

DATE: June 30, 2023

DEPARTMENT OF GENERAL SERVICES
BUREAU OF CAPITAL PROJECT DESIGN MANAGEMENT
1800 HERR STREETS
HARRISBURG, PENNSYLVANIA

ADDENDUM NO. 29

on

PROJECT NO. DGS C-0211-0005 PHASE 005
PROJECT TITLE - PA State Police Academy - Core Bldgs, BESO & Sitework
PROFESSIONAL:
SOM
7 World Trade Center
New York, NY, 10007

If you submitted a bid prior to this Addendum being issued, your bid has been discarded and you must re-submit your bid(s) prior to the bid opening date and time.

GENERAL CHANGES – ALL CONTRACTS

Item 1 - Please note the following:

Final questions must be submitted via e-Builder no later than 5:00 PM ET on Tuesday, July 18.

Final Addendum will be issued via e-Builder no later than Tuesday, July 25th.

Bids are due by Tuesday, August 1, no later than 2:00 PM. This is a very tight bidding schedule so please manage your time effectively.

Item 2 - Addendums for this bid begin with Addendum 24. Please note that Addendums 1-23 were issued in the course of the previous bid process and can be disregarded for the purposes of this bid. Items issued in addendums from the previous bid process have been incorporated into the current, re-issued bid documents.

Item 3 - Additional individuals from any bidder wishing to gain access to the bid documents must register through eMarketplace and create an account to access e-Builder. Access cannot be granted in any other fashion.

Item 4 - The optional pre-bid conference was held at the Pennsylvania State Police Academy on Friday, June 16 as notified in Addendum 26. Issued with the addendum are materials presented by SOM at that meeting for reference only. Concept phasing diagrams are shared for reference only, final phasing to be coordinated by contractors under means & methods of construction.

Item 5 - In response to questions submitted, please note the following:

.1 CONTRACT

- Question 72: CLT: What aspect of the CLT is delegated design? The documents indicate size, species and loading. Please advise.

- Response: The entire CLT construction should be delegated design to satisfy the design requirements in Mass Timber notes on GEN-S-016 and APA PRG 320. The CLT construction includes CLT panel and connections. The proposal of using alternative species should meet the required design strength and APA PRG 320. However, Douglas Fir should be used at the bottom exposed layer for architectural aesthetics, refer to Mass Timber notes on GEN-S-016.
- Question 73: CLT: Spec section 061719 - 2.1 - B indicates a certification showing timber is to be sustainably sourced and harvested. What are the sustainability requirements?
- Response: Acceptable industry standard certifications include the following: Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), American Tree Farm System (ATFS), and Canadian Standards Association (CSA).
- Question 74: CLT: Spec section 061719 - 2.1 - G indicates FRT treatment is required. It is our understanding that CLT cannot be fabricated with FRT lumber. Please advise.
- Response: Refer to revised specification 061719 as revised in Addendum 29. FRT treatment has been removed.
- Question 75: Glulam: Spec section 061800 - 2.1 - B indicates a certification showing timber is to be sustainably sourced and harvested. What are the sustainability requirements?
- Response: Acceptable industry standard certifications include the following: Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), American Tree Farm System (ATFS), and Canadian Standards Association (CSA).
- Question 83: Addendum #27 Question 26: The answer to this question is that the .1 and .2 contractors need to coordinate electricity and fuel requirements for temporary heat. That can't be done until after contracts are awarded so the .1 contractor doesn't know what to include in bid for fuel and electric for temporary heat. Please advise.
- Response: Bidders are to provide bids for estimation of temporary heat provisions during construction. Further adjustment requiring coordination with other contractors will be coordinated after award.
- Question 84: Owner Parking: What are the parking requirements, per phase, that need to be maintained for the Owner?
- Response: 125 spaces to be provided on site, remaining owner spaces will be provided off-site at adjacent facility, coordinated by owner.
- Question 85: Addendum 27 Questions 28 and 29: The answer provided on these is to coordinate with Package 2.1 contractor. This doesn't provide any direction for bidding purposes. We need to know the duration provided for these two buildings in order to insert into our schedule. Please advise.
- Response: Durations for not-in-contract work will be coordinated after award.
- Question 86: Addendum 27 Question 35 TE-01: Response to Question 35 regarding TE-01 only tells us that the fence is 6' tall. Please provide details. What is the gate width? Spec 323113 says 3' but that doesn't make sense for a trash enclosure. Are there bollards? Are we to scale the size of these enclosures?
- Response: Please see new detail 3/STE-L-901 for additional information on gate width, bollards, and general sizing for trash enclosures included in Addendum 29. Specification section 323113 has been revised.
- Question 89: Addendum 27 Question 46: Addendum 27 Response #46 calls for us to provide a lump sum to underpin/support the existing building. The EOR needs to provide the extent of underpinning required in

order to price. We don't have locations, dimensions, depths, quantities, or existing drawings to provide a price for this work.

- Response: Refer to Question 3 response as issued in Addendum 24. The evaluation of the of the existing building to remain adjacent to the soil nail wall is part of the soil nail wall design. Contractor bids should include the cost to retain a Professional Engineer licensed in Pennsylvania to design all aspects of the soil nail wall including any necessary support of the adjacent existing building to remain during construction that are deemed necessary as part of the soil nail wall design to allow construction of the soil nail wall without impacting the existing building. The contractor's engineer must determine the type of support, locations, dimensions, depths and quantities of any support required to the existing building. No drawings are available for the existing building to remain; any exploration of the building foundations needed for the design should be included in the bid cost.
- Question 92: Excavation: Please confirm that the .2, .3, and .4 contractors have all of their own excavation and backfill within 5' of the buildings and within the building footprints.
- Response: The .1 General Contractor is responsible for all excavation & backfill. The .1 General Contractor is responsible for installation for incoming service duct bank and all utility work 5' outside the building footprints.
- Question 93: Geothermal Excavation: Please confirm the .2 contractor is responsible for excavation and backfill for geothermal work since this is delegated design and is not currently shown on the documents.
- Response: The .1 General Contractor is responsible for all excavation & backfill. Work will need to be coordinated with .2 contractor during construction. Bidders are to provide bids for estimation of excavation during construction.
- Question 94: Generator Conduit: On drawing STE-C-701 the emergency generator conduit to the Marquee building runs through the existing building that needs to remain during the Marquee construction. Please advise.
- Response: Refer to revised drawing STE-C-701 as issued in Addendum 29 for the emergency generator conduit routing around existing academy.
- Question 95: Parking for Marquee: Please confirm what parking is needed to be turned over when the Marquee building is occupied.
- Response: 125 spaces to be provided on site through duration of project, remaining owner spaces will be provided off-site at adjacent facility, coordinated by owner.
- Question 96: Wage Rates: Please confirm the wage rates provided are good for the entire duration of the project. If not, please provide wage rates for entire duration.
- Response: Confirmed, bidders are only responsible for wage rates at time of issuance.
- Question 97: Excess Soils: Please confirm all excess soils can be placed on the site and that they don't need to be hauled away.
- Response: The design intent is that no material will be exported from the site. Please note that 20,000 CY of export material from this contract must be coordinated with adjoining contract area as shown on plans. Any remaining material could either be further coordinated with adjoining contract or spoiled on undeveloped areas on the site within the limit of disturbance.

- Question 98: Site Electric: Please confirm that the prime electrical contractor will have excavation and backfill and duct banks for the site electric. Profiles, amount of pipes, and pipes sizes are not provided for the .1 contractor to price this work.
- Response: The .1 General Contractor is responsible for excavation, backfill, duct banks, concrete encasement, manholes and any associated site work. The .4 Electrical contractor is responsible for all raceways, conduits, cabling initiated at the switchgear.
- Question 99: Masonry: Drawings ITV-A-111 and ITV-A-602 shows a masonry partition along column line M10 that does not have a label. Please confirm N1 is the correct masonry partition type.
- Response: Response will be provided in an upcoming addendum.
- Question 100: Masonry: The exterior masonry walls in the Auditorium of the Marquee Building are not completely labeled. Only the exterior finish is labeled as CMU-01 however, the backup CMU does not have a label. Please confirm CMU-08A is correct. See MAQ-A-568, 1/MAQ-A-515, 3/MAQ-A-565, MAQ-A-516, GEN-A-520 for reference.
- Response: Backup walls to be CMU-08 per Wall Type buildup described on GEN-A-500 - EXTERIOR WALL TYPES. For Wall Type, see MAQ-A-500 - WALL TYPE KEY ELEVATION.
- Question 101: Phasing Plan: A phasing plan was shared at the pre-bid meeting but was not issued in Addendum #28. Please provide.
- Response: Presentation is issued in Addendum 29 for reference only, final phasing to be coordinated by contractor under means & methods of construction.
- Question 102: STE-L-900: Please confirm where detail 8/STE-L-900 applied. I don't see where PV 4.0 is set up against the building and the Materials Schedule doesn't show PV 4.0 getting a concrete setting bed below it. PAV-03 is shown up against the building and does have a concrete setting bed underneath.
- Response: Detail occurs at paving that leads to main/central entry to Marquee Building. See revised detail in Addendum 29 drawings which indicates PAV-03 in lieu of PV 4.0.
- Question 103: Splash Pad: 4/STE-L-901 shows details for a splash pad and there a few questions regarding these details. A) Where are these splash pads shown in plan to quantify them? B) These details reference a material ST which doesn't show up in the material schedule to know that ST is. C) Please provide details for the concrete trench. D) Details points to a 4" wide concrete trench under ST but the concrete is shown to go up to grade. Please advise.
- Response: A) Refer to Sheet STE-L-104_D for splash pad location. B) ST revised to LST-01 C) Please see revised detail 4/STE-L-901 included in Addendum 29. D) Please see revised detail 4/STE-L-901 included in Addendum 29.
- Question 104: Retaining Walls: STE-C-454 has a detail for retaining wall. 5/STE-L-901 also has detail for site retaining wall. Please confirm which details apply where.
- Response: Detail 5/STE-L-901 only applies to the site wall explicitly called out in the Landscape drawings on Sheet STE-L-104. Refer to Civil details for all other site retaining walls.
- Question 105: Drain Covers: Spec 321400 2.2 and 2.3 call for drain covers in the unit pavers and mention to see material schedule and drawings for material type, size, and finish. Please confirm where this information is shown on the drawings.
- Response: 321400, 2.2-2.3 are not applicable and have been removed from the Specification.

- Question 106: Bollards: STE-C-451 has a bollard detail and STE-L-901 has a different bollard detail. Please confirm which detail goes where.
- Response: Bollards shown in details 2/STE-L-901 and included in Materials Schedule apply only to bollards explicitly called out in the Landscape drawings on Sheets STE-L-104 and STE-L-104_D. All other bollards, including at trash enclosure should follow the Civil detail.
- Question 107: Abatement: Spec 020800 notes that all layers of flooring needs to be removed at areas where ACM is identified. Please confirms types of flooring and layers where ACM is identified in order to provide a price.
- Response: Response will be provided in an upcoming addendum.
- Question 108: Abatement: Abatement spec 020800 and H series drawings note that Abatement contractor is responsible for all ACM removal whether it has been identified or not. This is not quantifiable or reasonable for a hard bid situation to know what cost to include. Please provide specific direction/quantities or an allowance for this work.
- Response: Response will be provided in an upcoming addendum.
- Question 109: Builder's Risk: We are being told by our builder's risk broker that the Marquee building could be classified as a mass timber project and will require special insurance. Should this building be classified as mass timber?
- Response: Response will be provided in an upcoming addendum.
- Question 110: Existing Kennel Buildings: Spec section 013110 notes that the existing kennel building can be demolished at any time for the construction of the BESO building. At the pre-bid, it was mentioned that the BESO building needed to be in phase 2. Please confirm.
- Response: Response will be provided in an upcoming addendum.
- Question 111: Geothermal Wells: Do all of the geothermal well fields need to be installed and activated for the turnover of the Marquee building? If so, this creates a phasing issue with the existing buildings that need to remain during the construction of the Marquee building such as, stables, garage building A, garage building b, and existing headquarters.
- Response: Response will be provided in an upcoming addendum.
- Question 112: Temporary Access Roads: Drawing STE-C-811 shows a conceptual access road the goes through a drainage basin and yard inlet. Please advise.
- Response: Response will be provided in an upcoming addendum.
- Question 113: Food Service: Please confirm the Hot Line Serving M-1205A casework and countertops are part of the Food Service Equipment package. If not, please provide section details and labels for the casework and countertops. Reference MAQ-QF-111.
- Response: Confirmed, All equipment and casework in M-1205A, Hot Line Serving, are part of the Food Service Equipment package.
- Question 114: Servery: Please confirm the cabinets of the Cold Line Servery M-1204 and Beverage Station M-1202 part of the Food Service Equipment package. Reference MAQ-QF-113.
- Response: Confirmed, All equipment and casework in M-1204, Cold Line Serving, are part of the Food Service Equipment package.

- Question 115: FTU Wall: FTU Site wall detailed on 5/GEN-A-521 indicates a fully grouted CMU backup wall, however, the backup CMU wall is labeled as CMU-01A, which is a 4" split face CMU. Please confirm R2 or N12 is the correct CMU type.
- Response: Site wall to be CMU-02 backup, faced with CMU-01. See 5/, 11/GEN-A-521 as issued in Addendum #29. Please note that CMU-01A is an 8x8x24 block per 042000.2.3.B
- Question 116: Ceiling Trim: Specification Section 092116 Gypsum Board Assemblies 2.7 Trim Accessories B. Metal Specialty Accessories 1. (call out the following) b. Channel Wall Reveal, c. Rounded Outside Corner d. Base Reveal e. W-Reveal f. Corner Trim g. Column Collar h. Partition End Caps. I do not see any of these trims shown on the drawings. Are any of these trims to be used in the project?
- Response: Response will be provided in an upcoming addendum.
- Question 117: Abuse vs impact: Specification Section 092166 Gypsum Board Assemblies 2.4 Gypsum Board Materials Gypsum Board 1. Provide Abuse Resistant Panels for the first 8 ft. of all gypsum board partitions, unless otherwise indicated. 3.4 C. Panel Materials 1. General Install Impact Resistant panels for the first 8ft. of all gypsum board partitions. Please clarify either Abuse or Impact board. There is a significant difference in cost.
- Response: Response will be provided in an upcoming addendum.
- Question 118: Masonry: Drawing note B1 in the BSO-A drawings reads "SEE STRUCTURAL" regarding load bearing CMU, however, there is no information regarding load bearing CMU in the BSO-S drawings. Please advise.
- Response: Refer to BSO-S-101.

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- Question 2: HVAC -1: Specification 230700 3.1 K. Ductwork Table - Lists Insulation type "D" for Exposed insulation in mechanical rooms or areas subject to damage. There is no specification for Type D insulation. Provide if applicable.
- Response: Refer to revised specification section 230700, as issued in Addendum 29.
- Question 3: HVAC-2: Specification 230700 3.1 L. Pipe Table - Lists Insulation type "4" for many pipes. There is no specification for Type 4 insulation. Provide if applicable.
- Response: Refer to revised specification section 230700, as issued in Addendum 29.
- Question 4: HVAC-3: Drawing BSO-M-402 B-CRAC-1 has no associated condensing unit associated. Provide Unit schedule with performance and electrical characteristics and location.
- Response: Refer to BSO-M-402 CRAC Unit Schedule, Note 2 states that B-CRAC-1 is a self contained unit. No external CU needed. Heat rejected to return area plenum.
- Question 5: HVAC-4: Drawing BSO-M-401 Split System Condensing Units B-CU-1 has a scheduled capacity of 600MBH while corresponding B-AHU-1 has a scheduled total DX capacity of 646.3MBH. Confirm this is correct.
- Response: Scheduled condensing unit confirmed. B-AHU-1 has a coil capacity of 637 MBH and B-CU-1 has a nominal capacity of 600 MBH.
- Question 6: HVAC-5: Drawing BSO-M-401 Split System Condensing Units B-CU-7 lists related fan as B-FCU-3. Confirm this should be B-FCU-6.
- Response: Confirmed, this should be FCU-6. Refer to revised drawing BSO-M-401 as issued in Addendum 29.

- Question 15: HVAC-13 Drawing BSO-M-402 Diffuser, Register and Grille Schedule. CD-1, provide round neck size.
- Response: Refer to revised BSO-M-402 as issued in Addendum 29, indicating round neck size.
- Question 16: HVAC-14 Drawing BSO-M-121 BESO Lounge B-222 shows (4) CD-1 Diffusers at 300 CFM/Ea. Scheduled airflow for CD-1 is 200 CFM Max. Confirm this is correct.
- Response: Diffusers serving BESO Lounge B-222 should be CD-4. Airflows confirmed correct. Refer to revised BSO-M-121 as issued in Addendum 29 indicating correct diffuser type.
- Question 17: HVAC-15 Drawing BSO-M-111: Drawing BSO-M-111 K9 Classroom B-129 depicts (1) CD-1/185 CFM. What is the other ceiling diffuser designation and air flow in this room.
- Response: CD-1/185 cfm is typical for both diffusers in B-129 K9 Classroom. Refer to revised BSO-M-111 as issued in Addendum 29.
- Question 18: HVAC-16 Specification 230700 3.1, L.Breeching Insulation Table – Breeching, Generator Exhaust Lists only Type 3 Insulation. Provide Type 3 Insulation Specification. ALSO, Heating and Chilled Water Storage and Air Separation Tanks and Heat Exchangers (Steam & Hydronic) lists Type 5 Insulation. Provide Type 5 Insulation if applicable.
- Response: Refer to revised spec section 230700 as issued in Addendum 29, clarifying types 3 and 5.
- Question 19: HVAC-17 Specification Section 230517: References are made referring to Specification Section 230517 “Sleeves and Seals for HVAC Piping”. Provide 230517 Section if applicable.
- Response: Response will be provided in an upcoming addendum.
- Question 20: HVAC-18 Control Sequence for Unit G-DHU-1: Provide a control sequence for Unit G-DHU-1 serving Training Tank G-130.
- Response: Reference response to question 9 and revised documents as issued in Addendum 29.
- Question 21: BESO Building: Please clarify the emergency generator BAS integration and controls scope.
- Response: Refer to revised control drawings as issued in Addendum 29 clarifying generator monitoring.
- Question 22: Marquee Building: Please clarify the emergency Generator BAS integration and controls scope.
- Response: Refer to revised control drawings as issued in Addendum 29 clarifying generator monitoring.
- Question 23: PICVs: Regarding specification section 230900, 2.14, F, 4: Please clarify locations and BAS monitoring for PICVs.
- Response: Refer to control drawings for BAS monitoring requirements and plan drawings for equipment locations
- Question 24: ePICVs: Regarding specification section 230900, 2.14, G: Please clarify locations and BAS monitoring for ePICVs.
- Response: Refer to control drawings for BAS monitoring requirements and plan drawings for equipment locations
- Question 25: Construction Schedule: Please provide building construction schedules.
- Response: Building construction schedule is being coordinated by .1 General Contractor and will be provided after award. Refer to spec section 013110 for critical milestones.
- Question 26: Firearms Training Unit: Does the firing range control system integrate into the BAS?
- Response: Yes. Refer to controls drawings.
- Question 27: 3rd Party Integration

- Response: Spec section referenced provides direction for controls contractor to intergrate points as shown on controls drawings regardless of protocol.
- Question 28: Electric Meters: Specification 230900, 2.3, D, 9, d refers to electrical meter reporting but electrical meters are not shown on the electrical drawings. Please verify meter location(s).
- Response: Electrical meters are on one line diagrams, refer to electrical drawings.
- Question 29: Gas Meters: Specification 230900, 2.3, D, 9, e refers to gas meter reporting but gas meters are not shown on the plumbing drawings. Please verify meter location(s).
- Response: Plumbing drawings show gas meters, refer to plumbing drawings.
- Question 30: Airflow Station Alternates: Regarding specification 230900, 2.14, I, 3: Are Accutrol duct mounted airflow stations an acceptable alternate?
- Response: Provide equipment as listed in specifications, alternates will not be accepted prior to award.
- Question 31: Ethernet Cabling Responsibilities: Please clarify who is responsible for ethernet cabling from the data closets to IP based BAS control panels and equipment with BAS IP integration.
- Response: Response will be provided in an upcoming addendum.
- Question 32: Marquee Building: Please clarify if there is any BAS integration or monitoring for the trench heaters.
- Response: BAS integration is not required.

SPECIFICATION CHANGES – ALL CONTRACTS

Item 1 - Please refer to the attached documents for updated specifications as described in responses to questions and listed below.

NUMBER / NAME / ACTION

061719 / Cross Laminated Timber / Revised

230000 / Heating, Ventilating and Air Conditioning (HVAC) Basic Requirements / Revised

230700 / HVAC Insulation / Revised

321400 / UNIT PAVING / Revised

323113 / CHAIN LINK FENCES & GATES / Revised

DRAWING CHANGES – ALL CONTRACTS

Item 1 - Please refer to the attached documents for updated drawings as described in responses to questions and listed below.

NUMBER / NAME / ACTION

STE-L-110 / MATERIALS SCHEDULE / Revised (schedule revised)

STE-L-900 / HARDSCAPE DETAILS / Revised (paver detail clarified)

STE-L-901 / HARDSCAPE DETAILS / Revised (paver detail clarified)

GEN-A-521 / TYPICAL CMU DETAILS / Revised (Detail annotation revised)

MAQ-M-700 / AIRSIDE DETAILS / Revised (note revised)

MAQ-M-701 / AIRSIDE DETAILS / Revised (note revised)

MAQ-M-807 / CONTROLS - MECHANICAL / Revised (Controls clarified)

GYM-M-700 / AIRSIDE DETAILS / Revised (note revised)
GYM-M-701 / AIRSIDE DETAILS / Revised (note revised)
GYM-M-801 / CONTROLS – MECHANICAL / Revised (Controls clarified)
FTU-M-700 / AIRSIDE DETAILS / Revised (note revised)
FTU-M-701 / AIRSIDE DETAILS / Revised (note revised)
FTU-M-802 / CONTROLS - MECHANICAL / Revised (Controls clarified)
BSO-M-111 / FLOOR PART PLAN B - LEVEL 1 -MECHANICAL / Revised (airflows clarified)
BSO-M-121 / FLOOR PART PLAN B - LEVEL 2 -MECHANICAL / Revised (airflows clarified)
BSO-M-401 / SCHEDULES- MECHANICAL / Revised (schedule clarified)
BSO-M-402 / SCHEDULES- MECHANICAL / Revised (schedule clarified)
BSO-M-800 / CONTROLS - MECHANICAL / Revised (controls clarified)
OTV-M-800 / CONTROLS – MECHANICAL / Revised (controls clarified)