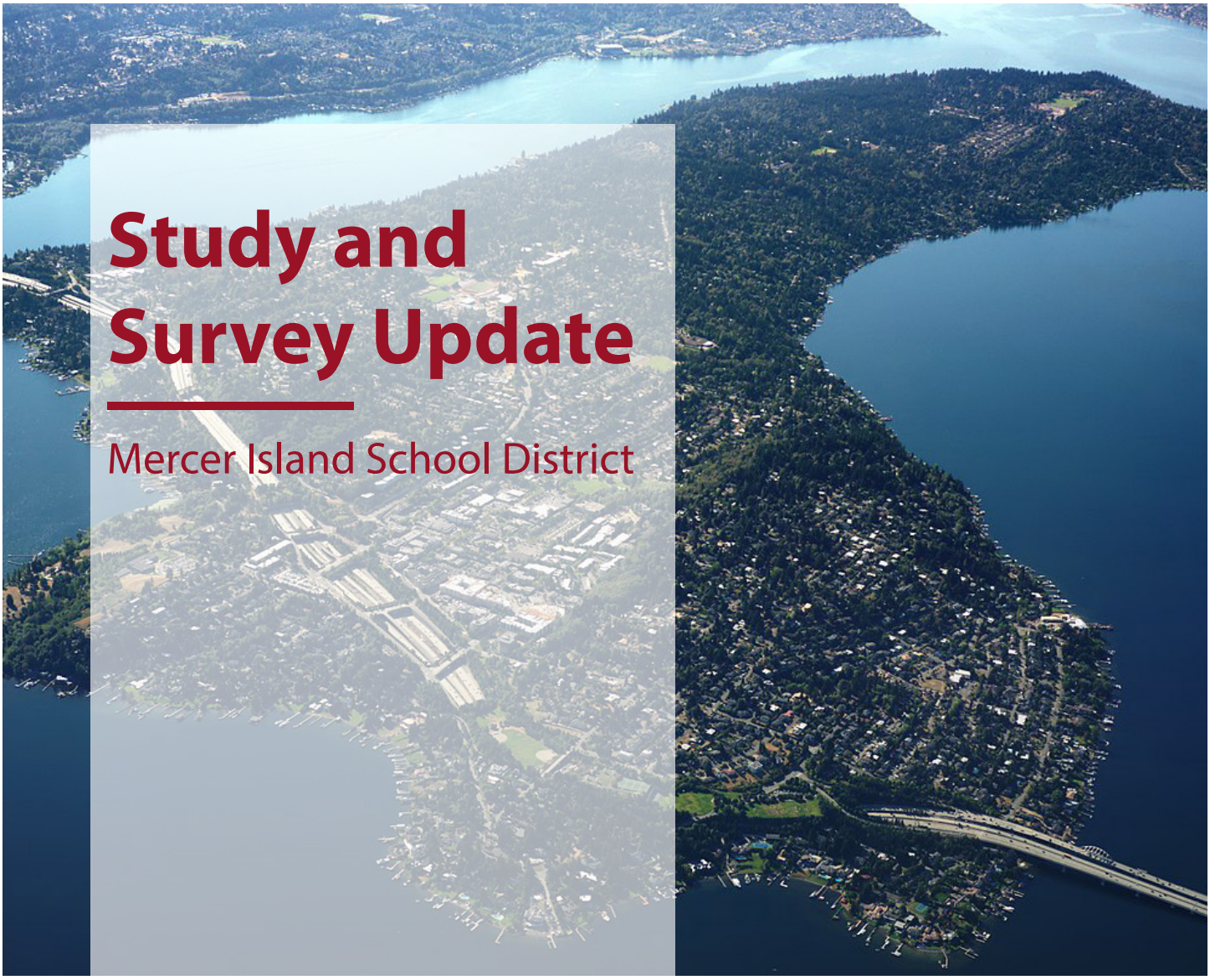

Study and Survey Update

Mercer Island School District

September 2018

BLRB architects

2018 Study and Survey Update

Mercer Island School District

Mercer Island School District
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Mercer Island, Washington 98040
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| September 2018 |

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Executive Summary

This Study and Survey has been prepared by BLRB Architects on behalf of the Mercer Island School District and under the direction of Superintendent Donna Colosky and the Facilities Department staff. The team's assignment has included, as part of the preparation of this Report, an update to the District's 2013 ICOS Evaluation. Work has been limited to "Chapter 1" of the District's OSPI Study and Survey. It is anticipated additional work on the remaining Chapters (Educational and Facilities Plan, Demographics and Enrollment Projections, and Facility Planning Implementation) will be completed at a future date and submitted to OSPI as a formal update to the District's Study and Survey.

EXISTING AND NEW FACILITY EVALUATION

The consulting team conducted an evaluation of the District's existing facilities using OSPI's Information and Conditions of Schools (ICOS) evaluation method, which establishes a numerical score for each facility. Since 2012, OSPI has changed their approach to evaluating schools. Rather than the hand scoring done through the Building Condition Assessment (BCA), OSPI has turned to ICOS, an on-line version of evaluating facilities.

ICOS is a web-based system where information and condition details, about facilities and sites operated by the District are documented and stored. ICOS meets the increasing demand for accurate school facility information and building condition data that supports statewide programs such as the School Construction Assistance Program (SCAP), District facility management, and school facility information requests or policy decisions. This information is also used to support the performance-based Asset Preservation Program which gauges how well the facilities, buildings, and sites are maintained.

ICOS benefits the Districts by providing functionality for inventory tracking, condition rating, record keeping, and comparative and report analysis. The scoring system of today does not equate to the system of old, BCA.

The score reflects building and site facilities in terms of their construction components. The educational adequacy and functionality to meet educational program needs at each facility was evaluated in 2009 and is not yet included in this update. However, changes and upgrades to technology have been noted in this report.

Island Park Elementary School

Island Park Elementary School was originally constructed in 1956 and was remodeled in 1995. The campus has two buildings that scored a weighted average of 76.32 overall utilizing the ICOS scoring method.

- Structural

  The buildings have no serious concerns. However, their seismic design does not meet current standards.

- Exterior

  The building exteriors are in good to fair condition. Some of the observed issues include minor water intrusion. It was noted that the roof on the Multi-Purpose Building could use better access for cleanability. The roofs are due for replacement in the near future.

- Interior

  The building interiors are in good to fair condition. Some of the observed problems include soiled acoustical ceiling panels but the building is getting a little refresh this summer while the administration area is being reconfigured. The district has added a secure entry vestibule since the last study and survey.

- Electrical

  The building is in fair to good condition. Video surveillance, fire alarm, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards. The generator is connected to a single transfer switch with mixed emergency and standby loads, which is a deficiency relative to the NEC.

- Mechanical

  The systems are in fair to poor conditions. Student restrooms and corridors are not ventilated adequately. The electrical room is not ventilated for gas storage and there are duct leaks in the attic above the Multi-Purpose Building. The boilers and heating water pumps are nearing end of life. The control and HVAC systems are functioning but outdated. For the waste system, it was noted that there have been sewer backups in the past few years.

- Site

  The buildings' site is in good to fair condition. The play area is adjacent to Island Crest Way which is not ideal, and the parking lot is cracked and settled.

  Trees and light poles obstruct sight lines turning out of the parking lot onto Island Crest Way.

  There are also two buildings on the site which is not the preferred configuration for security.

Lakeridge Elementary School

Lakeridge Elementary School was originally constructed in 1953 and was remodeled in 1995. It scored 80.92 overall utilizing OSPI's ICOS scoring.

- Structural

  The building has no serious concerns. However, its seismic design does not meet current standards.

- Exterior

  The building exterior is in good condition. The roof has been known to leak and there are missing and cracked shingles. It is due for replacement soon.

- Interior

  The building interior is in good to fair condition. Sheet vinyl flooring is nearing the end of its serviceable life in restrooms.

- Electrical

  The building is in fair to good condition. Video surveillance, fire alarm, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards. The generator and security systems were reported by district maintenance as showing signs of age and may need to be planned for future replacement. The generator is connected to a single transfer switch with mixed emergency and standby loads, which is a deficiency relative to the NEC.

- Mechanical

  The systems are in good to fair condition. The boilers and heating water pumps are nearing end of life and will need to be replaced soon. HVAC duct distribution is in need of cleaning. There is an outdated centralized air distribution system with reheat coils. The control system appears to be relatively newer. Fire service header is in good condition but sprinkler heads in classrooms are not quick response (but were code at the time of construction).

- Site

  The building and site are moderately non-compliant with handicap accessibility due to the last time the school was remodeled.

  The building site is in good to fair condition. Fencing does not adequately secure the property, the covered play area is too small, the parking lot and hard surface areas are cracked and settled, and there are problems with drainage on the site.

West Mercer Elementary School

West Mercer Elementary School was originally constructed in 1964 and was remodeled in 1995. It scored 85.60 overall utilizing OSPI's ICOS scoring.

- Structural

  The building has no serious concerns. However, its seismic design does not meet current standards and minor rusting was observed at exposed steel framing at the covered play-shed.

- Exterior

  The building exterior is in good condition. The roof over the south covered walkway is in need of attention. The roof over the covered play-shed has poor drainage.

- Interior

  The building interior is in fair to good condition. The wooden stage in the Multi-Purpose Room has a lot of wear, there is damage to wall corners in corridors.

- Electrical

  The building is in fair to good condition. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards. Lighting fixtures throughout have some mismatched lamp color temperatures. Classroom AV systems include only VGA cabling and do not have audio enhancement. The generator and tank are severely rusted and is connected to a single transfer switch with mixed emergency and standby loads, which is a deficiency relative to the NEC.

- Mechanical

  The systems are in poor to good condition. The boilers and pumps are in poor condition and nearing end of life. Replacement will be necessary in the near future. The HVAC systems are in fair condition and the attic has poor ventilation. The domestic water system is in fair to poor condition. No cooling is provided at the MDF room and is subsequently operating very warm. The control system is functioning but outdated.

- Site

  The building and site are moderately non-compliant with handicap accessibility, and the outdoor platform in the internal courtyard is not accessible.

  The building site is in fair to poor condition, due to poor draining soils on site, and uneven settlement in concrete walks present a tripping hazard and makes accessibility difficult.

Islander Middle School

Islander Middle School was originally constructed in 1958 and was remodeled in 1993. Classroom and Multi-Purpose additions to the 300 Building were completed in 2000. The older buildings on campus (100/200, and 300) scored a weighted average of 74.07* (score to be verified) overall utilizing OSPI's ICOS scoring.

The new building constructed in 2015 received a score of 96.94. Constructed in 2015 and occupied in 2016, it was designed for 21st Century learning, spaces are flexible and adaptable with significantly more transparency than the older buildings. The building has a small green roof over the entry and photovoltaics (PV) panels on the roof over the Commons, as well as energy dashboard technology that can be used as a teaching tool.

- Structural

  The building has no serious concerns. However, its seismic design of the older buildings does not meet current standards.

- Exterior

  The 100/200, and 300 building exteriors are in fair condition with the exception of the roof on the 100/200 building. It is past the end of its life and in need of replacement.

- Interior

  The 100/200 and 300 building interiors are in fair to poor condition. Carpet throughout and sheet flooring in the restrooms is at the end of its serviceable life. The New Building both interior and exterior is in excellent condition.

- Electrical

  All systems in the new building are in excellent condition and address all required functionality. The older vintage buildings are in fair condition. Video surveillance, access control, fire alarm, and wireless data systems have been upgraded within the older vintage buildings. Power distribution systems within the older vintage buildings are beyond useful life. Telecommunications cabling to wall-mounted telecommunications devices within the older vintage buildings are Category 5 cabling and do not support current transmission standards. The older vintage buildings are served by a generator with a single transfer switch for mixed standby and emergency loads, which is not allowed by NEC.

- Mechanical

  The systems are in excellent to poor condition. The new building HVAC and domestic water distribution systems are in excellent condition. In building 100/200, the HVAC and domestic water systems are in poor condition. Access to maintenance in the attic is difficult. The control system is functioning but outdated. In building 300, the boilers and water heaters were replaced in 2011 and still appear to be in excellent condition. The HVAC and domestic water distribution systems are in fair to poor condition.

- Site

  The buildings and campus are now in compliance with handicap accessibility.

  The building site is in excellent condition. The southeast parking lot has been redone under the 2015 campus improvements. Landscaping is in great condition.

  There are three separate buildings on the site requiring the student body to move outdoors between buildings during class periods. This approach is not preferred from a security standpoint. In addition, there is no fencing to secure the outdoor student areas or buildings.

Mercer Island High School

Mercer Island High School was originally constructed in 1955 and was remodeled in 1997. Additions were constructed in 2012 for Music and in 2014 as extensions of the `100, 200, and 300 halls. The building scored 85.40 overall utilizing OSPI's ICOS scoring.

- Structural

  The building has no serious concerns. However, its seismic design does not meet current standards, there is minor rust at exposed steel canopies at entries.

- Exterior

  The building exterior is in good condition. The roof was replaced this summer (2018).

- Interior

  The building interior is in good to fair condition. Walls are in good condition. Floor wear was observed in some areas, and some acoustical ceiling tiles have been damaged by water but with a new roof, this is more than likely taken care of.

- Electrical

  The building is in good to good condition. Existing lighting fixtures have been recently retrofitted with LED T8 type lamps. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices in the older areas of the building are Category 5 cabling and do not support current transmission standards. In the newer additions, Category 6 cabling has been installed. The generator is connected to a single transfer switch with mixed emergency and standby loads, which is a deficiency relative to the NEC.

- Mechanical

  The systems are in good to fair condition. The central HVAC systems are in good to fair condition, some systems are nearing end of life. The boilers and pumps were replaced in 2011 and in good condition, the chiller is showing signs of weathering but is in good operation. The domestic water system is in good condition and there is a mix of newer and older controls throughout the site.

- Site

  The building and site are moderately non-compliant with handicap accessibility. The bus pullout along 92nd Avenue SE does not have easy accessibility into the building

  The building site is in fair condition. Concrete at the bus pullout along 92nd Avenue SE is in like-new condition, at the pullout along 42nd Street SE, the concrete is in fair condition. Several of the campus' asphalt walks are cracked and settled and can be a challenge to accessibility.

Northwood Elementary School

Northwood Elementary School was constructed in 2015 and opened in 2016. It scored 98.91 overall utilizing OSPI's ICOS scoring. A two-story elementary school with the administration on the upper level near the parent drop off. The lower level is daylight and has access to the bus drop off area. The lower level has two areas -- the classroom area which can be separate from the gym and the more public area. Built for grades K through 5 it has approximately 22 general classrooms, pull out shared areas, a library, gymnasium, and lunch room.

Built for 21st Century learning, spaces are flexible and adaptable with lots of transparency. The building has a partial green roof and photovoltaics (PV) panels on the roof, as well as energy dashboard technology that can be used as a teaching tool.

- Exterior and Interior

  It is in excellent condition.

- Electrical

  The systems are new and in excellent condition.

- Mechanical

  The systems are new and in excellent condition.

Crest Learning Center

The Crest Learning Center was remodeled in 1997. It scored 84.63 overall utilizing OSPI's ICOS scoring.

- Structural
  The building has no serious concerns. However, its seismic design does not meet current standards.
- Exterior
  The building exterior is in good condition. Roofing is nearing the end of its life and is due for replacement.
- Interior
  The building interior is in fair condition. Floors are in good condition.
- Electrical
  The building is in fair to good condition. The exterior utility transformer is weathered/ rusting. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards.
- Mechanical
  The building is in fair condition. The electrical/ telecommunications room has poor ventilation, the exhaust is poor in the student restrooms, and no exhaust has been provided for the teacher workroom. The domestic water system is in good condition and there is a new water heater. The HVAC systems are dated, 80% efficient gas furnaces, but functioning and in good condition.
- Site
  The building and site are moderately non-compliant with handicap accessibility. The designated handicap parking stall is not accessible, and the accessible main entry had at the time of review, malfunctioning hardware.

District Administration Building

The District Administration Building was originally constructed in 1966 and had some tenant improvements in 1987. It has not been scored under the ICOS system due to the fact it does not house students. That said it has been entered to ICOS for overall inventory purposes.

- Structural
  The building has no serious concerns. However, its seismic design does not meet current standards.
- Exterior
  The building exterior is in good to fair condition. Walls, windows, and trim are in good condition.
- Interior
  The building interior is in good to fair condition. Walls and floor are worn and a few acoustical ceiling tiles are water damaged.
- Electrical
  The building is in fair to poor condition. The main electrical panel is in poor condition and is at end of usable life, making replacement parts not readily available. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards.

- Mechanical

  The building is in fair to poor condition. The second floor and warehouse are not sprinklered. The heating water system is poor condition. There is a fairly new chiller that is in excellent condition, but the HVAC systems are in need of replacement.

- Site

  The building and site are severely non-compliant with handicap accessibility. Accessible parking requires patrons to cross vehicular traffic, entry paths are not fully compliant, there is no elevator or accessible path around the building, the employee kitchen is not accessible, the upper floor restrooms are not accessible, and many of the door handles do not have levers.

  The building site is in good condition.

  The building is not compliant in regard to current standards for fire separation and egress. There is no fire separation between the warehouse and adjoining spaces, the rated one-hour corridor does not appear to meet current standards, the upper floor only has one direct access to the outside, egress out of the bottom floor corridor is being obstructed by boxes and does not have panic hardware, and secondary egress out of the board room terminates into a planter.

Mary Wayte Pool

The Pool was originally constructed in 1973 by King County Parks through a property lease with the District. The District took ownership of the building from King County in 2011. The building has always been a pool, designed by Kirk, Wallace, McKinley Architects. It is a wood framed construction single story building with a mezzanine for viewing purposes. The building does not have an ICOS score due to the fact that it is not a facility that is utilized for instruction through the Mercer Island School District. It has been entered into ICOS for district tracking purposes however.

- Site

  The site is in fair condition and has remained relatively unchanged since its construction.

- Electrical

  The building is in fair to poor condition. The electrical distribution equipment shows significant corrosion and is in need is replacement. Branch wiring devices throughout appear damaged and show signs of corrosion. Lighting fixtures in some areas show corrosion and some are missing lenses. There is not a facility-wide telecommunications system, all data access is based on a residential-style service with router and distribution within the administration area only. There is no fire alarm system in the building.

- Mechanical

  Mechanically, the systems are in fair to poor condition. There is extensive corrosion throughout the HVAC and plumbing systems. There is no fire protection system (and it is unknown if one would be required). The pool supply and drainage system was recently relined and appears to be functioning well.

BUILDING AREA SQUARE FOOTAGE SUMMARY AND OSPI COMPARISON

Building	OSPI SF Area Inventory Record	
	November 2009	**June 2018**
Island Park Elementary School	49,399	49,399
Lakeridge Elementary School	51,946	51,946
West Mercer Elementary School	54,221	54, 221
Islander Middle School	119,935	169,085
Mercer Island High School	206,919	223,719
North Mercer Campus	70,717	n/a
Northwood Elementary School	n/a	77,277
Crest Learning Center	10,058	10,058
Totals	***563,195***	***635,705***
Difference		(72,510)

BUILDING CONDITION EVALUATION SCORE SUMMARY

Facility	Score	
	2013	2018
Island Park Elementary School	76.47	76.32
Lakeridge Elementary School	82.65	80.92
West Mercer Elementary School	88.18	85.60
Islander Middle School:		
- Main Building	74.07	74.07
- 300 Wing	71.46	71.46
- New Addition	--	96.94
Mercer Island High School	85.21	84.50
Northwood Elementary School	n/a	98.91
Crest Learning Center	85.78	84.63

End of Executive Summary

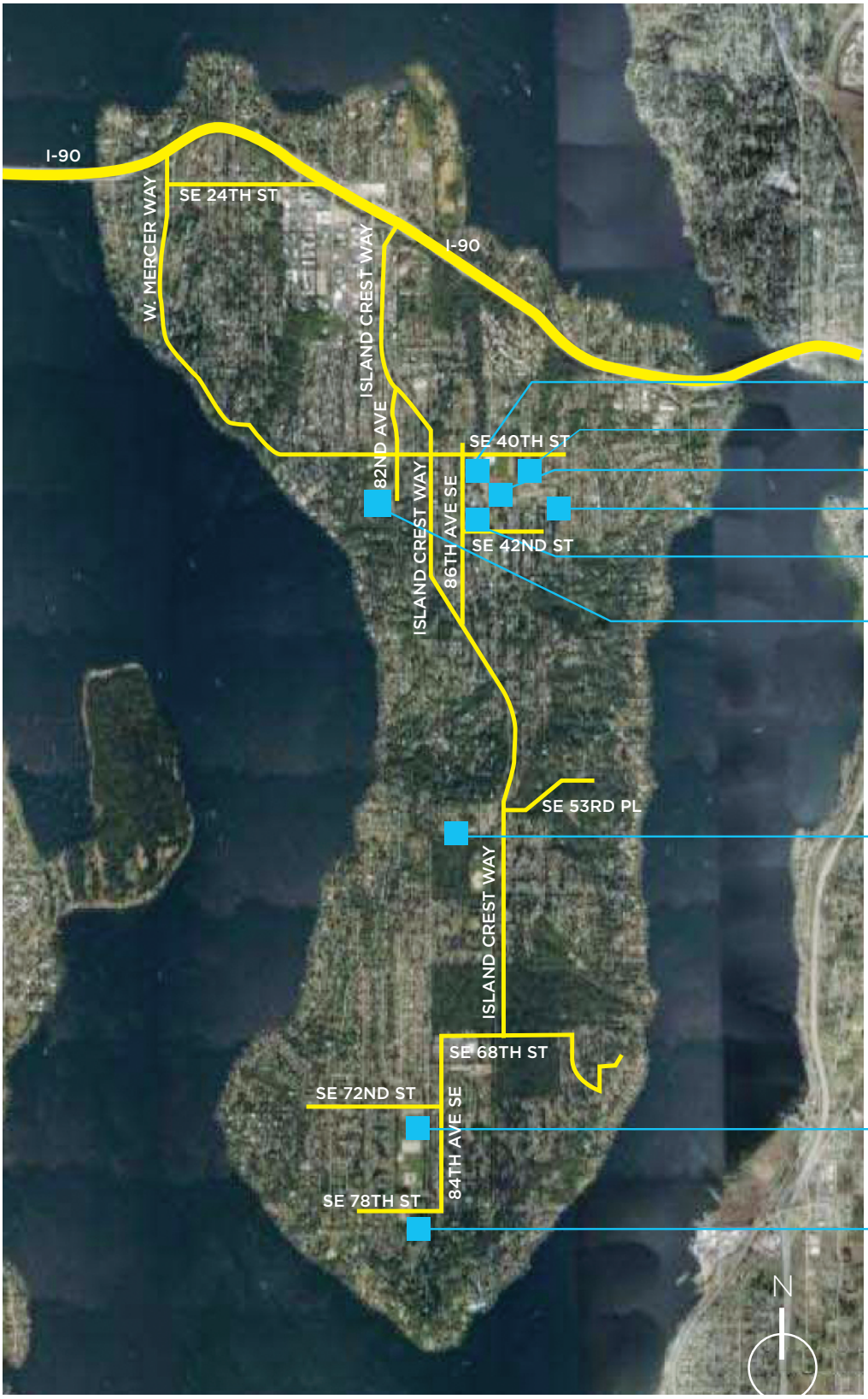
Chapter 1

INVENTORY, AREA ANALYSIS AND BUILDING CONDITIONS REPORTS OF EXISTING FACILITIES

Included in this Chapter are the following:

1. Map of Mercer Island School District indicating location of each facility.
2. Updated conditions for each facility including:
    a. School Site Plan
    b. School Floor Plan and Area Analysis Summary
    c. Building Condition Report
    d. Building Condition Evaluation Forms

MERCER ISLAND SCHOOL DISTRICT MAP



NORTHWOOD ELEMENTARY

MARY WAYTE POOL BUILDING

CREST LEARNING CENTER

MERCER ISLAND HIGH SCHOOL

ADMINISTRATION BUILDING

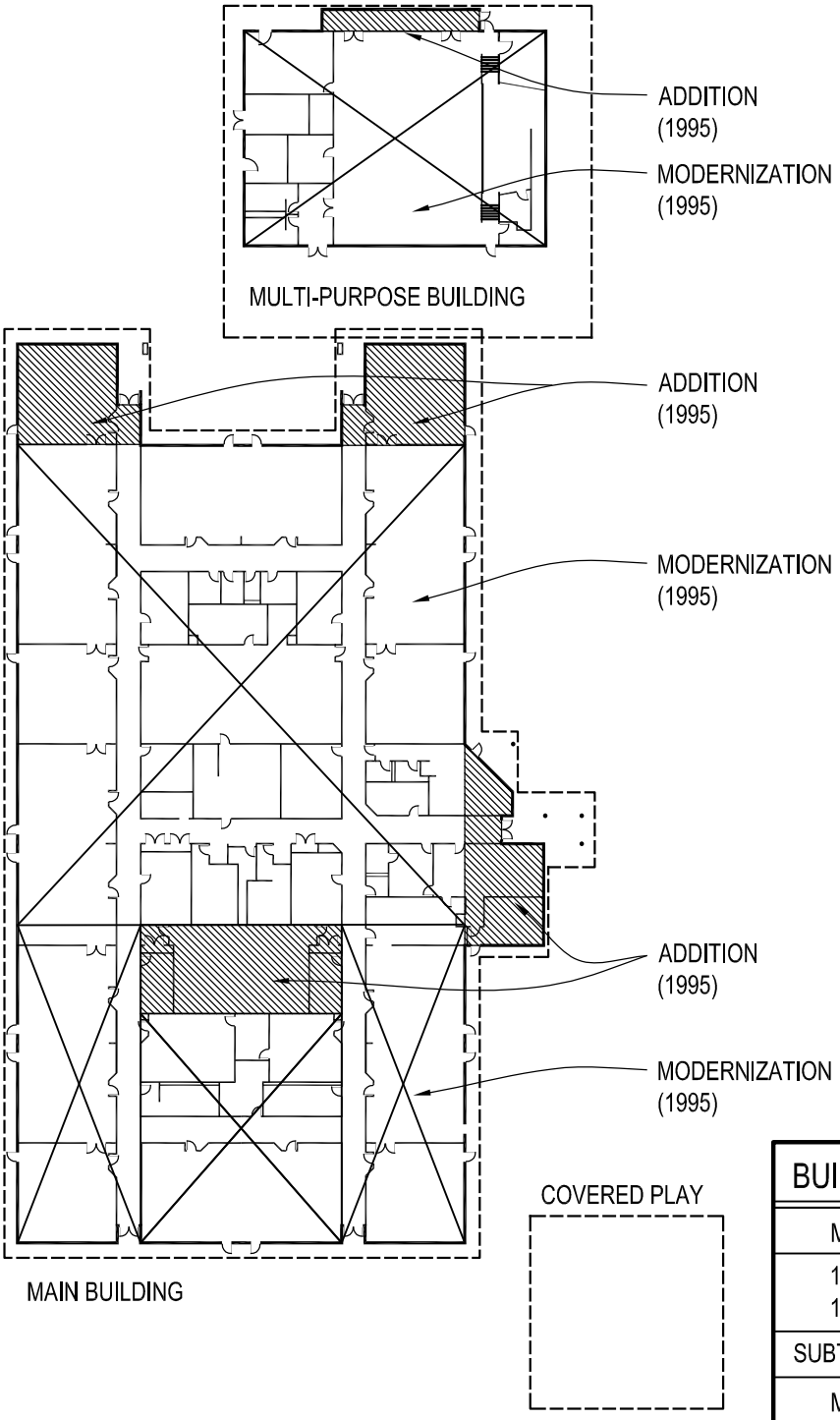
WEST MERCER ELEMENTARY

ISLAND PARK ELEMENTARY

ISLANDER MIDDLE SCHOOL

LAKERIDGE ELEMENTARY

Island Park Elementary School



BUILDING	SQ. FT.
MAIN BUILDING	
1995 MODERNIZATION	34,928
1995 ADDITION	5,454
SUBTOTAL	40,382
MULTI-PURPOSE BUILDING	
1995 MODERNIZATION	6,748
1995 ADDITION	357
SUBTOTAL	7,105
COVERED PLAY (3,823 / 2)	1,912
GRAND TOTAL	49,399

SCALE: 1"=60'

0 30' 60' 120' 180'

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1250 Pacific Ave., Ste. 700
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P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

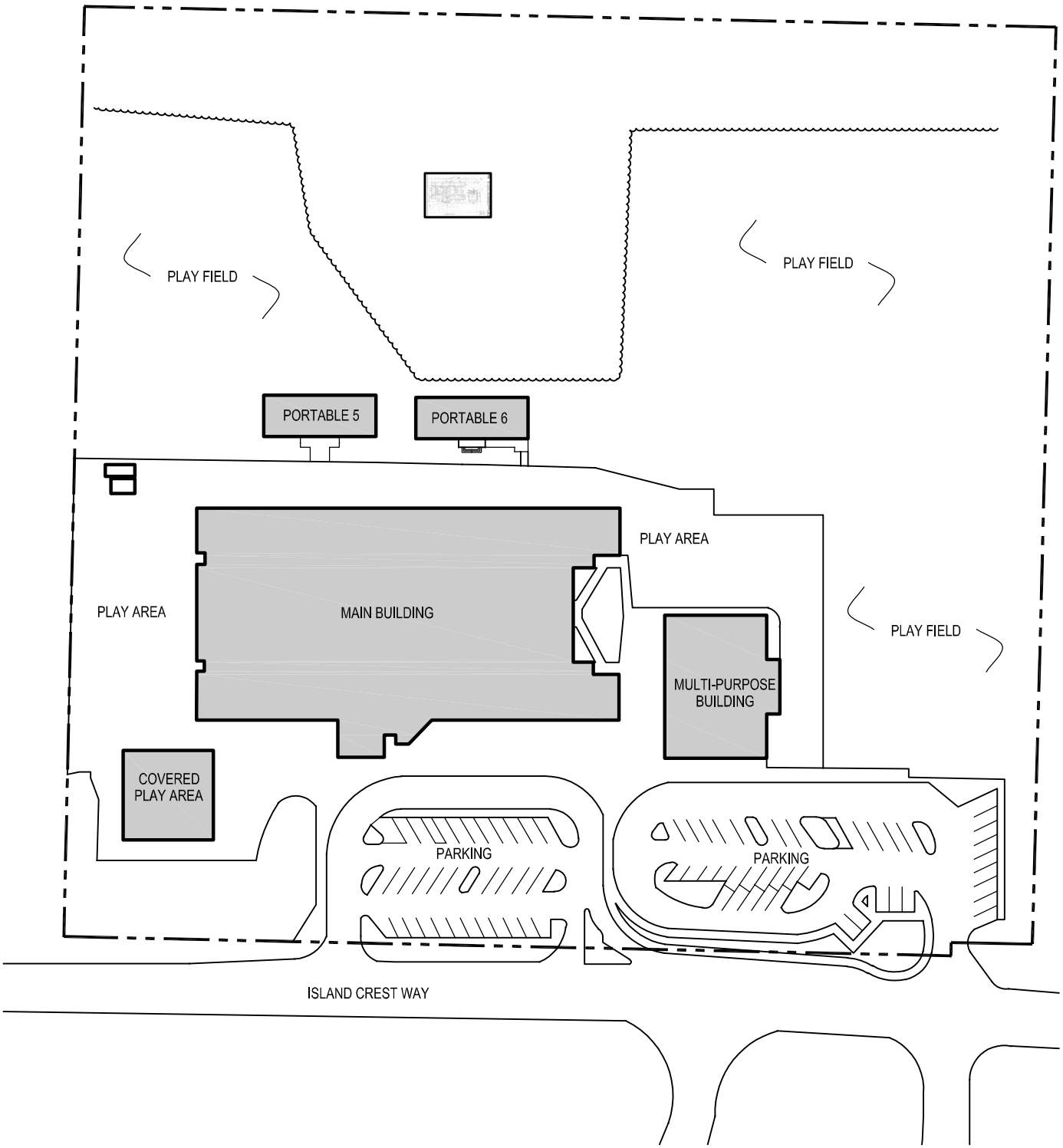
Drawing Title: ISLAND PARK ELEMENTARY SCHOOL 2009 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

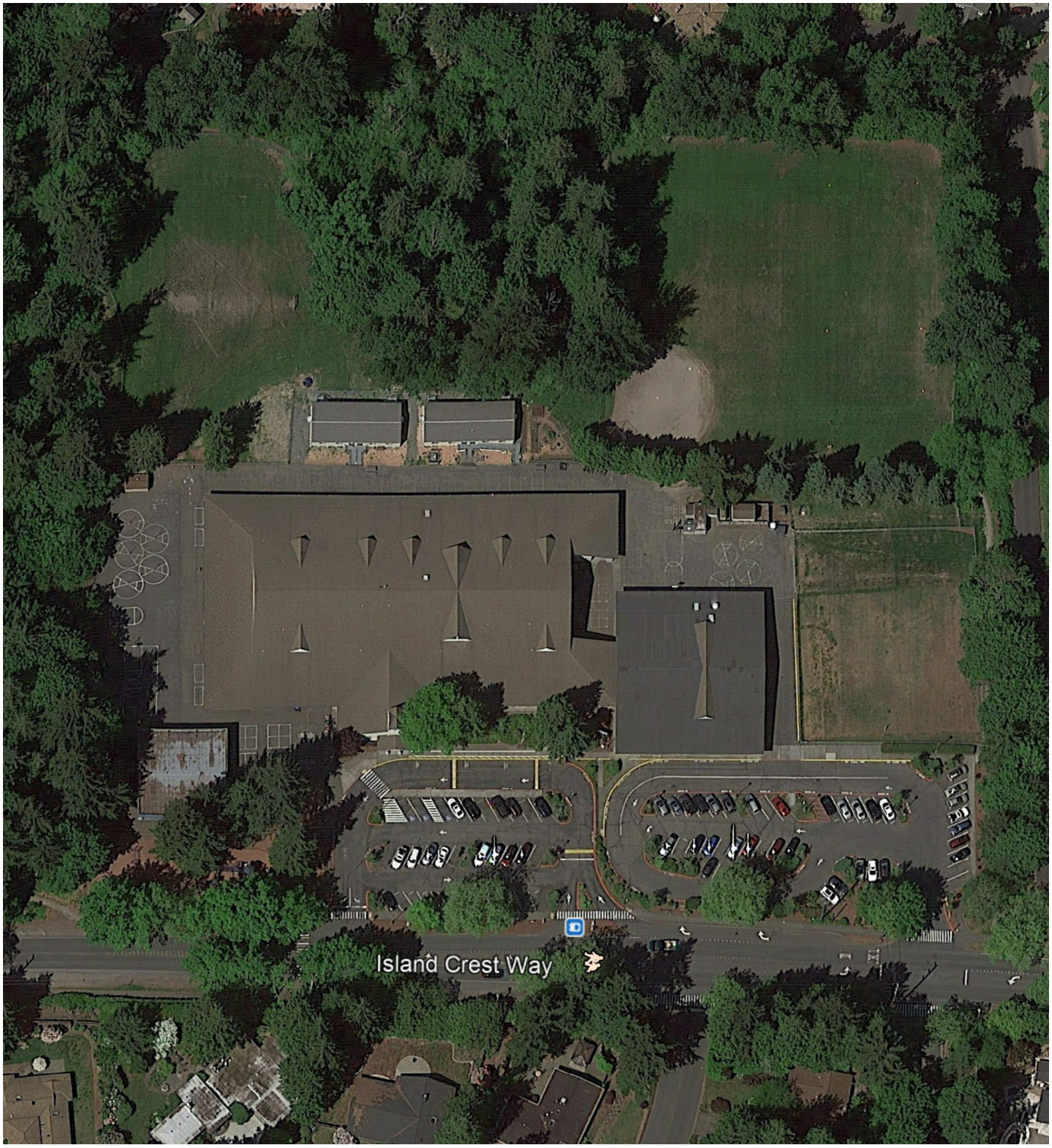
Reference Sheet No. 1



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY Drawing Title: ISLAND PARK ELEMENTARY SCHOOL SITE PLAN	Date: JUNE 2018 Drawn By: RAL Comm. No. 18.10	Reference Sheet No. 2



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 3
	Drawing Title: ISLAND PARK ELEMENTARY SCHOOL SITE AERIAL	Comm. No. 18.10	

Island Park Elementary School

5437 Island Crest Way
Mercer Island, WA 98040
206.236.3410

Site Information

County:	King
Approx. Acreage:	9.37 Acres
Zoning:	R-9.6
Tax Parcel No.:	1924059040
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades K-5

Current Square Footage (permanent construction):	49,399 SF
Number of Portable Buildings on-site:	2 Buildings (4) Classrooms

Current Enrollment (2018):

Kindergarten:	55
Grade 1:	83
Grade 2:	66
Grade 3:	58
Grade 4:	68
Grade 5:	69
Total Enrollment:	399

Summary of Teaching Spaces

General Use Classrooms:	22
Special Education Classrooms:	2
Occupational Therapy:	1
Technology Lab/Computer Room:	1
Art Room:	0
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	***29***

Building Condition Evaluation (2018 Study and Survey)

ICOS (Main Building):	76.32
ICOS (Multi-Purpose Building):	76.27

CONSTRUCTION HISTORY

Island Park Elementary School was originally built in 1956 and was added onto in 1966. In 1995 it was added onto and renovated. At this time, the internal courtyard was in-filled to create space for the new Music Room. The administration and main entrance to the Classroom Building was moved from the northern elevation, adjacent to the Multi-Purpose Building to the eastern elevation. The former location for administration was re-purposed into two classrooms which were modified into administration at the new entry. Two additional classrooms were added between the Classroom Building and the Multi-Purpose Building. Reorganization was done to relocate classrooms, special education, and teacher planning rooms within the existing footprint.

The Multi-Purpose Building was expanded to the north to allow for additional storage. The restrooms in this building were reconfigured to make them accessible and a storage room flanking the stage was modified into a ramp to make it accessible and to create a dressing room. The storage room to the north of the stage was re-purposed into an office.

The modernization included removal and replacement of all existing windows, addition of a sloped trussed framed system over the existing roofs and replacement of interior and exterior finishes. Most of the existing exterior walls of the Classroom Building were removed and new walls were constructed on the existing footings. The existing concrete slabs were reused as well. Interior walls between classrooms were removed and replaced with operable partitions. New casework along with marker boards and tackboards were installed. All of the doors and frames were replaced. New toilets, fixtures, and lighting were installed. Flooring throughout the facilities was replaced. In the summer of 2018, the administration front office received tenant improvements.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- Island Park Elementary Main Building has been constructed in several phases. There appears to be two original phases most likely constructed in the 1960's with concrete spread footing foundations, concrete slab on grade floor construction, reinforced CMU walls, steel roof joist and columns and metal roof decking for two thirds of the roof (assumed to be part of the original construction) and wood roof decking for the other third (assumed to be an addition).
- In 1995 the main building was modernized with a new over built wood roof, replacement of the exterior walls with wood stud walls and brick veneer and minor entry addition. The over build roof structure consist of open web wood roof trusses, wood roof sheathing and glu-lam roof beams supported by exiting steel columns.
- The lateral resisting system for the main building consists of the existing wood and metal decking roof diaphragm, plywood roof diaphragm at over built roof, interior reinforced masonry shear walls and interior and exterior plywood shear walls. There are also isolated areas with redundant steel cross bracing.
- The gymnasium structure has similar construction with exterior masonry walls, steel columns and roof beams and wood roof decking.
- In 1995 plywood sheathing was added over the existing wood roof decking.
- The lateral resisting system of the building consists of the plywood roof diaphragm and exterior reinforced masonry shear walls. There is also redundant steel rod cross bracing.

Foundation/Structure Condition Evaluation:

◊ We observe no significant signs of structural distress, differential settlement or deterioration.

- ◊ There have been some significant changes in the building code since Island Park Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus anchorage requirements for masonry walls have significantly increased. It is assumed that the existing structure is not in full compliance with the current code.

1.2 Exterior Walls System Description:

- The exterior wall for the main building consists of wood stud walls with plywood sheathing, block veneer wainscot and steel columns that support the roof structure above.
- At the gymnasium the exterior walls consists of reinforced CMU walls with steel columns supported roof structure.

Exterior Walls Condition Evaluation:

- ◊ We observed no significant signs of structural distress, differential settlement or deterioration.
- ◊ With the code changes in the anchorage requirements for masonry walls it is assumed that the existing anchorage is not in complete compliance with current code.

1.3 Exterior Roof System Description:

- Classroom Building:
  - ◊ The original low slope roof was covered by a sloped overbuild in 1995. The most recently constructed roof is comprised of asphalt composition shingles with roof felt underlayment over ¾" plywood sheathing. The roof positively slopes to metal gutters and PVC downspouts at the perimeter. The roof is interrupted by dormers which house mechanical louvers and storefronts. Ridge venting provides air circulation to the attic space. This roof has no fall restraint system.
- Multi-Purpose Building:
  - ◊ The roof is a built up roof over a nailer board, rigid insulation and plywood sheathing. This assembly is supported by 6x12 purlins and steel beams. The roof positively slopes to the perimeter which has metal gutters and PVC downspouts. Louver dormers are constructed of asphaltic composition shingles. This roof has no fall restraint system.

Exterior Roof Condition Evaluation:

- ◊ Classroom Building:
  - There appears to be a structural deformity that "bumps up" adjacent to the northwest window dormer above the library.
  - The roof has slight moss buildup.
- ◊ Multi-Purpose Building:
  - Access to this roof is provided through an attic space that is extremely difficult to navigate because of ductwork and structure. The hatch leading to the roof is spring loaded and takes a lot of force to close. The low slope roof has a lot of patches, suggesting that water intrusion is a major problem.
- ◊ Covered Play Shed:
  - Metal roofing system hidden by parapet.

1.4 Exterior Windows/Doors System Description:

- Classroom Building:
  - ◊ The windows are aluminum and were replaced in the 1995 addition and modernization. The classroom windows have operable upper hopper casements. These casements are covered with insect screens. Flashing at the sill sits atop a masonry cap and has a hemmed edge. The perimeter of the window is caulked and

sealed and there is no head flashing. The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Doors leading into classrooms and corridors have half lites while the main entry doors have full lites. There are some hollow metal windows above the main entry door and in the cupola above the main entry. All exterior windows are insulated.

- Multi-Purpose Building:
  - ◊ The windows, doors, and frames were replaced in 1995 as well. The windows are aluminum and the doors are hollow metal doors set within hollow metal frames.

Exterior Windows/Doors Condition Evaluation:

- ◊ Classroom Building:
  - The windows are in good condition and are sealed properly. Many of the door thresholds exceed ½" and do not rest properly on the exterior concrete walkways or asphalt as a result of settlement. Some of the door sweeps are missing screws or are damaged.
- ◊ Multi-Purpose Building:
  - The windows and doors are in good repair.

1.5 Exterior Trim System Description:

- Classroom Building:
  - ◊ A piece of 2x10 cedar trim provides backing for metal gutters and a 2x8 piece of cedar trim provides an end cap for double 2x6 outriggers. The soffit is a painted 2x6 painted tongue and groove decking that slopes with the roof. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster. Soffits over entries are plaster and have recessed light fixtures. A hemmed piece of flashing protects the masonry cavity wainscot.
- Multi-Purpose Building:
  - ◊ This building is trimmed with metal flashing over a 2x8 fascia board over a 2x10. A 2x8 wood trim provides the termination for the plaster wall. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster.

Exterior Trim Condition Evaluation:

- ◊ Classroom Building:
  - The exterior trim system is generally in good repair. Some gutters have standing water. All exterior light lenses are UV stained.
- ◊ Multi-Purpose Building:
  - The exterior trim system is generally in good repair. All exterior light lenses are UV stained.

2.0 Interior Building Condition

2.1 Floors System Description:

- Classroom Building:
  - ◊ All original flooring was removed and replaced in the 1995 addition and modernization. Classrooms have carpet with VCT along the cabinetry walls. Corridors and offices are carpeted as well. Restrooms have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT. The carpet is getting to the end of it useful life. The main office is currently being remodeled. Also, a new security vestibules has been installed in recent years.
- Multi-Purpose Building:
  - ◊ The multi-purpose room has VCT flooring that is striped for basketball. The kitchen has sheet vinyl flooring with a coved base. The wooden stage was built before the 1995 addition and modernization.

Floors Condition Evaluation:

◊ Classroom Building:
- The floors are in good repair.

◊ Multi-Purpose Building:
- The floors are generally in good repair.

2.2 Walls System Description:

- Classroom Building:
  ◊ Walls are generally type "x" gypsum wallboard over wood studs. Painted concrete masonry units provide a finish surface throughout the facility. Restrooms typically have plastic laminate wainscoting over existing CMU walls and gypsum wallboard. The main entry corridor and library have acoustical wall panels in the high volume spaces above. Vinyl wall covering is provided on one wall in the classrooms and in the corridors.
- Multi-Purpose Building:
  ◊ Walls in the Multi-Purpose room are comprised of concrete masonry units, painted MDO plywood that is capped with a 1x3 piece of wood trim, and type "x" gypsum wallboard above. They are covered by wall mats below. The Kitchen has painted CMU and FRP over gypsum wallboard. The wet walls do not have FRP but do have a large stainless steel backsplash integral to the stainless steel equipment. The Custodian Room does not have FRP on the wall adjacent to the mop sink. Acoustical wall panels are provided in the high volume space of the Multi-Purpose Room. Restrooms typically have plastic laminate wainscoting over existing CMU walls and gypsum wallboard.

Walls Condition Evaluation:

◊ Classroom Building:
- The walls are in good repair, but the coverings are fair.

◊ Multi-Purpose Building:
- CMU walls in the Kitchen and Multi-Purpose room should be repainted. There is water damage to the wall adjacent to the mop sink. The wall mats are in poor condition around the wall outlets. The outlet cover plates are damaged as well. Acoustical wall panels in the Multi-Purpose Room are soiled.

2.3 Ceilings System Description:

- Classroom Building:
  ◊ Ceilings consist of 2'x4' acoustical ceiling panels in the corridors and classrooms. The main entry corridor is a high volume space that has acoustical ceiling tiles that slope with the roofline. The library is also a high volume space with a ceiling that slopes in four directions. It is finished with acoustical ceiling tiles. Restrooms, storage rooms, electrical room, and a portion of the music room has a gypsum board ceiling.
- Multi-Purpose Building:
  ◊ The Multi-Purpose Room is a high volume space with exposed painted beams and purlins. Acoustical ceiling tiles are attached to the underside of the wood deck roof. The dressing room has acoustical ceiling panels. All other spaces have a gypsum board ceiling.

Ceilings Condition Evaluation:

◊ Classroom Building:
- Water damage was observed in several locations. Areas that were observed include above the door connecting the library with the east corridor, adjacent to structural steel in that location, in the staff lounge, and in the main entry corridor. It is unclear if this damage is caused by mechanical equipment above or from water intrusion from the roof.

- ◊ Multi-Purpose Building:
  - There are missing acoustical ceiling tiles in the Multi-Purpose Room.

2.4 Fixed Equipment System Description:

- Classroom Building:
  - ◊ Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinet, projection screen, white board, wall mounted television, and an operable partition wall.
  - ◊ The library has bookshelves along the wall and in islands that were resurfaced with plastic laminate during the 1995 addition and modernization.
  - ◊ The staff lounge is equipped with a stove, fume hood, refrigerator, dishwasher, and upper and lower cabinetry.
- Multi-Purpose Building:
  - ◊ The Multi-Purpose Room is equipped with two operable basketball backboards, six stationary practice backboards, and movable storage under the main stage. These backboards were repainted during the 1995 addition and modernization. The scoreboard was relocated during construction.
  - ◊ The Kitchen consists of a double door reach in refrigerator, double door reach in freezer, milk cooler, double stack convention oven, 3 well steam table, 3 compartment sink, single compartment dishwasher, and an exhaust hood. Much of the cabinetry was reused during the 1995 addition and modernization.

Fixed Equipment Condition Evaluation:

- ◊ Classroom Building:
  - The equipment appears to be in good repair.
- ◊ Multi-Purpose Building:
  - The equipment appears to be generally in fair repair. The movable storage located under the stage is difficult to operate.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Classroom Building:
  - ◊ Power Distribution
    - Utility Service: Island Park Elementary School's Main Classroom Building is fed from the Gym Building via a 600A breaker. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
    - Switchboard: The sub-distribution board is a "Square-D" brand "I-Line" type panelboard rated for 600A at 480Y/277V.
    - Generator: Emergency circuits for data and telecommunications are fed from the emergency distribution system in the Gym Building. The generator is not compliant with current National Electric Code (NEC) standards as the NEC requires emergency loads (life safety loads: lighting primarily) be on a separate ATS from other standby loads (telecom loads, pumps, etc.).
    - Panelboards: Existing panelboards are "Square-D" brand "NEHB", "I-Line", and "NQOD" type boards, most with spaces and spares for future capacity. "Leviton" 42120-DY3 transient voltage surge suppressors are installed on 120V panels.
  - ◊ Lighting
    - Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and corridors are key-switched at entries. Interior light fixtures are 2'X4' lay-in

lensed with LED retrofit T-8 lamps. Occupancy sensors control classroom lighting in conjunction with local switching. Low Voltage

◊ Low Voltage

- Telecommunications: The Main Distribution Frame (MDF) is located in Area B off Corridor 118. Network distribution for voice and data is hierarchical star topology. Data cabling is a mixture of Cat 5 and Cat 6 CommScope and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series II jacks. Classrooms have minimum connectivity. Demarcation enters MDF from above (attic space) the actual entrance into the building is unknown. (1) Cat 5 4-pair and (1) Cat 3 25-pair copper backbone cable connects to the gym building IDF. There is an optical fiber cabinet but no optical fiber is present. Wirelesses Access Points are in various classrooms.
- CATV Distribution: CATV distribution cabling is homerunned back to MDF with an extension to the gym building. The signal is extended to a 2' x 2' x 80" headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located in the Library work room. The CATV taps are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wall mounted TV outlet and a wall mounted TV set.
- Intercom/Clock: A Rauland Borg TC4130 intercom system is housed in the MDF. The 66-block terminations and cross-connects are mounted on the plywood backboard and clock power supplies and transformers are mounted in a 19" x 60" equipment rack. The gym building is connected to the main building, 66 blocks are wall mounted in the electrical room. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall mounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.
- Sound Systems: Sound systems are present in the following spaces
  - Gym/Commons (shared spaces)
  - Band/Choir Room (single room)
- Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security Cameras have recently been added to the school. Access card readers and security keypads are installed at selected entrances and a security vestibule at the main entrance has been added. System is monitored by Guardian.
- Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wall mounted 110 terminal blocks.

• Multi-Purpose Building:

◊ Power Distribution

- Utility Service: Island Park Elementary School's Gym Building is fed underground from an exterior pad-mounted 300kVA utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
- Switchboard: The main switchboard is a "Square-D" brand "QED" type switchboard rated for 800A at 480Y/277V. The main switchboard has an 800A main breaker and (7) available spaces.
- Generator: The existing generator is an 80kW "Katolight" brand 480Y/277V generator with a "Zenith" brand automatic transfer switch.

- Panelboards: Existing panelboards are “Square-D” brand “NQOD” and “NEHB” type boards. Most panels have available for future capacity. “Leviton” brand “42120-DY3” transient voltage surge suppressors have been installed throughout the facility.

◊ Lighting

- Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and corridors are key-switched at entries. Interior fixtures are T-8 type LED retrofit lamps including LED retrofit lamps in the in the gym. New lenses have been installed in the covered play area.

◊ Low Voltage

- IDF is located in the gym building Electrical Room 212. Patch panels and 110 blocks are wall mounted; there is no equipment rack at this location.
- All low voltage systems are typical of the main building.

Electrical Condition Evaluation:

◊ Classroom Building:

- The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
- The interior and exterior lighting is in good condition and appears to provide adequate lighting levels.
- The existing intercom system is in good operating condition.
- The existing security system provides adequate intrusion detection and access control functions. There is no existing video surveillance system.
- The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.
- The existing category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was re-terminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a category 5e or category 6 cabling plant. The current data backbone (Cat 5) is insufficient for future applications and should be replaced with laser optimized 50/125 multi-mode optical fiber cable to support current 10 gigabit per second Ethernet transmission standards for optical fiber cabling.
- The existing sound systems appear to be operating adequately.
- The existing demark cable may be in a code violation if length of exposed cable exceeds 50’ within building.

◊ Multi-Purpose Building:

- The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
- The main electrical room is also used as a storage room for gasoline and gas-powered equipment which is a safety concern and without proper ventilation is a code violation.
- The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.
- See main building “Electrical Conditions Evaluations” for low voltage evaluation.

3.2 Plumbing

- Classroom Building:
  - ◊ Staff and student restrooms are in good condition. All restrooms are equipped with metered faucets. Trap wrap is not installed in any ADA height sinks in the building.
  - ◊ All water closets are equipped with 1.6 GPF flush valves in good condition. Urinals in boys' restrooms are equipped with 1.0 GPF hands-free flush valves in good condition. Student restrooms are equipped with hose bibbs.
  - ◊ Each classroom is equipped with a sink and bubbler. Drinking fountains are not provided in hallways.
- Multi-Purpose Building:
  - ◊ Girls and boys restrooms are not equipped with ADA height sinks or trap wrap at sinks. Sinks have metered faucets in good condition. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF hands free flush valves.
  - ◊ Hot water is supplied by a Lochinvar water heater installed in 1995. The hot water heater is located in the boiler room and is showing signs of wear.

3.3. Hot Water/Forced Air Heating

- Classroom Building:
  - ◊ Forced air heating is provided by a hydronic heating water system. Temperature control is provided in classrooms by push-button thermostats. Hot water coils, air handling units, and return fans were installed in 1995, and are in good condition. Heating water is provided by Lochinvar boilers that were also installed in 1995. The boilers are nearing end of life.
  - ◊ Restrooms seem to have adequate exhaust. Minimal ventilation is provided to hallways. In the library, air is diffused from high on the wall, and returned at the floor.
  - ◊ In mechanical attics, dampers rattle in the ductwork in several areas. There are several areas with significant air leakage around a connection to a hot water coil. Heating water piping and ductwork for incoming outside air appeared to be well insulated.
  - ◊ There are no floor drains in mechanical attics. The heating water to coils is controlled by Griswold control valves.
  - ◊ Computer Room Cooling
    - One Carrier heat pump provides cooling to the computer room. The unit was installed in 1995.
- Multi-Purpose Building:
  - ◊ Forced air heating in the multipurpose building is provided by a hydronic heating water system. La Salle air handling units in the mechanical attic provide mixed air to heating coils for each zone. There is a separate return air fan. All equipment appears to have been installed in 1995. Ducts leak in several areas in the mechanical attic.
  - ◊ Heating water is supplied by two Patterson Kelly boilers. Both heating water pumps are controlled by VFD.
  - ◊ Student restrooms in the multipurpose building are not sufficiently ventilated.

4.0 Safety/Building Code

4.1 Means of Exit

- Classroom Building:
  - ◊ Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

- Multi-Purpose Building:
  - ◊ Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 Fire Control Capability

- Classroom Building:
  - ◊ Fire protection sprinklers are provided in the covered play area, but they are not shielded.
- Multi-Purpose Building:
  - ◊ Fire protection sprinkler heads in the multipurpose room are unshielded.

4.3 Fire Alarm System - System Description

- Classroom Building:
  - ◊ The fire alarm system has been recently replaced and new RF subscriber dialer installed. There appears to be an adequate number of notification and detection devices.
- Multi-Purpose Building:
  - ◊ There is a new fire alarm panel located in the main building. There appears to be an adequate number of notification and detection devices in this facility. The gum is monitored from the adjacent main building. There are tamper, flow, and low air switches installed in the building and there are beam detectors installed in the gym.

Fire Alarm System - Condition Evaluation:

- ◊ Classroom Building:
  - System is in good working condition and appears to meet current code coverage.
- ◊ Multi-Purpose Building:
  - System is in good working condition and appears to meet current code coverage.

4.4 Emergency Lighting System Description

- Classroom Building:
  - ◊ Emergency lighting for egress consists of fluorescent fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.
- Multi-Purpose Building:
  - ◊ Emergency lighting for egress consists of fluorescent fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- ◊ Classroom Building:
  - System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.
- ◊ Multi-Purpose Building:
  - System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 Fire Resistance

- Classroom Building:
  - ◊ The Classroom Building has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. A two hour area separation wall was built at the southeast corner between Classrooms 17 and 18 and adjacent to the Multi-Purpose Building. This wall is a 10" CMU wall with wood stud furring and GWB. The building is sprinklered.
- Multi-Purpose Building:
  - ◊ The Multi-Purpose Building has one floor of occupied space and is comprised mostly of CMU walls. This building is sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- Classroom Building:
  - ◊ The 1995 improvements to this school building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, and grab bars. Waste pipes are not insulated.
  - ◊ Throughout the building interior door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Sinks and countertops in the classrooms are 2'-10" above finish floor.
  - ◊ 3 Handicapped parking stalls are provided in the front parking area adjacent to the main entry. However, the path of access crosses the pick-up/drop-off lane of traffic. At this location, a painted crosswalk has been provided to highlight this path. A curb cut has been provided to give direct access from the driveway to the main entry of the building.
  - ◊ The height of many exterior door thresholds exceeds the ½ inch prescribed by current code. This occurs at the new concrete walk constructed in 1995 and at the asphalt paving that was kept in place during construction.
- Multi-Purpose Building:
  - ◊ Restrooms include the appropriate clearances, access widths, and grab bars. Sinks are not at an accessible height. Waste pipes are not insulated here or at the hand sink in the Kitchen.
  - ◊ There is one accessible drinking fountain in the Multi-Purpose room that does not have the appropriate high low configuration.

<u>Condition Evaluation:</u>

- ◊ Classroom Building:
  - Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated. Bottle fillers have been installed.
  - Uneven settlement in exterior sidewalks and asphalt walks has resulted in slab differentials at exterior door thresholds. Site work should be considered to fix this problem. This condition also presents a tripping hazard.
- ◊ Multi-Purpose Building:
  - Sinks should be at an accessible height and waste piping should be properly insulated.

Site Condition Evaluation

The site is surrounded by residential properties along its northern and western perimeters. The site slopes down to the west at the playfields. There are three playfields, one located to the northwest of the property and one at the southwest. They are separated from each other by a fenced ravine. The third playfield is located north of the Multi-Purpose Building and is currently being improved.

The northwest playfield has a sandlot at its southeast corner. Access to this playfield is provided by an asphalt ramp with handrails. The southwest field is currently fenced off and has no access.

The building is located toward the east of the property. Parent drop off occurs in a loop around staff parking to the east of the main entry, off of Island Crest Way. The bus loop is located in the northeast parking lot, off of Island Crest Way. Some of the parking stalls are designated compact. Flaggers help facilitate traffic from Island Crest Way during the morning and afternoon. Parking is inadequate even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school.

Play equipment areas are located on the southeast corner of the property, adjacent to Island Crest Way. It is screened by a fence and bushes. The covered play area is also located here.

Two portables are located to the west of the Classroom Building. Exterior storage shed and emergency supply storage are in good shape.

Physical Condition

Parking and Driveway Areas

- The asphalt paving in the north and south parking lots is in poor condition. The surface contains multiple cracks, signs of settlement, and previous patches. The parking lot should be resurfaced and re-striped.
- A concrete wheelstop in the parking lot has been damaged by vehicle tires and is broken in several locations. This wheelstop should be replaced.

Hard Surface Play Areas

- The hard surface play areas are generally in good repair. Game lines could stand to be repainted. There is minimal cracking to the surface.

Drainage

- The north softball field has poor drainage along its southern perimeter, where an underground spring keeps the field constantly wet.
- Drainage along the southern fence facing the wooded area is poor.

Playfields

- The south playfield is in poor condition. Dirt was relocated from South Mercer Playfields to help level this area. It is not level, not irrigated and would require significant restoration to make it usable.
- The north softball field is in poor condition. It is un-level with bumps and depressions. There are brown spots located around the perimeter and the sandlot has vegetation growing through it. The path leading down to this field is retained by jersey barriers.

Fencing

- There is a notice for Park Improvements on the fence in front of the soccer field. It is unclear if the scope of this work includes replacing or repairing the fencing.

- Chain link fencing surrounding the north softball field is severely damaged. In some locations the top rail has become detached, causing the chain link to sag. The chain link has holes and deformations in many locations. Some of the top rails are beginning to rust.
- Metal posts on the chain link fence fronting the portables are no longer perpendicular to the ground in some locations.
- Fencing along the southern property line provides security between the school and the heavily wooded area. This fence should be taller than three feet.

Play Equipment

- Codes related to play equipment have changed in the last several years. Because of this, the equipment should be inspected by a certified inspector on an annual basis. The play area is bordered by asphalt. There is no curb to contain the treated wood chips. One area includes a plastic border that appears to be performing well. The equipment areas are underlain with treated wood chips (fibar) and appear to be at sufficient depth.
- Three of the big toys have heavy timber structural columns with metal rails. One big toy has metal columns and rails with plastic slides. This play area has some small climbing walls, built in benches and tables.
- There is a large covered play area located to the southeast of the main building. It is constructed of, a structural steel rigid frame, steel purlins, exposed metal deck, and metal panel fascia, surrounded by concrete masonry units walls. There is a small storage shed connected to this structure. This shed has asphalt shingles on its low slope roof which are in poor condition. This covered play area has two basketball hoops which are in poor condition. The backboards have been vandalized and the nets are falling off. There is no roof access. From the main roof it appears as though the roof over the covered play area is filled with debris and balls and has little to no maintenance. Basketball hoops located adjacent to the covered play area are in fair condition.

Other Observations:

- Taking a left onto Island Crest Way from the main parking lot is hazardous. Site lines are obscured by trees and light poles. Leaving this parking lot is problematic during peak times. Traffic backs up south for approximately three quarters of a mile.
- The main play area is located adjacent to Island Crest Way. It is shielded from the street by fencing and bushes. Relocation of the play equipment and covered play area should be considered. Security barriers between the play area and the street should at least be considered if relocation proves not viable.

EDUCATIONAL ADEQUACY ASSESSMENT

Please refer to the November 2009 Mercer Island School District Study and Survey. This information has not been updated for this report.

1 of 1

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
76.32% Fair

ISLAND PARK ELEMENTARY SCHOOL - 01_MAIN BUILDING

Building Details

PROFILE TYPE	Classroom Building - Slabs On Grade
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1956	Area 1	34,928	34,928	34,928		
1995	Area 2	5,454	5,454	5,454		
	Building Totals	**40,382**	**40,382**	**40,382**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking		
	Causes:	Inadequate Insulation, Surface Damage		
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		62.00% Fair
	Deficiencies:	Peeling Paint or Delamination		
	Causes:	Caulking/Weather Stripping, Material Condition		
	Exterior Louvers and Vents	B2070		90.00% Good
Exterior Horizontal Enclosures	Roofing	B3010		30.00% Poor
	Deficiencies:	Ventilation		
	Causes:	Other, Surface Weathering		
	Comments:	Deficiency: Moss build up		
	Roof Appurtenances	B3020		90.00% Good
	Horizontal Openings	B3060		90.00% Good
	Overhead Exterior Enclosures	B3080		62.00% Fair
	Deficiencies:	Peeling Paint		
	Causes:	Insect Infestation, Surface Damage		
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		90.00% Good
	Interior Doors	C1030		90.00% Good
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Surface Damage		
	Flooring	C2030		62.00% Fair
	Deficiencies:	Holes, Tears, Stains, Discoloration		
	Causes:	Sealing		
	Ceiling Finishes	C2050		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Surface Damage		
Plumbing	Domestic Water Distribution	D2010		90.00% Good
	Sanitary Drainage	D2020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:	2017 sanitary sewer drainage issue		

	Building Support Plumbing Systems	D2030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Deficiency: Age	
HVAC	Facility Fuel Systems	D3010	90.00% Good
	Heating Systems	D3020	30.00% Poor
	Deficiencies:	System Inefficient	
	Causes:	Equipment Obsolescence	
	Facility HVAC Distribution Systems	D3050	62.00% Fair
	Deficiencies:	System Inefficient	
	Causes:	Equipment Obsolescence	
	Ventilation	D3060	62.00% Fair
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Older HVAC equipment	
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Facility Power Generation	D5010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Generator distribution includes single transfer switch with mixed emergency/standby loads	
	Electrical Services and Distribution	D5020	90.00% Good
	General Purpose Electrical Power	D5030	90.00% Good
	Lighting	D5040	90.00% Good
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	90.00% Good
	Audio-Video Communications	D6030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Ceiling mounted projectors with VGA cabling, no audio enhancement	
	Distributed Communications and Monitoring	D6060	90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Older control system	
Furnishings	Fixed Furnishings	E2010	90.00% Good
	Movable Furnishings	E2050	90.00% Good

1 of 1

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

ISLAND PARK ELEMENTARY SCHOOL - 01_MAIN BUILDING

Profile Name: Classroom Building - Slabs On Grade
Inventory Status: Recognized
Condition Rating: 76.32 %

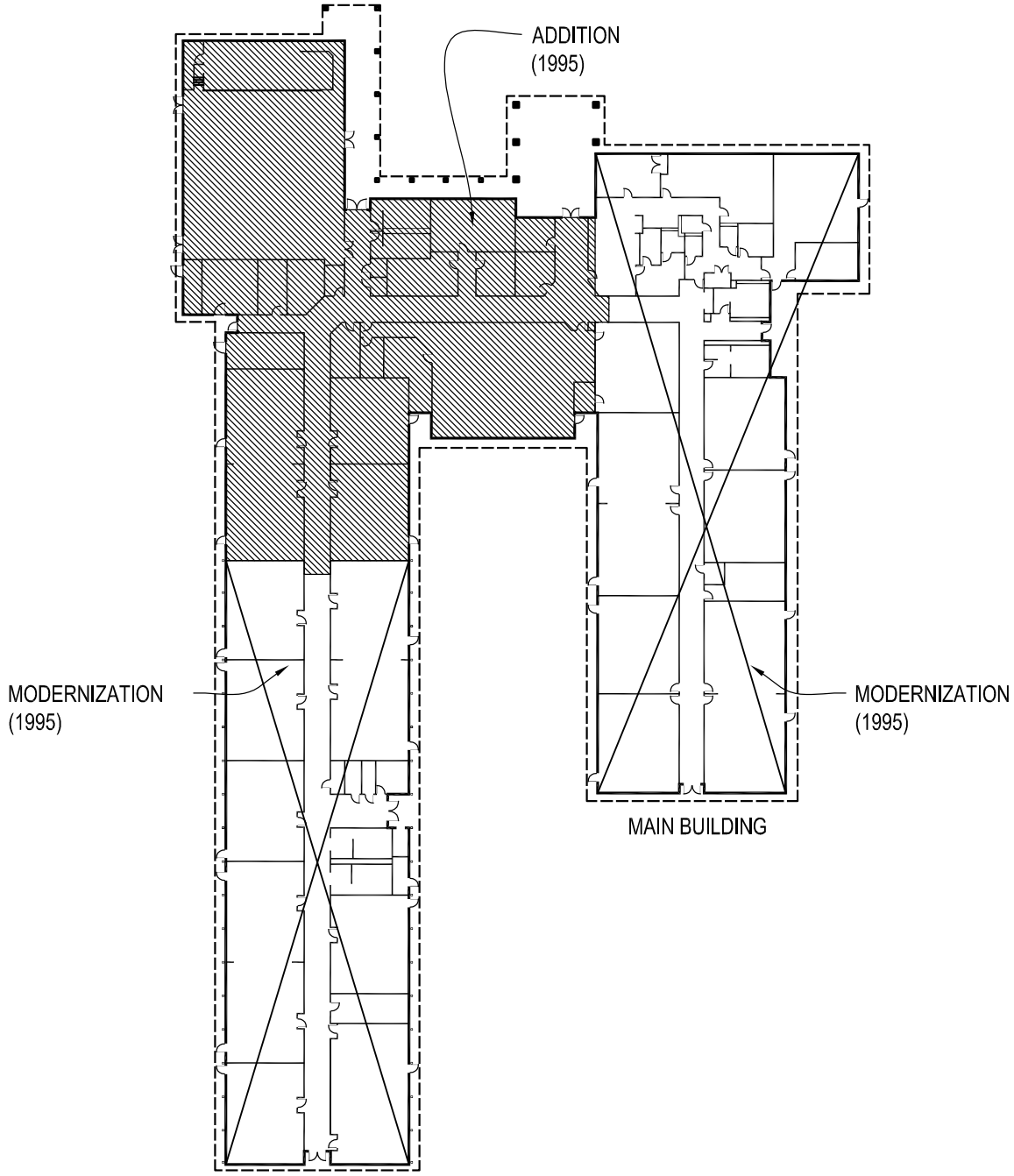
Currently BCA Certified: Yes
Last BCA Certify: 6/27/2018
Last District Review:

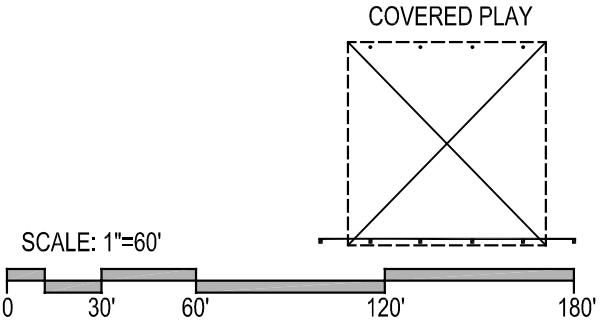
Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☐	☐	☑	☐	☐	30 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3060	Horizontal Openings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1030	Interior Doors	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2030	Flooring	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
HVAC											
D3010	Facility Fuel Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3020	Heating Systems	☐	☐	☐	☑	☐	☐	30 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3060	Ventilation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											

D5010	Facility Power Generation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐			
D5020	Electrical Services and Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
D5030	General Purpose Electrical Power	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
Communications														
D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
D6020	Voice Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
D6030	Audio-Video Communications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐			
D6060	Distributed Communications and Monitoring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
Electronic Safety and Security														
D7010	Access Control and Intrusion Detection	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐			
D7030	Electronic Surveillance	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐			
D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐			
Integrated Automation														
D8010	Integrated Automation Facility Controls	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐			
Furnishings														
E2010	Fixed Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐			
Unused Components														
C2020	Interior Fabrications	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐			

School Facilities and Organization *Generated: Aug 28, 2018* *Page 1 of 1*

Lakeridge Elementary School





BUILDING	SQ. FT.
1995 MODERNIZATION	41,036
1995 ADDITION	9,089
COVERED PLAY (3,642 / 2)	1,821
GRAND TOTAL	51,946

BLRB architects
Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308
P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

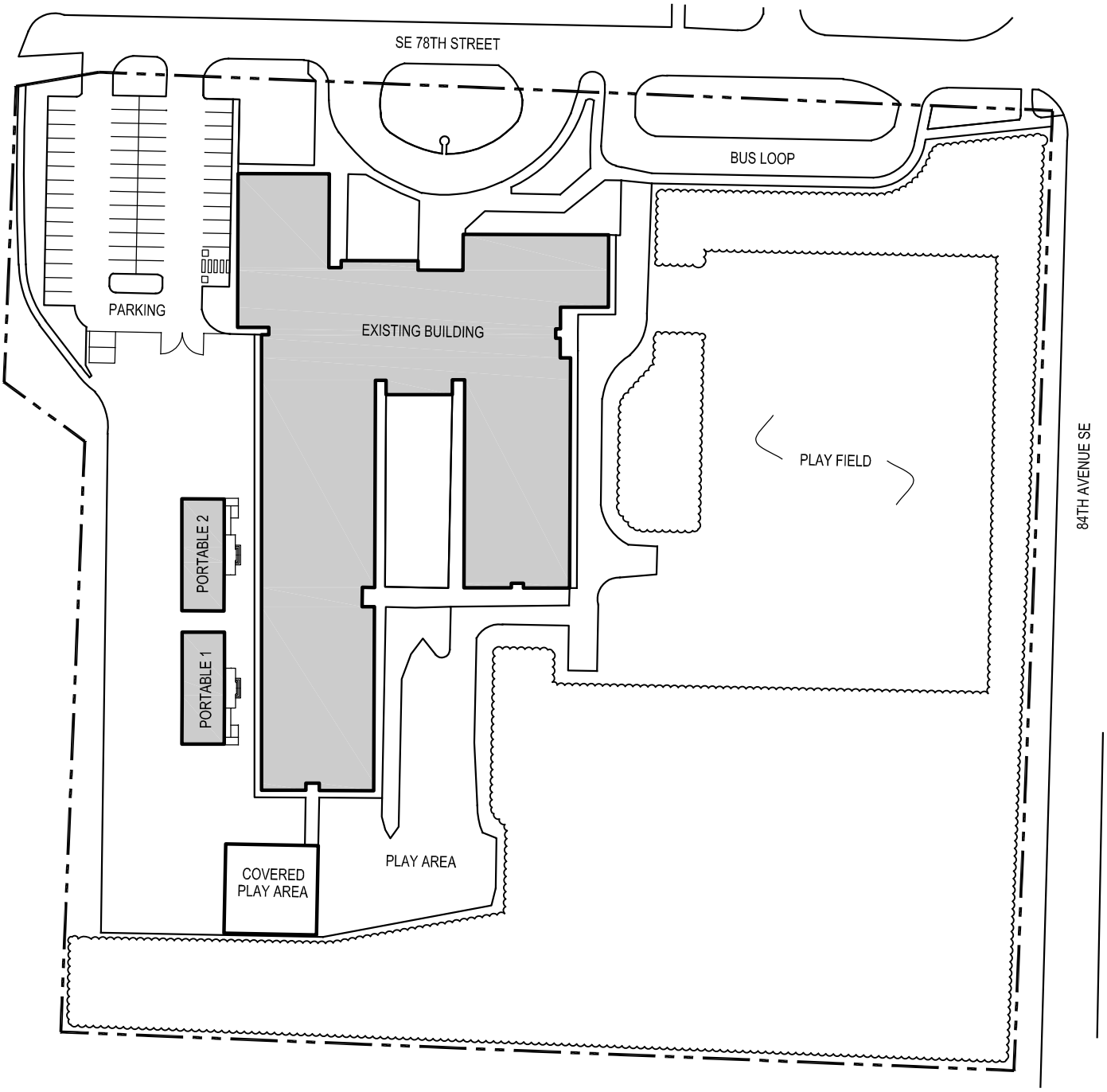
Drawing Title: LAKERIDGE ELEMENTARY SCHOOL 2009 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

Reference Sheet No. 1



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: LAKERIDGE ELEMENTARY SCHOOL SITE PLAN	Drawn By: JJJ	
		Comm. No. 18.10	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 3
	Drawing Title: LAKERIDGE ELEMENTARY SCHOOL SITE AERIAL	Drawn By: JJJ	
		Comm. No. 18.10	

Lakeridge Elementary School

8215 Southeast 78th
Mercer Island, WA 98040
206.236.3415

Site Information

County:	King
Approx. Acreage:	9.48 Acres
Zoning:	R-9.6
Tax Parcel No.:	2524049015
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades K-5

Current Square Footage (permanent construction):	51,496 SF
Number of Portable Buildings on-site:	2 Buildings (4) Classrooms

Current Enrollment (2018):

Kindergarten:	49
Grade 1:	61
Grade 2:	69
Grade 3:	99
Grade 4:	96
Grade 5:	87
Total Enrollment:	461

Summary of Teaching Spaces

General Use Classrooms:	22
Special Education Classrooms:	2
Occupational Therapy:	1
Technology Lab/Computer Room:	1
Art Room:	0
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	***29***

Building Condition Evaluation (2018 Study and Survey)

ICOS (Main Building):	80.92

CONSTRUCTION HISTORY

Lakeridge Elementary School was originally constructed in 1953. Until 1995, the campus was comprised of 2 classroom buildings, a Multi-Purpose Building, a mechanical building, and a covered playshed. All of these buildings were connected via a covered walkway.

In 1995, the existing Multi-Purpose Building and the mechanical building were demolished and the classroom buildings were modernized. These classroom buildings were connected and added onto by new construction consisting of a new Multi-purpose Room with a kitchen, office and storage. A library and office, 3 additional classrooms, a Resource Room, Chapter 1 Room, Speech Room, Itinerant Room, O.T./P.T., PTA Room, Teacher Planning, and additional storage and restrooms were also part of the addition. The addition is a slab on grade with wood framing and roof truss joists and asphalt shingles. Aluminum windows were installed.

The modernization included removal and replacement of all existing windows, addition of a sloped trussed framed system over the existing roofs and replacement of interior and exterior finishes. New casework along with markerboards and tackboards were installed. All of the doors and frames were replaced. Some of the classrooms had new wood framed walls with GWB installed. A secured entry vestibule has been added recently.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- Lakeridge Elementary School consists of two original classroom wings, assumed to be construction in the 1960's, and a newer addition, constructed in 1995 that connected the two wings together.
- The original construction of the classroom wings consists of concrete spread footing foundations, concrete slab on grade floor construction, steel beams and columns, partially reinforced CMU non-bearing shear walls, steel roof joists and metal decking at the west wing and wood decking at the east wing.
- In 1995 the building was modernized with a new over built wood roof consisting of open web wood roof joist and plywood decking supported by the existing steel columns. The exterior walls were infilled with wood stud framing with plywood sheathing. The interior and exterior masonry walls were backed with wood stud walls.
- The addition to the building consisted of concrete spread footing foundations, concrete slab on grade floor construction, wood stud bearing and exterior walls with plywood sheathing and open web wood roof joist with plywood sheathing.
- The playshed was seismically upgraded with the addition of masonry shear walls at the open end of the structure.
- The lateral resisting system for the building consists of the original wood and metal decking roof diaphragms, plywood roof diaphragm, and plywood shear walls and to some extent the existing masonry shear walls.

<u>Foundation/Structure Condition Evaluation:</u>

- We did not observe significant signs of structural distress, differential settlement or deterioration.
- There have been some significant changes in the building code since Lakeridge Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the existing structure is not in full compliance with the current code.

1.2 Exterior Walls System Description:

- The majority of the exterior walls at the Lakeridge Elementary are wood stud walls with plywood sheathing. At the end of the original wings the walls are partially reinforced masonry that were backed with wood stud walls in 1995.

Exterior Walls Condition Evaluation:

- We did not observe signs of significant structural distress, differential settlement or deterioration.
- The partially reinforced masonry walls are of some concern. The stresses on the walls were limited and they have been backed to reduce the potential for earthquake damage. The out of plane design forces for masonry walls have doubled since the building was upgraded in 1995. There is the potential for some overstress in the backing or masonry walls with respect to current code..

1.3 Exterior Roof System Description:

- The original low slope roof was covered by a sloped overbuild in 1995. The most recently constructed roof is comprised of asphalt composition shingles with roof felt underlayment over ¾" plywood sheathing. The roof positively slopes to metal gutters and PVC downspouts at the perimeter. The roof is interrupted by dormers which house mechanical louvers. Ridge venting provides air circulation to the attic space. This roof has no fall restraint system.

Exterior Roof Condition Evaluation:

- There are shingles missing in small areas throughout the roof with some of these shingles along ridge vents. There are some exposed nails along the ridge vents. The louver overbuilds have a 12:12 pitch causing the ridge shingles to crack. There is significant moss buildup on the roof, particularly in shaded areas. Some of the gutters are not sloped properly to drain. This is especially problematic
- Trees along line the eastern and southeastern side of the roof are higher than the roof requiring maintenance to keep the downspouts in that location from backing up.
- The boiler flue above the Utility Room has excessive condensation causing discoloration of the shingles below it. The base flanges of some stack vents are damaged and do not have sufficient contact with the roofing.

1.4 Exterior Windows/Doors System Description:

- The windows are aluminum and were replaced in the 1995 addition and modernization. The classroom windows are operable and have insect screens. The perimeter of the window is caulked and sealed and there is no head flashing. The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Doors leading into classrooms and corridors have half lites while the main entry doors have full lites. There are some hollow metal windows above the main entry door. All exterior windows are insulated.

Exterior Windows/Doors Condition Evaluation:

- Doors and frames are generally in good repair, but should be cleaned and repainted. The threshold at the door leading out of the northwest corner of the Multi-Purpose room does not have proper contact with the concrete walkway and exceeds the allowed height prescribed by current accessibility codes. This also occurs at the exterior door leading out of Staff 164.

1.5 Exterior Trim System Description:

- The roof fascia is comprised of prefinished corrugated metal panel over plywood sheathing. The soffit is painted plywood with surface mounted light fixtures. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster. Soffits over entries and the gymnasium are painted plywood and have recessed light fixtures. The main entry has exposed structural beams which have a stain finish.

Exterior Trim Condition Evaluation:

- The structural beams in front of the main entry should be re-finished. Stucco walls along the main entry soffit should be painted. The cedar trim below the pre-finished metal fascia and along the roof edges needs new paint. The cedar trim surrounding the mechanical louver dormers requires new paint. The stucco face of these louver overbuilds is dirty and should be cleaned and painted. Louver overbuilds on the south side of the gymnasium have head flashing that is turned up and do not drain properly.
- The plywood soffits around the perimeter of the building have a low level finish. They are in need of paint. Nail heads and seams are visible. There is a sprinkler line that runs underneath the covered walkway east of the Multi-Purpose room that is rusted.

2.0 Interior Building Condition

2.1 Floors System Description:

- All original flooring was removed and replaced in the 1995 addition and modernization. Classrooms, corridors, and offices are carpeted. Restrooms have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT. The multi-purpose room and stage have VCT floors. Carpet is nearing the end of it useful life.

Floors Condition Evaluation:

- The floors are generally in good repair. The exception would be in the boy and girl's toilet rooms where the sheet vinyl is shrinking, causing the seams in the floor and coved base to enlarge and collect dirt. The rubber treads and risers leading up to the stage in the Multi-Purpose room are losing bond with the substrate. The rubber base on the ramp leading up to the stage is also in poor condition.

2.2 Walls System Description:

- Walls are generally type "x" gypsum wallboard over wood studs. Restrooms typically have plastic laminate wainscoting over gypsum wallboard. The multi-purpose room and library have acoustical wall panels in the high volume spaces above. Vinyl wall covering is provided in the corridors.

Walls Condition Evaluation:

- The gymnasium wall mat is cracked and damaged, particularly around the wall outlets. Walls in the kitchen are damaged from heavy use and minimal wall protection. These walls do not have a waterproof finish on the wet walls. The walls leading up to the stage in the Multi-Purpose room are damaged as a result of high volumes of traffic and minimal wall protection. The handrails in this location do not have sufficient backing and are being pulled away from the wall.

2.3 Ceilings System Description:

- Ceilings consist of 2'x4' acoustical ceiling panels in the corridors and classrooms. The main entry corridor, library, and multi-purpose room are high volume spaces that have acoustical ceiling tiles sloping with the roofline. Restrooms, storage rooms, electrical rooms, and custodial rooms have a gypsum board ceiling.

Ceilings Condition Evaluation:

- The ceilings are generally in good repair. The acoustical ceiling panels in the principal's office are damaged from water infiltration.

2.4 Fixed Equipment System Description:

- Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinets, coat racks, whiteboard, wall mounted television, and an operable partition wall.

- The staff lounge is equipped with a stove, microwave, refrigerator, dishwasher, and upper and lower cabinetry. The Multi-Purpose room has 8 basketball hoops and stage lighting.
- The Kitchen consists of a double door reach in refrigerator, double door reach in freezer, milk cooler, double stack convention oven, 3 well steamtable, 3 compartment sink, single compartment dishwasher, and an exhaust hood.

Fixed Equipment Condition Evaluation:

- The equipment appears to be in good repair.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Power Distribution
    - Utility Service: Lakeridge Elementary School is fed underground from an exterior pad-mounted utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
    - Switchboard: The main switchboard is a “Square-D” brand “QED” type switchboard rated for 800A. The main switchboard has an 800A main circuit breaker, has (1) 200A spare, and (6) spaces.
    - Generator: The existing generator is a 40kW “Katolight” brand generator with a “Zenith” brand ATS. The generator is not compliant with current National Electric Code (NEC) standards as the NEC requires emergency loads (life safety loads: lighting primarily) be on a separate ATS from other standby loads (telecom loads, pumps, etc.).
    - Panelboards: Existing panelboards are “Square-D” brand “I-Line”, “NEHB”, and “NQOD” type boards, most have spares/spaces available for future capacity.
  - ◊ Lighting
    - Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior light fixtures are Interior light fixtures are 2’X4’ lay-in lensed with LED retrofit T-8 lamps.
  - ◊ Low Voltage
    - Telecommunications: The Main Distribution Frame (MDF) is located in Area 3 off Corridor 140. Network distribution for voice and data is hierarchical star topology. Data cabling is Cat 5 and Cat 6 and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series I and Series II jacks. Classrooms have minimum connectivity. (2)4”C with a 100-pair copper demarc enters and terminates within the MDF. (1) 12 Strand 62.5/125 multimode optical fiber cable and (1) Cat 3 25-pair copper backbone cable routes to Area 1 IDF. Wirelesses Access Points are in various classrooms.
    - IDF is located in Area 1 inside the east entrance in Corridor 110. Patch panels and data equipment are rack mounted and voice 110 blocks are wall mounted.
    - CATV Distribution: CATV distribution cabling is homerunned back to MDF with an extension to Area 1 IDF. The signal is extended to a 2’ x 2’ x 80” headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR’s are located in the Library work room. The CATV taps are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wall mounted TV outlet and a wall mounted TV set.

- Intercom/Clock: A Rauland Borg TC4130 intercom system is housed in the MDF. The 66-block terminations and cross-connects are mounted on the plywood backboard and clock power supplies and transformers are mounted in a 19" x 60" equipment rack. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall mounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.
- Sound Systems:
  - Sound systems are present in the following spaces
    - Gym/Commons (shared spaces)

◊ Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security Cameras have recently been added to the school. Access card readers and security keypads are installed at selected entrances and a security vestibule at the main entrance has been added. System is monitored by Guardian.

◊ Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wall mounted 110 terminal blocks.

Electrical Condition Evaluation:

◊ The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

◊ The interior lighting is in good condition and appears to provide adequate lighting levels.

◊ The existing intercom system is in good operating condition.

◊ The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have marginal coverage of parking and surrounding areas. The DVR has additional ports for expansion.

◊ The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.

◊ The existing category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was re-terminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a category 5e or category 6 cabling plant. Likewise the existing 62.5/125 multi-mode optical fiber cabling would need to be replaced with laser optimized 50/125 optical fiber cables to support current 10 Gigabit per second Ethernet transmission standards for optical fiber cabling.

◊ The existing sound systems appear to be operating adequately.

3.2 Plumbing

- Student restrooms are equipped with tempered, metered faucets at all sinks. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 0.6 GPF hands-free flush valves. Faucets in adult restrooms are not self metering.
- Sinks with bubblers are provided in each classroom, but aerators are missing on all faucets. Drinking fountains in hallways are not hi-lo type, and are not recessed.
- Hot water is supplied from a newer instantaneous water heater located in the boiler room. The instantaneous water heater feeds into an existing hot water storage tank. There are no floor drains in the mechanical attic.

3.3. Hot Water/Forced Air Heating

- Heating for the building is provided by a hydronic system that supplies heating water to hot water coils for each zone. Air handling units and return fans in the mechanical attic were installed in 1995. Ductwork in the

mechanical attic is not insulated in some areas, and there are some areas with air leakage. There are very few controls in the attic and some units utilize old style fuses. Several portions of the ductwork show dirt/dust buildup on the inside.

- Heating water is supplied by two Patterson Kelly boilers located in the boiler room. The boilers are nearing the end of their useful life. Also in the boiler room are two hydronic pumps. The pumps are not controlled by VFD.
- Thermostats in the building are push-button type. No exhaust has been provided in the teacher workroom for the copier. Exhaust in the student restrooms is insufficient. The gas meter is equipped with a seismic gas valve. The fan in classroom 27 is very loud.
- Computer Room Cooling
  - ◊ A Carrier heat pump provides heating and cooling to the computer room. The unit was installed in 1995.

4.0 Safety/Building Code

4.1 Means of Exit

- ◊ Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 Fire Control Capability

- ◊ Fire protection sprinkler heads in the multipurpose room are not shielded. Sprinkler heads in classrooms are not quick response.

4.3 Fire Alarm System - System Description

- ◊ The fire alarm system has been recently replaced with a new Siemens control panel and RF subscriber dialer installed. There appears to be an adequate number of notification and detection devices.

Fire Alarm System - Condition Evaluation:

- ◊ System is in good working condition and appears to meet current code coverage.

4.4 Emergency Lighting System Description

- Emergency lighting for egress consists of fluorescent fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- ◊ System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 Fire Resistance

- This facility has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. A two hour area separation wall was built to separate the Multi-Purpose Room from the rest of the facility. This wall is wood framed with 2 layers of GWB on both sides. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- The 1995 improvements to this school building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, and grab bars.

- Throughout the building interior door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Sinks and countertops in the classrooms are 2'-10" above finish floor. Ramps in corridors have handrails to assist people with disabilities.
- 2 Handicapped parking stalls are provided to the west of the Multi-Purpose room. A curb cut has been provided to give direct access from the driveway to the main entry of the building.
- The height of some of the exterior door thresholds exceeds the ½ inch prescribed by current code. There is a significant slope running east-west in the asphalt play area to the south of the building. This slope exceeds 1:12 and the accessible path from the upper and lower asphalt areas is provided through the building.

  Condition Evaluation:

  ◊ Accessible parking should be located as close to the main entry as possible.

  ◊ Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated.

  ◊ Uneven settlement in exterior sidewalks and asphalt walks has resulted in significant slab differentials at exterior door thresholds.

  ◊ Play areas should be made accessible to all students.

Site Condition Evaluation

The site is surrounded by residential properties with vehicular access from SE. 78th Street. The site slopes down from north to south and from west to east. There is also a large, steep hill between the east side of the building and adjacent residences. There is a fairly significant slope within the courtyard area making it difficult for anyone with disabilities to transverse the southern play surface area. The site has a large wooded at the southeast portion of the property. It is screened from adjacent properties by large trees along the south, east, and northeast perimeter. It is obscured from the western residences by a small hill, shrubbery, and fencing.

The building is located toward the western portion of the property. Staff parking, parent drop off, and buses all access the site from SE. 78th Street. Staff parking is located on the northwestern part of the property. This parking has 54 parking stalls in this lot including 2 handicapped stalls. Fire access is provided via a loop around the building and along the hard surface play area. Parent drop off is provided in a loop in front of the building.

Parking is inadequate on the Lakeridge site even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school. Overflow parking is provided across the street in the South Mercer Playfields which is managed by the City. This parking lot has 79 total stalls with 4 handicapped stalls. This parking lot is used as staging for parents picking up their kids after school. A flagger helps facilitate this process. There is a shoulder on SE. 78th Street which is also utilized for temporary parallel parking. The bus loop is located to the northeast of the building.

Pedestrian access to the site is provided along SE 78th Street, by a trail to the southwest of the property and through trails in the southeastern wooded area.

Play equipment is located to the southeast of the building, in the wooded area. There is grass playfield that is located to the east of the building which is currently being upgraded using a joint grant from the District and the City. A covered play area sits in a depression to the south of the building.

Physical Condition

Parking and Driveway Areas

- The asphalt paving in the northwest parking lot has been sealed.

- The asphalt paving in the parent drop off area and in the bus loop is in good condition. The paving signs and curbs in the bus loop should be repainted.

Hard Surface Play Areas

- The asphalt paving in the hard surface play areas is in poor condition. The surface contains multiple cracks, alligatoring, signs of settlement, and previous patches. There is vegetation growing through the cracks in several locations. The play area should be resurfaced and restriped for outdoor games.
- The asphalt paving area has many asphalt patches adjacent to exterior classroom doors where the entry mats that were added in the 1995 renovation and addition were taken out and filled.

Concrete Walks

- The concrete walk leading from the building to the covered play area to the south is cracked.

Drainage

- There is inadequate drainage directly west of the main entry. This causes the landscaping there to get soggy.
- The southeast portion of the staff parking lot tends to pond during rainfall. This area does not slope correctly to the adjacent catchment basin.
- Drainage between the playfield and the play area is poor. Water in this vicinity flows to the southeast.
- A trench drain was added by the School District outside of the exterior entry to Kindergarten 184 this was done in order to mitigate the flow of water from the adjacent hillside that is between the two wings.

Playfields

- The playfield was returfed in 2009 using a joint grant between the City and the District. It is currently being leveled and there are trenches being dug suggesting that irrigation is being planned for.

Fencing

- Security fencing at Lakeridge Elementary is particularly problematic and of great concern to the District. The perimeter fencing is sporadic and does not sufficiently secure the property. Screening between the staff parking and the hard surface play area is provided by a fire gate, chain link fencing, dumpster enclosures, and bollards. There is no fencing directly behind the portable that was recently moved to the site. Screening behind all other portables is provided by a hillside, shrubbery, and a private wooden fence built by the residences. There is an opening in the screening on the southwest corner of the school which leads to a private street. The chain link fencing on the south side of the property and to the east of the hard surface play area is in poor condition. The wooded play area has no security fencing between it and the adjacent trails and heavily forested area. The eastern playfield is currently fenced around the perimeter but it is difficult to determine its condition since the field is currently being upgraded and is not accessible.
- There are two gates leading into the dumpster enclosure, on of which the fencing is not obscured.
- The 4’ high chain link fencing along the western edge of the staff parking is in poor condition.
- There is gas meter with a fenced enclosure to the west of Classroom 104 which is not obscured.
- There is a chain link fence that serves as a guard along the high walk in the inner courtyard which is in poor condition. There are fence posts adjacent to this fence suggesting that there was another fence here at one time that was replaced. These posts are cast in a concrete footing that is above the finish grade.

Play Equipment

- Codes related to play equipment have changed in the last several years. Because of this, the equipment should be inspected by a certified inspector on an annual basis.

- The borders around the equipment are wood and extruded concrete curbs. The wooden borders appear to be in good condition, but the extruded curb is damaged and missing in some places. The equipment areas are underlain with treated wood chips (fibar) and generally appear to be at sufficient depth. However, the wood chips beneath the two spin toys are not of adequate depth. Wood chips are also spread outside of the play equipment borders and throughout the wooded area. These chips underlay some play equipment and are not of sufficient depth.
- The play area has one drinking fountain.
- Lakeridge is the only elementary school that still has play equipment with wood structure and metal rails. Two of these structures are suspended from trees which provide the main support for the play equipment. One structure resembles a boat, while the other is a simple tree fort with a roof. Cables from above provide additional support along the perimeter of the structures. Access to this equipment is provided by wooden and rope ladders. Both structures have plastic slides.
- There are benches spread throughout the wooded play area.
- There is a covered benched area within the play area. It is built of tube steel posts, tube steel joists, heavy wood beams, wood joists, wood sheathing, and metal fascia. It was recently reroofed by the District with a standing seam metal roof. The structure has metal gutters but no downspouts. The metal gutter is damaged. The tube steel joists are rusting. The structure is bordered by wood which appears to be in good shape. The canopy covers benches and table tops which have tiled mosaics depicting lions on two tabletops and chess boards on the other two. The benches are wooden and are in good repair.
- A covered play area sits on the southwest side of the property and is too small for the needs of this school. It sits in a depressed portion of the asphalt play area. It is constructed of concrete masonry walls, steel trusses, steel beams, and wood decking. The trusses are rusting and need to be painted along with the wood decking. There are three basketball hoops under this covered area. One of the basketball hoops is in poor condition and has no net.

Landscaping

- Landscaping in the staff parking lot islands is in poor condition.
- The landscaping on the west side of the site, behind, and between the portables is overgrown and does not appear to be maintained well.
- The landscaping between the two wings, on the western slope is in poor condition. Exposed asphalt edges and fence post bases above suggest that the finish grade was higher at one time.
- There is no landscaping in the fire hydrant island to the east of Kiln Room 185.
- Landscaping in the courtyard to the south of the library consists of grass, shrubs, and trees and is in fair condition.
- The landscaping in the island of the bus turnaround and in the island where parents drop off their students is in good condition. The landscaping along the front perimeter of the building is in good condition.

Other Observations:

- Because of its proximity to the ground, kids have been known to scale the roof above the library. This presents a hazard and potential liability. As a result the roofing along the gutter and the gutter itself have been damaged in this location.
- Additional storage is provided for on site by temporary sheds and large metal containers.
- There is no easy access to the two hot water tanks in the utility room. If one of the tanks were to fail, there would be no easy solution to removing and replacing it.

Chapter 1

EDUCATIONAL ADEQUACY ASSESSMENT

Please refer to the November 2009 Mercer Island School District Study and Survey. This information has not been updated for this report.

1 of 1

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
80.92% Fair

LAKERIDGE ELEMENTARY SCHOOL - 01_MAIN BUILDING

Building Details

PROFILE TYPE	Classroom Building - Slabs On Grade
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1953	Area 1	41,036	41,036	41,036		
1995	Area 2	9,089	9,089	9,089		
	Building Totals	**50,125**	**50,125**	**50,125**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		90.00% Good
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		62.00% Fair
	Deficiencies:	Peeling Paint or Delamination		
	Causes:	Material Condition		
	Exterior Louvers and Vents	B2070		90.00% Good
Exterior Horizontal Enclosures	Roofing	B3010		90.00% Good
	Deficiencies:	Ventilation		
	Causes:	Surface Weathering		
	Roof Appurtenances	B3020		90.00% Good
	Deficiencies:	Faulty Material		
	Causes:	Surface Weathering		
	Horizontal Openings	B3060		90.00% Good
	Overhead Exterior Enclosures	B3080		90.00% Good
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:	Deficiency: wire glass		
	Interior Doors	C1030		90.00% Good
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking, Surface Appearance		
	Causes:	Defective Material		
	Comments:	mostly rubber base and carpet		
	Interior Fabrications	C2020		90.00% Good
	Flooring	C2030		90.00% Good
	Ceiling Finishes	C2050		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Moisture		
	Comments:	Broken tile and water stains that may be indication of bigger issue		
Plumbing	Domestic Water Distribution	D2010		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:	Deficiency: age		
	Sanitary Drainage	D2020		62.00% Fair

	Deficiencies:	Slow Draining	
	Causes:	Lack of Cleanouts	
	Building Support Plumbing Systems	D2030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	fixtures are old and do not conserve water	
HVAC	Heating Systems	D3020	62.00% Fair
	Deficiencies:	System Inefficient	
	Causes:	Equipment Obsolescence	
	Facility HVAC Distribution Systems	D3050	90.00% Good
	Deficiencies:	System Inefficient	
	Causes:	Equipment Obsolescence	
	Ventilation	D3060	62.00% Fair
	Deficiencies:	Excessive Particulates	
	Causes:	Equipment Obsolescence	
	Comments:	Older HVAC equipment, dirty duct interiors	
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Facility Power Generation	D5010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Generator distribution includes single transfer switch with mixed emergency/standby loads	
	Electrical Services and Distribution	D5020	90.00% Good
	General Purpose Electrical Power	D5030	90.00% Good
	Lighting	D5040	90.00% Good
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	90.00% Good
	Audio-Video Communications	D6030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	VGA cabling only to projectors in classrooms, no built-in audio enhancement	
	Distributed Communications and Monitoring	D6060	90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	90.00% Good
	Electronic Surveillance	D7030	62.00% Fair
	Deficiencies:	Blind Zones	
	Causes:	Equipment Obsolescence, Insufficient Equipment	
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	90.00% Good
Furnishings	Fixed Furnishings	E2010	90.00% Good
	Movable Furnishings	E2050	90.00% Good

1 of 1

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

LAKERIDGE ELEMENTARY SCHOOL - 01_MAIN BUILDING

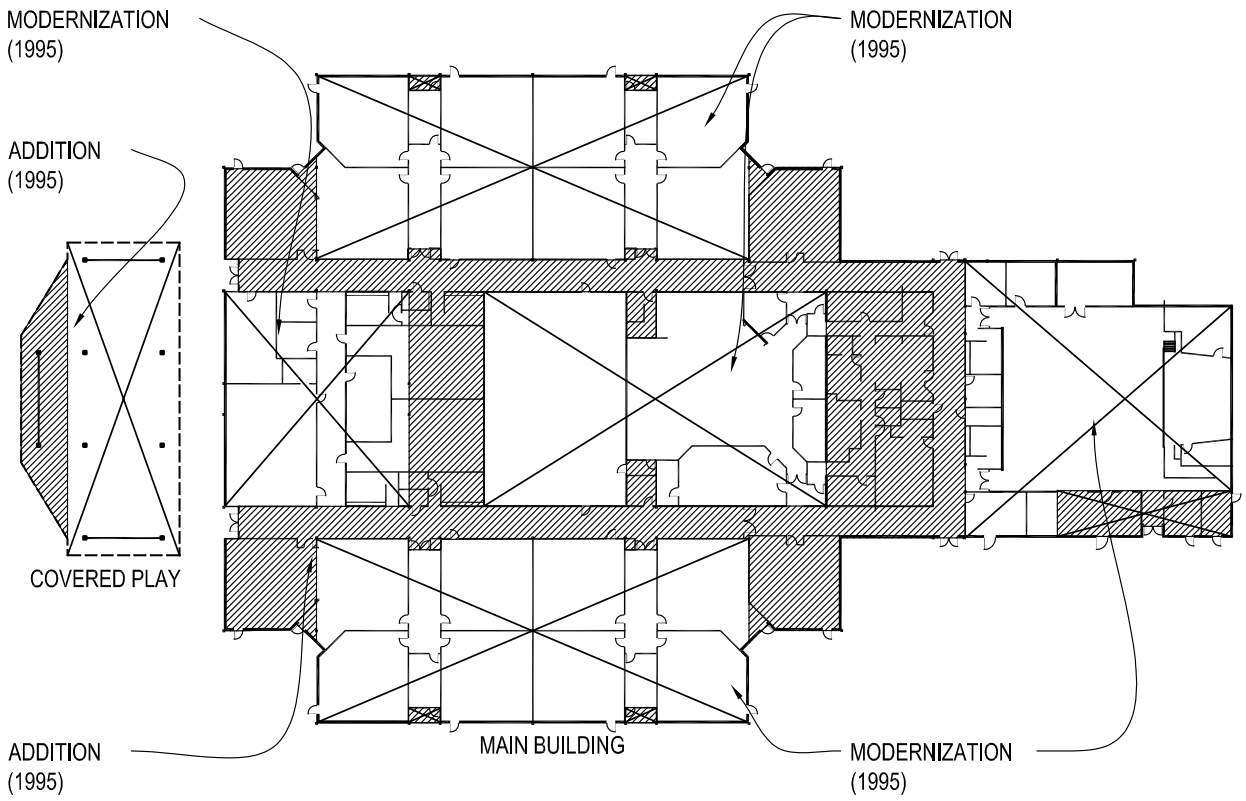
Profile Name: Classroom Building - Slabs On Grade
Inventory Status: Recognized
Condition Rating: 80.92 %

Currently BCA Certified: Yes
Last BCA Certify: 6/28/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3060	Horizontal Openings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1030	Interior Doors	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2020	Interior Fabrications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2030	Flooring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
HVAC											
D3020	Heating Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3060	Ventilation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											
D5010	Facility Power Generation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐

D5020	Electrical Services and Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5030	General Purpose Electrical Power	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Communications														
D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6020	Voice Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6030	Audio-Video Communications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D6060	Distributed Communications and Monitoring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electronic Safety and Security														
D7010	Access Control and Intrusion Detection	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D7030	Electronic Surveillance	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Integrated Automation														
D8010	Integrated Automation Facility Controls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Furnishings														
E2010	Fixed Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Unused Components														
D3010	Facility Fuel Systems	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐

West Mercer Elementary School



BUILDING	SQ. FT.
1995 MODERNIZATION	35,586
1995 ADDITION	16,843
COVERED PLAY (2,560 / 2)	1,280
1995 COVERED PLAY ADDITION (1,024 / 2)	512
GRAND TOTAL	54,221

SCALE: 1"=60'

0 30' 60' 120' 180'

BLRB architects
Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308
P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

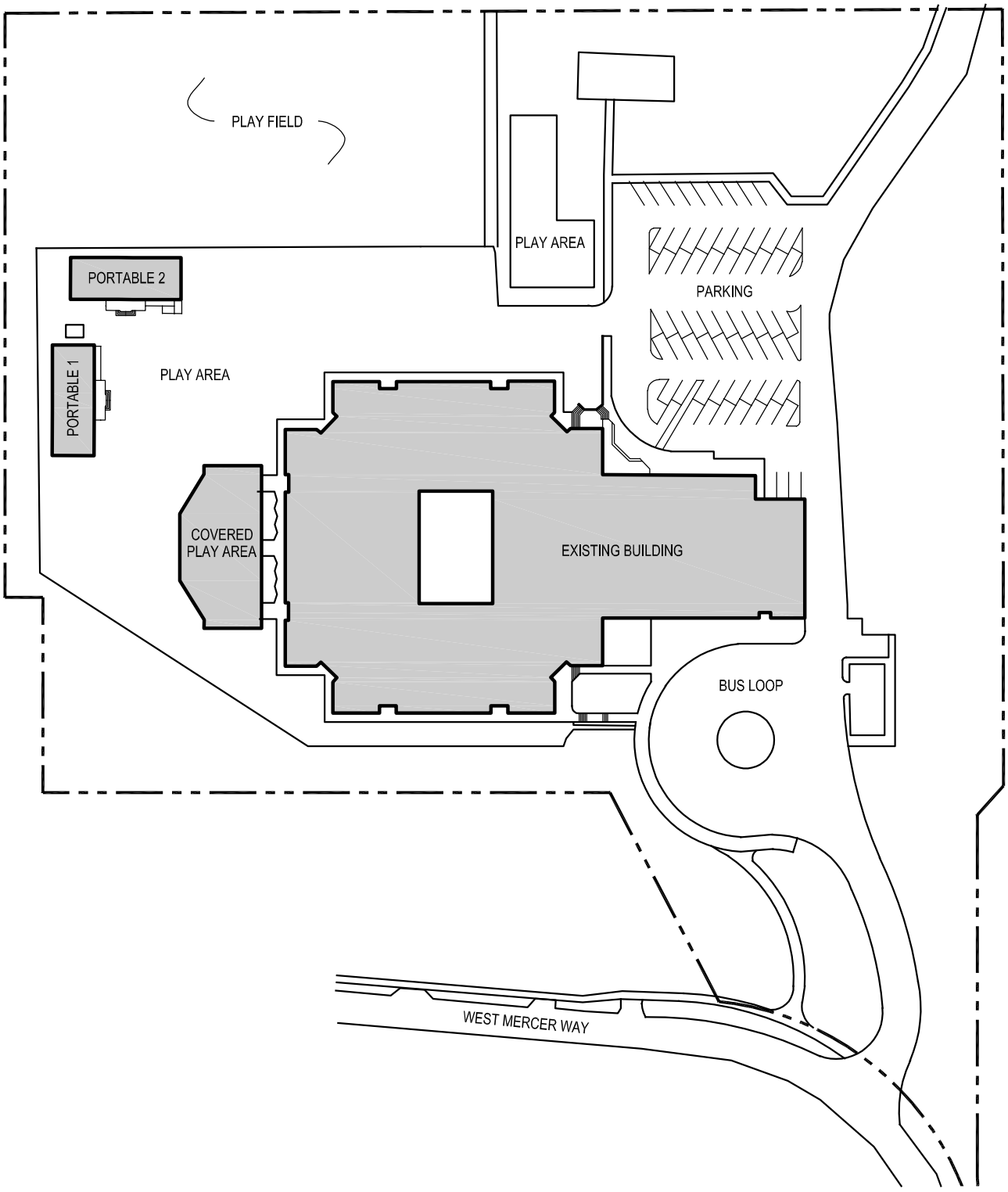
Drawing Title: WEST MERCER ELEMENTARY SCHOOL 2009 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

Reference Sheet No. 1



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: WEST MERCER ELEMENTARY SCHOOL SITE PLAN	Drawn By: JJJ	
		Comm. No.	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 3
	Drawing Title: WEST MERCER ELEMENTARY SCHOOL SITE AERIAL	Comm. No. 18.10	

West Mercer Elementary School

4141 81st Avenue SE
Mercer Island, WA 98040
206.236.3430

Site Information

County:	King
Approx. Acreage:	8.86 Acres
Zoning:	R-9.6
Tax Parcel No.:	9365700100
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades K-5

Current Square Footage (permanent construction):	54,221 SF
Number of Portable Buildings on-site:	2 Buildings (4) Classrooms

Current Enrollment (2018):

Kindergarten:	75
Grade 1:	72
Grade 2:	64
Grade 3:	76
Grade 4:	89
Grade 5:	109
Total Enrollment:	485

Summary of Teaching Spaces

General Use Classrooms:	24
Special Education Classrooms:	3
Occupational Therapy:	1
Technology Lab/Computer Room:	1
Art Room:	0
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	***32***

Building Condition Evaluation (2018 Study and Survey)

ICOS (Main Building):	85.60

CONSTRUCTION HISTORY

West Mercer Elementary School was originally constructed in 1963. Until its renovation and addition, the West Mercer campus was comprised of 5 separate buildings and 1 covered play area. In 1995, the exterior space between the buildings was infilled, creating one uniform building with an attached covered play area.

Much of the exterior walls and structure remained intact. A roof overbuild was constructed over all of the connected buildings. All doors and windows were removed and replaced. Flooring throughout the facilities was removed under a separate contract and replaced. Toilet rooms were removed and relocated. Extensive mechanical and electrical systems were replaced. Site work including concrete walks and landscaping was done to accommodate the renovated building.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- West Mercer consists of the original building, assumed to have been constructed in the 1960's with an addition and major modernization in 1995.
- The original structure consists of concrete spread footing foundations, concrete slab on grade floor construction, steel and concrete columns, partially reinforced CMU walls, steel beams and joist girders, and steel roof joist with wood roof decking.
- In 1995 a wood overbuilt roof was provided consisting of steel columns, glu-lam beams, open web wood roof trusses and plywood sheathing. Areas of addition were constructed with wood stud walls with plywood sheathing.
- Additional plywood and reinforced shear walls were added along with backing some of the masonry walls. Masonry shear walls were also added at the covered play area.
- The lateral resisting system for the building consist of the original wood roof diaphragm, plywood sheathing at the overbuilt roof, original partially reinforced masonry walls and plywood shear walls.

Foundation/Structure Condition Evaluation:

- We observed no significant signs of structural distress, differential settlement or deterioration.
- There was some minor rusting observed at the exposed steel framing at the covered play area.
- There have been some significant changes in the building code since West Mercer Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus anchorage requirements for masonry walls have significantly increased. It is assumed that the existing structure is not in full compliance with the current code.

1.2 Exterior Walls System Description:

- Exterior walls consist of masonry and wood stud walls with plywood sheathing.

Exterior Walls Condition Evaluation:

- We observed no significant signs of structural distress, differential settlement or deterioration.
- There have been significant changes to the out of plane earthquake design forces for masonry walls since the building was rehabilitated in 1995. Most of the walls are relatively short, however some of the taller walls, like the gymnasium and covered play, likely do not meet current code requirements.

1.3 Exterior Roof System Description:

- The roof is a comprised of composition shingles and it positively slopes to the outer perimeter of the building and toward the inner courtyard. Metal gutters and PVC downspouts provide drainage for the roof. Flat roofs with a single-ply membrane provide cover for walkways at the north and south entries. These roofs have internal drains. The drain at the north entry has an emergency overflow scupper approximately 6 feet south of the roof drain. The south entry walkway has 3 drains and no emergency overflows. The entire south gable over the multi-purpose room drains onto the south covered walkway. There is an existing masonry chimney stack at the southwest corner of the multi-purpose roof. Large trees overhang the southernmost perimeter and northeast perimeter of the building. There is no venting at the ridge of this roof. The roof has no fall restraint system in place.

Exterior Roof Condition Evaluation:

- The main roof has moss buildup. The single-ply membrane over the southern walkway has a deficient bond to its substrate causing it to blister severely. The existing chimney stack is not adequately reinforced and should be pinned and repointed. The roof requires regular maintenance to keep downspouts in proper working order.

1.4 Exterior Windows/Doors System Description:

- The windows are aluminum and most of them were replaced in the 1995 addition and renovation. Most of the windows are operable. These casements do not have insect screens. The perimeter of the window is caulked and sealed and there is no exposed head flashing. Window head conditions typically terminate at the soffit. The sill is flashed with an aluminum extruded aluminum sill that was provided by the window manufacturer. All exterior windows are insulated.
- The exterior door assemblies are hollow metal doors set within hollow metal frames. These doors and frames were all replaced in the 1995 addition and renovation. The hollow metal frames are solid fill grouted. Doors leading into classrooms are flush with overhead transoms in filled with a solid metal panel. The main entry doors, corridor doors, and door leading into the multi-purpose room have full lites. These frames have side and overhead transoms that are in filled with safety glazing. The head conditions at frame transoms typically terminate at the soffit.

Exterior Windows/Doors Condition Evaluation:

- The windows are generally in good condition and are sealed properly. The sealant in the windows above the multi-purpose room is beginning to crack. The extruded aluminum sill flashing at the south window of classroom 312 has been damaged and should be replaced.
- Exposed steel angles supporting masonry above windows and doors are rusting and there are no weeps in the masonry at those headers. The exterior door leading out of classroom 318 is bent and does not adequately cover the exterior concrete walk. Its threshold exceeds the height prescribed by current accessibility codes.

1.5 Exterior Trim System Description:

- An insulated stucco soffit and deep stucco fascia match the depth of the original marblecrete fascia, providing overhangs around the building. The transition between soffit and fascia is provided by a stainless steel screed. Original stucco soffits were cut and patched to allow for new lighting, mechanical, and structure. Stucco soffits are vented above new windows and new stucco walls and contain concealed sprinkler heads with cover plates. Light fixtures are also recessed into this soffit. Behind the external gutters is an exposed piece of 1x6 cedar fascia trim that stands proud of the stucco/marblecrete fascia. An extruded aluminum flashing trim matching the profile of adjacent window sill flashing provides a transition where there is a stucco infill above existing 6” SCR brick walls. Painted metal rake flashing and counter-flashing is provided at the transition between roof and stucco walls above the roofline. Downspouts consist of polyvinyl chloride (PVC) piping.

Exterior Trim Condition Evaluation:

- Many of the cover plates on the concealed sprinkler heads are missing or loose and need to be replaced. The cedar fascia behind the external gutters should be repainted. Soffits should be continuously vented to provide more even air circulation across the entire enclosed area. The counter-flashing above the multi-purpose room on the north slope is not adequately fastened and continuously falls off. Some of the recessed light fixtures are loose and have cracked lenses.

2.0 Interior Building Condition

2.1 Floors System Description:

- All original flooring except for in the storage and mechanical rooms flanking the multi-purpose room was removed and replaced in the 1995 addition and renovation. These rooms have an exposed concrete slab. The floor was prepped and leveled for new finishes. The wood stage in the multi-purpose room was part of the original construction. VCT is typically provided at the entries, vestibules, book, and supply rooms. The multi-purpose room has VCT flooring that is striped for basketball. Classrooms have carpet with VCT along the cabinetry walls. Corridors and offices are carpeted as well. Restrooms and the kitchen have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT.

Floors Condition Evaluation:

- Generally, the floor finishes are in fair to good repair. The wooden stage at the raised platform in the multi-purpose room has a lot of scratches resulting from many years of use. Rubber base, particularly around outside wall corners and in the multi-purpose room is in need of replacement.

2.2 Walls System Description:

- Typically, the interior partitions in classrooms, administrative office areas, and most other spaces consist of painted gypsum wallboard over staggered wood framing and acoustical insulation. Corridors walls are constructed of plaster veneer over “type x” gypsum wallboard. The gymnasium walls consist of exposed concrete masonry units at the ground floor level and plaster veneer over “type x” gypsum wallboard above. Wall mats provide protection around the perimeter of the gymnasium. Exposed concrete masonry units are in the Kitchen as well with fiberglass reinforced wall panels (FRP) being used on the wet walls for an impact-resistant, easy-to-clean wall finish. Plastic laminate is used in the restrooms. Each classroom has 2 walls of vinyl wall covering. There is vinyl wall covering in the library, administration office areas, and work spaces as well. There is some exposed brick at the main entry.

Walls Condition Evaluation:

- The wall finishes are generally in good repair. The corridor walls have some damage at corners where there are no corner guards. The CMU in the multi-purpose room facing the stage should be cleaned and repainted.

2.3 Ceilings System Description:

- The corridor ceilings are 12”x12” acoustical ceiling tiles over gypsum wallboard. There are gypsum wallboard soffits and beams in the corridors as well. The classrooms and offices have 2’x4’ acoustical ceiling panels for ceiling finishes. There are gypsum wallboard ceilings in the restrooms, storage areas, and Kitchen. The Library has 2’x4’ acoustical ceiling panels over the reception desk and over some of the bookcases. There are beams running through the space that are encased in gypsum wallboard. Above these beams, the ceiling follows the pitch of the roof and is furred out with gypsum wallboard and 12”x12” acoustical ceiling tile. The OT/PT room and the Music classroom consist of 12”x12” acoustical ceiling tiles above painted structural steel beams. Trusses and structural steel decking were left exposed in the Multi-Purpose room. 12”x12” acoustical ceiling tile provides the surface above the platform area.

Ceilings Condition Evaluation:

- The ceilings are generally in good repair. Some tiles appear to be water damaged around the building, suggesting water intrusion in the attic above.

2.4 Fixed Equipment System Description:

- Classrooms are typically equipped with 16-foot and 4-foot whiteboards, wall mounted televisions, folding partition walls, and plastic laminate finished storage casework.
- The gymnasium includes six backboards – one at each end, and two on each side.
- In 1995, new stainless steel equipment was installed in the Kitchen. This equipment includes a dishwasher and sinks, 2 door reach in freezer, 2 door reach in refrigerator, serving counter with hot food wells, a thermal shelf, a worktable with sink, a 2 deck convection oven, and exhaust hood, and a hand sink.
- Coiling roll-up doors provide counter access from the Kitchen to the gymnasium area for serving and dishwashing.

Fixed Equipment Condition Evaluation:

- The classroom equipment is in good repair, although at 2'-10" above finish floor, the sinks and accessories are difficult to reach for small children. The heights of mirrors in all restrooms are appropriate for children.
- The gymnasium equipment appears to be in good condition.
- All of the fixed equipment in the Kitchen appears to be in good repair. There are no refrigerator and freezer walk-in units provided.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: West Mercer Elementary School is fed underground from an exterior pad-mounted 300kVA utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
  - ◊ Switchboard: The main switchboard is a "Square-D" brand "QED" type switchboard rated for 800A at 480Y/277V. The main switchboard has an 800A main breaker and (7) available spaces. The main switchboard is equipped with a 'Square-D" brand "power logic" circuit monitor.
  - ◊ Generator: The existing generator is a 100kW "Kohler" brand 480Y/277V generator and "Kohler" brand automatic transfer switch. The generator is not compliant with current National Electric Code (NEC) standards as the NEC requires emergency loads (life safety loads, lighting primarily) be on a separate ATS from other standby loads (telecom loads, pumps, etc.).
  - ◊ Panelboards: Existing panelboards are "Square-D" brand "I-Line", "NEHB", and "NQOD" type boards, most have spares/spaces available for future capacity.
- Lighting
  - ◊ Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior light fixtures are 2'X4' lay-in lensed with LED retrofit T-8 lamps with LED type high bay LED gym retrofit lamps in the gym.
- Low Voltage
  - ◊ Telecommunications: The Main Distribution Frame (MDF) is located in Section 100 behind the Computer Lab Room 165 and supports the entire school. Network distribution for voice and data is single star topology.

Data cabling is Cat 6 and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series I and Series II jacks. Classrooms have minimum connectivity. There are (2)4"C and a 100 pair copper demarc cable that enters and terminates within the MDF. Wirelesses Access Points are in various classrooms and staff workrooms.

◊ CATV Distribution: CATV distribution cabling is via taps and splitters. The signal is extended to a 2' x 2' x 80" headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located in the Library work room. The CATV taps and splitters are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wall mounted TV outlet and a wall mounted TV set.

◊ Intercom/Clock: A Rauland Borg TC4130 intercom system is housed in the MDF. The 66-block terminations and cross-connects are mounted on the plywood backboard and clock power supplies and transformers are mounted in a 19" x 60" equipment rack. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall mounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.

◊ Sound Systems: Sound systems are present in the following spaces

- Gym/Commons (shared spaces)
- Band/Choir Room (single room)

◊ Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security Cameras have recently been added to the school. Access card readers and security keypads are installed at selected entrances and a security vestibule at the main entrance has been added. System is monitored by Guardian.

◊ Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wall mounted 110 terminal blocks.

<u>Electrical Condition Evaluation:</u>

- The main switchboard and branch panels appear to be in good condition. They appear to be current models and The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
- The generator enclosure and fuel tank are severely rusted. This appears to be caused by rain water over unprotected batteries within the generator housing.
- Pendant light fixtures in the computer lab have been mounted directly to the ceiling and the louvers are damaged.
- The remainder interior lighting is in good condition and appears to provide adequate lighting levels.
- The existing intercom system is in good operating condition.
- The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have good coverage of parking and surrounding areas. The DVR has additional ports for expansion.
- The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.
- The existing sound systems appear to be operating adequately.

3.2 Plumbing

- Student restrooms are equipped with metered faucets at all sinks, and trap wrap at one sink in girls' restrooms. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF hands-free flush valves. Each restroom also has a hose bibb.
- In classrooms, sinks and bubblers are in good condition. Drinking fountains in hallways are not hi-lo type, and are not recessed.
- Hot water is supplied from two AO Smith water heaters manufactured in 1992 and both are showing signs of their age. The water heaters are located in the boiler room.
- In the mechanical attic, piping is in good condition and is well labeled. There are no floor drains in the mechanical attic, and there was standing water on the floor near HP-1.

3.3. Hot Water/Forced Air Heating

- Heating for the building is provided by a hydronic system that supplies heating water to hot water coils for each zone. Air handling units and return fans in the mechanical attic were installed in 1995. Ductwork in the mechanical attic is insulated and well braced.
- Heating water is supplied by two Patterson Kelly boilers located in the boiler room. Also in the boiler room are two hydronic pumps. Both the boilers and pumps are showing signs of wear and are nearing the end of their useful life. Each pump is controlled by a VFD.
- Thermostats in the building are push-button type. Ventilation in the kiln room is sufficient. Exhaust has been provided in the teacher workroom for the copier and laminator.
- The MDF room was very warm and did not appear to have cooling or sufficient ventilation.

Computer Room Cooling

- A Carrier heat pump provides heating and cooling to the computer room. The unit was installed in 1995.

4.0 Safety/Building Code

4.1 Means of Exit

- Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 Fire Control Capability

- Fire protection sprinkler heads in the multipurpose room are not shielded.

4.3 Fire Alarm System - System Description

- The existing fire alarm panel is a "Siemens" brand panel with RF Subscriber unit dialer unit. The fire alarm panel is connected to an emergency system electrical panel and there appears to be an adequate number of notification and detection devices, including beam detectors in the gymnasium. Tamper, flow, and low air switches are also monitored by the fire alarm system. The annunciation appears to meet current code.

Fire Alarm System - Condition Evaluation:

- The system is in good working condition and appears to meet current code coverage.

4.4 Emergency Lighting System Description

- Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- System is in good working condition and appears to meet current code coverage. There appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 Fire Resistance

- This facility has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. The corridor walls are one hour and are mostly constructed of wood framing with GWB on both sides and plaster veneer on the corridor side. A two hour area separation wall separates the Multi-Purpose Room from the rest of the facility. These walls consist of CMU and CMU with wood furring and GWB. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- (2) Handicapped parking stalls are provided in the front parking area adjacent to the main entry. However, the path of access crosses the pick-up/drop-off lane of traffic. At this location, a painted crosswalk has been provided to highlight this path. This crosswalk is a continuation of the designated access aisle which is less than the 5'-0" prescribed by current accessibility standards. A curb cut has been provided to give direct access from the driveway to the main entry of the building. A van handicap stall is provided at the northeast corner of the multi-purpose room. This stall has no clear designated access aisle or crosswalk to an accessible entry. The supposed access aisle impedes into the adjacent fire lane and gate.
- The 1995 improvements to this school building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, protection from hot waste pipes, and grab bars.
- Circulation east-west in Hall Ramp Corridor 102 and 125 is provided via 1:12 ramps. The handrails for these ramps terminate at the main entry doors and fire doors, and wraps around existing concrete columns. It has an awkward termination in these instances and does not appear to have adequate extensions as prescribed by current accessibility standards.
- Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Although the sinks and countertops in the classrooms are 2'-10" above finish floor, the hot water waste pipes are not insulated.
- Some areas of the concrete sidewalks around the exterior perimeter of the buildings have settled unevenly, resulting in tripping hazards and slab differentials greater than ½-inch. Handrails throughout the building and site range between 36-38 inches. Although within acceptable heights, these handrails may be too high for small children with disabilities.
- There is a raised platform area in the internal courtyard which has no stairs or ramp leading to the top.

Condition Evaluation:

- Access to the building from parking areas should not require patrons to cross vehicular driveways. Accessible parking needs to be located as close to the main entry as possible. Cross slopes within the parking area should not exceed 2%.
- Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated.
- Uneven settlement in exterior sidewalks has resulted in slab differentials. Any differential greater than ½-inch needs to be repaired/replaced.

Site Condition Evaluation

The site is surrounded by residential properties with several access points from a variety of directions. The site slopes dramatically from north to south at the main drive into the site. There is also a large, steep hill between the east side of the building and adjacent residences. There are some significant grade elevation differences running east-west at the building that result in differing floor elevations and the use of concrete stairs for building access pathways around the perimeter of the building making access difficult for anyone with disabilities.

The building is located at the center of the property. There is a drive that extends from 40th Avenue to the front of the building providing access for staff parking and parent drop-off. Buses access the site from West Mercer Way and drop-offs from here access the building from the south entry. Additional temporary parking is provided on the east side of this bus loop. This parking is not paved and wood chips over dirt provide its surface. There are 65 parking stalls in the north lot including 2 handicapped stalls, one handicapped van parking and space for approximately 12 parking spots in the bus loop. Parking is inadequate even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school.

Play equipment areas are located in front of the building, immediately northeast of the hard surface play area and portables. The remainder of the site is grassed play fields which are north of the building. Field equipment includes a chain-link backstop in one location. There is a covered play area to the east of the building and it is connected to the school by 2 covered walkways.

The site has a significant amount of impervious area, exceeding the allowed impervious area of 40% prescribed by the Mercer Island Municipal Code. The site has challenges with draining because of its proximity to the north and east hill, poor maintenance of catchment basins and the site's impervious area.

Physical Condition

Parking and Driveway Areas

- The asphalt paving in both of the front parking areas is in fair condition. The front parking lot has some cracking and should be resurfaced and repainted
- An extruded curb lines the eastern edge of the property along the fire lane, but has been damaged by vehicle tires and is broken in several locations.
- Entry into the north parking lot is problematic with traffic backing up onto 40th Avenue when parents are dropping off their children.
- There are three parking stalls located at the northeast corner of the building which have no wheelstops or bollards to prevent a potential collision into the building.
- Parking at this site is insufficient for the needs of the staff and parents.

Hard Surface Play Areas

- The asphalt paving in the play area north, west, and south of the building is in poor condition. The surface contains multiple cracks, alligatoring, signs of settlement, and previous patches.
- Between the building and the covered play area are existing planters that were filled in with asphalt. These planters are flanked by two emergency exits whose pathways flush out with the top of the old planter boxes creating a potential falling hazard during an evacuation. Between these two planters is a stairway used during the original construction and abandoned in the 1995 addition and renovation. There is a large lip where the asphalt meets the concrete landing presenting a tripping hazard for anyone walking on top of the planters.
- There are gaps at the borders between the asphalt and concrete walks causing weeds to grow within these gaps.

Drainage

- The catchment basin located east of classroom 202 has been known to back up as a result of the overhead trees and from water runoff from the adjacent rockery retaining wall and stairs. This is especially problematic in the winter when it freezes and creates a slipping hazard.
- The west side of the bus loop accumulates standing water as a result of inadequate sloping to catchment basins.
- During heavy rainfalls, water runs down the hill north of the main entry and playfield. From there, it runs west along the fence line and south into the field, causing a swampy condition. This is further amplified by an underground spring in the north hill. The water also seeps into the adjacent big toy
- There is an underground retention tank on the west side of the northwest playfield. A city sewer line that runs into this retention tank has been known to back up because of overhead trees and poor maintenance by the city. When it backs up, the west side of the playfield becomes flooded. It also affects two catchment basins located north and northwest of the covered play area, causing ponding to occur in the depressions radiating from the basins.
- Maple trees have been known to backup the catchment basin south of classroom 318.
- Runoff from the east hill and underground springs cause a steady stream along the dumpsters and east side of the building during heavy rainfalls.
- Standing water tends to accumulate east of classroom 303. This is at the base of a hill and two stairways. The catchment basin in the adjacent hill seems to have little impact on this problem since the water seems to bypass it during heavy rainfalls.

Playfields

- Supervision from the school to the northwest field is obscured by the 6 portables that sit on the northern part of the hard surface play area.
- The western asphalt walk that provides access to the northwest playfield from the adjacent street is severely damaged and presents a tripping hazard.
- The two easternmost portables have a fenced area for small children located on the southeast side of this playfield. This play area is overgrown with weeds and is poorly maintained.

Fencing

- The perimeter fence along the north, west, and south side of the property varies in height and is broken and damaged in many places. The school is visually screened from adjacent property by large trees behind the perimeter fencing. There is a madrona tree growing north of the northwest property line that has damaged the backstop in that location. It is unclear as to whether or not this tree presents a hazard from falling.

Play Equipment

- Codes related to play equipment have changed in the last several years. The equipment should be inspected by a certified inspector on an annual basis. The borders around the equipment are concrete and appear to be in good condition. One area includes a plastic border that appears to be performing well. The equipment areas are underlain with treated wood chips (fibar) and appear to be at sufficient depth.
- There are two stairways leading up to the play equipment which have no handrails.
- There are basketball hoops, tetherball poles, designated areas for foursquare and hopscotch located throughout the hard surface play area. The basketball hoops are in poor condition, with nets that are failing and clear backboards accumulating mold and mildew.

- There is a large covered play area located to the west of the main building. It is constructed of brick, CMU, concrete columns, exposed steel trusses, and exposed wood decking. Its fascia matches the main building and its roof is connected to the main building by two flat roofs. The main roof of this structure has four internal drains. The roof is flat and a new single-ply membrane was applied to it in 1995. The roof structure was also expanded to the west in 1995 providing more cover. This roof has significant debris buildup and ponds along the eastern drains. The covered play area houses 3 basketball hoops which are in poor condition. The exposed steel trusses are rusting and the covered play area is in need of new paint.

Landscaping

- The landscaping and pond in the internal courtyard of the main building were started as a student project -- the landscaping is overgrown and requires attention.

Other Observations:

- Sidewalks around the perimeter of the building and throughout the site are cracked in many locations.
- Additional storage is provided for on site by temporary sheds and large metal containers.

EDUCATIONAL ADEQUACY ASSESSMENT

Please refer to the November 2009 Mercer Island School District Study and Survey. This information has not been updated for this report.

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School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
85.60% Good

WEST MERCER ELEMENTARY SCHOOL - 01_MAIN BUILDING

Building Details

PROFILE TYPE	Classroom Building - Slabs On Grade
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1964	Area 1	35,586	35,586	35,586		
1995	Area 2	16,843	16,843	16,843		
	Building Totals	**52,429**	**52,429**	**52,429**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		90.00% Good
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		90.00% Good
	Exterior Louvers and Vents	B2070		90.00% Good
Exterior Horizontal Enclosures	Roofing	B3010		62.00% Fair
	Deficiencies:	Ventilation		
	Causes:	Surface Weathering		
	Roof Appurtenances	B3020		62.00% Fair
	Deficiencies:	Ventilation		
	Causes:	Surface Weathering		
	Horizontal Openings	B3060		62.00% Fair
	Deficiencies:	Fastening Failure		
	Causes:	Flashing Failure, Mechanical Damage		
	Comments:	Age of material		
	Overhead Exterior Enclosures	B3080		90.00% Good
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other, Security		
	Comments:	Deficiency: Wire Glass		
	Interior Doors	C1030		90.00% Good
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Surface Damage		
	Interior Fabrications	C2020		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking, Surface Appearance		
	Causes:	Defective Material		
	Flooring	C2030		62.00% Fair
	Deficiencies:	Broken or Loose Tiles, Stains, Discoloration		
	Causes:	Deterioration		
	Ceiling Finishes	C2050		90.00% Good
Plumbing	Domestic Water Distribution	D2010		90.00% Good
	Sanitary Drainage	D2020		90.00% Good
	Building Support Plumbing Systems	D2030		90.00% Good
HVAC	Facility Fuel Systems	D3010		90.00% Good

	Heating Systems	D3020	90.00% Good
	Facility HVAC Distribution Systems	D3050	90.00% Good
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Well maintained but older HVAC equipment	
	Ventilation	D3060	90.00% Good
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence	
	Comments:	Well maintained but older HVAC equipment	
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Facility Power Generation	D5010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Though systems are fully functional, the existing on-site backup generator does not have seperate emergency and standby automatic transfer switches which does not meet current NEC (National Electrical Code) requirements.	
	Electrical Services and Distribution	D5020	90.00% Good
	General Purpose Electrical Power	D5030	90.00% Good
	Lighting	D5040	90.00% Good
	Causes:	Mismatched Lights	
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	90.00% Good
	Audio-Video Communications	D6030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Projectors with VGA cabling, no audio enhancement	
	Distributed Communications and Monitoring	D6060	90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Deficiency: Not obsolete but old.	
Furnishings	Fixed Furnishings	E2010	90.00% Good
	Movable Furnishings	E2050	90.00% Good

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

WEST MERCER ELEMENTARY SCHOOL - 01_MAIN BUILDING

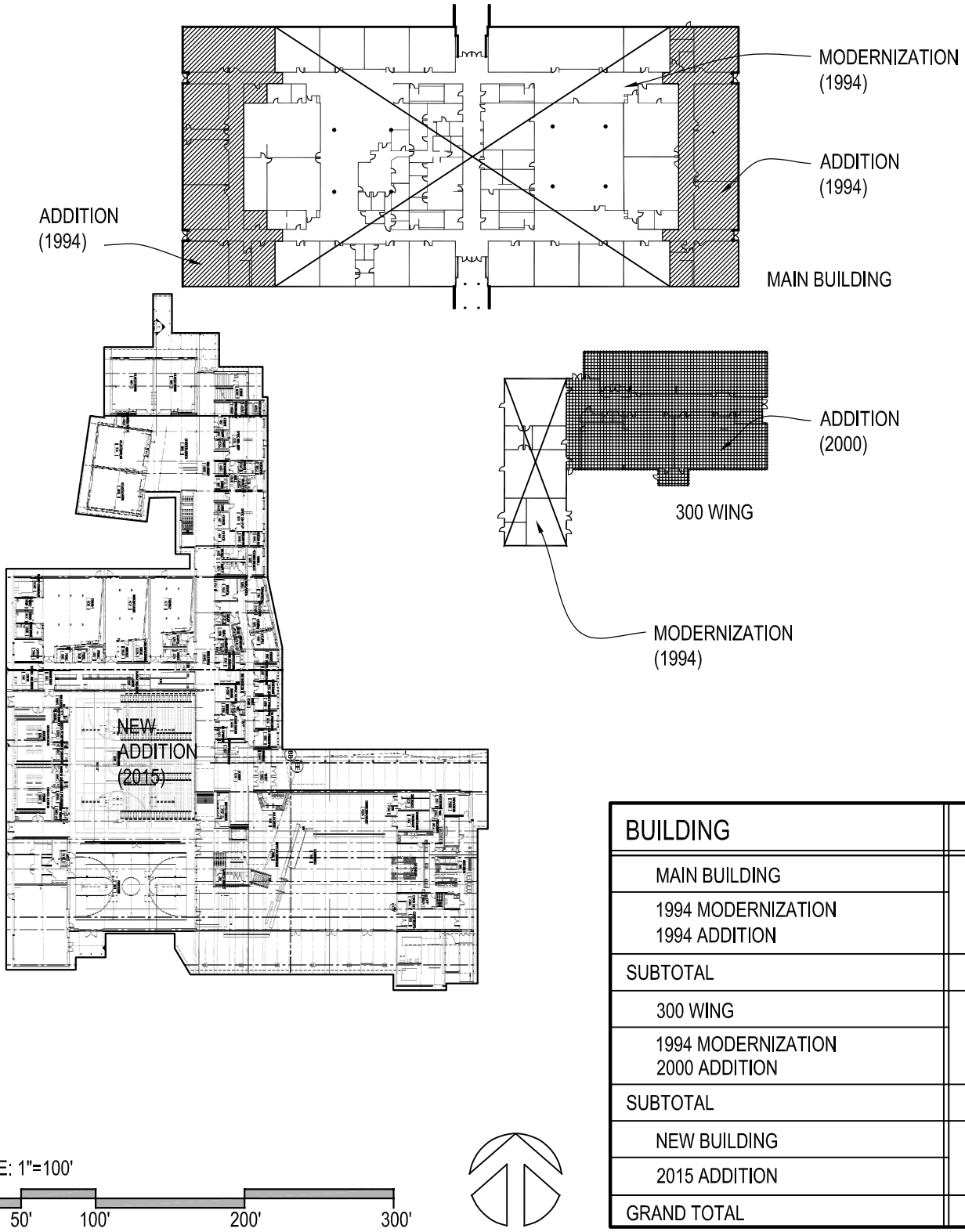
Profile Name: Classroom Building - Slabs On Grade
Inventory Status: Recognized
Condition Rating: 85.60 %

Currently BCA Certified: Yes
Last BCA Certify: 6/27/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3060	Horizontal Openings	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1030	Interior Doors	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2020	Interior Fabrications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2030	Flooring	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
HVAC											
D3010	Facility Fuel Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3020	Heating Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3060	Ventilation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											

D5010	Facility Power Generation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D5020	Electrical Services and Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5030	General Purpose Electrical Power	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Communications											
D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6020	Voice Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6030	Audio-Video Communications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D6060	Distributed Communications and Monitoring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electronic Safety and Security											
D7010	Access Control and Intrusion Detection	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7030	Electronic Surveillance	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Integrated Automation											
D8010	Integrated Automation Facility Controls	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Furnishings											
E2010	Fixed Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐

Islander Middle School



BUILDING	SQ. FT.
MAIN BUILDING	
1994 MODERNIZATION	47,571
1994 ADDITION	16,607
SUBTOTAL	64,178
300 WING	
1994 MODERNIZATION	4,907
2000 ADDITION	10,559
SUBTOTAL	15,466
NEW BUILDING	
2015 ADDITION	89,441
GRAND TOTAL	169,085

SCALE: 1"=100'

0 20' 50' 100' 200' 300'

BLRB architects

Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308
P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

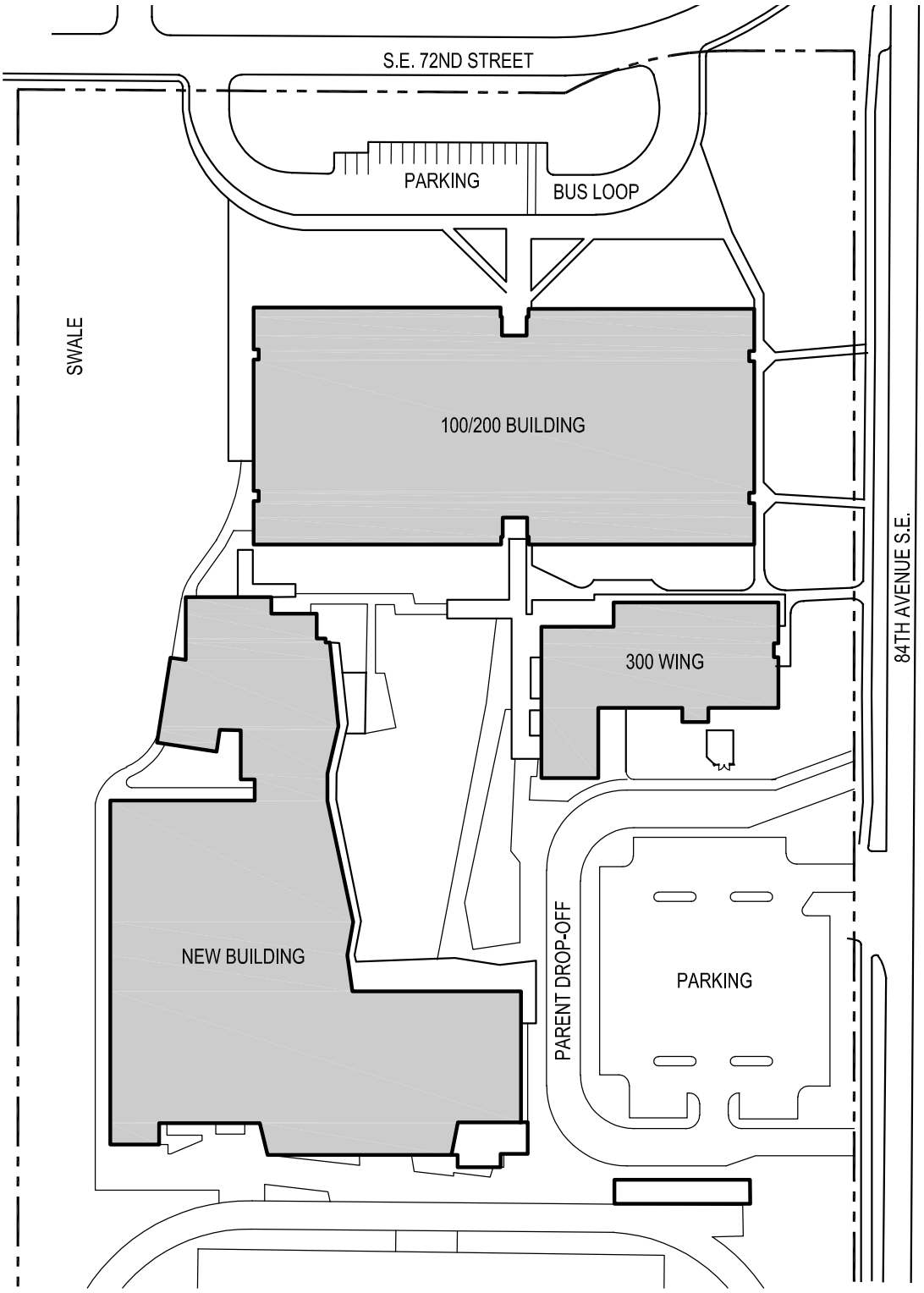
Drawing Title: ISLANDER MIDDLE SCHOOL 2018 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

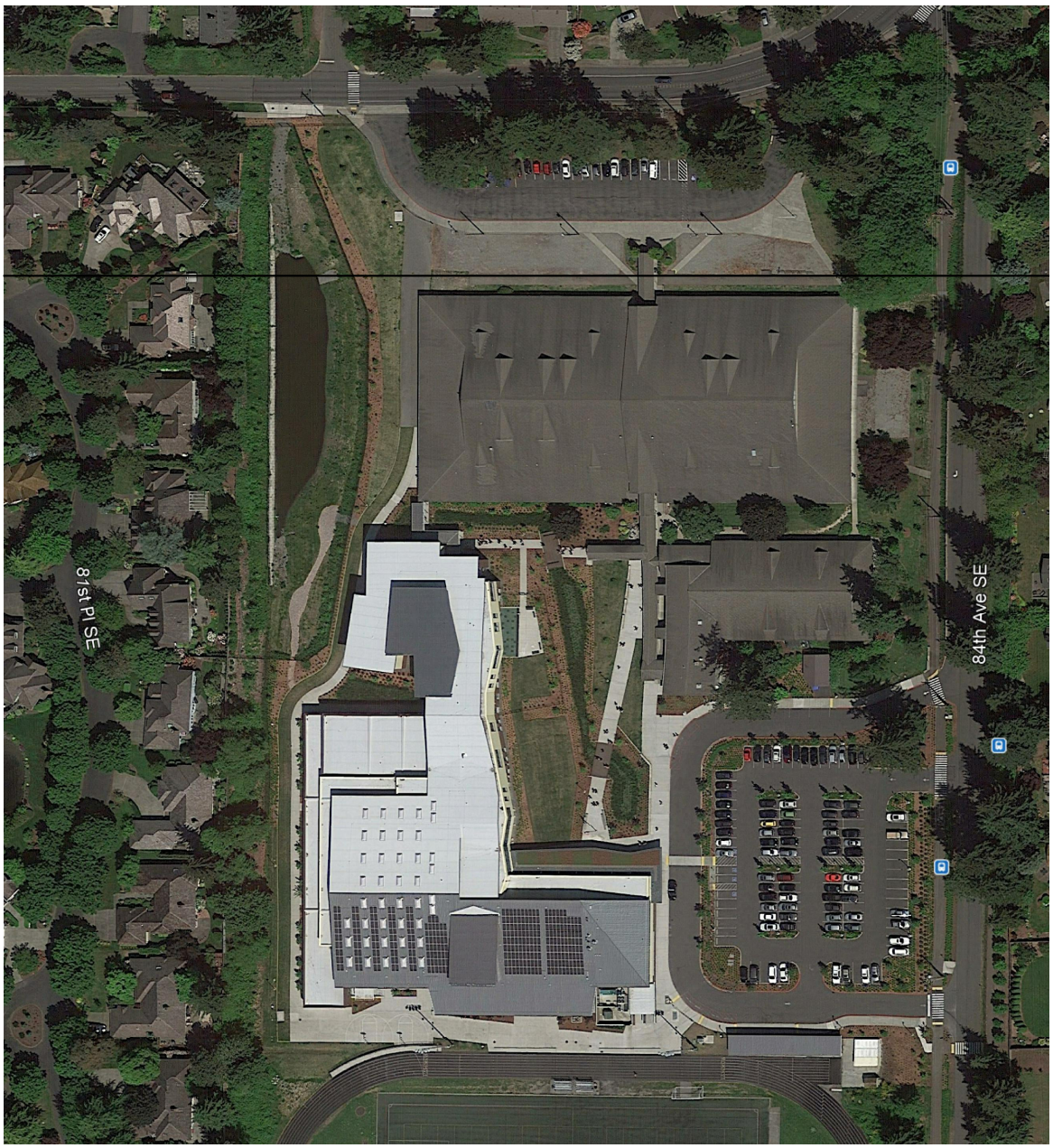
Reference Sheet No. 1



SCALE: 1"=120'

0 60' 120' 240' 480'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: ISLANDER MIDDLE SCHOOL SITE PLAN	Drawn By: JJJ	
		Comm. No. 18.10	



SCALE: 1"=150'

0 75' 150' 300' 450'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 3
	Drawing Title: ISLANDER MIDDLE SCHOOL SITE AERIAL	Comm. No. 18.10	

Islander Middle School

8225 Southeast 72nd Street
Mercer Island, WA 98040
206.236.3413

Site Information

County:	King
Approx. Acreage:	27.36 Acres
Zoning:	R-9.6
Tax Parcel No.:	2524049144
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades 6-8

Current Square Footage (permanent construction):	169,085 SF
Number of Portable Buildings on-site:	0

Current Enrollment (2018):

Grade 6:	382
Grade 7:	371
Grade 8:	385
Total Enrollment:	1,138

Summary of Teaching Spaces

General Use Classrooms:	48
Special Education Classrooms:	3
Occupational Therapy:	0
Technology Lab/Computer Room:	3
Art Room:	2
Music Room:	4
Gymnasium:	3
Library:	1
Total Teaching Spaces:	***64***

Building Condition Evaluation (2018 Study and Survey)

Score (100/200 Building):	74.07
Score (New Building):	96.94
Score (300 Wing):	71.46

CONSTRUCTION HISTORY

Islander Middle School was originally constructed in 1958. It is a campus of three buildings connected by covered walkways. It's most recent comprehensive renovation and addition was completed in 1994. The scope of that renovation included additions to two of the three buildings, and modernizations to all three buildings.

The new construction was wood framed walls with CMU veneer to match the existing CMU walls. The modernization of the buildings included roof overbuilds over the original low slope roofs. All roof systems, new and at the overbuilds were comprised of open web trusses supported by glu-lam beams. Rigid insulation was installed over the plywood sheathing and asphalt roof shingles over the insulation.

Existing spaces received new floor covering and suspended ceiling along with all wall surfaces being painted. Door and door frames were upgraded to comply with fire codes at that time. All existing windows were replaced with more energy efficient windows.

Site work included some upgrading and addition to the existing fore loop system and an additional meter service to improve domestic water. An on-site, above grade detention system was constructed for storm water control along with some replacement of existing sanitary line and on new side saver connection. Some sidewalk work was done to conform to codes of that time and to accommodate new construction. Minor landscape and irrigation restoration was done in these disturbed areas and where portables were removed. Some asphalt patching and painting was done at the existing parking lots.

The existing buildings and new construction received a new heating system, replacing the existing unit ventilators in each classroom and office. Some plumbing piping was replaced throughout the facilities. New toilets were installed at this time.

Power was upgraded to 277/480 V 3 Phase System. Many of the light fixtures were replaced. New data, TV, and a fire alarm system were installed. The entire campus was sprinkled. Asbestos was predominately removed under a separate contract.

The project delivery method was Fast Track with the roof overbuilds constructed while students were still in school during the spring of 1994. The renovated school was opened during the fall of 1994.

In 2000, an addition was constructed to expand the Multi-Purpose room seating area and add table storage space. Hollow metal door and window frames were salvaged and reused as part of this addition. Another addition was constructed at the 300 wing to provide 5 classrooms, 2 science rooms, student restrooms, storage, and a conference room. Asphalt, concrete walks, and landscaping was modified to accommodate this.

In 2014 Building 400 was demolished and a new building was erected and is now the front door to the campus. It consists of new secure main entrance to the administration offices as well as a new gymnasium, auxiliary gym and commons. New music facilities were constructed for a total of 22 new teaching stations.

The building is steel constructed with brick veneer to approximately 7 feet in height. A horizontal metal panel above the brick, then at the second floor transitions to a vertical metal siding.

The roof is partial metal roof and single ply membrane roof. Window systems are aluminum storefront.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- Islander Middle School consists of three building; the New Building, North Main, and East Classroom Buildings. The original construction date is not known and assumed to be in the 1960's. The new building was completed in 2016.
- The New Building consists of concrete spread footing foundations, concrete slab on grade, reinforced CMU bearing walls with structural steel framing at both the roof and second floor. The second floor is concrete filled metal decking and the roof is light gage metal decking spanning between the steel framing.
- The lateral force resisting system consists of metal deck roof diaphragms, concrete filled metal deck floor diaphragms and reinforced CMU shear walls.
- The 100/200 building and 300 building consists of concrete spread footing foundations, concrete slab on grade construction, steel columns, infill partially reinforced CMU walls, steel roof joist and beams and tectum roof sheathing. In 1994 a wood overbuilt roof was added consisting of open web wood roof trusses, plywood sheathing, wood and glu-lam roof beams supported by the existing steel columns of the original construction.
- The addition to the east has wood stud bearing walls, steel columns and open web wood roof trusses with plywood sheathing.
- The lateral resisting system for the North building consists of plywood and tectum horizontal diaphragms and plywood and partially reinforced CMU shear walls.
- The west end of the East Classroom Building is original masonry construction that was seismically upgraded in 1994 and a new wood framed over-built roof. The 2000 addition to the east consists of concrete spread footing foundations, slab on grade floor construction, wood stud interior and exterior bearing walls, wood roof trusses and plywood sheathing.
- The lateral resisting system for the East building consists of plywood roof diaphragm, plywood shear walls and masonry shear walls of the original construction.

<u>Foundation/Structure Condition Evaluation:</u>

- We did not observe significant signs of structural distress, differential settlement or deterioration.
- There have been some significant changes in the building code since Islander Middle School was seismically upgraded and added onto in 1994. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the older portions of the structure (North and East Buildings) are not in full compliance with the current code.

1.2 Exterior Walls System Description:

- At the older north and east buildings, the exterior walls consist of the original CMU walls or new wood stud walls with masonry veneer. The new building consists of metal stud frame walls or reinforced CMU walls. The new walls have a combination of exterior finishes with masonry veneer in several locations.

<u>Exterior Walls Condition Evaluation:</u>

- We did not observe significant signs of structural distress, differential settlement or deterioration.
- The lateral resisting system in the older buildings does rely on partially unreinforced masonry shear walls. The stresses are limited; however they are more susceptible to earthquake damage than properly reinforced masonry walls.
- The current design forces for out of plane design and anchorage of masonry walls has doubled since the 1994

seismic upgrades and additions. It is assumed that in some locations in the older structures, most likely at the taller walls, the anchorage or capacity of adjacent supporting steel columns do not meet current code.

1.3 Exterior Roof System Description:

- 100/200 Building:
  - ◊ The original low slope roof was covered by a sloped overbuild in 1993. The low sloped roof and structure over the main entry spine was demolished in 1993 and a new sloped roof was built overhead, creating a high volume space along this corridor. The most recently constructed roof is comprised of asphalt composition shingles with 2 layers of roof felt underlayment over ½" plywood, rigid insulation, building felt, and ¾" wood sheathing. The roof positively slopes at 3:12 pitch to metal gutters at the perimeter. The roof is interrupted by dormers which provide light into the Student Court and Library. Lower dormers house mechanical louvers. These dormer overbuilds are at a 12:12 pitch and are constructed of asphalt composition shingles. This roof has no ridge venting. This roof has no fall restraint system.
- New Building Wing:
  - ◊ The roof over the new building is a mixture of metal roof with rigid insulation and built-up single ply membrane for a majority of the roof. The metal roof has a mounted photovoltaic (pv) system.
- 300 Wing:
  - ◊ The roof over the 300 Wing is similar. Access to this roof is provided by using a ladder to climb on the covered walkway between this building and the Multi-Purpose Building. Ridges above the 2000 addition are vented.

<u>Exterior Roof Condition Evaluation:</u>

- 100/200 Building:
  - ◊ There appears to be a structural depression adjacent to a window dormer over the Student Court. Dormers have been known to leak at the valleys -- especially the northwest valley at the entry where the stucco wall comes in contact with the roof. Missing shingles were observed above the southwest dormer. The roof has been known to leak into the attic below at the truss lines. This roof has been patched several times since the 1993 modernization.
- New Building:
  - ◊ New roofing systems as of 2015. The roof is in excellent condition.
- 300 Wing:
  - ◊ Since most of this roof was recently constructed, it is generally in good repair. Missing shingles were observed at the ridge vent on the east side of the roof.

1.4 Exterior Windows/Doors System Description:

- 100/200 Building:
  - ◊ The windows are aluminum and were replaced in the 1993 addition and modernization. Bent metal flashing at the sill sits atop a masonry cap and is sealed. The perimeter of the window is caulked and sealed and there is no head flashing. Weeps are provided at the base of the vertical mullions. The classroom windows have operable upper casements and operable blinds.
  - ◊ The exterior door assemblies are hollow metal doors set within hollow metal frames which are solid fill grouted.
- New Building:
  - ◊ The window and door systems for the new building are all storefront systems in excellent condition.

- 300 Wing:
  - ◊ Doors and windows in the 300 Wing are similar.

Exterior Windows/Doors Condition Evaluation:

- 100/200 Building:
  - ◊ The sealant is cracked on some windows along the west elevation. One window adjacent to the main entry has compromised perimeter seals at the glazing.
  - ◊ Defective hardware should be replaced.
- New Building:
  - ◊ New windows and doors are aluminum storefront and in excellent condition.
- 300 Wing:
  - ◊ Doors and windows are in good repair.

1.5 Exterior Trim System Description:

- 100/200 Building:
  - ◊ A piece of 2x10 cedar trim provides backing for metal gutters and a 2x8 piece of cedar trim provides an end cap for double 2x6 outriggers. The soffit is a painted 2x6 painted tongue and groove decking that slopes with the roof. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster sill and a painted fascia board along the eaves. The covered walkways have a painted plywood ceiling.
- 300 Wing:
  - ◊ The exterior trim on the 300 Wing is similar.

Exterior Trim Condition Evaluation:

- 100/200 Building:
  - ◊ The underside of the wood fascia on the southwest corner of the building has been damaged. The wood fascia piece at many dormer peaks have holes in them caused by woodpeckers.
- 300 Wing:
  - ◊ The exterior trim is generally in fair repair. Paint fascia trim.

2.0 Interior Building Condition

2.1 Floors System Description:

- 100/200 Building:
  - ◊ All original flooring was called out in the documents to be removed and replaced in the 1993 addition and modernization. Classrooms and corridors are carpeted throughout the building. Restrooms have a sheet vinyl floor with a coved base. Art rooms have VCT flooring. Rubber base was installed in 1993 over carpeted areas and VCT.
- New Building:
  - ◊ The new building is primarily honed concrete floors. Based on what appears to be construction timelines there is a fair amount of cosmetic cracking. Tiled carpet is used in classrooms, breakout spaces and the library.
- 300 Wing:
  - ◊ Floors are similar to the 100/200 building.

Floors Condition Evaluation:

- 100/200 Building:
  - ◊ The rubber base in high traffic areas such as the corridors is damaged in many places and requires replacement. The sheet vinyl flooring in the restrooms is shrinking, causing its joints to get larger and collect dirt. The coves are cracking in some locations. The sheet vinyl coved base is losing its bond in some instances.
- New Building:
  - ◊ The carpet is in excellent condition. The polished concrete has cosmetic cracking and spidering along with construction footprints in the second floor slab.
- 300 Wing:
  - ◊ Floors are in good repair.

2.2 Walls System Description:

- 100/200 Building:
  - ◊ Corridor walls are typically constructed of painted concrete masonry units. Gypsum walls in the corridors are type “x” and have a ¼” MDF wainscoting that terminates at a wooden chair rail. Restrooms that were part of the addition in 1993 have a plastic laminate wainscoting over type “x” gypsum wallboard. Original restrooms have painted CMU and ceramic tile wainscoting. Classrooms are typically constructed of gypsum wallboard. Some walls have vinyl wall covering. The library and Student Court have acoustical wall panels in the high volume spaces.
- New Building:
  - ◊ There are a variety of systems used in the new building, ground faces cmu walls around gym facilities, gwb and phenolic wall panels in the hallways.
- 300 Wing:
  - ◊ Corridor walls in the 300 Wing are similar to the 100/200 building.

Walls Condition Evaluation:

- 100/200 Building:
  - ◊ The gypsum wallboard is damaged at the base in the Student Court area.
- New Building:
  - ◊ Interior wall systems are in excellent condition other than cosmetic streaking of the cmu sealant in the main corridor.
- 300 Wing:
  - ◊ The walls are in good repair.

2.3 Ceilings System Description:

- 100/200 Building:
  - ◊ The main entry corridor is a high volume space that has a gypsum board ceiling that slopes with the roofline. The library and Student Court are also high volume spaces with a ceiling that slopes with the roof and is finished with acoustical ceiling tiles. Ceilings consist of 2’x4’ acoustical ceiling panels in the corridors and classrooms. Restrooms, storage rooms, janitor rooms, and the utility room have a gypsum board ceiling.
- New Building:
  - ◊ New ceiling systems are a mixture of perforated wood panels (mostly in the public spaces), 2x2 sac (classrooms), and painted exposed metal decking (gymnasiums).

- 300 Wing:
  - ◊ Ceilings in the 300 Wing are similar to those in the Classroom Building.

Ceilings Condition Evaluation:

- 100/200 Building:
  - ◊ Ceilings in the 100/200 building are generally in poor condition.
- New Building:
  - ◊ All various ceiling types are in excellent condition.
- 300 Wing:
  - ◊ Ceilings in the 300 Wing are in good repair.

2.4 Fixed Equipment System Description:

- 100/200 Building:
  - ◊ Classrooms are generally equipped with four 8 foot long whiteboards with integral tack boards, built in lower and upper cabinetry, tall cabinet storage, three pull down projection screens and a wall mounted television.
  - ◊ The Art Rooms are equipped with a wall mounted television, a projection screen, and lowers with stainless steel sinks along the perimeter of the room. This cabinetry is original to the building and was re-laminated in the 1993 modernization. All of the countertops are 3'-0" above finish floor and there is no accessible sink or workspace. Electrical outlets are located above the sinks in some cases.
  - ◊ Countertops in the Faculty Room appear to be of a residential grade and were probably replaced after the renovation. Operable walls in the Teaching Room and in Conference Rooms 136, 138, and 139 were removed to make the rooms function better.
  - ◊ Most of the double-tier lockers in the corridors were existing during the 1993 modernization and addition and were refinished to match new lockers. These lockers are approximately 25 years old. Some of these lockers are missing hardware, hooks, and have damaged bottom plates.

Fixed Equipment Condition Evaluation:

- 100/200 Building:
  - ◊ The cabinetry in the Art Rooms is in poor working condition. Drawers are difficult to open and some of them are missing stops. Some doors are hung out of plumb and are missing magnetic closers. The cabinetry should be replaced and provisions for an accessible workspace and sink should be accounted for.
  - ◊ Phenolic toilet partitions in the restrooms have been vandalized extensively with sharp objects and should be replaced.
  - ◊ Lockers that were existing during the 1993 modernization have reached the end of their intended life, are in poor working condition, and should be replaced.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- 100/200 Building:
  - ◊ Power Distribution
    - Utility Service: Islander Middle School's 100/200 building is fed from the boiler/electrical building via an 800A breaker. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
    - Switchboard: The sub-distribution board is a "GE" brand "Spectra Series" type switchboard rated for 800A at 480Y/277V. The sub-distribution board has a "Hi-Break" 800A main circuit breaker.

- Generator: There is a “Generac” brand ATS installed in this building which feeds Panel “CM,” a 60A 208Y/120V emergency panel.
- Panelboards: Existing panelboards are “GE” brand “A-Series” type boards. 480Y/277V panels have available spare/spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with “Tycor” brand “TPY” series TVSS units.

◊ Lighting

- Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior fixtures are mostly linear fluorescent, except for HID and compact fluorescent fixtures in the corridors.

◊ Low Voltage

- Telecommunications: The Main Distribution Frame (MDF) is located in Area E off the Main Corridor 127. Network distribution for voice and data is hierarchical star topology. Data cabling is Cat 5 General/ CommScope and terminates on Infotap patch panels; voice cabling is Cat 5 General/CommScope and terminates on wall mount BIX blocks. Workstations are terminated on Leviton jacks. Classrooms have staff and student connectivity. Demarcation to school is located in Area C Electrical Room 306 with (2)2”C and a 50-pair copper. Demarc is extended into MC room with a Cat 3 25-pair copper backbone cable. (1) 12 strand 62.5/125 multimode optical fiber cable and (1) Cat 3 25-pair copper backbone cable connects to Area B IDF-AB. Wirelesses Access Points are in various classrooms.
- CATV Distribution: CATV distribution cabling is via taps and splitters with an extension to Area B. The signal is extended to a 2’ x 2’ x 80” headend cabinet located in the AV Workroom A221 across the corridor from the MDF. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR’s are located with the headend equipment. The CATV taps and splitters are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wall mounted TV outlet and a wall mounted TV set.
- Intercom/Clock: A Telecor II intercom system is located in Area E Admin 134. The 66-block terminations and cross-connects are mounted on the plywood backboard in the MDF. Area B is connected to the 100/200 building, 66 blocks are wall mounted in the IDF room. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall mounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.
- Sound Systems: Sound systems are present in the following spaces
  - Gym 601
  - Gym 602
  - Multi-Purpose 501
  - Band Room 401
  - Music Room 402
  - Choral Room 403
- Security: A Radionics D9112 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security cameras are located on the exterior and interior of the building with a DVR in the MDF. Interior cameras cover cafeteria/ multi-purpose room. Access card readers and security keypads are installed at selected entrances. System is monitored by Guardian.
- Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wall mounted BIX blocks.

- 300 Wing:
  - ◊ Power Distribution
    - Utility Service: Islander Middle School's main switchboard in the Boiler/Electrical Room is fed underground from an exterior utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
    - Switchboard: The main switchboard is a "GE" brand "AV-Line" type switchboard rated for 1600A at 480Y/277V. The main switchboard has a 1600A main circuit breaker and also has fusible switches to feed the 100/200 building and gym. There are also fusible disconnect switches to feed temporary power to the site for portable trailer.
    - Panelboards: Existing panelboards are "GE" brand "A-Series" type boards. 480Y/277V panels have available spare/spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with "Tycor" brand "TPY" series TVSS units.
  - ◊ Lighting
    - Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants. Exterior fixtures utilize metal halide lamps and interior fixtures are T-8 fluorescent.
- 2014 Building Addition:
  - ◊ Power Distribution
    - Utility Service: new addition has a main switchboard in the Boiler/Electrical Room is fed underground from an exterior utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
    - The school had a significant addition in 2013 and a 2nd service was added to the school. The addition switchboard is a 2500A, 480Y/277V board with step down transformer to supply 208Y/120V loads.
    - Generator: There is a 230kW generator which was installed in 2014. The generator has (2) ATS's which supply power to the emergency life safety loads in the building and the emergency standby loads which includes telecom rooms and food service equipment.
    - Panelboards: Existing panelboards are "GE" brand "A-Series" type boards. 480Y/277V panels have available spare/spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with "Tycor" brand "TPY" series TVSS units.
    - Switchboard: The main switchboard rated for 2500A at 480Y/277V. The main switchboard has a 2500A main circuit breaker and also breakers for subdistribution.
    - Panelboards: 480Y/277V and 208Y/120V panels have available spare/spaces and are protected with Innovative Technologies 'SPD' devices.
  - ◊ Lighting
    - Interior and exterior lighting are LED type. Interior fixtures operate based on time of day and occupancy sensor function through a lighting control system. Exterior fixtures operate based off of DDC integration, photocell and time of day scheduled control.

<u>Electrical Condition Evaluation:</u>

- 100/200 Building:
  - ◊ The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
  - ◊ The room housing the main switchboard is not well ventilated. The main distribution panel clearance does not meet code due to table with security camera monitoring equipment being placed in front of switchboard.

- ◊ Panels “CL” and “CK” are located behind couch in custodial office which is a code violation.
- ◊ The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.
- ◊ The existing intercom system is in good operating condition.
- ◊ The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have marginal coverage of parking and surrounding areas. Half the cameras are located in the cafeteria/multi-purpose area. The DVR has additional ports for expansion.
- ◊ The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.
- ◊ The existing category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was reterminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a category 5e or category 6 cabling plant. Likewise the existing 62.5/125 multimode optical fiber cabling would need to be replaced with laser optimized 50/125 optical fiber cables to support current 10 Gigabit per second Ethernet transmission standards for optical fiber cabling.
- ◊ The existing sound systems appear to be operating adequately.

- 300 Wing:
  - ◊ The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
  - ◊ The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixtures have broken lenses which need to be replaced.
- 2014 Building Addition:
  - ◊ All systems are new and in excellent working order.

3.2 Plumbing

- 100/200 Building:
  - ◊ In student restrooms, faucets are low flow and metered. Water closets are equipped with 1.28 GPF flush valves. Urinals are equipped with 0.125 GPF hands free flush valves.
  - ◊ Drinking fountains in hallways are hi-lo type with bottle fillers. Sinks are provided in some classrooms, and plaster traps are provided for art classrooms sinks.
  - ◊ Sinks in science classrooms are acid resistant and they drain, via acid resistant piping to an acid neutralization tank. Gas and air turrets are provided at all stations. Each science classroom and preproom has emergency eyewash/showers fed by tempered water. The air compressor for the science classrooms is located in the mechanical mezzanine along with an electric water heater which supplies hot water for the non-potable water piping in the science labs.
  - ◊ Hot water is provided by 3 new Conquest condensing style water heaters located in the boiler room.
- 300 Wing:
  - ◊ In student restrooms, faucets are metered, but some sinks are not equipped with trap wrap. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF hands free flush valves.
  - ◊ Sinks in science labs are not acid resistant, and they are not equipped with acid neutralization tanks. Gas turrets are provided at all stations. Some emergency eyewash showers have been disabled.
  - ◊ Sinks are not provided in math classrooms. Drinking fountains in hallways are hi-lo type. In the mechanical attic, piping is in good condition, but some is hung from the ductwork.

3.3. Forced Air Heating

- 100/200 Building:
  - ◊ Heating and cooling for the 100/200 building is provided Haakon air handlers which distribute to VAV boxes with reheat coils for multi zone systems and single zone Haakon air handlers for single zones. New Alerton controls are located throughout the building.
  - ◊ Change-over hydronic piping is fed by (2) Aerco boilers and (3) 30-ton Airstack air-source heat pumps. The boilers and pumps are located in a mezzanine adjacent to the gymnasium, near the custodial area.
  - ◊ Radiant heating is provided in the various classrooms and common areas in the classroom wing.
  - ◊ MDF, IDF, and elevator machine rooms are cooled by Mitsubishi mini-split systems.
- 300 Wing:
  - ◊ Thermostats in the building are push-button type. Heating for the science building is provided by a hydronic heating water system with hot water coils for each zone. Air handling units and return fans in the mechanical attic were installed in 2002. There is very little seismic bracing for ductwork in the mechanical attic.
  - ◊ Heating water is supplied by newer condensing style hydronic boilers in the boiler room. Also in the boiler room, there are two hydronic system pumps controlled by one VFD on a lead/lag scheme. An air handling unit is also installed in the boiler room.
  - ◊ There is no seismic valve on the gas meter.
  - ◊ Exhaust/ventilation in student restrooms is very deficient. Exhaust for the science storage room is also insufficient.

4.0 Safety/Building Code

4.1 Means of Exit

- 100/200 Building:
  - ◊ Illuminated fluorescent exit signs with battery back-up are located above the exit doors.
- 300 Wing:
  - ◊ Illuminated fluorescent exit signs with battery back-up are located above the exit doors.
- 2014 Addition:
  - ◊ Illuminated LED exit signs on generator power back-up are located above the exit doors.

4.3 Fire Alarm System - System Description

- 100/200 Building:
  - ◊ The 2014 building addition included a new fire alarm control panel with RF subscriber dialer. In 2015 and 2016, the existing buildings have undergone fire alarm system replacement and have been connected to the panel in the building addition. Fire sprinkler riser is located in building with monitored tamper switches, flow switches, and low air pressure switches.
- 300 Wing:
  - ◊ New fire alarm devices installed in 2015/2016 and tied into building addition control panel.
- 2014 Addition:
  - ◊ System is a voice annunciated addressable system with battery backup as well as generator power backup. System has RF subscriber dialer.

Fire Alarm System - Condition Evaluation:

- 100/200 Building:
  - ◊ System is in good working condition and appears to meet current code coverage.
- 300 Wing:
  - ◊ System is in good working condition and appears to meet current code coverage.
- 2014 Addition:
  - ◊ System is new and in excellent working condition.

4.4 Emergency Lighting System Description

- 100/200 Building:
  - ◊ Emergency lighting for egress consists of fluorescent fixtures supplied from emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.
- 300 Wing:
  - ◊ Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs.
- 2014 Addition:
  - ◊ Emergency lighting for egress consists of LED fixtures supplied from emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- 100/200 Building:
  - ◊ System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.
- 300 Wing:
  - ◊ System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.
- 2014 Addition:
  - ◊ Lighting is new and in excellent working condition.

4.5 Fire Resistance

- 100/200 Building:
  - ◊ The 100/200 building has one story of occupied space. Construction of interior walls is predominately comprised of wood studs with GWB on both sides. There are no fire separation walls in this building but it is sprinklered.
- 300 Wing:
  - ◊ The 300 Wing has one story of occupied space. Construction of interior walls is predominately comprised of wood studs with GWB on both sides and plaster on the corridor side. Corridor walls are one hour. The building is fully sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- Most of the accessible stalls are located in the southeast parking lot. Accessibility from the southeast parking to the building is provided by four accessible stalls. These stalls have access aisles, but do not have a clearly designated pathway leading to the sidewalk. The path of access crosses the pick-up/drop-off lane of traffic. Access onto the curb is provided by an asphalt ramp that extends into the drop off lane. The north parking lot has one accessible stall. There is a designated pathway extending from the access aisle to the sidewalk in front of the main entry. Access onto this sidewalk is provided by a curb cut, but it also crosses the drive and bus loop.
- Accessibility to portables is problematic. The asphalt walk that leads between the building and the portables has a slope that exceeds 1:20 and has no handrails. There is no walk leading to the ramps at portables 3 and 4. A person in a wheelchair would have to access them via the asphalt walk north of portable 6 and transverse the ramps of portables 5 and 6 which lead to a ramp in front of portable 4.
- Drinking fountains in the corridors are 2'-10" above finish floor, but do not have the appropriate high-low configuration. The sink and countertops in the Faculty Room are not accessible.
- The stairway between Hall 148 and Student Services 150 are not code compliant. The rise to run is 5 and 17. A handrail is provided by toilet room grab bar that varies in height from 2'-4" to 2'-10" above finish floor.
- Locker rooms and showers are not accessible. There are no accessible lockers, benches, or shower stalls. The shower area has a 6" curb that impedes a person with disabilities. The sinks in the restroom do not have waste pipe insulation. The coach's office does not have an accessible toilet, shower, sink, or required clearances. The door leading into the Boy's Locker Room from the vestibule does not have the appropriate maneuvering clearance at the push side. Doors leading outside from both locker rooms do not have the appropriate maneuvering clearance at the push side. The entries into Men's Restroom 142 or Toilet 133 do not have sufficient maneuvering clearances either. According to the plans there are many more doors that do not have maneuvering clearances.
- A handrail has been removed from one side of the ramp in Corridor 121. Some handrails are loose in their connection to the wall as a result of inadequate backing and/or anchoring to the wall and abuse from high traffic.
- The Boy's Restroom 224 does not have the necessary clear floor space around urinals to make them ADA compliant. Sinks require the user to twist the controls for water and the waste pipe has no insulation. Sinks in the Science Classrooms are 34 inches above finish floor and have accessible controls; however they all require a parallel approach.
- There are many doors throughout the facility that are difficult to operate due to improperly installed doors and frames and/or malfunctioning hardware.

<u>Condition Evaluation:</u>

- Access to the building from parking areas should not require patrons to cross vehicular driveways. Access onto the sidewalk should be provided by a curb cut as prescribed by current accessibility standards.
- A disabled person should have equal access to portables. Pathways leading to portables shall not exceed 1:12. If they exceed 1:20, they are required to have handrails on both sides. An accessible walkway should be provided from the school to the asphalt wlak between portables 4 and 5.
- All stairs should be have the appropriate rise and run and handrails as prescribed by current code standards.
- Showers and locker rooms should have equal access for disabled students. This requires accessible showers with the appropriate clearances, a bench, accessible controls, and grab bars. 5% of the lockers require accessible controls and should be at a height prescribed by current codes. Benches are required to be of an approved height, depth, length, and need to have back support. Accessible sinks should have waste pipe insulation so

that someone in a wheelchair does not burn their leg on the pipe. The instructor may be disabled and therefore should have an accessible restroom and shower. Doors out of the locker rooms must have a 12" clearance from the jamb to adjacent perpendicular wall on the push side.

- Ramps serving as a main path of egress are required to have a handrail on both sides. All missing handrails should be replaced. Loose handrails should be anchored appropriately to a solid backing surface.
- All urinals, toilets, and sinks should be a minimum distance apart of 30 inches. Accessible sinks should be no more than 34 inches high, have waste pipe insulation, and have controls that do not require tight grasping, pinching, or twisting of the wrist. In classrooms that have sinks, at least one should have clear floor space and clearances that allow for a forward approach.
- Doors should be easy to operate and have a maximum door opening force of 5 pounds. Hardware, doors, and frames should be refurbished or replaced as needed to achieve this. A further analysis of each door should be considered to determine which doors require attention.

Site Condition Evaluation

The site is surrounded by residential properties with several access points from a variety of directions. The site slopes down slightly from east to west. To the south of the building are the South Mercer Playfields and the track. These playfields are part of the property and are owned by the District. The City maintains all playfields on site, the track, and the bio swale located to the northwest of the property.

The building is located to the north of the property. The campus is composed of three separate buildings connected by covered walkways.

The site has a parking lot north of the building and one to the southeast of the building. The north parking lot is accessed from SE 72nd Street and serves as a bus loop and visitor parking. It is not large enough to accommodate all of the buses, causing many of them to double park during pick-up and drop-off. This parking lot has one designated accessible parking stall. This loop is also designated as a fire lane and double parked buses should not impede access to this site in case of an emergency.

The southeast parking lot is accessed from 84th Avenue SE. It serves as staff parking and parent drop off. Three buses also use this loop for picking up band members in the late morning. This parking lot becomes extremely congested, and the flow is inefficient. Fire gates block access between the loop and parking, to help facilitate parent drop off. Food service deliveries also occur at this location and are hindered by the inefficiencies of the lot. This lot contains outdoor storage in the southeast area. This parking lot has four accessible parking stalls.

A flagger is positioned at the intersection of SE 72nd Street and 84th Avenue SE during the morning and afternoon to facilitate traffic flow. Traffic tends to back up along SE 72nd Street, especially in the afternoon.

The South Mercer Playfields have four playfields.

Physical Condition

<u>Parking and Driveway Areas</u>

- The north parking lot is in fair condition and has minimal cracking and settlement. It should be restriped.
- The asphalt in the southeast parking lot is in ew condition.
- The parking lot at the South Mercer Playfield is in good condition.

<u>Playfields</u>

- There is a track and field to the south of the 300 wing.

Fencing

- The west side of the property has perimeter fencing.
- The internal courtyard has chain link fencing to keep foot traffic off of the landscaped area north of the Multi-Purpose room. A more permanent fence should be considered for this application.
- Chain link fencing lines the drive into the southeast parking lot.

Play Equipment

- Play equipment is located in the South Mercer Playfields.

Landscaping

- Landscaping is currently being funded by a grant on the two areas flanking the main entry walkway.
- Landscaping along the fence between the 100/200 building and Multi-Purpose Building is in poor condition.
- North of the band room is an area with dirt and no landscaping. This area should either be landscaped or filled in with a concrete walk.
- Grass areas along the walkway running parallel with 84th Avenue SE. do not appear to be getting adequate irrigation. Grass in this area is browning and is in poor condition.

Other Observations:

- Acoustics are poor in the old gymnasium. This is where the school typically holds assemblies and concerts. Acoustics are also poor in the main entry corridor. There is no acoustical wall or ceiling treatment.
- Many rooms in the 100/200 building have either been added, reconfigured, or were not originally built per plan since the 1993 modernization. Conference Rooms 136, 138, and 139 were reconfigured to make one large room. This is true for some locker locations as well.

EDUCATIONAL ADEQUACY ASSESSMENT

Please refer to the November 2009 Mercer Island School District Study and Survey. This information has not been updated for this report.

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School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
96.94% Excellent

ISLANDER MIDDLE SCHOOL - NEW BUILDING

Building Details

PROFILE TYPE	Middle/Junior High School - Multi-Story
NUMBER OF FLOORS	2
CHARACTERISTICS	Occupied
COMMENTS	Sq ft shown is from Report 1, showing SCAP Project No. 4802: 39,862 sq ft New-in-lieu plus 49,579 sq ft New. Verfiy/update with architect's certification of final sq ft. Confirm classroom count.

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
2016	Main Area	89,441	89,441	89,441		
	Building Totals	**89,441**	**89,441**	**89,441**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		100.00% Excellent
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
	Pits and Bases	A4040		100.00% Excellent
Water and Gas Mitigation	Building Subdrainage	A6010		100.00% Excellent
Superstructure	Floor Construction	B1010		90.00% Good
	Roof Construction	B1020		100.00% Excellent
	Stairs	B1080		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		100.00% Excellent
	Exterior Windows	B2020		100.00% Excellent
	Exterior Doors and Grilles	B2050		100.00% Excellent
	Exterior Louvers and Vents	B2070		100.00% Excellent
Exterior Horizontal Enclosures	Roofing	B3010		100.00% Excellent
	Roof Appurtenances	B3020		100.00% Excellent
	Horizontal Openings	B3060		100.00% Excellent
	Overhead Exterior Enclosures	B3080		100.00% Excellent
Interior Construction	Interior Partitions	C1010		100.00% Excellent
	Interior Windows	C1020		100.00% Excellent
	Interior Doors	C1030		100.00% Excellent
	Interior Grilles and Gates	C1040		100.00% Excellent
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		90.00% Good
	Interior Fabrications	C2020		90.00% Good
	Flooring	C2030		90.00% Good
	Stair Finishes	C2040		90.00% Good
	Ceiling Finishes	C2050		100.00% Excellent
Conveying	Vertical Conveying Systems	D1010		100.00% Excellent
Plumbing	Domestic Water Distribution	D2010		100.00% Excellent
	Sanitary Drainage	D2020		100.00% Excellent
	Building Support Plumbing Systems	D2030		100.00% Excellent
	General Service Compressed-Air	D2050		100.00% Excellent
HVAC	Facility Fuel Systems	D3010		100.00% Excellent
	Heating Systems	D3020		100.00% Excellent
	Cooling Systems	D3030		100.00% Excellent
	Facility HVAC Distribution Systems	D3050		100.00% Excellent
	Ventilation	D3060		100.00% Excellent

Fire Protection	Fire Suppression	D4010	100.00% Excellent
	Fire Protection Specialties	D4030	100.00% Excellent
Electrical	Facility Power Generation	D5010	100.00% Excellent
	Electrical Services and Distribution	D5020	100.00% Excellent
	General Purpose Electrical Power	D5030	100.00% Excellent
	Lighting	D5040	100.00% Excellent
Communications	Data Communications	D6010	100.00% Excellent
	Voice Communications	D6020	100.00% Excellent
	Audio-Video Communications	D6030	100.00% Excellent
	Distributed Communications and Monitoring	D6060	100.00% Excellent
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	100.00% Excellent
Equipment	Commercial Equipment	E1030	100.00% Excellent
	Institutional Equipment	E1040	100.00% Excellent
	Entertainment and Recreational Equipment	E1070	100.00% Excellent
	Other Equipment	E1090	90.00% Good
Furnishings	Fixed Furnishings	E2010	100.00% Excellent
	Movable Furnishings	E2050	100.00% Excellent

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

ISLANDER MIDDLE SCHOOL - NEW BUILDING

Profile Name: Middle/Junior High School - Multi-Story
Inventory Status: Recognized
Condition Rating: 96.94 %

Currently BCA Certified: Yes
Last BCA Certify: 6/28/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
A4040	Pits and Bases	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Superstructure											
B1010	Floor Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B1020	Roof Construction	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B1080	Stairs	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2020	Exterior Windows	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3020	Roof Appurtenances	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3060	Horizontal Openings	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1020	Interior Windows	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1030	Interior Doors	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1040	Interior Grilles and Gates	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2020	Interior Fabrications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2030	Flooring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2040	Stair Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2050	Ceiling Finishes	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Conveying											
D1010	Vertical Conveying Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D2020	Sanitary Drainage	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D2050	General Service Compressed-Air	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
HVAC											

D3010	Facility Fuel Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D3020	Heating Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D3030	Cooling Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D3060	Ventilation	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D4030	Fire Protection Specialties	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Electrical											
D5010	Facility Power Generation	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D5020	Electrical Services and Distribution	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D5030	General Purpose Electrical Power	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D5040	Lighting	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Communications											
D6010	Data Communications	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D6020	Voice Communications	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D6030	Audio-Video Communications	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D6060	Distributed Communications and Monitoring	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Electronic Safety and Security											
D7010	Access Control and Intrusion Detection	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7030	Electronic Surveillance	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Integrated Automation											
D8010	Integrated Automation Facility Controls	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Equipment											
E1030	Commercial Equipment	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
E1040	Institutional Equipment	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
E1070	Entertainment and Recreational Equipment	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
E1090	Other Equipment	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Furnishings											
E2010	Fixed Furnishings	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
E2050	Movable Furnishings	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐

School Facilities and Organization

Generated: Aug 28, 2018

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Profile Name:	Classroom Building - Slabs On Grade	**Currently BCA Certified:**	Yes
Inventory Status:	Recognized	**Last BCA Certify:**	6/28/2018
Reviewed By:	Consultant	**Last District Review:**	
Condition Rating:	71.46 %	**Last District Review:**	

		Condition Rating						Component	Priority		
Sub-Assembly	**Component**	**E**	**G**	**F**	**P**	**U**	**N/A**	**Score**	**L**	**M**	**H**
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3060	Horizontal Openings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1030	Interior Doors	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2020	Interior Fabrications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2030	Flooring	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
HVAC											
D3020	Heating Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3060	Ventilation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

Fire Protection					
D4010	Fire Suppression	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D4030	Fire Protection Specialties	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
Electrical					
D5010	Facility Power Generation	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D5020	Electrical Services and Distribution	☐ ☐ ☑ ☐ ☐ ☐	62 %	☐ ☐ ☐	
D5030	General Purpose Electrical Power	☐ ☐ ☑ ☐ ☐ ☐	62 %	☐ ☐ ☐	
D5040	Lighting	☐ ☐ ☑ ☐ ☐ ☐	62 %	☐ ☐ ☐	
Communications					
D6010	Data Communications	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D6020	Voice Communications	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D6030	Audio-Video Communications	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D6060	Distributed Communications and Monitoring	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
Electronic Safety and Security					
D7010	Access Control and Intrusion Detection	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
D7030	Electronic Surveillance	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐	
D7050	Detection and Alarm	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐	
Integrated Automation					
D8010	Integrated Automation Facility Controls	☐ ☐ ☑ ☐ ☐ ☐	62 %	☐ ☐ ☐	
Furnishings					
E2010	Fixed Furnishings	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	
E2050	Movable Furnishings	☐ ☑ ☐ ☐ ☐ ☐	90 %	☐ ☐ ☐	

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
71.46%

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Building Details

PROFILE TYPE	Classroom Building - Slabs On Grade
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1958	Area 1	4,907	4,907	4,907		
2000	Area 2	10,559	10,559	10,559		
	Building Totals	**15,466**	**15,466**	**15,466**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking		
	Causes:	Inadequate Insulation, Surface Damage		
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		90.00% Good
	Exterior Louvers and Vents	B2070		90.00% Good

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
71.46%

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Exterior Horizontal Enclosures	Roofing	B3010		62.00% Fair
	Deficiencies:	Ventilation		
	Causes:	Surface Weathering		
	Roof Appurtenances	B3020		90.00% Good
	Horizontal Openings	B3060		90.00% Good
	Overhead Exterior Enclosures	B3080		90.00% Good
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:	Deficiency: Wire Glass		
	Interior Doors	C1030		90.00% Good
	Suspended Ceiling Construction	C1070		62.00% Fair
	Deficiencies:	Missing Tiles		
	Causes:	Missing Securement		
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Surface Damage		
	Interior Fabrications	C2020		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking		
	Causes:	Defective Material		
	Flooring	C2030		62.00% Fair
	Deficiencies:	Stains, Discoloration		
	Causes:	Deterioration		
	Ceiling Finishes	C2050		62.00% Fair

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
71.46%

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Interior Finishes	*Deficiencies:*	Surface Appearance		
	Causes:	Surface Damage		
Plumbing	Domestic Water Distribution	D2010		62.00% Fair
	Deficiencies:	Lack of Water Flow		
	Causes:	Excessive Wear		
	Sanitary Drainage	D2020		62.00% Fair
	Deficiencies:	Slow Draining		
	Causes:	Loose Fittings		
	Building Support Plumbing Systems	D2030		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:	age of overall system		
HVAC	Heating Systems	D3020		62.00% Fair
	Deficiencies:	System Inefficient		
	Causes:	Equipment Obsolescence		
	Facility HVAC Distribution Systems	D3050		62.00% Fair
	Deficiencies:	System Inefficient		
	Causes:	Equipment Obsolescence		
	Ventilation	D3060		62.00% Fair
	Deficiencies:	Stuffy Areas		
	Causes:	Equipment Obsolescence		
Fire Protection	Fire Suppression	D4010		90.00% Good
	Fire Protection Specialties	D4030		90.00% Good
Electrical	Facility Power Generation	D5010		90.00% Good

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
71.46%

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Electrical	Electrical Services and Distribution	D5020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Equipment Obsolescence		
	Comments:	age of equipment		
	General Purpose Electrical Power	D5030		62.00% Fair
	Deficiencies:	Other		
	Causes:	Equipment Obsolescence		
	Comments:	age of equipment		
	Lighting	D5040		62.00% Fair
	Deficiencies:	Uneven or Low light Levels		
	Causes:	Bad Ballasts, Mismatched Lights		
Communications	Data Communications	D6010		90.00% Good
	Voice Communications	D6020		90.00% Good
	Audio-Video Communications	D6030		90.00% Good
	Distributed Communications and Monitoring	D6060		90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010		90.00% Good
	Causes:	Equipment Obsolescence		
	Electronic Surveillance	D7030		100.00% Excellent
	Deficiencies:	Blind Zones		
	Causes:	Equipment Obsolescence		
	Detection and Alarm	D7050		100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010		62.00% Fair
	Deficiencies:	Other		

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

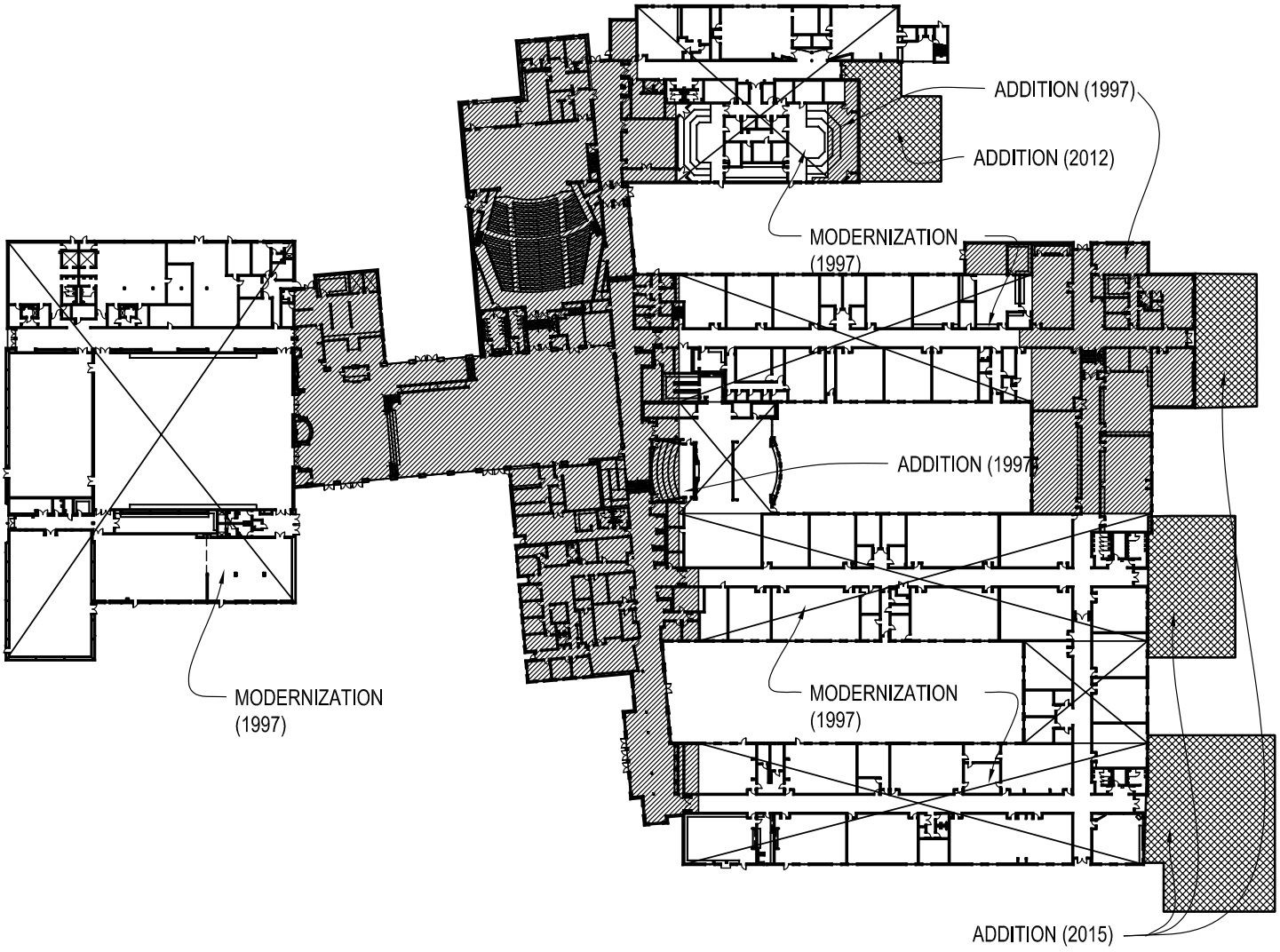
MERCER ISLAND
71.46%

ISLANDER MIDDLE SCHOOL - 02_300 BUILDING

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Integrated Automation	*Causes:*	Equipment Obsolescence		
	Comments:	Older control system		
Furnishings	Fixed Furnishings	E2010		90.00% Good
	Movable Furnishings	E2050		90.00% Good

Mercer Islander High School



BUILDING	SQ. FT.
1997 MODERNIZATION	146,656
1997 ADDITION	77,063
2012 ADDITION	1,800
2015 ADDITION	15,000
GRAND TOTAL	223,719

SCALE: 1"=100'

0 20' 50' 100' 200' 300'

BLRB architects

Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308
P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

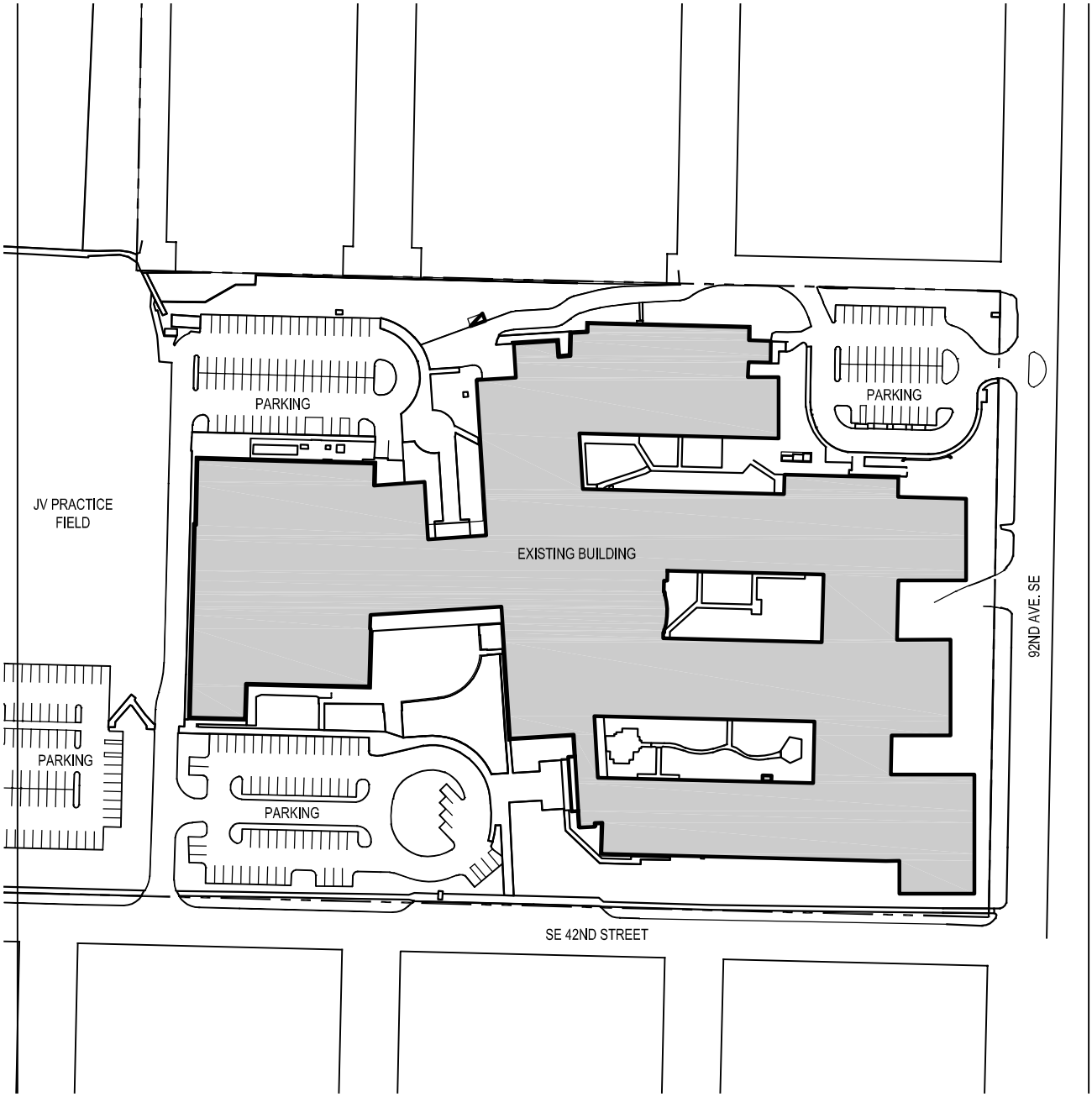
Drawing Title: MERCER ISLAND HIGH SCHOOL 2009 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

Reference Sheet No. 1



SCALE: 1"=150'

0 75' 150' 300' 450'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: MERCER ISLAND HIGH SCHOOL SITE PLAN	Drawn By: JCH	
		Comm. No. 18.10	

SCALE: 1"=300'

0 150' 300' 600' 900'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: MERCER ISLAND HIGH SCHOOL OVERALL CAMPUS SITE AERIAL	Drawn By: JJJ	
		Comm. No. 18.10	

SCALE: 1"=150'

0 75' 150' 300' 450'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 3
	Drawing Title: MERCER ISLAND HIGH SCHOOL SITE AERIAL	Comm. No. 18.10	

Mercer Island High School

9100 SE 42nd Street
Mercer Island, WA 98040
206.236.3345

Site Information

County:	King
Approx. Acreage:	27.36 Acres
Zoning:	R-9.6
Tax Parcel No.:	2524049144
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades 9-12

Current Square Footage (permanent construction):	223,719 SF
Number of Portable Buildings on-site:	0

Current Enrollment (2018):

Grade 9:	405
Grade 10:	372
Grade 11:	376
Grade 12:	413
Total Enrollment:	1,566

Summary of Teaching Spaces

General Use Classrooms:	46
Special Education Classrooms:	3
Occupational Therapy:	0 (part of SPED)
Technology Lab/Computer Room:	2
Art Room:	3
Music Room:	3
Gymnasium:	2
Library:	1
Stage 1:	1
Total Teaching Spaces:	***61***

Building Condition Evaluation (2018 Study and Survey)

ICOS (Main Building):	85.40

CONSTRUCTION HISTORY

Mercer Island High School was originally constructed in 1954 with a major modernization and addition in 1997. A large Multi-Purpose Building was constructed in 1957. This structure later housed cafetorium and student center until it was demolished in 1997. A large expansion occurred in 1961 with a new classroom, auditorium, art and shop space. More classrooms were added in 1967 along with an auditorium and expansion to the gymnasium. Smaller additions and renovations occurred in 1978 and 1986.

The high school campus was united under one roof in 1997. The cafetorium and boiler room building were demolished in order to provide space for a Multi-Purpose Room and kitchen that connects the Gymnasium with the rest of the school. The entire school was covered with a sloped roof overbuild. A central spine that houses the main circulation, locker bays, and administration was added at the west side of the classroom wings. The entire facility was upgraded with new fixtures, electrical, and mechanical systems and was fully sprinkled.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- Mercer Island High School was originally constructed in 1967 with a major modernization and addition in 1997. The original structure at the classroom wings consists of concrete spread footing foundations, concrete slab on grade, in isolated locations a crawl space on the ground level with steel beams and concrete slabs, steel columns, beams and roof trusses with wood roof decking. At the gymnasium the walls are partially reinforced CMU.
- In 1997 the original roof structure was overbuilt with a new sloped roof. In most cases this consists of plywood I joist with plywood sheathing supported by glu-lam beams and ultimately the existing structure. At the gymnasium open web wood trusses were provided.
- The 1997 additions structure consists of concrete spread footing foundations, reinforced masonry walls, steel columns, joist and metal roof decking.
- Seismic upgrade to the existing structure was provided in 1997 with the addition of the plywood roof diaphragm at the new overbuilt roof and the addition of plywood shear walls.
- The lateral resisting system for the building consists of plywood and metal deck roof diaphragms, masonry and plywood shear walls.
- In 2014, additions were made to the east ends of the three primary classroom wings. These additions were single story with small interior mechanical platforms, and were constructed with shallow concrete foundations. Two of the areas have structural steel floors with concrete filled metal deck over crawl spaces, while the third area is conventional slab on grade construction. The elevated platforms and the roofs are constructed from conventional wood framing; utilizing plywood I-joists and plywood decking supported by wood stud bearing walls and interior glulam beams.

<u>Foundation/Structure Condition Evaluation:</u>

- There were no significant signs of structural distress, differential settlement or deterioration. Some minor deterioration and differential settlement were observed as noted below.
- There is a crack and some differential settlement in the concrete slab at the intersection of the 300 and 400 wing. This is more a cosmetic issue rather than a structural concern.
- Minor rust was observed in the exposed steel at the commons and main entrance. This is a maintenance issue at this time.

- There have been some significant changes in the building code since Mercer Island High School was seismically upgraded and added onto in 1997. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the existing structure is not in full compliance with the current code. The 2014 additions were designed per current Code to be self-supporting and independent of the existing structure.

1.2 Exterior Walls System Description:

- The majority of the exterior walls of the original building are wood construction with masonry veneer. At the gymnasium and 1997 addition the walls are constructed of CMU.

Exterior Walls Condition Evaluation:

- With the exception of the deterioration of masonry walls at the kiln room we did not observe any significant signs of structural distress, differential settlement or deterioration.
- At the kiln room we observed spalling or minor deterioration of the exterior masonry. This condition should be monitored and has not affected the structural integrity of the wall.
- The current design forces of out of plane anchorage of masonry walls has doubled since the 1997 seismic upgrades and additions. It is assumed that in some locations, most likely where the walls are parallel to the roof framing the anchorage does not meet current code.

1.3 Exterior Roof System Description:

- The original low slope roofs were covered by a sloped overbuild in 1997. The most recently constructed roof is comprised of asphalt composition shingles with 2 layers of roof felt underlayment over ½" plywood, rigid insulation, and building felt. The roof positively slopes typically at a 3:12 pitch to metal gutters at the perimeter. The roof is interrupted by dormers which provide house mechanical louvers. These dormer overbuilds are at a 6:12 pitch and are constructed of asphalt composition shingles. The roof has ridge venting. The roof has no fall restraint system. Low slope applications are comprised of built-up roofing over ¾" cover board over rigid insulation. A new roof was installed the summer of 2018. It is comprised of a peel and stick membrane covered in and architectural style shingle.

Exterior Roof Condition Evaluation:

- The roof is generally in excellent condition.

1.4 Exterior Windows/Doors System Description:

- The windows are typically vinyl and were replaced in the 1997 modernization and addition. These windows are framed by a 2"x2" piece of wood trim with a ¾" chamfer. Operable windows have insect screens. The entry corridor spine has aluminum storefront and clerestory windows. The Commons also has storefront. All exterior windows are insulated.
- The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are filled with Structo-Lite.

Exterior Windows/Doors Condition Evaluation:

- The exterior windows and doors are generally in good repair. The exterior door to the auxiliary gymnasium has an exposed wood header. The building paper in this location is deteriorated. The center header masonry unit over the doors at the Wrestling Room and Weight Room is missing, leaving the steel angle exposed.

1.5 Exterior Trim System Description:

- Roof eaves and rakes are typically comprised of a continuous 2x10 capped with a 2x2 piece of wood trim and a 2x12 fascia board. A piece of 2x2 wood trims out the connection between painted plywood soffits and brick

veneer walls. Air circulation in these soffits is provided by a 2" continuous vent strip. Plaster soffits with recessed light fixtures are a typical condition above exterior doors to corridors. A metal panel soffit provides the finish for overhangs at the Commons. Aluminum gutters, scuppers, and downspouts provide drainage for the roof. Metal flashing provides the transition between concrete masonry units and exterior stucco above.

Exterior Trim Condition Evaluation:

◊ Downspouts adjacent to the Locker Room entries on the north side of the building and the south side of the Commons have damage and should be replaced. Metal flashing at the Gymnasium Building is faded and peeling

2.0 Interior Building Condition

2.1 Floors System Description:

- All original flooring was removed and replaced in the 1997 addition and modernization. Corridors and the Commons have VCT flooring. The administrative offices and general classrooms have carpet. The locker rooms and staff restrooms have a sheet vinyl floor with a coved base. The showers and student restrooms have a porcelain tile floor. The Ceramics classroom has a sealed concrete floor.

Floors Condition Evaluation:

◊ The VCT entries at the Commons is faded. VCT flooring at the 400 wing is cracked where the building has settled. VCT behind rubber stair nosings is cracked. Some of the rubber base at outside corners in corridors is beginning to crack. The VCT floor in Gymnastics is beginning to show signs of wear.

2.2 Walls System Description:

- Walls are generally type "x" gypsum wallboard over wood studs. Corridor walls are typically covered with FRP. Student restrooms have a porcelain tile wainscot and staff restrooms have an FRP wainscot. The Commons walls are concrete masonry units. Showers have full height porcelain tile walls. The Gymnasium walls are MDO with Tectum above.

Walls Condition Evaluation:

◊ The MDO panels in the Gymnasiums are in poor condition. They have sustained impact damage where volleyball poles are stored. Some of the panels are beginning to detach from the wall. They should be replaced as needed and painted. Damage is mostly along the west wall. The MDO panels in the Weight Room have similar damage. There is missing tile in the Boy's Shower that should be replaced. The southern CMU wall in the Auxiliary Gymnasium should be repainted as a part of general maintenance.

2.3 Ceilings System Description:

- Classrooms and offices typically have 2'x4' acoustical ceiling panels and most of the corridors have 2'x2' acoustical ceiling panels. The main entry spine, Commons, and Gymnasiums are high volume spaces with exposed structure. 12"x12" acoustical ceiling tile can be seen above the reception area, waiting area, and in the main entry corridor. The tectum ceiling in the Gymnasiums was repainted in 1997.

Ceilings Condition Evaluation:

◊ There is water damage to the acoustical ceiling tile above the reception area and around the grille in Waiting Reception. There are missing acoustical ceiling panels in Band Room and Choral Room.

2.4 Fixed Equipment System Description:

- Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinet, projection screen, whiteboard, wall mounted television, and an operable partition wall. New lockers were provided for students in the 1997 renovation and addition.

- The library has bookshelves along the wall and in islands that were resurfaced with plastic laminate during the 1995 addition and modernization.
- The staff lounge is equipped with a stove, fume hood, refrigerator, dishwasher, and upper and lower cabinetry.
- The kitchen is equipped with 3 double convection stoves, a dishwasher, a large grill, steamer oven/kettle, serving coolers, Hobart mixer, a Walk in Cooler and Walk in Freezer, commercial espresso machine, and slicer
- The Gymnasium has bleachers, basketball hoops, and a gym divider curtain.

Fixed Equipment Condition Evaluation:

- Most equipment is in fair to good shape. Equipment that should be replaced or requires attention includes the gas kiln, dishwasher, bleachers, and the gym divider curtain.
- Fixed elements in the aux gym are in need of replacement, i.e. scoreboard, louvers, ceiling material and tectum wall panels.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: The High School is has two separate electrical services and is fed underground by two exterior pad-mounted utility transformers. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.
  - ◊ Switchboard: There are two main switchboards at this facility, both independent from one another and serving opposite ends of the school. Main switchboard #1 is a “Square-D” brand “QED” type switchboard rated for 2500A at 480Y/277V with a 2500A main circuit breaker. Main switchboard #2 is a “Square-D” brand “QED” type switchboard rated for 1600A at 480Y/277V with a 1600A main circuit breaker.
  - ◊ Generator: There are two generators at this facility, both independent from one another and serving opposite ends of the school. Both generators are “Cummins” brand 50kW gensets each with (1) ATS for standby loads. Both ATS’s are rated for 125A each. Egress lighting, receptacles, communications equipment, security panels, and the fire alarm are connected to the generator. The generators are not compliant with current National Electric Code (NEC) standards as the NEC requires emergency loads (life safety loads: lighting primarily) be on a separate ATS from other standby loads (telecom loads, pumps, etc.)
  - ◊ Panelboards: A majority of the existing panelboards are “Square-D” brand “NQOD” type boards with minimal spares or spaces for future capacity.
- Lighting
  - ◊ The existing lighting control panel is a “Douglas” brand control panel. The district has invested time over the past few years and worked to upgrade the control system programming to properly control interior and exterior lighting zones. Interior fixtures are controlled via occupancy sensors and also locally switched by occupants. Exterior fixtures have been upgrades in recent years to LED retrofit and new LED fixture. Interior linear fluorescent T8 lamps have recently been upgraded to LED type T8 type lamps. Interior compact type fluorescent lamps have not been upgraded to respective LED retrofit type.
- Low Voltage
  - ◊ Intercom/Clock: A Rauland Borg Telecenter System 21 intercom system was installed in 1998 and is housed in the telecommunications room on the main level of Area 300. The 66-block terminations and cross-connects and clock power supplies and transformers are mounted to a plywood backboard. Combination intercom/clock speaker devices are located in instructional spaces and offices. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables.

Wall mounted double-faced digital clocks are located in the corridors. There are exterior speakers to provide paging coverage to the outside areas.

- ◊ Telephone System: A Nortel PBX telephone system is in the MDF located in the mezzanine above Area 300. The PBX station ports are terminated on wall mounted 110 terminal blocks.
- ◊ Telecommunications: A 100-pair unshielded twister-pair (UTP) voice backbone cable is installed from the Administrative Building. The cable is terminated on a Building Entrance Protection block. There are (2) Primary Rate Interface ISDN circuits to the Administrative Building. A ducted cooling system is provides environmental control of temperature and humidity levels in the MDF. One 12-strand multimode optical fiber backbone cable is installed from the MDF to the Administrative Building. The MDF contains four 19”x7’ equipment racks for mounting
  - Category 6 modular patch panels
  - Wire management panels
  - Cisco Ethernet 4503 switch
  - Dell PowerConnect and PowerEdge Servers
  - Rack mounted optical fiber cabinet
  - HP Procurve 4000 series and 3Com 3300 10/100 Ethernet switches
  - Apple Library server
- ◊ The telecommunications distribution system is a hierarchical star topology consisting of the MDF and six IDF’s. The IDF’s are connected to the MDF with 12-strand 62.5/125 multimode optical fiber and 50-pair UTP backbone cables. The optical fiber cabling is terminated on ST-style connectors. The Ethernet network backbone is operating at 1 GB/sec using SX gbic modules.
- ◊ The equipment in the MDF appears to be grounded with grounding conductors installed to a grounding system. However the integrity of the grounding system could not be confirmed and there is not a telecommunications grounding busbar visible in the MDF.
- ◊ The MDF power receptacles are connected to the emergency generator but power to the receptacles in the IDF’s is not on emergency backup.
- ◊ A typical IDF contains one to two 19”x7’ equipment racks equipped with category 6 48-port modular patch panels, wire management, rack mounted fiber cabinet, power distribution strip, and 10/100 ethernet switches with 1GB/sec GBIC uplink to MDF. A plywood backboard is installed for wall mounted equipment. There is a wall phone in each IDF and conduit sleeves for cabling pathway to the attic. A 50-pair UTP cable is installed from the 110 wiring block mounted on the plywood backboard to a 48-port voice cross-connect patch panel mounted on the 19” equipment rack. Ladder tray is installed above the racks to manage the cabling and service loops.
- ◊ AMP category 6 horizontal cables are installed from each IDF and the MDF to telecommunications outlets located in classrooms and offices. The horizontal cable is terminated per the T568B standard on rack mount patch panels and faceplates. Horizontal cables are typically installed above accessible ceilings and in the attic space using open cabling methods.
- ◊ IDF’s do not have cooling. There is a gravity vent located in the ceiling above the racks.
- ◊ No grounding facility was visible in the IDF’s
- ◊ A typical classroom has the following telecommunication outlets
  - (2) 3-port outlets on the corridor wall
  - (1) 3-port outlet on the exterior wall
  - (1) 4-port outlet in the corner on the exterior wall for the teacher’s desk
  - (1) 3-port outlet on an interior wall

- ◊ Each telecommunication outlet consists of:
  - A flush mounted 6-port AMP faceplate
  - 8-postion 8-conductor modular connectors for terminating the horizontal cable
  - Color-coded icons
  - Label
- ◊ Security: A Radionics D9112 security panel and associated power supplies are located in the telecommunications room on the main level of Area 300. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Recent upgrades have been made to the Security camera system. Cameras are located in interior spaces and mounted to the exterior of the building. Access card readers and security keypads are installed at selected entrances.
- ◊ CATV Distribution: CATV service is terminated on the backboard in the telecommunications room on the main level of Area 300. The signal is extended to a 2' x 2' x 80" headend cabinet. The cabinet contains
  - Blonder Tongue sub-channel processor
  - Rauland MR 200 media controller
  - Three (3) VCR's
  - Satellite receiver
  - (6) Pico PFAM 550 AV modulators
  - (2) RMDA broadband distribution amplifiers
  - Notch filter
- ◊ The CATV taps and splitters are mounted to the plywood backboard. The CATV signals are distributed to TV outlets in the high school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. The system is capable of supporting bandwidth of 550Mhz. Each classroom is equipped with a wall mounted TV outlet and a wall mounted TV set.
- ◊ Sound Systems: Sound systems are present in the following spaces
  - Commons
  - Gym
  - Band Room
  - Choir Room
  - Auditorium
  - Stadium. In additional to the stadium public address system there is a separate wireless system for providing two-way intercom coverage between the pressbox and the headsets used on the field.
- ◊ Each classroom is equipped with a ceiling mounted infrared transponder.

<u>Electrical Condition Evaluation:</u>

- ◊ The transformer supplying power to the main switchboard #2 is rusting.
- ◊ The main switchboards and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
- ◊ The generators and Automatic transfer switches appear to be new and replacement parts should be readily available. Only one transfer switch is provided per generator which does not comply with current code requirements to separate emergency (Life safety) from standby loads.
- ◊ In the attic spaces, some transformers have been installed on the floor, flush with the old roof. In some cases, these installations do not meet code because there is not adequate working clearance in front of the devices.

- ◊ In the automotive repair shop, gasoline, oil, and other flammable fluids are standing on the existing floor. In this room, a floor box with receptacles and a few convenience outlets along the walls have been installed at 18" above the finished floor. This combination of electrical devices and possible fumes is a code violation.
- ◊ The interior lighting is in good condition particularly with the recent LED retrofitting of the T8 lamps. Exterior light fixtures are in good condition from recent LED retrofit lamps replacements.
- ◊ The existing intercom system is in good operating condition
- ◊ The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system could be expanded with additional cameras and digital video recorders to increase the coverage area and amount of recorded material.
- ◊ The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.
- ◊ The existing category 6 telecommunications cabling is in good condition and supports the current 1 Gigabit per second Ethernet transmission standards. Given the lengths of the existing 62.5/125 multimode optical fiber cabling, it will not support current 10 Gigabit per second Ethernet and would need to be replaced with laser optimized 50/125 multimode cabling if 10 Gigabit per second Ethernet is required on the backbone.
- ◊ The existing sound systems appear to be operating adequately.

3.2 Plumbing

- Staff and student restrooms are in good condition. All restrooms are equipped with metered faucets with hot and cold controls at sinks. Zurn Aquaflush 6000 flush valves are provided on water closets. Hi-lo type ADA accessible drinking fountains are provided in the commons and locker room area, but not in classroom wings. Plumbing trap wrap is installed in staff restrooms, and some ADA height sinks in student restrooms. A gang shower is provided in locker rooms, with one curtained shower stall.
- Domestic hot water is heated by Sellers commercial water heaters in the boiler room, as well as smaller water heaters throughout the building in custodial rooms and mechanical attics.
- There are no floor drains in mechanical attics. In mechanical attics where cooling coils are present, condensate is routed in PVC piping to a mop sink in an attic.

3.3. Hot Water Heating/Central Air Conditioning-Heating Combination

- Heating at Mercer Island High School is provided by a hydronic heating water system. Heating water from (4) Aerco condensing style boilers, installed in 2013, pumped to Trane air handling units and heating coils. Supplementary heat is provided by several Heatex heat recovery units. Cooling to specific areas with the potential for high heat loads is provided by (2) Trane chillers and air handling units equipped with cooling coils. Temperature control is provided in classrooms by push-button thermostats. Duct hot water coils, air handling units, chillers and heat recovery units were installed in 1997, and are in good condition.
- In mechanical attics, ductwork is not insulated after heating coils. Water piping and ductwork for incoming outside air appeared to be well insulated.
- The heating water to coils is controlled by Griswold control valves. Controls for the boiler system need to be replaced.
- New classroom wings 100, 200 and 300 are fed by Nailor Thermal air handlers with heating water coils.

4.0 Safety/Building Code

4.1 Means of Exit

- Exit signs are typically fluorescent and "bug eye" egress fixtures are installed where associated metal halide up-lighting has been utilized. It should also be noted that there are no emergency lighting fixtures on the exterior of the building to aid with egress lighting.

4.2 Fire Control Capability

- The building is fully sprinklered.

4.3 Fire Alarm System - System Description

- The existing fire alarm panel is a “Guardian” brand “AM 2020” series panel. This system is fully addressable and there appears to be an adequate number of notification and detection devices installed throughout the facility. There are sprinkler flow and tamper installed.
- The annunciation appears to meet current code.

Fire Alarm System - Condition Evaluation:

- System is in good working condition and appears to meet current code coverage.

4.4 Emergency Lighting System Description

- Emergency lighting for egress consists of LED fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 Fire Resistance

- Mercer Island High School has one story of occupied space. Interior walls consist mostly of wood studs and GWB on both sides and CMU. The building is sprinklered. A 2 hour area separation wall is utilized between classroom wings, and at the library. The Main Corridor is separated with a two hour wall from the Commons and Auditorium. There is another two hour wall that provides separation between the Commons and the Gymnasium. The entire facility is fully sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- Overall, accessibility in the building is good. Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances.
- Restrooms include the appropriate clearances, access widths, accessible fixtures, and protection from hot waste pipes. Grab bars are good, but do not include the required vertical grab bar in the accessible toilet stall that has become a recent requirement.
- The building has adequate accessible parking. Wheelchair access from the bus loop is provided via ramp at the northeast corner of the building. Most of the accessibility issues pertain to the overall campus as a result of walkways that are too steep and lack of handrails.

Condition Evaluation:

- Restrooms and most spaces are generally compliant. Access in some of the level changes at the corridors is provided by a chair lift. There is no easy access from the bus loop. Access into the building from this location is provided by stairs and no ramp.

Site Condition Evaluation

This building is part of the overall high school campus site plan. It is sited in the southeast corner of the property. It is bordered by 92nd Avenue SE to the east, SE 42nd Street to the south, a JV practice field and parking to the west, and residences and parking to the north. The facility has a bus loop that runs parallel with 92nd Avenue SE. It is serviced by 4 parking lots to accommodate visitors, staff, and students.

The overall campus has a total of three practice fields and six tennis courts. It also contains the Bus Lot, Maintenance Building, District Administration Building, Crest Learning Center, the MOT Building, and a Stadium with a rubberized track and synthetic field. The North Mercer Campus is located in the property to the north of the Campus. Currently, the PEAK is being constructed in the property to the west of the campus.

Physical Condition

Parking and Driveway Areas

- The asphalt in the High School parking lots is in good condition.
- Concrete curbs in the parking lot adjacent to the main entry have been damaged by vehicle tires and is broken in several locations.
- Trees were planted in sawcut openings in the asphalt of the northeast and southwest parking lots. The asphalt around these sawcuts is beginning to crack.

Concrete Walkways

- Concrete walks, stairs, and the planter along the bus loop are cracking and spalled.
- The concrete walk south of the Music wing has severe settlement, exceeding the maximum ½" slab differential.

Hard Surface Play Areas

- The tennis courts are in good condition.

Drainage

- Drainage is inadequate at the east entry to the 700 corridor. There have been issues with water intrusion under the door, into the building at this location.
- Water seepage at the handicap ramp at the north entry to corridor 400 is problematic. There is a steady flow of water over the ramps during the winter and after heavy rainfalls.

Playfields

- The practice field to the direct west of the gymnasium drains unevenly due to inconsistent underlayment. The west portion of the field has an organic underlayment that doesn't drain as well as the sand on the east side of the field.

Fencing

- Fencing between the Bus Lot and the field is in poor shape.

Landscaping

- Landscaping tends to grow quickly in the main parking lot islands. It is overgrown and requires maintenance. This is especially problematic at the entry to this parking lot where it reduces sight lines and has been known to cause accidents.
- Landscaping at the outdoor classroom, adjacent to the bus loop is in poor condition.
- Generally, the landscaping between fields is in poor condition and overgrown.

1 of 1

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
85.40% Good

MERCER ISLAND HIGH SCHOOL - 01_MAIN BUILDING

Building Details

PROFILE TYPE	High School - Single Story
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied
COMMENTS	Verify sq ft of 2012 and 2015 additions. New Area Analyses and Floor Plans need to be uploaded.

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1955	Area 1	129,856	129,856	129,856		
1997	Area 2	77,063	77,063	77,063		
2012	Area 3 (Music Add)	1,800	1,800	1,800	9/4/2012	
2015	Area 4 (3 Wing Add)	15,000	15,000	15,000	7/17/2015	
	Building Totals	**223,719**	**223,719**	**223,719**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		90.00% Good
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		90.00% Good
	Exterior Louvers and Vents	B2070		90.00% Good
Exterior Horizontal Enclosures	Roofing	B3010		100.00% Excellent
	Roof Appurtenances	B3020		100.00% Excellent
	Horizontal Openings	B3060		90.00% Good
	Overhead Exterior Enclosures	B3080		90.00% Good
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		90.00% Good
	Interior Doors	C1030		62.00% Fair
	Deficiencies:	Peeling Paint or Delamination		
	Causes:	Material Condition		
	Interior Grilles and Gates	C1040		90.00% Good
	Suspended Ceiling Construction	C1070		62.00% Fair
	Deficiencies:	Broken T-Bar or Perimeter Track		
	Causes:	Missing Securement		
Interior Finishes	Wall Finishes	C2010		90.00% Good
	Interior Fabrications	C2020		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Missing Securement		
	Flooring	C2030		62.00% Fair
	Deficiencies:	Stains, Discoloration		
	Causes:	Deterioration		
	Ceiling Finishes	C2050		62.00% Fair
	Deficiencies:	Surface Appearance		
	Causes:	Surface Damage		
Plumbing	Domestic Water Distribution	D2010		90.00% Good
	Sanitary Drainage	D2020		90.00% Good
	Deficiencies:	Other		
	Causes:	Other		
	Comments:			

		Drainage issues in Ceramics, cause is likely age related.	
	Building Support Plumbing Systems	D2030	90.00% Good
	General Service Compressed-Air	D2050	90.00% Good
HVAC	Facility Fuel Systems	D3010	90.00% Good
	Heating Systems	D3020	62.00% Fair
	Deficiencies:	Insufficient Air Flow, System Inefficient	
	Causes:	Equipment Obsolescence	
	Comments:	Newer boilers	
	Cooling Systems	D3030	90.00% Good
	Facility HVAC Distribution Systems	D3050	90.00% Good
	Ventilation	D3060	90.00% Good
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Facility Power Generation	D5010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Though systems are fully functional, the existing on-site backup generator does not have seperate emergency and standby automatic transfer switches which does not meet current NEC (National Electrical Code) requirements.	
	Electrical Services and Distribution	D5020	100.00% Excellent
	General Purpose Electrical Power	D5030	100.00% Excellent
	Lighting	D5040	90.00% Good
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	90.00% Good
	Audio-Video Communications	D6030	90.00% Good
	Distributed Communications and Monitoring	D6060	100.00% Excellent
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	90.00% Good
	Causes:	Other	
	Comments:	East Music Card Reader bollard is damaged and requires repair.	
	Electronic Surveillance	D7030	90.00% Good
	Deficiencies:	Blind Zones	
	Causes:	Insufficient Equipment	
	Detection and Alarm	D7050	90.00% Good
Integrated Automation	Integrated Automation Facility Controls	D8010	90.00% Good
	Deficiencies:	Other	
	Comments:	Chiller control sequence issues	
Equipment	Vehicle and Pedestrian Equipment	E1010	62.00% Fair
	Deficiencies:	Safety Areas Not Identified	
	Causes:	No Signage or Markings	
	Commercial Equipment	E1030	62.00% Fair
	Deficiencies:	Unsightly	
	Causes:	Physical Damage	
	Institutional Equipment	E1040	90.00% Good
	Entertainment and Recreational Equipment	E1070	90.00% Good
	Other Equipment	E1090	62.00% Fair
	Deficiencies:	Cracks, Tears, Holes, Sagging	
	Causes:	Deterioration, Mineral/Rust Deposits	
Furnishings	Fixed Furnishings	E2010	62.00% Fair
	Deficiencies:	Surface Deterioration, Unsightly	
	Causes:	Deterioration	
	Comments:	fixed furniture in the gymnasium is taking abuse over time	
	Movable Furnishings	E2050	90.00% Good

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

MERCER ISLAND HIGH SCHOOL - 01_MAIN BUILDING

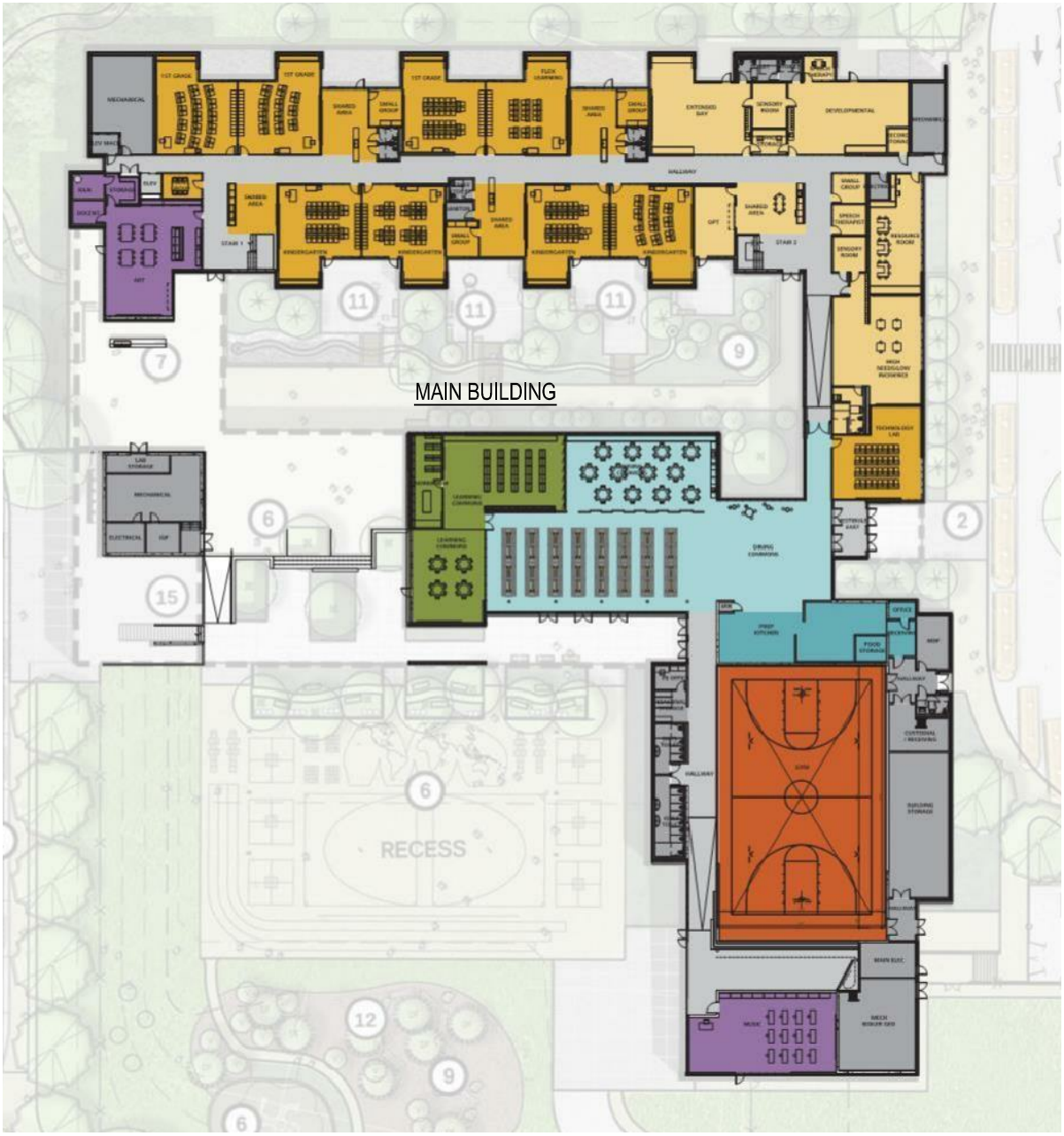
Profile Name: High School - Single Story
Inventory Status: Recognized
Condition Rating: 85.40 %

Currently BCA Certified: Yes
Last BCA Certify: 6/27/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3020	Roof Appurtenances	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3060	Horizontal Openings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1030	Interior Doors	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1040	Interior Grilles and Gates	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2020	Interior Fabrications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2030	Flooring	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2050	General Service Compressed-Air	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
HVAC											
D3010	Facility Fuel Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3020	Heating Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3030	Cooling Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3060	Ventilation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Fire Protection											

D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											
D5010	Facility Power Generation	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D5020	Electrical Services and Distribution	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D5030	General Purpose Electrical Power	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Communications											
D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6020	Voice Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6030	Audio-Video Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6060	Distributed Communications and Monitoring	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Electronic Safety and Security											
D7010	Access Control and Intrusion Detection	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D7030	Electronic Surveillance	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D7050	Detection and Alarm	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Integrated Automation											
D8010	Integrated Automation Facility Controls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Equipment											
E1010	Vehicle and Pedestrian Equipment	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
E1030	Commercial Equipment	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
E1040	Institutional Equipment	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
E1070	Entertainment and Recreational Equipment	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
E1090	Other Equipment	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Furnishings											
E2010	Fixed Furnishings	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐

Northwood Elementary School



BUILDING	SQ. FT.
MAIN BUILDING	77,277
GRAND TOTAL	77,277

SCALE: 1"=60'

0 30' 60' 120' 180'

BLRB architects
Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308
P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

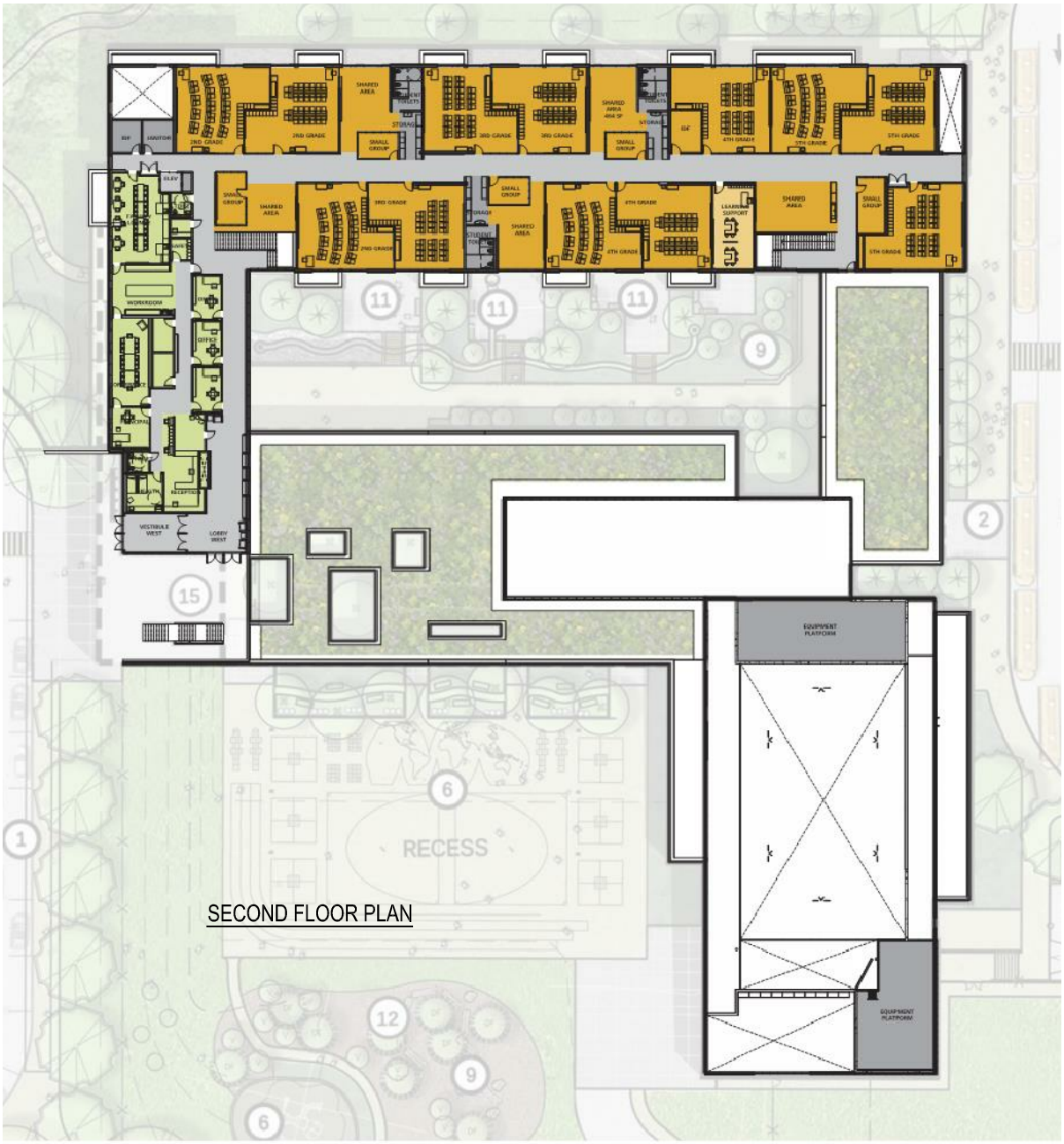
Drawing Title: NORTHWOOD ELEMENTARY SCHOOL - FIRST FLOOR PLAN

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 18.10

Reference Sheet No. 1



SCALE: 1"=60'

0 30' 60' 120' 180'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 2
	Drawing Title: NORTHWOOD ELEMENTARY SCHOOL - SECOND FLOOR PLAN	Comm. No. 18.10	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 3
	Drawing Title: NORTHWOOD ELEMENTARY SITE PLAN	Comm. No. 18.10	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 4
	Drawing Title: NORTHWOOD ELEMENTARY SITE PLAN	Drawn By: JJJ	
		Comm. No. 18.10	

Northwood Elementary School

4030 86th Avenue SE
Mercer Island, WA 98040
206.275.5800

Site Information

County:	King
Approx. Acreage:	8.4 Acres
Zoning:	R-9.6
Tax Parcel No.:	1824059006
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Grades K-5

Current Square Footage (permanent construction):	77,277 SF
Number of Portable Buildings on-site:	0

Current Enrollment (2018):

Kindergarten:	63
Grade 1:	82
Grade 2:	94
Grade 3:	47
Grade 4:	67
Grade 5:	79
Total Enrollment:	432

Summary of Teaching Spaces

General Use Classrooms:	21
Special Education Classrooms:	4
Occupational Therapy:	1
Technology Lab/Computer Room:	1
Art Room:	1
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	***31***

Building Condition Evaluation (2018 Study and Survey)

ICOS (Main Building):	98.91

CONSTRUCTION HISTORY

Northwood Elementary School was constructed in 2015 and opened in 2016. A two story elementary school with the administration on the upper level near the parent drop off. The lower level is daylite and has access to the bus drop off area. It appears to be a Type 2 B construction with one 2 hour wall on the lower level that separates the gym public area from the remainder of the classrooms on the lower level. Built for grades K through 5 it has approximately 21 general classrooms, pull out shared areas, a library, gymnasium and lunch room.

Built for 21st century learning spaces are flexible and adaptable with lots of transparency. The building has a partial green room and photovoltaics (PV) panels on the roof as a teaching tool.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- Foundation/Structure Condition Evaluation:

1.2 Exterior Walls System Description:

- The majority of the exterior walls of the building are steel stud construction with masonry veneer. There are a variety of other exterior materials; fiber siding and panel systems, and metal panel siding as well.

Exterior Walls Condition Evaluation:

- The exterior systems are in excellent condition.

1.3 Exterior Roof System Description:

- The low slope roofs area are a mixture of green roofing system along with single ply membrane system over rigid insulation. The second story portion of the roof is standing seam metal roof with skylights and photovoltaics mounted on them. The standing seam portion of the roof utilizes internal gutter system of single ply.

Exterior Roof Condition Evaluation:

- The roof is in excellent condition.

1.4 Exterior Windows/Doors System Description:

- The windows are storefront with operable casement windows. The doors are typically storefront except when accessing mechanical and storage spaces.

Exterior Windows/Doors Condition Evaluation:

- The door and windows are in excellent condition.

1.5 Exterior Trim System Description:

- The roof has an approximate 3 foot overhang and parapet system. Internal gutters behind the parapets which penetrate the soffit into pvc pipe. All downspouts have an overflow as well. Parapets are capped with metal fascia.

Exterior Trim Condition Evaluation:

- Exterior trim appears to be in excellent condition.

2.0 Interior Building Condition

2.1 Floors System Description:

- The flooring system is primarily rubber tile throughout including restrooms with rubber base. Carpet tile in the

classrooms. Walk off mats as the entry points and a felt flooring laid over the rubber at drinking fountains for slip resistance. Exposed concrete at stairways connecting floors.

Floors Condition Evaluation:

- The floors are in excellent condition.

2.2 Walls System Description:

- Corridor walls are type “x” gypsum wallboard over metal studs, just painted, no wainscot. Student restrooms have a porcelain tile wainscot.

Walls Condition Evaluation:

- Walls are in excellent condition.

2.3 Ceilings System Description:

- Most all ceiling systems are either painted gwb or a form of SAC suspended systems. Pull out spaces have a perforated gwb ceiling.

Ceilings Condition Evaluation:

- Ceilings are in excellent condition.

2.4 Fixed Equipment System Description:

- Classrooms have a mixture of fixed cabinets on one wall with the opposite wall having moveable full height whiteboards with storage behind. Other walls throughout the classrooms or pull out spaces have “wall talker” marker boards or cubbie storage depending on the grade level. Countertops in classrooms with sinks are plastic laminate. There is built-in and free standing storage in the hallways, also faced with plastic laminate.
- Classrooms have lots of glazing both the exterior and the interior, they all have roller shades. Interior shades are manual, while the exterior are motorized.

Fixed Equipment Condition Evaluation:

- The fixed equipment is in excellent condition.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: The Administration Building is fed underground from a pad-mounted, exterior utility transformer. Distribution is 480Y/277V
  - ◊ Switchboard: The main switchboard is a “Siemens” brand rated for 1200A at 280Y/277V. The main switchboard has a GFCI protected main breaker..
  - ◊ Generator: The existing generator is a 80kW “Caterpillar” brand diesel fuel 480Y/277V generator with an output bus which feeds (2) ATS’s interior to the building.
  - ◊ Panelboards: Siemens type ‘P1’ panelboards with approximately 25% spares or spaces for future capacity.
- Lighting
  - ◊ The existing lighting control system is a “Wattstopper” brand control panel. Interior fixtures are LED and controlled via occupancy sensors, locally switched by occupants and controlled by photocell and time of day input in common areas. Exterior fixtures are LED type and controlled by time of day and photocell control via the lighting control relay panels.

- Low Voltage
  - ◊ Intercom/Clock: An IP intercom clock system by 'Syn-Apps' was installed in 2015.
  - ◊ Telecommunications: The Main Distribution Frame (MDF) for the facility is located on the main level. Telco service is terminated on a demarcation point mounted on the plywood backboard. T1 circuits provide voice and data connections to service providers and other schools in the District. There are grounding busbars. An independent air-conditioning unit provides cooling to the space and other IDF rooms.
  - ◊ Four-plex and special electrical receptacles provide power to the equipment racks and wall mounted equipment. Telecom rooms are on generator backup power
  - ◊ The optical fiber, and UTP voice backbone cables enter the building through underground conduits.
  - ◊ Riser-rated category 6 horizontal cabling is installed from racks in MDF to telecommunication outlets in offices. The horizontal cabling is installed above the accessible ceilings using open cabling methods and is terminated on surface mounted telecommunication outlets.
  - ◊ Security: A Bosch Security panel, model number D9412GV4-C is located in the MDF. The system is monitored by Guardian security.
  - ◊ Security/Access Control: The school is equipped with card key access control, intrusion detection and video surveillance systems.

Electrical Condition Evaluation:

- All systems in the building are effectively new and in excellent working condition.

3.2 Plumbing

- Staff and student restrooms are in excellent condition. All water closets are equipped with 1.28 GPF flush valves and urinals in boys' restrooms are equipped with 0.125 GPF hands-free flush valves in good condition. Student restrooms are equipped with hose bibbs.
- Each classroom is equipped with a sink and bubbler. Dual height drinking fountains and bottle fillers are provided in hallways.
- Hot water is provided by HTP condensing style water heaters located in the boiler room.

3.3 Forced Air Heating

- A change-over style hydronic piping loop is supplied by (2) Fulton boilers and (1) 20-ton Multistack air-source heat pump. The air-source heat pump is currently sized to provide cooling only for the administration, but future space is allocated in the service yard for additional modules to be added in the future.
- Hydronic piping is routed to a number of mechanical rooms where Haakon air handlers serve the spaces. The classrooms are fed by a VAV system thru displacement ventilation along with radiant floor heating. The gymnasium, commons, administration, and other general areas are fed by overhead HVAC systems.
- Cook exhaust fans provide exhaust in the restrooms and other code required exhaust areas and Mitsubishi mini-split systems provide cooling at the MDF and elevator machine rooms.

4.0 Safety/Building Code

- Building meets all current Washington State building codes.

5.0 Provisions for the Handicapped

- Building meets all current Washington State ADA building codes.

1 of 1

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
98.91% Excellent

NORTHWOOD ELEMENTARY - MAIN BUILDING

Building Details

PROFILE TYPE	Elementary School - Multi-Story
NUMBER OF FLOORS	2
CHARACTERISTICS	Occupied
COMMENTS	Sq ft shown is estimate based on District website information. Verify final sq ft and upload plans and area analyses. Project is entirely locally funded.

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
2016	Main Area	77,277	77,000	77,000	8/31/2016	9/14/2017
	Building Totals	**77,277**	**77,000**	**77,000**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		100.00% Excellent
Slabs on Grade	Standard Slabs on Grade	A4010		100.00% Excellent
	Pits and Bases	A4040		100.00% Excellent
Water and Gas Mitigation	Building Subdrainage	A6010		100.00% Excellent
Superstructure	Floor Construction	B1010		100.00% Excellent
	Roof Construction	B1020		100.00% Excellent
	Stairs	B1080		100.00% Excellent
Exterior Vertical Enclosures	Exterior Walls	B2010		100.00% Excellent
	Exterior Windows	B2020		100.00% Excellent
	Exterior Doors and Grilles	B2050		100.00% Excellent
	Exterior Louvers and Vents	B2070		100.00% Excellent
Exterior Horizontal Enclosures	Roofing	B3010		100.00% Excellent
	Roof Appurtenances	B3020		100.00% Excellent
	Horizontal Openings	B3060		100.00% Excellent
	Overhead Exterior Enclosures	B3080		100.00% Excellent
Interior Construction	Interior Partitions	C1010		100.00% Excellent
	Interior Windows	C1020		100.00% Excellent
	Interior Doors	C1030		100.00% Excellent
	Interior Grilles and Gates	C1040		100.00% Excellent
	Raised Floor Construction	C1060		100.00% Excellent
	Suspended Ceiling Construction	C1070		100.00% Excellent
Interior Finishes	Wall Finishes	C2010		90.00% Good
	Interior Fabrications	C2020		100.00% Excellent
	Flooring	C2030		90.00% Good
	Stair Finishes	C2040		100.00% Excellent
	Ceiling Finishes	C2050		100.00% Excellent
Conveying	Vertical Conveying Systems	D1010		100.00% Excellent
Plumbing	Domestic Water Distribution	D2010		100.00% Excellent
	Sanitary Drainage	D2020		100.00% Excellent
	Building Support Plumbing Systems	D2030		100.00% Excellent
HVAC	Facility Fuel Systems	D3010		100.00% Excellent
	Heating Systems	D3020		100.00% Excellent
	Cooling Systems	D3030		100.00% Excellent
	Facility HVAC Distribution Systems	D3050		100.00% Excellent
	Ventilation	D3060		100.00% Excellent

Fire Protection	Fire Suppression	D4010	100.00% Excellent
	Fire Protection Specialties	D4030	100.00% Excellent
Electrical	Facility Power Generation	D5010	100.00% Excellent
	Electrical Services and Distribution	D5020	100.00% Excellent
	General Purpose Electrical Power	D5030	100.00% Excellent
	Lighting	D5040	100.00% Excellent
Communications	Data Communications	D6010	100.00% Excellent
	Voice Communications	D6020	100.00% Excellent
	Audio-Video Communications	D6030	100.00% Excellent
	Distributed Communications and Monitoring	D6060	100.00% Excellent
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	100.00% Excellent
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	ASHP control issues	
Equipment	Commercial Equipment	E1030	100.00% Excellent
	Institutional Equipment	E1040	100.00% Excellent
	Entertainment and Recreational Equipment	E1070	100.00% Excellent
	Other Equipment	E1090	100.00% Excellent
Furnishings	Fixed Furnishings	E2010	100.00% Excellent
	Movable Furnishings	E2050	100.00% Excellent

1 of 1

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

NORTHWOOD ELEMENTARY - MAIN BUILDING

Profile Name: Elementary School - Multi-Story
Inventory Status: Recognized
Condition Rating: 98.91 %

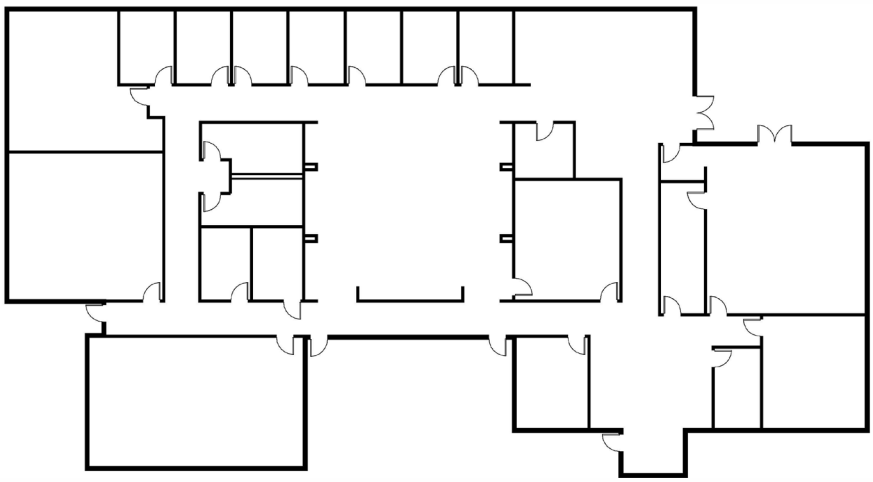
Currently BCA Certified: Yes
Last BCA Certify: 6/27/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
A4040	Pits and Bases	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Superstructure											
B1010	Floor Construction	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B1020	Roof Construction	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B1080	Stairs	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2020	Exterior Windows	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3020	Roof Appurtenances	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3060	Horizontal Openings	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
B3080	Overhead Exterior Enclosures	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1020	Interior Windows	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1030	Interior Doors	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1040	Interior Grilles and Gates	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1060	Raised Floor Construction	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2020	Interior Fabrications	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C2030	Flooring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2040	Stair Finishes	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
C2050	Ceiling Finishes	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Conveying											
D1010	Vertical Conveying Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D2020	Sanitary Drainage	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
HVAC											

D3010	Facility Fuel Systems	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D3020	Heating Systems	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D3030	Cooling Systems	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D3050	Facility HVAC Distribution Systems	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D3060	Ventilation	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Fire Protection				
D4010	Fire Suppression	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D4030	Fire Protection Specialties	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Electrical				
D5010	Facility Power Generation	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D5020	Electrical Services and Distribution	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D5030	General Purpose Electrical Power	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D5040	Lighting	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Communications				
D6010	Data Communications	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D6020	Voice Communications	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D6030	Audio-Video Communications	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D6060	Distributed Communications and Monitoring	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Electronic Safety and Security				
D7010	Access Control and Intrusion Detection	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D7030	Electronic Surveillance	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
D7050	Detection and Alarm	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Integrated Automation				
D8010	Integrated Automation Facility Controls	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Equipment				
E1030	Commercial Equipment	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
E1040	Institutional Equipment	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
E1070	Entertainment and Recreational Equipment	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
E1090	Other Equipment	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
Furnishings				
E2010	Fixed Furnishings	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐
E2050	Movable Furnishings	☑ ☐ ☐ ☐ ☐ ☐	100 %	☐ ☐ ☐

School Facilities and Organization *Generated: Aug 28, 2018* *Page 1 of 1*

Crest
Learning Center



MAIN BUILDING

SCALE: 1"=30'

0 15' 30' 60' 90'

BUILDING	SQ. FT.
MAIN BUILDING	10,058
GRAND TOTAL	10,058

BLRB architects

Pacific Plaza
1250 Pacific Ave., Ste. 700
Tacoma, WA, 98402-4308

P: 253.627.5599
F: 253.572.5167

Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY

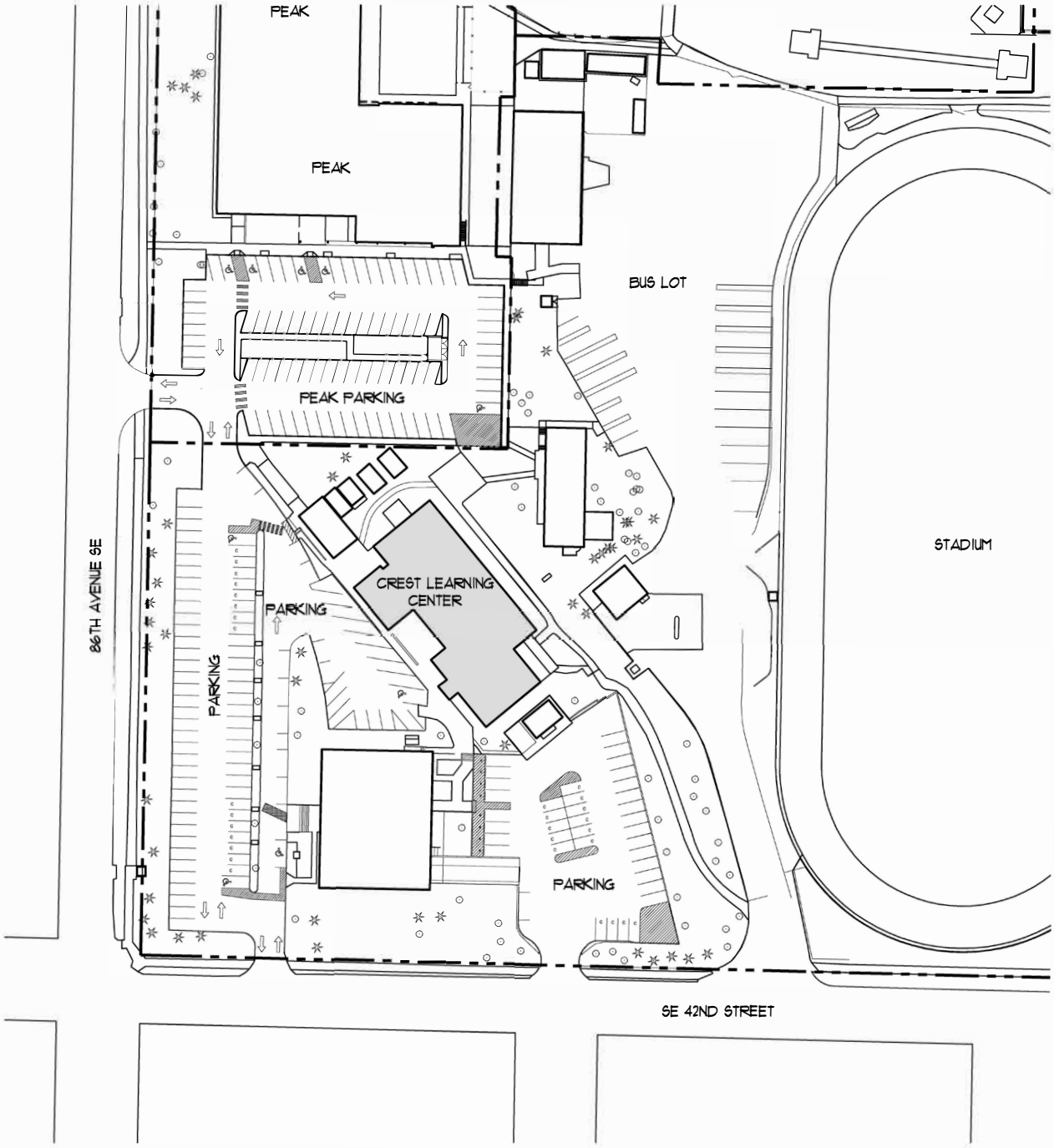
Drawing Title: CREST LEARNING CENTER 2009 AREA ANALYSIS

Date: JUNE 2018

Drawn By: JJJ

Comm. No. 08.12

Reference Sheet No. 1



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: CREST LEARNING CENTER SITE PLAN	Drawn By: JJJ	
		Comm. No. 08.12	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 3
	Drawing Title: CREST LEARNING CENTER SITE AERIAL	Drawn By: JJJ	
		Comm. No. 08.12	

Crest Learning Center

4150 86th Avenue SE
Mercer Island, WA 98040
206.236.3390

Site Information

County:	King
Approx. Acreage:	27.36 Acres
Zoning:	R-9.6
Tax Parcel No.:	1824059005
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Current Square Footage (permanent construction):	10,085 SF
Number of Portable Buildings on-site:	0

Current Enrollment (OSPI 2016):

Male Students:	Enrolled in MIHS
Female Students:	Enrolled in MIHS
Total Enrollment as of May 2017:	Enrolled in MIHS

Summary of Teaching Spaces

General Use Classrooms:	4
Special Education Classrooms:	0
Occupational Therapy:	0
Technology Lab/Computer Room:	1
Art Room:	1
Music Room:	0
Gymnasium:	0
Library:	0
Horticulture:	1
Total Teaching Spaces:	***7***

Building Condition Evaluation (2018 Study and Survey)

Adjusted Score:	84.63

CONSTRUCTION HISTORY

Crest Learning Center was originally built in the early 1960's and renovated and added onto in 1997. The renovation was approximately 4,039 square feet and the addition totaled 6,872 square feet. Selected walls and roof were demolished to accommodate the new program. The existing floor and acoustical ceiling panels were replaced and additional walls were wood framed.

The new addition included space for offices, a Great Room, restrooms, Math, a Computer Lab, and a Science Room. A Greenhouse was added at the northwest corner of the new construction. The addition was constructed of concrete slab on grade and concrete foundations and footings. The roof was constructed of T.J.I joists on glulam beams which rest on the wood framed walls. Plastic laminate was used at new casework and rooms were finished with carpet, sheet vinyl, VCT, rubber base, acoustical ceiling panels, acoustical ceiling tiles, and vinyl wall covering. Hollow metal doors and relite frames with wood and hollow metal doors were used. The exterior walls were comprised of brick veneer and stucco over wood framed walls.

The new and remodeled areas received new plumbing fixtures with new domestic water piping. Portions of the existing below ground waste piping was used. The HVAC system was replaced with new gas fired furnaces with a split system condenser and duct coil for the computer room cooling.

The main distribution voltage is 120/208 volt which serves the lighting system and large HVAC loads. The existing service feeder was upgraded to full capacity. 120/208V was provided for servicing computers and miscellaneous equipment. The lighting fixtures were replaced with T8/ compact fluorescents and electronic ballasts. High power factor ballasted metal halide fixtures were used for the exterior lighting. Low voltage systems that were added included fire alarm, telephone/ intercom/clock, computer LAN/WAN network, TV, and a security system.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- The building is a wood framed structure. The original construction date is not known and assumed to be in the 1960's. There was a major addition and modernization in 1997.
- The primary structural system consist of concrete spread footing foundations, concrete slab on grade floor construction, wood stud exterior walls with plywood and brick veneer, open web steel joist at the original roof with tectum roof sheathing and plywood I joist with plywood sheathing at the addition and over the original portion of the building. There is a pre-engineered steel frame greenhouse at one end of the building.
- The lateral resisting system of the building are the plywood shear walls and roof diaphragm.

Foundation/Structure Condition Evaluation:

- We did not observe any significant signs of structural distress, deterioration or differential settlement.
- There have been some changes in the building code since Crest Learning Center was seismically upgraded and added onto in 1997. The current IBC requires a 1.25 importance factor for school design. It is assumed that the existing structure is not in full compliance with the current code.

1.2 Exterior Walls System Description:

- Exterior walls are wood framed walls with plywood sheathing and brick veneer.

Exterior Walls Condition Evaluation:

- No significant signs of structural distress, deterioration or differential settlement.

1.3 Exterior Roof System Description:

- The roof is a comprised of asphalt composition shingles over felt and plywood sheathing. The roof positively slopes to metal gutters along the outer perimeter of the building. There are two Polygol skylights above the covered work area on the north side of the building. The roof is properly ventilated with ridge vents. The roof has no fall restraint system.

Exterior Roof Condition Evaluation:

- The roof is in good repair. There is moss buildup on the north side of the roof and in shaded areas. One of the gutters along the east side of the building is damaged.
- The roof overbuild over the main entry has been known to have water infiltration. A similar detail shown in the 1996 Construction Set indicates a hemmed piece of flashing that extends on top of the roof line 6" and extends up behind the cement plaster 4". A site inspection indicates that there was no flashing built in that location.

1.4 Exterior Windows/Doors System Description:

- The windows are aluminum and most of them were added in the 1997 during Phase II development of the project. Most of the windows are operable. Many of these casements have insect screens. The perimeter of the window is caulked and sealed and there is no exposed head flashing. Flashing extends behind the brick sill and out to masonry weeps beneath that sill. All exterior windows are insulated. Windows are equipped with operable mini-blinds at the ground level. Mechanically operated blinds are used in the high volume space above the Great Room.
- The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Most of the exterior doors have glazing.

Exterior Windows/Doors Condition Evaluation:

- The windows are in good repair. Blinds in the windows in the high volume space above the Great Room no longer function and parts have been discontinued by the manufacturer.
- The doors are generally in good repair. The door leading into the covered work area from the corridor has graffiti and should be repainted.

1.5 Exterior Trim System Description:

- Painted plywood sheathing comprises the soffit panel which is ventilated along the perimeter, behind the painted wood fascia trim. The soffit has a low level finish, with visible seams and paint. There are recessed light fixtures in the soffit panel. The downspouts are metal. Metal flashing with a drip edge provides the transition between the brick veneer and cement plaster.

Exterior Trim Condition Evaluation:

- The soffit panel and fascia should be repainted as part of general maintenance.

2.0 Interior Building Condition

2.1 Floors System Description:

- Generally, the floor finish throughout the building is carpet with rubber base. The store room and art room have VCT floors with rubber base. The restrooms and science room have sheet vinyl flooring with a coved base.

Floors Condition Evaluation:

- The floors are in good repair.

2.2 Walls System Description:

- Interior walls are typically gypsum wallboard over wood studs. Most rooms have vinyl wall covering. Wet walls in the restrooms and in the COT Room have a plastic laminate wainscot.

Walls Condition Evaluation:

- The walls are generally in good repair. The north wall and soffit above the main entry is damaged from water infiltration. The accessible door in this area has had defects in its hardware causing the closer to not work properly. When this occurs, the door slams, causing the nails in this wall to dislodge.

2.3 Ceilings System Description:

- Typically, the ceilings are 2'x4' acoustical ceiling panels. 12"x12" acoustical ceiling tile is attached to the underside of the high volume space in the main entry and Great Room and slopes with the roof. The restrooms, utility room, and store room have gypsum board ceilings. The joists in the art room are exposed.

Ceilings Condition Evaluation:

- The ceilings are typically in good repair. There is water damage to the acoustical ceiling panel above the main entry due to heavy rainfalls.

2.4 Fixed Equipment System Description:

- The Great Room has built in plastic laminate lower cabinetry and built in bookcases behind sliding whiteboards above.
- Teaching spaces are equipped with wall mounted televisions, plastic laminate lower and upper cabinetry, white boards and projection screens.

Fixed Equipment Condition Evaluation:

- Mechanical blinds over the Great Room no longer function and parts have been discontinued by the manufacturer. The reception desk at the main entry is damaged and will require new plastic laminate.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: The Crest Learning Center is fed underground from an exterior utility transformer. Distribution is 208Y/120V.
  - ◊ Switchboard: The main switchboard is a "Square-D" brand "I-Line" type switchboard rated for 500A at 208Y/120V. The main switchboard has a 500A main breaker and (6) 3-pole breakers. There are (2) 3-pole spaces for future capacity.
  - ◊ Generator: There is no generator installed at this facility and no emergency or standby power is available.
  - ◊ Panelboards: Existing panelboards are "Square-D" brand "NQOD" type boards with available spares and spaces for future capacity.
- Lighting
  - ◊ Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Exterior fixtures utilize LED lamps and interior fixtures are mostly linear T-8 fluorescent with compact fluorescent fixtures in offices. Interior fixtures have been partially retrofitted with LED lamps. Exit signs throughout the facility are typically fluorescent and utilize battery packs.

- Low Voltage
  - ◊ Intercom/Clock: A Rauland Borg Telecenter System 21 intercom system was installed in 1997 and is housed in the MDF. A terminal enclosure is mounted on the wall of the MDF and contains 66-block terminations and cross-connects. Clock power supplies and transformers are installed in 24”x24”x6” type 1 enclosure mounted on the plywood backboard.
  - ◊ Combination intercom/clock speaker devices are located in instructional spaces and the main office. Flush mounted ceiling speakers provide coverage in corridors. Coverage does not extend to speakers in offices.
  - ◊ Telecommunications: Two 19” x 7’ equipment racks are located in the MDF. The racks contain category 5 modular patch panels, wire management, servers, rack mounted optical fiber cabinets, HP Procurve 10/100 Ethernet switches, and power distribution units. A 50 pair unshielded twisted-pair (UTP) backbone cable is installed from the MDF to the Administrative building and is terminated on a 110 wiring block mounted to the plywood backboard. A 25-pair UTP cable is extended from the backboard to a rack-mounted voice cross-connect patch panel. AMP FutureLAN category 5 riser-rated horizontal cables are installed from the patch panels to telecommunications outlets in offices and instructional spaces. The horizontal cables are terminated at each telecommunication outlet on 8-postion 8-conductor modular connectors mounted in a flush mount 6-port AMP faceplate equipped with color-coded icons. The horizontal cabling is terminated using the T568B standard. The horizontal cabling is installed above the accessible ceiling using open cabling methods from the MDF to the telecommunication outlets. One Corning 24-strand 62.5/125 multimode OFNR is installed from the MDF to the Administrative Building. There is not a telecommunication grounding bus bar installed in the MDF. The 50-pair from the Administrative building does not appear to be grounded. There is no dedicated cooling available to the MDF. An exhaust fan grille is located in the ceiling above the racks.
  - ◊ Security: An Ademco Security panel, model number Vista 50P is located in the MDF. The system is monitored by Guardian security. A security key pad for arming and disarming the system and key card reader are located at the main entrance. Exterior doors are equipped with magnetic door contacts and motion detectors are located in the library, the main office, and instructional spaces.

<u>Electrical Condition Evaluation:</u>

- The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.
- The main electrical room also serves as the main Telecommunications equipment and is not properly ventilated.
- The exterior utility transformer is rusting.
- The interior lighting is in good condition and appears to provide adequate lighting levels.
- The existing intercom system is in good operating condition
- The existing security system provides adequate intrusion detection and access control functions but lacks video surveillance capabilities.
- The existing category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. Depending on the condition of the cabling and the installation practices, it is possible the cable is capable of supporting current standards if the cabling was reterminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a category 5e or category 6 cabling plant.

3.2 Plumbing

- Student restrooms are equipped with metered faucets at all sinks. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 0.6 GPF hands-free flush valves. Faucets in adult restrooms are not self metering.

- Sinks with bubblers are provided in classrooms, but aerators are missing on all faucets.
- Hot water is supplied from a new water heater located in a closet within the custodial room.

3.3 Forced Air Heating

- Heating for the building is provided by 80% efficient gas furnaces serving each zone. The furnaces are located in attic areas and are ducted down to each space.
- Thermostats in the building are push-button type. Exhaust fans serve the restrooms, work room, kitchen and IDF/MDF rooms. The gas meter is equipped with a seismic gas valve.

4.0 Safety/Building Code

4.1 Means of Exit

- Illuminated fluorescent exit signs with battery back-up are located above the exit doors.

4.2 Fire Control Capability

- Fire Protection exists at the school. Verification of quick response heads could not be determined.

4.3 Fire Alarm System - System Description

- The existing fire alarm panel is a “Notifier” brand panel with a “DCX” brand dialer. There appears to be an adequate number of notification and detection devices throughout the facility. The fire alarm panel is not connected to an emergency or standby electrical panel. Flow and tamper switches, as well as a PIV connection and pull stations are monitored by the fire alarm panel. The fire alarm control panel has been recently upgraded to a RF subscriber dialer.

Fire Alarm System - Condition Evaluation:

- System is in good working condition and appears to meet current code coverage.

4.4 Emergency Lighting System Description

- Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Emergency Lighting Condition Evaluation:

- System is in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.

4.5 Fire Resistance

- This facility has one floor of occupied space. It’s interior walls are mostly comprised of wood studs with a layer of GWB on both sides. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 System Description:

- Overall, accessibility in the building is good. Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances.

- Restrooms include the appropriate clearances, access widths, accessible fixtures, and protection from hot waste pipes. The paper towel dispenser controls are mounted too high for current accessibility standards. Grab bars are good, but do not include the required vertical grab bar in the accessible toilet stall that has become a recent requirement.
- The mechanically assisted accessible entry door does not function properly. A component of this hardware detaches periodically, causing the door opening mechanism to fail.
- The building has one handicapped parking stall. It sits on a slope that appears to be greater than 2%. This stall does not have a clearly designated accessible aisle.

Condition Evaluation:

- The hardware for the accessible door will have to either be repaired or replaced to comply with accessibility standards. The parking lot will require reconfiguration to fully comply with requirements necessary to an accessible stall.

Site Condition Evaluation

This building is part of the overall high school campus site plan. It is sited in the southwest corner of the property. To the immediate east of the Crest Learning Center is the future site for the District's Maintenance, Operations, and Transportation Building. To the east of this is bus parking and fueling. To the north is the site for the PEAK building that will begin construction in the spring of 2009. To the south is the District Administration Building.

The building is serviced by one parking lot that has 19 parking stalls. There is one designated accessible stall in this lot. The parking lot sits in a depression and slopes uphill significantly to the west. There are two more lots adjacent to the building that services the District Administration Building.

To the north of the building are greenhouses which serve instructional programs at the Learning Center. The building has three outdoor patios.

Physical Condition:

Parking and Driveway Areas

- The parking lot was resurfaced and restriped this summer. The configuration of the lot is very inefficient and counterintuitive. As a result, several car collisions have occurred at this site.

Hard Surface Play Areas

- There is a hard surface play area with one basketball hoop on the northeast corner of the building. The asphalt appears to be in fair condition. The asphalt walk connected to it and along the east of the building is in poor condition. Vegetation is growing in its cracks and it has many depressions.

Drainage

- The catchment basin under the covered work area tends to back up, causing standing water in that area and along the front of the building.

Playfields

- The site has no playfields

Fencing

- The screening around the heat pump on the north side of the building is in good condition.

Play Equipment

- There is one basketball hoop that appears to be in okay condition.

Landscaping

- Landscaping around the site is in poor condition. It is not maintained well around the site and is overgrown with weeds. This is particularly poor between the building and the greenhouses and in the north area. A gravel pit north of the building is overgrown with weeds. The greenhouses are overgrown with weeds.

Other Observations:

- The site is poorly maintained. There are concrete masonry units, plant boxes, and other miscellaneous items spread throughout the site.

1 of 1

School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
84.63% Fair

MERCER ISLAND CREST LEARNING CENTER - 01_MAIN BUILDING

Building Details

PROFILE TYPE	Classroom Building - Slabs On Grade
NUMBER OF FLOORS	1
CHARACTERISTICS	Occupied

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1960	Area 1	4,017	4,017	4,017		
1998	Area 2	6,041	6,041	6,041		
	Building Totals	**10,058**	**10,058**	**10,058**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Slabs on Grade	Standard Slabs on Grade	A4010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		90.00% Good
	Exterior Windows	B2020		90.00% Good
	Exterior Doors and Grilles	B2050		62.00% Fair
	Deficiencies:	Peeling Paint or Delamination		
	Causes:	Material Condition		
	Comments:	Deficiency: Door at North end needs to be adjusted; exterior surfaces need to be prepped and repainted to prevent premature failure.		
Exterior Horizontal Enclosures	Roofing	B3010		62.00% Fair
	Deficiencies:	Other		
	Causes:	Surface Weathering		
	Comments:	Additional: grouth needs to be addressed. No signes of leaking in the interior of the building.		
	Roof Appurtenances	B3020		90.00% Good
	Horizontal Openings	B3060		90.00% Good
Interior Construction	Interior Partitions	C1010		90.00% Good
	Interior Windows	C1020		90.00% Good
	Interior Doors	C1030		90.00% Good
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking, Surface Appearance		
	Causes:	Surface Damage		
	Interior Fabrications	C2020		90.00% Good
	Flooring	C2030		62.00% Fair
	Deficiencies:	Broken or Loose Tiles, Stains, Discoloration		
	Causes:	Deterioration		
	Ceiling Finishes	C2050		90.00% Good
Plumbing	Domestic Water Distribution	D2010		90.00% Good
	Sanitary Drainage	D2020		90.00% Good
	Building Support Plumbing Systems	D2030		90.00% Good
HVAC	Facility Fuel Systems	D3010		90.00% Good
	Heating Systems	D3020		62.00% Fair
	Deficiencies:	Other		
	Causes:	Other		
	Comments:			

		Deficiency: equipment is reaching 19 years old.	
	Facility HVAC Distribution Systems	D3050	90.00% Good
	Ventilation	D3060	90.00% Good
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Electrical Services and Distribution	D5020	90.00% Good
	General Purpose Electrical Power	D5030	90.00% Good
	Lighting	D5040	90.00% Good
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Ceiling mounted projectors with VGA cabling, no audio enhancement	
	Audio-Video Communications	D6030	90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	90.00% Good
Furnishings	Fixed Furnishings	E2010	90.00% Good
	Movable Furnishings	E2050	90.00% Good

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

MERCER ISLAND CREST LEARNING CENTER - 01_MAIN BUILDING

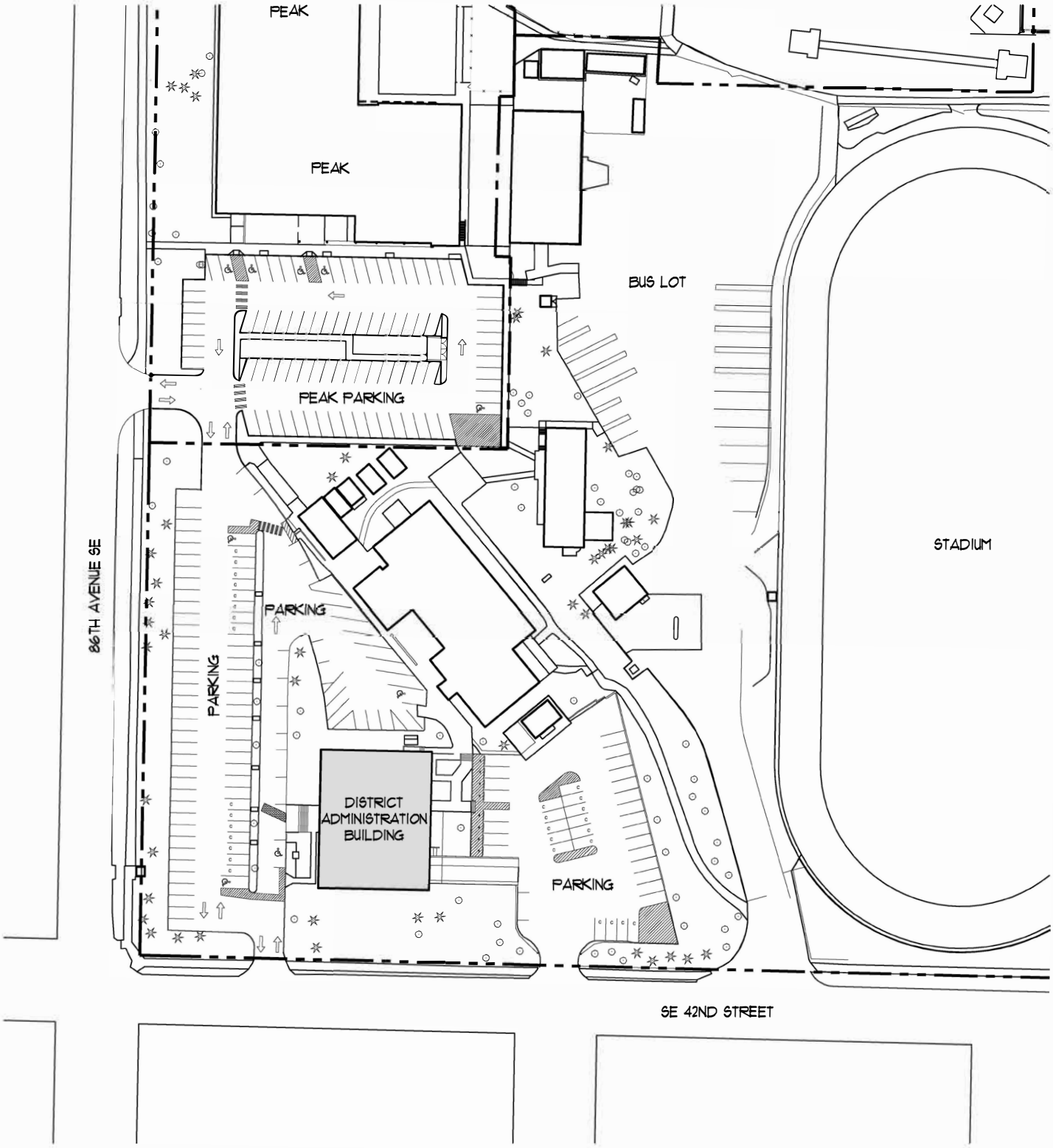
Profile Name: Classroom Building - Slabs On Grade
Inventory Status: Recognized
Condition Rating: 84.63 %

Currently BCA Certified: Yes
Last BCA Certify: 6/27/2018
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Slabs on Grade											
A4010	Standard Slabs on Grade	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2020	Exterior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B3060	Horizontal Openings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1020	Interior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1030	Interior Doors	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2020	Interior Fabrications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2030	Flooring	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
HVAC											
D3010	Facility Fuel Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3020	Heating Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3060	Ventilation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											
D5020	Electrical Services and Distribution	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5030	General Purpose Electrical Power	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐

	D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Communications														
	D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
	D6020	Voice Communications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
	D6030	Audio-Video Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electronic Safety and Security														
	D7010	Access Control and Intrusion Detection	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
	D7030	Electronic Surveillance	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
	D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Integrated Automation														
	D8010	Integrated Automation Facility Controls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Furnishings														
	E2010	Fixed Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
	E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Unused Components														
	B2070	Exterior Louvers and Vents	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐
	B3080	Overhead Exterior Enclosures	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐
	D5010	Facility Power Generation	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐
	D6060	Distributed Communications and Monitoring	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐

Administration Building



SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 1
		Drawn By: JJJ	
	Drawing Title: DISTRICT ADMINISTRATION BUILDING SITE PLAN	Comm. No. 08.12	

SCALE: 1"=100'

0 50' 100' 200' 300'

BLRB architects Pacific Plaza 1250 Pacific Ave., Ste. 700 Tacoma, WA, 98402-4308 P: 253.627.5599 F: 253.572.5167	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 2
	Drawing Title: DISTRICT ADMINISTRATION BUILDING SITE AERIAL	Drawn By: JJJ	
		Comm. No. 08.12	

Administration Building

4160 86th Avenue SE
Mercer Island, WA 98040
206.236.3310

Site Information

County:	King
Approx. Acreage:	27.36 Acres
Zoning:	R-9.6
Tax Parcel No.:	1824059005
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Current Square Footage (permanent construction):	16,100 SF
Number of Portable Buildings on-site:	0

Current Enrollment (OSPI 2016):
N/A

Summary of Teaching Spaces
N/A

Building Condition Evaluation (2018 Study and Survey)

Adjusted Score:	N/A

CONSTRUCTION HISTORY

The District Administration Building was originally constructed in 1966 to house the administrative staff and provide storage for the District. The original program consisted on warehouse storage, info research, and publications on the ground floor. The upper level housed offices for District staff, a curriculum library, a vault, restrooms, a kitchenette, and general storage. An internal Open Court provided daylight to internal offices. Bus parking was located in the parking lot to the east of the District Administration Building. The Administration building was reviewed under the 2018 update however it was not scored under the ICOS system due to the fact it does not house students.

The mechanical system in the publications or print room was updated. The curriculum library was eventually re-purposed into the Board Room. In 1977, approximately half of the internal Open Court was in-filled to provide space for a new lunchroom adjacent to the existing kitchenette and a new Duplicator Room.

In 1987, the existing lunchroom and kitchenette were re-purposed into a secretary area, reception area, and a small conference room. The existing waiting room and secretary space, adjacent to the main entry was turned into a conference room. The southern and western halves of the existing upper floor were renovated to accommodate more office space with the Special Education/ Services located to the south. The Lunchroom was moved to the southeast of the building.

The warehouse on the ground floor was significantly reduced in 1987 to allow space for relocation of the curriculum library, board room, kitchenette, and additional restrooms. This lower floor renovation was sprinkled at that time.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- The administration building is a two story combination concrete, steel and wood structure. It was original constructed in 1965. The structural system consists of concrete spread footing foundations, concrete slab on grade ground floor construction, concrete exterior walls up to the main level, concrete columns, beams and pan floor joist at the main level, steel columns and open web wood roof trusses with plywood sheathing.
- The lateral resisting system for the building consists of the concrete shear walls and diaphragms at the base and steel moment frame with plywood roof diaphragm above the main floor.

Foundation/Structure Condition Evaluation:

- We observed no significant signs of structural distress, deterioration or differential settlement.
- The steel moment frame above the main level does not meet current seismic detailing. The interior non-structural partitions can provide redundant lateral load path for the wood structure above the main floor.

1.2 Exterior Walls System Description:

- Exterior walls below the main level are reinforced concrete walls. The walls above the main floor are not load bearing and consist of wood framed fins and windows.

Exterior Walls Condition Evaluation:

- We observed no significant signs of structural distress, differential settlement or deterioration in the exterior walls. There was some minor damage to the upper portions of the exterior mansard walls from what appears to be woodpeckers. This damage is minor and is considered an ongoing maintenance item.

1.3 Exterior Roof System Description:

- The exterior roof is a built up roof that is relatively flat with minimal slope to four internal drains adjacent to the internal courtyard. The perimeter of the building has two overflow scuppers at the west end of the building

and two scuppers located on the east end. These overflows are 5 ½" x 5 ½" and are approximately 2" above the roofline. The roof has no fall restraint system.

- This building was reroofed in 1988. It was built up over the existing roofing membrane. This was a built-up roof over 1 ½" of insulation.

Exterior Roof Condition Evaluation:

- The roof is in poor condition. The roofing membrane is blistering in several locations. There has been water intrusion around the exhaust fans and flues. The roof has been known to leak into the warehouse on the ground floor during heavy rainfall via the boiler stack. The roof hatch is difficult to operate and needs to be replaced.

1.4 Exterior Windows/Doors System Description:

- The windows original to the building were reglazed 4-5 years ago with insulated units. These windows are set in wood forms. The windows on the east elevation at the lower level are original to the 1987 tenant improvement have insulated glazing set in an aluminum window frame.

Exterior Windows/Doors Condition Evaluation:

- The exterior windows are in good repair.
- The man door leading into the warehouse is difficult to open in the morning.

1.5 Exterior Trim System Description:

- The soffit panel is painted ½" plywood attached to the underside of 32" Trus-Joists. The soffit doesn't appear to have venting. Lights are recessed into this soffit. The joists are faced with painted cedar. Metal flashing over a 2"x8" piece of cedar provides the coping piece.

Exterior Trim Condition Evaluation:

- The exterior trim is in good repair. The soffit requires air circulation for adequate ventilation.

2.0 Interior Building Condition

2.1 Floors System Description:

- The interior floors are generally carpeted with a rubber base. Originally these floors had VCT which was covered by a layer of carpet later, and an additional layer of carpet which is now the finished surface. The east entry and kitchen at the ground level have VCT flooring. The warehouse has a sealed concrete floor. Restroom floors are tiled.

Floors Condition Evaluation:

- The floors are generally in good repair. Given the age of the original construction it is reasonable to assume that the original VCT flooring that is now encapsulated by two layers of carpet has asbestos in the tile and mastic.

2.2 Walls System Description:

- The interior walls are typically gypsum wallboard covered with vinyl wall covering. The restroom walls have a tile wainscot. Some of the lower level walls are painted CMU and concrete.

Walls Condition Evaluation:

- Walls are generally in good repair.

2.3 Ceilings System Description:

- Most of the ceilings are 2'x4' acoustical ceiling panels. The upper floor has 12"x12" acoustical ceiling tiles in some rooms and corridors. The restrooms and main entry have a gypsum wallboard soffit.

Ceilings Condition Evaluation:

- Ceilings are generally in fair repair. The ceiling panels are damaged where water infiltration from the roof occurs.

2.4 Fixed Equipment System Description:

- The print shop has a cutting shear, a drill, and a folding machine. The kitchen has dishwasher, range, refrigerator, and microwave.

Fixed Equipment Condition Evaluation:

- The cutting shear is in good repair. The dishwasher, range, microwave, and folding machine are in fair condition. The refrigerator is in poor condition.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: The Administration Building is fed underground from a pole-mounted, exterior utility transformer. Distribution is 208Y/120V
  - ◊ Switchboard: The main switchboard is a "Federal Pacific" brand "FPE" type switchboard rated for 600A at 208Y/120V. The main switchboard does not have a main disconnect; instead, there are (6) disconnects for downstream panelboards.
  - ◊ Generator: The existing generator is a 15kW "Generac" brand natural gas 208Y/120V generator with a 50A output breaker. The generator and associated ATS were installed in 2012. The generator is not compliant with current National Electric Code (NEC) standards as the NEC requires emergency loads (life safety loads: lighting primarily) be on a separate ATS from other standby loads (telecom loads, pumps, etc.).
  - ◊ Panelboards: Several existing panelboards are "Square-D" brand "NQOD" type boards with only minimal spares or spaces for future capacity. Other existing panelboards are "Federal Pacific" brand "FPE" type panels with no spares or spaces for future capacity.
- Lighting
  - ◊ Exterior fixtures are controlled by a contactor, photocell, and timeclock. Interior fixtures are locally switched by occupants. Exterior fixtures utilize LED retrofit lamps and interior fixtures are mostly 4' LED T-8 retrofit lamps or compact fluorescent fixtures.
- Low Voltage
  - ◊ Intercom/Clock: There is no intercom/clock or overhead paging system present. Paging functions are accomplished using speaker phones.
  - ◊ Telephone System: A Nortel Meridian PBX system is located in a separate telephone room on the basement level. Trunk cabling is extended from the telephone room the MDF located down the hall. The Octel voicemail is at capacity.
  - ◊ Telecommunications: The Main Distribution Frame (MDF) for the facility is located on the basement level. A 400-pair telco service is terminated on a demarcation point mounted on the plywood backboard. T1 circuits provide voice and data connections to service providers and other schools in the District. There are no grounding busbars visible in the MDF. 110 and 66 wiring blocks provide cross-connections from PBX to horizontal cabling serving work areas. An independent air-conditioning unit provides cooling to the space. The room houses (3) 19" equipment racks. The racks contain optical fiber terminations, category 6 modular patch panels and wire management. The following optical fiber cables are terminated in the MDF

- 6-strand singlemode optical fiber to city of Mercer Island (dark)
- 24-strand singlemode (Qwest service)
- 12-strand 62.5/125 multimode to Crest Learning Center
- 12-strand 62.5/125 multimode to Mercer Island High School
- K-20 singlemode optical fiber service

◊ Four-plex electrical receptacles provide power to the equipment racks and wall mounted equipment.

◊ The optical fiber, and UTP voice backbone cables enter the building through underground conduits and pull boxes located in the loading dock area.

◊ Riser-rated category 6 horizontal cabling is installed from racks in MDF to telecommunication outlets in offices. The horizontal cabling is installed above the accessible ceilings using open cabling methods and is terminated on surface mounted telecommunication outlets.

◊ Security: An Ademco Security panel, model number Vista 50-KP6139 is located in the MDF. The system is monitored by Guardian security. Security key pads for arming and disarming the system are located in the loading dock area and at the main entrance.

◊ CATV Distribution: The CATV service cable enters the building in the loading dock area. The service cable terminates in an 18”x18”x6” wall mounted enclosure on RCA a 50 900Mhz 4-way splitter, model number VH-140. The cabling is distributed on a 50 900Mhz 4-way splitter over RG-6 coaxial cabling.

Electrical Condition Evaluation:

- The main switchboard is old and not in good condition. Replacement parts are not readily available for this vintage and manufacturer of switchboard.
- In the main switchboard, the bending radius of the branch panel conductors is tight and appears to violate code.
- Replacement parts are readily available for the newer Square D panels, but replacement parts are not readily available for the Federal Pacific panels.
- The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.
- The intrusion detection and access control functions of the security system are in good condition. However there are no security cameras at the facility to provide video recording or monitoring.

3.2 Plumbing

- Plumbing fixtures on the upper level do not meet ADA requirements. Lavatories are not metered. The fixtures are all in fair condition, but are not low flow.

3.3 Forced Air Heating

- There is no boiler redundancy. The boiler is a Patterson Kelly boiler P-k series model N-700 with 700 btu in/595 btu out. A compression tank is used instead of an expansion tank. Heating is provided by a single hydronic heating pump with no backup. The building has no air separator or Pot feeder/constant volume system. Several areas of hydronic piping are missing insulation.
- A newer Trane chiller was installed in 2017.
- The building has a 5 zone multizone unit air handler with Belimo actuator that is approximately 2 years old. The air handler has a pump and the dampers (OA and SA) are original and not modulating.
- There is a separate system for CU/R and 320 ES which has a heat pump, Carrier, and dual circuit. The building utilizes Hydronic duct heaters.
- The storm system is not adequately insulated. OA Ductwork in the storage area is not insulated. The Data room

has its own air conditioning and carrier. It appears as though additional HVAC units were not added for additional square footage during renovations.

- The range requires exhaust fan to comply with current code requirements. There is no economizer on the multizone system and the ventilation is not adequate or per code. The temperature sensors have no thermostats for control. The multizone units do not have CO2 and EF was installed at the copiers.

4.0 Safety/Building Code

4.1 Means of Exit

- Illuminated exit signs appear to be supplied by the emergency generator distribution or supplied with battery back-up and are located above the exit doors.

4.2 Fire Control Capability

- The 1987 tenant improvement added a sprinkler system to rooms that were part of that contract. There is no sprinkler system on the upper floor.
- The emergency exit leading out of the north side of the lower floor does not have panic hardware. The secondary egress leading out of the boardroom to outside does not connect to a path, but terminates into a planter with stairs. Landscaping in that area makes emergency egress difficult.

4.3 Fire Alarm System - System Description

- The existing fire alarm panel is a “Gamewell” brand “Zans 400” series panel with a “Guardian” brand with recent RF subscriber type dialer. There are 5 initiating circuits and 3 signaling circuits within the building, although the quantity of both notification and detection devices seem relatively low. These circuits use an open-cabling method. The fire alarm panel is not connected to an emergency or standby electrical panel and the latch holding the panel closed is broken.

Fire Alarm System - Condition Evaluation:

- System is an older non-addressable system and appears to be in good working condition. The coverage is minimal and does not appear to comply with current code requirements.

4.4 Emergency Lighting System Description

- Exit signs are typically fluorescent with “bug eye” egress fixtures are installed throughout the facility.

Emergency Lighting Condition Evaluation:

- System appears to be in working condition but does not appear to be of sufficient quantity to meet current code coverage. There appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.

4.5 Fire Resistance

- The wall between the warehouse and adjacent rooms is not rated. There is no indication of fire dampers at ducts penetrating the wall or firestop at pipes and conduit. This wall is shown as a one hour wall in the 1987 construction documents.
- The wall between the east entry corridor and the boardroom is shown as a one hour wall in the 1987 construction documents, but the gypsum wallboard does not extend to underside of structure above.

5.0 Provisions for the Handicapped

5.1 System Description:

- The District Administration Building was built in 1965. A tenant improvement was done in 1987 added a ground floor entry, relocated the board room to the lower floor, added a curriculum library, kitchen, restrooms, and a storage room. The upper floor tenant improvement added office space, a conference room, and a personnel/ file area. The 1987 renovations improved accessibility; however, codes have changed dramatically since then.
- There are two accessible stalls in the western parking lot, facing the main entry. One of the stalls does not have a designated access aisle or pathway to the curb ramp. The other stall has a designated access aisle and path that crosses one way traffic. The handrail for the ramp leading into the building does not have acceptable graspability or extensions. The main stair leading into the building is 19'-8" wide and does not have intermediate handrails. The handrails are also not compliant because of insufficient graspability and extensions. The top landing of the entry stair is greater than 30" above finish floor. The handrail at this location serves as a guard as well and varies in height between 37"-38" above finish floor. The guardrails are vertical and are more than 4" apart.
- The eastern parking lot does not have designated accessible stalls even though the entry and ramp is ADA compliant. There is no accessible route from the parking lot to the concrete sidewalk. In order for a person with disabilities to access the ground floor, they would have to park in the Crest Learning Center handicap stall (which is not fully compliant) and enter via the ramp to the north of the east entry. This ramp does not have adequate handrail extension beyond the bottom landing. Although the approach to both entries does not comply with current standards, both doors have a mechanically assisted accessible entrance operated by a button.
- The building does not have an elevator and the entries are on opposite sides of the building and there is no accessible path around the perimeter. There is one stair in the building which does not have a continuous outer handrail. The inner handrail also serves as the guard and is interrupted by pipe stanchions. This rail also does not have code compliant extensions. The rail is 34" above finish floor and has a wire mesh infill panel at the top landing and at the top stair flight. These stairs present a falling hazard.
- Accessible restrooms built in 1987 are located downstairs. These restrooms have compliant clearances, fixture heights, and accessory heights. There is no insulation on hot water waste piping, and the accessible stall does not have a vertical grab bar required in current standards. The restrooms upstairs were built in 1965 and have no provisions for accessibility.
- Drinking fountains are not accessible.
- With a 30" aisle way, the kitchen downstairs does not have sufficient maneuverability or clearances. The sink and countertop are too high for a person with disabilities at 36" above finish floor.
- Since the handles of many doors throughout the building are close to walls, they do not have compliant minimum maneuvering clearances. Only the interior doors that were added in 1987 have lever handles.
- The inner courtyard has an approximate 3" threshold outside and is not accessible.

Condition Evaluation:

- Accessibility is extremely poor in this building. Significant tenant improvements would be required to bring it up to current standards. Parking lot improvements and site work are also required to make this building accessible.

Site Condition Evaluation

The building is a component of the overall high school campus site plan. It is sited in the southwest corner of the property. To the north of the building sits the Crest Learning Center and its parking lot. The building is flanked by two parking lots on the east and west side. Both of these parking lots were resurfaced and restriped over the summer to gain additional parking and repair the lots that were in poor condition. The western parking lot has two accessible stalls.

Physical Condition:

Parking and Driveway Areas

- The parking lot surfaces are in excellent condition. The extruded concrete curbs in the eastern parking lot, particularly around the loading dock area have been severely damaged by vehicle tires and are broken in several locations.

Hard Surface Play Areas

- This site has no hard surface play areas.

Drainage

- The site has adequate drainage.

Playfields

- The site has no playfields

Fencing

- This site has no fencing.

Play Equipment

- This site has no play equipment.

Landscaping

- Landscaping is generally well maintained.
- Landscaping in southwest corner of property is in poor condition.

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School Facilities and Organization
INFORMATION AND CONDITION OF SCHOOLS
Detailed Condition Assessment by Building
Reporting Year 2018-2019

MERCER ISLAND
Ratings Not Completed

MERCER ISLAND ADMINISTRATION - 01_MAIN BUILDING

Building Details

PROFILE TYPE	Administrative
NUMBER OF FLOORS	2
CHARACTERISTICS	Occupied
COMMENTS	Survey star rating comment: No serious remodel since 1966.

Building Inventory

AREA YEAR BUILT	DISTRICT ASSIGNED AREA	GROSS BUILDING SQ FT	GROSS INSTRUCTIONAL SQ FT	SCAP RECOGNIZED SQ FT	ORIGINAL OCCUPANCY DATE	ORIGINAL BOARD ACCEPTANCE DATE
1966	Area 1	15,000	15,000	0		
	Building Totals	**15,000**	**15,000**	**0**		

Building Components

SUB-ASSEMBLY	COMPONENT	COMPONENT CODE	MAINTENANCE PRIORITY	CONDITION RATING
Foundations	Standard Foundation	A1010		90.00% Good
Water and Gas Mitigation	Building Subdrainage	A6010		90.00% Good
Superstructure	Floor Construction	B1010		90.00% Good
	Roof Construction	B1020		90.00% Good
Exterior Vertical Enclosures	Exterior Walls	B2010		90.00% Good
	Exterior Windows	B2020		62.00% Fair
	Deficiencies:	Deficient Hardware/Operating Parts		
	Causes:	U-Value		
	Exterior Doors and Grilles	B2050		90.00% Good
	Exterior Louvers and Vents	B2070		Not Complete
Exterior Horizontal Enclosures	Roofing	B3010		62.00% Fair
	Deficiencies:	Sagging		
	Causes:	Standing Water, Surface Weathering		
	Roof Appurtenances	B3020		62.00% Fair
	Deficiencies:	Roof Drains Not Draining		
	Causes:	Cracks, Tears, Holes, and Breaks, Surface Weathering		
	Horizontal Openings	B3060		62.00% Fair
	Deficiencies:	Fastening Failure		
	Causes:	Flashing Failure, Mechanical Damage		
Interior Construction	Interior Partitions	C1010		62.00% Fair
	Deficiencies:	Acoustical Transference		
	Causes:	Other		
	Comments:	partition walls in good shape but don't go to structure. Noise transference		
	Interior Windows	C1020		90.00% Good
	Interior Doors	C1030		62.00% Fair
	Deficiencies:	Not ADA Compliant		
	Causes:	Other		
	Comments:	hardware not ada		
	Interior Grilles and Gates	C1040		90.00% Good
	Suspended Ceiling Construction	C1070		90.00% Good
Interior Finishes	Wall Finishes	C2010		62.00% Fair
	Deficiencies:	Cracking, Peeling, Flaking		
	Causes:	Maintenance, Settlement		
	Comments:	Downstairs are mostly cmu walls (mechanical and storage). Upstairs finishes are good		
	Interior Fabrications	C2020		90.00% Good
	Flooring	C2030		90.00% Good
	Ceiling Finishes	C2050		90.00% Good
Plumbing	Domestic Water Distribution	D2010		62.00% Fair

	Deficiencies:	Pressure Loss	
	Causes:	Lack of Insulation	
	Sanitary Drainage	D2020	62.00% Fair
	Deficiencies:	Slow Draining	
	Causes:	Lack of Cleanouts	
	Building Support Plumbing Systems	D2030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	overall age of system	
HVAC	Facility Fuel Systems	D3010	90.00% Good
	Heating Systems	D3020	30.00% Poor
	Deficiencies:	System Inefficient	
	Causes:	Corrosion, Mineral Deposits, Electrolysis, Equipment Obsolescence, Other	
	Comments:	Missing heating water piping insulation, leaks observed in boiler room.	
	Cooling Systems	D3030	100.00% Excellent
	Facility HVAC Distribution Systems	D3050	30.00% Poor
	Deficiencies:	Excessive Particulates, Insufficient Air Flow, System Inefficient	
	Causes:	Cracks, Tears, Holes, and Breaks, Dirty Ducts or Plenums, Equipment Obsolescence	
	Comments:	ductwork leaks and airflows not up to current design standards	
	Ventilation	D3060	30.00% Poor
	Deficiencies:	Excessive Particulates, Stuffy Areas	
	Causes:	Equipment Obsolescence	
Fire Protection	Fire Suppression	D4010	90.00% Good
	Fire Protection Specialties	D4030	90.00% Good
Electrical	Electrical Services and Distribution	D5020	62.00% Fair
	Deficiencies:	Other	
	Causes:	Equipment Obsolescence, Other	
	Comments:	Distribution Equipment approaching end of life.	
	General Purpose Electrical Power	D5030	90.00% Good
	Lighting	D5040	90.00% Good
Communications	Data Communications	D6010	90.00% Good
	Voice Communications	D6020	90.00% Good
	Audio-Video Communications	D6030	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	VGA cabling, no audio enhancement	
	Distributed Communications and Monitoring	D6060	90.00% Good
Electronic Safety and Security	Access Control and Intrusion Detection	D7010	100.00% Excellent
	Electronic Surveillance	D7030	100.00% Excellent
	Detection and Alarm	D7050	100.00% Excellent
Integrated Automation	Integrated Automation Facility Controls	D8010	62.00% Fair
	Deficiencies:	Other	
	Causes:	Other	
	Comments:	Older control system	
Furnishings	Fixed Furnishings	E2010	62.00% Fair
	Deficiencies:	Surface Deterioration	
	Causes:	Defective Material, Physical Damage	
	Movable Furnishings	E2050	90.00% Good

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STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2018-2019 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

MERCER ISLAND ADMINISTRATION - 01_MAIN BUILDING

Profile Name: Administrative
Inventory Status: Non-Recognized
Condition Rating: Ratings Not Completed

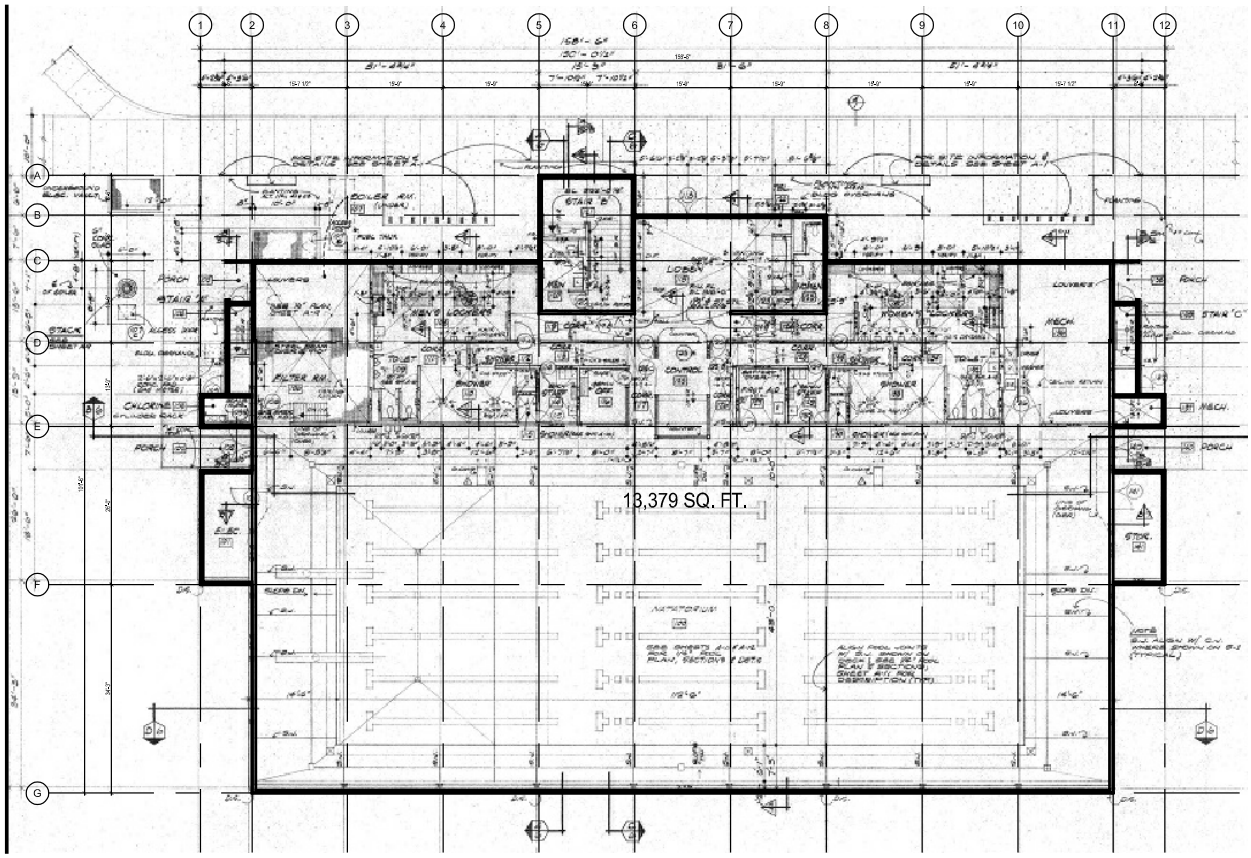
Currently BCA Certified: No
Last BCA Certify:
Last District Review:

Sub-Assembly	Component	Condition Rating E	G	F	P	U	N/A	Component Score	Priority L	M	H
Foundations											
A1010	Standard Foundation	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Water and Gas Mitigation											
A6010	Building Subdrainage	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Superstructure											
B1010	Floor Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B1020	Roof Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Exterior Vertical Enclosures											
B2010	Exterior Walls	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2020	Exterior Windows	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B2050	Exterior Doors and Grilles	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
B2070	Exterior Louvers and Vents	☐	☐	☐	☐	☐	☐		☐	☐	☐
Exterior Horizontal Enclosures											
B3010	Roofing	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3020	Roof Appurtenances	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
B3060	Horizontal Openings	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Interior Construction											
C1010	Interior Partitions	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1020	Interior Windows	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1030	Interior Doors	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C1040	Interior Grilles and Gates	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C1070	Suspended Ceiling Construction	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Interior Finishes											
C2010	Wall Finishes	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
C2020	Interior Fabrications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2030	Flooring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
C2050	Ceiling Finishes	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Plumbing											
D2010	Domestic Water Distribution	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2020	Sanitary Drainage	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D2030	Building Support Plumbing Systems	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
HVAC											
D3010	Facility Fuel Systems	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D3020	Heating Systems	☐	☐	☐	☑	☐	☐	30 %	☐	☐	☐
D3030	Cooling Systems	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D3050	Facility HVAC Distribution Systems	☐	☐	☐	☑	☐	☐	30 %	☐	☐	☐
D3060	Ventilation	☐	☐	☐	☑	☐	☐	30 %	☐	☐	☐
Fire Protection											
D4010	Fire Suppression	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D4030	Fire Protection Specialties	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electrical											

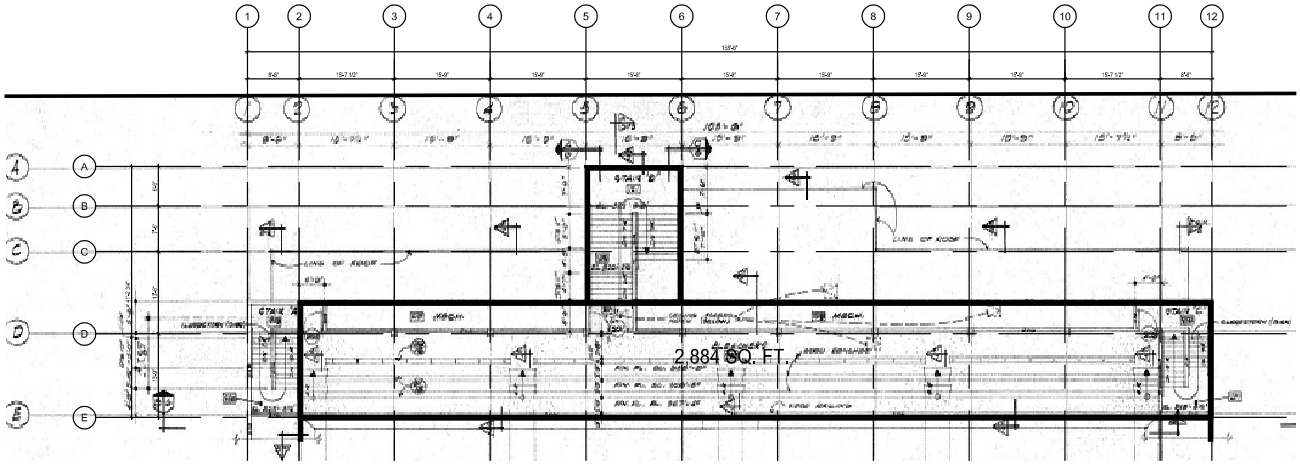
D5020	Electrical Services and Distribution	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D5030	General Purpose Electrical Power	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D5040	Lighting	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Communications														
D6010	Data Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6020	Voice Communications	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
D6030	Audio-Video Communications	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
D6060	Distributed Communications and Monitoring	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Electronic Safety and Security														
D7010	Access Control and Intrusion Detection	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7030	Electronic Surveillance	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
D7050	Detection and Alarm	☑	☐	☐	☐	☐	☐	100 %	☐	☐	☐
Integrated Automation														
D8010	Integrated Automation Facility Controls	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
Furnishings														
E2010	Fixed Furnishings	☐	☐	☑	☐	☐	☐	62 %	☐	☐	☐
E2050	Movable Furnishings	☐	☑	☐	☐	☐	☐	90 %	☐	☐	☐
Unused Components														
B3080	Overhead Exterior Enclosures	☐	☐	☐	☐	☐	☑	0 %	☐	☐	☐

School Facilities and Organization *Generated: Aug 28, 2018* *Page 1 of 1*

Mary Wayte Pool Building



MAIN BUILDING



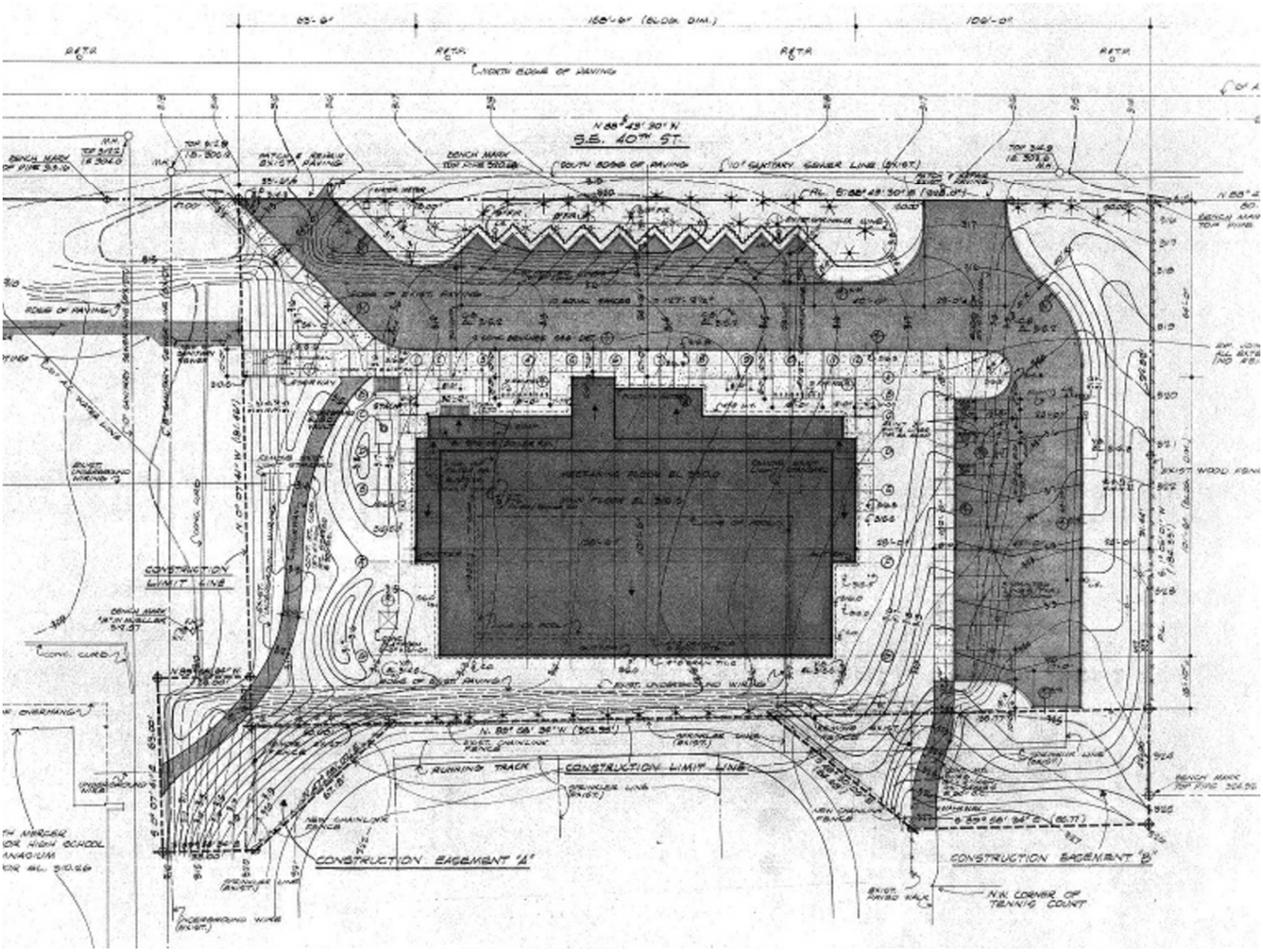
MEZZINE

BUILDING	SQ. FT.
1ST FLOOR	13,379
MEZZININE	2,884
GRAND TOTAL	16,263

SCALE: 1"=30'

0 15' 30' 60' 120'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018	Reference Sheet No. 1
	Drawing Title: MARY WAYTE POOL - 1ST FLOOR PLAN AND MEZZ.	Drawn By: JJJ	
		Comm. No. 18.10	



SCALE: 1"=60'

0 30' 60' 120' 240'

BLRB architects Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: JUNE 2018 Drawn By: JJJ	Reference Sheet No. 2
	Drawing Title: MARY WAYTE POOL SITE PLAN	Comm. No. 18.10	

SCALE: 1"=60'

0 30' 60' 120' 180'

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	Drawing Title: MARY WAYTE POOL SITE AERIAL	Comm. No. 18.10	

Mary Wayte Pool Building

8815 SE 40th Street
Mercer Island, WA 98040
206.588.1117

Site Information

County:	King
Approx. Acreage:	1.64 Acres
Zoning:	R-9.6
Tax Parcel No.:	1824059043
Jurisdiction:	City of Mercer Island
Police Jurisdiction:	Mercer Island Police Department
Fire Jurisdiction:	Mercer Island Fire Department

Building Information

Current Square Footage (permanent construction):	16,263 SF
Number of Portable Buildings on-site:	0

Current Enrollment

N/A

Summary of Teaching Spaces

N/A

Building Condition Evaluation (2018 Study and Survey)

Adjusted Score: N/A

CONSTRUCTION HISTORY

The Pool was originally constructed in 1973 as part of King County Parks. The District took ownership of the building from King County in 2011. The building has always been a pool, designed by Kirk, Wallace, McKinley Architects. It is a wood framed construction single story building with a mezzanine for viewing purposes.

The site has remains relatively unchanged since its construction. 21 parking spaces which include 2 handicap stalls. Hard surface coverage of the lots is approximately 22% of the total area.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 Foundation/Structure System Description:

- The building is primarily a wood framed structure. The original construction date is not known and assumed to be in the late 1960's or early 1970's.
- The primary structural system consist of shallow concrete spread footing foundations, concrete slab on grade floor construction, wood stud exterior walls with, glulam beams and light wood framing with plywood sheathing at the roof. The second floor appears to be structural concrete supported by CMU bearing walls.
- The lateral force resisting system of the building is the plywood shear walls and roof diaphragm. At the second floor, the concrete floor acts as a diaphragm spanning between CMU shear walls.

Foundation/Structure Condition Evaluation:

- We did not observe any significant signs of structural distress, deterioration or differential settlement.
- There have been some changes in the building code since Crest Learning Center was seismically upgraded and added onto in 1997. The current IBC requires a 1.25 importance factor for school design. It is assumed that the existing structure is not in full compliance with the current code.

1.2 Exterior Walls System Description:

- Exterior walls are wood framed walls with plywood sheathing.

Exterior Walls Condition Evaluation:

- No significant signs of structural distress, deterioration or differential settlement.

1.3 Exterior Roof System Description:

- The exterior roof is a composite shingle roof with a 4:12 slope. Originally designed with wood shakes now has composition shingles that appear to be near the end of their life span. It is not verified but the roof is insulated with 3" of ridged insulation below. It is not known if the shingles are vented below. The roof has no fall restraint system.

Exterior Roof Condition Evaluation:

- The roof is in poor condition. The comp shingles have moss growing in between them and are starting to curl.

1.4 Exterior Windows/Doors System Description:

- The windows were re-glazed years ago with insulated units in a most places. The windows are aluminum set in wood forms.

Exterior Windows/Doors Condition Evaluation:

- The exterior windows are clerestory windows and appear to have been changed out over the years to be insulated aluminum windows but it is difficult to tell their condition due to the height in the building.

1.5 Exterior Trim System Description:

- The soffit panel is painted ½" plywood attached to the underside of joists.. Lights are mounted on the soffit. Metal flashing will need to be replaced when the next time the roof is replaced.

Exterior Trim Condition Evaluation:

- The exterior trim is in fair repair. The soffit requires air circulation for adequate ventilation. However the roof itself has rigid insulation and therefore is not vented currently.

2.0 Interior Building Condition

2.1 Floors System Description:

- The interior floors are generally exposed aggregate concrete. The entry at ground level has 8x8 VCT flooring. The locker rooms have a sealed concrete floor. Shower floors are tiled with 1x1 tile.

Floors Condition Evaluation:

- The floors are generally in good repair. Given the age of the original construction it is reasonable to assume the original VCT flooring has asbestos in the tile and mastic however the district has had it evaluated and it does not.

2.2 Walls System Description:

- The interior walls are typically gypsum wallboard covered with stucco. The restroom walls have a tile wainscot.

Walls Condition Evaluation:

- Walls are generally in good repair.

2.3 Ceilings System Description:

- The ceilings in the main lobby are exposed cedar panels. Ceilings in the main pool facility are exposed wood trusses, purlins, joists, and decking. GWB with a stucco skim coat in the stairwells and locker rooms

Ceilings Condition Evaluation:

- Ceilings are generally in fair repair.

3.0 Mechanical/Electrical Systems Condition

3.1 Electrical System Description:

- Power Distribution
  - ◊ Utility Service: The Administration Building is fed underground from a pad-mounted, exterior utility transformer. Distribution is 208Y/120V
  - ◊ Switchboard: The main switchboard is rated for 600A at 208Y/120V Which appears to be original to the building. Switchboard is showing significant signs of corrosion.
  - ◊ Generator: No generator on site.
  - ◊ Panelboards: Several existing panelboards are "GE" brand boards with only minimal spares or spaces for future capacity.

- Lighting
  - ◊ Exterior fixtures are controlled by a contactor, photocell, and timeclock. Interior fixtures are locally switched by occupants. Exterior fixtures utilize high-pressure sodium lamps and interior fixtures are mostly 4' T-8 fluorescent or compact fluorescent fixtures.

Electrical Condition Evaluation:

- The main switchboard is old and not in good condition. Switchboard, panelboards and receptacles all show significant corrosion and should be replaced in the near future.

3.2 Plumbing

- Plumbing fixtures are dated and showing signs of wear, and in some areas corrosion. Toilets and urinals are not low flow style.
- Hot water is fed from a relatively newer hot water heater located in the boiler room. Corrosion/scaling was observed on domestic piping and fittings.

3.3. Forced Air Heating

- There is no boiler redundancy. The existing boiler has severe corrosion on the casing but is still operating. Hydronic piping in the boiler room is also showing signs of corrosion. The pool heat exchanger appears to be in fair condition. Plumbing lines routed under the pool were recently recoated and appear to be functioning well.
- There is inadequate ventilation throughout the building and humidity levels appeared to be higher than what is recommended for a pool hall.

4.0 Safety/Building Code

4.1 Means of Exit

- While the facility has not been remodeled over the years there have been upgrades to the illuminated exit signs and supplied with battery back-up and are located above the exit doors.

4.2 Fire Control Capability

- The facility does not have a sprinkler system..
- The emergency exits do not meet current ADA panic hardware requirements but rather are vintage crash bar exiting device. The secondary egress leading out of the boardroom to outside does not connect to a path, but terminates into a planter with stairs. Landscaping in that area makes emergency egress difficult.

4.3 Emergency Lighting System Description

- Exit signs are typically fluorescent with "bug eye" egress fixtures are installed throughout the facility.

Emergency Lighting Condition Evaluation:

- System appears to be in working condition but does not appear to be of sufficient quantity to meet current code coverage. Batteries may be nearing end of life for code required egress time.

5.0 Provisions for the Handicapped

5.1 System Description:

- There are two accessible stalls in the eastern parking area, around the corner from the main entry. One of the stalls does not have a designated access aisle or pathway to the curb ramp. The other stall has a designated access aisle and path that crosses one way traffic.

- The building does not have an elevator and the entry is located mid building with egress exits from the mezzanine on both the east and west sides. There is a main stair in the middle of the building near the main entrance.
- Restrooms are not fully accessible and are located within the locker rooms for both men and women.
- Drinking fountains are not accessible.
- Since the handles/knobs of many doors throughout the building are close to walls, they do not have compliance.

Condition Evaluation:

- Accessibility is extremely poor in this building. Tenant improvements would be required to bring it up to current standards. Parking lot improvements and site work are also required to make this building accessible.

Site Condition Evaluation

The building is a component of the overall high school campus site plan. It is sited in the northesst corner of the property. To the north of the building sits the main parking lot but there is a bit of parking on the east side as well. The west side parking lot belongs to Northwood Elementary. Parking lot. The eastern parking lot has two accessible stalls.

Physical Condition

Parking and Driveway Areas

- The parking lot surfaces are in good condition.

Drainage

- The site has adequate drainage.

Playfields

- This site has no playfields.

Fencing

- This site has no fencing.

Play Equipment

- This site has no play equipment

Landscaping

- Landscaping is generally well maintained.