

ADDENDUM NO. 1

The additions, omissions, clarifications and corrections contained herein shall be made to drawings and specifications for the project and shall be included in scope of work and proposals to be submitted. References made below to specifications and drawings shall be used as a general guide only. Bidder shall determine the work affected by Addendum items.

1.	Pre-Bid Conference Meeting Minutes and sign-in sheet	See attached Pre-Bid Conference Meeting Minutes and sign-in sheet.
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In the Specification:

1.	Call for Bids	CHANGE bid date from 2:00 p.m. on Tuesday, March 8, 2016 to <b>2:00 p.m. on Thursday, March 17, 2016.</b>
2.	General Conditions	REPLACE in its entirety with attached.
3.	Section 07 08 00 1.6.D Commissioning of Air Barriers and Building Envelope	REVISE to read: "Building Envelope Inspector / Testing Technician (Hired by Contractor).
4.	Section 27 00 10 General Provisions for Communications	REPLACE Section in its entirety with attached.
5.	Section 27 10 06 Structured Cabling for Voice and Data	REPLACE Section in its entirety with attached.
6.	Section 28 00 10 General Provisions for Electronic Safety and Security	REPLACE Section in its entirety with attached.
7.	Section 28 13 00 Access Control	REPLACE Section in its entirety with attached.
8.	Section 28 23 00 Video Surveillance	REPLACE Section in its entirety with attached.
9.	Section 28 31 00 Fire Detection and Alarm	REPLACE Section in its entirety with attached.

In the Drawings:

1.	Sheet L-101	REVISE Construction Note 5 to read as follows: "5. ALL PLANTER AREAS TO RECEIVE 2" DEEP ROCK MULCH TOP DRESSING, BASALT CHIP TO MATCH EXISTING. SEE CALLOUT NOTES ABOVE."
2.	Sheet P-001	CHANGE Keynote No. 7 to read: See detail #1, Sheet P-001.
3.	Sheet P-001	CHANGE Keynote No. 9 to read: See detail #2, Sheet P-001.
4.	Sheet E-050 Site Electrical Plan	ADDED Keynote 11: "... (See Addendum #1 Daktronics Internal Connection Board Diagram)..." See attached Daktronics Internal Connection Board Diagram and Clarification E-01.
5.	Sheet ET-101 Special Systems Plan	ADDED Keynote 7: "Camera mounted under canopy. Provide all necessary mounting apparatus. Coordinate final camera view with owner." See attached Clarification E-02.
6.	Sheet E-501	REPLACE Detail #4 with attached. See attached Clarification E-03.
7.	Sheet E-501	REPLACE Detail #6 with attached. See attached Clarification E-04.

Action      Item

Project No.:	2015-051	Liberty Bldg., Suite 400 203 North Washington Spokane, WA 99201-0233
Project Name:	Spokane International Airport Parking Operations Garage SIA Project No. 15-40-1867	509.838.8568 fax/509.458.3710 www.alscarchitects.com
Subject:	Pre-Bid Conference Meeting Minutes February 29, 2016 @ 2:00 p.m.	
By:	Kathy Russell	

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<u>Those Present</u>	<u>Representing</u>
See attached sign-in sheet.	

*This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.*

Action      Item

- I. INTRODUCTIONS
- II. SUMMARY OF WORK
  - A. Utilities, building, and landscaping for new Parking Operations Garage located northwest of the Exit Canopy and Southwest of the Irv Reed Center. It is an addition to the existing Parking Operations Building.
- III. INSTRUCTIONS TO BIDDERS
  - A. Bid Opening: Thursday, March 17, 2016 @ 2:00 p.m. (This date is a change by Addendum No. 1). Bids received no later than 2:00 p.m. on date of opening.
  - B. Location: SIA Board Room, Suite 204, 9000 W. Airport Drive, Spokane WA 99224.
  - C. No product substitution considered prior to award of contract.
- IV. BID SUBMITTAL
  - A. Bidder's Checklist:
    - Bidder's Checklist
    - Qualification of Bidder Information
    - Bid Proposal Form
    - Subcontractor List with the Bid. Use AIA Form or bid will be rejected.
    - Bid Security: 5% (of total Base Bid including Washington State Sales Tax) - In the form of a *certified or bank cashier's check payable to the Owner or a bid bond acceptable to the Owner and executed by a bonding company licensed in the State of Washington on a Public Works Bond or equivalent form. Confirm Bond Surety complies with Circular 570.*
    - Receipt of Addenda
    - Washington State Sales Tax to be Included in Bid amount

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- B. Unit Price – Rock Excavation Allowance.
  - C. Trench Excavation Safety Program.
  - D. State of Washington Prevailing Wage Rates.
- V. SCHEDULE
- A. Cut-off date and time for questions: Monday, March 14 at noon (with new bid date).
  - B. Notice to Proceed: Approximately end of April.
  - D. Substantial Completion 160 days.
    - 1. Liquidated Damages: \$1,000/day.
- VI. GENERAL CONDITIONS
- A. Bid Documents:
    - 1. Project Manual – 1 volume
    - 2. Drawing Sheets – 1 bound volume
    - 3. Addenda
  - B. Method of Correction (Addendum):
    - 1. Addendum No. 1 will be issued by Abadan Wednesday, March 2, 2016. Register with them at: [www.siaplanroom.com](http://www.siaplanroom.com) to receive notification.
    - 2. Addendum No. 1 Highlights:
      - a. Revised General Conditions. Contains:
        - i. Length of project closeout from substantial completion.
        - ii. Language to be added to provide evidence of completion of three similar size projects in the last three years.
      - b. Plumbing note clarification.
      - c. Door wiring detail in electrical drawings.
      - d. Camera detail.
  - C. Performance and Payment Bonds 100% of Contract (GC Part 2).
  - D. Insurance: (GC Part 2).
  - E. Supervision/Coordination with General Contractor (GC Article 5.01).
  - F. Fees: Building Plan Review Fee to be paid by Owner. All other permits, fees, costs and charges to be paid by the Contractor (GC Article 5.02).
    - 1. City plan review is nearly complete.
    - 2. No GFC's for this project. Let Matt Breen know if there are issues with this at the City.

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## VII. GENERAL REQUIREMENTS

- A. Inspection and Testing (Section 01 40 00) – Intermountain Materials Testing; paid by Owner.
- B. Coordination with Occupants (Section 01 10 00, 1.7).
- C. Work Restrictions (Section 01 10 00, 1.8):
  - 1. Access and Staging.
  - 2. Areas of Operation.
  - 3. Hours of Work (7:00 a.m. – 7:00 p.m.)
- D. Temporary Facilities.
- E. Coordination with Owners. Professional Traffic Control Plan and credentialed supervisors will be required with lane closures.
- F. Building Commissioning.
- G. Air infiltration testing required; paid by Contractor.

## VIII. OTHER ITEMS – no items.

## IX. QUESTIONS AND ANSWERS – no items

## X. Site tour was not mandatory. No attendance was taken at the tour.

*If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.*

KR:tmb:2015-051

Attachment

Distribution:       Attendees  
                          JJW/KR/File



**SPOKANE INTERNATIONAL AIRPORT  
PARKING OPERATIONS GARAGE**

#15-40-1867

Mandatory Pre-Bid Conference

February 29, 2016 2:00PM

Name	Company	Phone / Cell	Prime or Sub	Email Address
MATT BREEN	SIA	798-7276	OWNER	matth@spokaneairports.net
Gary Hayenger	Meridian	443 0252	Prime	Frank@meridianco.com
Mike Johnson	Graham Const	509 576 6700	Prime	mikej@grahamvs.com
Brooke Kelly	Swimmels	208.740.3401	Prime	brookemkelly@gmail.com
MAYNARD DAVIS	WESTERN STARS	509-892-0600	Prime	wsc@air-pipe.com
DARZIN WIFEKLS	DARZAN	208 773 5418	PRIME	darin@darzanic.com
Tom Clark	TWCHUCK CONST	509 927 0800	PRIME	BID@TWCLARK.COM
Dave Peterson	Peterson Electric	509 989 1950	Sub	Dave@PetersonElectric.com
Terry Witzzenburg	Johnson Central Contractors	509-744-3471	Sub	Terry-L.Witzzenburg@jci.com
Levi McPhee	Northwest Inc.	208-667-2456	Prime	levi@contractorsnorthwest.com
VAN FALT	Halme Builders Inc	509-725-1800	Prime	VANF@Halmebuilders.com
Lance Pounder	Lance Pounder Excavation	509 466 6751	Sub	LRPXL@comcast.net
Isaiah Clow	NNAC	208-635-5400	Prime	isaiah.clow@nnacinc.com
JEFF KILGORE	Kilgore Construction	509-238-0703	Prime	jeff@keispokane.com
DAVE ARMSTRONG	SIA	455-6448	OWNER	darmstrong@spokaneairports.net

**Please print clearly**



**SPOKANE INTERNATIONAL AIRPORT  
PARKING OPERATIONS GARAGE**

#15-40-1867

Mandatory Pre-Bid Conference

February 29, 2016 2:00PM

Name	Company	Phone / Cell	Prime or Sub	Email Address
Brian Saylor	Bartel	370-1462	PRIME	Brausebartelconstruction.com
Bill Murphy	Wm Winkler	489 6100	Prime	bmurphy@wwwinkler.com
Scott Frase	ALLWEST TESTING	534-4411	Sub	Sfrase@allwesttesting.com
Jesse Todd	LYDIG	89-495-4310	PRIME	jtodd@lydig.com
JEFF COLLINS	SIA	455-6964	OWNER	JEFF@SPOKANEAIRPORT.SIA
Lorraine Mead	Hull	981-0771	CM	lurraimead@hillint.com
Chance Arison	SIA	455-6445	Owner	cabhey@spokaneairport.sia

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**GENERAL CONDITIONS FOR SPOKANE AIRPORTS  
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**PART 1 - GENERAL PROVISIONS**

1.01 DEFINITIONS

- A. "Application for Payment" means a written request in a format approved by Owner submitted by Contractor to A/E for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. "A/E" means an Architect, Engineer, or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. "Change Order" means a written instrument signed by Owner and Contractor stating their mutual agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.
- D. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in Part 8.
- E. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates.
- F. "Contract Documents" means the Advertisement for Bids, Instructions for Bidders, completed Form of Proposal, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- G. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents.
- H. "Contract Time" is the number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- I. "Contractor" means the individual, partnership, firm, corporation, company, or joint venture contracting with the Owner to do prescribed Work.
- J. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- K. "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line.
- L. "Final Acceptance" means the written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents.
- M. "Final Completion" means that the Work is fully and finally completed in accordance with the Contract Documents.
- N. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in Part 3.05A.
- O. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
- P. "Notice to Proceed" means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- Q. "Owner" means the Spokane Airport Board, a joint operation of the City of Spokane and Spokane County, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- R. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.
- S. "Prior Occupancy" means Owner's use of all or parts of the Project before Substantial Completion.



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| T.  | "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in Part 3.02.  | includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.   |
| U.  | "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.  | 1.02 ORDER OF PRECEDENCE<br><br>Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:   |
| V.  | "Project Manual" means the volume usually assembled for the Work which may include the bidding requirements, sample forms, and other Contract Documents.   | 1. Signed Public Works Contract/Agreement, including any Change Orders, any Special Forms.   |
| W.  | "Project Record" means the separate set of Drawings and Specifications as further set forth in Part 4.02A.   | 2. Addenda   |
| X.  | "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principal category of Work, in such detail as requested by Owner.   | 3. Supplementary Conditions  |
| Y.  | "Shop Drawings" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. | 4. WSDOT Amendments  |
| Z.  | "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.  | 5. Modifications to the General Conditions   |
| AA. | "Subcontract" means a contract entered into by Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for or in connection with the Work.  | 6. General Conditions for Spokane Airport Public Works Construction  |
| AB. | "Subcontractor" means any individual, partnership, firm, corporation, company, or joint venture who is sublet part of the Contract by the Contractor.  | 7. Specifications--provisions in Division 1 shall take precedence over provisions of any other Division  |
| AC. | "Substantial Completion" means that stage in the progress of the Work where Owner has full and unrestricted use and benefit of the facilities for the purposes intended, as more fully set forth in Part 6.07.   | 8. Drawings--in case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings   |
| AD. | "Work" means the construction and services required by the Contract Documents, and   | 9. Signed and Completed Bid/Proposal Form  |
|     |  | 10. Instructions to Bidders, including Supplementaries   |
|     |  | 11. Advertisement for Bids   |
|     |  | 1.03 EXECUTION AND INTENT  |
|     |  | Contractor makes the following representations to Owner:   |
|     |  | 1. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;   |
|     |  | 2. Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other |

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requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may or could be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;

3. Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and
4. Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

**PART 2 - INSURANCE AND BONDS**

**2.01 CONTRACTOR'S LIABILITY INSURANCE**

Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this Part 2 shall be licensed to do business under Title 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in the Contract Sum the cost of all insurance and bond costs required to complete the Work. Insurance carriers providing insurance shall be acceptable to Owner, and its A. M. Best rating shall be no less than A- VII and shall be indicated on the insurance certificates.

- A. Contractor shall maintain the following insurance coverage during the Work and until the statue of repose after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by Part 5.16.
  1. Commercial General Liability Insurance (CGL) written on ISO form CG 0001 Edition date 10/01 or equivalent and shall confer a status or contain endorsement (Form CG 2503 or equivalent) requiring that the general aggregate limit of liability shall apply to this Project. Coverage shall be based on an occurrence form and include the hazards of: (a) Construction Operation, (b) Subcontractors and Independent Contractors, (c) Products and Completed Operations applicable to the additional insureds with Completed Operations to remain in force from the date of Final Acceptance of the Work until the statue of repose. CGL shall also include

Contractual Liability coverage sufficient to meet the requirements of the Contract (including defense cost and attorney fees assumed under the Contract in addition to the required limits of liability).

2. Commercial Auto Liability Insurance written on ISO form CA 0001 Edition date of 10/13 or equivalent covering all owned, leased, hired and non-owned vehicles used in connection with the Contract. .
  - B. Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act.
  - C. All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
  - D. All insurance coverages shall be endorsed to include Owner, the City of Spokane, the County of Spokane, and their elected and appointed officials, agents, and employees, each as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence additional insured. This insurance shall be primary to any insurance maintained by the additional insureds, with the additional insured insurance being noncontributory. This insurance shall include a waiver of subrogation in favor of the additional insured and shall include the severability of interest of the insureds and shall include a waiver of subrogation in favor of the additional insureds. The Additional Insured Endorsements must be on Form CG 2010, or CG2010 (10/01) plus CG 2037 (10/01) or equivalent and for Autos a CA 2048 or equivalent.
  - E. Contractor shall ensure and require that Subcontractors have insurance coverage to cover bodily injury and property damage on all operations and all vehicles owned or operated by Subcontractors. Subcontractors shall name Contractor and Owner, the City of Spokane, the County of Spokane, and their elected and appointed officials, agents, and employees, each as an additional named and give at least 30 Days' Notice of cancellation.

**2.02 COVERAGE LIMITS**

The coverage limits shall be not less than the amounts specified in the Agreement; if limits are not specified in

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the Agreement, coverage limits shall be not less than as follows:

- A. Limits of Liability shall not be less than \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage (other than Automobile liability) Each Occurrence; Personal Injury and Advertising Liability Each Occurrence.
- B. \$2,000,000 Combined Single Limit Annual General Aggregate.
- C. \$2,000,000 Annual Aggregate for Products and Completed Operations Liability.
- D. \$1,000,000 Combined Single Limit for Automobile Bodily Injury and Property Damage Liability, Each Accident or Loss.
- E. For work on the AOA or in close proximity to Aircraft, limits will be a minimum of \$5,000,000.
- F. Coverages and Minimums: Coverages are the minimum to be provided and are not limitations of liability under the Contract, indemnification, or applicable provisions of law. Contractor may, at its expense, purchase larger coverage amounts. Contractor's policy shall be designated primary coverage for both defense and indemnity, and any Owner's policies excess.

**2.03 INSURANCE COVERAGE CERTIFICATES**

- A. Prior to commencement of the Work, Contractor shall furnish to Owner a completed certificate of insurance coverage and additional insured endorsements.
- B. All insurance certificates shall name Owner's Project number and Project title.
- C. All insurance certificates shall specifically require 45 Days prior notice to Owner of cancellation or any material change, except 30 days for surplus line insurance.

**2.04 PAYMENT AND PERFORMANCE BONDS**

Payment and performance bonds for 100% of the Contract Award Amount and state sales tax, shall be furnished for the Work, using the current version of the Payment Bond and Performance Bond form published by and available from the American Institute of Architects (AIA) -- AIA A312 Payment Bond Form and AIA A312 Performance Bond Form or equivalent separate payment and performance bond forms. No payment or performance

bond is required if the Contract Sum is \$35,000 or less and Contractor agrees that Owner may, in lieu of the bond, retain 50% of the Contract Sum for the period allowed by RCW 39.08.010.

**2.05 ADDITIONAL BOND SECURITY**

Contractor shall promptly furnish payment and performance bonds from an alternate surety if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if requested by Owner.

**2.06 BUILDER'S RISK**

- A. Contractor shall purchase and maintain builder's risk insurance, including coverage for portions of Work stored off-site and portions of Work in transit, in the amount of the insurable value, including all Change Orders, for the Work on a replacement cost basis until Substantial Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Builder risk insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Contractor shall be responsible for any deductible.
- C. Builders risk insurance shall provide for partial occupancy or use, the insurance company or companies providing builder risk insurance shall consent to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.
- D. Before an exposure to loss may occur, the Contractor shall file with the Owner a copy of each policy that includes insurance coverages required by this Park 2.06. Each policy shall contain all

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generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 45 days' prior written notice has been given to the Owner.

- E. Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in Part 5.19, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Part 2.06, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the Person or entity had an insurable interest in the property damaged.

**PART 3 - TIME AND SCHEDULE**

**3.01 PROGRESS AND COMPLETION**

Contractor shall diligently prosecute the Work to achieve Substantial Completion within the Contract Time.

**3.02 CONSTRUCTION SCHEDULE**

- A. Unless otherwise identified, the Contractor shall submit a preliminary Progress Schedule at the preconstruction meeting. The Progress Schedule shall show the sequence in which Contractor proposes to perform the Work, and the dates on which Contractor plans to start and finish major portions of the Work, including dates for shop drawings and other submittals, and for acquiring materials and equipment.
- B. Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.
- C. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract

Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this part.

- D. Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in Part 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule.
- E. Contractor shall promptly notify Owner in writing of any actual or anticipated event which is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

**3.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE**

- A. Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 days, or for such longer period as mutually agreed.
- B. Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed the Owner shall either:
1. Cancel the written notice suspending the Work; or
  2. Terminate the Work covered by the notice as provided in the termination provisions of Part 9.

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- C. If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work. which no substitute reasonably acceptable to Owner was available.
- D. Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.
- B. Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment according to Part 7.03. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.
- 3.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE
- C. Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the negligence of Owner, provided the Contractor makes a request according to Parts 7.02 and 7.03.
- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- D. Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- B. Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.
- E. To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to Part 7.03, but shall not be entitled to an adjustment in Contract Sum.
- 3.05 DELAY
- F. Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise.
- A. Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party ("Force Majeure"). Acts of Force Majeure are limited to:
- 3.06 NOTICE TO OWNER OF LABOR DISPUTES
- A. If Contractor has knowledge that any actual or potential labor dispute is delaying or may delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.
1. Acts of God or the public enemy;
  2. Acts or omissions of any government entity;
  3. Fire or other casualty for which Contractor is not responsible;
  4. Quarantine or epidemic;
  5. Strike or defensive lockout;
  6. Unusually severe weather conditions which could not have been reasonably anticipated after having reviewed local historical weather data; and
  7. Unusual delay in receipt of supplies or products which were ordered and expedited and for
- B. Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier

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Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

**3.07 DAMAGES FOR FAILURE TO ACHIEVE  
TIMELY COMPLETION**

**A. Liquidated Damages**

1. Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.
2. The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
3. Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.
4. Liquidated damages shall be assessed at not less than \$1,000 (unless specifically called out as a different amount in the agreement between the parties) per calendar day for each day beyond the contract completion date that the work remains incomplete.

**PART 4 - SPECIFICATIONS, DRAWINGS, AND  
OTHER DOCUMENTS**

**4.01 DISCREPANCIES AND CONTRACT  
DOCUMENT REVIEW**

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials,

equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.

- B. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor shall carefully study and compare the Contract Documents with each other and with written information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to the A/E in writing.
- D. Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or Shop Drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

**4.02 PROJECT RECORD**

- A. Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order proposals. This separate set of Drawings and Specifications shall be the "Project Record."

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- B. The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD". The Project Record shall be updated at least weekly noting all changes and shall be available to Owner and A/E at all times.
- C. Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

**4.03 SHOP DRAWINGS**

- A. Shop Drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its' own expense. Owner may duplicate, use, and disclose Shop Drawings provided in accordance with the Contract Documents.
- B. Contractor shall coordinate all Shop Drawings, and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Shop Drawings shall be stamped by an appropriate professional licensed by the state of Washington. Shop Drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Shop Drawings. Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Shop Drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Shop Drawings. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.

- C. Approval, or other appropriate action with regard to Shop Drawings, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Shop Drawings, nor from full responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. If Shop Drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Shop Drawings, at the time it submits the Shop Drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded upon the Project Record.
- E. Unless otherwise provided in Division I, Contractor shall submit to A/E for approval 5 copies of all Shop Drawings. Unless otherwise indicated, 3 sets of all Shop Drawings shall be retained by A/E and 2 sets shall be returned to Contractor.

**4.04 ORGANIZATION OF SPECIFICATIONS**

Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

**4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

- A. The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All

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copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.

- B. The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.
- C. Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Shop Drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Shop Drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Shop Drawings, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Part 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Shop Drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this Part.
- D. The Shop Drawings and other submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Shop Drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

**PART 5 - PERFORMANCE**

**5.01 CONTRACTOR CONTROL AND SUPERVISION**

- A. Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.
- B. Performance of the Work shall be directly supervised by a competent superintendent who is satisfactory to Owner and has authority to act for Contractor. The superintendent shall not be changed without the prior written consent of Owner.
- C. Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, their employees and agents, including but not limited to their suppliers and materialmen.
- D. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, require Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Shop Drawings, and permits and permit drawings.

**5.02 PERMITS, FEES, AND NOTICES**

- A. Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. Permits and utility fees are called for and shall be included in Contractor's bid.



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- C. Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.

**5.03 PATENTS AND ROYALTIES**

Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

**5.04 PREVAILING WAGES**

- A. Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Washington State Department of Labor and Industries. All determinations of the prevailing rate of wage shall be made by the industrial statistician of the Washington State Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.

- B. Before commencing the Work, Contractor shall file a statement under oath with Owner and with the Director of Washington State Department of Labor and Industries certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate. Statements of Intent to Pay Prevailing Wages are required from the Contractor and all subcontractors prior to the approval of the first progress payment. Affidavits of Wages Paid are required for the Contractor and all subcontractors prior to release of retainage.

- C. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Washington State Department of Labor and Industries. The arbitration decision shall be final

and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.

- D. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Washington State Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made. Certified payrolls for the Contractor and all Subcontractors shall be submitted to the Owner by the Contractor on a weekly basis unless previously waived in writing by the Owner.

- E. In compliance with chapter 296-127 WAC, Contractor shall pay to the Washington State Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Washington State Department of Labor and Industries for certification.

**5.05 HOURS OF LABOR**

- A. Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference. Pursuant to that statute, no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work, shall be permitted or required to work more than eight hours in any one calendar day, provided, that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight hours of each calendar day shall be not less than one and one-half times the rate allowed for this same amount of time during eight hours' service.

- B. Notwithstanding the preceding paragraph, RCW 49.28 permits a contractor or subcontractor in any public works contract subject to those provisions, to enter into an agreement with its employees in which the employees work up to ten hours in a calendar day. No such agreement may provide that the employees work ten-hour days for more than four calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of RCW 49.28 shall not apply to the hours, up to forty hours per week, worked pursuant to any such agreement.

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C. Contractor shall be responsible for additional Owner's Representative costs, including but not limited to survey, inspection, etc. and other costs incurred by the Owner for contractor work over 40 hours per week.

5.06 NONDISCRIMINATION

A. Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Governorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.
2. Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
3. Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.
4. Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human

Rights Commission, for the purpose of investigation to ascertain compliance with this Part of the Contract Documents.

5. Contractor shall include the provisions of this Part in every Subcontract.

6. RCW 49.60 is incorporated herein by reference.

5.07 SAFETY PRECAUTIONS

A. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work. The Contractor shall be responsible for the safety of all workers and shall comply with all appropriate state safety and health standards, codes, rules, and regulations, including, but not limited to, those promulgated under the Washington Industry Safety and Health Act, RCW 49.17 (WISHA) and as set forth in Title 296 WAC (Washington State Department of Labor and Industries). In particular the Contractor's attention is drawn to the requirements of WAC 296-800 which requires employers to provide a safe workplace. More specifically WAC 296-800-11025 prohibits alcohol and narcotics in the workplace. The Contractor shall likewise be obligated to comply with all federal safety and health standards, codes, rules, and regulations that may be applicable to the Contract Work.

B. In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.

C. Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all

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times, have a right of access to all records of exposure.

D. Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals used in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.

1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
  - a. The requirements of chapter 296-62 WAC, General Occupational Health Standards;
  - b. Any operations in their work area where hazardous chemicals are present; and
  - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-800WAC.
2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
  - a. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
  - b. The physical and health hazards of the chemicals in the work area;
  - c. The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
  - d. The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

E. Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:

1. Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 days on the Project site.
2. Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.

F. All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.

G. In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall also act if so authorized or instructed by Owner or authorized representative.

H. Nothing provided in this Part shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

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**5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS**

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall remain the property of Contractor and shall be removed by Contractor at its expense upon completion of the Work.
- C. Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Materials measured and paid for by weight shall be in accordance with Section 1-09.2 of the Standard Specifications for Road, Bridge, and Municipal Construction, 2014, M41-10, Washington State Department of Transportation, which is incorporated herein by reference, including all citations and cross-references contained within 1-09.2 on the 2014 Standard Specifications.
- E. Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.
- F. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- G. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without

cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

**5.09 PRIOR NOTICE OF EXCAVATION**

Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

**5.10 UNFORESEEN PHYSICAL CONDITIONS**

Differing site conditions (changed conditions) will be handled according to Sec 1-04.7 of the WSDOT 2014 Standard Specifications for Road, Bridge, and Municipal Construction M 41-10. Section 1-04.7 is included herein by reference.

**5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES, AND IMPROVEMENTS**

- A. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation: at or near the Project site; and on adjacent property of a third party, the locations of which are to be determined by Contractor in advance of actual physical work by Contractor. Contractor shall review and fully comply with RCW 19.122, State of Washington underground utility damage prevention act which is incorporated herein by reference. Contractor shall be responsible for repair of any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and either charge the cost to Contractor or deduct or offset the cost from any funds due Contractor.
- B. Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.

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5.12 LAYOUT OF WORK

- A. Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.
- B. Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

5.13 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the specifications, unless otherwise specifically provided in the Contract Documents.
- B. Contractor shall do all concrete saw cutting, cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- C. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless

otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Owner may also deduct or offset such cost from any funds due Contractor. Contractor will carefully conserve any utilities furnished.

- B. Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

5.15 TESTS AND INSPECTION

- A. Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.
- B. Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:

1. Constitute or imply acceptance;
2. Relieve Contractor of responsibility for providing adequate quality control measures;

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- 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;
- 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or
- 5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.

Contractor shall pay the costs of examination and reconstruction.

C. Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.

C. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.

D. Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner may also deduct or offset such cost from any funds due Contractor. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

D. If, within one year after the date of Final Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under Part 6.09, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to not be in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of one year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.

**5.16 CORRECTION OF NONCONFORMING WORK**

E. Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

A. If a portion of the Work is covered contrary to the requirements in the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.

F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor, or deduct or offset the cost from any funds due Contractor.

B. If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes a request therefor as provided in Part 7. If such Work is not in accordance with the Contract Documents, the

G. Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

H. Nothing contained in this Part shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the

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time period of one year as described in paragraph 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.

- I. If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

**5.17 CLEAN UP**

Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor, or Owner may deduct or offset the cost from any funds due Contractor.

**5.18 ACCESS TO WORK**

Contractor shall provide Owner and A/E access to the Work in progress wherever located.

**5.19 OTHER CONTRACTS**

Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

**5.20 SUBCONTRACTORS AND SUPPLIERS**

- A. Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500.00. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or

supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions.

- B. Contractor shall, prior to final progress payment, submit Owner-approved conditional lien releases from Contractor, subcontractors and suppliers performing work or providing materials in excess of \$2,500.00. Contractor shall, prior to release of retainage, submit Owner-approved unconditional lien releases from Contractor, subcontractors and suppliers performing work or providing materials in excess of \$2,500.00. All Subcontracts must be in writing and signed by the parties thereto. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- C. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- D. Each Subcontract for a portion of the Work is hereby assigned by Contractor to Owner provided that:
  - 1. The assignment is effective only after termination by Owner for cause pursuant to Part 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
  - 2. Owner shall have assumed in writing all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.

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3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

**5.21 WARRANTY OF CONSTRUCTION**

- A. In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed, by Contractor.
- B. With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
  1. Obtain all warranties that would be given in normal commercial practice;
  2. Require all warranties to be executed, in writing, for the benefit of Owner;
  3. Enforce all warranties for the benefit of Owner, if directed by Owner; and
  4. Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranty should they extend beyond the period specified in the Contract Documents.
- C. The obligations under this Part shall survive Final Acceptance.

**5.22 INDEMNIFICATION**

- A. The Contractor shall defend, indemnify, and hold harmless the City and County of Spokane, their elected and appointed officials, the Spokane Airport Board, their Agents, Officers, and employees; and A/E, his Agents, Officers, and employees from and against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, losses, penalties, fines, costs, and expenses of whatsoever kind or character, including, but not limited to, attorneys' fees and expenses, whether for bodily injury, sickness, disease or death, or to injury to or destruction of property, including the loss of use resulting therefrom, arising out of or in any manner caused or occasioned or claimed to be caused or occasioned by any act, error, omission, fault, or negligence of Contractor or any person or entity employed by or acting on his behalf, including, but not limited to, Subcontractors and vendors, their Subcontractors and subvendors, and

the employees and agents of any of the foregoing, in connection with or incident to the Contract or the work to be performed thereunder, except where caused by the sole negligence of the indemnitee, unless otherwise specifically provided in this Part. For suits, actions, legal or administrative proceedings, claims, demands, damages, losses, penalties, fines, costs, and expenses caused by or resulting from the concurrent negligence of the Owner and the A/E or the Owner's or A/E's agents or employees and the Contractor or the Contractor's agents or employees, in situations where liability for damages arises from claims or bodily injury to persons or damage to property, the preceding indemnity provision shall be valid and enforceable only to the extent of the Contractor's negligence.

Without limiting the foregoing, Contractor shall defend, indemnify, and hold harmless the City and County of Spokane, the Spokane Airport Board, their agents, officers and employees from and against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, penalties, fines, costs, and expenses of whatsoever kind or character, including, but not limited to, attorneys' fees and expenses, arising out of or by reason of any damage or injuries (including death to any person or entity employed by or acting on Contractor's behalf under this Contract, except where caused by the sole negligence of the indemnitee, unless otherwise specifically provided in this Part. For suits, actions, legal or administrative proceedings, claims, demands, damages, losses, penalties, fines, costs, and expenses caused by or resulting from the concurrent negligence of the Owner and the A/E or the Owner's or A/E's agents or employees and the Contractor or the Contractor's agents or employees, in situations where liability for damages arises from claims of bodily injury to persons or damage to property, the preceding indemnity provision shall be valid and enforceable only to the extent of the Contractor's negligence.

The obligation of the Contractor under this Article shall not extend to the liability of the Owner and his agents or employees arising out of the preparation or approval of maps, drawings, reports, surveys, Change Orders, designs, or specifications.

Contractor acknowledges that by entering into a Contract with Owner, he has mutually negotiated the above indemnity provisions with the Owner and knowingly waives all defenses regarding the validity or effectiveness of the same.



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Contractor's indemnity and defense obligations shall survive the termination or completion of the Contract and remain in full force and effect until satisfied in full.

recertifying that the representations set forth in Part 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.

**PART 6 - PAYMENTS AND COMPLETION**

**6.01 CONTRACT SUM**

Owner shall pay Contractor the Contract Sum for performance of the Work, in accordance with the Contract Documents. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including sales tax.

**6.02 SCHEDULE OF VALUES**

Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, O&M manuals, and any other requirements for Project closeout, and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

**6.03 UNIT ITEMS**

For unit items paid for by weight, the Contractor shall provide Owner with each load ticket of material delivered to Project site for each individual truck load on the same day of delivery. Contractor waives all rights and/or claims for payment of any material delivered to Project site for which Contractor does not provide Owner with a load ticket evidencing such material on the same day as delivery.

**6.04 APPLICATION FOR PAYMENT**

- A. At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is

- C. At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule.
- D. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
  - 1. The material will be placed in a warehouse that is structurally sound, dry, lighted and suitable for the materials to be stored;
  - 2. The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;
  - 3. Only materials for the Project are stored within the warehouse (or a secure portion of a warehouse set aside for the Project);
  - 4. Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
  - 5. The warehouse (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;
  - 6. Owner shall at all times have the right of access in company of Contractor;
  - 7. Contractor and its surety assume total responsibility for the stored materials; and
  - 8. Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Project site.

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**6.05 PROGRESS PAYMENTS**

- A. Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with RCW 39.76.020 if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Subject to Federal Aviation Administration ("FAA") restrictions, Owner shall retain 5% of the amount of each progress payment until 45 days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with RCW 60.28, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor.
- C. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.
- D. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in RCW 39.76.

**6.06 PAYMENTS WITHHELD**

- A. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
  - 1. Work not in accordance with the Contract Documents and/or otherwise allow for deduction or offset from any funds due Contractor in accordance with the Contract Documents;
  - 2. Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;

- 3. Work by Owner to correct defective Work or complete the Work in accordance with Parts 5.16 and 5.17;
  - 4. Failure to perform in accordance with the Contract Documents; or
  - 5. Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions, including fines for acts of non-compliance with security regulations.
  - 6. Overtime work by Owner's Representative and assessed liquidated damages.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with RCW 39.76.020.

**6.07 RETAINAGE AND BOND CLAIM RIGHTS**

RCW chapters 39.08 and 60.28, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

**6.08 SUBSTANTIAL COMPLETION**

- A. Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Once Substantial Completion is achieved, the Contractor will not be charged additional time under the Contract unless the Contractor fails to diligently work towards Final Completion. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved. Once Substantial Completion is achieved, the Contractor will have 10 days to schedule a punchlist walkthrough at a time mutually convenient to the parties. Once the punchlist is complete and

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received by the Contractor, the Contractor shall have 14 days to achieve Final Completion. If the Contractor fails to achieve contract completion within that timeframe, Contract Time will be re-started. Once Contractor achieves Final Completion, Contractor shall notify Owner in writing of same, and schedule a Final Inspection.

- B. Once Substantial Completion is achieved, the Contractor shall have 90 days to reconcile quantities with the Owner. The agreed upon quantities shall then be included in the following Application for Payment. Contractor waives all rights and/or claims for payment for any quantities in which Contractor did not reconcile quantities pursuant to this Part 6.08(B).

**6.09 PRIOR OCCUPANCY**

- A. Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy, but only if such loss or damage is attributable to Owner. Contractor's one year duty to repair and any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

**6.10 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

- A. Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing.
- B. Final Acceptance is the formal action of Owner acknowledging in writing Final Completion. Prior to Final Acceptance, Contractor shall, in addition

to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance, nor final payment, shall release Contractor or its sureties from any obligations of these Contract Documents or the Bonds required by this Contract, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.

- C. Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in Part 8.

**PART 7 - CHANGES**

**7.01 CHANGES IN THE WORK**

- A. Owner may, at any time and without notice to Contractor's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of written Contract Change Authorizations (CCA), which are ultimately incorporated into Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in Part 7.02 or 7.03, respectively, and such adjustment(s) shall be incorporated into a Change Order.
- B. If Owner desires to order a change in the Work, it may request a written proposal from Contractor. Contractor shall submit a proposal within 7 days of the request from Owner, or within such other period as mutually agreed. Contractor's proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

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C. Upon receipt of the proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in Parts 7.02 and 7.03, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change, Owner may direct Contractor to proceed immediately with the Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.

D. If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a CCA, which will become a Change Order once authorized by the Owner. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.

E. If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach an agreement, Contractor's only remedy shall be to file a Claim as provided in Part 8.

**7.02 CHANGE IN CONTRACT SUM**

**A. General Application**

1. The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order proposal.
2. If the cost of Contractor's performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in

the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Contractor's changed cost of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of Force Majeure as defined in Part 3.05.

a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 days of the occurrence of the event giving rise to the request. For purposes of this Part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.

b. Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

c. Within 15 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with paragraph 7.02A above

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with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with paragraph 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are-prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
  - e. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.
3. The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods:
    - a. On the basis of a fixed price as determined in paragraph 7.02B.
    - b. By application of unit prices to the quantities of the items involved as determined in paragraph 7.02C.
    - c. On the basis of time and material as determined in paragraph 7.02D.
  4. When Owner has requested Contractor to submit a Change Order proposal, Owner may

direct Contractor as to which method in Part 7.02A3 to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work, or of a request for an equitable adjustment, on the basis of the fixed price method.

**B. Change Order Pricing -- Fixed Price**

When the fixed price method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:

1. Contractor's Change Order proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets in a form approved by Owner.
2. All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material, equipment, overhead, profit, bond and insurance costs.
3. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state such assumptions in the proposal or request for an equitable adjustment.
4. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, overhead, profit, bond and insurance markups will apply to the net difference.
5. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
6. Any request for adjustment of Contract Sum based upon the fixed price method shall be subject to the following maximum markup percentages:

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- a. Contractor costs: This is defined as payments to Contractor for changed Work performed by Contractor. The maximum markup percentages for Contractor costs shall be a single markup percentage not-to-exceed ten percent (10%) of the net direct costs of: (1) direct labor and allowable labor burden costs applicable solely to the Change Order; (2) net cost of material and equipment incorporated solely into the Work covered by a Change Order; and (3) net rental cost of major equipment and related fuel costs solely necessary to complete the Work covered by a Change Order.
  - b. Subcontractor costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor. The maximum markup percentages for Subcontractor costs shall be a single markup percentage not-to-exceed five percent (5%) of the net direct costs of all Work covered by a Change Order and performed by a Subcontractor.
- C. Change Order Pricing -- Unit Prices
- 1. Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
    - a. Scope of Work to be performed;
    - b. Type of reimbursement including pre-agreed rates for material quantities; and
    - c. Cost limit of reimbursement.
  - 2. Contractor shall:
    - a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working;
    - b. Leave access as appropriate for quantity measurement; and
- D. Change Order Pricing -- Time-and-Material Prices
- 1. Whenever Owner authorizes Contractor to perform Work on a time-and-material basis, Owner's authorization shall clearly state:
    - a. Scope of Work to be performed;
    - b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and
    - c. Cost limit of reimbursement.
  - 2. Contractor shall:
    - a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;
    - b. Identify on daily time sheets all labor performed in accordance with said authorization. Submit copies of daily time sheets within 2 working days for Owner's review;
    - c. Leave access as appropriate for quantity measurement;
    - d. Perform all Work in accordance with this Part as efficiently as possible; and
    - e. Not exceed any cost limit(s) without Owner's prior written approval.
  - 3. Contractor shall submit costs in accordance with paragraph 7.02B and additional verification supported by:
    - a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit, and bond and insurance costs; and
    - b. Quantities must be supported by field measurement statements signed by Owner.
- c. Not exceed any cost limit(s) without Owner's prior written approval.
- 3. Contractor shall submit costs in accordance with paragraph 7.02B. and satisfy the following requirements:
    - a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit, and bond and insurance costs; and
    - b. Quantities must be supported by field measurement statements signed by Owner.

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- a. Labor detailed on daily time sheets; and
- b. Invoices for material.

**7.03 CHANGE IN THE CONTRACT TIME**

- A. The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of Force Majeure, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible.
  - 1. A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 days of the occurrence of the event giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such record and if requested, shall promptly furnish copies of such record to Owner.
  - 2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible, the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
  - 3. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in

accordance with paragraph 7.03B(2) with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- 4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order, or based on a request for an equitable adjustment in the Contract Time, shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by resequencing of the Work or other reasonable alternatives.
- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this paragraph, 7.03D, subject to the following conditions:
  - 1. The change in Contract Time shall solely be caused by the fault or negligence of Owner, A/E or Force Majeure;
  - 2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under Part 7.02;

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3. Contractor shall follow the procedure set forth in paragraph 7.03B;
4. Contractor shall establish the extent of the change in Contract Time in accordance with paragraph 7.03C; and
5. The daily cost of any change in Contract Time shall be limited to the items below, less funds that may have been paid pursuant to a change in the Contract Sum that contributed to this change in Contract Time:
  - a. cost of nonproductive field supervision or;
  - a. cost of weekly meetings or similar indirect activities extended because of the delay;
  - c. cost of temporary facilities or equipment rental extended because of the delay;
  - d. cost of insurance extended because of the delay;
  - e. general and administrative overhead in an amount to be agreed upon, but not to exceed 3% of Contract Sum divided by the Contract Time for each day of the delay.

**7.04 DIFFERING SITE CONDITIONS**

- A. The parties agree that differing site conditions (changed conditions) will be handled in complete accordance with Section 1-04.7 of the Standard Specifications for Road, Bridge, and Municipal Construction, 2014, M41-10, Washington State Department of Transportation, which is attached hereto by reference, including all citations and cross-references contained within 1-04.7, Section 1-08.8, 1-09.4, 1-05.1, 1-04.5, and 1-09.11 on the 2014 Standard Specifications. If there is a conflict between the Standard Specification and these General Conditions, the Standard Specifications shall govern.

**PART 8 - CLAIMS & DISPUTE RESOLUTION,  
ET AL**

**8.01 CLAIMS ET AL**

- A. The parties agree that disputes and claims will be handled in complete accordance with the Standard Specifications for Road, Bridge and Municipal Construction, 2014, M 41-10, Washington State Department of Transportation, the following

sections of which are made a part of this Contract and are attached hereto by reference: Section 1-03.7, Judicial Review; Section 1-04.4, Changes; Section 1-04.5, Procedure & Protest by the Contractor; Section 1-04.7, Differing Site Conditions (Changed Conditions); Section 1-08.10 Termination of Contract, Section 1-09.11, Disputes & Claims; Section 1-09.12, Audits; and Section 1-09.13, Claims Resolution. If there is a conflict between any other portion of these General Conditions and the 2014 Standard Specifications, referenced above, the Standard Specifications shall govern.

**PART 9 – TERMINATION OF WORK**

**9.01 TERMINATION BY OWNER FOR CAUSE**

- A. Owner may, upon 7 days written notice to Contractor, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
  1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
  2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
  3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
  4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment, as determined in the sole discretion of Owner;
  5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;
  6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
  7. Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Upon termination, Owner may at its option:



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1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
2. Accept assignment of subcontracts pursuant to Part 5.20; and
3. Finish the Work by whatever other reasonable method it deems expedient.

C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

D. When Owner terminates the Work in accordance with this Part, Contractor shall take the actions set forth in paragraph 9.02(B), and shall not be entitled to receive further payment until the Work is accepted.

E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.

F. Termination of the Work in accordance with this Part shall not relieve Contractor or its surety of any responsibilities for Work performed.

G. If Owner terminates Contractor for cause, and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to Part 9.02.

**9.02 TERMINATION BY OWNER FOR CONVENIENCE**

A. Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.

B. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:

1. Stop performing Work on the date and as specified in the notice of termination;
2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;
4. Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;
5. Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and
6. Continue performance only to the extent not terminated.

C. If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus a reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of Part 7.

D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

**PART 10 - MISCELLANEOUS PROVISIONS**

**10.01 GOVERNING LAW**

The Contract Documents and the rights of the parties herein shall be governed by the laws of the state of Washington. Venue shall be the Superior Court of Spokane County, WA.

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**10.02 SUCCESSORS AND ASSIGNS**

Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

**10.03 MEANING OF WORDS**

Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Reference to the Revised Code of Washington or Washington Administrative Code shall be the code provision in effect or as may be amended. Wherever in the Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings, or required to complete the installation.

**10.04 RIGHTS AND REMEDIES**

No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

**10.05 CONTRACTOR REGISTRATION**

Pursuant to RCW 39.06, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27.

**10.06 TIME COMPUTATIONS**

When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the

period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

**10.07 RECORDS RETENTION**

The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records created or used for the work performed pursuant to this Contract, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

**10.08 THIRD-PARTY AGREEMENTS**

The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

**10.09 ANTITRUST ASSIGNMENT**

Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

**10.10 PAY FOR UNITS CONSTRUCTED**

Section 1-09.9, Payments, and Section 1-09.9(1) Retainage, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

**10.11 SUSPENSION OF WORK**

Section 1-08.6, Suspension of Work, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

**10.12 MAINTENANCE DURING SUSPENSION**

Section 1-08.7, Maintenance During Suspension, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

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**10.13 EXTENSIONS OF TIME**

Section 1-08.8, Extensions of Time, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

shall pay, in addition to all other remedies to which the prevailing party may be entitled, the costs and expenses incurred by the prevailing party in conducting the suit, action or proceeding, including actual attorneys' fees, expenses, and court costs, even if not recoverable by law (including, without limitation, all fees, taxes, costs and expenses incident to appellate, bankruptcy and post-judgment proceedings).

**10.14 TEMPORARY WATER POLLUTION/EROSION CONTROL**

Section 1-07.15, Temporary Water Pollution/Erosion Control, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

**10.15 CONTROL OF MATERIAL**

The following sections of the WSDOT 2014 Standard Specifications, M41-10, are incorporated herein by reference: 1-06.1, Approval of Materials Prior to Use; 1-06.1 (1), Qualified Products List; 1-06.1 (2), Request for Approval of Material; 1-06.2(1) Samples and Tests for Acceptance.

**10.16 ARCHAEOLOGICAL AND HISTORICAL OBJECTS**

Section 1-07.16(4), Archaeological and Historical Objects, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference

**10.17 TEMPORARY TRAFFIC CONTROL**

Section 1-10, Temporary Traffic Control, of the WSDOT 2014 Standard Specifications, M41-10, is incorporated herein by reference.

**10.18 AIRPORT SECURITY PLAN VIOLATIONS**

Contractor shall comply with the Airport Security Program (ASP); 49 CFR 1542. Failure to comply with the ASP will result in a \$1,000.00 fine per violation incident. Upon the third violation, the Contractor may be subject to review by the Airport Board. All fines and or violations against Owner due to Contractor fault or negligence will be assessed against the Contractor and withheld from progress payments per Part 6.05. Actions by the Owner may include, but not limited to, removal of Contractor and/or Subcontractor(s) from project, Suspension of Work per Section 1-08.6, and Termination for Default per Section 1-08.10(1), of the WSDOT 2014 Standard Specifications M 41-10.

**10.19 LITIGATION COSTS AND EXPENSES**

If either Owner or Contractor institutes any legal suit, action or proceeding against the other party to enforce the Contract Documents, the prevailing party in the suit, action or proceeding is entitled to receive, and the non-prevailing

**SECTION 27 00 10**  
**GENERAL PROVISIONS FOR COMMUNICATIONS**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of the contract, including General and Supplementary Conditions, Division 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. Section includes:
  - 1. Definitions
  - 2. Contract documents
  - 3. Code requirements
  - 4. Permits & fees
  - 5. Submittal requirements
  - 6. Warranty
  - 7. Construction phasing
  - 8. Project closeout requirements

1.3 DEFINITIONS

- A. Reference specification section 26 00 10 for common Division 26-28 definitions.

1.4 CONTRACT DOCUMENTS

- A. All limited energy systems, mounting hardware, labor and other items indicated on the Division 27 drawings, schedules and/or in the specifications shall be included in the Contractor's bid, unless specifically indicated otherwise. The specifications, schedules, diagrams, details and plans are complementary and what is indicated on any is as binding as if indicated on all. Where a conflict exists between what is shown and what is specified, the more stringent shall govern.
- B. The contract drawings indicate the extent and the general character and approximate location and arrangement of material and equipment. The documents do not necessarily show the total number of conductors, raceways, boxes, support, access panels, actual routing, block outs, cable sleeves, exact device or equipment locations or other such detailed information for the work required. The Contractor shall provide all necessary materials as required by applicable code and product specification for a complete and fully operational installation in accordance with the true intent of the drawings and specifications.
- C. The Division 27 documents do not separate work or responsibilities of sub-contractors. The General Contractor is responsible for defining the scope of work of each contractor. This specification recognizes only one contractor. That is the General Contractor who signs the

contract with the Owner. Where the term 'The Contractor' is used, it applies to the contractor responsible for the installation of the work described.

## 1.5 CODES

- A. The installation of this work shall comply in every way with the requirements of the laws, ordinances and rules of the State, the National Board of Fire Underwriters, the National Electrical Code, WISHA and the Owner.
- B. If any conflict occurs between these rules and this specification, the rules shall govern. Nothing in these drawings and specifications shall be construed to permit work not conforming with governing codes. This shall not be construed as relieving the Contractor from complying with any requirements of the plans or specifications which may be in excess of requirements of hereinbefore mentioned rules and not contrary to same.

## 1.6 PERMITS & FEES

- A. Obtain and pay for all licenses, permits, registration fees and inspections required by laws, ordinances and rules governing the work specified herein. Arrange for inspection of the work by inspectors and give the inspectors all necessary assistance in their work of inspection.
- B. The Division 27 bid shall include all Labor and Industries permit, inspection, licensing, registration or any other fees associated with the work specified under this Division.

## 1.7 SUBMITTALS

- A. Provide submittals in accordance with Division 26 General provisions. B. Provide brochures and shop drawings on the following materials:
  - 1. Telecommunications Cabling system

## 1.8 GUARANTEE

- A. This Contractor shall guarantee the satisfactory operation of all material, equipment and installations provided under this specification. Make good, repair or replace, as may be necessary, any defective work, materials or equipment which fail or become defective within one year after date of Owner occupancy. The beginning of the warranty period is to be determined by the Architect at the time of substantial completion.

## **PART 2 - PRODUCTS**

### 2.1 GENERAL MATERIAL REQUIREMENTS

- A. All materials shall be new and must be equal to the quality herein specified and as shown on the drawings or a reviewed and accepted equal.
- B. All materials shall be the standard products of manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest standard design and shall be manufactured in accordance with applicable standards of NEMA, ANSI or UL.
- C. All material, equipment and devices shall be listed by Underwriters Laboratories, Inc. and shall be manufactured for use with the system specified and the intended application.
- D. Materials and equipment shall be delivered to the project and stored in original containers or cartons and shall be properly protected from the elements, theft or vandalism. Items subject to moisture damage shall be stored in dry spaces.

- E. Material damaged during construction shall be replaced or repaired to the Owner's satisfaction.

## 2.2 GENERAL LIMITED ENERGY SYSTEMS CABLING REQUIREMENTS

- A. All Category 5e and Category 6 cable provided under this contract shall conform to the requirements of specification section 27 05 00. The material and installation requirements specified in section 27 05 00 are applicable project wide to all systems, which employ CAT-5e cable. The CAT-6 cable is limited specifically to the Daktronics sign installation as specified on the drawings.
- B. All interior open air cable shall be plenum rated. All cable run below floor or underground shall be rated for wet locations and installed in conduit.

## PART 3 - EXECUTION

### 3.1 GENERAL REQUIREMENTS FOR INSTALLATION

- A. Workmanship shall be of the best quality and none but competent mechanics shall be employed and shall be under the supervision of a competent foreman. All work shall be complete and present and neat and symmetrical appearance. Non-professional workmanship shall be removed and replaced if so directed by the architect at no additional cost to the owner.
- B. All equipment and material shall be installed to comply with all applicable codes and industry standard work practice.
- C. All work and materials shall be subject to inspections at any and all times by representatives of the Owner and/or Architect.
- D. The documents do not show all necessary transitions, offsets, changes in direction or every pull or junction box required. Provide all boxes necessary to install work to conform to the structure.

### 3.2 PHASING & SCHEDULING REQUIREMENTS

- A. Construction phasing and scheduling unless specifically indicated elsewhere in the bid documents is the responsibility of the General Contractor. The Electrical and Communications trades shall coordinate their work with the General Contractor.

### 3.3 COORDINATION

- A. All Division sub-contractors shall coordinate their work with the owner's IT representative.
- B. Prior to beginning work all Division 27 sub-contractors shall participate in a pre-construction meeting to discuss and coordinate their work with the owner's IT representatives.

### 3.4 MEETINGS AND FIELD OBSERVATION

- A. The requirements of Division 26 General provisions apply to Division 27.

### 3.5 PROJECT CLOSEOUT

- A. A. The requirements of Division 26 General provisions apply to Division 27.

## END OF SECTION 27 00 10

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**SECTION 27 10 06**  
**STRUCTURED CABLING FOR VOICE AND DATA**

**PART 1 - GENERAL**

1.1 SECTION INCLUDES

- A. Telecommunications service entrance to building(s).
- B. Cabling and pathways inside building(s).
- C. Cabling and pathways connecting building(s).
- D. Grounding and bonding the telecommunications distribution system.

1.2 RELATED REQUIREMENTS

- A. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
- B. Section 26 05 34 - Conduit.
- C. Section 26 05 37 - Boxes.
- D. Section 26 27 26 - Wiring Devices.

1.3 REFERENCE STANDARDS

- A. CEA-310 - Cabinets, Racks, Panels, and Associated Equipment; Consumer Electronics Association; Revision E, 2005.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- C. TIA/EIA-568-C.1 - Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements; Rev C, 2012; Addenda 1-7.
- D. TIA/EIA-568-C.2 - Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted Pair Cabling Components; Rev C, 2012; Addenda 1-11.
- E. TIA-569 - Commercial Building Standard for Telecommunications Pathways and Spaces; 2012.
- F. TIA/EIA-606 - Administration Standard for the Telecommunications Infrastructure; Rev B, 2012.
- G. ANSI/J-STD-607 - Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications; Rev A, 2002.
- H. UL 444 - Communications Cables; Current Edition, Including All Revisions.
- I. UL 1863 - Standard for Communications-Circuit Accessories; Current Edition, Including All Revisions.

1.4 SUBMITTALS

- A. See Division 01 for administrative requirements pertinent to submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:



1. Storage and handling requirements and recommendations.
  2. Installation methods.
- C. Shop Drawings: Show compliance with requirements on isometric schematic diagram of network layout, showing cable routings, telecommunication closets, rack and enclosure layouts and locations, service entrance, and grounding, prepared and approved by BICSI Registered Communications Distribution Designer (RCDD).
- D. Manufacturer Qualifications.
- E. Installer Qualifications.
- F. Field Test Reports.
- G. Project Record Documents: Prepared and approved by BICSI Registered Communications Distribution Designer (RCDD).
1. Record actual locations of outlet boxes and distribution frames.
  2. Show as-installed color coding, pair assignment, polarization, and cross-connect layout.
- H. Operation and Maintenance Data: List of all components with part numbers, sources of supply, and operation and maintenance instructions; include copy of project record documents.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: At least 3 years experience manufacturing products of the type specified.
- B. Installer Qualifications: A company having at least 3 years experience in the installation and testing of the type of system specified, and:
1. Employing a BICSI Registered Communications Distribution Designer (RCDD).
  2. Supervisors and installers shall be factory certified by manufacturers of products to be installed.
  3. Approved by the Manufacturer; certified to install the proposed and submitted cabling system and to provide an extended warranty. Provide satisfactory evidence of certification in the form of a current letter or certificate from the manufacturer as part of the proposal submission.
  4. Employing experienced technicians for all work; show at least 3 years experience in the installation of the type of system specified, with evidence from at least 2 projects that have been in use for at least 18 months; submit project name, address, and written certification by user.

#### 1.6 WARRANTY

- A. The telecommunications horizontal cabling system, as specified in this section, shall receive a Manufacturer system warranty that is the Channel partners advanced warranty (not basic) each Manufacturer has a unique warranty system, provide description of warranty. This extended warranty shall cover parts and labor for the duration of the extended warranty. This extended warranty shall also cover electrical performance of cabling system to the specific category per ANSI/TIA/EIA-568-B performance criteria for Permanent Link.

## **PART 2 - PRODUCTS**

### **2.1 SYSTEM DESIGN**

- A. Provide a complete permanent system of cabling and pathways for voice and data communications, including cables, conduits and wireways, pull wires, support structures, enclosures and cabinets, and outlets.
  - 1. Comply with TIA/EIA-568 and TIA/EIA-569, latest editions.
  - 2. Provide fixed cables and pathways that comply with NFPA 70 and ANSI/J-STD-607 and are UL listed or third party independent testing laboratory certified.
  - 3. Provide connection devices that are rated for operation under conditions of 32 to 140 degrees F at relative humidity of 0 to 95 percent, noncondensing.
  - 4. In this project, the term plenum is defined as return air spaces above ceilings, inside ducts, under raised floors, and other air-handling spaces.
- B. Capacity:
  - 1. Building Entrance: By others.
  - 2. Horizontal Cabling: Copper.

### **2.2 PATHWAYS**

- A. Conduit: As specified in Section 26 05 34; provide pull cords in all conduit.

### **2.3 COPPER CABLE AND TERMINATIONS**

- A. Copper Horizontal Cable: TIA/EIA-568 Category 5e solid conductor unshielded twisted pair (UTP), 24 AWG, 100 ohm; 4 individually twisted pairs; covered with blue jacket and complying with all relevant parts of and addenda to latest edition of TIA/EIA-568 and UL 444. Limited to the Daktronics sign installation, TIA/EIA-568 Category 6 solid conductor unshielded twisted pair (UTP), 24 AWG, 100 ohm; 4 individually twisted pairs; covered with blue jacket and complying with all relevant parts of and addenda to latest edition of TIA/EIA-568 and UL 444.
  - 1. In locations other than in plenums, provide NFPA 70 type CMG general purpose, CMR riser-rated, or type CMP plenum-rated cable.
  - 2. In plenums, provide NFPA 70 type CMP plenum-rated cable.
  - 3. Where outdoors, underground or below slab provide OSP rated cable.
- B. Jacks and Connectors: RJ-45, non-keyed, terminated with 110-style insulation displacement connectors; high impact thermoplastic housing; complying with same standard as specified horizontal cable and UL 1863.
  - 1. Performance: 500 mating cycles.
  - 2. Voice and Data Jacks: 4-pair, pre-wired to T568B configuration, with color-coded indications for T568B configuration.

### **2.4 CROSS-CONNECTION EQUIPMENT**

- A. Connector Blocks for Category 5e and Up Cabling: Type M66 block insulation displacement connectors; capacity sufficient for cables to be terminated plus 25 percent spare.

- B. Patch Panels for Copper Cabling: Sized to fit EIA standard 19 inch wide equipment racks; 0.09 inch thick aluminum; cabling terminated on Type M66 block insulation displacement connectors; printed circuit board interface.
1. Jacks: Non-keyed RJ-45, suitable for and complying with same standard as cable to be terminated; maximum 48 ports per standard width panel.
  2. Capacity: Provide ports sufficient for cables to be terminated plus 25 percent spare.
  3. Labels: Factory installed laminated plastic nameplates above each port, numbered consecutively; comply with TIA/EIA-606 using encoded identifiers.
  4. Provide incoming cable strain relief and routing guides on back of panel.
  5. Patch Cords: Provide one patch cord for each pair of patch panel ports.

## 2.5 ENCLOSURES

- A. Outlet Boxes: For flush mounting in walls; depth as required to accommodate cable manufacturer's recommended minimum conductor bend radius.
1. Size, Unless Otherwise Indicated: 4 inches square by 2-1/8 inches deep.
  2. Wall-Mounted Telephones: 4 inches high by 2 inches wide by 2-1/8 inches deep.
  4. Wall Plates: Material and finish to match wiring device and wall plate finishes specified in Section 26 27 26, complying with system design standards and UL 514C.
  5. Labels: Comply with TIA/EIA-606 using encoded identifiers; label each jack on the face plate as to its function with a unique numerical identifier.

## PART 3 - EXECUTION

### 3.1 INSTALLATION - GENERAL

- A. Comply with latest editions and addenda of TIA/EIA-568, TIA/EIA-569, ANSI/J-STD-607, NFPA 70, and SYSTEM DESIGN as specified in PART 2.

### 3.2 PATHWAYS

- A. Underground Service Entrance: Install conduit at least 18 inches below finish grade; encase in at least 3 inches thick concrete for at least 60 inches out from the building line.
- B. Install with the following minimum clearances:
1. 48 inches from motors, generators, frequency converters, transformers, x-ray equipment, and uninterruptible power systems.
  2. 12 inches from power conduits and cables and panelboards.
  3. 5 inches from fluorescent and high frequency lighting fixtures.
  4. 6 inches from flues, hot water pipes, and steam pipes.
- C. Conduit:
1. Do not install more than 2 (two) 90 degree bends in a single horizontal cable run.
  2. Leave pull cords in place where cables are not initially installed.

3. Conceal conduit under floor slabs and within finished walls, ceilings, and floors except where specifically indicated to be exposed.
  - a. Conduit may remain exposed to view in mechanical rooms, electrical rooms, and telecommunications rooms.
  - b. Treat conduit in crawl spaces and under floor slabs as if exposed to view.
  - c. Where exposed to view, install parallel with or at right angles to ceilings, walls, and structural members.
  - d. Under floor slabs, locate conduit at 12 inches, minimum, below vapor retarder; seal penetrations of vapor retarder around conduit.

D. Outlet Boxes:

1. Coordinate locations of outlet boxes provided under Section 26 05 37 as required for installation of telecommunications outlets provided under this section.
  - a. Mounting Heights: Unless otherwise indicated, as follows:
    - 1) Telephone and Data Outlets: 18 inches above finished floor.
    - 2) Telephone Outlets for Forward-Reach Wall-Mounted Telephones: 48 inches above finished floor to top of telephone.
  - b. Orient outlet boxes for vertical installation of wiring devices unless otherwise indicated.
  - c. Provide minimum of 24 inches horizontal separation between flush mounted outlet boxes installed on opposite sides of fire rated walls.
  - d. Unless otherwise indicated, provide separate outlet boxes for line voltage and low voltage devices.
  - e. Locate outlet boxes so that wall plate does not span different building finishes.
  - f. Locate outlet boxes so that wall plate does not cross masonry joints.

E. Grounding and Bonding: Perform in accordance with ANSI/J-STD-607 and NFPA 70.

### 3.3 INSTALLATION OF EQUIPMENT AND CABLING

A. Cabling:

1. Do not bend cable at radius less than manufacturer's recommended bend radius; for unshielded twisted pair use bend radius of not less than 4 times cable diameter.
2. Do not over-cinch or crush cables.
3. Do not exceed manufacturer's recommended cable pull tension.
4. When installing in conduit, use only lubricants approved by cable manufacturer and do not chafe or damage outer jacket.

- B. Service Loops (Slack or Excess Length): Provide the following minimum extra length of cable, looped neatly:
  - 1. At Distribution Frames - 120 inches.
  - 2. At Outlets - Copper: 12 inches.
- C. Copper Cabling:
  - 1. Category 5e/6: Maintain cable geometry; do not untwist more than 1/2 inch from point of termination.
  - 2. For 4-pair cables in conduit, do not exceed 25 pounds pull tension.
  - 3. Copper Cabling Not in Conduit: Use only type CMP plenum-rated cable as specified.
- D. Field-Installed Labels: Comply with TIA/EIA-606 using encoded identifiers.
  - 1. Cables: Install color coded labels on both ends.
  - 2. Outlets: Label each jack on its face plate as to its type and function, with a unique numerical identifier.
  - 3. Patch Panels: Label each jack as to its type and function, with a unique numerical identifier.
  - 4. Patch Cords: Label with jack identifier corresponding to initial installation.

### 3.4 FIELD QUALITY CONTROL

- A. Comply with inspection and testing requirements of specified installation standards.
- B. Visual Inspection:
  - 1. Inspect cable jackets for certification markings.
  - 2. Inspect cable terminations for color coded labels of proper type.
  - 3. Inspect outlet plates and patch panels for complete labels.
  - 4. Inspect patch cords for complete labels.
- C. Testing - Copper Cabling and Associated Equipment:
  - 1. Category 5e/6 Links: Perform tests for wire map, length, attenuation, NEXT, and propagation delay.
- E. Final Testing: After all work is complete, including installation of telecommunications outlets, and telephone dial tone service is active; test each voice jack for dial tone.

**END OF SECTION 27 10 06**

## SECTION 28 00 10

### GENERAL PROVISIONS FOR ELECTRONIC SAFETY AND SECURITY

#### PART 1 GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of the contract, including General and Supplementary Conditions, Division 01 Specification sections, apply to this section.
- B. Division 26 and 27 requirements for cabling, raceways and all other applicable materials shall apply to Division 28 work.

##### 1.2 SUMMARY

- A. Section includes:
  - 1. Definitions
  - 2. Contract documents
  - 3. Code requirements
  - 4. Permits and Fees
  - 5. Alternates
  - 6. Submittal requirements
  - 7. Prior approval requests
  - 8. Schedule of Values
  - 9. Warranty
  - 10. Construction phasing
  - 11. Project closeout requirements

##### 1.3 DEFINITIONS

- A. Provide shall mean to furnish and install.
- B. In general, electrical and electronics terms used in these specifications, and/or on the drawings, shall be as defined in Article 100 of the National Electrical Code (NFPA 70). Terms not specifically defined in this article shall be as defined in IEEE 100, IEEE Standard Dictionary of Electrical and Electronics Terms.

##### 1.4 CONTRACT DOCUMENTS

- A. All limited energy systems, mounting hardware, labor and other items indicated on the Division 28 drawings, schedules and/or in the specifications shall be included in the Contractor's bid, unless specifically indicated otherwise. The specifications, schedules, diagrams, details and plans are complementary and what is indicated on any is as binding as if indicated on all. Where a conflict exists between what is shown and what is specified, the more stringent shall govern.
- B. The contract drawings indicate the extent and the general character and approximate location and arrangement of material and equipment. The documents do not necessarily show the total number of conductors, raceways, boxes, support, access panels, actual routing, block outs, cable sleeves, exact device or equipment locations or other such detailed information for the

work required. The Contractor shall provide all necessary materials as required by applicable code and product specification for a complete and fully operational installation in accordance with the true intent of the drawings and specifications.

- C. The Division 28 documents do not separate work or responsibilities of sub-contractors. The General Contractor is responsible for defining the scope of work of each contractor. This specification recognizes only one contractor. That is the General Contractor who signs the contract with the Owner. Where the term 'The Contractor' is used, it applies to the contractor responsible for the installation of the work described.

## 1.5 CODES

- A. The installation of this work shall comply in every way with the requirements of the laws, ordinances and rules of the State, the National Board of Fire Underwriters, the National Electrical Code, and the Owner.
- B. If any conflict occurs between these rules and this specification, the rules shall govern. Nothing in these drawings and specifications shall be construed to permit work not conforming with governing codes. This shall not be construed as relieving the Contractor from complying with any requirements of the plans or specifications which may be in excess of requirements of herein aforementioned rules and not contrary to same.

## 1.6 PERMITS AND FEES

- A. Obtain and pay for all licenses, permits, registration fees and inspections required by laws, ordinances and rules governing the work specified herein. Arrange for inspection of the work by inspectors and give the inspectors all necessary assistance in their work of inspection.
- B. The Division 28 bid shall include all state required permits, inspections, licensing, registration or any other fees associated with the work specified under this Division.

## 1.7 SUBMITTALS

- A. Provide submittals in accordance with Section 26 00 10 Electrical General Provisions.
- B. Provide brochures and shop drawings on the following materials:
  - 1. Security/Access Control systems equipment
  - 2. Fire Alarm systems equipment

## 1.8 SCHEDULE OF VALUES

- A. Within 30 days of the Notice to Proceed the Contractor shall furnish a breakdown of the Division 28 work as indicated in the following Schedule of Values:
  - 1. Security/Access Control, Material
  - 2. Security/Access Control, Labor
  - 3. Fire Alarm Panels, Material
  - 4. Fire Alarm Panels, Labor
  - 5. Fire Alarm Smoke/Heat Detector, Material
  - 6. Fire Alarm Smoke/Heat Detector, Labor
  - 7. Fire Alarm Horn/Strobes, Material
  - 8. Fire Alarm Horn/Strobes, Labor
  - 9. Fire Alarm Pull Station, Material

## 10. Fire Alarm Pull Station, Labor

### 1.9 GUARANTEE

- A. This Contractor shall guarantee the satisfactory operation of all material, equipment and installations provided under this specification. Make good, repair or replace, as may be necessary, any defective work, materials or equipment which fail or become defective within one year after date of Owner occupancy. The beginning of the warranty period is to be determined by the Architect at the time of substantial completion.

## PART 2 - PRODUCTS

### 2.1 GENERAL MATERIAL REQUIREMENTS

- A. All materials shall be new and must be equal to the quality herein specified and as shown on the drawings or a reviewed and accepted equal.
- B. All materials shall be the standard products of manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest standard design and shall be manufactured in accordance with applicable standards of NEMA, ANSI or UL.
- C. All material, equipment and devices shall be listed by Underwriters Laboratories, Inc. and shall be manufactured for use with the system specified and the intended application.
- D. Materials and equipment shall be delivered to the project and stored in original containers or cartons and shall be properly protected from the elements, theft or vandalism. Items subject to moisture damage shall be stored in dry spaces.
- E. Material damaged during construction shall be replaced or repaired to the Owner's satisfaction.

### 2.2 GENERAL LIMITED ENERGY SYSTEMS CABLING REQUIREMENTS

- A. All Category 5e and Category 6 cable provided under this contract shall conform to the requirements of specification section 27 05 00. The material and installation requirements specified in section 27 05 00 are applicable project wide to all systems, which employ CAT-5e cable. The CAT-6 cable is limited specifically to the Daktronics sign installation as specified on the drawings.
- B. All interior open air cable shall be plenum rated. All cable run below floor or underground shall be rated for wet locations and installed in conduit.

## PART 3 - EXECUTION

### 3.1 GENERAL REQUIREMENTS FOR INSTALLATION

- A. Workmanship shall be of the best quality and none but competent technicians shall be employed and shall be under the supervision of a competent foreman. All work shall be complete and present a neat and symmetrical appearance. Non-professional workmanship shall be removed and replaced if so directed by the Architect/Engineer at no additional cost to the Owner.



- B. All equipment and material shall be installed so as to comply with all applicable codes and industry standard work practices.
- C. All work and materials shall be subject to inspection at any and all times by representatives of the Owner and/or Architect.
- D. The documents do not show all necessary transitions, offsets, changes in direction or every pull or junction box required. Provide all boxes necessary to install work to conform to the structure.

### 3.2 WORK NOT INCLUDED

- A. Network servers, switches or UPS units.

### 3.3 PHASING AND SCHEDULING REQUIREMENTS

- A. Construction phasing and scheduling unless specifically indicated elsewhere in the bid documents is the responsibility of the General Contractor. The Electrical and Communications trades shall coordinate their work with the General Contractor.

### 3.4 COORDINATION

- A. All Division sub-contractors shall coordinate their work with the Owner's IT representative.
- B. Prior to beginning work all Division 28 sub-contractors shall participate in a pre-construction meeting to discuss and coordinate their work with the Owner's IT representatives.

### 3.5 MEETINGS AND FIELD OBSERVATION

- A. The requirements of Division 26 General provisions apply to Division 28.

### 3.6 PROJECT CLOSEOUT

- A. The project closeout requirements of Section 260010 Electrical General Provisions apply to Division 27.

**END OF SECTION 28 00 10**

**SECTION 28 13 00**  
**ACCESS CONTROL**

**PART 1 - GENERAL**

The Spokane International Airport (SIA) has an existing campus access control system to which the contractor shall integrate the new Phase III Parking Operations Building (POB) Garage according to the requirements described below. This project shall be an extension and modification of the existing access control system in Phase II. The contractor is responsible for all aspects of the design of the door control including permitting, commissioning, approval, etc. Provide new components of the same manufacturer as existing. Contractor to provide new work as necessary to provide a complete and operational system meeting the requirements of the authority having jurisdiction.

1.1 SECTION INCLUDES

- A. Electric Door Strikes
- B. Door Openers
- C. Card Reader Pedestals

1.2 RELATED REQUIREMENTS

- A. See Division 07 for Firestopping.
- B. See Division 08 for Door Hardware.
- C. Section 26 05 19 - Building Wire and Cable.
- D. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
- E. Section 26 05 34 - Conduit.
- F. Section 26 05 53 - Identification for Electrical Systems: Identification products and requirements.
- G. Section 27 10 06 - Structured Cabling for Voice and Data.
- H. Section 28 23 00 - Video Surveillance: For interface with access control system.
- I. Section 28 31 00 - Fire Detection and Alarm: For interface with access control system.

1.3 REFERENCE STANDARDS

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; National Electrical Contractors Association; 2010.
- B. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

- C. NFPA 101 - Life Safety Code; 2012.
- D. UL 294 - Access Control System Units; Current Edition, Including All Revisions.

#### 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
  - 1. Coordinate the work with other installers to provide suitable door hardware as required for both access control functionality and code compliance.
  - 2. Coordinate the placement of readers with millwork, furniture, equipment, etc. installed under other sections or by others.
  - 3. Coordinate the work with other installers to provide power for equipment at required locations.
  - 4. Notify Architect/Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.
- B. Pre-installation Meetings:
  - 1. Conduct meeting with facility representative, Architect, and Contractor to review reader and equipment locations.
  - 2. Conduct meeting with facility representative and other related equipment manufacturers to discuss access control system interface requirements.

#### 1.5 SUBMITTALS

- A. Refer to Division 01 for administrative requirements pertinent to submittal procedures.
- B. Shop Drawings: Include plan views indicating locations of system components and proposed size, type, and routing of conduits and/or cables. Include elevations and details of proposed equipment arrangements. Include system interconnection schematic diagrams. Include requirements for interface with other systems.
- C. Product Data: Provide manufacturer's standard catalog pages and data sheets for each system component. Include ratings, configurations, standard wiring diagrams, dimensions, finishes, service condition requirements, and installed features.
- D. Certify that proposed system design and components meet or exceed specified requirements.
- E. Test Reports: Indicate satisfactory completion of required tests and inspections.
- F. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and operation of product.
- G. Manufacturer's detailed field testing procedures.
- H. Field quality control test reports.
- I. Maintenance contracts.
- J. Project Record Documents: Record actual locations of system components and installed wiring arrangements and routing.

- K. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
  - 1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.
- L. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.
- M. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Division 01 for additional provisions regarding product requirements.
  - 2. Deliver blank credentials to Owner as directed.

## 1.6 QUALITY ASSURANCE

- A. Comply with the following:
  - 1. NFPA 70
  - 2. NFPA 101 (Life Safety Code).
  - 3. The requirements of the local authorities having jurisdiction.
  - 4. Applicable TIA/EIA standards.
- B. Conform to requirements of NFPA 70.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience with access control systems of similar size, type, and complexity and providing contract maintenance service as a regular part of their business; authorized manufacturer's representative.
- E. Maintenance Contractor Qualifications: Same entity as installer.
- F. Products: Furnish products listed and classified by Underwriters Laboratories Inc. as suitable for purpose specified and indicated.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.
- B. Store products in manufacturer's unopened packaging, keep dry and protect from damage until ready for installation.

## 1.8 FIELD CONDITIONS

- A. Maintain field conditions within manufacturer's required service conditions during and after installation.

## 1.9 WARRANTY

- A. See Division 01 for additional warranty requirements for Closeout Submittals.

- B. Provide minimum one year manufacturer warranty covering repair or replacement due to defective materials or workmanship.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Electronic Door Hardware:
  - 1. Refer to Division 08 for required electronic door hardware.
- B. Door Openers:
  - 1. Refer to Division 08 for required hardware.
  - 2. Basis of Design: LiftMaster Logic 5.0, or approved equal.
- B. Card Reader Pedestals:
  - 1. Basis of Design: Chase Security Systems, INC., CPDN-9248122 or approved equal.

### **2.2 ACCESS CONTROL SYSTEM REQUIREMENTS**

- A. Provide provisions for new access control system consisting of all required conduit, boxes, supports, etc. as necessary for a complete system that provides the functional intent indicated.
- B. Surge Protection:
  - 1. Provide surge protection for door strikes/locks.
  - 2. Provide equipment power surge protection where electrical distribution system surge protection is not provided.
- C. Refer to drawings for locations of Architectural Door Hardware Schedule for additional information.
- D. Interface with Other Systems:
  - 1. Provide products compatible with other systems requiring interface with access control system.
  - 2. Interface with electrically operated door hardware as specified in Division 08.
    - a. Capable of locking/unlocking/releasing controlled doors.
    - b. Capable of receiving input from integral door hardware switches.
- E. Door Locking Devices (Electric Strikes) Comply with Division 08.
- F. Contractor shall provide raceway and rough-in only, final installation of card readers to be completed by SIA. Cabling to have 15' minimum slack loop on each end and each end labeled per specifications.
- G. Cable Basis of Design: West Penn Wire 22/6 Shielded or 18/2-16/2 unshielded as shown on the drawings, or approved equal.

### **2.3 DOOR OPENER REQUIREMENTS**

- A. Provide provisions for new door opener compatible with the access control system consisting of all required conduit, boxes, supports, etc. as necessary for a complete system that provides the functional intent indicated.

- B. Interface with Other Systems:
  - 1. Provide products compatible with other systems requiring interface with access control system.
  - 2. Interface with electrically operated door hardware as specified in Division 08.
    - a. Capable of locking/unlocking/releasing/opening controlled doors.
  
- C. Basis of Design: LiftMaster Logic 5.0, coordinated and verified through Continental Door.
  - 1. Exit Control Loop:
    - a. Dimensions: 12' diameter, 6" deep.
    - b. Centered 16' from door.
    - c. Capable of sending signal to motor/operator.
    - d. Basis of Design: EDI, LMA-1250-LV.
  - 2. Control Station:
    - a. 3-Button control station.
    - b. Capable of sending signal to motor/operator.
    - c. Steel enclosure.
    - d. Basis of Design: LiftMaster Logic 5.0, 02-103L.
  - 3. Entrapment Protection Devices:
    - a. Photoelectric sensors
    - b. Capable of protecting doors 20' wide minimum.
    - c. Capable of sending signal to motor/operator.
    - d. Basis of Design: LiftMaster Logic 5.0, CPS-U or CPS-UN4.
  
- D. Programming and Other
  - 1. Contractor to coordinate with Continental Door to meet all programming requirements as discussed during the design phase and detailed in other sections.
  - 2. Miscellaneous Requirements
    - a. The door will open upon entry with a card reader.
    - b. The opening will not be vehicle verified; meaning a person can walk up to the opener and activate the door with their card.
    - c. The garage door operates so that it is an adjustable timed opening and will time out after a pre-determined amount of time to close. All timing settings to be pre-approved / coordinated with Owner / Architect.
    - d. Provide safety sensors of varying height on the door; one on the bottom and the other at 12" – 18" above the floor. Final elevation coordinated with Owner / Architect.
    - e. Parking Garage exit door will be loop activated. It will take 5-6 seconds of the vehicle sitting on the loop before the vehicle opens the door. Vehicles pulling into the wash bay cannot activate the door. After the 5-6 seconds, the door will open and will close after timing out. All timing settings to be approved by Owner / Architect.
    - f. Entry and Exit doors will have a manual override with a chain and a push button door on the inside.

## 2.4 CARD READER PEDESTAL REQUIREMENTS

- A. Provide dual device, goose-neck card reader pedestal:
  - 1. Materials: 14-gauge steel.
  - 2. Color: SIA standard yellow
  - 3. Dimensions:
    - a. Lower head: 46"-50". Upper head: 90"-94".
    - b. Base: Minimum 12"x12", 3/8" thick.

## 2.5 ACCESSORIES

- A. Provide components as indicated or as required for connection of electric door strikes to devices and other systems indicated.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that ratings and configurations of system components are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive system components.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to system.
- E. Verify that conditions are satisfactory for installation prior to starting work.

### 3.2 INSTALLATION

- A. Install door hardware and electric strikes in accordance with NECA 1 (general workmanship).
- B. Install products in accordance with manufacturer's instructions.
- C. Wiring Method: Unless otherwise indicated, use cables (not in conduit).
  - 1. Use suitable listed cables in wet locations, including underground raceways.
  - 2. Use suitable listed cables for vertical riser applications.
  - 3. Use listed plenum rated cables in spaces used for environmental air.
  - 4. Install wiring in conduit for the following:
    - a. Where required for rough-in.
    - b. Where required by authorities having jurisdiction.
    - c. Where exposed to damage.
    - d. Where installed outside the building.
    - e. For exposed connections from outlet boxes to devices.
  - 5. Conduit: Comply with Section 26 0534.
  - 6. Conceal all cables unless specifically indicated to be exposed.
  - 7. Use power transfer hinges complying with Division 08 for concealed connections to door hardware.
  - 8. Cables in the following areas may be exposed, unless otherwise indicated:
    - a. Equipment closets.
    - b. Within joists in areas with no ceiling.
  - 9. Route exposed cables parallel or perpendicular to building structural members and surfaces.
  - 10. Do not exceed manufacturer's recommended maximum cable length between components.
- D. Provide grounding and bonding in accordance with Section 26 0526.
- E. Identify system wiring and components in accordance with Section 26 0553.

- F. Make conduit and wiring connections to door hardware devices furnished and installed under Division 08.

### 3.3 FIELD QUALITY CONTROL

- A. Perform field inspection and testing in accordance with Division 01.
- B. Provide services of a manufacturer's authorized representative to observe installation and assist in inspection and testing. Include manufacturer's detailed testing procedures and field reports with submittals.
- C. Test for proper interface with other systems.
- D. Correct defective work, adjust for proper operation, and retest until entire system complies with contract documents.
- E. Submit detailed reports indicating inspection and testing results and corrective actions taken.

### 3.4 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

### 3.5 CLOSEOUT ACTIVITIES

- A. See Division 01 for Closeout Submittals and Demonstration and Training.
- B. Demonstration: Demonstrate proper operation of system to Owner, and correct deficiencies or make adjustments as directed.
- C. Demonstrate normal and abnormal modes of operation, and required response to each.

### 3.6 PROTECTION

- A. Protect installed system components from subsequent construction operations.

### 3.7 MAINTENANCE

- A. See Division 01 for additional requirements relating to maintenance service.
- B. Conduct site visit at least once every three months to perform inspection, testing, and preventive maintenance. Submit report to Owner indicating maintenance performed along with evaluations and recommendations.
- C. Provide trouble call-back service upon notification by Owner:
  - 1. Include allowance for call-back service during normal working hours at no extra cost to Owner.
  - 2. Owner will pay for call-back service outside of normal working hours on an hourly basis, based on actual time spent at site and not including travel time; include hourly rate and definition of normal working hours in maintenance contract.



**END OF SECTION 28 13 00**

## **SECTION 28 23 00**

### **VIDEO SURVEILLANCE**

#### **PART 1 - GENERAL**

The Spokane International Airport (SIA) has an existing campus video surveillance system to which the contractor shall integrate the new Phase III Parking Operations Building (POB) Garage according to the requirements described below. This project shall be an extension and modification of the existing video surveillance system in Phase II. The contractor is responsible for all aspects of the design of the video surveillance system including permitting, commissioning, approval, etc. Provide new components of the same manufacturer as existing. Contractor to provide new work as necessary to provide a complete and operational system meeting the requirements of the authority having jurisdiction.

#### **1.1 SECTION INCLUDES**

- A. Video surveillance system requirements.
- B. Cameras.
- C. Accessories.
- D. Cable and accessories.

#### **1.2 RELATED REQUIREMENTS**

- A. See Division 07 for Firestopping.
- B. Section 26 0526 - Grounding and Bonding for Electrical Systems.
- C. Section 26 0529 - Hangers and Supports for Electrical Systems.
- D. Section 26 0534 - Conduit.
- E. Section 26 0553 - Identification for Electrical Systems.
- F. Section 27 1006 - Structured Cabling for Voice and Data.
- G. Section 28 1300 - Access Control: For interface with video surveillance system.

#### **1.3 REFERENCE STANDARDS**

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; National Electrical Contractors Association; 2010.
- B. NECA 303 - Standard for Installing Closed-Circuit Television (CCTV) Systems; National Electrical Contractors Association; 2005.

- C. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

#### 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
  - 1. Coordinate the placement of cameras with structural members, ductwork, piping, equipment, luminaires, diffusers, fire suppression system components, and other potential conflicts installed under other sections or by others.
  - 2. Coordinate the work with other installers to provide power for cameras and equipment at required locations.
  - 3. Notify Architect/Engineer of any conflicts with or deviations from the contract documents. Obtain direction before proceeding with work.
- B. Pre-installation Meetings:
  - 1. Conduct meeting with facility representative to review camera and equipment locations and camera field of view objectives.
  - 2. Conduct meeting with facility representative and other related equipment manufacturers to discuss video surveillance system interface requirements.

#### 1.5 SUBMITTALS

- A. See Division 01 for administrative requirements pertinent to submittal procedures.
- B. Shop Drawings: Include plan views indicating locations of system components and proposed size, type, and routing of conduits and/or cables. Include elevations and details of proposed equipment arrangements. Include system interconnection schematic diagrams. Include requirements for interface with other systems.
- C. Product Data: Provide manufacturer's standard catalog pages and data sheets for each system component. Include ratings, configurations, standard wiring diagrams, dimensions, finishes, service condition requirements, and installed features.
- D. Certify that proposed system design and components meet or exceed specified requirements.
- E. Evidence of qualifications for installer.
- F. Evidence of qualifications for maintenance contractor (if different entity from installer).
- G. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and operation of product.
- H. Manufacturer's detailed field testing procedures.
- I. Field quality control test reports.
- J. Project Record Documents: Record actual locations of system components and installed wiring arrangements and routing.

- K. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
  - 1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.
- L. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.

## 1.6 QUALITY ASSURANCE

- A. Comply with the following:
  - 1. NFPA 70
  - 2. Applicable TIA/EIA standards.
- B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience with video surveillance systems of similar size, type, and complexity and providing contract maintenance service as a regular part of their business; authorized manufacturer's representative.
  - 1. Contract maintenance office located within 100 miles of project site.
- E. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.
- F. Conform to requirements of NFPA 70.
- G. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- H. Supplier Qualifications: Authorized distributor of specified manufacturer with minimum three years documented experience.
- I. Products: Furnish products listed and classified by Underwriters Laboratories Inc. as suitable for purpose specified and indicated.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions and NECA 303.
- B. Store products in manufacturer's unopened packaging, keep dry and protect from damage until ready for installation.

## 1.8 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide minimum one year manufacturer warranty covering repair or replacement due to defective materials or workmanship.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Cameras
  - 1. Performance meeting or exceeding and having full compatibility with current Lenel System.
    - a. Fixed view as shown on the drawings.
    - b. Exterior cameras mounted in heated, weatherproof enclosures.
    - c. Exterior cameras having Day/Night capability.
  - 2. See Division 01 for product requirements regarding substitutions.
  - 3. Basis of Design:
    - a. Axis P3214-V or approved equal for Interior fixed view applications.
    - b. Axis P3367-VE or approved equal for Exterior fixed view applications.

### 2.2 VIDEO SURVEILLANCE SYSTEM

- A. Provide new video surveillance system consisting of all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. System Description: IP system with connection to network (IP) cameras.
  - 1. Surge Protection:
    - a. Provide surge protection for exterior cameras.
    - b. Provide equipment power surge protection where electrical distribution system surge protection is not provided.
- C. Cameras Required:
  - 1. See article "CAMERAS" below for product descriptions.
- D. Interface with Other Systems:
  - 1. Provide products compatible with other systems requiring interface with video surveillance system.
  - 2. Interface with access control system as specified in Section 28 1300.
    - a. Capable of affecting camera/video operation for selected access control system events.
- E. Provide products listed, classified, and labeled as suitable for the purpose intended.
- F. Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Limits: Comply with FCC requirements of CFR, Title 47, Part 15, for Class B, consumer application.

## 2.3 CAMERAS

- A. Provide cameras and associated accessories suitable for operation under the service conditions at the installed location. Provide additional components (e.g. enclosures, heaters, blowers, etc.) as required.
- B. Where not factory-installed, provide additional components (e.g. lenses, mounting accessories, etc.) as necessary for complete installation.
- C. Network (IP) Cameras:
  - 1. Signal-to-Noise Ratio: Not less than 50 dB.
  - 2. Provide the following standard features:
    - a. Automatic electronic shutter.
    - b. Automatic gain control.
    - c. Automatic white balance.
    - d. Web-based interface for remote viewing and setup.
    - e. Password protected security access.
- D. Lenses:
  - 1. Where not factory-installed, provide lenses matched to cameras and the intended application.
- E. Camera Enclosures and Mounting Brackets:
  - 1. Where not factory-installed, provide accessory camera enclosures suitable for operation under the service conditions at the installed location.
  - 2. Where not factory-installed, provide accessory camera mounting brackets necessary for installation.

## 2.4 COMPONENTS

- A. Cameras: General purpose video camera.
  - 1. Camera Tube: 1/2 inch diameter.
  - 2. Provide phase lock loop to synchronize camera to line voltage zero crossing.
  - 3. Lens: Standard.
  - 4. Ratings:
    - a. Input Power: 24 volts, 60Hz.
    - b. Scene Illumination: 0.25 fc for usable picture, 1 fc for full video.
    - c. Resolution: 600 lines, minimum.
    - d. Signal to noise: 44 dB, minimum.
    - e. Synchronization: To EIA RS-170, with 2:1 interlace.
    - f. Automatic Light Range: 100,000 to 1.
  - 5. Power Supply: Integral.
  - 6. Housing: Indoor or Outdoor as shown on drawings.

## 2.5 ACCESSORIES

- A. Provide components as indicated or as required for connection of video surveillance system to devices and other systems indicated.
- B. Provide cables as indicated or as required for connections between system components.

## 2.6 CAMERA MOUNTING POLE

- A. Install CCTV poles with concrete bases at locations as shown on the drawings, final location approved by Owner/Architect.
  - 1. See Camera Mounting Pole detail in drawings.
- B. Install (1) 1" C raceway to each pole. Extend underground raceways from data Rack #1 located in Parking Operations Building Data/IT room. Provide in-ground 18"X12"X10" composite junction enclosure at each pole and route underground raceway to enclosure. Extend raceway from enclosure into each pole. Cover of junction enclosure shall be labeled 'COMMUNICATION'.
- C. Provide (1) CAT 5e cable from data Rack #1 in Parking Operations Building Data/IT room to each pole. Cables shall be continuous from data Rack #1 to each pole. Provide 15 feet of slack cable for a maintenance loop at DATA/IT Room location and at each enclosure.
- D. Install CCTV cameras at poles as shown on drawings and terminate (1) CAT 5e cable to each camera.
- E. Secure CAT 5e cables at data Rack #1 and provide identification labels that correspond to each CCTV camera. Test CAT 5e cables for operational performance and correct any deficiencies. Cable to be routed and secured to patch panel located in data Rack #1 in Parking Operations Building Data/IT room. Verify exact final location with SIA IT Department.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install video surveillance system in accordance with NECA 1 (general workmanship) and NECA 303.
- B. Install products in accordance with manufacturer's instructions.
- C. Provide required support and attachment in accordance with Section 26 0529.
- D. Provide grounding and bonding in accordance with Section 26 0526.
- E. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 07 8400.
- F. Identify system wiring and components in accordance with Section 26 0553.
- G. Use branch video cable for circuits less than 500 feet; use main video cable for circuits longer than 500 feet. Provide equalizing amplifier for circuits longer than 100 feet.

### 3.2 INTERFACE WITH OTHER PRODUCTS

- A. SIA to program Lenel software for interface of video surveillance system.

### 3.3 FIELD QUALITY CONTROL

- A. Provide services of a manufacturer's authorized representative to observe installation and assist in inspection and testing. Include manufacturer's detailed testing procedures and field reports with submittals.
- B. Prepare and start system in accordance with manufacturer's instructions.
- C. Adjust cameras to provide desired field of view and produce suitable images under all service lighting conditions.
- D. Program system parameters according to requirements of Owner.
- E. Test for proper interface with other systems.
- F. Correct defective work, adjust for proper operation, and retest until entire system complies with contract documents.
- G. Submit detailed reports indicating inspection and testing results and corrective actions taken.
- H. See Division 01 for additional quality control requirements.
- I. Provide the services of manufacturer's technical representative to prepare and start systems and supervise final wiring connections and system adjustments.

### 3.4 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

### 3.5 ADJUSTING

- A. Adjust manual lens irises to meet lighting conditions.
- B. Aim and adjust manual zoom as required.

### 3.6 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of system to Owner, and correct deficiencies or make adjustments as directed.

### 3.7 MAINTENANCE

- A. See Division 01 for additional requirements relating to maintenance service.
- B. Provide service and maintenance of system for one year from Date of Substantial Completion.

**END OF SECTION 28 23 00**



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**SECTION 28 31 00**  
**FIRE DETECTION AND ALARM**

**PART 1 - GENERAL**

The Spokane International Airport (SIA) has an existing campus fire alarm system to which the contractor shall integrate the new Phase III Parking Operations Building (POB) Garage according to the requirements described below. This project shall be an extension and modification of the existing fire alarm system in Phase II. The contractor is responsible for all aspects of the design of the fire alarm system including permitting, commissioning, approval, etc. Provide new components of the same manufacturer as existing. Contractor to provide new work as necessary to provide a complete and operational system meeting the requirements of the authority having jurisdiction.

**1.1 SECTION INCLUDES**

- A. Fire alarm system design and installation, including all components, wiring, and conduit (when required to be used).
- B. Maintenance of fire alarm system under contract for specified warranty period.

**1.2 REFERENCE STANDARDS**

- A. 36 CFR 1191 - Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities; Final Rule; current edition; (ADA Standards for Accessible Design).
- B. IEEE C62.41.2 - Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits; 2002 (Cor 1, 2012).
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. NFPA 72 - National Fire Alarm and Signaling Code; 2013.
- E. NFPA 101 - Life Safety Code; 2012.

**1.3 SUBMITTALS**

- A. See Division 01 for administrative requirements pertaining to submittal procedures.
- B. Proposal Documents: Submit the following with cost/time proposal:
  - 1. NFPA 72 "Record of Completion", filled out to the extent known at the time.
  - 2. Manufacturer's detailed data sheet for each control unit, initiating device, and notification appliance.
  - 3. Certification by Contractor that the system design will comply with the contract documents.
  - 4. Proposed maintenance contract.
- C. Drawings must be prepared using AutoCAD Release 2010 or newer.
  - 1. Engineer will provide floor plan drawings for Contractor's use; verify all dimensions on Owner-provided drawings.
- D. Evidence of designer qualifications.

- E. Design Documents: Submit all information required for plan review and permitting by authorities having jurisdiction, including but not limited to floor plans, riser diagrams, and description of operation:
  - 1. Copy (if any) of list of data required by authority having jurisdiction.
  - 2. NFPA 72 "Record of Completion", filled out to the extent known at the time.
  - 3. Clear and concise description of operation, with input/output matrix similar to that shown in NFPA 72 Appendix A-7-5-2.2(9), and complete listing of software required.
  - 4. System zone boundaries and interfaces to fire safety systems.
  - 5. Location of all components, circuits, and raceways; mark components with identifiers used in control unit programming.
  - 6. Circuit layouts; number, size, and type of raceways and conductors; conduit fill calculations; spare capacity calculations; notification appliance circuit voltage drop calculations.
  - 7. List of all devices on each signaling line circuit, with spare capacity indicated.
  - 8. Manufacturer's detailed data sheet for each component, including wiring diagrams, installation instructions, and circuit length limitations.
  - 9. Description of power supplies; if secondary power is by battery include calculations demonstrating adequate battery power.
  - 10. Certification by either the manufacturer of the control unit or by the manufacturer of each other component that the components are compatible with the control unit.
  - 11. Certification by the manufacturer of the control unit that the system design complies with the contract documents.
  - 12. Certification by Contractor that the system design complies with the contract documents.
- F. Evidence of installer qualifications.
- G. Evidence of instructor qualifications; training lesson plan outline.
- H. Evidence of maintenance contractor qualifications, if different from installer.
- I. Inspection and Test Reports:
  - 1. Submit inspection and test plan prior to closeout demonstration.
  - 2. Submit documentation of satisfactory inspections and tests.
  - 3. Submit NFPA 72 "Inspection and Test Form," filled out.
- J. Operating and Maintenance Data: Revise and resubmit until acceptable; have one set available during closeout demonstration:
  - 1. Complete set of specified design documents, as approved by authority having jurisdiction.
  - 2. Additional printed set of project record documents and closeout documents, bound or filed in same manuals.
  - 3. Contact information for firm that will be providing contract maintenance and trouble call-back service.
  - 4. List of recommended spare parts, tools, and instruments for testing.

5. Replacement parts list with current prices, and source of supply.
  6. Detailed troubleshooting guide and large scale input/output matrix.
  7. Preventive maintenance, inspection, and testing schedule complying with NFPA 72; provide printed copy and computer format acceptable to Owner.
  8. Detailed but easy to read explanation of procedures to be taken by non-technical administrative personnel in the event of system trouble, when routine testing is being conducted, for fire drills, and when entering into contracts for remodeling.
- K. Project Record Documents: Have one set available during closeout demonstration:
1. Complete set of floor plans showing actual installed locations of components, conduit, and zones.
  2. "As installed" wiring and schematic diagrams, with final terminal identifications.
  3. "As programmed" operating sequences, including control events by device, updated input/output chart, and voice messages by event.
- L. Closeout Documents:
1. Certification by manufacturer that the system has been installed in compliance with his installation requirements, is complete, and is in satisfactory operating condition.
  2. NFPA 72 "Record of Completion", filled out completely and signed by installer and authorized representative of authority having jurisdiction.
  3. Certificate of Occupancy.
  4. Maintenance contract.
  5. Report on training results.
- M. Maintenance Materials, Tools, and Software: Furnish the following for Owner's use in maintenance of project.
1. In addition to the items in quantities indicated in PART 2, furnish the following:
    - a. All tools, software, and documentation necessary to modify the fire alarm system using Owner's personnel; minimum modification capability to include addition and deletion of devices, circuits, and zones, and changes to system description, operation, and evacuation and instructional messages.
    - b. One digital copy of all software not resident in read-only-memory.
    - c. Extra Fuses: Two for each installed fuse; store inside applicable control cabinet.

#### 1.4 QUALITY ASSURANCE

- A. Designer Qualifications: NICET Level III or IV (3 or 4) certified fire alarm technician or registered fire protection engineer, employed by fire alarm control panel manufacturer, Contractor, or installer, with experience designing fire alarm systems in the jurisdictional area of the authorities having jurisdiction.
- B. Installer Qualifications: Firm with minimum 3 years documented experience installing fire alarm systems of the specified type and providing contract maintenance service as a regular part of their business.

1. Authorized representative of control unit manufacturer; submit manufacturer's certification that installer is authorized; include name and title of manufacturer's representative making certification.
  2. Installer Personnel: At least 2 years of experience installing fire alarm systems.
  3. Supervisor: NICET level III or IV (3 or 4) certified fire alarm technician; furnish name and address.
  4. Contract maintenance office located within 50 miles of project site.
  5. Certified in the State in which the Project is located as fire alarm installer.
- C. Maintenance Contractor Qualifications: Same entity as installer or different entity with specified qualifications.
- D. Instructor Qualifications: Experienced in technical instruction, understanding fire alarm theory, and able to provide the required training; trained by fire alarm control unit manufacturer.

## 1.5 WARRANTY

- A. See Division 01 for additional closeout submittals regarding warranty requirements.
- B. Provide control panel manufacturer's warranty that system components other than wire and conduit are free from defects and will remain so for 1 year after date of Substantial Completion.
- C. Provide installer's warranty that the installation is free from defects and will remain so for 1 year after date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Fire Alarm Control Units: Provided their products meet or exceed the performance of the basis of design product, products of the following are acceptable:
  1. SimplexGrinnell: [www.simplexgrinnell.com](http://www.simplexgrinnell.com).
- B. Initiating Devices, and Notification Appliances:
  1. Provide all initiating devices and notification appliances made by the same manufacturer.

### 2.2 FIRE ALARM SYSTEM

- A. Fire Alarm System: Provide a new automatic fire detection and alarm system:
  1. Provide all components necessary, regardless of whether shown in the contract documents or not.
  2. Protected Premises: Entire building shown on drawings.
  3. Comply with the following; where requirements conflict, order of precedence of requirements is as listed:
    - a. ADA Standards for Accessible Design.
    - b. The requirements of the State Fire Marshal.

- c. The requirements of the local authority having jurisdiction.
  - d. Applicable local codes.
  - e. The contract documents (drawings and specifications).
  - f. NFPA 101.
  - g. NFPA 72; where the word "should" is used consider that provision mandatory; where conflicts between requirements require deviation from NFPA 72, identify deviations clearly on design documents.
- 4. Evacuation Alarm: Single smoke zone; general evacuation of entire premises.
  - 5. Combined Systems: Do not combine fire alarm system with other non-fire systems.
- B. Supervising Stations and Fire Department Connections:
- 1. Public Fire Department Notification: By on-premises supervising station.
  - 2. On-Premises Supervising Station: New proprietary station operated by Owner, located at SIA Fire Department.
  - 3. Means of Transmission to On-Premises Supervising Station: Directly connected noncoded system.
  - 4. Means of Transmission to Remote Supervising Station: Digital alarm communicator transmitter (DACT), 2 telephone lines.
  - 5. Auxiliary Connection Type: Local energy.
- C. Circuits:
- 1. Initiating Device Circuits (IDC): Class B, Style A.
  - 2. Signaling Line Circuits (SLC) Within Single Building: Class B, Style 0.5.
  - 3. Signaling Line Circuits (SLC) Between Buildings: Class A, Style 2.
  - 4. Notification Appliance Circuits (NAC): Class B, Style W.

## 2.3 COMPONENTS

- A. General:
- 1. Provide flush mounted units where installed in finish areas; in unfinished areas, surface mounted unit are acceptable.
  - 2. Provide legible, permanent labels for each control device, using identification used in operation and maintenance data.
- B. Fire Alarm Control Units, Initiating Devices, and Notification Appliances: Analog, addressable type; listed by Underwriters Laboratories as suitable for the purpose intended.
- C. Circuit Conductors: Copper; provide 200 feet extra; color code and label.
- D. Locks and Keys: Deliver keys to Owner.

1. Provide the same standard lock and key for each key operated switch and lockable panel and cabinet; provide 5 keys of each type

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Install in accordance with applicable codes, NFPA 72, NFPA 70, and the contract documents.
- B. Conceal all wiring, conduit, boxes, and supports where installed in finished areas.
- C. Obtain Owner's approval of locations of devices, before installation.
- D. Install instruction cards and labels.

#### **3.2 INSPECTION AND TESTING FOR COMPLETION**

- A. Notify Owner 7 days prior to beginning completion inspections and tests.
- B. Notify authorities having jurisdiction and comply with their requirements for scheduling inspections and tests and for observation by their personnel.
- C. Provide the services of the installer's supervisor or person with equivalent qualifications to supervise inspection and testing, correction, and adjustments.
- D. Prepare for testing by ensuring that all work is complete and correct; perform preliminary tests as required.
- E. Provide all tools, software, and supplies required to accomplish inspection and testing.
- F. Perform inspection and testing in accordance with NFPA 72 and requirements of local authorities; document each inspection and test.
- G. Correct defective work, adjust for proper operation, and retest until entire system complies with contract documents.
- H. Diagnostic Period: After successful completion of inspections and tests, Operate system in normal mode for at least 14 days without any system or equipment malfunctions.
  1. Record all system operations and malfunctions.
  2. If a malfunction occurs, start diagnostic period over after correction of malfunction.
  3. Owner will provide attendant operator personnel during diagnostic period; schedule training to allow Owner personnel to perform normal duties.
  4. At end of successful diagnostic period, fill out and submit NFPA 72 "Inspection and Testing Form."

#### **3.3 OWNER PERSONNEL INSTRUCTION**

- A. Provide the following instruction to designated Owner personnel:
  1. Hands-On Instruction: On-site, using operational system.
- B. Basic Operation: One-hour sessions for attendant personnel, security officers, and engineering staff; combination of classroom and hands-on:
  1. Initial Training: 1 session pre-closeout.

- C. Furnish the services of instructors and teaching aids; have copies of operation and maintenance data available during instruction.
- D. Provide means of evaluation of trainees suitable to type of training given; report results to Owner.

### 3.4 CLOSEOUT

- A. Closeout Demonstration: Demonstrate proper operation of all functions to Owner.
  - 1. Be prepared to conduct any of the required tests.
  - 2. Have at least one copy of operation and maintenance data, preliminary copy of project record drawings, input/output matrix, and operator instruction chart(s) available during demonstration.
  - 3. Have authorized technical representative of control unit manufacturer present during demonstration.
  - 4. Demonstration may be combined with inspection and testing required by authority having jurisdiction; notify authority having jurisdiction in time to schedule demonstration.
- B. Occupancy of the project will not occur prior to Substantial Completion.
- C. Substantial Completion of the project cannot be achieved until inspection and testing is successful and:
  - 1. Specified diagnostic period without malfunction has been completed.
  - 2. Approved operating and maintenance data has been delivered.
  - 3. Spare parts, extra materials, and tools have been delivered.
  - 4. All aspects of operation have been demonstrated to Owner.
  - 5. Final acceptance of the fire alarm system has been given by authorities having jurisdiction.
  - 6. Occupancy permit has been granted.
  - 7. Specified pre-closeout instruction is complete.
- D. Perform post-occupancy instruction within 3 months after Substantial Completion.

### 3.5 MAINTENANCE

- A. See Division 01 - for additional maintenance service execution requirements.
- B. Provide to Owner, at no extra cost, a written maintenance contract for entire manufacturer's warranty period, to include the work described below.
- C. Perform routine inspection, testing, and preventive maintenance required by NFPA 72, including:
  - 1. Maintenance of fire safety interface and supervisory devices connected to fire alarm system.
  - 2. Repairs required, unless due to improper use, accidents, or negligence beyond the control of the maintenance contractor.

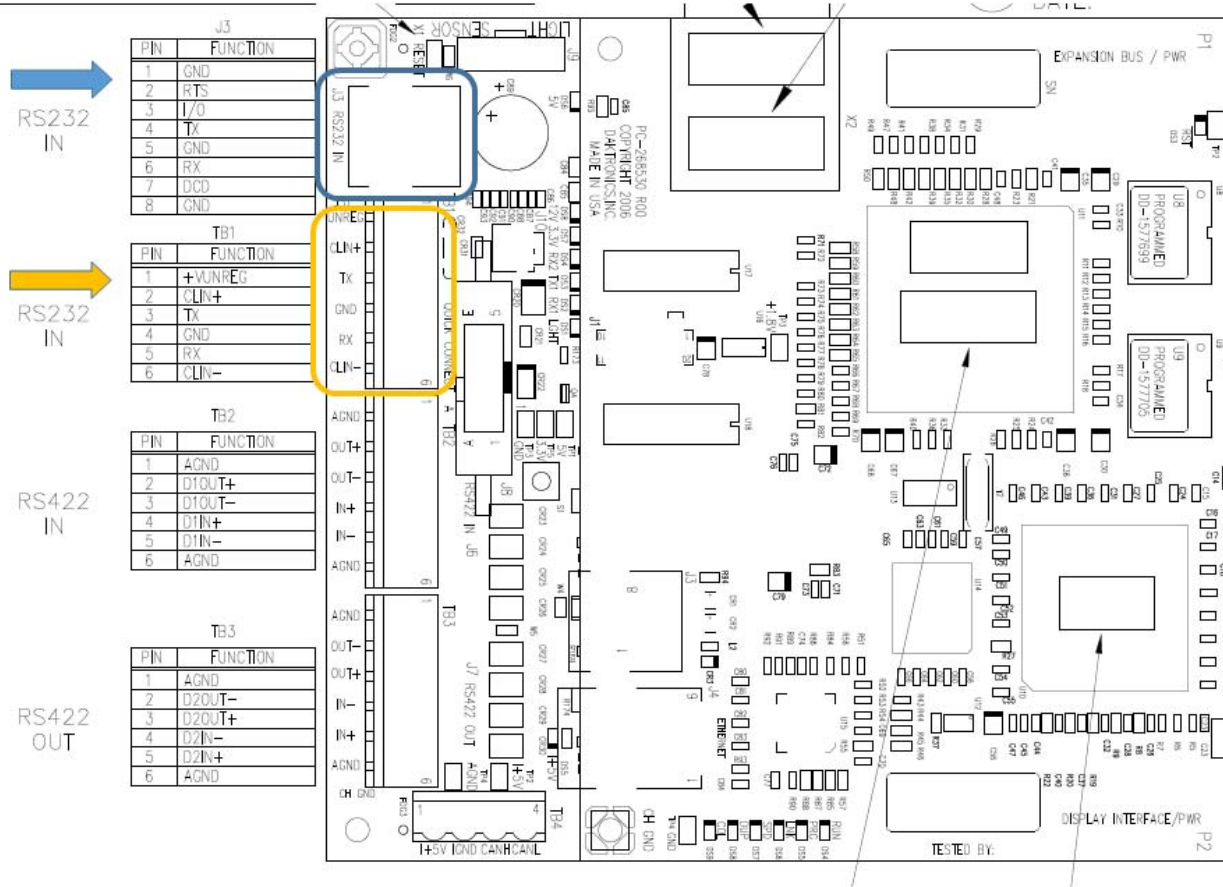


3. Record keeping required by NFPA 72 and authorities having jurisdiction.
- D. Provide trouble call-back service upon notification by Owner:
1. Provide on-site response within 2 hours of notification.
  2. Include allowance for call-back service during normal working hours at no extra cost to Owner.
  3. Owner will pay for call-back service outside of normal working hours on an hourly basis, based on actual time spent at site and not including travel time; include hourly rate and definition of normal working hours in maintenance contract.
- E. Provide a complete description of preventive maintenance, systematic examination, adjustment, cleaning, inspection, and testing, with a detailed schedule.
- F. Maintain a log at each fire alarm control unit, listing the date and time of each inspection and call-back visit, the condition of the system, nature of the trouble, correction performed, and parts replaced. Submit duplicate of each log entry to Owner's representative upon completion of site visit.
- G. Comply with Owner's requirements for access to facility and security.

**END OF SECTION 28 31 00**

# Daktronics Internal Connection Board:

You can use the modular jack labeled RS232 (J3) or the RS232 Phoenix connector (TB1) right next to it.



# KEY NOTES

1

11

NEW CAT6 CABLES ROUTED IN 3/4" CONDUIT. CAT6 CABLE SHOULD BE ROUTED TO DM-100 CONTROL ENCLOSURE LEAVING A 5" SLACK LOOP. TERMINATION AT THE CONTROL ENCLOSURE TO BE COMPLETED BY SIA. USING THE MARKED CONDUIT ENTRY POINTS OF THE SIGN (AND WEATHERPROOFING AS REQUIRED), TERMINATE INCOMING CABLES ON THE J3 OR TB1 RS-232 IN WIRING BLOCKS (SEE ADDENDUM #1 DAKTRONICS INTERNAL CONNECTION BOARD DIAGRAM) PER SIA INSTRUCTION USING THE FOLLOWING CONFIGURATION:  
 ORANGE/WHITE - TX (3)  
 ORANGE - RX (5)  
 GREEN - GND (4).

**ALSC**

ARCHITECTS

## ADDENDUM #1

PROJECT Parking Operations Garage SIA Proj.  
#15-40-1867 Phase III

DATE  
02.26.2016

DRAWN  
02.26.2016

DWG. NO.  
E-01

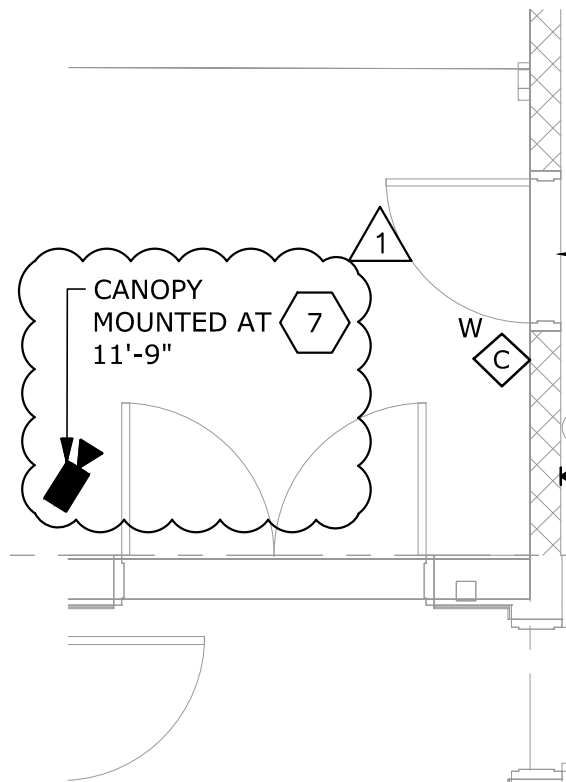
JOB NO.  
15-40-1867

REF. SHT.  
E-050

DESCRIPTION  
KEYNOTE ALTERATION.

## KEY NOTES

- 1
- 7 CAMERA MOUNTED UNDER CANOPY. PROVIDE ALL NECESSARY MOUNTING APPARATUS. COORDINATE FINAL CAMERA VIEW WITH OWNER.



**ALSC**

ARCHITECTS

### ADDENDUM #1

PROJECT Parking Operations Garage SIA Proj.  
#15-40-1867 Phase III

DATE  
02.26.2016

DRAWN  
02.26.2016

DWG. NO.  
E-02

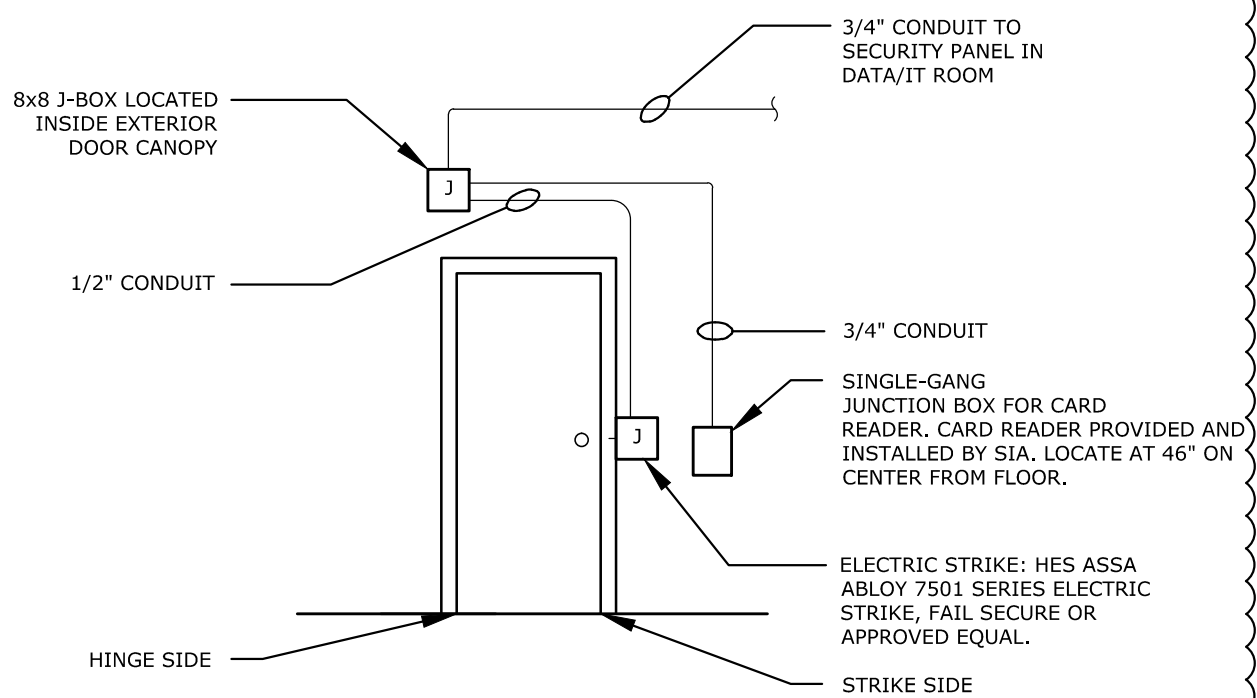
JOB NO.  
15-40-1867

REF. SHT.  
ET-101

DESCRIPTION  
CHANGED TO FIXED CAMERA.

1 **DETAIL NOTES**

1. CONTRACTOR TO PROVIDE ALL CABLE. ALL FIELD TERMINATION TO BE TO DOOR STRIKE TO BE DONE BY CONTRACTOR.
2. SIA TO PURCHASE AND INSTALL ACCESS CONTROL HARDWARE FOR HEAD END, INCLUDING CARD READER.
3. ALL HEAD END TERMINATION WILL BE DONE BY SIA. CABLES WILL BE CLEARLY MARKED WITH DOOR LOCATIONS AND DEVICE.
4. CABLE BASIS OF DESIGN WEST PENN WIRE, READER CABLE 22/6 SHIELDED OR APPROVED EQUAL. LOCK CABLE 18/2 OR 16/2 DEPENDING ON DISTANCE PER MANUFACTURE SPECS UNSHIELDED OR APPROVED EQUAL. PROVIDED AND INSTALLED BY CONTRACTOR.
5. FINAL LOCATION OF 8x8 J-BOX TO BE FIELD COORDINATED WITHIN EXTERIOR DOOR CANOPY.
6. ALL CONDUIT TO BE HIDDEN. SURFACE MOUNT CONDUIT TO BE APPROVED BY ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.



4 **SECURITY ACCESS DOOR INTERIOR ELEVATION**

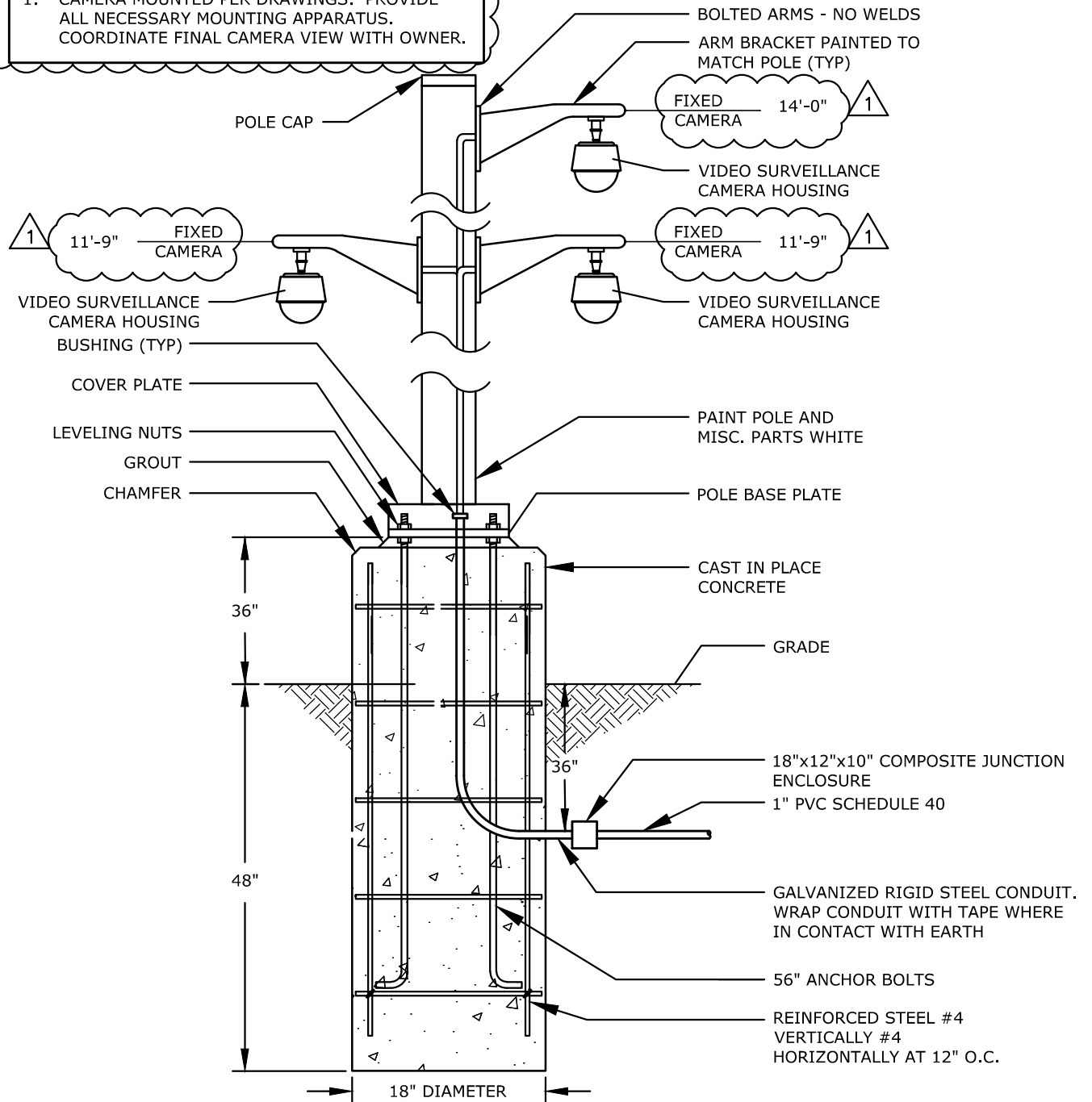
ET-101

PROJECT Parking Operations Garage SIA Proj. #15-40-1867 Phase III	DATE 02.26.2016	DRAWN 02.26.2016	DWG. NO. E-03	JOB NO. 15-40-1867	REF. SHT. E-501
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DESCRIPTION  
UPDATES TO SECURITY ACCESS DOOR DETAIL.

# DETAIL NOTES

1. CAMERA MOUNTED PER DRAWINGS. PROVIDE ALL NECESSARY MOUNTING APPARATUS. COORDINATE FINAL CAMERA VIEW WITH OWNER.



6  
ET-101

## TYPICAL CAMERA MOUNT DETAIL

**ALSC** ARCHITECTS

### ADDENDUM #1

PROJECT Parking Operations Garage SIA Proj.  
#15-40-1867 Phase III

DATE  
02.26.2016

DRAWN  
02.26.2016

DWG. NO.  
E-04

JOB NO.  
15-40-1867

REF. SHT.  
E-501

DESCRIPTION  
CHANGED TO FIXED CAMERA.