

RODD HANSEN, ARCHITECT, L.L.C.

ARCHITECTURE AND PLANNING

Date: May 24, 2023

To: All Prime Bidders

RE: Springfield High School – Softball Practice Facility
875 7th Street
Springfield, Oregon



ADDENDUM #1:

YOU ARE HEREBY DIRECTED TO PERFORM THE FOLLOWING WORK AND INCLUDE THE FOLLOWING WORK IN YOUR BID.

- Item #1: The Pre-Bid attendance sheet is included herein.
- Item #2: The District shall be responsible for paying for all permits, including special inspections. The Contractor is responsible for coordinating the schedule for special inspections.
- Item #3: The following items shall be O.F.O.I. (owner furnished owner installed) – standing seam metal roofing and restroom partitions.
- Item #4: The following items shall be O.F.C.I (owner furnished contractor installed) – All casework in Team Room 105 and Concession 113.
- Item #5: Sheet A6.1: The siding above the belly band shall be Hardi-Plank – cedarmill finish – 6” exposure.
- Item #6: Detail 11/A7.2 – the prefinished gutter shall be 6” fascia style – color as selected for standard color palette.
- Item #7: Concrete curing, finishing, sealing:
Curing & Sealing products:
1. Curing and protection paper: Products shall comply with ASTM C 171. Use nonstaining curing paper or paper with polyethylene film on floor slabs.
 2. Liquid curing & hardening agents as manufactured by Sonneborn or its descendants, or approved.
 3. Interior Flatwork to receive finish covering: Clear, colorless, with fugitive dye, approved by floor covering Contractor; meet or exceed ASTM C-309-Type 1., no VOC.

Curing of Slabs:

- A. Provide for curing of concrete as per ACI 308 for a minimum of seven days. Start curing procedures promptly after pour, to protect concrete from premature drying. Control curing methods, covers, and wetting, with special attention to weather conditions. Apply curing compound in strict accordance with manufacturer's instructions for conditions of use.
- B. During curing, protect concrete from heat or cold, to maintain temperature between 50 and 70 F. Degrees. Protect concrete from inclement weather, running water, construction equipment, movement and load stress. Apply liquid sealer in strict accordance with manufacturer's instructions for conditions of use.

Finishing of Slabs:

- A. Match up finish work to adjacent or nearby surfaces at all joints, edges, and corners.
- B. Floating, troweling, and special finishes shall be as noted on the Drawings. Do not begin floating until bleed water is gone and avoid over-troweling. Do not dust cement to expedite troweling start time.
- C. Complete finishes as shown on the Drawings including troweled finish for walking surfaces or those receiving floor covering or membrane. Broom finish shall be non-slip for landings and walkways.
- D. After first floating, check plane of surface with 10' steel straight edge. Finish work, measured with a 10' straightedge, must not exceed a tolerance of 1/8" in 10' in any direction. Exterior slabs which allow ponding of water to occur shall be removed and replaced.

- Item #8: All windows shall be white vinyl, Milgard, Alpine, Certainteed, or approved.
- Item #9: Detail 4, 8, 12/A9.2 – delete all reference to window trim - All window head, jamb and sills shall be wrapped with gyp. bd. – square corner bead – prime and paint.
- Item #10: Sheet A9.1 – The Door, Window, Finish and Hardware schedules have been updated and attached herein.
- Item #11: Detail 19/A10.1: delete reference to Keynote #13.
- Item #12: Sheet E200 – The electrical fixture schedule has been updated.
- Item #13: Refer to Section 00 07 00 – General Conditions of the Contract – Attached.
- Item #14: Builders Risk insurance shall be provided by the Owner.

- Item #15: The roll-up door in the concession area shall be “Overhead Door” – Counter Door 650 Series.
- Item #16: The 4” rubber base shall be “Burke” – color as selected by Owner.
- Item #17: The resilient sheet vinyl shall be “Armstrong – Corlon” – color as selected by Owner.
- Item #18: The countertops are furnished and installed by the Contractor. The finish material shall be “Wilsonart” plastic laminate – color as selected by Owner. Countertops are located in the Concession area only.
- Item #19: Sheet A9.1 – Finish Schedule – Material #6 shall be modified from CDX plywood to CCPTS plywood.
- Item #20: Sheet P001 – Fixture Schedule – WC-1 shall be modified to a floor mount toilet. Delete carrier.
Use American Standard Madera FloWise 16-1/2” height elongated flushometer toilet – white. Include seat and flushometer valve.
- Item #21: Sheet A3.2 – All upper windows shown shall have DF #2 4x8 headers.
- Item #22: Sheet A3.1 & A9.1 – Install full length aluminum thresholds at Doors 101B, 102A and 103A.
- Item #23: Sheet A3.1 & A9.1 – the exterior ceiling space outside the concession and restroom area shall have pre-primed 5/8” plywood soffit (cedarmill finish) over the exposed trusses.
- Item #24: Sheet E101 has been updated.
- Item #25: The following specification sections have been revised and included herein:
Section 26 09 23 – Lighting Control Devices
Section 26 24 16 – Panelboards
Section 26 50 00 – General Lighting Provisions.
- Item #26: The building type is Type V-N-Sprinklered. The fire sprinkler design shall be a deferred submittal via design-build. This shall be included in the scope of work.
- Item #27: The geotechnical report shall be provided by the Owner, and is currently not available.

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- Item #28: Section 01 10 00 – Summary of Work: Delete all references to background check requirements.
- Item #29: The Substantial Completion Date has been revised to January 19, 2024 and the Final Completion Date to January 26, 2024.

END OF ADDENDUM #1



Springfield Public Schools

SPRINGFIELD SCHOOL DISTRICT 19
PRE-BID CONFERENCE ATTENDANCE

BID NAME: Springfield High School Softball Practice Facility Project

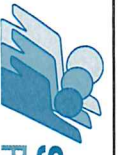
Wednesday, May 17, 2023 3:30 PM

Name	Company	Company Address	CCB#	E-Mail Address	Phone Number
Jeff Eversett	John Hynds Construction	PO Box 7867 Spokane, WA 99207	46071	JeffEversett@ihcncst.com	509-726-8081
Dave Bakke	Chambers Const.	3028 Twilins Road Everett, WA 98201	07903	dbakke@chambers-const.com	509-687-9445
Brett Culmann	Crawford Etc			brett@CrawfordEtc.com	509-505-6809
Larry Brabham Sr.	L. R. Brabham Inc	68 West 6 Street	97477	larry@lbrabham.com	509-747-6638
Don Strive	DSL Builders LLC	195 Pine St NE Salem, OR 97301	19282	jim@dsl-builders.com	509-294-2826
Mark Taisey	Western States	Westport OR 411 W. 1st Eugene, OR		mtaisey54@gmail.com	509-844-9036
Jodi Arend	BCI		76336	info@BINEHAM CONSTRUCTION.COM	509-484-9405
Adam Alexander	"				"
Alex Kiva	WILDISH BUILDING CO.	3600, WILDISH LANE		ESTIMATING@WILDISH.COM	509-255-7758
James Miller	GBC Construction	1925 NW 4th Street		James@gbcconstruction.com	509-285-8496

The above mentioned company representatives are hereby acknowledged as having attended the mandatory pre-bid conference at 3:30 PM on Wednesday, May 17, 2023

Date
5/17/23

Authorized District Representative
Melina Stalder



Springfield
Public Schools

SPRINGFIELD SCHOOL DISTRICT 19
PRE-BID CONFERENCE ATTENDANCE

BID NAME: Springfield High School Softball Practice Facility Project

Wednesday, May 17, 2023 3:30 PM

Name	Company	Company Address	CCB#	E-Mail Address	Phone Number
Ryan Dellit	Swineerton	542 Sw 2nd Ave Portland OR 97204	78483	Ryan.Dellit@swineerton.com	971-442-1511
Tim Kover	ATK CONSTRUCTION		222033	atkcconstruction@gmail.com TimKover@atkcconstruction.com	503-951-3084 541-224-1581
Joe Freeman	GBC CONSTRUCTION			joe@gbconstruction.com	
Don Brandt	Crawford			don@Crawfordelectronics.com	

The above mentioned company representatives are hereby acknowledged as having attended the mandatory pre-bid conference at 3:30 PM on Wednesday, May 17, 2023

Date
5/17/23

Authorized District Representative
Melina J. Miller

REFERENCES:

1. The General Conditions shall be "General Conditions of the Contract and/or Construction, Springfield School District No. 19, Lane County, Oregon," bound herein.

SUPPLEMENTS:

1. Supplements may modify, change, delete, or add to the General Conditions. Where any article of the General Conditions is modified or any paragraph deleted, subparagraph or clause thereof is modified, or deleted by these supplements, the unaltered provisions of such article, paragraph, subparagraph or clause shall remain in effect. The General Conditions and the Supplementary General Conditions are applicable to all of the Work under this Contract and shall apply to one Contractor and all Subcontractor's and Sub-subcontractors.

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ARTICLE 1
GENERAL PROVISIONS

1.1 DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, Supplementary and Special), the Drawings, the Specifications, and all Addenda issued prior to execution of the Contract, written amendments to the Contract signed by the Owner and the Contractor, Change Orders, a written interpretation or clarification issued by the Architect pursuant to Subparagraph 3.2.17 or a written order issued by the Construction Project Manager pursuant to Subparagraph 12.1.2, the Bidding Documents, such as the Advertisement or Invitation to Bid and the Instructions to Bidders, and the Contractor's Proposal.

1.1.2 THE CONTRACT

The Contract is the sum of all the Contract Documents. This Contract represents the entire and integrated agreement between the Owner and the Contractor and supersedes all prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by (1) a written amendment to the Contract signed by the Owner and the Contractor, (2) a Change Order, (3) a written interpretation or clarification issued by the Architect pursuant to Subparagraph 3.2.17, or (4) a written order issued by the Construction Project Manager pursuant to Subparagraph 12.1.2.

1.1.3 THE WORK

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

1.1.5 PLANS OR DRAWINGS

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

1.1.6 SPECIFICATIONS

The Project Manual is that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services. These are written to, and for, the Contractor, with guidance and reference given to suppliers and subcontractors in separate sections. It is the responsibility of the Contractor to ensure that all construction items in each section are implemented.

1.1.7 PROJECT MANUAL

The Project Manual is a volume assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

1.1.8 AS SHOWN, AS INDICATED, AS DETAILED

These words, and words of like implication, refer to information contained in the drawings describing the Work, unless explicitly stated otherwise in other Contract Documents.

1.1.9 BIDDER

Any individual, company, corporation, partnership, or joint venture who submits a bid to the Owner for the Work as distinct from a sub-bidder who submits a bid to a Bidder. "Lowest responsible bidder" and "resident bidder" are as defined in ORS 279C.375 and ORS 279A.120.

1.1.10 BIDDING DOCUMENTS

The Invitation to Bid, Instructions to Bidders, Sample Forms, Proposal, all Conditions of the Contract, Specifications, Drawings and Addenda issued prior to receipt of bids by Owner.

1.1.11 DIRECTED, REQUIRED, ACCEPTABLE

When these words refer to the Work or its performance, "directed," "required," "permitted," "ordered," "designated," "prescribed," and words of like implication, mean "by direction of," "requirements of," "permission of," "order of," "designation of," or "prescription of" the Architect. Likewise, "acceptable," "satisfactory," "in the judgement of," and words of like import, mean "recommended by," "acceptable to," "satisfactory to," or "in the judgement of" the Architect.

1.1.12 MANUFACTURER

An individual, company, or corporation who manufactures, fabricates, or assembles a standard product. A standard product is one that is not made to special design, and is furnished by either direct sale or by contract to the Contractor, Subcontractor or Vendor.

1.1.13 MATERIAL SUPPLIER OR VENDOR

A person or organization who supplies, but who is not responsible for the installation of, materials, products and equipment of a standard nature that are not specifically fabricated for this particular contract.

1.1.14 PRODUCT

The term "product" includes materials, systems and equipment.

1.1.15 PROPOSAL

A complete and properly signed document (whether entitled "bid" or "proposal") whereby a Bidder proposes to do the Work or designated portion thereof for the sums stipulated therein, supported by data called for by the bidding requirements.

1.1.16 PROVIDE

As a directive to the Contractor, "provide" means "furnish and install completely".

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. Work not covered in the Contract Documents will not be required unless it is consistent therewith or is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings unless otherwise specifically defined herein.

1.2.2 The organization of the Specifications into division, sections and articles, and the arrangement of the Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

1.2.3 If any portion of the Contract Documents shall be in conflict with any other portion, the various documents comprising the Contract Documents shall govern in the order of precedence as herein set forth according to their latest date of execution; written interpretation or clarification by the Architect issued pursuant to Subparagraph 3.2.18 or by the Construction Project Manager pursuant to Subparagraph 12.1.2; Change Orders; written amendments to the Owner-Contractor Agreement; the Owner-Contractor Agreement; Addenda; Special Conditions; Supplementary Conditions; General Conditions; Specifications; Drawings; Bidding Documents; Contractor's Proposal. The Specifications take precedence over Drawings for the specific type or quality of materials or the quality of installation; the Drawings take precedence over the Specifications with regard to quantities, locations or detail of installation; as between schedules and general notes given on Drawings, the general notes shall take precedence; as between general notes given on the Drawings and specific, detailed notes, the latter shall take precedence; as between large-scale Drawings and small-scale Drawings, the larger scale shall take precedence. Specifications having greater detail or specificity; and details take precedence over general drawings.

1.2.4 The Contractor agrees that nothing contained in the Contract Documents or any Contract between the Owner and the Construction Project Manager or the Owner and the Architect shall create any contractual relationship

between the Construction Project Manager and the Contractor, the Architect and the Contractor, the Architect and the Construction Project Manager, or between the Owner, Architect and Construction Project Manager and any Subcontractor or Sub-subcontractors. The Contractor acknowledges and agrees that this Agreement is not intended to create, nor shall any provision be interpreted as creating any contractual relationship between the Owner or Contractor and any third parties.

1.2.5 Any material or operation specified by reference to published specifications of a manufacturer, a society, an association, a code, or other published standard, shall comply with requirements of the listed document which is current on date of receipt of Proposals. In case of a conflict between referenced document and Project Specifications, Project Specifications shall govern. In case of a conflict between referenced documents, the one having more stringent requirements or higher value shall govern.

1.2.6 The Contractor, if requested, shall furnish an affidavit from manufacturer certifying that a material or product delivered to job meets requirements specified.

1.2.7 By executing the Contract, the Contractor represents that Contractor has visited the site, familiarized itself with the local conditions under which the Work is to be performed, and correlated Contractor's observations with the requirements of the Contract Documents.

1.2.8 The Contract Documents may be executed in counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

1.3 OWNERSHIP AND USE OF DRAWINGS AND SPECIFICATIONS

1.3.1 Unless otherwise provided in the Contract Documents, the Contractor will be furnished one copy of the Contract Documents. Any reproduction and use of the Contract Documents shall be solely and exclusively for the execution of the Work, and may not be used on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner and Architect.

1.3.2 After Bid Award, electronic copies containing simplified versions of the electronic construction drawings will be forwarded to the general contractor for the general contractor's use and distribution as base drawings for the preparation of the general contractor's shop drawings. The Architect, or the Architect's consultants, will not issue electronic drawing files of any nature to anyone other than the Contractor. The electronic copies may contain the following simplified drawings, as deemed appropriate by the Architect: Civil Site Plan(s), Base Floor and Reflected Ceiling Plans from architectural, structural, mechanical, electrical and other specialty consultants, General Building Sections.

The electronic copies will not contain the following items: Addenda issued during bidding, Specifications, Details, Schedules, or other items issued in the Project Manual.

Electronic drawings will generally be in AutoCad format, unless other formats are used by the Architect or their consultants. The Architect will not convert the formats provided to the Contractor, from other formats.

1.3.3 All Drawings, Specifications and copies thereof furnished to, or made by, the Contractor are and shall remain property of the Architect and the Owner. With the exception of one contract set for each party to the Contract, such documents are to be returned or suitably accounted for to the Owner on request at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the common law copyright or other reserved rights of the holder thereof.

ARTICLE 2
OWNER

2.1 DEFINITION

2.1.1 The Owner is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number. The term Owner means the Owner or its authorized representatives or agents.

2.2 CONSTRUCTION PROJECT MANAGER

2.2.1 The Construction Project Manager is the Owner's exclusive representative and agent to the Contractor with respect to this Project during construction and until the issuance of the final Certificate of Payment. The Owner's communications with the Contractor and Architect shall be exclusively through the Construction Project Manager. The Construction Project Manager will have full authority to act on behalf of the Owner with regard to all aspects of this Project except that the Owner must approve all Change Orders and payments to the Contractor. All of the Construction Project Manager's actions with regard to this Project will be as an agent and representative of the Owner. If no Construction Project Manager is designated in the Owner-Contractor Agreement, all references to the "Construction Project Manager" shall be deemed to refer to the Owner.

2.2.2 The Construction Project Manager is not authorized to revoke, alter, enlarge, relax or release any requirements of the Contract Documents, nor to approve or accept any portion of the Work not executed in accordance with, nor to issue instructions contrary to the Contract Documents.

2.3 INFORMATION, SERVICES AND RIGHTS OF THE OWNER

2.3.1 The Owner, through the Construction Project Manager, will provide administration of the Contract as hereinafter described.

2.3.2 The Owner and the Construction Project Manager shall at all times have access to the Work whenever it is in preparation or progress. The Contractor shall provide safe facilities for such access.

2.3.3 The Owner and the Construction Project Manager shall not be responsible for or have control or charge of the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

2.3.4 The Owner and Construction Project Manager will not be responsible for the failure of the Contractor to plan, schedule and execute the Work in accordance with the approved schedule or the failure of the Contractor to meet the Contract completion dates or the failure of the Contractor to schedule and coordinate the Work of Contractor's own trades and Subcontractors or to coordinate and cooperate with other separate Contractors.

2.3.5 The Owner and Construction Project Manager will not be responsible for the acts or omissions of the Architect, the Contractor, any other contractor, or any subcontractor, or any other contractor's or subcontractor's agents or employees, or any other persons performing any of the Work.

2.3.6 The Construction Project Manager has authority to disapprove, condemn or reject work on behalf of the Owner when, in the Construction Project Manager's opinion, the Work does not conform to the Contract Documents. Whenever in the Construction Project Manager's reasonable opinion it is considered necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, the Construction Project Manager shall have the authority to require special inspection or testing of any work in accordance with the provisions of the Contract Documents whether or not such work is then fabricated, installed, or completed.

2.3.7 The Construction Project Manager will have authority to require special inspection or testing of the Work in accordance with Subparagraph 2.3.6 whether or not such Work is then fabricated, installed or completed. However, neither the Construction Project Manager's authority to act under Subparagraphs 2.3.6 and 2.3.7, nor any decision made by the Construction Project Manager in good faith either to exercise or to not exercise such authority, shall give rise to any duty or responsibility of the Construction Project Manager to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.

2.3.8 The Construction Project Manager shall have the authority and discretion to call, schedule and conduct job meetings to be attended by the Contractor, Subcontractor representatives and the Architect to discuss such matters as procedures, progress, problems and scheduling.

2.3.9 The Construction Project Manager will establish procedures to be followed for processing all shop drawings, catalogs and other Project reports and other documentation, test reports and maintenance manuals.

2.3.10 The Construction Project Manager will review all requests for changes and shall implement the processing of Change Orders including applications for extensions of time.

2.3.11 The Construction Project Manager will review and process all applications for payment by the Contractor, including final application for payment and will consult with the Architect as appropriate.

2.3.12 The Owner will furnish all surveys in its possession describing the physical characteristics, legal limitations and utility locations for the site of the Project. The Contractor shall carefully review this data since the Owner makes no warranty as to accuracy or completeness of such surveys.

2.3.13 The Owner will secure and pay for easements for permanent structures or permanent changes in existing facilities.

2.3.14 Information or services under the Owner's control will be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.

2.4 OWNER'S RIGHT TO STOP THE WORK

2.4.1 If the Contractor fails to correct defective Work as required by Paragraph 4.6 or persistently fails to carry out the Work or supply labor or material in accordance with the Contract Documents, the Construction Project Manager, by a written order, may instruct the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Construction Project Manager to stop the Work on behalf of the Owner shall not give rise to any duty on the part of the Construction Project Manager to exercise this right for the benefit of the Contractor or any other person or entity.

2.4.2 The Construction Project Manager may order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the Owner.

ARTICLE 3 ARCHITECT

3.1 DEFINITION

3.1.1 The Architect is the person or organization lawfully licensed to practice architecture or engineering, or any entity lawfully practicing architecture or engineering, and identified as such in the Owner-Contractor Agreement, and is referred to throughout the Contract Documents as if singular in number. The term Architect means the Architect and its architects and engineers, whether under contract or within its own organization, or its authorized representatives.

3.1.2 Communications between the Contractor or subcontractors and Architects, employees or subconsultants, shall be limited to matters of information; but in no case shall such communications relate to or authorize changes in the Work or give rise to claims for additional Work. The Architect, its architects, engineers, and their employees must communicate with the Contractor only through the Architect's authorized representative and through the Construction Project Manager as provided elsewhere in these contract documents.

3.2 SERVICES OF THE ARCHITECT

3.2.1 The Architect will provide certain services as hereinafter described.

3.2.2 The Architect shall at all times have access to the Work whenever it is in preparation or progress. The Contractor shall provide safe facilities for such access so the Architect may perform its functions under the Contract Documents.

3.2.3 The Architect is not the agent of the Owner and has no authority to agree on changes in the Contract Sum or Contract Time on the Owner's behalf. The Architect will not be responsible for or have control or charge of the

construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for the acts or omissions of the Contractor, any Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.

3.2.4 The Architect shall review Shop Drawings, Product Data and Samples, and other submissions of the Contractor as well as the Work performed by the Contractor but only for conformance with the design concept of the Project and for general compliance with the Contract Documents. The review of submittals shall be accomplished by the Architect within fifteen (15) calendar days from date of receipt except when authorized otherwise by the Construction Project Manager.

3.2.5 The Construction Project Manager will establish with the Architect, procedures to be followed for review and processing of all Shop Drawings, catalog submissions, Project reports, test reports, maintenance manuals, and other necessary documentation, as well as requests for changes and applications for extensions of time.

3.2.6 The Architect shall, when requested by the Construction Project Manager, prepare Change Orders.

3.2.7 Should errors, omissions or conflicts in the Drawings, Specifications or other Contract Documents by the Architect be discovered, the Architect will prepare such amendments or supplementary documents, and provide consultation as may be required.

3.2.8 The Architect will make such periodic visits to the Project site as may be necessary to familiarize itself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of such on-site observations, the Architect shall endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor. The Architect and its consulting engineers shall not be required to make exhaustive or full-time on-site inspections to check the quality or quantity of the Work, but shall make as many inspections as may be reasonably required to fulfill the Architect's obligations to the Owner.

3.2.9 The Architect will render written field reports to the Construction Project Manager in the form required by the Construction Project Manager relating to the periodic visits and inspections of the Project required by Subparagraph 3.2.8.

3.2.10 The Architect shall consult with the Construction Project Manager regarding the Contractor's Applications for Payment and shall sign the Certificates of Payment as provided in Subparagraph 9.4.2.

3.2.11 If the Architect observes any work that does not conform to the Contract Documents, the Architect shall report this observation to the Construction Project Manager.

3.2.12 The Architect has authority to disapprove, condemn or reject work on behalf of the Owner when, in the Architect's opinion, the Work does not conform to the Contract Documents. Whenever in the Architect's reasonable opinion it is considered necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, the Architect will have the authority to require special inspection or testing of any Work in accordance with the provisions of the Contract Documents whether or not such Work is then fabricated, installed or completed.

3.2.13 The Architect will prepare on a regular basis, a "deficiency list" of items during the process of construction that are not in conformance with the Contract Documents. The Construction Project Manager will transmit such lists to the Contractor for corrections.

3.2.14 The Architect will prepare and submit to the Construction Project Manager "punchlists" at Substantial Completion of Work of the Contractor which are not in conformance with the Contract Documents. The Construction Project Manager will transmit such lists to the Contractor for correction or completion thereof.

3.2.15 The Architect and Construction Project Manager shall conduct observations to determine the dates of Substantial Completion and Final Completion and will jointly issue a final Certificate for Payment.

3.2.16 The Architect will prepare a set of reproducible Record Drawings showing significant changes in the Work made during the construction process, based on the as-built drawings and other data furnished by the Contractor. The Architect will also transmit the as-built drawing in electronic format.

3.2.17 The Architect will provide the Owner assistance in the original operation of any equipment or system such as initial start-up, testing, adjusting and balancing.

3.2.18 As required, the Architect will render to the Construction Project Manager, within a reasonable time, interpretations or clarifications of requirements of the Contract Documents. The Architect will make all interpretations consistent with the intent of, and reasonably inferable from, the Contract Documents. The Architect's decisions in matters relating to artistic effect shall be final if consistent with the intent of the Contract Documents.

3.2.19 All communications, correspondence, submittals and documents exchanged between the Architect and the Contractor in connection with the Project shall be through the Construction Project Manager or in the manner prescribed by the Construction Project Manager.

3.2.20 If the Owner terminates the employment of the Architect, the Owner may appoint a new Architect. Status of the new Architect under the Contract Documents shall be that of the former Architect.

3.2.21 The Architect is not bound to define the limits of any subcontract, and will not enter into disputes between the Contractor and its employees, including Subcontractors. Notwithstanding any provision of the Contract Documents to the contrary, all decisions, order and certificates of Architect are advisory only and not binding upon Owner until approved by Owner.

ARTICLE 4 CONTRACTOR

4.1 DEFINITION

4.1.1 The Contractor is the person or organization identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number. The term Contractor means the Contractor or its authorized representatives, who shall have authority to bind the Contractor in all matters pertinent to this Contract.

4.1.2 The service or services to be rendered under this Contract are those of an independent contractor. Contractor is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

4.1.3 Contractor is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under this Contract. Contractor will not be eligible for any benefits from these contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual.

4.1.4 If this payment is to be charged against federal funds, Contractor certifies that it is not currently employed by the federal government. This does not preclude the Contractor from holding another contract with the Federal Government. Contractor certifies he/she is not an employee of the Springfield School District No. 19, Lane County, Oregon for purposes of performing work under this Contract.

4.1.5 Contractor shall certify that all subcontractors performing Work described in ORS 701.005(2) (i.e., construction work) will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.035 to 701.055 before the subcontractors commence Work under the Contract.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1 Before submitting a Proposal to the Owner, and continuously after the execution of this Agreement, the Contractor shall carefully study and compare the Contract Documents and shall at once report to the Owner through the Construction Project Manager, any error, inconsistency or omission the Contractor may discover including any requirement which may be contrary to any law, ordinance, rule, regulation or order of any public authority bearing on the performance of the Work. By submitting a Proposal for this Agreement and the Work under it, the Contractor agrees that the Contract Documents, along with any supplementary written instructions issued by or through the Construction Project Manager that have become a part of the Contract Documents, appear accurate, consistent, and complete insofar as can reasonably be determined. If the Contractor has reported in writing an error, inconsistency or omission and has promptly stopped the affected Work until instructed, and otherwise followed the instructions of the

Owner, the Contractor shall not be liable to the Owner or the Architect for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents. The Contractor shall do no Work without Contract Documents and, when required, approved Shop Drawings, Product Data or samples for such portions of the Work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct the Work, using its best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

4.3.2 The Contractor shall be responsible to the Owner for the acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing any of the Work.

4.3.3 The Contractor shall not be relieved from its obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect or the Construction Project Manager in their administration of the Contract, or by inspections, tests or approvals (or the lack thereof) required or performed under Paragraph 4.22 by persons other than the Contractor.

4.3.4 The Contractor shall employ a competent Superintendent and necessary assistants who shall be in regular attendance at the Project site during all phases of the progress of the Work. The Superintendent shall represent the Contractor and all communications given to the Superintendent shall be as binding as if given to the Contractor. As soon as practicable after Contract award, the Contractor shall provide a management chart and a list of personnel which shall constitute the superintending staff. All references to the Superintendent below shall be taken to mean superintending staff. The Contractor shall not employ a proposed Superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the Superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

4.3.5 The Superintendent shall remain on the Project not less than eight hours per day, five days a week unless the job is closed down due to a general strike, conditions beyond the control of the Contractor, termination of the Contract in accordance with the Contract Documents, or until Final Completion. The Superintendent shall not be employed on any other project during the course of this Work. The Superintendent that is assigned to the Project by the Contractor shall not be relieved of his position until after the Project has had its Final Completion with the Punchlist complete in its entirety, all the O & M Manuals complete, as-built drawings complete and accepted, and all demonstrations have been delivered.

4.3.6 If the Owner and/or Architect object to the Contractor's Project Team (i.e, Superintendent, Project Manager, etc.) that has been assigned to the Project, the Owner will reply in writing within seven (7) days after bid. Contractor will then assign different members to perform the Work acceptable to both Owner and Architect.

4.3.7 Before starting work, the Contractor shall locate all general reference points. The Contractor shall employ a registered surveyor (licensed by the State of Oregon) to perform such work. The Contractor shall take such steps as are necessary to prevent the dislocation or destruction of the reference points, and shall be responsible for the accuracy of the site and building layout and elevations for the work.

4.4 LABOR AND MATERIALS

4.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the execution and completion of the Work in accordance with the Contract Documents and any applicable code, regulation or statute, whether or not specifically required thereby as long as the same is reasonably inferable therefrom as being necessary to produce the intended results, and whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work.

4.4.2 All work under this Contract shall be performed in a skillful and workmanlike manner.

4.4.3 The Contractor shall at all times enforce strict discipline and good order among its employees and Subcontractors, and shall not employ on the Work any unfit person or anyone not skilled in the task assigned. The Owner may, in writing, require the Contractor to remove from the Work any employee the Owner deems incompetent, careless or otherwise objectionable.

4.5 WARRANTY

4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All work not conforming to these requirements, including substitutions not properly approved and authorized, is hereby deemed defective. If required by the Construction Project Manager or the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

4.5.2 If, within one year after the Date of Final Completion of the Work or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so. This obligation shall survive Termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

4.5.3 Nothing contained in this Paragraph 4.5 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 4.6 hereof. The establishment of the time period of one year after the Date of Final Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which its obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligations other than the obligation to correct the Work in accordance with this Paragraph 4.5.

4.5.4 The warranties set forth in Paragraph 4.5 and elsewhere in the Contract Documents shall survive final acceptance under Paragraph 9.9.

4.6 UNCOVERING AND CORRECTION OF WORK

4.6.1 If any portion of the Work should be covered contrary to the request of the Owner, the Architect or the requirements specifically expressed in the Contract Documents, it must be, if required in writing by the Owner, uncovered for observation and shall be replaced at the Contractor's expense.

4.6.2 If any other portion of the Work has been covered which the Architect or the Owner has not specifically requested to observe prior to being covered, either may request to see such Work and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work be found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor as provided in Article 6, in which event the Owner shall be responsible for the payment of such costs.

4.6.3 The Contractor shall promptly correct all Work rejected by the Construction Project Manager or the Architect as defective or as failing to conform to the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect's and the Construction Project Manager's additional services made necessary thereby.

4.6.4 The Contractor shall, unless removal is waived by the Owner, remove from the site all portions of the Work which are defective or non-conforming, or if permitted or required, shall correct such Work in place by and at the expense of the Contractor promptly after notice, and such rejected Work shall not thereafter be tendered for acceptance unless the Contractor gives notice that the Work was subject to former rejection or requirement of correction.

4.6.5 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Owner, the Owner may either (1) by contract or otherwise replace or correct such Work and charge the Contractor the cost occasioned the Owner thereby and remove and store the materials or equipment at the expense of the Contractor; or (2) terminate this Contract for default as provided in Paragraph 13.3.

4.6.6 The Contractor shall bear the cost of restoring any work of the Owner or separate contractors destroyed or damaged by such correction or removal.

4.6.7 If the Owner prefers to accept defective or non-conforming Work, it may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. If the amount is determined after final payment, it shall be paid to the Owner by the Contractor.

4.7 TAXES

4.7.1 The Contractor shall pay all consumer, use, and other similar taxes for the work or portions thereof provided by the Contractor, which are legally enacted at the time the bids are received, whether or not yet effective. Compliance with all Oregon tax laws shall be certified by the Contractor.

4.8 PERMITS, FEES AND NOTICES

4.8.1 The Owner shall coordinate and obtain all permits necessary to obtain the general building permit for the Project. The Owner will pay for the general building permits (including right of way permits, grading and drainage, foundation, mechanical, plumbing and electrical as necessary to initially begin construction), utility connection fees, system development charges and related inspections. The Contractor will be responsible to obtain and pay for all other permits, assessments, penalties, charges, licensing and re-inspection fees required for the proper execution of the Work which are legally required at the time the bids are received or thereafter as a consequence of the Contractor's acts or omissions. The Contractor is responsible for coordinating and obtaining all required inspections and approval signatures. The Contractor is required to submit all inspection records to the District at the completion of the project and as a prerequisite for final payment. Contractor shall not be entitled to any additional time for performance because of its failure to secure or coordinate with the Owner for procurement of any required permits on a timely basis. The contractor will be required to maintain the permit documents at the site as required by the governing authority.

4.8.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations or orders of any public authority bearing on the performance of the Work.

4.8.3 If the Contractor performs any of the Work knowing it to be contrary to any laws, ordinances, rules, regulation or orders of any public authority bearing on the performance of the Work, and does so without reasonable notice to the Construction Project Manager of same, Contractor shall assume full responsibility therefor and shall bear all costs attributable thereto.

4.8.4 The Contractor and its subcontractors shall comply with the provisions of ORS 757.541 through 757.571 relating to notice prior to excavation.

4.9 ALLOWANCES

4.9.1 Allowances will not be used under this contract.

4.10 CONTRACTOR'S CONSTRUCTION SCHEDULE

4.10.1 The Contractor, immediately after being awarded the Contract, shall prepare and submit, for the Construction Project Manager's approval, a Construction Schedule for the Work which shall provide for expeditious and practicable execution of the Work for completion within the Contract Time. This schedule shall be coordinated with the entire Project Construction Schedule to the extent required by the Contract Documents. The Construction Schedule shall be revised as required by the conditions of the Work and the Project, subject to the Construction Project Manager's approval.

The Contractor's Construction Schedule shall conform to the requirements of Division 1, Section 01 3200.

4.11 RESPONSIBILITY FOR COMPLETION

4.11.1 The Contractor shall furnish such manpower, services, materials, facilities and equipment and shall work such hours, including night shifts, overtime operations, Sundays and holidays, as may be necessary to ensure the prosecution and completion of the Work or specified portions thereof within the specific dates of the Contract. If it becomes apparent to the Construction Project Manager from progress on the current Construction Schedule that the Work will not be completed within the Contract Time, the Contractor agrees that it will, as necessary, take some or all of the following actions, at no additional cost to the Owner, to improve the progress:

- .1 increase manpower in such quantities and crafts as will substantially eliminate, in the judgment of the Construction Project Manager, the backlog of work;
- .2 increase the number of working hours per shift, shifts per working day, working days per week or the amount of equipment, or any combination of the foregoing, sufficiently to substantially eliminate, in the judgment of the Construction Project Manager, the backlog of work; and
- .3 reschedule activities to achieve maximum practical concurrency of accomplishment of activities.

In addition, if any of the conditions noted under paragraph 4.11.2 should occur, the Construction Project Manager may require the Contractor to submit a Recovery Schedule demonstrating the Contractor's proposed plan to make up lag in scheduled progress and to ensure completion of the Work within the Contract Time. If the Construction Project Manager finds the proposed plan not acceptable, it may require the Contractor to submit a new plan. If the actions taken by Contractor or the second plan proposed are not satisfactory, the Construction Project Manager may require Contractor to take any of the actions set forth in this Paragraph 4.11, without additional cost to the Owner, to make up the lag in scheduled progress.

4.11.2 In the event any of the following conditions exist, the Contractor shall, at no additional cost to the Owner, require that its' Superintendent, workers, and all subcontractors affecting the progress of the work be at the job site not less than ten (10) hours per day, six (6) days per week:

- .1 should Substantial Completion not be accomplished on schedule;
- .2 should Final Completion not be accomplished on schedule;
- .3 should the Project schedule indicate the Contractor to be ten (10) or more work days behind schedule at any time during construction up until twenty (20) days prior to scheduled Substantial Completion;
- .4 should the Project schedule indicate the Contractor to be five (5) or more work days behind schedule at any time during the last twenty (20) days prior to scheduled Substantial Completion.

4.11.3 Failure of the Contractor to substantially comply with the requirements of this Paragraph 4.11 may be considered grounds for a determination by the Owner, pursuant to Subparagraph 13.3.1, that the Contractor is failing to prosecute the Work with such diligence as will ensure its completion within the time specified.

4.12 DOCUMENTS AND SAMPLES AT THE SITE

4.12.1 The Contractor shall maintain in a safe place at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders, amendments and written interpretations and clarifications, in good order and marked currently to record all changes applicable to the Work made during construction and approved Shop Drawings, Product Data and Samples. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work certified in writing by the Contractor to show complete and exact "as-built" conditions, stating sizes, kind of materials, vital piping, conduit locations and similar matters.

4.13 SHOP DRAWINGS AND SAMPLES

4.13.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.13.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor which illustrate a material, product or system for some portion of the Work.

4.13.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.13.4 The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents. Contractor shall submit all shop drawings, samples, product data in the quantity and format specified in Division 1, Section 01 3300.

4.13.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that it has determined and verified all materials, field measurements, and field construction criteria related thereto, and that it

has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The Contractor shall adhere to any supplementary processing and scheduling instructions, pertaining to Shop Drawings, as may be issued by the Construction Project Manager.

4.13.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's review of Shop Drawings, Product Data or Samples under Subparagraph 3.2.4 unless the Contractor has received a Change Order for same. Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's review thereof.

4.13.7 The Contractor shall make any corrections required by the Architect and shall resubmit the corrected copies of Shop Drawings or new Samples. Resubmittal of Shop Drawings necessitated by required corrections shall not be a cause for extension of time. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than the corrections requested on previous submittals.

4.13.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been reviewed by the Architect as provided in Subparagraph 3.2.4. All such portions of the Work shall be in accordance with approved submittals.

4.13.9 Shop Drawings and Samples shall be dated and bear: Project name; description or names of equipment, materials and items; and complete identification of locations at which materials or equipment are to be installed.

4.13.10 Submission of Shop Drawings, Product Data or Samples shall be accompanied by transmittal letter containing Project name, Contractor's name, number of drawings and samples, titles and other pertinent data.

4.13.11 Each Shop Drawing and Product Data submittal shall bear the Contractor's stamp or seal stating that the submittal has been reviewed by the Contractor and that it conforms to the requirements of the Contract Documents.

4.14 USE OF SITE

4.14.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site or access to the site with any materials or equipment.

4.14.2 The Contractor shall coordinate all of its operations with and secure approval from the Owner before using any portion of the site.

4.14.3 The Contractor shall not occupy the site nor commence work thereon until deemed by the Construction Project Manager to be in compliance with all bond and insurance requirements.

4.15 CUTTING AND PATCHING OF WORK

4.15.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

4.15.2 The Contractor shall not damage or endanger any portion of the Work of the Owner or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Contractor shall not unreasonably withhold its consent to cutting or otherwise altering the Work from the Owner or any separate contractor.

4.15.3 Existing structures and facilities, including but not limited to buildings, utilities, topography, streets, curbs, walks, etc., that are damaged or removed due to required excavations or other construction work, shall be patched, repaired or replaced by the Contractor to the satisfaction of the Construction Project Manager, the Architect, the owner of such structures and facilities and authorities having jurisdiction. In the event the local jurisdictional authorities require that such repairing and patching be done with their own labor and materials, the Contractor shall abide by such regulations and pay for such work.

4.16 CLEANING UP

4.16.1 The Contractor at all times shall keep the premises and streets or areas used for access thereto free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work, the Contractor

shall remove all its waste materials and rubbish from and about the Project as well as all tools, construction equipment, machinery and surplus materials.

4.16.2 If the Contractor fails to clean up during or at the completion of the Work, the Owner may do so as provided in Paragraph 6.3 and the cost thereof shall be charged to the Contractor.

4.17 COMMUNICATIONS

4.17.1 The Contractor shall forward all communications, whether to the Architect or Owner, only through the Construction Project Manager. Similarly, all communications to the Contractor from the Owner and Architect will be through the Construction Project Manager.

4.18 ROYALTIES AND PATENTS

4.18.1 The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and shall indemnify and hold the Owner, Construction Project Manager and Architect harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, it shall be responsible for such loss unless it promptly gives notice of such infringement to the Construction Project Manager.

4.19 INDEMNIFICATION

4.19.1 To the fullest extent permitted by law, the Contractor shall at its sole cost and expense, indemnify, defend, satisfy all judgments and hold harmless the Owner, the Construction Project Manager and the Architect, and their respective directors, officers, agents, representatives, and employees, from and against all claims, actions, judgments, costs, penalties, liabilities damages, losses and expenses, including but not limited to attorney's fees arising out of or resulting from the performance of the Work, provided that any such claim, action, judgment, cost, penalty, liability, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent or other wrongful act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph 4.19. If any provision herein could be read to require a type or degree of indemnification or insurance not permitted by Oregon law, it is hereby expressly restricted to require only that type or degree of indemnification or insurance which is permitted by Oregon law. Without limitation, to the extent required under ORS 30.140, no provision of this Agreement shall require Contractor, or its surety or insurer to indemnify another against liability for damage arising out of death or bodily injury to persons or damage to property caused in whole or in part by negligence of the indemnitee, provided this paragraph shall not affect any provision of this Agreement that requires Contractor or Contractor's surety or insurer to indemnify against liability for damage arising out of death or bodily injury to persons or damage to property to the extent that the death or bodily injury to persons or damage to property arises out of the fault of the indemnitor, or the fault of the indemnitor's agents, representatives or subcontractors.

4.19.2 In any and all claims against the Owner, the Construction Project Manager or the Architect or any of their agents, representatives or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.19 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' workmen's compensation acts, disability acts or other employee benefit acts.

4.19.3 No provision of this Paragraph 4.19 shall give rise to any duties on the part of the Construction Project Manager, the Architect or the Owner or their agents, representatives or employees.

4.19.4 It is the intent of this contract to require the Contractor to indemnify the Owner, Construction Project Manager, and the Architect and their agents, representatives and employees, to the fullest extent permitted by Oregon Revised Statutes as it now exists or is hereafter amended. It is specifically intended that the Contractor's indemnity shall cover allegations of concurrent negligence of indemnitor and indemnitee, their agents or employees; and that the duty to so indemnify shall cover all costs of defense of such claims. The Contractor's indemnity obligations shall not cover

allegations or adjudicated determinations that the liability arises from the sole negligence of an indemnitee. The Contractor shall provide insurance covering such indemnity obligations subject to the terms and conditions provided in Article 11 including the naming of Owner, Construction Project Manager and Architect as additional insured upon such policy.

4.19.5 The provisions of Subparagraph 4.19 shall survive the completion, termination or expiration of this Contract.

4.20 PERSONS AUTHORIZED TO SIGN DOCUMENTS

4.20.1 The Contractor shall, within five (5) days after Notice to Proceed or execution of the Contract, whichever is earliest, file with the Construction Project Manager a list of all persons who are authorized to sign documents such as contracts, certificates, and affidavits, on behalf of the Contractor and to fully bind the Contractor to all the conditions and provisions of such documents, except that in the case of a corporation it shall file with the Construction Project Manager a certified copy of a resolution of the Board of Directors of the corporation in which are listed the names and titles of the corporation's personnel who are authorized to sign documents on behalf of the corporation and to fully bind the corporation to all the conditions and provisions of such documents.

4.21 CONDITIONS AFFECTING THE WORK

4.21.1 The Contractor shall be responsible for having taken all steps necessary to ascertain the nature and location of the Work, and the general and local conditions and legal requirements which can affect the Work or the cost thereof. Failure by Contractor to fully acquaint itself with conditions which may affect the Work, including, but not limited to, conditions relating to transportation, handling, storage of materials, availability of labor, utility services, roads, weather, topographic and subsurface conditions, other separate contractors, applicable provisions of law, and the character and availability of equipment and facilities needed prior to and during the prosecution of the Work, shall not relieve Contractor of its responsibilities under the Contract Documents and shall not constitute a basis for an equitable adjustment under any circumstances. The Owner assumes no responsibility for any understanding or representations concerning conditions made by the Contractor, any of its officers, agents, employees or Subcontractors prior to the execution of this Contract, unless such understanding or representations are expressly stated in the Contract Documents.

4.21.2 If in the execution of the Work any valuable items or materials of any kind are discovered buried or hidden within the Work, such items or materials shall be the property of the Owner. The Contractor shall take reasonable precautions to prevent any persons from removing or damaging such items or materials and shall, immediately upon discovery thereof and before removal, acquaint the Construction Project Manager or the Architect with such discovery and carry out, at the expense of the Owner, the Construction Project Manager's orders as to disposal of the same.

4.22 TESTS

4.22.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall arrange for such inspection, testing or approval, and shall give the Construction Project Manager timely notice of its readiness so the Architect and the Construction Project Manager may observe such inspection, testing or approval. The Owner shall bear all costs of such inspections, tests or approvals.

4.22.2 If the Architect or the Construction Project Manager determines that any Work requires special inspection, testing, or approval which Subparagraph 4.22.1 does not include, the Construction Project Manager will instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Subparagraph 4.22.1. If such special inspection or testing reveals a failure of the Work to comply (1) with the requirements of the Contract Documents, or (2) with respect to the performance of the Work, with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including compensation for the Architect's and the Construction Project Manager's additional services made necessary by such failure. If such special inspection or testing reveals that the Work is in compliance with all applicable requirements, the Owner shall bear all costs thereof.

4.22.3 Inspections and tests required to establish compliance with the Contract Documents, as provided for in the Contract Documents, will be made by a pre-qualified, independent testing agency approved by the Owner. The cost of services of such agency will be paid by the Owner. When the initial tests indicate non-compliance with the Contract Documents, any subsequent retesting occasioned by non-compliance shall be performed by the same agency and

the cost thereof borne by the Contractor. Representatives of the testing agency shall have access to the Work at all times. The Contractor shall provide facilities for such access in order that the agency may properly perform its functions.

4.22.4 Inspections or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

4.22.5 The independent testing agency shall prepare the test reports, logs, and certificates applicable to the specific inspections and tests and promptly deliver the specified number of copies of same to the designated parties. Certificates of inspection, testing or approval required by public authorities shall be secured by the Contractor and delivered to it by the Owner, in such time as to not delay progress of the Work or final payment therefor.

4.22.6 Inspection and laboratory testing shall be provided as called for in the General Requirements and Technical Specifications by an independent testing consultant retained by the Owner.

4.23 ENVIRONMENTAL POLLUTION

4.23.1 Unless disposition of environmental pollution is specifically a part of this Contract, Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the work required by this Contract. "Hazardous substance(s)" are those substances, materials, or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a bona fide risk or danger to the health or well being of Contractor's or any subcontractor's work force.

4.23.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the project site, Owner shall arrange for the proper disposition of such hazardous substance(s).

4.24 SPILL RESPONSIBILITY

4.24.1 Contractor will be responsible for any and all releases of hazardous substances during performance of the Contract which occur as a result of, or are contributed by, actions of its agents, personnel, or subcontractors. Contractor agrees to promptly dispose of such spills or leaks to satisfaction of the Owner and proper regulatory agencies in a manner that complies with applicable federal, state, and local laws and regulations. Cleanup shall be at no cost to the Owner.

4.24.1.1 Contractor shall obtain the Owner's written consent prior to bringing onto the work site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any applicable federal, state, or local statutes, rules or ordinances. Notwithstanding such written consent from the Owner, the Contractor, at all times, shall:

- .1 properly handle, use and dispose of all environmental pollutants and hazardous substances or materials brought onto the work site, in accordance with all applicable federal, state, or local statutes, rules, or ordinances;
- .2 be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the work site; and
- .3 promptly clean up, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all applicable federal, state, or local statutes, rules or ordinances.

4.24.1.2 Contractor shall be liable for any and all costs, expenses, damages, claims, and causes of action, or any of them, related to or arising out of a spill, release, discharge, or leak of (or from) any environmental pollutant or hazardous substance or material, to the extent such spill, release, discharge, or leak was caused or contributed to by Contractor's (i) negligence or (ii) failure to perform in accordance with the Contract Documents. Nothing in this paragraph 4.24 shall limit Contractor's liability or responsibility under paragraph 4.19 of the General Conditions.

4.24.2 Contractor shall report all reportable quantity releases to applicable federal, state, and local regulatory and emergency response agencies. Reportable quantities are found in 40 CFR, Part 302, Table 302.4 for hazardous substances and in OAR 340-142 for petroleum products. Upon discovery, regardless of quantity, Contractor must

telephonically report all releases to the Owner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, at a minimum:

4.24.2.1 Description of items released (identity, quantity, manifest no., and all other documentation required by law).

4.24.2.2 Whether the quantities released require EPA/DEQ reporting, and, if so, when it was reported.

4.24.2. Exact time and location of release, including a description of the area involved.

4.24.2.4 Containment procedures initiated.

4.24.2.5 Summary of communications about the release Contractor has had with members of the press or State officials other than Owner.

4.24.2.6 Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.

4.24.2.7 Personnel injuries, if any, resulting from, or aggravated by, the release.

4.25 ENVIRONMENTAL CLEAN-UP

4.25.1 As part of the Final Completion Notice, or as a separate written notice submitted with or before the Notice of Final Completion, the Contractor shall certify to the Owner that all environmental pollution clean-up which was performed as part of this Contract has been disposed of in accordance with all applicable rules, regulations, laws, and statutes of all agencies having jurisdictions over such environmental pollution. The notice shall indemnify and hold the Owner harmless from any claims resulting from the disposal of the environmental pollution including removal, encapsulation, transportation, handling, and disposal.

ARTICLE 5 SUBCONTRACTORS

5.1 DEFINITION

5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the site. The term Subcontractor is referred to throughout the Construction Documents as if singular in number and means a Subcontractor or its authorized representatives. The term Subcontractor does not include any separate contractor or its subcontractors.

5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform any of the Work at the site. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or its authorized representatives.

5.1.3 Nothing contained in the Contract Documents is intended to nor shall it create any contractual relationship between the Owner, the Construction Project Manager, the Architect or any of their agents, employees or representatives and any Subcontractor or Sub-subcontractor.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.2.1 Within five (5) days of receipt of a Notice to Proceed, the Contractor shall furnish to the Construction Project Manager in writing for review and acceptance by the Owner the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Construction Project Manager will promptly reply to the Contractor in writing stating whether or not the Owner, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Construction Project Manager to reply promptly shall constitute notice of no reasonable objection. The Contractor understands and agrees that it alone is responsible to the Owner for all of the Work under this Agreement and that any review of Subcontractors or Sub-subcontractors by Owner or the Construction Project Manager will not in any way make the Owner responsible to nor for the actions or failures of any Subcontractor or Sub-subcontractor.

5.2.2 The Contractor shall not contract with any such proposed person or entity to whom the Owner has made reasonable objection under the provisions of Subparagraph 5.2.1.

5.2.3 If the Owner, the Construction Project Manager or the Architect, has reasonable objection to any such proposed person or entity, the Contractor shall submit a replacement to whom the Owner, the Construction Project Manager and Architect, have no reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such replacement and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by Subparagraph 5.2.1 or if the Construction Project Manager stated said objection in writing before the submission by the Contractor of the accepted proposal or if the proposed subcontractor is unable to enter into and carry out its work under its proposed subcontract, or if the Subcontractor fails to comply with all applicable laws, or if the proposed subcontractor is not an on-going business in the field of its proposed subcontract, or if the proposed subcontractor does not have a labor force and the means of supply compatible with the scope of the subcontract.

5.2.4 If the Owner requires a change of any proposed subcontractor or person or organization previously accepted by it the Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued.

5.2.5 The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the Owner, the Construction Project Manager or the Architect, makes objection to such substitution.

5.3 SUBCONTRACTUAL RELATIONS

5.3.1 By an appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor in terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Said agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with its Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 5.3, and shall identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to its Sub-subcontractors.

5.4 PREPARATORY WORK

5.4.1 Before starting each section of Work, the Contractor shall ensure that the responsible Subcontractor has carefully examined all preparatory work that has been executed to receive its work. The Subcontractor shall check carefully, by whatever means are required, to ensure that the work and adjacent related work will finish to proper contours, planes, and levels. The Subcontractor shall promptly notify the Contractor who shall notify the Construction Project Manager in writing of any defects or imperfections in preparatory work which will, in any way, affect satisfactory completion of the Work. Absence of such notification will be construed as an acceptance of preparatory work and later claims of defects therein will not be recognized.

5.4.2 Under no conditions shall a section of Work proceed prior to preparatory work having been completed, cured, dried, and otherwise made satisfactory to receive such related work. Responsibility for timely installation of all materials and equipment rests solely with the Contractor, who shall maintain coordination control at all times.

ARTICLE 6 WORK BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

6.1.1 The Owner reserves the right to perform work related to the Project with its own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under any contract terms and conditions which the Owner, in its sole discretion, may require.

6.1.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

6.2 MUTUAL RESPONSIBILITY

6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate its Work with theirs as required by the Contract Documents.

6.2.2 If any part of the Work depends for proper execution or results upon work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, carefully inspect and promptly report to the Owner any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and promptly report shall constitute an acceptance of the Owner's or separate contractors' work as fit and proper to receive its Work, except as to latent defects which Contractor could not have reasonably discovered by its inspection.

6.2.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

6.2.4 Should the Contractor wrongfully cause damage to work or property of the Owner, or to other work on the site, the Contractor shall promptly remedy and be wholly responsible for such damage.

6.2.5 Should the Contractor wrongfully cause damage to the work or property of any separate contractor, the Contractor shall upon due notice promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute at law. If such separate contractor sues or initiates a proceeding against the Owner, the Construction Project Manager and/or the Architect on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall defend such proceedings at its own expense, and if any judgment or award against the Owner, the Construction Project Manager and/or the Architect arises therefrom, the Contractor shall pay or satisfy it and shall reimburse the Owner, the Construction Project Manager and/or the Architect for all attorneys' fees and court or arbitration costs which the Owner, the Construction Project Manager and/or the Architect have incurred.

6.2.6 In the event there is more than one contractor engaged on the Project, each such contractor shall be responsible to the other for damages to work, injury to any person or persons, or for any loss, cost, claims or damages arising out of or in connection with the work required by each contract with the Owner or any loss, cost, expense or damage caused by separate contractor's neglect or failure to finish or satisfactorily complete its part of the Work within the time prescribed. In all events the provisions of Paragraph 4.19 shall be applicable.

6.2.7 Whenever the Contractor receives items from a separate contractor or from the Owner for storage, erection or installation, the Contractor receiving such items shall give receipt for items delivered, and thereafter will be held responsible for care, storage and any necessary replacing of item or items received.

6.2.8 When certain items of equipment and other work are indicated as "NIC" (not in contract), or to be furnished and installed under other contracts, any requirements for preparation of openings, provision of backing, etc., for receipt of such "NIC" work will be furnished upon written request of the Contractor who shall properly form and otherwise prepare its work in a satisfactory manner to receive such "NIC" work.

6.3 OWNER'S RIGHT TO PERFORM DISPUTED WORK

6.3.1 If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by the Contract Documents, for accomplishing coordination or doing required cutting, filling, excavating or patching as required by the Contract Documents, the Owner may carry out such work and charge the cost thereof to the several contractors responsible therefor as the Owner shall determine to be just.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

7.1.1 This Contract shall be governed by the laws of the State of Oregon, without giving effect to any conflict-of-law principle that would result in the laws of any other jurisdiction governing this Contract.

7.1.2 If any of the provisions of this Contract shall be held invalid or unenforceable in any respect, the enforceability of the provision in any other respect and of the remaining provisions of this Contract will not be impaired, if the essential terms and conditions of this Contract remain, valid, binding, and enforceable.

7.2 SUCCESSORS AND ASSIGNS

7.2.1 The Owner and the Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract or sublet it in whole or part without the written consent of the Owner, nor shall the Contractor assign any monies due or to become due to it hereunder, without the prior written consent of the Owner.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party who gives the notice.

7.4 CLAIMS AND DAMAGES

7.4.1 Claims by either the Owner or Contractor must be initiated by written notice to the other party, with a copy sent to the Architect. Claims by either party must be initiated within 7 days after occurrence of the event giving rise to such claim or within 7 days after the claimant first recognizes the condition giving rise to the claim, whichever is later.

7.5 PERFORMANCE BOND, LABOR AND MATERIAL PAYMENT BOND

7.5.1 Contractor shall secure, include costs therefore in the Proposal, and pay for a performance bond and payment bond in compliance with ORS 279C.380 and other applicable Oregon Revised Statutes issued by a bonding company licensed to transact business in the State of Oregon.

Liability under each bond shall be:

100% of Contract sum for (1) performance of the Contract and (2) labor and material payment.

7.5.2 The Contractor shall deliver the required bonds to the Owner not later than three (3) days following the date the Owner-Contractor Agreement is entered into.

7.5.3 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

7.5.4 The Contractor shall commence no work on site until satisfactory compliance with Subparagraph 7.5.1. through 7.5.3. Failure to obtain such bonds in a timely manner shall not be a basis of claim for extension in time.

7.6 RIGHTS AND REMEDIES

7.6.1 The duties and obligations of the Contractor imposed by the Contract Documents and the rights and remedies of the Owner available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law or equity.

7.6.2 The failure of the Owner, the Construction Project Manager or the Architect to insist in any one or more instances upon the strict performance of any one or more of the provisions of this Contract, or to exercise any right herein contained or provided by law, shall not be construed as a waiver or relinquishment of the performance of such provision or right(s) or of the right to subsequently demand such strict performance or exercise such right(s), and the rights shall continue unchanged and remain in full force and effect.

7.6.3 Contractor agrees that it can be adequately compensated by money damages or time extensions for any breach of this Contract which may be committed by the Owner and hereby agrees that, no default, act, or omission of the Owner, the Construction Project Manager or the Architect, except only for failure to make payments as required by the Contract Documents, shall constitute a material breach of the Contract entitling Contractor to cancel or rescind the provisions of this Contract or (unless the Owner shall so consent or direct in writing) to suspend or abandon

performance of all or any part of the Work. Contractor hereby waives any and all rights and remedies to which it might otherwise be or become entitled, saving only its right to money damages or time extensions pursuant to the terms of this contract.

7.7 DISPUTE RESOLUTIONS

7.7.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract shall be subject to mediation as a condition precedent to binding dispute resolution. Mediation shall be before the Arbitration Service of Portland, Inc. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Bend, Oregon, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

7.7.2 Any claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by then-current rules of the Arbitration Service of Portland, Inc. in effect on the date of the Contract. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all claims then known to that party on which arbitration is permitted to be demanded. A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the claim. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Contract shall be specifically enforceable under applicable law in any court having jurisdiction thereof. Each party consents and submits to the jurisdiction of the state courts located in Lane County, Oregon.

7.7.3 Either party, at its sole discretion, may consolidate an arbitration conducted under this Contract with any other arbitration to which it is a party provided that the arbitrations to be consolidated substantially involve common questions of law or fact, and the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s). Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder.

ARTICLE 8 TIME

8.1 DEFINITIONS

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Final Completion of the Work, including authorized adjustments thereto.

8.1.2 The date of commencement of the Work is the date established in the Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Owner-Contractor Agreement or such other date as may be established therein.

8.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the date certified by the Architect and the Construction Project Manager when the Work has sufficiently progressed, in accordance with the Contract Documents, so the Owner can fully occupy and utilize the Work or designated portion thereof for the use which it is intended, with all of the parts and systems operable as required by the Contract Documents and where all work is complete, accessible, operable and usable by the Owner. Only incidental corrective work under "punchlists" and final cleaning (if required) beyond cleaning needed for the Owner's full use may remain for Final Completion.

8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

8.2 PROGRESS AND COMPLETION

8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

8.2.2 The Contractor shall begin the work on the date of commencement as defined in Subparagraph 8.1.2. It shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial and Final Completion within the Contract Dates stated in the Contract Documents.

8.2.3 If a date or time of completion is included in the Contract, it shall be the Date of Substantial Completion as defined in Subparagraph 8.1.3, including authorized extensions thereto, unless otherwise provided.

8.2.4 Attention is directed to the fact that the Work is urgently needed by the Owner and that time is of the essence. For this reason, it shall be agreed that the Contractor will substantially complete the Work, or designated portions thereof, under the Contract, within the time and dates established in the Contract Documents for such completion, and that it will complete the Contract in all its details for final acceptance as specified after Substantial Completion.

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 Except as specifically provided under Paragraph 2.4 (Owner's Right to Stop Work) or Paragraph 12.1 (Changes in the Work), Contractor shall not be entitled to payment or compensation of any kind from the Owner for direct, indirect, or impact damages, including but not limited to costs of acceleration, arising because of reasonable hindrance or delay from any cause whatsoever, whether such hindrance or delay be foreseeable or unforeseeable or avoidable or unavoidable provided however, that this provision shall not preclude recovery by Contractor for damages for unreasonable delays or hindrances caused by the acts or omissions of the Owner or persons acting for the Owner. Notwithstanding the foregoing, under no circumstances shall Contractor be entitled to delay damages attributable to a delay in Owner's execution of the Contract unless the Owner executes the Contract after the time provided for in the Contract Documents. The Contractor shall not in any event be entitled to damages arising out of actual or alleged loss of efficiency; morale, fatigue, attitude, or labor rhythm; constructive acceleration; home office overhead; expectant underrun; trade stacking; reassignment of workers; concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics ripple; seasons change; extended overhead; profit upon damages for delay; impact damages; or similar damages. Except as provided in this subparagraph, the Contractor's sole remedy for delays shall be an extension of time.

8.3.2 The Contract Time shall be adjusted only for Changes in the Work (pursuant to Paragraph 12.1), Owner's Rights to Stop Work (pursuant to Subparagraph 2.4) and Excusable Delays (pursuant to Subparagraph 8.3.3). In the event the Contractor requests an extension of the Contract Time, it shall furnish such justification and supporting evidence as the Owner may deem necessary for a determination as to whether the Contractor is entitled to an extension of time under the provisions of this Contract. The Owner, after receipt of such justification and supporting evidence, shall make its findings of fact and decision thereon and shall advise the Contractor in writing thereof. If the Owner finds that the Contractor is entitled to any extension of the Contract Time, the Owner's determination as to the total number of days' extension shall be based upon the currently approved schedule and on all data relevant to the extension. Such data will be included in the next monthly updating of the schedule. The Contractor acknowledges and agrees that actual delays (due to said changes, suspension of Work or excusable delays) in activities which, according to the schedule, do not affect the Contract Time or Specific Dates, will not be the basis for an extension of the Contract Time or Specific Dates.

8.3.3 Subject to other provisions of this Contract, Contractor may be entitled to an extension of the Contract Time (but no increase in the Contract Sum) for delays arising from unforeseeable causes beyond the control and without the fault or negligence of the Contractor or its Subcontractors as follows:

8.3.3.1 Labor strikes (including strikes affecting transportation), that do, in fact, directly and critically affect the progress of the Work; however, an extension of Contract Time on account of an individual labor strike shall not exceed the number of calendar days of said strike;

8.3.3.2 Acts of God, tornado, fire, hurricane, blizzard, earthquake, typhoon, or flood that damage completed work or stored materials, provided that an act of neglect by the Contractor did not contribute to such damage;

8.3.3.3 Abnormal inclement weather; however

- .1 Contractor agrees that it shall not be entitled to a time extension for normal inclement weather which can be expected at the Project locale due to precipitation **or** temperature, based upon actual data from the U.S.

- Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) for the locale of the Project.
- .2 Contractor agrees that the measure of abnormal inclement weather due to precipitation **or** temperature during the period covered by this Contract shall be the number of days in excess of the average of the previous 10 years as shown in the NOAA weather data, in which precipitation exceeded the average by 0.10 inch (or in the case of snow or ice pellets, 1 inch or more), or in which the highest temperature was 32 degrees F. or below. Either precipitation **or** temperature will be used for the entire month in question.
- .3 No extension of time will be made for abnormal inclement weather after the principal portions of the Work are enclosed except for site work which critically affects the Contract Time or Specific Dates. For the purpose of this Paragraph 8.3, the term "enclosed" is defined to mean when the Work is sufficiently closed in (exterior walls up and roof in place) so as to permit any structure, or major portion thereof which is part of the Work, to be adequately heated so as to allow the various trades to perform their work. The Construction Project Manager shall determine when the structure is "enclosed" and shall issue, upon the request of Contractor, a letter certifying the date the Work became enclosed for the purposes thereof.
- .4 If the total calendar days lost due to inclement weather, from the start of the Work at the Project site by the Contractor until the principal portions of the Work are enclosed, exceeds the total number of days to be expected for the same period, a time extension, if granted, shall only be the number of calendar days needed to equal the excess number of calendar days lost due to such abnormal inclement weather.

8.3.3.4 Acts of the public enemy, acts of the State, Federal or local Government in its sovereign capacity, and acts of another contractor in the performance of a contract with the Owner relating to the Project.

8.3.4 All claims for extensions of time shall be made in writing to the Construction Project Manager no more than seven (7) days after the beginning of the delay; otherwise all such claims are waived by the Contractor. In the case of a continuous cause of delay only one written claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

8.3.5 If no schedule or agreement is made stating the dates upon which written interpretations as set forth in Subparagraph 3.2.17 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen (15) days after demand is made for them, and not then unless such claim is reasonable.

ARTICLE 9 PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the Owner-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Owner a Schedule of Values allocated to the various portions of the Work, as set forth in Division 1, Section 01 2973 of the General Requirements entitled "Schedule of Values," and supported by such data to substantiate its accuracy as the Construction Project Manager and the Owner may require. This schedule, unless objected to by the Owner, shall be used only as a basis for the Contractor's Applications for Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 On or about the dates specified in the Contract Documents, Contractor shall meet with the Construction Project Manager and submit a completed Progress Report, in accordance with the requirements of Contract Documents, supported by such data substantiating the Contractor's right to payment as the Owner or Construction Project Manager may require. Contractor shall also certify that it has paid all due and payable amounts for which previous certificates for payment were issued and payments received from the Owner. Each application for payment thereafter shall include the Contractor's statement that prevailing wages have been paid in accordance with ORS 279C.800 through 279C.870.

9.3.1.1 The submission and approval of the Construction Schedule and monthly updates thereof as required by the Contract Documents shall be an integral part and basic element of the Application upon which progress payment shall be made. The Contractor shall be entitled to progress payments only upon substantial compliance with all the requirements of this Article 9, which compliance shall be a condition precedent to the processing of Contractor's Applications.

9.3.2 Retainage shall be in accordance with ORS 279C.550 through 279C.570.

9.3.2.1 The Owner shall make progress payments on the contract monthly as work progresses on the Work. Payments shall be based upon estimates of work completed that are approved by the Architect and the Owner. A progress payment shall not be considered acceptance or approval of any work or waiver of any defects therein. The Owner shall pay to the Contractor interest on the progress payment, not including retainage, at a rate equal to three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after receipt of the invoice from the contractor or 15 days after the payment is approved by the contracting agency, whichever is the earlier date, but the rate of interest may not exceed 30 percent. The interest shall commence 30 days after the request for payment is made by the Contractor or 15 days after the payment is approved by the Owner, whichever is the earlier date.

9.3.2.2 The Owner shall reserve as retainage from any progress payment on this Contract an amount not to exceed five percent of the payment.

9.3.2.3 The retainage held by the Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Sum. The Owner shall pay to the Contractor interest at the rate of one and one-half percent per month on the final payment due the Contractor, interest to commence 30 days after the work under the contract has been completed and accepted and to run until the date when the final payment is tendered to the Contractor. The Contractor shall notify the Owner in writing when the Contractor considers the work complete and the Owner shall, within 15 days after receiving the written notice, either accept the work or notify the Contractor of work yet to be performed on the Contract. If the Owner does not within the time allowed notify the Contractor of work yet to be performed to fulfill contractual obligations, the interest provided by this subparagraph shall commence to run 30 days after the end of the 15-day period.

9.3.3 Payments may be made by the Owner at its sole discretion, on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site by the Contractor. Materials once paid for by the Owner become the property of the Owner and may not be removed from the Project site without the Owner's written permission.

9.3.4 The Contractor warrants that title to all Work (including all materials and equipment) within the scope of an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor from Owner, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances (hereinafter referred to in this Article 9 as "liens"); and that no Work, materials or equipment covered by Application for Payment will have been acquired by the Contractor, or by any other person performing or furnishing any portion of the Work for Contractor, subject to an agreement under which a security interest therein or any other encumbrance thereon is retained by the seller or supplier, or is otherwise imposed thereon by Contractor or such other person.

9.3.5 Everything charged to the Contractor by the Owner under the provisions of the Contract shall be paid to the Owner within three (3) days of written demand. Such charges may be deducted by the Owner from monies due or to become due under the Contract. The Owner may recover such charges from the Contractor or its surety.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 The Construction Project Manager after receipt of the Contractor's Application for Payment, will within a reasonable time issue a Certificate of Payment to the Owner, with a copy to the Contractor, for such amount as the Construction Project Manager and Architect, determine is properly due, or notify the Contractor in writing of the reasons for withholding a Certificate as provided in paragraph 9.6.

9.4.2 The signing of a Certificate for Payment will constitute a representation by the Construction Project Manager or Architect to the Owner, that based upon observations at the site, pursuant to their agreements with the Owner, and the data comprising the Application for Payment, the Work has progressed to the point indicated and that, to the best of their knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to: an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion; the results of any subsequent tests required by or performed under the Contract Documents; minor deviations from the Contract Documents correctable prior to completion; and any specific qualifications stated in the Certificate for Payment); and that the Contractor is entitled to payment in the amount certified. However, by signing a Certificate for Payment, the Construction Project Manager and Architect shall not thereby be deemed to represent that either has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, or that either has reviewed the construction means, methods, techniques, sequences or procedures, or that either has made any examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract Sum.

9.5 PROGRESS PAYMENTS

9.5.1 After a Certificate for Payment has been issued, the Owner shall make payment in the manner and within the time provided in Division 1, Section 01 2900.

9.5.1.1 Prior to the twenty-fifth (25th) day of each month, the Contractor shall submit to the Architect and the Construction Project Manager a draft Application for Payment. The Application shall be on the forms required by Division 1, Section 01 2900 and shall be accompanied by such other certificates as may be required by the Owner. On or before the last day of each month, the Contractor shall submit to the Architect and the Construction Project Manager an Application for Payment that has been corrected from the draft Application. No Application for payment will be accepted after the date of Substantial Completion until the Request for Final Payment, except that if extensions in the contract Time total thirty (30) calendar days or more there shall be additional progress payments for each full thirty (30) calendar days of the Contract Time extension.

9.5.1.2 The Owner shall make payment on or before the fourteenth (14th) day of the month following Application submittal. Progress payments shall bear interest at the statutory rate established in ORS 279C.570, thirty days (30) after the request for payment is made by the Contractor or fifteen days (15) after the payment is approved by the Owner, whichever is the earlier date. Interest, if any, on a final payment due and unpaid shall commence upon expiration of the applicable time period under Article 13.

9.5.2 The Contractor shall pay each Subcontractor (including material suppliers and laborers) performing labor or furnishing material for the Work within seven (7) days of receipt of payment from the Owner out of the amount paid to the Contractor on account of the Work of such Subcontractor, material supplier, or laborer, the amount which said Subcontractor is entitled as required by Oregon Revised Statutes, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Work. The Contractor shall, by an appropriate agreement with each Subcontractor, also require each Subcontractor to make payments to its Sub-subcontractors in similar manner. The Contractor or Subcontractor may withhold payment of not more than 5% from the monies earned by any Subcontractor or any Sub-subcontractor or supplier in accordance with ORS 701.410 to 701.440 as it now exists or may hereafter be amended except as provided in ORS 279C.580.

9.5.3 The Owner may, on request and at its discretion, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Construction Project Manager on account of Work done by such Subcontractor.

9.5.4 Neither the Owner, the Construction Project Manager nor the Architect shall have any obligation to pay, nor to see to the payment of, any monies to any Subcontractor except as may otherwise be required by law.

9.5.5 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute an acceptance of any Work which is not in accordance with the Contract Documents.

9.5.6 Contractor agrees to keep the Work and the site(s) on which Work is to be performed free and clear of all liens and claims of liens on materials furnished pursuant to the Contract Documents. Contractor hereby waives any right it may have in connection with the Work to file any liens, mechanics or otherwise. Notwithstanding anything to the contrary contained in the Contract Documents, if any such lien is filed or there is any reason to believe that any lien may be filed at any time during the progress of the Work or the duration of this Contract, the Owner may refuse to make any payment otherwise due the Contractor or withhold from any payment due to Contractor a sum sufficient in the opinion of the Owner to pay all obligations and expenses necessary to satisfy such lien or claim and completely indemnify the Owner against any such lien or claim unless and until Contractor shall furnish satisfactory evidence that the indebtedness and the lien in respect thereof, if any, has been satisfied, discharged and released of record or that the Contractor has caused such lien to be released of record if and as provided by law pending the resolution of any dispute between Contractor and the person filing such lien; and if such evidence is not furnished by Contractor to the Owner within a period of five (5) days after demand to do so, the Owner may discharge such indebtedness and deduct the amount required therefore, together with any and all losses, costs, damages and attorney's fees suffered or incurred by the Owner from any sum payable to Contractor under the Contract Documents. Final Payment to Contractor may be withheld until the Work and the site(s) on which the Work is to be performed are free and clear of any and all liens or rights thereto arising because of Work performed or materials furnished under the Contract Documents. This Subparagraph 9.5.6 shall be specifically included in all subcontracts and Purchase Orders entered into by Contractor.

9.5.7 Pursuant to Oregon Revised Statutes ORS 279C.505, the Contractor shall make prompt payment, as due, to all persons supplying to the Contractor labor or material for the prosecution of the work provided for herein, pay all contributions or amounts due the State Industrial Accident Fund from the Contractor incurred in the performance of the contract herein, not permit any lien or claims to be filed or prosecuted against the Owner on account of any labor or material furnished, and to pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

9.5.8 Pursuant to ORS 279C.515, if the Contractor fails, neglects or refuses to make prompt payments of any claim for labor or services furnished to the Contractor or a subcontractor by any person in connection with a "public contract", as defined in ORS 279A, as such claim become due, the proper official representing the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to come due the Contractor by reason of this Contract, but the payment of a claim in the manner authorized herein shall not relieve the Contractor or its surety from its or its obligation with respect to any unpaid claims.

9.6 PAYMENTS WITHHELD

9.6.1 The Construction Project Manager and Architect may decline to certify payment and may withhold the Certificate in whole or in part, to the extent necessary to protect the Owner, if in their opinion they are unable to make representations to the Owner as provided in Subparagraph 9.4.2. If the Construction Project Manager and Architect are unable to make representations to the Owner as provided in Subparagraph 9.4.2 and to certify payment in the amount of the Application, they will notify the Contractor as provided in Subparagraph 9.4.1. If the Contractor, the Architect and the Construction Project Manager cannot agree on a revised amount, the Construction Project Manager and Architect will promptly issue a Certificate for Payment in the amount for which they are able to make such representations to the Owner. The Construction Project Manager and Architect may also decline to certify payment or any part thereof or, because of subsequent observations, they may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in their opinion to protect the Owner from loss because of:

- .1 defective work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
- .3 failure of the Contractor to make payments as required by the Contract to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or another contractor;
- .6 reasonable evidence that the Work will not be or has not been completed within the Contract Time or Specific Dates;

- .7 failure to carry out the Work in accordance with the Contract Documents;
- .8 liens filed or reason to believe it is probable a lien will be filed for any portion of the Work, as more specifically provided in Subparagraph 9.5.6; or
- .9 failure or refusal of the Contractor to fully comply with Division 1, Section 01 3200 of the General Requirements entitled "Schedules and Reports."

9.6.2 When the above grounds in Subparagraph 9.6.1 are removed, payment shall be made for amounts withheld because of them.

9.7 FAILURE OF PAYMENT

9.7.1 If the Owner does not make payment to the Contractor within the time provided for elsewhere in the Contract Documents, or if no time is stated, within a reasonable time, after receipt of the Contractor's approved Application for Payment from the Construction Project Manager; and if the Contractor is not responsible for such failure; and if the Owner is otherwise not entitled under the Contract Documents or applicable law to withhold payment, Contractor shall give Owner written notice thereof within seven (7) days of such failure to make payment. Should the Owner fail, within fourteen (14) days of receipt of such notice from the Contractor, to make payment to Contractor or to specify, in writing, the justification for withholding or not making payment, Contractor may stop the Work until payment of the amount owing according to the Contract Documents has been received. In such event, the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which shall be effected by appropriate Change Order as provided herein. Should Owner specify to Contractor, within the fourteen (14) day period stated above, the basis for the Owner's refusal to make payment, such decision of the Owner shall be final and binding upon the Contractor unless the Contractor, within seven (7) days of the receipt of such writing from the Owner, notifies the Construction Project Manager.

9.8 SUBSTANTIAL COMPLETION

9.8.1 When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete as defined in Subparagraph 8.1.3, the Contractor shall prepare for the Owner a list of items to be completed or corrected and request in writing that the Work be inspected for Substantial Completion determination. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect and the Construction Project Manager, on the basis of an inspection, jointly determine that the Work or designated portion thereof is substantially complete, they will then prepare a Certificate of Substantial Completion, state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall not commence until the Date of Final Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion or the Contract Documents. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

9.8.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Construction Project Manager and the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or such portion thereof, as provided in the Contract Documents.

9.8.3 Should the Architect and the Construction Project Manager determine that the Work or the portion thereof designated by Contractor pursuant to Subparagraph 9.8.1 is not substantially complete, they shall provide the Contractor a written notice stating why the Work or designated portion thereof is not Substantially Complete. The Contractor shall expeditiously complete the Work and shall re-request in writing that the Architect and the Construction Project Manager perform a Substantial Completion inspection. Contractor shall pay Owner for all costs associated with such re-inspection by the Construction Project Manager and Architect.

9.8.4 The acceptance of Substantial Completion payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the Application for Payment for the Substantial Completion payment, and except for the sum due for Final Completion and the retainage sum due after Final Completion.

9.9 FINAL COMPLETION AND FINAL PAYMENT

9.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect and the Construction Project Manager will promptly make such inspection and, when they find the Work acceptable under the Contract Documents and the Contract fully performed, they will jointly issue a final Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Subparagraph 9.9.2 have been fulfilled.

9.9.1.1 For Final Completion of the Work or designated portion thereof to be achieved, (1) Substantial Completion of the Work or designated portion thereof must have been achieved, (2) the Owner must have received a final certificate of occupancy and all other governmental approvals necessary and required for the Owner to occupy or utilize the Work or designated portion thereof for its intended purpose, or a temporary certificate of occupancy if Contractor is not responsible for the non-issuance of a final certificate of occupancy, (3) the Contractor must have submitted all warranties, operating and maintenance manuals, as-built drawings and Specifications, keys and other submittals required for the Work or designated portion thereof, and (4) the Contractor otherwise must have fully performed and completed all of its other obligations required for Final Completion under the Contract Documents with respect to the Work or designated portion thereof.

9.9.2 Neither final payment nor the remaining retained percentage shall become due until the Work is free and clear of any and all liens as required by Subparagraph 9.5.6 and the Contractor submits to the Owner (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or its property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment, (3) valid waivers of all construction lien claims by the Contractor and each Subcontractor in a form acceptable to the Owner, and (4) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner.

If any Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any loss. If any such lien or claim remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the Owner may be compelled to pay in discharging such lien or claim, including all costs and attorneys' fees. The Owner may withhold from final payment any sum that the Owner has reason to believe may be needed to satisfy any lien, claim or threat of lien arising out of the Work. The Owner may deduct from final payment an amount equal to any costs, expenses and attorneys' fees incurred by the Owner in removing or discharging any liens arising out of the Work. Payment of the retained percentage shall be in accordance with and subject to the conditions as set forth in ORS 279C.570.

9.9.3 If Owner, after a substantial portion of the work has been completed, finds that an unreasonable delay will occur in the completion of the remaining portion of the contract for any reason not the result of a breach thereof, it may, if the Contractor agrees, delete from the contract the remaining work and accept as final the improvement at the stage of completion then attained and may make payment in proportion to the amount of work accomplished.

9.9.4 The making of Final Payment shall not constitute a waiver of any claims by the Owner against the Contractor.

9.9.5 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.

9.10 LIQUIDATED DAMAGES

9.10.1 Should the Contractor fail to substantially complete the Work on or before the date stipulated for Substantial Completion (or such later date as may result from extension of time granted by Owner), it shall pay the Owner, as liquidated damages, the sum specified in the Contract for each consecutive calendar day that terms of the contract remain unfulfilled beyond the date allowed by the Contract, which sum is agreed upon as a reasonable and proper measure of damages which the Owner will sustain per day by failure of the Contractor to complete the Work or designated portion thereof within time as stipulated; it being recognized by the Owner and the Contractor that the injury to the Owner which could result from a failure of the Contractor to complete on schedule is uncertain and

cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor.

9.10.2 For each consecutive calendar day that the Work remains incomplete after the date established for Final Completion, the Owner will retain from the compensation otherwise to be paid to the Contractor the sum specified in the Contract. This amount is the minimum measure of damages the Owner will sustain by failure of the Contractor to complete all remedial work, correct deficient work, clean up and other miscellaneous tasks as required to complete all work specified. This amount is in addition to the liquidated damages prescribed above.

9.10.3 For the purposes of Liquidated Damages, the date of Final Completion shall be the date as stated in the Architect's letter to the Owner that the Project is finally complete.

9.11 OWNER'S RIGHT TO OCCUPY INCOMPLETE WORK

9.11.1 Should the Work, or any portion thereof, be incomplete for Substantial Completion or Final Completion at the scheduled date or dates, the Owner shall have the right to occupy any portion of the Work. In such an event, the Contractor shall not be entitled to any extra compensation on account of said occupancy by the Owner or by the Owner's normal full use of the Work, nor shall the Contractor interfere in any way with said normal full use of the Work. Further, in such an event, the Contractor shall not be entitled to any extra compensation on account of the Owner's occupancy and use of the Work, nor shall the Contractor be relieved of any responsibilities of the Contract including the required times of completion. Such occupancy by the Owner does not, by itself, constitute Substantial Completion nor Final Completion.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Owner, the Construction Project Manager and the Architect, or their agents, employees or representatives, are not responsible for the means, methods, techniques, sequences or procedures utilized by the Contractor, or for safety precautions and programs in connection with the Work. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

10.1.2 Any notice given to the Contractor by the Owner, the Construction Project Manager or the Architect of a safety or property protection violation will not; (1) relieve the Contractor of sole and complete responsibility for the violation and the correction thereof, or of sole liability for the consequences of said violation; (2) impose any obligation upon Owner, Construction Project Manager or Architect to inspect or review Contractor's safety program or precautions or to enforce Contractor's compliance with the requirements of this Article 10; and (3) impose any continuing obligation upon Owner, Construction Project Manager or Architect to provide such notice to Contractor or any other person or entity.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

- .1 all employees on the Work and all other persons who may be affected thereby;
- .2 all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of its Subcontractors of Sub-subcontractors; and
- .3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavement, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

10.2.5 The Contractor shall promptly remedy all damage or loss to any property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, and Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Clause 10.2.1.2 and 10.2.1.3, except damage or loss caused by the acts or omissions of the Owner or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Paragraph 4.19.

10.2.6 The Contractor shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents and monitoring of the Work to insure compliance with all applicable laws, ordinances, rules, regulations and lawful orders of public authority bearing on the safety of persons or protection of property. This person shall be the Contractor's Superintendent unless otherwise designated by the Contractor in writing to the Owner.

10.2.7 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

10.3 EMERGENCIES

10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for Changes in the Work.

ARTICLE 11 INSURANCE

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1 The Contractor shall purchase and maintain such insurance as will protect it, the Owner, the Construction Project Manager and the Architect and their agents, representatives and employees from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by itself or by any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 claims under workers' compensation, disability benefit and other similar employee benefit acts (with Workers' Compensation and Employers Liability Insurance in an amount not less than those necessary to meet the statutory requirements of the state(s) having jurisdiction over any portion of the Work;
- .2 claims for damages because of bodily injury, occupational sickness or disease, or death of persons performing work or services or supplying materials for the Work;
- .3 claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees;
- .4 claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person;
- .5 claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and
- .6 claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

- .7 Without limiting the above, during the term of the Contract, the Contractor shall, at its own expense, purchase and maintain the following insurance with companies licensed to do business in the jurisdiction in which the Project is located and satisfactory to the Owner.

1. Workers' Compensation with limits as required by law.
2. Employer's Liability (Stop Gap) \$ 1,000,000
3. Commercial General Liability Insurance covering bodily injury and property damage on an "occurrence" form. This coverage shall include contractual liability insurance for the indemnity provided under this contract. The following limits of insurance will be carried:

a.	Coverage	Limit
	Each Occurrence	\$2,000,000
	General Aggregate	\$4,000,000 *
	Products-Completed Operations Aggregate	\$4,000,000*
	Personal & Advertising Injury	\$2,000,000
	Fire Damage (Any one Fire)	\$100,000
	Medical Expense	\$5,000

*To apply on a per location basis

4. Comprehensive Automobile Liability covering all owned, non-owned, and hired automobiles ("Symbol 1"):
 - a. Combined Single Limit \$ 2,000,000
5. Umbrella coverage will also be required, and will apply over all primary liability policies including but not limited to coverages outlined in 2, 3, & 4 above.
 - a. Occurrence/Aggregate Limit \$ 5,000,000
6. Administrative School District #1 – Bend LaPine Public Schools, its officers, directors, employees, Construction Project Manager, and Architect shall be named as additional insured on all liability policies, by endorsement. This additional insured coverage shall include completed operations.
7. There shall be no cancellation, material change, exhaustion of aggregate limits or intent not to renew insurance coverage without 30 days written notice the Bend-La Pine Schools. Any failure to comply with this provision will not affect the insurance coverage provided to the District. The 30 days' notice of cancellation provision shall be physically endorsed on to the policy.
8. As evidence of the insurance coverage required by this contract, including additional insured endorsement, the contractor shall furnish a Certificate of Insurance to Bend-La Pine Schools. No contract shall be effected until the required certificates have been received and approved by the District. A renewal certificate will be sent to the District 10 days prior to coverage expiration. Where noted above, copies of policy endorsements must be attached to all Certificated of Insurance. Note that certificates cannot change, modify or endorse insurance policies.

11.1.2 The insurance required by Subparagraph 11.1.1 shall be primary and noncontributing to any insurance possessed or procured by the Owner, and limits of liability shall not be less than those set forth in the Special Conditions of this Contract.

11.1.3 The insurance required by Subparagraph 11.1.1 shall include contractual liability insurance applicable to the Contractor's obligations under Paragraph 4.19.

11.1.4 The insurance required by Subparagraph 11.1 shall be written for not less than any limits of liability specified in the Contract Documents or required by law, whichever is greater.

11.1.5 Before signing this Contract, or commencing work on any project or allowing any Subcontractor to commence work, the Contractor shall obtain all insurance required under this subparagraph. The Contractor shall maintain this insurance until Final Completion. Proof of insurance will be required prior to performing work under the warranty.

11.1.6 The service or services to be rendered under this contract are those of an independent contractor in accordance with ORS 670.600 and 670.605. Contractor is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

11.1.7 The Contractor, its subcontractors, if any, and all employees providing work, labor or materials under this Contract are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide worker's compensation coverage that satisfies Oregon law for all their subject workers. Out-of-state employers must provide Oregon worker's compensation coverage for their workers who work at a single location within Oregon for more than thirty days (30) in a calendar year. Contractors who perform the work without the assistance or labor of any employee need not obtain such coverage. This shall include Employers Liability Insurance with coverage limits of not less than \$1,000,000 each accident.

11.1.8 Coverages provided by the Contractor must be underwritten by an insurance carrier deemed acceptable by the Owner. The Owner reserves the right to reject any or all insurance carrier(s) with an unacceptable financial rating.

11.2 - PROPERTY INSURANCE

11.2.1 Unless otherwise provided, the Owner shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief. All contractors, subcontractors, and sub-subcontractors will be financially responsible for their own equipment, tools, machinery, and supplies during the course of this project. If the Owner does not intend to purchase such insurance for the full insurable value of the entire Work, it shall inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance which will protect the interests of itself, its Subcontractors and the Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by failure of the Owner to purchase or maintain such insurance and to so notify the Contractor, then the Owner shall bear all reasonable costs properly attributable thereto. If not covered under the all risk insurance or other wise provided in the Contract Documents, the Contractor shall effect and maintain similar property insurance on portions of the Work stored off the site or in transit.

11.2.2 Any loss insured under Subparagraph 11.2.1 is to be adjusted with the Owner and made payable to the Owner as trustee for this insured, as their interests may appear, subject to the requirements of any applicable mortgagee clause and of Subparagraph 11.2.8. The Contractor shall pay each Subcontractor a just share of any insurance monies received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to its Sub-subcontractor in similar manner.

11.2.3 The Owner and Contractor waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Paragraph 11.2 or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Owner as trustee. The Contractor shall require, by appropriate agreement, written where legally required for validity, similar waivers in favor of the Owner and the Contractor by Subcontractors and Sub-subcontractors. With respect to the waiver of rights of recovery, the term Owner shall be deemed to include, to the extent covered by property insurance applicable thereto, its consultants, employees and agents, including the Construction Project Manager and the Architect and their consultants, officers, employees and agents. The Contractor waives as against any separate contractor described in Article 6 all rights for damages caused by fire or other perils in the same manner as is provided above as against the Owner. The Owner shall require, by appropriate agreement, written where legally required for validity, similar waivers in favor of the Contractor by any separate contractor and its Subcontractors and Sub-subcontractors.

11.2.4 If required in writing by any party in interest, the Owner as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of its duties. It shall deposit in a separate account any money so received, and it shall distribute it in accordance with such agreement as the parties in interest may reach, or in accordance with a court order or award. If after such loss no other special agreement is made, replacement of damaged work shall be covered by an appropriate Change Order.

11.2.5 The Owner as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within five days after the occurrence of loss to the Owner's exercise of this power, and if such objection be made, the matter shall be decided by a court of competent jurisdiction or as the parties in interest otherwise agree. The Owner as trustee shall, in that case, make settlement with the insurers in accordance with the directions of such arbitrators. If distribution of the insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

11.2.6 If the Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, Contractor shall obtain the consent of the insurance company or companies providing the property insurance, by endorsement to the policy or policies. No insurance required by this Article 11 shall be canceled or lapsed on account of such partial occupancy or use.

11.2.7 In the event Contractor neglects, refuses or fails to provide the insurance required under the Contract Documents, or if such insurance is canceled for any reason, the Owner shall have the right but not the duty to procure the same, and the cost thereof shall be deducted from monies then due or thereafter to become due to Contractor.

11.2.8 Contractor will be responsible for a deductible carried by the Owner on Property Insurance policies referenced in 11.2.1. This deductible level will be \$25,000 per occurrence.

11.3 EFFECT OF SUBMISSION OF CERTIFICATES

11.3.1 The Owner and Construction Project Manager shall be under no obligation to review any Certificates of Insurance provided by the Contractor or to check or verify the Contractor's compliance with any and all requirements regarding insurance imposed by the Contract Documents. The Contractor is fully liable for the amounts and types of insurance required herein and is not excused should any policy or certificate of insurance provided by the Contractor not comply with any and all requirements regarding insurance imposed by the Contract Documents.

11.4 FAILURE OF COMPLIANCE

11.4.1 Should the Contractor fail to provide and maintain in force any and all insurance, or insurance coverage required by the Contract Documents or by law, or should a dispute arise between Owner and any insurance company of Contractor over policy coverage or limits of liability as required herein, the Owner shall be entitled to recover from the Contractor all amounts payable, as a matter of law, to Owner or any other parties, including but not limited to the Construction Project Manager and the Architect, had the required insurance or insurance coverage been in force. Said recovery shall include, but is not limited to interest for the loss of use of such amounts of money, plus all attorney's fees costs and expenses incurred in securing such determination and any other consequential damages arising out of the failure of the Contractor or insurance company to comply with the provisions of the Contract Documents, or any policy required hereby, or any other requirements regarding insurance imposed by law. Nothing herein shall limit any damages for which Contractor is responsible as a matter of law.

ARTICLE 12 CHANGES IN THE WORK

12.1 CHANGES IN THE WORK

12.1.1 The Owner may, at any time, without notice to the sureties and without invalidating the Contract, by written order designated or indicated to be a Change Order, make any Change in the Work within the general scope of the Contract, including, but not limited to Changes:

- .1 in the Specifications and the Drawings,
- .2 in the sequence, method or manner of performance of the Work,
- .3 in the Owner-furnished facilities, equipment, materials, services or site, or
- .4 directing acceleration in the performance of the Work.

12.1.2 Any other written order (which terms as used in this Subparagraph shall include direction, instruction, interpretation or determination) from the Owner, the Construction Project Manager or the Architect which causes any such change, shall be treated as a Change Order under this subparagraph, provided that the Contractor gives the

Construction Project Manager prompt, written notice stating the date, circumstances and source of the order and that the Contractor regards the order as a Change Order.

12.1.3 Except as provided in Subparagraphs 12.1.1 and 12.1.2, no order, statement, or conduct of the Owner, the Construction Project Manager or the Architect shall be treated as a change or entitle the Contractor to an equitable adjustment hereunder.

12.1.4 If any change under this Paragraph 12.1 causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the Work under this Contract, including work not affected directly by the change, an equitable adjustment shall be made and the Contract modified in writing accordingly; provided, however, that except for claims based on defective Specifications, no claim for any Change under Subparagraph 12.1.2 shall be allowed for any costs incurred more than seven (7) days before the Contractor gives the Construction Project Manager written notice as therein required.

12.1.5 If the Contractor intends to assert a claim for an equitable adjustment under this Article, it must, within twenty (20) days after receipt of a written Change Order under Subparagraph 12.1.1 above or the furnishing of a written notice under Subparagraph 12.1.2, submit to the Construction Project Manager a written statement setting forth the general nature and approximate cost of such claim, unless this period is extended by the Construction Project Manager. The statement of claim hereunder may be included in the notice under Subparagraph 12.1.2 above.

12.1.6 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after Final Payment under this Contract.

12.1.7 The cost or credit to the Owner resulting from a Change in the Work shall be determined in one or more of the following ways (subject to DJ-AR 49-0910):

- .1 by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data as the Construction Project Manager may require to permit evaluation. At a minimum, the Contractor shall submit an itemized breakdown of the cost and/or time required by the Change in the Work including, but not limited to, the following:
 - .a Material quantities and costs.
 - .b Direct labor hours and hourly rates for specific work or operation to be performed.
 - .c Equipment costs or rental charges.
 - .d Specified overhead and profit markup as identified in Subparagraph 12.1.10.
- .2 by unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 by cost to be determined in a manner agreed upon by the parties plus a stipulated fixed or percentage fee; or
- .4 by the method provided in Subparagraph 12.1.12.

12.1.8 For the purposes of Subparagraph 12.1.7, cost shall be limited to the following: cost of materials and equipment, including cost of delivery; cost of in-field labor not including project staff or supervision, including Social Security, payroll taxes, fringe benefits, unemployment insurance and workers' compensation insurance; rental rate of and fuel for power tools and equipment not normally on the project.

12.1.9 For the purposes of Subparagraph 12.1.7, overhead shall include the following: project insurance, bond premiums, general administration, supervision which includes project managers and staff not completing direct material work in the field, superintendence, general foremen, wages of time-keepers, watchmen and clerks, small tools, incidentals, general office expense, home office overhead, project office overhead and expenses, and all other expenses not included in "cost."

12.1.10 For the purposes of Subparagraph 12.1.7, combined overhead and profit included in the total cost to the Owner for any Change shall not exceed the rates set forth in the following schedule:

- .1 for the Contractor, for work performed by its own forces, 10% of cost;
- .2 for each Subcontractor involved, work performed by Subcontractor forces, 10% of the cost; and
- .3 for the Contractor, for work performed by Subcontractors, 5% of the cost;

This shall also apply for overhead and profit to the Subcontractor for its Sub-subcontractors.

12.1.11 If the net value of a Change results in a credit from the Contractor or Subcontractor, the credit given shall be the net cost without overhead or profit. The cost as used herein shall include all items of labor, materials and equipment.

12.1.12 If none of the methods set forth in Subparagraph 12.1.7.1, is agreed upon, the Contractor, provided it receives a written order signed by the Construction Project Manager, shall promptly proceed with the Work involved. The cost of such Work shall then be determined subject to DJ-AR 49-0910 by the Construction Project Manager on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, the stipulated allowance for overhead and profit. In such case, and also under Subparagraphs 12.1.7.3 and 12.1.7.4 above, the Contractor shall keep and present, in such form as the Construction Project Manager may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a Change Order. Unless otherwise provided in the Contract Documents, cost shall be limited to the following: cost of materials, including cost of delivery; cost of labor, including social security, payroll taxes, unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; and rental value of equipment and machinery. Pending final determination of cost by the Owner, payments of account shall be made on the Certificate for Payment issued by the Construction Project Manager and the Architect.

12.1.13 The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Owner. When both additions and credits covering related Work or substitutions are involved in any one Change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any, with respect to that Change.

12.1.14 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to the Owner or the Contractor, the applicable unit prices shall be equitably adjusted.

12.1.15 Nothing in this Article shall excuse the Contractor from proceeding with the Contract as changed.

12.1.16 The amount payable to the Contractor under this Contract, the Contract Time and the date required for performance of any part of the Work may be changed only by a written Change Order to this Contract.

12.1.17 In the event that the Contractor fails to submit its proposal within the designated period of time or in the event that the parties are unable to agree as to the reasonable cost and time to perform the Change in or addition to the Work based upon the Contractor's Proposal and the Construction Project Manager and Owner do not elect to have the Change in the Work performed on a time and material basis, the Owner and Construction Project Manager shall make a unilateral determination of the reasonable cost and time to perform the Change in the Work, based upon their own estimates, the Contractor's submission or a combination thereof. A Change Order shall be issued for the amounts of cost and time determined by the Construction Project Manager and the Owner and shall become binding upon the Contractor unless the Contractor submits its protest in writing to the Owner within twenty (20) days of the issuance of the Change Order. Owner has the right to direct in writing the Contractor to perform the Change in the Work, which is the subject of such Change Order. Failure of the parties to reach agreement regarding the cost and time of the performing the Change in the Work and/or any pending protests, shall not relieve that Contractor from performing the Change in the Work promptly and expeditiously.

12.2 CLAIMS FOR ADDITIONAL COST

12.2.1 If the Contractor wishes to make a claim for an increase in the Contract Sum, it shall give the Construction Project Manager written notice thereof within seven (7) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Paragraph 10.3. No claim shall be valid unless so made. Contractor hereby waives all claims not so made. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order, subject to DJ-AR 49-0910.

12.2.2 If the Contractor claims that additional cost is involved because of, but not limited to, any written interpretation pursuant to Subparagraph 3.2.17, the Contractor shall make such claim as provided in Subparagraph 12.2.1.

12.3 DISPUTES REGARDING CHANGES.

12.3.1 If any dispute should arise between the parties with respect to an increase or decrease in the Contract Sum or an expansion or contraction in the Contract Time as a result of a Change in the Work, the Contractor shall not suspend performance of a Change in the Work or the Work itself unless otherwise so ordered by the Owner in writing. The Owner shall, however, pay to the Contractor up to the Owner's reasonable estimated value of the Change in the Work, regardless of the dispute if said Change in the Work results in an increase in the Contract Sum; and the Owner shall have the right to decrease the Contract Sum up to the Owner's reasonable estimated value of the Change in the Work, regardless of the dispute, if said Change in the Work results in a decrease in the Contract Sum.

12.4 AUDIT RIGHTS

12.4.1 With respect to any Change in the Work resulting in an increase in the Contract Sum, the Contractor shall afford (and shall require its Subcontractors to afford) access to the Owner at all reasonable times to any books, correspondence, instructions, receipts, vouchers, memoranda and records of any kind relating thereto, all of which shall be maintained by the appropriate parties for a period of at least two (2) years from and after the date the Owner makes payment on account of such Change in the Work. The Contractor authorizes the Owner (and shall require its Subcontractors to authorize the Owner) to check directly with any suppliers of labor and material with respect to any item chargeable to the Owner under this Article, to confirm balances due and to obtain sworn statements and waivers of lien, all if the Owner so elects.

12.5 MINOR CHANGES IN THE WORK

12.5.1 The Owner shall have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension to the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be affected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.

12.6 DIFFERING SITE CONDITIONS

12.6.1 Should the Contractor encounter subsurface and/or latent conditions at the site materially differing from those shown on the drawings or indicated in the specifications, it shall immediately give notice to the Construction Project Manager of such conditions before they are disturbed. The Construction Project Manager and the Architect shall thereupon promptly investigate the conditions and if it finds that they materially differ from those shown on the drawings or indicated in the specifications, the Architect shall at once make such changes in the drawings and/or specifications as it may find necessary. Any increase or decrease of cost resulting from such changes shall be adjusted in the manner provided herein for adjustments as to extra and/or additional work and changes. However, neither the Owner, Construction Project Manager nor the Architect shall be liable or responsible for additional work, costs or changes to the Work due to material differences between actual conditions and any geotechnical, soils and other reports, surveys and analyses made available for the Contractor's review.

12.7 GENERAL PROVISIONS RELATED TO CHANGES

12.7.1 The Contractor shall not be entitled to any amount of indirect costs, damages or expenses of any nature, including, but not limited to, so-called "impact" costs, labor inefficiency, wage, material or other escalations beyond the prices upon which the proposal is based and to which the parties have agreed pursuant to the provisions of Article 12, and which the Contractor, its Subcontractors or Sub-subcontractors or any other person may incur as a result of reasonable delays, interferences, suspensions, changes in sequence or the like, arising from the performance of any and all changes in the Work performed pursuant to this Article 12. It is understood and agreed that the Contractor's sole and exclusive remedy in such event shall be recovery of its direct costs as compensable hereunder and an extension of the Contract Time, but only in accordance with the provisions of the Contract Documents. This provision shall not preclude recovery by Contractor for damages for unreasonable delays, interferences, suspensions, changes in sequence or the like that are caused by the acts or omissions of the Owner or persons acting for the Owner pursuant to the provisions of the Contract.

ARTICLE 13 TERMINATION OF THE CONTRACT

13.1 TERMINATION BY THE CONTRACTOR

13.1.1 The Contractor shall have the right to terminate the contract only upon those conditions and with such rights as are set forth in ORS 279C.

13.2 TERMINATION FOR CONVENIENCE OF OWNER

13.2.1 The Owner may, at any time upon ten days' written notice to the Contractor and Contractor's surety, terminate (without prejudice to any right or remedy of the Owner) the whole or any designated portion of the Work for the convenience of the Owner.

13.3 DEFAULT TERMINATION

13.3.1 The Owner may, upon ten (10) days' written notice to the Contractor, terminate (without prejudice to any right or remedy of the Owner or any subsequent buyer of any portion of the Work) the whole or any portion of the Work required by the Contract Documents in any one of the following circumstances:

- .1 if the Contractor refuses or fails to prosecute the Work or any separable part thereof with such diligence as will ensure the Substantial Completion of the Work within the Contract Time;
- .2 if the Contractor is in material default in carrying out any provisions of this Contract for a cause within its control;
- .3 if the Contractor is adjudged a bankrupt, makes a general assignment for the benefit of its creditors, or if a receiver is appointed on account of its insolvency;
- .4 if the Contractor fails to supply a sufficient number of properly skilled workers or proper materials;
- .5 if the Contractor fails to make prompt payment to Subcontractors or for materials or labor;
- .6 if the Contractor persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction; or
- .7 if the Contractor substantially violates any provision of the Contract Documents.

The right of the Contractor to proceed shall not be so terminated under this Paragraph 13.3 because of any delays in the completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor or its Subcontractors as set forth in Subparagraph 8.3.3.

13.3.2 If, after Contractor has been terminated for default pursuant to this Paragraph 13.3, it is determined that none of the circumstances set forth in Subparagraph 13.3.1 exist, then such termination shall be considered a termination for convenience pursuant to Paragraph 13.2.

13.4 ALLOWABLE TERMINATION COSTS

13.4.1 If the Owner terminates the whole or any portion of the Work pursuant to Paragraph 13.2, then the Owner shall only be liable to Contractor for those costs reimbursable to Contractor in accordance with Subparagraph 13.4.2, plus a markup of ten percent on the actual fully accounted costs recovered under 13.4.2; provided, however, that if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, no profit shall be included or allowed hereunder and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss.

13.4.2 If the Owner terminates the whole or any portion of the Work pursuant to Paragraph 13.2, the Owner shall pay the Contractor the amounts determined by the Construction Project Manager as follows:

- .1 an amount for supplies, services, or property accepted by the Owner pursuant to Subparagraph 13.5.1.6 (or sold or acquired pursuant to Subparagraph 13.5.1.7) and not heretofore paid for, and to the extent provided in the Contract such amount shall be equivalent to the aggregate price for such supplies or services computed in accordance with the Price or Prices specified in the Contract, appropriately adjusted for any saving of freight or other charges; and
- .2 the total of:
 - (1) the cost incurred in the performance of the Work terminated, including initial costs and preparatory expense allocable thereto, but exclusive of any costs attributable to supplies or services paid or to be paid for under Subparagraph 13.4.2.1 or 13.4.2.2(2),
 - (2) the cost of settling and paying claims arising out of the termination of Work under subcontracts or orders, pursuant to Subparagraph 13.5.1.5, which are properly chargeable to the terminated portion of the Contract (exclusive of amounts paid or payable on account of completed items of equipment delivered or services furnished by subcontractors or

- vendors prior to the effective date of the Notice of Termination), which amounts shall be included in the costs payable under (1) above, and
- (3) the reasonable costs of settlement, including accounting, legal, clerical and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation and other costs incurred in connection with the protection or disposition of property allocable to this Contract.

13.4.3 The total sum to be paid to the Contractor under this Paragraph 13.4 shall not exceed the Contract Sum as reduced by the amount of payments otherwise made, by the Contract Price of Work not terminated and as otherwise permitted by this Contract. Except for normal spoilage, and except to the extent that the Owner shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor, as provided in this Subparagraph 13.4.3, the fair value, as determined by the Construction Project Manager, of property which is destroyed, lost, stolen or damaged so as to become undeliverable to the Owner or to a buyer pursuant to Subparagraph 13.5.1.7.

13.4.4 If the Owner terminates in whole or in any part of the Work pursuant to Paragraph 13.3, then the Owner may procure, upon such terms and in such manner as the Construction Project Manager may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the Owner for any excess costs for such similar supplies or services. The Contractor shall continue the performance of this Contract to the extent not terminated hereunder.

13.5 GENERAL TERMINATION PROVISIONS

13.5.1 After receipt of a Notice of Termination from the Owner, pursuant to Paragraph 13.2 or 13.3, and except as otherwise directed by the Construction Project Manager, the Contractor shall:

- .1 stop Work under the Contract on the date and to the extent specified in the Notice of Termination;
- .2 place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the Work under the Contract as is not terminated;
- .3 terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
- .4 assign to the Owner in the manner, at the times and to the extent directed by the Construction Project Manager, all of the right, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
- .5 settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Construction Project Manager, to the extent it may require, which approval or ratification shall be final for all the purposes of this clause;
- .6 transfer title and deliver to the entity or entities designated by the Owner, in the manner, at the times and to the extent, if any, directed by the Construction Project Manager, and to the extent specifically produced or specifically acquired by the Contractor for the performance of such portion of the Work as had been terminated:
 - (1) the fabricated or unfabricated parts, Work in process, partially completed supplies and equipment, materials, parts, tools, dies, jigs and other fixtures, completed Work, supplies and other material produced as part of, or acquired in connection with the performance of, the Work terminated by the Notice of Termination, and
 - (2) the completed or partially completed plans, drawings, information and other property related to the Work;
- .7 use its best efforts to sell, in the manner, at the times, to the extent and at the price or prices directed or authorized by the Construction Project Manager, any property of the types referred to in Subparagraph 13.5.1.6; provided, however, that the Contractor:
 - (1) shall not be required to extend credit to any buyer, and
 - (2) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Construction Project Manager; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Owner to the Contractor under this Contract or shall otherwise be credited to the price or

cost of the Work covered by this Contract or paid in such other manner as the Construction Project Manager may direct;

- .8 take such action as may be necessary, or as the Construction Project Manager may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.

13.5.2 The Contractor shall, from the effective Date of Termination until the expiration of three years after final settlement under this Contract, preserve and make available to the Owner, at all reasonable times at the office of the Contractor, but without direct charge to the Owner, all books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the Work terminated hereunder, or, to the extent approved by the Construction Project Manager, photographs, micro-photographs or other authentic reproductions thereof.

13.5.3 In arriving at any amount due the Contractor pursuant to Paragraph 13.4, there shall be deducted:

- .1 all unliquidated advance or other payments on account theretofore made to the Contractor applicable to the terminated portion of this Contract;
- .2 any claim which the Owner may have against the Contractor;
- .3 such claim as the Construction Project Manager determines to be necessary to protect the Owner against loss because of outstanding or potential liens or claims; and
- .4 the agreed price for, or the proceeds of sale of any materials, supplies or other things acquired by the Contractor or sold, pursuant to the provisions of Subparagraph 13.5.1.7, and not otherwise recovered by or credited to the Owner.

13.5.4 If the termination, pursuant to Paragraph 13.2, be partial, the Contractor may file with the Construction Project Manager a claim for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the Contractor for an equitable adjustment under this clause must be asserted within six months from the effective date of the Notice of Termination.

13.5.5 The Contractor shall refund to the Owner any amounts paid by the Owner to the Contractor in excess of costs reimbursable under Paragraph 13.4.

13.5.6 The Owner may, at its option and Contractor's expense, have costs reimbursable under Paragraph 13.4 audited and certified by independent certified public accountants selected by the Owner.

13.5.7 The Contractor shall be entitled to only those damages and that relief from termination by the Owner as specifically provided in Article 13.

END OF SECTION

LIGHTING CONTROL DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Photoelectric switches.
 - 2. Standalone daylight-harvesting switching and dimming controls.
 - 3. Indoor occupancy and vacancy sensors.
 - 4. Switchbox-mounted occupancy sensors.
 - 5. High-bay occupancy sensors.
 - 6. Outdoor motion sensors.
 - 7. Lighting contactors.
 - 8. Emergency shunt relays.
- B. Related Requirements:
 - 1. Section 262726 "Wiring Devices" for wall-box dimmers, non-networkable wall-switch occupancy sensors, and manual light switches.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
 - 1. Show installation details for the following:
 - a. Occupancy sensors.
 - b. Vacancy sensors.
 - 2. Interconnection diagrams showing field-installed wiring.
 - 3. Include diagrams for power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plan(s) and elevations, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Suspended ceiling components.
 - 2. Structural members to which equipment will be attached.
 - 3. Items penetrating finished ceiling, including the following:
 - a. Luminaires.
 - b. Air outlets and inlets.
 - c. Sprinklers.
 - d. Access panels.
 - e. Control modules.
- B. Field quality-control reports.
- C. Sample Warranty: For manufacturer's warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For each type of lighting control device to include in operation and maintenance manuals.
- B. Software and Firmware Operational Documentation:
 - 1. Software operating and upgrade manuals.
 - 2. Program Software Backup: On manufacturer's website. Provide names, versions, and website addresses for locations of installed software.
 - 3. Device address list.
 - 4. Printout of software application and graphic screens.

1.6 WARRANTY

- A. Manufacturer's Warranty: Manufacturer and Installer agree to repair or replace lighting control devices that fail(s) in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Faulty operation of lighting control software.
 - b. Faulty operation of lighting control devices.
 - 2. Warranty Period: Two year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 OUTDOOR PHOTOELECTRIC SWITCHES

- A. Manufacturers:
 - 1. Wattstopper
 - 2. Leviton
 - 3. Cooper
 - 4. Or approved equal
- B. Description: Solid state, with SPST dry contacts rated for 1000 W incandescent to operate connected relay, contactor coils, or microprocessor input; complying with UL 773A, and compatible with ballasts and LED lamps.
 - 1. Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - 2. Light-Level Monitoring Range: 1.5 to 10 fc (16.14 to 108 lux), with an adjustment for turn-on and turn-off levels within that range, and a directional lens in front of the photocell to prevent fixed light sources from causing turn-off.
 - 3. Time Delay: Fifteen-second minimum, to prevent false operation.
 - 4. Surge Protection: Metal-oxide varistor.
 - 5. Mounting: Twist lock complies with NEMA C136.10, with base-and-stem mounting or stem-and-swivel mounting accessories as required to direct sensor to the north sky exposure.
 - 6. Failure Mode: Luminaire stays ON.

2.2 INDOOR OCCUPANCY AND VACANCY SENSORS

- A. Manufacturers:
 - 1. Wattstopper
 - 2. Leviton
 - 3. Cooper
 - 4. Or approved equal

- B. General Requirements for Sensors:
1. Ceiling-mounted, solid-state indoor occupancy and vacancy sensors.
 2. Dual technology.
 3. Integrated or Separate power pack.
 4. Hardwired connection to switch.
 5. Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 6. Operation:
 - a. Occupancy Sensor: Unless otherwise indicated, turn lights on when coverage area is occupied, and turn them off when unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
 - b. Vacancy Sensor: Unless otherwise indicated, lights are manually turned on and sensor turns lights off when the room is unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
 - c. Combination Sensor: Unless otherwise indicated, sensor shall be programmed to turn lights on when coverage area is occupied and turn them off when unoccupied, or to turn off lights that have been manually turned on; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
 7. Sensor Output: Sensor is powered from the power pack.
 8. Power: Line voltage.
 9. Power Pack: Dry contacts rated for 20-A LED load at 120- and 277-V ac, for 13-A tungsten at 120-V ac, and for 1 hp at 120-V ac. Sensor has 24-V dc, 150-mA, Class 2 power source, as defined by NFPA 70.
 10. Mounting:
 - a. Sensor: Suitable for mounting in any position on a standard outlet box.
 - b. Relay: Externally mounted through a 1/2-inch (13-mm) knockout in a standard electrical enclosure.
 - c. Time-Delay and Sensitivity Adjustments: Recessed and concealed behind hinged door.
 11. Indicator: Digital display, to show when motion is detected during testing and normal operation of sensor.
 12. Bypass Switch: Override the "on" function in case of sensor failure.
 13. Automatic Light-Level Sensor: Adjustable from 2 to 200 fc (21.5 to 2152 lux); turn lights off when selected lighting level is present.

2.3 SWITCHBOX-MOUNTED OCCUPANCY SENSORS

- A. Manufacturers:
1. Wattstopper
 2. Leviton
 3. Cooper
 4. Or approved equal
- B. General Requirements for Sensors: Automatic-wall-switch occupancy sensor with manual on-off switch, suitable for mounting in a single gang switchbox, using hardwired connection.
1. Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 2. Occupancy Sensor Operation: Unless otherwise indicated, turn lights on when coverage area is occupied, and turn lights off when unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
 3. Operating Ambient Conditions: Dry interior conditions, 32 to 120 deg F (0 to 49 deg C).
 4. Switch Rating: Not less than 800-VA LED load at 120 V, 1200-VA LED load at 277 V, and 800-W incandescent.

- C. Wall-Switch Sensor:
 - 1. Standard Range: 180-degree field of view, field adjustable from 180 to 40 degrees; with a minimum coverage area of 900 sq. ft. (84 sq. m).
 - 2. Sensing Technology: PIR.
 - 3. Switch Type: SP, field-selectable automatic "on," or manual "on," automatic "off."
 - 4. Capable of controlling load in three-way application.
 - 5. Voltage: Match the circuit voltage
 - 6. Ambient-Light Override: Concealed, field-adjustable, light-level sensor from 10 to 150 fc (108 to 1600 lux). The switch prevents the lights from turning on when the light level is higher than the set point of the sensor.
 - 7. Concealed, field-adjustable, "off" time-delay selector at up to 30 minutes.
 - 8. Adaptive Technology: Self-adjusting circuitry detects and memorizes usage patterns of the space and helps eliminate false "off" switching.
 - 9. Color: White.
 - 10. Faceplate: Color matched to switch.

2.4 CONDUCTORS AND CABLES

- A. Power Wiring to Supply Side of Remote-Control Power Sources: Not smaller than No. 12 AWG. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
- B. Classes 2 and 3 Control Cable: Multiconductor cable with stranded-copper conductors not smaller than No. 18 AWG. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
- C. Class 1 Control Cable: Multiconductor cable with stranded-copper conductors not smaller than No. 18 AWG. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

2.5 ACCEPTABLE MANUFACTURERS –BATTING AREA AND LOCKER ROOM LIGHTING CONTROL SYSTEM

- A. Acuity N – Lite
- B. Wattstopper DLM.
- C. Substitutions: Under provisions of Section 26 01 00.

2.6 BATTING AREA AND LOCKER ROOM LIGHTING CONTROL SYSTEM FEATURES

- A. Up / Down Entry Station for manual on / Dimming override operation.
- B. Enclosure: Entry station shall mount in recessed back box. Control station will be surface mounted.
- C. Occupancy sensors to control batting area and locker room lighting system.
- D. Daylight sensors shall provide high end trim for each lighting zone noted on drawings.
- E. All components shall be UL listed as a system.
- F. Ceiling mounted passive infrared Occupancy Sensors:
 - 1. 180 degree coverage
 - 2. Adjustable sensitivity and time delay

- 3. Additional single pole, double throw isolated relay outputs
- F. Occupancy Sensor Settings:
 - 1. Occupancy sensors to be manual on / automatic off mode.

2.6 STANDALONE DIMMING SWITCHES – APPROVED MANUFACTURERS

- A. Acuity
- B. Wattstopper
- C. Lutron

2.7 DIMMING SWITCH – CHARACTERISTICS

- A. Linear slide control with off position.
- B. Provide dimming modules as required to control loads identified in lighting control panel schedule.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine lighting control devices before installation. Reject lighting control devices that are wet, moisture damaged, or mold damaged.
- B. Examine walls and ceilings for suitable conditions where lighting control devices will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SENSOR INSTALLATION

- A. Comply with NECA 1.
- B. Coordinate layout and installation of ceiling-mounted devices with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, smoke detectors, fire-suppression systems, and partition assemblies.
- C. Install and aim sensors in locations to achieve not less than 90-percent coverage of areas indicated. Do not exceed coverage limits specified in manufacturer's written instructions.

3.3 LIGHTING CONTROL SYSTEM – BATTING AREA AND LOCKER ROOM

- A. Interconnect sensors with power supplies using CAT 5 cable. Install cable open in concealed building spaces. Install cable in raceways when installed on building surfaces. Run cable in spaces identified for network wiring.
- B. Install sensors and accessories per manufacturer's recommendations.
- C. Select and locate sensors to provide 100% area coverage.
- D. Adjust sensor to turn off area lighting circuit(s) if unoccupied for a period of 15 minutes.

- E. Home run low voltage wiring from each lighting zone to lighting control panel
- F. Interconnect sensors with lighting control system using CAT 5 cable. Install cable in _____ spaces identified for network wiring.
- G. Adjust sensor to limit light levels to minimum of 10 footcandles.

3.3 WIRING INSTALLATION

- A. Comply with NECA 1.
- B. Wiring Method: Comply with Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Minimum conduit size is 1/2 inch (13 mm).
- C. Wiring within Enclosures: Comply with NECA 1. Separate power-limited and nonpower-limited conductors according to conductor manufacturer's written instructions.
- D. Size conductors according to lighting control device manufacturer's written instructions unless otherwise indicated.
- E. Splices, Taps, and Terminations: Make connections only on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures.

3.4 IDENTIFICATION

- A. Identify components and power and control wiring according to Section 260553 "Identification for Electrical Systems."
 - 1. Identify controlled circuits in lighting contactors.
 - 2. Identify circuits or luminaires controlled by photoelectric and occupancy sensors at each sensor.
- B. Label time switches and contactors with a unique designation.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to evaluate lighting control devices and perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- C. Perform the following tests and inspections:
 - 1. Operational Test: After installing time switches and sensors, and after electrical circuitry has been energized, start units to confirm proper unit operation.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Lighting control devices will be considered defective if they do not pass tests and inspections.
- E. Prepare test and inspection reports.

3.6 ADJUSTING

- A. Occupancy Adjustments: When requested within 12 months from date of Substantial Completion, provide on-site assistance in adjusting lighting control devices to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.
 - 1. For occupancy and motion sensors, verify operation at outer limits of detector range. Set time delay to suit Owner's operations.
 - 2. For daylighting controls, adjust set points and deadband controls to suit Owner's operations.
 - 3. Align high-bay occupancy sensors using manufacturer's laser aiming tool.

3.7 SOFTWARE SERVICE AGREEMENT

- A. Technical Support: Beginning at Substantial Completion, service agreement shall include software support for two years.
- B. Upgrade Service: At Substantial Completion, update software to latest version. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system and new or revised licenses for using software.
 - 1. Upgrade Notice: At least 30 days to allow Owner to schedule and access the system and to upgrade computer equipment if necessary.

3.8 DEMONSTRATION

- A. Coordinate demonstration of products specified in this Section with demonstration requirements for low-voltage, programmable lighting control systems specified in Section 260943.16 "Addressable-Luminaire Lighting Controls" and Section 260943.23 "Relay-Based Lighting Controls."
- B. Train Owner's maintenance personnel to adjust, operate, and maintain lighting control devices.

END OF SECTION

PANELBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Lighting and appliance branch-circuit panelboards.

1.3 DEFINITIONS

- A. GFCI: Ground-fault circuit interrupter.
- B. MCCB: Molded-case circuit breaker.
- C. SPD: Surge protective device.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of panelboard.
 - 1. Include materials, switching and overcurrent protective devices, SPDs, accessories, and components indicated.
 - 2. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For each panelboard and related equipment.
 - 1. Include dimensioned plans, elevations, sections, and details.
 - 2. Show tabulations of installed devices with nameplates, conductor termination sizes, equipment features, and ratings.
 - 3. Detail enclosure types including mounting and anchorage, environmental protection, knockouts, corner treatments, covers and doors, gaskets, hinges, and locks.
 - 4. Detail bus configuration, current, and voltage ratings.
 - 5. Short-circuit current rating of panelboards and overcurrent protective devices.
 - 6. Include evidence of NRTL listing for SPD as installed in panelboard.
 - 7. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
 - 8. Include wiring diagrams for power, signal, and control wiring.
 - 9. Key interlock scheme drawing and sequence of operations.
 - 10. Include time-current coordination curves for each type and rating of overcurrent protective device included in panelboards. Submit on translucent log-log graph paper; include selectable ranges for each type of overcurrent protective device. Include an Internet link for electronic access to downloadable PDF of the coordination curves.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency.
- B. Panelboard Schedules: For installation in panelboards.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:
1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
 2. Time-current curves, including selectable ranges for each type of overcurrent protective device that allows adjustments.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Keys: Two spares for each type of panelboard cabinet lock.
 2. Circuit Breakers Including GFCI and GFEP Types: Two spares for each panelboard.
 3. Fuses for Fused Switches: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.

1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: ISO 9001 or 9002 certified.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Remove loose packing and flammable materials from inside panelboards; install temporary electric heating (250 W per panelboard) to prevent condensation.
- B. Handle and prepare panelboards for installation according to NECA 407.

1.10 FIELD CONDITIONS

- A. Environmental Limitations:
1. Do not deliver or install panelboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above panelboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
 2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:
 - a. Ambient Temperature: Not exceeding minus 22 deg F (minus 30 deg C) to plus 104 deg F (plus 40 deg C).
 - b. Altitude: Not exceeding 6600 feet (2000 m).
- B. Service Conditions: NEMA PB 1, usual service conditions, as follows:
1. Ambient temperatures within limits specified.
 2. Altitude not exceeding 6600 feet (2000 m).

1.11 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace panelboards that fail in materials or workmanship within specified warranty period.
1. Panelboard Warranty Period: 18 months from date of Substantial Completion.

- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace SPD that fails in materials or workmanship within specified warranty period.
 - 1. SPD Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PANELBOARD REQUIREMENTS

- A. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Section 260548.16 "Seismic Controls for Electrical Systems."
- B. Product Selection for Restricted Space: Drawings indicate maximum dimensions for panelboards including clearances between panelboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Comply with NEMA PB 1.
- E. Comply with NFPA 70.
- F. Enclosures: Surface-mounted, dead-front cabinets.
 - 1. Rated for environmental conditions at installed location.
 - a. Indoor Dry and Clean Locations: NEMA 250, Type 1.
 - b. Outdoor Locations: NEMA 250, Type 3R.
 - 2. Height: 84 inches (2.13 m) maximum.
 - 3. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box. Trims shall cover all live parts and shall have no exposed hardware.
 - 4. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover. Trims shall cover all live parts and shall have no exposed hardware.
 - 5. Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
 - 6. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
 - 7. Finishes:
 - a. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
 - b. Back Boxes: Galvanized steel.
 - c. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
- G. Incoming Mains:
 - 1. Location: Convertible between top and bottom.
 - 2. Main Breaker: Main lug interiors up to 400 amperes shall be field convertible to main breaker.
- H. Phase, Neutral, and Ground Buses:
 - 1. Material: Hard-drawn copper, 98 percent conductivity.
 - a. Plating shall run entire length of bus.
 - b. Bus shall be fully rated the entire length.

2. Interiors shall be factory assembled into a unit. Replacing switching and protective devices shall not disturb adjacent units or require removing the main bus connectors.
 3. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
 4. Full-Sized Neutral: Equipped with full-capacity bonding strap for service entrance applications. Mount electrically isolated from enclosure. Do not mount neutral bus in gutter.
 5. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and listed and labeled by an NRTL acceptable to authority having jurisdiction, as suitable for nonlinear loads in electronic-grade panelboards and others designated on Drawings. Connectors shall be sized for double-sized or parallel conductors as indicated on Drawings. Do not mount neutral bus in gutter.
 6. Split Bus: Vertical buses divided into individual vertical sections.
- I. Conductor Connectors: Suitable for use with conductor material and sizes.
1. Material: Hard-drawn copper, 98 percent conductivity.
 2. Terminations shall allow use of 75 deg C rated conductors without derating.
 3. Size: Lugs suitable for indicated conductor sizes, with additional gutter space, if required, for larger conductors.
 4. Main and Neutral Lugs: Compression type, with a lug on the neutral bar for each pole in the panelboard.
 5. Ground Lugs and Bus-Configured Terminators: Compression type, with a lug on the bar for each pole in the panelboard.
 6. Feed-Through Lugs: Compression type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
 7. Subfeed (Double) Lugs: Compression type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.
 8. Gutter-Tap Lugs: Compression type suitable for use with conductor material and with matching insulating covers. Locate at same end of bus as incoming lugs or main device.
 9. Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs mounted on extra-capacity neutral bus.
- J. NRTL Label: Panelboards shall be labeled by an NRTL acceptable to authority having jurisdiction for use as service equipment with one or more main service disconnecting and overcurrent protective devices. Panelboards or load centers shall have meter enclosures, wiring, connections, and other provisions for utility metering. Coordinate with utility company for exact requirements.
- K. Future Devices: Panelboards shall have mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices.
1. Percentage of Future Space Capacity: Twenty percent.
- L. Panelboard Short-Circuit Current Rating: Rated for series-connected system with integral or remote upstream overcurrent protective devices and labeled by an NRTL. Include label or manual with size and type of allowable upstream and branch devices listed and labeled by an NRTL for series-connected short-circuit rating.
1. Panelboards rated 240 V or less shall have short-circuit ratings as shown on Drawings, but not less than 10,000 A rms symmetrical.
- M. Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals. Assembly listed by an NRTL for 100 percent interrupting capacity.
1. Panelboards and overcurrent protective devices rated 240 V or less shall have short-circuit ratings as shown on Drawings, but not less than 10,000 A rms symmetrical.

2.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Panelboards shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
 - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
- B. Surge Suppression: Factory installed as an integral part of indicated panelboards, complying with UL 1449 SPD Type 1.

2.3 POWER PANELBOARDS

- A. Manufacturers:
 - 1. Eaton
 - 2. Siemens
 - 3. Square D
 - 4. Or approved equal.
- B. Doors: Secured with vault-type latch with tumbler lock; keyed alike.
 - 1. For doors more than 36 inches (914 mm) high, provide two latches, keyed alike.
- C. Mains: Circuit breaker
- D. Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes 125 A and Smaller: Bolt-on circuit breakers.

2.4 IDENTIFICATION

- A. Panelboard Label: Manufacturer's name and trademark, voltage, amperage, number of phases, and number of poles shall be located on the interior of the panelboard door.
- B. Breaker Labels: Faceplate shall list current rating, UL and IEC certification standards, and AIC rating.
- C. Circuit Directory: Directory card inside panelboard door, mounted in transparent card holder.
 - 1. Circuit directory shall identify specific purpose with detail sufficient to distinguish it from all other circuits.
- D. Circuit Directory: Computer-generated circuit directory mounted inside panelboard door with transparent plastic protective cover.
 - 1. Circuit directory shall identify specific purpose with detail sufficient to distinguish it from all other circuits.

2.5 ACCESSORY COMPONENTS AND FEATURES

- A. Accessory Set: Include tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify actual conditions with field measurements prior to ordering panelboards to verify that equipment fits in allocated space in, and comply with, minimum required clearances specified in NFPA 70.
- B. Receive, inspect, handle, and store panelboards according to NECA 407.
- C. Examine panelboards before installation. Reject panelboards that are damaged, rusted, or have been subjected to water saturation.
- D. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the Work.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Coordinate layout and installation of panelboards and components with other construction that penetrates walls or is supported by them, including electrical and other types of equipment, raceways, piping, encumbrances to workspace clearance requirements, and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.
- B. Comply with NECA 1.
- C. Install panelboards and accessories according to NECA 407.
- D. Equipment Mounting:
 - 1. Install panelboards on cast-in-place concrete equipment base(s). Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
 - 2. Attach panelboard to the vertical finished or structural surface behind the panelboard.
 - 3. Comply with requirements for seismic control devices specified in Section 260548.16 "Seismic Controls for Electrical Systems."
- E. Comply with mounting and anchoring requirements specified in Section 260548.16 "Seismic Controls for Electrical Systems."
- F. Mount top of trim 90 inches (2286 mm) above finished floor unless otherwise indicated.
- G. Mount panelboard cabinet plumb and rigid without distortion of box.
- H. Mount recessed panelboards with fronts uniformly flush with wall finish and mating with back box.
- I. Mount surface-mounted panelboards to steel slotted supports 5/8 inch (16 mm) in depth. Orient steel slotted supports vertically.
- J. Install overcurrent protective devices and controllers not already factory installed.

1. Set field-adjustable, circuit-breaker trip ranges.
 2. Tighten bolted connections and circuit breaker connections using calibrated torque wrench or torque screwdriver per manufacturer's written instructions.
- K. Make grounding connections and bond neutral for services and separately derived systems to ground. Make connections to grounding electrodes, separate grounds for isolated ground bars, and connections to separate ground bars.
- L. Install filler plates in unused spaces.
- M. Stub four 1-inch (25 mm) empty conduits from panelboard into accessible ceiling space or space designated to be ceiling space in the future. Stub four 1-inch (25 mm) empty conduits into raised floor space or below slab not on grade.
- N. Arrange conductors in gutters into groups and bundle and wrap with wire ties.

3.3 IDENTIFICATION

- A. Identify field-installed conductors, interconnecting wiring, and components; install warning signs complying with requirements in Section 260553 "Identification for Electrical Systems."
- B. Create a directory to indicate installed circuit loads; incorporate Owner's final room designations. Obtain approval before installing. Handwritten directories are not acceptable. Install directory inside panelboard door.
- C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems."
- D. Device Nameplates: Label each branch circuit device in power panelboards with a nameplate complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems."
- E. Install warning signs complying with requirements in Section 260553 "Identification for Electrical Systems" identifying source of remote circuit.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- B. Perform tests and inspections.
1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- C. Acceptance Testing Preparation:
1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
 2. Test continuity of each circuit.
- D. Tests and Inspections:
1. Perform each visual and mechanical inspection and electrical test for low-voltage air circuit breakers and low-voltage surge arrestors stated in NETA ATS, Paragraph 7.6 Circuit Breakers optional tests. Certify compliance with test parameters.

2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
3. Perform the following infrared scan tests and inspections and prepare reports:
 - a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each panelboard. Remove front panels so joints and connections are accessible to portable scanner.
 - b. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each panelboard 11 months after date of Substantial Completion.
 - c. Instruments and Equipment:
 - 1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
- E. Panelboards will be considered defective if they do not pass tests and inspections.
- F. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results, with comparisons of the two scans. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

- A. Adjust moving parts and operable components to function smoothly and lubricate as recommended by manufacturer.
- B. Set field-adjustable circuit-breaker trip ranges as indicated.
- C. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes. Prior to making circuit changes to achieve load balancing, inform Architect of effect on phase color coding.
 1. Measure loads during period of normal facility operations.
 2. Perform circuit changes to achieve load balancing outside normal facility operation schedule or at times directed by the Architect. Avoid disrupting services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
 3. After changing circuits to achieve load balancing, recheck loads during normal facility operations. Record load readings before and after changing circuits to achieve load balancing.
 4. Tolerance: Maximum difference between phase loads, within a panelboard, shall not exceed 20 percent.

3.6 PROTECTION

- A. Temporary Heating: Prior to energizing panelboards, apply temporary heat to maintain temperature according to manufacturer's written instructions.

3.7 ARC FLASH LABELING

- A Provide arc flash labels at all panelboards and in accordance with NFPA 70E Standards. Labels shall identify available fault current and incident energy available at panel

END OF SECTION

GENERAL LIGHTING PROVISIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes general information related to providing and installing all interior and exterior lighting systems throughout the project.

B. RELATED REQUIREMENTS

- 1. Section 26 09 23 "Interior Lighting Controls"

1.3 DEFINITIONS

- A. Fixture: See "Luminaire."
- B. IP: International Protection or Ingress Protection Rating.
- C. LED: Light-emitting diode.
- D. Luminaire: Complete lighting unit, including lamp, reflector, and housing.

1.4 WARRANTIES

- A. Submit a copy of manufacturers' written guarantees for each manufacturer for transmittal to the Owner, agreeing to repair or replace any and all defects in workmanship and/or materials for a period of two (2) years, or as otherwise specified, from the date of final acceptance of the installation, without cost to the Owner.
- B. Submit the Contractor's written guarantee for a period of one (1) year after the date of final acceptance, all apparatus installed by the Contractor to be free of mechanical and electrical defects in workmanship, and to replace the same if, in the opinion of the Architect, the responsibility lies with the Contractor.
- C. LED luminaires shall have a ten (10) year warranty on driver and light modules.

1.5 REQUIREMENTS OF REGULATORY AGENCIES

- A. All equipment covered in this section shall comply with all applicable standards of IESNA, National Electrical Code and all laws, codes and regulations of Federal, State, County and City authorities having jurisdiction over this work.
- B. All equipment shall be U.L. Listed. Equipment shall be listed for Wet or Damp locations, as stated in the luminaire schedule, or as specified by the luminaire catalog number.
- C. Luminaires shall be located so as not to provide any conflicts with barrier free spaces: Public Law 90-480 and American National Standards Institute A1117.1-1961

- D. NEMA WD 6 – Wiring Devices-Dimensional Requirements
- E. All work shall be inspected and approved by the appropriate authorities.

1.6 MATERIALS AND WORKMANSHIP

- A. All materials and apparatus required for the work, except as specified otherwise, shall be new, of first class quality, and shall be furnished, delivered, erected, connected and finished in every detail, and shall be so selected and arranged as to fit properly into the spaces.
- B. All component parts of each item of equipment or device shall bear the Manufacturer's Nameplate, giving at least the name of the manufacturer, description, size, type, serial number, and electrical characteristics in order to facilitate maintenance or replacement.
- C. Blemished, damaged, or unsatisfactory luminaires shall be replaced at the direction of the Architect in a satisfactory manner at no cost to the Owner. This includes manufacturer defects as well as damage or blemishes to luminaires during handling and installation.
- D. Luminaires that are installed and or used during construction must be protected from the construction activities, dirt and debris. Any luminaires showing dirt or debris must be cleaned prior to turnover of the area to the Owner.

1.7 SUBMITTALS

- A. Substitute Products Approval during Bidding
 - 1. Substitutions for lighting equipment other than that specified will be considered if equal (or better and/or higher) in quality, performance, ratings and function; and similar in type, size and appearance.
 - 2. Substitutions are to be provided to the Architect at least (14) days prior to proposals being presented to the Owner. Said substitution package shall include data on both the proposed substitution and the specified product is such detail as to permit the two products to be adequately compared.
 - 3. Submit Electronic Submittals or (4) hard copies on request, of the substitution requests to the Architect. The Architect will distribute to the Owner and, Electrical Engineer. Contractor shall submit bid alternates for approval prior to bidding. Proposed alternates shall include specification sheets with adequate information for comparison. The Architect will issue a statement of approval or rejection within (14) days of receiving the substitution documents.
- B. Shop Drawings & Product Submittals
 - 1. Before releasing any materials, the Contractor shall submit manufacturers catalog cut sheets, diagrams, and a complete list of all of the equipment and materials which the Contractor intends to install. This list shall include, but is not limited to, the following:
 - a. Details on backing to be provided for wall mounted fixtures over ten pounds to be wall mounted.
 - b. Luminaire mountings, luminaires, finishes, light sources, fixture hickey's, fixture studs, visible chains, visible cables, seismic supports, and ballasts;
 - c. Bolt plate covers;
 - d. Performance and Photometric data, and UL listing;
 - e. Wiring and connection diagrams of all luminaires, etc.
 - f. Lighting dimming control components specifications, if applicable.
 - 2. The list shall include the brand name, any identifying numbers, relevant technical data, and any other information necessary for the agency responsible for maintenance of the

- system to procure exact replacements of any and all equipment and material used on the project. All equipment shall be new, first quality and approved by Underwriter's Laboratories, Inc.
3. Indicate dimensions, weights, methods of field assembly, components, features, and accessories.
 4. All luminaires of the same type classification shall be provided by the same manufacturer.
 5. Before releasing any non-standard, modification of standard specification product, semi-custom, or custom luminaires, the Contractor shall submit shop drawings which detail methods of assembly and fastening. Shop drawings shall also indicate colors and their locations on each lighting element for review and approval prior to releasing. Contractor shall also supply manufacturer descriptions on luminaires, light standard materials, fabrication performance, and installation.
 6. The Contractor shall submit all Certificates of Compliance supplied by the manufacturer of the equipment. This equipment shall include, but is not limited to, the following:
 - a. Luminaire mountings.
 - b. Luminaire standards and accessories.
 - c. Luminaires, light sources, drivers and ballasts.
 - d. Photometric data

PART 2 PRODUCTS

2.1 GENERAL MATERIALS REQUIREMENTS

- A. Provide accessories as required for compatibility with installation requirements. Luminaire catalog numbers do not necessarily denote specific mounting accessories for where/how luminaire is to be installed.
- B. All materials used in fabrication and mounting luminaires shall be of a non-corrosive nature.
- C. Luminaires shall be free of light leaks. Luminaires shall be designed to provide adequate ventilation for both light sources and drivers or transformers.
- D. Luminaires shall be designed to hide mounting hardware from view when luminaire is completely installed. Exposed fasteners shall not be acceptable, except as noted on details.
- E. Wiring channels and lamp holder mountings shall be rigid and accurately manufactured.
- F. All luminaires when installed shall be set true and free of warps, dents, or other irregularities. The finish of exposed parts or trims shall be as specified or as directed by the Architect/Engineer.
- G. Rivets, springs, and other hardware shall not be visible after installation.

2.2 PRODUCT DELIVERY AND STORAGE

- A. All components shall be packed in a manner consistent with ICC regulations to minimize damage during shipping.
- B. Store all luminaires, light sources, drivers and hardware flat, in a clean, dry area off the ground under watertight cover.

PART 3 EXECUTION

3.1 PREPARATION

- A. Report all defects. Contractor shall be held responsible for any existing defects that adversely affect the luminaire or its performance.
- B. Upon Architect's request, Contractor shall provide one sample of selected luminaires.

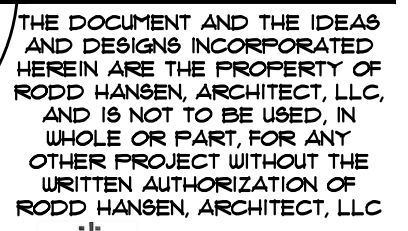
3.2 INSTALLATION

- A. The installation shall be in accordance with all governing local ordinances and regulations, the Drawings, these special provisions and those sections of the Standard Specifications which apply. All workmanship shall be first class and finished work shall present a neat, uncluttered appearance. The Contractor shall coordinate his work with other construction phases so as to provide a minimum of interference to the combined operations.
- B. Clean the housing, trim, reflector surfaces, lens of all luminaires after construction is complete, so as to render them free of any material.
- C. Any luminaire or lamp or lighting device damaged during construction shall be replaced without cost to the Owner.
- D. Replace all inoperative light sources, ballasts, drivers and transformers just prior to acceptance of Project by Owner. Verify that all light sources are installed are exactly as specified for each luminaire type.
- E. Notify Owner and/or Architect about field conditions at variance with contract documents before commencing installation.
- F. It is the contractor's responsibility to review and coordinate with the Architectural drawings for placement of luminaires and lighting control devices.

3.4 TESTS

- A. Prior to final acceptance, the Contractor shall demonstrate by test to the Architect's and/or Lighting Consultant 's satisfaction that all the electrical and lighting equipment installations are in proper condition per drawings and specifications. The Contractor shall furnish all equipment and appliances to make the test.

END OF SECTION



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S.H.S. SOFTBALL PRACTICE FACILITY

DISTRICT 19 SPRINGFIELD SCHOOL DISTRICT

EXTERIOR
TITLE: ELEVATIONS

JOB#: 1451.08312021

DRAWN BY: JSD

5-22-2023

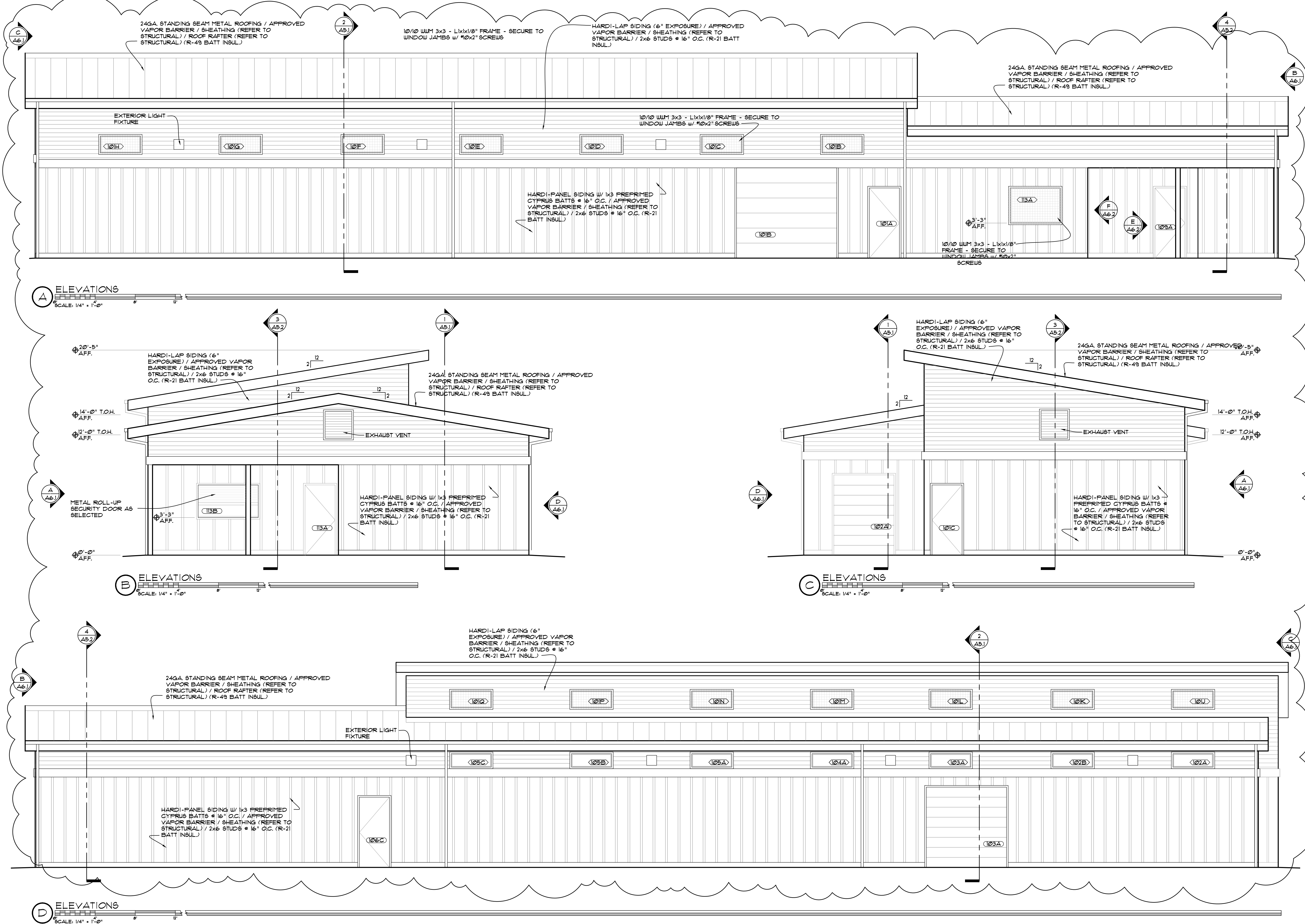
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3

ISSUE DATE: 11-10-2022

SCALE: 1/4" = 1'-0"

A6.1



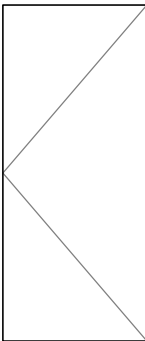
DOOR SCHEDULE																	
TAG	TYP.	DOOR			MATL	GLAZING	LOUVER		MATL	FRAME			FIRE RATING LABEL	HARDWARE		NOTES	TAG
		WD	HGT	THK			WD	HGT		HEAD	JAMB	SILL		SET NO	KEYSIDE RM NO		
101A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		101A
101B *	2	10'-0"	9'-0"	--	--	--	--	--	MTL.	--	--	10/A9.2	--	4	EXT	*GARAGE DOOR	101B *
101C	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		101C
102A*	2	3'-0"	7'-0"	--	--	--	--	--	MTL.	--	--	10/A9.2	--	4	EXT	*GARAGE DOOR	102A
103A*	2	3'-0"	7'-0"	--	--	--	--	--	MTL.	--	--	10/A9.2	--	4	EXT	*GARAGE DOOR	103A
104A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	TIMLEY	2/A9.2	6/A9.2	--	--	1	101		104A
104B	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	TIMLEY	2/A9.2	6/A9.2	--	--	1	103		104B
106A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	TIMLEY	2/A9.2	6/A9.2	--	--	1	106		106A
106B	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	TIMLEY	2/A9.2	6/A9.2	--	--	1	106		106B
106C	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		106C
107A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	2/A9.2	6/A9.2	--	--	1	106		107A
108A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		108A
109A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	2	EXT		109A
110A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		110A
111A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	2/A9.2	6/A9.2	--	--	1	101		111A
112A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	2/A9.2	6/A9.2	--	--	1	101		112A
113A	1	3'-0"	7'-0"	1-3/4"	H.M.	--	--	--	MTL.	1/A9.2	5/A9.2	9/A9.2	--	3	EXT		113A
113B*	SPECIAL	6'-0'	3'-3"	--	--	--	--	--	MTL.							*ROLL UP SECURITY DOOR	113B*

WINDOW SCHEDULE												
TAG	TYP.	WINDOW			GLAZING	MATL	FRAME			FIRE RATING LABEL	NOTES	TAG
		WD	HGT	MATL			HEAD	JAMB	SILL			
101B	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--	• 10/10 UWM 3x3 - 1.1kx1/8" FRAME - SECURE TO WINDOW JAMBS w/ #10x2" SCREWS (INTERIOR AND EXTERIOR APPLICATION)	101B
101C	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101C
101D	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101D
101E	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101E
101F	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101F
101G	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101G
101H	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101H
101J	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101J
101K	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101K
101L	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--	• 10/10 UWM 3x3 - 1.1kx1/8" FRAME - SECURE TO WINDOW JAMBS w/ #10x2" SCREWS (INTERIOR APPLICATION)	101L
101M	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101M
101N	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101N
101P	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101P
101Q	1	4'-0"	1'-8"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		101Q
102A	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		102A
102B	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		102B
103A	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		103A
104A	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		104A
104B*	1	4'-0"	4'-0"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--	• 10/10 UWM 3x3 - 1.1kx1/8" FRAME - SECURE TO WINDOW JAMBS w/ #10x2" SCREWS (BATTING ROOM 101 APPLICATION)	104B
105A	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		105A
105B	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		105B
105C	1	4'-0"	1'-4"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		105C
113A	1	5'-0"	3'-10"	--	--	VINYL	4/A9.2	8/A9.2	12/A9.2	--		113A
113B	*	--	--	--	--	--	--	--	--	--		113B

FINISH SCHEDULE												
ROOM #	ROOM NAME	FLOOR MAT.	FLOOR FINISH	WALL MAT.	WALL BASE	WALL FINISH				CEILING HEIGHT	REMARKS	ROOM #
						N	W	S	E			
101	BATTING / TEAM ROOM	3	4	7	--	6	6	6	6	VARIES		101
102	FOOTBALL STORAGE	3	4	7	9	5	5	5	5	VARIES*	* 5/8" GYPBD. ON CEILING	102
103	TEAM GEAR STORAGE	3	4	7	9	5	5	5	5	VARIES*	* 5/8" GYPBD. ON CEILING	103
104	COACH'S OFFICE	3	4	7	9	5	5	5	5	VARIES*	* 5/8" GYPBD. ON CEILING	104
105	TEAM ROOM	3	4	7	9	5	5	5	5	VARIES*	* 5/8" GYPBD. ON CEILING	105
106	HALL	3	4	7	9	5	5	5	5	10'-0"	* 5/8" GYPBD. ON CEILING	106
107	JANITOR	3	4	7	9	5*, ***	5	5	5*, ***	10'-0"	* 5/8" GYPBD. ON CEILING	107
108	GIRL'S RESTROOM	3	4	7	9	5*, ***	5*, ***	5*, ***	5*, ***	10'-0"	* 5/8" MR GYPBD BEHIND ALL WATER FIXTURES AND TO EXTEND 2' BEYOND ** 5/8" GYPBD. ON CEILING, ***RESILIENT SHEET VINYL + 48" AFF	108
109	FAMILY RESTROOM	3	4	7	9	5*, ***	5*, ***	5**	5*, ***	10'-0"		109
110	BOY'S RESTROOM	3	4	7	9	5*, ***	5*, ***	5*, ***	5*, ***	10'-0"		110
111	TEAM GEAR STORAGE	3	4	7	9	5	5	5	5	10'-0"	* 5/8" GYPBD. ON CEILING	111
112	ELECT.	3	4	7	9	5	5	5	5	10'-0"	* 5/8" GYPBD. ON CEILING	112
113	CONSESSION	3	4	7	9	5	5*	5	5	10'-0"***	* 5/8" MR GYPBD BEHIND ALL WATER FIXTURES AND TO EXTEND 2' BEYOND ** 5/8" GYPBD. ON CEILING	113

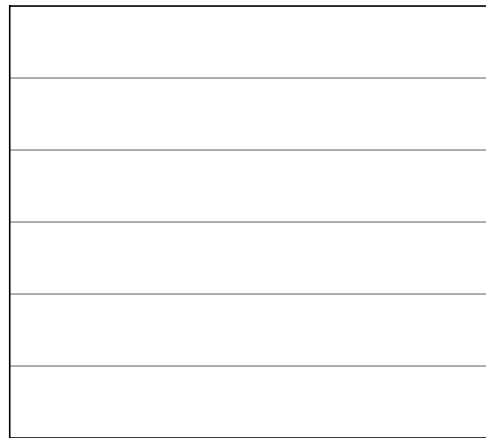
HARDWARE SCHEDULE			
MANUFACTURES SPECIFIED:			
PRODUCT SPECIFIED	MANUFACTURER SPECIFIED	SYMBOL SPECIFIED	APPROVED EQUAL
BUTTS LOCKSETS CYLINDERS PLANES CLOSERS STOPS SEALS	McKINNEY SCHLAGE SCHLAGE VON DUFRIN LCN IVES STEELCRAFT	MC SCH SCH VD LCN I STE	IVES NONE NONE NONE NONE NONE NONE
KEYING: PROVIDE CONSTRUCTION CYLINDERS ON EXTERIOR DOORS. KEY: ALL NEW CYLINDERS INTO EXISTING GRAND?MASTER KEY SYSTEM. VERIFY KEYWAY WITH ARCHITECT AND OWNER			
HARDWARE GROUPS:			
GROUP 1			
104A, 104B, 106A, 106B, 107A, 111A, 112A			
3 EA BUTTS BBB1HW 4.5 X 4.5 NRP		652	IVE
1 EA LOCKSET L3456P 06A		626	SCH
1 EA WALLSTOP W840TCCV		630	IVE
1 EA KICKPLATE 8400 10 X 2" LDW		630	IVE
1 EA SEALS 844D 1TFT		DKB	P
GROUP 2			
109A			
3 EA BUTTS BBB1HW 4.5 X 4.5 NRP		652	IVE
1 EA LOCKSET L3456P 06A L283-T22		626	SCH
1 EA WALLSTOP W840TCCV		630	IVE
1 EA KICKPLATE 8400 10 X 2" LDW		630	IVE
1 EA CLOSER 4111 S CUSH DA WMS		ALUM	LCN
1 EA THRESHOLD VERIFY		ALUM	
1 EA DOOR BOTTOM 216AV		ALUM	P
1 EA RAIN DRIP 346C		ALUM	
1 EA SEALS 844D 1TFT		DKB	P
GROUP 3			
DOORS: 101A, 101C, 106C, 108A, 110A, 113A			
3 EA BUTTS BBB1HW 4.5 X 4.5 NRP		652	IVE
1 EA LOCKSET L3456P 06A		626	SCH
1 EA KICKPLATE 8400 10 X 2" LDW		630	IVE
1 EA CLOSER 4111 S CUSH DA WMS		ALUM	LCN
1 EA THRESHOLD VERIFY		ALUM	
1 EA DOOR BOTTOM 216AV		ALUM	
1 EA RAIN DRIP 346C		ALUM	
1 EA SEALS 844D 1TFT		DKB	P
GROUP 4			
DOORS: 101B, 102A, 103A			
HARDWARE AS SUPPLIED BY DOOR MANUFACTURER			

DOOR TYPES

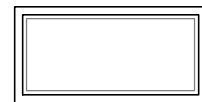


1

WINDOW TYPES



2



1

MATERIAL SCHEDULE		
PAINT	WALL SUBSTRATE	CEILING FINISH
1. LATEX ENAMEL COLOR TO SELECTED BY OWNER	5. 5/8" GYPSUM BOARD TYPE "X" (INTERIOR APPLICATION OVER WOOD FRAMING ONLY) NOTE: MR. GYPBD. TO BE USES BEHIND ALL WATER FIXTURES AND TO RUN 2'-0" PAST THE FIXTURE ON EITHER SIDE (typ.)	10. 1/2" CDX PLY.WD. (PAINT COLOR AS SELECTED (EXTERIOR CEILING AND SOFFIT) PAINT TO MATCH EXTERIOR COLOR
2.	6. 5/8" "CDX" PLY.WD. 2x6 WOOD STUD	11. 5/8" GYPSUM BOARD TYPE "X" (INTERIOR CEILING AND PAINT AS SELECTED)
FLOOR SUBSTRATE	7. 1/2" TH-II (EXTERIOR APPLICATION OVER EXTERIOR FRAMING ONLY)	WALL FINISH
3. CONCRETE	8. 4" RUBBER BASE	
FLOOR FINISH		12. RESILIENT SHEET VINYL + 48" AFF.
4. FINISHED AND SEALED CONCRETE		



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S.H.S. SOFTBALL PRACTICE FACILITY
DISTRICT 19 SPRINGFIELD SCHOOL DISTRICT
875 7TH STREET,
SPRINGFIELD, OR. 97477

DOOR, WINDOW AND FINISH SCHEDULES

JOB#: 145108312021

DRAWN BY: JSD

5-22-2023

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ISSUE DATE: 11-10-2022

SCALE: NONE

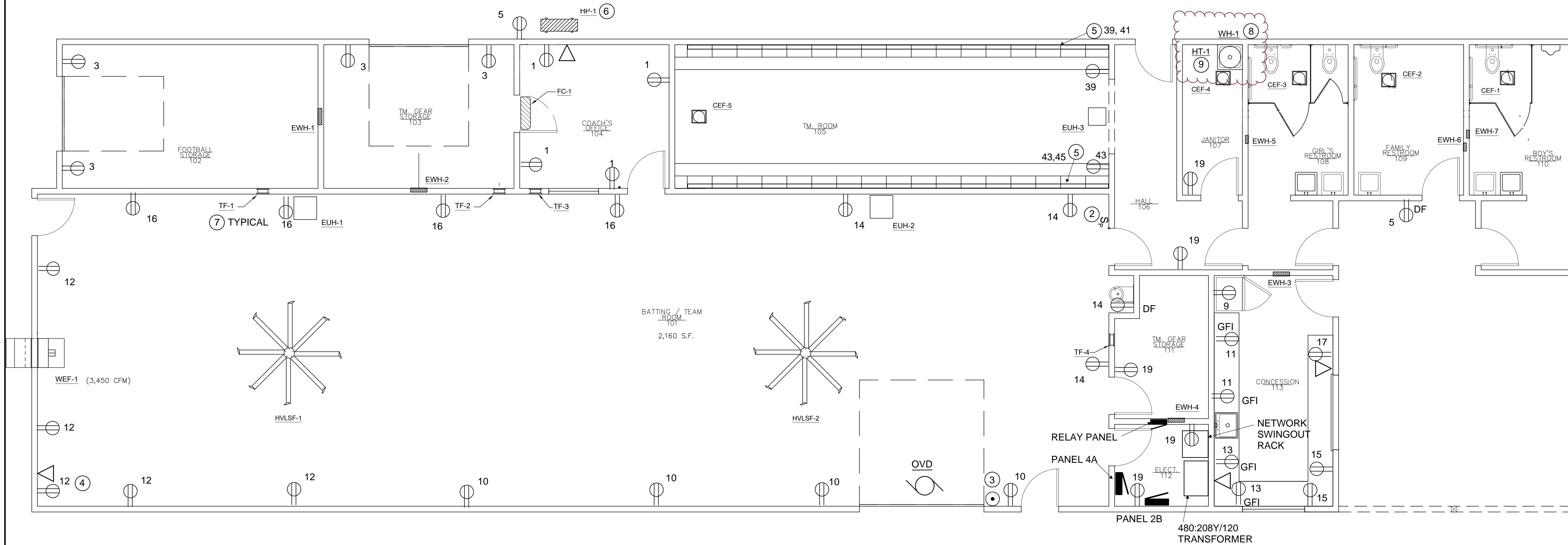
S.H.S. SOFTBALL PRACTICE FACILITY

SPRINGFIELD, OREGON 97478

PROJECT TYPE:
FIRST FLOOR
POWER &
SIGNAL

CHECKED BY: JK	PROJECT NO:
DRAWN BY:	
DATE: 04/05/2023	
ADD #1 5/23/2023	
DRAWING SCALE: AS NOTED	PLOT SCALE: 1-1
SHEET NO: 2 OF 3	REV.

E101



FIRST FLOOR PLAN - POWER & SIGNAL
SCALE: 1/4" = 1'-0"

SHEET NOTES:

- SPLIT WIRED RECEPTACLE WITH UPPER OUTLET ROUTED THROUGH LIGHTING CONTROL PANEL.
- FAN SPEED CONTROLLER FURNISHED BY DIVISION 23 SUBCONTRACTOR, INSTALLED UNDER DIVISION 26.
- WIRE OVERHEAD DOOR OPERATOR PER MANUFACTURERS RECOMMENDATIONS.
- PROVIDE POWER & DATA OUTLET FOR TV SCREEN. VERIFY OUTLET LOCATION WITH OWNER.
- PROVIDE WIREMOLD AT LOCKER SHELF LEVEL. PROVIDE DUPLEX OUTLET AT EACH LOCKER LOCATION. TYPICAL OF 34. ALTERNATE CIRCUITS, 8-9 OUTLETS PER CIRCUIT.
- FEED FC-1 ON SAME CIRCUIT AS HP-1.
- SEE MECHANICAL EQUIPMENT SCHEDULE FOR BRANCH CIRCUIT INFORMATION FOR ALL MECHANICAL EQUIPMENT SHOWN.
- PROVIDE ELECTRICAL CONNECTION TO WATER HEATER. 2# 10 COPPER WITH #10 GROUND. CONNECT TO CIRCUIT 28-38.
- PROVIDE 120 VOLT CONNECTION TO HEAT TRACE, FURNISHED AND INSTALLED PER DRAWING #102. CONNECT TO CIRCUIT 28-38.

PANEL: 4A

VOLTS: 277/480

LOCATION: 1st Floor Storage Room

MOUNTING: Surface

NOTES:

TYPE:

AMPS: 200

PHASE: 3

WIRE: 4

MAIN: Main Breaker

DATE: April 4, 2023

PROJECT: Springfield High Softball Facility

LOAD CLASS	Conn. VA	Demand Factor	Demand Load VA
LIGHTING	22550	125%	28188
OUTLETS	21600	*****	15800
MOTOR LOADS	12911		12911
RESISTANCE LOADS	74400	100%	74400

TOTAL VOLT-AMPS
MAXIMUM PHASE AMPS

Connected

131,461

Demand****

131,298

158.4

158.2

BREAKER A	P	DESCRIPTION	WATTS	CIR. NO.	PHASE	CIR. NO.	WATTS	DESCRIPTION	BREAKER P	A
60	3	Panel 2B	16380	1	A	2	1400	Future Light Pole	3	40
			14250	3	B	4	1400			
			16930	5	C	6	1400			
20	1	Spare		7	A	8	1400	Future Light Pole	3	40
20	1	Spare		9	B	10	1400			
20	1	Batting Area Lighting	2400	11	C	12	1400			
20	3	Sewage Ejector Pump	1523.5	13	A	14	1400	Future Light Pole	3	40
			1523.5	15	B	16	1400			
			1523.5	17	C	18	1400			
20	1	Spare		19	A	20	1400	Future Light Pole	3	40
20	1	Lighting Interior	1300	21	B	22	1400			
20	1	Lighting Exterior	370	23	C	24	1400			
		Space		25	A	26	12500	Unit Heater	2	125
		Space		27	B	28	12500			
		Space		29	C	30	12500	Unit Heater	2	125
		Space		31	A	32	12500			
		Space		33	B	34		Spare	1	20
		Space		35	C	36		Spare	1	20
		Space		37	A	38		Spare	1	20
		Space		39	B	40	2500	Unit Heater EUH 3	2	30
		Space		41	C	42	2500			

PANEL: 2B

VOLTS: 120/208

LOCATION: 1st Floor Storage Room

MOUNTING: Surface

NOTES:

TYPE:

AMPS: 150

PHASE: 3

WIRE: 4

MAIN: Main Breaker

DATE: April 4, 2023

PROJECT: Springfield High Softball Facility

LOAD CLASS	Conn. VA	Demand Factor	Demand Load VA
LIGHTING	1680	125%	2100
OUTLETS	20340	*****	15170
MOTOR LOADS	8340		8340
RESISTANCE LOADS	17200	100%	17200

TOTAL VOLT-AMPS
MAXIMUM PHASE AMPS

Connected

47,560

Demand****

42,810

132.1

118.9

BREAKER A	P	DESCRIPTION	WATTS	CIR. NO.	PHASE	CIR. NO.	WATTS	DESCRIPTION	BREAKER P	A
20	1	Receptacles - Office	900	1	A	2	1080	HP-1, FC-1	2	20
20	1	Receptacles Storage	720	3	B	4	1080			
20	1	Outdoor Receptacle	360	5	C	6	2250	Water Heater	2	30
20	1	Receptacles - Concession	1500	7	A	8	2250			
20	1	Receptacles - Concession	1500	9	B	10	720	Receptacles, Batting Area	1	20
20	1	Receptacles - Concession	1500	11	C	12	720	Receptacles, Batting Area	1	20
20	1	Receptacles - Concession	1500	13	A	14	720	Receptacles, Batting Area	1	20
20	1	Receptacles - Concession	1500	15	B	16	720	Receptacles, Batting Area	1	20
20	1	Receptacles - Concession	1500	17	C	18	1000	Electric Heater	2	20
20	1	Utility Receptacle	900	19	A	20	1000			
20	1	Electric Heater	1500	21	B	22		Spare	1	20
20	1	Electric Heater	1500	23	C	24		Spare	1	20
20	1	Electric Heater	1000	25	A	26		Spare	1	20
			1000	27	B	28		Spare	1	20
20	1	Electric Heater	1500	29	C	30		Spare	1	20
20	1	Electric Heater	1500	31	A	32	1100	Exhaust Fans	1	20
20	1	Electric Heater	1500	33	B	34	1100	Exhaust Fans	1	20
20	1	Receptacles - Team Room 540	1080	35	C	36	680	Miscellaneous Fans and Heat Trace	1	20
20	1	Receptacles - Team Room 540	1080	37	A	38	750	Overhead Fans	2	20
20	1	Receptacles - Team Room 540	1080	39	B	40	750			
20	1	Receptacles - Team Room 540	1080	41	C	42	840	Overhead Door	1	20

LIGHT FIXTURE SCHEDULE						
FIXTURE TYPE	Description	Manufacturer Catalog Number	VOLT RATING	Light Source	Mounting	Notes
A	Surface Mounted 4 foot - LED Strip with Lens Diffuser	Vertex CLF11 4Ft AL MIN10 100W 10000 40K 120 OP WHT GLR	277	100 Watt , 10000 Lumen LED	Surface Mounted	Provide 2 Level Daylight Control with Manual Override.
B	Surface Mounted 4 foot - LED Strip with Lens Diffuser	Lithonia CLX L48 4000LM HEF WDL WD 120 40K 80CRI WH	277	30 Watt , 4000 Lumen LED	Surface Mounted	
C	Surface Mounted 13" LED Disk	Juno JSF 13 IN	277	20 Watt , 1800 Lumen LED	Surface Mounted	
D	LED Downlight	Lithonia REAL6C DC MW ESL 1500L 40K .65 120 LP6LN	277	19 Watt LED	Recessed	
EM	Emergency 2 Lamp LED	Lithonia ELM 2L	277		Surface	
EX	Emergency Exit Sign with 2 Adjustable Emergency Heads	Lithonia LHQM R	277		Surface	
F	Exterior Wall Pack	Lithonia WPX1 LED 50K MVOLT PE DDBXD	277	24 Watt LED	Wall Mounted	
G	Surface Mounted 1 x 4 foot - LED Flat Panel	Lithonia EPNL 1 x 4 4000 Lumen 80 CRI 3500K 277V	277	30 Watt , 4000 Lumen LED	Surface Mounted	

TYPICAL NETWORK FACEPLATE OR CAMERA

NETWORK EQUIPMENT SWING OUT RACK

JUNCTION BOX BY OTHERS

PULL BOX BY OTHERS

NEW 18" x 18" x 6" PULL BOX

COMMUNICATION ONE LINE DIAGRAM

NOTE: CONDUIT BETWEEN TWO RVERS / DOS RIOS ELEMENTARY IS FOR FUTURE USE. WIRELESS COMMUNICATION TO NETWORK EQUIPMENT RACK WILL BE USED INITIALLY. SCHOOL DISTRICT WILL PROVIDE WIRELESS NETWORK EQUIPMENT.

PANEL "4A"

60A

150A

PANEL "2B"

45 KVA TRANSFORMER 480:208Y/120V

#4 CU

NEUTRAL GROUND

UFER GROUND

BUILDING STEEL

(2) 10" GROUND RODS 10' O.C.

METER BASE AND DISCONNECT SWITCH BY OTHERS

PULL BOX BY OTHERS

NEW 18" x 18" x 6" PULL BOX

ELECTRICAL ONE LINE DIAGRAM

FEEDER SCHEDULE

Designation	Description	Conduit	Wire	Ground	Notes
200A	200 Amp, 480V 3 Phase 4 Wire in New 2" Conduit	3"	4#4/0 Copper	#6	
200B	200 Amp, 480V 3 Phase 4 Wire in Existing 2" Conduit	3"	4#4/0 Copper	#6	Conduit installed Under a Separate Contract
150A	200 Amp, 208V 3 Phase 4 Wire in New 2" Conduit	1 1/2"	4#1/0 Copper	#6	
60A	60 Amp, 480V 3 Phase 4 Wire in New 1" Conduit	1"	3#6 Copper	#10	

Springfield High Lighting Control Matrix			
Area	Type of Controls	Control Functions	Product Basis For Design
Batting / Team Room	Daylight / Relay Panel	2 Daylight Zones; Wall mounted Dimmer switch for each Daylight zone; Sweep off when security system is armed	Acuity N-Lite, Wattstopper DLM
Team Locker Room	Occupancy Sensor	Switch on / off with Occupancy Sensor	Line voltate controls
Office	Occupancy Sensor	Switch on / off with Occupancy Sensor and Dimming Switch	Line voltate controls
Team Storage	Vacancy Sensor with switch	Switch on / off; Vacancy Sensor Off.	Line voltate controls
Rest Rooms	Occupancy Sensor	Switch on / off with Occupancy Sensor	Line voltate controls
Electrical / Storage	Manual Switch	Switch on / off	Line voltate controls
Concession	Manual Switch	Switch on / off	Line voltate controls
Exterior Canopy Mount	Relay Panel on / off	Photocell on / Time Clock Off	Line voltate controls
Exterior Wall Mount	Relay Panel on / off	Photocell on / Time Clock Off	Line voltate controls

MECHANICAL EQUIPMENT SCHEDULE

TAG	Description	VOLT RATING	Circuit Breaker	Branch Circuit	Circuit Assignment
EUH1, EUH2	25 kW Unit Heater	480/ 3	40/3	1"C, 3#8, #10G	4A-18:20:22; 24:26:28
EUH3	5 kW Unit Heater	480/ 1	20/2	1/2"C, 2#12, #12G	4A-38:40
EWH-1	2 KW Electric Wall Heater	208/1	20/2	1/2"C, 2#12, #12G	2A-25:27
EWH-2	2 KW Electric Wall Heater	208/1	20/2	1/2"C, 2#12, #12G	2A-18:20
EWH-3	1.5 KW Electric Wall Heater	120	20/1	1/2"C, 2#12, #12G	2A-31
EWH-4	1.5 kW Electric Wall Heater	120	20/1	1/2"C, 2#12, #12G	2A-33
EWH-5	1.5 kW Electric Wall Heater	120	20/1	1/2"C, 2#12, #12G	2A-21
EWH-6	1.5 kW Electric Wall Heater	120	20/1	1/2"C, 2#12, #12G	2A=23
EWH-7	1.5 kW Electric Wall Heater	120	20/1	1/2"C, 2#12, #12G	2A-29
WEF-1	1/2 HP Wall Exhaust Fan	120	20/1	1/2"C, 2#12, #12G	2B-32
TF1, TF2, TF3, TF4	16W Wall Transfer Fans	120	20/1	1/2"C, 2#12, #12G	2B-36
CEF1, CEF2, CEF3	22W Ceiling Exhaust Fan	120	20/1	1/2"C, 2#12, #12G	2B-36
CEF4	13W Ceiling Exhaust Fan	120	20/1	1/2"C, 2#12, #12G	2B-36
CEF5	81W Ceiling Exhaust Fan	120	20/1	1/2"C, 2#12, #12G	2B-36
HVLSF-1 and HVLSF-2	Ceiling Circulation Fan	208/1	20/2	1/2"C, 2#12, #12G	2B-38:40
OHD	Overhead Door	120	20/1	1/2"C, 2#12, #12G	2B-42
WH-1	4.5 kW Electric Water Heater	208	30/2	3/4"C, 2#10	2B-6:8
DF-1	Drinking Foutain 370W	120	20/1	1/2"C, 2#12, #12G	2B-30
HT-1	Electric Heat Trace - 500W	120	20/1	1/2"C, 2#12, #12G	2B-36
HP-1	Heat Pump Outdoor Unit	208/1	20/2	1/2"C, 2#12,, #12G	2B-2:4
FC-1	Heat Pump Indoor Unit	208/1	20/2	1/2"C, 2#12,, #12G	2B-2:4
SEP	Sewage Ejector Pump	480/3	20/3	1/2"C, 3#12,, #12G	4A-13:15:17

LEGEND:

LINEAR LED FIXTURE

WALL MOUNTED LED FIXTURE

CEILING MOUNTED LED FIXTURE

LOW VOLTAGE SWITCH

CEILING MOUNTED OCCUPANCY SENSOR

WALL MOUNTED OCCUPANCY SENSOR

DAYLIGHT SENSOR

NOTE REFERENCE

DUPLEX OUTLET

NETWORK FACEPLATE

DUPLEX OUTLET WITH GFCI

DUPLEX OUTLET WITH WEATHERPROOF COVER

FAN SPEED CONTROLLER

OVERHEAD DOOR CONTROLLER

MOTOR CONNECTION

DISCONNECT SWITCH

PLUG MOLD

NOTE REFERENCE

EQUIPMENT REFERENCE

PANELBOARD

METER BASE

REGISTERED PROFESSIONAL ENGINEER
12688

OREGON
EST. 21, 1981
JAMES P. KRUMSICK

EXPIRES 06/30/2023

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S.H.S. SOFTBALL PRACTICE FACILITY

SPRINGFIELD, OREGON 97478

PROJECT TYPE:

ONE LINE SCHEDULES & LEGEND

CHECKED BY:
JK

DRAWN BY:

DATE:
04/05/2023

PROJECT NO:

ADD #1 5/23/2023

DRAWING SCALE:
AS NOTED

PLOT SCALE:
1-1

SHEET NO:
1 OF 3

REV.

E200