CITY OF POINT PLEASANT
MASON COUNTY, WEST VIRGINIA

POINT PLEASANT RIVER MUSEUM
POINT PLEASANT, WEST VIRGINIA
THRASHER PROJECT #060-10152

ADDENDUM #2
November 16, 2020

Prospective Bidders:

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated October 23, 2020. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

GENERAL:

1. Sketch SKP-1 has been issued to indicate cold water routing to aquarium. This question was addressed in Addendum 01 (Q/A 77)
2. Sketch SKP-2 has been issued to indicate the gas meter pressure regulator detail.
3. Sketch SKE-1 has been issued to indicate information related to floor boxes in SUPPORT 204.
4. The bid form has been revised to include several deduct alternates. Please submit your bid on form provided with this Addendum.
5. The WV Jobs Act is applicable to this project. Required information has been attached to this Addendum. The form labeled BOR-8 shall be submitted with the other Bid Opening Requirements. A new Bid Opening Requirements checklist has also been issued with this addendum.

CHANGES TO SPECIFICATIONS:

1. **ADD** section 012100 - Allowances
2. **ADD** section 012300 - Alternates
3. **ADD** section 281300 – Access Control.
4. **ADD** section 323119 – Decorative Metal Fences and Gates

CHANGES TO DRAWINGS:

1. P2.01- Refer to Piping Roof Plan, branch gas piping to RTU-3 shall be 1-1/4".

2. P3.01- See sketch SKP-2 for revised gas meter detail and generator gas piping.
3. M2.01- Reference AIR CURTAIN SCHEDULE, power for air curtain shall be 208 3P, 25A breaker.
4. Reference EXHAUST FAN SCHEDULE, EF-1, EF-2 Time clock shall be an Intermatic T187BR (or equal) Mount beside panel B, use circuit B-12 to power time clock.
5. Reference CAV ROOFTOP UNIT Schedule; RTU-1 Supply air shall be 2600 Return Air 2375, RTU-2 Supply air shall be 2555, Return air shall be 2330.
6. E2.01- Reference Power Roof Plan, add 120v 20A circuit from panel B to RTU-1, RTU-2 and RTU-3 for convenience outlet.
7. E2.01- Reference Power Roof Plan, add duct smoke detectors to RTU-1, RTU-2 and RTU-3.
8. E4.01- Replace sheet with E4.01R.
9. A5.03 – Replace sheet with A5.03R
10. A6.01 – Replace sheet with A6.01R
11. C1.01 – Replace sheet with C1.01R

QUESTIONS & ANSWERS:

Q-01) The following room numbers 106, 108, 200, 202, 204, & 206 & S1 indicate the floor finish to be sealed concrete. The concrete specifications nor painting specifications indicate what type of finish. Could a specification be provided for Sealed Concrete as noted on Sheet A6.01 Room Finish Schedule?

A-01) Basis of Design product is Foundation Armor AR350 solvent-based acrylic wet-look concrete sealer in Clear finish.

Q-02) On Sheet A2.01 Exterior Elevations; Note E7. Who provides and installs the building plaque and could specifications be provide in order to prepare the substrate for mounting?

A-02) Contractor shall provide and install building plaques. Owner will provide an Allowance of $75,000 for building signage including plaques, building exterior signage, and building interior signage.

Q-03) On Sheet A2.01 Exterior Building Elevations; Note E8. Who provides and installs the building signage and could specifications be provided in order to prepare the substrate for mounting?

A-03) Contractor shall provide and install building signage. Owner will provide an Allowance of $75,000 for building signage including plaques, building exterior signage, and building interior signage.

Q-04) Refer to Specification Section 101423.16 Signage and Graphics:

3.4 INTERIOR SIGNAGE SCHEDULE

A. Refer to the list of interior signs required for the project as attached to this Section.

Could a signage schedule be provided?

A-04) Contractor shall provide and install building plaques. Owner will provide an Allowance of $75,000 for building signage including plaques, building exterior signage, and building interior signage.

Q-05) Refer to Specification Section 101423.16 Signage and Graphics:

1.2 RELATED SECTIONS

A. Section 10410 - Directories.

B. Section 10420 - Plaques.

C. Section 10430 - Exterior Signage.

Where are these specification?

A-05) The specifications will not be provided. Contractor shall provide and install building plaques. Owner will provide an Allowance of $75,000 for building signage including plaques, building exterior signage, and building interior signage.

Q-06) Refer to Masonry Veneer 042613 Specifications. White sand and white mortar is very expensive compared to other products. Will white mortar and white sand need to be considered during the bidding phase?

A-06) White mortar and white sand shall not be required.

Q-07) Will nelson studs be required to be welded to the structure steel prior to deck placement and concrete pours within the second floor suspended concrete on decking?

A-07) No, this will not be required.

Q-08) Will welded wire mesh actually be required within the suspend concrete on metal deck as indicated on Sheet S300?

A-08) Yes, wire mesh shall be provided as indicated.

Q-09) What is the camber and/or deflection rate design of the steel joist framing for the second floor concrete and metal deck? Will shoring for the concrete pour be required due to the span?

A-09) No camber shall be required. Shoring shall not be required. Metal decking shall be double or triple span.

Q-10) Was the steel joist framing, metal decking and concrete designed strong enough to carry ride along trowel machines for concrete finishing and scissor lifts for construction activities?

A-10) Depends on the size and weight of the equipment. Equipment loads up to 2,500 lbs can be accommodated. Anything over that will need to be submitted and checked by Engineer on a case by case basis.

Q-11) Should the wet wall at the drinking fountain between doors 104 and 105 be a 6" or 8" metal stud in order to accommodate the plumbing rough-ins?

A-11) Revise to be 6" stud; this wall only. Construct similar to Type 1 partition.

Q-12) Referring to Gas Piping from the meter up the side of the exterior building to HVAC on the roof: Is the Mechanical Engineer requiring all gas piping to be welded pipe?

A-12) See Sheet MEP, General Gas Piping Notes for welded connection requirements.

Q-13) Will the Owner be providing the work order for the gas connection with the local utility company?

A-13) The Owner will be providing all work orders for utilities.

Q-14) Has the WVDOH Permit for the Type F Trench Repair at the drain connection crossing Main Street been established?

A-14) No WVDOH Permit is required for this trench repair. Main Street is a City-owned street and does not fall under the jurisdiction of the WVDOH. Coordination with the City shall be required when the Work is being performed.

Q-15) F.F.E has been set to 560.90. What is the top and bottom curb elevations on Main Street?

A-15) The proposed curb elevations shall match the existing curbs with the exception of the ADA ramps.

Q-16) Where is the bench mark located? Can the stakes and elevations be provided from the preliminary investigative survey provided during the design phase?

A-16) The mapping was provided by the City. The City will provide a benchmark prior to construction.

Q-17) Has the proposed F.F.E. been set to allow for proper slopes for WVDOH & ADA cross slopes specifications of concrete sidewalks?

A-17) Yes, based on the survey information provided, the building was set to match the existing sidewalk abutting the front entrance and designed to comply with WVDOH and ADA

requirements. The Contractor shall be responsible for maintaining and confirming installed slopes.

Q-18) Regarding the brick paver note on Sheet C1.01: Could a detail be provided should a concrete curb be needed for the brick pavers? Could a section detail be provided indicating the minimum thickness of gravel bedding and what type of sands may be required for brick paving installations? What price range of brick pavers should be quoted. Low end brick paver or premium brick paver?

A-18) A 6" wide concrete rim will be used at exposed edges with a 4" crusher run bedding stone, leveling sand, min. 60mm paver, and polymeric sand to fill paver joints.

Q-19) Refer to Sheet C1.01 Over Legend and Over-All Site Plan C1.01: The existing contour lines are hard to distinguish amongst all the information being plotted on one plan sheet. What is the limits of Earth Moving? Is the site balanced? Do existing foundations remain in place?

A-19) 1' contour intervals are already shown and site is flat. The limits of earth moving will be defined in a revised site plan by an LOD. The site is not balanced. If existing foundations are encounter, then they must be removed.

Q-20) If unsuitable materials are encountered, will the Site Contractor be paid on a CY Unit of Measure for over excavation and placement of compacted suitable materials?

A-20) The existing materials are not suitable for bearing per the Geotechnical Report supplied with Addendum 01. Contractor shall plan accordingly for over-excavation of unsuitable material and supplying suitable material.

Q-21) Refer to Foundation Note # 1 on Sheet S001: Will the geo-tech reports be provided by American Geotech and issued in the Addendum? Conflicting statements: Is the Geotech report for recommendation use for the Structural Engineer and the General Contractor shall bid as per Structural Drawings & Technical Specifications or are the directions within the reports to be included in the bid? Should ground water or unsuitable earth not meeting the minimum 2,000 PSF be encountered. Will there be a pay item for dewatering and a pay item for removal of unsuitable material and replacement with engineered fill?

A-21) The Geotechnical Report was provided with Addendum 01. All earthwork shall be performed per the Geotechnical Report

Q-22) Sheet C1.01 Site Plan: The limits of disturbance are not identified. Is CMU Properties, LLC Parcel 23 available for staging?

A-22) For bidding purposes, assume the adjacent lot is available for staging.

Q-23) Refer to Sheet A3.02 Note: 34 4" PERF. FOOTING DRAIN WRAPPED IN GEOTEXTILE AND SURROUNDED BY CLEAN STONE FILL. SEE 'C' SHEETS FOR CONTINUATION AND TIE-IN. Where is the tie-in for the foundation drainage piping?

A-23) The drains will be tied into proposed inlet Type B inlet indicated on Civil sheets.

Q-24) Refer to Sheets P1.01 Notes A, B & J. and Sheet C1.01 Site Plan: It appears the storm piping from the building to the new Type B Drainage Inlet has been inadvertently left out of the bid documents. Can a storm piping plan be provided indicating pipe types and sizes, clean-outs, etc.?

A-24) An additional pipe system has been added to the plans.

Q-25) Refer to Specification Section Soil Preparation 329113: Is it of the Civil Engineer's opinion that on site soils is adequate for new turfs and grasses, therefore, eliminating the need to import soils?

A-25) Topsoil will be required for seeding/planting.

Q-26) Has the City of Point Pleasant reviewed the bidding documents and has the City of Point Pleasant issued a plan review letter?

A-26) The City has not reviewed the bidding documents.

Q-27) Can the work order for the new electrical service be provided?

A-27) The Owner will be providing all work orders for utilities.

Q-28) Will the Owner be responsible for the associated costs of the Electrical Service work order, should the work order not be generated prior to the biding phase?

A-28) The Owner will be providing all work orders for utilities.

Q-29) Can the work order for the new communication service be provided?

A-29) The Owner will be providing all work orders for utilities.

Q-30) Will the Owner be responsible for the associated costs of the Communication Service work order, should the work order not be generated prior to the bidding phase?

A-30) The Owner will be providing all work orders for utilities.

Q-31) It is a little concerning when there is a 90 day hold period. Are the funds all already available for the construction of this project.

A-31) Funds are available up to the budget amount indicated in Addendum 01.

Q-32) Refer to Sheet E4.02 & Sheet C1.01: Sheet E4.02 indicates a Transformer Pad Detail, however, Sheet C1.01 does not indicate a location. Will a transformer be required for this project?

A-32) The need for a transformer will be determine by the electrical utility supplier. For bidding purposes, anticipate a transformer being required. Contractor shall provide a pad as detailed. Anticipated transformer pad shall be located in the Northeast corner of the site in the grass area.

Q-33) Refer to Sheet M1.01 & Sheet S103: Sheet M1.01 indicates (3) three RTU's, however, Sheet S103 does not show the locations of the structural steel support typical roof unit support detail identified on Sheet S503. Should we be concerned with any coordination issues with the locations of the RTU's, structural steel and architectural layout below?

A-33) Structural support for RTU's and other rooftop equipment shall be provided per detail 7/S503. Units shall be located approximately as indicated throughout the remainder of the drawing set.

Q-34) Refer to Sheet C1.01 the (50') Fifty linear foot dimension in front of overhead door and the (8) pipe bollards: Finishing asphalt around pipe bollards next to a building in hand work and does not have a neat appearance. Recommending this area to include a concrete apron in lieu of asphalt paving.

A-34) Contractors may, at their option, provide a concrete apron in lieu of asphalt paving as described.

Q-35) Refer to Sheet C1.01 Pipe Bollard Locations, C2.02 Steel Bollard Detail and Exposed Metal Specifications: Since the pipe bollards has been clearly identified to be painted, is there still a need to have them galvanized?

A-35) Yes, pipe bollards shall be galvanized and painted.

Q-36) Refer to Specification Section Non-Structural Metal Framing 092216: Appears the distance from F.F.E. to bottom of second floor deck is about 15'-8". Is there a concern about the distance from the bottom of the second floor deck to the proposed ceiling height of 10'-0" for suspended drywall ceilings? This is about a 5'-8" distance of suspension. Is fastening the Non-Structural Metal Suspended Framing System to the bottom of the steel joist system permitted? Will the Stamped Engineered Drawings be required for the Non-Structural Metal Framed Suspension Ceiling System?

A-36) There are no concerns with the suspension distance. Fastening to the steel joist system will be permitted. Stamped Engineered Drawings will be required where indicated in the specifications and in the drawings.

Q-37) Refer to Specification Section Cast-in-Place Concrete 033000: Upon reviewing the specifications there were no related information pertaining to pouring slab on deck. Could specifications be provided that coordinates with the structural steel, steel joist framing and metal decking for the second floor?

A-37) There is no specification section specific to pouring concrete on metal decks. Concrete shall be placed per the provided specification sections and as indicated on drawings. For pouring concrete on the second floor, comply with the metal decking manufacturer's written instructions and recommendations for installation, and Steel Decking Institute (SDI) recommendations.

Q-38) Refer to Sheet E4.01:The Electrical Drawings indicate a 20KW Generator. I cannot seem to locate the generator on the Civil Plans. Please identify the underground fuel source and underground electrical to the building.

A-38) Generator shall be located in the Northeast corner of the site in the grass area. The fuel source shall be natural gas.

Q-39) Are there any specs or details for the fencing that is shown on the drawings?

A-39) Refer to specification section 323119 – Decorative Metal Fences and Gates and sheet A5.03R attached to this addendum. Basis of Design product is Ameristar Fence Products, Aegis Plus Warrior Series light commercial steel fence.

Q-40) Can you clarify the excavation depth for the footers? It was mentioned briefly in the site meeting about 6' depth and brought back up to elevation. I can't locate that information on the prints.

A-40) Please refer to the Geotechnical Report provided in Addendum 01 for specifics. The intent is that the site shall be over-excavated and brought back up to bearing level indicated on the drawings with suitable material.

Q-41) The southeast corner of the first floor appears to be where the fish tank is being placed. Just wanted to make sure of the floor finishes and the raised concrete pad edge finishes. The cross hatching appears to be vct. Is this correct? Assuming we would install a base up the sides of the concrete or paint. Does the fish tank cantilever over the concrete pad?

A-41) The crosshatching indicates a trench drain around the perimeter of the aquarium. Floor finish throughout this area shall be sealed concrete. No base shall be required at the sides of the concrete support for the aquarium; it shall be left exposed. The aquarium is not intended to cantilever over the concrete pad.

Q-42) Is a specification available for the exterior brick pavers?

A-42) No specification shall be provided. Refer to A-18 above.

Q-43) Is an installation detail available for the exterior brick pavers?
A-43) No detail shall be provided. Refer to A-18 above.

Q-44) Who provides and installs the aquarium?
A-44) Aquarium shall be provided and installed by the Owner.

Q-45) Is the aquarium actually 24,000 gallons? If so, it would be approximately 30' tall.
A-45) No.

Q-46) The plumbing drawings illustrate a trench drain around part of the aquarium. Does the trench drain encircle the entire aquarium?
A-46) Yes, the trench drain shall be installed around the full perimeter of the aquarium base.

Q-47) Do you have a detail that illustrates the aquarium trench drain adjacent to its foundation?
A-47) Install trench drain per manufacturer's instructions and consistent with details 8/S500 and 9/S500. Nearest edge of trench drain shall be located 18" from face of aquarium pad.

Q-48) Addendum #1, A-80; Anodized finishes vary in price considerably, is it possible to determine the finish before bid date.
A-48) Overhead door finish color will be selected during construction. Anodized finish, if selected, shall be Class I.

Q-49) Addendum #1, A-80; does "…or factory color finished in color selected by Architect…" mean that a powder coat finish is acceptable?
A-49) A powder coat finish will be acceptable for overhead doors.

Q-50) Please clarify the Exterior Stairs on the Point Pleasant River Museum. The Structural Drawings seem to show Two Exterior Stairs, Noted "By Others". (I assume "By Others" means the Exterior Stairs are not by the Structural Engineer) The Architectural Drawings show only One Exterior Stair. Please confirm that there is to be only ONE Exterior Stair (Grating Stair) per the Architectural Drawings.
A-50) Exterior stairs shall be provided and installed by Contractor as indicated on the A-sheets. Only one set of exterior stairs shall be required.

Q-51) Drawing A3.04 identifies it as a Grating Stair, but Detail 4/A3.04 is not drawn as would typically represent Grating. This Detail appears to show a Closed Riser Stair and Notes "Angled Steel Riser for 1" Nosing". Grating Stairs are typically Open Riser with a Checkered Plate Nosing on each Tread. Please confirm what we are needing to provide.

A-51) Exterior grating stairs shall be fabricated with open risers per specification section 055119.

Q-52) Page C101: The service entry shown on this page has power coming from power pole located near the ADA parking spot, traveling the length of the building, and then entering at back of building. A transformer detail is shown on page E402 but a transformer is not shown on C101. Page E401 shows an overhead service, please clarify which service entry is correct.

A-52) Service entry shall be determined by utility company. For bidding purposes, assume the entry shall be provided as indicated on C101.

Q-53) Page E201: Note A says to bring power to floor box, please provide a circuit for boxes. Does Note A apply to every junction box located in room 204?

A-53) Updated information for the referenced floor boxes has been provided and is attached to this Addendum.

Q-54) What equipment is existing? (Any power distribution panels, generator, elevator)

A-54) There is no existing equipment. This project is entirely new construction.

Q-55) If we are providing the distribution panels is there any specific brand we are to use or match?

A-55) Refer to specification section 262416 – Panelboards for acceptable manufacturers.

Q-56) Where is the generator going to be set? (up by the existing entrance or back where the new meter will be mounted outside the electrical room?)

A-56) The generator shall be set in the Northeast corner of the site in the grass area.

Q-57) Who is providing the generator?

A-57) Contractor shall provide and install the generator

Q-58) Are there any more details on the junction boxes in the floor in room 204 (E2.01)

A-58) Updated information for the referenced floor boxes has been provided and is attached to this Addendum.

Q-59) The (E3.01) drawings specify Reuse existing FACP and Annunciator. What Product/Brand is the existing system?
A-59) There is no existing fire alarm equipment. Contractor shall provide and install all new equipment.

Q-60) Even though locations were not set, the Annunciator does not appear on the drawings, do they want it in the building at all?
A-60) Annunciator and FACP shall be located in the Gift Shop

Q-61) What are the Access Control Spec Requirements?
A-61) Access Control specification is attached to this Addendum.

Q-62) We will be bidding with Notifier, but drawing E3.01 (bottom let corner) notes that we are to reuse existing annunciator and FACP. Are we to assume that this is a new building since Volume 2 Specs specified manufactures to use?
A-62) This is a new building and Notifier is acceptable per the specifications.

Q-63) The Access Control Equipment is listed on the fire drawings however, no specified manufactures are listed in the specs as far as the Panel (Honeywell, Galaxy, etc.) are there manufacturer requirements?
A-63) See A-61 above

Q-64) Is there any demo that will be required that is not listed on the construction documents?
A-64) No demolition of existing structures is required.

Q-65) Is there a B&O tax Requirement? If so, what is the amount?
A-65) Contractor shall verify all B&O and tax requirements with the City.

Q-66) Is the Building permit by Owner?
A-66) Contractor shall be responsible for obtaining a building permit.

Q-67) Will the owner pay for all special testing and inspections?
A-67) Special inspections and testing responsibilities shall be as stated in individual specification sections that require them.

Q-68) The Geotech report reference the bottom of footing should be 36” below exterior finish grade with the structural drawing be change to reflect this elevation?
A-68) Structural drawings indicate top of footing location and 1’-0” deep spread footings. This puts the bottom of footing elevation at 36” below exterior finish grade.

Q-69) Can the rigid foam insulation at perimeter wall foundation be exposed at the elevator pit?
A-69) Rigid foam insulation shall not be left exposed.

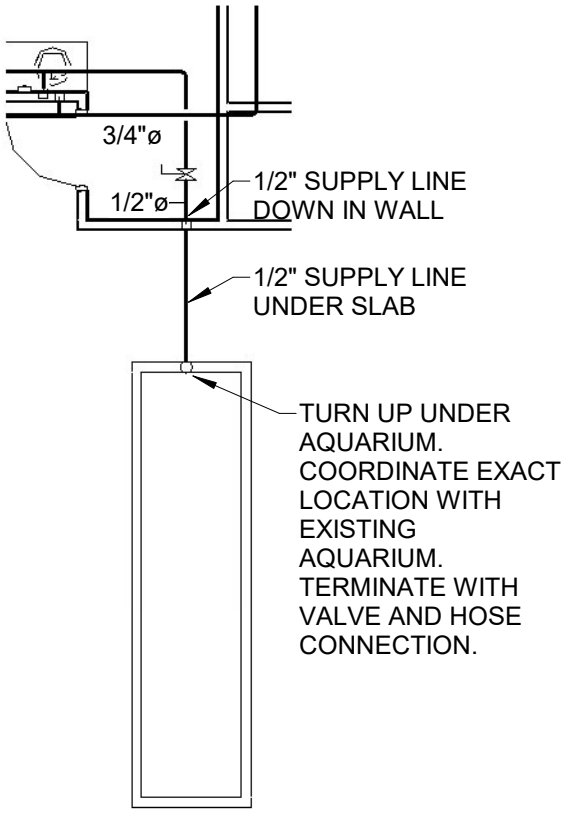
Q-70) Can the EIFS profile #1&#2 be framed from 2x materials and then covered in 4" of insulation?
A-70) Yes, the described construction method shall be acceptable for this application provided it follows EIFS manufacturer's written installation instructions.

Sincerely,

THE THRASHER GROUP, INC.

Josh Lyons
Architect

STATE OF WEST VIRGINIA
JOSHUA Z LYONS
No. 4791
REGISTERED
ARCHITECT
11/16/2020



1 / SKP-1 AQUARIUM PIPING SKETCH
1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

POINT PLEASANT RIVER MUSEUM

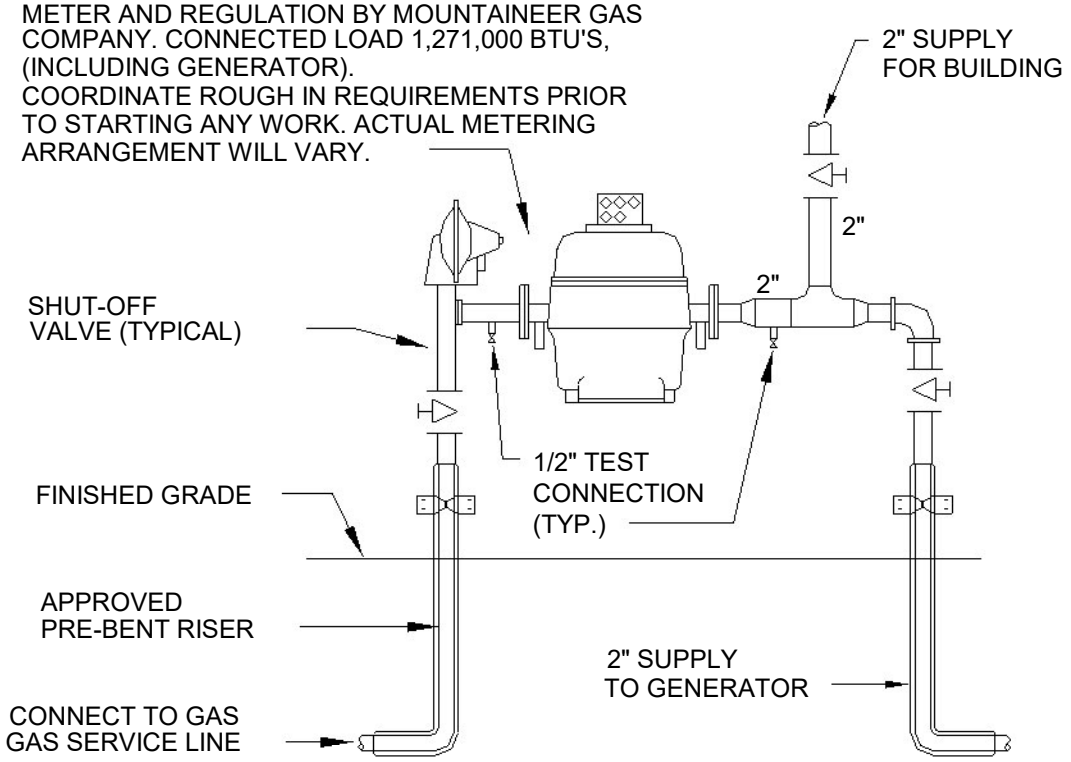
MASON COUNTY, WV

Harper Engineering
52 B Street
St Albans, WV 25177
p. 304.722.3602 f. 304.722.3603

SKP-1

Date: 11/10/2020

METER AND REGULATION BY MOUNTAINEER GAS COMPANY. CONNECTED LOAD 1,271,000 BTU'S, (INCLUDING GENERATOR).
COORDINATE ROUGH IN REQUIREMENTS PRIOR TO STARTING ANY WORK. ACTUAL METERING ARRANGEMENT WILL VARY.



NOTE: 2" GAS LINE FROM GAS METER TO GENERATOR. PROVIDE APPROVED RISER, VALVE, UNION, DIRT LEG AND FINAL CONNECTION.

ELEVATION

NOTE:
SUPPORT FROM GRADE OR WALL W/STEEL BRACKETS ON CONCRETE BASE.

GAS METER/PRESSURE REGULATOR DETAIL

CONSTRUCTION DOCUMENTS

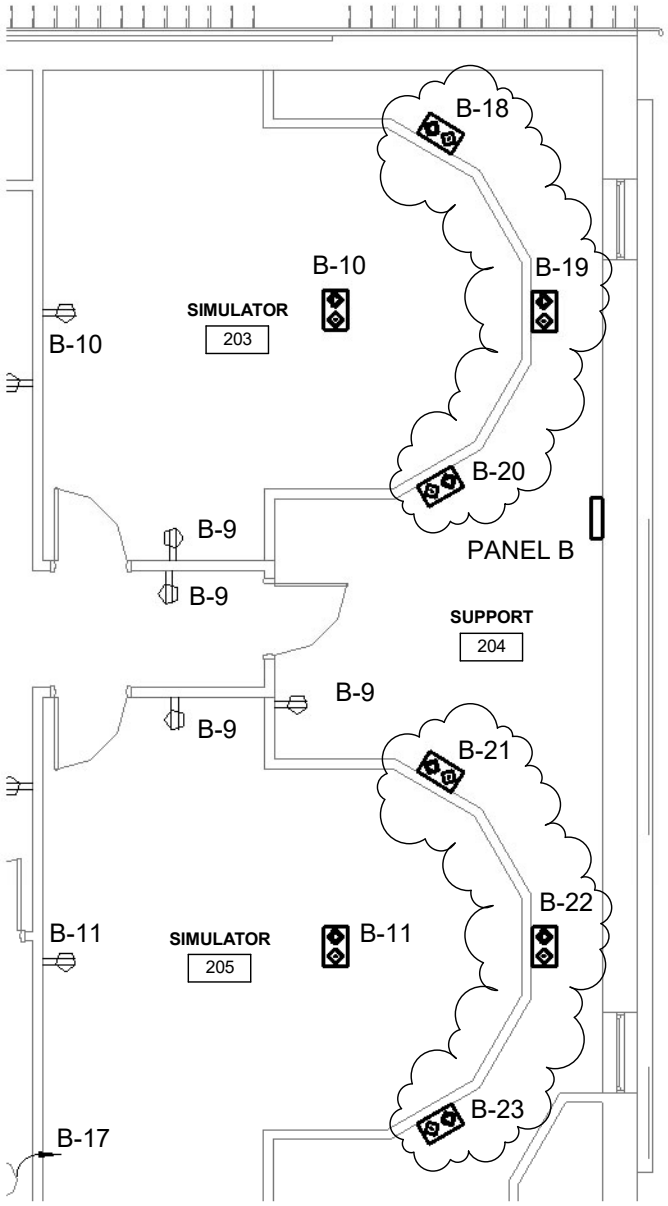
POINT PLEASANT RIVER MUSEUM

MASON COUNTY, WV

Harper Engineering
52 B Street
St Albans, WV 25177
p. 304.722.3602 f. 304.722.3603

SKP-2

Date: 11/10/2020



1 / SKE-1 Power Plan Second Floor SK
1/8" = 1'-0"

PROVIDE WIREMOLD EVOLUTION (EFB 10S OG (OR EQUAL)) FLOORBOXES WITH 4-DUPLEX RECEPTACLES, 4-DATA OUTLETS, COVER TO MATCH ARCHITECTURAL FINISHES.

CONSTRUCTION DOCUMENTS

POINT PLEASANT RIVER MUSEUM

MASON COUNTY, WV

Harper Engineering
52 B Street
St Albans, WV 25177
p. 304.722.3602 f. 304.722.3603

SKE-1

Date: 11/16/2020

BID

Proposal of _____
(hereinafter called "BIDDER"), organized and existing under the laws of the State of
_____ doing business as _____
_____*.
To City of Point Pleasant (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the Point Pleasant River Museum in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT by August 15, 2021. BIDDER further agrees to pay as liquidated damages, the sum of $1,500.00 for each consecutive calendar day thereafter as provided in Section 15 of the General Conditions.

BIDDER acknowledges receipt of the following ADDENDUM:

_____

_____

* Insert “a corporation”, “a partnership”, or “an individual” as applicable.
BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following lump sum:

CITY OF POINT PLEASANT
MASON COUNTY, WEST VIRGINIA
FOR THE
POINT PLEASANT RIVER MUSEUM
Thrasher Project #101-060-10152

BID SCHEDULE

BASE BID:

Provide all labor, materials, equipment, fees, bonds, insurance and taxes to perform the work as detailed in the plans and specifications and addenda.

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

_____

ALTERNATES:
Deduct Alternate Bid Item #1 – Brick Paver Courtyard.
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #1 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #2 – Exposed Aggregate Front Entry.
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #2 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #3 – Interior Storefront in Gift Shop 100.
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #3 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #4 – Operable Folding Panel Partition.
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #4 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #5 – Vinyl Tile.
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #5 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #6 – Brick Masonry Veneer Façade (South Elevation).
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #6 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Deduct Alternate Bid Item #7 – Brick Masonry Veneer Façade (East Elevation).
Cost to deduct all labor, materials, equipment, fees, bonds, insurance and taxes to construct the work for Deduct Alternate #7 as detailed in the plans and specifications and addenda for the stipulated sum of:

_____

_____Dollars ($_____)
(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

METHOD OF AWARD

If at the time this contract is to be awarded, the lowest total base bid, plus any combination of alternate bid items selected by the Owner to obtain the best value, submitted by a qualified, responsive, responsible Bidder does not exceed the amount of funds then estimated by the Owner, as available to finance the contract, the construction contract will be awarded. If such bids exceeds such amount, the owner may reject all bids.

Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids.

SUBMITTED this _____ day of _____, 20 _____

By_____(SEAL)
(Company Name)

Doing business as _____

Business address: _____

_____

_____

Phone No. _____

WV Contractor's License No. _____

Authorized Signature _____

CITY OF POINT PLEASANT
MASON COUNTY, WEST VIRGINIA
PROPOSED
POINT PLEASANT RIVER MUSEUM
Thrasher Project # 101-060-10152

A two envelope system will be used. Envelope No. 1 will be opened first and the Bid Opening Requirement items checked for compliance, as outlined on this page. If such documents are found to be in order, sealed Envelope No. 2 "Bid Proposal", which shall also be placed inside of Envelope #1, will then be opened and will be publicly read aloud. If the documents required to be contained in Envelope No. 1 are not in order, Envelope No. 2 "Bid Proposal" will not be opened and the Bid will be considered non-responsive and will be returned to the Bidder. At that time, the Owner will declare the Bidder non-responsive. The lowest responsive, responsible Bidder shall be the Bidder who has completed all of the requirements of the "Bid Opening Requirements" and has the lowest total bid.

BID OPENING REQUIREMENT CHECKLIST

Item		**Completed Satisfactory (Check if completed)**
1.	Bid submitted on time	_____
2.	Certification of receipt of all addenda to Plans and Specifications. (BOR- 2)	_____
3.	Bid Bond (BOR 3 & 4 Sample)	_____
4.	West Virginia Code §21-1D-5 Drug Free Workplace Conformance Affidavit (BOR-5 & 6)	_____
5.	Affidavit of Non-Collusion (BOR -7)	_____
6.	Any additional special requirements (by owner or engineer) 1. Copy of WV Contractor License	_____
7.	WV Jobs Act Compliance (BOR – 8)	_____

Certification of Bidder Regarding Compliance with the
WV Jobs Act (SB 103) WV Code 21-1C-1

WV JOBS ACT REQUIREMENTS

(a) Contractors shall hire at least 75% of employees for the project from the local labor market.

- Two employees from outside local labor markets are permissible for each employer
- Employees shall have resided in the local labor market

(b) Any employer unable to employ the minimum number of employees from the local labor market shall provide the nearest office of the Workforce West Virginia the following:

(1) the number of qualified employees needed; and
(2) a job description of positions to be filled

(c) If, within 3 business days following the placing of the job order with Workforce West Virginia, Workforce West Virginia is unable to refer any qualified applicants to the employer or refers less qualified job applicants than the number requested, then Workforce West Virginia shall issue a waiver to the employer stating the unavailability of applicants and permit the employer to fill any positions by the waiver from outside the local labor market.

CONTRACTOR REQUIREMENTS

The contractor hereby agrees to the following:

(a) Contractor will comply with the WV Jobs Act and will file, or cause to be filed, with Workforce West Virginia copies of waiver certificates and certified payrolls as required by the Ac, or other comparable documents that include the number of employees, the county and state where the employees reside and their occupation

(b) the contractor will follow the procedure established by Workforce West Virginia for efficient collection of the data;

(c) the contractor will provide with each pay requisition a certification that he contract is in compliance with the WV Jobs Act

Name & Title of Signer (Please type)	
Signature:	Date:

WEST VIRGINIA DIVISION OF LABOR

1900 Kanawha Boulevard East
State Capitol Complex – Building 3, Room 200 - Charleston, WV 25305
Telephone: (304)558-7890 labor.wv.gov Fax: (304)558-3797

West Virginia Jobs Act

Public Authority's Responsibilities

Under the West Virginia Jobs Act, a public authority includes every state, county or municipal officer, board, commission or agency.

A public authority has specific responsibilities for complying with the Jobs Act when undertaking a construction project with a total cost of $500,000.00 or more that is funded with public funds, excluding improvements funded in whole or in part by federal funds.

These responsibilities are to:

1. **Describe** the obligations of contractors and subcontractors to comply with the Jobs Act requirements in the construction contract.

2. **Notify** the Division of Labor as soon as possible of a construction project covered by the Jobs Act, including the project start date and the project location. This information can be sent by email to **JobsAct@wv.gov**.

3. **Comply** with the reporting requirements of the Jobs Act, which means providing the Division of Labor with copies of any waiver certificates issued by WorkForce West Virginia, if any, and certified payroll documents on a **weekly** basis for all contractors and subcontractors.

4. **Review** certified payroll documents before submitting to the Division of Labor.

5. **File**, or require an employer, as defined in §21-1C-2 (5) of this code and §42-37, to file certified payroll documents on a **weekly** basis that include: the name and address of the employer, identification of the payroll number and the work week ending date, the name of the project location, identification of the contract number, the names of employees, each employee's work classification or job title, the **physical address of the primary residence for each employee, including the county**, the days and hours worked, hourly rate of pay or salary, gross wages, federal and state withholding amounts, or other authorized deductions and net pay.

If you have additional questions, please contact the Division of Labor or send your inquiries to **JobsAct@wv.gov**.

WEST VIRGINIA DIVISION OF LABOR

1900 Kanawha Boulevard East
State Capitol Complex – Building 3, Room 200 - Charleston, WV 25305
Telephone: (304)558-7890 labor.wv.gov Fax: (304)558-3797

West Virginia Jobs Act

Contractor's and Subcontractor's Responsibilities

A contractor or subcontractor working on a public authority's construction project with a total cost of $500,000.00 or more that is funded entirely with public funds, excluding improvements funded in whole or in part by federal funds, must comply with the following West Virginia Jobs Act requirements.

1. **Hire** at least 75% of employees from the local labor market, with two (2) employees permitted from outside the local labor market.

   • The local labor market includes every West Virginia county and any county outside of West Virginia if any portion of that county is within fifty (50) miles of the border of West Virginia.

   • An employee's **primary residence** must be located within the local labor market to comply with the Jobs Act requirements.

2. **Contact** the nearest WorkForce West Virginia office and complete a job order if you are unable to employ the minimum number of employees from the local labor market.

   • WorkForce will either refer qualified job applicants or issue a written waiver permitting the employer to fill any positions covered by the waiver from outside the local labor market.

3. **Complete and submit** certified payroll documents on a **weekly** basis to the public authority and/or Division of Labor that include:

   • The name and address of the employer, identification of the payroll number and the work week ending date, the name of the project location, identification of the contract number, the names of employees, each employee's work classification or job title, the **physical address of the primary residence for each employee, including the county**, the days and hours worked, hourly rate of pay or salary, gross wages, federal and state withholding amounts, or other authorized deductions, and net pay.

4. **Pay civil penalties** of between $250 to $500 per day for **each employee** needed to meet the 75% requirement.

If you have additional questions, please contact the Division of Labor or send your inquiries to **JobsAct@wv.gov**.

WEST VIRGINIA CODE
CHAPTER 21
LABOR

ARTICLE 1C
WEST VIRGINIA JOBS ACT

§21-1C-1. Short title

This article shall be called the "West Virginia Jobs Act".

§21-1C-2. Definitions

As used in this article:

(1) The term “commissioner” means the Commissioner of the West Virginia Division of Labor, or his or her authorized representatives.

(2) The term “construction project” means any construction, reconstruction, improvement, enlargement, painting, decorating or repair of any public improvement let to contract in an amount equal to or greater than $500,000. The term “construction project” does not include temporary or emergency repairs;

(3) The term “domicile” or “primary residence” means an individual’s true, fixed, principal, and permanent home, to which he or she returns or intends to return, even though currently residing elsewhere. Presentation of a valid, government-issued identification card shall be conclusive proof of domicile.

(4) (A) The term “employee” means any person hired or permitted to perform hourly work for wages by a person, firm or corporation in the construction industry;

(B) The term “employee” does not include:

(i) Bona fide employees of a public authority or individuals engaged in making temporary or emergency repairs;

(ii) Bona fide independent contractors; or

(iii) Salaried supervisory personnel necessary to assure efficient execution of the employee’s work;

(5) The term “employer” means any person, firm or corporation employing one or more employees on any public improvement and includes all contractors and subcontractors;

(6) The term “local labor market” means every county in West Virginia, and any county outside of West Virginia if any portion of that county is within fifty miles of the border of West Virginia;

(7) The term “public authority” means any officer, board, commission or agency of the State of West Virginia and its subdivisions, including counties and municipalities. Further, the economic grant

committee, economic development authority, infrastructure and jobs development council and School Building Authority shall be required to comply with the provisions of this article for loans, grants or bonds provided for public improvement construction projects;

8) The term “public improvement” includes, the construction of all buildings, roads, highways, bridges, streets, alleys, sewers, ditches, sewage disposal plants, waterworks, airports and all other structures that may be let to contract by a public authority, excluding improvements funded, in whole or in part, by federal funds.

§21-1C-4. Local labor market utilization on public improvement construction projects; waiver certificates.

a) Employers shall hire at least seventy-five percent of employees for public improvement construction projects domiciled in the local labor market, to be rounded off, with at least two employees from outside the local labor market permissible for each employer per project.

(b) Any employer unable to employ the minimum number of employees from the local labor market shall inform the nearest office of Workforce West Virginia of the number of qualified employees needed and provide a job description of the positions to be filled.

(c) If, within three business days following the placing of a job order, Workforce West Virginia is unable to refer any qualified job applicants to the employer or refers less qualified job applicants than the number requested, then Workforce West Virginia shall issue a waiver to the employer stating the unavailability of applicants and shall permit the employer to fill any positions covered by the waiver from outside the local labor market. The waiver shall be in writing and shall be issued within the prescribed three days. A waiver certificate shall be sent to both the employer for its permanent project records and to the public authority.

§21-1C-5. Applicability and scope of article; reporting requirements.

(a) This article applies to expenditures for construction projects by any public authority for public improvements as defined by this article.

(b) For public improvement projects let pursuant to this article, the public authority shall file, or require an employer as defined in section two of this article to file, with the Division of Labor copies of the waiver certificates and certified payrolls, pursuant to article five-a of this chapter, or other comparable documents that include the number of employees, the county and state wherein the employees reside and their occupation.

(c) The Division of Labor shall compile the information required by this section and submit it annually to the Joint Committee on Government and Finance by the fifteenth day of October. The joint committee may forward these reports to the Legislative Auditor to review and make comments regarding the usefulness of the information collected and to suggest changes to the division's method of reporting to ensure the information collected will prove useful in evaluating the effectiveness of the provisions of this article.

(d) Each public authority has the duty to implement the reporting requirements of this article. Every public improvement contract or subcontract let by a public authority shall contain provisions conforming to the requirements of this article.

(e) The Division of Labor is authorized to establish procedures for the efficient collection of data, collection of civil penalties prescribed in section six of this article and transmittal of data to the Joint Committee on Government and Finance.

§21-1C-6. Penalties for violation of article, notice of violations; administrative remedies.

(a) If, after inspection or investigation, the commissioner determines that an employer has violated any provision of this article, the commissioner shall provide a written notice of violation to the employer and the public authority, setting forth the number of violations, a description of every violation and the amount of the penalty that will be imposed if the employer continues to violate any provision of this article after receipt of the notice of violation, and shall direct the public authority to withhold final payment to the employer until the employer has paid the penalty or the matter has been otherwise resolved.

(b) Any employer who violates any provision of this article is subject to a civil penalty of $250 per each employee less than the required threshold of seventy-five percent per day of violation after receipt of a notice of violation issued by the commissioner. This civil penalty terminates upon compliance or upon issuance of a waiver by Workforce West Virginia.

(c) Any employer that continues to violate any provision of this article more than fourteen calendar days after receipt of a notice of violation is subject to a civil penalty of $500 per each employee less than the required threshold of seventy-five percent per day of violation. This civil penalty terminates upon compliance or upon issuance of a waiver by Workforce West Virginia.

(d) All civil penalties paid pursuant to this section shall be paid to the commissioner and deposited in an appropriated special revenue account hereby created in the State Treasury to be known as the "West Virginia Jobs Act Fund" and expended for the implementation and enforcement of this article.

TITLE 42
PROCEDURAL RULE
WEST VIRGINIA DIVISION OF LABOR AND WORKFORCE WEST VIRGINIA

SERIES 37
JOBS ACT PROCEDURES

§42-37-1. General.

1.1. Scope. – This rule establishes procedures for the efficient collection of data from employers and public authorities, procedures used by WorkForce West Virginia in issuing a waiver as prescribed in W. Va. Code §21-1C-4, procedures for the collection of penalties prescribed in W. Va. Code §21-1C-6, procedures for conducting inspections and investigations of public improvement projects for compliance with the Jobs Act, and procedures for the transmittal of data to the Joint Legislative Committee on Government and Finance.

1.2. Authority. -- W. Va. Code §21-1C-5(e).

1.3. Filing Date. -- January 24, 2018.

1.4. Effective Date. -- March 1, 2018.

§42-37-2. Definitions.

2.1. "Act" means the West Virginia Jobs Act, W. Va. Code § 21-1C-1, *et seq*.

2.2. "Certified payroll records" means either the United States Department of Labor Form WH-347 or other comparable document that includes the name and address of the employer, identification of the payroll number and the work week ending date, the name of the project and project location, identification of the contract number, the names of employees, their work classification or job title, the county and state of the employees' residence, the day and hours worked, hourly rate of pay or salary, gross wages, federal and state withholding amounts, other authorized deductions, and net pay.

2.3. "Division" means the West Virginia Division of Labor.

2.4. "Executive Director" means the executive director of WorkForce West Virginia or his or her authorized representatives.

2.5. "Job order" means the WorkForce West Virginia Job Order Details Form, ESD-102, that complies with W. Va. Code §21-1C-4(b).

2.6. "Qualified job applicant" means a prospective employee who has a current credential as required by the state of West Virginia to work on a construction project or as required by the contract with the public authority and who is a resident of the local labor market.

2.7. "Violation" means the employer's failure to meet the requirements of section 4 of the Act or the employer's failure to comply with the terms of a waiver issued by WorkForce West Virginia,

and which is determined by the number of employees that an employer needs on a daily basis to meet the 75% local labor market threshold.

2.8. "Waiver" or "waiver certificate" means the written document issued by WorkForce West Virginia to an employer, after receipt of a properly completed job order, that states that WorkForce is unable to refer the number of qualified applicants requested, that there are no applicants available, and that the employer is permitted to fill a specific number of positions from outside the local labor market who meet specific criteria.

2.9. "WorkForce West Virginia" or "WorkForce" includes all local offices located throughout the state and whose contact information can be found at workforcewv.org/about-us/contact-us.html.

§42-37-3. Responsibilities of Public Authorities.

3.1. A public authority that solicits bids for a public improvement and construction project subject to the Act shall include the following statements and information in the bid package:

3.1.a. Specification of the employer's responsibilities under the Act;

3.1.b. The employer's responsibility to submit weekly certified payroll records and waiver certificates, if any, to the public authority; and

3.1.c. Specification of credentials required to work on the construction project, including the employer's WV Contractor License number and classifications.

3.2. A public authority shall notify the Division as soon as possible of construction projects that are or will be covered by the Act, including the start date of the project, the project location and contract number if available.

3.3. A public authority shall notify the Division at least 10 days in advance of all pre-bid meetings. This notification shall include the dates, times and locations.

3.4. When the project begins, the public authority shall submit certified payroll records and waiver certificates, if any, to the Division.

3.5. A public authority shall monitor the employer's compliance with the construction project contract, and shall promptly notify the Division of Labor, WorkForce, and the West Virginia Tax Department or other state agency, if applicable, of an employer's possible violations, including actions taken by the public authority to require the employer's compliance with its contractual obligations.

§42-37-4. Responsibilities of Employers; Calculation of the 75% Threshold; Procedures for Submitting a Job Order to WorkForce; Issuance of a Waiver by WorkForce.

4.1. An employer shall employ at least 75% of employees from the local labor market, with 2 employees permitted from outside the local labor market.

4.2. An example of how to calculate the number of employees needed to meet the 75% threshold from the local labor market when there are no waivers issued by WorkForce West Virginia is as follows:

4.2.a. The employer has 10 employees working on the project, excluding supervisory personnel;

4.2.b. 10 employees minus 2 employees permissible from outside the local labor market = 8 employees subject to the 75% threshold calculation;

4.2.c. 8 employees x .75 = 6 employees that must be from the local labor market to comply with the Act.

4.3. An example of how to calculate the number of employees needed to meet the 75% threshold from the local labor market when there are waivers issued by WorkForce West Virginia is as follows:

4.3.a. The employer has 12 employees working on the project, excluding supervisory personnel;

4.3.b. WorkForce has issued 2 waivers: 12 employees minus 2 employees with waivers = 10 employees;

4.3.c. 10 employees minus 2 employees permissible from outside the local labor market = 8 employees subject to the 75% threshold calculation;

4.3.d. 8 employees x .75 = 6 employees that must be from the local labor market to comply with the Act.

4.4. If an employer is unable to hire at least 75% of employees from the local labor market, the employer must submit a properly completed Job Order to the nearest WorkForce office as soon as practical, but prior to starting work on the project to allow WorkForce to have 3 business days to respond to the Job Order and for the employer to interview prospective employees.

4.5. If WorkForce is unable to refer qualified job applicants to the employer within 3 business days after receipt of a properly completed Job Order, WorkForce shall issue a written waiver to the employer.

4.6. The waiver shall include the following information and statements:

4.6.a. The employer name and address;

4.6.b. The name of the employer’s contact person and contact information;

4.6.c. The maximum number of employees that the employer may hire from outside the local labor market;

4.6.d. The specific terms and conditions, including credentials, that employees from outside the local labor market must have;

4.6.e. A statement that the waiver is not transferable and is only valid for an identified project at a specific location;

4.6.f. Effective dates of the waiver;

4.6.g. A statement that the waiver can be revoked or revised at any time if the employer fails to comply with the terms and conditions of the waiver, or if the waiver was issued due to incorrect or false or fraudulent information provided by the employer;

4.6.h. The signature of the Executive Director or his or her authorized representative; and

4.6.i. The notarized signature of the employer, certifying that the employer fully understands the terms and conditions of the waiver and will at all times comply with the waiver.

4.7. WorkForce shall provide a copy of the waiver to the employer, to the public authority responsible for the public improvement project and to the Division.

§42-37-5. Inspection and Investigation by the Division.

5.1. The Commissioner may conduct routine inspections of any public improvement construction project to determine compliance with the Act.

5.2. A public authority and all employers engaged in the construction of a public improvement shall make employee and payroll records available to the Commissioner for inspection and investigation as he or she deems necessary and appropriate to determine compliance with the Act.

5.3. Upon receipt a written complaint alleging violations of the Act, the Commissioner shall investigate to determine the validity of the complaint.

§42-37-6. Notice to Employer of Violation of the Act; Notice to Employer of Penalties; Collection of Penalties.

6.1. If, after inspection or investigation, the Commissioner determines that an employer has violated the Act, he or she shall provide a written notice of violation to the employer and the public authority, setting forth the number of violations, the amount of the penalty that will be imposed if the employer continues to violate the Act, and directing the public authority to withhold final payment to the employer until the employer has paid the penalty or the matter has been otherwise resolved.

6.2. After receipt of the notice of violation, if the employer continues to violate the Act, the employer shall be subject to a civil penalty of $250 for each employee less than the required 75% threshold per day.

6.3. If the Commissioner determines that an employer is continuing to violate the Act after receipt of the notice of violation, he or she shall provide a written notice of penalties to the employer and the public authority.

6.4. Examples of the civil penalty calculation: an employer needs to have 6 employees from the local labor market to meet the required 75% threshold.

Day 1: the employer has 5 employees from the local labor market = 1 violation.
Day 2: the employer has 4 employees from the local labor market = 2 violations.
Day 3: the employer has 6 employees from the local labor market = 0 violations.
Day 4: the employer has 4 employees from the local labor market = 2 violations.
Day 5: the employer has 6 employees from the local labor market = 0 violations.
Day 6: the employer has 5 employees from the local labor market = 1 violation.

Total violations for the work week: 6 violations x $250 = a civil penalty of $1,500.

6.5. After 14 calendar days from receipt of the notice of violation, if the employer continues to violate the Act, the employer shall be subject to a civil penalty of $500 for each employee less than the required 75% threshold per day.

§42-37-7. Annual Report to the Joint Legislative Committee on Government and Finance.

The Division shall compile the following information, and submit it annually to the Joint Committee on Government and Finance by October 15th:

7.1. The name of the public authority, including the name and title of the project's contact person;

7.2. The name of the project, the project's start and completion dates, and the project location;

7.3. Whether the public authority's contract included the provisions required by the Act;

7.4. Dates and results of the Division's inspections or investigations;

7.5. The number of qualified applicants referred to the employer by WorkForce WV and the number of employees the employer reported hired to WorkForce;

7.6. The number of waiver certificates issued by WorkForce WV;

7.7. Whether the employer's payroll records complied with the requirements of the Act; and

7.8. The number of violations and the amount of penalties collected.

APPENDIX

LIST OF LOCAL LABOR MARKET COUNTIES AND AREAS WITHIN 50 MILES OF THE WEST VIRGINIA BORDER

DISTRICT OF COLUMBIA

KENTUCKY

Bath
Boyd
Breathitt
Carter
Elliott
Fleming
Floyd
Greenup
Johnson
Knott
Lawrence
Letcher
Lewis
Magoffin
Martin
Menifee
Morgan
Perry
Pike
Rowan
Wolfe

MARYLAND

Allegany
Anne Arundel
Baltimore
Carroll
Charles
Frederick
Garrett
Howard
Montgomery
Prince George's
Washington

NORTH CAROLINA

Alleghany
Ashe
Surry

OHIO

Adams
Athens
Belmont
Carroll
Columbiana
Coshocton
Fairfield
Gallia
Guernsey
Harrison
Hocking
Jackson
Jefferson
Lawrence
Mahoning
Meigs
Monroe
Morgan
Muskingum
Noble
Perry
Pickaway
Pike
Portage
Ross
Scioto
Stark
Summit
Trumbull
Tuscarawas
Vinton
Washington

PENNSYLVANIA

Adams
Allegheny
Armstrong
Beaver
Bedford

PENNSYLVANIA, continued

Blair
Butler
Cambria
Cumberland
Fayette
Franklin
Fulton
Greene
Huntingdon
Indiana
Juniata
Lawrence
Mercer
Perry
Somerset
Venango
Washington
Westmoreland
York

TENNESSEE

Johnson
Sullivan

VIRGINIA

Albemarle
Alleghany
Amherst
Augusta
Bath
Bedford
Bland
Botetourt
Buchanan
Carroll
Clarke
Craig
Culpeper
Dickenson
Fairfax
Fauquier
Floyd
Franklin
Frederick

VIRGINIA, continued

Giles
Grayson
Greene
Henry
Highland
Lee
Loudoun
Madison
Montgomery
Nelson
Orange
Page
Patrick
Prince William
Pulaski
Rappahannock
Roanoke
Rockbridge
Rockingham
Russell
Scott
Shenandoah
Smyth
Stafford
Tazewell
Warren
Washington
Wise
Wythe

WEST VIRGINIA

All counties

January 4, 2018

VIRGINIA'S INDEPENDENT CITIES

1 Alexandria
2 Bedford
3 Bristol
4 Buena Vista
5 Charlottesville
6 Chesapeake
7 Clifton Forge
8 Colonial Heights
9 Covington
10 Danville
11 Emporia
12 Fairfax
13 Falls Church
14 Franklin
15 Fredericksburg
16 Galax
17 Hampton
18 Harrisonburg
19 Hopewell
20 Lexington
21 Lynchburg
22 Manassas
23 Manassas Park
24 Martinsville
25 Newport News
26 Norfolk
27 Norton
28 Petersburg
29 Poquoson
30 Portsmouth
31 Radford
32 Richmond
33 Roanoke
34 Salem
35 Staunton
36 Suffolk
37 Virginia Beach
38 Waynesboro
39 Williamsburg
40 Winchester

N

0 15 25 30 45 50 60 Miles

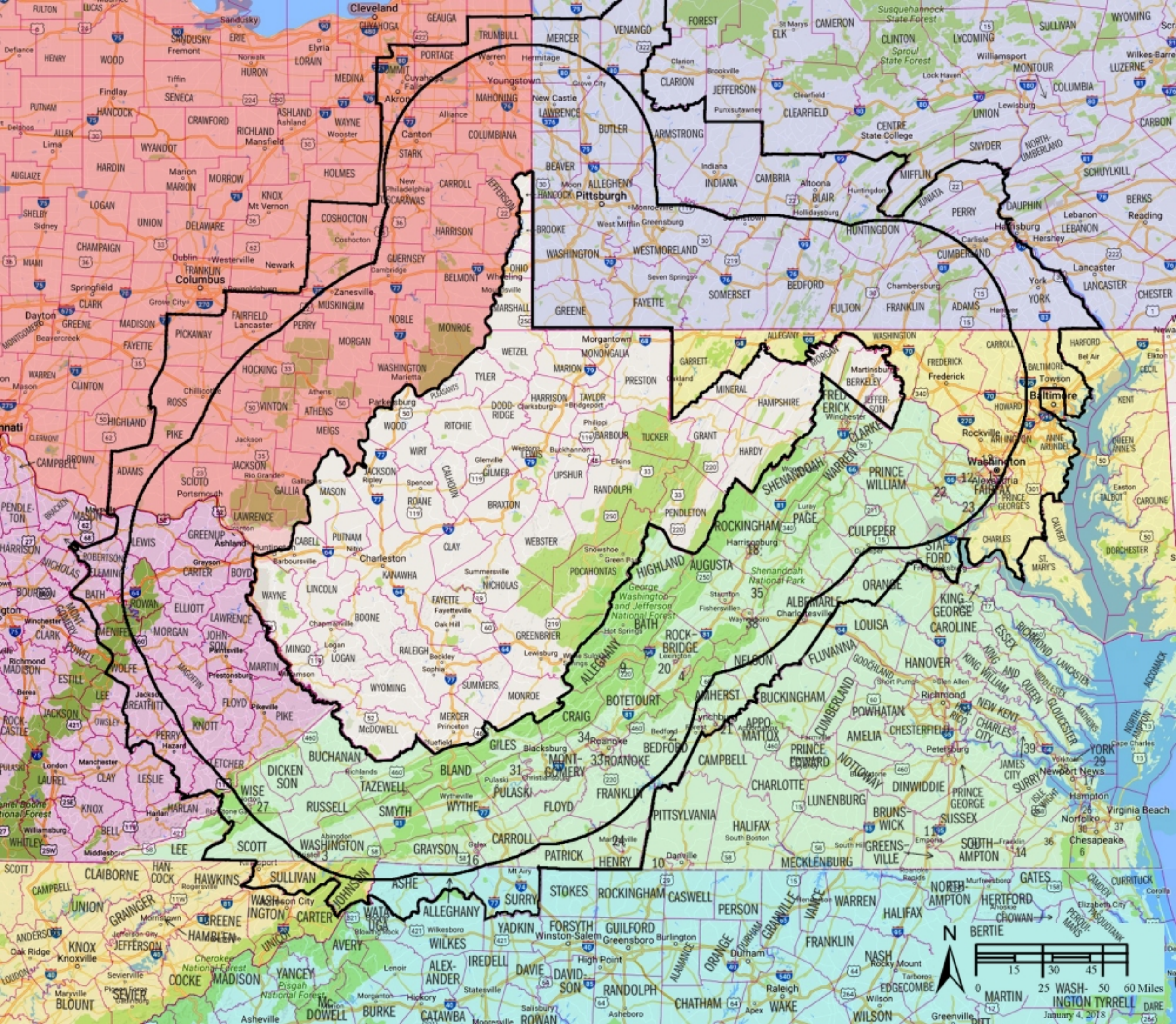
January 4, 2018

VIRGINIA'S INDEPENDENT CITIES

1 Alexandria
2 Bedford
3 Bristol
4 Buena Vista
5 Charlottesville
6 Chesapeake
7 Clifton Forge
8 Colonial Heights
9 Covington
10 Danville
11 Emporia
12 Fairfax
13 Falls Church
14 Franklin
15 Fredericksburg
16 Galax
17 Hampton
18 Harrisonburg
19 Hopewell
20 Lexington
21 Lynchburg
22 Manassas
23 Manassas Park
24 Martinsville
25 Newport News
26 Norfolk
27 Norton
28 Petersburg
29 Poquoson
30 Portsmouth
31 Radford
32 Richmond
33 Roanoke
34 Salem
35 Staunton
36 Suffolk
37 Virginia Beach
38 Waynesboro
39 Williamsburg
40 Winchester

N

0 15 25 30 45 50 60 Miles



Cleveland
Akron
Canton
Youngstown
Columbus
Dayton
Pittsburgh
Morgantown
Charleston
Washington
Baltimore
Richmond
Harrisburg
Hampton
Newport News
Norfolk
Virginia Beach
Chesapeake
Winston-Salem
Greensboro
Durham
Raleigh
Knoxville
Ashland
Huntington
Parkersburg
Wheeling
Zanesville
Lynchburg
Roanoke
Blacksburg
Charlottesville
Harrisonburg
Winchester
Martinsburg
Frederick
Hagerstown
Altoona
State College
Shenandoah National Park
George Washington and Jefferson National Forest
N
0
15
30
45
60 Miles
January 4, 2018

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements governing allowances.

B. Types of allowances include the following:

1. Lump-sum allowances.

1.2 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.

B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.3 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 LUMP-SUM ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include **taxes,** freight**,** and delivery to Project site.

1.6 ADJUSTMENT OF ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

Allowance No. 1: Lump-Sum Allowance: Include the sum of $75,000.00 for the following items; Custom Building Signage, Metal Lettering, Building Plaques, and Interior Room Signage.

1. This allowance includes material, receiving, handling, and installation costs, and Contractor overhead and profit.

END OF SECTION 012100

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SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Execute accepted alternates under the same conditions as other work of the Contract.

C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Deduct Alternate No. 01: Brick Paver Courtyard.

1. Base Bid: Brick paver courtyard with fence at east and west ends as indicated on Drawings A1.01 and C1.01.
2. Alternate: Cost to deduct the fence at the east and west end, deduct the brick pavers and associated bedding, and terminate the concrete sidewalk at the end of the exterior stair instead of extending to the east fence gate.

B. Deduct Alternate No. 02: Exposed Aggregate Front Entry.

1. Base Bid: Exposed aggregate concrete finish at front entry as indicated on Drawing A1.01.
2. Alternate: Cost to deduct the exposed aggregate finish and instead provide a traditional concrete sidewalk finish as specified for other sidewalk areas.

C. Deduct Alternate No. 03: Interior Storefront in Gift Shop 100.

1. Base Bid: Interior glass storefront system (SF4) as revised in this Addendum (A6.01R).
2. Alternate: Cost to revise SF4 to frame for Door 100B only. Provide 36" tall by 60" wide opening, with 48" sill, trimmed in drywall, at each side of Door 100B.

D. Deduct Alternate No. 04: Operable Folding Panel Partition.

1. Base Bid: Operable partition as indicated on A1.01 and specified in section 102239 – Folding Panel Partitions
2. Alternate: Cost to deduct the operable partition and associated supplemental structure, bulkhead, and panel enclosure walls. Instead, provide a standard gypsum board partition, Type 1 as indicated on A5.01

E. Deduct Alternate No. 05: Vinyl Tile.

1. Base Bid: Vinyl tile flooring as indicated on sheets A6.01 and A7.01 and in specification section 096519 – Resilient Tile Flooring
2. Alternate: Cost to deduct the vinyl tile flooring throughout the project, except in the elevator cab. Instead, provide sealed concrete floor finish throughout.

F. Deduct Alternate No. 06: Brick Masonry Veneer Façade (South Elevation).

1. Base Bid: Brick masonry veneer façade as indicated on Drawings 3/A2.01.
2. Alternate: Cost to deduct the brick masonry veneer from the South Elevation and instead provide EIFS finish consistent with appearance of the North Elevation (approx. 2,390 sf). Brick veneer shall remain for a distance of 12'-8" from either corner and EIFS shall be provided in between.

G. Deduct Alternate No. 07: Brick Masonry Veneer Façade (East Elevation).

1. Base Bid: Brick masonry veneer façade as indicated on Drawings 2/A2.01.
2. Alternate: Cost to deduct the brick masonry veneer from the East Elevation and instead provide EIFS finish consistent with appearance of the North and South Elevations (approx. 773 sf). Brick veneer shall remain for a distance of 12'-8" from either corner and EIFS shall be provided in between.

END OF SECTION 012300

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SECTION 281300 - ACCESS CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Security access central-control station.
2. One or more security access networked workstations.
3. Security access operating system and application software.
4. Security access controllers connected to high-speed electronic-data transmission network.

1.3 DEFINITIONS

A. Credential: Data assigned to an entity and used to identify that entity.

B. dpi: Dots per inch.

C. Identifier: A credential card; keypad personal identification number; or code, biometric characteristic, or other unique identification entered as data into the entry-control database for the purpose of identifying an individual. Where this term is presented with an initial capital letter, this definition applies.

D. Location: A Location on the network having a PC-to-controller communications link, with additional controllers at the Location connected to the PC-to-controller link with a TIA 485-A communications loop. Where this term is presented with an initial capital letter, this definition applies.

E. PCI Bus: Peripheral Component Interconnect. A peripheral bus providing a high-speed data path between the CPU and the peripheral devices such as a monitor, disk drive, or network.

F. RAS: Remote access services.

G. TWAIN: Technology without an Interesting Name. A programming interface that lets a graphics application, such as an image editing program or desktop publishing program, activate a scanner, frame grabber, or other image-capturing device.

H. UPS: Uninterruptible power supply.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, and furnished specialties and accessories. Reference each product to a location on Drawings. Test and evaluation data presented in Product Data shall comply with SIA BIO-01.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

1. Diagrams for cable management system.
2. System labeling schedules, including electronic copy of labeling schedules that are part of the cable and asset identification system of the software specified in Parts 2 and 3.
3. Wiring Diagrams. For power, signal, and control wiring.

4. Cable Administration Drawings: As specified in "Identification" Article.
5. Battery and charger calculations for central station, workstations, and controllers.

1.5 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For security system to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

1. Microsoft Windows software documentation.
2. PC installation and operating documentation, manuals, and software for the PC and all installed peripherals. Software shall include system restore, emergency boot diskettes, and drivers for all installed hardware. Provide separately for each PC.
3. Hard copies of manufacturer's specification sheets, operating specifications, design guides, user's guides for software and hardware, and PDF files on CD-ROM of the hard-copy submittal.
4. System installation and setup guides with data forms to plan and record options and setup decisions.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Laser Printers: Three toner cassettes and one replacement drum unit.
2. Credential card blanks, ready for printing. Include enough credential cards for all personnel to be enrolled at the site plus an extra 50 percent for future use.
3. Fuses of all kinds, power and electronic, equal to 10 percent of amount installed for each size used, but no fewer than three units.

1.8 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and approved by manufacturer.

B. Source Limitations: Obtain central station, workstations, controllers, Identifier readers, and all software through one source from single manufacturer.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Comply with NFPA 70, "National Electrical Code."

E. Comply with SIA DC-01, SIA DC-03 and SIA DC-07.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Central Station, Workstations, and Controllers:

1. Store in temperature- and humidity-controlled environment in original manufacturer's sealed containers. Maintain ambient temperature between 50 and 85 deg F, and not more than 80 percent relative humidity, noncondensing.
2. Open each container; verify contents against packing list; and file copy of packing list, complete with container identification, for inclusion in operation and maintenance data.
3. Mark packing list with the same designations assigned to materials and equipment for recording in the system labeling schedules that are generated by software specified in "Cable and Asset Management Software" Article.
4. Save original manufacturer's containers and packing materials and deliver as directed under provisions covering extra materials.

1.10 PROJECT CONDITIONS

A. Environmental Conditions: System shall be capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:

1. Control Station: Rated for continuous operation in ambient conditions of 60 to 85 deg F and a relative humidity of 20 to 80 percent, noncondensing.
2. Indoor, Controlled Environment: NEMA 250, Type 1 enclosure. System components, except the central-station control unit, installed in air-conditioned indoor environments shall be rated for continuous operation in ambient conditions of 36 to 122 deg F dry bulb and 20 to 90 percent relative humidity, noncondensing.
3. Outdoor Environment: NEMA 250, NEMA 250, Type 3R enclosures. System components installed in locations exposed to weather shall be rated for continuous operation in ambient conditions of minus 30 to plus 122 deg F dry bulb and 20 to 90 percent relative humidity, condensing. Rate for continuous operation where exposed to rain as specified in NEMA 250, winds up to 85 mph and snow cover up to 24 inches thick.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Bosch Security Systems, Inc.
2. Galaxy Control Systems.
3. Honeywell International Inc.
4. Allegion/Vanderbilt “Bright Blue”.

2.2 DESCRIPTION

A. Security Access System: Panel-based central station and field installed controllers connected by a high-speed electronic-data transmission network. Provide readers, power supplies with battery backup, printers, and other devices/equipment as required to provide a complete and operational system.

2.3 OPERATION

A. Security access system shall use a single database for access-control and credential-creation functions.

B. Location Capacity:

1. 32 reader-controlled doors.

C. System Network Requirements:

1. System components shall be interconnected and shall provide automatic communication of status changes, commands, field-initiated interrupts, and other communications required for proper system operation.
2. Communication shall not require operator initiation or response and shall return to normal after partial- or total-network interruption such as power loss or transient upset.
3. System shall automatically annunciate communication failures to the operator and shall identify the communications link that has experienced a partial or total failure.
4. Communications controller may be used as an interface between the central station display systems and the field device. Communications controller shall provide functions required to attain the specificed network performance.

D. Field equipment shall include controllers, sensors, and controls.

1. Controllers shall serve as an interface between the central station and sensors and controls.
2. Data exchange between the central station and the controllers shall include down-line transmission of commands, software, and databases to controllers.

3. The up-line data exchange from the controller to the central station shall include status data such as intrusion alarms, status reports, and entry-control records.
4. Controllers/reader interfaces are classified as alarm-annunciation or entry-control type.

E. False-Alarm Reduction: The design of the central station and controllers shall contain features to reduce false alarms. Equipment and software shall comply with SIA CP-01.

F. Data Line Supervision: System shall initiate an alarm in response to opening, closing, shorting, or grounding of data transmission lines.

G. Door Hardware Interface:

1. Comply with requirements in Section 087100 "Door Hardware" and Section 087111 "Door Hardware (Descriptive Specification)" for door hardware required to be monitored or controlled by the security access system.
2. Electrical characteristics of controllers shall match the signal and power requirements of door hardware.

2.4 APPLICATION SOFTWARE

A. Workstation Software:

1. Password levels shall be individually customized at each workstation to allow or disallow operator access to program functions for each Location.
2. Workstation event filtering shall allow user to define events and alarms that will be displayed at each workstation. If an alarm is unacknowledged (not handled by another workstation) for a preset amount of time, the alarm will automatically appear on the filtered workstation.

B. Controller Software:

1. Controllers shall operate as autonomous, intelligent processing units.

a. Controllers shall make decisions about access control, alarm monitoring, linking functions, and door-locking schedules for their operation, independent of other system components.
b. Controllers shall be part of a fully distributed processing-control network.
c. The portion of the database associated with a controller, and consisting of parameters, constraints, and the latest value or status of points connected to that controller, shall be maintained in the controller.

2. The following functions shall be fully implemented and operational within each controller:

a. Monitoring inputs.
b. Controlling outputs.
c. Automatically reporting alarms to the central station.
d. Reporting of sensor and output status to the central station on request.
e. Maintaining real time, automatically updated by the central station at least once a day.

f. Communicating with the central station.
g. Executing controller resident programs.
h. Diagnosing.
i. Downloading and uploading data to and from the central station.

3. Controller Operations at a Location:

a. Up to 32 controllers connected to TIA 485-A communications loop. Globally operating I/O linking and anti-passback functions between controllers within the same Location without central-station or workstation intervention. Linking and anti-passback shall remain fully functional within the same Location even when the central station or workstations are off-line.
b. In the event of communication failure between the central station and a Location, there shall be no degradation in operations at the controllers at that Location. Buffered events shall be handled in a first-in-first-out mode of operation.

4. Individual Controller Operation:

a. Controllers shall transmit alarms, status changes, and other data to the central station when communications circuits are operable.
b. On failure for any reason, controllers shall perform an orderly shutdown and force controller outputs to a predetermined failure-mode state, consistent with the failure modes shown and the associated control device.
c. After power is restored, following a power failure, startup software shall initiate self-test diagnostic routines, after which controllers shall resume normal operation.
d. After controller failure, if the database and application software are no longer resident, controllers shall not restart but shall remain in the failure mode until repaired. If database and application programs are resident, controllers shall immediately resume operation. If not, software shall be restored automatically from the central station.

5. Communications Monitoring:

a. System shall monitor and report status of TIA 485-A communications loop of each Location.
b. Communication status window shall display which controllers are currently communicating, a total count of missed polls since midnight, and which controller last missed a poll.
c. Communication status window shall show the type of CPU, the type of I/O board, and the amount of RAM for each controller.

6. Operating systems shall include a real-time clock function that maintains seconds, minutes, hours, day, date, and month. The real-time clock shall be automatically synchronized with the central station at least once a day to plus or minus 10 seconds. The time synchronization shall be automatic, without operator action and without requiring system shutdown.

C. PC-to-Central Station Communications:

1. Central-station or workstation communications shall use the following:
a. TCP/IP LAN interface.

D. Central Station-to-Controller Communications:

1. TIA 485-A, four-wire, point-to-point, regenerative (repeater) communications network methodology.
2. TIA 485-A communications signal shall be regenerated at each controller.
3. TCP/IP LAN interface.

E. Operator Interface:

1. Manufacturers standard interface.

F. Operator Commands:

1. Command Input: Plain-language words and acronyms shall allow operators to use the system without extensive training or data-processing backgrounds. System prompts shall be a word, a phrase, or an acronym.

G. Alarms:

1. System Setup:

a. Assign manual and automatic responses to incoming-point status change or alarms.
b. Automatically respond to input with a link to other inputs, outputs, or operator-response plans; unique sound with use of WAV files; and maps or images that graphically represent the point location.
c. Secondary messages shall be assignable by the operator for printing to provide further information and shall be editable by the operator.

H. Alarm Monitoring: Monitor sensors, controllers, and DTS circuits and notify operators of an alarm condition. Display higher-priority alarms first and, within alarm priorities, display the oldest unacknowledged alarm first. Operator acknowledgment of one alarm shall not be considered acknowledgment of other alarms nor shall it inhibit reporting of subsequent alarms.

I. Report-Generator Software: Include commands to generate reports for displaying, printing, and storing on disk and tape. Reports shall be stored by type, date, and time. Report printing shall be the lowest-priority activity. Report-generation mode shall be operator selectable but set up initially as periodic, automatic, or on request. Include time and date printed and the name of operator generating the report. Report formats may be configured by operators.

J. Anti-Passback:

1. System shall have global and local anti-passback features, selectable by Location. System shall support hard and soft anti-passback.
2. Soft Anti-Passback: Should a violation of the proper IN or OUT sequence occur, access shall be granted, but a unique alarm shall be transmitted to the control station, reporting the credential holder and the door involved in the violation. A separate report may be run on this event.
3. Timed Anti-Passback: A controller capability that prevents an access code from being used twice at the same device (door) within a user-defined amount of time.
4. The anti-passback schemes shall be definable for each individual door.
5. The Master Access Level shall override anti-passback.

6. System shall have the ability to forgive (or reset) an individual credential holder or the entire credential-holder population anti-passback status to a neutral status.

K. Visitor Assignment:

1. Provide for and allow an operator to be restricted to only working with visitors. The visitor badging subsystem shall assign credentials and enroll visitors. Allow only those access levels that have been designated as approved for visitors.
2. Provide an automated log of visitor name, time and doors accessed, and name of person contacted.
3. Allow a visitor designation to be assigned to a credential holder.
4. Security access system shall be able to restrict the access levels that may be assigned to credentials issued to visitors.
5. Allow operator to recall visitors' credential-holder file once a visitor is enrolled in the system.
6. The operator may designate any reader as one that deactivates the credential after use at that reader. The history log shall show the return of the credential.
7. System shall have the ability to use the visitor designation in searches and reports. Reports shall be able to print all or any visitor activity.

L. Entry-Control Enrollment Software: Database management functions that allow operators to add, delete, and modify access data as needed.

2.5 SURGE AND TAMPER PROTECTION

A. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor-entry connection to components.

1. Minimum Protection for Power Connections 120 V and More: Auxiliary panel suppressors as recommended by manufacturer.
2. Minimum Protection for Communication, Signal, Control, and Low-Voltage Power Connections: as recommended by manufacturer for type of line being protected.

2.6 CENTRAL-STATION HARDWARE

A. Central Station Panel: Manufacturers standard Central Station Control Panel with options required to meet performance listed herein. Provide power supplies with battery backup as required to support system. Battery Backup shall provide power for a minimum of 4 hours.

2.7 CONTROLLERS

A. Controllers: Intelligent peripheral control unit, complying with UL 294, that stores time, date, valid codes, access levels, and similar data downloaded from the central station or workstation for controlling its operation.

2.8 CARD READERS, CREDENTIAL CARDS, AND KEYPADS

A. Card-Reader Power: Powered from its associated controller, including its standby power source, and shall not dissipate more than 5 W.

B. Enclosure: Suitable for surface, semi-flush, pedestal, or weatherproof mounting. Mounting types shall additionally be suitable for installation in the following locations:

1. Indoors, controlled environment.
2. Indoors, uncontrolled environment.
3. Outdoors, with built-in heaters or other cold-weather equipment to extend the operating temperature range as needed for operation at the site.
4. Narrow for Mullion Mounting.

C. Touch-Plate and Proximity Readers:
1. Passive-detection proximity card readers shall use a swept-frequency, RF field generator to read the resonant frequencies of tuned circuits laminated into compatible credential cards. The resonant frequencies read shall constitute a unique identification code number.
2. The card reader shall read proximity cards in a range from direct contact to at least 6 inches from the reader.

D. Keypads:
1. Keypads shall contain an integral alphanumeric/special symbols keyboard with symbols arranged in ascending ASCII-code ordinal sequence.
2. Communication protocol shall be compatible with the local processor.

E. Keypad Power:

1. The keypad shall be powered from the source as shown and shall not dissipate more than 150 W.

F. Keypad Mounting Method:

1. Keypads shall be suitable for surface, semi-flush, pedestal, or weatherproof mounting as required.

G. Keypad Duress Codes:

1. Keypads shall provide a means for users to indicate a duress situation by entering a special code.

H. Communication Protocol: Compatible with local processor.

I. Credential Card Modification: Entry-control cards shall be able to be modified by lamination direct print process during the enrollment process without reduction of readability. The design of the credential cards shall allow for the addition of at least one slot or hole to accommodate the attachment of a clip for affixing the credential card to the badge holder used at the site.

J. Card Size and Dimensional Stability: Credential cards shall be 2-1/8 by 3-3/8 inches. The credential card material shall be dimensionally stable so that an undamaged card with deformations resulting from normal use shall be readable by the card reader.

K. Card Material: Abrasion resistant, nonflammable, nontoxic, and impervious to solar radiation and effects of ultraviolet light.

L. Card Construction:

1. Core and laminate or monolithic construction.
2. Lettering, logos, and other markings shall be hot stamped into the credential material or direct printed.
3. Furnish equipment for on-site assembly and lamination of credential cards.

2.9 ENROLLMENT CENTER

A. <Double click here to find, evaluate, and insert list of manufacturers and products.>

B. Equipment for enrolling personnel into, and removing personnel from, system database, using a dedicated workstation PC.

C. Enrollment equipment shall support encoding of credential cards including cryptographic and other internal security checks as required for system.

1. Allow only authorized entry-control enrollment personnel to access the enrollment equipment using passwords.
2. Include enrollment-subsystem configuration controls and electronic diagnostic aids for subsystem setup and troubleshooting with the central station.
3. Enrollment-station records printer shall meet requirements of the report printer.

D. Entry-Control Enrollment Software:

1. Shall include database management functions for the system, and shall allow an operator to change and modify the data entered in the system as needed.
2. Software shall not have alarm response or acknowledgment functions as a programmable function.
3. Multiple, password-protected access levels shall be provided at the enrollment station.
4. Database management and modification functions shall require a higher operator-access level than personnel enrollment functions.
5. Software shall provide a means for disabling the enrollment station when it is unattended, to prevent unauthorized use.
6. Software shall provide a method to enter personnel identifying information into the entry-control database files through enrollment stations to include a credential unit in use at the installation.
7. In the case of personnel identity-verification subsystems, this data shall include biometric data.
8. Software shall allow entry of this data into the system database files through the use of simple menu selections and data fields. The data field names shall be customized to suit user and site needs.
9. Personnel identity-verification subsystems selected for use with the system shall fully support the enrollment function and shall be compatible with the entry-control database files.

E. Accessories:

1. Console and Equipment Racks: Comply with EIA/ECA-310-E.
2. Equipment, with the exception of the printers, shall be rack mounted in the console and equipment racks.

F. System Capacity: Number of badges shall be limited only by hard disk space. Badge templates and images shall be in color, supporting the maximum color capability of Microsoft Windows.

G. Badge Configuration:

1. Software for badge template creation shall include a template consisting of background and predetermined locations of photographs, text objects and data fields for text, and bar-code and biometric information. Include automatic sizing of data fields placed on a badge to compensate for names, which may otherwise be too large to fit in the area designated.
2. Allow different badge templates to be used for each department, tenant, or visitor.
3. As a setup option, templates shall be automatically selected for the badge, based on the group to which the credential holder is assigned. Allow the operator to override the automatic template selection and use a template chosen by the operator for creating a badge.
4. Setup shall determine which graphics and credential-holder information will be displayed and where on the card it will be placed. All data in the security access system, such as name, code, group, access level, and any of the 99 user-defined fields, shall be selectable, with the ability to place them anywhere on the card.
5. System shall include an importing, filing, and recall system of stored images and shapes that can be placed on the badge.
6. Allow multiple images on the same badge, including, but not limited to, bar codes, digital photos, and signatures.
7. Support transparent backgrounds so that image is only surrounded by the intended background and not by its immediate background.

H. Photo Imaging: Integral to security access.

1. Import images from bitmap file formats, digital cameras, TWAIN cameras, or scanners. Allow image cropping and editing, WYSIWYG badge-building application, and badge print-preview and printing capabilities.
2. System shall support multiple images stored for each credential holder, including signatures, portrait views, and profile views.

I. Text Objects: Badge configuration shall provide for creation of custom text as an object, allowing font selection, typing, scaling, and formatting of the text object. Formatting options shall include changing font, font size, text flow, and text alignment; bending or curving the text object into a circle or semicircle; applying 3-D effects; and applying predefined effects such as tilt, extrusion, or beveling. Text shall be placed and optionally automatically centered within any region of the badge layout.

J. Badges and Credential Cards:

1. Badges are credential cards that do not contain data to be read by card readers.
2. Credential cards shall store uniquely coded data used by card readers as an Identifier.
    a. Proximity Cards: Use proximity detection without physical contact with the reader for proper operation.

3. Allow entry-control card to be modified by lamination or direct print process during the enrollment process for use as a picture and identification badge without reduction of readability. The design shall allow for the addition of at least one slot or hole to accommodate the attachment of a clip for affixing the credential card to the type of badge holder used at the site.

    a. Card Size and Dimensional Stability: Standard size, 2-1/8 by 3-3/8 inches; dimensionally stable so that an undamaged card with deformations resulting from normal use shall be readable by the card reader.
    b. Card Material: Abrasion resistant, nonflammable, and nontoxic; and impervious to solar radiation and effects of ultraviolet light.
    c. Card Construction: Core and laminate or monolithic construction. Lettering, logos, and other markings shall be hot stamped into the credential material or direct printed.
        1) Furnish equipment for on-site assembly and lamination of credential cards.

    d. Card Durability and Maintainability: Designed and constructed to yield a useful lifetime of at least five years or 5000 insertions or swipes, whichever results in a longer period of time. Allow credential cards to be cleaned by wiping with a sponge or cloth wetted with soap and water.

K. Card-Making Equipment: Consisting of a workstation, video camera, video-imaging equipment, and a printer.

1. Camera: NTSC color standard, RGB video output, 470 lines minimum horizontal resolution, and automatic white balance with full rated output under illumination of 0.5 fc.
2. Video Imaging: Live-image capture software and hardware and a digital signature capture pad.
3. Standard workstation, modified as follows:

    a. Redundant workstation is not required.
    b. Printer is not required.
    c. UPS is not required.
    d. Sound card is not required.

4. Printer: Dye-sublimation resin thermal transfer, 300 dpi resolution, 16.7 million colors, accepting cards ranging in size from 2.1 by 3 inchesto 2.6 by 3.7 inches and having card thickness ranging from 0.020 to 0.060 inch. Printer shall have options for encoding magnetic stripe using tracks 1, 2, and 3. Throughput shall be not less than 60 seconds per card.

2.10 PUSH-BUTTON SWITCHES

A. <Double click here to find, evaluate, and insert list of manufacturers and products.>

B. Push-Button Switches: Momentary-contact back-lighted push buttons with stainless-steel switch enclosures.

C. Electrical Ratings:

1. Minimum continuous current rating of 10 A at 120-V ac or 5 A at 240-V ac.
2. Contacts that will make 720 VA at 60 A and that will break at 720 VA at 10 A.

D. Enclosures: Flush or surface mounting. Push buttons shall be suitable for flush mounting in the switch enclosures.

E. Enclosures shall additionally be suitable for installation in the following locations:

1. Indoors, controlled environment.
2. Indoors, uncontrolled environment.
3. Outdoors.

F. Power: Push-button switches shall be powered from their associated controller, using dc control.

2.11 DOOR AND GATE HARDWARE INTERFACE

A. Electric Door Strikes: Use end-of-line resistors to provide power-line supervision. Signal switches shall transmit data to controller to indicate when the bolt is not engaged and the strike mechanism is unlocked, and they shall report a forced entry. Power and signal shall be from the controller. Electric strikes are specified in Section 087100 "Door Hardware."

B. Electromagnetic Locks: End-of-line resistors shall provide power-line supervision. Lock status sensing signal shall positively indicate door is secure. Power and signal shall be from the controller. Electromagnetic locks are specified in Section 087100 "Door Hardware."

2.12 CABLES

A. General Cable Requirements: As recommended by system manufacturer for integration requirement.

B. Multiconductor, PVC, Reader and Wiegand Keypad Cables:

1. No. 18 AWG, paired and twisted multiple conductors, stranded tinned copper conductors, plenum rated jacket, overall aluminum-foil/polyester-tape shield with 100 percent shield coverage, plus tinned copper braid shield with 65 percent shield coverage, and plenum rated jacket.
2. NFPA 70, Type CMP.
3. Flame Resistance: NFPA 262 Flame Test.
4. For TIA 485-A applications.

C. Paired, Plenum-Type, Lock Cables:

1. One pair, twisted, No. 16 AWG, stranded (19x29) tinned copper conductors, PVC insulation, unshielded, and PVC jacket.
2. NFPA 70, Type CMP.
3. Flame Resistance: NFPA 262 flame test.

D. Paired, Plenum-Type, Lock Cables:

1. One pair, twisted, No. 18 AWG, stranded (19x30) tinned copper conductors, fluorinated-ethylene-propylene insulation, unshielded, and plastic jacket.
2. NFPA 70, Type CMP.
3. Flame Resistance: NFPA 262 flame test.

E. Paired, Plenum-Type, Input Cables:

1. One pair, twisted, No. 22 AWG, stranded (7x30) tinned copper conductors, fluorinated-ethylene-propylene insulation, aluminum-foil/polyester-tape shield (foil side out), with No. 22 AWG drain wire, 100 percent shield coverage, and plastic jacket.
2. NFPA 70, Type CMP.
3. Flame Resistance: NFPA 262 flame test.

F. Paired, Plenum-Type, AC Transformer Cables:

1. One pair, twisted, No. 18 AWG, stranded (19x30) tinned copper conductors, fluorinated-ethylene-propylene insulation, unshielded, and plastic jacket.
2. NFPA 70, Type CMP.
3. Flame Resistance: NFPA 262 flame test.

G. LAN Cabling:

1. Catergory 6 Plenum Cabling
2. NFPA 262.

2.13 TRANSFORMERS

A. NFPA 70, Class II control transformers, NRTL listed. Transformers for security access-control system shall not be shared with any other system.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine pathway elements intended for cables. Check raceways, cable trays, and other elements for compliance with space allocations, installation tolerances, hazards to cable installation, and other conditions affecting installation.

B. Examine roughing-in for LAN and control cable conduit systems to PCs, controllers, card readers, and other cable-connected devices to verify actual locations of conduit and back boxes before device installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 CABLING

A. Comply with NECA 1, "Good Workmanship in Electrical Construction."

B. Install cables and wiring according to requirements in Section 280513 "Conductors and Cables for Electronic Safety and Security."

C. Wiring Method: Install wiring in raceway and cable tray except within consoles, cabinets, desks, and counters and except in accessible ceiling spaces and in gypsum board partitions where unenclosed wiring method may be used. Use NRTL-listed plenum cable in environmental airspaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces.

D. Install LAN cables using techniques, practices, and methods that are consistent with Category 6 rating of components and fiber-optic rating of components, and that ensure Category 6 and fiber-optic performance of completed and linked signal paths, end to end.

E. Boxes and enclosures containing security-system components or cabling, and which are easily accessible to employees or to the public, shall be provided with a lock. Boxes above ceiling level in occupied areas of the building shall not be considered accessible. Junction boxes and small device enclosures below ceiling level and easily accessible to employees or the public shall be covered with a suitable cover plate and secured with tamperproof screws.

F. Install end-of-line resistors at the field device location and not at the controller or panel location.

3.3 CABLE APPLICATION

A. Comply with TIA 569-B, "Commercial Building Standard for Telecommunications Pathways and Spaces."

B. Cable application requirements are minimum requirements and shall be exceeded if recommended or required by manufacturer of system hardware.

C. TIA 485-A Cabling: Install at a maximum distance of 4000 ft..

D. Card Readers and Keypads:

1. Install number of conductor pairs recommended by manufacturer for the functions specified.
2. Unless manufacturer recommends larger conductors, install No. 18 AWG wire if maximum distance from controller to the reader is 500 ft.

3.4 GROUNDING

A. Comply with IEEE 1100, "Recommended Practice for Power and Grounding Electronic Equipment."

B. Ground cable shields, drain conductors, and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.

C. Bond shields and drain conductors to ground at only one point in each circuit.

D. Signal Ground:

1. Terminal: Locate in each equipment room and wiring closet; isolate from power system and equipment grounding.
2. Bus: Mount on wall of main equipment room with standoff insulators.
3. Backbone Cable: Extend from signal ground bus to signal ground terminal in each equipment room and wiring closet.

3.5 INSTALLATION

A. Push Buttons: Where multiple push buttons are housed within a single switch enclosure, they shall be stacked vertically with each push-button switch labeled with 1/4-inch-high text and symbols as required. Push-button switches shall be connected to the controller associated with the portal to which they are applied, and shall operate the appropriate electric strike, electric bolt, or other facility release device.

B. Install card readers, keypads, push buttons, and biometric readers.

3.6 IDENTIFICATION

A. In addition to requirements in this article, comply with TIA/EIA 606-A.

B. Label each terminal strip and screw terminal in each cabinet, rack, or panel.

1. All wiring conductors connected to terminal strips shall be individually numbered, and each cable or wiring group being extended from a panel or cabinet to a building-mounted device shall be identified with the name and number of the particular device as shown.
2. Each wire connected to building-mounted devices is not required to be numbered at the device if the color of the wire is consistent with the associated wire connected and numbered within the panel or cabinet.

C. At completion, cable and asset management software shall reflect as-built conditions.

3.7 SYSTEM SOFTWARE AND HARDWARE

A. Develop, install, and test software and hardware, and perform database tests for the complete and proper operation of systems involved. Assign software license to Owner.

3.8 FIELD QUALITY CONTROL

A. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

B. Tests and Inspections:

1. LAN Cable Procedures: Inspect for physical damage and test each conductor signal path for continuity and shorts. Use Class 2, bidirectional, Category 5 tester. Test for faulty connectors, splices, and terminations. Test according to TIA/EIA 568-B.1, "Commercial Building Telecommunications Cabling Standards - Part 1: General Requirements." Link performance for UTP cables must comply with minimum criteria in TIA/EIA 568-B.1.
2. Test each circuit and component of each system. Tests shall include, but are not limited to, measurements of power-supply output under maximum load, signal loop resistance, and leakage to ground where applicable. System components with battery backup shall be operated on battery power for a period of not less than 10 percent of the calculated battery operating time. Provide special equipment and software if testing requires special or dedicated equipment.
3. Operational Test: After installation of cables and connectors, demonstrate product capability and compliance with requirements. Test each signal path for end-to-end performance from each end of all pairs installed. Remove temporary connections when tests have been satisfactorily completed.

C. Devices and circuits will be considered defective if they do not pass tests and inspections.

D. Prepare test and inspection reports.

3.9 STARTUP SERVICE

A. Engage a factory-authorized service representative to supervise and assist with startup service.

1. Complete installation and startup checks according to approved procedures that were developed in "Preparation" Article and with manufacturer's written instructions.
2. Enroll and prepare badges and access cards for Owner's operators, management, and security personnel.

3.10 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain security access system. See Section 017900 "Demonstration and Training."

END OF SECTION 281300

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SECTION 323119 - DECORATIVE METAL FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Decorative metallic-coated-steel tubular picket fences.
2. Decorative steel fences.
3. Swing gates.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For fencing and gates.

1. Include plans, elevations, sections, and attachment details.
2. Include diagrams for power, signal, and control wiring.

C. Samples: For each fence material and for each color specified.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Product test reports.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Wind Loading: Comply with ASCE/SEI 7 requirements for fence height, wind exposure, design wind speed, and design wind pressure.

B. Lightning-Protection System: Maximum grounding-resistance value of 25 ohms under normal dry conditions.

2.2 DECORATIVE METALLIC-COATED-STEEL TUBULAR PICKET FENCES

A. Decorative Metallic-Coated-Steel Tubular Picket Fences: Comply with ASTM F2408 for light-industrial (commercial) application (class) unless otherwise indicated.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Ameristar Fence Products; an ASSA ABLOY company.
b. Builders Fence Company, Inc.
c. Fortress Iron.
d. Iron Eagle Industries, Inc.
e. Iron World Manufacturing, LLC.
f. Merchants Metals.

B. Post Caps: Formed from steel sheet and hot-dip galvanized after forming.

C. Pickets: Square tubes.

1. Extend pickets beyond top rail as indicated and press flat and trim to produce spear point shape.
2. Picket Spacing: 4 inches (101.6 mm) clear, maximum.

D. Metallic-Coated Steel Sheet: Galvanized-steel sheet or aluminum-zinc, alloy-coated steel sheet.

E. Finish: Powder coating.

2.3 DECORATIVE STEEL FENCES

A. Decorative Steel Fences: Fences made from steel tubing bars and shapes, hot-dip galvanized.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Ameristar Fence Products; an ASSA ABLOY company.
b. Ametco Manufacturing Corporation.
c. Builders Fence Company, Inc.

B. Posts: Square steel tubing. 2-1/2 by 2-1/2 inches (64 by 64 mm) with1/8-inch (3.2-mm) wall thickness.

C. Post Caps: Formed from steel sheet and hot-dip galvanized after forming.

D. Rails:

1. Steel Tube Rails: Square steel tubing2 by 2 inches (51 by 51 mm with 1/8-inch (3.2-mm) wall thickness.

E. Pickets: 1 inch (25 mm) square by 0.065-inch (1.65-mm) steel tubes.

1. Picket Spacing: 4 inches (101.6 mm) clear, maximum.

F. Fabrication: Assemble fences into sections by welding pickets to rails.

G. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A123/A123M. For hardware items, hot-dip galvanize to comply with ASTM A153/A153M.

1. Hot-dip galvanize posts and rails.
2. Hot-dip galvanize rail and picket assemblies after fabrication.

H. Finish for Metallic-Coated-Steel Items: High-performance coating.

2.4 SWING GATES

A. Galvanized-Steel Frames and Bracing: Fabricate members from square tubes 2-1/2 by 2-1/2 inches (64 by 64 mm) formed from 0.108-inch (2.74-mm) nominal-thickness, metallic-coated steel sheet or formed from 0.105-inch (2.66-mm) nominal-thickness steel sheet and hot-dip galvanized after fabrication.

B. Hardware: Latches permitting operation from both sides of gate, hinges, and keepers for each gate leaf more than 5 feet (1.52 m) wide.. Fabricate latches with integral eye openings for padlocking; padlock accessible from both sides of gate.

1. .

C. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A123/A123M. For hardware items, hot-dip galvanize to comply with ASTM A153/A153M.

D. Metallic-Coated-Steel Finish: High-performance coating.

E. Steel Finish: Shop painted High-performance coating.

2.5 STEEL AND IRON

A. Plates, Shapes, and Bars: ASTM A36/A36M.

B. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A29/A29M, Grade 1010.

C. Tubing: ASTM A500/A500M, cold-formed steel tubing.

D. Bar Grating: NAAMM MBG 531.

E. Uncoated Steel Sheet: Hot-rolled steel sheet, ASTM A1011/A1011M, Structural Steel, Grade 45 (Grade 310) or cold-rolled steel sheet, ASTM A1008/A1008M, Structural Steel, Grade 50 (Grade 340).

F. Galvanized-Steel Sheet: ASTM A653/A653M, structural quality, Grade 50 (Grade 340), with G90 (Z275) coating.

G. Aluminum-Zinc, Alloy-Coated Steel Sheet: ASTM A792/A792M, structural quality, Grade 50 (Grade 340), with AZ60 (AZM180) coating.

2.6 COATING MATERIALS

A. Epoxy Zinc-Rich Primer for Uncoated Steel: Complying with MPI #20 and compatible with coating specified to be applied over it.

B. Epoxy Primer for Galvanized Steel: Epoxy primer recommended in writing by topcoat manufacturer.

C. Intermediate Coat for Uncoated Steel: Epoxy or polyurethane intermediate recommended in writing by primer and topcoat manufacturer.

D. Polyurethane Intermediate Coat and Topcoat: Complying with MPI #72 and compatible with undercoat.

2.7 MISCELLANEOUS MATERIALS

A. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 033000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3000 psi (20 MPa), 3-inch (75-mm) slump, and 1-inch (25-mm) maximum aggregate size or dry, packaged, normal-weight concrete mix complying with ASTM C387/C387M mixed with potable water according to manufacturer's written instructions.

2.8 GROUNDING MATERIALS

A. Comply with requirements of Section 260526 "Grounding and Bonding for Electrical Systems."

B. Grounding Conductors: Size as indicated on Drawings. Bare, solid wire for No. 6 AWG and smaller; stranded wire for No. 4 AWG and larger.

1. Material above Finished Grade: Copper.
2. Material on or below Finished Grade: Copper.

C. Grounding Connectors and Grounding Rods: Comply with UL 467.

2.9 STEEL FINISHES

A. Surface Preparation: Clean surfaces according to SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning." After cleaning, apply a conversion coating compatible with the organic coating to be applied over it.

B. Powder Coating: Immediately after cleaning, apply manufacturer's standard two-coat finish consisting of epoxy primer and TGIC polyester topcoat to a minimum total dry film thickness of not less than 8 mils (0.20 mm). Comply with coating manufacturer's written instructions.

1. Color and Gloss: As selected by Architect from manufacturer's full range.

C. Primer Application: Apply zinc-rich epoxy primer immediately after cleaning, to provide a minimum dry film thickness of 2 mils (0.05 mm) per applied coat, to surfaces that are exposed after assembly and installation, and to concealed surfaces.

D. High-Performance Coating: Apply intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

1. Match approved Samples for color, texture, and coverage. Remove and refinish, or recoat work that does not comply with specified requirements.

2.10 METALLIC-COATED-STEEL FINISHES

A. Galvanized Finish: Clean welds, mechanical connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

B. Surface Preparation: Clean surfaces of oil and other contaminants. Use cleaning methods that do not leave residue. After cleaning, apply aconversion coating compatible with the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas and apply galvanizing repair paint, complying with SSPC-Paint 20, to comply with ASTM A780/A780M.

C. Powder Coating: Immediately after cleaning and pretreating, apply manufacturer's standard TGIC polyester powder-coat finish to a minimum dry film thickness of 2 mils (0.05 mm).

1. Color and Gloss: As selected by Architect from manufacturer's full range.

D. Powder Coating: Immediately after cleaning and pretreating, apply manufacturer's standard two-coat finish consisting ofepoxy prime coat and TGIC polyester topcoat to a minimum dry film thickness of 2 mils (0.05 mm). Comply with coating manufacturer's written instructions to achieve a minimum total dry film thickness of 4 mils (0.10 mm).

1. Color and Gloss: As selected by Architect from manufacturer's full range.

E. High-Performance Coating: Apply epoxy primer, polyurethane intermediate coat, and polyurethane topcoat to prepared surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop,

Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

1. Match approved Samples for color, texture, and coverage. Remove and refinish, or recoat work that does not comply with specified requirements.

PART 3 - EXECUTION

3.1 DECORATIVE FENCE INSTALLATION

A. Install fences according to manufacturer's written instructions.

B. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than 24 inches (600 mm) plus 3 inches (75 mm) for each foot (300 mm) or fraction of a foot (300 mm) that fence height exceeds 4 feet (1.2 m).

C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts and sleeves and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
3. Posts Set in Concrete: Extend post to within 6 inches (150 mm) of specified excavation depth, but not closer than 3 inches (75 mm) to bottom of concrete.
4. Space posts uniformly.

3.2 GATE INSTALLATION

A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.3 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

1. Grounding-Resistance Tests: Subject completed grounding system to a megger test at each grounding location. Measure grounding resistance not less than two full days after last trace of precipitation, without soil having been moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural grounding resistance. Perform tests by two-point method according to IEEE 81.

END OF SECTION 323119

Branch Panel: A

Location:		**A.I.C. Rating:**	35,000
Supply From:		**Mains Type:**	MCB
Mounting:		**Mains Rating:**	600A
Enclosure:	Type 1	**MCB Rating:**	600A
Volts:	120/208 Wye		
Phases:	3		
Wires:	4		

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
A-1	Lighting	20 A	1	1007 VA	320 VA					1	20 A	Lighting	A-2
A-3	Receptacle	20 A	1			211 VA	720 VA			1	20 A	Receptacle	A-4
A-5	Receptacle	20 A	1					1470 VA	720 VA	1	20 A	Receptacle	A-6
A-7	Receptacle	20 A	1	1110 VA	500 VA					1	20 A	Receptacle EWC	A-8
A-9	Receptacle	20 A	1			900 VA	900 VA			1	20 A	Receptacle	A-10
A-11	Receptacle	20 A	1					1110 VA	750 VA	1	20 A	Receptacle	A-12
A-13	Receptacle	20 A	1	750 VA	720 VA					1	20 A	Receptacle	A-14
A-15	EWH-2	25 A	2			1500 VA	1500 VA			2	25 A	EWH-1	A-16
A-17								1500 VA	1500 VA				A-18
A-19	DAC-1	25 A	3	2000 VA	360 VA					1	20 A	Receptacle TCB	A-20
A-21						2000 VA	1200 VA			1	20 A	GEN BLOCK HTR	A-22
A-23								2000 VA	500 VA	1	20 A	GEN BATTERY CHARGER	A-24
A-25	WH-1	30 A	1	1600 VA	500 VA					1	20 A	ELEV SUMP	A-26
A-27							360 VA			1	20 A	RCP	A-28
A-29													A-30
A-31													A-32
A-33													A-34
A-35													A-36
A-37	EM	150 A	3	10630...	22442...					3	250 A	B	A-38
A-39						10220...	21792...						A-40
A-41								9738 VA	22648...				A-42
			Total Load:	41924 VA		41303 VA		41936 VA					
			Total Amps:	350 A		344 A		350 A					

Legend:

Notes:

Branch Panel: B

Location:		**A.I.C. Rating:**	22,000
Supply From:	A	**Mains Type:**	MCB
Mounting:		**Mains Rating:**	250A
Enclosure:	Type 1	**MCB Rating:**	250A
Volts:	120/208 Wye		
Phases:	3		
Wires:	4		

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
B-1	Lighting	20 A	1	563 VA	1097 VA					1	20 A	Lighting	B-2
B-3	Receptacle	20 A	1			900 VA	540 VA			1	20 A	Receptacle	B-4
B-5	Receptacle	20 A	1					720 VA	900 VA	1	20 A	Receptacle	B-6
B-7	Receptacle	20 A	1	900 VA	540 VA					1	20 A	Receptacle	B-8
B-9	Receptacle	20 A	1			720 VA	180 VA			1	20 A	Receptacle	B-10
B-11	Receptacle	20 A	1					180 VA	696 VA	1	20 A	EF-1	B-12
B-13	EF-2	20 A	1	696 VA	120 VA					1	20 A	DOOR CTRL	B-14
B-15	Receptacle	20 A	1			360 VA	540 VA			1	20 A	RTU Receptacles	B-16
B-17	WH-1	30 A	1					1600 VA	720 VA	1	20 A	FLOOR BOX SIM	B-18
B-19	FLOOR BOX SIM	20 A	1	720 VA	720 VA					1	20 A	FLOOR BOX SIM	B-20
B-21	FLOOR BOX SIM	20 A	1			720 VA	720 VA			1	20 A	FLOOR BOX SIM	B-22
B-23	FLOOR BOX SIM	20 A	1					720 VA	0 VA	1	20 A	Spare	B-24
B-25	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	B-26
B-27	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	B-28
B-29													B-30
B-31					4320 VA					3	50 A	RTU-1	B-32
B-33							4320 VA						B-34
B-35									4320 VA				B-36
B-37	RTU-2	50 A	3	4320 VA	8472 VA					3	90 A	RTU-3	B-38
B-39						4320 VA	8472 VA						B-40
B-41								4320 VA	8472 VA				B-42
			Total Load:	22442 VA		21792 VA		22648 VA					
			Total Amps:	188 A		182 A		190 A					

Legend:

Notes:

RISER NOTES:

A. (2) - 3" CONDUITS WITH (4) - 350MCM CONDUCTORS.

B. 150A, 3-POLE, SOLID NEUTRAL, OPEN TRANSITION, NON-SERVICE RATED ATS.

C. (1) - 1 1/2" CONDUIT WITH (4) - 1/0 + #6 GND.

D. (1) - 2 1/2" CONDUIT WITH (4) - 250MCM + #4 GND.

E. GROUND PER NEC.

F. PROVIDE CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS.

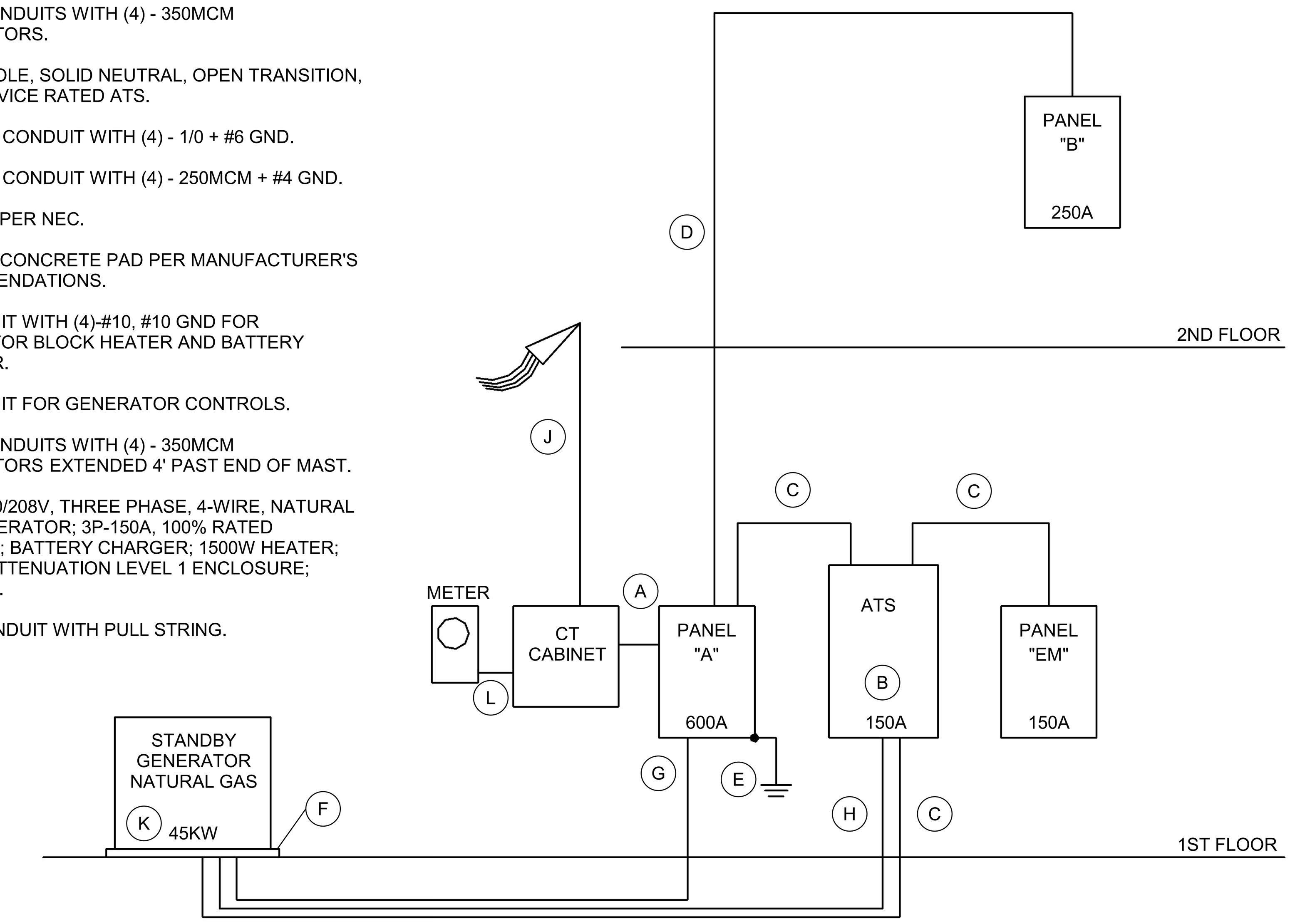
G. 1" CONDUIT WITH (4)-#10, #10 GND FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER.

H. 1" CONDUIT FOR GENERATOR CONTROLS.

J. (2) - 3" CONDUITS WITH (4) - 350MCM CONDUCTORS EXTENDED 4' PAST END OF MAST.

K. 45KW, 120/208V, THREE PHASE, 4-WIRE, NATURAL GAS GENERATOR; 3P-150A, 100% RATED BREAKER; BATTERY CHARGER; 1500W HEATER; SOUND ATTENUATION LEVEL 1 ENCLOSURE; MUFFLER.

L. 1-1/4" CONDUIT WITH PULL STRING.



ELECTRICAL RISER

NOT TO SCALE

Branch Panel: EM

Location:		**A.I.C. Rating:**	22,000
Supply From:	A	**Mains Type:**	MCB
Mounting:		**Mains Rating:**	150A
Enclosure:	Type 1	**MCB Rating:**	150A
Volts:	120/208 Wye		
Phases:	3		
Wires:	4		

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
EM-1	Receptacle	20 A	1	900 VA	750 VA					1	20 A	Receptacle AQUAR	EM-2
EM-3	Receptacle	20 A	1			720 VA	8500...			3	100 A	ELEV	EM-4
EM-5	Lighting	20 A	1					738 VA	8500...				EM-6
EM-7	DOOR CTRL	20 A	1	480 VA	8500...								EM-8
EM-9	ELEV LTS	20 A	1			500 VA	500 VA			1	20 A	FACP	EM-10
EM-11	Equipment	20 A	1					500 VA					EM-12
EM-13													EM-14
EM-15													EM-16
EM-17													EM-18
EM-19													EM-20
EM-21													EM-22
EM-23													EM-24
			Total Load:	10630 VA		10220 VA		9738 VA					
			Total Amps:	89 A		86 A		81 A					

Legend:

Notes:

LAYOUT TAB: ELECTRICAL DETAILS
CAD FILE: BIM 360://20070 Point Pleasant River Museum/20070C Point Pleasant River Museum MEP R19.rvt
PLOT DATE/TIME: 11/16/2020 2:58:01 PM
USER: Author

NO.	BY	DATE	DESCRIPTION

Harper Engineering
52 B Street
St. Albans, WV 25177
Office: 304.722.3602 Fax: 304.722.3603

SCALE: 1/8" = 1'-0"	
DRAWN: STAFF	DATE: 10/23/2020
CHECKED: JEH	DATE: 10/23/2020
APPROVED: JEH	DATE: 10/23/2020
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

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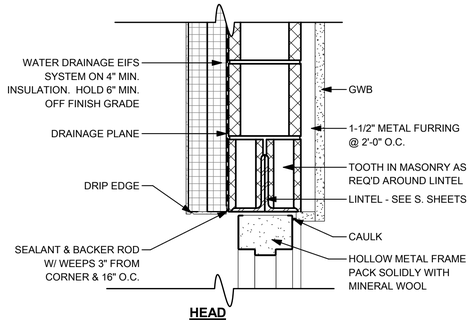
CONTRACT No.

PROJECT No.
060-10152

ELECTRICAL DETAILS
POINT PLEASANT RIVER MUSEUM
MASON COUNTY, WV
10/23/2020
CONSTRUCTION DOCUMENTS

SHEET No.
E4.01R



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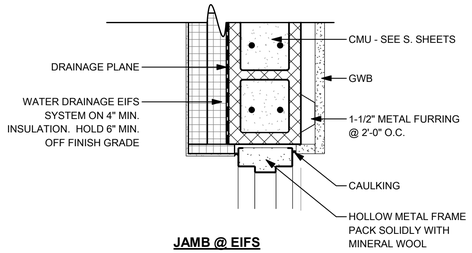

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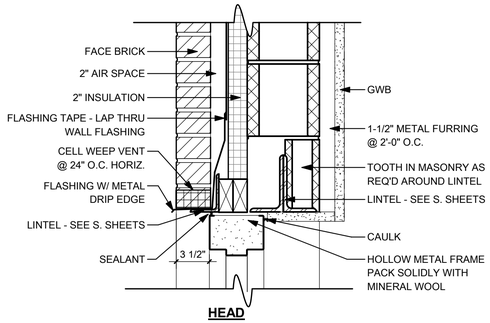

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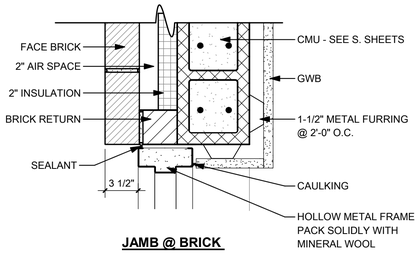
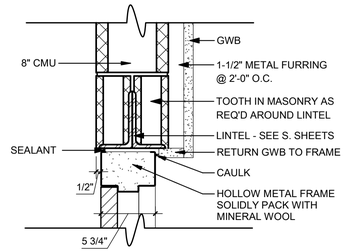


JAMB @ BRICK



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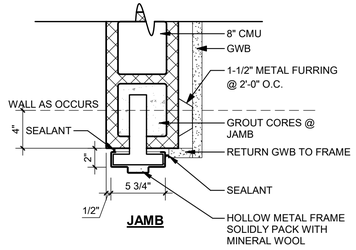
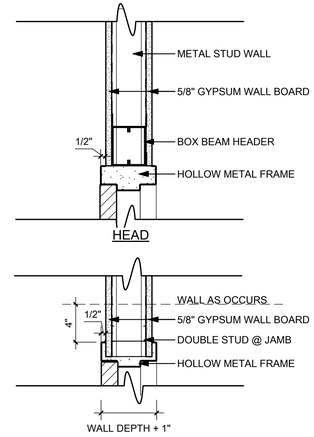


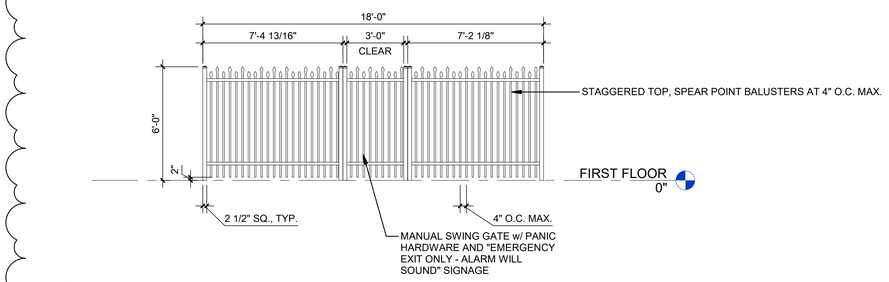
JAMB

A - DOOR DETAIL - INTERIOR DOOR

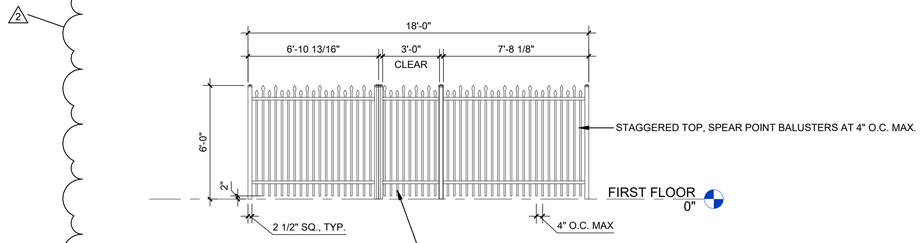


DOOR DETAIL - INTERIOR HOLLOW METAL DOOR

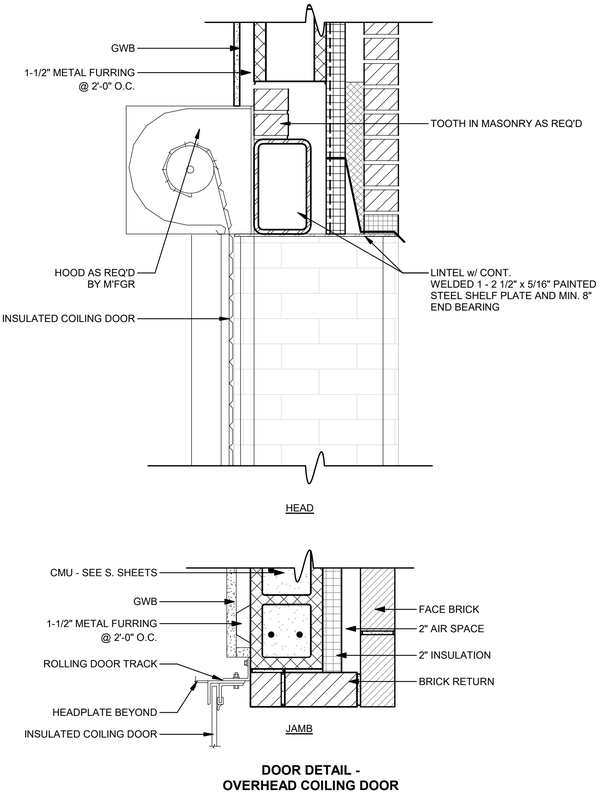
1 A5.03R DOOR DETAILS
1 1/2" = 1'-0"



2 A5.03R FRONT FENCE DETAIL
1/4" = 1'-0"



3 A5.03R REAR FENCE DETAIL
1/4" = 1'-0"



DOOR DETAIL - OVERHEAD COILING DOOR

NO.	BY	DATE	DESCRIPTION
2		11/11/2020	Addendum 02

SCALE:	As Indicated
DRAWN: Author	DATE: DATE
CHECKED: Checker	DATE: DATE
APPROVED: Approver	DATE: DATE
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER
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PHASE No.	
CONTRACT No.	
PROJECT No.	060-10152

DOOR DETAILS
POINT PLEASANT RIVER MUSEUM
MASON COUNTY, WV
10/23/2020
CONSTRUCTION DOCUMENTS

SHEET No.
A5.03R

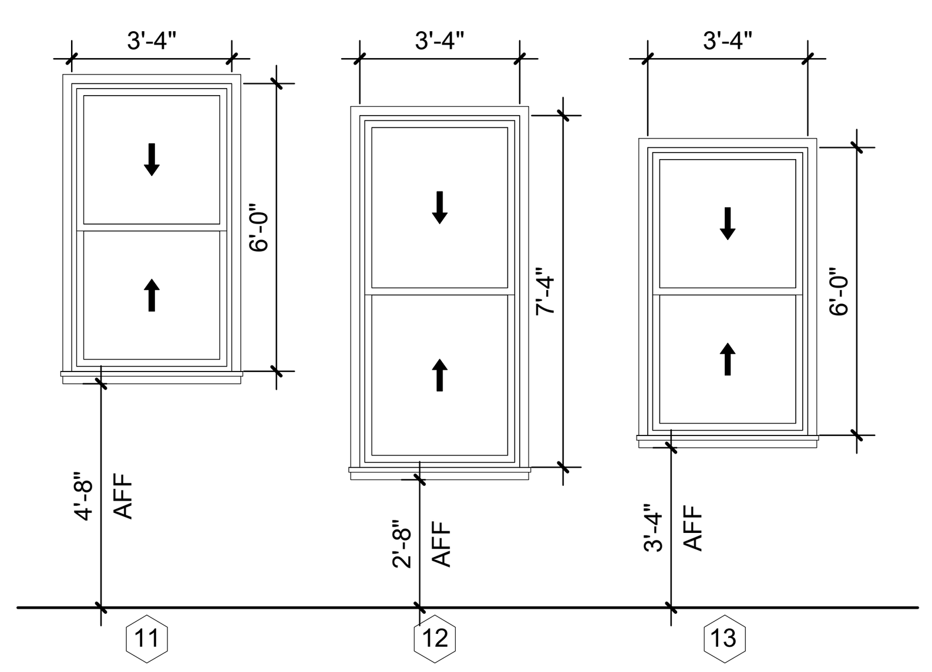
LAYOUT TAB: DOOR DETAILS
CAD FILE: C:\Users\jbyrd\Documents\060-10152_PRRM_v2019_CENTRAL_jbyrdDWNLD.rvt
PLOT DATE/TIME: 11/15/2020 1:51:49 PM
USER: Author

DOOR, FRAME, & HARDWARE SCHEDULE

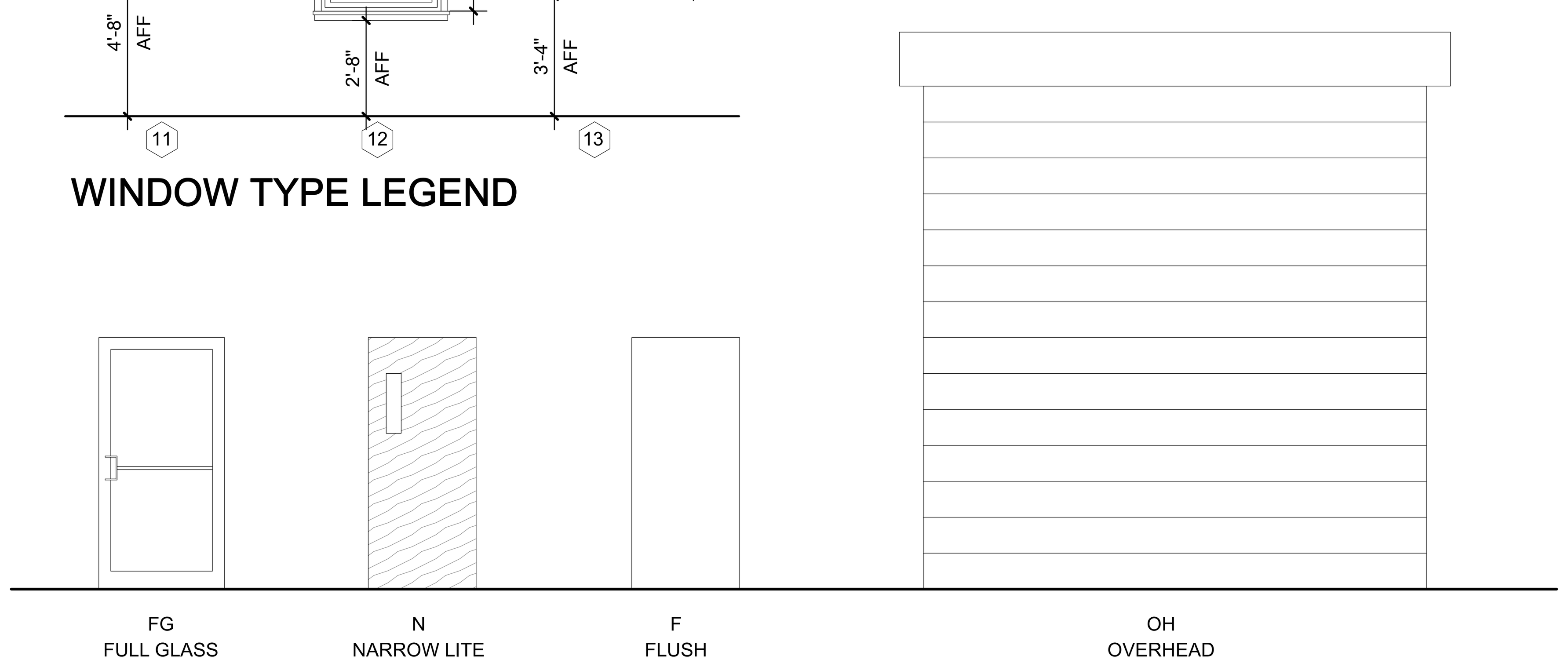
#	DOOR						FRAME				ASSEMBLY		
	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	FRAME TYPE	FRAME DEPTH	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HARDWARE SET	REMARKS
100A	FG	3'-0"	7'-0"	1 3/4"	ALUM.	ANODIZED		6"	ALUM.	ANODIZED		16	
100B	FG	3'-0"	7'-0"	1 3/4"	ALUM.	ANODIZED		6"	ALUM.	ANODIZED		15	
101	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		10	
102	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		11	
103	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		02	
104	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		01	
105	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		01	
106	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D	45 MIN.	17	
107A	F	3'-0"	7'-0"	1 3/4"	H.M.	PT'D	1	5 3/4"	GALV. H.M.	PT'D		14	
107B	F	3'-0"	7'-0"	1 3/4"	H.M.	PT'D	1	5 3/4"	GALV. H.M.	PT'D		14	
107C	OH	10'-0"	10'-0"	3"	ALUM.	PT'D	← N/A →					06	
108	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		04	
109	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		03	
110	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	1	5 3/4"	H.M.	PT'D	60 MIN.	09	
111	F	3'-0"	7'-0"	1 3/4"	H.M.	PT'D	1	5 3/4"	GALV. H.M.	PT'D		14	
200	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		03	
201	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		07	
202	F	3'-0"	7'-0"	1 3/4"	H.M.	PT'D	1	5 3/4"	GALV. H.M.	PT'D		14	
203	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		12	
204	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		13	
205	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		12	
206	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		05	
207	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		08	
208	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		08	
209	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	2	5 7/8"	H.M.	PT'D		10	
210	F	3'-0"	7'-0"	1 3/4"	SCWD	FACTORY VENEER	1	5 3/4"	H.M.	PT'D	60 MIN.	09	

ROOM FINISH SCHEDULE

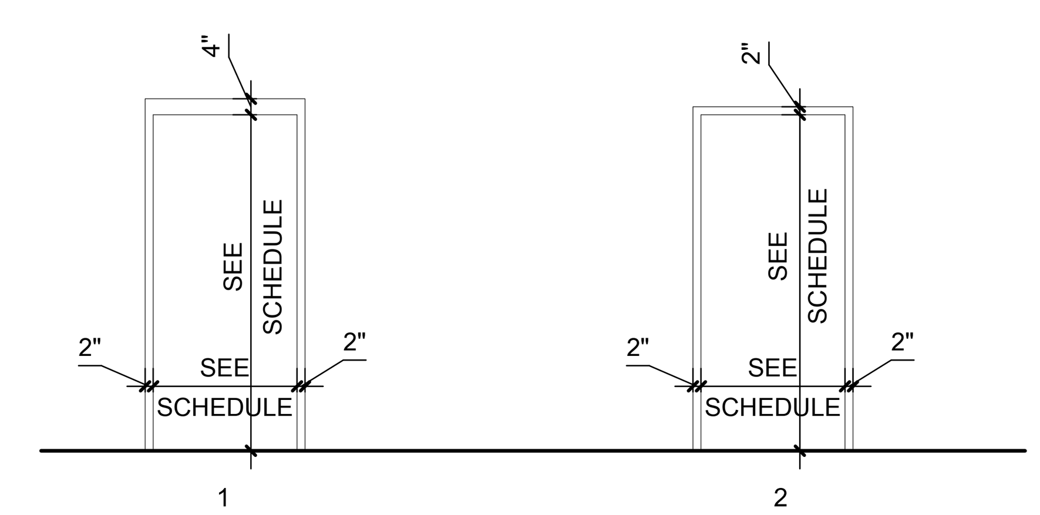
ROOM #	ROOM NAME	FLOOR FINISH	BASE	WALL FINISH				CEILING HEIGHT	CEILING FINISH	REMARKS
				NORTH	EAST	SOUTH	WEST			
100	GIFT SHOP	VINYL TILE	RESILIENT	PT'D GWB	STOREFRONT / PT'D GWB	PT'D GWB	STOREFRONT	10'-6"	2X2 ACT	
101	OFFICE	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
102	FILES	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
103	RR	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
104	M.	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
105	W.	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
106	JC/MECH	SEALED CONC.	N/A	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
107	EXHIBIT AREA	SEALED CONC.	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	EXPOSED	PT'D STRUCTURE	
108	STORAGE	SEALED CONC.	N/A	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
109	PANTRY	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
200	CLASSROOM	SEALED CONC.	N/A	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	11'-6"	2X2 ACT	
201	LIBRARY	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	11'-0"	2X2 ACT	
202	EXHIBIT AREA (1)	SEALED CONC.	N/A	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	EXPOSED	PT'D STRUCTURE	
203	SIMULATOR	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
204	SUPPORT	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
205	SIMULATOR	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
206	JC	SEALED CONC.	N/A	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
207	UNISEX	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
208	UNISEX	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-0"	PT'D GWB	
209	OFFICE	VINYL TILE	RESILIENT	PT'D GWB	PT'D GWB	PT'D GWB	PT'D GWB	10'-6"	2X2 ACT	
S1	STAIR 1	SEALED CONC.	RESILIENT	PT'D CMU	PT'D CMU	PT'D CMU	PT'D CMU	11'-0"*	PT'D GWB	*MEASURED FROM SECOND FLOOR



WINDOW TYPE LEGEND



DOOR TYPE LEGEND



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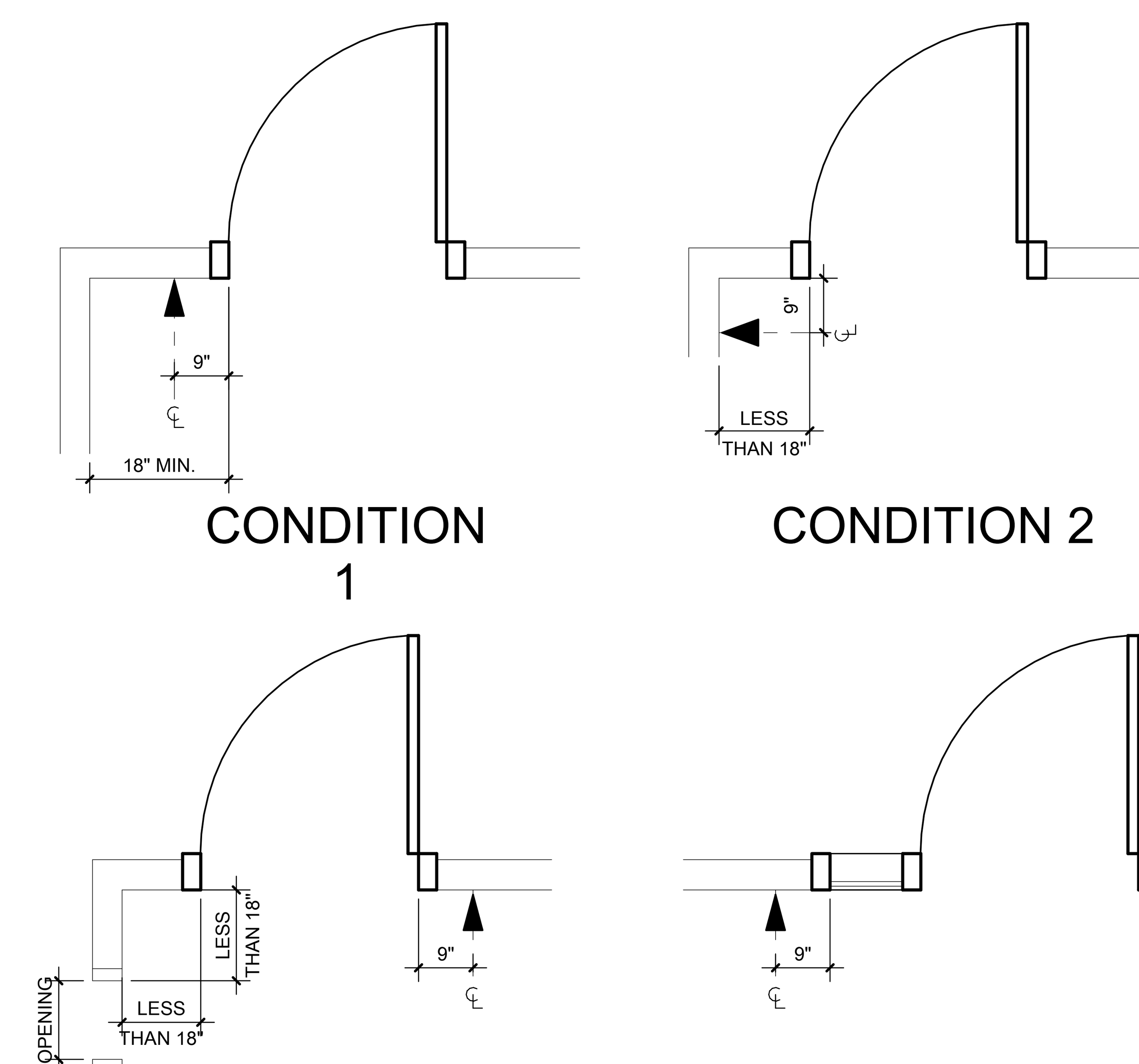
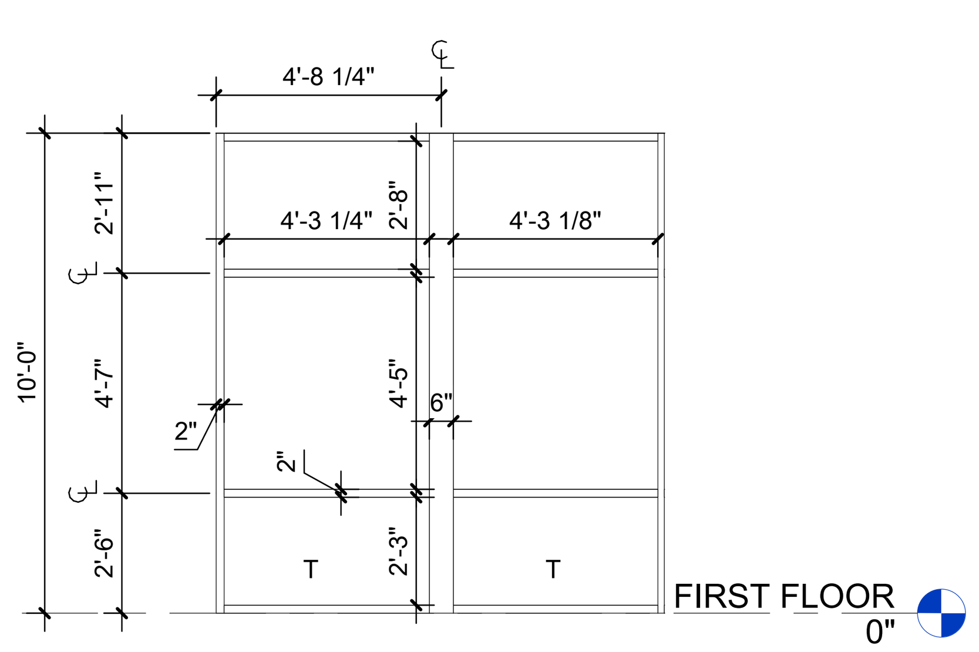
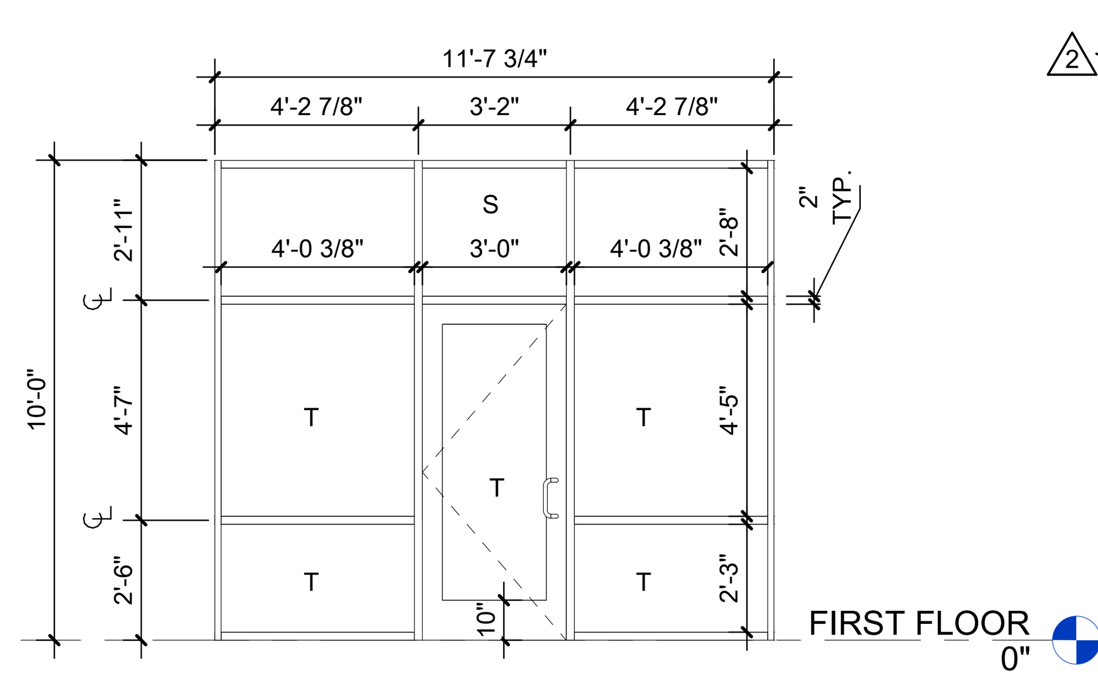
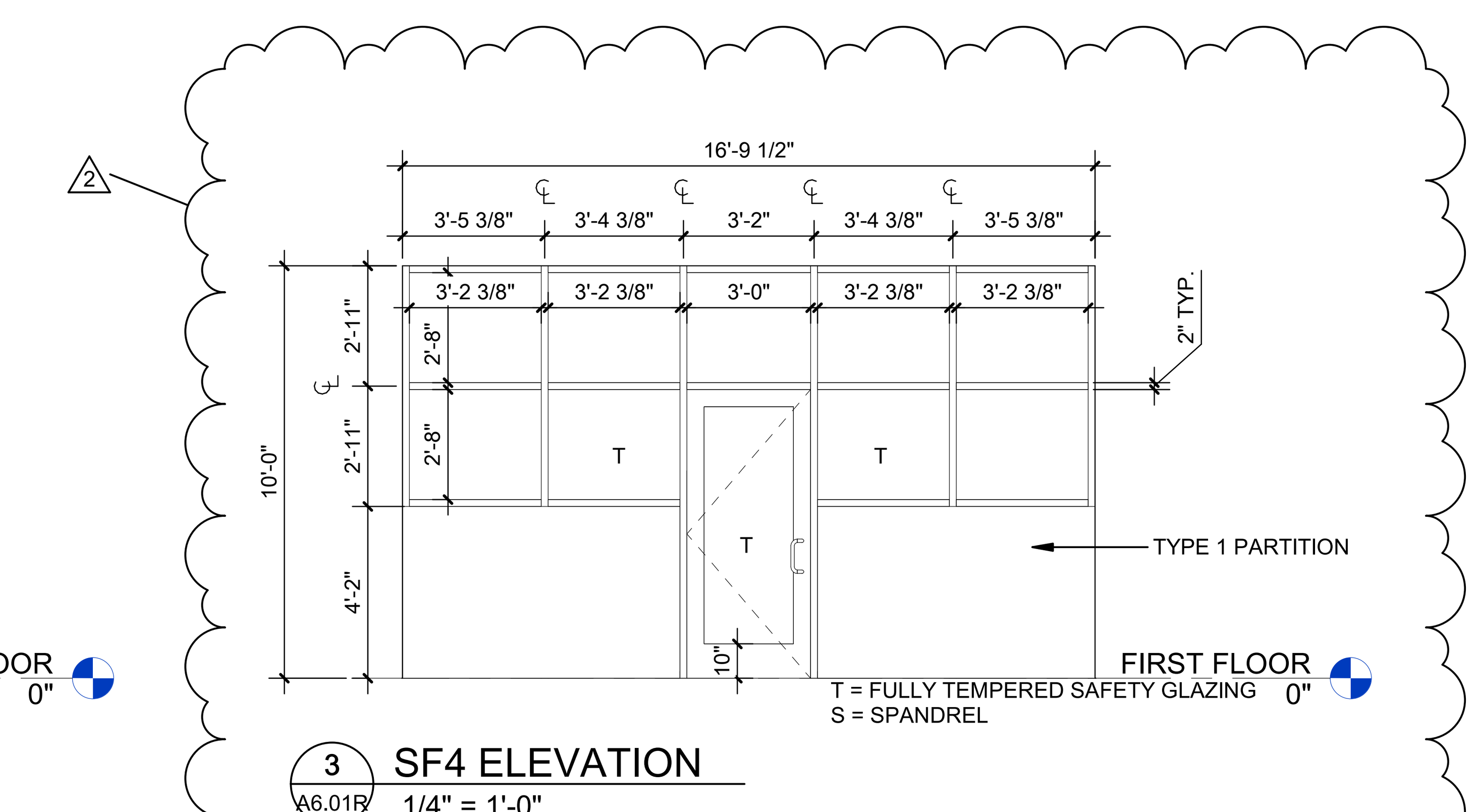




1 A6.01R SF1& SF3 ELEVATIONS
1/4" = 1'-0"



2 A6.01R SF2 ELEVATION
1/4" = 1'-0"



3 A6.01R SF4 ELEVATION
1/4" = 1'-0"

4 A6.01R ROOM SIGN CONDITIONS
1/2" = 1'-0"

USER: Author

PLOT DATE/TIME: 11/16/2020 3:48:50 PM

LAYOUT TAB: SCHEDULES & DIAGRAMS

CAD FILE: C:\Users\jlyons\Documents\060-10152_PPRM_r2019_CENTRAL_jlyonsDYHLD.rvt

NO.	BY	DATE	DESCRIPTION
1		11/05/2020	Addendum 01
2		11/11/2020	Addendum 02

SCALE: As indicated
DRAWN: Author — DATE: DATE
CHECKED: Checker — DATE: DATE
APPROVED: Approver — DATE: DATE
SURVEY DATE:
SURVEY BY:
FIELD BOOK No.:

THRASHER
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PHASE No.

CONTRACT No.

PROJECT No. 060-10152

SCHEDULES & DIAGRAMS
POINT PLEASANT RIVER MUSEUM
MASON COUNTY, WV
10/23/2020
CONSTRUCTION DOCUMENTS

SHEET No. A6.01R

OVERALL LEGEND

- EXISTING CONTOURS
- LOD — PROPOSED LIMIT OF DISTURBANCE
- W — PROPOSED WATER
- PROPOSED STORM SEWER
- UE — PROPOSED UNDERGROUND ELECTRIC
- UGT/C — PROPOSED CONDUIT/COMMUNICATIONS
- G — PROPOSED GAS
- SAN — PROPOSED SEWER
- CFS — PROPOSED COMPOST FILTER SOCK
- PROPOSED INLET
- JB — PROPOSED JUNCTION BOX
- PROPOSED SEWER CLEANOUTS
- GM — PROPOSED GAS METER
- WM — PROPOSED WATER METER
- PROPOSED WATER VALVE
- ASPHALT
- CONCRETE
- PAVERS
- GRASS/LANDSCAPE AREA

LOD — PROPOSED LIMIT OF DISTURBANCE (1)

MAIN ST

TIE INTO EXISTING STORM INLET

EXISTING SANITARY CLEANOUT

TIE INTO EXISTING SANITARY SEWER LINE LATERAL OR NEW COORDINATE WITH LOCAL UTILITY

BUILDING CORNER
N 672840.3497
E 1644133.5582
EL = 560.90

54 LF 12" HDPE

TYPE F ROADWAY REPAIR SEE DETAIL OR MATCH EXISTING

6" CONCRETE CURB

ADA RAMP

NEW ADA PARKING SPOT

EXISTING UTILITY POLE

ADA RAMP

EXISTING 9.0' ENTRANCE

TYPE B DRAINAGE INLET
HEEL PROOF GRATE
RIM = 560.80
IN OUT = 558.30

BRICK PAVERS PATIO

80 LF 4" SDR-35 SEWER PIPE MINIMUM 0.5% SLOPE

PRO STORM CLEANOUT (TYP)

90 LF 12" HDPE

PROPOSED SANITARY CLEANOUT

BUILDING CORNER
N 672793.1158
E 1644117.1584
EL = 560.90

FFE = 560.90

GRASS AREA

BOLLARDS

6" CONCRETE CURB

(2) 2" CONDUITS

8" COMPOSITE FILTER SOCK

ASPHALT LOT

BUILDING CORNER
N 672807.5501
E 1644228.0261
EL = 560.90

6" FIRE PROTECTION WATERLINE

1½" DOMESTIC WATERLINE

GRASS AREA

GENERATOR PAD (1)

CONCRETE SIDEWALK
6" WATERLINE
4.0' TYP.

6" CONCRETE CURB

CURB TAPER

BUILDING CORNER
N 672760.3161
E 1644211.6263
EL = 560.40

TIE INTO EXISTING 6 INCH WATERLINE

EXISTING 6" WATERLINE

EXISTING OVERHEAD UTILITIES

N: 672797.1048
E: 1644250.9285
ELEV: 561.63

N: 672752.4385
E: 1644234.3170
ELEV: 559.77

N: 672740.1571
E: 1644237.4822
ELEV: 559.55

N: 672784.5954
E: 1644141.5823
ELEV: 560.90

N: 672776.7149
E: 1644164.3925
ELEV: 560.37

N: 672772.6300
E: 1644102.3292
ELEV: 560.79

N: 672768.3625
E: 1644114.6223
ELEV: 560.82

N: 672766.0172
E: 1644124.5491
ELEV: 560.70

N: 672764.9648
E: 1644132.6096
ELEV: 560.4

N: 672762.6195
E: 1644142.5364
ELEV: 560.2

N: 672753.9870
E: 1644167.4002
ELEV: 559.90

N: 672741.1455
E: 1644204.3850
ELEV: 559.70

N: 672730.7589
E: 1644234.3000
ELEV: 559.34

10' 0 10' 20'

JEFFREY L. GOLA
REGISTERED
15621
STATE OF VIRGINIA
PROFESSIONAL ENGINEER
10/23/2020

CAD FILE: R:\060\060-10152.00-Point Pleasant River Museum-City Of Point Pleasant-\Drawing\Civil\000-SITE PLAN-10152.dwg
PLOT DATE/TIME: 11/16/2020 8:26 AM
LAYOUT: 000-SITE PLAN
USER: bruce degroot

NO.	BY	DATE	DESCRIPTION
1	BD	11-16-2020	ADDENDUM #3 STORM NETWORK / GENERATOR PAD LOCATION / ADDED LOD

SCALE:	
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

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SITE PLAN
POINT PLEASANT RIVER MUSEUM
MASON COUNTY, WV
10/23/2020
CONSTRUCTION DOCUMENTS

SHEET No.
C1.01R