



Jay Willard Gymnasium Replacement Project

Environmental Impact Report

SCH#2017022042

prepared by

Eureka City Schools

2100 J Street

Eureka, California 95501

prepared with the assistance of

Rincon Consultants

4825 J Street, Suite 200

Sacramento, California 95816

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Executive Summary

This section summarizes the characteristics of the proposed project as well as the environmental impacts, mitigation measures, and residual impacts associated with implementation of the proposed project.

Project Synopsis

Project Proponent

Eureka City Schools
2100 J Street
Eureka, California 95501

Project Description

A detailed description of the proposed project is included in Section 2.0, *Project Description*. The key characteristics of the proposed project are summarized below.

The proposed project would replace and modernize an existing school gymnasium on the Eureka High School campus located in the City of Eureka, Humboldt County, California. It would involve the demolition of the existing gymnasium and construction of a replacement gymnasium to the west of the existing gymnasium. To accommodate the siting of the new gymnasium and facilitate safe student access, the existing bus lane and parking areas on the project site would be reconfigured and new concrete walkways would be constructed providing pedestrian access to the new gymnasium and bus loop. The proposed project would involve modifications to an approximately 3.8 acre area in the southern portion of the Eureka High School campus. The reconfiguration of the project site would consist of the following components:

1. The existing gymnasium would be demolished and replaced with a parking area that would provide 133 parking spaces.
2. A new gymnasium would be constructed in the area of the project site that is currently one block west of the existing gymnasium and contains a painted paved lot used for school recreational activities and parking. A new parking area would be provided to the south of the proposed gymnasium, surrounding an existing classroom bungalow in the southeast corner of the block with nine parking spaces.
3. The existing bus lane, which currently runs through Humboldt Street and K Street, would be replaced with concrete walkways providing direct access to the new gymnasium and a new bus loop. The bus loop would functionally replace the existing bus lane and would be constructed in the northwest area of the project site (currently a paved lot used for parking).

The replacement gymnasium would serve the same student population and accommodate the same uses as the existing gymnasium (i.e., physical education classes, sports events). However, the proposed facility would be smaller in size than the existing facility—approximately 29,940 square

feet, rather than 40,075 square feet— and would not provide an indoor pool facility; the pool in the existing gymnasium has been permanently drained and closed since 2009.

Vehicle access to the bus loop and parking areas would be provided at the intersection of K Street and Trinity Street along the southern boundary of the project site. A smaller access point to the parking area in the western portion of the project would be provided along Trinity Street.

It is assumed that construction of the proposed project would occur over approximately about 13 months. The new gymnasium would utilize existing utility infrastructure on the Eureka High School campus. Gas and electric service would be provided by Pacific Gas and Electric (PG&E), water service would be provided by the City of Eureka, and waste services would be provided by Recology.

Project Objectives

1. Provide a gymnasium on the campus of Eureka High School that can be used by the student population for physical education courses and sports events
2. Provide a gymnasium with a similar amount of usable play area (i.e., basketball court, wrestling room, weight room) as the existing gymnasium, but without a swimming pool
3. Provide a gymnasium for Eureka High School that is structurally sound, and also meets current seismic code standards and ADA accessibility requirements
4. Provide a school bus loading area on campus with safe pedestrian access for students
5. Provide parking areas to serve the gymnasium and provide additional parking during school events

Alternatives

Three alternatives to the proposed project were chosen for analysis:

- Alternative 1: No project
- Alternative 2: Renovation of existing Jay Willard Gymnasium
- Alternative 3: Adaptive reuse of the existing gymnasium and construction of a new gymnasium

Alternative 1, no project, assumes that the proposed gymnasium would not be constructed. The site and existing gymnasium would continue to operate under existing conditions and seismic and ADA accessibility improvements would not be achieved. Under this alternative, the Jay Willard Gymnasium would not be demolished.

Under Alternative 2, the existing Jay Willard Gymnasium would be renovated to meet seismic code, ADA compatibility standards, and to address other safety hazards identified in prior evaluations of the building. The existing lobby and entry would be demolished and a new entry/ lobby would be constructed compatible with the historic elements and massing of the building. Renovations and alterations to the building would comply with the Secretary of the Interior's Standards for Rehabilitation and a historic architect shall review the project during planning, design, and implementation.

Alternative 3 considers adaptive reuse of the existing gymnasium as a community center or other community resource, and construction of a new gymnasium. This would require reconfiguration of school bus lane and reduce the amount of available parking. No existing buildings would be altered or demolished.

All three alternatives would reduce noise impacts relative to the proposed project and eliminate demolition of the existing gymnasium. However, Alternative 2, renovation of the existing gymnasium, would be the environmentally superior alternative.

Refer to Section 6.0, *Alternatives*, for the complete alternatives analysis.

Summary of Impacts and Mitigation Measures

Table 1 includes a brief description of the environmental issues relative to the proposed project, the identified environmental impacts, proposed mitigation measures, and residual impacts. Impacts are categorized by significance. *Significant and unavoidable* adverse impacts require a statement of overriding considerations to be issued per Section 15093 of the State CEQA Guidelines if the project is approved. *Significant but mitigable* impacts are adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *State CEQA Guidelines*. *Less than significant* impacts would not exceed significance thresholds and therefore would not require mitigation. The summary table includes noise and transportation/traffic impacts and mitigation measures, which were initially addressed in the Initial Study (Appendix A), as well as cultural resources impacts assessed in the EIR. Impacts related to all other resource areas were determined to be less than significant in the Initial Study (contained in full in Appendix A) or the EIR.

Table 1 Summary of Significant Environmental Impacts, Mitigation Measures, and Residual Impacts

| Impact | Mitigation Measure | Residual Impact |
|--|--------------------|-----------------------|
| Cultural Resources and Tribal Cultural Resources | | |
| <i>Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</i> | None required. | No significant impact |
| The proposed project would reconfigure an existing bus lane and parking areas and demolish the existing gymnasium on the Eureka high school campus. No listed historic resource exists on the project site. In addition, alterations to the Jay Willard Gymnasium since its opening in 1950, and in particular, alterations to the lobby window wall since 2006, have compromised the integrity of the building's historic elements. In its current state, the building no longer meets the criteria for listing as a historical resource in the NHRP, CRHP, or Eureka LRHP. Therefore, the building is not considered historically significant under CEQA and the District determines that its demolition would not result in an impact to a historical resource. | | |
| <i>Would the project cause a substantial adverse change in the significance of a</i> | None required. | Less than significant |

| Impact | Mitigation Measure | Residual Impact |
|---|--|------------------------------|
| <i>tribal cultural resource?</i> | | |
| <p>The project would involve minor ground disturbance during project construction. However, no tribal resources have been identified on the site and communication with the Wiyot, Blue Lake, and Bear River tribes have not revealed any further information regarding cultural resources on the site. Impacts would be less than significant.</p> | | |
| Noise (Initial Study) | | |
| <p><i>Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</i></p> <p>Demolition of the existing gymnasium, construction of the new gymnasium, and reconfiguration of the bus lane on the project site would result in potentially significant noise impacts to nearby school and residential uses. Incorporation of mitigation would reduce potential impacts to a less than significant level.</p> | <p>N-1 Eureka City Schools shall require construction contractors to limit standard construction activities to between 7:00 a.m. and 7:00 p.m. Monday through Friday. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed. No extreme noise-generating activities shall be allowed on weekends and holidays. This would limit impacts on sensitive receptors to daytime hours.</p> <p>N-2 Eureka City Schools shall require construction contractors to either: 1) conduct demolition activities, which involve the greatest noise impacts, on days when school is not in session, or 2) conduct demolition activities shall during the summer when fewer students are enrolled and no bus service is provided and prohibit school activities within 150 feet of the demolition site boundary. This would limit noise impacts on school uses. If feasible, it is recommended that other construction activities occur outside of school hours or during the summer as well.</p> <p>N-3 To reduce daytime noise impacts due to construction, Eureka City Schools shall require construction contractors to implement the following measures:</p> <ol style="list-style-type: none"> 1. Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds), wherever feasible. 2. Impact tools (e.g., jack hammers, pavement breakers, and rock drills) shall be hydraulically or electrically powered rather than pneumatically powered wherever possible. Where use of pneumatic tools is unavoidable, an exhaust muffler shall be applied to the pneumatic tool; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter tools and procedures shall be used whenever feasible. 3. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be | <p>Less than significant</p> |

| Impact | Mitigation Measure | Residual Impact |
|---|--|-----------------------|
| | <p>muffled and enclosed within temporary sheds, insulation barriers, or other noise control measures to the extent feasible.</p> <p>4. Where feasible, temporary barriers shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed of material having a minimum surface weight of 2 pounds per square foot or greater, and a demonstrated STC rating of 25 or greater as defined by American Society for Testing and Materials (ASTM) Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant.</p> <p>N-4 Eureka City Schools shall require construction contractors to either: 1) reconfigure the bus lane during a period of time when school is not in session, such as at the end of summer, or 2) conduct construction activities during the summer and prohibit school activities within 150 feet of the construction site boundary.</p> | |
| Transportation (Initial Study) | | |
| <p><i>Would the project result in inadequate emergency access?</i></p> <p>Construction on the proposed project would temporarily block a portion of a fire access road that enters the project site from the parking lot north of the project site, travels west across the northern boundary of the site, and exits onto Humboldt Street. This would potentially impact emergency access to the project site and vicinity.</p> | <p>T-1 Prior to issuance of building and/ or grading permits, Eureka City Schools must submit a Construction Emergency Access Plan to the Humboldt County Fire Department and Eureka Public Works department (Street/Alley Maintenance program) for review and approval. This plan would detail emergency access to the project site under existing conditions and construction conditions, impacts to emergency access resulting from construction of the proposed project, and include measures to ensure adequate emergency access during project construction, if applicable. If, upon review, these measures are deemed necessary for adequate emergency access, they shall be implemented as part of the proposed project.</p> | Less than significant |

1 Introduction

This document is a Draft Environmental Impact Report (EIR) for the proposed Jay Willard Replacement Gymnasium, located in the City of Eureka in Humboldt County. For the purposes of this EIR, the proposed project refers to the scenario where the existing gymnasium is demolished and a replacement gym constructed, as detailed in Section 2.0, Project Description.

This section describes: (1) the general project background; (2) the environmental impact report background; (3) the purpose and legal authority of the EIR; (4) the scope and content of the EIR; (5) lead, responsible, and trustee agencies; (6) the environmental review process required under the California Environmental Quality Act (CEQA); and (7) areas of known controversy.

1.1 Project Background

Eureka City Schools has identified the need to replace the existing Jay Willard Gymnasium on the Eureka High School campus due to concerns regarding the aging state of the existing facility. The existing gymnasium was constructed in 1949 and retains its 70-year old plumbing system and outdated electrical system breaker boxes. It does not meet current state standards for earthquake safety or American with Disabilities Act (ADA) accessibility requirements.

1.2 Environmental Impact Report Background

Eureka City Schools prepared a Notice of Preparation (NOP) of an EIR and distributed it for agency and public review for the required 30-day review period on February 13, 2017. The City received one comment letter and one question in response to the NOP during the public review period. The NOP is presented in Appendix A, along with the Initial Study that was prepared for the project, and the NOP responses received. The intent of the NOP was to provide interested individuals, groups, public agencies and others a forum to provide input to Eureka City Schools regarding scope and focus of the EIR. Table 2 lists the issues relevant to the EIR that were brought up in the NOP written comments and at the public scoping meetings as well as the EIR sections where the issues are addressed.

Table 2 NOP Comments and EIR Response

| Commenter | Comment/Request | How and Where it was Addressed |
|-------------------------|--|---|
| Wiyot Tribe | Requested further information on depth of grading at the project site. | <ul style="list-style-type: none"> Email response provided on February 15, 2017. Anticipated grading and potential impacts to Tribal Cultural Resources is discussed in Section 4.1, Cultural Resources and Tribal Cultural Resources. |
| Eureka Heritage Society | <p>Alludes to a previous report prepared in 2005 for the Eureka City Schools that finds the existing gymnasium eligible for listing as a historical resource.</p> <p>Provides a number of recommended actions in evaluating the feasibility of retaining the existing gym.</p> <p>Provides items to address in the EIR, such as the loss of the pool and smaller size of the proposed project relative to existing conditions.</p> | <ul style="list-style-type: none"> A review of documents evaluating the historical significance of the existing Jay Willard Gymnasium is provided in Section 4.1, Cultural Resources, as well as the Historic Resource Evaluation prepared by Page & Turnbull for the project in 2017 (Appendix B). Comments regarding the historical significance of the existing gymnasium are addressed in Section 4.1. Comments regarding the cost of the project relative to alternatives lie outside the scope of CEQA and are not addressed in this EIR. Alternatives to the proposed project, including retention and rehabilitation of the existing building, are considered in Section 6.0, Alternatives. |

1.3 Purpose and Legal Authority

The proposed project requires the discretionary approval of Eureka City Schools. Therefore, it is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines*, the purpose of this EIR is to serve as an informational document that:

...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR has been prepared as a Project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.

This EIR is to serve as an informational document for the public and school district decision makers. The process will culminate with a Eureka City Schools Board hearing to consider certification of the Final EIR and approval of the project.

1.4 Scope and Content

Of the 18 areas discussed in the Initial Study prepared for the project and provided in Appendix A, the following were identified as requiring further study in an EIR:

- Cultural Resources
- Tribal Cultural Resources

This EIR addresses the issues referenced above and identifies potentially significant environmental impacts of the project and cumulative development in the city in accordance with provisions set forth in the CEQA Guidelines. The EIR also recommends feasible mitigation measures, where needed and possible, that would reduce or eliminate adverse environmental effects. In preparing the EIR, pertinent policies and guidelines, existing EIRs, and other background documents were used. A full reference list is contained in Section 7.0, References and Preparers.

The Alternatives section of the EIR was prepared in accordance with Section 15126.6 of the CEQA Guidelines and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the Alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" Alternative and two alternative development scenarios.

1.5 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. Eureka City Schools is the lead agency for the project because it holds principal responsibility for certifying the EIR and approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. The Office of Public School Construction (OPSC) and Division of the State Architect, both under the California Department of General Services, are responsible agencies for the project.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

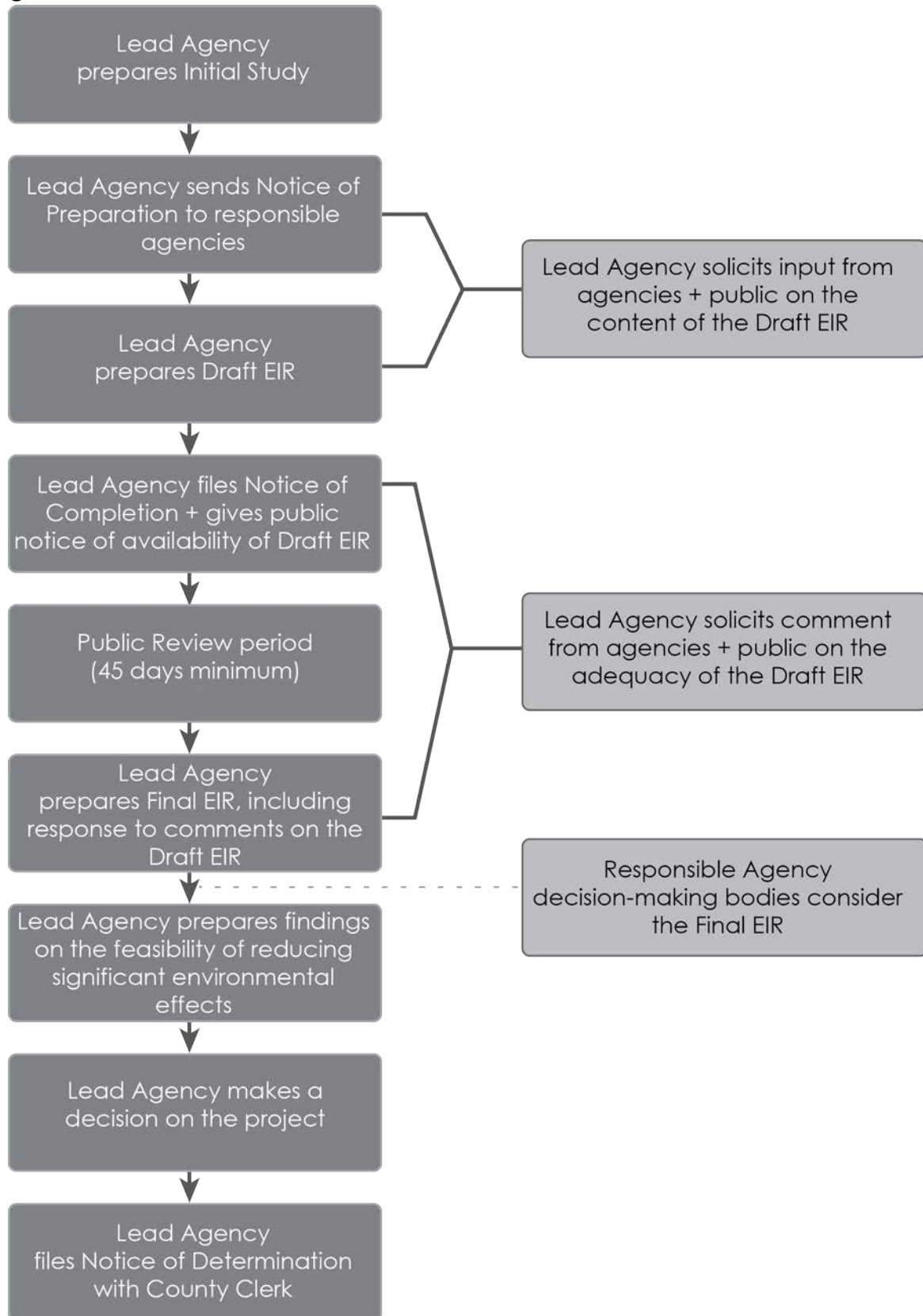
1.6 Environmental Review Process

1. The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1. The steps are presented in sequential order.
2. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency.
3. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
4. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code

Section 21092) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.

5. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.
6. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
7. **Certification of Final EIR.** The lead agency shall certify: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project.
8. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.
9. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.
10. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
11. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.

Figure 1 Environmental Review Process



1.7 Areas of Known Controversy

The existing Jay Willard Gymnasium opened its doors in 1950 and has served primarily as Eureka High School's venue for indoor sporting events since. Although it is not currently listed as a historic resource in the National Register of Historic Places, California Register of Historic Resources, or Eureka Local Register of Historic Places, the Eureka Heritage Society considers it to be a historic resource. Prior historic evaluations conducted in 2005 and 2006 by Stillman & Associates and Carey & Co., respectively, concluded that the building would be eligible for listing due to its architecture, which was designed in a Late Moderne style with elements of International Style, as well as for its role as a cultural center in the community. However, a more recent historic assessment of the Gymnasium conducted in 2017 for the project by Page & Turnbull finds the Gymnasium to be ineligible for listing as a historic resource in large part due to building alterations that have occurred since 2006 that have compromised the integrity of the building's historic elements. This area of controversy is addressed more fully in Section 4.1, *Cultural Resources and Tribal Cultural Resources*.

2 Project Description

This section describes the proposed project, including the project proponent, project location, existing site characteristics, the proposed project's characteristics, project objectives, and approvals needed to implement the project.

2.1 Project Proponent

Eureka City Schools
2100 J Street
Eureka, California 95501

2.2 Project Location

The project site consists of an approximately 3.8-acre area located on the campus of Eureka High School at 1915 J Street in the City of Eureka in Humboldt County, California. The project site lies in the southern portion of campus and is bounded by Trinity Street and existing tennis courts to the south, the school cafeteria and an existing classroom building to the north, J Street to the west, and vegetation to the east. The Assessor Parcel Number (APN) for Eureka High School, including the project site, is 011-131-005. Figure 2 shows the regional location of the project site and Figure 2 shows the project location in its neighborhood context.

2.3 Existing Site Characteristics

The project site is located on the Eureka City High School campus, which is designated for Public/Quasi-Public (PQP) land use in the City of Eureka General Plan and zoned as a Public District (P) by the City of Eureka (Municipal Code, Sec. 10-5.107).

The project site currently encompasses three distinct campus areas, as shown on Figure 3:

1. **Existing gym and surrounding paved surface lot.** This area is located north of the school tennis courts and south of a school classroom building and is bound by K Street to the west and vegetation to the east. The paved surface lot surrounding the existing Jay Willard Gymnasium provides parking for gymnasium use and sports events.
2. **Block west of the existing gym.** This block is bounded by Humboldt Street and Trinity Street to the north and south, and J Street and K Street to the west and east. This area is currently a painted paved lot used for recreation that also provides parking for gymnasium use and sports events. The only existing structures on this block consist of a bungalow in the southeast corner that is used as a classroom, and a large storage bin in the southwest corner. The bungalow classroom would be retained and the replacement gym would be built to the north of the classroom.
3. **Bus lane.** The bus lane runs north along K Street and west along Humboldt Street, and exits onto J Street. School buses utilize this area for student drop off and pick up; eight buses drop off in the morning and nine buses pick up in the afternoon. The bus lane also provides vehicle access

Figure 2 Regional Location

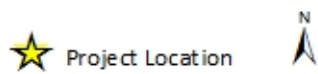
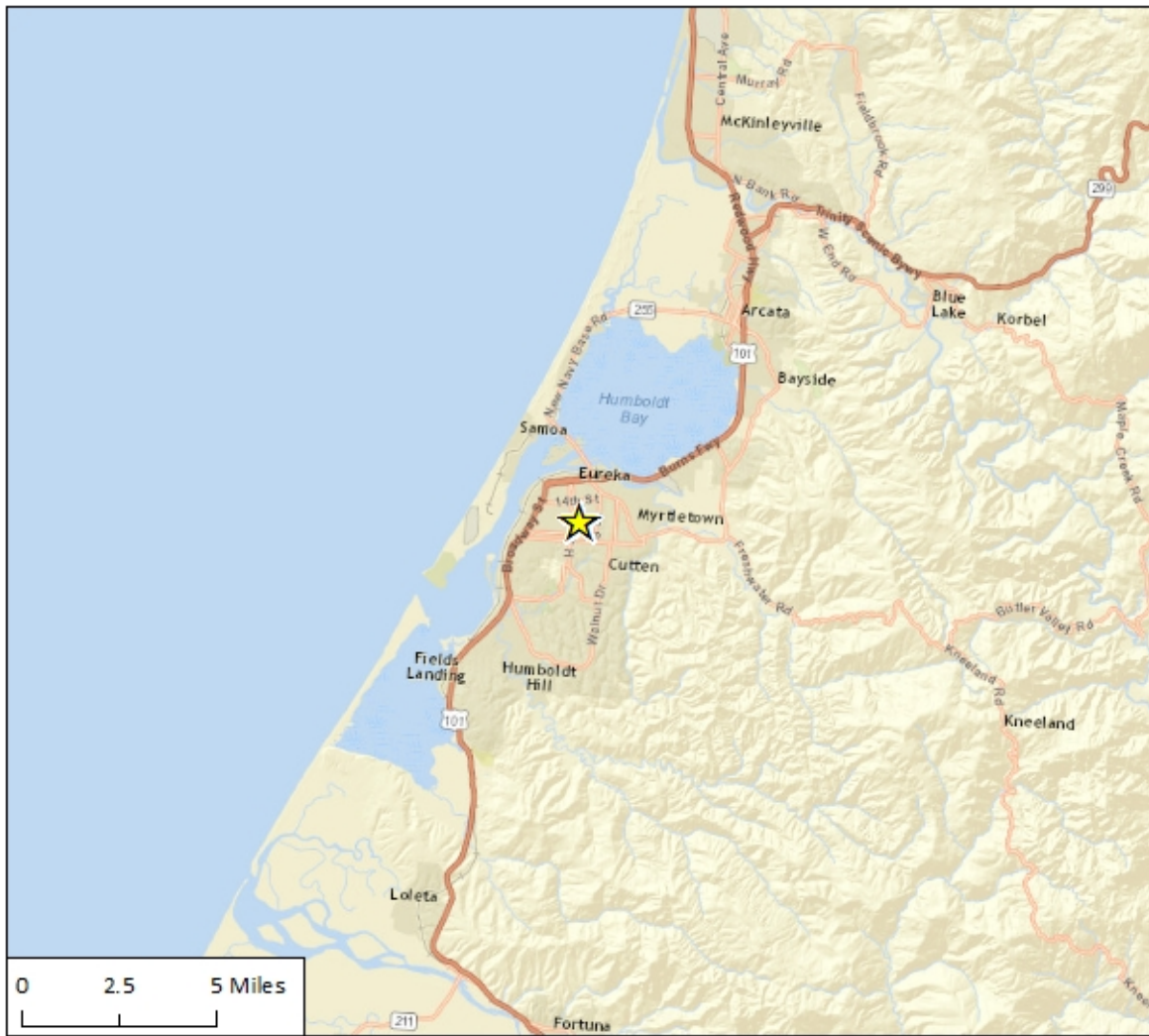


Fig. 1 Regional Location

Figure 3 Project Location



to parking on the surface lots adjacent to K Street. The bus lane is a private road owned by Eureka City Schools.

The existing gymnasium is a 40,075-square-foot (sf) structure that occupies about one acre on a paved surface lot. The gymnasium is a one-story, flat-roofed, concrete-framed building with three distinct wings that was first constructed in 1948. The Main Gymnasium Wing is the northernmost wing and contains the main gymnasium space with basketball courts and seating; it is the largest volume of the building with a height of approximately 36 feet. This portion of the gymnasium is set back from K Street and has parking spaces in front. The Swimming Pool Wing lies to the southeast and is slightly lower in height. It contains a swimming pool that has been permanently drained and closed since 2009, as well as the girls' locker rooms. The Secondary Gymnasium Wing lies to the southwest of the main wing and abuts K Street. It includes a second gymnasium space and weight room. Figure 4 shows photos of the project site and Figure 5 shows photos of the gymnasium interior.

2.4 Surrounding Land Uses

The project site is directly adjacent to other school facilities and residences. To the west across J Street lie the Eureka City Schools District Office and Eureka Adult School. To the north across Humboldt Street is the main campus area of Eureka High School and to the northeast is a track and field facility surrounded by vegetation. To the south across Trinity Street and between J and K Street are one-story and two-story single-family residences, and directly south of the existing gymnasium are tennis courts; more one-story and two-story single-family residences lie south of the tennis courts. The surrounding areas are residential with primarily one-story and two-story single family houses. Figure 6 shows photos of the surrounding area.

2.5 Project Characteristics

2.5.1 Proposed Land Uses and Development

The proposed project would replace and modernize an existing school gymnasium, as well as reconfigure an existing bus lane and parking areas on the project site to accommodate the new gymnasium and facilitate safe student access. The replacement gymnasium would be smaller in size than the existing facility—approximately 29,940 sf, rather than 40,075 sf—and would be sited to the west of the existing gymnasium. To facilitate safe student access, the existing bus lane would be replaced with a concrete walkway and the bus lane would be rerouted to loop in the area that currently contains the paved surface lot adjacent to the existing gymnasium, as shown in the proposed site plan (Figure 7). The following changes would occur at each of the three campus areas in the project site identified above (see Figure 7).

1. **Existing gym and surrounding paved surface lot.** The existing gym would be demolished and paved over to provide a new parking area that would provide 133 spaces for gymnasium use and sports events, **including** events at the adjacent track and field facility. This would essentially replace existing **parking** located in front of the existing gymnasium and in the block to the west. Much of the area that is currently a paved surface lot would be transformed into a bus lane that would loop around a landscape element. Vehicles would access the new parking area and the bus loop via a driveway at the intersection of K Street and Trinity Street along the southern border of the project site, which would serve as both entry and exit. The driveway would provide two access points to the new parking area to the east and an access point to a new

Figure 4 Site Photos



Photo 1: View looking east across J Street to the site of the replacement gym and existing Jay Willard Gymnasium.



Photo 2: View looking southeast across J Street to the site of the replacement gym, existing Jay Willard Gymnasium, and adjacent residences.



Photo 3: View looking east to the Jay Willard Gymnasium's main gymnasium wing, swimming pool wing, and secondary gymnasium wing.

Source: FF & J Architects, Inc. 2016. Eureka High School Gymnasium, Preliminary Historic Assessment & Code Analysis. Prepared by Page & Turnbull. July 12, 2016.



Photo 4: View looking northeast across K Street to the west façade of the secondary gymnasium wing.

Figure 5 Jay Willard Gymnasium Photos



Photo 5: Main gymnasium wing interior, view looking east.



Photo 6: Lobby opening to the main gymnasium and secondary gymnasium and swimming pool wings, view looking south.

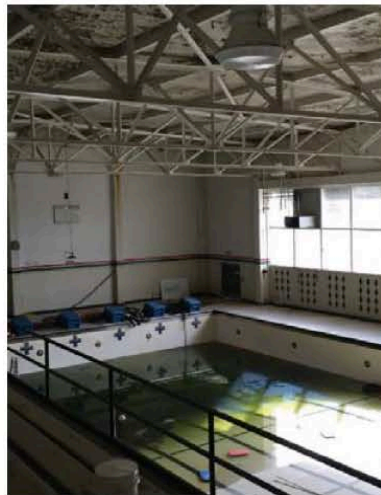


Photo 7: Swimming pool as viewed from the balcony, view looking southeast.

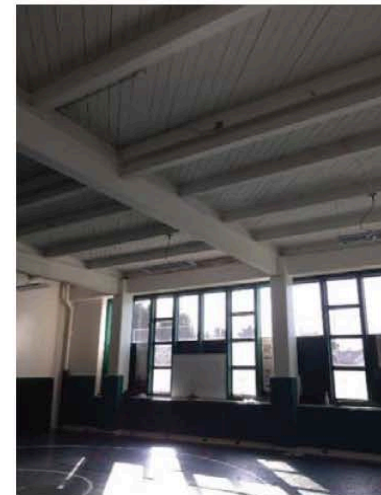


Photo 8: Weight room in the secondary gymnasium wing, view looking south.

Source: FF & J Architects, Inc. 2016. Eureka High School Gymnasium, Preliminary Historic Assessment & Code Analysis. Prepared by Page & Turnbull. July 12, 2016.

Figure 6 Surrounding Area Photos



Source: Image Capture: April 2012 © 2017 Google

Photo 1: Facing south on K Street, one block south of the project site.



Source: Image Capture: April 2012 © 2017 Google

Photo 2: Immediately north of the Gymnasium, looking east.



Source: Image Capture: April 2012 © 2017 Google

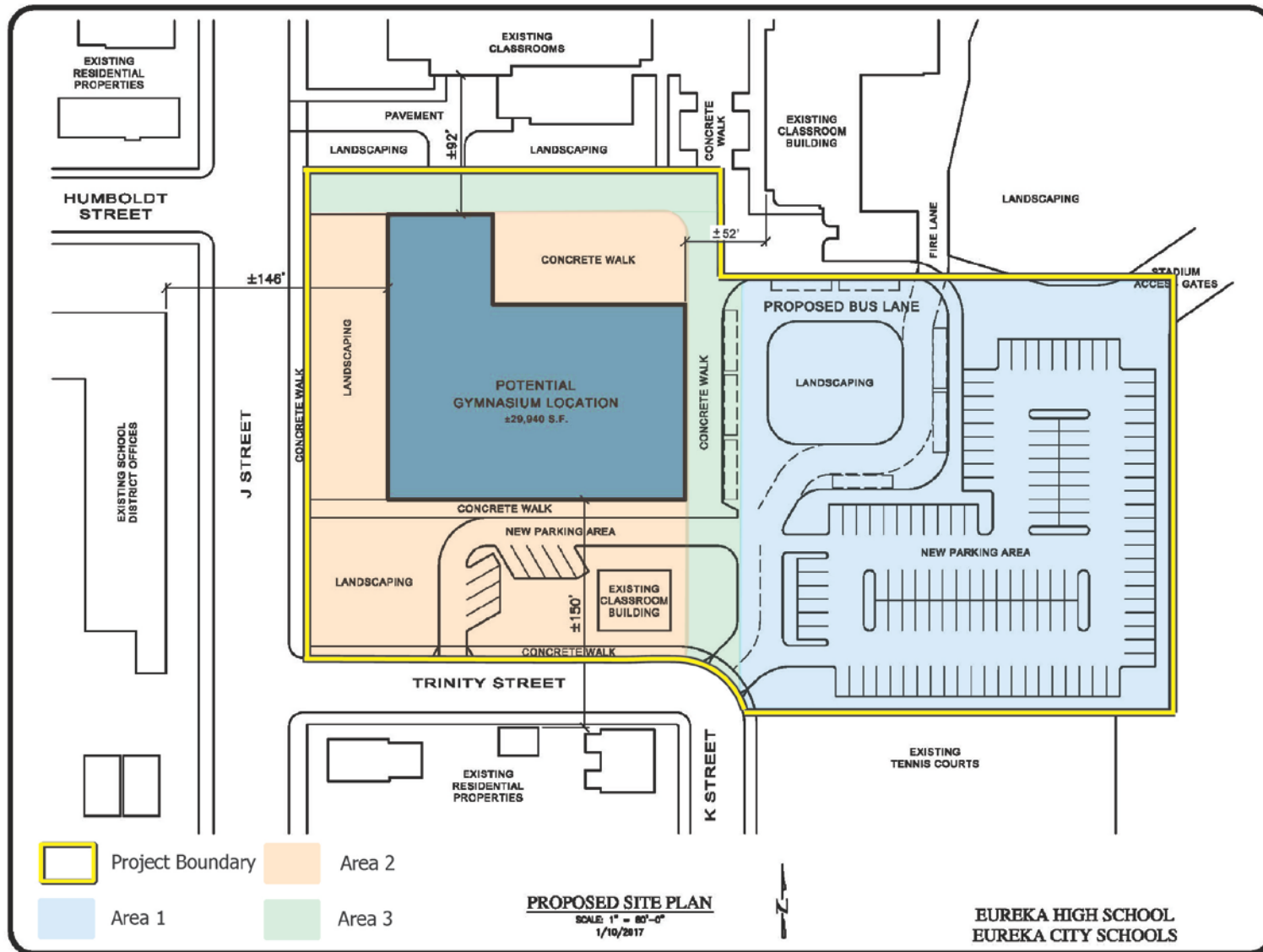
Photo 3: Facing west on Humboldt Street, across from the project site.



Source: Image Capture: April 2012 © 2017 Google

Photo 4: Eureka High School's main building, looking northeast.

Figure 7 Proposed Site Plan



parking area to the west (described below) before merging into the bus loop. The proposed bus lane would provide access to the existing fire lane north of the project site (see Figure 7).

2. **Block west of the existing gym.** The existing bungalow classroom would be retained and a small new parking area would be painted directly to the north and west of the classroom that would provide nine parking spaces. The new parking area would be accessed off the driveway at the intersection of K Street and Trinity Street or directly from Trinity Street to the west of the classroom. The replacement gymnasium would be constructed to the north of the new parking area, with a concrete walk dividing the two. A concrete walk would also run along the east and north faces of the proposed gymnasium, providing vehicle-free pedestrian access between classroom uses, existing campus walkways, the gymnasium, and the bus loop.
3. **Bus lane.** The bus lane would be removed and the area integrated into the other uses on the project described above (i.e., concrete walkways, driveway, and bus loop).

2.5.2 Construction

The construction timeframe for the proposed project has not yet been determined. For the purpose of this analysis, it is assumed that construction would occur over 13 months (assumption based on the standard emission model defaults, see Section 3, Air Quality, of the Initial Study in Appendix A) and would involve:

- Demolition of the existing gymnasium
- Site preparation and grading at the replacement gymnasium site
- Building construction of the replacement gymnasium and paving of new parking areas
- Reconfiguration of the bus lane and construction of new concrete walkways

2.6 Project Objectives

The objectives of the proposed project are as follows:

1. Provide a gymnasium on the campus of Eureka High School that can be used by the student population for physical education courses and sports events.
2. Provide a gymnasium for Eureka High School that is structurally sound, and also meets current seismic code standards and ADA accessibility requirements.
3. Provide a school bus loading area on campus with safe pedestrian access for students.
4. Provide parking areas to serve the gymnasium and provide additional parking during school events.

2.7 Required Approvals

The project would require approval by the Eureka City Schools Board of Education, as well as the Office of Public School Construction (OPSC) and Division of the State Architect, both under the California Department of General Services. No other permits or approvals would be required at this time.

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3 Environmental Setting

3.1 Regional Setting

The project site is in the City of Eureka, a coastal city located in central Humboldt County in California's North Coast region. The city contains approximately 16.4 square miles (10,477 acres) of land and water area. Eureka serves as the political seat for the County and is located approximately 275 miles north of San Francisco and 100 miles south of the Oregon border. The U.S. 101 is the only major highway connecting Eureka to other destinations in California. Eureka is situated on Humboldt Bay, which holds the most important port between San Francisco and Coos Bay, Oregon, and has an extensive urban waterfront devoted to commercial and industrial uses. The climate in Eureka is categorized as cool-summer Mediterranean with mild and rainy winters and cool and dry summers. The region is subject to various natural hazards, including earthquakes, tsunamis, and flooding.

3.2 Project Site Setting

The project site consists of an approximately 3.8-acre area in the southern portion of the Eureka City High School campus. The site is bounded by Trinity Street and existing tennis courts to the south, the school cafeteria, an existing classroom building, and staff parking lot to the north, J Street to the west, and vegetation to the east. The Eureka City Schools District Office and Eureka Adult School lie west across J Street and two-story single family residences lie south of Trinity Street and to the northwest of the intersection of Humboldt Street and J Street. The surrounding areas are residential with primarily one-story and two-story single family houses.

The project site is currently occupied by the Jay Willard Gymnasium (40,075 square feet), paved lots, and a classroom bungalow located at the southeast corner of Area 2 (see Figure 3). A bus lane travels through the project site, going one-way north along K Street and then west along Humboldt Street and exiting onto J Street. Site access is provided by the bus lane, which is accessed via K Street or Trinity Street. A fire access road also traverses the project site, connecting the staff parking lot north of the project site to the bus lane.

Photos of the project site and surrounding uses are shown in Figure 4 and Figure 6. The project site setting is described in greater detail in the individual environmental issue analyses in Section 4, *Environmental Impact Analysis*.

3.3 Cumulative Development

CEQA defines "cumulative impacts" as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 4, *Environmental Impact Analysis*. Section 15130 of the *CEQA Guidelines* states that an adequate discussion of cumulative impacts should include either a list of past, present, and probable future projects producing related or cumulative impacts; or a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

For cumulative impacts that are localized in nature, such as cultural resources, the cumulative analysis in this EIR uses the list of planned and pending projects shown in Table 3, based on information found on the City of Eureka's website under "CEQA Documents Pending Approval," (http://www.ci.eureka.ca.gov/depts/development_services/cd/ceqa_documents.asp), as well as a query of CEQAnet (<http://www.ceqanet.ca.gov/QueryForm.asp>) for projects in the City of Eureka with Notice of Determinations submitted between January 2016 and April 2017. The projects on this list consist of planned or pending projects in the City of Eureka within five miles of the proposed project. Five planned or pending projects were identified within this area. None of these projects involve development of new residential, commercial, or industrial uses.

Table 3 Cumulative Projects List

| Project No. | Project Name/Applicant | Project Location | Description |
|-------------------------------|---|--|---|
| 1 | Former Eureka PG&E Manufactured Gas Plant (Project No. CDP-16-0007) | 1206 West 14 th Street | PG&E is proposing to remediate contamination associated with the operations of the Former Eureka Manufactured Gas Plant at West 14th St and Railroad Avenue, Eureka, CA. |
| 2 | Coasts Seafood Company, Humboldt Bay Shellfish Aquaculture Permit Renewal and Expansion Project | Highway 101/Highway 255, Humboldt Bay | The project involves: 1) extending regulatory approvals for Coast's existing approximate 300 acres of shellfish culture; 2) increasing shellfish culture within an already permitted floating upwelling system by adding eight culture bins; 3) authorizing culture of Pacific and Kumamoto oysters within Coast's existing clam rafts; 4) relocating approximately 5 acres of existing cultch on longline culture; and 5) permitting an additional 622 acres of intertidal culture in two phases |
| 3 | Eureka-Arcata Route 101 Corridor Improvement Project | Numerous locations-Route 101/ Airport Road is only location within 5 miles of project site | Possible signalization and realignment of Route 101/Airport Road intersection. |
| 4 | Chevron Eureka Terminal Dock seismic retrofit | 3400 Christie Street | Conducting of a seismic retrofit of the Chevron fuel dock to bring the fuel pipe way support structure into compliance with the CA Building Code. |
| 5 | Eureka Waterfront Trail Construction | Various locations along Eureka waterfront | Construct three segments of the CA Coastal trail through the City of Eureka creating approx. 3.75 miles of the CA Coastal Trail. |
| Source: Eureka 2017, OPR 2017 | | | |

4 Environmental Impact Analysis

This section discusses the potential environmental effects of the proposed project for the specific environmental issue areas that were identified through the Initial Study process (or otherwise determined to be appropriate to include in this analysis) as having the potential to experience significant impacts.

“Significant effect” is defined by the State CEQA Guidelines §15382 as:

“a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

The assessment of each issue area begins with the setting and is followed by the impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by Eureka City Schools (as the CEQA Lead Agency) or other public agencies, as determined appropriate. Other thresholds are generally recognized or have been developed specifically for this analysis. The next subsection describes each impact of the proposed project, feasible mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

Significant and Unavoidable. An impact that cannot be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.

Significant but Mitigable. An impact that can be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.

Less than Significant. An impact that may be adverse, but does not exceed the significance threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

No Impact. No impact would occur.

Beneficial Impact. The project would result in a beneficial impact on the environment.

Following each environmental effect discussion is a listing of feasible mitigation measures (if required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other past, present and probable future development in the area.

4.1 Cultural Resources and Tribal Cultural Resources

The information and analysis presented in this section is based on a Historic Resources Evaluation prepared by Page & Turnbull in April 2017, as well as searches of the California Historical Resources Information System (CHRIS) (Rincon 2016) and Native American Heritage Commission's (NAHC) Sacred Land File (SLF), and communication with NAHC-identified tribes completed by Rincon Consultants in November and December 2016. A copy of the Page & Turnbull Historic Resources Evaluation, CHRIS summary report, and SLF search results are included as Appendix B of this EIR.

4.1.1 Setting

Historical Background

Prehistory

Early archaeological research in the northwest coastal region centered on explaining the order of entry of the diverse groups present in this small area (Fredrickson 1984:477). In all, speakers of at least 11 dialects representing three major linguistic groupings (Algic superfamily, Athabascan family, and Hokan stock) resided along the coast and immediate interior, and shared enough similarities culturally to be grouped by Kroeber (1925) into a single cultural subregion.

The culture history of California's northwest coast was initially organized by Fredrickson (1984) into patterns and aspects, where patterns are large shared cultural expressions that are shared by multiple culture groups over a period of time, and aspects are local variants of patterns, possibly reflecting discrete culture groups. Six basic patterns are recognized, with four being applicable to the project area, ordered from oldest to youngest: Post Pattern, Borax Lake Pattern, Mendocino Pattern, and Gunther Pattern. As much of what we know about the archaeology of this region derives from research done after Fredrickson's 1984 synthesis, the following overview relies heavily on Hildebrandt (2007).

The initial human occupation of the region is first evidenced by **Post Pattern** (11,500 – 8000 B.C.) sites, which are notable for their flaked stone crescents and fluted (Clovis-like) projectile points. Dating these sites is difficult, since no clearly single component sites or strata/components have been identified to date. Obsidian hydration readings suggest a Pleistocene/Holocene transition date for this pattern, however. Given the lack of identified, unmixed Post Pattern sites to date, little can be said about cultural adaptations during the period (Hildebrandt 2007:86-87).

The subsequent **Borax Lake Pattern** (8000 – 5000 B.C.) is better known. Marked by large, wide-stemmed projectile points with concave bases, serrated bifaces, manos, and metates, this pattern occurs from the coast to nearby mountains and ridges with elevations of up to 6,000 feet. Some of the oldest houses in California are assigned to the Borax Lake Pattern, although the settlement pattern appears to have been highly mobile, with frequently relocated base camps serving as an adaptation to patchily distributed resources. Coastal sites from this period are rare; the one well-defined site is located about 2 km inland in Humboldt County (CA-HUM-513/H), and it lacks characteristically coastal ecofacts and artifacts (Hildebrandt 2007:87-90).

The **Mendocino Pattern** (3000 B.C. – A.D. 500) is identified by the presence of side-notched, corner-notched, and concave-base dart points, manos and metates, and the occasional cobble mortar and pestle. Most sites appear to be temporary camps or short-term residential basis occupied by people

who focused their subsistence pursuits on terrestrial resources. Coastal sites include an example in Humboldt Bay (CA-HUM-227) that post-dates 500 B.C. (Hildebrandt 2007:91-92).

The **Gunther Pattern** (post A.D. 500) on the northwest coast of California is represented by a more elaborate and marine-focused assemblage of artifacts as compared with earlier patterns, including Gunther barbed projectile points, concave-based points that were used in composite harpoons, and ground and polished stone artifacts. Pestles, clubs, stone adze handles, mauls, and steatite bowls, along with fishing gear such as net sinkers, hooks, and harpoons, are common. Marine-focused faunal collections provide further evidence of a developing coastal lifeway (Hildebrandt 2007:93-94).

The Wiyot, who were present in the area at European contact, are thought to have entered from the Columbia Plateau ca. 900 AD and settled directly on the coastal strip. The Yurok, their linguistic relatives, are believed to have arrived some 200 years later, again settling along the coast. They quickly became specialized and efficient marine mammal hunters (Hildebrandt 1981), and spread along the coast, eventually displacing or assimilating some of the Wiyot population (Fredrickson 1984).

The settlement of the coast by the Yurok and Wiyot is thought to be archaeologically manifested by the Gunther Pattern, first defined by Loud's (1918) excavation of CA-HUM-67 at Humboldt Bay. This was the former Wiyot village of Tolowot, and the site of the Gunther Island massacre in 1860 (Fredrickson 1984). Further excavation was done at the site by an amateur archaeologist. Archaeologists at the University of California at Berkeley were able to analyze some of his collections (Heizer and Elsasser 1964), and Hughes (1978) performed X-ray fluorescence analysis of the obsidian found at the site. Other Gunther Pattern sites include CA-HUM-118, a Yurok seasonal camp at Patrick's Point, CA- HUM -169 and CA- HUM -129, historic Yurok villages, and CA- HUM -174, a Yurok ceremonial site on an offshore rock (Fredrickson 1984).

Ethnography

Prior to the arrival of Euroamericans in the region, the Humboldt Bay area was the home of the Wiyot, an Algonquian-speaking group within the greater northwestern California subculture area defined by Kroeber (1925). Wiyot territory extended eastward from the Pacific to the crest of the first mountain range some 15 to 20 miles inland, bounded on the north by the Little River and to the south by the Bear River (Elsasser 1978). Their territory thus included Humboldt Bay and many miles of ocean front and the lower courses of rivers, as well as inland redwood forest.

Subsistence practices reflected this habitat, and fishing, mollusk collecting, and sea mammal hunting were all important activities. Much of Wiyot technology revolved around these practices as well, including redwood dugout canoes, weirs, platforms, traps, nets, spears, and harpoons. Although the redwood belt was not prime oak habitat, acorns were an important prehistoric food source, as were berries.

Structures were substantial, rectangular, split-redwood plank affairs often occupied by two or more families. The village often had a single sweathouse. Clothing was made from deerskins and woven rabbitskins, and women's aprons were made from bark, often strung with nuts. Twined basket hats were worn.

The Wiyot were normally patrilineal and patrilocal, organized into tribelets. Status was based upon wealth. The Wiyot partook to some degree in the elaborate Northwest California World Renewal rituals.

The foregoing synthesis is relatively bare since the Wiyot suffered greatly at the hands of the Euroamericans due to the highly favorable coastal area they occupied. In spite of initially good relationships with local fishermen and farmers, a series of atrocities decimated their numbers in the 19th century (Heizer and Almquist 1971; Loud 1918). The most famous of these, the massacre at Gunther (or Indian) Island, took place in 1860 during World Renewal ceremonies at the village of Tuluwat, and survivors were scattered to the Klamath River, Hoopa, and Smith River Reservations. By 1860, the population had shrunk from 1,000 to 200; by 1910, only 100 full-blooded local people were left.

Today, the Wiyot, now more than 500 strong, occupy 88 acres at Table Bluff.

History

Post-Contact history for the state of California can be generally divided into three periods: The Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). The Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769–1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríguez Cabrillo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrillo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

Ocean exploration of the northern coast of California dates to the sixteenth century and includes a diverse group of Spanish, Russian, and British ships. While the first recorded Humboldt landing at Trinidad by the Spanish did not occur until 1775, maps from Spanish trading voyages referenced the area as early as 1587 (Hoover et al. 2002). Concerned with these activities, George Vancouver was sent out by the British in 1792 to investigate the extent of Spanish possessions along the coast. The first entrance to Humboldt Bay occurred soon after by Jonathan Winship, an American employed by the Russian-American Company. As part of a fur-trading exhibition, Winship and a group of Aleut Indians entered the bay while searching for sea otters, which he named Bay of Indians due to the numerous native villages located along the shore (Hoover et al. 2002). Although this marked the first European or American entry into Humboldt Bay, the region would remain relatively unchanged into the following decades.

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr.

Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

Mexican Period (1822–1848)

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Throughout most of California, extensive land grants were established during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities. In Humboldt County however, no land grants were awarded, and the area would not experience significant changes until the mid-nineteenth century.

American Period (1848–Present)

With the discovery of gold in Coloma, California in 1848, Americans flocked to California and began exploring both easily accessed and more remote regions, including the northern Pacific Coast. The first of this influx to reach the Humboldt Bay was Dr. Josiah Gregg, who set out with a party to trace the Trinity River from its source to its mouth. First reaching the Trinidad Head on December 7, 1849, they turned south and soon reached the bay that Winship had recorded some forty years earlier. The first ships arrived the following spring, with numerous Americans embarking on trips inland to gold mining districts on the Klamath, Salmon, and Trinity rivers (Van Kirk 1999). One of the first ships was the *Laura Virginia*, bringing members of the Laura Virginia Association. They quickly founded a small townsite, known as Warnersville. Other towns quickly followed, including Humboldt City, Bucksport, Union, and Eureka (Irvine 1915).

While most of these small communities were ultimately unsuccessful, several managed to survive and grow, including Uniontown (Arcata) and Eureka. Uniontown was commercially successful due to its close proximity to the overland mining trails, but as the region's economy shifted towards lumber manufacturing, Eureka was poised to become the "metropolis of Humboldt Bay" (Hoover et al. 2002:105); a future that was secured after the city became the seat of the new County of Humboldt in 1856.

In 1853, Fort Humboldt was established to ease tensions between the local indigenous population and the influx of miners and settlers flooding into the area as a result of the gold rush. The fort also

served as a supply headquarters for the region, which included Forts Bragg and Wright in northern Mendocino County, and Fort Ter-Waw in Klamath and Camp Lincoln near present-day Crescent City. In the years leading up to the Civil War, soldiers at Fort Humboldt witnessed numerous battles between settlers and Indians, including the Indian (nee Gunther) Island Massacre of 1860, in which from 80 to 250 Wiyot men, women, and children were murdered.

Although most settlers came to the region in search of gold, it didn't take long for them to recognize that the region's wealth truly lay in its other natural resources. Logging soon became the County's primary revenue source, with farming, shipping, shipbuilding and salmon fishing also becoming strong industries. Initially, the manufacture of lumber was confined to pine, spruce, and fir as the early lumberman did not have the means to handle and saw the tremendous size and weight of redwood trees. But with the arrival of more advanced equipment by ship in 1852, the first successful redwood sawmills were soon in operation. As Gold Rush San Francisco exhausted the supply of lumber in the Bay Area, demand for redwood quickly grew and lumber merchants towards the bountiful forests of California's North Coast (Bukley 1997). Humboldt Bay emerged as the best harbor for ships to export redwood cargo to the south due its deep water channel, and a number of settlements begin to emerge along the bay as individuals and companies came to the region in ever-increasing numbers (Palais and Robets 1950).

Twentieth Century Growth

The population of Eureka grew in the early twentieth century as the "Queen City of the Ultimate West" entered a new period of prosperity. While the lumber industry remained the primary contributor to the local economy following consolidation by a number of large companies, dairy farming and other agricultural operations became increasingly important. Eureka's growth was supported by the development of new transportation routes, connecting the remote region to the rest of California and the country through the completion of the Northwest Pacific Railroad (1914) and Highway 101 (1924-26). In addition to the continued outward push of residential development, a number of civic improvements also occurred during this time, including the construction of a Carnegie Library and landscaping of Forest Park, by now renamed Sequoia Park, with picnic grounds, a pond, and Zoo (Heald et al. 2004:13).

Similar to the rest of the country, Eureka was impacted by the Great Depression and while residential development decreased, some civic projects were undertaken during this period. These included projects such as the Art Deco-style Municipal Auditorium (1935), and the Streamline Moderne Eureka Theater (1937). Another recreational facility developed at this time was Redwood Acres, which was established in 1937 and provided the residents of Humboldt County with a fairgrounds east of Eureka in Myrtle town. Historic aerial photographs show that by 1940, the facility included a large horse racing track, a covered grandstand, eight stables, and a number of ancillary buildings. By the early 1940s, war prioritization restricted the construction of private buildings and little development occurred until the end of World War II.

Following the war, Eureka and Humboldt County experienced an economic boom as unprecedented residential and commercial development throughout the country resulted in an increased demand for construction materials. Local building and construction also flourished, with more than five million dollars expended in 1949, over a million more than ever before (Eureka 2004). Much of this development was residential, with new housing tracts built in areas south and east of Eureka. This included the unincorporated areas of Cutten and Myrtle town, which were transformed into suburban neighborhoods seemingly overnight.

Site History

As discussed in the Historic Resource Evaluation Report prepared for this project (Appendix B), Eureka High School's original gymnasium at the campus' southeast corner remained in place until at least 1946. In 1945, the City of Eureka and the school district considered combining resources to build a gymnasium and swimming pool. In 1947, architects Masten and Hurd designed a new gymnasium and swimming pool for Eureka High School. Located south of their earlier Industrial Education Building, around the area of the previous gymnasium, the new gym building included a main boy's gymnasium, a secondary girl's gymnasium, and the natatorium for a swimming pool, each as three distinct volumes of the building.

A bond measure passed in 1948 allowed the gymnasium and other Eureka City School facilities to be built after the long pause in construction, due to World War II. Construction on the gymnasium started in 1948 with photographs showing the main gymnasium's steel truss roof and three long skylights. Although the original drawings showed the skylights designed with a single pitch, they were built as double pitched. The secondary gymnasium also had similar, though shorter, skylights.

Opened in 1950, the reinforced concrete building was designed in a Late Moderne style with elements of the emerging International Style, most noticeable in its glazed main lobby. The lobby's highly transparent curtain walls contrasted with the mostly solid concrete walls elsewhere and showcased the lobby interior with its two open staircases. The original doors were also glazed, as was the secondary entrance to the south of the lobby volume with its window wall. In the front plaza was a designed courtyard with L-shaped planters in a formal, geometric pattern and additional planting areas along the building and courtyard edge.

When it first opened, the swimming pool was available to the community as the only public pool in Eureka. The swimming pool wing's south façade was originally a full window wall, as reported and shown in a *Humboldt Standard* article at the time of its opening, but by 1966, the lower row of glazing had been infilled with concrete block. Also by 1969, the three pairs of wood-framed, glazed front doors to the gymnasium had been replaced by partially glazed metal doors.

The Gymnasium hosted much of the high school's indoor sporting events, as well as school dances, concerts, performances, and graduations through the 1950s and into the 1960s. It occasionally held community-wide events, like lectures or public meetings, but was mainly used by the high school. In 1973, the Gymnasium was re-named for Jay Willard (1898-1973), former football, basketball, baseball, and track coach at the high school who retired in 1963. Willard had been the football coach for the Eureka Loggers from 1927 to 1954, during which time the team won 21 championships. After he retired from coaching football, he remained at the high school teaching physical education and coaching other sports until his retirement in 1963.

In 1983, the graduating class donated a 13-foot tall sculpture of the school's mascot, Mr. Logger, for the gymnasium's lobby. Carved from a redwood tree, the sculpture remains in the lobby.

From historic aerials and according to school facilities staff, the raised L-shaped and rectangular planters in the front plaza had deteriorated by the 1980s; they were removed by 1990 and the former plaza was paved with asphalt.

Recent Alterations

More recently, the swimming pool closed in 1996 due to a leak. It underwent renovations in 2001, along with the adjacent restrooms, drains, and deck, and reopened in 2003 and was still the only

community pool in Eureka at the time. However, the pool was drained again in 2009 after the heater failed and the drains were not code-compliant; it has remained closed ever since.

It appears Eureka City Schools considered demolishing the Gymnasium as early as 2005, as part of a master planning project. A revised project that included building a new gymnasium and demolishing the existing Gymnasium was also considered in 2006 and 2007, in part due to structural concerns about wood rot at the glazed entry lobby volume. According to the school's facilities staff, the Division of State Architects (DSA) found the lobby volume structurally unsound in the early 2000s. Eureka City Schools considered options for condemning the lobby volume portion while allowing for the rest of the building to be functional. The school district also considered options to demolish the lobby volume and reconstruct it in a different material, along with outright demolition of the Gymnasium in 2006. Instead, the school district's facilities staff installed plywood sheathing to the exterior and interior of the glazed lobby volume in late 2006 to provide shear reinforcement (see Figure 8). The secondary door south of the main entrance may also have been altered at this time, as it was in its original configuration in 2006.

Figure 8 Gymnasium Lobby Façade



Source: Carey & Co. 2006.

Entry lobby in 2006, prior to the addition of plywood panels.



Source: Page & Turnbull 2017.

Current entry lobby with glazed walls no longer visible.

Although no drawings or other documentation for this work on the main lobby have been located, adding the plywood panels appeared to provide sufficient structural support and DSA allowed the Gymnasium to continue operating. The school facilities staff confirmed that the window framing and remaining glazing of the lobby's curtain walls had not been removed and that the plywood cladding on the interior and exterior is attached to the wood framing. Battens were added to the exterior to cover the plywood seams. Other window openings around the building have plywood covers, typically to cover broken windows.

In 2008, the Gymnasium underwent several additional alterations:

- Roof replaced on main gymnasium and skylight glazing replaced; new heating system added at the roof
- Roof replaced on secondary gymnasium. Linear skylights removed and single skylights installed
- Main gymnasium floor replaced with new wood flooring, and courtside bleachers replaced

Prior Historic Evaluations (2005-2006)

The historic significance of the Jay Willard Gymnasium was previously evaluated in reports by Stillman & Associates (2005) and Carey & Co. (2005 and 2006). In 2005, Stillman & Associates prepared a *CEQA Analysis of Historical Resources and Potential Impacts of Development Project* for the Jay Willard Gymnasium as part of a proposed master plan project for the Eureka High School. The Stillman & Associates report found the Gymnasium to be individually eligible for listing in the National Register, California Register, and the Eureka Local Register for its architecture as one of the few examples of the International Style in Eureka with a good degree of integrity, despite some alterations. It was also found eligible as contributing to the social development of the community as part of Eureka's only high school, for supporting the development of sports in Humboldt County, and as an important component of Eureka's recreation program. The 2005 Stillman & Associates report also found a potentially eligible historic district at the Eureka High School campus of buildings constructed between 1925 and 1950, with the Gymnasium as a likely contributor to the eligible district.

The Gymnasium was also evaluated by Carey & Co. Inc. in 2005 and again in 2006 in their report, *Historic Resource Evaluation, Impacts and Mitigations for Proposed Eureka High School Gymnasium Project*. Rather than a master plan project, the 2006 project was to demolish the existing Gymnasium and build a new one. Only Carey & Co.'s 2006 report was reviewed, which supported its previous 2005 finding that the Gymnasium is eligible for individual listing in the National Register and California Register for its architecture as "an excellent physical expression of the c.1950s education reform movement, as well as an example of the modern architectural movement and International style [sic]—particularly the main entry and lobby." The building was also potentially eligible for its place in the development of the Eureka High School campus and surrounding community, and the association with 1950s education reform (Criterion A/1). The Carey & Co. report found the Gymnasium had sufficient integrity to be an eligible historic resource.

Carey & Co. in 2005 came to a different conclusion than the Stillman & Associates report about a potential historic district at Eureka High School. Carey & Co. did not find a context that supported the significance of a historic district at the campus, especially as not all of the current high school buildings were constructed for the high school. Given their previous finding, the 2006 Carey & Co. report does not evaluate a potential historic district at the high school campus, or the Gymnasium's possible status as a contributor to an eligible district.

It should be noted that both reports were completed prior to the 2008 plywood cladding of the Gymnasium's front lobby volume.

Existing Conditions

A Historical Resources Evaluation Report for this project was prepared in April 2017 (Appendix B) and provides the most recent documentation of existing conditions of the Jay Willard Gymnasium. The gymnasium is a one- and two-story, flat-roofed, concrete-framed building designed in the Late Moderne style with International Style influences. The gymnasium has an asymmetrical composition of three distinct wings with varying roof heights and an irregular floorplan (see Figure 9).

The building is composed of:

- The Main Gymnasium Wing, setback from K Street and housing the main gym space (originally called Boy's Gymnasium)
- The Swimming Pool (or Natatorium) Wing to the southeast, slightly lower in height; and

- The Secondary Gymnasium Wing (originally Girl's Gymnasium) to the southwest, which generally has a low roof height with taller volumes in the northwest and southwest corners. The Secondary Gymnasium Wing extends west from the front of the Main Gymnasium Wing to surround a paved area that was originally a front plaza with raised planters (see Figure 7).

The building walls are painted concrete. Windows are wood framed and are in three configurations: double rows of fixed and awning rectangular windows within a projecting concrete frame; groupings of rectangular or square fixed and awning windows slightly recessed from the surrounding wall plane; and window or curtain wall systems with fixed rectangular glazing in a grid of wood framing. Exterior doors appear to be mainly replacement hollow metal doors with some glazing. Above the main gym space at the Main Gymnasium Wing roof are three linear double-pitched skylights. The Secondary Gymnasium Wing roof has individual square skylights above the locker rooms that replaced original skylights that were similar to those at the main gymnasium.

The lobby volume's façade, and north and south sides were covered with plywood cadding in 2006 (see Figure 8); a set of non-original hollow metal doors are installed at the north side. South of the lobby volume is a smaller, one-story volume with a secondary entrance now centered and composed of a set of paired hollow metal doors with a glazed transom below a metal canopy (see Figure 10); there was originally a glazed window wall and doors at this location.

Figure 9 Gymnasium Wings



Source: Page & Turnbull 2017

The Main Gymnasium Wing, Swimming Pool Wing, and Secondary Gymnasium, looking east.

Figure 10 Gymnasium Secondary Entrance



Source: Carey & Co. 2006

Secondary entry on west facade in 2006.



Source: Page & Turnbull 2017

Current secondary entry, altered in 2006.

Regulatory Setting

Federal

Projects that involve federal funding or permitting (i.e., have a federal nexus) must comply with the provisions of the National Historic Preservation Act of 1966 (NHPA), as amended (16 United States Code [U.S.C.] 470f). The proposed project does not have a federal nexus and, therefore, compliance with reference to the NHPA and other federal laws is provided here for informational purposes only. Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA through one of its implementing regulations, 36 Code of Federal Regulations (CFR) 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. Other relevant federal laws include the Archaeological Data Preservation Act of 1974, American Indian Religious Freedom Act of 1978, Archaeological Resources Protection Act of 1979, and Native American Graves Protection and Repatriation Act of 1989.

National Register of Historic Places

The National Register of Historic Places was established by the NHPA of 1966 as “an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment” (CFR 36 CFR 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. Criteria are provided under Section 4.1.2, *Impact Analysis*.

State

California Register of Historic Resources

The California Register of Historical Resources (CRHR) is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register of Historic Places. Criteria are provided under Section 4.1.2, *Impact Analysis*.

CEQA

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A *historical resource* is a resource listed, or determined to be eligible for listing, in the CRHR; a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

City of Eureka

The City of Eureka initiated a historic preservation program in 1996 through legislative action to adopt the Historic Preservation Ordinance (Eureka Municipal Code, Title 15, Chapter 157). Amended in 2007 and 2012, the Historic Preservation Ordinance established the Local Register of Historic Places (LRHP) to locally designate historical resources. Criteria for LRHP designation are the same as those for listing in the NRHP as outlined above (i.e., criteria A-D) (Eureka Municipal Code, Title 15, Chapter 157.004 (C)(2)). The LRHP includes properties that were identified in the Eureka Heritage Society survey, which was conducted in the 1970s, unless a property owner objected to the listing. New properties can be added to the LRHP if a property meets NRHP eligibility criteria and the owner consents to the listing.

4.1.2 Impact Analysis

Significance Thresholds

CEQA Guidelines

According to Appendix G of the *State CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

1. Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature of paleontological or cultural value

4. Disturb any human remains, including those interred outside of formal cemeteries

In addition, impacts related to tribal cultural resources from the proposed project would be significant if the project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Cod Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe.

A thorough analysis of these issues relating to thresholds 2 through 4 was conducted. No archaeological or paleontological resources or human remains are likely to occur on site. Therefore, impacts were found to be less than significant and the Initial Study has been revised in this EIR to include discussions for these two impact areas; see Appendix A. Therefore, only Cultural Resource threshold 1 will be discussed in this EIR, as well as Tribal Cultural Resource threshold 1. See Appendix A for the Initial Study and the discussion of Cultural Resources thresholds 2 through 4.

Methodology

Historical resources are “significantly” affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior’s Guidelines for the Treatment of Historic Properties with Guidelines *for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior’s Standards *for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* [13 PRC 15064.6 (b)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [13 PRC 15126.4 (b)(3)]. Preservation in place is the preferred form of mitigation for a “historical resource of an archaeological nature” as it retains the relationship between artifact and context, and may avoid conflicts with groups associated with the site [PRC 15126.4 (b)(3)(A)]. Historic resources of an archaeological nature and “unique archaeological resources” can be mitigated to below a level of significance by:

- Relocating construction areas such that the site is avoided;
- Incorporation of sites within parks, greenspace, or other open space;
- “Capping” or covering the site with a layer of chemically stable soil before building; or
- Deeding the site into a permanent conservation easement. [PRC 15126.4 (b)(3)(B)].

If an archaeological resource does not meet either the historical resource or the more specific “unique archaeological resource” definition, impacts do not need to be mitigated [13 PRC 15064.5 (e)]. Where the significance of a site is unknown, it is presumed to be significant for the purpose of the EIR investigation.

Historical Listing Criteria

As stated above, the *State CEQA Guidelines* define a historical resource as a resource listed, or determined to be eligible for listing, in the CRHR; a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]). Consequently, the existing gymnasium would be considered a historic resource if it is eligible for listing in the NRHP, CRHR, or Eureka LRHP. The eligibility criteria for listing under each of these registers are provided below.

National Register of Historic Places

A property is eligible for the NRHP if the resource:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Is associated with the lives of persons significant in our past; or
- C. Embodies the distinctive characteristics of a type, period, or method of installation, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting these criteria, a property must retain historic integrity, which is defined in National Register Bulletin 15 as the “ability of a property to convey its significance” (National Park Service 1990). In order to assess integrity, the National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, which are defined in the following manner in National Register Bulletin 15:

- 1. **Location.** The place where the historic property was constructed or the place where the historic event occurred;
- 2. **Design.** The combination of elements that create the form, plan, space, structure, and style of a property;
- 3. **Setting.** The physical environment of a historic property;
- 4. **Materials** are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- 5. **Workmanship.** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- 6. **Feeling.** A property’s expression of the aesthetic or historic sense of a particular period of time;
- 7. **Association.** The direct link between an important historic event or person and a historic property.

Integrity is a “yes” or “no” determination. A historic property either has adequate integrity, or it does not. To retain historic integrity, a property will often possess several, if not all of the aforementioned aspects. Specific aspects of integrity may also be more important, depending on the criteria for which it is significant. It is important to note that historic integrity is not synonymous

with condition. A building or structure can possess all or many of the seven aspects of integrity, even if the condition of the materials has degraded. Condition comes into consideration when there is a substantial loss of historic material or other character-defining features.

California Register of Historic Resources

California Register criteria are modeled on NRHP criteria. For listing in the CRHR, a property must be eligible under one or more of the following criteria and retain sufficient integrity to convey its significance:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Eureka Local Register of Historic Places

Criteria for LRHP designation are the same as those for listing in the NRHP as outlined above (i.e., criteria A-D).

In the impact analysis below, criteria are referred to by the numbers and letters under the three registers. For example, Criterion A/1/A refers to NRHP Criterion A, CRHR Criterion 1, and Eureka LRHP Criterion A (same as NRHP).

Project Impacts

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|-------------------|---|
| Threshold: | Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. |
|-------------------|---|

Impact CR/TCR-1 THE PROPOSED PROJECT WOULD RECONFIGURE AN EXISTING BUS LANE AND PARKING AREAS AND DEMOLISH THE EXISTING GYMNASIUM ON THE EUREKA HIGH SCHOOL CAMPUS. NO LISTED HISTORIC RESOURCE EXISTS ON THE PROJECT SITE. IN ADDITION, ALTERATIONS TO THE JAY WILLARD GYMNASIUM SINCE ITS OPENING IN 1950, AND IN PARTICULAR, ALTERATIONS TO THE LOBBY WINDOW WALL SINCE 2006, HAVE COMPROMISED THE INTEGRITY OF THE BUILDING'S HISTORIC ELEMENTS. IN ITS CURRENT STATE, THE BUILDING NO LONGER MEETS THE CRITERIA FOR LISTING AS A HISTORICAL RESOURCE IN THE NRHP, CRHP, OR EUREKA LRHP. THEREFORE, THE BUILDING IS NOT CONSIDERED HISTORICALLY SIGNIFICANT UNDER CEQA AND THE DISTRICT DETERMINES THAT ITS DEMOLITION WOULD NOT RESULT IN AN IMPACT TO A HISTORICAL RESOURCE.

Searches of the CHRIS and the Native American Heritage Commission's SLF failed to identify any historical or archaeological resources within the project area (see Appendix B). However, previous historic evaluations of the existing Jay Willard Gymnasium conducted in 2005 and 2006 by Stillman & Associates and Carey & Co., respectively, deemed the building as potentially eligible for listing in the NRHP, CRHR, and/or Eureka LRHP. The reports determined the building as potentially eligible due to its architecture (Criterion C/3/C)—it remains one of the few examples of the International Style in Eureka—and as a contributor to the social development of the community (Criterion A/1/A). The two reports disagreed on their finding as to whether the Gymnasium contributes to a potential

historic district. The Gymnasium opened in 1950 and was designed in a Late Moderne style with elements of the emerging International Style, most notably in the main lobby of the building.

Since the prior historic evaluations were completed, the main lobby curtain wall has been covered in plywood sheathing to provide adequate structural support for the lobby, which is structurally unsound and poses a seismic hazard (Buehler & Buehler 2004); seismic evaluations of the gymnasium have recommended demolition and replacement of the entire entry structure. Additional plywood has been applied along other window walls, primarily to cover broken windows. A new historic evaluation was conducted in April 2017 by Page & Turnbull (contained in full in Appendix B) to re-assess the Jay Willard Gymnasium under current conditions. The following analysis relies on the findings presented in this report.

In its existing condition, the Jay Willard Gymnasium does not appear to be eligible for the National Register of Historic Places, the California Register of Historical Resources, or the Eureka Local Register of Historic Places under Criterion A/1/A, association with important events or development patterns, Criterion B/2/B, association with significant persons, or Criterion C/3/C, architecture (Page & Turnbull 2017). In addition, the gymnasium is not considered a significant contributor to a potential historic district (Page & Turnbull 2017). The Gymnasium's potential eligibility under each criterion is discussed in greater detail below.

Criterion A/1/A (Events)

The Jay Willard Gymnasium at Eureka High School does not appear to be associated with any important events or development patterns in Eureka. It was constructed after World War II as part of several bond measures to build facilities for Eureka City Schools, either as additions to existing schools or as new campuses. Although it was one of the first postwar facilities built, it does not appear to be particularly significant within the school district's building program.

The building was used primarily by the high school to replace an older gymnasium and was not a notable community gathering space beyond its role as a high school sporting space. However, its swimming pool was Eureka's only public pool, and many members of the community apparently used it when it was available. However, Eureka had many recreational facilities used by the public, and the Gymnasium's status as the sole public swimming pool does not appear to be significant within the theme of community recreation in Eureka.

According to National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, to be considered under Criterion A,

A property must be associated with one or more events important in the defined historic context...The events or trends, however, must clearly be important within the associated context...Moreover, the property must have an important association with the event or historic trends, and it must retain historic integrity. (NPS 1995)

While the Gymnasium is well-known to many Eureka citizens who attended Eureka High School, or learned to swim in the swimming pool, the building does not rise to a level of significance to meet Criterion A/1/A. As such, the Gymnasium is not eligible for listing in the National Register, California Register, or Eureka Local Register under Criterion A/1/A.

Criterion B/2/B (Persons)

The Gymnasium is not associated with the lives of persons significant to Eureka that would meet Criterion B/2/B. The Gymnasium was re-named for Jay Willard in 1973, a long-time and successful

football coach at the high school from the 1920s to the 1950s. The re-naming was a tribute after Willard's death in 1973, and the Gymnasium is not associated with Willard during his prominent football coaching career. As such, the Gymnasium is not eligible for listing in the National Register, California Register, or Eureka Local Register under Criterion B/2/B.

Criterion C/3/C (Architecture)

The Jay Willard Gymnasium, as originally designed by architects Masten and Hurd, embodied the distinctive characteristic of the Late Moderne style with elements of the International Style. The building's intersecting volumes of its three wings were characteristic of Late Moderne, as were the projecting concrete frames around horizontal window groupings as the only decoration on some walls. The extensive use of glazed walls in select places—the prominent lobby volume, the rear volume's north façade, and the Swimming Pool Wing's south facade—introduced International Style elements in select areas. Wood framing for the window and curtain walls and for all window framing retained an element of regionalism recognizing Eureka's logging industry and the ready availability of materials.

The building's original design reflected the transition from the various 1930s and 1940s Moderne styles' movement toward modernity, to the more fully modern use of glass, steel, and the International Style in the postwar years. Masten and Hurd designed a similar transitional building at the Fortuna High School gymnasium, though that glazed volume was built with steel framing rather than wood. These two examples represented a clear step toward modern design that would become more common in the 1950s and 1960s in Humboldt County. As such, the Gymnasium's original design would meet Criterion C/3/C for listing in the National Register, California Register, and Eureka Local Register as an unusual example of Late Modern design with International Style elements at the local level. However, alterations to the building have significantly affected the Gymnasium's ability to convey this significance, and it no longer has sufficient integrity to be listed in the National Register, California Register, or Eureka Local Register under Criterion C/3/C.

While the Gymnasium has retained integrity of location, materials, and association, its integrity of setting and workmanship have been compromised due to changes over time and it has lost its integrity of design and feeling associated with its design significance as an example of Late Moderne design with International Style elements. The Gymnasium's design integrity has been severely compromised with the alterations to virtually all of its International Style glazed elements. The most impactful alteration is the addition of plywood sheathing on the interior and exterior of the entry lobby volume that conceals its glazed curtain walls. Without the glazed walls and transparency of the entry lobby, the Gymnasium's International Style design intent is missing. Window wall has also been lost at the front (west) façade's secondary entrance and the infill of the lower row at the Swimming Pool Wing's south glazed wall. The only intact International Style feature is the window wall at the rear north entryway (at the northeast corner).

While the entry lobby's original curtain walls may remain under the sheathing, their lack of visibility significantly affects the building's design integrity. Per National Register Bulletin 15:

Properties eligible under Criteria A, B, and C must not only retain their essential physical features, but the features must be visible enough to convey their significance. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed under modern construction (NPS 1995).

The Gymnasium no longer reads as a transitional building with both Late Moderne and International Style design aspects. Thus, the Gymnasium no longer feels like an example of Late Moderne design

with International Style elements. As compared to when it was first built, the building does not have the same sense of transparency or innovation that distinguished its original design.

Although the Gymnasium's material integrity is intact, the workmanship aspect has been reduced due to the loss of the International Style elements. The curtain walls and window walls represent a change in the application of wood framing members that is now much less visible.

The Gymnasium's setting integrity has also been reduced since its construction. Most notably, the original 1915 Eureka Senior High School building was demolished in the 1960s and the Junior High School building became the high school's main building. The Gymnasium now appears isolated and far from the center of campus. This disconnect is further emphasized by the barren landscape around the Gymnasium, especially at its front where the loss of its raised planters and subsequent surface paving has erased the sense of the original front plaza. Without the front plaza and the original high school building, the Gymnasium's integrity of setting is reduced.

Historic District

The Gymnasium is part of the grouping of buildings on the Eureka High School campus. The campus originally developed around the Eureka Senior High School building (1915, demolished 1963), with the Industrial Education Building (1939) and the Gymnasium (1949) constructed in relationship to the Senior High School Building. The Junior High School at Del Norte and J Streets was a self-contained building that stood apart from the Senior High School grouping. The demolition of the Senior High School Building in the 1960s removed the primary campus building and re-oriented focus to the Junior High School building when it was converted for use as the main high school building in 1963. Constructing the Science Building and Cafeteria Wing in the location of the former Senior High School Building also significantly altered the spatial relationship of the remaining buildings to each other and to the broader campus. The center core of the campus shifted away from J Street and inward towards the interior courtyard, around which most of the remaining buildings are located.

Without the original Senior High School building and the addition of the 1960s buildings, Eureka High School campus does not appear to have a core grouping of buildings that were intended to relate to each other in a cohesive and pre-conceived fashion. As such, the Eureka High School campus does not appear to constitute a potential historic district.

Because the Gymnasium does not appear eligible for listing as a historic resource in its current state, the District has determined that the building is not considered a historic resource. Therefore, the District concludes that demolition of the Gymnasium would not impact a historic resource. No mitigation would be required.

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| Threshold: | Cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21 074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or an object with cultural value to a California Native American tribe. |
|-------------------|---|

Impact CR/TCR-2 THE PROJECT WOULD INVOLVE MINOR GROUND DISTURBANCE DURING PROJECT CONSTRUCTION. HOWEVER, NO TRIBAL RESOURCES HAVE BEEN IDENTIFIED ON THE SITE AND COMMUNICATION WITH THE WIYOT, BLUE LAKE, AND BEAR RIVER TRIBES HAVE NOT REVEALED ANY FURTHER INFORMATION REGARDING CULTURAL RESOURCES ON THE SITE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would involve minor ground disturbance in a developed site on an existing high school campus. The deepest cut anticipated for construction would be 24 inches; trenching for the sewer line would extend to a depth of approximately 48 to 60 inches at its deepest point. No tribal cultural resources have been identified on the site. Searches of the California Historical Resources Information System and the Native American Heritage Commission's Sacred Lands File (SLF) failed to identify any archaeological resources within the project area, including tribal cultural resources. In addition, the Wiyot tribe was notified of the project and contacted for consultation as part of AB 52, and the Blue Lake, Cher-Ae Heights, and Bear River Band tribes were also notified of the project and solicited for information regarding tribal cultural resources on the site as part of the SLF process (see Appendix B). Information regarding the depth of ground disturbance was provided to the Wiyot Cultural Director during the IS-NOP public comment period in response to his email (see Appendix A), but further consultation was not pursued by the Wiyot tribe and no new information was provided by the Wiyot tribe regarding tribal resources on the site.

In the unlikely event that tribal cultural resources are unearthed during construction, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code, which requires the lead agency to mitigate significant effects of the project on unique archaeological resources. Part of this mitigation would include notifying the Blue Lake, Bear River, and Wiyot tribal historic preservation officers if any prehistoric artifacts or deposits are encountered. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. Therefore, the project's impact to tribal cultural resources would be less than significant and no mitigation is required.

4.1.3 Cumulative Impacts

In terms of historical resources, the analysis of cumulative impacts relates to whether impacts of the project and future related projects, considered together, might substantially impact and/or diminish the number of similar historic resources, in terms of context or property type. The project would not impact historical resources in the project site or vicinity. Therefore, it would not contribute to cumulative impacts to historical resources. Similarly, the project would not impact tribal cultural resources; therefore, it would not contribute to cumulative impacts to these resources.

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5 Other CEQA Required Discussions

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the project.

5.1 Growth Inducing Effects

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population and Economic Growth

Population

The proposed project would involve the reconfiguration of an existing bus lane and parking areas, demolition of an existing gym, and construction of a replacement gym of approximately the same size and the same intended uses as the existing gym. It would not provide new residences or increase school capacity and therefore would not contribute to an increase in the student population or number of school staff.

Economic

The project would generate temporary employment opportunities during construction, which would be expected to draw workers from the existing regional work force. Therefore, construction of the project would not be considered growth inducing from a temporary employment standpoint.

The proposed project does not involve any commercial uses that would generate permanent employment opportunities and would be replacing an existing gym. It would facilitate the continuation of existing staff positions, but would not result in new positions. Therefore, the proposed project would not be growth-inducing with respect to jobs and the economy.

5.2 Removal of Obstacles to Growth

The project site is located in a fully urbanized area that is served by existing infrastructure. As discussed in Section 17, Utilities and Service Systems, and 9, Hydrology and Water Quality, of the Initial Study (see Appendix A), existing water supply and utilities would be adequate to serve the proposed project. The proposed project does not require capacity-increasing transportation or circulation improvements. Because the project involves the replacement of an existing school facility within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.3 Energy Effects

The *CEQA Guidelines* Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

The proposed project would involve the use of energy during construction and operation. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems.

Electricity and gas service for the proposed project would be provided by PG&E. PG&E's power mix in 2015 consisted of approximately 30 percent renewable energy sources (wind, geothermal, solar, small hydroelectric, and biomass (PG&E 2016).

California used 295,405 gigawatt-hours (GWh) of electricity in 2015 (California Energy Commission [CEC] 2017) and 2,313 billion cubic feet of natural gas in 2014 (CEC 2016a). Californians presently consume over 18 billion gallons of motor vehicle fuels per year (CEC 2016b).

The proposed project's estimated energy usage, calculated using CalEEMod and shown in the CalEEMod output files in Appendix B of the Initial Study (see Appendix A of the EIR), is summarized and compared to state-wide usage in Table 4. As shown in Table 4, the proposed project would make a minimal contribution to state-wide energy consumption in these categories.

Table 4 Estimated Project-Related Energy Usage Compared to State-Wide Energy Usage

| Form of Energy | Units | Annual Project-Related Energy Use | Annual State-Wide Energy Use | Project % of State-Wide Energy Use |
|----------------|----------------|-----------------------------------|------------------------------|------------------------------------|
| Electricity | megawatt hours | 174.75 ¹ | 295,405,000 ² | <0.00001% |
| Natural Gas | billion BTU | 0.14 ¹ | 2,313,000 ³ | <0.00001% |

¹ CalEEMod output provided in the Air Quality Analysis (see Appendix B of the Initial Study [Appendix A] for calculation results)

² CEC 2017

³ CEC 2016a

The proposed project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the 2016 California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of

energy efficiency measures. The California Green Building Standards Code sets targets for: energy efficiency, water consumption, dual plumbing systems for potable and recyclable water, diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. Adherence to Title 24 energy conservation requirements would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner.

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6 Alternatives

As required by Section 15126.6 of the CEQA Guidelines, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of its basic objectives (stated in Section 2.5 of this EIR), but avoid or substantially lessen any of its significant effects.

The key objectives of the project are to:

1. Provide a gymnasium on the campus of Eureka High School that can be used by the student population for physical education courses and sports events
2. Provide a gymnasium with a similar amount of usable play area (i.e., basketball court, wrestling room, weight room) as the existing gymnasium, but without a swimming pool
3. Provide a gymnasium for Eureka High School that is structurally sound, and also meets current seismic code standards and ADA accessibility requirements
4. Provide a school bus loading area on campus with safe pedestrian access for students
5. Provide parking areas to serve the gymnasium and provide additional parking during school events

The following discussion analyzes three alternatives to the proposed project, including the CEQA-required “no project” alternative. This section also identifies the Environmentally Superior Alternative.

The following alternatives are evaluated in this EIR:

- Alternative 1: No project
- Alternative 2: Renovation of existing Jay Willard Gymnasium
- Alternative 3: Adaptive reuse of the existing gymnasium and construction of a new gymnasium

6.1 No Project Alternative

Description

This alternative assumes that the existing gym would not be demolished and the replacement gym would not be constructed. The area proposed for the replacement gymnasium would continue in its current condition as a paved surface lot and the existing gymnasium would continue to serve Eureka High School as the campus venue for physical education classes and school sporting events.

Impact Analysis

Cultural Resources and Tribal Cultural Resources

This alternative would not require demolition of the existing gymnasium. Therefore, like the proposed project, this alternative would not result in an impact to a historic resource or an identified tribal cultural resource. However, without improvements, the gymnasium would continue to deteriorate over time.

Other Impact Areas

This alternative would not require mitigation of any noise impacts or transportation impacts that would occur under the proposed project, as there would be no construction or demolition activities. However, without improvements, the gymnasium would continue to pose a life safety hazard and would expose users of the gymnasium to higher risk levels of life safety hazard over time due to further degradation of the building's structural integrity.

This alternative would not provide the campus with a gymnasium that meets seismic code standards, and therefore, would not fulfill one of the key objectives of this project. A Facility Hardship Study and FEMA-310 Evaluation (i.e., seismic evaluation) of facilities at the Eureka High School were prepared by Buehler & Buehler Structural Engineers, Inc. in February 2003 and January 2004, respectively. The documents identify a number of structural deficiencies in the Gymnasium, including inadequate shear reinforcement of beams in the main gymnasium, inadequate design of the roof area over the girl's locker room, and deterioration of the entry foyer and an absence of lateral-resisting systems at its front and sides. In August 2016, the District prepared an Eligibility Evaluation Report that was submitted to the Division of the State Architect (DSA) to determine the Gymnasium's eligibility for Seismic Mitigation Program funding. The report confirmed the presence of conditions that represent "a high potential for catastrophic collapse." Therefore, the no project alternative would introduce a new potentially significant environmental impact, as it would expose people and structures to potentially substantial adverse effects involving strong seismic ground shaking (CEQA Appendix G, Geology and Soils(a)(2)). This alternative would have no other impacts.

6.2 Renovation of Existing Jay Willard Gymnasium

Description

This alternative assumes that the replacement gym would not be constructed and the existing gym would not be demolished. Instead, the existing gymnasium would be renovated to meet all the project objectives, including ADA compliance, structural soundness, and compliance with seismic code. The site of the proposed replacement gymnasium would continue in its current condition as a paved surface lot and the bus lane and parking areas associated with the gymnasium would not change relative to existing conditions.

Renovation of the existing gymnasium would still require the demolition of the existing entry and lobby, which has been deemed structurally unsafe. However, the new entry and lobby would be designed to be compatible with the historic materials, features, size, scale and proportion, and massing of the building, would incorporate International-style elements, and would comply with the Secretary of the Interior's Standards for Rehabilitation. A Historical Architect meeting the Secretary of Interior's Standards (as defined in CFR, Title 36, Part 61) would review the project during the planning, design, and implementation of this project element. In addition, the existing entry and lobby would be professionally photo-documented prior to their demolition. A Historical Architect would be consulted to ensure the proper execution of this recommended photo-documentation process.

Additional modifications to the building would be required to seismically retrofit the building and provide ADA accessibility features, such as anchoring of the unreinforced chimney at the east corner of the building, strengthening of existing shear walls, beams and stress points at the roof, widening of building entryways, and installation of an elevator. These improvements would be completed in accordance with the Secretary of the Interior's Standards for Rehabilitation.

Impact Analysis

Cultural Resources and Tribal Cultural Resources

This alternative would retain the existing gymnasium and also complete necessary seismic improvements in a manner that would preserve the building's historic elements and potentially restore its historic integrity through reconstruction of the existing entry and lobby. Therefore, although the proposed project would not result in an impact to a historic resource, this alternative would result in a beneficial impact to historic resources as it may improve the integrity of the existing gymnasium such that the structure could be considered eligible for listing as a historic resource.

Other Impact Areas

Under this alternative, noise impacts and impacts to emergency access during construction would be less than under the proposed project because demolition of the entire gymnasium would not occur and the existing bus lane would not need to be reconfigured. Impacts to other resource areas would be similar to the proposed project.

6.3 Adaptive Reuse of the Existing Gymnasium and Construction of a New Gymnasium

Description

This alternative considers adaptive reuse of the existing gymnasium as a community center, or other community resource, that would no longer be used by Eureka High School for school functions. A new gymnasium would be constructed to serve the needs of Eureka High School. This scenario would require a re-design of the bus lane and parking areas relative to current and proposed conditions. No existing buildings would be altered or demolished.

Impact Analysis

Cultural Resources and Tribal Cultural Resources

This alternative would retain the existing gymnasium building. Therefore, like the proposed project, this alternative would not result in an impact to a historic resource or an identified tribal cultural resource. However, as described under the no project alternative, without improvements, the building would continue to deteriorate.

Other Impact Areas

This alternative would retain the existing gymnasium building. However, as described under the no project alternative, without improvements, the building would continue to deteriorate, increasing risk levels of life safety hazard over time. Thus, this alternative would introduce a new potentially significant impact geological impact relative to the proposed project.

This alternative would not involve demolition of the existing gymnasium. Thus, noise impacts from demolition of the existing gymnasium building would not occur. Nevertheless, the same noise mitigation to prevent impacts to noise-sensitive receptors—in particular, students—would still need to be incorporated. Construction of the new gymnasium and parking areas would still result in a substantial temporary increase in ambient noise levels. Reconfiguration of the bus lane and

construction of pedestrian walkways would likely still occur to accommodate the new gymnasium building and would occur in close proximity to classrooms, requiring mitigation measures to prevent significant noise impacts to students.

This alternative would potentially result in new transportation/ traffic impacts relative to the proposed project due to increased trips to the site and reduced parking spaces. The proposed project is not expected to generate new trips as it would not alter the existing use of the site as a gymnasium with parking areas. However, adaptive reuse would introduce a new use (e.g., a community center) that would generate new trips to the project site, in addition to maintaining the existing use. Furthermore, under this alternative, the area of the existing gymnasium, which would provide 133 parking spaces under the proposed project, would not be available as an augmented parking area. These spaces would need to be developed on-site (potentially in the area of the site along Trinity Street) or elsewhere on campus, or be replaced with off-site parking along streets near the campus. This may result in an increase in traffic and roadway noise at nearby residences. Impacts to other resource areas would be similar to the proposed project.

6.4 Environmentally Superior Alternative

The environmental analysis contained in this EIR determined that the project would result in no significant impacts to historical resources or tribal cultural resources. The Initial Study determined that the project would result in less than significant noise and transportation impacts, with mitigation incorporated, and determined that the project would not result in a significant impact to the other issue areas on the CEQA checklist. Each of the alternatives considered above would reduce the project's identified noise impacts and allow the existing gymnasium building to be retained.

However, the Renovation Alternative would be the environmentally superior alternative of those considered as it would reduce the project's noise and transportation impacts, improve the integrity of the existing gymnasium such that the structure could be considered a historic resource, and would meet all of the project objectives. Therefore, from an environmental standpoint, this alternative would be environmentally superior.

Please note that the proposed project would not have any significant impacts; therefore, adopting Alternative 2, the Renovation Alternative rather than the proposed project would not reduce the level of significant environmental effects as compared to the proposed project.

7 References

7.1 Bibliography

- Bancroft, Hubert Howe. 1885. *History of California*. The History Company, San Francisco, California.
- Buckley, James M. 1997. A Factory without a Roof: The Company Town in the Redwood Lumber Industry. *Perspectives in Vernacular Architecture 7 (Exploring Everyday Landscapes)*: pp. 75-92.
- Buehler & Buehler Structural Engineers, Inc. 2003. *Eureka High School, Facility Hardship Study*. February 20, 2003.
- _____. 2004. *Eureka City School District FEMA-310 Evaluation*, Eureka High School. Eureka, CA. January 16, 2004.
- California Energy Commission (CEC). 2016b. Diesel Fuel Data, Facts, and Statistics. http://www.energy.ca.gov/almanac/transportation_data/diesel.html. (accessed April 2017).
- California Energy Commission (CEC). 2017. *California Energy Almanac: 2015 Total Electricity System Power*. http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. (accessed April 2017).
- Carey & Co, Inc. Architecture. 2006. *Historic Resource Evaluation Impacts and Mitigations, For Proposed Eureka High School Gymnasium Project*. Eureka, CA. February 17, 2006.
- Dallas, S. F. 1955. *The Hide and Tallow Trade in Alta California 1822–1848*. Unpublished Ph.D. dissertation, Indiana University, Bloomington.
- Elsasser, A.B. 1978. Wiyot. In: *Handbook of North American Indians, Volume 8: California*, edited by R.F. Heizer, pp. 155-163. Smithsonian Institution, Washington, D.C.
- Eureka, City of. 2017. *CEQA Documents*. http://www.ci.eureka.ca.gov/depts/development_services/cd/ceqa_documents.asp. (accessed April 2017).
- Fredrickson, D.A. 1984. The North Coastal Region. In *California Archaeology*, edited by M.J. Moratto, pp. 471-528. Academic Press, Orlando.
- Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Johns Hopkins University Press, Baltimore.
- Heald, Leslie, Susanne Guerra and Alex Stillman. 2004. *City of Eureka Historic Preservation Element*. Prepared for the City of Eureka.
- Heizer, R.F. and A.F. Almquist. 1971. *The Other Californians: Prejudice and Discrimination under Spain, Mexico, and the United States to 1920*. University of California Press, Berkeley.
- Heizer, R.F. and A.B. Elsasser. 1964. Archaeology of Hum-67, the Gunther Island site in Humboldt Bay, California. *University of California Archaeological Survey Reports* 62:1-122.

- Hildebrandt, W.R. 1981. Native Hunting Adaptations on the North Coast of California. Unpublished PhD. Dissertation, University of California, Davis.
- _____. 2007. Northwest California: Ancient Lifeways among Forested Mountains, Flowing Rivers, and Rocky Ocean Shores. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 83-98. AltaMira Press, Lanham, MD.
- Hoover, Mildred B., Hero E. Rensch, Ethel G. Rensch, and William N. Abeloe. 2002. *Historic Spots in California*. Fifth Edition, revised by Douglas E. Kyle. Stanford University Press, Stanford.
- Hughes, R.E. 1978. Aspects of prehistoric Wiyot exchange and social ranking. *The Journal of California Anthropology* 5(1):53-66.
- Irvine, Leah. 1915. *History of Humboldt County California*. Historic Record Co., Los Angeles, CA.
- Kroeber, Alfred J. 1925. *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.
- Loud, L.L. 1918. Ethnogeography and archaeology of the Wiyot territory. *University of California Publications in American Archaeology and Ethnology* 14(3):221-437, Berkeley.
- National Park Service, National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation, (Washington D.C.: National Park Service, 1995), 12.
- Office of Planning and Research. 2017. CEQAnet Database. Query completed April 25, 2017. <http://www.ceqanet.ca.gov/QueryForm.asp>.
- Pacific Gas & Electric. 2016. Exploring Clean Energy Solutions. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page. (accessed April 2017).
- Page & Turnbull. 2017. Jay Willard Gymnasium, Eureka High School, Historic Resources Evaluation. Prepared for Eureka City Schools. Eureka, CA. April 2017.
- Palais, Hyman and Earl Roberts. 1950. The History of the Lumber Industry in Humboldt County. *Pacific Historical Review* 19(1): 1-16.
- Rincon Consultants, Inc. 2016. California Historical Resources Information System (CHRIS) database query. NWIC File No.: 16-0750. November 28, 2016.
- Stillman & Associates. 2005. CEQA Analysis of Historical Resources and Potential Impacts of Development Project, Jay Willard Gymnasium. Prepared for 3D/International. Eureka, CA. March 29, 2005.
- Van Kirk, Susie. 1999. *Humboldt County: A Briefest of Histories*. Prepared for the Shades of Humboldt Project. <http://www.humboldthistory.org/bHumboldtHistory.html>. (accessed April 2017).

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Appendix A

Initial Study/Notice of Preparation and Comments



Jay Willard Gymnasium Replacement Project

Initial Study

prepared by
Eureka City Schools
2100 J Street
Eureka, California 95501

prepared with the assistance of
Rincon Consultants
4825 J Street, Suite 200
Sacramento, California 95816

Jay Willard Gymnasium Replacement Project

Initial Study

prepared by
Eureka City Schools
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Eureka, California 95501

prepared with the assistance of
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4825 J Street, Suite 200
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Initial Study

1 Project Title

Jay Willard Gymnasium Replacement Project

2 Lead Agency Name and Address

Eureka City Schools
2100 J Street
Eureka, California 95501

3 Contact Person and Phone Number

Fred Van Vleck, Ed. D., Superintendent, Eureka City Schools
(707) 441-2414

4 Project Sponsor's Name and Address

Eureka City Schools
2100 J Street
Eureka, California 95501

5 Project Location

The project site consists of an approximately 3.8-acre area located on the campus of Eureka High School at 1915 J Street in the City of Eureka in Humboldt County, California. The project site lies in the southern portion of campus and is bounded by Trinity Street and existing tennis courts to the south, the school cafeteria, an existing classroom building, and parking lot to the north, J Street to the west, and vegetation to the east. The Assessor Parcel Number (APN) for Eureka High School, including the project site, is 011-131-005. Figure 1 shows the regional location of the project site and Figure 2 shows the project location in its neighborhood context.

6 Existing Setting

The project site currently encompasses three distinct campus areas (see Figure 2):

- 1) **Existing gym and surrounding paved surface lot.** This area is located north of the school tennis courts and south of a school classroom building and is bound by K Street to the west and vegetation to the east. The paved surface lot surrounding the existing Jay Willard Gymnasium provides parking for gymnasium use and sports events.
- 2) **Block west of the existing gym.** This block is bounded by Humboldt Street and Trinity Street to the north and south, and J Street and K Street to the west and east. This area is currently a painted paved lot used for recreation that also provides parking for gymnasium use and sports events. The only existing structures on this block consist of a bungalow in the southeast corner that is used as a classroom, and a large storage bin in the southwest corner. The bungalow

classroom would be retained and the replacement gym would be built to the north of the classroom.

- 3) **Bus lane.** The bus lane runs north along K Street and west along Humboldt Street, and exits onto J Street. School buses utilize this area for student drop off and pick up; eight buses drop off in the morning and nine buses pick up in the afternoon. The bus lane also provides vehicle access to parking on the surface lots adjacent to K Street. The bus lane is a private road owned by Eureka City Schools.

The existing gymnasium is a 40,075-square-foot (sf) structure that occupies about one acre on a paved surface lot. The gymnasium is a one-story, flat-roofed, concrete-framed building with three distinct wings that was first constructed in 1948. The Main Gymnasium Wing is the northernmost wing and contains the main gymnasium space with basketball courts and seating; it is the largest volume of the building with a height of approximately 36 feet. This portion of the gymnasium is set back from K Street and has parking spaces in front. The Swimming Pool Wing lies to the southeast and is slightly lower in height. It contains a swimming pool that has been permanently drained and closed since 2009, as well as the girls' locker rooms. The Secondary Gymnasium Wing lies to the southwest of the main wing and abuts K Street. It includes a second gymnasium space and weight room. Figure 3 shows photos of the project site and gymnasium interior.

7 Surrounding Land Uses and Setting

The project site is directly adjacent to other school facilities and residences. To the west across J Street lie the Eureka City Schools District Office and Eureka Adult School. To the north across Humboldt Street is the main campus area of Eureka High School and to the northeast is a track and field facility surrounded by vegetation. To the south across Trinity Street and between J and K Street are one-story and two-story single-family residences, and directly south of the existing gymnasium are tennis courts; more one-story and two-story single-family residences lie south of the tennis courts. The surrounding areas are residential with primarily one-story and two-story single family houses. Figure 4 shows photos of the surrounding area.

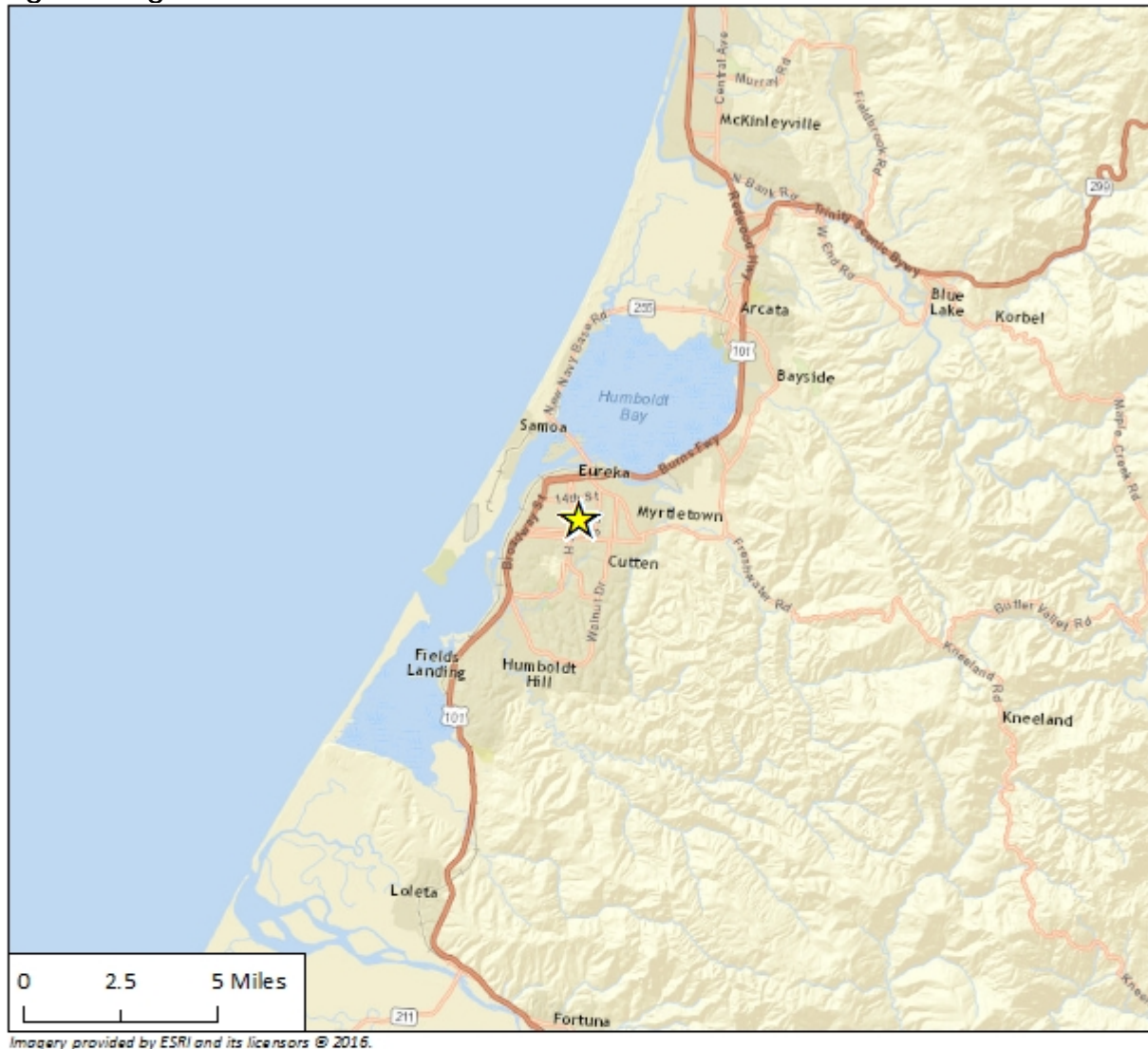
8 General Plan Designation

The project site is designated for Public/Quasi-Public (PQP) land use in the City of Eureka General Plan.

9 Zoning

The project site is zoned by the City of Eureka as a Public District (P) (Municipal Code, Sec. 10-5.107).

Figure 1 Regional Location



★ Project Location



Fig. 1 Regional Location

Figure 2 Project Location



Imagery provided by Google and its licensors © 2016.

Fig 2 Project Location

Figure 3 Site Photos



Photo 1: View looking east across J Street to the site of the replacement gym and existing Jay Willard Gymnasium.



Photo 2: View looking southeast across J Street to the site of the replacement gym, existing Jay Willard Gymnasium, and adjacent residences.



Photo 3: View looking east to the Jay Willard Gymnasium's main gymnasium wing, swimming pool wing, and secondary gymnasium wing.

Source: FF & J Architects, Inc. 2016. Eureka High School Gymnasium, Preliminary Historic Assessment & Code Analysis. Prepared by Page & Turnbull. July 12, 2016.



Photo 4: View looking northeast across K Street to the west façade of the secondary gymnasium wing.

Figure 4 Jay Willard Gymnasium Photos



Photo 5: Main gymnasium wing interior, view looking east.



Photo 6: Lobby opening to the main gymnasium and secondary gymnasium and swimming pool wings, view looking south.

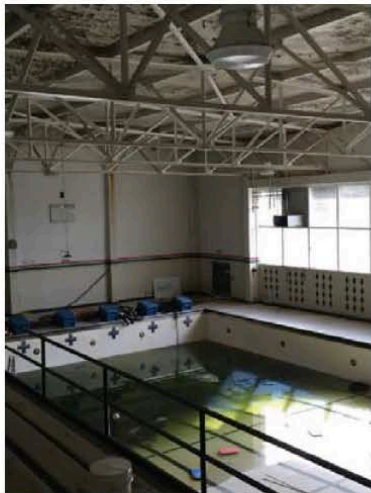


Photo 7: Swimming pool as viewed from the balcony, view looking southeast.

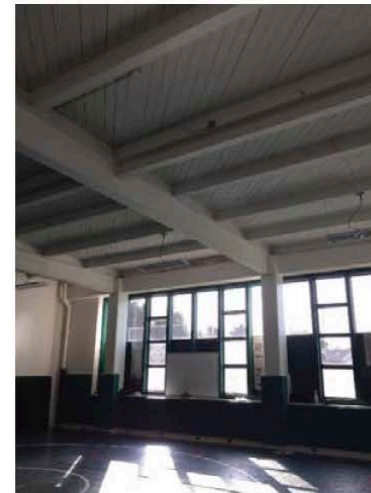
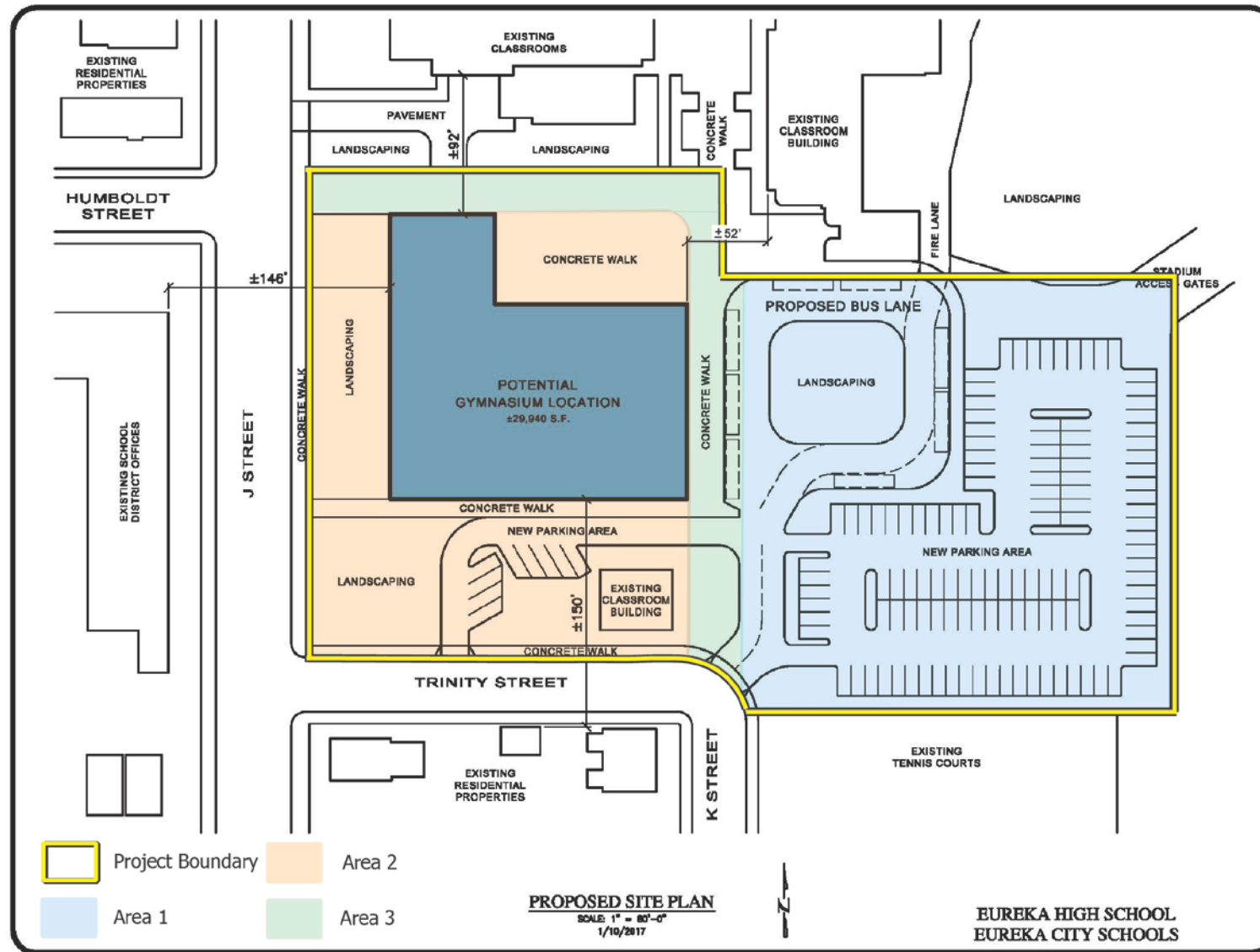


Photo 8: Weight room in the secondary gymnasium wing, view looking south.

Source: FF & J Architects, Inc. 2016. Eureka High School Gymnasium, Preliminary Historic Assessment & Code Analysis. Prepared by Page & Turnbull. July 12, 2016.

Figure 5 Proposed Site Plan



10 Description of Project

Eureka City Schools is proposing to construct a replacement gymnasium on the Eureka High School campus to address concerns regarding the aging state of the existing Jay Willard Gymnasium. The existing gymnasium was constructed in 1948 and retains its 70-year old plumbing system and outdated electrical system breaker boxes. It does not meet current state standards for earthquake safety or American with Disabilities Act (ADA) accessibility requirements.

The proposed project would replace and modernize an existing school gymnasium, as well as reconfigure an existing bus lane and parking areas on the project site to accommodate the new gymnasium and facilitate safe student access. The replacement gymnasium would be smaller in size than the existing facility—approximately 29,940 sf, rather than 40,075 sf—and would be sited to the west of the existing gymnasium. To facilitate safe student access, the existing bus lane would be replaced with a concrete walkway and the bus lane would be rerouted to loop in the area that currently contains the paved surface lot adjacent to the existing gymnasium, as shown in the proposed site plan (Figure 5). The following changes would occur at each of the three campus areas in the project site identified above (see Figure 5):

- 1) **Existing gym and surrounding paved surface lot.** The existing gym would be demolished and paved over to provide a new parking area that would provide 133 spaces for gymnasium use and sports events, including events at the adjacent track and field facility. This would essentially replace existing parking located in front of the existing gymnasium and in the block to the west. Much of the area that is currently a paved surface lot would be transformed into a bus lane that would loop around a landscape element. Vehicles would access the new parking area and the bus loop via a driveway at the intersection of K Street and Trinity Street along the southern border of the project site, which would serve as both entry and exit. The driveway would provide two access points to the new parking area to the east and an access point to a new parking area to the west (described below) before merging into the bus loop. The proposed bus lane would provide access to the existing fire lane north of the project site (see Figure 5).
- 2) **Block west of the existing gym.** The existing bungalow classroom would be retained and a small new parking area would be painted directly to the north and west of the classroom that would provide nine parking spaces. The new parking area would be accessed off the driveway at the intersection of K Street and Trinity Street or directly from Trinity Street to the west of the classroom. The replacement gymnasium would be constructed to the north of the new parking area, with a concrete walk dividing the two. A concrete walk would also run along the east and north faces of the proposed gymnasium, providing vehicle-free pedestrian access between classroom uses, existing campus walkways, the gymnasium, and the bus loop.
- 3) **Bus lane.** The bus lane would be removed and the area integrated into the other uses on the project described above (i.e., concrete walkways, driveway, and bus loop).

Construction

The construction timeframe for the proposed project has not yet been determined. For the purpose of this analysis, it is assumed that construction would occur over about 13 months based on emission model defaults (see Section 3, Air Quality) and would involve:

- site preparation and grading at the replacement gymnasium site,
- building construction of the replacement gymnasium and paving of new parking areas,

- reconfiguration of the bus lane and construction of new concrete walkways, and
- demolition of the existing gymnasium.

11 Required Approvals

The project would require approval by the Eureka City Schools Board of Education, as well as the Office of Public School Construction (OPSC) and Division of the State Architect, both under the California Department of General Services. No other permits or approvals would be required at this time.

12 Other Public Agencies Whose Approval is Required

Eureka City Schools is the lead agency with responsibility for approving the proposed project. In addition, the following additional approvals would be required by the Department of Education, School Facilities & Transportation Services Planning Division:

- Preliminary and Final Plan Approval
- Allocation of Construction Funding

13 California Native American Tribe Consultation

Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation. Tribal consultation for the proposed project has been initiated in November 2016. The Wiyot tribe has requested consultation with Eureka City Schools and has been contacted for consultation.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use/ Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation / Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☒ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Substantial adverse effect on a scenic vista | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a state scenic highway | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. Would the project have a substantial adverse effect on a scenic vista?

The project site is located on the southern end of the Eureka High School campus and approximately 1.3 miles south of the ocean. The Land Use and Community Design section of the City of Eureka General Plan establishes a goal of maintaining and expanding views of the waterfront, inner harbor, and landmark buildings from public streets and other public spaces (Goal 1.H). The project site does not lie in a view corridor to any of these scenic features. Therefore, no scenic vistas would be viewed from the project site or would be obstructed by the proposed project. There would be no impact to scenic vistas.

NO IMPACT

b. *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings in a state scenic highway?*

The project site is located nearly a mile from U.S. Highway (US) 101 and State Route (SR) 255. Neither highway is designated a state scenic highway in Humboldt County and the project would not affect any trees, rock outcroppings, historic buildings, or other identified scenic resources that would be visible from a scenic highway. No impact would occur and further analysis in an EIR is not warranted.

NO IMPACT

c. *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

The project would involve the demolition of an existing gymnasium, construction of a new gymnasium, creation of new parking areas and new concrete walkways, and rerouting of a bus lane in an area of the

Eureka High School campus that currently includes a gymnasium, parking areas, and a bus lane. Consequently, the proposed project would primarily reconfigure existing elements on the project site with a few minor additions consisting of concrete walkways around the north, east, and south of the new gymnasium and a landscape element (likely mowed grass) at the center of the proposed bus loop. There would be no substantial change in the overall visual character of the site. Rather, the building massing in this portion of the campus would be shifted and result in similar overall visual effects. Impacts would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The proposed project would replace an existing gymnasium with a new gymnasium. The replacement gymnasium would be smaller in size than the existing gymnasium and would be used for physical education instruction, sporting events, and other group congregate events in the same manner as the existing gymnasium. The new gymnasium would be used for indoor activities and would not result in substantial light or glare impacts to adjacent residences located to the south across Trinity Street or to the northwest across Humboldt Street. Consequently, the proposed project would not result in a net increase of light or glare related to gymnasium use.

The proposed project would replace existing parking areas on the project site with new parking areas. As the new parking areas would replace existing parking areas on the project site and serve the same purpose (i.e., provide parking for gymnasium users and sports event attendees), they would not increase vehicle traffic to the project site that could create additional light and glare sources.

In addition, the proposed project would reroute the existing bus lane that currently runs in one direction north along K Street, west along Humboldt Street, and exits onto J Street. The reconfigured bus lane would change the exit route of buses and vehicles accessing the bus pick-up and drop-off areas and adjacent parking areas as the proposed project would require buses and vehicles to exit onto K Street or Trinity Street, rather than onto J Street. However, the level of bus traffic associated with the existing bus lane is minimal—eight school buses drop off students in the morning and nine buses pick up students in the afternoon—and would be limited to specific hours corresponding to the start and end of the school day. In addition, personal vehicle traffic that would require access to the proposed driveway and new parking areas would primarily be generated by sports events. Sports events, such as basketball games, typically occur only once or twice a week in the evenings during the school year (Eureka City Schools 2016). Therefore, vehicle traffic associated with the proposed project would not contribute new sources of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land. This includes the Forest and Range Assessment Project and the Forest Legacy Assessment Project, along with the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section*

4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

The project site is not located in or near any designated farmland, agricultural zones or forest lands, as specified in the Land Use and Community Design Element of the General Plan (Eureka 1997). Additionally, no agricultural or forest land resources are present on the project site, as it is part of a fully developed high school campus. The proposed project would have no impact upon agricultural or forest resources and further analysis in an EIR is not warranted.

NO IMPACT

3 Air Quality

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Expose sensitive receptors to substantial pollutant concentrations | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Create objectionable odors affecting a substantial number of people | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The project site is within the North Coast Air Basin (the Basin) under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). As the local air quality management agency, the NCUAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Basin is classified as being in "attainment" or "nonattainment." The health effects associated with criteria pollutants upon which attainment of state and federal air quality standards is measured are described in Table 1.

The Basin is designated as non-attainment for the state 24-hour PM₁₀ standard (NCUAQMD 2016a). Humboldt County's climate, pollution-trapping mountains and valleys, and growing population, all contribute to the non-attainment status for PM₁₀ (HCAOG 2014). The primary sources of particulate matter in the Eureka area are exhaust and dust generated from on-road and off-road vehicles, open burning of vegetation, residential wood stoves, and stationary industrial sources (NCUAQMD 2016). The NCUAQMD prepared an Attainment Plan in 1995 to assess the sources of air pollution, determine reduction targets, and identify control strategies to achieve attainment with state standards. Control strategies identified by the study include transportation control measures (public transit, ridesharing, vehicle buy-back program, traffic flow improvements, bicycle incentives, etc.), land use measures to reduce reliance on automobiles, and open burning measures (NCUAQMD 1995). This document was not a required component of District attainment efforts and was prepared solely to inform NCUAQMD.

Table 1 Health Effects Associated with Criteria Pollutants

| Pollutant | Adverse Effects |
|---|---|
| Ozone | (1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage. |
| Carbon monoxide (CO) | Reduces oxygen delivery leading to: (1) Aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses. |
| Nitrogen dioxide (NO ₂) | (1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration. |
| Sulfur dioxide (SO ₂) | (1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma. |
| Suspended particulate matter (PM ₁₀) | (1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹ |
| Suspended particulate matter (PM _{2.5}) | (1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ¹ |

Source: U.S. EPA 2016

1. More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and EPA, Air Quality Criteria for Particulate Matter, October 2004.

The NCUAQMD has not formally adopted significance thresholds to guide CEQA significance determinations for land development projects (NCUAQMD 2016b). Instead, the District uses the Best Available Control Technology (BACT) emission rates for stationary sources as defined in the NCUAQMD Rule 110 and listed in Table 2 as significance thresholds. For the purpose of this analysis, air quality emissions are considered to have a significant individual and cumulative impact if they exceed the District's significance thresholds for BACT adoption.

Table 2 NCUAQMD Significance Thresholds for BACT Adoption

| Pollutant | Mass Daily Thresholds | |
|-------------------------------------|-----------------------|-----------------------|
| | Daily (pounds/day) | Annual (tons/year) |
| CO | 500 | 100 |
| Fluorides | 15 | 2 |
| Hydrogen sulfide (H ₂ S) | 50 | 10 |
| Lead | 3.2 | 0.6 |
| Nitrogen Oxides (NO _x) | 50 | 40 |
| PM ₁₀ | 80 | 15 |
| PM _{2.5} | 50 | 10 |
| Reactive Organic Compounds (ROC) | 50 | 40 |
| Reduced Sulfur Compounds | 50 | 10 |
| Sulfur Oxides | 80 | 40 |
| Sulfuric Acid Mist | 35 | 7 |
| Total Reduced Sulfur Compounds | 50 | 10 |

Source: Rule 110, NCUAQMD 2015

1. Reactive Organic Compounds (ROC) are formed during combustion and evaporation of organic solvents. ROCs are also referred to as Reactive Organic Gases (ROG) and Volatile Organic Compounds (VOC).

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project may be inconsistent with an applicable air quality plan if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the plan. The proposed project would not increase the population because it does not include residential uses, nor would it generate employment growth as it would replace an existing gymnasium and not increase school capacity. Therefore, no impact would occur.

NO IMPACT

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Because the proposed replacement gymnasium would have the same uses as the existing gymnasium, serve the same student population, and generate approximately the same number of vehicle trips, the proposed project would not result in any net new operational emissions. In fact, the new gymnasium

would likely result in lower operational emissions due to energy and water use efficiency improvements required by current building standards. The existing gymnasium was first constructed over sixty years ago in 1948. In addition, the new gymnasium would be about 25 percent smaller in size than the existing gymnasium (29,940 sf rather than 40,075 sf) and would not include an indoor pool, which is a source of water and energy-use related emissions. Consequently, for the purpose of this analysis, the proposed project is assumed to generate no net new operational emissions. Operational emissions would be less than significant.

Demolition of the existing gymnasium and construction of the replacement gymnasium would, however, generate temporary emissions. To determine whether construction emissions would have significant impacts, emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1. Based on model defaults, it was assumed that construction would occur over a 13-month period. The timing of architectural coating was revised to begin halfway through the start of construction and end one week post-construction, which better reflects standard construction practices. CalEEMod was run assuming demolition of a 40,075-square foot structure, construction of a 29,940-square foot structure, and construction of a surface parking lot with 133 spaces on a 3.8 acre lot. The proposed project emissions were estimated using defaults for a “health club” land use as CalEEMod does not provide “school gymnasium” as an option; a health club offers facilities similar to a high school gymnasium, such as basketball courts, weight rooms and locker rooms, and therefore, would have comparable building construction requirements. In addition, it was assumed the proposed project would divert 50 percent of its waste, as mandated by AB 939, and that diesel engine equipment would meet U.S. EPA Tier 2 emission standards, which went into effect for model years 2006 or earlier (U.S. EPA 1998). CalEEMod outputs, which include modeling assumptions, are provided in Appendix A.

Table 3 Maximum Daily and Annual Construction Emissions

| Pollutant | Maximum Daily Emissions (pounds/day) | Daily Significance Threshold (pounds/day) | Maximum Annual Emissions (tons/year) | Annual Significance Threshold (tons/year) | Significant Impact? |
|-------------------|---|--|---|--|----------------------------|
| CO | 26.74 | 500 | 1.7 | 100 | No |
| NO _x | 36.60 | 50 | 2.1 | 40 | No |
| PM ₁₀ | 9.23 | 80 | 0.1 | 15 | No |
| PM _{2.5} | 5.46 | 50 | 0.1 | 10 | No |
| ROCs | 7.15 | 50 | 0.5 | 40 | No |
| SO _x | 0.048* | 80 | <0.01 | 40 | No |

Sources: Appendix A (CalEEMod outputs); Rule 110, NCUAQMD 2015 (significance thresholds).

* CalEEMod provides estimated emissions for SO₂, which is the predominant form of SO_x emitted.

Table 3 shows the estimated construction emissions generated by the proposed project and NCUAQMD recommended significance thresholds for applicable criteria pollutants. Emissions of fluorides, lead, and sulfuric acid mist are associated with industrial sources, while hydrogen sulfide emissions are associated with sewage and manure; lead is also associated with aviation fuel. As the proposed project would not be a source of these criteria pollutants, they were not considered in the construction emissions analysis (U.S. EPA 2014). As shown in Table 3, construction emissions for the proposed project would not exceed NCUAQMD recommended significance thresholds. Therefore, the proposed project would not violate or contribute to violation of air quality standards and would not result in a cumulatively considerable

increase in PM₁₀, for which the project region is in non-attainment. Impacts would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. The project site is adjacent to a residential neighborhood and is located on a school site in close proximity to school operations. Both the school and the adjacent residences are considered to be sensitive receptors. However, as shown in Table 3, construction emissions from the proposed project would not exceed NCUAQMD significance thresholds and operation emissions would be equivalent to, or below, existing conditions.

The NCUAQMD recommends the use of the latest version of the California Air Pollution Control Officers Association (CAPCOA) "Health Risk Assessments for Proposed Land Use Projects" to assess impacts from toxic air contaminants. Because the proposed project is neither a source of toxic air contaminants, as defined in CAPCOA's guidance document, nor located in the vicinity of a source of toxic air contaminants, a health risk assessment is not required.

Due to the age of the existing gymnasium (over 60 years old), there is the potential for asbestos and lead to be emitted into the air during demolition. Lead-based materials and asbestos exposure are regulated by the California Occupational Safety and Health Administration (Cal OSHA). The California Code of Regulations (CCR), §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an eight-hour period and exposure must be reduced to lower concentrations if the work day exceeds eight hours. Similarly, CCR §1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers. The NCUAQMD also enforces Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), which regulate the control of asbestos during the renovation and demolition of buildings under the Clean Air Act (CAA) (NCUAQMD 2016c). The CAA requires a thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expeditiously as practicable (U.S. EPA 2016). Furthermore, demolition would be conducted when school is not in session, as required by mitigation measure N-2 (see Section 12, Noise), which would further reduce the risk that students and staff would be exposed to harmful levels of lead or asbestos.

As the proposed project would not result in emissions exceeding significance thresholds or be a source of toxic air contaminants, and would comply with regulations limiting lead and asbestos emissions and exposure, the project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. Further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

School uses are not considered a land use associated with odor complaints (SCAQMD 1993). In addition, the proposed project would replace an existing gymnasium and would not result in any additional odors

from its operation. Objectionable odors may be generated by the operation of equipment during the construction phases of the proposed project. Odors associated with construction machinery include diesel machinery fumes, such as the smell of oil or diesel fuels. Some of these odors may reach sensitive receptors adjacent to the project site, but impacts would be temporary in nature. The odors would be limited to the time that construction equipment is operating and all off-road construction equipment is required to limit engine idling to five minutes under the CARB anti-idling rule (SS2449(d)(2)). As odors from construction would be temporary and limited by CARB regulations, no significant impact would occur and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*
- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The proposed project would involve the demolition of an existing gymnasium and construction of a replacement gymnasium on an operating high school campus. The project site is not within the area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2015, USFWS 2016). The project site is almost entirely covered in impervious surface with minor ornamental landscaping, including grasses, and shrubs, bordering the existing gymnasium walls. There are no trees on the project site. The site does not include any riparian or sensitive natural communities, wetlands, or wildlife corridors. Therefore, the project would not impact any special status species or conflict with local policies, such as a tree preservation policy. No biological impacts would occur.

NO IMPACT

5 Cultural Resources

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 | ■ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 | <input type="checkbox"/> | <input type="checkbox"/> | ■ | <input type="checkbox"/> |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | ■ | <input type="checkbox"/> |
| d. Disturb any human remains, including those interred outside of formal cemeteries | <input type="checkbox"/> | <input type="checkbox"/> | ■ | <input type="checkbox"/> |

- a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

The Jay Willard Gymnasium was originally constructed in 1948 and opened in 1949. It was originally designed by the architecture firm Masten and Hurd in the Late Moderne style with elements of the International Style, typical of the firm's post-World War II educational projects. A Preliminary Historic Assessment and Code Analysis conducted by Page & Turnbull (2016) concluded that the existing gymnasium does not appear to be individually eligible for the National Register of Historical Places, California Register of Historical Resources, or Eureka Register of Local Places due to alterations to its original design. However, the gymnasium is considered potentially historic by a local heritage society. The proposed project would demolish the existing gymnasium, which requires structural, accessibility, and other types of improvements. Due to the potential historical status of the existing gymnasium, further analysis will be conducted in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*
- d. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The project site is on the campus of an existing high school in an urban setting. The proposed project would involve minor excavation for construction of the replacement gymnasium in an area that has been previously disturbed and developed for school uses. The project ~~would not disturb native soils and is~~ would not be expected to include substantial excavation. The deepest cut anticipated for construction would be 24 inches; trenching for the sewer line would extend to a depth of approximately 48 to 60 inches at its deepest point. ~~Nevertheless, there is a potential that existing human remains, cultural, archaeological, and paleontological resources are present under the existing lots, and that for it is~~

~~possible that project construction activities, including demolition, could impact existing identified and previously unidentified paleontological and archaeological resources or disturb any unidentified human remains. Impacts to cultural resources archaeological resources and human remains would be potentially significant and will be further discussed in the EIR. In the unlikely event that archaeological resources or human remains are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. If archaeological resources are identified, as defined by Section 21083.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. Compliance with regulations to protect archaeological and human remains would reduce potential impacts to a less than significant level.~~

LESS THAN SIGNIFICANT IMPACT

C. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources have traditionally been considered to be animal and plant remains of Pleistocene-aged or older geologic units; however, recent codification of the definition of paleontological resources (SVP 2010) has revised these standards, and now, as defined by the SVP, Paleontological Resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010). Holocene sediments include units deposited during the past 11,700 years; Pleistocene sediments include units dated between 2.6 million and 11,700 years old.

The project area is underlain by undifferentiated non-marine terrace deposits that are Holocene to Pleistocene in age (Qt of McLaughlin et al. 2000). These sediments comprise dissected, possibly uplifted gravel, sand, silt, and clay, deposited by rivers. Proposed project ground disturbance is expected to occur only within previously disturbed sediment at or near the surface. Ground disturbance is thus not anticipated to be sufficiently deep to disturb early Holocene or Pleistocene native sediments. Thus, project impacts to paleontological resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Geology and Soils

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| 1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Strong seismic ground shaking | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Seismic-related ground failure, including liquefaction | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Landslides | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Be located on expansive soil, as defined in Table 1-B of the <i>Uniform Building Code</i> , creating substantial risks to life or property | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a.1. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

Humboldt County lies in an area of high seismic risk (Humboldt County 2012). Three crustal plates—the Pacific Plate, Gorda Plate, and North American Plate—intersect offshore to form the Mendocino Triple

Junction. Consequently, the area is seismically active and offshore Cape Mendocino has the highest concentration of earthquake events in the continental United States. The project site, however, does not lie in a fault rupture zone, as delineated by the Alquist-Priolo Earthquake Fault Zoning Map (California Department of Conservation [DOC] 2016). Therefore, impacts due to rupture of a known earthquake fault would be less than significant and do not warrant further analysis in an EIR.

LESS THAN SIGNIFICANT IMPACT

a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Humboldt County contains four major fault zones: San Andreas Fault, Falor-Korbel (Mad River) Fault, Trinidad and Big Lagoon Faults, and Cascadia Subduction Zone (Humboldt County 2012). Activity along any of these fault systems could result in strong ground shaking and all of Eureka lies in an area of relatively high earthquake shaking potential (CGS and USGS 2008). However, the proposed project does not lie in an area of significant seismic hazards (CA DOC 1980) and would be constructed in accordance with California Building Code (CBC) standards. In addition, there are a number of state regulations that apply to schools that would prevent and/ or mitigate seismic hazards, including the Field Act and California Education Code, Section 17212.5, which apply to the proposed project. The Field Act established the Division of the State Architect to develop design standards and quality control procedures for school earthquake-resistant construction, and requires that schools be designed by registered architects and engineers. California Education Code, Section 17212.5 requires preparation of geological and soil engineering studies for the construction of any school building, or for the reconstruction, alteration, or addition to any school building that alters structural elements, if the estimated cost exceeds \$20,000. Compliance with applicable standards and regulations would reduce seismic ground shaking impacts to a less than significant level. Further analysis of this issue in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. The project site is not located in an area with liquefaction hazard potential as mapped in the Eureka Geology for Planning Map (CA DOC 1980). There would be no impact and further analysis in an EIR is not warranted.

NO IMPACT

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is located in a flat, developed area without any nearby slopes and has not been mapped as an area at risk for seismically induced landslides (DOC 1980). As there is no risk of landslides on the site, no impact would occur and further analysis in an EIR is not warranted.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The project involves demolition of an existing gymnasium and construction of a new gymnasium. Construction of the new gymnasium would involve removal of the existing pavement and shallow excavation, along with grading activities. The project site is located in a flat, urbanized area not subject to

erosion. In addition, construction activities would be subject to the National Pollution Discharge Elimination System (NPDES) Construction General Permit (2009-0009-DWQ), most recently adopted by the California State Water Board on September 2, 2009. This permit became effective on July 1, 2010 and applies to construction sites one acre or larger in size. All developments for which the Construction General Permit applies are required to prepare and implement a storm water pollution prevention plan (SWPPP). SWPPPs specify best management practices (BMP) to be implemented by the contractor during construction to minimize soil erosion, storm water runoff, and downstream impacts to water quality. With adherence to the BMPs required by a SWPPP, erosion impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The project site is not located in an area vulnerable to liquefaction, collapse, landsliding, lateral spreading, lurch cracking or fault rupture as mapped in the Geology for Planning Eureka Quadrangle (DOC 1980), nor located in an area of land subsidence (USGS 2016a). Thus, the proposed project would not result in on or offsite impacts to geological instability and further analysis in an EIR is not warranted.

NO IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?*

The project site is located on an operating high school campus and has previously been paved and utilized for school activities. No issues with expansive soils are known to be present. There would be no impact.

NO IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Eureka High School is served by an existing sewer system. The proposed project would not involve the use of septic tanks or any other alternative waste water disposal systems. No impact would occur.

NO IMPACT

7 Greenhouse Gas Emissions

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|-------------------------------------|--------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHG), which contribute to the "greenhouse effect," a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the sun hits the earth's surface and warms it. The surface in turn radiates heat, known as infrared radiation, back toward the atmosphere. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat and contribute to an average increase in Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs include fossil fuel burning (coal, oil, and natural gas for heating and electricity, gasoline and diesel for transportation); methane generated by landfill wastes and raising livestock; deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition. Changes to the land surface indirectly affect the atmosphere by changing the way in the Earth absorbs gases from the atmosphere. Potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Energy Commission [CEC] 2009).

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the

California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

In September 2016, Governor Brown signed SB 32, which requires California to reduce GHG emissions by 40 percent below 1990 levels by the year 2030 (Office of Governor 2016). State guidance for meeting the SB 32 mandated reduction will be provided by the California Air Resource Board (ARB) in its next Scoping Plan, which is anticipated to be finalized in 2017.

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The NCUAQMD has not set any thresholds with which to assess the significance of GHG emissions under CEQA (NCUAQMD 2016b). In the absence of any regional guidance, for the purpose of this analysis, the proposed project is considered to have significant impacts on greenhouse gas emissions if it would conflict with AB 32, an approach adopted by a number of AQMDs to guide the determination of significance thresholds. The Bay Area Air Quality Management District (BAAQMD) has adopted this approach and set a significance threshold for projects other than stationary sources of: 1,100 metric tons of CO₂ equivalent (MT CO₂e) units per year, or 4.6 MT CO₂e per service population per year, or consistency with a Climate Action Plan (BAAQMD 2009). The "bright line thresholds" set by the BAAQMD are expected to cause 52 percent of all new land use development projects that account for 92 percent of all Bay Area emissions to require mitigation measures, which would close the gap between 2020 emission levels mandated by AB 32 and BAAQMD forecast emissions under a scenario where only Scoping Plan strategies are implemented.

The significance threshold of 1,100 MT CO₂e per year is adopted for the following analysis although the proposed project is not within the BAAQMD and the BAAQMD threshold has not yet been updated to reflect SB 32 requirements. Because the BAAQMD has experienced a much higher population growth and increase in vehicle use since 1990 than the North Coast, and therefore has a bigger gap to close, the bright line threshold adopted by BAAQMD represents a conservative threshold for a new land use development project occurring in the North Coast. In addition, as explained in greater detail below, the proposed project would not contribute any net new GHG emissions—rather, the only GHG emissions would result only from one-time project construction activities. Therefore, the proposed project would not conflict with the goals of SB 32.

Emissions associated with the proposed project were estimated using the CalEEMod version 2016.3.1 as previously described in Section 3, *Air Quality*. Complete CalEEMod results and assumptions can be viewed in Appendix A.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The proposed project's energy use, daily operational activities, and associated vehicle trips would generate GHG emissions. However, the proposed project would not result in a net increase in

operational GHG emissions compared to existing conditions as the proposed replacement gymnasium would not introduce new uses or increase the student population relative to the existing gymnasium, and, in fact, would likely emit fewer GHG emissions as the proposed structure would be more energy and water-efficient than the existing gymnasium, originally constructed in 1948. Consequently, operational GHG emissions would be less than significant.

Project construction activities would generate net new GHG emissions compared to existing conditions, primarily from the burning of fossil fuels associated with construction equipment and construction vehicle trips. CalEEMod 2016.3.1 was used to calculate emissions resulting from construction activities associated with the proposed project. Construction of the proposed project would generate a total of approximately 248 MT CO₂e in a single year. Because construction-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project, the construction-related GHG emissions have been amortized over a 30-year period. Thus, the approximate annual GHG contribution of the proposed project would be approximately 8.3 MT of CO₂e per year, which is far below the BAAQMD significance threshold of 1,100 MT CO₂e per year.

As construction emissions would be minimal and operational GHG emissions would be at or below existing levels, the proposed project's GHG emissions would have a less than significant impact on the environment. The proposed project would not impede attainment of AB 32 or SB 32 reduction goals. Impacts from GHG emissions would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

8 Hazards and Hazardous Materials

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

The proposed gymnasium would not create a significant hazard to the public or the environment as it would not involve routine transport, use, or disposal of hazardous materials. Materials used by the proposed project would be similar to those found in common household projects such as surface and floor cleaning products utilized for routine janitorial cleaning procedures. These materials would not be accessible to the students attending the school and would not be utilized in large quantities that would cause a significant environmental or health risk to the public. Also, any use of potentially hazardous materials utilized during construction of the proposed project would comply with all local, state, and federal regulations regarding the handling of potentially hazardous materials. Therefore, impacts would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*
- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Land uses such as schools, typically do not use or store large quantities of hazardous materials. Consequently, operation of the project would not create a significant hazard to the public or the environment and would not emit hazardous emissions. However, due to the age of the existing gymnasium (over 60 years old), there is the potential for asbestos and lead to be released during demolition. As previously discussed in Section 3, Air Quality, lead-based materials and asbestos exposure is regulated by Cal OSHA. CCR §1532.1 regulates lead emissions and exposure and CCR §1529 regulates asbestos emissions and exposure. The NCUAQMD also enforces Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) that regulate asbestos during the renovation and demolition of buildings (NCUAQMD 2016c). Furthermore, demolition would be conducted when school is not in session, as required by mitigation measure N-2 (see Section 12, Noise), which would further reduce the risk that students and staff would be exposed to harmful levels of lead or asbestos.

Potentially hazardous materials such as fuels, lubricants, and solvents could also be used during construction of the project. However, the transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Adherence to existing requirements for hazardous materials would reduce impacts to a less than significant level and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The following databases compiled pursuant to Government Code Section 65962.5 were checked (November 7, 2016) for known hazardous materials contamination within 1,000 feet of the project site:

- U.S. EPA
 - *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Search*

- *California State Water Resources Control Board*
 - *Geotracker search for leaking underground storage tanks (LUST) and other Cleanup Sites*
- *California Department of Toxic Substances Control*
 - *Cortese list of Hazardous Waste and Substances Sites*
 - *Envirostor: Cleanup Site and Hazardous Waste Facilities Database*

No hazardous material sites within 1,000 feet of the project site were identified in CERCLIS, Envirostor, or the Cortese list. A search using Geotracker identified one LUST site located within 1,000 feet east of the project site at 2233 N Street. The site was cleaned up and case closed as of April 2004, indicating the site is no longer a hazard to the public or the environment. Given the status of the case and the fact that there are no other relevant listings for potential contamination, no impact would occur. Further analysis in an EIR is not warranted.

NO IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*
- f. *For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?*

The project site is located approximately 2.5 miles southwest of the Murray Field-Eka airport, 2.8 miles northeast of the Samoa Field Airport, and about 13 miles southwest of the Arcata-Eureka Airport in McKinleyville. No other airports or private air strips are located in the project vicinity. The proposed project would not be located within an airport influence area (Humboldt County 2007) and would not conflict with adopted or planned airport land use plans. Consequently, it would not result in a safety hazard for students or employees. Therefore, no impact would occur and further analysis in an EIR is not warranted.

NO IMPACT

- g. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not directly impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, or involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation. The proposed gymnasium would replace an existing gymnasium on an existing high school campus and would not alter, procedures, or communications to be utilized or implemented during an emergency, or generate additional population or traffic that could slow emergency response. The proposed reconfiguration of the bus lane would not impede access to the fire lane north of the project site. Therefore, existing access routes for emergency vehicles would not be affected. In addition, the proposed project would comply with the CBC standards, including Fire Code requirements. Therefore, impacts would be less than significant and further analysis of this issue in an EIR is not warranted.

NO IMPACT

- h. *Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is located in an urbanized area in Eureka, surrounded primarily by paved surfaces and structures. The city of Eureka is surrounded by open space that begins, at its nearest point, approximately a mile to the south and east of the project site. The project site is not located in a Fire Hazard Severity Zone (CAL Fire 2007), indicating that the area is at low risk from fire and the County has no Very High Fire Hazard Severity Zones.

Eureka is a Local Responsibility Area (LRA), so fire protection is provided locally rather than by CAL FIRE. Humboldt Bay Fire (HBF) provides fire protection services to the City of Eureka and the Greater Eureka area (HBF 2016). The project site is located approximately 1.3 miles by car from HBF Station 1 (533 C Street), approximately 1.8 miles from HBF Station 3 (2905 Ocean Avenue, approximately 2.2 miles from HBF Station 5 (3455 Harris Street), and approximately 3.2 miles from HBF Station 2 (Herrick Avenue). As the project site lies in an area at low risk for fire and in proximity to local fire protection resources, impacts would be less than significant. Further analysis of this issue in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

9 Hydrology and Water Quality

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Violate any water quality standards or waste discharge requirements | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Otherwise substantially degrade water quality | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam | <input type="checkbox"/> | <input type="checkbox"/> | ■ | <input type="checkbox"/> |
| j. Result in inundation by seiche, tsunami, or mudflow | <input type="checkbox"/> | <input type="checkbox"/> | ■ | <input type="checkbox"/> |

- a. *Would the project violate any water quality standards or waste discharge requirements?*
- e. *Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- f. *Would the project otherwise substantially degrade water quality?*

The City of Eureka manages the stormwater drainage system within its jurisdictional boundary. The proposed replacement gymnasium would utilize the existing storm drainage system at the project site. Because the proposed project would connect to City storm drain systems, the connection is subject to the requirements of the City. The City of Eureka has been issued a National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Storm Sewer System (MS4) Permit, which requires long-term, post-construction BMPs to be incorporated into new development and significant redevelopment projects, such as the inclusion of permeable surfaces on site to allow natural drainage. In addition, the proposed project would be subject to the NPDES General Construction Permit, as previously described in Section 6, Geology and Soils, which requires all project sites greater than an acre in size to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would identify best management practices to minimize stormwater runoff and prevent sediment and other pollutants from entering storm drains during construction.

The proposed project involves demolition of an existing gymnasium and construction of a replacement gymnasium on an existing paved lot. The new gymnasium would be used for physical education courses and sporting events in the same manner as the existing gymnasium, and almost 100 percent of the project site currently is, and would continue to be, impervious surfaces. Consequently, the proposed project would not result in a net change in waste water generation or runoff, or otherwise contribute to a net change in water quality.

As the proposed project would not generate additional wastewater or runoff and would be required to comply with the City's MS4 and General Construction permit requirements to reduce runoff and stormwater contamination, impacts to water quality and storm drain system capacity would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?*

The City's potable water is purchased from the Humboldt Bay Municipal Water District (the District) and consists almost entirely of groundwater drawn from wells below the bed of the Mad River. The District

currently has water rights to divert 75 million gallons per day (mgd) from the Mad River, or 84,000 acre feet per year (AFY) and the City of Eureka maintains water rights to Mad River water equivalent to 5.8 mgd (6,499 AFY) (Humboldt County 2007). Projected water demand for Eureka through 2030 never exceeds 3,470 AFY, leaving a surplus of at least 3,000 AFY (Eureka 2010).

The proposed project would not affect the existing hydrologic condition, nor result in additional demand on water resources. The proposed project would not alter the net spatial amount of impervious surface area at the subject site as the area is paved and otherwise developed with structures. Therefore, groundwater recharge would not be affected. Overall, impacts on local groundwater would be less than significant and further analysis in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including by altering the course of a stream or river, in a manner that would result in substantial erosion or siltation on or offsite?*
- d. *Would the project substantially alter the existing drainage pattern to the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite?*

The project site is almost entirely covered with impervious surfaces. Implementation of the proposed project would not alter this condition. Potential exposure of underlying surfaces during construction activities would not substantially alter the existing drainage pattern of the site or area as contractors would be required to implement BMPs identified in the project's SWPPP to prevent substantial erosion and runoff onsite. Furthermore, the project site is not located in proximity to a stream or river and the project drainage would flow into the existing storm drain system. Consequently, the proposed project would not alter the site in a manner that would lead to erosion or siltation on or offsite, nor would it result in flooding. No further analysis in an EIR is warranted.

NO IMPACT

- g. *Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?*
- h. *Would the project place in a 100-year flood hazard area structures that would impede or redirect flood flows?*
- i. *Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding including that occurs as a result of the failure of a levee or dam?*
- j. *Would the project result in inundation by seiche, tsunami, or mudflow?*

According to the Federal Emergency Management Agency (FEMA), the project site is located outside of the 1 percent and 0.2 percent annual chance flood hazard zone (FIRM panel 06023C0830F; FEMA 2016). Therefore, it would not place housing or other structures in a flood hazard area. There is no documented risk of flooding at the project site due to levee or dam failure. In addition, the project site lies outside of Eureka's tsunami inundation zone, as depicted in the Eureka Quadrangle of the "Tsunami Inundation Map for Emergency Planning" (EMA 2009) and would not be vulnerable to seiches, which cause vertical movement of waves, as opposed to horizontal movement and thus impact near shore areas. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Land Use and Planning

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project have any of the following impacts? | | | | |
| a. Physically divide an established community | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with an applicable habitat conservation plan or natural community conservation plan | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project physically divide an established community?*
- b. *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

The project site is located at an existing high school campus in an urbanized area of Eureka. The proposed project would replace an existing gymnasium with a new gymnasium, as well as reconfigure a bus lane and parking areas on a high school campus. It would not introduce a new use that would divide an established community or conflict with any applicable Eureka City School District, or state plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There would be no impact to an established community or inconsistency with applicable land use regulations.

NO IMPACT

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

The project site is not located within an area subject to a habitat conservation plan or natural community conservation plan (USFWS 2016; CDFW 2015). There would be no conflict with a conservation plan and no impact would occur.

NO IMPACT

11 Mineral Resources

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project have any of the following impacts: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is already developed as a high school campus with no mineral resource extraction activities occurring onsite or in adjacent areas and no mineral resources identified onsite (USGS 2016b). Thus the project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site.

NO IMPACT

12 Noise

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above those existing prior to implementation of the project | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Equivalent noise level (L_{eq}) is the preferred method to describe sound levels that vary over time and provides an average noise value over a specified amount of time.

Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level from point sources attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Roadway traffic is characterized by many, continuous sources of noise. Noise from roadway traffic attenuates at a rate of 3 dBA per doubling of distance. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object,

proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. A single row of buildings typically attenuates sound by 10 dBA.

Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses.

The City of Eureka establishes noise level performance standards for new projects in the Health and Safety Element of the General Plan, Table 7-1. The maximum allowable daytime (7 a.m. to 10 p.m.) noise level as measured within the property line of lands designated for noise-sensitive uses is a maximum of 70 dBA or 50 dBA hourly L_{eq} . The maximum allowable nighttime (10 p.m. to 7 a.m.) noise level is a maximum of 65 dBA or 45 dBA hourly L_{eq} . These standards are intended to apply to project operational noise levels and not temporary noise levels due to new project construction. The General Plan also establishes noise standards for transportation noise sources and noise compatibility thresholds for land uses with respect to transportation noise. However, these standards are not applicable to the proposed project as it would not build school capacity or result in new uses relative to the existing gymnasium that would generate new trips and increase transportation noise.

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- c. *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

The proposed project would serve the existing student population and would provide the same uses that occupy the project site (i.e., gymnasium, bus lane, parking areas). Consequently, the proposed project would not result in a net change in noise at the project site and operational noise would not expose nearby sensitive uses to noise levels in exceedance of applicable standards or result in a substantial permanent increase in ambient noise levels. Activities associated with the proposed gymnasium would occur indoors and the new gymnasium would be constructed in accordance with CBC construction standards. Replacement of the existing gymnasium would likely reduce ambient noise levels as noise standards for new buildings have become more stringent over time and the existing gymnasium was first constructed over sixty years ago in 1948. Thus, the proposed new gymnasium may result in lower exterior ambient noise levels associated with events inside the gymnasium compared to the existing gymnasium. Impacts would be less than significant and further analysis of this issue in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Construction of the proposed project would generate temporary noises that would potentially impact sensitive receptors near the project site. Typical noise levels from individual pieces of construction equipment range from about 70 dBA to 90 dBA at a distance of 50 feet (Table 4). Noises associated with demolition of the existing gymnasium would impact nearby sensitive receptors. The existing gymnasium site has school buildings as close as 40 feet to the north and residences as close as 90 feet to the southwest. Noise levels associated with construction of the replacement gymnasium would also impact nearby sensitive receptors. The proposed site of the replacement gymnasium has school buildings as close as 92 feet to the north and residences as close as 150 feet to the south (see Figure 3) from the project site boundary. In addition, reconfiguration of the bus lane would occur in areas along the project site's northern border directly adjacent to classrooms. However, construction activities associated with

this component of the project would be smaller in magnitude relative to other components as no demolition or construction of structures would be involved. For the purpose of this analysis, noise impacts from construction activities associated with demolition of the existing gymnasium and construction of the replacement gymnasium and new parking areas are evaluated separately from noise impacts from construction activities associated with reconfiguration of the bus lane.

Table 4 Typical Noise Levels Generated by Construction Equipment

| Equipment | Typical Lmax (dBA) 50 feet from the Source |
|----------------|---|
| Air Compressor | 78 |
| Backhoe | 78 |
| Concrete Saw | 90 |
| Concrete Mixer | 79 |
| Generator | 81 |
| Paver | 77 |
| Roller | 80 |
| Welder/Torch | 74 |

Source: FHWA 2015

Demolition and Construction of Gymnasium and Parking Areas

Construction noise levels were modeled by phase to determine the proposed project's impacts on ambient noise levels due to construction activities. Table 5 shows the hourly Leq for different phases of construction at the nearest school and residential sensitive receptors. The type of construction equipment used and hours of use for each phase were assigned based on CalEEMod 2016.3.1 defaults. Noise levels and percentage of acoustical usage for different construction equipment were taken from the Federal Highway Administration's (FHWA) *Construction Noise Handbook*, Table 9.1. It was assumed construction activities would occur on average 50 feet from the project site boundary as construction activities would occur throughout the site. With this assumption incorporated, demolition activities would occur at a distance of 90 feet and 140 feet from the nearest school and residential receptors, respectively, and construction activities would occur at a distance of 142 feet and 190 feet from the nearest school and residential receptors, respectively. Appendix B provides calculations and results for construction noise modeling.

Demolition and construction activities would result in a temporary increase in ambient noise levels for sensitive receptors. As shown in Table 5, the proposed project would result in noise levels above the maximum thresholds for noise-sensitive uses of 50 dBA hourly Leq in all phases of construction and would exceed the 70 maximum dBA in all phases, except for architectural coating. While City exterior noise standards do not apply to construction activities and are not intended to be used as significance thresholds, they are indicative of typical ambient noise levels for surrounding uses. Therefore, the fact that construction activities would cause exterior noise levels to exceed standards for surrounding uses indicates that the proposed project would result in a substantial temporary increase in ambient noise levels in the project vicinity. There are no restrictions on construction activities in the City's General Plan

or Municipal Code. Mitigation measures provided below would be incorporated to reduce construction noise impacts to a less than significant level.

Table 5 Construction Noise Levels at Sensitive Receptors

| Phase | Nearest School Receptor | Nearest Residential Receptor |
|------------------------------|---------------------------------|---------------------------------|
| | Combined Hourly Noise (dBA Leq) | Combined Hourly Noise (dBA Leq) |
| Demolition ¹ | 80 | 76 |
| Site Preparation and Grading | 74 | 71 |
| Building Construction | 72 | 69 |
| Architectural Coating | 64 | 61 |
| Paving | 76 | 73 |

Source: FHWA 2015

1. Demolition activities would occur only in the area of the existing gymnasium. All other phases of construction would occur one block to the west of the existing gymnasium.

Mitigation Measures

The following mitigation measures are required to reduce construction noise impacts to a less than significant level.

- N-1** Eureka City Schools shall require construction contractors to limit standard construction activities to between 7:00 a.m. and 7:00 p.m. Monday through Friday. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed. No extreme noise-generating activities shall be allowed on weekends and holidays. This would limit impacts on sensitive receptors to daytime hours.
- N-2** Eureka City Schools shall require construction contractors to either: 1) conduct demolition activities, which involve the greatest noise impacts, on days when school is not in session, or 2) conduct demolition activities shall during the summer when fewer students are enrolled and no bus service is provided and prohibit school activities within 150 feet of the demolition site boundary. This would limit noise impacts on school uses. If feasible, it is recommended that other construction activities occur outside of school hours or during the summer as well.
- N-3** To reduce daytime noise impacts due to construction, Eureka City Schools shall require construction contractors to implement the following measures:
 1. Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds), wherever feasible.
 2. Impact tools (e.g., jack hammers, pavement breakers, and rock drills) shall be hydraulically or electrically powered rather than pneumatically powered wherever possible. Where use of pneumatic tools is unavoidable, an exhaust muffler shall be applied to the pneumatic tool; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter tools and procedures shall be used whenever feasible.
 3. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, insulation barriers, or other noise control measures to the extent feasible.

4. Where feasible, temporary barriers shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed of material having a minimum surface weight of 2 pounds per square foot or greater, and a demonstrated STC rating of 25 or greater as defined by American Society for Testing and Materials (ASTM) Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant.

Use of a sound barrier with an STC rating of 25 or greater typically reduces construction noise levels by 8 to 10 dBA, and can feasibly reduce noise levels up to 15 dBA, and even higher. Use of manufacturer-certified mufflers associated with construction equipment would reduce noise levels generally by 5 dBA, but has the potential to reduce noise levels by up to 8 dBA (West Hollywood 2014). Together, these two measures would reduce sound levels during construction by approximately 13-23 dBA. Table 6 shows the mitigated construction noise levels by construction phase at the nearest sensitive receptors.

Table 6 Mitigated Construction Noise Levels at Nearest Sensitive Receptor

| Phase | Mitigated Combined Hourly Noise (dBA Leq) | |
|------------------------------|---|------------------------------|
| | Nearest School Receptor | Nearest Residential Receptor |
| Demolition ¹ | NA or 53-60 ² | 53-60 |
| Site Preparation and Grading | 51-58 | 48-55 |
| Building Construction | 49-56 | 46-53 |
| Architectural Coating | 41-48 | 38-45 |
| Paving | 53-60 | 50-57 |

Source: FHWA 2015

1. Demolition activities would occur only in the area of the existing gymnasium. All other phases of construction would occur one block to the west of the existing gymnasium.

2. Demolition activities would have no noise impact on school receptors if it would occur when school is not in session (mitigation measure N-2, option 1) or would result in exterior noise levels of 76 dBA at a distance of 150 feet (mitigation measure N-2, option 2), which would be mitigated to 53-60 dBA. See Appendix B for modeling worksheet.

With mitigation, exterior noise levels during construction at sensitive receptors would be reduced to sound levels of 60 dBA Leq or lower. 60 dBA is comparable to the sound of conversation in a restaurant, a busy office, background music, or an air conditioner unit at 100 feet (IAC Acoustics 2017). In addition, construction would be limited to daytime hours when noise-sensitive activities (e.g., sleeping) generally do not occur. School activities occur primarily indoors where walls and insulation would attenuate exterior construction noises to lower levels. Therefore, construction of the proposed project would result in an adverse, but less than significant noise impact with incorporation of mitigation.

Bus Lane Reconfiguration

Repaving and construction of new curbs and walkways associated with reconfiguration of the existing bus lane would occur directly adjacent to existing classrooms along the northern border of the project site. However, the scope of these construction activities would be of shorter duration and more limited in scope and can be mitigated through a timing restriction or distance restriction similar to mitigation measure N-2. Mitigation measure N-4 below, as well as other applicable noise mitigation measures (i.e.,

N-1 and N-3), would be incorporated to reduce noise impacts from bus lane reconfiguration construction activities to a less than significant level.

Mitigation Measure

The following mitigation measure is required to reduce construction noise impacts associated with bus lane reconfiguration to a less than significant level.

- N-4** Eureka City Schools shall require construction contractors to either: 1) reconfigure the bus lane during a period of time when school is not in session, such as at the end of summer, or 2) conduct construction activities during the summer and prohibit school activities within 150 feet of the construction site boundary.

With mitigation incorporated, exterior noise levels associated with bus reconfiguration would be no greater than 60 dBA Leq at a distance of 150 feet. At this minimum distance, exterior noise levels during demolition phase for the proposed project would be 76 dBA Leq (calculations provided in Appendix B), which would be mitigated to 53-60 dBA Leq. As construction activities associated with bus reconfiguration would generate lower levels of noise than demolition, this is a conservative approach for determining a minimum distance. Incorporation of mitigation would reduce construction noise impacts on school uses to a less than significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

- b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Vibration is a unique form of noise because its energy carries through buildings, structures, and the ground, whereas noise carries through the air. Therefore, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

Vibration impacts would be significant if they exceed the following Federal Railroad Administration (FRA) thresholds:

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

Therefore, construction-related vibration impacts would be less than significant if they are below the threshold of physical damage to buildings (100 VdB), would not interfere with sleep at adjacent

residences, and would be below the threshold for institutional land uses (75 dBA) at adjacent school uses during school hours. Table 7 shows vibration levels for construction equipment of concern.

Table 7 Typical Vibration Levels for Construction Equipment

| Equipment | Approximate VdB | | | | |
|-----------------|-----------------|---------|----------|----------|----------|
| | 30 Feet | 50 Feet | 100 Feet | 200 Feet | 300 Feet |
| Large Bulldozer | 85 | 78 | 69 | 60 | 55 |
| Loaded Trucks | 83 | 77 | 68 | 59 | 54 |
| Jackhammer | 76 | 70 | 61 | 52 | 47 |
| Small Bulldozer | 55 | 48 | 40 | 31 | 26 |

Source: Federal Transit Administration 2006.

Table 8 shows construction vibration levels at the nearest school and residential receptor for demolition activities, which would occur at the site of the existing gymnasium, and construction activities, which would occur one block to the west at the site of the proposed replacement gymnasium. Distances used to model vibration impacts were the same as those used to model noise impacts. Vibration impacts were modeled for a large bulldozer and loaded truck, which would be the only two pieces of construction equipment associated with construction of the proposed project that could produce potentially significant vibration impacts; the list of construction equipment to be used for project construction was compiled based on CalEEMod defaults as construction details have not yet been determined by Eureka City Schools at this time. Appendix B provides model inputs and results. Vibration impacts during construction of the replacement gymnasium would be at or below FRA thresholds for residential and institutional uses, including schools. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Table 8 Construction Vibration Levels at Sensitive Receptors

| Phase | Equipment | Maximum vibration at nearest school receptor (VdB) | Maximum vibration at nearest residential receptor (VdB) |
|-------------------------|-----------------|--|---|
| Demolition ¹ | Large bulldozer | 70 | 65 |
| | Loaded truck | 69 | 63 |
| Construction | Large bulldozer | 64 | 60 |
| | Loaded truck | 63 | 58 |

1. Demolition activities would occur only in the area of the existing gymnasium. All other phases of construction would occur one block to the west of the existing gymnasium.

- e. *For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*
- f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?*

The project site is located approximately 2.5 miles southwest of the Murray Field-Eka Airport, 2.8 miles northeast of the Samoa Field Airport, and about 13 miles southwest of the Arcata-Eureka Airport in McKinleyville. The project site is not located within an influence area for any of these airports (Humboldt

County 2007). No other airports or private airstrips are located in the project vicinity. Therefore, students, school employees, and school visitors would not be exposed excessive noise levels from an airport or private air strip. No impact would occur and further analysis in an EIR is not warranted.

NO IMPACT

13 Population and Housing

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would involve the replacement of an existing gymnasium and reconfiguration of a bus lane and parking areas on a high school campus. The proposed project would be serviced by existing infrastructure. It would not increase school capacity or develop new infrastructure that would indirectly induce population growth. Therefore, no impact to population or housing stock would be anticipated.

NO IMPACT

- b. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*
- c. *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The proposed project would replace an existing gymnasium and reconfigure a bus lane and parking areas on a high school campus. No residential dwelling units would be affected or residents displaced and there would be no impact to existing housing or any impact that would cause residents to be displaced.

NO IMPACT

14 Public Services

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| 1. Fire protection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Police protection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Parks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Other public facilities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?*

Fire protection in Eureka is provided by Humboldt Bay Fire (HBF) (HBF 2016). The project site is located approximately 1.3 miles by car from HBF Station 1 (533 C street), approximately 1.8 miles from HBF Station 3 (2905 Ocean Avenue, approximately 2.2 miles from HBF Station 5 (3455 Harris Street), and approximately 3.2 miles from HBF Station 2 (Herrick Avenue). The proposed project would comply with all Fire Prevention Bureau provisions required by HBF and is located within an area that is already served by the HBF. It would not increase school capacity or provide residences that would increase HBF's service population. Therefore, it would not result in substantial adverse impacts or the need for additional facilities. There would be no impact to the provision of these public services and no further analysis in an EIR is warranted.

NO IMPACT

- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts,*

in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Police protection services in Eureka are provided by the Eureka Police Department (EPD), which has a station at 604 C Street, about 1.2 miles away by car from the project site. The proposed project would not increase school capacity or provide residences that would increase the EPD's service population. Therefore, it would not result in substantial adverse impacts to existing police facilities or impact the need for additional facilities or staff. There would be no impact on police services and no further analysis in an EIR is warranted.

NO IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?*

The proposed project would replace an existing gymnasium and reconfigure a bus lane and parking areas on the Eureka High School campus. It would not increase school capacity or induce population growth. Therefore, it would not result in a need for new or physically altered governmental facilities to meet school service and performance objectives. There would be no construction or alteration of new governmental facilities and no resulting impacts and no further analysis in an EIR is warranted.

NO IMPACT

- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?*

The proposed project would replace an existing gymnasium on the Eureka High School campus. It would not increase school capacity or induce population growth. It would be anticipated to provide an enhanced delivery of recreation services through upgrades to gymnasium facilities. The proposed project would not result in substantial adverse impacts to existing park facilities or impact the need for additional park facilities. There would be no impact and no further analysis in an EIR is warranted.

NO IMPACT

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?*

The proposed project would replace an existing gymnasium on the Eureka High School campus. It would not increase school capacity or induce population growth. Therefore, it would not result in substantial adverse impacts to existing government facilities or impact the need for additional facilities, such as libraries, roadways, and infrastructure. There would be no impact to government services and no further analysis in an EIR is warranted.

NO IMPACT

15 Recreation

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project would replace an existing gymnasium on the Eureka High School campus. It would not increase school capacity or induce population growth. Therefore, it would not increase the use of existing recreational facilities, require the construction of new facilities, or require expansion of existing recreational facilities. The proposed project would replace an older gymnasium that does not currently meet state standards for earthquake safety or ADA accessibility requirements. Environmental impacts of the recreational facilities that would be provided by the proposed gym are evaluated in this Initial Study. There would be no adverse impact to recreational facilities or resulting from new recreational facilities and no further analysis in an EIR is warranted.

NO IMPACT

16 Transportation

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Result in inadequate emergency access? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*
- b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*
- f. *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?*

The proposed project would replace an existing gymnasium on the Eureka High School campus, reconfigure an existing bus lane, and provide new parking areas and concrete walkways. Construction would generate temporary construction-related traffic such as deliveries of equipment and materials to the project site and construction worker traffic. However, this traffic would be temporary and limited to the duration of the construction schedule.

Operation of the replacement gymnasium would not increase the student population or result in any new uses that would generate net new trips associated with the project site. However, the proposed reconfiguration of the bus lane and parking areas would change the vehicle exit routes of buses and vehicles relative to existing conditions at the project site. Currently, school buses and vehicles exit onto J Street. Implementation of the proposed project would require buses and vehicles to exit onto K Street or Trinity Street. However, the level of bus traffic associated with the existing bus lane is minimal—eight school buses drop off students in the morning and nine school buses pick up students in the afternoon—and would be limited to specific hours corresponding to the start and end of the school day. In addition, personal vehicle traffic that would utilize the proposed driveway and new parking areas would primarily be generated by sports events. Sports events, such as basketball games, typically occur once or twice a week in the evenings during the school year (Eureka City Schools 2016). Therefore, the proposed project is not expected to result in a significant increase of traffic along K Street or Trinity Street.

The project site is on an existing high school campus and would not impact existing public transit facilities and there are no bike facilities in the vicinity of the project site. The proposed project would provide new concrete walkways that would improve pedestrian access on campus and, in combination with reconfiguration of the bus lane, would provide vehicle-free pedestrian access to the proposed bus loop, new gymnasium, and parking areas. As such, the proposed project would improve pedestrian facilities on campus.

The proposed project would not be expected to affect the performance and facilities for area circulation, congestion, public transit, and alternative modes of transportation. Therefore, the proposed project would not conflict with applicable plans or programs to manage circulation and congestion and there would be a less than significant impact on transit, congestion, or transit facilities and further analysis of these issues in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The project site is located approximately 2.5 miles southwest of the Murray Field-Eka Airport, 2.8 miles northeast of the Samoa Field Airport, and about 13 miles southwest of the Arcata-Eureka Airport in McKinleyville. The project site is not located within an influence area for any of these airports (Humboldt County 2007) and no other airports or private airstrips are located in the project vicinity. Therefore, no impact to air traffic patterns would occur, and further analysis in an EIR is not warranted.

NO IMPACT

- d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- e. *Would the project result in inadequate emergency access?*

The proposed project would involve demolition of an existing gymnasium, construction of a new gymnasium, reconfiguration of an existing bus lane, and construction of new parking areas and concrete walkways on the Eureka High School campus. The two streets that currently comprise the bus lane, Humboldt Street and K Street, are private roads owned by Eureka City Schools. No alterations to surrounding public roads would occur and the proposed project would not generate any net new vehicle trips. Construction of the replacement gymnasium would comply with CBC standards, and structures and accesses would comply with California Fire Code Section 90, as well as Humboldt County Fire Chief's Fire & Life Safety Standards, which set requirements for roads and driveways to ensure adequate emergency access (Eureka 2003). Construction and operation of the proposed project would not result in use of vehicles or equipment, such as farm equipment or tractors, that would be incompatible with existing land uses in the surrounding area.

During operation, the project site would continue to provide access between the fire road that runs through the staff parking lot north of the existing gymnasium site and the bus lane (see Figure 5). However, construction activities, especially demolition activities and reconfiguration of the bus lane, could temporarily restrict use of the fire access road on the project site. To ensure emergency response vehicles have adequate access to the project site and vicinity during construction, the following mitigation would be incorporated.

Mitigation Measure

The following mitigation measure is required to reduce impacts to emergency access during construction activities to a less than significant level.

- T-1** Prior to issuance of building and/ or grading permits, Eureka City Schools shall submit a Construction Emergency Access Plan to the Humboldt County Fire Department and Eureka Public Works department) for review and approval. This plan would detail how emergency access to the project would be maintained during construction, and include measures to ensure adequate emergency access during project construction, such as providing signage for altered fire routes, if needed.

Preparation, review, and implementation of a Construction Emergency Access Plan would ensure adequate emergency access during project construction. Impacts due to a design feature or modification to emergency access would be less than significant with mitigation and further analysis in an EIR is not warranted.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

17 Tribal Cultural Resources

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-----------|
|--|--------------------------------------|--|------------------------------------|-----------|

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

| | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

a, b Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is (a) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (b) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?

The project site is on the campus of an existing high school in an urban setting. The proposed project would involve minor excavation for construction of the replacement gymnasium in an area that has been previously disturbed and developed for school uses. The project would not disturb native soils and is not expected to affect a tribal cultural resource listed or eligible for listing in the state or local register of historical resources, or determined by the lead agency to be significant to a California Native American tribe. However, tribal consultation has been requested by the Wiyot tribe and the consultation process has been initiated to determine if any tribal cultural resources would be impacted by the project. Impacts will be further discussed and analyzed in an EIR after consultation is complete.

POTENTIALLY SIGNIFICANT IMPACT

18 Utilities and Service Systems

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project result in any of the following impacts? | | | | |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

-
- a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

- c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The project site is located within the jurisdiction of the North Coast Regional Water Quality Control Board (NCRWQCB). Wastewater is treated at the City of Eureka's wastewater treatment facilities, which include a 5.2 million gallon per day treatment plant utilizing the trickling filter/solids contact process (Eureka 2000a). Water service is also provided by the City of Eureka, which has 22.3 million gallons of storage reservoirs and four potable water boost stations (Eureka 2000). Eureka experiences large amounts of rainfall with some areas receiving more than 100 inches of precipitation in a year (Eureka 2011). Consequently, water supply is not an issue of concern for new development (Eureka 2011). The City of Eureka purchases groundwater from the Humboldt Bay Municipal Water District (HBMWD), which draws water from wells located in the bed of the Mad River just northeast of Arcata. Water is treated by the HBMWD and then delivered by a pipeline to the City's water treatment complex in Eureka where it undergoes additional treatment (Eureka 2013). Wastewater and potable water treatment facilities are designed to meet NCRWQCB standards.

The proposed project would continue to be served by the existing sewerage, domestic water, and storm drain infrastructure on the project site. The proposed project would not increase school capacity and therefore, would not increase the service population for onsite utilities. Proposed gymnasium facilities would be similar to existing gymnasium uses. Like the existing gymnasium, the new gymnasium would include a basketball court/ indoor court with seating, weight rooms, and locker room. Unlike the existing gymnasium, however, it would not have an indoor pool. Therefore, operation of the proposed project would generate no net new wastewater, and would, in fact likely decrease wastewater generation because it would not have an indoor pool and would be constructed in accordance with 2016 CBC standards, whereas the existing gymnasium was first constructed in 1948. As the proposed project would not increase wastewater generation, water use, or storm drain use relative to existing conditions, there would be no impact to stormwater drainage facilities, water supplies, or wastewater treatment and further analysis in an EIR is not warranted.

NO IMPACT

- f. *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

The City of Eureka has a mandatory/universal garbage and recycling collection program to help the City meet State recycling/waste diversion mandates, such as AB 341 and 1826 (Eureka 2000b). Curbside collection and waste hauling in the Eureka area is provided by Recology (HWMA 2016), which actively promotes waste reduction in its service areas. Collected waste is sent to the Hawthorne Street Transfer Station and Recycling Center, which is managed by the Humboldt Waste Management Authority (HWMA) and located about a mile and a half away from the project site (HWMA 2016). Any waste that cannot be diverted is sent to Potrero Hills Landfill in Solano County (HWMA pers. comm. 2016).

The proposed project would not substantially alter existing uses on the project, and, therefore, would not induce growth in the student population that could increase solid waste generation compared to the current use. In addition, gymnasiums are responsible for a relatively small portion of a school's solid waste. Non-recyclable waste produced by education facilities in Humboldt County is composed primarily

of food waste (33%), as well as other organics, other food-related waste, like compostable paper products, and paper products, like office paper (CalRecycle 2016a).

Demolition of the existing gymnasium and construction of the replacement gymnasium would be a temporary source of additional solid waste. The proposed project would involve the demolition of the existing gymnasium, which is approximately 40,075 sf in size. Waste management facilities serving Eureka would have ample capacity to handle one-time construction and demolition (C & D) waste. The Hawthorne Street Transfer Station has a capacity of 200,750 tons per year and can process up to 550 tons per day (CalRecycle 2016b). Potrero Hills Landfill has a capacity of 83,100,000 cubic yards, can process up to 4,330 tons of solid waste per day, and has a remaining capacity of 13,872,000 cubic yards as of 2006 (CalRecycle 2016c). Therefore, the proposed project would be served by a landfill with sufficient capacity to accommodate its solid waste needs. There would be a less than significant impact and further analysis of this issue in an EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

The proposed project would comply with applicable state regulations, which include new requirements in the 2016 CBC to divert at least 65 percent construction and demolition waste for non-residential construction projects. There would be no impact and further analysis of this issue in an EIR is not warranted.

NO IMPACT

19 Mandatory Findings of Significance

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As noted in Section 4, *Biological Resources*, the project site is on a fully developed and extensively paved high school campus that does not support native biological resources habitat. The site does not support any sensitive natural communities. The existing Jay Willard Gymnasium has not been previously identified as a potential historic resource in prior surveys of historic resources and is therefore not listed as a resource in the National Register of Historic Places, the California Register of Historical Resources, nor in the City of Eureka Local Register of Historic Places. However, it has been identified as historic by a local heritage society. Impacts to cultural resources, including impacts to historic resources, archaeological resources, paleontological resources, human remains and tribal cultural resources will be analyzed further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of environmental checklist Sections 1 through 17, with mitigation measures incorporated, the proposed project would have no impact or a less than significant impact with respect to all environmental resource areas, except for Cultural Resources and Tribal Cultural Resources. The proposed project would not substantially alter existing uses on the project site, which include a bus lane, gymnasium, and parking areas. Consequently, operation of the proposed project would not augment environmental impacts relative to existing conditions and could potentially reduce certain environmental impacts, such as operational noise impacts, by replacing a gymnasium constructed in the 1940s with a newer structure subject to current CBC standards. Therefore, with respect to all environmental resource areas, excepting Cultural Resources and Tribal Cultural Resources, operation of the proposed project would have less than significant cumulative impacts.

Construction of the proposed project would result in new impacts to noise, air quality, greenhouse gas emissions, traffic, emergency access, and solid waste. However, these impacts would be temporary and limited to the duration of the construction schedule. Cumulative impacts of these resource areas have already been addressed in the individual resource sections (see CEQA Guidelines Section 15064(h)(3)). Incorporation of mitigation measures to reduce noise impacts have been provided in Section 12 and would reduce cumulatively significant impacts to less than significant levels. In addition, construction of the proposed project may potentially result in significant impacts to cultural resources, particularly historic resources and tribal cultural resources that may be cumulatively significant. Therefore, while the majority of cumulative impacts resulting from the proposed project would be less than significant, potentially cumulatively significant impacts to cultural and tribal resources warrant further analysis in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the proposed project would not result, either directly or indirectly in adverse hazards related to air quality, hazardous materials, or noise. As discussed in Section 3, *Air Quality*, emission of criteria pollutants associated with the proposed project would be minimal and primarily result from construction activities, which would be temporary and would be less than significant. As discussed in Section 8, *Hazards and Hazardous Materials*, the proposed project would not be located in an area containing hazardous materials and operation of the gymnasium would not require routine transport, handling or release of hazardous materials into the environment and would not result in substantial adverse effects on human beings. As discussed in Section 3, *Air Quality*, and Section 8, *Hazards and Hazardous Materials*, demolition of the existing gymnasium would comply with state and federal standards regulating lead and asbestos exposure and would not expose students or construction workers to harmful levels of lead or asbestos. Section 12, *Noise*, concluded that the proposed project would result in noise impacts associated with construction activities, but that these could be mitigated to less than significant levels by restricting the timing of construction activities and/or distance to school uses, and implementing mitigation measures, such as mufflers and acoustical barriers. Section 16, *Transportation*, identified that emergency access during construction activities may be restricted warranting preparation, review, and implementation of a Construction Emergency Access Plan. Overall, with mitigation incorporated, the proposed project would not result in significant environmental effects that could have a substantial adverse effect on human beings. Further analysis of this issue area in an EIR is not warranted.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

References

Bibliography

- California Air Pollution Control Officers Association (CACOPA). 2008. CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA).
- California Department of Conservation (CA DOC). 2015. CGS Information Warehouse: Mineral Land Classification. <http://maps.conservation.ca.gov/cgs/informationwarehouse/>. (accessed November 2016).
- _____. 2016. CGS Information Warehouse: Regulatory Maps. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps> (accessed November 2016).
- California Department of Conservation (CA DOC), Division of Mines and Geology. 1980. Geology for Planning, Eureka 7 ½' Quadrangle. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_80-09/OFR_80-09_Plate1a.pdf. (accessed November 2016).
- California Department of Fish and Wildlife (CDFW). 2015. California Regional Conservation Plans Map. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>. (accessed November 2016).
- California Department of Transportation (CADOT). 2016. *List of Eligible and Officially Designated State Scenic Highways*. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm. (accessed November 2016).
- California Emergency Management Agency. 2009. Tsunami Inundation Map for Emergency Planning, Eureka Quadrangle.
- California Energy Commission (CEC). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature.
- California Geological Survey and United States Geological Survey (CGS and USGS). 2008. Earthquake Shaking Potential For California (Map Sheet 48). http://www.conservation.ca.gov/cgs/information/publications/ms/documents/ms48_revised.pdf. (accessed November 2016).
- California State Water Resources Control Board. 2015. GeoTracker. http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603701785. (accessed November 2016).
- CAL FIRE. 2007. Humboldt County Fire Hazard Severity Zone Map: Local Responsibility Area. http://frap.fire.ca.gov/webdata/maps/humboldt/fhszl06_1_map.12.pdf. (accessed November 2016).

- CalRecycle. 2016a. Business Group Waste Stream by Material. Search terms: Humboldt, Education. <https://www2.calrecycle.ca.gov/WasteCharacterization/MaterialTypeStreams?bg=105>. (accessed November 2016).
- _____. 2016b. Facility/Site Summary Details: Hawthorne Street Transfer Station. <http://www.calrecycle.ca.gov/SWFacilities/Directory/12-AA-0033/Detail/>. (accessed November 2016).
- _____. 2016c. Facility/Site Summary Details: Potrero Hills Landfill. <http://www.calrecycle.ca.gov/SWFacilities/Directory/48-AA-0075/Detail/>. (accessed November 2016).
- Eureka, City of. 1997. General Plan-Policy Document. Eureka, CA: Amended March 4, 2008.
- Eureka, City of. 2000a. Utilities Operations. http://www.ci.eureka.ca.gov/depts/pw/utilities_operations/default.asp. (accessed November 2016).
- Eureka, City of. 2000b. Recycling/ Waste Diversion. <http://www.ci.eureka.ca.gov/depts/recycle/default.asp>. (accessed November 2016).
- Eureka, City of. 2003. Humboldt County Fire Chief's Association, Fire Prevention Officer's Section, Local Fire and Life Safety Standards, Topic: Roads. <http://www.ci.eureka.ca.gov/depts/fire/prevention/standards.asp>. (accessed November 2016).
- Eureka, City of. 2011. City of Eureka Urban Water Management Plan, 2010 Update. June 2011. <http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Eureka,%20City%20of/2010%20UWMP%20FINAL9-24-11.pdf>. (accessed November 2016).
- Eureka, City of. 2013. Drinking Water Consumer Confidence Report. <http://www.ci.eureka.ca.gov/civica/filebank/blobdload.asp?BlobID=9546>. (accessed November 2016).
- Eureka City Schools. 2016. Eureka High School Calendar. http://www.eurekacityschools.org/index.php?option=com_content&view=article&id=1294&Itemid=148
- Federal Railroad Administration (FRA). 1998. Human Response to Different Levels of Groundborne Vibration.
- Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment.
- Federal Emergency Management Agency (FEMA). 2016. National Flood Hazard Layer: FIRM panel 06023C0830F. November 3, 2016.
- FF & J Architects, Inc. 2016. Eureka High School gymnasium Preliminary Historic Assessment & Code Analysis, Eureka, CA. Prepared by Page & Turnbull. July 12, 2016.
- Humboldt Bay Fire (HBF). 2016. Welcome to the home of Humboldt Bay Fire. <http://www.hbfire.org/>. (accessed November 2016).

- Humboldt County. 2002. Natural Resources & Hazards Background Report: 10. Geologic, Seismic, and Soil Hazards. <http://humboldt.gov/DocumentCenter/Home/View/1375>. (accessed November 2016).
- Humboldt County, Planning and Building Department. 2007. Airport Land Use Compatibility Zones: Humboldt County, California, 2007. Humboldt County Planning and Building Department. <http://purl.stanford.edu/bm978dp1411>. (accessed November 2016).
- Humboldt County, Community Development Division. 2007. Draft Water Resources Technical Report. Prepared by Winzler & Kelly Consulting Engineers. Eureka, CA: November 2007.
- Humboldt County Association of Governments (HCAOG). 2014. Final Environmental Impact Report: Humboldt Regional Transportation Plan 2013/14 Update. Prepared with assistance by Rincon Consultants, Inc. Eureka, CA: August 2014.
- Humboldt Waste Management Authority (HWMA). 2016. Curbside Pickup- Garbage & Recycling. <http://www.hwma.net/curbside-dropoff>. (accessed November 2016).
- Humboldt Bay Waste Management Authority. 2016. Hawthorne Street Transfer Station. Phone Call with Representative. November 15, 2016.
- IAC Acoustics. 2017. Comparative Examples of Noise Levels. <http://www.industrialnoisecontrol.com/comparative-noise-examples.htm>. (accessed January 2017).
- Los Angeles Unified School District (LAUSD). 2014. School Upgrade Program EIR .p 5.6-11,12. Los Angeles, CA: June 2014.
- McLaughlin, R.J., Ellen, S.D., Blake, M.C., Jayko, A.S., Irwin, W.P., Aalto, K.R., Carver, G.A., Clarke, S.H., Barnes, J.B., Cecil, J.D., and Cyr, K.A. 2000. Geology of the Cape Mendocino, Eureka, Garberville, and southwestern part of the Hayfork 30 X 60 minute quadrangles and adjacent offshore area, northern California, with digital database: U.S. Geological Survey, Miscellaneous Field Studies Map MF-2336, scale 1:100,000.
- National Register of Historic Places (NRHP). 2016. Online Mapping available at: <https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>. Accessed October 2016.
- North Coast Unified Air Quality Management District (NCUAQMD). 2016a. The North Coast Air Basin. <http://www.ncuaqmd.org/index.php?page=northcoast.airbasin>. (accessed November 2016).
- _____. 2016b. Air Quality Planning & CEQA. <http://www.ncuaqmd.org/index.php?page=aqplanning.ceqa#T1>. (accessed November 2016).
- _____. 2016c. Asbestos Regulations. <http://www.ncuaqmd.org/index.php?page=asbestos>. (accessed December 2016).
- Office of Governor Edmund G. Brown Jr. 2016. Governor Brown Signs Historic Climate Change Legislation. September 8, 2016. <https://www.gov.ca.gov/news.php?id=19522>. Accessed October 2016.

- Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.
- Southern California Air Quality Management District. 1993. Figure 5-5, Land Uses Associated with Odor Complaints, in SCAQMD CEQA Air Quality Handbook.
- United States Environmental Protection Agency (U.S. EPA). 1998. Emissions of Air Pollution from Nonroad Diesel Engines: Final Rule. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-emissions-air-pollution-nonroad-0>. (accessed January 2017).
- _____. 2014. Report on the Environment.
- _____. 2016. Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>. (accessed November 2016).
- _____. 2016. Asbestos National Emissions Standard for Hazardous Air Pollutants. <https://www.epa.gov/asbestos/asbestos-national-emissions-standard-hazardous-air-pollutants-neshap>. (accessed January 2017).
- United States Fish and Wildlife Service (USFWS). 2016. Environmental Conservation Online System. <http://ecos.fws.gov/ecp0/conservationPlan/region/summary?region=8&type=HCP>. (accessed November 2016).
- United States Geological Survey (USGS). 2016a. Areas of Land Subsidence in California, Map. http://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. (accessed December 2016)/
- _____. 2016b. Mineral Resources On-Line Spatial Data, Humboldt County. <http://mrdata.usgs.gov/mrds/select.php?place=f06023&div=fips>. (accessed November 2016).
- West Hollywood, City of. 2014. Recirculated Draft Environmental Impact Report for the Melrose Triangle Project, City of West Hollywood.

Personal Communication

Humboldt Waste Management Authority (HWMA) Staff Member. 2016. Phone Call. November 15, 2016.

List of Preparers

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Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Results

Eureka High School Gym Replacement Project - Humboldt County, Winter

Eureka High School Gym Replacement Project

Humboldt County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------|--------|----------|-------------|--------------------|------------|
| Health Club | 40.08 | 1000sqft | 2.60 | 29,940.00 | 0 |
| Parking Lot | 133.00 | Space | 1.20 | 53,200.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------|--------------------------------|--------------------------|-------|---------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 103 |
| Climate Zone | 1 | | | Operational Year | 2019 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 641.35 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Altered lot size of health club to get total lot size of 3.8 acres. Number of parking spaces area as shown on proposed site plan.

Construction Phase - Architectural Coating phase modified to begin halfway through building construction, rather than at end of paving, to better reflect actual construction practices.

Demolition -

Waste Mitigation -

Construction Off-road Equipment Mitigation - Assumed all equipment except generator sets would be Tier 2 as USEPA mandated Tier 2 emissions standards for most engines (except generator sets) starting 2004.

Eureka High School Gym Replacement Project - Humboldt County, Winter

[illegible]

Eureka High School Gym Replacement Project - Humboldt County, Winter

| | | | |
|---------------------------|-------------------------|-----------|------------|
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstructionPhase | NumDays | 18.00 | 160.00 |
| tblConstructionPhase | PhaseEndDate | 7/26/2018 | 7/9/2018 |
| tblConstructionPhase | PhaseStartDate | 7/3/2018 | 11/28/2017 |
| tblLandUse | BuildingSpaceSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LandUseSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LotAcreage | 0.92 | 2.60 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2019 |

2.0 Emissions Summary

Eureka High School Gym Replacement Project - Humboldt County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2017 | 8.6094 | 52.4723 | 25.0800 | 0.0475 | 18.2141 | 2.8803 | 21.0944 | 9.9699 | 2.6498 | 12.6197 | 0.0000 | 4,822.127 9 | 4,822.127 9 | 1.2075 | 0.0000 | 4,849.996 8 |
| 2018 | 8.0943 | 28.0293 | 23.3830 | 0.0373 | 0.4395 | 1.6787 | 2.1182 | 0.1187 | 1.5874 | 1.7061 | 0.0000 | 3,652.842 0 | 3,652.842 0 | 0.7236 | 0.0000 | 3,670.931 6 |
| Maximum | 8.6094 | 52.4723 | 25.0800 | 0.0475 | 18.2141 | 2.8803 | 21.0944 | 9.9699 | 2.6498 | 12.6197 | 0.0000 | 4,822.127 9 | 4,822.127 9 | 1.2075 | 0.0000 | 4,849.996 8 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2017 | 7.1503 | 36.6044 | 26.7416 | 0.0475 | 8.2777 | 1.3008 | 9.2255 | 4.5080 | 1.2992 | 5.4558 | 0.0000 | 4,822.127 9 | 4,822.127 9 | 1.2075 | 0.0000 | 4,849.996 8 |
| 2018 | 7.0397 | 28.3327 | 24.9302 | 0.0373 | 0.4395 | 1.2567 | 1.6963 | 0.1187 | 1.2554 | 1.3741 | 0.0000 | 3,652.842 0 | 3,652.842 0 | 0.7236 | 0.0000 | 3,670.931 6 |
| Maximum | 7.1503 | 36.6044 | 26.7416 | 0.0475 | 8.2777 | 1.3008 | 9.2255 | 4.5080 | 1.2992 | 5.4558 | 0.0000 | 4,822.127 9 | 4,822.127 9 | 1.2075 | 0.0000 | 4,849.996 8 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|-------|-------|-------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 15.05 | 19.33 | -6.62 | 0.00 | 53.27 | 43.90 | 52.95 | 54.14 | 39.71 | 52.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

2.2 Overall Operational**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Energy | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Mobile | 4.1822 | 20.1803 | 44.8794 | 0.0698 | 4.8773 | 0.1423 | 5.0196 | 1.3088 | 0.1348 | 1.4436 | | 7,021.0446 | 7,021.0446 | 0.5537 | | 7,034.8881 |
| Total | 5.0468 | 20.2089 | 44.9211 | 0.0700 | 4.8773 | 0.1445 | 5.0218 | 1.3088 | 0.1370 | 1.4458 | | 7,055.1480 | 7,055.1480 | 0.5545 | 6.2000e-004 | 7,069.1965 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Energy | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Mobile | 4.1822 | 20.1803 | 44.8794 | 0.0698 | 4.8773 | 0.1423 | 5.0196 | 1.3088 | 0.1348 | 1.4436 | | 7,021.0446 | 7,021.0446 | 0.5537 | | 7,034.8881 |
| Total | 5.0468 | 20.2089 | 44.9211 | 0.0700 | 4.8773 | 0.1445 | 5.0218 | 1.3088 | 0.1370 | 1.4458 | | 7,055.1480 | 7,055.1480 | 0.5545 | 6.2000e-004 | 7,069.1965 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 6/5/2017 | 6/30/2017 | 5 | 20 | |
| 2 | Site Preparation | Site Preparation | 7/1/2017 | 7/7/2017 | 5 | 5 | |
| 3 | Grading | Grading | 7/8/2017 | 7/19/2017 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/20/2017 | 6/6/2018 | 5 | 230 | |
| 5 | Architectural Coating | Architectural Coating | 11/28/2017 | 7/9/2018 | 5 | 160 | |
| 6 | Paving | Paving | 6/7/2018 | 7/2/2018 | 5 | 18 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 44,910; Non-Residential Outdoor: 14,970; Striped Parking Area: 3,192 (Architectural Coating – sqft)

OffRoad Equipment

Eureka High School Gym Replacement Project - Humboldt County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 2 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 6.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 6.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

Trips and VMT

Eureka High School Gym Replacement Project - Humboldt County, Winter

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 182.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 35.00 | 14.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 7.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.9724 | 0.0000 | 1.9724 | 0.2986 | 0.0000 | 0.2986 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1031 | 42.7475 | 23.0122 | 0.0388 | | 2.1935 | 2.1935 | | 2.0425 | 2.0425 | | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |
| Total | 4.1031 | 42.7475 | 23.0122 | 0.0388 | 1.9724 | 2.1935 | 4.1659 | 0.2986 | 2.0425 | 2.3412 | | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.2 Demolition - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1458 | 3.7765 | 0.8108 | 7.3700e-003 | 0.1581 | 0.0399 | 0.1980 | 0.0433 | 0.0382 | 0.0814 | | 771.7185 | 771.7185 | 0.0301 | | 772.4712 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |
| Total | 0.3090 | 3.9406 | 2.0677 | 8.6500e-003 | 0.2813 | 0.0413 | 0.3226 | 0.0759 | 0.0395 | 0.1154 | | 897.8446 | 897.8446 | 0.0418 | | 898.8898 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.8876 | 0.0000 | 0.8876 | 0.1344 | 0.0000 | 0.1344 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2617 | 32.6638 | 24.6739 | 0.0388 | | 0.9135 | 0.9135 | | 0.9135 | 0.9135 | 0.0000 | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |
| Total | 1.2617 | 32.6638 | 24.6739 | 0.0388 | 0.8876 | 0.9135 | 1.8011 | 0.1344 | 0.9135 | 1.0479 | 0.0000 | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.2 Demolition - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1458 | 3.7765 | 0.8108 | 7.3700e-003 | 0.1581 | 0.0399 | 0.1980 | 0.0433 | 0.0382 | 0.0814 | | 771.7185 | 771.7185 | 0.0301 | | 772.4712 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |
| Total | 0.3090 | 3.9406 | 2.0677 | 8.6500e-003 | 0.2813 | 0.0413 | 0.3226 | 0.0759 | 0.0395 | 0.1154 | | 897.8446 | 897.8446 | 0.0418 | | 898.8898 |

3.3 Site Preparation - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.9608 | 52.2754 | 23.4554 | 0.0380 | | 2.8786 | 2.8786 | | 2.6483 | 2.6483 | | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |
| Total | 4.9608 | 52.2754 | 23.4554 | 0.0380 | 18.0663 | 2.8786 | 20.9448 | 9.9307 | 2.6483 | 12.5790 | | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.3 Site Preparation - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1958 | 0.1970 | 1.5083 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.3512 | 151.3512 | 0.0140 | | 151.7024 |
| Total | 0.1958 | 0.1970 | 1.5083 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.3512 | 151.3512 | 0.0140 | | 151.7024 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.1298 | 0.0000 | 8.1298 | 4.4688 | 0.0000 | 4.4688 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2097 | 33.7214 | 22.9600 | 0.0380 | | 0.9462 | 0.9462 | | 0.9462 | 0.9462 | 0.0000 | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |
| Total | 1.2097 | 33.7214 | 22.9600 | 0.0380 | 8.1298 | 0.9462 | 9.0760 | 4.4688 | 0.9462 | 5.4150 | 0.0000 | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.3 Site Preparation - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1958 | 0.1970 | 1.5083 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.3512 | 151.3512 | 0.0140 | | 151.7024 |
| Total | 0.1958 | 0.1970 | 1.5083 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.3512 | 151.3512 | 0.0140 | | 151.7024 |

3.4 Grading - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5523 | 0.0000 | 6.5523 | 3.3675 | 0.0000 | 3.3675 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.0705 | 33.8868 | 17.1042 | 0.0297 | | 1.7774 | 1.7774 | | 1.6352 | 1.6352 | | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |
| Total | 3.0705 | 33.8868 | 17.1042 | 0.0297 | 6.5523 | 1.7774 | 8.3298 | 3.3675 | 1.6352 | 5.0027 | | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.4 Grading - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |
| Total | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9486 | 0.0000 | 2.9486 | 1.5154 | 0.0000 | 1.5154 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0093 | 26.2791 | 18.9906 | 0.0297 | | 0.7725 | 0.7725 | | 0.7725 | 0.7725 | 0.0000 | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |
| Total | 1.0093 | 26.2791 | 18.9906 | 0.0297 | 2.9486 | 0.7725 | 3.7210 | 1.5154 | 0.7725 | 2.2879 | 0.0000 | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.4 Grading - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |
| Total | 0.1632 | 0.1641 | 1.2569 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.1260 | 126.1260 | 0.0117 | | 126.4186 |

3.5 Building Construction - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1149 | 26.5546 | 18.1825 | 0.0269 | | 1.7879 | 1.7879 | | 1.6791 | 1.6791 | | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |
| Total | 3.1149 | 26.5546 | 18.1825 | 0.0269 | | 1.7879 | 1.7879 | | 1.6791 | 1.6791 | | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.5 Building Construction - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1374 | 2.3408 | 0.8769 | 3.8800e-003 | 0.0945 | 0.0300 | 0.1245 | 0.0272 | 0.0287 | 0.0559 | | 404.3611 | 404.3611 | 0.0267 | | 405.0279 |
| Worker | 0.3808 | 0.3830 | 2.9328 | 2.9900e-003 | 0.2875 | 3.2800e-003 | 0.2908 | 0.0763 | 3.0400e-003 | 0.0793 | | 294.2941 | 294.2941 | 0.0273 | | 294.9768 |
| Total | 0.5182 | 2.7237 | 3.8097 | 6.8700e-003 | 0.3820 | 0.0333 | 0.4153 | 0.1035 | 0.0317 | 0.1352 | | 698.6552 | 698.6552 | 0.0540 | | 700.0047 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3988 | 22.8111 | 17.5909 | 0.0269 | | 0.9935 | 0.9935 | | 0.9935 | 0.9935 | 0.0000 | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |
| Total | 1.3988 | 22.8111 | 17.5909 | 0.0269 | | 0.9935 | 0.9935 | | 0.9935 | 0.9935 | 0.0000 | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1374 | 2.3408 | 0.8769 | 3.8800e-003 | 0.0945 | 0.0300 | 0.1245 | 0.0272 | 0.0287 | 0.0559 | | 404.3611 | 404.3611 | 0.0267 | | 405.0279 |
| Worker | 0.3808 | 0.3830 | 2.9328 | 2.9900e-003 | 0.2875 | 3.2800e-003 | 0.2908 | 0.0763 | 3.0400e-003 | 0.0793 | | 294.2941 | 294.2941 | 0.0273 | | 294.9768 |
| Total | 0.5182 | 2.7237 | 3.8097 | 6.8700e-003 | 0.3820 | 0.0333 | 0.4153 | 0.1035 | 0.0317 | 0.1352 | | 698.6552 | 698.6552 | 0.0540 | | 700.0047 |

3.5 Building Construction - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.6795 | 23.3900 | 17.5804 | 0.0269 | | 1.4999 | 1.4999 | | 1.4099 | 1.4099 | | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |
| Total | 2.6795 | 23.3900 | 17.5804 | 0.0269 | | 1.4999 | 1.4999 | | 1.4099 | 1.4099 | | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.5 Building Construction - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1208 | 2.2169 | 0.7713 | 3.8800e-003 | 0.0945 | 0.0246 | 0.1191 | 0.0272 | 0.0235 | 0.0507 | | 404.7962 | 404.7962 | 0.0251 | | 405.4224 |
| Worker | 0.3564 | 0.3472 | 2.6476 | 2.9200e-003 | 0.2875 | 3.0800e-003 | 0.2906 | 0.0763 | 2.8500e-003 | 0.0791 | | 288.0517 | 288.0517 | 0.0247 | | 288.6699 |
| Total | 0.4771 | 2.5641 | 3.4189 | 6.8000e-003 | 0.3820 | 0.0277 | 0.4097 | 0.1035 | 0.0264 | 0.1298 | | 692.8480 | 692.8480 | 0.0498 | | 694.0923 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3341 | 22.4603 | 17.5646 | 0.0269 | | 0.9551 | 0.9551 | | 0.9551 | 0.9551 | 0.0000 | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |
| Total | 1.3341 | 22.4603 | 17.5646 | 0.0269 | | 0.9551 | 0.9551 | | 0.9551 | 0.9551 | 0.0000 | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.5 Building Construction - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1208 | 2.2169 | 0.7713 | 3.8800e-003 | 0.0945 | 0.0246 | 0.1191 | 0.0272 | 0.0235 | 0.0507 | | 404.7962 | 404.7962 | 0.0251 | | 405.4224 |
| Worker | 0.3564 | 0.3472 | 2.6476 | 2.9200e-003 | 0.2875 | 3.0800e-003 | 0.2906 | 0.0763 | 2.8500e-003 | 0.0791 | | 288.0517 | 288.0517 | 0.0247 | | 288.6699 |
| Total | 0.4771 | 2.5641 | 3.4189 | 6.8000e-003 | 0.3820 | 0.0277 | 0.4097 | 0.1035 | 0.0264 | 0.1298 | | 692.8480 | 692.8480 | 0.0498 | | 694.0923 |

3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.3323 | 2.1850 | 1.8681 | 2.9700e-003 | | 0.1733 | 0.1733 | | 0.1733 | 0.1733 | | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |
| Total | 4.9001 | 2.1850 | 1.8681 | 2.9700e-003 | | 0.1733 | 0.1733 | | 0.1733 | 0.1733 | | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.6 Architectural Coating - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0762 | 0.0766 | 0.5866 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 58.8588 | 58.8588 | 5.4600e-003 | | 58.9954 |
| Total | 0.0762 | 0.0766 | 0.5866 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 58.8588 | 58.8588 | 5.4600e-003 | | 58.9954 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5893 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |
| Total | 5.1571 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.6 Architectural Coating - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0762 | 0.0766 | 0.5866 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 58.8588 | 58.8588 | 5.4600e-003 | | 58.9954 |
| Total | 0.0762 | 0.0766 | 0.5866 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 58.8588 | 58.8588 | 5.4600e-003 | | 58.9954 |

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2986 | 2.0058 | 1.8542 | 2.9700e-003 | | 0.1506 | 0.1506 | | 0.1506 | 0.1506 | | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |
| Total | 4.8664 | 2.0058 | 1.8542 | 2.9700e-003 | | 0.1506 | 0.1506 | | 0.1506 | 0.1506 | | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.6 Architectural Coating - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0713 | 0.0694 | 0.5295 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.6104 | 57.6104 | 4.9400e-003 | | 57.7340 |
| Total | 0.0713 | 0.0694 | 0.5295 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.6104 | 57.6104 | 4.9400e-003 | | 57.7340 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5893 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |
| Total | 5.1571 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.6 Architectural Coating - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0713 | 0.0694 | 0.5295 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.6104 | 57.6104 | 4.9400e-003 | | 57.7340 |
| Total | 0.0713 | 0.0694 | 0.5295 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.6104 | 57.6104 | 4.9400e-003 | | 57.7340 |

3.7 Paving - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4239 | 14.5184 | 12.4333 | 0.0189 | | 0.8370 | 0.8370 | | 0.7718 | 0.7718 | | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |
| Paving | 0.1747 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.5986 | 14.5184 | 12.4333 | 0.0189 | | 0.8370 | 0.8370 | | 0.7718 | 0.7718 | | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.7 Paving - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2036 | 0.1984 | 1.5129 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 164.6010 | 164.6010 | 0.0141 | | 164.9542 |
| Total | 0.2036 | 0.1984 | 1.5129 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 164.6010 | 164.6010 | 0.0141 | | 164.9542 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.7524 | 16.0849 | 13.5323 | 0.0189 | | 0.5601 | 0.5601 | | 0.5601 | 0.5601 | 0.0000 | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |
| Paving | 0.1747 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 0.9271 | 16.0849 | 13.5323 | 0.0189 | | 0.5601 | 0.5601 | | 0.5601 | 0.5601 | 0.0000 | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

3.7 Paving - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.2036 | 0.1984 | 1.5129 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 164.6010 | 164.6010 | 0.0141 | | 164.9542 |
| Total | 0.2036 | 0.1984 | 1.5129 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 164.6010 | 164.6010 | 0.0141 | | 164.9542 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Eureka High School Gym Replacement Project - Humboldt County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.1822 | 20.1803 | 44.8794 | 0.0698 | 4.8773 | 0.1423 | 5.0196 | 1.3088 | 0.1348 | 1.4436 | | 7,021.0446 | 7,021.0446 | 0.5537 | | 7,034.8881 |
| Unmitigated | 4.1822 | 20.1803 | 44.8794 | 0.0698 | 4.8773 | 0.1423 | 5.0196 | 1.3088 | 0.1348 | 1.4436 | | 7,021.0446 | 7,021.0446 | 0.5537 | | 7,034.8881 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Health Club | 1,319.83 | 836.47 | 1071.34 | 2,099,603 | 2,099,603 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,319.83 | 836.47 | 1,071.34 | 2,099,603 | 2,099,603 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|-------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Health Club | 9.50 | 7.30 | 7.30 | 16.90 | 64.10 | 19.00 | 52 | 39 | 9 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Health Club | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |
| Parking Lot | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| NaturalGas Unmitigated | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Health Club | 289.557 | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Health Club | 0.289557 | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

6.0 Area Detail**6.1 Mitigation Measures Area**

Eureka High School Gym Replacement Project - Humboldt County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Unmitigated | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2002 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6596 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.6900e-003 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Total | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

Eureka High School Gym Replacement Project - Humboldt County, Winter

6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2002 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6596 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.6900e-003 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Total | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Eureka High School Gym Replacement Project - Humboldt County, Winter

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

Eureka High School Gym Replacement Project - Humboldt County, Summer

Eureka High School Gym Replacement Project

Humboldt County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------|--------|----------|-------------|--------------------|------------|
| Health Club | 40.08 | 1000sqft | 2.60 | 29,940.00 | 0 |
| Parking Lot | 133.00 | Space | 1.20 | 53,200.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------|--------------------------------|--------------------------|-------|---------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 103 |
| Climate Zone | 1 | | | Operational Year | 2019 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 641.35 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Altered lot size of health club to get total lot size of 3.8 acres. Number of parking spaces area as shown on proposed site plan.

Construction Phase - Architectural Coating phase modified to begin halfway through building construction, rather than at end of paving, to better reflect actual construction practices.

Demolition -

Waste Mitigation -

Construction Off-road Equipment Mitigation - Assumed all equipment except generator sets would be Tier 2 as USEPA mandated Tier 2 emissions standards for most engines (except generator sets) starting 2004.

Eureka High School Gym Replacement Project - Humboldt County, Summer

[illegible]

Eureka High School Gym Replacement Project - Humboldt County, Summer

| | | | |
|---------------------------|-------------------------|-----------|------------|
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstructionPhase | NumDays | 18.00 | 160.00 |
| tblConstructionPhase | PhaseEndDate | 7/26/2018 | 7/9/2018 |
| tblConstructionPhase | PhaseStartDate | 7/3/2018 | 11/28/2017 |
| tblLandUse | BuildingSpaceSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LandUseSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LotAcreage | 0.92 | 2.60 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2019 |

2.0 Emissions Summary

Eureka High School Gym Replacement Project - Humboldt County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2017 | 8.5247 | 52.4390 | 24.9019 | 0.0476 | 18.2141 | 2.8803 | 21.0944 | 9.9699 | 2.6498 | 12.6197 | 0.0000 | 4,835.008 3 | 4,835.008 3 | 1.2070 | 0.0000 | 4,862.802 0 |
| 2018 | 8.0149 | 27.9342 | 23.0375 | 0.0374 | 0.4395 | 1.6782 | 2.1177 | 0.1187 | 1.5869 | 1.7056 | 0.0000 | 3,664.367 2 | 3,664.367 2 | 0.7204 | 0.0000 | 3,682.377 9 |
| Maximum | 8.5247 | 52.4390 | 24.9019 | 0.0476 | 18.2141 | 2.8803 | 21.0944 | 9.9699 | 2.6498 | 12.6197 | 0.0000 | 4,835.008 3 | 4,835.008 3 | 1.2070 | 0.0000 | 4,862.802 0 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2017 | 7.0657 | 36.5043 | 26.5636 | 0.0476 | 8.2777 | 1.3002 | 9.2255 | 4.5080 | 1.2986 | 5.4558 | 0.0000 | 4,835.008 3 | 4,835.008 3 | 1.2070 | 0.0000 | 4,862.802 0 |
| 2018 | 6.9602 | 28.2376 | 24.5847 | 0.0374 | 0.4395 | 1.2562 | 1.6958 | 0.1187 | 1.2549 | 1.3736 | 0.0000 | 3,664.367 2 | 3,664.367 2 | 0.7204 | 0.0000 | 3,682.377 9 |
| Maximum | 7.0657 | 36.5043 | 26.5636 | 0.0476 | 8.2777 | 1.3002 | 9.2255 | 4.5080 | 1.2986 | 5.4558 | 0.0000 | 4,835.008 3 | 4,835.008 3 | 1.2070 | 0.0000 | 4,862.802 0 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|-------|-------|-------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 15.20 | 19.45 | -6.69 | 0.00 | 53.27 | 43.92 | 52.95 | 54.14 | 39.73 | 52.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

2.2 Overall Operational**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|--------------------|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Energy | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Mobile | 4.0652 | 19.2409 | 39.7788 | 0.0707 | 4.8773 | 0.1388 | 5.0161 | 1.3088 | 0.1315 | 1.4403 | | 7,121.824 2 | 7,121.824 2 | 0.5190 | | 7,134.799 0 |
| Total | 4.9298 | 19.2694 | 39.8205 | 0.0709 | 4.8773 | 0.1411 | 5.0184 | 1.3088 | 0.1337 | 1.4425 | | 7,155.927 6 | 7,155.927 6 | 0.5197 | 6.2000e-004 | 7,169.107 4 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|--------------------|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Energy | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Mobile | 4.0652 | 19.2409 | 39.7788 | 0.0707 | 4.8773 | 0.1388 | 5.0161 | 1.3088 | 0.1315 | 1.4403 | | 7,121.824 2 | 7,121.824 2 | 0.5190 | | 7,134.799 0 |
| Total | 4.9298 | 19.2694 | 39.8205 | 0.0709 | 4.8773 | 0.1411 | 5.0184 | 1.3088 | 0.1337 | 1.4425 | | 7,155.927 6 | 7,155.927 6 | 0.5197 | 6.2000e-004 | 7,169.107 4 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 6/5/2017 | 6/30/2017 | 5 | 20 | |
| 2 | Site Preparation | Site Preparation | 7/1/2017 | 7/7/2017 | 5 | 5 | |
| 3 | Grading | Grading | 7/8/2017 | 7/19/2017 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/20/2017 | 6/6/2018 | 5 | 230 | |
| 5 | Architectural Coating | Architectural Coating | 11/28/2017 | 7/9/2018 | 5 | 160 | |
| 6 | Paving | Paving | 6/7/2018 | 7/2/2018 | 5 | 18 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 44,910; Non-Residential Outdoor: 14,970; Striped Parking Area: 3,192 (Architectural Coating – sqft)

OffRoad Equipment

Eureka High School Gym Replacement Project - Humboldt County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 2 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 6.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 6.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

Trips and VMT

Eureka High School Gym Replacement Project - Humboldt County, Summer

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 182.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 35.00 | 14.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 7.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.9724 | 0.0000 | 1.9724 | 0.2986 | 0.0000 | 0.2986 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1031 | 42.7475 | 23.0122 | 0.0388 | | 2.1935 | 2.1935 | | 2.0425 | 2.0425 | | 3,924.283 3 | 3,924.283 3 | 1.0730 | | 3,951.107 0 |
| Total | 4.1031 | 42.7475 | 23.0122 | 0.0388 | 1.9724 | 2.1935 | 4.1659 | 0.2986 | 2.0425 | 2.3412 | | 3,924.283 3 | 3,924.283 3 | 1.0730 | | 3,951.107 0 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.2 Demolition - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1415 | 3.7041 | 0.7368 | 7.4900e-003 | 0.1581 | 0.0392 | 0.1973 | 0.0433 | 0.0375 | 0.0808 | | 784.2098 | 784.2098 | 0.0275 | | 784.8971 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |
| Total | 0.2772 | 3.8405 | 1.8897 | 8.7700e-003 | 0.2813 | 0.0407 | 0.3220 | 0.0759 | 0.0388 | 0.1148 | | 910.7249 | 910.7249 | 0.0388 | | 911.6951 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.8876 | 0.0000 | 0.8876 | 0.1344 | 0.0000 | 0.1344 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2617 | 32.6638 | 24.6739 | 0.0388 | | 0.9135 | 0.9135 | | 0.9135 | 0.9135 | 0.0000 | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |
| Total | 1.2617 | 32.6638 | 24.6739 | 0.0388 | 0.8876 | 0.9135 | 1.8011 | 0.1344 | 0.9135 | 1.0479 | 0.0000 | 3,924.2833 | 3,924.2833 | 1.0730 | | 3,951.1070 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.2 Demolition - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1415 | 3.7041 | 0.7368 | 7.4900e-003 | 0.1581 | 0.0392 | 0.1973 | 0.0433 | 0.0375 | 0.0808 | | 784.2098 | 784.2098 | 0.0275 | | 784.8971 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |
| Total | 0.2772 | 3.8405 | 1.8897 | 8.7700e-003 | 0.2813 | 0.0407 | 0.3220 | 0.0759 | 0.0388 | 0.1148 | | 910.7249 | 910.7249 | 0.0388 | | 911.6951 |

3.3 Site Preparation - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.9608 | 52.2754 | 23.4554 | 0.0380 | | 2.8786 | 2.8786 | | 2.6483 | 2.6483 | | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |
| Total | 4.9608 | 52.2754 | 23.4554 | 0.0380 | 18.0663 | 2.8786 | 20.9448 | 9.9307 | 2.6483 | 12.5790 | | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.3 Site Preparation - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1628 | 0.1637 | 1.3835 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.8182 | 151.8182 | 0.0136 | | 152.1576 |
| Total | 0.1628 | 0.1637 | 1.3835 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.8182 | 151.8182 | 0.0136 | | 152.1576 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.1298 | 0.0000 | 8.1298 | 4.4688 | 0.0000 | 4.4688 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.2097 | 33.7214 | 22.9600 | 0.0380 | | 0.9462 | 0.9462 | | 0.9462 | 0.9462 | 0.0000 | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |
| Total | 1.2097 | 33.7214 | 22.9600 | 0.0380 | 8.1298 | 0.9462 | 9.0760 | 4.4688 | 0.9462 | 5.4150 | 0.0000 | 3,894.9500 | 3,894.9500 | 1.1934 | | 3,924.7852 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.3 Site Preparation - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1628 | 0.1637 | 1.3835 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.8182 | 151.8182 | 0.0136 | | 152.1576 |
| Total | 0.1628 | 0.1637 | 1.3835 | 1.5400e-003 | 0.1479 | 1.6900e-003 | 0.1496 | 0.0392 | 1.5600e-003 | 0.0408 | | 151.8182 | 151.8182 | 0.0136 | | 152.1576 |

3.4 Grading - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5523 | 0.0000 | 6.5523 | 3.3675 | 0.0000 | 3.3675 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.0705 | 33.8868 | 17.1042 | 0.0297 | | 1.7774 | 1.7774 | | 1.6352 | 1.6352 | | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |
| Total | 3.0705 | 33.8868 | 17.1042 | 0.0297 | 6.5523 | 1.7774 | 8.3298 | 3.3675 | 1.6352 | 5.0027 | | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.4 Grading - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |
| Total | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9486 | 0.0000 | 2.9486 | 1.5154 | 0.0000 | 1.5154 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0093 | 26.2791 | 18.9906 | 0.0297 | | 0.7725 | 0.7725 | | 0.7725 | 0.7725 | 0.0000 | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |
| Total | 1.0093 | 26.2791 | 18.9906 | 0.0297 | 2.9486 | 0.7725 | 3.7210 | 1.5154 | 0.7725 | 2.2879 | 0.0000 | 3,037.9107 | 3,037.9107 | 0.9308 | | 3,061.1809 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.4 Grading - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |
| Total | 0.1357 | 0.1364 | 1.1529 | 1.2800e-003 | 0.1232 | 1.4100e-003 | 0.1246 | 0.0327 | 1.3000e-003 | 0.0340 | | 126.5152 | 126.5152 | 0.0113 | | 126.7980 |

3.5 Building Construction - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1149 | 26.5546 | 18.1825 | 0.0269 | | 1.7879 | 1.7879 | | 1.6791 | 1.6791 | | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |
| Total | 3.1149 | 26.5546 | 18.1825 | 0.0269 | | 1.7879 | 1.7879 | | 1.6791 | 1.6791 | | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.5 Building Construction - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1298 | 2.3113 | 0.7746 | 3.9700e-003 | 0.0945 | 0.0294 | 0.1239 | 0.0272 | 0.0281 | 0.0553 | | 414.2963 | 414.2963 | 0.0244 | | 414.9062 |
| Worker | 0.3166 | 0.3182 | 2.6901 | 2.9900e-003 | 0.2875 | 3.2800e-003 | 0.2908 | 0.0763 | 3.0400e-003 | 0.0793 | | 295.2020 | 295.2020 | 0.0264 | | 295.8619 |
| Total | 0.4464 | 2.6295 | 3.4647 | 6.9600e-003 | 0.3820 | 0.0327 | 0.4147 | 0.1035 | 0.0312 | 0.1346 | | 709.4984 | 709.4984 | 0.0508 | | 710.7681 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3988 | 22.8111 | 17.5909 | 0.0269 | | 0.9935 | 0.9935 | | 0.9935 | 0.9935 | 0.0000 | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |
| Total | 1.3988 | 22.8111 | 17.5909 | 0.0269 | | 0.9935 | 0.9935 | | 0.9935 | 0.9935 | 0.0000 | 2,650.9797 | 2,650.9797 | 0.6531 | | 2,667.3078 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1298 | 2.3113 | 0.7746 | 3.9700e-003 | 0.0945 | 0.0294 | 0.1239 | 0.0272 | 0.0281 | 0.0553 | | 414.2963 | 414.2963 | 0.0244 | | 414.9062 |
| Worker | 0.3166 | 0.3182 | 2.6901 | 2.9900e-003 | 0.2875 | 3.2800e-003 | 0.2908 | 0.0763 | 3.0400e-003 | 0.0793 | | 295.2020 | 295.2020 | 0.0264 | | 295.8619 |
| Total | 0.4464 | 2.6295 | 3.4647 | 6.9600e-003 | 0.3820 | 0.0327 | 0.4147 | 0.1035 | 0.0312 | 0.1346 | | 709.4984 | 709.4984 | 0.0508 | | 710.7681 |

3.5 Building Construction - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 2.6795 | 23.3900 | 17.5804 | 0.0269 | | 1.4999 | 1.4999 | | 1.4099 | 1.4099 | | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |
| Total | 2.6795 | 23.3900 | 17.5804 | 0.0269 | | 1.4999 | 1.4999 | | 1.4099 | 1.4099 | | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.5 Building Construction - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1140 | 2.1925 | 0.6794 | 3.9800e-003 | 0.0945 | 0.0241 | 0.1186 | 0.0272 | 0.0230 | 0.0502 | | 415.2517 | 415.2517 | 0.0228 | | 415.8228 |
| Worker | 0.2958 | 0.2883 | 2.4362 | 2.9200e-003 | 0.2875 | 3.0800e-003 | 0.2906 | 0.0763 | 2.8500e-003 | 0.0791 | | 288.9432 | 288.9432 | 0.0239 | | 289.5414 |
| Total | 0.4098 | 2.4808 | 3.1156 | 6.9000e-003 | 0.3820 | 0.0271 | 0.4092 | 0.1035 | 0.0259 | 0.1293 | | 704.1949 | 704.1949 | 0.0468 | | 705.3642 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3341 | 22.4603 | 17.5646 | 0.0269 | | 0.9551 | 0.9551 | | 0.9551 | 0.9551 | 0.0000 | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |
| Total | 1.3341 | 22.4603 | 17.5646 | 0.0269 | | 0.9551 | 0.9551 | | 0.9551 | 0.9551 | 0.0000 | 2,620.9351 | 2,620.9351 | 0.6421 | | 2,636.9883 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.5 Building Construction - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1140 | 2.1925 | 0.6794 | 3.9800e-003 | 0.0945 | 0.0241 | 0.1186 | 0.0272 | 0.0230 | 0.0502 | | 415.2517 | 415.2517 | 0.0228 | | 415.8228 |
| Worker | 0.2958 | 0.2883 | 2.4362 | 2.9200e-003 | 0.2875 | 3.0800e-003 | 0.2906 | 0.0763 | 2.8500e-003 | 0.0791 | | 288.9432 | 288.9432 | 0.0239 | | 289.5414 |
| Total | 0.4098 | 2.4808 | 3.1156 | 6.9000e-003 | 0.3820 | 0.0271 | 0.4092 | 0.1035 | 0.0259 | 0.1293 | | 704.1949 | 704.1949 | 0.0468 | | 705.3642 |

3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.3323 | 2.1850 | 1.8681 | 2.9700e-003 | | 0.1733 | 0.1733 | | 0.1733 | 0.1733 | | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |
| Total | 4.9001 | 2.1850 | 1.8681 | 2.9700e-003 | | 0.1733 | 0.1733 | | 0.1733 | 0.1733 | | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.6 Architectural Coating - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0636 | 0.5380 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 59.0404 | 59.0404 | 5.2800e-003 | | 59.1724 |
| Total | 0.0633 | 0.0636 | 0.5380 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 59.0404 | 59.0404 | 5.2800e-003 | | 59.1724 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5893 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |
| Total | 5.1571 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4481 | 281.4481 | 0.0297 | | 282.1909 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.6 Architectural Coating - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0636 | 0.5380 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 59.0404 | 59.0404 | 5.2800e-003 | | 59.1724 |
| Total | 0.0633 | 0.0636 | 0.5380 | 6.0000e-004 | 0.0575 | 6.6000e-004 | 0.0582 | 0.0153 | 6.1000e-004 | 0.0159 | | 59.0404 | 59.0404 | 5.2800e-003 | | 59.1724 |

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2986 | 2.0058 | 1.8542 | 2.9700e-003 | | 0.1506 | 0.1506 | | 0.1506 | 0.1506 | | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |
| Total | 4.8664 | 2.0058 | 1.8542 | 2.9700e-003 | | 0.1506 | 0.1506 | | 0.1506 | 0.1506 | | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.6 Architectural Coating - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0592 | 0.0577 | 0.4872 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.7886 | 57.7886 | 4.7900e-003 | | 57.9083 |
| Total | 0.0592 | 0.0577 | 0.4872 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.7886 | 57.7886 | 4.7900e-003 | | 57.9083 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 4.5678 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5893 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |
| Total | 5.1571 | 3.2389 | 3.4172 | 2.9700e-003 | | 0.2734 | 0.2734 | | 0.2734 | 0.2734 | 0.0000 | 281.4485 | 281.4485 | 0.0267 | | 282.1171 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.6 Architectural Coating - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0592 | 0.0577 | 0.4872 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.7886 | 57.7886 | 4.7900e-003 | | 57.9083 |
| Total | 0.0592 | 0.0577 | 0.4872 | 5.8000e-004 | 0.0575 | 6.2000e-004 | 0.0581 | 0.0153 | 5.7000e-004 | 0.0158 | | 57.7886 | 57.7886 | 4.7900e-003 | | 57.9083 |

3.7 Paving - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.4239 | 14.5184 | 12.4333 | 0.0189 | | 0.8370 | 0.8370 | | 0.7718 | 0.7718 | | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |
| Paving | 0.1747 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.5986 | 14.5184 | 12.4333 | 0.0189 | | 0.8370 | 0.8370 | | 0.7718 | 0.7718 | | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.7 Paving - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1690 | 0.1647 | 1.3921 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 165.1104 | 165.1104 | 0.0137 | | 165.4523 |
| Total | 0.1690 | 0.1647 | 1.3921 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 165.1104 | 165.1104 | 0.0137 | | 165.4523 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.7524 | 16.0849 | 13.5323 | 0.0189 | | 0.5601 | 0.5601 | | 0.5601 | 0.5601 | 0.0000 | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |
| Paving | 0.1747 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 0.9271 | 16.0849 | 13.5323 | 0.0189 | | 0.5601 | 0.5601 | | 0.5601 | 0.5601 | 0.0000 | 1,872.5505 | 1,872.5505 | 0.5672 | | 1,886.7312 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

3.7 Paving - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1690 | 0.1647 | 1.3921 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 165.1104 | 165.1104 | 0.0137 | | 165.4523 |
| Total | 0.1690 | 0.1647 | 1.3921 | 1.6700e-003 | 0.1643 | 1.7600e-003 | 0.1661 | 0.0436 | 1.6300e-003 | 0.0452 | | 165.1104 | 165.1104 | 0.0137 | | 165.4523 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|-----|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 4.0652 | 19.2409 | 39.7788 | 0.0707 | 4.8773 | 0.1388 | 5.0161 | 1.3088 | 0.1315 | 1.4403 | | 7,121.824 2 | 7,121.824 2 | 0.5190 | | 7,134.799 0 |
| Unmitigated | 4.0652 | 19.2409 | 39.7788 | 0.0707 | 4.8773 | 0.1388 | 5.0161 | 1.3088 | 0.1315 | 1.4403 | | 7,121.824 2 | 7,121.824 2 | 0.5190 | | 7,134.799 0 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Health Club | 1,319.83 | 836.47 | 1071.34 | 2,099,603 | 2,099,603 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,319.83 | 836.47 | 1,071.34 | 2,099,603 | 2,099,603 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|-------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Health Club | 9.50 | 7.30 | 7.30 | 16.90 | 64.10 | 19.00 | 52 | 39 | 9 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Health Club | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |
| Parking Lot | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| NaturalGas Unmitigated | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Health Club | 289.557 | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Health Club | 0.289557 | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 3.1200e-003 | 0.0284 | 0.0239 | 1.7000e-004 | | 2.1600e-003 | 2.1600e-003 | | 2.1600e-003 | 2.1600e-003 | | 34.0655 | 34.0655 | 6.5000e-004 | 6.2000e-004 | 34.2679 |

6.0 Area Detail**6.1 Mitigation Measures Area**

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Unmitigated | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2002 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6596 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.6900e-003 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Total | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

Eureka High School Gym Replacement Project - Humboldt County, Summer

6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2002 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6596 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.6900e-003 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |
| Total | 0.8615 | 1.7000e-004 | 0.0178 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 0.0379 | 0.0379 | 1.0000e-004 | | 0.0405 |

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

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Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

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Eureka High School Gym Replacement Project

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1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------|--------|----------|-------------|--------------------|------------|
| Health Club | 40.08 | 1000sqft | 2.60 | 29,940.00 | 0 |
| Parking Lot | 133.00 | Space | 1.20 | 53,200.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------|--------------------------------|--------------------------|-------|---------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 103 |
| Climate Zone | 1 | | | Operational Year | 2019 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 641.35 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Altered lot size of health club to get total lot size of 3.8 acres. Number of parking spaces area as shown on proposed site plan.

Construction Phase - Architectural Coating phase modified to begin halfway through building construction, rather than at end of paving, to better reflect actual construction practices.

Demolition -

Waste Mitigation -

Construction Off-road Equipment Mitigation - Assumed all equipment except generator sets would be Tier 2 as USEPA mandated Tier 2 emissions standards for most engines (except generator sets) starting 2004.

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[illegible]

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| | | | |
|---------------------------|-------------------------|-----------|------------|
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstructionPhase | NumDays | 18.00 | 160.00 |
| tblConstructionPhase | PhaseEndDate | 7/26/2018 | 7/9/2018 |
| tblConstructionPhase | PhaseStartDate | 7/3/2018 | 11/28/2017 |
| tblLandUse | BuildingSpaceSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LandUseSquareFeet | 40,080.00 | 29,940.00 |
| tblLandUse | LotAcreage | 0.92 | 2.60 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2019 |

2.0 Emissions Summary

Eureka High School Gym Replacement Project - Humboldt County, Annual

2.1 Overall Construction**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2017 | 0.3393 | 2.4695 | 1.6899 | 2.7200e-003 | 0.1163 | 0.1453 | 0.2615 | 0.0481 | 0.1361 | 0.1843 | 0.0000 | 246.3122 | 246.3122 | 0.0541 | 0.0000 | 247.6639 |
| 2018 | 0.5274 | 1.7361 | 1.4626 | 2.3400e-003 | 0.0254 | 0.1041 | 0.1295 | 6.8800e-003 | 0.0984 | 0.1053 | 0.0000 | 207.7821 | 207.7821 | 0.0421 | 0.0000 | 208.8339 |
| Maximum | 0.5274 | 2.4695 | 1.6899 | 2.7200e-003 | 0.1163 | 0.1453 | 0.2615 | 0.0481 | 0.1361 | 0.1843 | 0.0000 | 246.3122 | 246.3122 | 0.0541 | 0.0000 | 247.6639 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2017 | 0.1960 | 2.0855 | 1.6968 | 2.7200e-003 | 0.0661 | 0.0783 | 0.1445 | 0.0254 | 0.0782 | 0.1037 | 0.0000 | 246.3120 | 246.3120 | 0.0541 | 0.0000 | 247.6637 |
| 2018 | 0.4651 | 1.7815 | 1.5778 | 2.3400e-003 | 0.0254 | 0.0792 | 0.1046 | 6.8800e-003 | 0.0791 | 0.0860 | 0.0000 | 207.7819 | 207.7819 | 0.0421 | 0.0000 | 208.8337 |
| Maximum | 0.4651 | 2.0855 | 1.6968 | 2.7200e-003 | 0.0661 | 0.0792 | 0.1445 | 0.0254 | 0.0791 | 0.1037 | 0.0000 | 246.3120 | 246.3120 | 0.0541 | 0.0000 | 247.6637 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|-------|------|-------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 23.73 | 8.05 | -3.88 | 0.00 | 35.38 | 36.83 | 36.30 | 41.27 | 32.90 | 34.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1 | 6-5-2017 | 9-4-2017 | 1.3264 | 1.0175 |
| 2 | 9-5-2017 | 12-4-2017 | 1.0862 | 0.9120 |
| 3 | 12-5-2017 | 3-4-2018 | 1.1999 | 1.1430 |
| 4 | 3-5-2018 | 6-4-2018 | 1.1829 | 1.1582 |
| 5 | 6-5-2018 | 9-4-2018 | 0.2608 | 0.2865 |
| | | Highest | 1.3264 | 1.1582 |

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |
| Energy | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 57.2344 | 57.2344 | 2.4400e-003 | 5.9000e-004 | 57.4700 |
| Mobile | 0.6874 | 3.2776 | 7.0403 | 0.0118 | 0.7684 | 0.0235 | 0.7919 | 0.2073 | 0.0223 | 0.2296 | 0.0000 | 1,076.2294 | 1,076.2294 | 0.0811 | 0.0000 | 1,078.2569 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 46.3753 | 0.0000 | 46.3753 | 2.7407 | 0.0000 | 114.8929 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.7520 | 5.2107 | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |
| Total | 0.8451 | 3.2828 | 7.0463 | 0.0118 | 0.7684 | 0.0239 | 0.7923 | 0.2073 | 0.0227 | 0.2300 | 47.1274 | 1,138.6775 | 1,185.8049 | 2.9017 | 2.4600e-003 | 1,259.0807 |

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2.2 Overall Operational**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |
| Energy | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 57.2344 | 57.2344 | 2.4400e-003 | 5.9000e-004 | 57.4700 |
| Mobile | 0.6874 | 3.2776 | 7.0403 | 0.0118 | 0.7684 | 0.0235 | 0.7919 | 0.2073 | 0.0223 | 0.2296 | 0.0000 | 1,076.2294 | 1,076.2294 | 0.0811 | 0.0000 | 1,078.2569 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 23.1877 | 0.0000 | 23.1877 | 1.3704 | 0.0000 | 57.4464 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.7520 | 5.2107 | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |
| Total | 0.8451 | 3.2828 | 7.0463 | 0.0118 | 0.7684 | 0.0239 | 0.7923 | 0.2073 | 0.0227 | 0.2300 | 23.9397 | 1,138.6775 | 1,162.6172 | 1.5314 | 2.4600e-003 | 1,201.6343 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|--------------|-------------|-------------|--------------|-------------|-------------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 49.20 | 0.00 | 1.96 | 47.23 | 0.00 | 4.56 |

3.0 Construction Detail**Construction Phase**

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| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 6/5/2017 | 6/30/2017 | 5 | 20 | |
| 2 | Site Preparation | Site Preparation | 7/1/2017 | 7/7/2017 | 5 | 5 | |
| 3 | Grading | Grading | 7/8/2017 | 7/19/2017 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/20/2017 | 6/6/2018 | 5 | 230 | |
| 5 | Architectural Coating | Architectural Coating | 11/28/2017 | 7/9/2018 | 5 | 160 | |
| 6 | Paving | Paving | 6/7/2018 | 7/2/2018 | 5 | 18 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 44,910; Non-Residential Outdoor: 14,970; Striped Parking Area: 3,192 (Architectural Coating – sqft)

OffRoad Equipment

Eureka High School Gym Replacement Project - Humboldt County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 2 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 6.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 6.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

Trips and VMT

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| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 182.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 35.00 | 14.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 7.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 8 | 20.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0197 | 0.0000 | 0.0197 | 2.9900e-003 | 0.0000 | 2.9900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0410 | 0.4275 | 0.2301 | 3.9000e-004 | | 0.0219 | 0.0219 | | 0.0204 | 0.0204 | 0.0000 | 35.6005 | 35.6005 | 9.7300e-003 | 0.0000 | 35.8438 |
| Total | 0.0410 | 0.4275 | 0.2301 | 3.9000e-004 | 0.0197 | 0.0219 | 0.0417 | 2.9900e-003 | 0.0204 | 0.0234 | 0.0000 | 35.6005 | 35.6005 | 9.7300e-003 | 0.0000 | 35.8438 |

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3.2 Demolition - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.4300e-003 | 0.0372 | 7.6800e-003 | 7.0000e-005 | 1.5000e-003 | 4.0000e-004 | 1.8900e-003 | 4.1000e-004 | 3.8000e-004 | 7.9000e-004 | 0.0000 | 7.0666 | 7.0666 | 2.6000e-004 | 0.0000 | 7.0731 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.4700e-003 | 1.4700e-003 | 0.0120 | 1.0000e-005 | 1.1600e-003 | 1.0000e-005 | 1.1700e-003 | 3.1000e-004 | 1.0000e-005 | 3.2000e-004 | 0.0000 | 1.1484 | 1.1484 | 1.0000e-004 | 0.0000 | 1.1510 |
| Total | 2.9000e-003 | 0.0387 | 0.0197 | 8.0000e-005 | 2.6600e-003 | 4.1000e-004 | 3.0600e-003 | 7.2000e-004 | 3.9000e-004 | 1.1100e-003 | 0.0000 | 8.2150 | 8.2150 | 3.6000e-004 | 0.0000 | 8.2241 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 8.8800e-003 | 0.0000 | 8.8800e-003 | 1.3400e-003 | 0.0000 | 1.3400e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0126 | 0.3266 | 0.2467 | 3.9000e-004 | | 9.1400e-003 | 9.1400e-003 | | 9.1400e-003 | 9.1400e-003 | 0.0000 | 35.6005 | 35.6005 | 9.7300e-003 | 0.0000 | 35.8438 |
| Total | 0.0126 | 0.3266 | 0.2467 | 3.9000e-004 | 8.8800e-003 | 9.1400e-003 | 0.0180 | 1.3400e-003 | 9.1400e-003 | 0.0105 | 0.0000 | 35.6005 | 35.6005 | 9.7300e-003 | 0.0000 | 35.8438 |

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3.2 Demolition - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.4300e-003 | 0.0372 | 7.6800e-003 | 7.0000e-005 | 1.5000e-003 | 4.0000e-004 | 1.8900e-003 | 4.1000e-004 | 3.8000e-004 | 7.9000e-004 | 0.0000 | 7.0666 | 7.0666 | 2.6000e-004 | 0.0000 | 7.0731 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.4700e-003 | 1.4700e-003 | 0.0120 | 1.0000e-005 | 1.1600e-003 | 1.0000e-005 | 1.1700e-003 | 3.1000e-004 | 1.0000e-005 | 3.2000e-004 | 0.0000 | 1.1484 | 1.1484 | 1.0000e-004 | 0.0000 | 1.1510 |
| Total | 2.9000e-003 | 0.0387 | 0.0197 | 8.0000e-005 | 2.6600e-003 | 4.1000e-004 | 3.0600e-003 | 7.2000e-004 | 3.9000e-004 | 1.1100e-003 | 0.0000 | 8.2150 | 8.2150 | 3.6000e-004 | 0.0000 | 8.2241 |

3.3 Site Preparation - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0452 | 0.0000 | 0.0452 | 0.0248 | 0.0000 | 0.0248 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0124 | 0.1307 | 0.0586 | 1.0000e-004 | | 7.2000e-003 | 7.2000e-003 | | 6.6200e-003 | 6.6200e-003 | 0.0000 | 8.8336 | 8.8336 | 2.7100e-003 | 0.0000 | 8.9013 |
| Total | 0.0124 | 0.1307 | 0.0586 | 1.0000e-004 | 0.0452 | 7.2000e-003 | 0.0524 | 0.0248 | 6.6200e-003 | 0.0315 | 0.0000 | 8.8336 | 8.8336 | 2.7100e-003 | 0.0000 | 8.9013 |

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3.3 Site Preparation - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 4.4000e-004 | 3.6000e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3445 | 0.3445 | 3.0000e-005 | 0.0000 | 0.3453 |
| Total | 4.4000e-004 | 4.4000e-004 | 3.6000e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3445 | 0.3445 | 3.0000e-005 | 0.0000 | 0.3453 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0203 | 0.0000 | 0.0203 | 0.0112 | 0.0000 | 0.0112 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.0200e-003 | 0.0843 | 0.0574 | 1.0000e-004 | | 2.3700e-003 | 2.3700e-003 | | 2.3700e-003 | 2.3700e-003 | 0.0000 | 8.8336 | 8.8336 | 2.7100e-003 | 0.0000 | 8.9013 |
| Total | 3.0200e-003 | 0.0843 | 0.0574 | 1.0000e-004 | 0.0203 | 2.3700e-003 | 0.0227 | 0.0112 | 2.3700e-003 | 0.0135 | 0.0000 | 8.8336 | 8.8336 | 2.7100e-003 | 0.0000 | 8.9013 |

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3.3 Site Preparation - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 4.4000e-004 | 3.6000e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3445 | 0.3445 | 3.0000e-005 | 0.0000 | 0.3453 |
| Total | 4.4000e-004 | 4.4000e-004 | 3.6000e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3445 | 0.3445 | 3.0000e-005 | 0.0000 | 0.3453 |

3.4 Grading - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0262 | 0.0000 | 0.0262 | 0.0135 | 0.0000 | 0.0135 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0123 | 0.1356 | 0.0684 | 1.2000e-004 | | 7.1100e-003 | 7.1100e-003 | | 6.5400e-003 | 6.5400e-003 | 0.0000 | 11.0238 | 11.0238 | 3.3800e-003 | 0.0000 | 11.1082 |
| Total | 0.0123 | 0.1356 | 0.0684 | 1.2000e-004 | 0.0262 | 7.1100e-003 | 0.0333 | 0.0135 | 6.5400e-003 | 0.0200 | 0.0000 | 11.0238 | 11.0238 | 3.3800e-003 | 0.0000 | 11.1082 |

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3.4 Grading - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 5.9000e-004 | 4.8000e-003 | 1.0000e-005 | 4.6000e-004 | 1.0000e-005 | 4.7000e-004 | 1.2000e-004 | 1.0000e-005 | 1.3000e-004 | 0.0000 | 0.4594 | 0.4594 | 4.0000e-005 | 0.0000 | 0.4604 |
| Total | 5.9000e-004 | 5.9000e-004 | 4.8000e-003 | 1.0000e-005 | 4.6000e-004 | 1.0000e-005 | 4.7000e-004 | 1.2000e-004 | 1.0000e-005 | 1.3000e-004 | 0.0000 | 0.4594 | 0.4594 | 4.0000e-005 | 0.0000 | 0.4604 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0118 | 0.0000 | 0.0118 | 6.0600e-003 | 0.0000 | 6.0600e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0400e-003 | 0.1051 | 0.0760 | 1.2000e-004 | | 3.0900e-003 | 3.0900e-003 | | 3.0900e-003 | 3.0900e-003 | 0.0000 | 11.0238 | 11.0238 | 3.3800e-003 | 0.0000 | 11.1082 |
| Total | 4.0400e-003 | 0.1051 | 0.0760 | 1.2000e-004 | 0.0118 | 3.0900e-003 | 0.0149 | 6.0600e-003 | 3.0900e-003 | 9.1500e-003 | 0.0000 | 11.0238 | 11.0238 | 3.3800e-003 | 0.0000 | 11.1082 |

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3.4 Grading - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 5.9000e-004 | 4.8000e-003 | 1.0000e-005 | 4.6000e-004 | 1.0000e-005 | 4.7000e-004 | 1.2000e-004 | 1.0000e-005 | 1.3000e-004 | 0.0000 | 0.4594 | 0.4594 | 4.0000e-005 | 0.0000 | 0.4604 |
| Total | 5.9000e-004 | 5.9000e-004 | 4.8000e-003 | 1.0000e-005 | 4.6000e-004 | 1.0000e-005 | 4.7000e-004 | 1.2000e-004 | 1.0000e-005 | 1.3000e-004 | 0.0000 | 0.4594 | 0.4594 | 4.0000e-005 | 0.0000 | 0.4604 |

3.5 Building Construction - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1822 | 1.5534 | 1.0637 | 1.5700e-003 | | 0.1046 | 0.1046 | | 0.0982 | 0.0982 | 0.0000 | 140.6883 | 140.6883 | 0.0347 | 0.0000 | 141.5549 |
| Total | 0.1822 | 1.5534 | 1.0637 | 1.5700e-003 | | 0.1046 | 0.1046 | | 0.0982 | 0.0982 | 0.0000 | 140.6883 | 140.6883 | 0.0347 | 0.0000 | 141.5549 |

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3.5 Building Construction - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.7800e-003 | 0.1355 | 0.0479 | 2.3000e-004 | 5.2500e-003 | 1.7300e-003 | 6.9900e-003 | 1.5200e-003 | 1.6600e-003 | 3.1800e-003 | 0.0000 | 21.7650 | 21.7650 | 1.3500e-003 | 0.0000 | 21.7987 |
| Worker | 0.0200 | 0.0201 | 0.1639 | 1.8000e-004 | 0.0158 | 1.9000e-004 | 0.0160 | 4.2100e-003 | 1.8000e-004 | 4.3900e-003 | 0.0000 | 15.6752 | 15.6752 | 1.4200e-003 | 0.0000 | 15.7107 |
| Total | 0.0278 | 0.1556 | 0.2118 | 4.1000e-004 | 0.0210 | 1.9200e-003 | 0.0230 | 5.7300e-003 | 1.8400e-003 | 7.5700e-003 | 0.0000 | 37.4402 | 37.4402 | 2.7700e-003 | 0.0000 | 37.5094 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0818 | 1.3345 | 1.0291 | 1.5700e-003 | | 0.0581 | 0.0581 | | 0.0581 | 0.0581 | 0.0000 | 140.6881 | 140.6881 | 0.0347 | 0.0000 | 141.5547 |
| Total | 0.0818 | 1.3345 | 1.0291 | 1.5700e-003 | | 0.0581 | 0.0581 | | 0.0581 | 0.0581 | 0.0000 | 140.6881 | 140.6881 | 0.0347 | 0.0000 | 141.5547 |

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3.5 Building Construction - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.7800e-003 | 0.1355 | 0.0479 | 2.3000e-004 | 5.2500e-003 | 1.7300e-003 | 6.9900e-003 | 1.5200e-003 | 1.6600e-003 | 3.1800e-003 | 0.0000 | 21.7650 | 21.7650 | 1.3500e-003 | 0.0000 | 21.7987 |
| Worker | 0.0200 | 0.0201 | 0.1639 | 1.8000e-004 | 0.0158 | 1.9000e-004 | 0.0160 | 4.2100e-003 | 1.8000e-004 | 4.3900e-003 | 0.0000 | 15.6752 | 15.6752 | 1.4200e-003 | 0.0000 | 15.7107 |
| Total | 0.0278 | 0.1556 | 0.2118 | 4.1000e-004 | 0.0210 | 1.9200e-003 | 0.0230 | 5.7300e-003 | 1.8400e-003 | 7.5700e-003 | 0.0000 | 37.4402 | 37.4402 | 2.7700e-003 | 0.0000 | 37.5094 |

3.5 Building Construction - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1514 | 1.3215 | 0.9933 | 1.5200e-003 | | 0.0847 | 0.0847 | | 0.0797 | 0.0797 | 0.0000 | 134.3385 | 134.3385 | 0.0329 | 0.0000 | 135.1613 |
| Total | 0.1514 | 1.3215 | 0.9933 | 1.5200e-003 | | 0.0847 | 0.0847 | | 0.0797 | 0.0797 | 0.0000 | 134.3385 | 134.3385 | 0.0329 | 0.0000 | 135.1613 |

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3.5 Building Construction - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.6000e-003 | 0.1240 | 0.0407 | 2.2000e-004 | 5.0700e-003 | 1.3700e-003 | 6.4400e-003 | 1.4700e-003 | 1.3100e-003 | 2.7800e-003 | 0.0000 | 21.0587 | 21.0587 | 1.2200e-003 | 0.0000 | 21.0892 |
| Worker | 0.0181 | 0.0176 | 0.1431 | 1.7000e-004 | 0.0153 | 1.7000e-004 | 0.0154 | 4.0600e-003 | 1.6000e-004 | 4.2300e-003 | 0.0000 | 14.8183 | 14.8183 | 1.2500e-003 | 0.0000 | 14.8494 |
| Total | 0.0247 | 0.1417 | 0.1838 | 3.9000e-004 | 0.0203 | 1.5400e-003 | 0.0219 | 5.5300e-003 | 1.4700e-003 | 7.0100e-003 | 0.0000 | 35.8770 | 35.8770 | 2.4700e-003 | 0.0000 | 35.9386 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0754 | 1.2690 | 0.9924 | 1.5200e-003 | | 0.0540 | 0.0540 | | 0.0540 | 0.0540 | 0.0000 | 134.3383 | 134.3383 | 0.0329 | 0.0000 | 135.1612 |
| Total | 0.0754 | 1.2690 | 0.9924 | 1.5200e-003 | | 0.0540 | 0.0540 | | 0.0540 | 0.0540 | 0.0000 | 134.3383 | 134.3383 | 0.0329 | 0.0000 | 135.1612 |

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3.5 Building Construction - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.6000e-003 | 0.1240 | 0.0407 | 2.2000e-004 | 5.0700e-003 | 1.3700e-003 | 6.4400e-003 | 1.4700e-003 | 1.3100e-003 | 2.7800e-003 | 0.0000 | 21.0587 | 21.0587 | 1.2200e-003 | 0.0000 | 21.0892 |
| Worker | 0.0181 | 0.0176 | 0.1431 | 1.7000e-004 | 0.0153 | 1.7000e-004 | 0.0154 | 4.0600e-003 | 1.6000e-004 | 4.2300e-003 | 0.0000 | 14.8183 | 14.8183 | 1.2500e-003 | 0.0000 | 14.8494 |
| Total | 0.0247 | 0.1417 | 0.1838 | 3.9000e-004 | 0.0203 | 1.5400e-003 | 0.0219 | 5.5300e-003 | 1.4700e-003 | 7.0100e-003 | 0.0000 | 35.8770 | 35.8770 | 2.4700e-003 | 0.0000 | 35.9386 |

3.6 Architectural Coating - 2017**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.9900e-003 | 0.0262 | 0.0224 | 4.0000e-005 | | 2.0800e-003 | 2.0800e-003 | | 2.0800e-003 | 2.0800e-003 | 0.0000 | 3.0639 | 3.0639 | 3.2000e-004 | 0.0000 | 3.0720 |
| Total | 0.0588 | 0.0262 | 0.0224 | 4.0000e-005 | | 2.0800e-003 | 2.0800e-003 | | 2.0800e-003 | 2.0800e-003 | 0.0000 | 3.0639 | 3.0639 | 3.2000e-004 | 0.0000 | 3.0720 |

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3.6 Architectural Coating - 2017**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2000e-004 | 8.3000e-004 | 6.7200e-003 | 1.0000e-005 | 6.5000e-004 | 1.0000e-005 | 6.6000e-004 | 1.7000e-004 | 1.0000e-005 | 1.8000e-004 | 0.0000 | 0.6431 | 0.6431 | 6.0000e-005 | 0.0000 | 0.6445 |
| Total | 8.2000e-004 | 8.3000e-004 | 6.7200e-003 | 1.0000e-005 | 6.5000e-004 | 1.0000e-005 | 6.6000e-004 | 1.7000e-004 | 1.0000e-005 | 1.8000e-004 | 0.0000 | 0.6431 | 0.6431 | 6.0000e-005 | 0.0000 | 0.6445 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0548 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.0700e-003 | 0.0389 | 0.0410 | 4.0000e-005 | | 3.2800e-003 | 3.2800e-003 | | 3.2800e-003 | 3.2800e-003 | 0.0000 | 3.0639 | 3.0639 | 3.2000e-004 | 0.0000 | 3.0720 |
| Total | 0.0619 | 0.0389 | 0.0410 | 4.0000e-005 | | 3.2800e-003 | 3.2800e-003 | | 3.2800e-003 | 3.2800e-003 | 0.0000 | 3.0639 | 3.0639 | 3.2000e-004 | 0.0000 | 3.0720 |

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3.6 Architectural Coating - 2017**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.2000e-004 | 8.3000e-004 | 6.7200e-003 | 1.0000e-005 | 6.5000e-004 | 1.0000e-005 | 6.6000e-004 | 1.7000e-004 | 1.0000e-005 | 1.8000e-004 | 0.0000 | 0.6431 | 0.6431 | 6.0000e-005 | 0.0000 | 0.6445 |
| Total | 8.2000e-004 | 8.3000e-004 | 6.7200e-003 | 1.0000e-005 | 6.5000e-004 | 1.0000e-005 | 6.6000e-004 | 1.7000e-004 | 1.0000e-005 | 1.8000e-004 | 0.0000 | 0.6431 | 0.6431 | 6.0000e-005 | 0.0000 | 0.6445 |

3.6 Architectural Coating - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.3106 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0203 | 0.1364 | 0.1261 | 2.0000e-004 | | 0.0102 | 0.0102 | | 0.0102 | 0.0102 | 0.0000 | 17.3622 | 17.3622 | 1.6500e-003 | 0.0000 | 17.4034 |
| Total | 0.3309 | 0.1364 | 0.1261 | 2.0000e-004 | | 0.0102 | 0.0102 | | 0.0102 | 0.0102 | 0.0000 | 17.3622 | 17.3622 | 1.6500e-003 | 0.0000 | 17.4034 |

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3.6 Architectural Coating - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3500e-003 | 4.2400e-003 | 0.0345 | 4.0000e-005 | 3.6700e-003 | 4.0000e-005 | 3.7100e-003 | 9.8000e-004 | 4.0000e-005 | 1.0200e-003 | 0.0000 | 3.5669 | 3.5669 | 3.0000e-004 | 0.0000 | 3.5744 |
| Total | 4.3500e-003 | 4.2400e-003 | 0.0345 | 4.0000e-005 | 3.6700e-003 | 4.0000e-005 | 3.7100e-003 | 9.8000e-004 | 4.0000e-005 | 1.0200e-003 | 0.0000 | 3.5669 | 3.5669 | 3.0000e-004 | 0.0000 | 3.5744 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.3106 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0401 | 0.2203 | 0.2324 | 2.0000e-004 | | 0.0186 | 0.0186 | | 0.0186 | 0.0186 | 0.0000 | 17.3621 | 17.3621 | 1.6500e-003 | 0.0000 | 17.4034 |
| Total | 0.3507 | 0.2203 | 0.2324 | 2.0000e-004 | | 0.0186 | 0.0186 | | 0.0186 | 0.0186 | 0.0000 | 17.3621 | 17.3621 | 1.6500e-003 | 0.0000 | 17.4034 |

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3.6 Architectural Coating - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3500e-003 | 4.2400e-003 | 0.0345 | 4.0000e-005 | 3.6700e-003 | 4.0000e-005 | 3.7100e-003 | 9.8000e-004 | 4.0000e-005 | 1.0200e-003 | 0.0000 | 3.5669 | 3.5669 | 3.0000e-004 | 0.0000 | 3.5744 |
| Total | 4.3500e-003 | 4.2400e-003 | 0.0345 | 4.0000e-005 | 3.6700e-003 | 4.0000e-005 | 3.7100e-003 | 9.8000e-004 | 4.0000e-005 | 1.0200e-003 | 0.0000 | 3.5669 | 3.5669 | 3.0000e-004 | 0.0000 | 3.5744 |

3.7 Paving - 2018**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0128 | 0.1307 | 0.1119 | 1.7000e-004 | | 7.5300e-003 | 7.5300e-003 | | 6.9500e-003 | 6.9500e-003 | 0.0000 | 15.2887 | 15.2887 | 4.6300e-003 | 0.0000 | 15.4045 |
| Paving | 1.5700e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0144 | 0.1307 | 0.1119 | 1.7000e-004 | | 7.5300e-003 | 7.5300e-003 | | 6.9500e-003 | 6.9500e-003 | 0.0000 | 15.2887 | 15.2887 | 4.6300e-003 | 0.0000 | 15.4045 |

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3.7 Paving - 2018**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6500e-003 | 1.6000e-003 | 0.0130 | 2.0000e-005 | 1.3900e-003 | 2.0000e-005 | 1.4000e-003 | 3.7000e-004 | 1.0000e-005 | 3.8000e-004 | 0.0000 | 1.3488 | 1.3488 | 1.1000e-004 | 0.0000 | 1.3517 |
| Total | 1.6500e-003 | 1.6000e-003 | 0.0130 | 2.0000e-005 | 1.3900e-003 | 2.0000e-005 | 1.4000e-003 | 3.7000e-004 | 1.0000e-005 | 3.8000e-004 | 0.0000 | 1.3488 | 1.3488 | 1.1000e-004 | 0.0000 | 1.3517 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7700e-003 | 0.1448 | 0.1218 | 1.7000e-004 | | 5.0400e-003 | 5.0400e-003 | | 5.0400e-003 | 5.0400e-003 | 0.0000 | 15.2887 | 15.2887 | 4.6300e-003 | 0.0000 | 15.4045 |
| Paving | 1.5700e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 8.3400e-003 | 0.1448 | 0.1218 | 1.7000e-004 | | 5.0400e-003 | 5.0400e-003 | | 5.0400e-003 | 5.0400e-003 | 0.0000 | 15.2887 | 15.2887 | 4.6300e-003 | 0.0000 | 15.4045 |

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3.7 Paving - 2018**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6500e-003 | 1.6000e-003 | 0.0130 | 2.0000e-005 | 1.3900e-003 | 2.0000e-005 | 1.4000e-003 | 3.7000e-004 | 1.0000e-005 | 3.8000e-004 | 0.0000 | 1.3488 | 1.3488 | 1.1000e-004 | 0.0000 | 1.3517 |
| Total | 1.6500e-003 | 1.6000e-003 | 0.0130 | 2.0000e-005 | 1.3900e-003 | 2.0000e-005 | 1.4000e-003 | 3.7000e-004 | 1.0000e-005 | 3.8000e-004 | 0.0000 | 1.3488 | 1.3488 | 1.1000e-004 | 0.0000 | 1.3517 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.6874 | 3.2776 | 7.0403 | 0.0118 | 0.7684 | 0.0235 | 0.7919 | 0.2073 | 0.0223 | 0.2296 | 0.0000 | 1,076.2294 | 1,076.2294 | 0.0811 | 0.0000 | 1,078.2569 |
| Unmitigated | 0.6874 | 3.2776 | 7.0403 | 0.0118 | 0.7684 | 0.0235 | 0.7919 | 0.2073 | 0.0223 | 0.2296 | 0.0000 | 1,076.2294 | 1,076.2294 | 0.0811 | 0.0000 | 1,078.2569 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Health Club | 1,319.83 | 836.47 | 1071.34 | 2,099,603 | 2,099,603 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,319.83 | 836.47 | 1,071.34 | 2,099,603 | 2,099,603 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|-------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Health Club | 9.50 | 7.30 | 7.30 | 16.90 | 64.10 | 19.00 | 52 | 39 | 9 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Health Club | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |
| Parking Lot | 0.459523 | 0.056060 | 0.207286 | 0.143189 | 0.053205 | 0.008548 | 0.014776 | 0.043712 | 0.003050 | 0.001807 | 0.006178 | 0.001540 | 0.001126 |

Eureka High School Gym Replacement Project - Humboldt County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 51.5944 | 51.5944 | 2.3300e-003 | 4.8000e-004 | 51.7966 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 51.5944 | 51.5944 | 2.3300e-003 | 4.8000e-004 | 51.7966 |
| NaturalGas Mitigated | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |
| NaturalGas Unmitigated | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Health Club | 105688 | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Health Club | 105688 | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 5.7000e-004 | 5.1800e-003 | 4.3500e-003 | 3.0000e-005 | | 3.9000e-004 | 3.9000e-004 | | 3.9000e-004 | 3.9000e-004 | 0.0000 | 5.6399 | 5.6399 | 1.1000e-004 | 1.0000e-004 | 5.6734 |

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5.3 Energy by Land Use - Electricity**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Health Club | 130538 | 37.9751 | 1.7200e-003 | 3.6000e-004 | 38.1239 |
| Parking Lot | 46816 | 13.6193 | 6.2000e-004 | 1.3000e-004 | 13.6727 |
| Total | | 51.5944 | 2.3400e-003 | 4.9000e-004 | 51.7966 |

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Health Club | 130538 | 37.9751 | 1.7200e-003 | 3.6000e-004 | 38.1239 |
| Parking Lot | 46816 | 13.6193 | 6.2000e-004 | 1.3000e-004 | 13.6727 |
| Total | | 51.5944 | 2.3400e-003 | 4.9000e-004 | 51.7966 |

6.0 Area Detail**6.1 Mitigation Measures Area**

Eureka High School Gym Replacement Project - Humboldt County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|--------|-------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |
| Unmitigated | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0365 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1204 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.5000e-004 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |
| Total | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |

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6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0365 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1204 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.5000e-004 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |
| Total | 0.1571 | 1.0000e-005 | 1.6100e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 3.0900e-003 | 3.0900e-003 | 1.0000e-005 | 0.0000 | 3.3000e-003 |

7.0 Water Detail**7.1 Mitigation Measures Water**

Eureka High School Gym Replacement Project - Humboldt County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|-------------|--------|
| Category | MT/yr | | | |
| Mitigated | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |
| Unmitigated | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |

7.2 Water by Land Use**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|
| Land Use | Mgal | MT/yr | | | |
| Health Club | 2.37046 / 1.45286 | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |

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7.2 Water by Land Use**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|
| Land Use | Mgal | MT/yr | | | |
| Health Club | 2.37046 / 1.45286 | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 5.9627 | 0.0775 | 1.8700e-003 | 8.4577 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Eureka High School Gym Replacement Project - Humboldt County, Annual

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|----------|
| | MT/yr | | | |
| Mitigated | 23.1877 | 1.3704 | 0.0000 | 57.4464 |
| Unmitigated | 46.3753 | 2.7407 | 0.0000 | 114.8929 |

8.2 Waste by Land Use**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use | tons | MT/yr | | | |
| Health Club | 228.46 | 46.3753 | 2.7407 | 0.0000 | 114.8929 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 46.3753 | 2.7407 | 0.0000 | 114.8929 |

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8.2 Waste by Land Use**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Health Club | 114.23 | 23.1877 | 1.3704 | 0.0000 | 57.4464 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 23.1877 | 1.3704 | 0.0000 | 57.4464 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

Eureka High School Gym Replacement Project - Humboldt County, Annual

Eureka High School Gym Replacement Project
Humboldt County, Mitigation Report

Construction Mitigation Summary

| Phase | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-------|-------|-------|------|-----------------|------------------|----------|--------------|-----------|------|------|------|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | -0.06 | -0.58 | -0.66 | 0.00 | -0.77 | -0.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | 0.46 | 0.09 | 0.01 | 0.00 | 0.40 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 0.65 | 0.22 | -0.07 | 0.00 | 0.57 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading | 0.64 | 0.22 | -0.10 | 0.00 | 0.56 | 0.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 0.38 | -0.11 | -0.08 | 0.00 | 0.33 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Site Preparation | 0.73 | 0.35 | 0.02 | 0.00 | 0.67 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

OFFROAD Equipment Mitigation

| Equipment Type | Fuel Type | Tier | Number Mitigated | Total Number of Equipment | DPF | Oxidation Catalyst |
|---------------------------|-----------|-----------|------------------|---------------------------|-----------|--------------------|
| Air Compressors | Diesel | Tier 1 | 1 | 1 | No Change | 0.00 |
| Cement and Mortar Mixers | Diesel | Tier 2 | 2 | 2 | No Change | 0.00 |
| Concrete/Industrial Saws | Diesel | Tier 2 | 1 | 1 | No Change | 0.00 |
| Cranes | Diesel | Tier 2 | 1 | 1 | No Change | 0.00 |
| Forklifts | Diesel | Tier 2 | 3 | 3 | No Change | 0.00 |
| Generator Sets | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Graders | Diesel | Tier 2 | 1 | 1 | No Change | 0.00 |
| Pavers | Diesel | Tier 2 | 1 | 1 | No Change | 0.00 |
| Paving Equipment | Diesel | Tier 2 | 2 | 2 | No Change | 0.00 |
| Rollers | Diesel | Tier 2 | 2 | 2 | No Change | 0.00 |
| Rubber Tired Dozers | Diesel | Tier 2 | 6 | 6 | No Change | 0.00 |
| Tractors/Loaders/Backhoes | Diesel | Tier 2 | 11 | 11 | No Change | 0.00 |
| Welders | Diesel | Tier 2 | 1 | 1 | No Change | 0.00 |
| Excavators | Diesel | Tier 2 | 4 | 4 | No Change | 0.00 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------|--------------|--------------|--------------|--------------|---------------|-------------------|--------------|--------------|--------------|--------------|--------------|
| Unmitigated tons/yr | | | | | | | Unmitigated mt/yr | | | | | |
| Air Compressors | 2.42900E-002 | 1.62610E-001 | 1.48500E-001 | 2.40000E-004 | 1.23200E-002 | 1.23200E-002 | 0.00000E+000 | 2.04261E+001 | 2.04261E+001 | 1.97000E-003 | 0.00000E+000 | 2.04754E+001 |
| Cement and Mortar Mixers | 7.90000E-004 | 4.97000E-003 | 4.16000E-003 | 1.00000E-005 | 2.00000E-004 | 2.00000E-004 | 0.00000E+000 | 6.18670E-001 | 6.18670E-001 | 6.00000E-005 | 0.00000E+000 | 6.20280E-001 |
| Concrete/Industrial Saws | 5.81000E-003 | 4.26100E-002 | 3.74900E-002 | 6.00000E-005 | 3.07000E-003 | 3.07000E-003 | 0.00000E+000 | 5.37656E+000 | 5.37656E+000 | 4.70000E-004 | 0.00000E+000 | 5.38839E+000 |
| Cranes | 6.21200E-002 | 7.39700E-001 | 2.68890E-001 | 5.80000E-004 | 3.25400E-002 | 2.99400E-002 | 0.00000E+000 | 5.34372E+001 | 5.34372E+001 | 1.65000E-002 | 0.00000E+000 | 5.38497E+001 |
| Excavators | 1.20100E-002 | 1.33200E-001 | 1.13440E-001 | 1.80000E-004 | 6.55000E-003 | 6.03000E-003 | 0.00000E+000 | 1.62826E+001 | 1.62826E+001 | 4.99000E-003 | 0.00000E+000 | 1.64073E+001 |
| Forklifts | 6.72100E-002 | 5.87410E-001 | 4.24520E-001 | 5.30000E-004 | 4.77400E-002 | 4.39200E-002 | 0.00000E+000 | 4.85251E+001 | 4.85251E+001 | 1.49800E-002 | 0.00000E+000 | 4.88997E+001 |
| Generator Sets | 6.19100E-002 | 4.93560E-001 | 4.32470E-001 | 7.60000E-004 | 3.23800E-002 | 3.23800E-002 | 0.00000E+000 | 6.49989E+001 | 6.49989E+001 | 4.98000E-003 | 0.00000E+000 | 6.51234E+001 |
| Graders | 2.14000E-003 | 2.98800E-002 | 7.84000E-003 | 3.00000E-005 | 9.70000E-004 | 9.00000E-004 | 0.00000E+000 | 2.47210E+000 | 2.47210E+000 | 7.60000E-004 | 0.00000E+000 | 2.49103E+000 |
| Pavers | 2.94000E-003 | 3.24800E-002 | 2.63400E-002 | 4.00000E-005 | 1.59000E-003 | 1.46000E-003 | 0.00000E+000 | 3.86297E+000 | 3.86297E+000 | 1.20000E-003 | 0.00000E+000 | 3.89304E+000 |
| Paving Equipment | 3.21000E-003 | 3.58900E-002 | 3.42400E-002 | 6.00000E-005 | 1.76000E-003 | 1.62000E-003 | 0.00000E+000 | 5.02133E+000 | 5.02133E+000 | 1.56000E-003 | 0.00000E+000 | 5.06041E+000 |
| Rollers | 3.48000E-003 | 3.36600E-002 | 2.61300E-002 | 4.00000E-005 | 2.32000E-003 | 2.13000E-003 | 0.00000E+000 | 3.23206E+000 | 3.23206E+000 | 1.01000E-003 | 0.00000E+000 | 3.25721E+000 |
| Rubber Tired Dozers | 3.87800E-002 | 4.21050E-001 | 1.45740E-001 | 2.70000E-004 | 2.06100E-002 | 1.89600E-002 | 0.00000E+000 | 2.49747E+001 | 2.49747E+001 | 7.65000E-003 | 0.00000E+000 | 2.51660E+001 |
| Tractors/Loaders/Backhoes | 9.74800E-002 | 9.48080E-001 | 7.87860E-001 | 1.03000E-003 | 6.95000E-002 | 6.39400E-002 | 0.00000E+000 | 9.53260E+001 | 9.53260E+001 | 2.94300E-002 | 0.00000E+000 | 9.60617E+001 |
| Welders | 5.42600E-002 | 1.96860E-001 | 2.16930E-001 | 2.90000E-004 | 1.38900E-002 | 1.38900E-002 | 0.00000E+000 | 2.16454E+001 | 2.16454E+001 | 4.42000E-003 | 0.00000E+000 | 2.17559E+001 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------|--------------|--------------|--------------|--------------|---------------|-----------------|--------------|--------------|--------------|--------------|--------------|
| Mitigated tons/yr | | | | | | | Mitigated mt/yr | | | | | |
| Air Compressors | 4.71500E-002 | 2.59110E-001 | 2.73380E-001 | 2.40000E-004 | 2.18700E-002 | 2.18700E-002 | 0.00000E+000 | 2.04260E+001 | 2.04260E+001 | 1.97000E-003 | 0.00000E+000 | 2.04754E+001 |
| Cement and Mortar Mixers | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.00000E-005 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 6.18670E-001 | 6.18670E-001 | 6.00000E-005 | 0.00000E+000 | 6.20280E-001 |
| Concrete/Industrial Saws | 2.40000E-003 | 4.95400E-002 | 3.85900E-002 | 6.00000E-005 | 2.00000E-003 | 2.00000E-003 | 0.00000E+000 | 5.37656E+000 | 5.37656E+000 | 4.70000E-004 | 0.00000E+000 | 5.38838E+000 |
| Cranes | 1.42700E-002 | 4.93390E-001 | 3.09110E-001 | 5.80000E-004 | 1.04600E-002 | 1.04600E-002 | 0.00000E+000 | 5.34371E+001 | 5.34371E+001 | 1.65000E-002 | 0.00000E+000 | 5.38496E+001 |
| Excavators | 6.84000E-003 | 1.50130E-001 | 1.33210E-001 | 1.80000E-004 | 4.61000E-003 | 4.61000E-003 | 0.00000E+000 | 1.62826E+001 | 1.62826E+001 | 4.99000E-003 | 0.00000E+000 | 1.64073E+001 |
| Forklifts | 2.49100E-002 | 5.14470E-001 | 4.00740E-001 | 5.30000E-004 | 2.08000E-002 | 2.08000E-002 | 0.00000E+000 | 4.85250E+001 | 4.85250E+001 | 1.49800E-002 | 0.00000E+000 | 4.88996E+001 |
| Generator Sets | 6.19000E-002 | 4.93560E-001 | 4.32470E-001 | 7.60000E-004 | 3.23800E-002 | 3.23800E-002 | 0.00000E+000 | 6.49988E+001 | 6.49988E+001 | 4.98000E-003 | 0.00000E+000 | 6.51233E+001 |
| Graders | 6.50000E-004 | 2.24500E-002 | 1.40600E-002 | 3.00000E-005 | 4.80000E-004 | 4.80000E-004 | 0.00000E+000 | 2.47209E+000 | 2.47209E+000 | 7.60000E-004 | 0.00000E+000 | 2.49103E+000 |
| Pavers | 1.65000E-003 | 3.61400E-002 | 3.20700E-002 | 4.00000E-005 | 1.11000E-003 | 1.11000E-003 | 0.00000E+000 | 3.86297E+000 | 3.86297E+000 | 1.20000E-003 | 0.00000E+000 | 3.89303E+000 |
| Paving Equipment | 2.15000E-003 | 4.71800E-002 | 4.18600E-002 | 6.00000E-005 | 1.45000E-003 | 1.45000E-003 | 0.00000E+000 | 5.02132E+000 | 5.02132E+000 | 1.56000E-003 | 0.00000E+000 | 5.06040E+000 |
| Rollers | 1.66000E-003 | 3.43800E-002 | 2.67800E-002 | 4.00000E-005 | 1.39000E-003 | 1.39000E-003 | 0.00000E+000 | 3.23206E+000 | 3.23206E+000 | 1.01000E-003 | 0.00000E+000 | 3.25721E+000 |
| Rubber Tired Dozers | 6.59000E-003 | 2.27790E-001 | 1.42710E-001 | 2.70000E-004 | 4.83000E-003 | 4.83000E-003 | 0.00000E+000 | 2.49746E+001 | 2.49746E+001 | 7.65000E-003 | 0.00000E+000 | 2.51659E+001 |
| Tractors/Loaders/Backhoes | 4.84600E-002 | 1.00086E+000 | 7.79610E-001 | 1.03000E-003 | 4.04600E-002 | 4.04600E-002 | 0.00000E+000 | 9.53259E+001 | 9.53259E+001 | 2.94300E-002 | 0.00000E+000 | 9.60616E+001 |
| Welders | 1.21800E-002 | 1.94390E-001 | 1.72140E-001 | 2.90000E-004 | 1.17600E-002 | 1.17600E-002 | 0.00000E+000 | 2.16454E+001 | 2.16454E+001 | 4.42000E-003 | 0.00000E+000 | 2.17559E+001 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|---------------|---------------|---------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Percent Reduction | | | | | | | | | | | | |
| Air Compressors | -9.41128E-001 | -5.93444E-001 | -8.40943E-001 | 0.00000E+000 | -7.75162E-001 | -7.75162E-001 | 0.00000E+000 | 9.79141E-007 | 9.79141E-007 | 0.00000E+000 | 0.00000E+000 | 9.76782E-007 |
| Cement and Mortar Mixers | 1.00000E+000 | 1.00000E+000 | 1.00000E+000 | 0.00000E+000 | 1.00000E+000 | 1.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Concrete/Industrial Saws | 5.86919E-001 | -1.62638E-001 | -2.93412E-002 | 0.00000E+000 | 3.48534E-001 | 3.48534E-001 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.85584E-006 |
| Cranes | 7.70283E-001 | 3.32986E-001 | -1.49578E-001 | 0.00000E+000 | 6.78549E-001 | 6.50635E-001 | 0.00000E+000 | 1.30995E-006 | 1.30995E-006 | 0.00000E+000 | 0.00000E+000 | 1.11421E-006 |
| Excavators | 4.30475E-001 | -1.27102E-001 | -1.74277E-001 | 0.00000E+000 | 2.96183E-001 | 2.35489E-001 | 0.00000E+000 | 1.22830E-006 | 1.22830E-006 | 0.00000E+000 | 0.00000E+000 | 1.21897E-006 |
| Forklifts | 6.29371E-001 | 1.24172E-001 | 5.60162E-002 | 0.00000E+000 | 5.64307E-001 | 5.26412E-001 | 0.00000E+000 | 1.23647E-006 | 1.23647E-006 | 0.00000E+000 | 0.00000E+000 | 1.22700E-006 |
| Generator Sets | 1.61525E-004 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.23079E-006 | 1.23079E-006 | 0.00000E+000 | 0.00000E+000 | 1.07488E-006 |
| Graders | 6.96262E-001 | 2.48661E-001 | -7.93367E-001 | 0.00000E+000 | 5.05155E-001 | 4.66667E-001 | 0.00000E+000 | 4.04514E-006 | 4.04514E-006 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Pavers | 4.38776E-001 | -1.12685E-001 | -2.17540E-001 | 0.00000E+000 | 3.01887E-001 | 2.39726E-001 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 2.56869E-006 |
| Paving Equipment | 3.30218E-001 | -3.14572E-001 | -2.22547E-001 | 0.00000E+000 | 1.76136E-001 | 1.04938E-001 | 0.00000E+000 | 1.99150E-006 | 1.99150E-006 | 0.00000E+000 | 0.00000E+000 | 1.97612E-006 |
| Rollers | 5.22989E-001 | -2.13904E-002 | -2.48756E-002 | 0.00000E+000 | 4.00862E-001 | 3.47418E-001 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Rubber Tired Dozers | 8.30067E-001 | 4.58995E-001 | 2.07904E-002 | 0.00000E+000 | 7.65648E-001 | 7.45253E-001 | 0.00000E+000 | 1.20122E-006 | 1.20122E-006 | 0.00000E+000 | 0.00000E+000 | 1.19209E-006 |
| Tractors/Loaders/Balckhoes | 5.02872E-001 | -5.56704E-002 | 1.04714E-002 | 0.00000E+000 | 4.17842E-001 | 3.67219E-001 | 0.00000E+000 | 1.25884E-006 | 1.25884E-006 | 0.00000E+000 | 0.00000E+000 | 1.14510E-006 |
| Welders | 7.75525E-001 | 1.25470E-002 | 2.06472E-001 | 0.00000E+000 | 1.53348E-001 | 1.53348E-001 | 0.00000E+000 | 9.23985E-007 | 9.23985E-007 | 0.00000E+000 | 0.00000E+000 | 9.19289E-007 |

Fugitive Dust Mitigation

| Yes/No | Mitigation Measure | Mitigation Input | Mitigation Input | Mitigation Input | | | |
|--------|--|------------------|------------------|------------------|-------|---------------------|------|
| No | Soil Stabilizer for unpaved Roads | PM10 Reduction | 0.00 | PM2.5 Reduction | 0.00 | | |
| No | Replace Ground Cover of Area Disturbed | PM10 Reduction | 0.00 | PM2.5 Reduction | 0.00 | | |
| Yes | Water Exposed Area | PM10 Reduction | 55.00 | PM2.5 Reduction | 55.00 | Frequency (per day) | 2.00 |

| | | | | | | | |
|-----|-------------------------|-----------------------|------|------------------------|------|--|--|
| No | Unpaved Road Mitigation | Moisture Content % | 0.00 | Vehicle Speed (mph) | 0.00 | | |
| Yes | Clean Paved Road | % PM Reduction | 0.00 | | | | |

| Phase | Source | Unmitigated | | Mitigated | | Percent Reduction | |
|-----------------------|---------------|-------------|-------|-----------|-------|-------------------|-------|
| | | PM10 | PM2.5 | PM10 | PM2.5 | PM10 | PM2.5 |
| Architectural Coating | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Architectural Coating | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | Roads | 0.04 | 0.01 | 0.04 | 0.01 | 0.00 | 0.00 |
| Demolition | Fugitive Dust | 0.02 | 0.00 | 0.01 | 0.00 | 0.55 | 0.55 |
| Demolition | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading | Fugitive Dust | 0.03 | 0.01 | 0.01 | 0.01 | 0.55 | 0.55 |
| Grading | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Site Preparation | Fugitive Dust | 0.05 | 0.02 | 0.02 | 0.01 | 0.55 | 0.55 |
| Site Preparation | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Operational Percent Reduction Summary

| Category | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|------|------|------|------|--------------|---------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Indoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Outdoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Operational Mobile Mitigation

Project Setting:

| Mitigation | Category | Measure | % Reduction | Input Value 1 | Input Value 2 | Input Value |
|------------|----------|-------------------------------------|-------------|---------------|---------------|-------------|
| No | Land Use | Increase Density | 0.00 | | | |
| No | Land Use | Increase Diversity | 0.11 | 0.33 | | |
| No | Land Use | Improve Walkability Design | 0.00 | | | |
| No | Land Use | Improve Destination Accessibility | 0.00 | | | |
| No | Land Use | Increase Transit Accessibility | 0.25 | | | |
| No | Land Use | Integrate Below Market Rate Housing | 0.00 | | | |
| | Land Use | Land Use SubTotal | 0.00 | | | |

| | | | | | |
|----|---------------------------|--|------|--|------|
| No | Neighborhood Enhancements | Improve Pedestrian Network | | | |
| No | Neighborhood Enhancements | Provide Traffic Calming Measures | | | |
| No | Neighborhood Enhancements | Implement NEV Network | 0.00 | | |
| | Neighborhood Enhancements | Neighborhood Enhancements Subtotal | 0.00 | | |
| No | Parking Policy Pricing | Limit Parking Supply | 0.00 | | |
| No | Parking Policy Pricing | Unbundle Parking Costs | 0.00 | | |
| No | Parking Policy Pricing | On-street Market Pricing | 0.00 | | |
| | Parking Policy Pricing | Parking Policy Pricing Subtotal | 0.00 | | |
| No | Transit Improvements | Provide BRT System | 0.00 | | |
| No | Transit Improvements | Expand Transit Network | 0.00 | | |
| No | Transit Improvements | Increase Transit Frequency | 0.00 | | |
| | Transit Improvements | Transit Improvements Subtotal | 0.00 | | |
| | | Land Use and Site Enhancement Subtotal | 0.00 | | |
| No | Commute | Implement Trip Reduction Program | | | |
| No | Commute | Transit Subsidy | | | |
| No | Commute | Implement Employee Parking "Cash Out" | | | |
| No | Commute | Workplace Parking Charge | | | |
| No | Commute | Encourage Telecommuting and Alternative Work Schedules | 0.00 | | |
| No | Commute | Market Commute Trip Reduction Option | 0.00 | | |
| No | Commute | Employee Vanpool/Shuttle | 0.00 | | 2.00 |
| No | Commute | Provide Ride Sharing Program | | | |
| | Commute | Commute Subtotal | 0.00 | | |

| | | | | | |
|----|-------------|------------------------------|------|--|--|
| No | School Trip | Implement School Bus Program | 0.00 | | |
| | | Total VMT Reduction | 0.00 | | |

Area Mitigation

| Measure Implemented | Mitigation Measure | Input Value |
|---------------------|--|-------------|
| No | Only Natural Gas Hearth | |
| No | No Hearth | |
| No | Use Low VOC Cleaning Supplies | |
| No | Use Low VOC Paint (Residential Interior) | 250.00 |
| No | Use Low VOC Paint (Residential Exterior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Interior) | 250.00 |
| No | Use Low VOC Paint (Non-residential Exterior) | 250.00 |
| No | Use Low VOC Paint (Parking) | 250.00 |
| No | % Electric Lawnmower | |
| No | % Electric Leafblower | |
| No | % Electric Chainsaw | |

Energy Mitigation Measures

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---------------------|----------------------------------|---------------|---------------|
| No | Exceed Title 24 | | |
| No | Install High Efficiency Lighting | | |
| No | On-site Renewable | | |

| Appliance Type | Land Use Subtype | % Improvement |
|----------------|------------------|---------------|
| ClothWasher | | 30.00 |
| DishWasher | | 15.00 |
| Fan | | 50.00 |
| Refrigerator | | 15.00 |

Water Mitigation Measures

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---------------------|--|---------------|---------------|
| No | Apply Water Conservation on Strategy | | |
| No | Use Reclaimed Water | | |
| No | Use Grey Water | | |
| No | Install low-flow bathroom faucet | 32.00 | |
| No | Install low-flow Kitchen faucet | 18.00 | |
| No | Install low-flow Toilet | 20.00 | |
| No | Install low-flow Shower | 20.00 | |
| No | Turf Reduction | | |
| No | Use Water Efficient Irrigation Systems | 6.10 | |
| No | Water Efficient Landscape | | |

Solid Waste Mitigation

| Mitigation Measures | Input Value |
|---------------------|-------------|
|---------------------|-------------|

| | |
|--|-------|
| Institute Recycling and Composting Services Percent Reduction in Waste Disposed | 50.00 |
|--|-------|



Appendix B

Construction Noise and Vibration Analyses

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Demolition

Receptor Locations: School Building- 40 feet, Nearest Residence-90 feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Concrete Saw | 90 | 1 | 1 | 0.2 | 40 | 85 |
| Dozer | 82 | 1 | 1 | 0.4 | 40 | 80 |
| Backhoe | 78 | 3 | 1 | 0.4 | 40 | 81 |

| Noise Source- At Residential Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|---------------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Concrete Saw | 90 | 1 | 1 | 0.2 | 90 | 78 |
| Dozer | 82 | 1 | 1 | 0.4 | 90 | 73 |
| Backhoe | 78 | 3 | 1 | 0.4 | 90 | 74 |

TOTAL Leq DURING NORMAL OPERATIONS:

| | | | | | |
|--|-----------|------------|----------------|-----------|------------|
| At School Receptor | 87 | dBA | At Residential | 80 | dBA |
| Daytime Ambient without Equipment Operating | 50 | dBA | | 50 | dBA |
| Nighttime Ambient without Equipment Operating | 45 | dBA | | 45 | dBA |
| Daytime Hours Operating: | 8 | | | 8 | |
| Evening Hours Operating: | 0 | | | 0 | |
| Nighttime Hours Operating: | 0 | | | 0 | |
| Combined Daytime Hourly Leq-School Receptor | 87 | dBA | | 80 | dBA |
| Combined Daytime Hourly Leq-Residential Receptor | 80 | | | 50 | |
| Combined Nighttime Hourly Leq: | 45 | dBA | | 45 | dBA |
| ESTIMATED Ldn: | 82 | dBA | | 75 | dBA |

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

* Assumed percentage of time that equipment is operating at near maximum sound level.

* Equipment type per CalEEMod supplied information

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Site Prep and Grading
 Receptor Locations: School Building- 80
 feet, Nearest Residential Building-110 feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|-------------------------|---------------|----------|
| Graders* | 85 | 1 | 1 | 0.4 | 80 | 77 |
| Dozer | 82 | 1 | 0.875 | 0.4 | 80 | 73 |
| Backhoe | 78 | 1 | 1 | 0.4 | 80 | 70 |

| Noise Source- At Residential Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor | Distance, Ft. | Leq, dBA |
|---------------------------------------|--------------------------------------|--------|--|-------------------------|---------------|----------|
| Graders* | 85 | 1 | 1 | 0.4 | 110 | 74 |
| Dozer | 82 | 1 | 0.875 | 0.4 | 110 | 71 |
| Backhoe | 78 | 1 | 1 | 0.4 | 110 | 67 |

TOTAL Leq DURING NORMAL OPERATIONS:

| | | | | | |
|---|-----------|------------|----------------|-----------|------------|
| At School Receptor | 79 | dBA | At Residential | 76 | dBA |
| Daytime Ambient without Equipment Operating | 50 | dBA | | 50 | dBA |
| Nighttime Ambient without Equipment Operating | 45 | dBA | | 45 | dBA |
| Daytime Hours Operating: | 8 | | | 8 | |
| Evening Hours Operating: | 0 | | | 0 | |
| Nighttime Hours Operating: | 0 | | | 0 | |
| Combined Daytime Hourly Leq: | 50 | dBA | | 50 | dBA |
| Combined Nighttime Hourly Leq: | 45 | dBA | | 45 | dBA |
| ESTIMATED Ldn: | 74 | dBA | | 72 | dBA |

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

- * Assumed percentage of time that equipment is operating at near maximum sound level.
- * Equipment type per CalEEMod supplied information
- * Actual Measured Lmax not available, so used Spec Lmax

Equipment Use and Noise Level Source:

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Building Construction
 Receptor Locations: School Building- 80
 feet, Nearest Residential Building-110 feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Cranes | 81 | 1 | 0.75 | 0.16 | 80 | 68 |
| Forklifts | 75 | 1 | 0.75 | 0.2 | 80 | 63 |
| Generators | 81 | 1 | 1 | 0.5 | 80 | 74 |
| Backhoe | 78 | 1 | 0.75 | 0.4 | 80 | 69 |
| Welder | 74 | 3 | 1 | 0.4 | 80 | 71 |

| Noise Source- At Residential Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|---------------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Cranes [3] | 81 | 1 | 0.75 | 0.16 | 110 | 65 |
| Forklifts | 75 | 1 | 0.75 | 0.2 | 110 | 60 |
| Generators [3] | 81 | 1 | 1 | 0.5 | 110 | 71 |
| Backhoe [3] | 78 | 1 | 0.75 | 0.4 | 110 | 66 |
| Welder [3] | 74 | 3 | 1 | 0.4 | 110 | 68 |

TOTAL Leq DURING NORMAL OPERATIONS:

| | | | | | |
|---|-----------|------------|----------------|-----------|------------|
| At School Receptor | 77 | dBA | At Residential | 74 | dBA |
| Daytime Ambient without Equipment Operation | 50 | dBA | | 50 | dBA |
| Nighttime Ambient without Equipment Operation | 45 | dBA | | 45 | dBA |
| Daytime Hours Operating: | 8 | | | 8 | |
| Evening Hours Operating: | 0 | | | 0 | |
| Nighttime Hours Operating: | 0 | | | 0 | |
| Combined Daytime Hourly Leq: | 77 | dBA | | 74 | dBA |
| Combined Nighttime Hourly Leq: | 45 | dBA | | 45 | dBA |
| ESTIMATED Ldn: | 72 | dBA | | 70 | dBA |

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

* Assumed percentage of time that equipment is operating at near maximum sound level.

* Equipment type per CalEEMod supplied information

Equipment Use Source:

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Architectural Coating
 Receptor Locations: School Building- 80
 feet, Nearest Residential Building-110 feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Air Compressor | 78 | 1 | 0.75 | 0.4 | 80 | 69 |

| Noise Source- At Residential Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|---------------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Air Compressor | 78 | 1 | 0.75 | 0.4 | 110 | 66 |

TOTAL Leq DURING NORMAL OPERATIONS:

| | | | | | |
|---|-----------|------------|----------------|-----------|------------|
| At School Receptor | 69 | dBA | At Residential | 66 | dBA |
| Daytime Ambient without Equipment Operating | 50 | dBA | | 50 | dBA |
| Nighttime Ambient without Equipment Operating | 45 | dBA | | 45 | dBA |
| Daytime Hours Operating: | 8 | | | 8 | |
| Evening Hours Operating: | 0 | | | 0 | |
| Nighttime Hours Operating: | 0 | | | 0 | |
| Combined Daytime Hourly Leq: | 69 | dBA | | 66 | dBA |
| Combined Nighttime Hourly Leq: | 45 | dBA | | 45 | dBA |
| ESTIMATED Ldn: | 64 | dBA | | 62 | dBA |

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

* Assumed percentage of time that equipment is operating at near maximum sound level.

* Equipment type per CalEEMod supplied information

Equipment Use Source:

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Building Construction
 Receptor Locations: School Building- 80
 feet, Nearest Residential Building-110 feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Cement Mixers | 79 | 1 | 0.75 | 0.4 | 80 | 70 |
| Pavers | 77 | 1 | 0.75 | 0.5 | 80 | 69 |
| Paving Equipment* | 90 | 1 | 1 | 0.2 | 80 | 79 |
| Rollers | 80 | 1 | 0.75 | 0.4 | 80 | 71 |
| Backhoe | 78 | 1 | 1 | 0.4 | 80 | 70 |

| Noise Source- At Residential Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|---------------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Cement Mixers | 79 | 1 | 0.75 | 0.4 | 110 | 67 |
| Pavers | 77 | 1 | 0.75 | 0.5 | 110 | 66 |
| Paving Equipment* | 90 | 1 | 1 | 0.2 | 110 | 76 |
| Rollers | 80 | 1 | 0.75 | 0.4 | 110 | 68 |
| Backhoe | 78 | 1 | 1 | 0.4 | 110 | 67 |

TOTAL Leq DURING NORMAL OPERATIONS:

| | | | | | |
|---|-----------|------------|----------------|------------|-----|
| At School Receptor | 81 | dBA | At Residential | 78 | dBA |
| Daytime Ambient without Equipment Operating | 50 | dBA | 50 | dBA | |
| Nighttime Ambient without Equipment Operating | 45 | dBA | 45 | dBA | |
| Daytime Hours Operating: | 8 | | 8 | | |
| Evening Hours Operating: | 0 | | 0 | | |
| Nighttime Hours Operating: | 0 | | 0 | | |
| Combined Daytime Hourly Leq: | 81 | dBA | 78 | dBA | |
| Combined Nighttime Hourly Leq: | 45 | dBA | 45 | dBA | |
| ESTIMATED Ldn: | 76 | dBA | 73 | dBA | |

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

- * Assumed percentage of time that equipment is operating at near maximum sound level.
- * Assumed Paving Equipment to be Pavement Scarifier
- * Equipment type per CalEEMod supplied information

Equipment Use Source:

HEAVY EQUIPMENT NOISE IMPACT ESTIMATION Jay Willard Gymnasium Replacement Project

Scenario: Demolition during summer school at a distance of 150 feet
(Applicable for mitigation measures N-2 and N-4)
feet

| Noise Source- At School Receptor | Ave. Maximum SPL @ 50 ft., dBA | Number | Percentage of Workday Hours In Use | Effective Use Factor * | Distance, Ft. | Leq, dBA |
|----------------------------------|--------------------------------------|--------|--|---------------------------|---------------|----------|
| Concrete Saw | 90 | 1 | 1 | 0.2 | 150 | 73 |
| Dozer | 82 | 1 | 1 | 0.4 | 150 | 68 |
| Backhoe | 78 | 3 | 1 | 0.4 | 150 | 69 |

TOTAL Leq DURING NORMAL OPERATIONS:

At School Receptor **76 dBA**

Daytime Ambient without Equipment Operation **50 dBA**

Nighttime Ambient without Equipment Operation **45 dBA**

Daytime Hours Operating: **8**

Evening Hours Operating: **0**

Nighttime Hours Operating: **0**

Combined Daytime Hourly Leq-School Receptor **76 dBA**

Combined Daytime Hourly Leq-Residential **50**

Combined Nighttime Hourly Leq: **45 dBA**

ESTIMATED Ldn: 71 dBA

Distance attenuation assumed at: 6 dBA per doubling of distance

Notes: #N/A = Not Applicable

* Assumed percentage of time that equipment is operating at near maximum sound level.
Equipment type per CalEEMod supplied information

Equipment Use and Noise Level Source:

Federal Highway Administration (FHWA) (2006), *Construction Noise Handbook*. Accessed at
https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/

Vibration Analysis-Demolition

$$PPV \text{ (in/sec)} = PPV \{ref\} * (25/D)^{1.5}$$

Where PPV = Peak Particle Velocity
 {ref} = PPV at the reference distance of 25 feet
 D = distance to the receptor

Demolition Site

Equipment = Large Dozer

PPV{ref} = 0.089 in/sec
 D = 40 feet
PPV at receptor = 0.044 in/sec

0.089 in/sec
 90 feet
0.013 in/sec

PPV is 1.7x to 6x larger than RMS velocity
 Assume typical conversion factor of

4 PPV:RMS

4 PPV:RMS

School Building
Therefore estimated RMS velocity = 0.011 in/sec
School Receptor Lv = 81 VdB

School Building
Therefore estimated RMS velocity = 0.003 in/sec
Residential Receptor Lv = 70 VdB

Equipment = Loaded truck

PPV{ref} = 0.076 in/sec
 D = 40 feet
PPV at receptor = 0.038 in/sec

0.076 in/sec
 90 feet
0.011 in/sec

PPV is 1.7x to 6x larger than RMS velocity
 Assume typical conversion factor of

4 PPV:RMS

4 PPV:RMS

School Building
Therefore estimated RMS velocity = 0.009 in/sec
School Receptor Lv = 79 VdB

School Building
Therefore estimated RMS velocity = 0.003 in/sec
Residential Receptor Lv = 69 VdB

Source: Chapter 12 Noise and Vibration During Construction in
Transit Noise and Vibration Assessment, April 1995
 Harris Miller Miller & Hanson, Inc.
 Prepared For: USDOT Federal Transit Administration

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~4

Criterion

| US Bureau of Mines, 1971 | |
|--------------------------|------------------|
| PPV, in/sec | Degree of Damage |
| <2 | Safe |
| 2 - 4 | Plaster Cracking |
| 4 - 7 | Minor Damage |
| >7 | Major Damage |

| Canmet, Bauer, and Calder, 1977 | | |
|---------------------------------|-----------------------|--------------------|
| Equipment | PPV Threshold, in/sec | Type of Damage |
| Rigid Mercury Switches | 0.5 | Trip Out |
| House | 2 | Cracked Plaster |
| Concrete Block | 8 | Crack in Block |
| Cased Drill Holes | 15 | Horizontal Offset |
| Pumps, Compressors | 40 | Shaft Misalignment |

Human Response Criteria

| Level, Lv in VdB | Equivalent Noise Level, dBA | | Human Response |
|------------------|-----------------------------|-----------------|---|
| | Low freq (30Hz) | Hi Freq (60 Hz) | |
| 65 | 25 | 40 | Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping |
| 75 | 35 | 50 | Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas. |
| 85 | 45 | 60 | Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches. |
| 90 | 50 | 65 | Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses. |

Impact Criteria

| Land Use | Lv in VdB | | |
|---|---------------------------|---------------------------|-----------------------------|
| | Frequent Events (70+/day) | Occasional Events (30-70) | Infrequent (<30 events/day) |
| Category 1: Vibration | 65 | 65 | 65 |
| Concert Halls | 65 | 65 | 65 |
| TV Studios | 65 | 65 | 65 |
| Recording Studios | 65 | 65 | 65 |
| Category 2: Residences, hotels, sleeping areas | 72 | 75 | 80 |
| Auditoriums | 72 | 80 | 80 |
| Theaters | 72 | 80 | 80 |
| Category 3: Institutional with primarily daytime use only | 75 | 78 | 83 |

Vibration Analysis-Construction

$$PPV \text{ (in/sec)} = PPV \{ref\} * (25/D)^{1.5}$$

Where PPV = Peak Particle Velocity
 {ref} = PPV at the reference distance of 25 feet
 D = distance to the receptor

Equipment = Large Dozer

PPV{ref} = 0.089 in/sec
 D = 92 feet
PPV at receptor = 0.013 in/sec

0.089 in/sec
 150 feet
 0.006 in/sec

PPV is 1.7x to 6x larger than RMS velocity
 Assume typical conversion factor of

4 PPV:RMS
 School Building
Therefore estimated RMS velocity = 0.003 in/sec
School Receptor Lv = 70 VdB

4 PPV:RMS
 School Building
Therefore estimated RMS velocity = 0.002 in/sec
Residential Receptor Lv = 64 VdB

Equipment = Loaded truck

PPV{ref} = 0.076 in/sec
 D = 92 feet
PPV at receptor = 0.011 in/sec

0.076 in/sec
 150 feet
 0.005 in/sec

PPV is 1.7x to 6x larger than RMS velocity
 Assume typical conversion factor of

4 PPV:RMS
 School Building
Therefore estimated RMS velocity = 0.003 in/sec
School Receptor Lv = 69 VdB

4 PPV:RMS
 School Building
Therefore estimated RMS velocity = 0.001 in/sec
Residential Receptor Lv = 62 VdB

Source: Chapter 12 Noise and Vibration During Construction in
Transit Noise and Vibration Assessment, April 1995
 Harris Miller Miller & Hanson, Inc.
 Prepared For: USDOT Federal Transit Administration

* RMS Velocity in decibels VdB with Vref of 1E-6 in/sec and PPV:RMS of ~4

Criterion

| US Bureau of Mines, 1971 | |
|--------------------------|------------------|
| PPV, in/sec | Degree of Damage |
| <2 | Safe |
| 2 - 4 | Plaster Cracking |
| 4 - 7 | Minor Damage |
| >7 | Major Damage |

| Canmet, Bauer, and Calder, 1977 | | |
|---------------------------------|-----------------------|--------------------|
| Equipment | PPV Threshold, in/sec | Type of Damage |
| Rigid Mercury Switches | 0.5 | Trip Out |
| House | 2 | Cracked Plaster |
| Concrete Block | 8 | Crack in Block |
| Cased Drill Holes | 15 | Horizontal Offset |
| Pumps, Compressors | 40 | Shaft Misalignment |

Human Response Criteria

| Level, Lv in VdB | Equivalent Noise Level, dBA | | Human Response |
|------------------|-----------------------------|-----------------|---|
| | Low freq (30Hz) | Hi Freq (60 Hz) | |
| 65 | 25 | 40 | Approximate threshold of perception, low-freq inaudible, but mid-freq excessive for sleeping |
| 75 | 35 | 50 | Approx. dividing line between barely perceptible and clearly perceptible. Annoying vibration for most people. Low-freq acceptable for sleeping areas. |
| 85 | 45 | 60 | Vibration acceptable only if no more than 2 events/day for residential uses. Low-freq annoying in sleeping areas; mid-freq unacceptable for sensitive uses, including schools and churches. |
| 90 | 50 | 65 | Difficulty with tasks such as reading computer screens. Generally annoying for commercial uses. |

Impact Criteria

| Land Use | Lv in VdB | | |
|---|---------------------------|---------------------------|-----------------------------|
| | Frequent Events (70+/day) | Occasional Events (30-70) | Infrequent (<30 events/day) |
| Category 1: Vibration | 65 | 65 | 65 |
| Concert Halls | 65 | 65 | 65 |
| TV Studios | 65 | 65 | 65 |
| Recording Studios | 65 | 65 | 65 |
| Category 2: Residences, hotels, sleeping areas | 72 | 75 | 80 |
| Auditoriums | 72 | 80 | 80 |
| Theaters | 72 | 80 | 80 |
| Category 3: Institutional with primarily daytime use only | 75 | 78 | 83 |



Micalyn Harris <harrismicalyn@eurekacityschools.org>

Re: NOP Comments - Jay Willard Gymnasium Replacement Project

1 message

Micalyn Harris <harrismicalyn@eurekacityschools.org>

Mon, Feb 27, 2017 at 9:43 AM

To: Tom <tom@wiyot.us>

Cc: erikacooper@brb-nsn.gov, Janet Eidsness <jpeidsness@yahoo.com>, Janet Eidsness <jeidsness@bluelakerancheria-nsn.gov>

Bcc: Smadar Levy <slevy@rinconconsultants.com>

To all:

The previous clarification was in regard to the depth of the trench for the sewer line.

Thank you.

Micalyn

On Mon, Feb 27, 2017 at 9:38 AM, Micalyn Harris <harrismicalyn@eurekacityschools.org> wrote:

Dr. Torma:

I received additional clarification regarding the depth of ground disturbance and it appears the depth of the trench would be approximately 48 to 60 inches below the current finish surfaces at "J" Street and approximately 36 to 42 inches where it would connect at the building.

Thank you.

Micalyn

On Wed, Feb 15, 2017 at 1:17 PM, Micalyn Harris <harrismicalyn@eurekacityschools.org> wrote:

Dr. Torma:

I have been informed that for most of the project site (i.e., building foundation and parking areas), ground disturbance would not exceed 24-inches, with the exception of trenching for utility lines to serve the new building. Trenches would vary from a minimum of 36-inches to whatever depth is required to connect the new sewer line to the existing city sewer line in the street. The width of each trench would vary from 18-inches to 48-inches and could be wider depending on the depth of the line in order to meet Cal-OSHA safety requirements for trenching.

Thank you.

Micalyn Harris, Executive Assistant
Superintendent's Office
Eureka City Schools
2100 J Street - Eureka, CA 95501
Tel: 707-441-2414

On Wed, Feb 15, 2017 at 9:28 AM, Tom <tom@wiyot.us> wrote:

Dear Micalyn,

Thank you for the AB 52 consultation request. Before I can fully comment, do you have information on the depth of ground disturbance associated with this project? That will be very helpful in determining whether or not Tribal Cultural Resources will be affected by this proposed project.

Thank you,

Tom

Dr. Thomas Torma

Lhatsik Wadaqumilh (Cultural Director)

Wiyot Tribe

1000 Wiyot Drive

Loleta, CA 95551

tel. 707.733.5055 ext. 107

cel. 406.850.2220

fax 707.733.5601

<http://wiyot.us/cultural>

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--

Micalyn Harris, Executive Assistant
Superintendent's Office
Eureka City Schools
2100 J Street - Eureka, CA 95501
Tel: 707-441-2414

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Micalyn Harris, Executive Assistant
Superintendent's Office
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2100 J Street - Eureka, CA 95501
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Micalyn Harris <harrismicalyn@eurekacityschools.org>

Re: NOP Comments - Jay Willard Gymnasium Replacement Project

1 message

Micalyn Harris <harrismicalyn@eurekacityschools.org>

Mon, Feb 27, 2017 at 9:33 AM

To: Janet Eidsness <JEidsness@bluelakerancheria-nsn.gov>

Cc: Tom <tom@wiyot.us>, "erikacooper@brb-nsn.gov" <erikacooper@brb-nsn.gov>, Janet Eidsness <jpeidsness@yahoo.com>

Good morning Ms. Eidsness:

The Notice of Preparation and Initial Study can be found via the following link, under Jay Willard Gymnasium: http://www.eurekacityschools.org/index.php?option=com_content&view=category&id=124&Itemid=392.

Thank you.

Micalyn Harris, Executive Assistant
Superintendent's Office
Eureka City Schools
2100 J Street - Eureka, CA 95501
Tel: 707-441-2414

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On Tue, Feb 21, 2017 at 4:27 PM, Janet Eidsness <JEidsness@bluelakerancheria-nsn.gov> wrote:

Micalyn,

Would you please send me this project notice for tribal review – thanks

Janet P. Eidsness, M.A.

Tribal Heritage Preservation Officer (THPO)

Blue Lake Rancheria

P.O. Box 428 (428 Chartin Road)

Blue Lake, CA 95525

Office (707) 668-5101 ext. 1037

Fax (707) 668-4272

jeidsness@bluelakerancheria-nsn.gov

cell (530) 623-0663 jpeidsness@yahoo.com

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From: Tom [mailto:tom@wiyot.us]
Sent: Wednesday, February 15, 2017 9:28 AM
To: harrismicalyn@eurekacityschools.org
Cc: erikacooper@brb-nsn.gov; 'Janet Eidsness'; Janet Eidsness
Subject: NOP Comments - Jay Willard Gymnasium Replacement Project

Dear Micalyn,

Thank you for the AB 52 consultation request. Before I can fully comment, do you have information on the depth of ground disturbance associated with this project? That will be very helpful in determining whether or not Tribal Cultural Resources will be affected by this proposed project.

Thank you,

Tom

Dr. Thomas Torma

Lhatsik Wadaqoumilh (Cultural Director)

Wiyot Tribe

1000 Wiyot Drive

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tel. 707.733.5055 ext. 107

cel. 406.850.2220

fax 707.733.5601

<http://wiyot.us/cultural>

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—
Micalyn Harris, Executive Assistant
Superintendent's Office
Eureka City Schools
2100 J Street - Eureka, CA 95501
Tel: 707-441-2414

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Micalyn Harris <harrismicalyn@eurekacityschools.org>

Re: NOP Comments - Jay Willard Gymnasium Replacement Project

1 message

Micalyn Harris <harrismicalyn@eurekacityschools.org>

Tue, Mar 14, 2017 at 4:08 PM

To: Eureka Heritage Society <eurekaheritagesociety@gmail.com>

Cc: Mary Ann McCulloch <mcculloch.m@sbcglobal.net>

Bcc: Fred Van Vleck <vanvleckf@eurekacityschools.org>, Smadar Levy <slevy@rinconconsultants.com>

Ms. McCulloch:

This will confirm receipt of your correspondence (comments) dated March 14, 2017. There is no need to send a hard copy, email is sufficient.

Thank you!

Micalyn

On Tue, Mar 14, 2017 at 4:00 PM, Eureka Heritage Society <eurekaheritagesociety@gmail.com> wrote:

Hello Micalyn,

Attached please find the Eureka Heritage Society's comments on the Notice of Preparation for the Jay Willard Gymnasium project.

Would you please confirm receipt of this email and the comments? Would you like me to send a hard copy of the comments?

Thank you,

Mary Ann McCulloch

President

Eureka Heritage Society

Mailing address: PO Box 1354, Eureka, CA 95502

Physical address: 1000 F Street, Eureka, CA 95501

--

Micalyn Harris, Executive Assistant

Superintendent's Office

Eureka City Schools

2100 J Street - Eureka, CA 95501

Tel: 707-441-2414

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Micalyn Harris <harrismicalyn@eurekacityschools.org>

NOP Comments - Jay Willard Gymnasium Replacement Project

1 message

Eureka Heritage Society <eurekaheritagesociety@gmail.com>

Tue, Mar 14, 2017 at 4:00 PM

To: harrismicalyn@eurekacityschools.org

Cc: Mary Ann McCulloch <mcculloch.m@sbcglobal.net>

Hello Micalyn,

Attached please find the Eureka Heritage Society's comments on the Notice of Preparation for the Jay Willard Gymnasium project.

Would you please confirm receipt of this email and the comments? Would you like me to send a hard copy of the comments?

Thank you,

Mary Ann McCulloch

President

Eureka Heritage Society

Mailing address: PO Box 1354, Eureka, CA 95502

Physical address: 1000 F Street, Eureka, CA 95501



NOP comments EHS Gym.doc

68K



March 14, 2017

Eureka City Schools
2100 J Street
Eureka, CA 95501

Re: Comments regarding Notice of Preparation (NOP) of Draft Environmental Impact Report (EIR) - Jay Willard Gymnasium

Per your request, the Eureka Heritage Society is providing comments regarding its views on the proposed project of replacement of the Jay Willard Gymnasium. These comments and concerns are among those to be considered when preparing the Draft EIR's discussion of environmental topics, significant effects, mitigation measures, and alternatives.

Comments with respect to historic resources:

- The Jay Willard Gymnasium was determined to be an historic resource by a qualified firm, Stillman and Associates, in a 2005 *CEQA Analysis of Historical Resources and Potential Impacts of Development Project* report prepared for the Eureka City Schools. Their report is germane to this project
- The above-mentioned report concluded the gymnasium's eligibility for listing on the National Register, California Register of Historical Resource and the Local Register of historical Resources
- The alterations made to the Jay Willard Gymnasium facade since the report were made through prior mutual agreement between the Eureka City Schools and the Eureka Heritage Society. The alterations were intended to be temporary and should not be considered in this evaluation
- The cost attributes of revitalization versus demolition/construction of a new facility should be thoroughly examined and a cost/benefit analysis should be included in the report
- Other historic gymnasium renovations/restorations and funding sources should be investigated
- California's State Historic Preservation Office should be consulted
- The current construction of the building, including current seismic capabilities, should be determined
- The report should address any Field Act seismic requirement changes since the construction of the Jay Willard Gymnasium
- The services of a qualified historic architect and engineer should be engaged for this project
- ADA alternatives for historic buildings should be determined
- Full compliance with Section 106 of the National Historic Preservation Act, if applicable, should be ensured
- Preparation of a Historical Resources Impact Statement should be considered. This statement may allow the school district opportunities for hardship grants. If such a statement is not prepared, the rationale for the decision should be stated in the report

Comments with respect to other cultural resources:

- Address the loss of the pool
- Address the loss of the existing gymnasium square footage with new construction

- Address the loss of the existing stadium seating
- Ensure the entire cost for Jay Willard Gymnasium demolition and source of funding is in the cost analysis, including the impact to the landfill of demolition
- Address potentially salvageable materials

Per CEQA guidelines:

- Include a range of reasonable alternatives to the project
- Ensure a full cost/benefit analysis of all alternatives is included
- Ensure all alternatives are considered, not just those perceived or already determined
- Identify all available alternate financing

In addition, the project should comply fully with the terms of the bond measure.

It is the firm position of the Eureka Heritage Society that the Jay Willard Gymnasium is historic. It is a vital part of the Eureka High campus and has been a fixture in the community for many years and part of the community for generations. Its demolition should not be taken lightly without the proper due process and a full investigation of the alternatives.

The Eureka Heritage Society looks forward to reviewing the Draft EIR and full disclosure of the information obtained during the process.

Sincerely,

Mary Ann McCulloch
 President
 Eureka Heritage Society
 Society email: eurekaheritagesociety@gmail.com
 Personal email: mcculloch.m@sbcglobal.net

Appendix B

Cultural Resources Reports

JAY WILLARD GYMNASIUM
EUREKA HIGH SCHOOL
HISTORIC RESOURCE EVALUATION
EUREKA, CA
[16048A]

Prepared for
EUREKA CITY SCHOOLS



PAGE & TURNBULL

imagining change in historic environments through design, research, and technology

APRIL 18, 2017

FINAL

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I. INTRODUCTION

Eureka City Schools school district engaged Page & Turnbull to prepare a Historic Resources Evaluation (HRE) for the Jay Willard Gymnasium (Gymnasium) at Eureka High School located at 1915 J Street in Eureka, California (Figure 1). The high school campus is bounded roughly by Del Norte Street to the north, J Street to the west, Huntoon Street to the south, and N Street to the east, where the stadium is located. The Gymnasium is toward the southern end of campus, one block east of J Street on K Street, with the tennis courts to the south and the football stadium toward the east accessible by a path at the back of the Gymnasium. Designed by San Francisco-based Masten and Hurd Architects, the Gymnasium opened in 1950.

The school district is pursuing demolition of the Gymnasium as part of a project to construct a new gymnasium at the high school. This HRE is to evaluate the Willard Gymnasium's historic significance and its eligibility as a historic resource for the purpose of environmental review under the California Environmental Quality Act (CEQA).

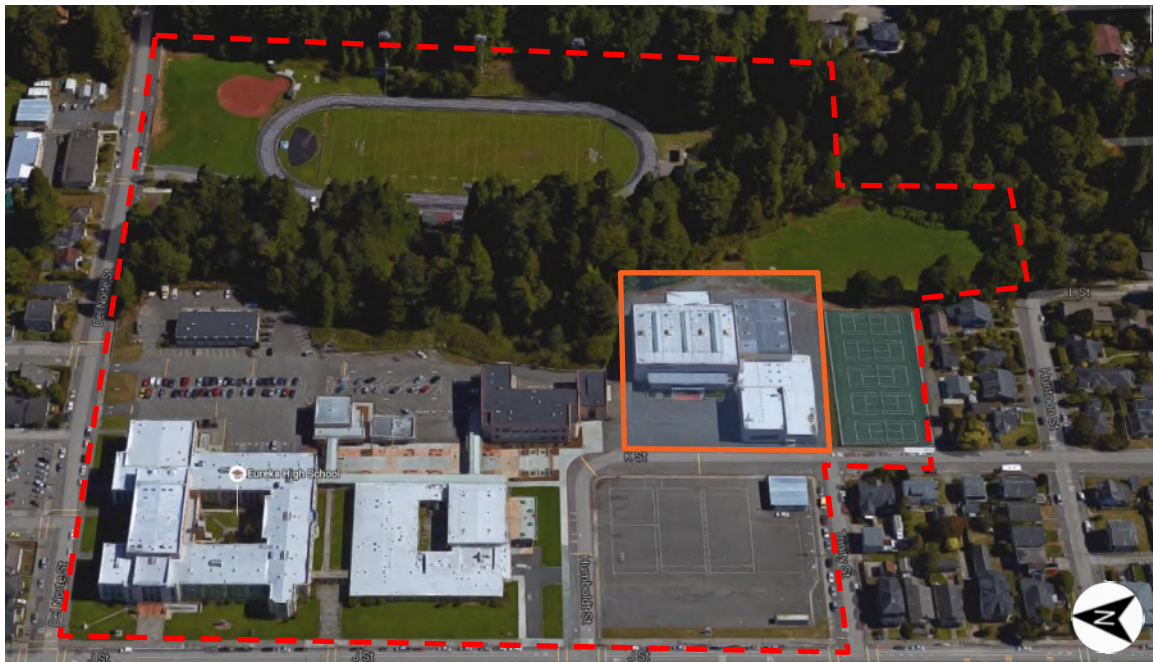


Figure 1: Aerial view of Eureka High School with the Jay Willard Gymnasium in solid outlined and the approximate high school campus in dashed outline, looking east.
Source: Google Maps, 2016, edited by Page & Turnbull.

METHODOLOGY

This report provides an overview of the Gymnasium's current historic status, a physical description, historic context, site and building history, and an evaluation of the building's eligibility for listing in the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and the Eureka Local Register of Historic Places (Eureka Local Register).

Page & Turnbull prepared the report using research collected at Humboldt County Historical Society and at Special Collections (Humboldt Room) at Humboldt State University Library. Additional research was conducted remotely and through inquiries to the Humboldt County Library, Eureka Heritage Society, and the City of Eureka Community Development Department. Research was also conducted through Internet sources such as historic newspaper databases, digital Sanborn Maps, and other electronic databases. It should be noted that local Eureka newspapers available through historic newspaper databases are incomplete, including the years during which the Gymnasium was constructed. Humboldt State University has the newspapers on microfilm, but no indexes are available.

Eureka City Schools and the project team provided original architectural plans, historic photographs, and information about recent alterations. Page & Turnbull conducted a site visit in February 2016 and March 2017 to document the property. All photographs are by Page & Turnbull from the site visits unless otherwise noted.

Summary of Findings

Opened in 1950, the Jay Willard Gymnasium at Eureka High School was designed by San Francisco-based architects Masten and Hurd in the Late Moderne style with striking elements of the International Style. Most prominent was its glass-walled entry lobby that announced the move toward modern design in the postwar years. However, alterations to the entry lobby and other International Style elements at the building has affected the building's design so that it no longer appears as an example of this transitional period. As such, it does not convey its architectural significance and is not eligible listing in the National Register, the California Register, or the Eureka Local Register for its architecture under Criterion 3/C/3.

Research also did not uncover important events or development patterns associated with the Gymnasium. It was constructed as part of a postwar expansion of Eureka City Schools, but did not play a significant role during that expansion. It mostly hosted high school sporting events and was the only community swimming pool in Eureka. While the Gymnasium is familiar to many in Eureka who attended high school or learned to swim there, it does not meet the significance threshold for Criterion A/1/A.

The Gymnasium also does not appear eligible under Criterion B/2/B for association with significant individuals. It was named for long-time football coach and instructor Jay Willard, but is not directly related to Willard's successful football career from the 1920s to the 1950s.

Overall, the Willard Gymnasium does not appear to be eligible individually for historic designation at any level. There does not appear to be a potential historic district at Eureka High School, as the original Senior High School building was demolished in the 1960s and the Junior High School was re-purposed as the main high school building. Therefore, the Gymnasium is not considered a historic resource under the California Environmental Quality Act.

II. HISTORIC STATUS

The following section outlines the national, state, and local historical ratings currently assigned to the Gymnasium at the Eureka High School.

DESIGNATION PROGRAMS

National Register of Historic Places

The National Register of Historic Places (National Register) is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The Gymnasium at Eureka High School is not currently listed in the National Register of Historic Places.

California Register of Historical Resources

The California Register of Historical Resources (California Register) is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register of Historic Places.

The Gymnasium at Eureka High School is not currently listed in the California Register of Historical Resources.

Eureka Local Register of Historic Places

The buildings identified in the Eureka Heritage Society survey conducted in the 1970s are listed in the City of Eureka Local Register of Historic Places (Local Register), unless the owners object to the listing (see below for more information about the Eureka Heritage Society survey). New properties can be added to the Local Register if: 1) they meet the criteria for National Register of Historic Places listing, and 2) have owner consent.

According to City of Eureka planning staff, it appears the Eureka City Schools objected to listing any school building(s) in the Local Register at the time of the survey, so none are formally listed. However, those school buildings identified in the Eureka Heritage Society survey are considered historic resources by the City of Eureka for the purposes of the California Environmental Quality Act (CEQA).

The Gymnasium at Eureka High School is not currently listed in the Eureka Local Register of Historic Places, and is not one of the school buildings identified in the Eureka Heritage Society survey (see below).

HISTORIC SURVEYS AND EVALUATIONS

California Historical Resource Status Code

Properties listed or under review by the State of California Office of Historic Preservation are assigned a California Historical Resource Status Code (Status Code) of “1” to “7” to establish their historical significance in relation to the National Register of Historic Places (National Register or NR) or California Register of Historical Resources (California Register or CR). Properties with a Status Code of “1” or “2” are either eligible for listing in the California Register or the National Register, or are already listed in one or both of the registers. Properties assigned Status Codes of “3” or “4” appear to be eligible for listing in either register, but normally require more research to support this rating. Properties assigned a Status Code of “5” have typically been determined to be locally significant or to have contextual importance. Properties with a Status Code of “6” are not eligible for listing in either register. Finally, a Status Code of “7” means that the resource has not been evaluated for the National Register or the California Register, or needs reevaluation.

As of 2010, the last printed directory available, the Gymnasium is not listed in the California Historic Resources Information System (CHRIS) database with any status code. This means that at that time, the building had not been formally evaluated using California Historical Resource Status Codes and submitted to the California Office of Historic Preservation.

Eureka Heritage Society Survey

In the 1970s, the Eureka Heritage Society conducted a citywide survey of 1,540 properties selected as potentially eligible for the National Register of Historic Places. The results of the survey were published in *Eureka: An Architectural View* in 1987. Two buildings from Eureka High School were identified and ranked in the survey:

- The Gothic Revival-style building at 1900 J Street, designed by architect John J. Donovan of Oakland and built by James McLaughlin of San Francisco. Constructed in 1925 as the Eureka Junior High School, the building was converted into the high school building in the 1960s. It was given an “L” rating, meaning important to the history and development of architecture on a community or regional level.
- The Streamline Moderne-style building at 1915 J Street, designed by architectural firm Masten and Hurd of San Francisco and built by DeLuca and Son of San Francisco. Constructed in 1939 as the Industrial Arts Building, it was also given an “L” rating in the survey.

The Humboldt County Library houses the Eureka Heritage Society’s survey records in the library’s Humboldt Room. Inquiries to the Humboldt Room did not yield survey forms or records about the Gymnasium. It appears the building was not surveyed by the Eureka Heritage Society.

Stillman & Associates Evaluation

In 2005, Stillman & Associates prepared a “CEQA Analysis of Historical Resources and Potential Impacts of Development Project,” for the Jay Willard Gymnasium as part of a proposed master plan project for the Eureka High School. The Stillman & Associates report found the Gymnasium to be individually eligible for listing in the National Register, California Register, and the Eureka Local Register for its architecture (Criterion C/3) as one of the few examples of the International Style in Eureka with a good degree of integrity, despite some alterations. It was also found eligible as contributing to the social development of the community as part of Eureka’s only high school, for supporting the development of sports in Humboldt County, and as an important component of Eureka’s recreation program (Criterion A/1).¹

The report also found a potentially eligible historic district at the Eureka High School campus of buildings constructed between 1925 and 1950, with the Gymnasium as a likely contributor to the eligible district. It should be noted that the Stillman & Associates report was completed prior to the 2008 plywood cladding of the Gymnasium’s front lobby volume.

Carey & Co. Evaluations

The Gymnasium was evaluated also evaluated by Carey & Co. Inc. in 2005 and again in 2006 in their report, “Historic Resource Evaluation, Impacts and Mitigations for Proposed Eureka High School Gymnasium Project.” Rather than a master plan project, the 2006 project was to demolish the existing Gymnasium and build a new one. Only Carey & Co.’s 2006 report was reviewed, which supported its previous 2005 finding that the Gymnasium is eligible for individual listing in the National Register and California Register for its architecture (Criterion C/3) as “an excellent physical expression of the c.1950s education reform movement, as well as an example of the modern architectural movement and International style [sic]—particularly the main entry and lobby.”² The building was also potentially eligible for its place in the development of the Eureka High School campus and surrounding community, and the association with 1950s education reform (Criterion A/1). The Carey & Co. report found the Gymnasium had sufficient integrity to be an eligible historic resource, though again, the evaluation was prior to the 2008 plywood cladding of the entry lobby volume.

It appears that Carey & Co. in 2005 came to a different conclusion than the Stillman & Associates report about a potential historic district at Eureka High School. Carey & Co. did not find a context that supported the significance of a historic district at the campus, especially as not all of the current high school buildings were constructed for the high school. Given their previous finding, the 2006 Carey & Co. report does not evaluate a potential historic district at the high school campus, or the Gymnasium’s possible status as a contributor to an eligible district.

¹ Stillman & Associates, “CEQA Analysis of Historical Resources and Potential Impacts of Development Project,” Jay Willard Gymnasium, Eureka High School, prepared for 3D/International, March 29, 2005, 3 and 25-26.

² Carey & Co. Inc., “Historic Resource Evaluation, Impacts and Mitigations, for Proposed Eureka High School Gymnasium Project,” prepared for Winzler & Kelly Consulting Engineers, February 17, 2006, 11.

III. PHYSICAL DESCRIPTION

The Jay Willard Gymnasium is a one- and two-story, flat-roofed, concrete-framed building designed in the Late Moderne style with International Style influences. It has an asymmetrical composition of three distinct wings with varying roof heights and an irregular floorplan (**Figure 2**).



Figure 2: The Jay Willard Gymnasium with the Main Gymnasium Wing to the north (left). Forming an L around the front paved areas is the Secondary Gymnasium Wing to the south (right), with its varying lower roofline, looking southeast.



Figure 3: The Gymnasium with Main Gymnasium Wing, Swimming Pool Wing and Secondary Gymnasium Wing outlined, looking east. Source: Google Map, 2016, edited by Page & Turnbull.

The building is composed of the Main Gymnasium Wing, setback from K Street and housing the main gym space (originally called Boy's Gymnasium); the Swimming Pool (or Natatorium) Wing to the southeast, slightly lower in height; and the Secondary Gymnasium Wing (originally Girl's Gymnasium) to the southwest, which generally has a low roof height with taller volumes in the northwest and southwest corners (**Figure 3**). The Secondary Gymnasium Wing extends west from the front of the Main Gymnasium Wing to surround a paved area that was originally a front plaza with raised planters.

The building walls are painted concrete. Windows are wood framed and are in three configurations: double rows of fixed and awning rectangular windows within a projecting concrete frame; groupings of rectangular or square fixed and awning windows slightly recessed from the surrounding wall plane; and window or curtain wall systems with fixed rectangular glazing in a grid of wood framing. Exterior doors appear to be mainly replacement hollow metal doors with some glazing. Above the main gym space at the Main Gymnasium Wing roof are three linear double-pitched skylights. The Secondary Gymnasium Wing roof has individual square skylights above the locker rooms that replaced original skylights that were similar to those at the main gym.

Main Gymnasium Wing

The Main Gymnasium Wing is the largest volume of the building. Approximately 36 feet high, it contains the main gymnasium space at the center, and offices along the north periphery. The wing has three exposed exterior façades at the front (west), north, and rear (east) sides; the south façade is connected to the adjacent wings. A shorter lobby volume is located at the front (west) façade, and a second volume is located at the rear (east) with a partially above ground basement responding to the site's grade change at the east (**Figure 4**).



Figure 4: Front (west) façade of the Gymnasium, with the lobby volume in front of the Main Gymnasium Wing and facing the front paved area, looking east.

The front (west) façade of the Main Gymnasium is painted concrete with “Jay Willard Gymnasium” signage painted at the top left (north) side. The two-story entry lobby volume projects from the façade at center (**Figure 5**). The lobby volume has a thin projecting eave above a plaster band that wraps around the volume. Below the plaster band is plywood covering over the original glazed curtain walls (**Figure 6**). Battens hide the seams between plywood boards and create a pattern that roughly matches the glazed walls’ framing, which remains underneath. Centered on the lobby volume are three paired non-original entry doors below a projecting canopy (**Figure 7**). Two large rectangular banded volumes that originally housed ticket booths are at each end of the canopy, which is additionally supported by four thin equally-spaced metal posts. A set of wide concrete steps extending the length of the entry canopy lead to the entry doors. Flanking the steps are raised concrete planting beds.



Figure 5: Projecting entry lobby volume at front (west) façade, looking southeast.



Figure 6: Detail of plywood covering entry lobby walls.



Figure 7: Main entry doors and steps to the Gymnasium, looking southeast.



Figure 8: Altered secondary entrance on front (west) façade, looking east.

The lobby volume’s north and south sides have also been covered with plywood, with a set of non-original hollow metal doors at the north side. South of the lobby volume is a smaller, one-story volume with a secondary entrance now centered and composed of a set of paired hollow metal doors with a glazed transom below a metal canopy; there was originally a glazed window wall and doors at this location (**Figure 8**).

The Main Gymnasium's north façade is painted concrete with a projecting concrete frame centered on the façade, containing double rows of fixed and awning rectangular windows (**Figure 9**). Flues have been installed in three windows while the lower awning windows have horizontal bars on the interior (**Figure 10** and **Figure 11**).



Figure 9: North façade of the Gymnasium (left), looking southeast.



Figure 10: Typical double row of fixed and awning windows within a projecting concrete frame, as seen on the north façade, looking southeast.



Figure 11: Detail of the projecting concrete frame and windows at north façade, looking east.

The rear (east) façade of the Main Gymnasium Wing is integrated with the rear façade of the Swimming Pool Wing, and features a shorter, one-story-over-basement projecting volume at the north end (**Figure 12**). The main façade plane behind the projecting volume has no openings and a thin chimney south-of-center rising above the roofline. The rear projecting volume has a T-shaped floor plan with a center portion that corresponds to a weight room in the first floor, and a

boiler room in the basement. The boiler room has a mix of louver, awning, and fixed windows set flush with the wall plane, while the first-floor weight room has four groupings of fixed and awning windows slightly recessed from the wall plane.



Figure 12: Rear (east) façade of the Gymnasium, with Swimming Pool Wing to the south (left) and the rear projecting volume at the north (right), looking west.

The north face of the rear volume has two parts (**Figure 13**). The east part has no openings except for basement doors accessed via a set of stairs. The west part, adjacent to the north façade, has a glazed window wall with wood-framed panes, some of which have been a solid panel replacing broken glazing; the interior stairs are visible through the windows (**Figure 14**). Concrete stairs lead to two sets of double doors at the base of the windows; a concrete planter is next to the stairs. A grouping of slightly recessed awning windows is located adjacent to this entrance area on the rear (east) façade of the Main Gymnasium Wing plane.



Figure 13: North face of rear projecting volume with a solid east part and a window wall at the west part, looking southwest.



Figure 14: Window wall and entrance at the rear volume's north façade, looking south.

At the south portion of the projecting rear volume, which is attached to the Swimming Pool Wing, there are doors at the first floor and below grade at the basement, both with associated concrete stairs (**Figure 15**). Two groupings of square awning windows are above the first-floor door.



Figure 15: Entrance and stairs south of the rear projecting volume, as well as the non-original stair from the Swimming Pool Wing, looking west



Figure 16: East façade of Swimming Pool Wing, (left), looking southwest.

Swimming Pool Wing

The Swimming Pool Wing is at the building's southeast corner and has two exposed exterior façades. The east (rear) façade is attached to the projecting rear volume of the Main Gymnasium Wing. It has no openings, except an upper level exit door leading to a set of open stairs (**Figure 16**).



Figure 17: South façade Swimming Pool Wing (right), with the Secondary Gymnasium Wing to the west (left), looking northwest.



Figure 18: Window wall at south façade of Swimming Pool Wing, looking northwest.

The south façade of the Swimming Pool Wing intersects with the lower Secondary Gymnasium Wing to the west (**Figure 17**). It has a window wall below a narrow overhang flanked by paired hollow metal exit doors. The glazing in the lower row of the three-row window wall has been removed and the openings infilled with concrete blocks, while metal grilles screen the upper two rows of windows (**Figure 18**). Two glazing panes in the top row have been replaced by vents in

metal panels. The west façade of the Swimming Pool Wing is partially visible above the low Secondary Gymnasium Wing and contains no fenestration.

Secondary Gymnasium Wing

The Secondary Gymnasium Wing is at the building's southwest corner. It extends from the Swimming Pool Wing west to K Street and defines the south edge of the front paved area (**Figure 19**). The wing has varying rooflines, with the tallest volume at the northwest, a lower volume at the southwest, and the remaining one-story area capped with a flat roof (**Figure 20**).



Figure 19: Secondary Gymnasium Wing's north (left) façade at the front paved area and west (right) façade at K Street, looking southeast.



Figure 20: Secondary Gymnasium Wing's west façade (left) and south façade (right), looking northeast from K Street.

The Secondary Gymnasium Wing has three exposed exterior façades. The south façade, situated west of the Swimming Pool Wing's south façade, is composed of two sections (**Figure 21**). The east section has a single row of fixed and awning windows below a projecting eave, and a recessed entry containing original paired doors (**Figure 22**). The taller west section has a projecting concrete frame containing double rows of fixed and awning windows. Some of the lower windows are covered with plywood.



Figure 21: South façades of Secondary Gymnasium Wing (left) and Swimming Pool Wing (right), looking northeast.



Figure 22: East part of Secondary Gymnasium Wing's south façade, with original paired doors, looking northeast.

The Secondary Gymnasium Wing's west façade fronts onto K Street and is also divided into two sections (**Figure 23**). The south section has an entry door below a canopy supported by square banded concrete columns. The taller, north section has a grouping of fixed and awning windows in two rows surrounded by a projecting concrete frame.



Figure 23: West façade of Secondary Gymnasium Wing along K Street, looking east.



Figure 24: North façade of Secondary Gymnasium Wing (right), at front paved area, looking south.

The Secondary Gymnasium Wing's north façade intersects with the west façade of the Main Gymnasium Wing and forms an L-shape around the front paved area (**Figure 24**). It also has two sections. The taller west section has a projecting concrete frame with double rows of fixed and awning windows. The easternmost portion, where the wing connects with the Main Gymnasium Wing, is one story in height with one row of fixed and awning windows slightly recessed from the wall plane.

Interior

Entering through the main doors at the Main Gymnasium Wing is the entry lobby with open, pipe-rail stairs to the balconies at the north and south ends (**Figure 28**). Plywood is installed on the interior over what was glazed walls at the north, south, and east walls, including at the balconies; a tall statue of Mr. Logger, the high school mascot, is in the lobby. A smaller lobby is to the south of the main entry lobby, down a short ramp and below the stairs, corresponding to the secondary door on the main (west) façade the south (**Figure 26** and **Figure 8**).



Figure 25: Entry lobby with plywood-clad walls at left (west), looking north.



Figure 26: Smaller lobby leading to secondary gymnasium and swimming pool, looking south.

The main gymnasium space (originally Boy's Gymnasium) is accessed from the entry lobby and is located in the middle of the Main Gymnasium Wing (**Figure 27**). The main gym is a large open space spanned by steel trusses and lit by three linear skylights. There are balconies with bleachers along the north and south sides with a radio booth located at the south balcony (**Figure 28**).

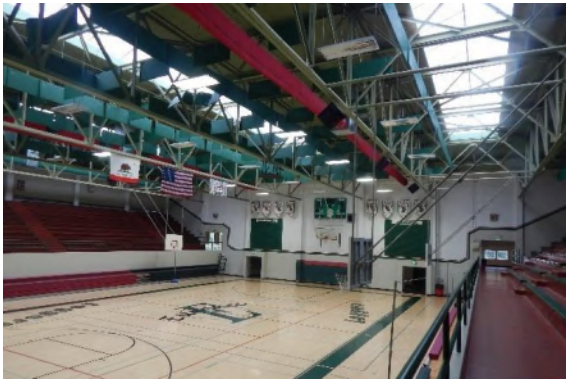


Figure 27: Main gym interior with steel trusses and skylight in the roof and balconies flanking the floor, looking northeast.



Figure 28: Radio booth at south balcony in Main gym, looking southeast.

North of the main gym is a hallway of offices and equipment rooms with an angled ceiling reflecting the raked balconies in the main gym (**Figure 29 and Figure 30**). South of the main gym is a similar hallway that accesses the boys locker room.

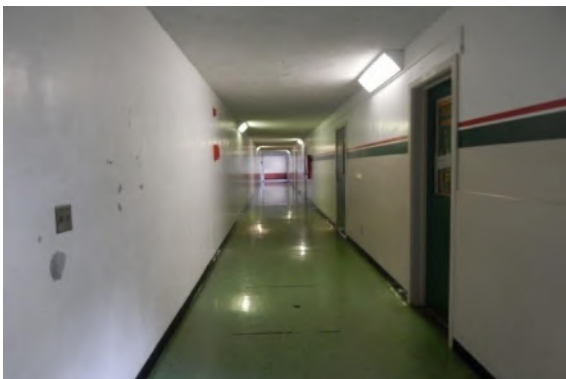


Figure 29: Hallway north of the main gym with doors to offices and equipment rooms, looking west.



Figure 30: Example of equipment rooms along the north hallway, with angled ceiling and windows.

Behind the main gym, to the east, is a weight room, which is located in the rear projecting volume of the Main Gymnasium Wing (**Figure 31**). Also at the rear is the glazed window wall entrance, which also has a set of stairs and short ramp similar to the front entry lobby (**Figure 32**).



Figure 31: Weight room at the rear of the main gym, in the rear projecting volume, looking east.

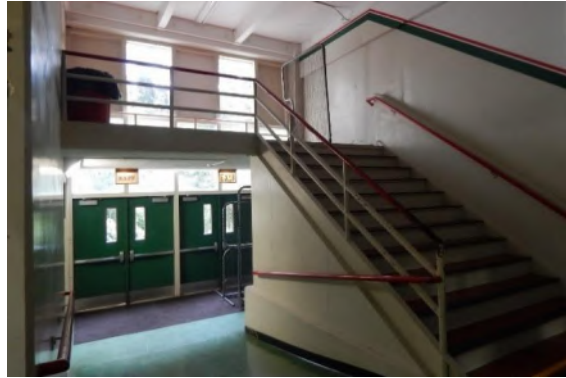


Figure 32: Rear entrance at glazed window wall that extends to the balcony level, looking north.

South of the main gym is the swimming pool space in the Swimming Pool Wing (Figure 33). The interior also has a steel truss roof and is double-height with a balcony along the north side (Figure 34). The swimming pool has been permanently drained and closed since 2009; the present water in the pool appears to be a result of leaks in the roof. The pool is accessed directly from the girls and boys locker rooms, with a set of stairs from the secondary lobby providing access to the balcony level.



Figure 33: Swimming pool space as seen from its balcony along the north end, looking southeast.



Figure 34: Swimming pool space with balcony, looking northeast.

West of the swimming pool space is the girl's locker room, the second gym space (originally Girl's Gymnasium), and an adjacent weight room in the Secondary Gymnasium Wing. The second gym space has a steel truss roof while its weight room has a concrete frame roof, both with wood decks (Figure 35 and Figure 36).



Figure 35: Ceiling in second gym within the Secondary Gymnasium Wing.



Figure 36: Weight room adjacent to second gym in Secondary Gymnasium Wing.

The boys and girls locker rooms and their associated showers were last renovated in 2008 (**Figure 37**). The girls locker room originally had linear skylights, which were replaced with individual skylights (**Figure 38**).



Figure 37: Renovated shower facilities in the boys locker room.



Figure 38: Renovated girls locker room with individual skylights.

Eureka High School Campus

The Willard Gymnasium is in the southeast corner of the Eureka High School campus, set back from J Street, behind a large paved lot that serves as a parking area for the high school (**Figure 39**). Tennis courts are to the south of the Gymnasium and the football stadium to the east. To the north is a 1939 Streamline Moderne building that was originally the Industrial Education building (**Figure 40**).



Figure 39: The Jay Willard Gymnasium looking east from J Street behind large parking area, with the Industrial Education Building to the north (left).



Figure 40: Streamline Moderne building from 1939 that was originally the Industrial Education Building, just north of the Gymnasium, looking east.



Figure 41: Eureka High School's main Gothic Revival-style building, originally built in 1926 as the Junior High School building, looking northeast.

The main high school building is at the northwest corner of the campus at J Street and Del Norte Street (**Figure 41**). Originally built as in 1926 as Eureka's junior high school, the Gothic Revival-style building is two stories with a central courtyard. South of the main building and connected by a covered walkway is a one-story building constructed in the 1960s as a Science Building, located where the original high school building once stood before it was demolished (**Figure 42**). A Cafeteria Wing is attached at the east side of the Science Building and separated from the Industrial Education Building by a courtyard (**Figure 43**).



Figure 42: 1960s Science Building (left) and Cafeteria Wing (right), with the main building in the background, looking north from parking lot.



Figure 43: Cafeteria Wing (left) separated from the Industrial Education Building (right) by a courtyard and covered walkways.

North of the Industrial Education Building is the Music Building and another one-story building, now called Building G that also face the courtyard (Figure 44). The buildings are within the campus and not visible from the street.

At the campus' north end is a one-story, automotive workshop building, constructed in the 1960s (Figure 45). It has a similar aesthetic as the Science Building and was constructed around the same time.



Figure 44: Music Building (background) and Building G (foreground) located north of the Industrial Education Building around the interior courtyard, looking northeast. The main school building is in the background at left.



Figure 45: The automotive workshop building constructed in the 1960s at the campus's north end near Del Norte Street, behind the main school building, looking southeast.

IV. HISTORIC CONTEXT

City of Eureka

As a result of its remote location in far northwest California, the region surrounding Humboldt Bay was not settled by Anglo-Americans until 1849, the year that overland explorers in search of gold established camps for mining operations along the Trinity and Klamath rivers.³ The first towns to be founded in April 1850 were Humboldt City (now known as Buhne Point) and Union (now known as Arcata).⁴ The town of Eureka, which derived its name from both the Greek word meaning “I have found it” (referring to the discovery of gold) and the California state motto, was founded in May 1850; it would eventually become the county seat for Humboldt County. Eureka is located midway along the eastern shore of Humboldt Bay and was planned with a regular street grid, with numbered streets oriented east-west and lettered streets oriented north-south. The population was 23 at the close of 1850.⁵



Figure 6. Looking south toward the intersection of Fourth and G streets, 1864. This is the earliest known street scene of Eureka. Source: Images of America, 23.

The army of prospectors soon exhausted the gold supply, and the region then became economically attractive for its abundant forests. Of the local pioneer settlements, Eureka was best situated to access, harvest, and transport trees, and milling operations began as early as the summer of 1850. Until the arrival of the railroad in 1914, the isolation of Humboldt Bay meant that water transport was the only sure method by which to move goods and people, and shipping and shipbuilding became chief industries of Eureka, in addition to lumber manufacturing.⁶ These commercial activities attracted settlers from New England and eastern Canada, where men had lumbered and carpentered for generations, and they brought with them their cultural and

³ Architectural Resources Group, *Eureka: An Architectural View* (Eureka, Calif: Eureka Heritage Society, Inc., 1994), 2.

⁴ Architectural Resources Group, 9.

⁵ Architectural Resources Group, 12.

⁶ Architectural Resources Group, 3.

architectural traditions.⁷ Many of Eureka's earliest buildings featured simplified elements associated with the Greek Revival style that was fashionable across America, and most of the extant buildings dating from this period (1850-1870) are located between First and Third streets.⁸ The use of Greek Revival-inspired features continued well into the 1880s, when improved communication to the area brought news of architectural developments.⁹

In the mid-1870s, the production of Eureka's numerous mills exceeded demand for lumber and the area experienced its first depression. It was short-lived, however, and by 1880, building booms in other parts of California revived the vigorous pace of lumber production, and the population rose to 2,600.¹⁰ The economic prosperity of Eureka resulted in many civic enhancements, including municipal services, street improvements, regular news service, and new educational, religious, financial, and legislative institutions. The town limits grew incrementally over time to include 67 additional blocks by 1884, and property continued to be given to the town by local landowners.¹¹ Many commercial and residential buildings were constructed in Eureka during this time, and they reflected the widespread influence of pattern books modeled after those by Andrew Jackson Downing, which explored the picturesque revival styles of Gothic and Italianate architecture.¹²

After another brief depression in 1885, a surge of building activity led to the construction of 257 new buildings—most of them Italianate style—in Eureka by 1887.¹³ That year, the town initiated a system of streetcars and horsecars.¹⁴ The grand Humboldt County courthouse, designed by Curtis & Bennett of San Francisco, was built in Eureka and completed in 1889.¹⁵ In the final decades of the nineteenth century, Queen Anne and Stick/Eastlake styles of architecture dominated, transforming Eureka into an elegant Victorian city. Many of the buildings from this period remain into the twenty-first century, and Victorian-era architecture continues to characterize both downtown Eureka and some residential neighborhoods.¹⁶

A nationwide depression followed the Panic of 1893, an international financial crisis, and Eureka suffered alongside countless American cities. Commercial productivity and employment fell dramatically, but the population continued to rise. By the turn of the twentieth century, Eureka had reached a population of more than 7,000 and the town consisted of approximately 2,000 buildings.¹⁷ Several local benefactors helped to restore the local economy by commissioning large building projects that employed many men and served a number of local businesses.

⁷ Architectural Resources Group, 14-15.

⁸ Architectural Resources Group, 17.

⁹ Architectural Resources Group, 15.

¹⁰ Architectural Resources Group, 23, 42.

¹¹ Architectural Resources Group, 23-25.

¹² Architectural Resources Group, 25-26.

¹³ Architectural Resources Group, 39, 42.

¹⁴ Architectural Resources Group, 42.

¹⁵ Architectural Resources Group, 43.

¹⁶ Architectural Resources Group, 44-45.

¹⁷ Architectural Resources Group, 42.

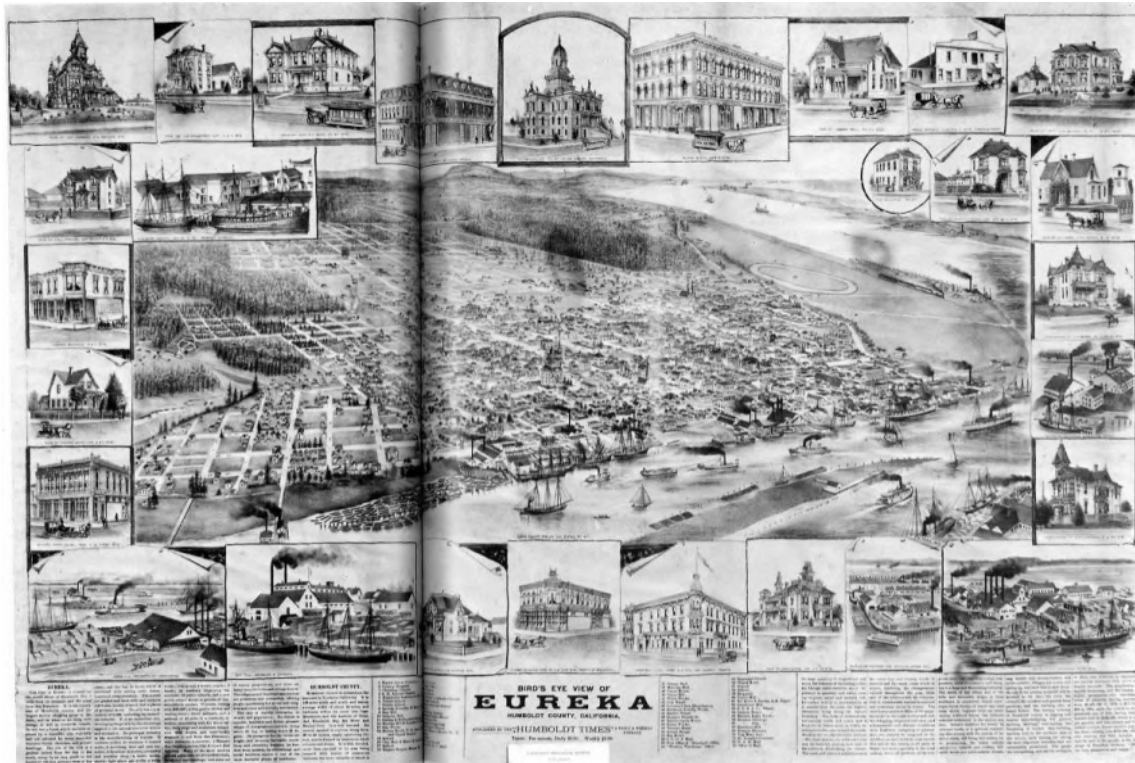


Figure 7. Aerial view of Eureka, 1895, with examples of the local buildings of the period. Source: ARG, 40-41.

In the early twentieth century, Eureka's economy grew to include new industries, namely animal husbandry, farming, wool production, and mining of quartz, coal, copper and oil.¹⁸ In 1914, after more than a decade of delays, the Pacific Northwest Railroad completed a direct line from Humboldt County to the San Francisco Bay Area.¹⁹ As a result of the area's newfound accessibility, an increasing number of people moved to Eureka, and many services were added to the downtown, including banks, grocers, hotels, churches, hospitals, fraternal societies, schools, an opera house, and a Carnegie library. Because of its abundant resources and manpower, Eureka played an important role in American shipbuilding efforts during the First World War.²⁰ Buildings from the early twentieth century reflect national architectural trends and regional developments, including the Arts and Crafts movement and Classical Revival styles associated with world fairs and expositions.²¹

The Great Depression in the 1930s greatly affected the lumber industry, as it did many other industries across the country. Federal New Deal recovery programs helped to boost the local economy, both directly and indirectly, with Eureka as the center for supplies to the 12 Civilian Conservation Corps (CCC) camps established in Humboldt County.²² Few buildings were constructed during the Depression and World War II. Those that were typically employed

¹⁸ Architectural Resources Group, 72-73.

¹⁹ Architectural Resources Group, 73-74.

²⁰ Architectural Resources Group, 75-76.

²¹ Architectural Resources Group, 77-79.

²² Architectural Resources Group, 106.

modernistic design elements, such as Art Deco, Streamline Moderne, Zig-Zag Moderne, or Moderne styles inspired by the modern machine age.

In the post-World War II years, the pent-up demand for housing and other buildings resulted in the great demand for lumber, which in turn fueled another population boom. By 1950, Eureka's population had grown to over 22,000.²³ Although the International Style and modern architecture proliferated in the postwar years, few examples are in Eureka's historic core, where wholesale demolition and redevelopment did not occur. Instead, development occurred in the suburban areas, where residential tracts and local commercial buildings to support the growing communities were constructed

Eureka City Schools

The history of schools in Eureka often parallels the development of the town. The earliest grammar schools were established in the 1850s when families began settling in the Humboldt Bay area.²⁴ In the early 20th century, as the railroad and Highway 101 further connected Humboldt Bay to other areas in California, Eureka grew and attracted more residents. Square, two-story-over-basement grammar schools started to replace the earlier one-room schoolhouses. Between 1903 and 1910, six of these square school buildings were built with the same general floor plans in simplified traditional revival styles (**Figure 46**).²⁵



Figure 46: Franklin School (undated), typical of Eureka's square, two-story with basement grammar schools from the early 20th century. Source: Palmquist Collection, Humboldt Room Photograph Collection, 2003.01.2326.

²³ Ibid., 118.

²⁴ Mary Beth Woldford, Humboldt Senior Resource Center, "Washington School," National Register of Historic Places Registration Form, prepared April 12, 2001, section 8, page 3.

²⁵ Glen N. Nash, "A Look at Eureka Schools Constructed in the 1900s," *The Humboldt Historian*, September-October 1986

High school classes had been held at the Winship school building since 1896, but with the growth of Eureka came a need for a stand-alone high school building. Voters initially rejected funding for the construction of a high school in 1911, but voted in favor in 1913. The first high school building, designed in a Classical Revival style, was completed in 1914.²⁶ Once built, the seventh and eighth grade classes moved from the grammar schools to Winship School as the beginnings of a junior high school. Voters approved the construction of a dedicated junior high school building in 1924 and the new Gothic Revival style building opened in 1926.²⁷ The high school's football stadium, called Albee Stadium, was also built around this time.²⁸

After high-profile earthquakes in California in the 1920s and 1930s, and one in Eureka in 1932, Eureka school officials reviewed the schools for safety. All six of Eureka's grammar schools were condemned as fire hazards in 1938, and five of them demolished; only the Washington School survived. According to the National Register nomination for the Washington School, the new schools were built on the playgrounds of the old schools, and once completed, the old square school building was demolished. Washington School was spared because its replacement was built at another location, and it was repurposed once it was no longer a school.²⁹

Between 1940 and 1941, four replacement schools opened.³⁰ Compared to the square schools, these one-story schools were decidedly modern (**Figure 47**). At least two, Jefferson and Marshall elementary schools, were designed by San Francisco-based Masten and Hurd Architects in the Moderne style.³¹ They all had a similar architectural design, including a linear horizontality offset by a vertical pylon at the entrance, use of redwood board siding, and originally Humboldt shake roofs.³²



Figure 47: Lincoln Elementary School, one of four Moderne elementary schools built in 1940-41 to replace the 1900s square schools.



Figure 48: Jacobs Junior High School built in the postwar years as a California modern school type with finger buildings around courtyards.

²⁶ Nash, "A Look at Eureka Schools Constructed in the 1900s."

²⁷ Nash, "A Look at Eureka Schools Constructed in the 1900s."

²⁸ "Eureka City School Show Result of Study Progress, Improved Facilities," *Humboldt Times Centennial Edition*, February 7, 1954.

²⁹ Woldford, "Washington School," section 8, page 4.

³⁰ "Eureka Grade Students to Occupy New Schools," *Humboldt Standard*, September 5, 1941.

³¹ Architectural Resources Group and Eureka Heritage Society, Inc., 88 and 184

³² "Eureka Grade Students to Occupy New Schools."

World War II brought a virtual stand-still to building, which resulted in pent-up demand in the postwar years, just as the population boomed. Starting in 1948, voters approved eight bond measures in 10 years to construct school facilities in the elementary school district and high school district, which together compose Eureka City Schools.³³ The first bond measure resulted in the construction of additions to the 1940s elementary schools, as well as a new elementary school at the elementary school district, while the high school district built a new gymnasium and swimming pool for Eureka High School, a field house for the high school's football stadium, and a bus garage.³⁴

Subsequent bond measures constructed two new elementary schools to replace those condemned in 1938, as well as several new schools for the growing postwar community. A new junior high school, George C. Jacobs Junior High School, was also built, as well as an agricultural building near Eureka High School (**Figure 48**).³⁵ These postwar schools were generally design in the California modern school layout, with one or more rows of one-story classroom buildings arranged around courtyards and covered walkways connecting buildings across sprawling open campuses. International Style elements were used such as walls of windows facing north for natural light visible, lack of ornament, and flat roofs.

By 1966, Eureka City Schools had nine elementary schools, three junior high schools, and one high school.³⁶ Since then, student populations have fluctuated up and down, though no new schools have been constructed. Some schools have closed and been converted to other uses, such as the 1940-41 Marshall Elementary School that is now used as Eureka City Schools' district offices.

Eureka High School

In 1896, the first high school classes were held in the Winship School at E Street and Eleventh Street (current location of the Eureka Municipal Auditorium).³⁷ The original Eureka Senior High School building was built in 1915 at the current high school campus on J Street, between Sonoma and Trinity streets (**Figure 49**). Designed by W.H. Weeks, the Classical Revival building was of modern, fireproof, concrete construction.³⁸ It had a had a T-shaped footprint with an auditorium. The 1920 Sanborn fire insurance map showed a manual training building and tennis courts to the east of the main building, and a high school gymnasium further south (**Figure 50**).

³³ "Public Schools Observance Week Starts," *Humboldt Standard*, April 21, 1958.

³⁴ "Eureka to Vote on School Bonds, Recent Expenditures Reviewed," *Humboldt Standard*, May 9, 1950.

³⁵ Nash, "A Look at Eureka Schools Constructed in the 1900s."

³⁶ "Eureka City Schools Financial Data," January 1966, in Schools, Eureka, Administration to 1969 folder, Humboldt Room, Humboldt State University.

³⁷ Nash, "A Look at Eureka Schools Constructed in the 1900s," and Sanborn-Perris Map, Eureka, California, Oct. 1900, 17.

³⁸ Nash and Barbara Canepa Saul, "...How True to You We Are, Eureka High!: The First One Hundred Years 1895-1995," *Humboldt Historian*, Fall 1995.



Figure 49: Eureka Senior High School building, 1915. Source: Palmquist Collection, Humboldt Room Photograph Collection, 2003.01.2543.

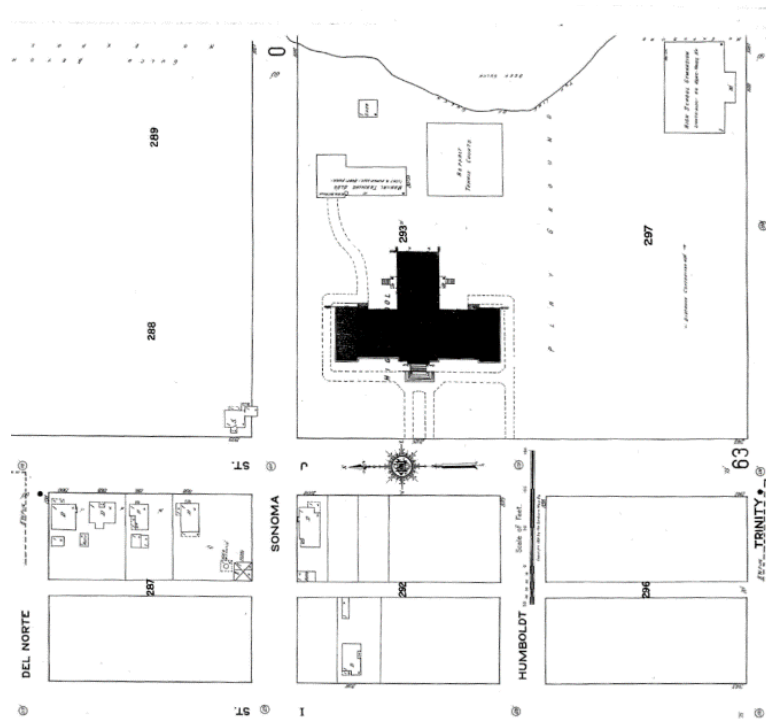


Figure 50: Sanborn fire insurance map from 1920 showing the original Eureka High School building and campus. Source: Los Angeles Public Library.

In 1926, the Eureka Junior High School building was constructed north of the Senior High School building at the corner of J Street and Del Norte (**Figure 51**). Sonoma Street, which had continued north of the Senior High School building, was removed so that the Junior High School building shared a campus with the Senior High School. Architect John H. Donovan from Oakland designed the Junior High School building in the Gothic Revival style.³⁹

³⁹ Architectural Resources Group and Eureka Heritage Society, Inc., *Eureka, An Architectural View*, (Eureka, CA: Eureka Heritage Society, Inc., 1994), p. 88 and 184.

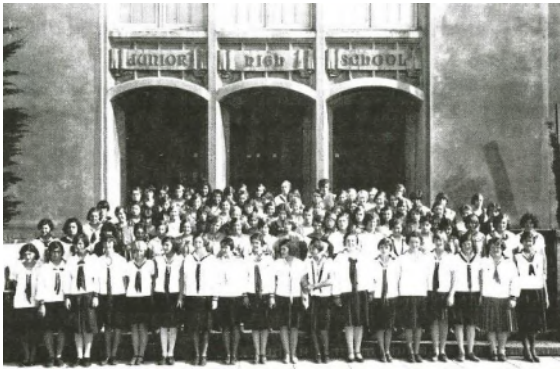


Figure 51: Eureka Junior High School building, c.1931. Source: *History of Humboldt County Schools by High School Districts*.



Figure 52: Eureka High School in 1946, with the Junior High School building to the northwest (left) and the Industrial Education Building behind the main high school building (center), looking northeast. Note the old gymnasium at the southeast (right). Source: Shuster Collection, Humboldt Room Photograph Collection, 2001.01.0098.

In 1939, the Industrial Education Building (also known as the Manual Arts Building) was constructed southeast of the Senior High School building (**Figure 52**). San Francisco-based architecture firm Masten and Hurd designed the building, which was funded by the Public Works Administration (PWA), in the Streamline Moderne style.⁴⁰ It included space for a museum that would be the original location of the Clarke Historical Museum, which was founded by Eureka High School teacher Cecile Clarke. A Music Building was also constructed around the same time.⁴¹ By 1948, a shop building had also been built behind the Senior High School building, and the manual training building converted into the gym; the previous gym at the southern end of the campus had been demolished.

At the end of World War II, funds were allocated to build a new gym, as well as a field house.⁴² The new gym opened in 1949 at the campus' southeast corner (**Figure 53**). In 1952, the Agriculture Building was built across Del Norte Street from the stadium to house the school's vocational agriculture classes.⁴³

In the late 1950s, the Eureka Board of Education evaluated the existing campus and considered demolition of the Senior High School building, along with two other small buildings at the high school. The consideration was prompted by state school officials in order to qualify for state loans.⁴⁴

⁴⁰ Architectural Resources Group and Eureka Heritage Society, p.113 and 184. Masten and Hurd was misspelled as Matson and Hurd. Also, "Eureka High School Project Approved," *Healdsburg Tribune*, November 24, 1938.

⁴¹ Saul, "...How True to You We Are, Eureka High!"

⁴² Saul, "...How True to You We Are, Eureka High!"

⁴³ Saul, "...How True to You We Are, Eureka High!"

⁴⁴ "Three Eureka High School Buildings Will Be Razed to Qualify for State Loan," *Eureka Humboldt Standard*, May 22, 1959.

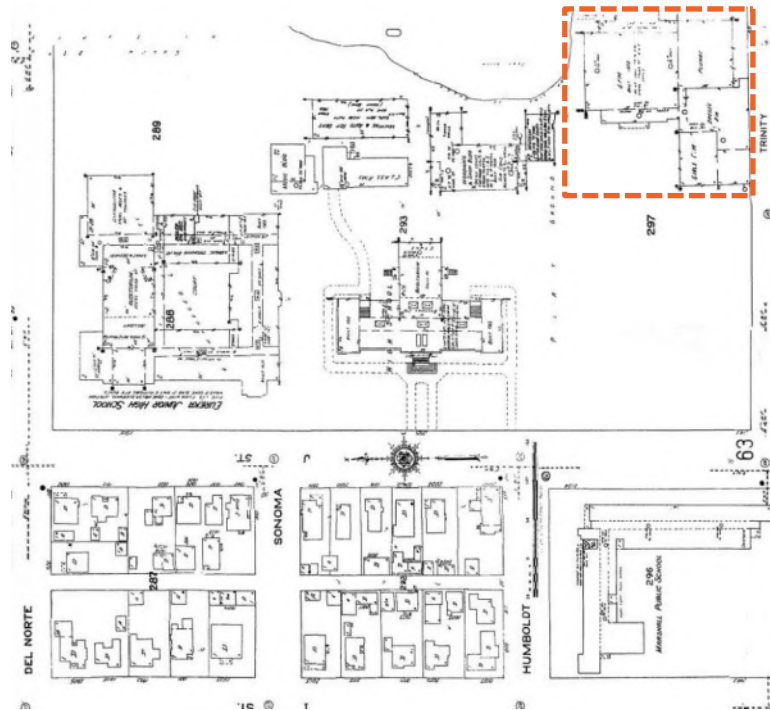


Figure 53: Sanborn fire insurance map from 1957 showing Eureka High School with the new (current) gymnasium (in dashed box). Source: Los Angeles Public Library.

An earthquake in September 1962, and subsequent structural inspections, prompted closing of the Senior High School building to student occupancy.⁴⁵ The cost for rehabilitation was deemed too high and would not adequately provide the high school with usable space, particularly for its science program. A state loan was approved later that year to remodel the Eureka Junior High School Building into a high school and construct a new science facility in the location of the demolished 1915 high school building.⁴⁶

When the Eureka Senior High School Building was demolished in 1963, a new Science Building with a Cafeteria Wing, designed by Eureka-based architects Matson and Nielsen, was built in its place and opened in 1965.⁴⁷ The Eureka Junior High School Building was rehabilitated into the current high school building. A new automotive workshop building was also constructed during this period, also designed by Matson and Nielsen, and other existing campus buildings, including the Music Building and the Industrial Education Building, were also rehabilitated.⁴⁸

⁴⁵ "High School Comes Down Regardless," *Eureka Humboldt Times*, October 30, 1962.

⁴⁶ "High School Loan Passes; Mitchell, Landis Leading," *Eureka Humboldt Times*, November 7, 1962.

⁴⁷ Saul, "...How True to You We Are, Eureka High!" Not to be confused with Masten and Hurd, the principals of Matson and Nielsen were architects Gerald Matson and Jack Nielsen.

⁴⁸ "1.6 Million State Funds for EHS," *Eureka Humboldt Standard*, July 10, 1963 and "Bid Opening Tuesday On First of New High School Buildings," *Eureka Humboldt Standard*, November 11, 1963.

V. SITE HISTORY

Eureka High School's original gymnasium at the campus' southeast corner remained in place until at least 1946. In 1945, the City of Eureka and the school district considered combining resources to build a gymnasium and swimming pool, and to levy a tax to pay for it; it is not known if the tax was imposed.⁴⁹ In 1947, architects Masten and Hurd designed a new gymnasium and swimming pool for Eureka High School. Located south of their earlier Industrial Education Building, around the area of the previous gymnasium, the new gym building included a main boy's gymnasium, a secondary girl's gymnasium, and the natatorium for a swimming pool, each as three distinct volumes of the building (See Appendix for original plans).

A bond measure passed in 1948 that allowed the gymnasium and other Eureka City School facilities to be built after the long pause in construction, due to World War II.⁵⁰ Construction on the gymnasium started in 1948 with photographs showing the main gymnasium's steel truss roof and three long skylights (**Figure 54 and Figure 55**). Although the original drawings showed the skylights designed with a single pitch, they were built as double pitched. The secondary gymnasium also had similar, though shorter, skylights.



Figure 54: Construction photograph of the Gymnasium building, c.1948. Source: Eureka High School 1949 Yearbook, Humboldt County Historical Society.



Figure 55: The gymnasium under construction in 1949. Source: Shuster Collection, Humboldt Room Photograph Collection, 2001.01.1284.

Opened in 1950, the reinforced concrete building was designed in a Late Moderne style with elements of the emerging International Style, most notably in its glazed main lobby (**Figure 56**). The lobby's highly transparent curtain walls contrasted with the mostly solid concrete walls elsewhere and showcased the lobby interior with its two open staircases. The original doors were also glazed, as was the secondary entrance to the south of the lobby volume with its window wall (**Figure 57**). In the front plaza was a designed courtyard with L-shaped planters in a formal, geometric pattern and additional planting areas along the building and courtyard edge (**Figure 58 and Figure 59**).

⁴⁹ "Civic Recreation Levy is Proposed," *Humboldt Times*, March 7, 1945.

⁵⁰ "Eureka to Vote on School Bonds, Recent Expenditures Reviewed," *Humboldt Standard*, May 9, 1950 and "Public Schools Observance Week Starts," *Humboldt Standard*, April 21, 1958.

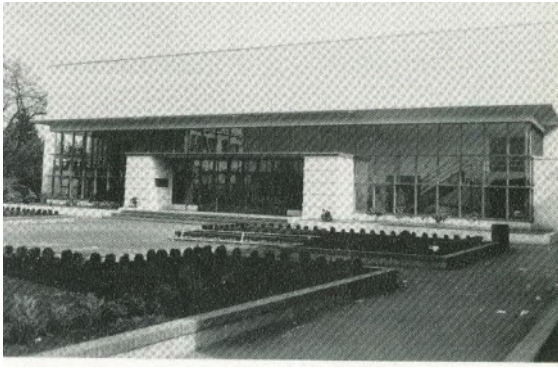


Figure 56: The Gymnasium's glazed lobby volume showing the open stairs to the balcony on the interior, undated. Note the original glazed entry doors. Source: Eureka High School yearbook, courtesy of Eureka City Schools.



Figure 57: The secondary entrance at the west façade also had a glazed window wall and doors, undated. Source: Eureka High School yearbook, courtesy of Eureka City Schools.



Figure 58: The completed Gymnasium with its three distinct wings located south of the Industrial Education Building and behind the 1915 Eureka Senior High School Building (demolished in the 1960s), undated. Source: Eureka High School yearbook, courtesy of Eureka City Schools.



Figure 59: Front plaza original in front of the Main Gymnasium Wing. Note the glazed window wall at the secondary entrance. Source: 1956 Eureka High School yearbook, courtesy of Eureka City Schools.

When it first opened, the swimming pool was available to the community as the only public pool in Eureka. The swimming pool wing's south façade was originally a full window wall, as reported and shown in a *Humboldt Standard* article at the time of its opening, but by 1966, the lower row of glazing had been infilled with concrete block (**Figure 60 and Figure 61**).⁵¹ Also by 1969, the three pairs of wood-framed, glazed front doors to the gymnasium had been replaced by partially glazed metal doors.

⁵¹ "Come On In...The Water's Fine...At New EHS Swim Pool," *Humboldt Standard*, May 3, 1950 and Eureka High School 1966 Yearbook.



Figure 60: Newspaper image of the new swimming pool and its southern window wall at the time of opening in 1950. Source: *Humboldt Standard*, Humboldt State University Library.



Figure 61: The lower row of glazing at the Swimming Pool Wing's window wall infilled by 1966. Source: Eureka High School 1966 Yearbook, Humboldt County Historical Society.



Figure 62: Wood-framed, glazed doors originally at the Gymnasium's main entrance. Source: Eureka High School 1956 Yearbook, courtesy of Eureka City Schools.



Figure 63: Partially glazed replacement front doors to the Gymnasium by 1969. Source: Eureka High School 1969 Yearbook, Humboldt County Historical Society.

The Gymnasium hosted much of the high school's indoor sporting events, as well as school dances, concerts, performances, and graduations through the 1950s and into the 1960s. It occasionally held community-wide events, like lectures or public meetings, but was mainly used by the high school. In 1973, the Gymnasium was re-named for Jay Willard (1898-1973), former football, basketball, baseball, and track coach at the high school who retired in 1963.⁵² Willard had been the football coach for the Eureka Loggers from 1927 to 1954, during which time the team won 21 championships.⁵³ After he retired from coaching football, he remained at the high school teaching physical education and coaching other sports until his retirement in 1963.⁵⁴

⁵² "School Fires Subjects Discussed by Trustees," *Humboldt Times-Standard*, March 6, 1973.

⁵³ "Jay Willard Honored at Annual EHS Gridiron Banquet," *Humboldt Standard*, December 16, 1954.

⁵⁴ "Jay Willard---And His Boys!" *Humboldt Times-Standard*, January 14, 1973

In 1983, the graduating class donated a 13-foot tall sculpture of the school's mascot, Mr. Logger, for the gymnasium's lobby.⁵⁵ Craved from a redwood tree, the sculpture remains in the lobby. From historic aerials and according to school facilities staff, the raised L-shaped and rectangular planters in the front plaza had deteriorated by the 1980s; they were removed by 1990 and the former plaza was paved with asphalt.

Recent Alterations

More recently, the swimming pool closed in 1996 due to a leak.⁵⁶ It underwent renovations in 2001, along with the adjacent restrooms, drains, and deck, and reopened in 2003 as still the only community pool in Eureka.⁵⁷ However, the pool was drained again in 2009 after the heater failed and the drains were not code-compliant; it remains closed.⁵⁸

It appears Eureka City Schools considered demolishing the Gymnasium as early as 2005, as part of a master planning project. A revised project that included building a new gymnasium and demolishing the existing Gymnasium was also considered in 2006 and 2007, in part due to structural concerns about wood rot at the glazed entry lobby volume. According to the school's facilities staff, the Division of State Architects (DSA) found the lobby volume structurally unsound in the early 2000's. Eureka City Schools considered options for condemning the lobby volume portion while allowing for the rest of the building to be functional. The school district also considered options to demolish the lobby volume and reconstruct it in a different material, along with outright demolition of the Gymnasium in 2006.⁵⁹ Instead, the school district's facilities staff installed plywood sheathing to the exterior and interior of the glazed lobby volume in late 2006 to provide shear reinforcement (**Figure 64 and Figure 65**).⁶⁰ The secondary door south of the main entrance may also have been altered at this time, as it was in its original configuration in 2006.



⁵⁵ Eureka High Given Giant Logger Sculpture," *Humboldt Times-Standard*, June 16, 1983.

⁵⁶ Sara Watson Arthurs, "Pool May Reopen Soon," *Humboldt Times-Standard*, January 30, 2001.

⁵⁷ Matson & Vallerger Architects, Inc., "Swimming Pool Alterations, Eureka Senior High School, Eureka City Schools," drawing set dated May 15, 2001 and "Testing the Waters," *Humboldt Times-Standard*, January 23, 2003.

⁵⁸ Michael Popke, "Cash-Strapped High Schools Struggle to Keep Pools Open," *Athletic Business*, July 2009, accessed April 25, 2016. <http://www.athleticbusiness.com/aquatics/cash-strapped-high-schools-struggle-to-keep-pools-open.html>.

⁵⁹ Carey & Co., Inc., 15-18.

⁶⁰ Emails from Charley Batini, Director on Maintenance and Facilities, Eureka City Schools, February 7 and 8, 2017.

Figure 64: Entry lobby in 2006, prior to the addition of plywood shear panels. Source: Carey & Co. 2006 report.



Figure 65: Current entry lobby with glazed walls no longer visible.



Figure 66: Secondary entry on west facade in 2006. Source: Carey & Co. 2006 report.

Figure 67: Current secondary entry, altered in 2006.

Although no drawings or other documentation for this work at the main lobby has been located, adding the plywood panels appeared to be sufficient and DSA allowed the Gymnasium to continue operating. The school facilities staff confirmed that the window framing and remaining glazing of the lobby's curtain walls were not removed and that the plywood cladding on the interior and exterior is attached to the wood framing.⁶¹ Battens were added to the exterior to cover the plywood seams. Other areas where plywood covers window openings around the building were typically to address broken windows.

In 2008, the Gymnasium underwent several alterations:

- Roof replaced on main gymnasium and skylight glazing replaced; new heating system added at the roof
- Roof replaced on secondary gymnasium. Linear skylights removed and single skylights installed
- Main gymnasium floor replaced with new wood flooring, and courtside bleachers replaced

⁶¹ Emails from Charley Batini, Director on Maintenance and Facilities, Eureka City Schools, March 31, 2017.

VI. ARCHITECTURE CONTEXT

Late Moderne

In the years during and after World War II, the exuberance of the Streamline Moderne gave way to the more restrained Late Moderne style, at the same time that the International Style and Modern Movement was gaining traction in the United States. Derived from Streamline Moderne but with an emphasis on sharp angularity rather than curves, Late Moderne was prominent from the mid-1940s until the late 1950s. The style was often used for hospitals, fire stations, and other civic and institutional buildings.⁶² Characteristics of the style are strong horizontal elements, use of spare surfaces, and intersecting volumes that reinforced the style's angularity. A signature feature is the beveled window or horizontal window groupings surrounded with a projecting flange or frame.

International Style

Rooted in the Modern Movement that emerged out of Europe in the 1910s and 1920s, the International Style marked a major aesthetic shift in architecture that emphasized functionalism, rationalism, technological innovation, and a rejection of historic precedents. The style is characterized by the clear expression of structural forms, smooth wall surfaces, rectilinear shapes, the lack of ornament, and extensive use of glazing made possible by advances in glass and building technology. The International Style spread in the post-World War II years representing a new, clean, modern, cost-effective, and forward-looking approach that could be adopted in any part of the world.

Masten and Hurd Architects

Charles F. Masten (1886-1973) and Lester W. Hurd (1894-1967) formed their partnership, Masten and Hurd Architects in 1924. Masten had graduated from the University of California in 1913 while Hurd was raised in the East Bay and eventually attended the Ecole des Beaux Arts in Paris. Both practiced independently before the partnership. Their offices were located in a variety of locations in San Francisco.

During the 40-plus years of their practice, Masten and Hurd's work evolved along with economic booms and busts, advances in technology, and evolving stylistic preferences. In the first decade of their practice, Masten and Hurd seemed to specialize in residential design and construction. The first project to garner favorable attention for the firm was a row of "English cottages" designed for the upper-middle-class suburb of St. Francis Wood in San Francisco. An article written by Stafford Jory that appeared in the December 1926 edition of *Architect & Engineer* favorably reviewed at least a dozen of their St. Francis Wood houses.

By the 1930s, Masten and Hurd's work was beginning to break away from the traditional revival styles popular in the 1910s and 1920s. Feeling the influences of European Modernism, California firms began to explore an architecture of increasing abstraction. However, the firm, like so many,

⁶² Paul Gleye, *The Architecture of Los Angeles*, (Los Angeles: Rosebud Books, 1981), p. 149-52.

experienced difficult times during the Depression and dissolved for two years during the late 1930s. By the end of the decade, the economy was gradually improving and Masten and Hurd was revived. The firm worked throughout northern California mostly in a stripped Moderne style typical of the 1930s. Projects from this period included the University of California Berkeley Printing Plant (1938), the Samuel Gompers School in San Francisco (1939) (**Figure 68**), the Industrial Education Building at Eureka High School (1939), and a fire station in Redding, California, which has been called “the most striking example of the Streamline Moderne in the state,” (**Figure 69**).⁶³



Figure 68: Samuel Gompers School by Masten and Hurd (1937) Source: San Francisco History Center, San Francisco Public Library.



Figure 69: Redding Fire House by Masten and Hurd (1939) Source: RoadsideArchitecture.com

During World War II, Masten and Hurd again closed their offices as at least one or both partners were involved in the war efforts. Following the conclusion of the war in 1945, Masten and Hurd reopened their offices. From the late 1940s until the partnership ended with Lester Hurd's death in 1967, Masten and Hurd concentrated on large-scale institutional projects such as schools, university buildings, and hospitals. According to Hal Crosby, a former employee who started working with the firm in 1948-49, Charles Masten was primarily involved with schools and Lester Hurd concentrated on hospitals.⁶⁴ Some of the firm's postwar institutional work includes buildings at the Bevatron, Lawrence Laboratory, University of California, Berkeley (1947-49); Hastings College of Law in San Francisco (1950); Warren Hall, University of California Berkeley (1955); and three junior (or community) colleges designed in association with Ernest J. Kump & Associates: Foothill College in Los Altos Hills (1962) and Cabrillo College (1962) and De Anza College (1968) in Cupertino. The firm became Masten, Hurd and Gwathmey in 1959.

Masten and Hurd received much acclaim for their later academic and institutional buildings. Hastings College and Warren Hall on the UC Berkeley campus were praised for their “softened” approach to International Style modernism. However, it was the educational projects with Ernest J. Kump & Associates that became Masten and Hurd's best-known work. According to former employee Crosby, Kump had just returned from a long stay in Europe when he won the commission to design Foothill College. Without a large office of his own, Kump collaborated with

⁶³ David Gebhard, Robert Winter, et al, *The Guide to Architecture in San Francisco and Northern California* (Salt Lake City: Peregrine Smith Books, 1976, revised 1985), p. 345.

⁶⁴ Telephone interview conducted by Page & Turnbull with Hal Crosby, March 2001.

Masten and Hurd (with forty employees) in order to produce the construction drawings. The collaboration was so successful that Kump and Masten and Hurd continued to work together in the succeeding projects of Cabrillo and De Anza College. All three of these college campuses were widely praised for their softened Modernist lines and regional approach to site layout and materials, though the designs are more likely attributed to Kump than Masten and Hurd.

Masten and Hurd designed several school buildings in Eureka in the years surrounding World War II, including the Industrial Education Building at Eureka Senior High School (1939); Marshall Elementary School (1941) (**Figure 70**); Jefferson Elementary School (1941); the gymnasium at Eureka Senior High School (1949); and Alice Birney School (c.1953). They were also responsible for buildings at Arcata High School (1947 and 1949) and the gymnasium at Fortuna High School (1953) (**Figure 71**), among others in the Humboldt County area. After 1955, Masten and Hurd became associated with William Van Fleet for their work north of Ukiah, with Van Fleet's name appearing with Masten and Hurd on subsequent projects.⁶⁵



Figure 70: Marshall School by Masten and Hurd (1941), now Eureka City Schools District Office.



Figure 71: Fortuna High School gymnasium by Masten and Hurd (1953)

Gymnasium Building Type

The modern-day gymnasium was introduced in Berlin in 1811 by Freidrich Jahn, following the defeat of the Prussians by Napoleon of France. Known as the Turnplatz, the large open aired venue featured a series of spaces with equipment that catered to several exercises, activities, and sports, and was meant as a preparation tool for the broader public for inevitable conflict.⁶⁶ Two of Janh's students emigrated to the United States in the 1820s, and ultimately established the first collegiate gymnasium in the United States at Harvard, bringing physical education to the United States.

With the proliferation of public education in the United States during the late 19th and early 20th century, primary (approx. K-7) and secondary schools (approx. 8-12) began to adopt physical education into their curriculum and modeled their facilities after the collegiate gymnasium. This often-featured separate facilities for both boys and girls, but as the 20th century progressed and gender integration occurred in schools, one facility for the entire student body became more

⁶⁵ "Eureka School District Budgets Indicate No Raise in Taxation," *Humboldt Standard*, August 4, 1955.

⁶⁶ Eric Chaline, "School for Naked Exercise: A History of the Gym," *The Boston Globe*, accessed March 24, 2017, http://epaper.bostonglobe.com/BostonGlobe/article_popover.aspx?guid=f635710c-4ce1-4bd4-88fd-6be74cb0d59a&source=next

common. The basis of the school gymnasium was firmly established by the 1950s. It featured a central large space that could be used for a number of sports, as well as an event space; a performance stage was occasionally located towards one side of the gymnasium and could be used as a multi-purpose space for student or community productions. Additional rooms were located along the periphery of the central gymnasium, including locker rooms, shower facilities, equipment storage, and staff offices. A primary entrance foyer often featured a display area for sporting and school memorabilia. These buildings were often additions to the primary school building and accessed via a corridor, but in more temperate climates, gymnasiums were often constructed as separated buildings. In most instances, the gymnasium was adjacent to outdoor sporting amenities, such as running tracks, playing fields, spectator seating, tennis courts, and swimming pools.

Gymnasiums differed in architectural style, often exhibiting the popular styles of the period in which they were constructed, or as a reflection of the main school building. Wood or steel truss roofs were typical to span large-column-free spaces until material advances and availability allowed structural systems like laminated timber and concrete shells to be more common place around World War II.

During the 1940s and 1950s, gymnasiums became more simplified, reflecting both the emerging Modernist trends, as well as the moratorium of materials that stemmed from World War II and the Korean War. Gymnasiums continued to be simple buildings with little architectural articulation, due in part to decreasing education budgets and the emphasis of traditional arts and sciences in the curriculum. Windows on most facades were used sparingly, favoring artificial lighting and ventilation to regulate environmental conditions. The gymnasium is still an important part of all school campuses around the United States, and the typology has remained largely unchanged.

VII. EVALUATION

The following section concurrently examines the eligibility of the Jay Willard Gymnasium at Eureka High School for listing in the National Register, California Register, and the Eureka Local Register.

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places (National Register) is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes districts, sites, buildings, structures and objects significant in American history, architecture, archeology, engineering, and culture. These resources contribute to an understanding of the historical and cultural foundations of the Nation at the national, state, or local level. Typically, properties over 50 years of age may be eligible for listing in the National Register if they meet any one of the four significance criteria and if they retain sufficient historic integrity to convey that significance. Properties under fifty years of age may be determined eligible if it can be demonstrated that they are of "exceptional importance." Other criteria considerations apply to cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed buildings, and properties primarily commemorative in nature. National Register criteria are defined in depth in *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*.

The National Register has four basic criteria under which a property may be considered eligible for listing. It can be found significant under one or more of the following criteria:

- Criterion A (Event): Properties associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B (Person): Properties associated with the lives of persons significant in our past;
- Criterion C (Design/Construction): Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant distinguishable entity whose components lack individual distinction; and
- Criterion D (Information Potential): Properties that have yielded, or may be likely to yield, information important in prehistory or history.

A property may be considered significant on a national, state, or local level to American history, architecture, archaeology, engineering, and culture.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (California Register) is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.”⁶⁷ A property may be eligible for listing in the California Register if it meets one or more of the following criteria:

- Criterion 1: Associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Criterion 2: Associated with the lives of persons important in our past;
- Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

These criteria are based upon National Register of Historic Places criteria; however, the California Register does not impose as specific requirements for integrity and age as the National Register. Properties eligible for listing in the California Register must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. While the National Register guidelines for integrity can be applied for California Register eligibility, it is possible that resources, which may not retain sufficient integrity for listing in the National Register, may still be eligible for the California Register. Moved or reconstructed buildings, structures, or objects may also be considered for listing in the California Register under specific circumstances. In addition, properties that were constructed less than fifty years ago or which achieved significance less than fifty years ago may be eligible for inclusion in the California Register provided that sufficient time has passed to understand their significance within a historic context.

Properties may be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Additionally, properties formally determined eligible for listing in the National Register are automatically listed in the California Register. Properties may also be nominated to the California Register by local governments, private organizations, or citizens.

The California Register of Historical Resources follows nearly identical guidelines to those used by the National Register, but identifies the Criteria for Evaluation numerically (1 through 4) instead of alphabetically (A through D). With the exception of some properties with additional criteria consideration (50 years or less, moved buildings, etc.), properties that meet the National Register criteria typically also meet the California Register criteria and vice versa and are often evaluated together.

⁶⁷ Pub. Res. Code Section 5024.1(a).

EUREKA LOCAL REGISTER OF HISTORIC PLACES

The Eureka Local Register consists of properties identified in the Eureka Heritage Society survey conducted in the 1970s, unless the owners object to the listing. New properties can be added to the Local Register if they meet the criteria for National Register of Historic Places and with owner consent.

The following section concurrently examines the eligibility of the Gymnasium at Eureka High School for listing in the National Register (A through D), California Register (1 through D), and Eureka Local Register (same criteria as the National Register, also A through D).

Criterion A/1/A (Events)

The Jay Willard Gymnasium at Eureka High School does not appear to be associated with any important events or development patterns in Eureka. It was constructed after World War II as part of several bond measures to build facilities for Eureka City Schools, either as additions to existing schools or as new campuses. Although it was one of the first postwar facilities built, it does not appear to be particularly significant within the school district's building program.

The building was used primarily by the high school to replace an older gymnasium and was not a notable community gathering space beyond its role as a high school sporting space. Its swimming pool was Eureka's only public pool, and many members of the community apparently used it when it was available. However, Eureka had many recreational facilities used by the public, and the Gymnasium's status as the sole public swimming pool does not appear to be significant within the theme of community recreation in Eureka.

According to *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, to be considered under Criterion A,

A property must be associated with one or more events important in the defined historic context...The events or trends, however, must clearly be important within the associated context...Moreover, the property must have an important association with the event or historic trends, and it must retain historic integrity.⁶⁸

While the Gymnasium is well-known to many Eureka citizens who attended Eureka High School, or learned to swim in the swimming pool, the building does not rise to a level of significance to meet Criterion A/1/A. As such, the Gymnasium is not eligible for listing in the National Register, California Register, or Eureka Local Register under Criterion A/1/A.

Criterion B/2/B (Persons)

Research also did not find any association with the lives of persons significant to Eureka that would meet Criterion B/2/B. The Gymnasium was re-named for Jay Willard in 1973, a long-time

⁶⁸ National Park Service, *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*, (Washington D.C.: National Park Service, 1995), 12.

and successful football coach at the high school from the 1920s to the 1950s. The re-naming was a tribute after Willard's death in 1973, and the Gymnasium is not associated with Willard during his prominent football coaching career. As such, the Gymnasium is not eligible for listing in the National Register, California Register, or Eureka Local Register under Criterion B/2/B.

Criterion C/3/C (Architecture)

The Jay Willard Gymnasium, as originally designed by architects Masten and Hurd, embodied the distinctive characteristic of the Late Moderne style with elements of the International Style (Criterion C/3/C). Reflecting the post-World War II shift in architectural aesthetics, the building was restrained and unadorned with smooth wall planes but used varieties in massing and forms to create interest. The building's intersecting volumes of its three wings were characteristic of Late Moderne, as were the projecting concrete frames around horizontal window groupings as the only decoration on some walls. The extensive use of glazed walls in select places—the prominent lobby volume, the rear volume's north façade, and the Swimming Pool Wing's south facade—introduced International Style elements in select areas. Wood framing for the window and curtain walls and for all window framing retained an element of regionalism recognizing Eureka's logging industry and the ready availability of materials.

The building's original design reflected the transition from the various 1930s and 1940s Moderne styles' movement toward modernity, to the more fully modern use of glass, steel, and the International Style in the postwar years. Masten and Hurd designed a similar transitional building at the Fortuna High School gymnasium, though that glazed volume was built with steel framing rather than wood. These two examples represented a clear step toward modern design that would become more common in the 1950s and 1960s in Humboldt County. As such, the Gymnasium's original design would meet Criterion C/3/C for listing in the National Register, California Register, and Eureka Local Register as an unusual example of Late Modern design with International Style elements at the local level. However, alterations to the building have significantly affected the Gymnasium's ability to convey this significance, and it no longer has sufficient integrity to be listed in the National Register, California Register, or Eureka Local Register under Criterion C/3/C (see Integrity discussion below).

Criterion 4 (Information Potential)

The "potential to yield information important to the prehistory or history of the local area" typically relates to archeological resources, rather than built resources. When Criterion D/4 does relate to built resources, it is for cases when the building itself is the principal source of important construction-related information. Based on historic research, Criterion D/4 is not applicable to the Jay Willard Gymnasium.

INTEGRITY

In addition to qualifying for listing under at least one of the National Register criteria, a property must be shown to have sufficient historic integrity in order to be considered eligible for listing in the National Register. The concept of integrity is essential to identifying the important physical characteristics of historic resources and hence, in evaluating adverse changes to them. Integrity

is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” For historic districts to retain integrity as a whole, the majority of the components that make up the district’s historic character must possess integrity. In addition, the relationships among the district’s components must be substantially unchanged since the period of significance.⁶⁹

According to the *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*, these seven aspects are generally defined as follows:

- Location is the place where the historic property was constructed.
- Design is the combination of elements that create the form, plans, space, structure and style of the property.
- Setting addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building/s.
- Materials refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history.
- Feeling is the property’s expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.

Integrity is a “yes” or “no” determination. A historic property either has adequate integrity, or it does not. To retain historic integrity, a property will often possess several, if not all of the aforementioned aspects. Specific aspects of integrity may also be more important, depending on the criteria for which it is significant.

It is important to note that historic integrity is not synonymous with condition. A building or structure can possess all or many of the seven aspects of integrity, even if the condition of the materials has degraded. Condition comes into consideration when there is a substantial loss of historic material or other character-defining features.

Location: The Jay Willard Gymnasium has not been moved from its originally constructed location, so it retains integrity of location.

Design: The Gymnasium’s design integrity has been severely compromised with the alterations to virtually all of its International Style glazed elements. The most impactful alteration is the addition of plywood sheathing on the interior and exterior of the entry lobby volume that conceals its glazed curtain walls. Without the glazed walls and transparency of the entry lobby, the Gymnasium’s International Style design intent is missing. Added to this is the loss of the window wall at the front (west) façade’s secondary entrance and the infill of the lower row at the Swimming Pool Wing’s south glazed wall. The only intact International Style feature is the window wall at the rear north entryway (at the northeast corner).

⁶⁹ National Park Service, *National Register Bulletin Number 15*, 46.

While the entry lobby's original curtain walls may remain under the sheathing, their lack of visibility significantly affects the building's design integrity. Per *National Register Bulletin 15*:

Properties eligible under Criteria A, B, and C must not only retain their essential physical features, but the features must be visible enough to convey their significance. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed under modern construction.⁷⁰

The Gymnasium no longer reads as a transitional building with both Late Moderne and International Style design aspects.

Setting: The Gymnasium's setting has also changed since its construction. Most notably, the original 1915 Eureka Senior High School building was demolished in the 1960s and the Junior High School building became the high school's main building. The Gymnasium now appears isolated and far from the center of campus. This disconnect is further emphasized by the barren landscape around the Gymnasium, especially at its front where the loss of its raised planters and subsequent surface paving has erased the sense of the original front plaza. Without the front plaza and the original high school building, the Gymnasium's integrity of setting is reduced.

Materials: Much of the Gymnasium's original materials remain. Its concrete walls and wood windows are intact, though most of its wood and glazed doors have been replaced with hollow metal doors. The linear skylights at the girls locker room have also been removed, but the skylights in the main gym remain. The redwood framing members of the entry lobby's curtain walls are no longer visible, even if they remain behind the plywood cladding. Despite the alterations and loss of the International Style elements, which account for a relatively small amount of materials, the vast majority of the building's materials remain and the building retains its material integrity.

Workmanship: Although the Gymnasium's material integrity is intact, the workmanship aspect has been reduced due to the loss of the International Style elements. The curtain walls and window walls represent a change in the application of wood framing members that is much less visible at the building. Workmanship related to the concrete construction, steel trusses, and other wood windows generally remain intact.

Feeling: Due to the changes outlined under the design integrity discussion, the Gymnasium no longer feels like an example of Late Moderne design with International Style elements. As compared to when it was first built, the building does not have the same sense of transparency or innovation that distinguished its original design.

Association: The building continues to function as a gymnasium and retains its integrity of association.

⁷⁰ National Park Service, *National Register Bulletin Number 15*, 46.

Overall, the Willard Gymnasium has integrity of location, materials, and association. Its integrity of setting and workmanship has been compromised due to changes over time. However, it has lost its integrity of design and feeling associated with its design significance as an example of Late Moderne design with International Style elements. With its compromised setting and workmanship, and the lack of design and feeling, the building does not retain sufficient integrity related to its architectural significance to be eligible for listing in the National Register. This also means it is not eligible for the Eureka Local Register.

It may be possible for properties that do not retain sufficient integrity for the National Register to be eligible still for the California Register. The California Office of Historic Preservation's "Technical Assistance Series #6, California Register and National Register: A Comparison (for Purpose of Determining Eligibility for the California Register)," states:

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.⁷¹

However, the loss of virtually all of the Gymnasium's International Style features render it no longer able to convey its significance as a transitional work. It does not appear to have sufficient design integrity to be eligible for the California Register.

HISTORIC DISTRICT DISCUSSION

The Gymnasium is part of the grouping of buildings on the Eureka High School campus. The campus originally developed around the Eureka Senior High School building (1915, demolished 1963), with the Industrial Education Building (1939) and the Gymnasium (1949) constructed in relationship to the Senior High School Building. The Junior High School at Del Norte and J Streets was a self-contained building that stood apart from the Senior High School grouping. The demolition of the Senior High School Building in the 1960s removed the primary campus building and re-oriented focus to the Junior High School building when it was converted for use as the main high school building in 1963.

Constructing the Science Building and Cafeteria Wing in the location of the former Senior High School Building also significantly altered the spatial relationship of the remaining buildings to each other and to the broader campus. The center core of the campus shifted away from J Street and inward towards the interior courtyard, around which most of the remaining buildings are located.

⁷¹ California Office of Historic Preservation, "Technical Assistance Series #6, California Register and National Register: A Comparison (for Purpose of Determining Eligibility for the California Register)," accessed online <http://ohp.parks.ca.gov/pages/1054/files/ts06ca.pdf>.

Without the original Senior High School building and the addition of the 1960s buildings, Eureka High School campus does not appear to have a core grouping of buildings that were intended to relate to each other in a cohesive and pre-conceived fashion. As such, the Eureka High School campus does not appear to constitute a potential historic district.

VIII. CONCLUSION

The Jay Willard Gymnasium at Eureka High School does not appear to be individually eligible for the National Register of Historic Places, the California Register of Historical Resources, or the Eureka Local Register of Historic Places under Criterion A/1/A for association with important events or development patterns. The Gymnasium was primarily used for sporting events related to the high school. While the swimming pool was open to the public and the sole community pool, that alone does not rise to the level of significance to meet Criterion A/1/A. It was constructed as part of a postwar expansion of Eureka City Schools, but did not play a significant role during that expansion. Although the Gymnasium is a building familiar to many in Eureka who attended high school there, it does not meet the significance threshold for Criterion A/1/A.

The Gymnasium also does not appear individually eligible under Criterion B/2/B for association with significant individuals. It was named for long-time football coach and instructor Jay Willard, but is not directly related to Willard's successful football career from the 1920s to the 1950s.

As originally designed by noted San Francisco architects Masten and Hurd, the Gymnasium's Late Moderne design was distinguished by its International Style elements that reflected a transition to postwar modernism. Its original design was an excellent example of this period, but alterations to virtually all of the International Style elements has affected its integrity so that it no longer conveys its design significance. As such, the Gymnasium is not individually eligible for listing in the National Register, California Register, or Eureka Local Register under Criterion C/3/C.

No potential historic district appears to exist at Eureka High School, so the Gymnasium is not considered a contributing resource to a historic district.

Overall, the Willard Gymnasium does not appear to be eligible for historic designation at any level, and is not considered a historic resource under the California Environmental Quality Act.

IX. REFERENCES CITED

Published Works

Architectural Resources Group. *Eureka: An Architectural View*. Eureka, Calif: Eureka Heritage Society, Inc., 1994.

Gebhard, David, Robert Winter, et al. *The Guide to Architecture in San Francisco and Northern California*. Salt Lake City: Peregrine Smith Books, 1976, revised 1985.

Gleye, Paul. *The Architecture of Los Angeles*. Los Angeles: Rosebud Books, 1981.

Public Records

California Office of Historic Preservation. "Technical Assistance Series #6, California Register and National Register: A Comparison (for Purpose of Determining Eligibility for the California Register)." Accessed online
<http://ohp.parks.ca.gov/pages/1054/files/ts06ca.pdf>.

Carey & Co. Inc. "Historic Resource Evaluation, Impacts and Mitigations, for Proposed Eureka High School Gymnasium Project." Prepared for Winzler & Kelly Consulting Engineers, February 17, 2006, 11.

Stillman & Associates. "CEQA Analysis of Historical Resources and Potential Impacts of Development Project," Jay Willard Gymnasium, Eureka High School. Prepared for 3D/International, March 29, 2005.

National Park Service. *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*. Washington D.C.: National Park Service, 1995.

Woldford, Mary Beth, Humboldt Senior Resource Center. "Washington School." National Register of Historic Places Registration Form, prepared April 12, 2001.

Journal Articles

Nash, Glen N. "A Look at Eureka Schools Constructed in the 1900s." *The Humboldt Historian*, September-October 1986.

Saul, Barbara Canepa. "...How True to You We Are, Eureka High!: The First One Hundred Years 1895-1995." *Humboldt Historian*, Fall 1995.

Newspaper Articles

Arthurs, Sara Watson. "Pool May Reopen Soon." *Humboldt Times-Standard*, January 30, 2001.

"1.6 Million State Funds for EHS, *Eureka Humboldt Standard*, July 10, 1963.

"Bid Opening Tuesday On First of New High School Buildings." *Eureka Humboldt Standard*, November 11, 1963.

"Civic Recreation Levy is Proposed." *Humboldt Times*, March 7, 1945.

"Come On In...The Water's Fine...At New EHS Swim Pool." *Humboldt Standard*, May 3, 1950.

"Eureka to Vote on School Bonds, Recent Expenditures Reviewed." *Humboldt Standard*, May 9, 1950.

"Eureka City School Show Result of Study Progress, Improved Facilities." *Humboldt Times Centennial Edition*, February 7, 1954.

"Eureka Grade Students to Occupy New Schools." *Humboldt Standard*, September 5, 1941.

"Eureka High Given Giant Logger Sculpture." *Humboldt Times-Standard*, June 16, 1983.

"Eureka High School Project Approved." *Healdsburg Tribune*, November 24, 1938.

"Eureka School District Budgets Indicate No Raise in Taxation." *Humboldt Standard*, August 4, 1955.

"High School Comes Down Regardless." *Eureka Humboldt Times*, October 30, 1962.

"High School Loan Passes; Mitchell, Landis Leading." *Eureka Humboldt Times*, November 7, 1962.

"Jay Willard---And His Boys!" *Humboldt Times-Standard*, January 14, 1973

"Jay Willard Honored at Annual EHS Gridiron Banquet." *Humboldt Standard*, December 16, 1954.

"Public Schools Observance Week Starts." *Humboldt Standard*, April 21, 1958

"School Fires Subjects Discussed by Trustees." *Humboldt Times-Standard*, March 6, 1973.

"Testing the Waters." *Humboldt Times-Standard*, January 23, 2003.

"Three Eureka High School Buildings Will Be Razed to Qualify for State Loan." *Eureka Humboldt Standard*, May 22, 1959.

Internet

Michael Popke, "Cash-Strapped High Schools Struggle to Keep Pools Open," *Athletic Business*, July 2009, accessed April 25, 2016. <http://www.athleticbusiness.com/aquatics/cash-strapped-high-schools-struggle-to-keep-pools-open.html>.

Eric Chaline, "School for Naked Exercise: A History of the Gym," *The Boston Globe*, accessed March 24, 2017, http://epaper.bostonglobe.com/BostonGlobe/article_popover.aspx?guid=f635710c-4ce1-4bd4-88fd-6be74cb0d59a&source=next

Repositories

Humboldt Room, Humboldt State University

Humboldt Times (1940s)

Humboldt Standard (1940s)

Eureka Schools Folder

Humboldt County Historical Society

Eureka High School Yearbooks, 1948-1990s

Arcata High School Yearbooks

The Humboldt Historians

Eureka Schools folder

Schools Misc. folder

Recreation and Sports Misc. folder

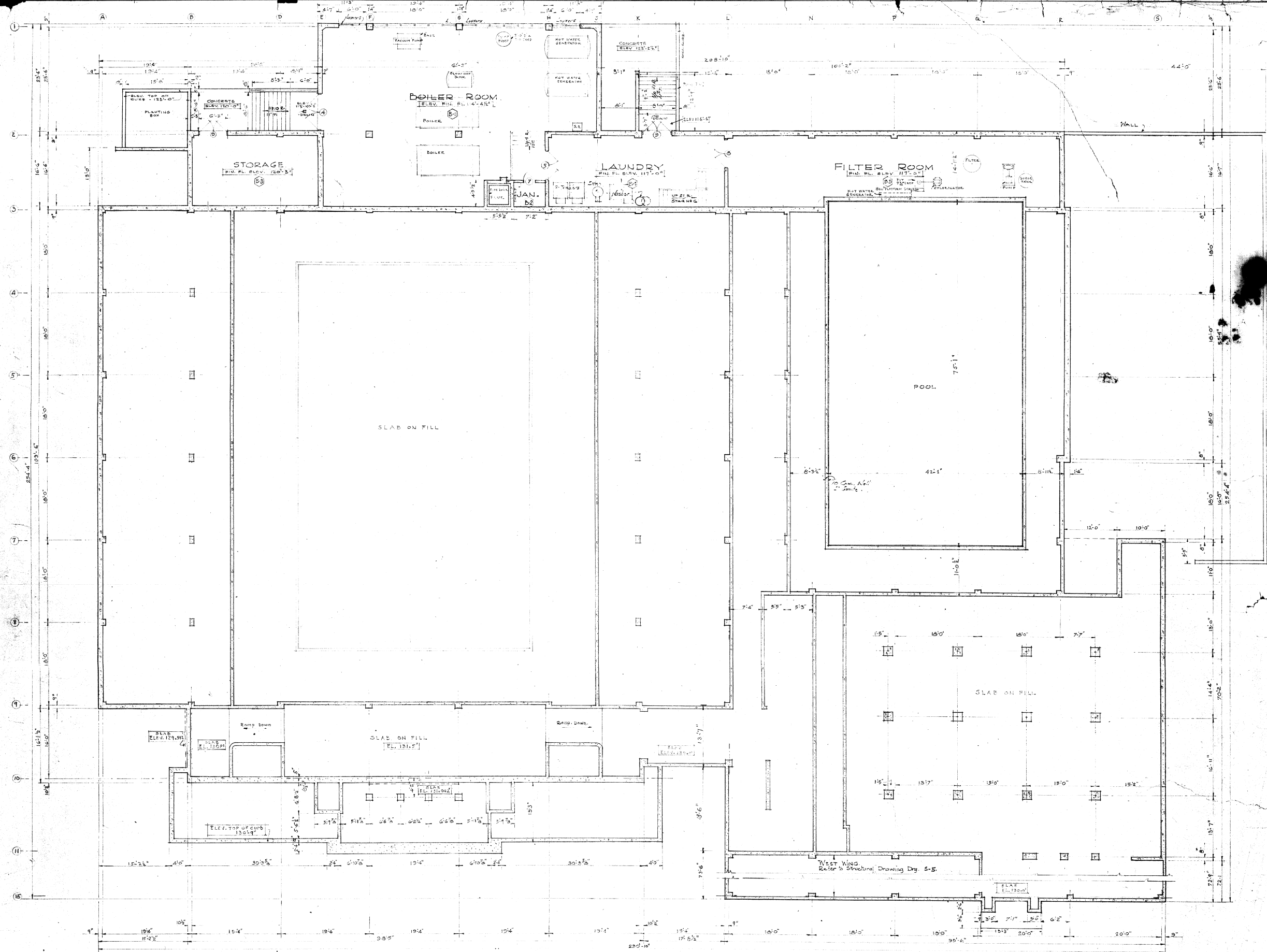
Correspondence and Oral Histories

Emails from Charley Batini, Director on Maintenance and Facilities, Eureka City Schools, February 7, February 8, and March 31, 2017.

Telephone interview conducted by Page & Turnbull with Hal Crosby, March 2001.

X. APPENDIX

Original drawings “Gymnasium for Board of Education, Eureka, Humboldt Co., California,” by Masten and Hurd, Architects, dated September 1947, as provided by Eureka City Schools.



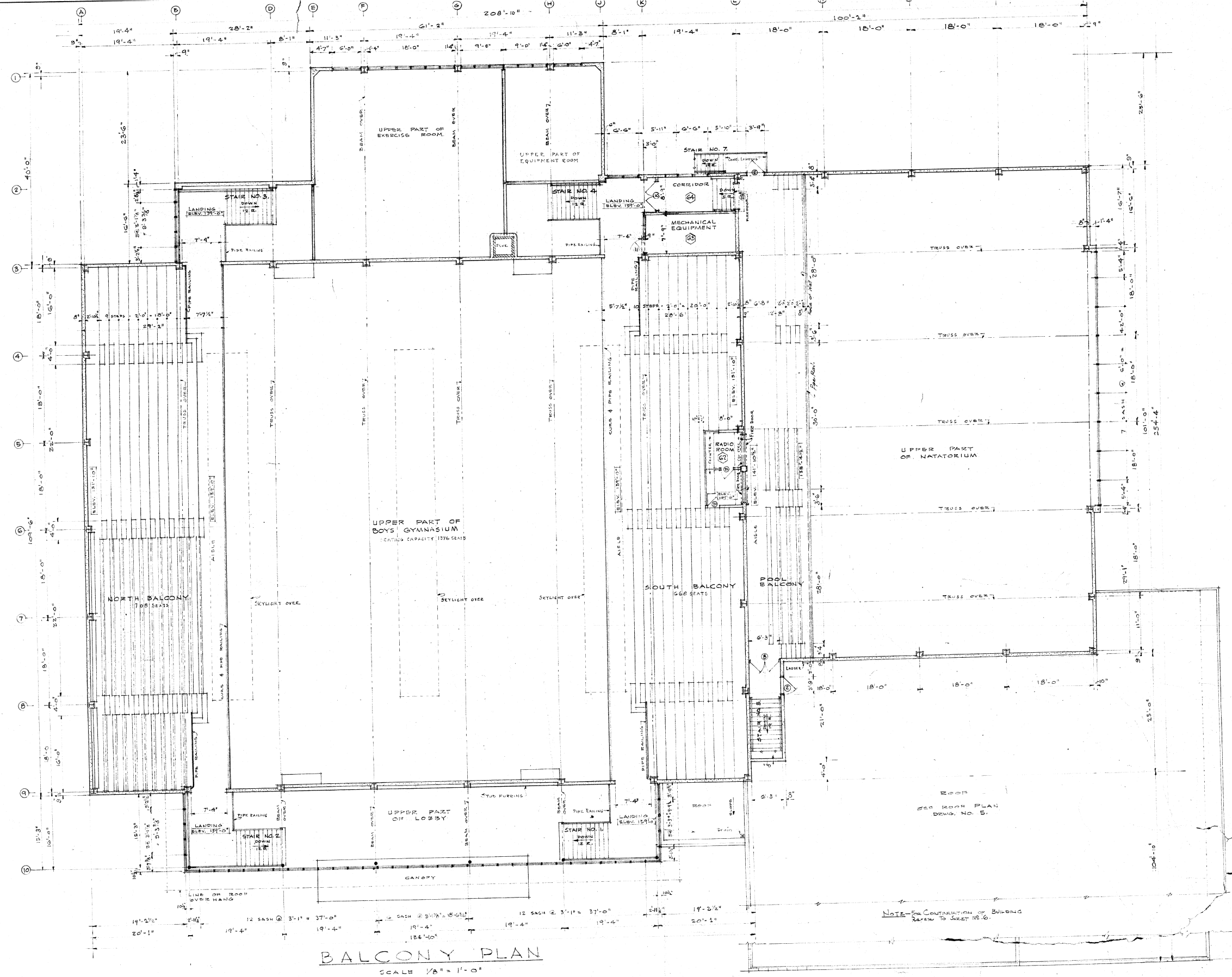
BASEMENT PLAN

SCALE 1/8" = 1'-0"
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 REFERS TO STRUCTURAL DRAWING FOR ALL DIMENSIONS, WALL THICKNESS, ETC.
 (DIMENSIONS ON THE DRAWING ARE GENERAL)



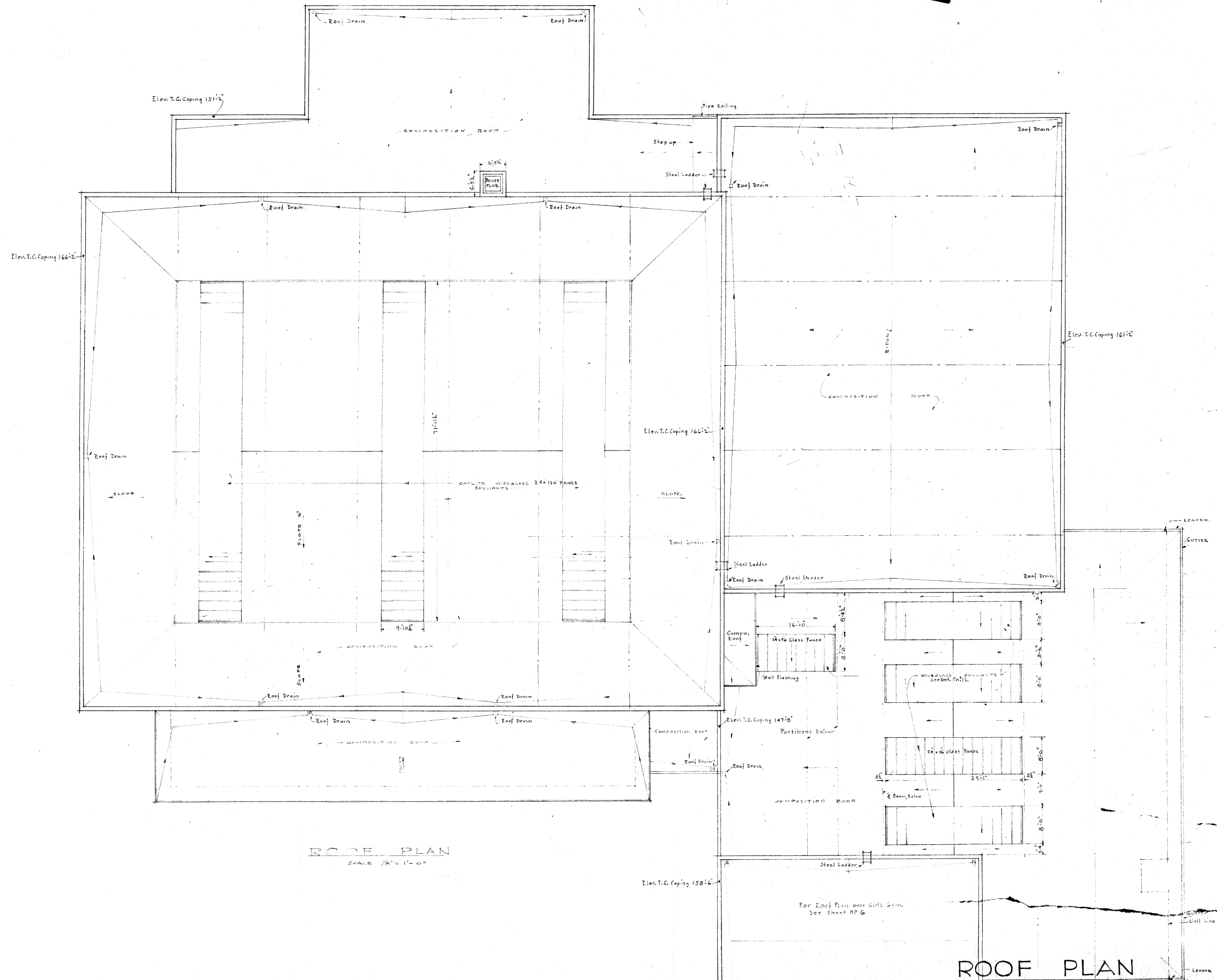
BASEMENT PLAN

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| GYMNASIUM FOR EUREKA, HUMBOLDT CO., CALIFORNIA MASTEN AND HURD ARCHITECTS 526 POWELL STREET - SAN FRANCISCO, 2 | | | | | | | | | |



BALCONY PLAN

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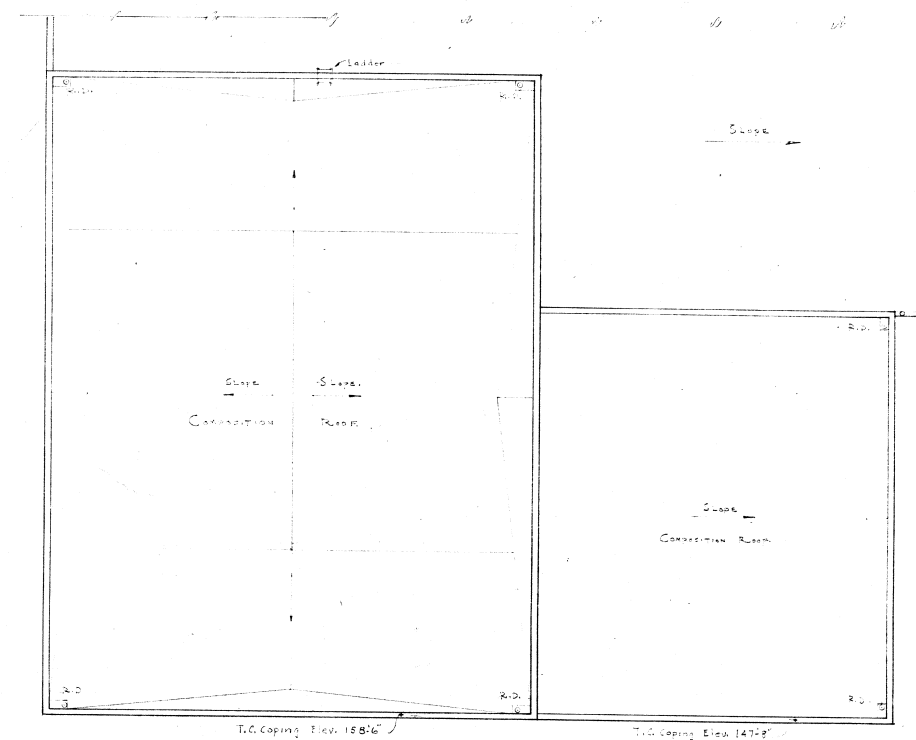
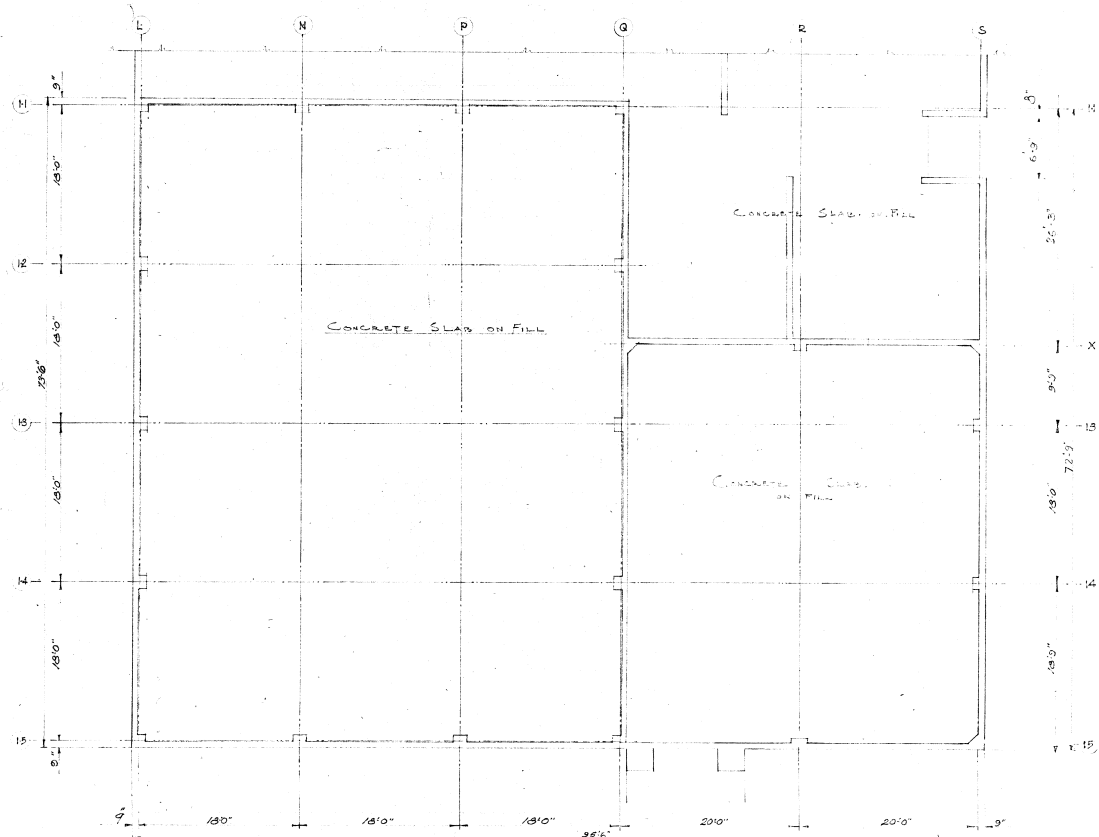
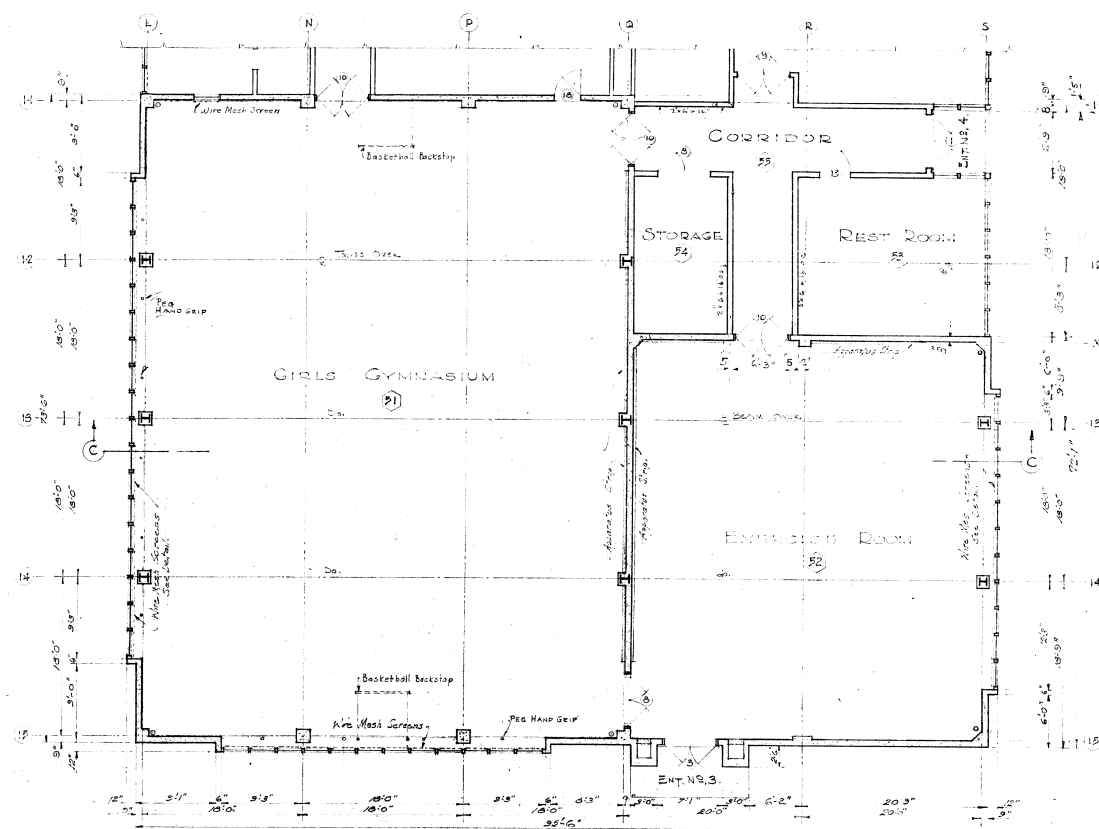


ROOF PLAN
SCALE 1/8" = 1' - 0"

ROOF PLAN

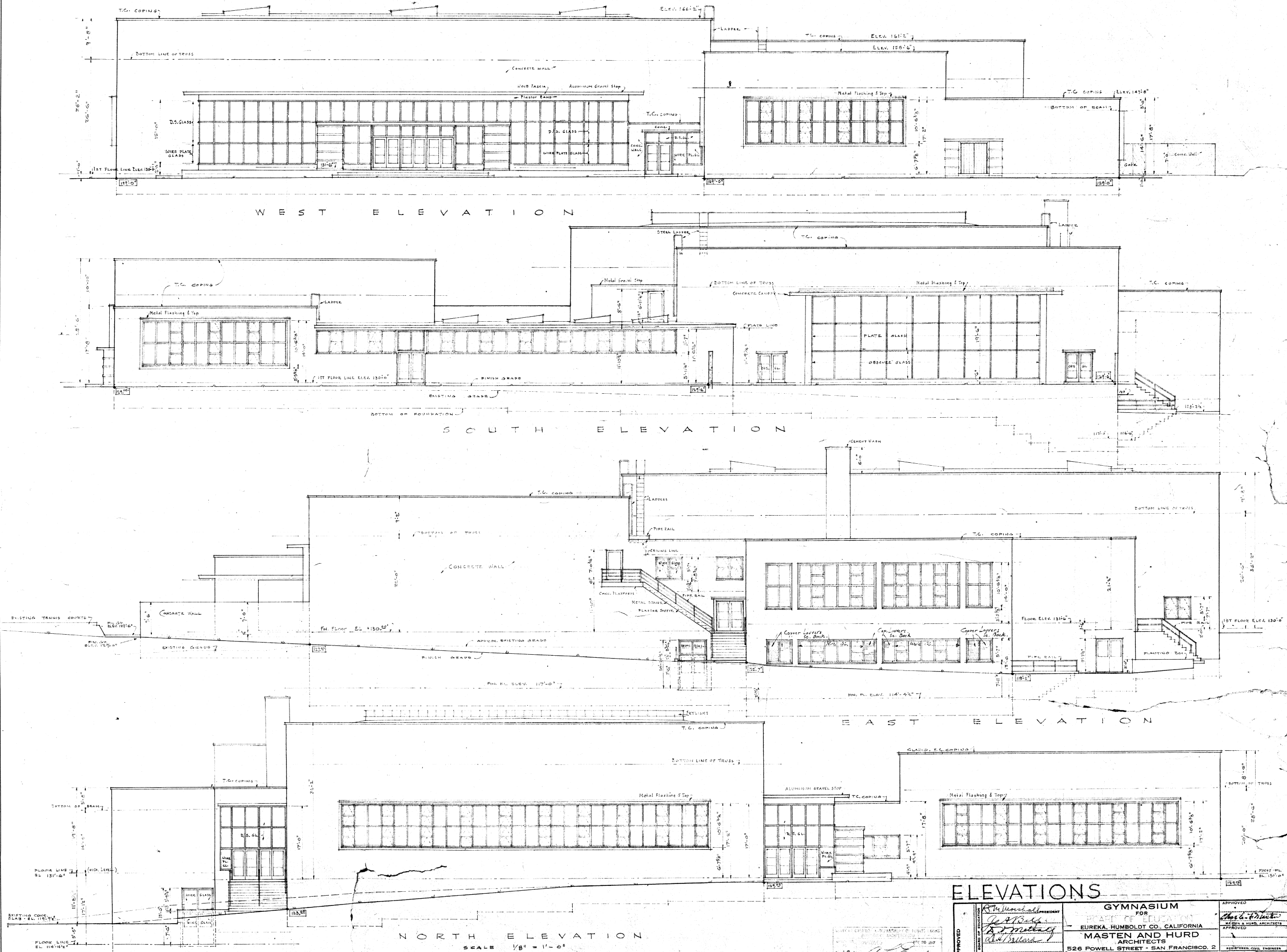


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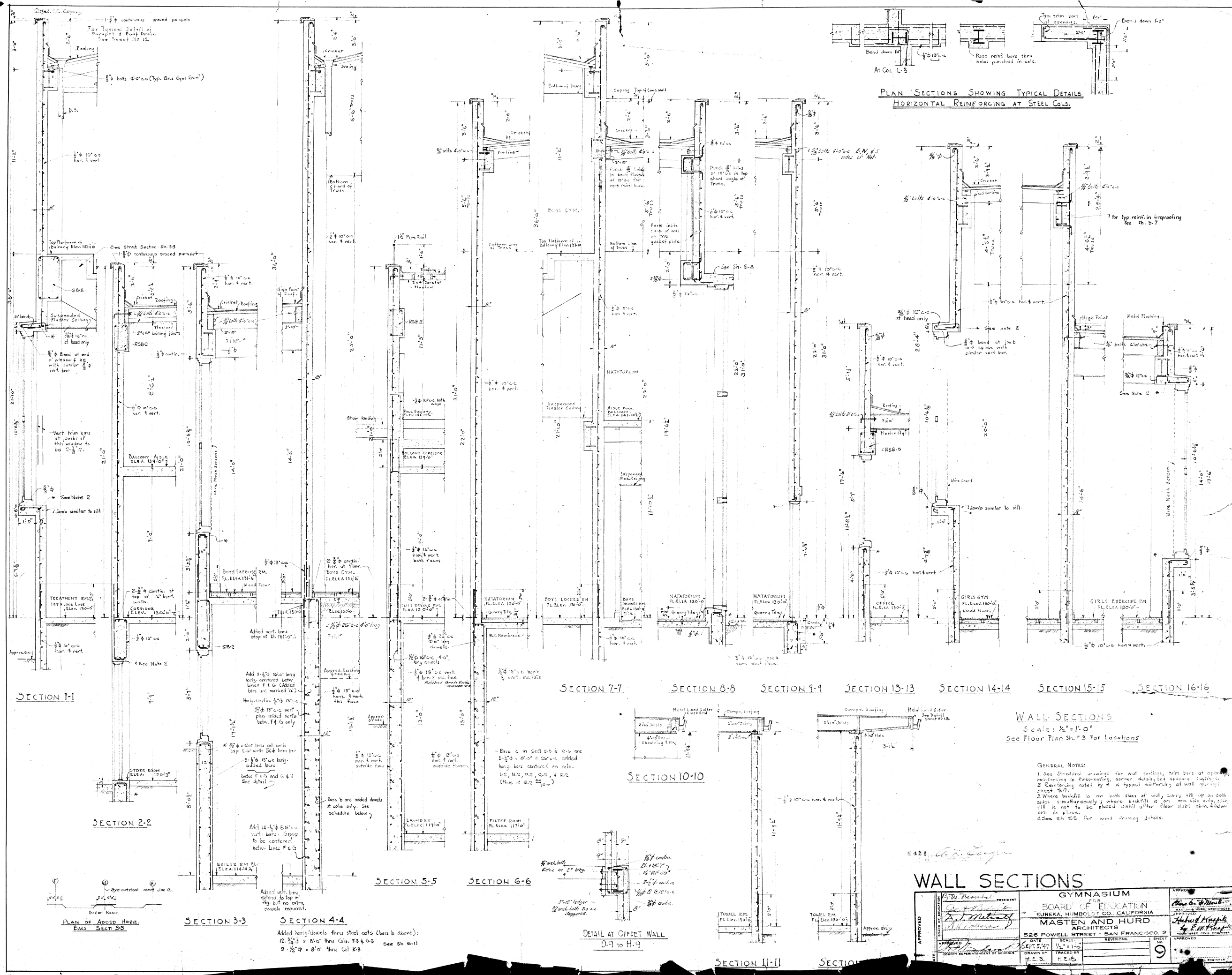


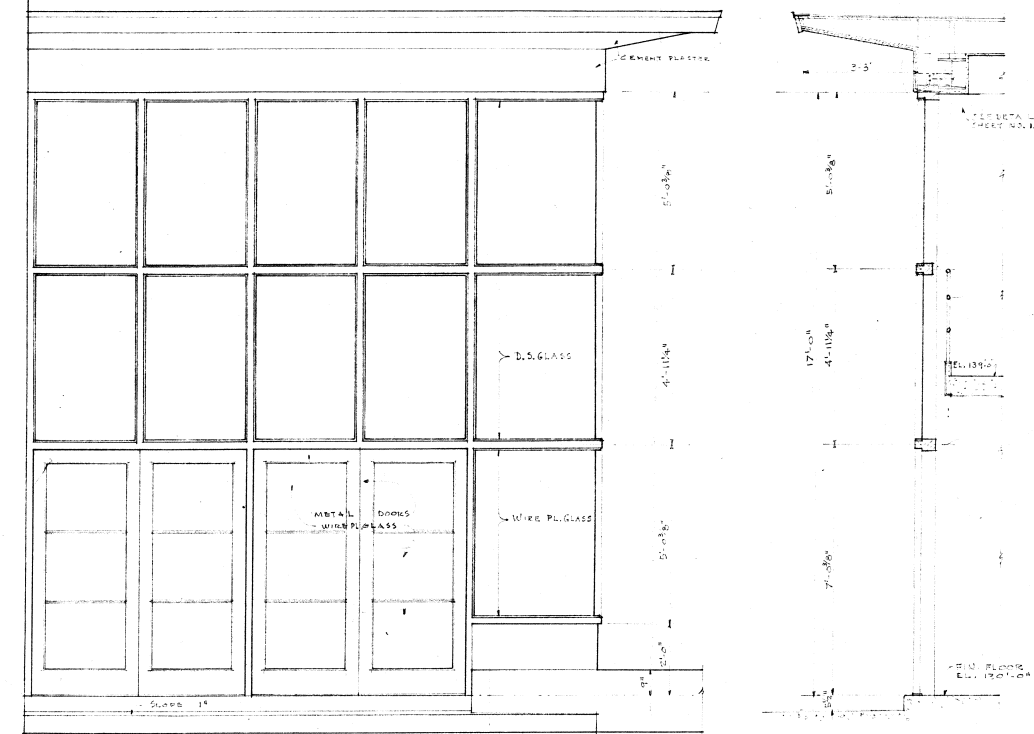
PLANS OF WEST WING GIRLS GYMNASIUM

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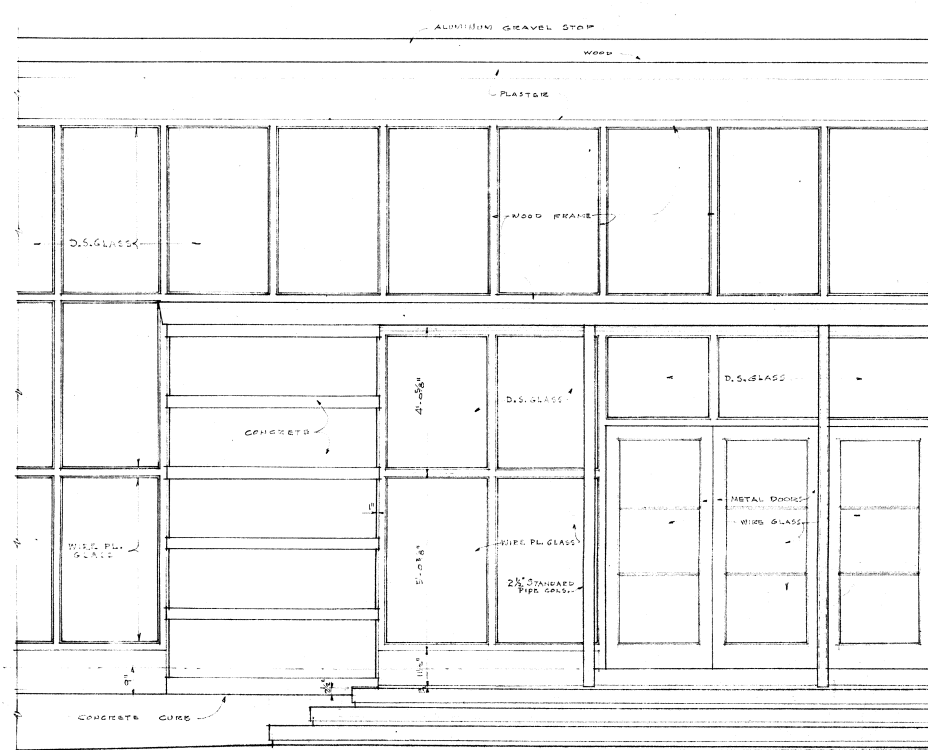


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| MASTEN AND HURD ARCHITECTS | |
| 526 POWELL STREET - SAN FRANCISCO, 2 | |
| DATE: DEC. 5, 1917 | SCALE: 1/8" = 1'-0" |
| DRAWN BY: W.H.B. | TRACED BY: W.H.B. |
| SHEET NO. 7 | |
| APPROVED: [Signature] ARCHITECT | |
| APPROVED: [Signature] CIVIL ENGINEER | |

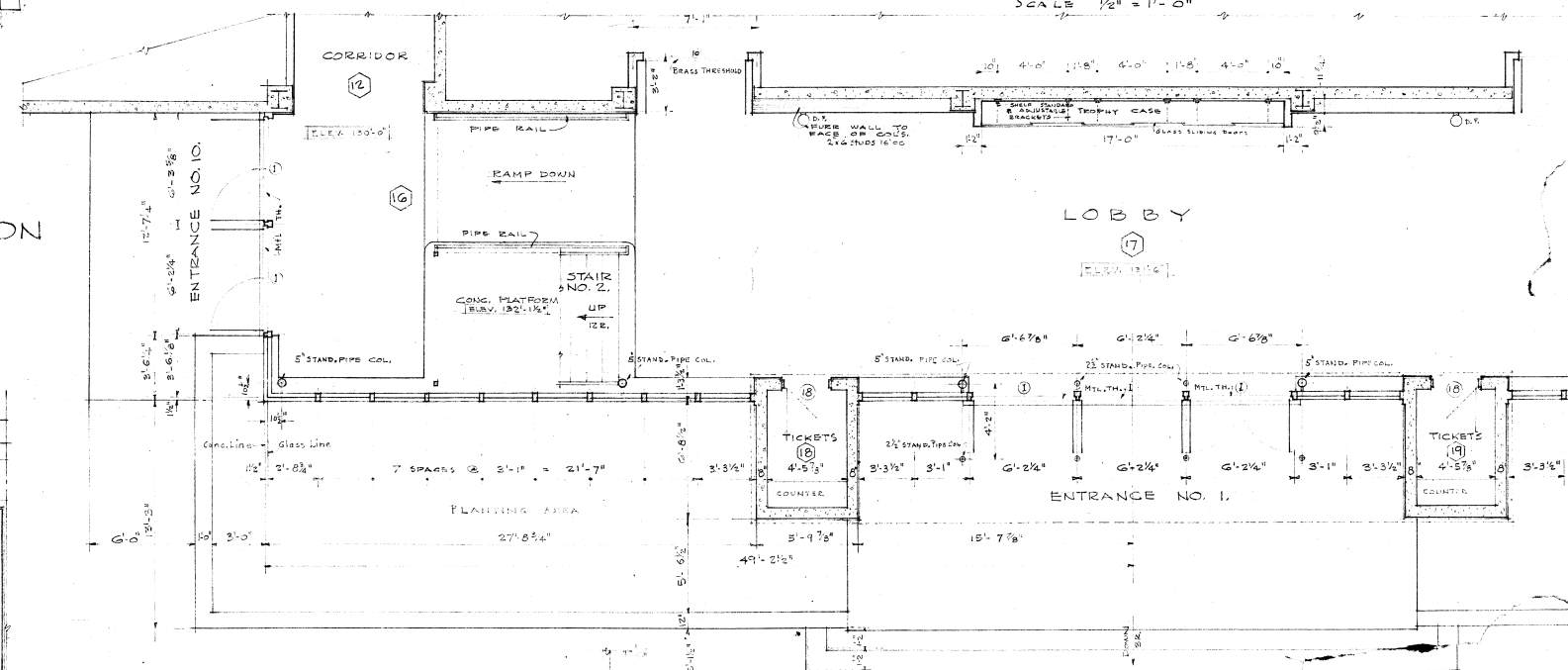




ELEVATION • ENTRANCE NO. 10 • SECTION



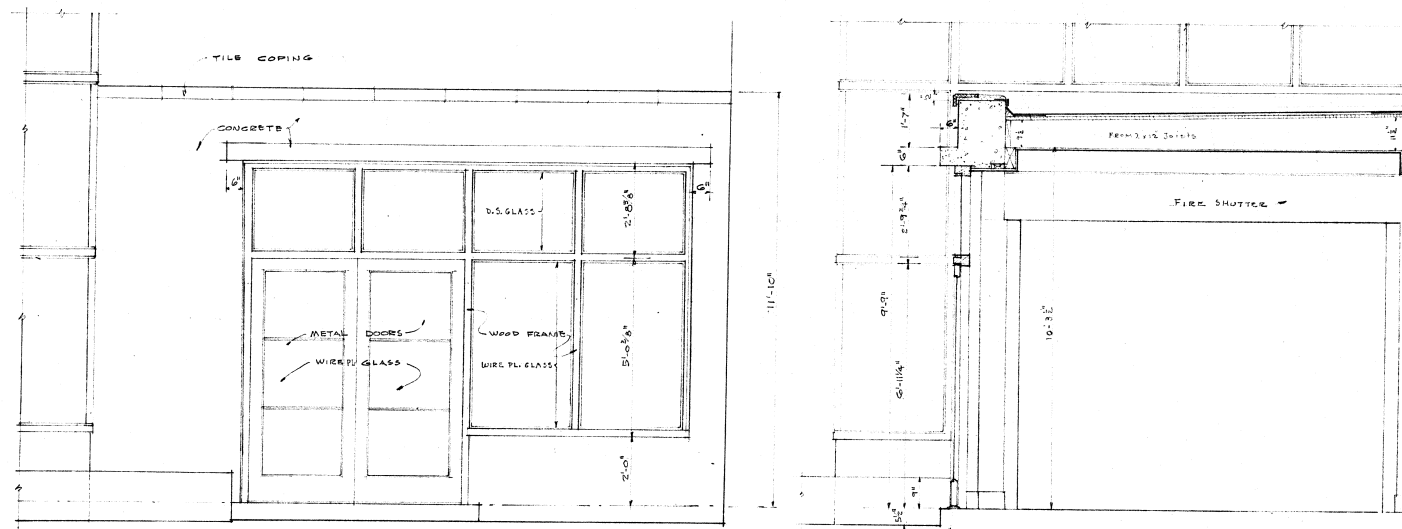
HALF ELEVATION • ENTRANCE NO. 1 • SECTION
SCALE $\frac{1}{2}" = 1'-0"$



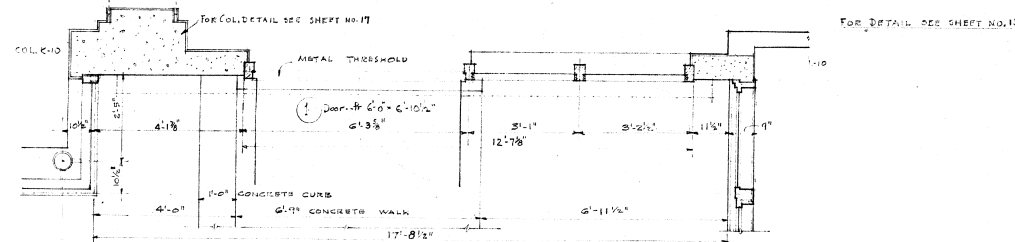
~~PLAN OF ENTRANCES NO. 10~~ $\frac{1}{4}$ 1.
SCALE $\frac{1}{4}" = 1'-0"$

ENTRANCE DETAILS
ENTRANCES NO. 1, 9 & 10

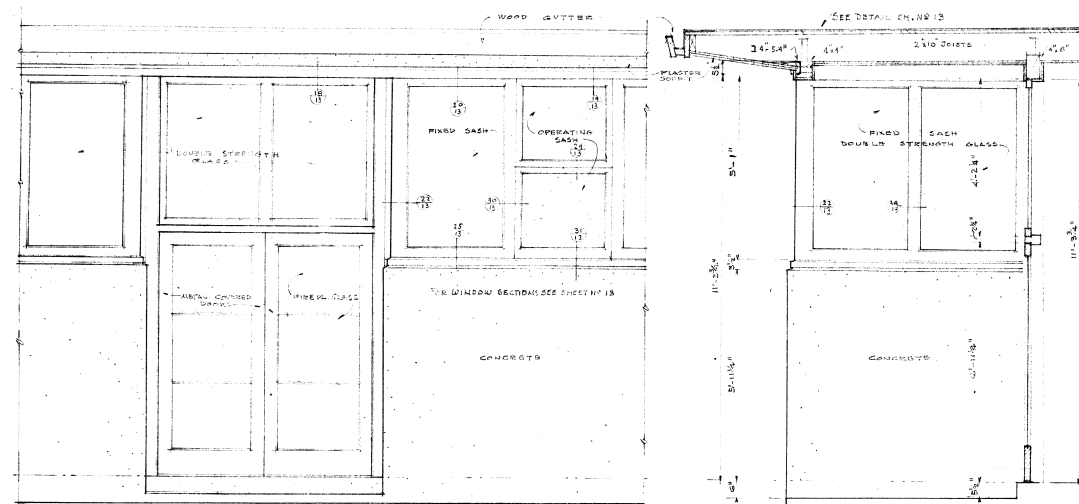
| | | | | | |
|----------|---|-----------------------|--|-----------|---|
| APPROVED | BOARD OF EDUCATION | PRESIDENT | GYMNASIUM FOR | | APPROVED |
| | <i>John A. Hill</i> <i>S. J. Minton</i> <i>W. H. Hill</i> | | EUREKA, HUMBOLDT CO., CALIFORNIA MASTEN AND HURD ARCHITECTS | | <i>Charles F. Minton</i> MASTEN & HURD, ARCHT. APPROVED |
| | APPROVED | | 526 POWELL STREET - SAN FRANCISCO, 2 | | REGISTERED CIVIL ENGINEER APPROVED |
| | DATE | SCALE | REVISIONS | SHEET NO. | |
| | DRAWN BY W. H. S. | TRACED BY W. H. S. | | 10 | |



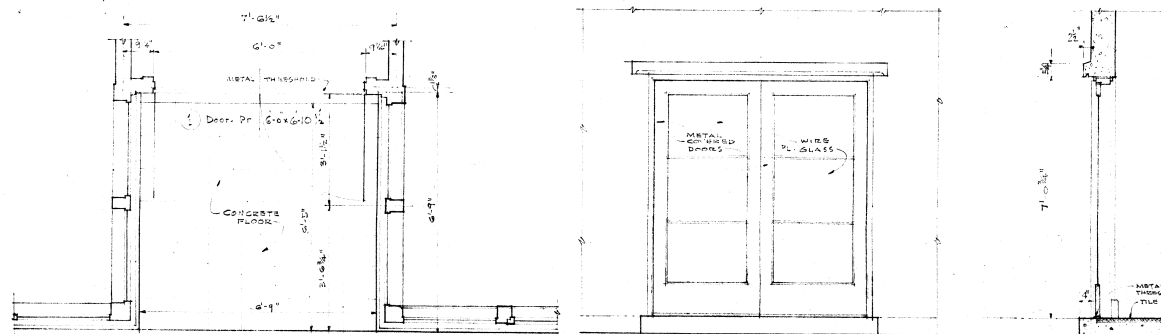
ELEVATION • ENTRANCE NO. 2 • SECTION
SCALE 1/2" = 1'-0"



PLAN OF ENTRANCE NO. 2
SCALE 1/2" = 1'-0"

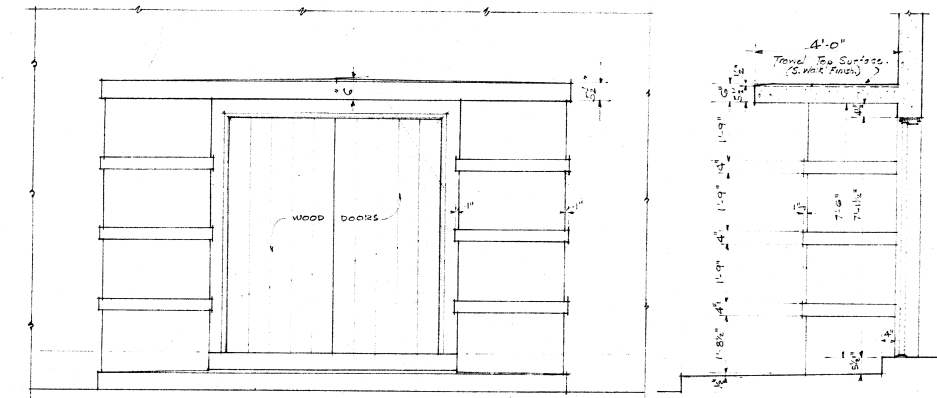


ELEVATION • ENTRANCE NO. 4 • SECTION
SCALE 1/2" = 1'-0"

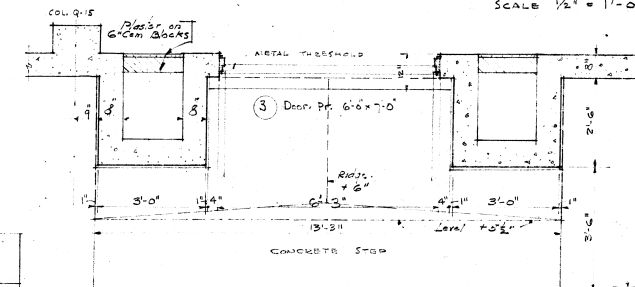


PLAN OF ENTRANCE NO. 4
SCALE 1/2" = 1'-0"

ELEVATION • SECTION
ENTRANCES NO. 6 & 7
SCALE 1/2" = 1'-0"

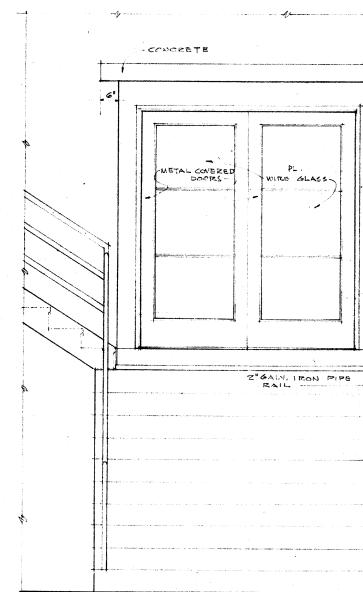


ELEVATION • ENTRANCE NO. 3 • SECTION
SCALE 1/2" = 1'-0"

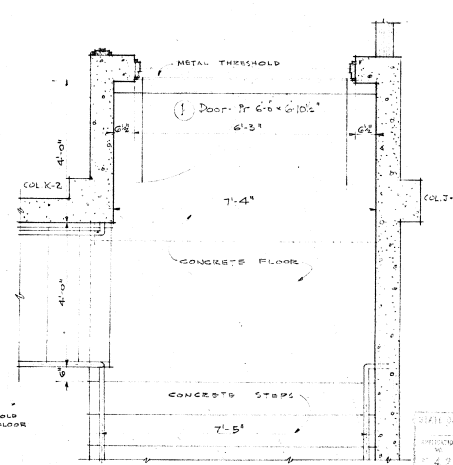


PLAN OF ENTRANCE NO. 3
SCALE 1/2" = 1'-0"

NOTE - All Concrete



ELEVATION • ENTRANCE NO. 8 • SECTION
SCALE 1/2" = 1'-0"



PLAN OF ENTRANCE NO. 8
SCALE 1/2" = 1'-0"

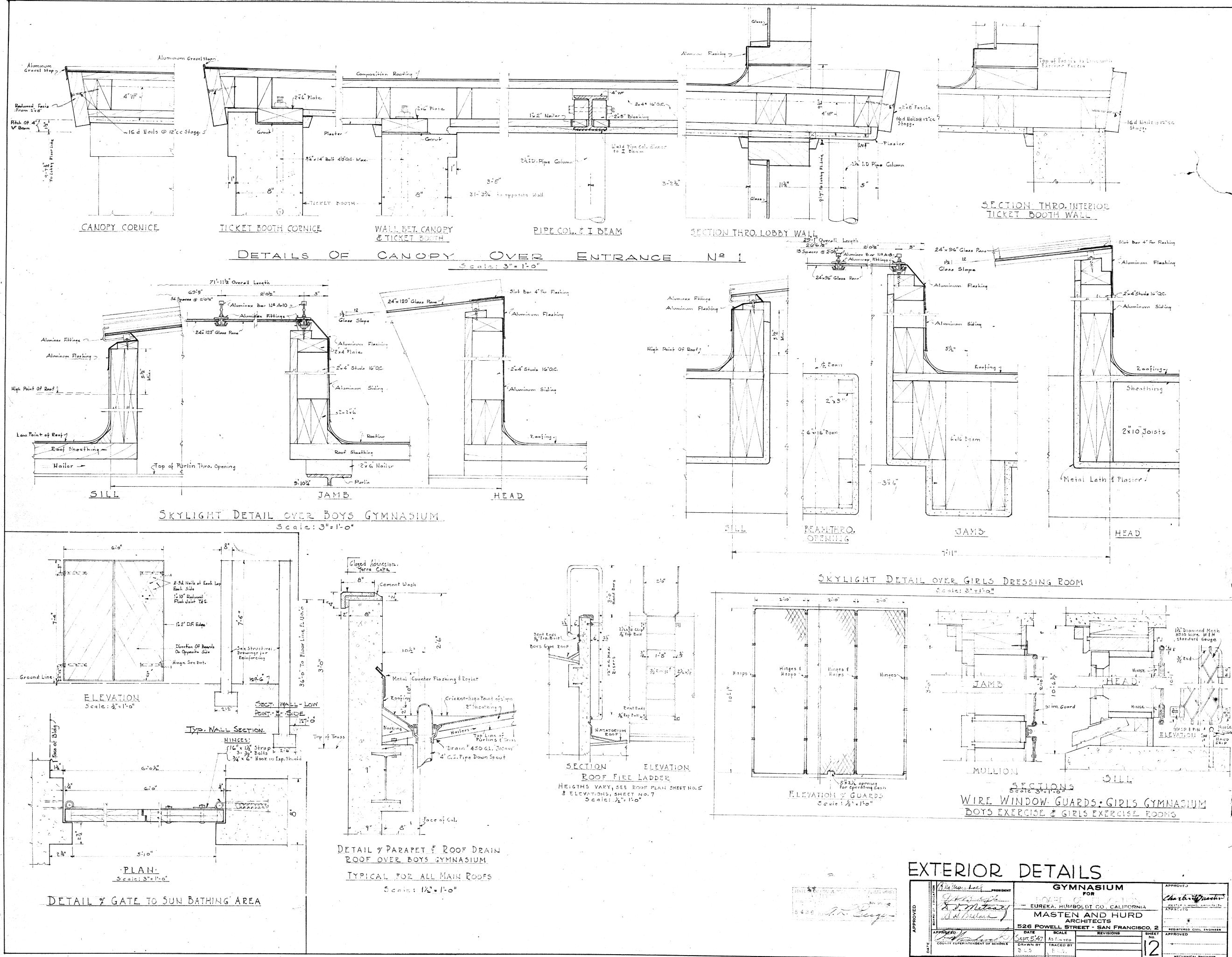
ENTRANCE DETAILS ENTRANCES NO. 2-8 INCL.

| | | | | | | | |
|-----------------------------|--|--------------------------|--|------------------|--|------------------|--|
| <p>APPROVED</p> <p>DATE</p> | | <p>DATE</p> <p>SCALE</p> | | <p>REVISIONS</p> | | <p>SHEET NO.</p> | |
| <p>APPROVED</p> <p>DATE</p> | | <p>DATE</p> <p>SCALE</p> | | <p>REVISIONS</p> | | <p>SHEET NO.</p> | |
| <p>APPROVED</p> <p>DATE</p> | | <p>DATE</p> <p>SCALE</p> | | <p>REVISIONS</p> | | <p>SHEET NO.</p> | |

GYMNASIUM FOR EUREKA, HUMBOLDT CO., CALIFORNIA
MASTEN AND HURD ARCHITECTS
526 POWELL STREET - SAN FRANCISCO, 2

DATE: Sept. 5, 1917
DRAWN BY: W.H.B.
TRACED BY: W.H.B.

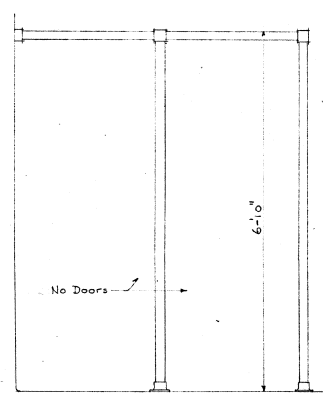
REGISTERED CIVIL ENGINEER
REGISTERED MECHANICAL ENGINEER



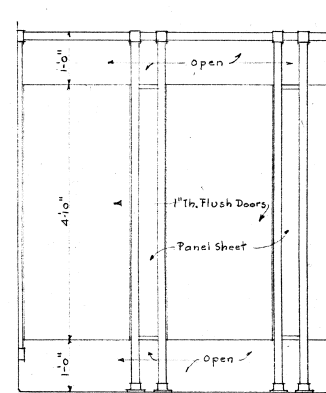
SCHEDULE OF INTERIOR FINISHES

| ROOM NO. | NAME OF ROOM | FLOOR | BASE | WALLS | CEILING | WAINSCOT | TRIM | REMARKS |
|----------|---------------------|-------|------|-------|---------|----------|------|---|
| B-1 | BOILER ROOM | | | | | | | PLASTER ON STUD WALL |
| B-2 | JANITOR CLOSET | | | | | | | PLASTER ON STUD WALL |
| B-3 | STORAGE | | | | | | | |
| B-4 | LAUNDRY | | | | | | | |
| B-5 | FILTER ROOM | | | | | | | |
| 1 | BOYS GYMNASIUM | | | | | | | EXPOSED TRUSSES - SPRING PLANE, PLASTER ON STUD WALL, 10' TO 12' JAMBS ON 12' - 14' APPROPRIATELY |
| 2 | EXERCISE ROOM | | | | | | | PLASTER ON STUD WALL |
| 3 | EQUIPMENT ROOM | | | | | | | PLASTER ON STUD WALL |
| 4 | RAMP PASSAGE | | | | | | | PLASTER ON STUD WALL |
| 5 | COACH | | | | | | | PLASTER ON STUD WALL |
| 6 | SHOWER ROOM | | | | | | | |
| 7 | DRESSING ROOM | | | | | | | |
| 8 | TEAM ROOM | | | | | | | |
| 9 | TOILET | | | | | | | |
| 10 | JANITOR CLOS. | | | | | | | |
| 11 | TOILET | | | | | | | |
| 12 | CORRIDOR | | | | | | | PLASTER ON STUD WALL |
| 13 | TREATMENT ROOM | | | | | | | |
| 14 | CLASS ROOM | | | | | | | |
| 15 | MENS TOILET | | | | | | | |
| 16 | RAMP PASSAGE | | | | | | | |
| 17 | LOBBY | | | | | | | |
| 18 | TICKET BOOTH | | | | | | | |
| 19 | TICKET BOOTH | | | | | | | |
| 20 | RAMP PASSAGE | | | | | | | |
| 21 | CORRIDOR | | | | | | | |
| 22 | RAMP PASSAGE | | | | | | | |
| 23 | SUIT DRYING | | | | | | | |
| 24 | JANITOR CLOS. | | | | | | | |
| 25 | SUPPLIES | | | | | | | |
| 26 | OFFICE | | | | | | | |
| 27 | DRESSING ROOM | | | | | | | |
| 28 | POOL CLEANING GEAR | | | | | | | |
| 29 | TOWELS | | | | | | | |
| 30 | DRYING ROOM | | | | | | | |
| 31 | BOYS LOCKER ROOM | | | | | | | |
| 32 | BOYS SHOWER ROOM | | | | | | | |
| 33 | NATATORIUM | | | | | | | POOL CLOSURE, PLASTER FINISH, RECEPTOR, SHOWER TUB, PLASTER, PLASTER ON STUD WALLS |
| 34 | TOILET | | | | | | | |
| 35 | FOOT BATH | | | | | | | |
| 36 | DRYING ROOM | | | | | | | |
| 37 | MENS LOCKER ROOM | | | | | | | |
| 38 | JANITOR CLOS. | | | | | | | |
| 39 | POOL CONTROL OFF. | | | | | | | |
| 40 | FOOT BATH | | | | | | | |
| 41 | TOILET | | | | | | | |
| 42 | WOMENS TOILET | | | | | | | |
| 43 | CORRIDOR | | | | | | | |
| 44 | WOMENS TOILET | | | | | | | |
| 45 | WAITING ROOM | | | | | | | |
| 46 | OFFICE | | | | | | | |
| 47 | DRESSING ROOM | | | | | | | |
| 48 | CORRIDOR | | | | | | | |
| 49 | JANITOR CLOS. | | | | | | | |
| 50 | SUPPLY ROOM | | | | | | | |
| 51 | GIRLS GYMNASIUM | | | | | | | APPROPRIATE STAIR |
| 52 | EXERCISE ROOM | | | | | | | PLASTER ON STUD WALLS, APPROPRIATE PLASTER ON STUD WALLS |
| 53 | REST ROOM | | | | | | | |
| 54 | STORAGE | | | | | | | |
| 55 | CORRIDOR | | | | | | | |
| 56 | TOILET | | | | | | | |
| 57 | GIRLS DRESSING ROOM | | | | | | | |
| 58 | GIRLS SHOWER ROOM | | | | | | | |
| 59 | DRYING ROOM | | | | | | | |
| 60 | SHOWER ROOM | | | | | | | |
| 61 | TOWEL SUITS | | | | | | | |
| 62 | RADIO ROOM | | | | | | | |
| 63 | MECH. EQUIPMENT | | | | | | | |
| 64 | CORRIDOR | | | | | | | |

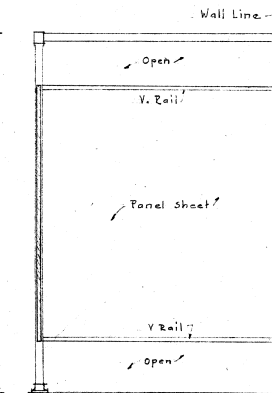
S = Sloping ceilings see sections for heights



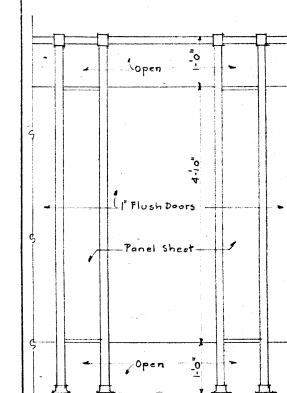
FRONT ELEVATION



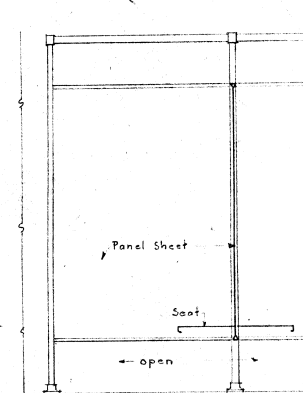
FRONT ELEVATION



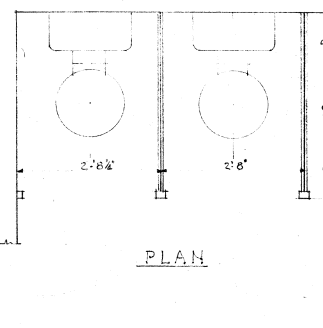
SECTION



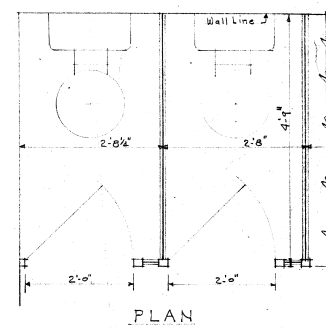
FRONT ELEVATION



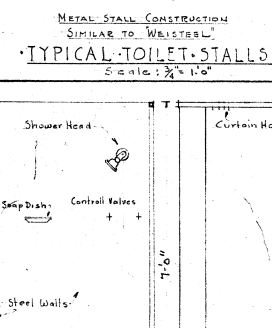
SECTION



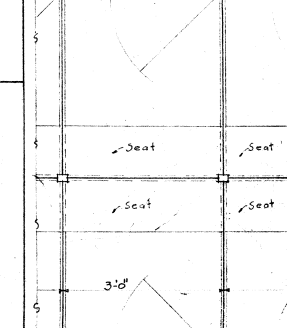
PLAN



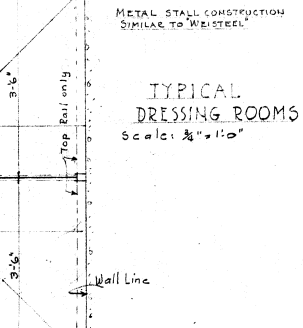
PLAN



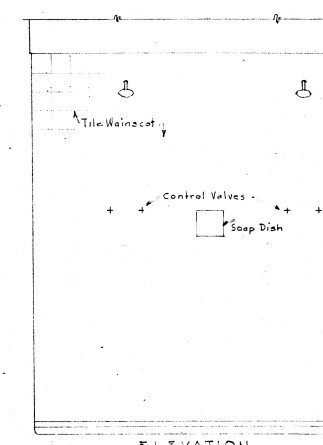
SECTION



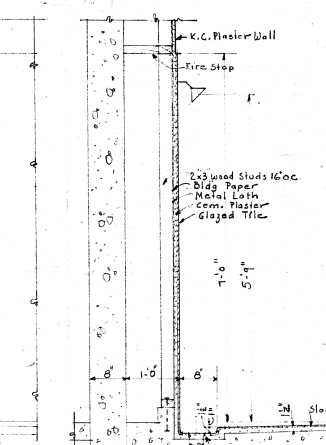
FRONT ELEVATION



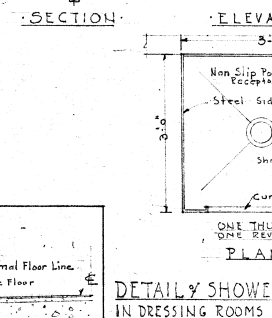
SECTION



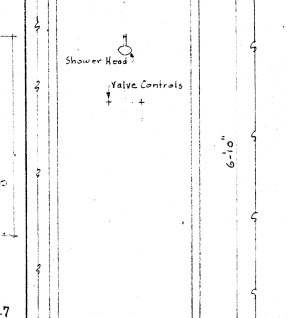
ELEVATION



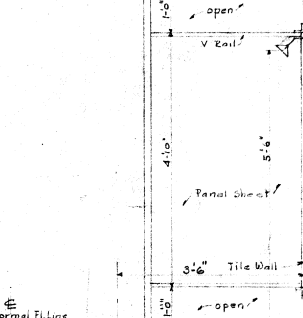
SECTION
TYPICAL SHOWER UNIT
BOYS SHOWER ROOM
Scale: 3/4" = 1'-0"



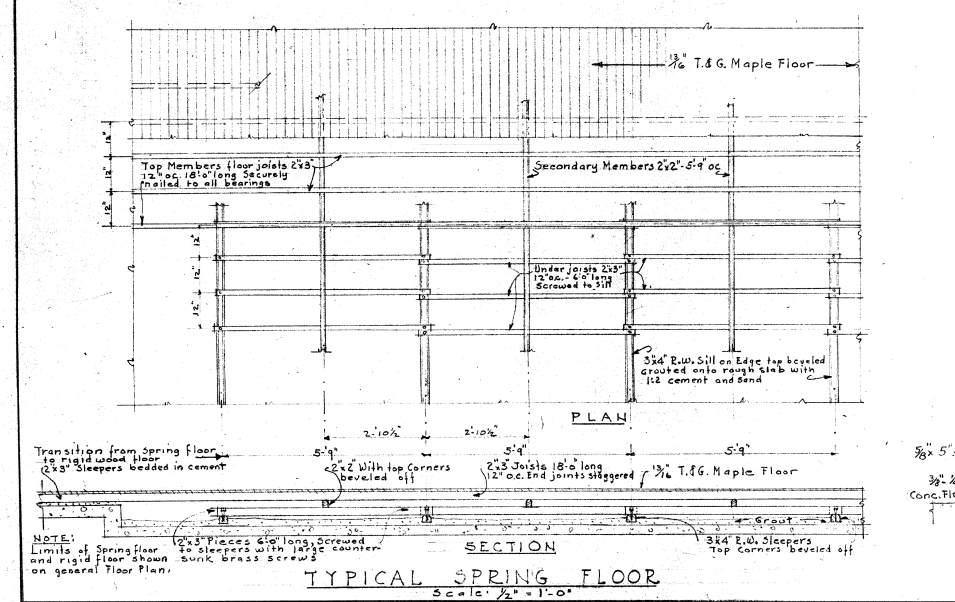
ELEVATION



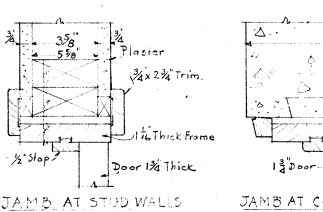
FRONT ELEVATION



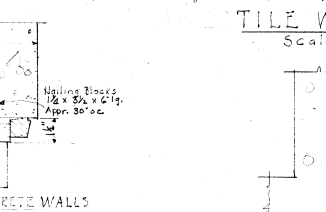
SECTION



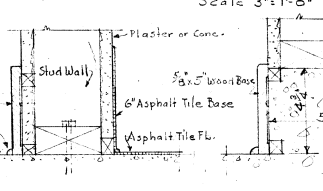
TYPICAL SPRING FLOOR
Scale: 1/2" = 1'-0"



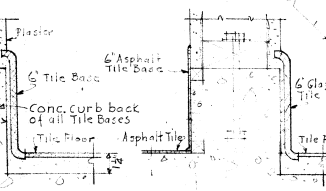
JAMB AT STUD WALL



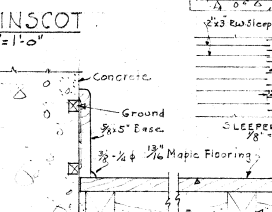
JAMB AT CONCRETE WALL



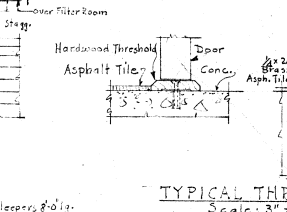
TYPICAL INTERIOR DOOR JAMBS
Scale: 3/4" = 1'-0"



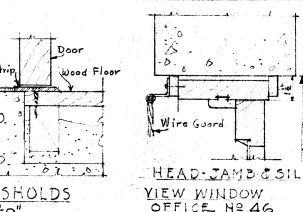
TYPICAL BASES
Scale: 3/4" = 1'-0"



TILE WAINSCOT
Scale: 3/4" = 1'-0"



TYPICAL THRESHOLDS
Scale: 3/4" = 1'-0"



HEAD JAMB & SILL
VIEW WINDOW
OFFICE NO. 46
Scale: 3/4" = 1'-0"

| | | | | |
|---|-------------------------------------|--|---|---|
| FINISH SCHEDULE & INTERIOR DETAILS | | GYMNASIUM FOR EDUCATION EUREKA, HUMBOLDT CO., CALIFORNIA MASTEN AND HURD ARCHITECTS 526 POWELL STREET - SAN FRANCISCO, 2 | | APPROVED A. H. MASTEN ARCHITECT |
| DATE COUNTY SUPERINTENDENT OF SCHOOLS | DATE SCALE DRAWN BY H.E.B. | REVISIONS SHEET 16 | APPROVED H. E. B. MECHANICAL ENGINEER | |

Obs. Glass in Doors to Meteorium

6'-0"

3'-6"

2'-8"

6'-0"

7'-0"

6'-0"

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

DOOR LAYOUTS
Scale: 3/8"=1'-0"

Note: All Doors shall be 1 1/2" thick unless otherwise noted.

24Ga. Metal Covered 18ca. Mould

SEC. A

Laminated Pine Core.

Hardwood Edges

SEC. B

Stop to Match Veneer

SEC. C

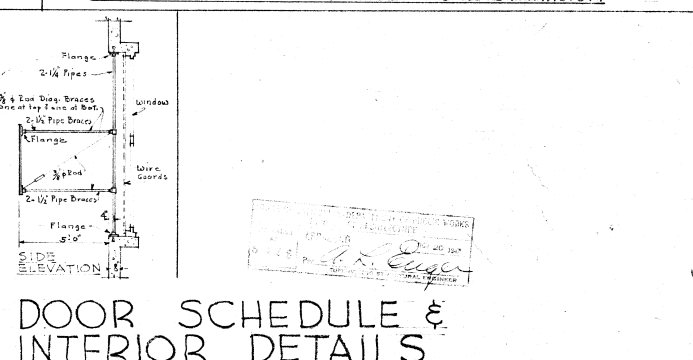
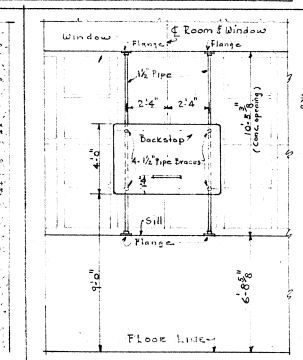
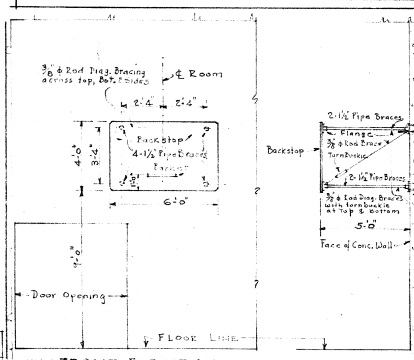
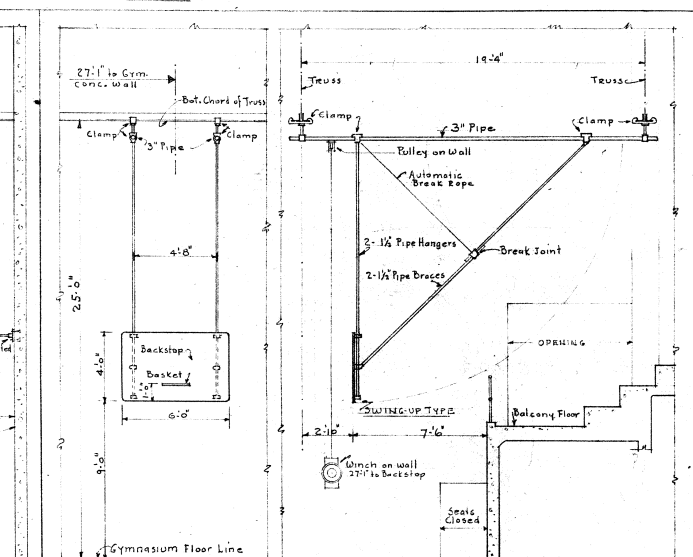
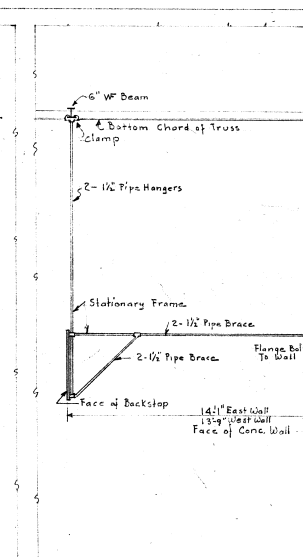
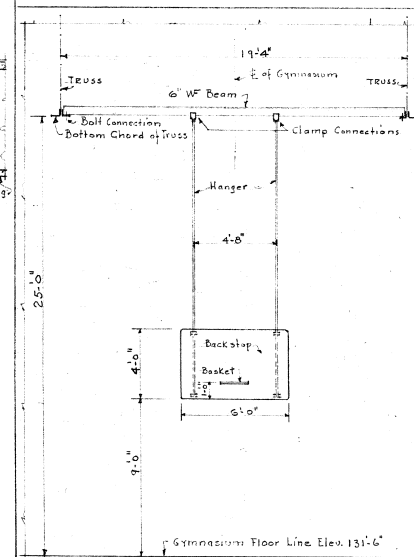
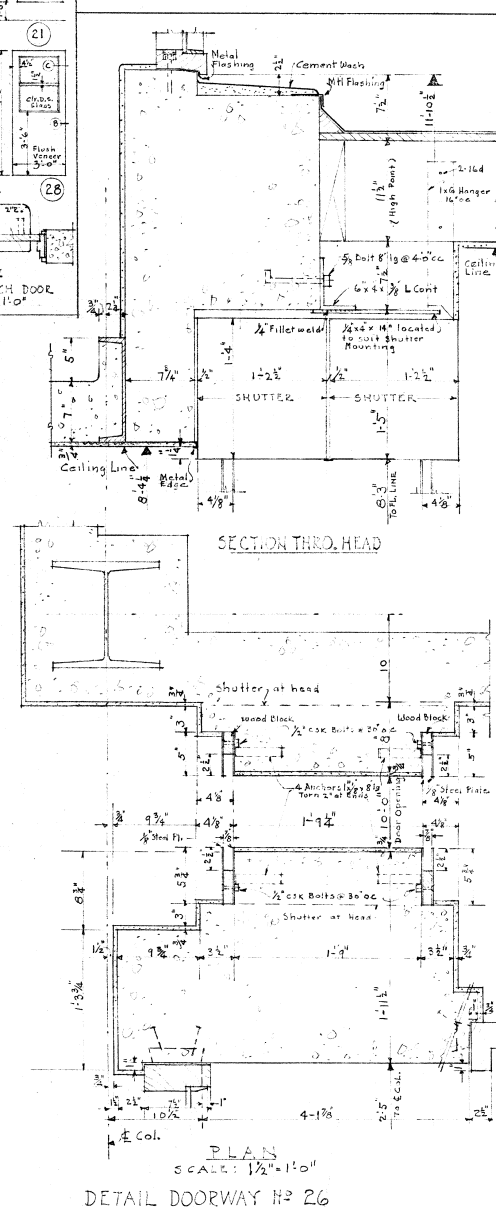
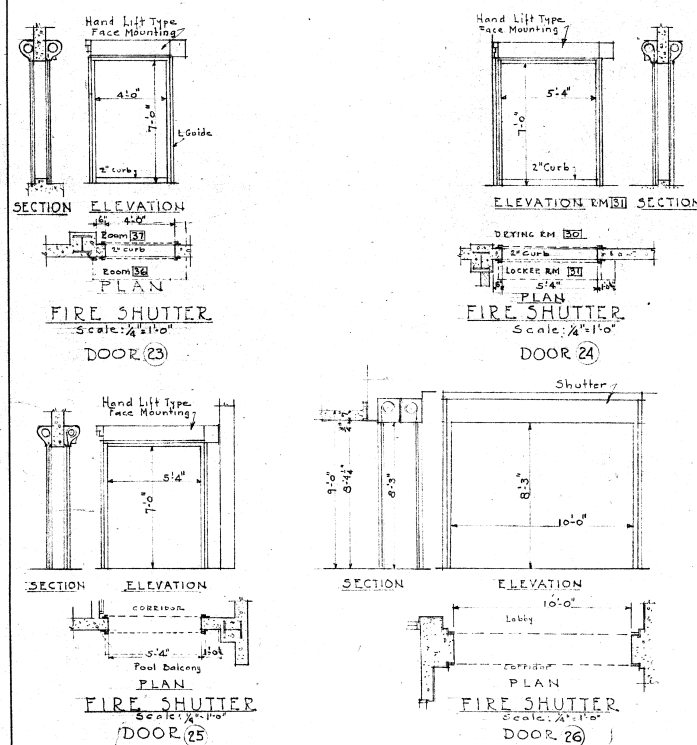
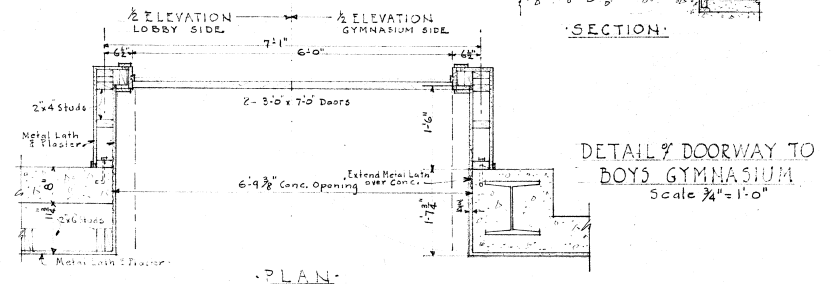
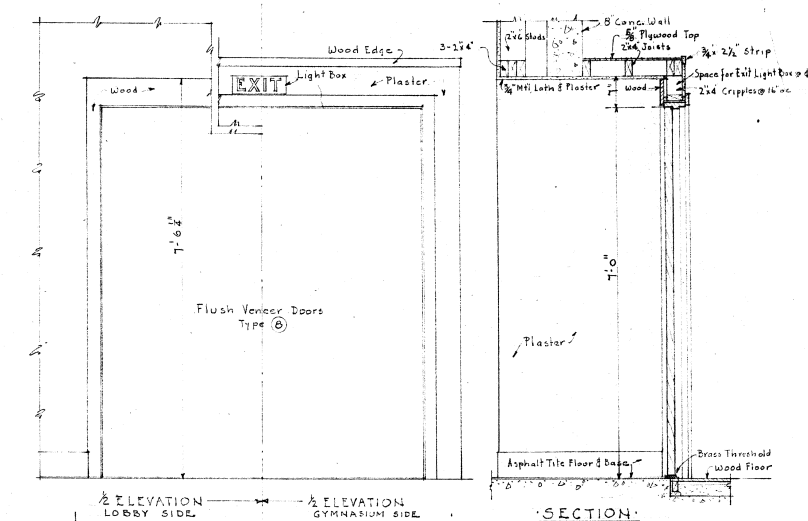
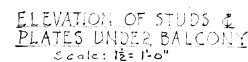
SEC. D

SEC. E

SEC. F

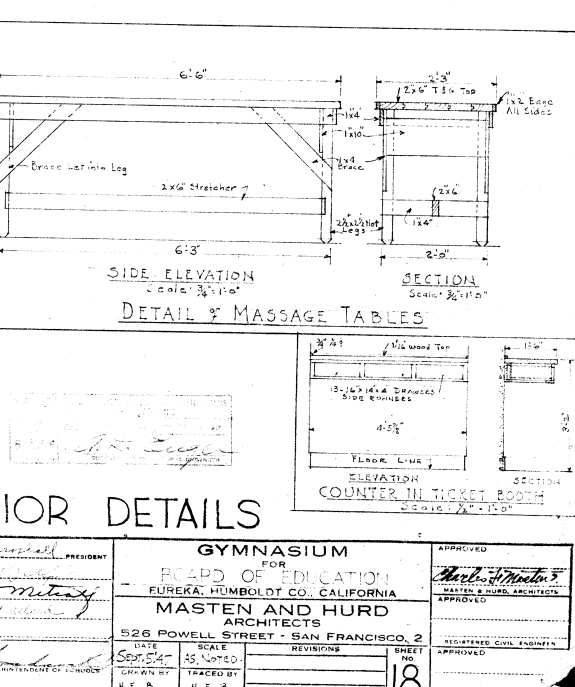
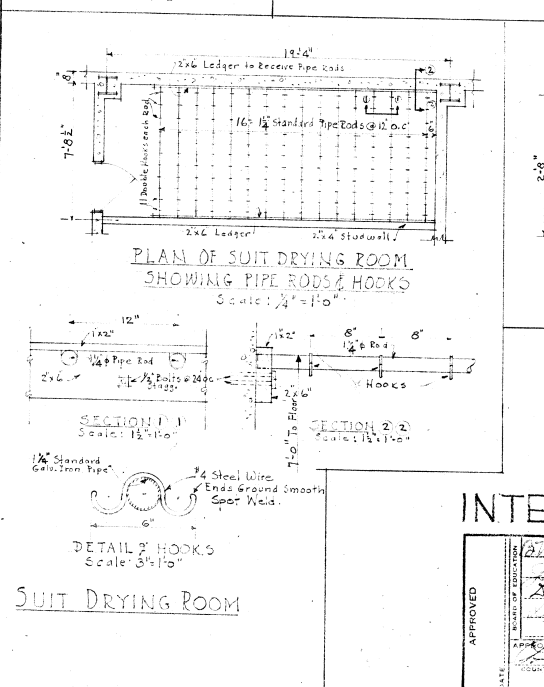
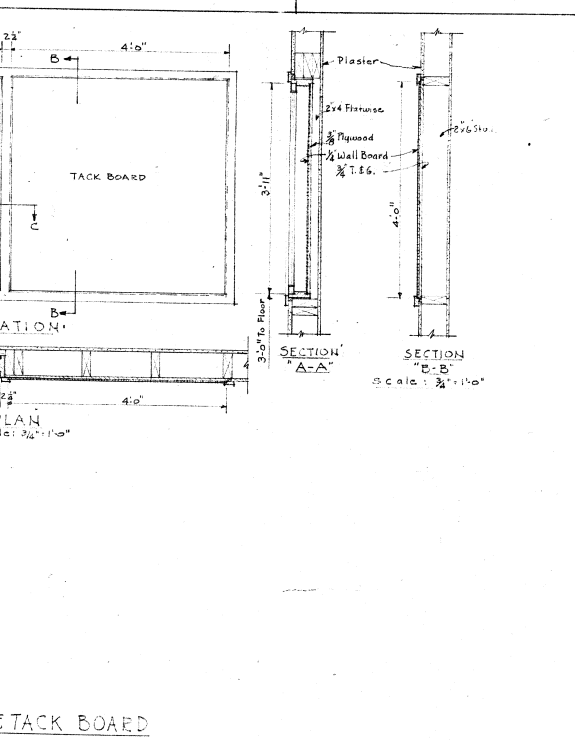
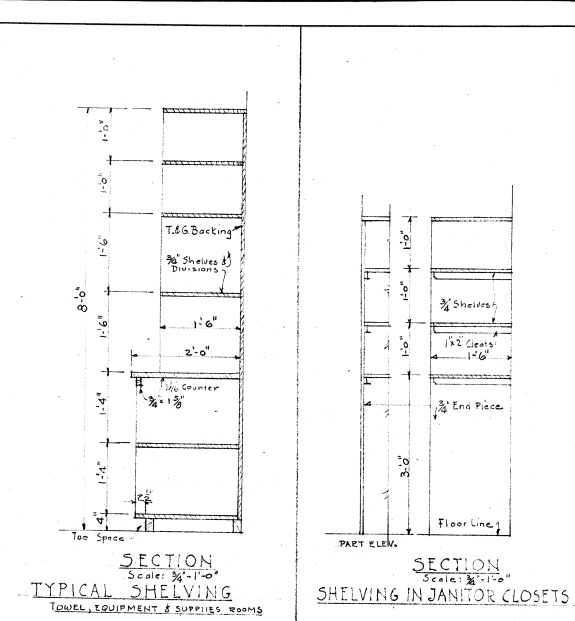
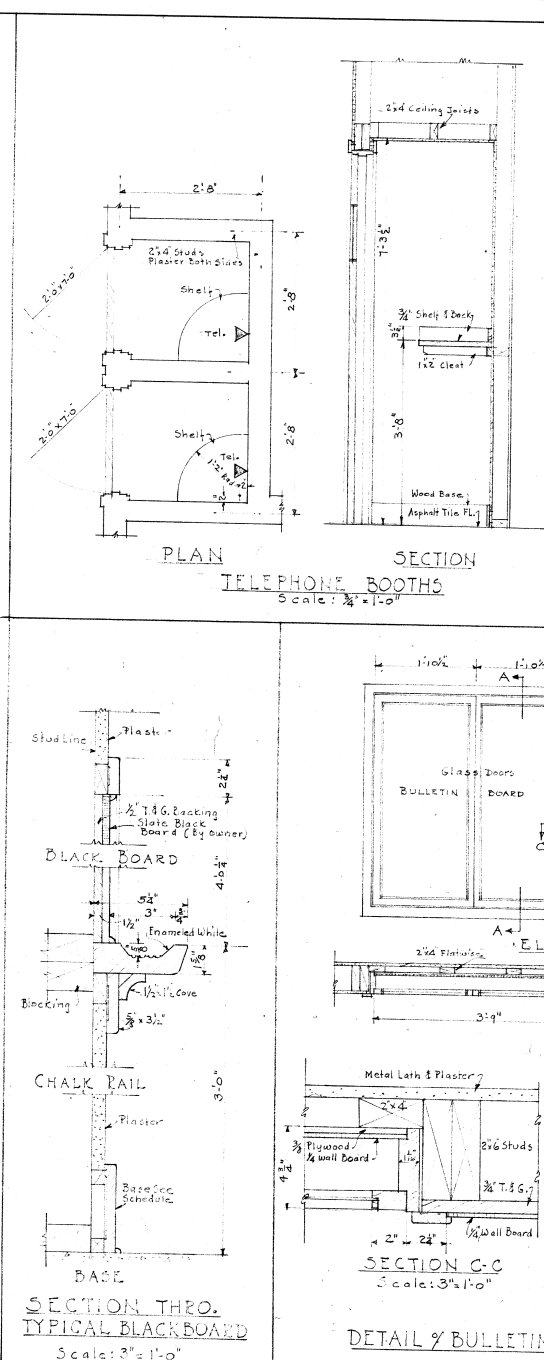
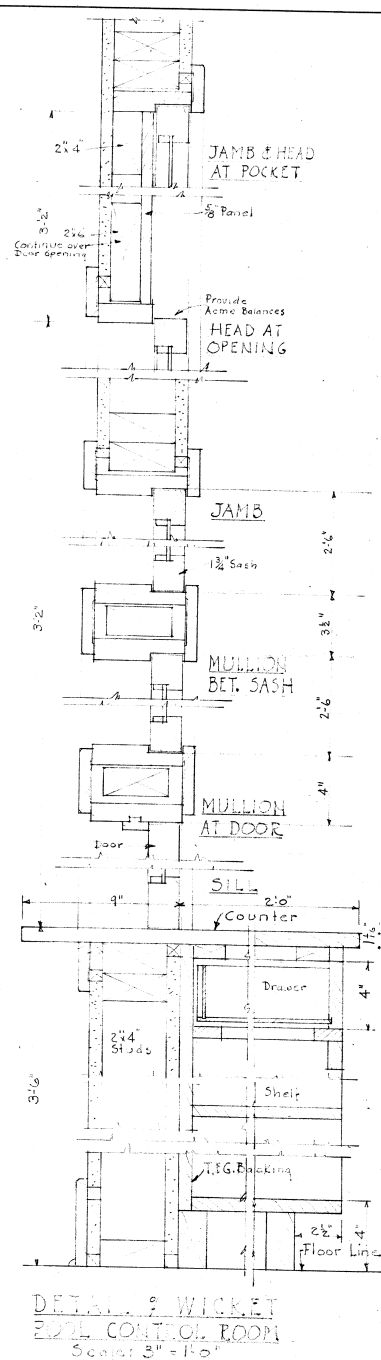
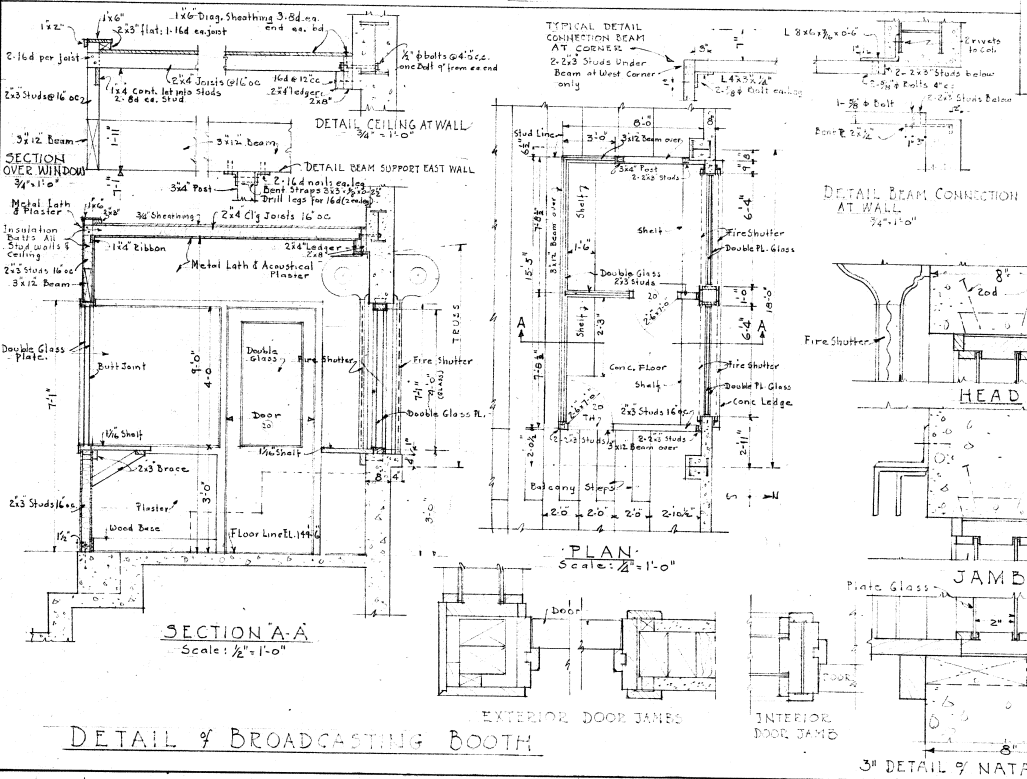
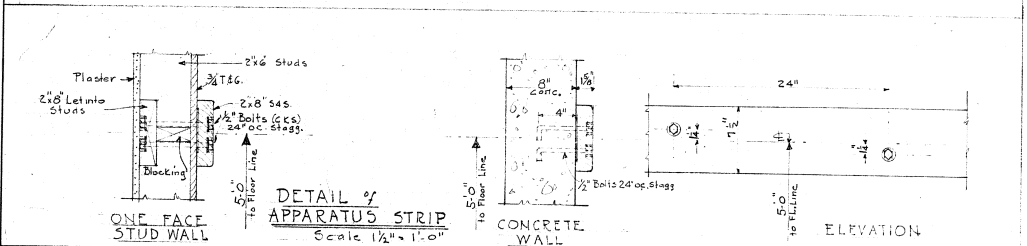
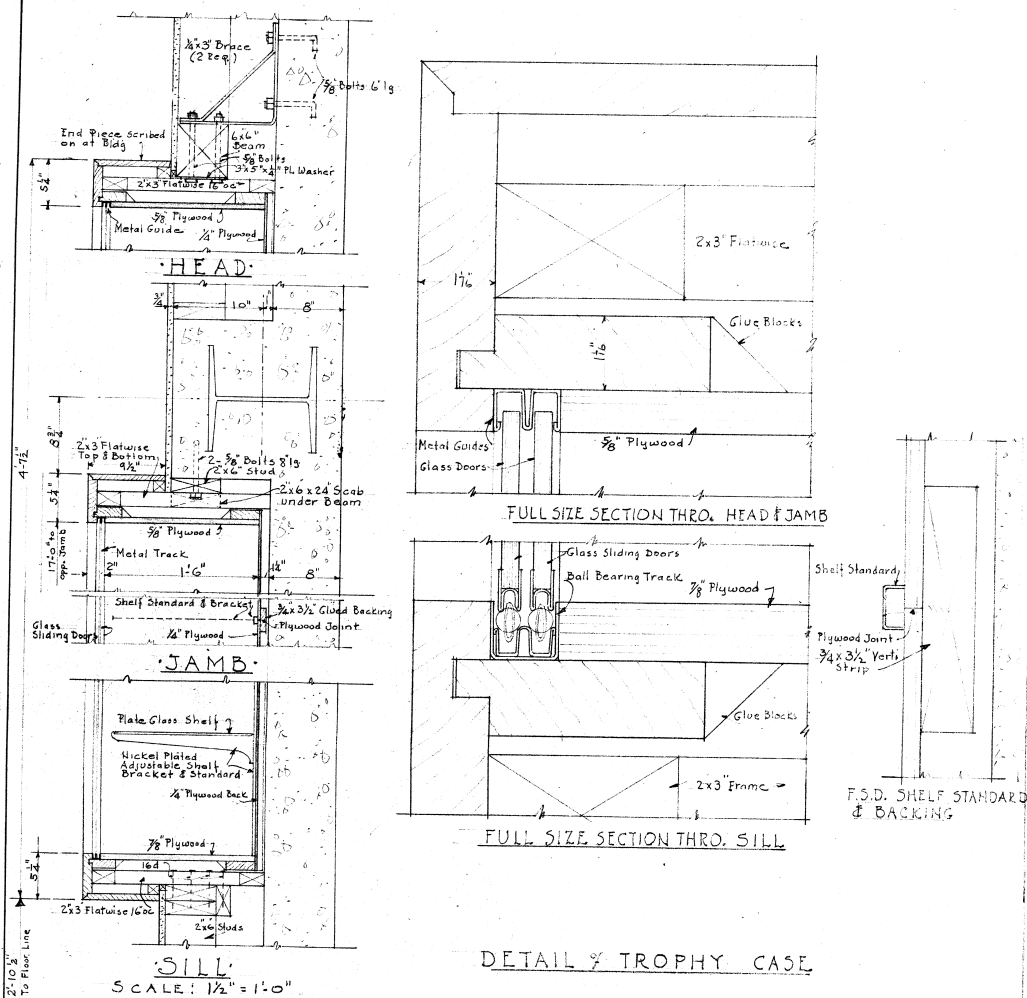
DETAIL SECTIONS
Scale: 3/8"=1'-0"

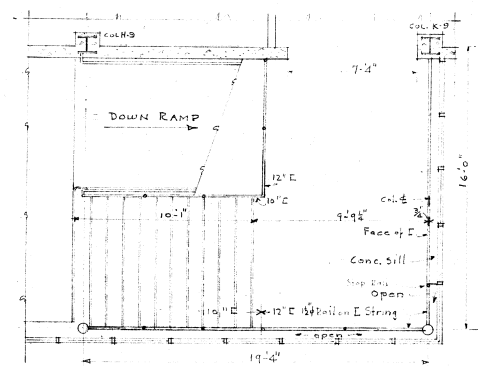
PLAN OF DUTCH DOOR
Scale: 3/8"=1'-0"



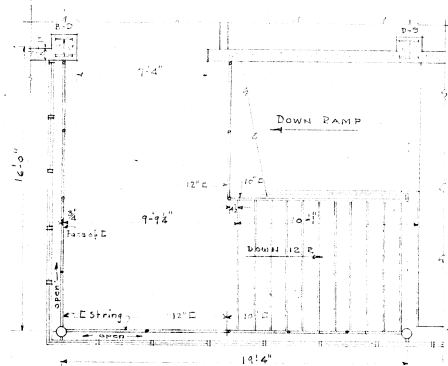
DOOR SCHEDULE & INTERIOR DETAILS

| | | | | | | | |
|----------|--|---|--|--|--|--|--|
| APPROVED | COUNTY OF COCONINO DATE <u>Sept 5, 1917</u> COUNTY SUPERINTENDENT OF SCHOOLS | GYMNASIUM FOR BOARD OF EDUCATION - EUREKA, HUMBOLDT CO. CALIFORNIA MASTEN AND HURD ARCHITECTS 526 POWELL STREET - SAN FRANCISCO, 2 | | APPROVED <u>Mark A. Hurd</u> MARK A. HURD, ARCHITECT APPROVED | | | |
| | | DATE <u>SEPT 5, 17</u> AS NOTED DRAWN BY <u>H. E. B.</u> TRACED BY <u>H. E. B.</u> | REVISIONS <table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table> | | | | |
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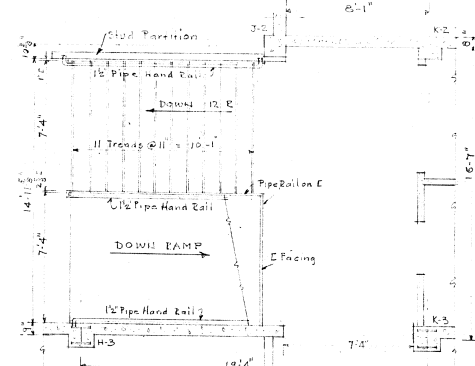




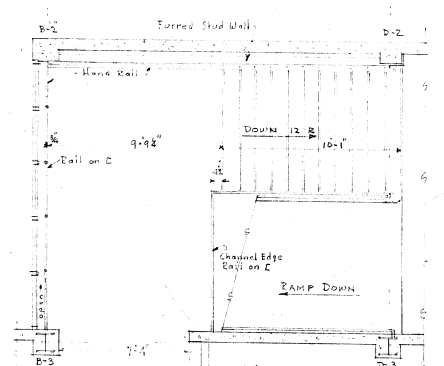
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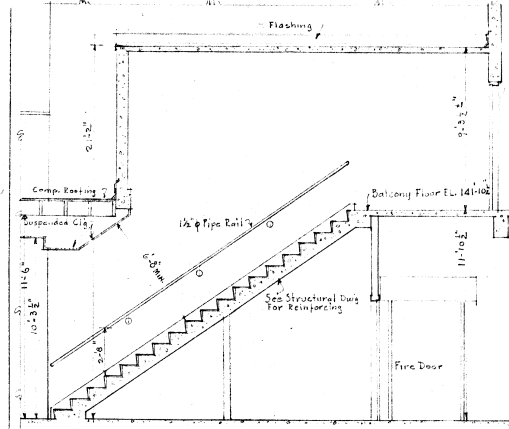
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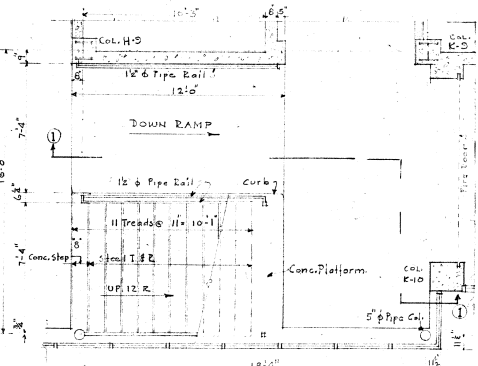
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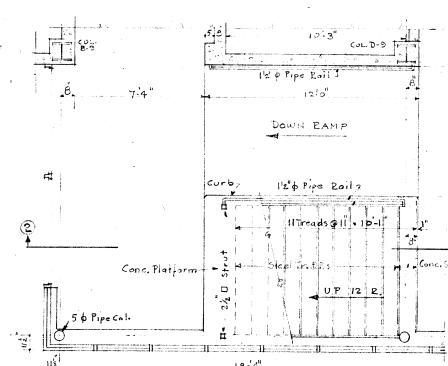
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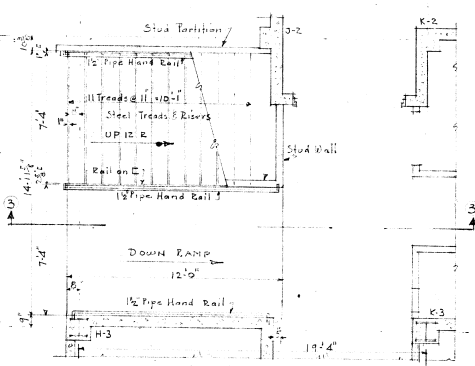
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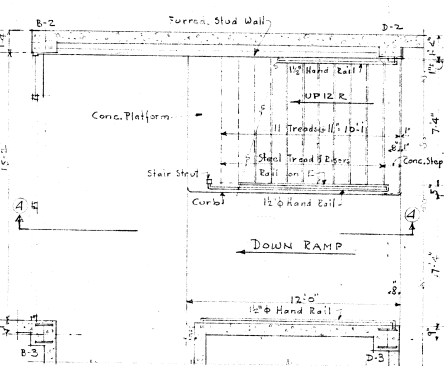
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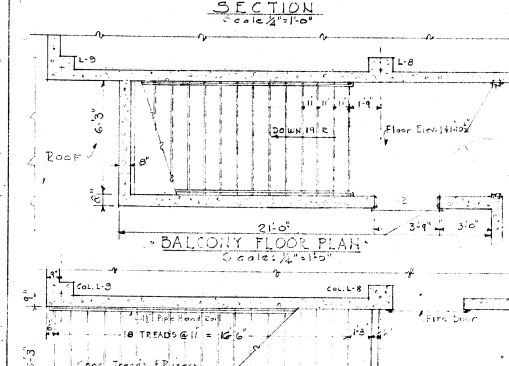
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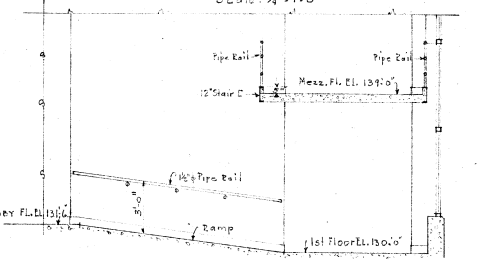
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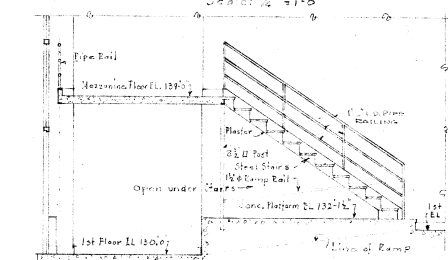
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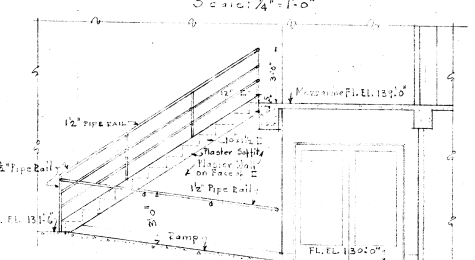
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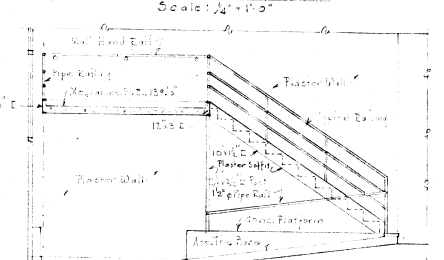
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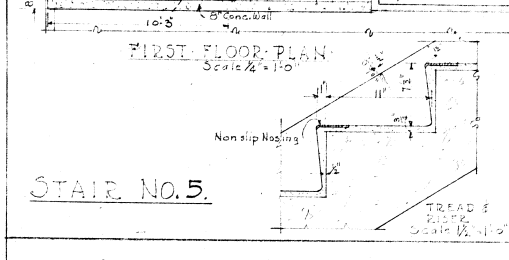
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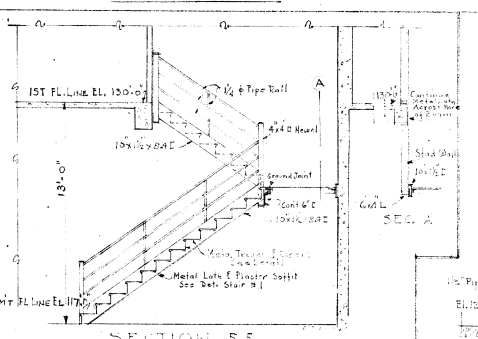
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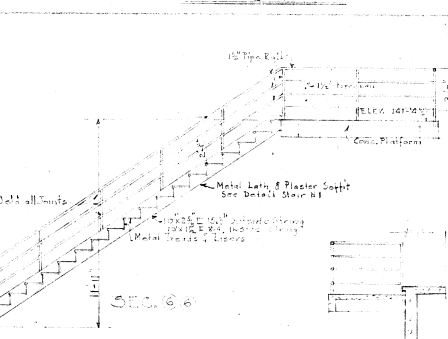
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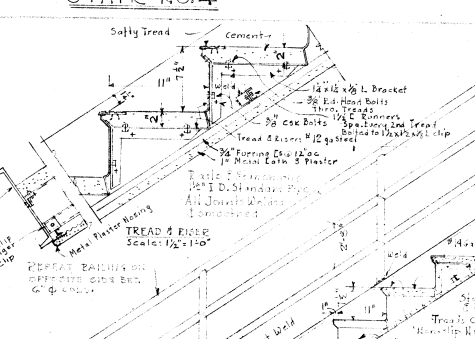
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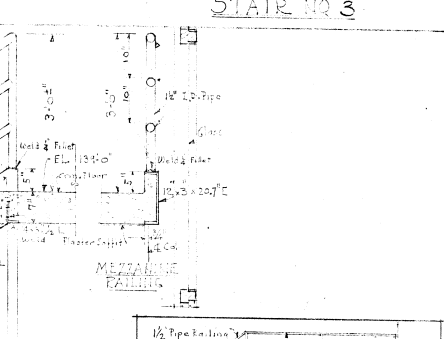
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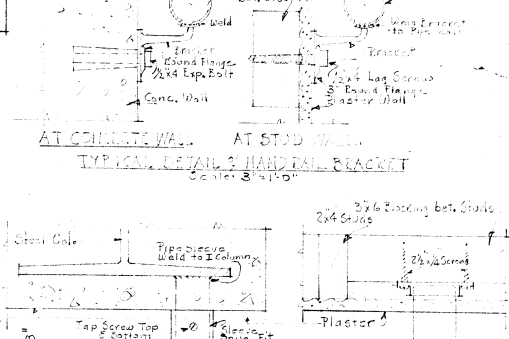
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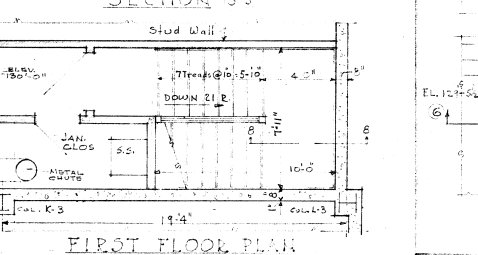
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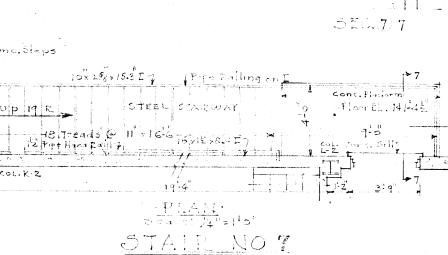
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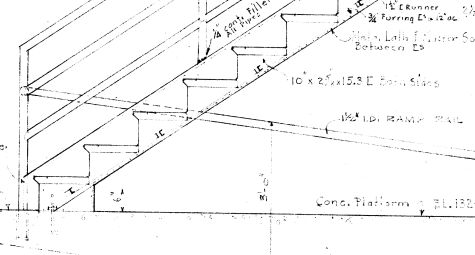
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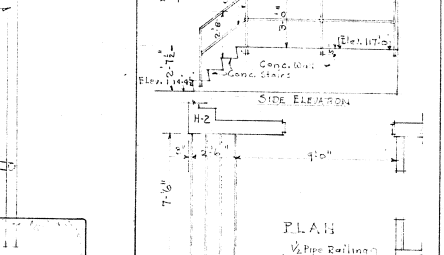
FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"



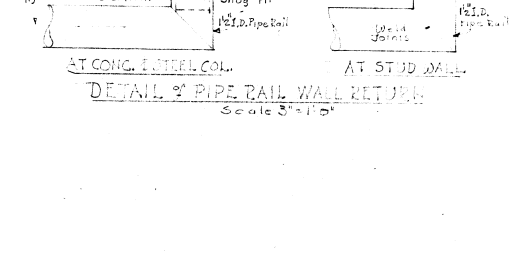
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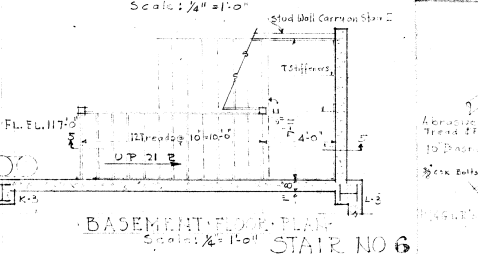
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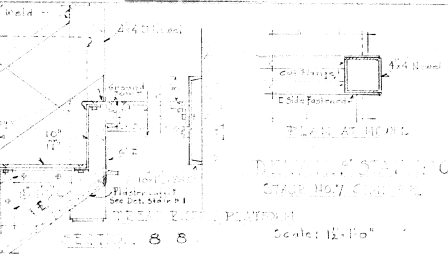
BOILER RM. STEPS



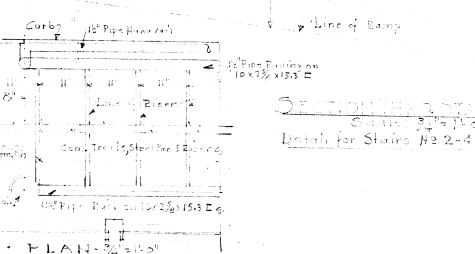
DETAIL 2 PIPE RAIL WALL RETURN
Scale: 3/4" = 1'-0"



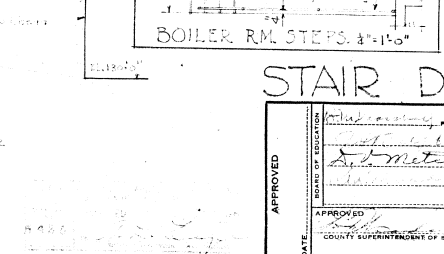
BASEMENT FLOOR PLAN
Scale: 1/4" = 1'-0"



STAIR NO. 6

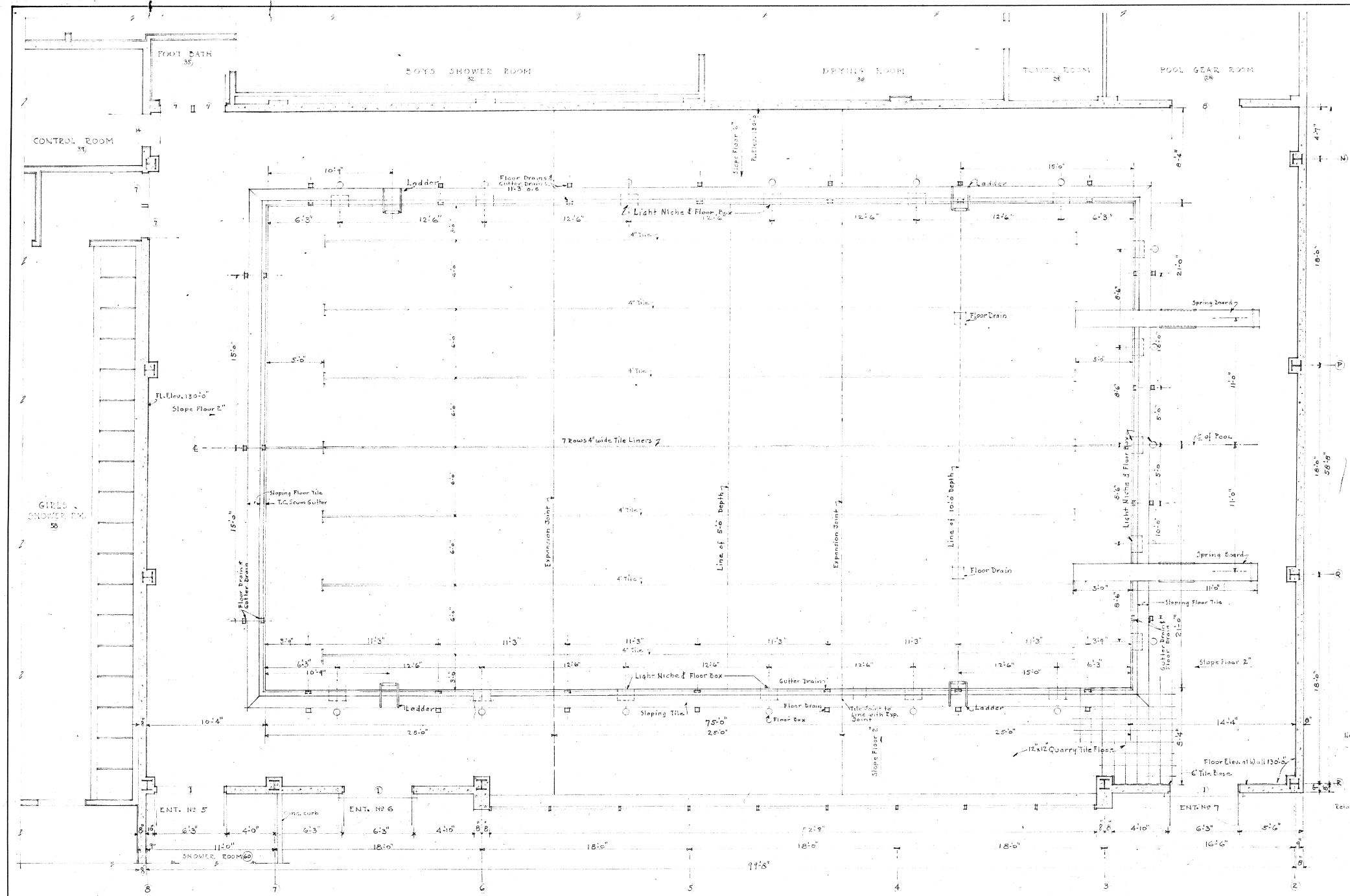


PART PLAN

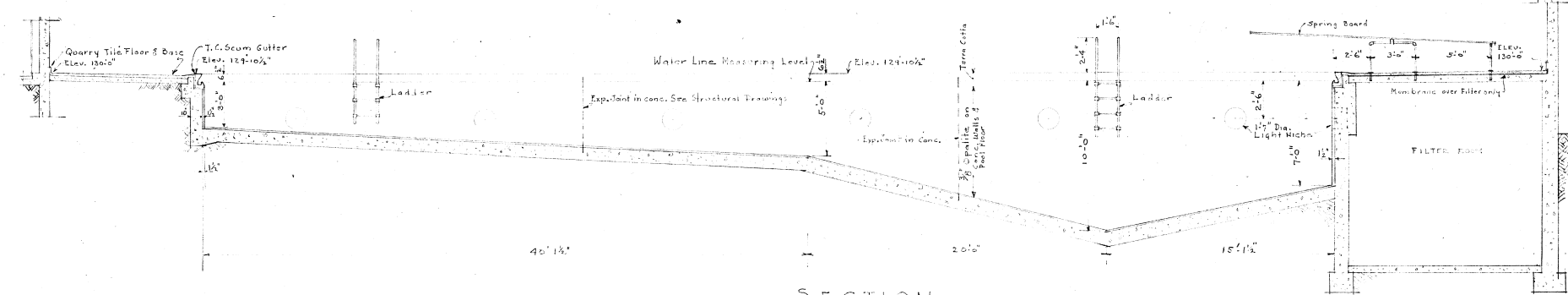


STAIR DETAILS

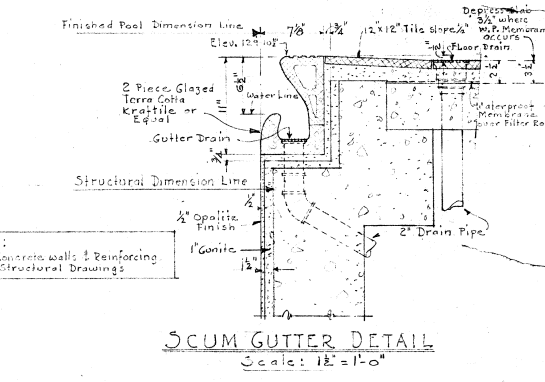
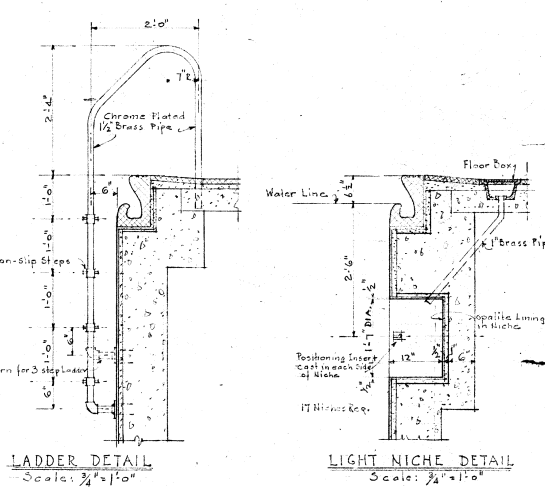
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| APPROVED | | DATE | | SCALE | | SHEET NO. | |
| EUREKA, HUMBOLDT CO., CALIFORNIA | | MARTIN & HURD ARCHITECTS | | 526 POWELL STREET - SAN FRANCISCO, 2 | | REGISTERED CIVIL ENGINEER | |
| DRAWN BY | | CHECKED BY | | TRACED BY | | APPROVED BY | |
| V.L.B. | | M.E.C. | | M.E.C. | | 19 | |



FLOOR PLAN
Scale: 1/4" = 1'-0"

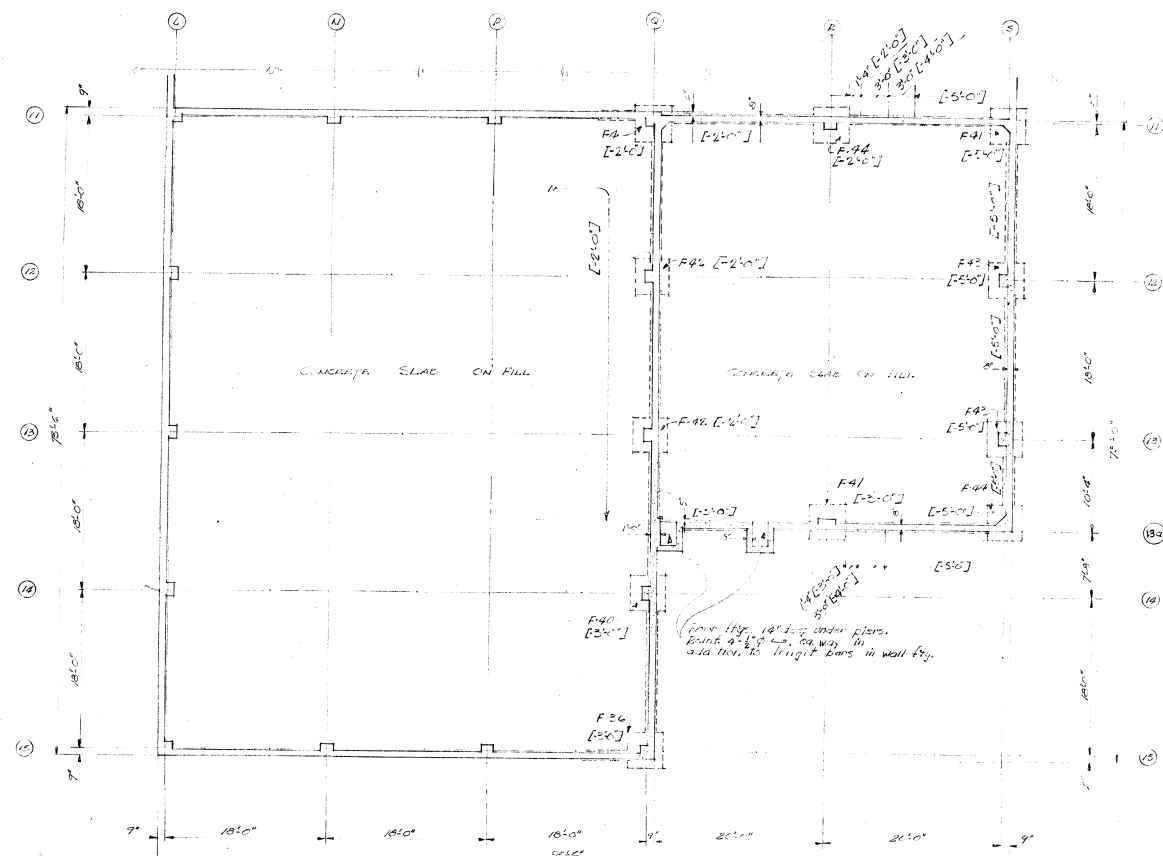


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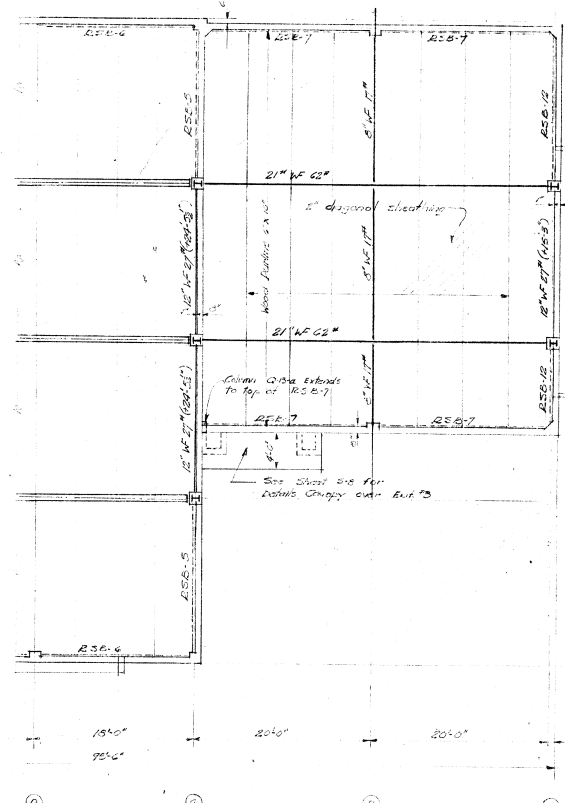


SWIMMING POOL

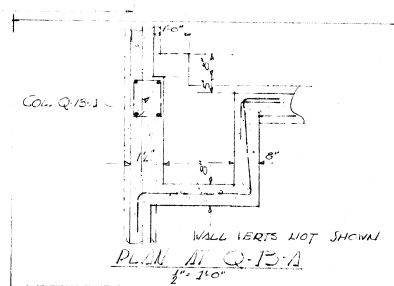
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| GYMNASIUM FOR EUREKA, HUMBOLDT CO., CALIFORNIA MASTEN AND HURD ARCHITECTS 526 POWELL STREET - SAN FRANCISCO, 2 | | APPROVED <i>Charles F. Masten</i> REGISTERED CIVIL ENGINEER |
| DATE SEPT. 5, 1947 COUNTY SUPERINTENDENT OF SCHOOLS | SCALE 1/4" = 1'-0" DRAWN BY H. S. B. | REVISIONS SHEET NO. 20 |



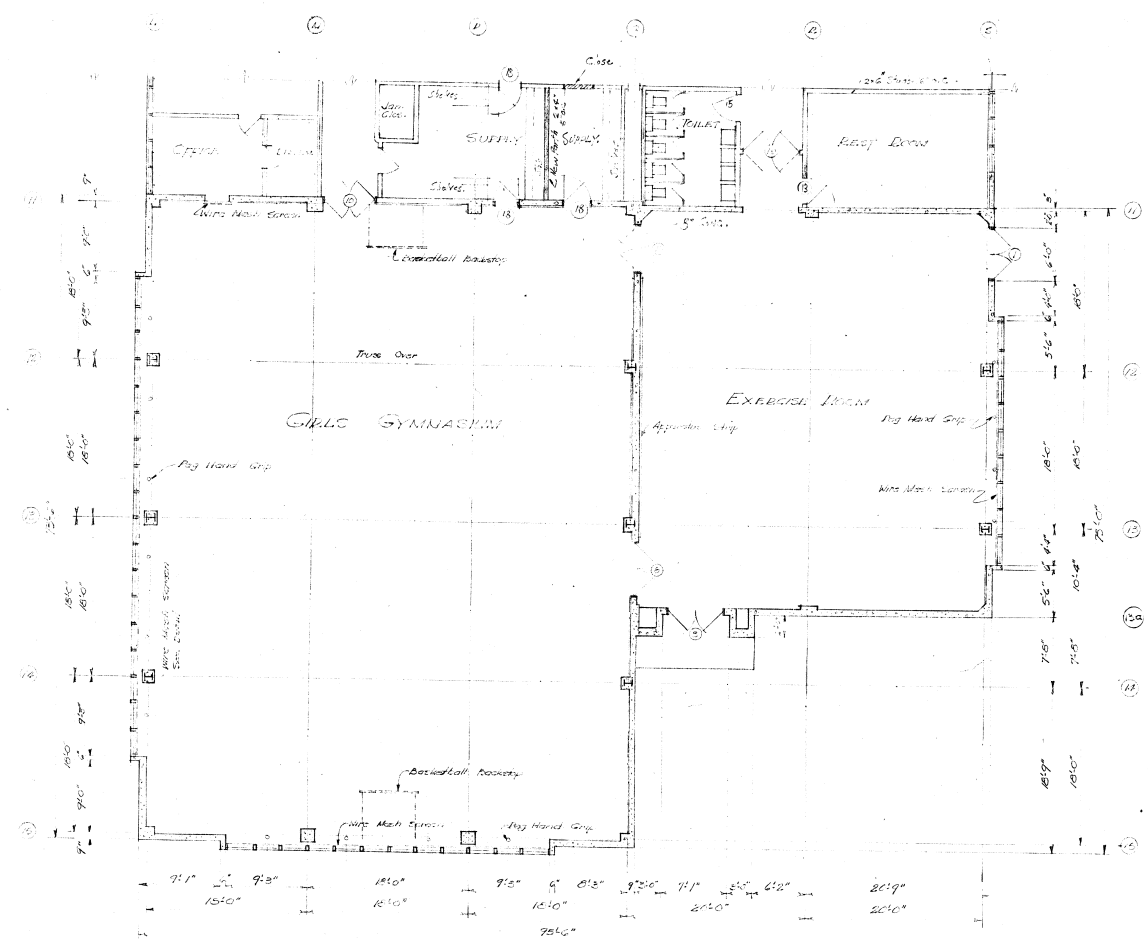
FOUNDATION PLAN
8" = 1'-0"



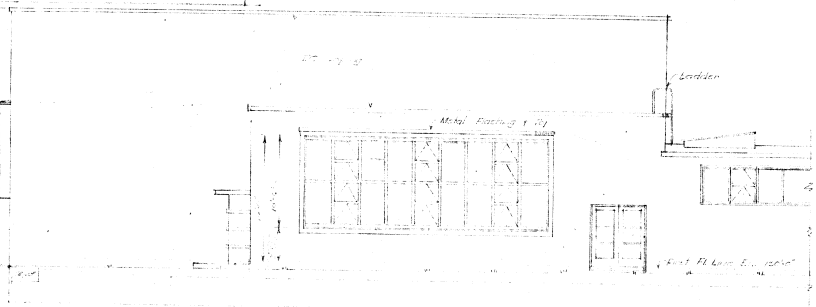
ROOF FRAMING PLAN
WEST WING
8" = 1'-0"



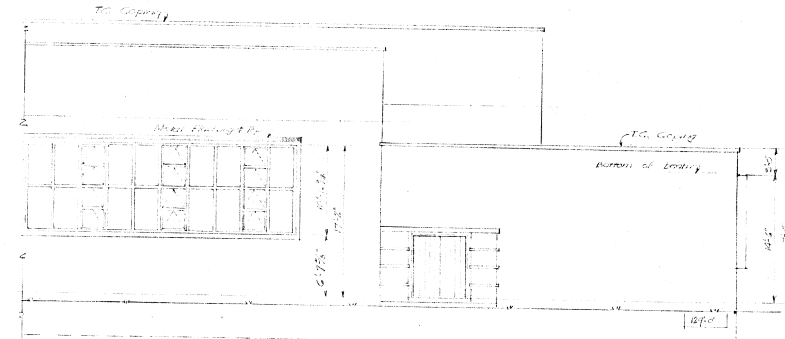
Column Q-13-A
8" = 1'-0"



FIRST FLOOR PLAN
8" = 1'-0"



SOUTH ELEVATION



WEST ELEVATION

NOTE
COLUMNS ARE SAME AS SCHEDULED ON SHEET 'SC' EXCEPT SUBSTITUTE THE FOLLOWING COLUMN C-OPERATES:
FOR C-12a, ON SCHEDULE SUBSTITUTE Q-13-a
" R-12a " " " R-11
" S-12a " " " S-11
" R-13 " " " R-13-a
" S-13 " " " S-13-a
STEEL COLS ARE SAME AS SCHEDULED ON SHEET 'S-11' EXCEPT
FOR S-14 ON SCHEDULE SUBSTITUTE S-12

ALTERNATE NO 10

GIRLS EXERCISE ROOM - ALTERNATE FLOOR PLAN & ELEVATIONS

| | | | |
|--|--|---|--|
| STATE OF CALIFORNIA, DEPARTMENT OF PUBLIC WORKS DIVISION OF ARCHITECTURE APPROVED: <i>[Signature]</i> MAY 1 1938 5428 | | GYMNASIUM BOARD OF EDUCATION EUREKA, HUMBOLDT CO., CALIFORNIA MASTEN AND HURD ARCHITECTS 1528 POWELL STREET - SAN FRANCISCO 2 DESIGNED BY: R.P. DRAWN BY: R.P. CHECKED BY: R.P. 22 | |
|--|--|---|--|

CEQA Analysis of Historical Resources and Potential Impacts of Development Project

**Jay Willard Gymnasium,
Eureka High School
1915 J. Street
Eureka, Ca.**

**Prepared for
3D/International
3200 Walford Avenue
Eureka, Ca. 95503**

**STILLMAN & ASSOCIATES
P.O. BOX 1194
ARCATA, CA 95518**

Submitted: March 29, 2005

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| ▪ DPR 523 A, B and L : Willard Gymnasium | |
| ▪ DPR 523 A and D: Eureka High School Historic District | |

I. EXECUTIVE SUMMARY

The purpose of this project is to review the proposed demolition of the Willard Gymnasium, located on the campus of Eureka High School, at 1915 J. Street, Eureka Ca. under the California Environmental Quality Act (CEQA). The campus has been located on this site for over 100 years and includes numerous buildings, structures and objects. The Willard Gymnasium has been in continuous use as for High School physical education classes and as a community sports and recreational facility since it was placed into service in 1950.

The gymnasium was not included in the comprehensive survey of architecturally significant historic resources conducted by the Eureka Heritage Society, in 1974, because it did not meet the 45 year threshold for consideration as a potential historical resource at that time. The gymnasium and the campus setting were inspected during the current assessment in order to document and evaluate the historic significance and integrity of this building.

The gymnasium is over fifty years of age and, although some renovations have occurred within the last fifty years it retains a very good degree of integrity. It is a very good example of the International Style, of which few buildings from this period have been documented in Eureka. The Gymnasium was designed by the firm of Masten and Hurd, architects who were acknowledged during the period when this building was constructed as contributing significantly to the design of educational facilities in California.

The Willard Gymnasium retains its integrity should be considered an historical resource and is individually eligible for listing on the National Register, California Register of Historical Resource and the Local Register of Historical Resources and is significant as one of few examples of the International Style in Eureka. The Gymnasium may also be listed as a Contributor to an historic district that would include other historical resources on the Eureka High School campus

The campus, though previously unrecorded in its entirety, evidences a very good degree of integrity as an historical district of architectural significance. Most major buildings were constructed from 1925 though 1950, and the campus is potentially eligible for listing as an historic district on the National Register, The California Register of Historical Resources and the Local Register of Historical Resources. Several buildings on the campus were surveyed and determined eligible for listing on the National Register of Historic Resources, in the first comprehensive survey of historical resources of the City, including Main Building and the Industrial Arts Building. [Architectural Resources Group: 1987] An historical resources survey of the campus should be conducted prior to the initiation of Phase II.

This report also recommends that the cultural landscape be evaluated and considered as a contributing historic resource, in compliance with current federal and state standards for the documentation and evaluation of historical resources. The property owner is proposing a project which could demolish the gymnasium, an historical resource, and may also impact the integrity of other historical resources on the campus. Recommendations for mitigating these proposed changes are advanced at the conclusion of this report.

II. PROJECT DESCRIPTION

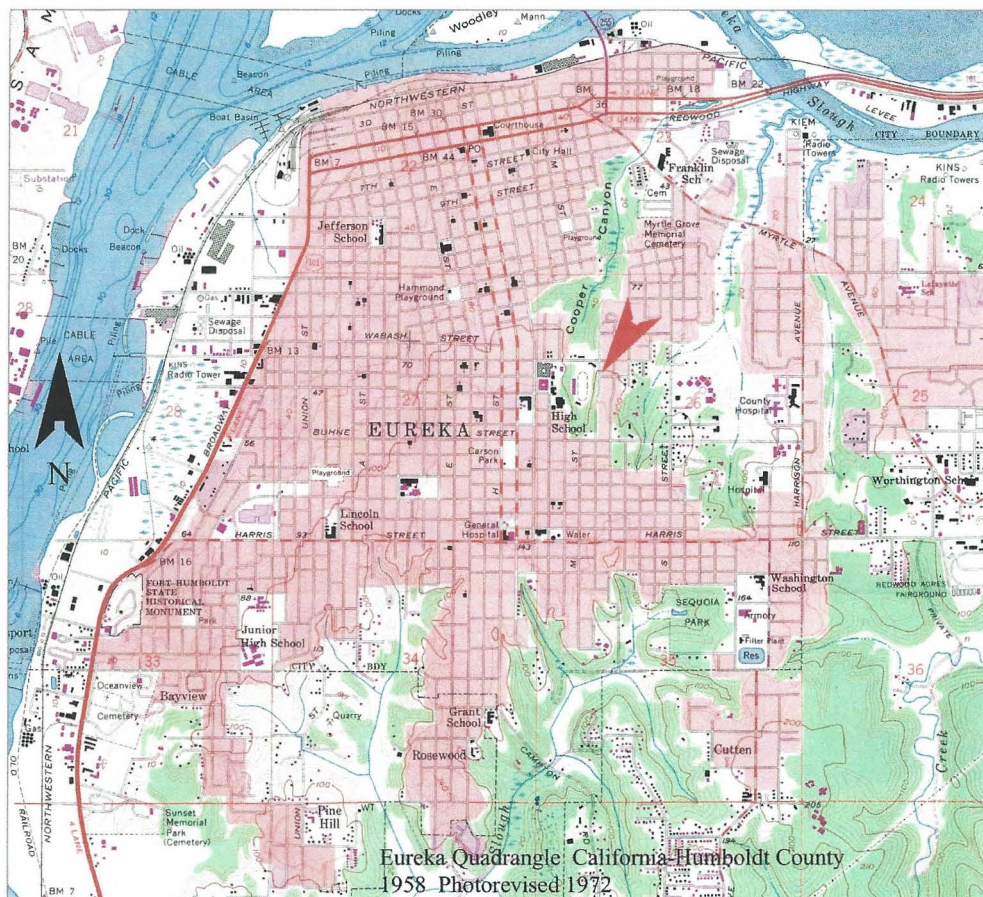
The Project: Eureka High School Master Plan

Property Owner: Eureka City Schools, 3200 Walford Avenue, Eureka, Ca.

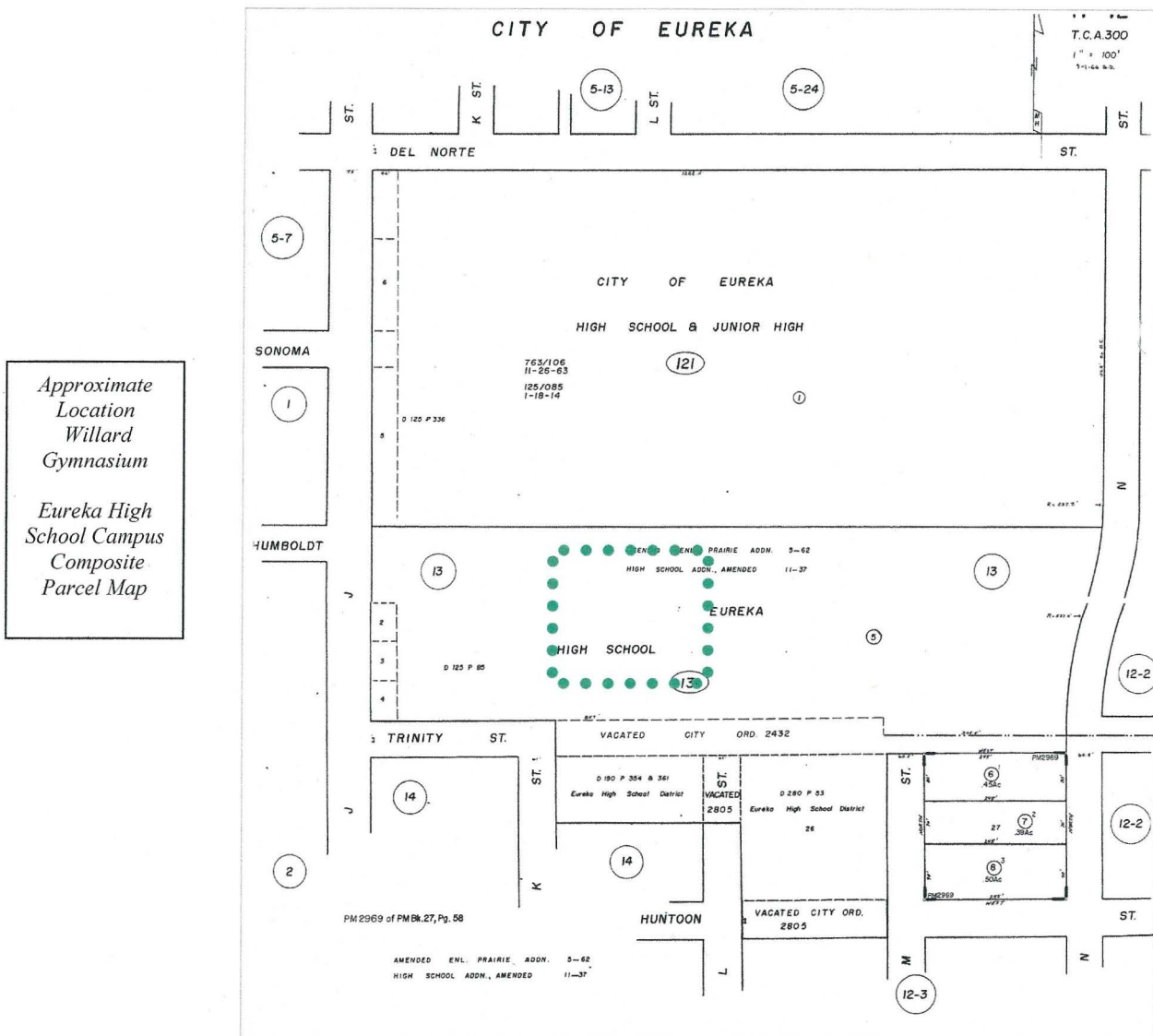
Engineer/Planner: 3D/International, 3200 Walford Avenue, Eureka Cal 95503

Description: The Plan proposes the redesign of the Eureka High School Campus, including the rehabilitation or demolition of many buildings and the construction of new buildings, structures and landscaping. The element of this project that is reviewed in this assessment calls for the demolition of Willard Gymnasium, to be replaced by a new gymnasium and pool.

Project Environment: The Willard Gymnasium is located on assessor's parcel 011-131-005, one of several that comprise the campus. The campus is located in a central area of the city of Eureka, immediately adjacent to and developed at the same time as the historic neighborhood known as the Prairie Addition. This area is bounded by Humboldt Bay to the north and by US 101 to the south, and the drainage of Cooper Gulch to the east. It is characterized by a mix of single family historic residences and more recent single family homes and apartments, with small clusters of commercial services.



General location
1958 Eureka, Calif.
USGS quad map.



California Environmental Quality Act: The California Environmental Quality Act (CEQA) is intended to evaluate and mitigate the effects a proposed project will have on the environment. In addition to natural resources, CEQA considers impacts on historic and cultural resources. To determine if a project will have significant impacts on historic resources, CEQA applies a two-part test; the resource must be "historically significant" and the project would cause "substantial adverse change" to the resource (Bass et al 1999). In order to qualify as "historically significant," a resource must meet one of three qualifications. It can be listed in, or eligible for, the California Register or Historical Resources. It can also be considered historically significant if it is listed in a local register of historic resources, or if it has been identified as important in a cultural resources survey. Finally, it can be considered significant if the Lead Agency responsible for CEQA review determines it to be so.

In order to evaluate a historic resource under CEQA, it is necessary to determine if it is listed, or eligible for listing, in the California Register of Historical Resources. The California Register recognizes properties that meet at least one of the following eligibility criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California, or the United States; or
- It is associated with the lives of persons important to local, California, or national history; or
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (California Office of Historic Preservation Technical Assistance Series #6).

In addition to meeting one of these criteria, the resource must possess integrity. Resources that possess integrity "retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance" (California Office of Historic Preservation, Technical Assistance Series #6).

III. METHODS

Research: Preliminary research was conducted at Humboldt State University Library; Humboldt County Historical Society; and Humboldt County Library, City of Eureka, Planning Department; and included review and analysis of previous published and unpublished histories and historical context studies; preliminary identification of periods of significance and geographical, social, economic and physical development themes relating to the study area; historic property nominations, prior surveys, academic research papers. Original plans on file at the City of Eureka, Planning Department were reviewed, then copied and scanned in order to serve as a baseline for comparison with the physical structure. Staff of Eureka High School and Eureka City Schools provided additional information on the campus in telephone conversations or by e-mail. Research was subsequently conducted at the Environmental Design Library, University of California, Berkeley; San Francisco Architectural Heritage, San Francisco, Ca.; San Francisco Public Library, San Francisco, Ca., and a record search obtained from the AIA Archives, New York City. A search of the National Register listings and updates, the California Register of Historical Resources, the California Landmarks and Points of Historic Interest, and the City of Eureka Local Register of Historic Places revealed that the gymnasium is not listed on any historical resources register. It is not listed on the last historical resources survey of Eureka, conducted around 1974.

Oral History: An analysis of existing oral histories in various repositories revealed no prior research on this resource. One interview with the Red Cross Swimming Program Coordinator, a 46 year employee of the local office, was conducted. Questionnaires or written correspondence were used as appropriate when oral interviews could not be obtained. Digitized copies of archival materials held in personal collections were made when available.

Site Visit: The consultant conducted a site inspection on February 22, 2005. Photographs were taken of the interior and exterior of the building, as well as the campus setting, with an Olympus Zoom 2000, 35 mm SLR. Photographs were scanned in color at 400 dpi. The gymnasium was recorded and compared with original construction plans, noting design, materials, setting and alterations on California Department of Parks and Recreation series DPR 523 forms, and included with a set of photos on a CD.

IV. HISTORICAL CONTEXT

Theme: High Schools in California

Free publicly supported high schools were not established in California until the latter part of the nineteenth century. During the Gold Rush period and for many years after, secondary schooling was very limited. While the constitution made it a duty of the legislature to provide a system of schools, funding was authorized for only primary and grammar schools.

Between 1850 and 1890 most grammar school and college preparatory courses were offered by private schools, usually church affiliated seminaries for girls, academies or institutes for boys. Protestant missionary schools provided another alternative to the Catholic seminaries and colleges established during the Spanish and Mexican period. Those who could afford a higher education for their children either hired private tutors or sent them abroad to Europe or to the Eastern United States. In 1852, there were only twenty public schools in the entire state.

At that time, the primary role of a high school was to prepare students for college. The first public, though not free, high school in California was established in San Francisco in 1856. The San Francisco High School provided a four year course designed for college entrance. Teachers trained in California were graduates of the state normal school in San Jose, which provided a two year teacher training course to students who entered with at least a grammar school education. [Falk: 1968].

Several reforms passed in the late nineteenth century provided the greatest public incentives to the creation of the modern high school system. The Act which created the University of California, in 1885, also established an accrediting system for high schools so that students from accredited schools could be admitted without an examination.

Funding for a school system that could meet the needs of a growing population was always a concern. While operating costs were partially supported by state funds, school districts provided the buildings. Bond acts for the construction of public high schools were legalized in 1881, and soon became the primary method for funding their construction. In 1901, the State Legislature approved a state tax for the support of high schools. [Falk: 1968].

Under the provisions of an act passed by the Legislature in 1891, adjoining school districts could unite for the support of high schools and pool their collective resources. Within the next decade more than sixty Union High Schools were established in California. Union high schools were established in Arcata in 1894 and in Ferndale in 1904, with district high schools created in Eureka in 1895, and Fortuna in 1903. [HCL: Various].

Eureka High School

Eureka High School has served as the only public high school in the City of Eureka for more than 100 years. Several private academies or institutes had been established in the Humboldt Bay region prior to 1890, but few were able to maintain sufficient enrollment to survive financially. St. Joseph's College started in Eureka in 1969 and relocated to Rohnerville, where it

closed in 1889. St. Joseph's Academy for Young Ladies opened in Eureka in 1872 and closed in 1910.

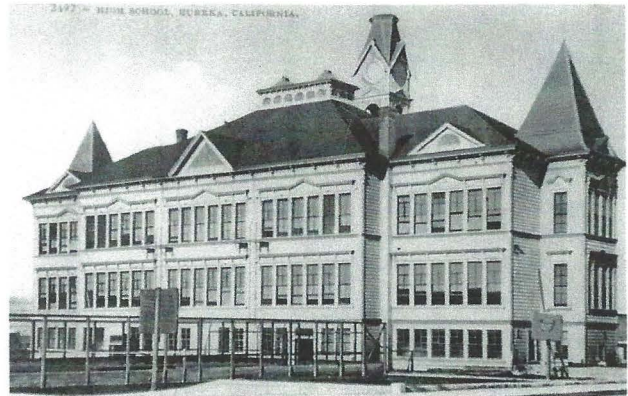
Professor N.S. Phelps founded the Eureka Academy and Business College in 1886, on the site of the former Humboldt County Young Ladies Seminary. Phelps was a former public school teacher and County Superintendent of Schools, and his goal for the new school was to provide an advanced education for students in the County since there was no public high school. The school curriculum offered five programs, including an elementary or Preparatory program; Academic or high school level; Normal, which prepared students to become public school teachers; Music; and Commercial, which trained students to work in business. [HCHS: Various.].

The Academy was founded during a time of confidence in the City of Eureka and trust in continued growth and prosperity, as a newspaper account of the time described:

"But little time has elapsed since our immediate outskirts was a forest and a few clearances given over to stumps...they cannot realize the change from stumps and forests to wide thoroughfares, elegant residence, and solid business structures; nor can they appreciate the rapidly growing commercial importance of the city. We have never experienced a speculative boom like that at present sweeping over the southern portion of the state. We are not built upon a paper foundation, but our progress has been great, solid, and sure."

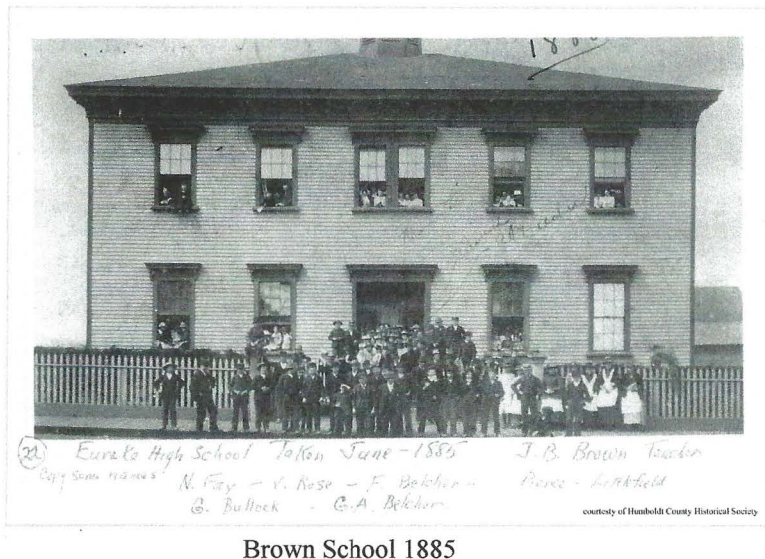
[Architectural Resources Group: 1987].

In 1895, a city wide measure to decide if a high school should be established passed, with 517 of the 605 votes cast. The high school opened in 1896, with 107 pupils and three teachers. Classes were held at Winship School, a grammar school because the high school district did not own any buildings. The standard curriculum for public high schools offered four courses of study: literary, scientific, classical and business. Educational reformers, opposed to academic tracking and to promote American values among a diverse immigrant community, encouraged extracurricular activities such as student government, publications and athletics.



Winship School ca. 1900

Football commenced in the fall of 1896, with a 25 man football team that played rivals Arcata High and Eureka Business College. A drill team of twenty girls was also organized, though their short dresses caused such a local stir that they performed in public only once. Two thirds of the students in that first class intended to pursue a college degree.



By 1910, 279 students were enrolled and classes were divided between three facilities, with home arts taught at Grant School and woodworking at the nearby Brown School. School construction bonds were on the ballot three times, beginning in 1911, before they were finally approved in 1913. [Saul: 1995]. Advocates for a new high school appealed to civic pride, high schools as a means to raise public morals, as well as to the practical benefits of a trained workforce. [HCL: Various].

The measure eventually gained broad support with people like C.W. Widnes, a Eureka baker and leader in the local Norwegian immigrant community, and George McDaniel, Socialist member of the City Council offering public statements of support. [HCHS: Various].

Newspaper editorials pointed out this should be considered an investment and that the final decision was still in the hands of the voters:

The small property owner and wage earner should carefully consider and see how absurdly and ridiculously small are the additional taxes when compared with the increased educational advantages which will be offered the children of the community It has been truly said that the middle class forms the backbone of this country and we of the middle class know that the high school is our college, because 97 per cent of the children of California do not pursue educational work... [HCHS: Various].

The school bond proposal passed on June 3, 1913, with nearly 75% of local voters approving the expenditure of \$150,000 for a new school to be constructed on eleven acres at Trinity and J Streets. By the time the building was completed in 1915, enrollment in the High School had almost doubled. [HCHS: Various].

THEME: SCHOOL ARCHITECTURE

Between 1880 and 1920, the accepted concept of the school building changed from that of a collection of similar rooms in a schoolhouse to that of a complex school plant. These changes were largely the result of three major factors a) reforms in the educational system; b) increased emphasis on the health and hygiene of children, and c) the changing role of education in American society. School architecture reflected these changing attitudes, inspired by advances in technology, to meet these requirements. Health and safety concerns became foremost, as a result of school fires in predominantly wooden schoolhouse of that time, and new designs incorporated fireproof materials such as reinforced concrete, more hallways, stairs and exits. [Donovan:

1921]. The expansion of the standard curriculum to include vocational and manual training, and an increased emphasis on health and fitness, resulted in the design of specialized facilities that are now standard in our concept of the modern public school facility. [Gyure:2001].

Where schoolhouses were once designed as larger versions of domestic buildings, the new schools were designed to reflect the educational status and values of a community. Architects became increasingly involved in the design of school facilities as school facilities became more complex and specialized "school plants," with different types of activities taking place in many different areas and an increased emphasis on efficiency. [Gyure: 2001].

The changing role of the high school in American society beginning in the 1880s was reflected in both the broadening of curriculum, and in the development of the modern school building. Social historian David Macleod describes the changing public attitude toward secondary education as moving from an "extension of childhood" to a "ladder to adulthood." As the culmination of the educational experience of the average American at that time, the high school was a central social agency that taught skills needed for later life. [Gyure: 2001]. [HS: 29 May 1913].

Schools had also become social centers, where the auditoriums, playgrounds, pools and classrooms were made available to neighborhood residents after hours. [HT: 6 May 1913]. Tax supported schools belonged to the public, so that programs were adopted in most large American cities to provide some degree of public access. The National Education Association, in 1911, advocated that:

The school buildings of our land and the grounds surrounding them should be open to the pupils and to their parents and families as recreation centers outside of school hours. [Gyure:2001].

Athletics were the most popular activity, with activities such games and sports, singing, gymnastics and dancing. The trend toward wider use of school buildings encouraged the development of larger facilities suited to increased public attendance. [Donovan: 1921]. In rural areas such as Eureka, high school facilities like the Albee Stadium were often used by the State Normal School as well as other schools in the local area because it was one of the few sites that could accommodate a sizeable crowd. [Forbes: 68]. [Trepia: 1982].

While the public recognized school facilities as social investments and sources of civic pride, most school systems never had sufficient funds to construct all new schools. During the early twentieth century, school architects generally created modest versions of classical or Gothic buildings that implied civic importance, a sense of order and dignity. [Gyure::2001].

School Gymnasiums

The development of physical education programs in the schools had an important influence on school architecture. In the nineteenth century, providing physical activity would not typically have been a consideration in the school curriculum because the country was largely agricultural.

Children were expected to perform chores that might involve hard physical labor, especially if they lived on a farm.. As the growth of cities and industrialization drew people out of the comparatively healthy rural environment, a small number of writers and social commentators began to draw attention to the lack of physical stamina among American males. [Foster: 1884].[Showalter:1985].

During the Civil War nearly fifty percent of all draftees from the professional, skilled and semi-skilled laboring classes were rejected as physically unfit. This elicited comments from educators, and appeals to nationalism:

Our public schools in American ought to be up with this step in education. Every Ward School, High School, or school of any importance, should have its gymnasium. Of all nations in the world, this, with its intense and constant stimulus to the nervous system, needs the balance of healthy exercise for the muscular . Children are growing up puny, and nervous and delicate...[Massachusetts Teacher and Journal of Home and School Education:1857].

One result of this concern was the growth of private athletic clubs and public gyms along with organizations such as the YMCA (1851) and YWCA (1866) that promoted fitness programs as part of a program of personal self improvement. German American social clubs, the Turnvereins, advocated for physical education programs that included weight and strength training in the Oakland City schools, advocating "harmonious development of body and mind" [LAT:17 Apr 1890].

Around 1890, the first gymnasium in a public high school was constructed in the city of Chicago. In the 1880s, school based physical education programs had consisted of simple exercises or "gymnastics" conducted in any available indoor or outdoor space. Rarely were special rooms provided for physical education, and often classes were held in a basement, assembly hall or outdoors. The New York Athletic Club, the first amateur sports association in the United States, was established in 1868 and built a premiere sports complex in 1874. This five story building with facilities for both men and women, including a heated swimming pool, bowling alley, and archery courts among other amenities. [Foster:1884].

While membership in the club was open to any male over sixteen, the facility was designed to also appeal to business and professional men suffering from "neurasthenia." This condition, also called "nervous exhaustion." was thought to be caused by excessive mental exertion and the luxuries, vices and excesses of modern life. [Showalter:1985]. Even for women, gymnastics were the cure:

The strain occasioned by too close mental application may be removed by the teaching of correct methods of exercise, and practical application of the same along the lines of physical education.[Ladies Home Journal:1900].

Public playgrounds also made their first appearance around this time, promoted in part to counter the effects on children crowded into unhealthy tenements and industrial centers. A segment of

the public believed that an answer to social ills, even among the lowest classes in society, was to be found in school physical education programs that promoted physical and moral values.

Let us build schoolhouse gymnasiums and insure the health of our children until we can find a better way to save both their bodies and their souls. [LAT: 23 Jun 1902].

During World War I, physical fitness once again became a war-preparation issue. By 1916, physical education programs were required in all California schools. A special credential was approved for teachers of physical education that same legislative session. [Falk: 1968].

By 1920, the modern high school incorporated an athletic complex that might include a gymnasium, swimming pool, athletic fields, locker rooms, and exercise tracks. School sporting events were also becoming a part of the social life of the family and community. In larger schools separate fields and gymnasiums would be provided for boys and girls. [Donovan: 1921]. Support for school sports activities for young women also increased during this period, both as a means to promote American values of citizenship and to combat juvenile crime. [NYT: 30 Dec 1922].

As school enrollments had increased, student health and safety became major concerns. Educators soon began to ask for more improvements in lighting, ventilation and fire safety. Proper lighting reduced vision problems in children, while sunlight would “disinfect” the classroom and reduce illnesses such as influenza. [Gyure:2001]. Planning such complex facilities required a skilled architect, one who specialized in modern school architecture. [Donovan: 1921].

SCHOOL ARCHITECTS: MASTEN AND HURD A.I.A.

The first Eureka School District contract with the firm of Masten and Hurd AIA in 1923, began a long and successful partnership. Over the approximately twenty-five year period that they worked in the local area, they also established themselves as leading school and college architects in the state of California. They are credited with the design of many buildings for the University of California, the City of San Francisco and the Veterans Administration. The firm went on to design school and university campuses that are recognized as important contributions to school architecture and to modern architecture in California.

Charles F. Masten was born in Nebraska in 1884 and grew up in Corona, California. He attended the California School of Arts and Crafts in Oakland and received a B.A. and M.S. degree from the University of California in engineering. During World War I he served in Europe in the Army Corps of Engineers. He then studied architecture in Paris for a year before returning to San Francisco in 1919 where he founded his practice.

Lester (Leslie) W. Hurd was born in Winters, California in 1894. He received his early training at the Architectural Club in San Francisco (Beaux Arts Institute of Design), the West Coast representative of the Beaux Arts Society of Paris where Masten had also studied. The Architectural Club pre-dates the University of California program in architecture. Hurd received his architectural certificate in 1922, and then joined Masten as partner in Masten and Hurd.

The firm's first commissions of note were for homes in the St. Francis Wood section of San Francisco in 1925. However, they are best known today for their large public buildings in the Moderne and International Styles, especially schools, college campuses and hospitals. Several of the structures they designed are now listed on the National Register of Historic Places or as local historical landmarks, including the Bevatron (NR), Samuel Gompers Trade School (San Francisco, City Landmark Nominee 2005), and U.C. Press Building (Berkeley, Historic Landmark 272). In later years, they collaborated with prominent modernist architect Ernest J. Kump on the award winning Foothill and DeAnza College campuses.

In his nomination for fellowship in the American Institute of Architects, granted in 1957, Masten's colleagues praise:

Charles Masten's contribution to the development of school house design in the Bay Region is significant over the last twenty years and he is numbered as one of the leading school architects in the Area [AIA: Various].

Masten and Hurd designs for the Bevatron, the School of Public Health and Hastings College of the Law for the University of California were also noted at the time of their construction.

These structures have done much to establish contemporary architecture in the Bay Area while the Bevatron, for the Atomic Energy Commission is an early example of the effect of the nuclear age upon architectural design form. [AIA: Various].

Eureka City Schools



L. 1924 Addition by Masten and Hurd, R. First EHS gymnasium (1920). Foreground-Playing field
Courtesy Humboldt County Historical Society.

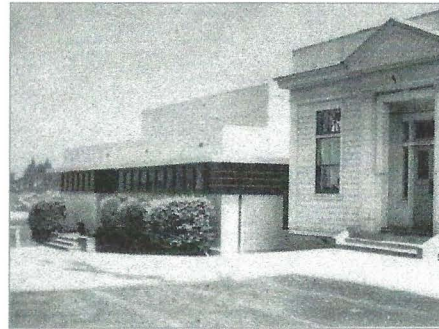
The first local commission awarded to the firm of Masten and Hurd was an addition to the Eureka High School Gymnasium. The first gymnasium was designed by local architect Franklin T. Georgeson and completed around 1920. It was an unheated wood frame building with unfinished interior walls, an open beam ceiling with exposed roof trusses, with a shaped parapet. The two story Neoclassical addition designed by Masten and Hurd, completed in 1924, provided restrooms, showers and fuel oil heating. [City of Eureka: Various]. [Sanborn:1920].

Masten and Hurd were awarded a major contract in 1938, under school Bond and Federal Emergency Administration of Public Works (PWA) funding. This commission included the design of the Shop Building and attached Museum, now called the Arts/ Industrial Arts Building, as well as the Music Building. The firm had designed Kezar Stadium and Basketball Pavilion, San Francisco, Ca. 1925, in association with E. Geoffrey Bangs, AIA., as well as Placer Junior College, Auburn, California in 1936. [AIA: Various].

Matson and Hurd had just completed the Samuel Gompers Trade School (1939), now incorporated into San Francisco City College, and the University Press Building (UC), Berkeley, Ca. (1939) in the Streamline Moderne Style. This style is sometimes called PWA Moderne or Stripped Classicism and common in the late Depression. The influence of Zig Zag Moderne, also known as Art Deco, which is the dominant feature of Gompers School, is also evident in the design of the Industrial Arts Building at Eureka High School. [Architectural Resources Group: 1987]. The horizontal bands of industrial windows, large porthole window, canopy and curved entry wall are distinctive features. [San Francisco Architectural Heritage Society:2003].



Arts/Industrial Arts Building, Museum wing on right.



Music Building on left.

For their next commissions Masten and Hurd designed Marshall Elementary School and Jefferson Elementary School, both completed in 1941. Both of these buildings feature an entrance pylon, one of the set of characteristic design features that reflect a fascination with the aerodynamic speed and romance of the locomotive, airplane and ocean liner in what is called the Streamline Moderne Style. [Architectural Resources Group: 1987].

The Gymnasium and the Field House were the final projects commissioned for the Eureka High School site. During World War II the firm was closed when both partners re-entered military service. Hurd served as a Colonel and was placed in charge of an emergency building program in the Chemical Warfare Service from 1941-1946. Masten was commissioned as a Lieutenant Colonel in the Corps of Engineers and served as an architect in the South Pacific organizing air base and hospital construction. The contract was awarded in 1946, when the partners reopened their design firm, and construction was completed in 1950. [AIA: Various].

Sub-Theme: Modern Architecture in Eureka

European Modernists did not significantly impact American residential design during the period between World War I and World War II, but their impact began to be felt in industrial and commercial architecture. Masten and Hurd had both studied architecture in Europe during this period and would have been exposed to the cubic architecture of the Dutch De Stijl movement and of the new industrial aesthetic of Walter Gropius, founder of the German architectural school known as the Bauhaus in 1919. The exodus of progressive intellectuals and artists from Europe prior to World War II brought many of these innovators to the United States and had had a lasting influence on American design. [Handline: 2004].

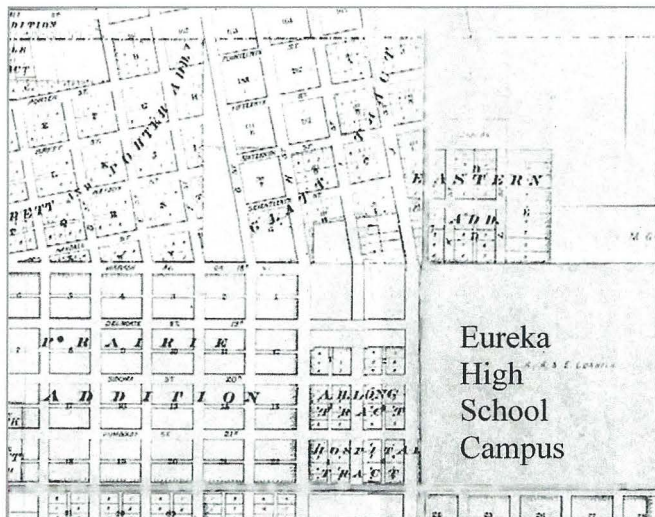
Modern Style reflected a streamlined geometry, with minimal surface ornament, and often incorporated new materials such as plywood, plasterboard, reinforced concrete, steel and chrome. This style was applied to everyday objects such as furniture and clothing as well as to architectural design. Examples of this style generally fall into two distinctive types. Zig-Zag Moderne and Streamline Moderne. Zig-Zag Moderne is popularly known as Art Deco, and derives its name from the 1925 Paris exhibition of "Arts Decoratifs et Industriels Modernes." This style was an attempt to unite arts and industrial design and is characterized by patterned wall surfaces with geometric motifs influenced by exotic cultures, rich materials and use of color. Streamline Moderne architecture was also inspired by industrial design and is characterized by smooth wall surfaces, flat roofs, the use of horizontal grooves or "speed lines" in a wall, and curved corners. Buildings might be composed of adjoining sections with roof lines at various levels. [Handline: 2004]. [Carley: 1994].

Locally, few buildings were constructed during the period between 1930 through 1945. The most significant examples of these early modern styles are primarily public buildings constructed as projects of the federal Public Works Administration (PWA) and Works Progress Administration (WPA). Local examples of the Art Deco Style are displayed in public buildings such as the Veterans Memorial Building and the Eureka Municipal Auditorium. In Eureka, examples of the Streamline Moderne Style include three other public buildings designed by Masten and Hurd. These are Jefferson Elementary School, Marshall Elementary School, and the Music Building at Eureka High School. [Architectural Resources Group: 1987].

The International Style received its name at a groundbreaking exhibition at the Museum of Modern Art in New York called "Modern Architecture: International Exhibition" in 1932. This style presented clean uncluttered lines, without "superfluous" ornament. The use of steel and concrete minimized load bearing walls and made glass curtain walls and the open light filled interiors possible. The emphasis was on function, emphasizing how the building served its users and embracing innovative technology and engineering to solve design problems. [Handline: 2004]. The Willard Gymnasium and the Field House were designed in 1946 in the International Style that was evolving after World War II which was more restrained. [Carley: 1994].

Public buildings reflect the vision and image of its community members. In their selection of Modern design for these important public spaces, Eureka's civic leaders portray an image of a city that is as modern and prosperous as any great urban center in the United States.

V. HISTORICAL DEVELOPMENT OF THE STUDY AREA



The Eureka High School campus is located on a parcel of land that had been surveyed, but not previously developed. Lentell's 1901 map indicates that the property where the new school was to be located was originally owned by R. A. and E. Connick.

Eleven acres had been offered for sale to the district for \$22,500 by Alexander Connick. Connick and his wife Elena were Eureka residents, originally from Canada, and he was described at that time as a local businessman.

The site selected for the new campus was described in glowing terms in a newspaper account of the time:

The site is in the geographical center of the city, located on a car line and located on high ground, affording excellent drainage and one of the finest scenic views in the entire county. The greater part of the land is level, affording ample room for all buildings and a large campus and athletic field. A portion of the land is a deep gulch and in this gulch are numerous springs, one of which will furnish water to exceed all requirements of the school. By clearing the side hills, the land may be used for agricultural purposes in connection with the teaching of that course. Through horticulture the grounds may be made the most beautiful of any in the state. [HCL: Various].

The property consisted of seven level acres and four acres of gulch at the head of Cooper Canyon, and drained north into Humboldt Bay. The land had been parceled into six blocks, of which four were level. In 1892, when this area was surveyed, the southern boundary of the City of Eureka was at present day Trinity Street. The campus of the Eureka High School on J St., and Marshall School between J and I Street, are on the eastern boundary of the neighborhood known as "Prairie Addition," surveyed and recorded by the County in May 1876.

The setting of the campus is within a neighborhood that developed along with the campus was being developed. The quality and diversity of the architecture in this area of Eureka readily recalls this earlier period in Eureka's heritage, notably the first half the 20th century. Streetscapes are lined with modest bungalows and architect-designed high style homes on large lots, with a small commercial district just north of the campus on J Street. [Stillman & Associates: 2004].

The original high school building on this site was dedicated on February 23, 1915, with ceremonies held on the front steps, a concert by the school orchestra in the new Assembly Hall, and tours offered by the senior class and faculty. Widespread fire and safety concerns influenced

American school architecture and most major buildings after this period would be constructed of reinforced concrete.



Despite the promise of a gymnasium and pool during the bond campaign, there were insufficient funds to cover any other buildings or structures after the main building was complete.

Three additional buildings were constructed for the High School between 1915 and 1924, and funded by local taxes. This included the gymnasium, constructed around 1920, a two story manual training building (1923) and a two story addition to the wooden gymnasium constructed in 1924.

Blueprints of the addition indicate that the Gymnasium was designed by local architect Franklin Georgeson. The addition to the gym is the first commission on the campus for the San Francisco architectural firm of Masten and Hurd. [City of Eureka: Various [Sanborn: 1920].

In 1924, the Board of Education purchased 15 acres adjacent to the High School and made plans for the construction of a new Junior High School because the old wooden building was overcrowded. Recent laws required all children under the age of sixteen to attend school, and the city had annexed several districts, so enrollment has also increased. The new school, designed in a Gothic Revival Style by John J. Donovan of Oakland, was dedicated in 1926. It contained 40 classrooms, an auditorium with a seating capacity of 1,200, and two fully equipped gymnasiums—one for boys and one for girls.

While the Depression had delayed any further growth on the campus, in 1937 a baseball diamond with wooden grandstand bleachers was constructed along the north end of Albee Stadium and facing Del Norte Street. This field was used by the semiprofessional softball team, Humboldt Crabs; Babe Ruth and American Legion youth league teams; as well as Eureka High School until the mid-1970s.

In 1939, Masten and Hurd were commissioned to design a new Music Building and an Industrial Arts Building. The Music Building is constructed of wood and concrete, while the Industrial Arts Building is of reinforced concrete. The Industrial Arts Building includes an attached museum wing to house the collection of artifacts assembled by teacher Effie Mae Clarke. Both of these structures were funded under the federal Works Progress Administration and designed in the Moderne Style. [City of Eureka: Various].

With the end of World War II, plans were made by the Board of Education for a new gymnasium and field house. Students such as Ralph Matson, Class of 1946, and his friends were actively involved in distributing flyers and getting out the vote for a school bond on the June 20, 1946

ballot.¹ An editorial in the Humboldt Standard the day before the election advocated support of urgently needed improvements, “including a long postponed swimming pool,” while paid advertisements promised no increase in taxes. [HS: 19 Jun.1946].

Plans were commissioned by the Eureka school board on October 30, 1946, with the firm of Masten and Hurd of San Francisco to design the gymnasium and swimming pool, along with a field house to be placed at the south end of Albee Stadium. Though the Field House was a modest one story building constructed of wood, it was designed in the same International Style applied to the concrete gymnasium. The new gymnasium would be placed on the site of the old gymnasium and bus garages, fronting on Trinity Street. The Board also promised that:

While the building is to be located on the high school grounds housing the high school gymnasium as well as the swimming pool, it will be open to the general public at certain hours of each day on a schedule to be worked out between the school board and the Eureka city council. [HS: 30 Oct. 1946].

Construction of the gymnasium, along with a field house was authorized in August 1948. Physical education classes were relocated to the old Manual Training Building during construction. [HT: 2. Sept. 1948]. An agricultural curriculum had been added at Eureka High school about that same time, and a new Agricultural Building for the High School was added in 1952 adjacent to the Junior High School Auto Mechanics shop. This building, located on Del Norte Street across from Albee Stadium, was designed in the International Style and may also have been designed by Masten and Hurd. Marshall Elementary School, constructed in 1941 directly across from the original High School building, was designed by Masten and Hurd in the Streamline Moderne Style. Declining enrollment forced the closure of the elementary school in the 1980s, and it was eventually incorporated into the High School campus as an arts complex.

The next wave of construction resulted from damages to the original main campus building from a major earthquake that hit Eureka on September 4, 1962. The quake, measured at 5.0 on the Richter scale, severely damaged the 47 year old Eureka High School and it was closed and condemned within weeks and demolished on January 25, 1963. High school students were moved into the adjacent Junior High School Building and Junior High students were placed on split session and bussed to Jacobs Junior High. Overcrowding was the norm for three years until new facilities could be constructed. School bonds provided funding for two new junior high schools in 1965, along with a new Auto Shop (1964), Science Building/Cafeteria (1965) and remodeling of the Junior High school to house the present Eureka High School. [McKay: 2005]. [Saul: 1995].

The new Science Building and Cafeteria complex was constructed on the site of the 1915 High School building. At some point after 1957, the building which houses the present Technology Center was constructed on the footprint of the old Manual Arts Building. [McKay: 2005]. Portable classroom units were added around 1995, to accommodate a growing enrollment of high school students. [Saul: 1995].

¹ Ralph Matsen, personal communication, November 12, 2004

The Eureka High School campus is a catalogue of modern school design. While the original high school was constructed in 1915, the major buildings and structures present on the Eureka High School campus today were constructed during a twenty five year period from 1925 to 1950. The reinforced concrete Main Building (1925) is designed in the Gothic Revival Style popular during this period; the Industrial Education Building (1939) is Art Deco Moderne, while the Marshall School complex across the street (1941) is Streamline Moderne, and the Willard Gymnasium (1950) is designed in the International Style. Smaller buildings include the Music Building (1939) which, although the entry has been altered, retains some of its Streamline Moderne characteristics in the horizontal speed lines and ribbon windows. The Field House and the Agricultural Building both appear to retain their integrity as modest examples of the International Style.

The architectural survey conducted by the Eureka Heritage Society thirty years ago found that very few buildings were constructed in Eureka during the period from 1930 to 1945. Only a few exceptional buildings from the following decade were surveyed at that time, and examples of the International Style in commercial or public architecture are rare in Eureka. [Architectural Resources Group: 1987]. The Willard Gymnasium is a very good example of that style in Eureka. It retains good integrity of design and setting that are important to maintain the character of the historic campus and to qualify it as a contributor to an historic district.

VI. EVALUATION OF SIGNIFICANCE: JAY WILLARD GYMNASIUM

As the largest and most modern campus in the County, the sports and recreational facilities at Eureka High School served as a regional sports complex for several decades. The relative isolation of the area and the slow growth of college athletics within the region contributed to a greater following for high school sports. As the largest urban area within the county, Eureka High also had a greater number of potential participants to draw from.

The first football team had been established when the school opened, and a variety of sports had been added over the following two decades. By 1920, Eureka High School had fielded four champion football teams and, in 1920, a championship girls basketball team. It had also produced local track star and future Olympian Elta Cartwright, who participated in the 1928 Olympics while a student at Humboldt State University. Male students had an athletic society, the "Block E," while female students formed a "Big E Society." [Saul: 1995].

A new gymnasium was designed by local architect Franklin Georgeson and dedicated on January 30, 1920. It had one basketball court and portable bleachers. Suspended about the court was an oval running track. The single story building contained an office for the Physical Education instructor, a dressing room, locker and showers. In 1923, the gym was enlarged with a two story addition, and girls physical education programs were assigned to the old building. [Willard: ND].

A set of tennis courts had been constructed directly behind the High School sometime before 1920, and in 1930 five new tennis courts were added. [Sanborn: 1920]. [Saul: 1995]. Under the direction of Principal George Albee, plans were made for a park and athletic field with bleachers, and a large football stadium in the natural basin created by the gulch. Prior to that time, games had been played in the area between the old gym and J Street. Albee gave instructions to preserve many of the trees and the construction was able to accommodate the nature of the site. The stadium was completed in 1924 and named for Albee. Albee had guided the development of the High School since 1898, and retired in 1939 as Superintendent of Schools. Night games began in 1930 when light towers were added to Albee Stadium. [Saul: 1995].

In contrast to the diverse sports and recreational activities offered at Eureka High School, neither the local high schools nor the local college could provide a similar program at that time. The State Normal School in Arcata, known today as Humboldt State University, was established in 1913. Normal schools were established to train teachers, many of whom were local residents, and a great majority of the student body was women. The first campus was located at Pleasant Hill School, and facilities were shared. [Trepia: 1982]. [Forbes: 1968].

Men's and women's basketball was played in the college multipurpose room or the Fireman's Hall in Arcata. The multipurpose room served as gymnasium, auditorium and cafeteria, with a limited budget for equipment. A temporary building provided one unheated shower stall for everyone. Football began at Humboldt State in the 1920s, with college teams playing the local high school teams on the high school campuses. A small gymnasium was constructed around 1920 and served as the only gym for more than a decade. Both the basketball and baseball teams played area high schools, partly in an effort to recruit more students. [Trepia: 1982]. [Forbes:

1968]. Many tournament, league and conference games were played over the years at Albee Stadium, because it had the capacity to hold a large crowd. [Saul: 1995].

The first gymnasium on the new Normal School campus was constructed in 1931, but structural problems forced limited use until repairs were made the following year. Redwood Bowl, constructed in the gulch behind Founder's Hall, was constructed in 1946. A swimming pool was finally added in 1959, along with a Field House. [Trepik: 1982].

When Eureka High School constructed the new gymnasium in 1950, it also began a community recreational swimming program that continued without interruption for forty-six years. While public bath houses had first been constructed in Humboldt County since the 1860s, these were generally seasonal outdoor pools or available only to members. Most residents swam in the local rivers, and popular "swimming holes. A public swimming pool had been included in the proposal for the original high school gym, and was again one of the major campaign points for advocates of the 1946 school bond. [HS: 19 Jun. 1946].

Olympic swimming events had received wide coverage in news media, and were then being promoted as an important part of a year round fitness program for athletes of all ages. What the community envisioned was a natatorium that would be open to both school children and to the general public. Large municipalities included them as part of their recreation and physical education programs. [LAT: 29 Apr. 1932].

The original design of the Willard Gymnasium incorporated many features that would be found in a heavily used public pool. This includes a pool control office, storage area for gear, a suit drying room, waiting area and sunbathing area. At the time that it was constructed it was the only pool open to the general public, with public hours scheduled around school use. The elementary school and Junior High swim programs began in 1950 and were eliminated in 1964. The pool was converted to temporary classrooms as a result of earthquake damage to the original Eureka High School building, which was subsequently demolished. [Saul: 1995]. [Speier: 2005].

As local Red Cross swimming instructor June Speier recalled recently, community use of the pool and gymnasium has always been intensive. Public programs were coordinated through the American Red Cross and the Eureka Parks and Recreation Department.

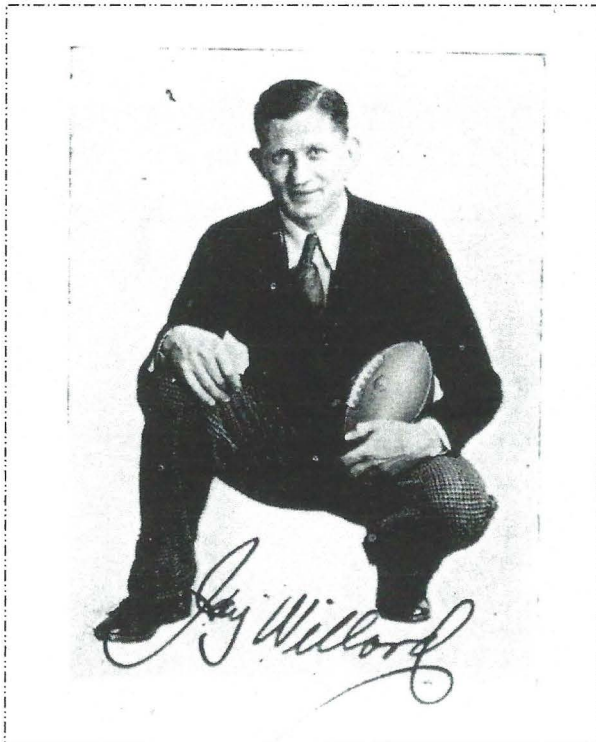
The College of the Redwoods offered classes one night per week and adult education classes two nights per week during the school year. City Recreation Department offered two night classes and one weekend day, disabled swimming was on Saturday mornings. Youth groups could book the pool on Friday evenings. Summer school and recreational swimming instruction took five weeks each. The pool was closed one month for maintenance. Speire, Red Cross swimming instructor for 62 years, recalled that the gymnasium itself was often the site of other community events such as gymnastic competitions, choir or band concerts. For many years, Christmas pageants were held in conjunction with the local elementary school. [Speier: 2005].

Over time the demand for school use of the facility and for the space previously allotted for pool management to be used other purposes, has increased. For several decades Eureka High School was the only school in the area to offer a swim team. Competitive swimming groups in the local

area were unable to use the pool at Humboldt State University or College of the Redwoods, so they also trained at Eureka High. In 1996 the Eureka High Pool closed and underwent a major renovation. The Arcata Community Pool, which had opened around 1985, became the only public pool that was still available. Although it had lost some community participants by the time it reopened in 1992, school use of the facility has increased. [Speier: 2005].

The Jay Willard Gymnasium is named for Coach Jay Willard who began his coaching career at Eureka High School in 1927. After one year as shop and physical education teacher at the new Junior High School, he was recruited for the job by George Albee when the previous coach resigned.

Willard taught all of the boys physical education classes, coached football, basketball, baseball and track, and advised the boys' athletic society. In his first few years at Eureka High School his teams collected two football titles, two basketball championships and a baseball championship. In 1955 he retired as football coach, and the entrance to Albee Stadium was renamed Jay Willard Way. He continued to coach until his retirement in 1963 and in 1969 was named to the California Coaches Association Hall of Fame. On his death in 1973, the Times Standard commented:



"Builder of strength and molder of men." That was the motto around which the retirement dinner for the late Jay Willard revolved. Now it could well serve as his epitaph. Few men in Humboldt County history have been held in such lofty esteem. He is revered as both teacher and coach. People were proud to be known as his friend. [TS: 14 Jan 1973].

The Willard Gymnasium is historically significant under Criterion C for its architecture, as a very good example of the International Style, of which very few buildings were constructed in Eureka. The Gymnasium was designed by Masten and Hurd, architects who are acknowledged as contributing significantly to the design of educational facilities in California, and to the establishment of contemporary architecture in Northern California over their 50 year practice.

Physical Characteristics: This building is constructed of reinforced concrete, and designed in the International Style. It is characterized by asymmetrical single story units surrounding a barrel roofed gymnasium in a modified L configuration, with adjoining Girls gym and natatorium wings. The exterior walls are of smooth concrete, with poured concrete slab landings and steps. This is a back sloping lot which was addressed by the architects by placing a single story foyer and Girls gym on the west elevation on a concrete slab foundation at grade. The east

elevation features a gymnasium and a natatorium with open beam ceilings over a semi-underground basement.

The primary entrances feature grouped or paired doors, set within a wall of large fixed glass panes. The front entrance is defined by a glass walled foyer, with sunshade overhanging. Flat canopy over grouped entry doors, flanked by ticket booth pillars with pipe columns, stanchions and handrails, and broad concrete slab stoop with concrete steps and built in planters on the side. Exterior doors are originally paired metal covered wooden or metal with inset panels of wire glass. The exterior door to Girl's gym on the west elevation is unique with wide paired wooden board doors.

Curtain walls, bands of fixed and movable pane windows, allow light into the classrooms, with parallel rows of skylights and ribbon windows for locker and dressing rooms. Windows are glass, either safety plate or wire mesh. Frames and casings are of unadorned metal or wood and the sash is awning type. Ribbons, grouped and paired fixed panes are divided by sections of movable windows with wood frame and metal flashing. Metal louver windows with wire mesh screen are used for the basement boiler room. Wire mesh screens cover windows in the exercise rooms and gyms. Exterior stairs are concrete with round pipe handrails and stanchions. Interior stairs are metal with metal or concrete landings. Round metal pipe ladders with metal pipe handholds provide access to the roof.

The Main gym is rectangular with a bleacher mezzanine on each side. Stairs on west and east elevation for access with metal handrails. The Main gym features wood spring floors; exposed metal roof trusses, retractable basketball goals and skylights. A broadcast booth is located on the south mezzanine of the Main gym. Plate glass windows open view to the adjacent Natatorium, with metal fire door over windows. The Girls' gym has a wooden floor, exposed metal roof truss, with wire mesh screen over windows.

The Natatorium is adjacent to the Main gym and contains a bleacher mezzanine on the north elevation with stair access on either end and a window wall on the south elevation. The pool was rebuilt in 1996. Open metal staircases at each end of the lobby leading to the Main gym mezzanine are anchored by massive concrete footings. The lobby is bathed in light, as floor to ceiling windows illuminate the stairway and landings leading to the mezzanines in the Main gym.

Ramps with pipe hand rails slope toward the hallways leading to the classrooms and office spaces on either side of the Main gym. Interior hallways are unadorned with solid doors and no windows. Single interior wooden doors, are either single glass pane, solid or Dutch style with some non-original solid doors. Roll-up metal fire doors. Interior wall surfaces are of smooth plaster, with some exposed rafters and board ceilings painted to match. Tongue and groove flooring is installed in offices and classrooms, concrete and tile in the restrooms, showers and dressing rooms. Vinyl flooring in foyer and hallways is more recent but there is no specific date for this work. Built in features include, storage shelves, few; mesh tote lockers, intact; ticket booths, intact; fixed bench seating in bleachers, intact; trophy case, intact; dumbwaiter, intact; slate/blackboards, few; phone booths; one intact.

The Willard Gymnasium is located on the southern perimeter of the Cooper Canyon Gulch, a remnant of the canyons and sloughs that are characteristic of Eureka. Walkways directly behind the building lead to the upper level soccer field and through a grove of redwood trees to the Albee Stadium facilities in Cooper Canyon, which was constructed in the natural basin formed by the gulch. The building is set back from the street toward the middle of the property and anchors the complex of recreation and sports facilities located on the southeast section of the campus, including the tennis courts and soccer field.

Eligibility: The Willard Gymnasium is historically significant under Criterion C for its architecture, as a very good example of the International Style, of which very few buildings were constructed in Eureka. The Gymnasium was designed by Masten and Hurd, architects who are acknowledged as contributing significantly to the design of educational facilities in California, and to the establishment of contemporary architecture in Northern California over their 50 year practice.

The Willard Gymnasium may also be listed as a contributor to a potential historic district identified at the Eureka High School campus to be listed on the National Register and the California Register of Historical Resources under Criterion C, for architecturally significant resources designed and constructed between 1925 and 1950. Three buildings on the campus were identified as eligible for the National Register during the comprehensive survey of local historical resources conducted around 1974. The Willard Gymnasium was not included in the survey at that time because it was not within the 45 year threshold used by the survey to evaluate potential significance.

The Eureka High School campus is a catalogue of modern school design. While the original high school was constructed in 1915, the major buildings and structures present on the Eureka High School campus today were constructed during a twenty five year period from 1925 to 1950. The reinforced concrete Main Building (1925) is designed in the Gothic Revival style popular during this period; the Industrial Education building (1939) is Art Deco Moderne, while the Marshall School complex across the street (1941) is Streamline Moderne, and the Willard Gymnasium (1950) is designed in the International Style. Smaller buildings include the Music Building (1939) which, although the entry has been altered, retains some of its Streamline Moderne characteristics in the horizontal speed lines and ribbon windows. The Field House and the Agricultural building both appear to retain their integrity as modest examples of the International style.

The architectural survey conducted by the Eureka Heritage Society thirty years ago found that very few buildings were constructed in Eureka during the period from 1930 to 1945. Only a few exceptional buildings from the following decade were surveyed at that time, and examples of the International Style in commercial or public architecture are rare in Eureka. [Architectural Resources Group: 1987] The Willard Gymnasium is a very good example of that style in Eureka. It retains good integrity of design and setting that are important to maintain the character of the historic campus and to qualify it as a contributor to an historic district.

The building is also determined to be eligible under Criterion A. As an integral part of the Eureka High School campus, the gymnasium has contributed to the social development of the

community, the creation of community identity and served as a community resource. It has been the only public high school in the city for over 100 year, and its sports programs have served to unite a diverse community of local residents over this entire period. Eureka High School has also provided a regional sports complex that supported the development of sports and recreation in Humboldt County, and served as important component of the City recreation program.

The Willard Gymnasium preserves the integrity of setting in its physical relation to the adjacent sports facilities, including the Albee Stadium (1924). These were constructed within one of the original sloughs, a characteristic feature of the cultural landscape of the City of Eureka. The Eureka High School campus was established at the same time that the surrounding Prairie Addition historic neighborhood was being developed and its growth and development reflect the pattern of development of the surrounding city. The Willard Gymnasium has functioned in its original capacity as an educational facility and community recreational resource since it was opened in 1950.

The building is not eligible for listing under Criterion B. While the gymnasium is named for a noted coach at Eureka High School, Jay Willard, his period of greatest achievement was before 1955 and he retired in 1963. It is not eligible for listing under Criterion D because, prior to the development of this specific site, the area was forested and since that time a structure has always been located here. Any archaeological resources that may have still been present after the first period of development, from 1920-1924, would have been destroyed during the much larger construction project that was undertaken from 1949-1950.

VII. IMPACTS ON HISTORIC RESOURCES

The California Environmental Quality Act (CEQA) is intended to evaluate and mitigate the effects a proposed project will have on the environment. In addition to natural resources, CEQA considers impacts on historic and cultural resources. In order to determine if a project will have significant impacts on historic resources, CEQA applies a two-part test; the resource must be “historically significant” and the project would cause “substantial adverse change” to the resource such as “demolition, destruction, relocation, or alteration that impair the significance of the historic resource.” [(Bass et al: 1999)]

For the purposes of this project, a significant impact would result if the project were to have an effect on any property listed, or potentially eligible for listing, on the California Register of Historical Resources, as a California Historical Landmark, or at the local level, City Register of Historical Resources. Such an impact could result through the demolition of or substantial adverse change to, a property individually listed or individually eligible; or to a property that has been documented as a contributor to a listed or eligible historic district; or through other adverse effects such that the integrity of the district or eligibility of the resources is diminished.

Integrity is the ability of a historic resource to convey the reasons for its significance (California Office of Historic Preservation 2001f). The Department of the Interior, National Park Service (NPS) is the umbrella agency for federal and state cultural resource management in the United States. NPS standards and guidelines are universally accepted as the appropriate tools for evaluating resource significance and for treatment of historic properties.

NPS has defined seven qualities of integrity that should be considered when evaluating impacts to cultural resources [National Park Service 1990]. The seven qualities are:

- Location – part of the significance of a historic property is tied up in the location where it was built, this is usually destroyed by moving buildings
- Design – the combination of elements that creates the form, plan, space, structure, and style of a building
- Setting – the physical environment or context of a historic property, the “character” of the place, not just where a property is situated
- Materials – the physical elements that were used to create the historic building, the choice and combination of materials reveals the preferences of the creators
- Workmanship- the physical evidence of the artisan’s labor to build the structure, workmanship speaks to the technology used to create the building
- Feeling – a property’s expression of the aesthetic or historic sense of a particular period of time, feeling results from presence of physical features that, taken together, convey the property’s historic character
- Association – association is the direct link between an important historic event or person and a historic property

Depending upon its placement, nature and design, new construction may cause significant impacts by changing the setting, feeling, and association of the historic area.

MITIGATION GUIDELINES

The Secretary of the Interior's Standards for Historic Preservation are a set of nationally recognized standards for treating historic properties. CEQA section 15064.5(b) (3) states that:

Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings [1995], Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.

The Standards for Rehabilitation, which are the most widely used, recognize the need for changing uses within historic areas and outline ways that new community needs can be accommodated without damaging the historic qualities of the area. The Secretary of the Interior's Standards for Rehabilitation are an appropriate treatment method for preserving historic resources. They provide adequate mitigation under state law and have been used to formulate all mitigation measures described in this section.

The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995

STANDARDS FOR REHABILITATION

[From: <http://www2.cr.nps.gov/tps/secstan1.htm>]

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

MITIGATION MEASURES

Impact 1: Demolition of Historic Resources

Discussion: Under the proposed project, the Willard Gymnasium would be demolished. Most historic resources are significant because of their ability to relate to a specific historic context. Demolishing resources that display these significant elements destroys their ability to relate to historic contexts.

The Secretary of the Interior's Standards for Rehabilitation require that a historic property be maintained in its historic use, or it may be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships [National Park Service 1995]. Some alterations may have achieved sufficient age to be considered as historically significant, while others may have restored or repaired previous damage. The Gymnasium retains a good degree of integrity although sections of the interior have been altered. The building could be adapted to a new use that would preserve the historic integrity of the structure. Uses that would preserve the historic nature of this building, include a community center, recreation or cultural center, or senior center

Where this is not economically or structurally feasible, the Secretary of the Interior's Standards do not preclude other compatible uses that "requires minimal change to its distinctive materials, features, spaces, and spatial relationships." It may be possible to restore elements of the historic exterior façade and retain significant features of the interior. Windows that have been covered may be restored and many of the present alternations to interior office or classroom spaces are reversible.

The building may also be relocated to another location site that would allow it to retain integrity of setting and location. Resources which are relocated must be placed at a new site that provides continuity with their historic context. If the building cannot be moved, then some alterations or even partial demolition may be necessary in order to preserve the building for alternative uses. Documentation and salvage of historic fabric should also be included as part of any rehabilitation project.

The potential impact of the loss of this historic resource would be difficult to estimate. The demolition of this building would also impact the integrity of a potentially significant historic district at Eureka High School. Any efforts to obtain additional documentation would be invaluable for future scholars and important in interpreting the history of the development of the City of Eureka and the social history of the region.

Determination: Significant and unavoidable impact.

Mitigation Measure 1.1: Restoration and Rehabilitation Alternative

Demolition of historical resources cannot be mitigated. Appropriate alternatives to demolition include restoration, rehabilitation, and/or relocation of historic resources. Resources which are restored or rehabilitated should be treated in accordance with Use the Secretary of the Interior's Standards for Rehabilitation. The Standards should be used to guide all work to existing buildings that have been defined as contributing resources within a historically significant district.

1.1. a: Employ a qualified Historic Architect (must meet Secretary of the Interiors Standards for Archaeology and Historic Preservation Professional Qualification Standards, see http://www.cr.nps.gov/local-law/arch_stnds_9.htm) to oversee rehabilitation work consistent with the Secretary of the Interior's Standards.

Mitigation Measure 1.2: Adaptive Reuse Alternative

Conversion of any building or structure to other uses should comply with the Secretary of the Interior's Standards for Rehabilitation. The rehabilitation should be monitored by either a qualified consultant or staff of the California Office of Historic Preservation.

1.2. a: Any repairs and proposed upgrades to the buildings that involve removal and/or replacement of original materials and features may adversely impact their integrity. Inappropriate additions to historic buildings also may have adverse impacts on integrity. Repairs that preserve original features and materials, preventing their deterioration, may have positive impacts on integrity. Removal of non-historic additions and materials may also have positive impacts, as may the replacement of missing historic features if the replacements are based on solid documentary evidence.

1.2. b: Employ a qualified Historic Architect (must meet Secretary of the Interiors Standards for Archaeology and Historic Preservation Professional Qualification Standards, see http://www.cr.nps.gov/local-law/arch_stnds_9.htm) to oversee rehabilitation work

Mitigation Measure 1.3 Relocation Alternative: Relocation of buildings has the potential to impact their historic context. Location, setting and possibly feeling and association can be impacted by moving a historic resource from its original location. It is always preferable to maintain a historic resource at its original site. However, in cases where there are no other alternatives, it may be a less than significant impact to move a historic building to a new site, as long as the new location is appropriate.

1.3a: The relocation of an historic building, structure or object must be reviewed and approved by a qualified Historic Architect (must meet Secretary of the Interiors Standards for Archaeology and Historic Preservation Professional Qualification Standards, see http://www.cr.nps.gov/local-law/arch_stnds_9.htm).

Mitigation Measure 1.4 Documentation:

The Eureka High School campus has served as the only public high school in Eureka for over 100 years and the sports program has provided a sense of continuity and community identity for generations of Eureka residents. Additionally, with the largest and most modern sports facilities in the area for many years, the Gymnasium served the community as a regional sports and recreation complex and supported the development of other sports and recreational activities. Our research identified potential sources for additional documentation within the community and this investigation could pursue areas of local history that have not been previously documented. The loss of a building means that the physical record is gone so documentation or written history becomes more important. Documentation alone does not reduce impacts to less than significant level and should be undertaken in conjunction with recordation of physical resources, historic interpretation and the preservation and maintenance of any remaining historical resources

1.4. a. Develop an oral history project to document the history of the Gymnasium and sports programs at Eureka High School. Past participants and organizers of activities may reside locally and may still be of an age where oral history documentation could be obtained. A community-oriented oral history project could be invaluable for heritage tourism planning and economic development, as well for as historians and local residents.

Oral history projects will follow current guidelines and practices for collecting folklife and oral history accepted by the Oral History Association, (see <http://www.dickinson.edu/oha>). These may include the *Smithsonian Folklife and Oral History Interviewing Guide*, published by the Smithsonian, Center for Folklife and Cultural Heritage, (see <http://www.folklife.si.edu>), or programs developed by the Library of Congress.

1.4. b. Archives and libraries have begun to expand their scope of collections to include materials associated with ethnic and minority history within the last decade, so that historians increasingly rely upon personal collections held by individuals, or by social and cultural institutions within the community. An archival retrieval program, based on models such as the State Library sponsored program, "Shades of California" could collect new materials that may be deposited in the Humboldt County Library or Humboldt County Historical Society. Such materials would be valuable resources for historians, for local students and families, and as well as a comprehensive reference and guide for the rehabilitation and interpretation of this historic property and to the interpretation of its impact on the region.

1.4. b Prior to any demolition, documentation of the building will be completed in conformance with the Secretary of the Interior's Standards for Architectural and

Engineering Documentation, Historic American Building Survey (HABS). The documentation will consist of selected large format, black-and-white views of the existing building, to the Historical American Building Survey Standards. At a minimum the views shall include: building views, exterior facades, interiors, auxiliary structures, related equipment, setting and selected details.

Photo Documentation: Four (4) copies of the documentation (three copies of the photographs with one set of the negatives) shall be submitted to the City of Eureka Community Development Department for distribution to the Humboldt County Library; Humboldt Room, Humboldt State University Library; and to the Humboldt County Historical Society. One (1) photocopy of the documentation shall also be submitted to the Community Development Department. Digital photos may be provided as a supplement to the photo-documentation described above but not in place of it. Digital photography shall be recorded at a minimum of 500 dpi or 5 mega pixels and recorded on a high quality CD and shall be submitted with the above documentation.

Professional Qualifications: The documentation is to be conducted by a qualified consultant meeting the professional qualification standards of the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

Mitigation Measure 1.5 Historic Property Designation: The Gymnasium was not included in the Historic Resources Inventory conducted by the Eureka Heritage Society. However, it is architecturally significant as one of the few remaining public or commercial buildings in Eureka designed in the International Style. The Gymnasium retains integrity by maintaining the essential physical features to convey its history and has functioned in its original capacity for fifty-five years. Another aspect of significance is the association of this building with the campus and other historical resources on the property, to which this building could be a contributor. The Gymnasium should be documented as a contributor to a potential architectural district for the National Register of Historic Places, and the Local Register of Historical Resources.

Mitigation Measure 1.6 Salvage: The project applicant shall arrange a tour of the building with the Eureka Heritage Society and representatives of the Eureka Historic Preservation Commission to identify elements of the building that warrant salvage for public information or for reuse in other locations. It will be the applicant's responsibility to facilitate removal and transfer of the identified building elements to the above entities. Any building elements not identified for salvage through this effort shall be made available to salvage companies facilitating the reuse of historic building materials.

Impact 2: New Construction

Discussion: New construction should not overwhelm the potentially significant historic resources on the High School campus. Phase I of the proposed project would involve the demolition of the Gymnasium and Pool and Phase II would involve the demolition of several adjacent buildings and construction of a new gymnasium. The design for the new construction, as proposed, would impact the setting and location of the Gymnasium and related structures that

are a component of the sports complex and would have an adverse effect on the integrity of the remaining historic resources on this site.

Another alternative would be to allow a compatible addition on the south or east elevations, that would not compromise the integrity of the overall design. The major character defining features of the building are apparent on the west façade, particularly the entry foyer. Because of the asymmetrical massing of the original design, the building could potentially accommodate a single story wing along the south elevation or a multi-story addition on the east elevation behind the main gymnasium. The exterior of the building appears to have had relatively few alterations except on the south elevation. This area is partially obscured by the tennis courts and is not clearly visible from the street. This wing of the building has had major interior alterations. Interior spaces that have already been greatly remodeled, such as the girl's dressing room, lockers and pool supply room, could be entirely renovated for other potential uses. Except for the grouped windows on the exercise room and the ribbon of windows, for the basement the east elevation is plain and does not provide a primary approach to the building.

Determination: Significant and unavoidable impact.

Mitigation Measure 2.1 Both the placement and the design of the new construction must be carefully considered to avoid impacts to historic resources. New construction should be appropriate in scale and not overwhelm historic resources, and should be placed in such a way that historic views, settings and corridors are preserved. This includes character defining elements of the historic resource such as the glass curtain walls, flat roof entry, barrel roofed gym, and asymmetrical massing which are most apparent on the west elevation. The new construction may incorporate design elements of the original building but should not create a false sense of history through exact reproduction.

Mitigation Measure 2.2 An historical resources survey of the campus should be conducted before initiating Phase II of the Eureka High School Master Plan. The historic property survey forms for the buildings and structures on the Eureka High School campus have not been updated since the original survey was conducted thirty years ago. They include only two buildings on the original campus. Two of the three school buildings on J Street that are included in the survey were designed by the same architects who designed the Gymnasium. These surveys may not include information that has become available through later research. They do not record any alterations or historic property rehabilitation and or restoration that may have been conducted subsequently.

New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment. Certain architectural styles, such as Moderne Design or the International Style may have only been studied in depth within the last decade. At the time of the survey reviewers may not have felt that this building was of sufficient age to be considered significant, so it was never included. Several other schools in Eureka that were designed by Masten and Hurd are included in the survey, so this property could be considered against other local examples of their work.

Existing survey forms for buildings on this site should be updated to current preservation standards. Only two campus buildings were recorded during the survey conducted by the Eureka Heritage Society in the 1970s, and an adjacent school building that was also recorded at that time has now been incorporated into the campus. These forms need to be updated, as these surveys may not include information that has become available through later research and they do not record any alterations, rehabilitation and or restoration that may have been conducted subsequently. In addition, all buildings and structures not surveyed previously should be recorded on California State DPR 523 L Continuation Forms or National Register Continuation Forms. Since few buildings on the campus were included in that survey, the revised forms should consider other potentially significant resources and whether together they may constitute an architecturally significant historic district. Current federal and state standards also require the documentation and evaluation of the related cultural landscape for its potential historical significance. The updated documentation will serve as a reliable guide for preservation planning, maintenance and interpretation of the historic structures on this site.

BIBLIOGRAPHY

Architectural Resources Group

- 1987 *Eureka: An Architectural View*. Eureka Heritage Society, Eureka, California.

Carley, Rachey,

- 1994 *The Visual Dictionary of American Domestic Architecture*, Henry Holt and company, Inc. , 115 West 18th Street, New York, New York 10011, © 1994 Roundtable Press

City of Eureka

- 1997 City of Eureka General Plan: Background Report, on file at the Community Development Department, City of Eureka, Eureka, CA.
- 2004 Historic Preservation Plan, on file at the Community Development Department, City of Eureka, Eureka, CA.

City of Eureka Historic Preservation Commission

- 1997 Local Register of Historic Places City of Eureka, on file at Community Development Department, Eureka, CA.

Donovan, John J. B.S. A.I.A. et al

- 1921 *School Architecture, Principles and Practices*, The Macmillan Company, New York, New York

Falk, Charles J.

- 1968 *The Development of Education in California*, Harcourt Brace & World, Inc. New York, New York.

Forbes, Joseph M.

- 1968 "History of Athletics Humboldt State College 1914-1968, The Lumberjack Story," Arcata, Ca. Manuscript on file, Humboldt Room, Humboldt State University

Foster, S. Conant

- 1884 "The New York Athletic Club," Outing and the Wheelman : Sept.

Gyure, Dale Allen,

- 2001 "The Transformation of the Schoolhouse: American Secondary School Architecture and Educational Reform, 1880-1920," University of Virginia, Ph.D. Dissertation, History, © 2001 Dale Allen Gyure

Handline, David P.

- 2004 *American Architecture*, Second Edition, Series: Thames & Hudson World of Art, Thames & Hudson Ltd, London, England

Ladies Home Journal,

1900 *Article 3-No Title*, No Author; May 1900; Vol. VII, No. 6

Lentell

1901 Map of Eureka

Massachusetts Teacher and Journal of Home and School Education]

1857 "Physical Education," Resident Editors Department, Journal, March

McAlester, Virginia and Lee

1996 *A Field Guide to American Houses*. Alfred A. Knopf, New York.

Saul, Barbara Canepa

1995 "'How True to you we are, Eureka High!'" The First One Hundred Years 1895-1995,'
Humboldt Historian, Humboldt County Historical Society, Fall

Sanborn Fire Insurance Company-Maps

1900 Eureka

1920 Eureka

1920 Eureka, 1920, Revised 1949

1920 Eureka 1920, Revised 1957

San Francisco Architectural Heritage Society

2003 "New Plans for City College Mission Campus," Heritage News: Sept. /Oct Vol.
XXXI No. 5

Showalter, Elaine

1985 *The Female Malady: Women, Madness, and English Culture, 1830-1980*, New York:
Pantheon Books

Stillman & Associates

2004 Historical Resources Analysis: E Street Neighborhood, Prairie Addition Tract,
Eureka, Ca, © 2004 Stillman & Associates, Arcata, Ca.

Trepiak, Tom

1982 "History of Athletics, Humboldt State University 1924-1982," Sports Information
Director, Humboldt State University, Arcata, Ca.

Willard, Harriet.

N.D. *Coach Jay Willard, His Story*, manuscript on file at Humboldt County Historical
Society

Newspapers:

Humboldt Standard (HS)

Humboldt Times (HT)

Los Angeles Times (LAT)

New York Times (NYT)

Year Books

Eureka High School,

- 1936 *Sequoia*
- 1921 *Sequoia*
- 1935 *Sequoia*
- 1960 *Sequoia*
- 1961 *Sequoia*
- 1963 *Sequoia*

Eureka Junior High School

- 1938 *Burl*
- 1939 *Burl*

Unpublished Sources

American Institute of Architects, Library and Archives (AIA)

- Various Membership Files

Eureka Heritage Society (EHS)

- Various Survey records, on file at Humboldt County Library, Eureka, CA.

Humboldt County Library (HCL)

- Various Subject Files

City of Eureka

- Various Eureka High School, Plans & Blueprints, on file in the Planning Department

SUPPLEMENTAL BIBLIOGRAPHY

Bass, Ronald E., Albert I. Herson, and Kenneth M. Bogdan

- 1999 *CEQA Deskbook: A Step-by-Step Guide on How to Comply with the California Environmental Quality Act*. Solano Press, Point Arena, CA.

California Office of Historic Preservation

- 2001 *California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register)*, Technical Assistance Series #6, Department of Parks and Recreation, Office of Historic Preservation, Sacramento, CA.

U.S. Department of the Interior, National Park Service, National Register of Historic Places

- 1992 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, U.S. Department of the Interior, National Park Service, National Register of Historic Places, Published.

1979 National Register Bulletin 22: *Guidelines for Evaluating and Nominating*
(Rev. *Properties that Have Achieved Significance Within the Past Fifty Years*,
1990) Marcella Sherfy, W. Ray Luce

INTERVIEWS

Michael McKay, Planner, Eureka City Schools, Correspondence, March 1-3, 2005

June Speier, Personal Archives & Interview, February 19, 2005

Ralph Matson, Telephone conversation, February 20, 2005

APPENDICES

- **DPR 523 A, B and L : Willard Gymnasium**
- **DPR 523 A and D: Eureka High School Historic District**

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI# _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 11 *Resource Name or #: Willard Gymnasium

P1. Other Identifier: Eureka High School

* P2. Location: ☐ Not for Publication ☒ Unrestricted

* a. County: Humboldt

* b. USGS 7.5' Quad: Eureka, Ca. Date: 1958 T 5N; R 1 W; Section 23, West 1/4 of NE 1/4 of SW 1/4 B.M.

c. Address: 1915 J. Street City: Eureka, CA Zip: 95501

d. UTM: (Give more than one for large and/or linear resources) Zone , / mN

e. Other Locational Data: APN 011-131-005

* P3a. Description:

This building is located on the campus of Eureka High School, with other school buildings constructed from 1925 to 1975. Constructed of reinforced concrete, and designed in the International Style. Characterized by asymmetrical single story units surrounding a barrel roofed gymnasium in a modified L configuration, adjoining Girls gym and natatorium wings. Exterior walls of smooth concrete, poured concrete slab landings and steps. West elevation single story on concrete slab foundation at grade. East elevation- open beamed gymnasium and natatorium over semi-underground basement. Primary entrances feature grouped or paired doors, flush within a wall of large fixed glass panes. The front entrance is defined by a glass walled foyer, sunshade overhanging; flat canopy over grouped entry doors, ticket booth pillars; pipe columns, stanchions and handrails, broad concrete slab stoop with concrete steps. Exterior doors are originally paired metal covered wooden or metal with inset panels of wire glass. Exterior door to Girl's gym is unique with wide paired wooden board doors. Curtain walls, bands of fixed and movable pane windows, in classrooms, parallel rows of skylights over locker and dressing room with aluminum frames, some skylights covered. Windows-glass, safety or wire mesh; frames and casings, unadorned metal or wood; sash is awning type; ribbons, grouped and paired fixed panes divided by sections of movable windows; wood frame, metal flashing; metal lower with wire mesh screen for boiler room; wire mesh screens in the exercise rooms and gyms. Exterior stairs concrete with round pipe handrails and stanchions. Interior stairs metal with metal or concrete landings. Round metal pipe ladders with handholds access roof.

Main gym and courts rectangular with a bleacher mezzanine on each side, metal handrails; wood spring floors; exposed metal trusses, retractable basketball goal; skylights. Broadcast booth on south mezzanine of Main gym, plate glass window opens to adjacent Natatorium, metal fire door over windows. Girls' gym has wooden floor, exposed metal roof truss, wire mesh screen over windows. Natatorium adjacent to the Main gym, bleacher mezzanine on north elevation, window wall on south elevation. Pool rebuilt in 1996. Open metal staircases at each end of lobby are anchored by massive concrete footings. Space is bathed in light, floor to ceiling windows illuminate the stairway and landings leading to mezzanines in the gymnasium. Ramps with pipe hand rails slope toward the hallways leading to the classrooms and office spaces. Interior hallways are unadorned with solid doors and no windows Single interior wooden doors, single glass pane, solid and Dutch style; some non-original solid doors. Roll-up metal fire doors. Interior surfaces of smooth plaster, some exposed rafters and board ceilings painted to match. Tongue and groove flooring in offices and classrooms, concrete and tile in restrooms, showers and dressing rooms, more recent vinyl in foyer and hallways. Built in features include, storage shelves, few; mesh tote lockers, intact; ticket booths, intact; fixed bench seating in bleachers, intact; trophy case, intact; dumbwaiter, intact; slate/blackboards, few; phone booths; one intact.

Located on the southern perimeter of the Cooper Canyon Gulch, a remnant of the canyons and sloughs that are characteristic of Eureka. Walkways directly behind the building lead to the upper level soccer field and through a grove of redwood trees to the Albee Stadium facilities in Cooper Canyon, constructed in the natural basin formed by the gulch. The building is set back from the street toward the middle of the property and anchors the complex of recreation and sports facilities located on the southeast section of the campus including the tennis courts and soccer field.

* P3b. Resource Attributes: HP 15 Educational Building

* P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)

* P5a. Photos



February 2005 Front Elevation -Main Entrance

P5b. Description of Photo(s): Front Elevation-2/25/2005. S. Guerra.



Front Elevation-Girls Gym and Pool Wing

Constructed/Age and Source: ☒ Historic ☐ Prehistoric ☐ Both Construction Plans, City of Eureka, Planning Department, Eureka, Ca.

* P7. Owner and Address: Eureka City Schools, 3200 Walford Avenue, Eureka, Ca. 95503

* P8. Recorded by: Stillman & Associates, Box 1184, Arcata, Ca. 95518; Suzanne Guerra, Box 367 Bayside, Ca. 95524.

* P9. Date Recorded: 2/25/2005 * P10. Survey Type: CEQA Assessment

* P11. Report Citation: CEQA Analysis of Historical resources and Potential impacts of Development Project, Stillman & Assoc. 2005

*Attachments: ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record

☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record

☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

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DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary #
HRI #

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*NRHP Status Code: 3

*Resource Name or #: (Assigned by Recorder) Willard Gymnasium

B1. Historic Name: *Eureka High School Gymnasium*

B2. Common Name: *Willard Gymnasium*

B3. Original Use: *Gymnasium*

B4. Present Use: *Gymnasium*

*B5. Architectural Style: *Moderne, International Style*

*B6. Construction History: (construction date, alterations, and date of alterations) *Construction Date: 1950, Plans, City of Eureka, Planning Dept.*

This building is designed with a compound floor plan, adjoining asymmetrical single story units surrounding the barrel roofed gymnasium, Girls gymnasium and natatorium wings on south elevation. There have been no additions to the building from the time that it was constructed. The building was constructed on the site of the first gymnasium (1920, and old tennis courts, which were demolished in order to construct this building.

The exterior of the building exhibits a very good degree of integrity, with minor alterations that do not change the overall character. The most frequent alterations are to doors and windows, including; replacement of glass panel metal-clad wooden doors with solid or single pane metal doors; replacing glass panes with plywood; removing the floor level pool windows and replacing it with a solid wall, installing a wire mesh screen over the remaining windows. Metal exterior stairs from the pool bleachers were replaced with concrete steps. The original asphalt and gravel roof was replaced around 1980 with Built-up Roof (BUR) of hot tar, plywood sheets, and cap sheet. The fence and gates and planter boxes on the north and west elevations were removed at an undetermined time in the past.

The interior retains a good degree of integrity with alterations primarily in one section of the building. Major alternations have occurred to the interior of the Girls gym and pool wing, primarily in conjunction with the recent repair and upgrade of the pool around 1996. The Girls dressing room, showers and restroom were redesigned to incorporate the rooms originally designed to serve as pool storage area, and a new shower area was added to serve the pool. The sunbathing area was eliminated and a new slab landing was added for disabled access to the pool area. Pool rebuilt in 1996. The heating and ventilation system was upgraded in 1982, although the original boilers and pipes are still in place. Most alterations to the interior appear to be highly reversible as features were covered over rather than being replaced or removed. This would include disabling the dumbwaiter, removing interior doors and shelves, or covering window, as the occupants assigned other uses to the space. Floors in the utility areas were originally concrete and vinyl tile flooring was installed prior to 1977.

*B7. Moved: *NA*

*B8. Related Features:

*B9a. Architect: *Masten and Hurd AIA, San Francisco, Ca.*

b. Builder: *Maurer and Sons, Eureka, Ca.*

*B10. Significance: *Regional Theme: Architectural Heritage; Recreation Area: City of Eureka*

Period of Significance: Postwar 1945-Present [1925-1950-District] Property Type: Gymnasium

Applicable Criteria: Criterion C; Criterion A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This building is determined to be significant under Criterion C as a very good example of modern architecture in the International Style, of which few remain from this period within the city of Eureka. The building retains its architectural integrity and minor alterations do not change the overall character. It contributes to the integrity of the Eureka High School campus which constitutes a very good collection of examples of modern school architecture in California from 1925-1950. The building is also determined to be eligible under Criterion A. As an integral part of the campus, the gymnasium has contributed to the social development of the community, the creation of community identity and served as a community resource. It has been the only public high school in the city for over 100 year, and sports have served to unite a diverse community of local residents over this period. Eureka High School has also provided a regional sports complex that supported the development of sports and recreation in Humboldt County, and was an important component of the City recreation program. It preserves the integrity of setting in its physical relation to the adjacent sports facilities constructed within one of the original sloughs, which are a characteristic feature of the cultural landscape of the City of Eureka. The campus was first established at the same time that the surrounding Prairie Addition historic neighborhood was being developed and its growth and development reflect the pattern of development of the surrounding city. The building has functioned in its original capacity as an educational facility and community recreational resource since 1950. The building is not eligible for listing under Criterion B. While the gymnasium is named for a noted coach at Eureka High School, Jay Willard, his period of greatest achievement was before 1955 and he retired in 1963. It is not eligible for listing under Criterion D because prior to the development of this specific site the area was forested and since that time a structure has always been located here. This building is determined to be eligible as a Contributor to a proposed Eureka High School Historic District that may be listed on the National Register and the California Register of Historical Resources

B11. Additional Resource Attributes: (List attributes and codes) *(HP 15) Gymnasium*

*B12. References: *Architectural Resources Group, Eureka: An Architectural View. Eureka Heritage Society, Eureka, California. 1987; City of Eureka 1997; City of Eureka General Plan: Background Report, on file at the Community Development Department, City of Eureka, Eureka, CA; City of Eureka 2003, Historic Preservation Plan, City of Eureka, Eureka, CA. 2004.*

B13. Remarks:

*B14. Evaluator: *Stillman & Associates, Box 1184, Arcata, Ca. 95518; Suzanne Guerra, Box 367 Bayside, Ca. 95524.*

*Date of Evaluation: *February 25, 2005*

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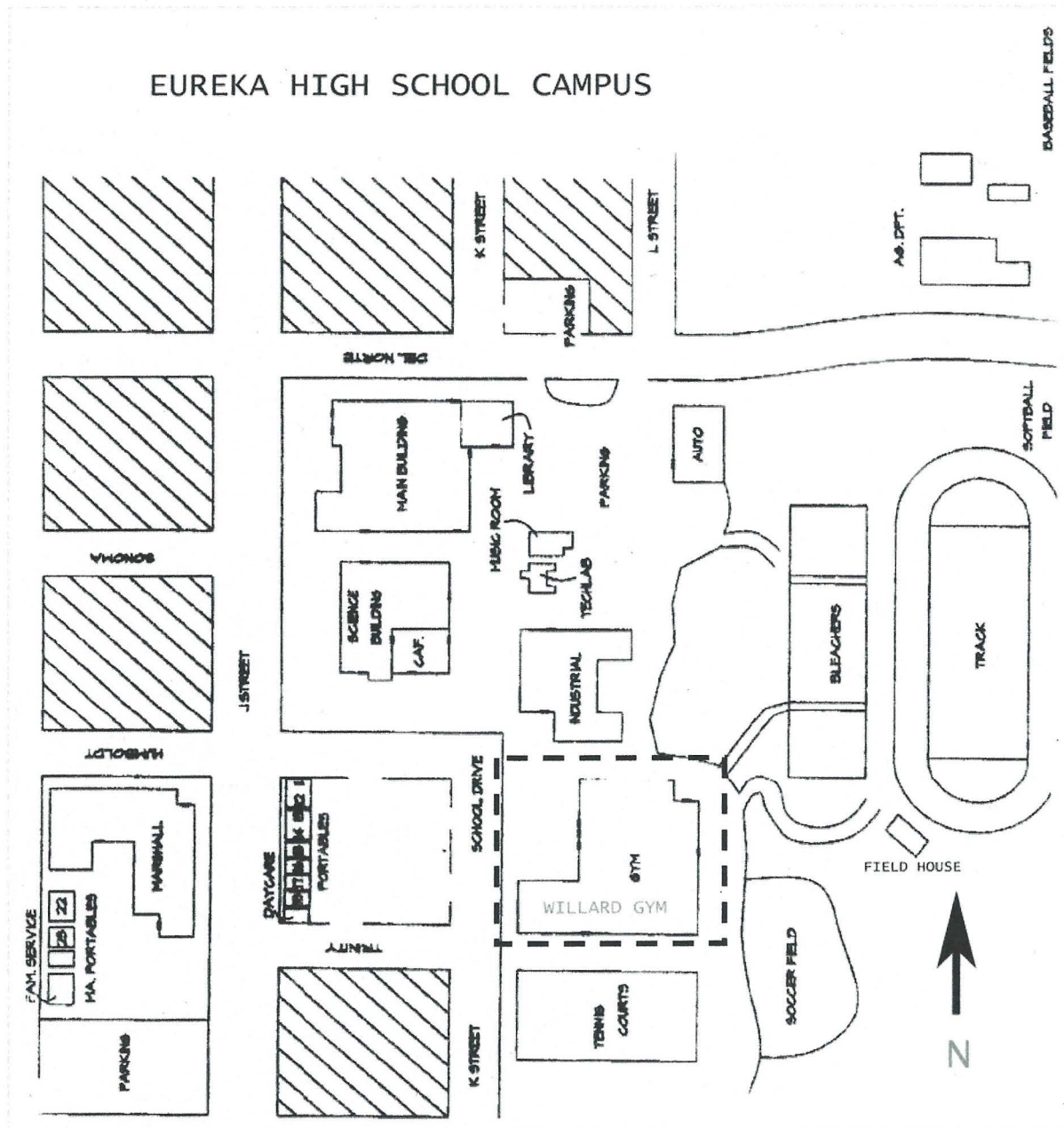
Primary # _____
HRI# _____
Trinomial _____

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Recorded by: Stillman & Associates, Suzanne Guerra Date: February 25, 2005

☒ Continuation ☐ Update

SKETCH MAP



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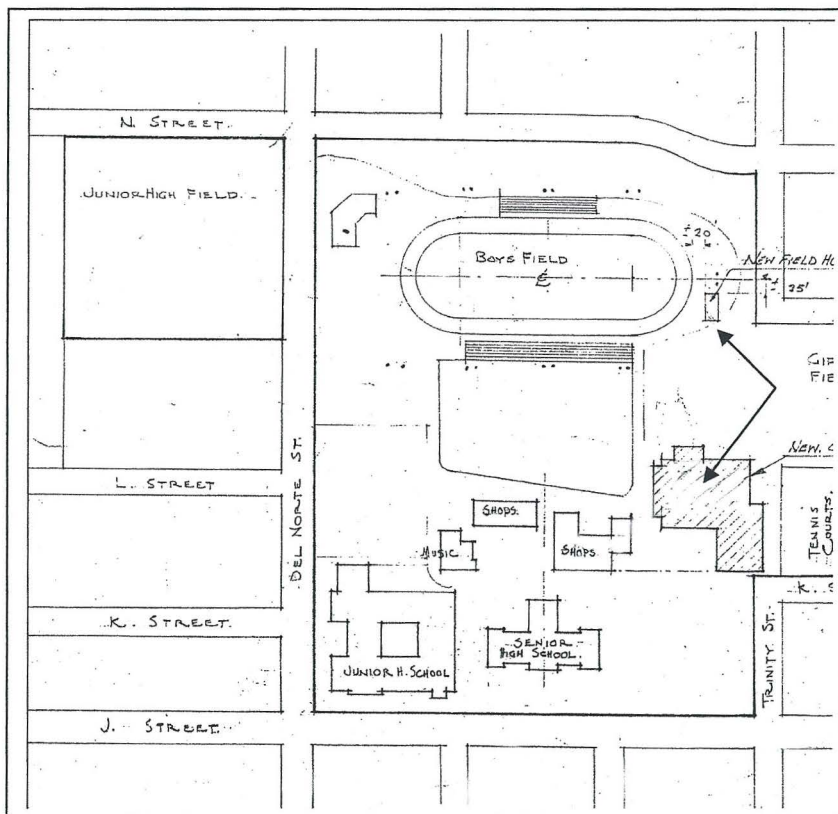


Campus Setting 2005

V. East at J. Street &
Humboldt Street

L. Industrial Arts Building

R. Willard Gymnasium



Original Plot Map 1950

Albee Stadium

Field House

Gymnasium

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Entrance Foyer

V. to North Entrance
Stair and Mezzanine

Gymnasium

South Bleachers
Radio/Broadcast Booth



Gymnasium

North Mezzanine

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Pool

V. to South Entrance
Curtain wall



North Wall Bleachers

Roll up metal fire windows
on Radio/Broadcast Booth

Metal roof trusses

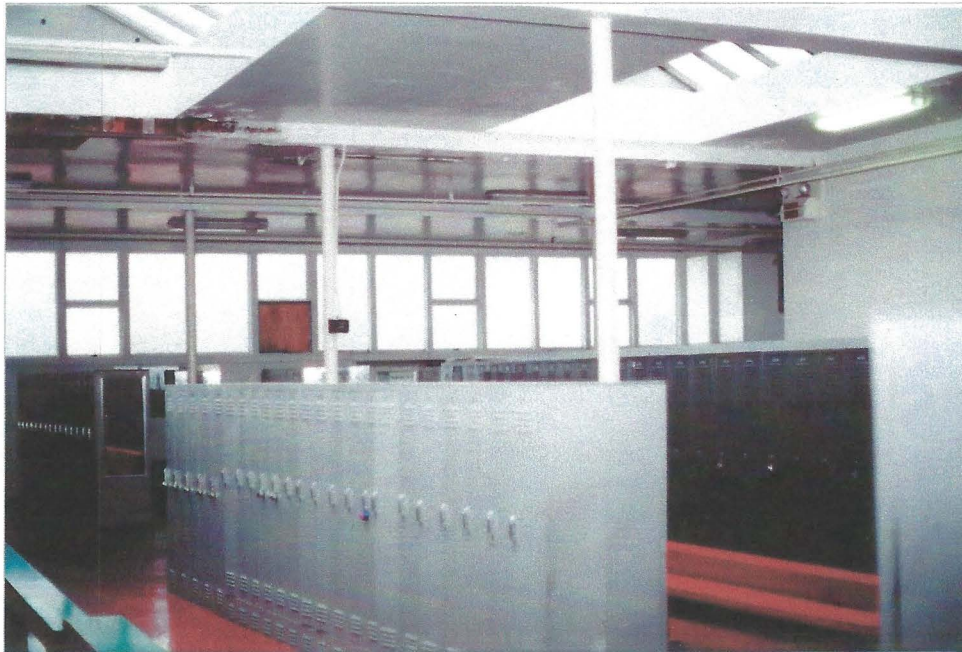
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Girls Locker Room

Rows of Skylights
Band of Windows
Metal Pole Supports



Pool Control Office

Slide up sash, pocket windows and built in storage. Converted to faculty office.

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East Elevation

Access stairs on roof.

Exit stairs from
Natatorium bleachers,
exit from gym.

Round metal pipe rails,
stanchions, handholds.
Concrete steps.

East Elevation

Basement Level -ribbon windows,
copper louver with mesh screens



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Design Element

Flat canopy
Raised horizontal concrete bars



West Elevation-Girls Gym entry

Flat canopy on pilasters, double wooden board door.

West Elevation-Main Entry

Flat canopy over Ticket Booth pillars

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N. Elevation, Foyer, Girl's Gym Wing

Foyer- North Entry

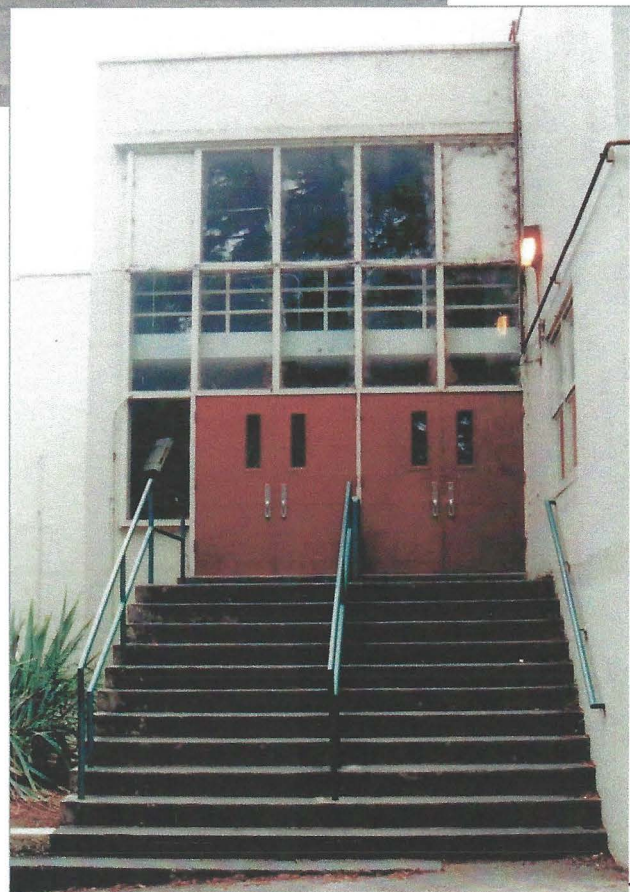
- Curtain wall above paired double multipane doors (not original)
- Canopy sunshade
- Concrete planters

Girls Gym

- Horizontal band of windows

N. Elevation, Gym & Boys Wing

- Curtain wall above paired double doors (not original)
- Round pipe rails, stanchions, concrete steps
- Small planter adjacent.
- Wood framing, coping defines edges.



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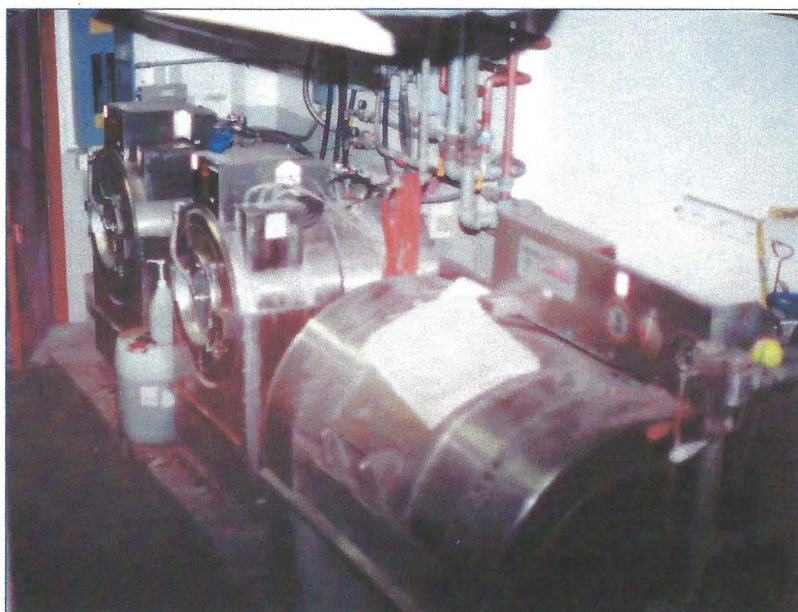


Boys Locker Room

Original built in basket tray lockers.

Basement

Original laundry equipment



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PRIMARY RECORD

Primary # _____
HRI# _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3 *Resource Name or #: **Eureka High School**

P1. Other Identifier: Eureka High School

* **P2. Location:** ☐ Not for Publication ☒ Unrestricted

* **a. County:** Humboldt

* **b. USGS 7.5' Quad:** Eureka, Ca. **Date:** 1958 **T** 5N; **R** 1 W; Section 23, West 1/4 of NE 1/4 of SW 1/4 B.M.

c. Address: 1915 J. Street **City:** Eureka, CA. **Zip:** 95501

d. UTM: (Give more than one for large and/or linear resources) Zone , / mN

e. Other Locational Data: APN 011-131-005; 011-121-001

* **P3a. Description:**

The campus is located in the center of the City and has been the only public High School in Eureka since 1896. The property is located on the southern perimeter of the Cooper Canyon Gulch, which is a remnant of the canyons and sloughs that are characteristic of Eureka. The campus site was developed along with the adjoining historic neighborhood known as the Prairie Addition and its growth reflects the pattern of development of the central city. The buildings and structures at the Eureka High School campus are very good representative of contemporary American school architecture from 1925 to 1950, and range from large two story buildings such as the Main Building and Industrial Education Building; smaller single story buildings such as the Music Building, Agriculture Building and Field House; the multilevel Willard Gymnasium, and the vernacular stadium. Building construction is generally of reinforced concrete, with some wood siding, molding and trim, metal pipe rails and stairs.

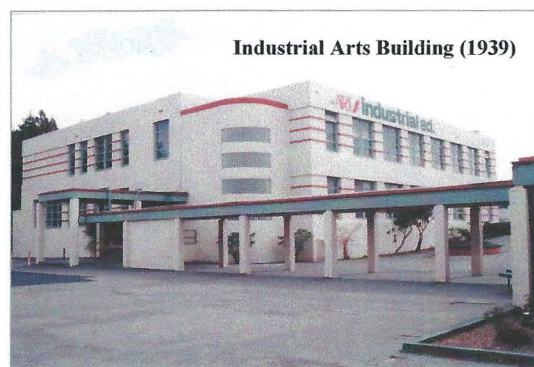
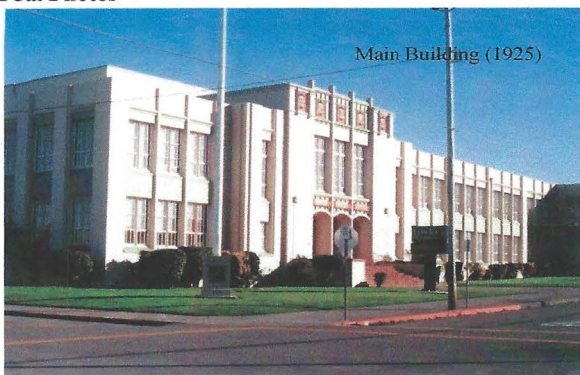
The Main Building (1925) is designed in the Gothic Revival style popular for high schools constructed during this period; the Industrial Education building (1939) is Art Deco Moderne, while the Marshall School complex across the street (1941) is Streamline Moderne, and the Willard Gymnasium (1950) is designed in the International Style. While several buildings have had exterior alterations, the degree of alteration to important exterior materials and design features has not changed the overall character of the proposed district. Smaller buildings include the Music Building (1939) which, although the entry has been altered, retains some of its Streamline Moderne characteristics in the horizontal speed lines and ribbon windows. The Field House (1950) and the Agricultural Building (1950) appear to retain their integrity as modest examples of the International style and incorporate elements found in the Willard Gymnasium such as the window walls and ribbon windows. Walkways directly behind the campus lead to the upper level soccer field and through a grove of redwood trees to the Albee Stadium facilities in Cooper Canyon, constructed in the natural basin formed by the gulch. A complex of recreation and sports facilities are located on the southeast section of the campus including the Willard Gymnasium, the tennis courts and soccer field and the Albee Stadium (1924).

Later additions to the campus, particularly the covered walks added with the Science Building and Cafeteria complex, have impacted the historic views of the Main Building, Industrial Arts Building and the Music Building from the south and west elevations. Portable classrooms obstruct the street view of the Gymnasium from the west. The stadium playing fields and parking areas have been upgraded recently and did not impact the essential character of the Stadium.

* **P3b. Resource Attributes:** HP 15 Educational Building

* **P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ☐ Site ☒ District ☐ Element of District ☐ Other (Isolates, etc.)

* **P5a. Photos**



P5b. Description of Photo(s): Front Elevation-2/25/2005. S. Guerra.

Constructed/Age and Source: ☒ Historic ☐ Prehistoric ☐ Both 1925 to 1955 Construction Plans, City of Eureka, Planning Department, Eureka, Ca.

* **P7. Owner and Address:** Eureka City Schools, 3200 Walford Avenue, Eureka, Ca. 95503

* **P8. Recorded by:** Stillman & Associates, Box 1184, Arcata, Ca. 95518; Suzanne Guerra, Box 367 Bayside, Ca. 95524.

* **P9. Date Recorded:** 2/25/2005 * **P10. Survey Type:** CEQA Assessment

* **P11. Report Citation:** CEQA Analysis of Historical resources and Potential impacts of Development Project, Stillman & Assoc. 2005

* **Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record

☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DISTRICT RECORD

Primary # _____
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*NRHP Status Code 3

*Resource Name or # (Assigned by recorder) Eureka High School

D1. Historic Name: Eureka High School D2. Common Name: Eureka High School

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features.

List all elements of district.): *While the original high school was constructed on this site in 1915, the major buildings and structures present on the Eureka High School campus today were constructed during a twenty five year period from 1925 to 1950. The reinforced concrete Main Building (1925) is designed in the Gothic Revival style popular for high schools constructed during this period; the Industrial Education building (1939) is Art Deco Moderne, while the Marshall School complex across the street (1941) is Streamline Moderne, and the Willard Gymnasium (1950) is designed in the International Style. While several buildings have had exterior alterations, the degree of alteration to important exterior materials and design features has not changed the overall character of the proposed district. Smaller buildings include the Music Building (1939) which, although the entry has been altered, retains some of its Streamline Moderne characteristics in the horizontal speed lines and ribbon windows. The Field House and the Agricultural building appear to retain their integrity as modest examples of the International style. Few buildings were constructed in Eureka during the period from 1930 to 1945, and examples of the International Style are rare in Eureka. Masten and Hurd, the designers of most of the buildings identified as contributing resources, were noted architects of educational facilities and exponents of contemporary design at the time that these resources were constructed. Albee Stadium and playing fields are set in the natural basin of Cooper Canyon and paths connect the sports facilities on the southeast and east sides of the campus.*

The campus is eligible for listing as an historic district on the National Register and on the California Register under Criterion A, for its contribution to the social development of the community, the creation of a community identity and served as a community resource. As the only public high school in the city for over 100 years, the sports programs offered by Eureka High School have served to unite a diverse community of local residents for generations. Eureka High School has also provided a regional sports complex that supported the development of sports and recreation in Humboldt County, and was an important component of the City recreation program. The campus was first established at the same time that the surrounding Prairie Addition historic neighborhood was being developed and its growth and development reflect the pattern of development of the surrounding city. The landscape elements reflect the historical development of the City and an appreciation of the cultural landscape of the canyons and sloughs that are characteristic of Eureka. While the City was originally platted on a grid, Eureka's landscape was characterized by large gulches which proved to be major obstacles to development. Gulches could be 30 or 40 feet with flowing streams and luxuriant undergrowth. As the City developed, many of these were gradually filled in and streets extended across gulches once considered in appropriate for development. The Eureka High is site incorporates the natural setting as part of the campus. Walking paths meander from the main campus through the redwoods and onto playing fields and adjacent sports facilities in Cooper Canyon, where the natural basin created by the gulch serves as the setting for Albee Stadium.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.):

The main campus is roughly bounded on the west by J Street; on the north by Del Norte Street; south by Trinity Street, and east by N Street, which encompasses the original boundaries of the joint Junior/ Senior High School campus. Two buildings from this period are located on adjacent parcels, Marshall School (Marshall arts complex), is located at 2014 J Street and bounded by Humboldt Street on the north; Huntoon Street on the south and I Street on the west. The agricultural building is located in Cooper Canyon across from Albee Stadium, and is bounded on the south by Del Norte Street; north by N Street; west and north by the slough.

***D5. Boundary Justification:**

This boundary encompasses the main structures from this period, including the Marshall School arts complex, and the sports facilities associated with the gymnasium, facilities that historically served both the community and the school.

D6. Significance: Theme Architectural Heritage; Recreation
Period of Significance (1925-1951 proposed)

Area: Regional, City of Eureka

Applicable Criteria: Criterion A, Criterion C

The Eureka High School campus is eligible for listing as an historic district on the National Register and on the California Register under Criterion C, for its architecture as catalogue of modern school design in California from 1925 though 1950. The Albee Stadium is commonly said to have been constructed in 1924, and further documentation could alter the early date by one year. The campus is eligible for listing as an historic district on the National Register and on the California Register under Criterion A for its contribution to the pattern of development in the city of Eureka and for its role in the development of sports and recreation in Humboldt County. The only public high school in the city for over 100 years, the sports programs offered by Eureka High School have served to unite a diverse community of local residents for generations. Eureka High School has also provided a regional sports complex that supported development of sports and recreation in Humboldt County, and as a component of City recreation program.

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

Architectural Resources Group, Eureka: An Architectural View. Eureka Heritage Society, Eureka, California. 1987; City of Eureka 1997 General Plan and City of Eureka General Plan: Background Report, City of Eureka, Eureka, CA; City of Eureka 2003, Historic Preservation Plan, City of Eureka, Eureka, CA. 2004. Membership Files: American Institute of Architects, Library and Archives (AIA), New York, New York. Willard Gymnasium, CEQA Analysis of Historical Resources and Potential Impacts of Development Project, Stillman & Assoc. 2005

***D8. Evaluators:** Suzanne Guerra

Date: 2/25/2005

Affiliation and Address: Stillman & Associates, Box 1184, Arcata, Ca. 95518

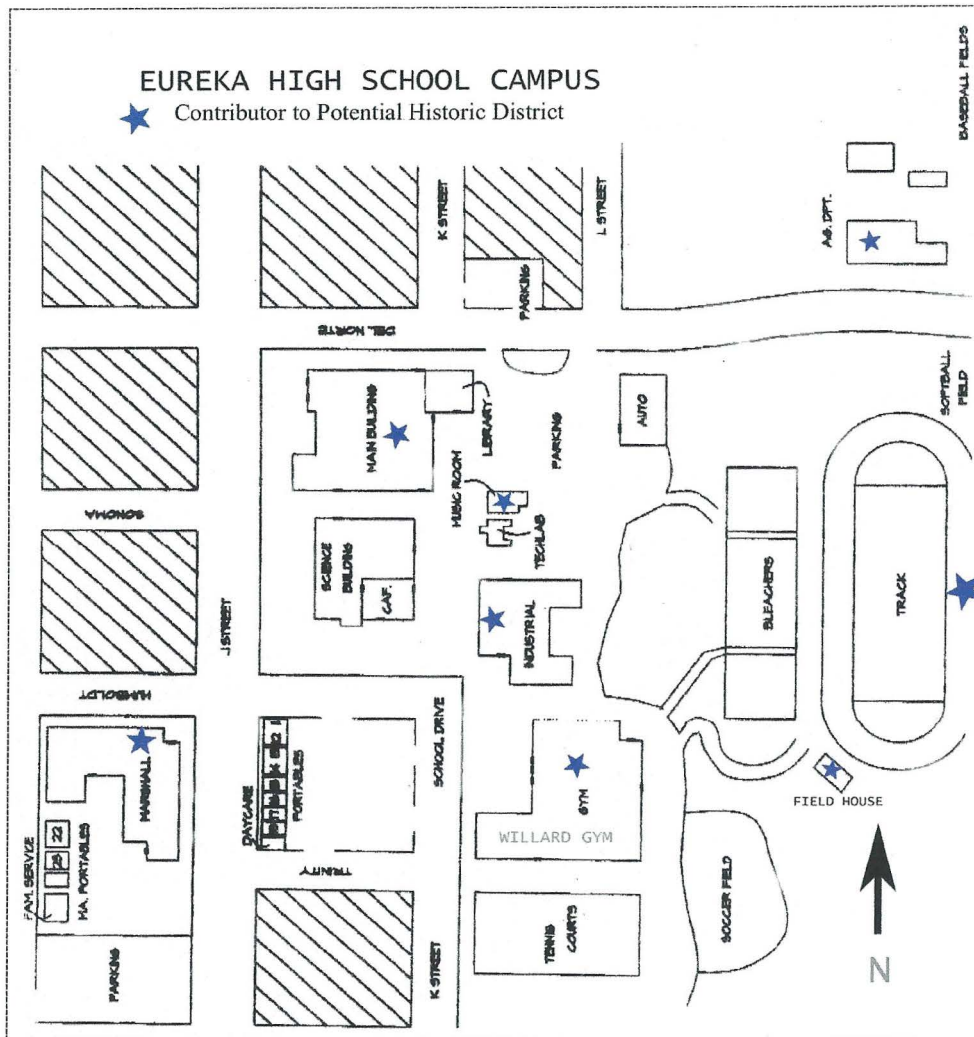
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Recorded by: Stillman & Associates, Suzanne Guerra Date: February 25, 2005

☒ Continuation ☐ Update



Boundary Map

District Elements

| RESOURCES | ARCHITECTURAL STYLE | ARCHITECT |
|--|-----------------------------------|---|
| Main Building (1925) | Gothic Revival | James McLaughlin AIA, San Francisco |
| Agriculture Building (1950) | International | Undetermined, possibly Masten and Hurd AIA, San Francisco |
| Marshall Arts Complex (Marshall School) (1941) | Streamline Moderne, International | Masten and Hurd AIA, San Francisco |
| Music Building (1939) | Moderne, Streamline Moderne | Masten and Hurd AIA, San Francisco |
| Industrial Arts Building (1939) | Zig-Zag Modern, Art Deco | Masten and Hurd AIA, San Francisco |
| Gymnasium (1950) | International | Masten and Hurd AIA, San Francisco |
| Field House (1950) | International | Masten and Hurd AIA, San Francisco |
| Albee Stadium (1924) | Vernacular | Undetermined |

HISTORIC RESOURCE EVALUATION
IMPACTS AND MITIGATIONS

For Proposed
Eureka High School Gymnasium Project
Eureka, California

February 17, 2006



CAREY & CO. INC.
ARCHITECTURE

**HISTORIC RESOURCE EVALUATION
IMPACTS AND MITIGATIONS**

**For Proposed
Eureka High School Gymnasium Project
Eureka, California**

February 17, 2006

Prepared for
Winzler & Kelly
Consulting Engineers



CAREY & CO. INC.
ARCHITECTURE

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| APPENDIX B: CALIFORNIA HISTORIC RESOURCE STATUS CODES..... | | INCLUDED |

A. INTRODUCTION

Eureka Unified School District is proposing to build a new gymnasium on the Eureka High School campus to meet current and future athletic and physical education needs and to demolish the Jay Willard Gymnasium. The existing gymnasium and natatorium, constructed 1949-1950, are challenged to meet the educational demands of the school and are in need of extensive renovation for both educational and health and safety purposes. The project is subject to review under the California Environmental Quality Act (CEQA), including not only the evaluation of impacts to the existing gymnasium, but to any surrounding historic resources. Previous surveys and studies have identified campus buildings that are potential individual historic resources including: Main building, Industrial Arts Building, Jay Willard Gymnasium, and Marshall School. This report is intended to verify the findings of these existing surveys and studies concerning the Jay Willard Gymnasium, and to evaluate the potential impacts on this resource and the other historic resources associated with the proposed new gymnasium. In addition to the proposed project, two project alternatives will be evaluated in this report.

B. METHODOLOGY

Carey & Co. conducted a site visit and field survey on January 4 and 5, 2006. Representatives from Winzler & Kelly Consulting Engineers provided an introduction to the proposed gymnasium project and alternatives. Field surveying studied the exterior and interior integrity, alterations and conditions. Having been provided with written descriptions of the proposed project and two alternatives, a survey of the potential impact areas was performed. Additionally, exterior and interior photographs were taken.

Archival research was also conducted while in Eureka. Repositories visited include Humboldt State University Library, Humboldt County Historical Society, and Humboldt County Library where information regarding Eureka High School campus development, the Gymnasium, and persons of potential significance was pursued. Original plans were provided for Carey & Co.'s review by Winzler & Kelly. Further research was conducted at the San Francisco Public Library.

C. PHYSICAL DESCRIPTION

Eureka High School Campus

The Eureka High School campus is generally bound by J Street (west), Del Norte Street (north), N Street (east), and Buhne and Trinity Streets (south), with the exception of the Agriculture building located north of Del Norte Street and Annex/Marshall School at the southwest corner of J Street and Humboldt. The site is divided by a steep slope with a significant drop in elevation between the east and west halves. A majority of the classroom buildings are sited on the upper (west) portion, leaving the lower (east) portion to athletic fields, the track/stadium, and field and agriculture buildings. Campus buildings range in size, style, and date of construction, though several have been connected by concrete covered walkways. The Main Building and Science Building front J Street with the Industrial Arts, Music, Technology, and Auto Buildings behind to the east. The Gymnasium sits south of this cluster, along the slope edge. The paved area west of the Gymnasium, bound by J Street, Trinity Street, and campus driveways, is used for both event parking and athletics with portable classroom buildings lining

the south edge of the campus. Landscaping includes lawns and concrete planters scattered throughout the campus. The slope is home to a grove of redwood trees through which paved paths lead down from the back of the Gymnasium to the stadium.

Jay Willard Gymnasium

Constructed in 1949-1950, the 37,000 square foot footprint of the roughly "L"-shaped, International Style gymnasium includes a glazed lobby, exercise areas, locker/restrooms, a natatorium, and a small basement boiler room. The concrete and steel structure is primarily single-story, with the exception of the feature court and natatorium with mezzanine bleacher areas. A combination of concrete-encased steel columns, steel roof trusses and wood sheathing make up the gymnasium and natatorium roofs. The lower spaces are covered by sheathing and wood purlins spanning to steel and concrete structural members. Gabled skylights illuminate many of the interior spaces. A smooth stucco finish covers a majority of the building. The primary entry, at the west façade, is part of the gymnasium lobby, a separate single-story projecting mass of metal grid frame and glazed panel construction. A flat roof with wide overhangs shades the once fully glazed gridded lobby facades, now only 70% glazed due to solid infill or paint. The entry, centered on the lobby mass, is denoted by a lower flat canopy supported on either side by large pilasters featuring speed lines and intermediately by metal pipe columns. Three sets of double doors stand adjacent to each other with transoms and outer side lites. The lobby and entry have been permanently closed due to the risk of catastrophic failure; they can no longer be used as a fire exit, thus reducing the legal occupancy capacity of the gym. Secondary entries are at the north vestibule façade, as well as south of the main entry. The remaining facades are characterized by both projecting and recessed bands of windows arranged in a continuous pattern of two fixed, followed by one operable, often two bands stacked. Tertiary entries are similarly configured, but are simpler than the main entry.

The interior arrangement of the gymnasium is focused around the feature court, accessed directly from the main entry lobby. The entry lobby contains two ticket booths, two phone alcoves, and a built-in trophy case. Classrooms and locker/restrooms flank the feature court to the north and south, with exercise/weight rooms to its east. The natatorium is located south of the feature court, with the main locker room and shower facility between them. The wing projecting west, creating the "L"-shape of the building footprint, was constructed as the girl's gym with a smaller court space, exercise room, and locker/restrooms between the court and the natatorium. This wing is now used as auxiliary spaces. Interior finishes include: smooth plaster walls and ceilings; exposed structure and wood sheathed ceilings in court/exercise spaces; wood flooring in courts, exercise rooms, and offices and classrooms; asphalt tile floors in lobby and corridors; and pipe handrails at concrete stairs. Interior doors are wood, either solid, Dutch, or with a small single pane of glass. Built-ins, mostly in locker and equipment rooms and at mezzanine seating levels, include: wood storage shelves, fixed bench and bleacher seating, blackboards, and trophy case.

The International style was born of the post-WWII modern movement. It is generally defined by flat roofs, metal windows set flush with the outer wall, smooth wall surfaces with no decorative detailing at doors and windows, and asymmetrical facades. Non-load bearing walls allow for long bands of windows with greater height. Walls are typically smooth stucco-clad with function dictating location, size, and type of opening.¹ The Jay Willard Gymnasium is a representative of the International style incorporating smooth stucco walls, large expanses of windows, a flat roof, and minimal ornament. The entry and lobby are of particular interest and value featuring projecting roof sections and gridded steel and glass walls indicative of high International style public buildings.

¹ Virginia and Lee McAlester. *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1986): 469-473.

Major character defining features of the building include: the main entry and lobby, mass and form of the structure, expressed structural system, windows and skylights, exterior stucco finish, interior finishes in primary spaces (feature court, girls' gym), and interior spatial configuration and use relationships.

A condition assessment, based on visual observation, professional judgment, and evaluations provided by structural and materials testing specialists, indicates that the Jay Willard Gymnasium, as a whole, appears to be in fair condition; however individual components exist in varying degrees of deterioration. Carey & Co. measures the condition of an historic building or individual element using the following rating system:

- Good:* The building or element physically communicates its historic significance and requires little or no repair.
- Fair:* The building or element physically communicates most of its historic significance but requires some repair.
- Poor:* The building or element no longer physically communicates its historic significance and requires substantial repair or replacement.

The exterior and interior walls are in fair condition requiring crack and spall repairs and refinishing and the roof suffers from leaks at skylights, however the overall structural system appears to be in fair to good condition, though in need of seismic upgrade. Windows and doors seem in good physical condition. Interior finishes are deteriorating as a result of either age, such as flooring and bleacher seating, or moisture issues as in the locker rooms and natatorium. These elements range in condition from fair to poor depending on ability to repair the element to a functional state. Cosmetic issues such as peeling paint are considered fair. The main entry and lobby have been determined to be in poor structural condition.

D. HISTORICAL DEVELOPMENT

Eureka High School Campus

Eureka's first public high school was opened to students in January of 1896. In California at this time most small towns had public grammar schools, but few had public high schools. A private school, the Eureka Academy, had served as a high school in Eureka from the 1880s until the building burned in 1893. Finally, the townspeople voted to fund a public high school in 1895, and the following January students began classes at the Winship School, a large Victorian-style building constructed in 1889. Within a few years the student body had outgrown this space, and so in 1915 a new school was built, supported by a voter-approved bond measure.²

In 1924 plans were drawn for "A School Building Survey and Schoolhousing Program for Eureka, California." This report included drawings by prominent school architect John J. Donovan showing the "Eureka High School Group" which featured the footprint of his Junior High School building, completed in 1925. The landscape architect for this scheme was Howard Gilkey, an Oakland-area

² Barbara Canepa Saul, "How true to you we are, Eureka High!": The First One Hundred Years 1895-1995," *The Humboldt Historian*, Vol. 43, No. 3, Fall 1995, 4-7.

designer who is noteworthy for his design of the Cleveland Cascades near Lake Merritt in Oakland. Donovan and Gilkey's plan is characterized by symmetrically arranged structures located adjacent to more naturally arranged landscape features. Primarily straight walkways connect the buildings, while winding paths lead to the athletic field.³

In addition to physical plans for the development of the Eureka public schools, officials with the school district were also examining the mission of the educational system. An article published in the Eureka Chamber of Commerce journal in 1926, titled "A Study of the Working of the Eureka School Plan" by George C. Jensen, Principal of Secondary Schools, explained the philosophy of the Eureka secondary school system, calling it the "Eureka Plan." This plan sought to provide curriculum geared toward student's individual goals, generally either in college-preparatory tracks or vocational training tracks.⁴

A number of Eureka's grammar schools were constructed during the first decade of the 20th century. However, in 1938 these wooden school buildings were condemned due to fire safety concerns. Replacement schools were built in the ensuing years; however, this new construction was limited by the Depression and onset of World War II. At least one school construction project completed at this time was accomplished with help from the federal government. The Works Progress Administration, a Depression-era program under the Roosevelt administration's "New Deal" work relief initiatives, provided funding for the Eureka High School Industrial Arts Building. Constructed in 1939, it is one of few buildings constructed in Eureka from the period of 1930 to 1945. Others include the Marshall School, constructed in 1941, which replaced its demolished namesake (a wooden grammar school).⁵ Three other elementary schools were constructed at the same time, including the Jefferson School, the Lincoln School, and the Franklin School.⁶

Post-war buildings added to the High School included the Jay Willard Gymnasium (1949-1950), the Field House (1950), and the Agricultural Building (1950).

The 1960s brought a great deal of change to Eureka's public school landscape. Following an earthquake in 1962, the High School building that had been erected in 1915 was condemned and demolished. The high school students were moved next door into the Junior High School building, constructed in 1925. Junior high school students were moved into the existing George C. Jacobs Junior High, sharing class space with students from that school from 1962 to 1965. Two new junior high school buildings were opened in 1965, ending this arrangement. A Science/Cafeteria building, serving the high school students, was built on the site of the demolished high school in 1964.⁷ That year also saw the construction of the Auto Shop, and a covered walkway system connecting the main buildings. More recently, a number of portable buildings have been added at the paved areas west of the Gymnasium. The Marshall School ceased to be an elementary school, and was annexed to the High School in 2003.

³ Frank W. Hart and L. H. Peterson, "A School Building Survey and Schoolhousing Program for Eureka, California," 1924; "Howard Gilkey, designer of the Cleveland Cascade," cited 15, July 2005, available at: <http://clevelandcascade.org/gilkey.html>.

⁴ George C. Jensen, "A Study of the Working of the Eureka School Plan," Redwood Chips (Eureka Chamber of Commerce) Vol. 3, No. 11, 1 May 1926.

⁵ Glen N. Nash, "A look at Eureka Schools Constructed in the 1900s," The Humboldt Historian, Sept.-Oct. 1986, 10-12; Architectural Resources Group, Eureka: An Architectural View, (Eureka, CA: Eureka Heritage Society, 1987) 106-108; Stillman & Associates, CEQA Analysis of "Jay Willard Gymnasium," 2005, 18, 20.

⁶ Nash, 11.

⁷ Saul, 9.

Jay Willard Gymnasium

In 1947, Masten and Hurd Architects produced a set of plans for a new gymnasium on the Eureka High School campus. The new facility would replace the existing gym, which featured an addition designed by Masten and Hurd in 1923. The school yearbook, the *Sequoia*, features highlights of the construction starting in 1949 and citing delays before final occupancy at the end of 1950. The new gymnasium was created during a time of great change in design, as well as education. A modern aesthetic and a modern approach to healthy education were both moving towards common acceptance.

The new plans included a large feature court with mezzanine bleacher seating, encircled by classrooms, offices, locker rooms, restrooms, and therapy and exercise rooms. Adjacent to the gym was the natatorium, easily accessed from the locker room, and ancillary rooms for suit drying and equipment. The pool featured diving boards and mezzanine bleacher seating. The design also proposed a separate girls' gym wing complete with small court, exercise room, and access to the natatorium. Individual shower and dressing stalls differentiated the girls' locker room from the boys'.⁸ The gymnasium appears to have been constructed in accordance with Masten and Hurd's exterior design, interior configuration, and materials and finishes.

The gymnasium is named for Coach Jay Willard, a coach and advisor at Eureka High School from 1927 to his retirement in 1963. During his 36 year career, Willard taught boys' physical education classes, coached football, basketball, baseball, and track, advised the boys' athletic society, and was named to the California Coaches Association Hall of Fame in 1969. Coach Willard died in 1973.

Over the past 55 years, the Jay Willard Gymnasium has kept up with the demands of the Eureka High School students, faculty, and staff, as well as community use. Elementary and secondary school programs, as well as a community recreational swimming program began in 1950. The gym has facilitated a vast array of athletic and educational programs and hosted championship sports games and intramural competitions.

Few alterations have been made to the original Masten and Hurd design, most noticeably solid infill panels at the glazed entry lobby. Alterations appear to have been limited to general maintenance, mechanical upgrades, and minor changes in room use with little modification to the physical fabric and integrity of the building. Most alterations, including those made to the main entry and lobby, appear to be reversible. Renovation of the pool occurred in the early 1990s.

Current concerns include deteriorating finish materials and building systems, water infiltration at the skylights, and the structural safety of the entry lobby. These issues are accelerating the natural deterioration of the building and its components resulting in declining physical conditions and eventually loss of integrity.

E. HISTORICAL CONTEXT

Modern School Architecture

The battle for better school design has long been underway. Movements in the United States have arisen in waves. Around the turn of the century the Chicago School of Architects is credited with one such movement, producing influential school architects including John J. Donovan, responsible for the

⁸Masten and Hurd Architects, Gymnasium drawings, 1947.

preliminary plans for the Eureka High School campus (the Main Building being constructed in 1925). The concept of a school evolved from schoolhouse to school plant/campus with reforms to America's educational system and concerns for health and safety. From 1915 to 1945, progress in school design was slowed, in part due to the reactionary enactment of codes and regulations. However, a post-war movement brought enlightened school design back to the forefront. William Caudill, author of *Toward Better School Design* published in 1954, sites 1950 as "a year in history when for the first time a large majority of architects and educators throughout the entire nation got together to try to solve their common problems."⁹ Codes were revised, conferences were held bringing architects and school administrators together, and public opinion finally accepted modern contemporary design over traditional. The result was a pupil focused approach to school design – recognizing the physical and emotional needs of the student in order to produce peak academic performance. Thought was even given to social needs, generating the idea of the social center. Caudill describes the space as an "area for social interchange," going further to say "...In essence the center is an oversized corridor which serves...(3) as a lobby for the gymnasium..."¹⁰ The concept of "form follows function" also came into wide acceptance resulting in modest, unadorned buildings that openly expressed their structure and function and elements of importance and beauty.

Gymnasium Design

Physical education was born out of increasing urban growth and industrialization. The latter half of the nineteenth century saw an increasing demand for organized physical activity resulting in the formation of private clubs and public gyms. The first public high school gymnasium was built in Chicago around 1890, signifying the transition of physical activity in schools from a periphery concern to a planned educational necessity. By the early twentieth century physical education programs had become a curriculum requirement in California. Increasing enrollment and popularity of sporting events led to improvements and expansions in athletic facility and campus design.

By mid-century physical education was widely accepted and expected in public schools. Engelhardt, Engelhardt, and Leggett, authors of *Planning Secondary School Buildings* published in 1949, wrote "Vigorous exercise, the joy of team play, and comfortable relaxation with fellow students after tiring play are aspects of a good physical program for adolescents that all who are physically able should and do enjoy."¹¹ The modern school movement of the 1950s toward pupil-oriented design greatly affected the planning and design of indoor physical education facilities. Architects were presented with a larger participatory portion of the student body, a wider variety of games and activities, specialized teachers and staff, and community recreational use of the facility. In 1946, Karl Bookwalter published the following list of principles addressing the planning of facilities for health and physical education programs:

1. Facilities should be conveniently located.
2. Facilities should be attractive and inspire appreciative treatment.
3. Related areas and groups should be in a functionally related unit or department.
4. Expenditure of money, time, and energy for the construction, use, and maintenance of health and physical education plant should be kept as low as is compatible with effective instruction and with maximum wholesome participation.

⁹William Caudill, *Toward Better School Design* (New York: F.W. Dodge Corporation, 1954): 16.

¹⁰Caudill, 38-39.

¹¹N.L. Engelhardt, N.L. Engelhardt Jr., & Stanton Leggett, *Planning Secondary School Buildings* (New York: Reinhold Publishing Corporation, 1949): 129.

5. Increase or change in the activities offered should be readily and economically feasible.
6. The elimination of odors, noises, and moisture; the segregation of activity groups; and the exclusion of undesirable persons should be automatic and effective.
7. Consideration must be given to safety, hygiene, and sanitation in the provision, arrangement, and maintenance of facilities.
8. The oversight, control, and management of activities and groups will be facilitated by visibility.
9. Adaptability of areas to multiple use enhances their utility.
10. Facilities must be in accord with curricular needs, scientific facts, legal requirements, and interscholastic sports rules.¹²

Modern school design utilized both gymnasiums and field houses, provided separate play areas for boys and girls, and included a swimming pool when possible. Engelhardt, Engelhardt, and Leggett specifically address the planning and design of gymnasiums in secondary schools around 1950, when Masten and Hurd were designing and construction the Jay Willard Gymnasium at the Eureka High School campus. The pupil-oriented design was to consider light and ventilation providing the maximum amount of operable windows feasible in any given play space. No student-occupied areas were to be placed in the basement or walled in. Instructor offices and examination/treatment rooms were also considered important. Adequate and well-located dressing and shower rooms were essential, providing gang showers for boys and individual showers and dressing booths for girls. The design of the modern gymnasium emphasized efficiency and safety while providing for a dense and diverse physical education program.¹³

Masten and Hurd Architects

Charles Masten and Lester Hurd operated out of San Francisco throughout the early-twentieth century. The firms early work consists primarily of residential architecture in San Francisco, however in their later years, Masten and Hurd became known for their Moderne and International style large public buildings, particularly schools and college campuses. Notable works include several buildings on the Eureka High School campus, Lynbrook High School in San Jose (1965), King Middle School gymnasium in Oakland (c.1955), and Foothill (1961) and DeAnza College (1963). Several ventures were undertaken jointly with well-known modernist Ernest Kump of Palo Alto.

Masten and Hurd was first commission by the Eureka Unified School District in 1923 to design an addition to the first Eureka High School Gymnasium. The firm later returned to design the Industrial Arts Building and Music Building, completed 1939, followed by several area elementary schools. In 1947 Masten and Hurd laid out plans for the new Eureka High School Gymnasium and began construction in 1949. Their design was cutting edge for the time, applying all the ideals and guidelines emerging from the modern movement, both architecturally and in education reform.

F. CEQA EVALUATION

Criteria

A historic resource under the California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a) includes the following:

¹² Excerpt from Engelhardt, *Planning Secondary School Buildings* (New York: Reinhold Publishing Corporation, 1949): 130.

¹³ Engelhardt, 131-134.

1. A resource listed in, or determined to be eligible for listing in, the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR).
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in an historical resource survey meeting the requirements in section 5024.1(g) of the Public Resources Code.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered "historically significant" if it meets the criteria for listing on the California Register of Historical Resources.

Evaluation

To evaluate the Jay Willard Gymnasium, Carey & Co. reviewed individual eligibility for the National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR), as well as existing local listings.

Previous evaluation performed by Stillman & Associates in March 2005 identified the gymnasium as a contributor to a potential Eureka High School historic district referring to the campus as "a catalog of modern school design," citing its variety of styles and construction dates from 1925 to 1950.

Independent evaluation undertaken by Carey & Co. in July 2005 resulted in a different determination regarding the feasibility of a historic district. The Carey & Co. report was unable to identify a shared context that fit into one or more of the National Register Criteria, and was not so general that it would also apply to many other schools, school campuses, or other groups of buildings in Eureka or elsewhere. The buildings on the campus date from 1925 to present; represent several styles including Gothic Revival, Streamline Moderne, and the International Style; are by different architects, although Masten and Hurd designed four of the structures; and were not all originally built for the High School. These factors informed Carey & Co.'s determination that the Eureka High School campus structures represent several disparate themes that are more appropriately evaluated as individual resources than as a district. This report supports Carey & Co.'s previous district findings and therefore does not address the potential for a historic district, or the gymnasium, as a contributor.

For a historic resource to qualify as eligible for the National Register and/or California Register, it must retain historic integrity of its character defining features. Integrity refers to the property's physical features and how they relate to its significance. Carey & Co. uses the seven aspects of integrity established by the National Register to evaluate and determine the degree of integrity a property retains. These aspects are location, design, setting, materials, workmanship, feeling, and association. Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.

The term "condition," as used by Carey & Co. in relation to a structure and its corresponding elements, refers only to the physical state of the building materials and features as surveyed and analyzed by a qualified professional. The assessment of a material's condition is not founded upon historical significance or integrity, but rather on the technical observations of the material's physical status in reference to issues such as deterioration, structural stability or failure thereof, corrosion, water damage

etc. A building may be determined to be in overall poor physical condition, while exhibiting historical features and physical characteristics that lend to the separate determination of a structure's historical significance and integrity.

Local

Currently, the Gymnasium is not a locally designated historic resource and is not included in the 1987 survey *Eureka: An Architectural View*, presumably because at the time of survey, it was not yet 45 years old.

National Register

National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors: the property must be over 50 years old (except in special cases, as described below) and associated with an important historic context. The National Register identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these context types are:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.¹⁴

Second, for a property to qualify under the National Register's Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance."¹⁵ While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance."¹⁶ To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity. These are:

Location is the place where the historic property was constructed or the place where the historic event occurred...

Design is the combination of elements that create the form, plan, space, structure, and style of a property...

Setting is the physical environment of a historic property...

¹⁴ *How to Complete the National Register Registration Form*, National Register Bulletin, no. 16A (Washington, D.C.: United States Department of the Interior, 1997): 75.

¹⁵ *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin, no. 15 (Washington, D.C.: United States Department of the Interior, 1997): 3.

¹⁶ *How to Apply the National Register Criteria for Evaluation*, 44.

Materials is the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property...

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory...

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time...

Association is the direct link between an important historic event or person and a historic property.¹⁷

Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.¹⁸

In addition to the Criteria for Evaluation, the National Register maintains a list of property types or circumstances that generally automatically disqualify properties from listing on the NRHP. These are:

"cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years"¹⁹

However, the National Register also provides for special consideration if a property described above is either an "integral" contributor to a district that qualifies under the Criteria for Evaluation or one of the following:

- a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or
- d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

¹⁷ *How to Apply the National Register Criteria for Evaluation*, 44-45.

¹⁸ *How to Apply the National Register Criteria for Evaluation*, 45.

¹⁹ *How to Apply the National Register Criteria for Evaluation*, 2.

- f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- g. A property achieving significance within the past 50 years if it is of exceptional importance.²⁰

The Jay Willard Gymnasium was identified as individually eligible for listing on the National Register by both Stillman & Associates (March 2005) and Carey & Co. (July 2005). This report supports those previous findings. The structure is 55 years old and meets NRHP Criterion C, embodying distinctive characteristics of a type and period, and possessing high artistic values.

C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

The Gymnasium, as well as several other Eureka High School campus buildings, was designed by a well-known firm specializing in school design, Masten and Hurd. This San Francisco-based firm had its first commission in Eureka in 1923, with the addition to the first Eureka High School Gymnasium. The firm later returned to Eureka to design the Industrial Arts Building and Music Building, completed 1939, followed by several elementary schools, and then finally the International Style Gymnasium in 1947 (constructed 1949-1950). After a cursory review of other Masten and Hurd school buildings, including the King Junior High School gymnasium in Oakland, the Jay Willard Gymnasium appears to be an exemplary example of Masten and Hurds involvement in modern school architecture.

Design and construction of the gymnasium coincided with the modern school design movement toward pupil-oriented facilities. Masten and Hurd's original plans incorporate the ideals and expectations of the educational movement at its forefront. The unadorned, straightforward International style lent itself to the modern educational requirements of vast expanses of glass, simple and economical space, and functionality. The Jay Willard Gymnasium serves as an excellent physical expression of the c.1950s education reform movement, as well as an example of the modern architectural movement and International style – particularly the main entry and lobby.

The structure may also be NRHP eligible under Criterion A for its place in the development of the Eureka High School campus and the surrounding community and its association with 1950s education reform.

Though the gymnasium is named for Jay Willard, esteemed coach and faculty member, little significance can be derived from this association as a majority of Coach Willard's time and achievements pre-date the gym (Criterion B). Jay Willard taught at Eureka High School from 1927 to 1963, having gone into partial retirement in 1955.

It is unlikely that the building will yield information important to prehistory or history (Criteria D).

²⁰ *How to Apply the National Register Criteria for Evaluation*, 2.

The gymnasium appears to retain a high degree of integrity despite deteriorating conditions. Its location and setting on the Eureka High School campus have changed little over the past 55 years. Minimal alterations and general maintenance have had little to no effect on the buildings design, materials, and workmanship. Most character defining features, both exterior and interior, remain intact and able to convey their historic relationship and significance. The main entry and lobby have suffered material loss over time; however infill and alterations made to the lobby's glass wall system appear to be reversible and therefore do not significantly impact the integrity of the entry component or the gymnasium building. The aspects of feeling and association have also been retained with the school's continued use of the facility for athletics and the maintenance of its International style features, exposed structure, and form conceived by function.

California Register

California Office of Historic Preservation's Technical Assistance Series #6, *California Register and National Register: A Comparison*, outlines the differences between the federal and state processes. The context types to be used when establishing the significance of a property for listing on the California Register are very similar, with emphasis on local and state significance. They are:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.²¹

Like the NRHP, evaluation for eligibility to the California Register requires an establishment of historic significance before integrity is considered. California's integrity threshold is slightly lower than the federal level. As a result, some resources that are historically significant but do not meet NRHP integrity standards may be eligible for listing on the California Register.²²

California's list of special considerations is shorter and more lenient than the NRHP. It includes some allowances for moved buildings, structures, or objects, as well as lower requirements for proving the significance of resources that are less than 50 years old and a more elaborate discussion of the eligibility of reconstructed buildings.²³

²¹ *California Register and National Register: A Comparison*, California Office of Historic Preservation Technical Assistance Series, no. 6 (Sacramento, CA: California Department of Parks and Recreation, 2001), 1.

²² *Ibid*, 1.

²³ *Ibid*, 2.

In addition to separate evaluations for eligibility to the California Register, the state will automatically list resources if they are listed or determined eligible for the NRHP through a complete evaluation process.²⁴

Since the requirements for listing on the California Register are so similar to those for the National Register, the Jay Willard Gymnasium appears eligible for the California Register under Criteria 1 & 3 for the reasons listed above.

G. IMPACTS AND MITIGATION MEASURES

Significance Criteria

A project is normally found to have a significant effect on architectural resources if it will substantially disrupt or substantially adversely affect a property that has been determined to be a historic resource as per California Environmental Quality Act (CEQA) Section 21084.1 and CEQA Guidelines Section 15064.5. CEQA states that “a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” CEQA Guidelines Section 15064.5(b)(2)(A) further states: “The significance of an historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance....” Also, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties is generally considered to be mitigated to a level of less than a significant impact on the environment (CEQA Guidelines Section 15064.5(b)(3)).

Proposed Project - New Gymnasium

Eureka Unified School District is proposing the construction of a new gymnasium to replace the existing Jay Willard Gymnasium and Natatorium. The new gym would be located south of the existing Science Building facing J Street, which will involve closing the campus driveway extension from Humboldt Street. The new building would be of similar massing to the existing gym.

The intent of the proposed project is to provide improved physical education facilities for the student and faculty population of Eureka High School. The new building would feature additional space for lockers, concessions, bleachers and showers. The proposed project is to offer the following multiple benefits to the existing Eureka High School (EHS) campus: ADA access, seismic safety, increased seating capacity during sports events, 2-3 regulation basketball courts, minimal long-term maintenance, adequate classroom and activity spaces, acceptable acoustics and lighting, efficient heating/ventilation and utilities, modernization, maintenance of current parking capacity, and Community Office of Emergency Services center.

The proposed gym is of similar massing to the existing gym, but with fewer separate rooms and hallways, and therefore more floor space available for athletic activities. The new facility would include a feature court, auxiliary gym, locker and shower rooms, classroom/team room, staff offices, wrestling/dance room, weight room, fitness room, storage rooms, restrooms, concessions, ticketing, and lobby. The building would be a tilt up construction with a built up roof. Skylights and clerestory windows would be

²⁴ All State Historical Landmarks from number 770 onward are also automatically listed on the California Register. (*California Register of Historical Resources: The Listing Process*, California Office of Historic Preservation Technical Assistance Series, no. 5 [Sacramento, CA: California Department of Parks and Recreation, n.d.], 1.)

incorporated in the feature court. The structural design would meet FEMA 310 Level 3, making it suitable for housing in the event of an emergency in the community. The proposed new gym would also meet Title 24 and the Americans with Disabilities Act. Other construction activities related to the new gymnasium would include: removal of existing asphalt and concrete sidewalks, excavation and installation of underground utilities, installation of outdoor lighting fixtures, and addition of new landscaped areas.

During construction of the new facility, the existing gym would remain in place and be modified to allow continued use until the new gym is complete. The entry lobby of the existing gym has been determined structurally unsafe due to rot in the timber framing that supports the entrance windows, walls and roof. The project proposes the complete removal of the entry lobby including all remaining glass, window frames, supports, and roof, which will make the area safe for use as an entryway and provide necessary safe fire exits for anticipated high occupancy during athletic functions. The construction of the new gymnasium would take approximately 12-14 months, which is also the time span expected for interim use of the existing gymnasium.

The existing gymnasium is proposed to be demolished once the new building is completed and all facilities have been transferred to the new site. Specific demolition procedures would be at the discretion of the Contractor for the demolition project. Salvageable materials would be removed from the existing structure, as feasible, prior to demolition. The demolition would be completed with a wrecking ball or excavator and would take approximately 6 weeks from start to finish. Site demolition intends to remove all materials down to an elevation of useful base material or native material. A retaining wall is proposed to the east of the existing gymnasium to allow for overfill and leveling of the site after the gymnasium is demolished. The level area would then be resurfaced with asphalt and used for all season outdoor courts, play fields, and event parking.

Two small wood structures exist at the eastern corner of the existing gymnasium. These buildings would be removed prior to commencement of the gymnasium demolition activities.

Project Alternative 1 – No-project

The no-project alternative, as required per CEQA guidelines, is defined as the resultant actions the Eureka Unified School District would implement in the event the proposed project does not occur. The immediate plan would be to continue maintaining and utilizing the existing gymnasium to the best of the District's ability. The District has an obligation and commitment to provide a quality educational environment including physical education facilities for students. Without the proposed project, the District would have continued difficulty meeting mandated student needs due to the ongoing maintenance issues with the existing building (the entryway has already been condemned due to structural degradation). The student health and safety and ADA accessibility issues with the current gymnasium would not be resolved with the no-project alternative. With the no-project alternative, the District would make repairs on an as-needed basis. Thus, the no-project alternative could result in many of the repairs proposed under the renovation alternative, but not likely to the same degree as the renovation alternative.

Project Alternative 2 - Renovation of Jay Willard Gymnasium

An alternative to the proposed construction of a new gym at Eureka High School and demolition of the Jay Willard Gymnasium is to renovate the existing gym facilities. The renovation alternative would allow the fundamental design and function of the gym to remain the same and provide for additional uses, improvements, and repairs. It would also incorporate a new classroom expansion project. The

existing pool facility would remain unchanged with the exception of upgrades to seating, doors and surface finishes, and replacement of the roof.

Prior to any renovation activities, a survey for asbestos and lead would be conducted. These activities would have little effect on the structure and usability of the building. Any damage caused as a result of the sampling process will be immediately patched or repaired. A structural engineering evaluation must also be conducted. The Humboldt County area is subject to strong motion from numerous active and potentially active earthquake faults, the closest of which is approximately 3.8 kilometers from the project site. Recommendations reported as a result of this evaluation would be used to determine the extent of renovation necessary. Structural and seismic upgrades would be conducted per structural engineer recommendations and a renovation plan design. All recommendations would be taken into consideration and implemented to the extent feasible. Architectural services would be contracted to evaluate existing building and site conditions applicable to Title 24 and other California code compliance issues.

In order to make the building safe for continued use, the renovation alternative proposes replacement of the gymnasium main entrance and lobby, deemed structurally unsafe as a result of rot in the timber framing that supports the entrance windows, walls and roof. This part of the project would result in changes to the existing entrance design and use. The new design allows for restrooms, a concession stand and a new ticket booth, as well as new entrance and exit doors and lobby west of the existing lobby. The new design would have a larger footprint, but the International Modern style of the main gymnasium building would be incorporated.

All exterior walls would need to be refurbished by applying a colored acrylic stucco coating to the existing lathing. This activity would require application of new surface coating materials that may alter the aesthetic value of the building by making it look dissimilar to the existing buildings at the site. In addition, all existing murals and signage would be covered with the new stucco coating.

Interior renovations would include: replacement of existing bleacher seating in the main gymnasium, all new interior finishes for walls, doors and floors, new roof with upgraded drain system, and repair of existing skylights. ADA access would be provided for both sides of the mezzanine bleachers by means of a handicap chair lift. ADA access would also be provided to a new bleacher mezzanine in the Natatorium. ADA requires that the existing interior and exterior doors and framing be removed and replaced in order to allow the installation of wider doors to accommodate wheelchair traffic.

The renovation would also involve electrical, mechanical, and plumbing upgrades. New electrical wiring, switchgear, and fixtures would be installed, as well as upgrades to the low-voltage wiring for fire alarms, phones, PA's, etc. All new wiring would be surface run. A new plumbing system will be installed in order to better service the newly renovated building. Evaluation of the existing sewer line indicated an aging, damaged pipeline. Past repairs to the plumbing system indicate that the system has been compromised with probable leakage in buried pipes. Additional mechanical space would be provided for dehumidification and air handling equipment. A new heating and ventilation system would be installed to service the gymnasium, locker rooms, offices, and common areas.

Evaluation of Potential Impacts

Mitigation Measures identified in this study are discussed below. In some cases, the recommended mitigations will only lessen the degree of impact, but not below a level of significance. In such cases, mitigation to a level less-than-significant is not feasible.

Proposed Project –

- Construction of new gymnasium
- Interim use and modification of existing gymnasium
- Demolition of existing gymnasium

Impact 1: Demolition of existing Jay Willard Gymnasium

The existing gymnasium, identified as an historic resource potentially eligible for the National Register, is proposed for demolition upon completion of the new gymnasium facility.

During construction of the new gymnasium, the existing gym will remain in use. In order to allow for safe entry and exiting of students and full occupancy during sports events, the project proposes immediate demolition of the existing entry and lobby which have been identified as structurally unsafe. The existing lobby and entry constitute the primary character defining feature of the building.

Determination: Significant unavoidable impact

Mitigation 1.1: Photo-documentation

Prior to demolition of the lobby and entry, the entire Jay Willard Gymnasium will be professionally photo-documented. The photographs shall be large format (minimum 4"x5" negative size), black and white, and processed archivally in accordance with Photographic Specifications set by the Historic American Buildings Survey (HABS). Four (4) copies shall be distributed as follows: one copy to the Humboldt County Library, one copy to the Humboldt County Historical Society, one copy to the Humboldt Room of the Humboldt State University Library, and one to the City of Eureka Community Development Department. A Historical Architect meeting the Secretary of the Interiors Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall be consulted to ensure the proper execution of this recommended photo-documentation process.

Determination after Mitigation: The above measure would reduce the adverse effect, but would not reduce the impact to a less-than-significant level. Therefore, a significant unavoidable impact on the historic resource would remain.

Impact 2: Design and location of proposed new gymnasium could impact adjacent historic resources

The new gymnasium will be sited south of the existing Science Building between J Street and a campus driveway extension from K Street, closing the campus driveway extending from Humboldt Street. The building is proposed as similar in size and massing to the existing gymnasium, a majority of the building a little over 30 feet in height of fairly solid tilt-up construction. Design features of the proposed building include: skylights and clerestory windows, an entry and lobby component with some allusion to the existing gymnasium's lobby aesthetic, and connection to the campus' covered walkway system.

Determination: The proposed location of the new facility will essentially complete the barrier that was begun with the erection of the Science Building concealing all of the campus' historic modern buildings from public view, including the 1939 Masten and Hurd Industrial Arts Building determined potentially individually eligible for the National Register. While these structures, particularly the Industrial Arts Building, will suffer diminished visibility from J Street, the primary public artery past the high school, and loss of historically available vantage points, close range views from within the campus will be maintained.

The proposed new building design is of size and scale compatible with existing campus buildings. Materials used are consistent with preceding structures and though current construction methods and aesthetics prevail, some visual allusion is made to the Moderne/International style in the horizontality, glazing, and narrow canopy supports of the proposed entry design.

The location and design of the new gymnasium as proposed would constitute a less-than-significant impact to the surrounding campus resources and no mitigation is proposed.

Other proposed project activities include the following:

- Demolition of two small wood structures at the east corner of the existing gym – no significant impact
- New retaining wall in the slope east of the existing gym (post-demolition) – no significant impact
- New landscaping and exterior lighting fixtures – no significant impact

Project Alternative 1 –

- No-project

If the proposed project did not proceed, the unavoidable impacts associated with the proposed project would not occur. Loss of or alteration to the Jay Willard Gymnasium would be avoided, however the no-project alternative would not incorporate life safety and seismic improvements proposed as part of the project. Nor would it address the requirements and needs of the school which include: additional space for lockers, concessions, bleachers and showers; ADA access; increased seating capacity during sports events; 2-3 regulation basketball courts; minimal long-term maintenance; adequate classroom and activity spaces; acceptable acoustics and lighting; efficient heating/ventilation and utilities; and a Community Office of Emergency Services center. The historic resource would also continue to physically deteriorate over time, which could result eventually in loss of integrity and affect its National Register eligibility status. If a maintenance plan for the building, consistent with the Secretary of the Interior's Standards for Rehabilitation, were implemented, the life of the gym and its historic integrity and status could be prolonged.

Project Alternative 2 –

- Renovation of Jay Willard Gymnasium

Impact A2.1: Demolition and replacement of existing gymnasium entry and lobby

In order to allow for safe entry and exiting of students and full capacity during sports events, the renovation alternative proposes to demolish the existing entry and lobby, which has been identified as

structurally unsafe. The existing lobby and entry constitute the primary character defining feature of the building. The proposed new lobby and entry will have a larger footprint allowing for adequate ticketing and concession spaces. The design will incorporate International-style elements to achieve compatibility with the remainder of the existing structure.

Determination: Potential significant impact

Mitigation A2.1.1: New construction would comply with the Secretary of the Interior's Standards for Rehabilitation.

- A. The new entry/lobby shall be compatible with the historic materials, features, size, scale and proportion, and massing of the building and comply with the Secretary of the Interior's Standards for Rehabilitation. A Historical Architect meeting the Secretary of the Interiors Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall review the project during the planning, design, and implementation of this project element to ensure that the project follows the Secretary of the Interiors Standards.
- B. Prior to demolition the existing entry and lobby will be professionally photo-documented. The photographs shall be large format, black and white, and processed archivally in accordance with photographic standards set by the Historic American Buildings Survey (HABS). Four (4) copies shall be distributed as follows: one copy to the Humboldt Count Library, one copy to the Humboldt County Historical Society, one copy to the Humboldt Room of the Humboldt State University Library, and one to the City of Eureka Community Development Department. A Historical Architect meeting the Secretary of the Interiors Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall be consulted to ensure the proper execution of this recommended photo-documentation process.
- C. The existing entry and lobby features shall be carefully demolished to avoid damage to adjacent features and finishes to remain.

Determination after Mitigation: Execution of Mitigation A2.1.1 would reduce the impact to less-than-significant.

Impact A2.2: Seismic and structural upgrades

Upgrades would include strengthening of existing shear walls, beams, and stress points at the roof; bracing of overhead pipes; and anchorage of mechanical equipment. Walls would require crack and spall patching, as well as repair to wood members suffering dry rot. Areas of water penetration through walls and roof would be repaired. Also, the unreinforced brick chimney at the east corner of the building would be anchored to the building structure.

Determination: Potential significant impact

Mitigation A2.2.1: Comply with the Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior's Standards for Rehabilitation provide guidance for making required modifications to historic structures. Of these standards, numbers 9 and 10 are most relevant to this impact. These read as follows:

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

A Historical Architect meeting the Secretary of the Interiors Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall review the project during the planning, design, and implementation of this project element to ensure that the project follows the Secretary of the Interiors Standards.

Determination after Mitigation: The undertaking of Mitigation A2.2.1 would reduce the impact to less-than-significant.

Impact A2.3: Exterior wall surface alteration

All exterior walls are proposed to be refurbished by applying a colored acrylic stucco coating to the existing surface. This activity will require application of new surface coating materials that may alter the aesthetic value of the building by making it look dissimilar from the existing buildings at the site. In addition, all existing murals and signage will be covered with the new stucco coating.

Determination: Potential significant impact

Mitigation A2.3.1: Repair existing exterior stucco finish

Selectively patch existing stucco, use compatible material to repair cracks, and repaint with a high quality acrylic latex paint. Protect in place and touch up as necessary historic painted signage.

Determination after Mitigation: The undertaking of Mitigation A2.3.1 would reduce the impact to less-than-significant.

Impact A2.4: Interior finish demolition and replacement

The renovation alternative proposes all new interior finishes for walls, doors, and floors. Floor supports for the existing wood floors in the feature and auxiliary gymnasiums are damaged. Paint finishes in wet areas such as locker rooms and pool areas are flaking and peeling.

Determination: Potential significant impact

Mitigation A2.4.1: Select appropriate materials and installation methodology

Follow the Secretary of the Interior's Standards for Rehabilitation to select appropriate materials and methods for restoring this feature. Standard 6 is most relevant here; it reads:

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

This standard recommends matching deteriorated or missing features in design, color and texture. Missing features must be substantiated by physical and documentary evidence.

A Historical Architect meeting the Secretary of the Interior's Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall review the project during the planning, design, and implementation of this project element to ensure that the project follows the Secretary of the Interior's Standards.

Determination after Mitigation: Replacement of finishes in accordance with the Secretary of the Interior's Standards would assure a less-than-significant impact.

Impact A2.5: Accessibility lifts

Lifts are proposed to provide disabled access to both the feature court and natatorium bleacher seating. Placement of these lifts could affect historic features or character of the space.

Determination: Potential significant impact

Mitigation A2.5.1: Comply with the Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior's Standards for Rehabilitation provide guidance for making required modifications to historic structures. Of these standards, numbers 9 and 10 are most relevant to this impact. These read as follows:

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

A Historical Architect meeting the Secretary of the Interiors Standards, as defined in the Code of Federal Regulations, Title 36, Part 61, shall review the project during the planning, design, and implementation of this project element to ensure that the project follows the Secretary of the Interiors Standards.

Determination after Mitigation: Following the above mitigation would reduce the impact to a less-than-significant effect.

Other proposed project activities include the following:

- Mechanical, electrical, and plumbing upgrades – no significant impact

H. BIBLIOGRAPHY

Architectural Resources Group. *Eureka: An Architectural View*. Eureka, CA: Eureka Heritage Society, 1987.

California Retired Teachers Association, North Coast Section, ed. *History of Humboldt County Schools By High School Districts: Volume II – Eureka Area*. Humboldt County Office of Education, 1989.

Carey & Co. Inc. "Eureka High School and Annex, Eureka, Calif., Historic Resources Survey, Impacts and Mitigations." San Francisco, CA: Carey & Co., 18 July 2005.

Caudill, William W. *Toward Better School Design*. New York: F.W. Dodge Corporation, 1954.

Engelhardt, N.L., N.L. Engelhardt Jr., and Stanton Leggett. *Planning Secondary School Buildings*. New York: Reinhold Publishing Corporation, 1949.

"Eureka City Schools Show Result of Steady Progress, Improved Facilities." Humboldt Times Centennial Edition, Eureka (Calif.) Newspapers, Inc. 1854-1954. Section 13 Page Four, clipping c.1954. From file at Humboldt County Historical Society, Eureka, CA.

"Eureka's Splendid School System." The (Eureka, Calif.) Humboldt Times, 1 February 1914.

Hart, Frank W. and L. H. Peterson. "A School Building Survey and Schoolhousing Program for Eureka, California" 1924.

Jensen, George C. "A Study of the Working of the Eureka School Plan" Redwood Chips (Eureka Chamber of Commerce) Vol. 3, No. 11, 1 May 1926.

McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1986.

Macdonald, Jill. "Eureka High campus: A treasure about to be lost?" The (Eureka, Calif.) Times-Standard, November 2004, 2.

"Moving Day for Two Eureka Schools." The (Eureka, Calif.) Humboldt Times, 23 September 1962.

Nash, Glen N. "A look at Eureka Schools Constructed in the 1900s" The Humboldt Historian, Sept.-Oct. 1986.

"Public School Observance Week Starts." Clipping dated 20 April 1958. From "Schools, Eureka – Administration to 1969" file at Humboldt State University Library, Arcata, CA.

Saul, Barbara Canepa. "How true to you we are, Eureka High!": The First One Hundred Years 1895-1995" The Humboldt Historian, Vol. 43, No. 3, Fall 1995.

Sequoia (Eureka High School Yearbook). Eureka, CA: Eureka High School Printing Department, 1949, 1950, 1951, 1956.

Stillman & Associates. "CEQA Analysis of Historic Resources and Potential Impacts of Development

Project: Jay Willard Gymnasium, Eureka High School, 1915 J. Street, Eureka, Ca.” Eureka, CA:
Stillman and Associates (Prepared for 3D/International), 29 March 2005.

Archives and Repositories

Humboldt County Historical Society, Eureka, CA.

Humboldt County Public Library, Eureka, CA

Humboldt State University Library, Arcata, CA.

San Francisco Public Library

APPENDIX A: DPR 523 A/B

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI# _____
Trinomial _____
NRHP Status Code: _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

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Resource Name or #: (Assigned by recorder) Jay Willard Gymnasium

P1. Other Identifier: _____

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County: Humboldt

*b. USGS Quad: _____ Date: _____ T: _____ R: _____ S: _____

c. Address: 1915 J Street City Eureka ZIP 95503

d. UTM (Give more than one for large or linear resources) Zone _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, directions to resource, elevation, etc. as appropriate)

APN: 011-131-005

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The roughly "L"-shaped, International Style gymnasium includes a glazed lobby, exercise areas, locker/restrooms, a natatorium, and a small basement boiler room. The concrete and steel structure is primarily single-story, with the exception of the feature court and natatorium with mezzanine bleacher areas. A combination of concrete-encased steel columns, steel roof trusses and wood sheathing make up the court and natatorium roofs, while sheathing and wood purlins spanning to steel and concrete members compose the lower roofs. Gabled skylights illuminate many of the interior spaces. A smooth stucco finish covers the building. The primary (west) entry is part of the lobby, a separate single-story projecting mass of metal grid frame and glazed panel construction with a flat roof and wide overhangs. The entry, centered on the lobby mass, is denoted by a lower flat canopy supported on either side by large pilasters featuring speed lines and intermediately by metal pipe columns. Three sets of double doors stand adjacent to each other with transoms and outer side lites. Secondary entries are at the north facade, as well as south of the main entry. The remaining facades are characterized by both projecting and recessed bands of windows arranged in a continuous pattern of two fixed, followed by one operable, often two bands stacked. Tertiary entries are similarly configured, but are simpler than the main entry. See attached continuation sheets for Description continued.

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other



P5b. Description of Photo (view,date,etc):

Primary façade, view looking southeast, 1/4/06

*P6. Date Constructed/Age/Sources:

☒ Historic ☐ Prehistoric ☐ Both

Constructed 1947-1950, original drawings and Sequoia yearbook

*P7. Owner and Address

Eureka City Schools

3200 Walford Avenue

Eureka, Calif. 95503

*P8. Recorded By:

Carey and Co.

460 Bush Street

San Francisco, CA 94108

*P9. Date Recorded: 1/4/06

*P10. Survey Type:

Intensive survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none")

Carey & Co., "Proposed Eureka High School Gymnasium Project, Historic Resource Evaluation," February 2006.

*Attachments: ☐ NONE ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record

☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (list): _____

BUILDING, STRUCTURE, AND OBJECT RECORD

NRHP Status Code: _____

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Resource Name or #: (Assigned by recorder) Jay Willard Gymnasium

B1. Historic Name: _____

B2. Common Name: _____

B3. Original Use: Educational, Gymnasium

B4. Present Use: Educational, Gymnasium

*B5. Architectural Style: Moderne/International

*B6. Construction History: (construction date, alterations, date of alterations)

Design and construction of the gymnasium occurred between 1947 and 1950. Alterations appear to have been limited to general maintenance, mechanical upgrades, and minor changes in room use with little modification to the physical fabric and integrity of the building. Broken glazing at the main lobby has been replaced over time with solid infill panels. Renovation of the pool occurred in the early 1990s.

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date _____ Original Location _____

*B8. Related Features:

B9a. Architect: Masten and Hurd Architects, San Francisco, b. Builder: Maurer and Sons, Eureka, Calif.

*B10. Significance: Theme: Modern School/Gymnasium Architecture Area: Eureka, Calif.

Period of Significance: 1947-1950

Property Type: Gymnasium

Applicable Criteria: A, C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Jay Willard Gymnasium at Eureka High School in Eureka, Calif., is not currently listed on the National Register of Historic Places or the California Register of Historic Resources. Carey & Co. has assigned the building, a "3S" status code, indicating that the property appears to be eligible for the National Register as an individual property through survey evaluation.

See attached continuation sheets for Background History and Evaluation, and appended summary of California Historical Resources Status Codes updated August 2003.

B11. Additional Resource Attributes(List attributes and codes) _____

B12. References:

See attached continuation sheet for References.

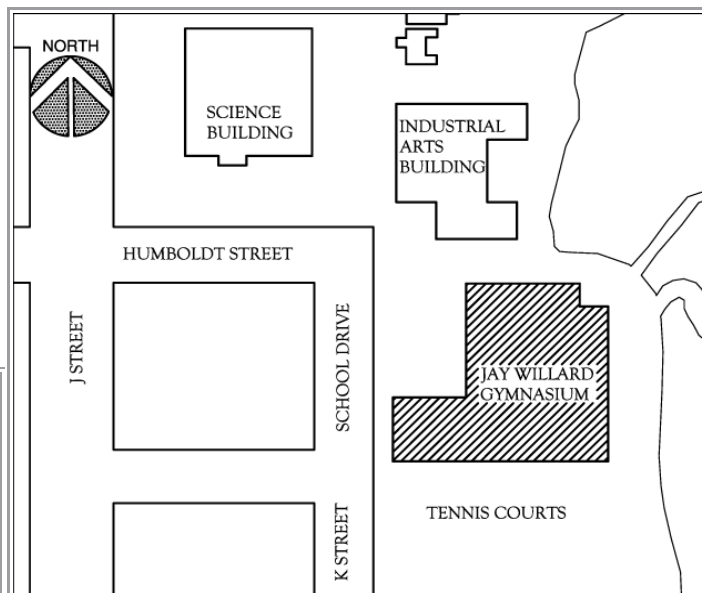
B13. Remarks:

Historic Resource Evaluation

*B14. Evaluator: Carin Petersen, Carey & Co. Inc.

*Date of Evaluation: 1/4/06

(This space reserved for official comments)



*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

☐ Update

P3a. Description

The interior arrangement of the gymnasium is focused around the feature court, accessed directly from the main entry lobby. The entry lobby contains two ticket booths, two phone alcoves, and a built-in trophy case. Classrooms and locker/restrooms flank the feature court to the north and south, with exercise/weight rooms to its east. The natatorium is located south of the feature court, with the main locker room and shower facility between them. The wing projecting west, creating the "L"-shape of the building footprint, was constructed as the girl's gym with a smaller court space, exercise room, and locker/restrooms between the court and the natatorium. This wing is now used as auxiliary spaces. Interior finishes include: smooth plaster walls and ceilings; exposed structure and wood sheathed ceilings in court/exercise spaces; wood flooring in courts, exercise rooms, and offices and classrooms; asphalt tile floors in lobby and corridors; and pipe handrails at concrete stairs. Interior doors are wood, either solid, Dutch, or with a small single pane of glass. Built-ins, mostly in locker and equipment rooms and at mezzanine seating levels, include: wood storage shelves, fixed bench and bleacher seating, blackboards, and trophy case.

The International style was born of the post-WWII modern movement. It is generally defined by flat roofs, metal windows set flush with the outer wall, smooth wall surfaces with no decorative detailing at doors and windows, and asymmetrical facades. Non-load bearing walls allow for long bands of windows with greater height. Walls are typically smooth stucco-clad with function dictating location, size, and type of opening.¹ The Jay Willard Gymnasium is a representative of the International style incorporating smooth stucco walls, large expanses of windows, a flat roof, and minimal ornament. The entry and lobby are of particular interest and value featuring projecting roof sections and gridded steel and glass walls indicative of high International style public buildings.

Major character defining features of the building include: the main entry and lobby, mass and form of the structure, expressed structural system, windows and skylights, exterior stucco finish, interior finishes in primary spaces (feature court, girls' gym), and interior spatial configuration and use relationships.

A condition assessment, based on visual observation, professional judgment, and evaluations provided by structural and materials testing specialists, indicates that the Jay Willard Gymnasium, as a whole, appears to be in fair condition; however individual components exist in varying degrees of deterioration. The exterior and interior walls are in fair condition requiring crack and spall repairs and refinishing and the roof suffers from leaks at skylights, however the overall structural system appears to be in fair to good condition, though in need of seismic upgrade. Windows and doors seem in good physical condition. Interior finishes are deteriorating as a result of either age, such as flooring and bleacher seating, or moisture issues as in the locker rooms and natatorium. These elements range in condition from fair to poor depending on ability to repair the element to a functional state. Cosmetic issues such as peeling paint are considered fair. The main entry and lobby have been determined to be in poor structural condition.

¹ Virginia and Lee McAlester. *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1986): 469-473.

*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

☐ Update

P5a. Photos/P5b. Description of Photos Continued



Overall view of gymnasium primary (west) elevation, from adjacent paved lot, 1/4/06



Moderne/International style lobby and primary entry at west facade, 1/4/06

*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

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Primary entry, centered on lobby, west facade, 1/4/06



Secondary entry south of lobby structure, west facade, 1/4/06

*Recorded by: Carey & Co.

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Secondary entry at north façade of lobby structure, 1/4/06



North elevation of girls' gym wing, 1/4/06

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West elevation of girls' gym wing, 1/4/06



Entry to girls' gym wing at west wing façade, featuring
Moderne/International style elements and wood doors, 1/4/06

*Recorded by: Carey & Co.

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North elevation, portion nearest lobby, 1/4/06



North elevation at northeast corner, tertiary entry/exit at rear of feature court 1/4/06

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Rear (east) elevation, north portion, 1/4/06



East elevation, viewed from southeast corner, 1/4/06

*Recorded by: Carey & Co.

*Date: 1/4/06

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☐ Update



Tertiary entry at rear of feature court with wood hung windows above, basement access doors below, 1/4/06



South elevation of natatorium portion, windows have received infill panels (lowest row), metal screens, and mechanical ventilation units, 1/4/06

*Recorded by: Carey & Co.

*Date: 1/4/06

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South elevation of girls' gym wing, 1/4/06



Recessed tertiary entry at south façade of girls' gym wing, 1/4/06

*Recorded by: Carey & Co.

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Window type - Wood fixed and stacked (two-high) awning windows aligned in continuous band and set in stepped frame (example located near secondary entry, north façade of girls' gym wing), 1/4/06



Window type – Wood fixed and stacked (four-high) awning windows aligned in continuous band and set in stepped frame (example located at north elevation), 1/4/06

*Recorded by: Carey & Co.

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Window type – Wood fixed and stacked (four-high) awning windows aligned in continuous band and projecting in a stepped frame (example located at west elevation of girls' gym wing), 1/4/06

END.

*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

☐ Update

B10. Significance: CON'T

Background History:

Eureka High School Campus

Eureka's first public high school was opened to students in January of 1896. In California at this time most small towns had public grammar schools, but few had public high schools. A private school, the Eureka Academy, had served as a high school in Eureka from the 1880s until the building burned in 1893. Finally, the townspeople voted to fund a public high school in 1895, and the following January students began classes at the Winship School, a large Victorian-style building constructed in 1889. Within a few years the student body had outgrown this space, and so in 1915 a new school was built, supported by a voter-approved bond measure.²

In 1924 plans were drawn for "A School Building Survey and Schoolhousing Program for Eureka, California." This report included drawings by prominent school architect John J. Donovan showing the "Eureka High School Group" which featured the footprint of his Junior High School building, completed in 1925. The landscape architect for this scheme was Howard Gilkey, an Oakland-area designer who is noteworthy for his design of the Cleveland Cascades near Lake Merritt in Oakland. Donovan and Gilkey's plan is characterized by symmetrically arranged structures located adjacent to more naturally arranged landscape features. Primarily straight walkways connect the buildings, while winding paths lead to the athletic field.³

In addition to physical plans for the development of the Eureka public schools, officials with the school district were also examining the mission of the educational system. An article published in the Eureka Chamber of Commerce journal in 1926, titled "A Study of the Working of the Eureka School Plan" by George C. Jensen, Principal of Secondary Schools, explained the philosophy of the Eureka secondary school system, calling it the "Eureka Plan." This plan sought to provide curriculum geared toward student's individual goals, generally either in college-preparatory tracks or vocational training tracks.⁴

A number of Eureka's grammar schools were constructed during the first decade of the 20th century. However, in 1938 these wooden school buildings were condemned due to fire safety concerns. Replacement schools were built in the ensuing years; however, this new construction was limited by the Depression and onset of World War II. At least one school construction project completed at this time was accomplished with help from the federal government. The Works Progress Administration, a Depression-era program under the Roosevelt administration's "New Deal" work relief initiatives, provided funding for the Eureka High School Industrial Arts Building. Constructed in 1939, it is one of few buildings constructed in Eureka from the period of 1930 to 1945. Others include the Marshall School, constructed in 1941, which replaced its demolished namesake (a wooden

² Barbara Canepa Saul, "How true to you we are, Eureka High!": The First One Hundred Years 1895-1995," *The Humboldt Historian*, Vol. 43, No. 3, Fall 1995, 4-7.

³ Frank W. Hart and L. H. Peterson, "A School Building Survey and Schoolhousing Program for Eureka, California," 1924; "Howard Gilkey, designer of the Cleveland Cascade," cited 15, July 2005, available at: <http://clevelandcascade.org/gilkey.html>.

⁴ George C. Jensen, "A Study of the Working of the Eureka School Plan," *Redwood Chips* (Eureka Chamber of Commerce) Vol. 3, No. 11, 1 May 1926.

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grammar school).⁵ Three other elementary schools were constructed at the same time, including the Jefferson School, the Lincoln School, and the Franklin School.⁶

Post-war buildings added to the High School included the Jay Willard Gymnasium (1949-1950), the Field House (1950), and the Agricultural Building (1950).

The 1960s brought a great deal of change to Eureka's public school landscape. Following an earthquake in 1962, the High School building that had been erected in 1915 was condemned and demolished. The high school students were moved next door into the Junior High School building, constructed in 1925. Junior high school students were moved into the existing George C. Jacobs Junior High, sharing class space with students from that school from 1962 to 1965. Two new junior high school buildings were opened in 1965, ending this arrangement. A Science/Cafeteria building, serving the high school students, was built on the site of the demolished high school in 1964.⁷ That year also saw the construction of the Auto Shop, and a covered walkway system connecting the main buildings. More recently, a number of portable buildings have been added at the paved areas west of the Gymnasium. The Marshall School ceased to be an elementary school, and was annexed to the High School in 2003.

Jay Willard Gymnasium

In 1947, Masten and Hurd Architects produced a set of plans for a new gymnasium on the Eureka High School campus. The new facility would replace the existing gym, which featured an addition designed by Masten and Hurd in 1923. The school yearbook, the Sequoia, features highlights of the construction starting in 1949 and citing delays before final occupancy at the end of 1950. The new gymnasium was created during a time of great change in design, as well as education. A modern aesthetic and a modern approach to healthy education were both moving towards common acceptance.

The new plans included a large feature court with mezzanine bleacher seating, encircled by classrooms, offices, locker rooms, restrooms, and therapy and exercise rooms. Adjacent to the gym was the natatorium, easily accessed from the locker room, and ancillary rooms for suit drying and equipment. The pool featured diving boards and mezzanine bleacher seating. The design also proposed a separate girls' gym wing complete with small court, exercise room, and access to the natatorium. Individual shower and dressing stalls differentiated the girls' locker room from the boys'.⁸ The gymnasium appears to have been constructed in accordance with Masten and Hurd's exterior design, interior configuration, and materials and finishes.

The gymnasium is named for Coach Jay Willard, a coach and advisor at Eureka High School from 1927 to his retirement in 1963. During his 36 year career, Willard taught boys' physical education classes, coached football, basketball, baseball, and track, advised the boys' athletic society, and was named to the California Coaches Association Hall of Fame in 1969. Coach Willard died in 1973.

⁵ Glen N. Nash, "A look at Eureka Schools Constructed in the 1900s," The Humboldt Historian, Sept.-Oct. 1986, 10-12; Architectural Resources Group, Eureka: An Architectural View, (Eureka, CA: Eureka Heritage Society, 1987) 106-108; Stillman & Associates, CEQA Analysis of "Jay Willard Gymnasium," 2005, 18, 20.

⁶ Nash, 11.

⁷ Saul, 9.

⁸ Masten and Hurd Architects, Gymnasium drawings, 1947.

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Over the past 55 years, the Jay Willard Gymnasium has kept up with the demands of the Eureka High School students, faculty, and staff, as well as community use. Elementary and secondary school programs, as well as a community recreational swimming program began in 1950. The gym has facilitated a vast array of athletic and educational programs and hosted championship sports games and intramural competitions.

Few alterations have been made to the original Masten and Hurd design, most noticeably solid infill panels at the glazed entry lobby. Alterations appear to have been limited to general maintenance, mechanical upgrades, and minor changes in room use with little modification to the physical fabric and integrity of the building. Most alterations, including those made to the main entry and lobby, appear to be reversible. Renovation of the pool occurred in the early 1990s.

Current concerns include deteriorating finish materials and building systems, water infiltration at the skylights, and the structural safety of the entry lobby. These issues are accelerating the natural deterioration of the building and its components resulting in declining physical conditions and eventually loss of integrity.

Historical Context:

Modern School Architecture

The battle for better school design has long been underway. Movements in the United States have arisen in waves. Around the turn of the century the Chicago School of Architects is credited with one such movement, producing influential school architects including John J. Donovan, responsible for the preliminary plans for the Eureka High School campus (the Main Building being constructed in 1925). The concept of a school evolved from schoolhouse to school plant/campus with reforms to America's educational system and concerns for health and safety. From 1915 to 1945, progress in school design was slowed, in part due to the reactionary enactment of codes and regulations. However, a post-war movement brought enlightened school design back to the forefront. William Caudill, author of *Toward Better School Design* published in 1954, sites 1950 as "a year in history when for the first time a large majority of architects and educators throughout the entire nation got together to try to solve their common problems."⁹ Codes were revised, conferences were held bringing architects and school administrators together, and public opinion finally accepted modern contemporary design over traditional. The result was a pupil focused approach to school design – recognizing the physical and emotional needs of the student in order to produce peak academic performance. Thought was even given to social needs, generating the idea of the social center. Caudill describes the space as an "area for social interchange," going further to say "...In essence the center is an oversized corridor which serves...(3) as a lobby for the gymnasium..."¹⁰ The concept of "form follows function" also came into wide acceptance resulting in modest, unadorned buildings that openly expressed their structure and function and elements of importance and beauty.

Gymnasium Design

Physical education was born out of increasing urban growth and industrialization. The latter half of the nineteenth century saw an increasing demand for organized physical activity resulting in the formation of private clubs and public gyms. The first public high school gymnasium was built in Chicago around 1890, signifying the transition of physical activity in schools from a periphery concern to a planned educational necessity. By the

⁹William Caudill, *Toward Better School Design* (New York: F.W. Dodge Corporation, 1954): 16.

¹⁰Caudill, 38-39.

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early twentieth century physical education programs had become a curriculum requirement in California. Increasing enrollment and popularity of sporting events led to improvements and expansions in athletic facility and campus design.

By mid-century physical education was widely accepted and expected in public schools. Engelhardt, Engelhardt, and Leggett, authors of *Planning Secondary School Buildings* published in 1949, wrote "Vigorous exercise, the joy of team play, and comfortable relaxation with fellow students after tiring play are aspects of a good physical program for adolescents that all who are physically able should and do enjoy."¹¹ The modern school movement of the 1950s toward pupil-oriented design greatly affected the planning and design of indoor physical education facilities. Architects were presented with a larger participatory portion of the student body, a wider variety of games and activities, specialized teachers and staff, and community recreational use of the facility. In 1946, Karl Bookwalter published the following list of principles addressing the planning of facilities for health and physical education programs:

1. Facilities should be conveniently located.
2. Facilities should be attractive and inspire appreciative treatment.
3. Related areas and groups should be in a functionally related unit or department.
4. Expenditure of money, time, and energy for the construction, use, and maintenance of health and physical education plant should be kept as low as is compatible with effective instruction and with maximum wholesome participation.
5. Increase or change in the activities offered should be readily and economically feasible.
6. The elimination of odors, noises, and moisture; the segregation of activity groups; and the exclusion of undesirable persons should be automatic and effective.
7. Consideration must be given to safety, hygiene, and sanitation in the provision, arrangement, and maintenance of facilities.
8. The oversight, control, and management of activities and groups will be facilitated by visibility.
9. Adaptability of areas to multiple use enhances their utility.
10. Facilities must be in accord with curricular needs, scientific facts, legal requirements, and interscholastic sports rules.¹²

Modern school design utilized both gymnasiums and field houses, provided separate play areas for boys and girls, and included a swimming pool when possible. Engelhardt, Engelhardt, and Leggett specifically address the planning and design of gymnasiums in secondary schools around 1950, when Masten and Hurd were designing and construction the Jay Willard Gymnasium at the Eureka High School campus. The pupil-oriented design was to consider light and ventilation providing the maximum amount of operable windows feasible in any given play space. No student-occupied areas were to be placed in the basement or walled in. Instructor offices and examination/treatment rooms were also considered important. Adequate and well-located dressing and shower rooms were essential, providing gang showers for boys and individual showers and dressing booths for girls. The design of the modern gymnasium emphasized efficiency and safety while providing for a dense and diverse physical education program.¹³

¹¹ N.L. Engelhardt, N.L. Engelhardt Jr., & Stanton Leggett, *Planning Secondary School Buildings* (New York: Reinhold Publishing Corporation, 1949): 129.

¹² Excerpt from Engelhardt, *Planning Secondary School Buildings* (New York: Reinhold Publishing Corporation, 1949): 130.

¹³ Engelhardt, 131-134.

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Masten and Hurd Architects

Charles Masten and Lester Hurd operated out of San Francisco throughout the early-twentieth century. The firm's early work consists primarily of residential architecture in San Francisco, however in their later years, Masten and Hurd became known for their Moderne and International style large public buildings, particularly schools and college campuses. Notable works include several buildings on the Eureka High School campus, Lynbrook High School in San Jose (1965), King Middle School gymnasium in Oakland (c.1955), and Foothill (1961) and DeAnza College (1963). Several ventures were undertaken jointly with well-known modernist Ernest Kump of Palo Alto.

Masten and Hurd was first commissioned by the Eureka Unified School District in 1923 to design an addition to the first Eureka High School Gymnasium. The firm later returned to design the Industrial Arts Building and Music Building, completed 1939, followed by several area elementary schools. In 1947 Masten and Hurd laid out plans for the new Eureka High School Gymnasium and began construction in 1949. Their design was cutting edge for the time, applying all the ideals and guidelines emerging from the modern movement, both architecturally and in education reform.

Evaluation:

To evaluate the Jay Willard Gymnasium, Carey & Co. reviewed individual eligibility for the National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR), as well as existing local listings.

Previous evaluation performed by Stillman & Associates in March 2005 identified the gymnasium as a contributor to a potential Eureka High School historic district referring to the campus as "a catalog of modern school design," citing its variety of styles and construction dates from 1925 to 1950. Independent evaluation undertaken by Carey & Co. in July 2005 resulted in a different determination regarding the feasibility of a historic district. The Carey & Co. report was unable to identify a shared context that fit into one or more of the National Register Criteria, and was not so general that it would also apply to many other schools, school campuses, or other groups of buildings in Eureka or elsewhere. The buildings on the campus date from 1925 to present; represent several styles including Gothic Revival, Streamline Moderne, and the International Style; are by different architects, although Masten and Hurd designed four of the structures; and were not all originally built for the High School. These factors informed Carey & Co.'s determination that the Eureka High School campus structures represent several disparate themes that are more appropriately evaluated as individual resources than as a district. This report supports Carey & Co.'s previous district findings and therefore does not address the potential for a historic district, or the gymnasium, as a contributor.

For a historic resource to qualify as eligible for the National Register and/or California Register, it must retain historic integrity of its character defining features. Integrity refers to the property's physical features and how they relate to its significance. Carey & Co. uses the seven aspects of integrity established by the National Register to evaluate and determine the degree of integrity a property retains. These aspects are location, design, setting, materials, workmanship, feeling, and association. Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.

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The term “condition,” as used by Carey & Co. in relation to a structure and its corresponding elements, refers only to the physical state of the building materials and features as surveyed and analyzed by a qualified professional. The assessment of a material’s condition is not founded upon historical significance or integrity, but rather on the technical observations of the material’s physical status in reference to issues such as deterioration, structural stability or failure thereof, corrosion, water damage etc. A building may be determined to be in overall poor physical condition, while exhibiting historical features and physical characteristics that lend to the separate determination of a structure’s historical significance and integrity.

Local

Currently, the Gymnasium is not a locally designated historic resource and is not included in the 1987 survey *Eureka: An Architectural View*, presumably because at the time of survey, it was not yet 45 years old.

National Register

National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors: the property must be over 50 years old (except in special cases, as described below) and associated with an important historic context. The National Register identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, “Statement of Significance,” of the National Register of Historic Places Registration Form, these context types are:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.¹⁴

Second, for a property to qualify under the National Register’s Criteria for Evaluation, it must also retain “historic integrity of those features necessary to convey its significance.”¹⁵ While a property’s significance relates to its role within a specific historic context, its integrity refers to “a property’s physical features and how they relate to its significance.”¹⁶ To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity. These are:

Location is the place where the historic property was constructed or the place where the historic event occurred...

¹⁴ *How to Complete the National Register Registration Form*, National Register Bulletin, no. 16A (Washington, D.C.: United States Department of the Interior, 1997): 75.

¹⁵ *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin, no. 15 (Washington, D.C.: United States Department of the Interior, 1997): 3.

¹⁶ *How to Apply the National Register Criteria for Evaluation*, 44.

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Design is the combination of elements that create the form, plan, space, structure, and style of a property...

Setting is the physical environment of a historic property...

Materials is the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property...

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory...

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time...

Association is the direct link between an important historic event or person and a historic property.¹⁷

Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.¹⁸

In addition to the Criteria for Evaluation, the National Register maintains a list of property types or circumstances that generally automatically disqualify properties from listing on the NRHP. These are:

"cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years"¹⁹

However, the National Register also provides for special consideration if a property described above is either an "integral" contributor to a district that qualifies under the Criteria for Evaluation or one of the following:

- a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or
- d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

¹⁷How to Apply the National Register Criteria for Evaluation, 44-45.

¹⁸How to Apply the National Register Criteria for Evaluation, 45.

¹⁹How to Apply the National Register Criteria for Evaluation, 2.

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- e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- g. A property achieving significance within the past 50 years if it is of exceptional importance.²⁰

The Jay Willard Gymnasium was identified as individually eligible for listing on the National Register by both Stillman & Associates (March 2005) and Carey & Co. (July 2005). This report supports those previous findings. The structure is 55 years old and meets NRHP Criterion C, embodying distinctive characteristics of a type and period, and possessing high artistic values.

C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

The Gymnasium, as well as several other Eureka High School campus buildings, was designed by a well-known firm specializing in school design, Masten and Hurd. This San Francisco-based firm had its first commission in Eureka in 1923, with the addition to the first Eureka High School Gymnasium. The firm later returned to Eureka to design the Industrial Arts Building and Music Building, completed 1939, followed by several elementary schools, and then finally the International Style Gymnasium in 1947 (constructed 1949-1950). After a cursory review of other Masten and Hurd school buildings, including the King Junior High School gymnasium in Oakland, the Jay Willard Gymnasium appears to be an exemplary example of Masten and Hurd's involvement in modern school architecture.

Design and construction of the gymnasium coincided with the modern school design movement toward pupil-oriented facilities. Masten and Hurd's original plans incorporate the ideals and expectations of the educational movement at its forefront. The unadorned, straight-forward International style lent itself to the modern educational requirements of vast expanses of glass, simple and economical space, and functionality. The Jay Willard Gymnasium serves as an excellent physical expression of the c.1950s education reform movement, as well as an example of the modern architectural movement and International style – particularly the main entry and lobby.

The structure may also be NRHP eligible under Criterion A for its place in the development of the Eureka High School campus and the surrounding community and its association with 1950s education reform.

²⁰ How to Apply the National Register Criteria for Evaluation, 2.

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Though the gymnasium is named for Jay Willard, esteemed coach and faculty member, little significance can be derived from this association as a majority of Coach Willard's time and achievements pre-date the gym (Criterion B). Jay Willard taught at Eureka High School from 1927 to 1963, having gone into partial retirement in 1955.

It is unlikely that the building will yield information important to prehistory or history (Criteria D).

The gymnasium appears to retain a high degree of integrity despite deteriorating conditions. Its location and setting on the Eureka High School campus have changed little over the past 55 years. Minimal alterations and general maintenance have had little to no effect on the buildings design, materials, and workmanship. Most character defining features, both exterior and interior, remain intact and able to convey their historic relationship and significance. The main entry and lobby have suffered material loss over time; however infill and alterations made to the lobby's glass wall system appear to be reversible and therefore do not significantly impact the integrity of the entry component or the gymnasium building. The aspects of feeling and association have also been retained with the school's continued use of the facility for athletics and the maintenance of its International style features, exposed structure, and form conceived by function.

Carey & Co. has assigned the Jay Willard Gymnasium, a "3S" California Historical Resources Status code, indicating that the property appears to be eligible for the National Register as an individual property through survey evaluation.

California Register

California Office of Historic Preservation's Technical Assistance Series #6, *California Register and National Register: A Comparison*, outlines the differences between the federal and state processes. The context types to be used when establishing the significance of a property for listing on the California Register are very similar, with emphasis on local and state significance. They are:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.²¹

Like the NRHP, evaluation for eligibility to the California Register requires an establishment of historic significance before integrity is considered. California's integrity threshold is slightly lower than the federal level.

²¹ *California Register and National Register: A Comparison*, California Office of Historic Preservation Technical Assistance Series, no. 6 (Sacramento, CA: California Department of Parks and Recreation, 2001), 1.

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As a result, some resources that are historically significant but do not meet NRHP integrity standards may be eligible for listing on the California Register.²²

California's list of special considerations is shorter and more lenient than the NRHP. It includes some allowances for moved buildings, structures, or objects, as well as lower requirements for proving the significance of resources that are less than 50 years old and a more elaborate discussion of the eligibility of reconstructed buildings.²³

In addition to separate evaluations for eligibility to the California Register, the state will automatically list resources if they are listed or determined eligible for the NRHP through a complete evaluation process.²⁴

Since the requirements for listing on the California Register are so similar to those for the National Register, the Jay Willard Gymnasium appears eligible for the California Register under Criteria 1 & 3 for the reasons listed above.

END.

²² Ibid, 1.

²³ Ibid, 2.

²⁴ All State Historical Landmarks from number 770 onward are also automatically listed on the California Register. (*California Register of Historical Resources: The Listing Process*, California Office of Historic Preservation Technical Assistance Series, no. 5 [Sacramento, CA: California Department of Parks and Recreation, n.d.], 1.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI#
Trinomial

Page 24 of 25

*Resource Name or # (Assigned by recorder) Jay Willard Gymnasium (HRE)

*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

☐ Update

B12. References: CON'T

Architectural Resources Group. *Eureka: An Architectural View*. Eureka, CA: Eureka Heritage Society, 1987.

California Retired Teachers Association, North Coast Section, ed. *History of Humboldt County Schools By High School Districts: Volume II – Eureka Area*. Humboldt County Office of Education, 1989.

Carey & Co. Inc. "Eureka High School and Annex, Eureka, Calif., Historic Resources Survey, Impacts and Mitigations." San Francisco, CA: Carey & Co., 18 July 2005.

Caudill, William W. *Toward Better School Design*. New York: F.W. Dodge Corporation, 1954.

Engelhardt, N.L., N.L. Engelhardt Jr., and Stanton Leggett. *Planning Secondary School Buildings*. New York: Reinhold Publishing Corporation, 1949.

"Eureka City Schools Show Result of Steady Progress, Improved Facilities." Humboldt Times Centennial Edition, Eureka (Calif.) Newspapers, Inc. 1854-1954. Section 13 Page Four, clipping c.1954. From file at Humboldt County Historical Society, Eureka, CA.

"Eureka's Splendid School System." The (Eureka, Calif.) Humboldt Times, 1 February 1914.

Hart, Frank W. and L. H. Peterson. "A School Building Survey and Schoolhousing Program for Eureka, California" 1924.

Jensen, George C. "A Study of the Working of the Eureka School Plan" Redwood Chips (Eureka Chamber of Commerce) Vol. 3, No. 11, 1 May 1926.

McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1986.

Macdonald, Jill. "Eureka High campus: A treasure about to be lost?" The (Eureka, Calif.) Times-Standard, November 2004, 2.

"Moving Day for Two Eureka Schools." The (Eureka, Calif.) Humboldt Times, 23 September 1962.

Nash, Glen N. "A look at Eureka Schools Constructed in the 1900s" The Humboldt Historian, Sept.-Oct. 1986.

"Public School Observance Week Starts." Clipping dated 20 April 1958. From "Schools, Eureka – Administration to 1969" file at Humboldt State University Library, Arcata, CA.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI#
Trinomial

Page 25 of 25

*Resource Name or # (Assigned by recorder) Jay Willard Gymnasium (HRE)

*Recorded by: Carey & Co.

*Date: 1/4/06

☒ Continuation

☐ Update

Saul, Barbara Canepa. "How true to you we are, Eureka High!": The First One Hundred Years 1895-1995" The Humboldt Historian, Vol. 43, No. 3, Fall 1995.

Sequoia (Eureka High School Yearbook). Eureka, CA: Eureka High School Printing Department, 1949, 1950, 1951, 1956.

Stillman & Associates. "CEQA Analysis of Historic Resources and Potential Impacts of Development Project: Jay Willard Gymnasium, Eureka High School, 1915 J. Street, Eureka, Ca." Eureka, CA: Stillman and Associates (Prepared for 3D/International), 29 March 2005.

END.

APPENDIX B: CALIFORNIA HISTORIC RESOURCE STATUS CODES

California Historical Resource Status Codes

1 Properties listed in the National Register (NR) or the California Register (CR)

- 1D Contributor to a district or multiple resource property listed in NR by the Keeper. Listed in the CR.
- 1S Individual property listed in NR by the Keeper. Listed in the CR.

- 1CD Listed in the CR as a contributor to a district or multiple resource property by the SHRC
- 1CS Listed in the CR as individual property by the SHRC.
- 1CL Automatically listed in the California Register – Includes State Historical Landmarks 770 and above and Points of Historical Interest nominated after December 1997 and recommended for listing by the SHRC.

2 Properties determined eligible for listing in the National Register (NR) or the California Register (CR)

- 2B Determined eligible for NR as an individual property and as a contributor to an eligible district in a federal regulatory process. Listed in the CR.
- 2D Contributor to a district determined eligible for NR by the Keeper. Listed in the CR.
- 2D2 Contributor to a district determined eligible for NR by consensus through Section 106 process. Listed in the CR.
- 2D3 Contributor to a district determined eligible for NR by Part I Tax Certification. Listed in the CR.
- 2D4 Contributor to a district determined eligible for NR pursuant to Section 106 without review by SHPO. Listed in the CR.
- 2S Individual property determined eligible for NR by the Keeper. Listed in the CR.
- 2S2 Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR.
- 2S3 Individual property determined eligible for NR by Part I Tax Certification. Listed in the CR.
- 2S4 Individual property determined eligible for NR pursuant to Section 106 without review by SHPO. Listed in the CR.

- 2CB Determined eligible for CR as an individual property and as a contributor to an eligible district by the SHRC.
- 2CD Contributor to a district determined eligible for listing in the CR by the SHRC.
- 2CS Individual property determined eligible for listing in the CR by the SHRC.

3 Appears eligible for National Register (NR) or California Register (CR) through Survey Evaluation

- 3B Appears eligible for NR both individually and as a contributor to a NR eligible district through survey evaluation.
- 3D Appears eligible for NR as a contributor to a NR eligible district through survey evaluation.
- 3S Appears eligible for NR as an individual property through survey evaluation.

- 3CB Appears eligible for CR both individually and as a contributor to a CR eligible district through a survey evaluation.
- 3CD Appears eligible for CR as a contributor to a CR eligible district through a survey evaluation.
- 3CS Appears eligible for CR as an individual property through survey evaluation.

4 Appears eligible for National Register (NR) or California Register (CR) through other evaluation

- 4CM Master List - State Owned Properties – PRC §5024.

5 Properties Recognized as Historically Significant by Local Government

- 5D1 Contributor to a district that is listed or designated locally.
- 5D2 Contributor to a district that is eligible for local listing or designation.
- 5D3 Appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation.

- 5S1 Individual property that is listed or designated locally.
- 5S2 Individual property that is eligible for local listing or designation.
- 5S3 Appears to be individually eligible for local listing or designation through survey evaluation.

- 5B Locally significant both individually (listed, eligible, or appears eligible) and as a contributor to a district that is locally listed, designated, determined eligible or appears eligible through survey evaluation.

6 Not Eligible for Listing or Designation as specified

- 6C Determined ineligible for or removed from California Register by SHRC.
- 6J Landmarks or Points of Interest found ineligible for designation by SHRC.
- 6L Determined ineligible for local listing or designation through local government review process; may warrant special consideration in local planning.
- 6T Determined ineligible for NR through Part I Tax Certification process.
- 6U Determined ineligible for NR pursuant to Section 106 without review by SHPO.
- 6W Removed from NR by the Keeper.
- 6X Determined ineligible for the NR by SHRC or Keeper.
- 6Y Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing.
- 6Z Found ineligible for NR, CR or Local designation through survey evaluation.

7 Not Evaluated for National Register (NR) or California Register (CR) or Needs Revaluation

- 7J Received by OHP for evaluation or action but not yet evaluated.
- 7K Resubmitted to OHP for action but not reevaluated.
- 7L State Historical Landmarks 1-769 and Points of Historical Interest designated prior to January 1998 – Needs to be reevaluated using current standards.
- 7M Submitted to OHP but not evaluated - referred to NPS.
- 7N Needs to be reevaluated (Formerly NR Status Code 4)
- 7N1 Needs to be reevaluated (Formerly NR SC4) – may become eligible for NR w/restoration or when meets other specific conditions.
- 7R Identified in Reconnaissance Level Survey: Not evaluated.
- 7W Submitted to OHP for action – withdrawn.

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwc@sonoma.edu
<http://www.sonoma.edu/nwic>

11/28/2016

NWIC File No.: 16-0750

Kyle Brudvik
Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, CA 94606

re: 16-03412, Eureka City Schools, Jay Willard Gym Replacement Project

The Northwest Information Center received your record search request for the project area referenced above, located on the Eureka USGS 7.5' quad. The following reflects the results of the records search for the project area and a 0.5 mile radius:

| | |
|---|--|
| Resources within project area: | None |
| Resources within 0.5 mile radius: | P-12-2925, 2926, & 3402. |
| Reports within project area: | S-886, 42394, & 43416. |
| Reports within 0.5 mile radius: | S-43467, 43499, & 9052. |
| Other Reports within records search radius: | S-848, 2458, 8226, 11185, 15529, & 20395. These reports are classified as Other Reports; reports with little or no field work or missing maps. The electronic maps do not depict study areas for these reports, however a list of these reports has been provided. In addition, you have not been charged any fees associated with these studies. |

Resource Database Printout (list):

☐ enclosed ☒ not requested ☐ nothing listed

Resource Database Printout (details):

☐ enclosed ☒ not requested ☐ nothing listed

Resource Digital Database Records:

☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (list):

☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details):

☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records:

☐ enclosed ☒ not requested ☐ nothing listed

Resource Record Copies:

☒ enclosed ☐ not requested ☐ nothing listed

Report Copies:

☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory:

☒ enclosed ☐ not requested ☐ nothing listed

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☒ enclosed ☐ not requested ☐ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Shipwreck Inventory: ☐ enclosed ☒ not requested ☐ nothing listed

***Notes:**

S-886 includes lists of historic buildings in the Eureka area.

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 Fax



November 22, 2016

Kyle Brudvik
Rincon

Sent by: kbrudvik@rinconconsultants.com

RE: Eureka City Schools, Jay Willard Gym Replacement, Humboldt County

Dear Mr. Brudvik,

Attached is a list of tribes that have cultural and traditional affiliation to the area of potential project effect (APE) referenced above. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult, as may be required under particular state statutes. If a response has not been received within two weeks of notification, the Native American Heritage Commission (NAHC) requests that you follow-up with a telephone call to ensure that the project information has been received.

The NAHC also recommends that project proponents conduct a record search of the NAHC Sacred Lands File (SLF) at the appropriate regional archaeological Information Center of the California Historic Resources Information System (CHRIS) (http://ohp.parks.ca.gov/?page_id=1068) to determine if any tribal cultural resources are located within the area(s) affected by the proposed action. The SFL, established under Public Resources Code section 5094, are sites submitted for listing to the NAHC by California Native American tribes. The SFL, established under Public Resources Code section 5094, are sites submitted for listing to the NAHC by California Native American tribes. A record search of the SLF was completed for the APE referenced above with negative results. Please note records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of tribal cultural resources. A tribe may be the only source of information regarding the existence of tribal cultural resources.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: frank.lienert@nahc.ca.gov

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

Native American Contacts

November 22, 2016

Blue Lake Rancheria
Claudia Brundin, Chairperson

P.O. Box 428
Blue Lake , CA 95525
bmobbs@bluelakerancheria-nsn.gov
(707) 668-5101
(707) 668-4272 Fax

Wiyot
Yurok
Tolowa

Bear River Band of the Rohnerville Rancheria
Barry Brenard, Chairperson

266 Keisner Road
Loleta , CA 95551
(707) 733-1900

Wiyot
Mattole

(707) 733-1727 Fax

Wiyot Tribe
Ted Hernandez, Chairperson

1000 Wiyot Drive
Loleta , CA 95551
ted@wiyot.us
(707) 733-5055

Wiyot

(707) 733-5601 Fax

Cher-Ae Heights Indian Community of the Trinidad Rancheria
Garth Sundberg Sr., Chairperson

P.O. Box 630
Trinidad , CA 95570
AAtkins@TrinidadRancheria.com
(707) 677-0211 Office

Yurok
Karuk
Tolowa
Wiyot

(707) 677-3921 Fax

Blue Lake Rancheria
Janet Eidsness, Historic Preservation Officer

P.O. Box 428
Blue Lake , CA 95525
jeidsness@bluelakerancheria-nsn.gov
(707) 668-5101
(530) 623-0663 - Cell
707-668-4272 - Fax

Wiyot
Yurok
Tolowa

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for
Eureka City Schools, Jay Willard Gym Replacement, Humboldt County



Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com

www.rinconconsultants.com

December 8, 2016
Project No: 16-03412

Claudia Brundin, Chairperson
Blue Lake Rancheria
P.O. Box 428
Blue Lake, CA 95525
Via email: bmobbs@bluelakerancheria-nsn.gov

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Chairperson Brundin:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon received the results of the SLF on November 22, 2016. The results stated that a search of the SLF was returned with negative results. The NAHC recommended that we contact you to discuss the project and any cultural resources that you may have knowledge of within the project site.

Rincon conducted a cultural resources records search at the North Western Information Center (NWIC); no previously recorded cultural resources, including prehistoric and tribal cultural resources, were identified within 0.5-mile of the project site.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing via email at bcampbell@rinconconsultants.com, or by telephone at (760)-918-9444, ext. 217. Thank you for your assistance.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Breana Campbell", is written over a light blue horizontal line.

Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

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December 8, 2016
Project No: 16-03412

Barry Brenard, Chairperson
Bear River Band of the Rohnerville Rancheria
266 Keisner Road
Loleta, CA 95551

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Chairperson Brenard:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

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Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map



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December 8, 2016
Project No: 16-03412

Ted Hernandez, Chairperson
Wiyot Tribe
1000 Wiyot Drive
Loleta, CA 95551
Via email: ted@wiyot.us

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Chairperson Hernandez:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

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Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map



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December 8, 2016
Project No: 16-03412

Garth Sundberg SR., Chairperson
Cher-Ae Heights Indian Community of the Trinidad Rancheria
P.O. Box 630
Trinidad, CA 95570
Via email: aatkins@trinidadrancheria.com

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Chairperson Sundberg:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

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Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map



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Oakland, California 94612

510 834 4455 OFFICE AND FAX

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www.rinconconsultants.com

December 8, 2016
Project No: 16-03412

Janet Eidsness, Historic Preservation Officer
Blue Lake Rancheria
P.O. Box 428
Blue Lake, CA 95525
Via email: jeidsness@bluelakerancheria-nsn.gov

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Ms. Eidsness:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

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Rincon Consultants, Inc.

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Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map



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December 8, 2016
Project No: 16-03412

Thomas Torma, Wiyot Cultural Director
Wiyot Tribe
1000 Wiyot Drive
Loleta, CA 95551
Via email: tom@wiyot.us

Subject: Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project
1915 J Street Eureka, California 95501

Dear Mr. Torma:

Rincon Consultants, Inc. has been retained to prepare an Environmental Impact Report (EIR) for the Jay Willard Gymnasium Replacement Project (project) in Eureka, California. The project proposes to complete much needed structural, accessibility, and additional improvements to the facility which was constructed in 1949. The project is subject to the California Environmental Quality Act (CEQA).

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Sincerely,

Rincon Consultants, Inc.

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Breana Campbell, M.A.
Archaeologist

Enclosure: Project Location Map

From: Breana Campbell
To: "Janet Eidsness"
Cc: erikacooper@brb-nsn.gov; Tom Torma (tom@wiyot.us)
Subject: RE: Blue Lake THPO comment on EIR for Jay Willard Gym replacement at Eureka High School
Date: Monday, December 19, 2016 1:27:00 PM
Attachments: [image001.png](#)

Greetings Janet,

Thank you for your response.

We will be adding a clause specific to inadvertent archaeological discoveries to the EIR. I will include the contact information for Blue Lake, Bear River, and Wiyot THPOs to be contact in the event a discovery is made.

If you have any additional comments or would like to discuss the project further, please feel free to contact me either via email or by phone at the numbers listed below.

Best,

Breana Campbell, M.A., RPA
Archaeologist & Project Manager

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Office: 760-918-9444 ext. 217

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Environmental Scientists Planners Engineers

Our Carlsbad Office has recently moved. Please note our new mailing address:

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From: Janet Eidsness [<mailto:JEidsness@bluelakerancheria-nsn.gov>]
Sent: Monday, December 19, 2016 1:18 PM
To: Breana Campbell
Cc: erikacooper@brb-nsn.gov; Tom Torma (tom@wiyot.us)
Subject: Blue Lake THPO comment on EIR for Jay Willard Gym replacement at Eureka High School

Dear Breana,

Thanks for your letter dated 12/8/16 asking for input on Tribal Cultural Resources (TCR) for the subject EIR being prepared by your firm.

I conferred with a archaeologist colleague, Jamie Roscoe, who indicated he had conducted a survey of the school property some time ago (he taught there for 20+ years), with negative findings. I am

not aware of any known TCR on the property, or in the area that may be impacted by the replacement.

I recommend that ground disturbing development be subject to a condition for Inadvertent Archaeological Discovery, to include notification to the Blue Lake, Bear River and Wiyot THPOs should prehistoric artifacts or deposits be encountered.

Best wishes for the holiday.

Janet P. Eidsness, M.A.

Tribal Heritage Preservation Officer (THPO)

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