Turner Construction
3700 Koppers St. Suite 345
Baltimore, MD 21227
Phone: 410-715-7240

BID INFORMATION LETTER # 04

November 8, 2021

Project: Cross Country ES/MS Replacement School, Baltimore MD

Proposal Due Date: Thursday November 18 - NO LATER THAN 12:00 PM EST

Prospective Bidders,

This is to notify you of the following information, including documents that have been posted to the BuildingConnected project website. This **Bid Information Letter #04** and its attachments shall be part of your bid price and supplement the bid invitation.

GENERAL INFORMATION:

1. This is to inform you that **RFIs** has been posted to Building Connected. There is **NO** change to the bid date and bids are due ***Thursday, November 18, 2021 no later than noon***.

DOCUMENTS POSTED IN BUILDING CONNECTED:

1. 2021-11.08_GMP 2 RFI Responses_*posted under file 07_RFIs on Building Connected*
2. 142123.16 TRACTION ELEVATORS_ *posted under file 07_RFIs on Building Connected*
3. RFI 012 Attachment_247-1953-2-S-1_ *posted under file 07_RFIs on Building Connected*
4. 21-006 - S201 – SCHEDULES_ *posted under file 07_RFIs on Building Connected*

Sincerely,

Mark Armstrong

Procurement Manager

CROSS COUNTRY ES/MS

GMP 02 RFI Log

RFI #	Discipline	Sheet	Detail	Spec	Question	Response	Date Submitted	RFI Author
001	Structural	S100A, S201			Spread footing for column at D/2.3 is listed as F66 on S100A. Footing schedule on S201 does not have "F66" as a footing type. Provide further information on this footing.	Will add to schedule		
002	Structural	S100A, S100B, S201			The spread footing at E/2 is shown as F75 on S100A. Please confirm this should be F76. This occurs at a few other locations as well.	Correct, These should say F76. Will revise the plans		
003	Structural	S100A, S201			There is a spread footing on S100A referenced as F239130. This spread footing is not listed on S201 footing schedule. Please provide further information.	Will add to schedule		
004	Structural	S100A, S201			There is a spread footing on S100A referenced as F192130. This spread footing is not listed on S201 footing schedule. Please provide further information.	Will add to schedule		
005	Multiple				Will a stand alone mock-up be required for this project? If so, please provide further design information or provide an Allowance for this item. Trades affected for GMP 2 are Earthwork, Concrete and Structural Steel.	a masonry mock-up will be required for new construction phase, details will be provided in 100% CD submission		
006	Civil			Geotech Report Section 5.1	For bid purposes, please confirm the footprint of the proposed building is to be undercut two (2') feet from the underside of the foundations. All additional undercut will be tracked on a unit price basis. (Ref Figure 6 of the Geotech report)	All work related to undercutting of footings shall be performed under the recommendation(s) of the geotechnical engineer. Specific wording in Section 5.1 should be followed.		
007	Civil			Geotech Report Section 5.1	Please confirm all undercut material is to be removed from site and is not to be re-used for backfill at areas outside the building footprint.	This is confirmed per Section 5.1 of the Geotech report.		
008	Architectural			142400-2.01	Spec 142400 only lists two elevator manufacturers for this project. Please advise if other elevator manufacturers are acceptable - i.e. Schindler, Thyssen Krupp, Otis, Kone, etc. Note: Kone and Otis are approved per spec section 142700 - Elevator Cab Interior System.	Please see attached revised Elevator Specifications, updated per design standards		
009	Architectural			142400	Spec 142400 only allows hydraulic elevators. Are traction elevators acceptable?	Please see attached revised Elevator Specifications, updated per design standards		
010	Architectural			142400-1.02A.1	Spec section 142400-1.02-A-1 references to "modernize existing passenger elevator". Please provide update spec removing any modernization references or references to existing equipment.	Please see attached revised Elevator Specifications		
011	Civil	C6.00			Is there a pad required for the Emergency Generator? C6.00 does not address this. Electrical drawings do not address this either. Please provide further information.	There will be a concrete pad that will sit under the fuel tank. The generator will sit on top of the fuel tank. The concrete pad will be the same dimension as the fuel tank.		
012	Civil	C2.00			Please provide the existing depths of the crawl space. This is needed to provide an accurate quantity of backfill of this space.	Please find existing building foundation drawing attached (247-1953-2-S-1). Please note that not all of the building was constructed initially and therefore not all of it has a crawl space.		
013	Civil	C3.00, C3.01			Confirm it is acceptable to backfill trench of utilities to be removed with on site material. Backfill at these ares does not require imported structural backfill.	Strucutral backfill is not required. However, earth moving activities are not permitted during the phase 1 early demolition. Therefore, it may be necessary to supplement on-site backfill with borrow.		
014	Civil	C9.04			The proposed water line calls for the 6" DIP to be concrete encased per Baltimore City Standard Details and Specifications. Please provide the standard detail reference number. Confirm detail 864.01 is to be followed.	We have revised the water profile so that the ex. 10" sanitary line will be encased instead of the water line. The standard Baltimore City Detail is BC 830.04. Sanitary pipe should be encased 10' in all directions and have a minimum thickness of 1' below the invert.		
015								

Turner

SECTION 142123.16 - MACHINE-ROOM-LESS ELECTRIC TRACTION PASSENGER ELEVATORS

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 machine-room-less electric traction passenger and service elevators.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for temporary use of elevators for construction purposes.
2. Section 033000 "Cast-in-Place Concrete" for setting sleeves, inserts, and anchoring devices in concrete.
3. Section 042000 "Unit Masonry" for setting sleeves, inserts, and anchoring devices in masonry and for grouting elevator entrance frames installed in masonry walls.
4. Section 055000 "Metal Fabrications" for the following:

    a. Attachment plates and angle brackets for supporting guide-rail brackets.
    b. Divider beams.
    c. Hoist beams.
    d. Structural-steel shapes for subsills.
    e. Pit ladders.
    f. Cants made from steel sheet in hoistways.

1.3 DEFINITIONS

A. Definitions in ASME A17.1/CSA B44 apply to work of this Section.

B. Service Elevator: A passenger elevator that is also used to carry freight.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include capacities, sizes, performances, operations, safety features, finishes, and similar information.
2. Include Product Data for car enclosures, hoistway entrances, and operation, control, and signal systems.

B. Shop Drawings:

1. Include plans, elevations, sections, and large-scale details indicating service at each landing, coordination with building structure, relationships with other construction, and locations of equipment.
2. Include large-scale layout of car-control station and standby power operation control panel.
3. Indicate maximum dynamic and static loads imposed on building structure at points of support, and maximum and average power demands.

C. Samples for Initial Selection: For each type of exposed finish involving color selection.

D. Samples for Verification: For exposed car, hoistway door and frame, and signal equipment finishes; 3-inch- square Samples of sheet materials; and 4-inch lengths of running trim members.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Manufacturer Certificates: Signed by elevator manufacturer certifying that hoistway and pit layout and dimensions, as indicated on Drawings, and electrical service including standby power generator, as shown and specified, are adequate for elevator system being provided.

C. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For elevators to include in emergency, operation, and maintenance manuals.

1. Submit manufacturer's or Installer's standard operation and maintenance manual, according to ASME A17.1/CSA B44 including diagnostic and repair information available to manufacturer's and Installer's maintenance personnel.

B. Inspection and Acceptance Certificates and Operating Permits: As required by authorities having jurisdiction for normal, unrestricted elevator use.

C. Continuing Maintenance Proposal: Submit a continuing maintenance proposal from Installer to Owner, in the form of a standard two-year maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Elevator manufacturer or an authorized representative who is trained and approved by manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle materials, components, and equipment in manufacturer's protective packaging. Store materials, components, and equipment off of ground, under cover, and in a dry location.

1.9 COORDINATION

A. Coordinate installation of inserts, sleeves, block outs, elevator equipment with integral anchors, and other items that are embedded in concrete or masonry for elevator equipment. Furnish templates, inserts, sleeves, elevator equipment with integral anchors, and installation instructions and deliver to Project site in time for installation.

B. Coordinate locations and dimensions of work specified in other Sections that relates to electric traction elevators including pit ladders; sumps and floor drains in pits; entrance subsills; electrical service; and electrical outlets, lights, and switches in hoistways and pits.

1.10 WARRANTY

A. Manufacturer's Special Warranty: Manufacturer agrees to repair, restore, or replace elevator work that fails in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, operation or control system failure, including excessive malfunctions; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.
2. Warranty Period: Two year(s) from date of Substantial Completion.
3. **Notification: Notify City Schools, in writing, 60 days in advance of date of expiration of warranty. Failure to notify City Schools by required time shall automatically extend warranty to 60 days after written notification is received by City Schools at no additional cost to City Schools. Extended warranty period shall be considered part of, and manufacturer is fully responsible for Work described in original warranty.**
4. **Warranty Claim: Warranty claims made by City Schools prior to expiration of warranty shall be satisfied even though the warranty has subsequently expired.**

PART 2 PRODUCTS

2.1 MANUFACTURERS

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

1. KONE Inc.; MonoSpace
2. Otis Elevator Co.; Gen2
3. Schindler Elevator Corp; 3300
4. ThyssenKrupp Elevator.

B. Source Limitations: Obtain elevators, including elevators specified in other Sections, from single manufacturer.

1. Major elevator components, including driving machines, controllers, signal fixtures, door operators, car frames, cars, and entrances, shall be manufactured by single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with ASME A17.1/CSA B44.

B. Accessibility Requirements: Comply with requirements for accessible elevators in the United States Access Board's ADA-ABA Accessibility Guidelines and with ICC A117.1.

2.3 ELEVATORS

A. Elevator System, General: Manufacturer's standard elevator systems. Unless otherwise indicated, manufacturer's standard components shall be used, as included in standard elevator systems and as required for complete system.

B. Elevator Description:

1. Type: Passenger, gearless traction elevator.
2. Rated Load: 3500 lb.
3. Freight Loading Class for Service Elevator(s): Class A.

4. Rated Speed: 200 fpm.
5. Operation System: Selective-collective automatic operation.
6. Auxiliary Operations:

    a. Standby power operation.
    b. Automatic dispatching of loaded car.
    c. Nuisance-call cancel.
    d. Loaded-car bypass.

7. Security Features: Car-to-lobby feature. Keyswitch feature to control call button functions; provide up to 30 keys as requested by facility.
8. Machine Location: Inside the hoistway mounted on car guide rail.
9. Control Space Location: Remote Closet.
10. Car Enclosures:

    a. Inside Width and Depth: Of dimensions large enough to accommodate a 24 inch by 84 inch stretcher.
    b. Inside Height: Not less than 93 inchesto underside of ceiling.
    c. Front Walls (Return Panels): Satin stainless steel, No. 4 finish.
    d. Car Fixtures: Satin stainless steel, No. 4 finish.
    e. Side and Rear Wall Panels: Satin stainless steel, No. 4 finish.
    f. Reveals: Black Satin stainless steel, No. 4 finish.
    g. Door Faces (Interior): Satin stainless steel, No. 4 finish.
    h. Door Sills: Aluminum.
    i. Ceiling: Satin stainless steel, No. 4 finish.
    j. Handrails: 1/2 by 2 inches rectangular satin stainless steel, No. 4 finish, at sides of car.
    k. Floor: Resilient tile.

11. Hoistway Entrances:

    a. Width: 42 inches.
    b. Height: 84 inches.
    c. Type: Single-speed side sliding.
    d. Frames: Satin stainless steel, No. 4 finish.
    e. Doors: Satin stainless steel, No. 4 finish.
    f. Sills: Aluminum.

12. Hall Fixtures: Satin stainless steel, No. 4 finish.
13. Additional Requirements:

    a. Provide inspection certificate in each car, mounted under acrylic cover with frame made from satin stainless steel, No. 4 finish.
    b. Provide hooks for protective pads in service car and one complete set(s) of full-height protective pads.

14. Phone system for emergency call out shall be wireless system. City Schools will provide the monthly wireless service. Wireless gateway shall be located in the elevator machine room. Hard-wired phone lines are not acceptable.

2.4 TRACTION SYSTEMS

A. Elevator Machines: Permanent magnet, variable-voltage, variable-frequency, ac-type hoisting machines and solid-state power converters.

1. Provide regenerative system.
2. Limit total harmonic distortion of regenerated power to 5 percent per IEEE 519.

3. Provide means for absorbing regenerated power when elevator system is operating on standby power.
4. Provide line filters or chokes to prevent electrical peaks or spikes from feeding back into building power system.

B. Fluid for Hydraulic Buffers: Fire-resistant fluid.

C. Inserts: Furnish required concrete and masonry inserts and similar anchorage devices for installing guide rails, machinery, and other components of elevator work. Device installation is specified in another Section.

D. Machine Beams: Provide steel framing to support elevator hoisting machine and deflector sheaves from the building structure. Comply with Section 055000 "Metal Fabrications" for materials and fabrication.

E. Car Frame and Platform: Bolted- or welded-steel units.

F. Guides: Roller guides. Provide guides at top and bottom of car and counterweight frames.

2.5 OPERATION SYSTEMS

A. General: Provide manufacturer's standard microprocessor operation systems as required to provide type of operation indicated.

B. Auxiliary Operations:

1. Single-Car Standby Power Operation: On activation of standby power, car is returned to a designated floor and parked with doors open. Car can be manually put in service on standby power, either for return operation or for regular operation, by switches in control panel located at fire-command station. Manual operation causes automatic operation to cease.
2. Automatic Dispatching of Loaded Car: When car load exceeds 80 percent of rated capacity, doors begin closing.
3. Nuisance-Call Cancel: When car calls exceed a preset number while car load is less than a predetermined weight, all car calls are canceled. Preset number of calls and predetermined weight can be adjusted.
4. Automatic Operation of Lights and Fan: When elevator is stopped and unoccupied with doors closed, lighting, ventilation fan, and cab displays are de-energized after five minutes and are re-energized before car doors open.
5. Emergency Hospital Service: Service is initiated by a keyswitch at designated floors. One elevator is removed from group operation and directed to the floor where service was initiated. On arriving at the floor, elevator opens its doors and parks. Car is placed in operation by selecting a floor and pressing door close button or by operating keyswitch to put car in independent service. After responding to floor selected or being removed from independent service, car is returned to group operation. If car is not placed in operation within a preset time after being called, it is returned to group operation.

C. Security features shall not affect emergency firefighters' service.

1. Keyswitch Operation Only: Push buttons are eliminated in favor of keyswitches at hall stations. Key is removable in either position.
2. Car-to-Lobby Feature: Feature, activated by keyswitch at main lobby, that causes car to return immediately to lobby and open doors for inspection. On deactivation by keyswitch, calls registered before keyswitch activation are completed and normal operation is resumed.

2.6 DOOR REOPENING DEVICES

A. Infrared Array: Provide door reopening device with uniform array of 36 or more microprocessor-controlled, infrared light beams projecting across car entrance. Interruption of one or more light beams shall cause doors to stop and reopen.

B. Nudging Feature: After car doors are prevented from closing for predetermined adjustable time, through activating door reopening device, a loud buzzer shall sound and doors shall begin to close at reduced kinetic energy.

2.7 CAR ENCLOSURES

A. General: Provide enameled or powder-coated steel car enclosures to receive removable wall panels, with removable car roof, access doors, power door operators, and ventilation.

1. Provide standard railings complying with ASME A17.1/CSA B44 on car tops where required by ASME A17.1/CSA B44.

B. Materials and Finishes: Manufacturer's standards, but not less than the following:

1. Subfloor: Exterior, C-C Plugged grade plywood, not less than 7/8-inch nominal thickness.
2. Stainless-Steel Wall Panels: Flush, formed-metal construction; fabricated from stainless-steel sheet.
3. Fabricate car with recesses and cutouts for signal equipment.
4. Fabricate car door frame integrally with front wall of car.
5. Stainless-Steel Doors: Flush, hollow-metal construction; fabricated from stainless-steel sheet.
6. Sight Guards: Provide sight guards on car doors.
7. Sills: Extruded or machined metal, with grooved surface, 1/4 inch thick.
8. Metal Ceiling: Flush panels, with four low-voltage downlights in each panel. Align ceiling panel joints with joints between wall panels.

2.8 HOISTWAY ENTRANCES

A. Hoistway Entrance Assemblies: Manufacturer's standard horizontal-sliding, door-and-frame hoistway entrances complete with track systems, hardware, sills, and accessories. Frame size and profile shall accommodate hoistway wall construction.

1. Where gypsum board wall construction is indicated, frames shall be self-supporting with reinforced head sections.

B. Fire-Rated Hoistway Entrance Assemblies: Door and frame assemblies shall comply with NFPA 80 and be listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction based on testing at as close-to-neutral pressure as possible according to NFPA 252 or UL 10B.

1. Fire-Protection Rating: 1-1/2 hours.

C. Materials and Fabrication: Manufacturer's standards, but not less than the following:

1. Enameled or Powder-Coated Steel Frames: Formed from cold- or hot-rolled steel sheet. Provide with factory-applied enamel or powder-coat finish; colors as selected by Architect from manufacturer's full range.
2. Star of Life Symbol: Identify emergency elevators with star of life symbol, not less than 3 inches high, on both jambs of hoistway door frames.
3. Stainless-Steel Doors: Flush, hollow-metal construction; fabricated from stainless-steel sheet.
4. Sight Guards: Provide sight guards on doors matching door edges.
5. Sills: Extruded or machined metal, with grooved surface, 1/4 inch thick.
6. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous

grout complying with ASTM C 1107/C 1107M.

2.9 SIGNAL EQUIPMENT

A. General: Provide hall-call and car-call buttons that light when activated and remain lit until call has been fulfilled. Provide buttons and lighted elements illuminated with LEDs.

B. Car-Control Stations: Provide manufacturer's standard recessed car-control stations. Mount in return panel adjacent to car door unless otherwise indicated.

1. Mark buttons and switches for required use or function. Use both tactile symbols and Braille.
2. Provide "No Smoking" sign matching car-control station, either integral with car-control station or mounted adjacent to it, with text and graphics as required by authorities having jurisdiction.

C. Firefighters' Two-Way Telephone Communication Service: Provide flush-mounted cabinet in each car and required conductors in traveling cable for firefighters' two-way telephone communication service.

D. Car Position Indicator: Provide illuminated, digital-type car position indicator, located above car door or above car-control station. Also, provide audible signal to indicate to passengers that car is either stopping at or passing each of the floors served. Include travel direction arrows if not provided in car-control station.

E. Hall Stations: Provide one hall station at each landing.

1. Provide units with flat faceplate for mounting with body of unit recessed in wall.
2. Equip units with keyed switches for calling elevator and for indicating desired direction of travel.
3. Provide telephone jack in each unit for firefighters' two-way telephone communication.

F. Hall Lanterns: Units with illuminated arrows; but provide single arrow at terminal landings. Provide the following:

1. Manufacturer's standard wall-mounted units, for mounting above entrance frames.

G. Hall Annunciator: With each hall lantern, provide audible signals indicating car arrival and direction of travel. Signals sound once for up and twice for down.

1. At manufacturer's option, audible signals may be placed on cars.

H. Hall Position Indicators: Provide illuminated, digital-display-type position indicators, located above hoistway entrance at ground floor. Provide units with flat faceplate and with body of unit recessed in wall.

1. Integrate ground-floor hall lanterns with hall position indicators.

I. Fire-Command-Center Annunciator Panel: Provide panel containing illuminated position indicators for each elevator, clearly labeled with elevator designation; include illuminated signal that indicates when elevator is operational and when it is at the designated emergency return level with doors open. Provide standby power elevator selector switch(es), as required by ASME A17.1/CSA B44, adjacent to position indicators. Provide illuminated signal that indicates when normal power supply has failed.

J. Emergency Pictorial Signs: Fabricate from materials matching hall stations, with text and graphics as required by authorities having jurisdiction, indicating that in case of fire, elevators are out of service and exits should be used instead. Provide one sign at each hall station unless otherwise indicated.

2.10 FINISH MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, commercial steel, Type B, exposed, matte finish.

B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, commercial steel, Type B, pickled.

C. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304.

D. Stainless-Steel Bars: ASTM A 276, Type 304.

E. Stainless-Steel Tubing: ASTM A 554, Grade MT 304.

F. Aluminum Extrusions: ASTM B 221 , Alloy 6063.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine elevator areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work. Examine hoistways, hoistway openings, and pits as constructed; verify critical dimensions; and examine supporting structure and other conditions under which elevator work is to be installed.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

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

3.2 INSTALLATION

A. Comply with manufacturer's written instructions.

B. Welded Construction: Provide welded connections for installing elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustment, inspection, maintenance, and replacement of worn parts. Comply with AWS standards for workmanship and for qualifications of welding operators.

C. Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts to minimize vibration transmission to structure and structure-borne noise due to elevator system.

D. Lubricate operating parts of systems, including ropes, as recommended by manufacturers.

E. Alignment: Coordinate installation of hoistway entrances with installation of elevator guide rails for accurate alignment of entrances with car. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe, workable dimension at each landing.

F. Leveling Tolerance: 1/8 inch, up or down, regardless of load and travel direction.

G. Set sills flush with finished floor surface at landing. Fill space under sill solidly with nonshrink, nonmetallic grout.

H. Locate hall signal equipment for elevators as follows unless otherwise indicated:

1. Place hall lanterns either above or beside each hoistway entrance.
2. Mount hall lanterns at a minimum of 72 inches above finished floor.

3.3 FIELD QUALITY CONTROL

A. Acceptance Testing: On completion of elevator installation and before permitting elevator use (either temporary or permanent), perform acceptance tests as required and recommended by ASME A17.1/CSA B44 and by governing regulations and agencies.

B. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times that tests are to be performed on elevators.

3.4 PROTECTION

A. Temporary Use: Limit temporary use for construction purposes to one elevator. Comply with the following requirements for elevator used for construction purposes:

1. Provide car with temporary enclosure, either within finished car or in place of finished car, to protect finishes from damage.
2. Provide strippable protective film on entrance and car doors and frames.
3. Provide padded wood bumpers on entrance door frames covering jambs and frame faces.
4. Provide other protective coverings, barriers, devices, signs, and procedures as needed to protect elevator and elevator equipment.
5. Do not load elevators beyond their rated weight capacity.
6. Engage elevator Installer to provide full maintenance service. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleanup, and adjustment as necessary for proper elevator operation at rated speed and capacity. Provide parts and supplies same as those used in the manufacture and installation of original equipment.
7. Engage elevator Installer to restore damaged work, if any, so no evidence remains of correction. Return items that cannot be refinished in the field to the shop, make required repairs and refinish entire unit, or provide new units as required.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate, adjust, and maintain elevator(s).

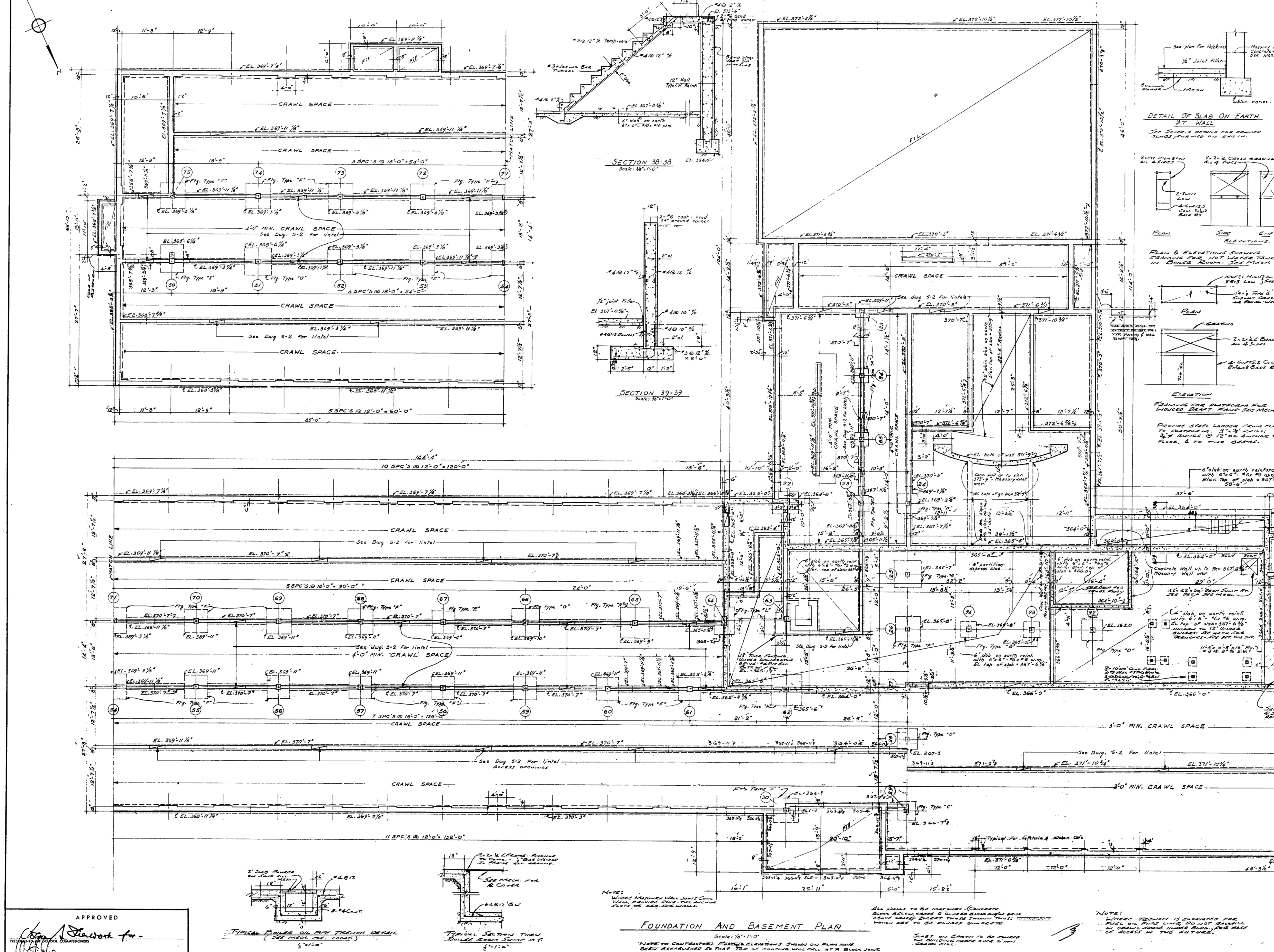
B. Check operation of elevator with Owner's personnel present before date of Substantial Completion and again not more than one month before end of warranty period. Determine that operation systems and devices are functioning properly.

3.6 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 24 months' full maintenance by skilled employees of elevator Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.

1. The elevator manufacturer shall provide maintenance service consisting of regular examinations, adjustments and safety tests of the elevator equipment for a period of 24 Months after date of substantial completion. Replacement parts shall be produced by the original equipment manufacturer.
2. Provide any other service required for compliance with warranty terms and requirements.
3. Maintenance service be performed during regular working hours of regular working days and shall include regular time call back service.
4. Include 24-hour-per-day, 7-day-per-week emergency callback service; response time must be two hours or less.

END OF SECTION 142123.16



GENERAL NOTES

Foundations: Bottom of all exterior footings shall be a minimum of 3'-0" below finished grade and a minimum of 1'-6" below original grade. A soil bearing capacity of 4000 p.s.f. has been assumed in foundation design. If soil of this capacity is not encountered at elevations indicated on plan footings shall be lowered or increased as directed.

Concrete: See Specifications for mix.

Structural Steel: All welding to be in accordance with latest recommendations of A.W.S. Shop & Field inspection by an approved testing laboratory; cost to be borne by Contractor. Erection Seats as manufactured by J.H. Williams Co. Buffalo, N.Y. or approved equal. Steel encased in concrete not to be painted; for painting of structural steel see specifications.

Steel Joist: Bethlehem Open Web Steel Joist or approved equal. Joist installation shall conform to the requirements of the Steel Joist Institute. Every third joist shall be anchored to masonry walls. Steel Joist to be welded to steel supporting members. See typical detail for strut bridging. Provide ceiling extension rods as required.

***Lintels:** All openings in walls & partitions to be provided with lintels. Lintels shall be loaded tile, stone concrete, cinder concrete, or loose angles as indicated or noted on drawings.
All lintels in partitions to have 4" min. end bearing, all other to have 8" min. end bearing.
For openings for ducts, radiators and other openings for mechanical trades or for any other opening not specifically shown provide one L - 4x 3½x 5/16 for each 4" of wall thickness for spans up to 6'-0" and one L - 6x 3½x 5/16 for each 4" of wall thickness for spans over 6'-0", or precast lintels as directed by Architect.
Precast lintels to have 1-#4 reinforcing bar top & bottom for each 4" of wall thickness. See Arch. drawings for masonry supported on door bucks.

* NOTE:
THIS NOTE IS TO SUPERCEDE SPECIFICATION ¶ 5(f) PAGE G-3.

Design Stresses: F'_c = 3000 p.s.i F_c = 0.45 F'_c F_s = 20000 p.s.i

Live Loads:

Roof	= 30 p.s.f.
Classrooms	= 50 p.s.f.
Corridors & Lobby	= 75 p.s.f.
Lockers & Showers Rooms	= 75 p.s.f.
Auditorium	= 60 p.s.f.
Stage	= 125 p.s.f.
Cafeteria, Stairs.	= 100 p.s.f.

Note: Where masonry wall joins conc. wall, provide dove-tail anchor slots or key the walls.

All walls to be masonry - (concrete block below grade & cinder block and/or brick above grade) except those shown thus: [hatch] which are to be poured concrete.

Slabs on earth to be poured on building paper over 6" min. gravel fill.

Note to Contractor: Footing elevations shown on plan have been established so that top of footing will fall at a block joint.

Note: Where trench is excavated for fuel oil pipe line, do not backfill in crawl space under bldg. for ease of access in the future.

247530901S000000L

NO.	DATE	DESCRIPTION

APPROVED

President Board of School Commissioners

Director of School Facilities

Director of Public Works

Building Construction Engineer

R. E. L. WILLIAMS
BUILDING CONSTRUCTION ENGINEER

BOARD OF SCHOOL COMMISSIONERS
AND
DEPARTMENT OF PUBLIC WORKS BUREAU OF BUILDING CONSTRUCTION

CROSS COUNTRY BOULEVARD ELEMENTARY SCHOOL

FOR THE MAYOR AND CITY COUNCIL OF BALTIMORE

Van Rensselaer P. Saxe — Prof. Engineer — 52 — State of Maryland

FOUNDATION AND BASEMENT PLAN

Scale: As noted.

BUCKLER, FENHAGEN, MEYER & AYERS
ARCHITECTS

JAMES POSEY & ASSOCIATES   VAN RENSSELAER P. SAXE

DRAWING S-1 OF 6

COLUMN SCHEDULE

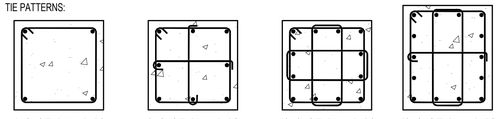
MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x60	18"x18"x1 3/8"	(4) 3/4" DIAMETER ASTM F1554
C6	HSS 8"x8"x1/2"	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554

NOTES:
1. ALL HSS COLUMNS SHALL RECEIVE A 5/8" THICK CAP PLATE UNLESS NOTED OTHERWISE.
2. FOR BASE PLATES AT LATERAL FRAMES, SEE S202 AND S203

CONCRETE PIER SCHEDULE

MARK	SIZE	VERTICAL REINFORCEMENT	REMARKS
P22	22"x22"	8-#5	
P2226	22"x26"	12-#7	
P24	24"x24"	12-#7	
P2428	24"x28"	12-#7	
P2430	24"x30"	14-#7	
P28	28"x28"	12-#7	
P2830	28"x30"	14-#7	

TIE PATTERNS:



4 LONGITUDINAL BARS | 8 LONGITUDINAL BARS | 12 LONGITUDINAL BARS | 12 LONGITUDINAL BARS

NOTES:
1. ALTERNATE THE 180 DEGREE HOOKED END OF ALL SINGLE-LEG TIES.
2. ALL TIES SHALL BE PLACED WITH 1 1/2" CONCRETE COVER UNLESS NOTED OTHERWISE.

WALL FOOTING SCHEDULE

MARK	SIZE	THICKNESS	REINFORCEMENT
WF20	2'-0" CONTINUOUS	12"	2-#5 CONTINUOUS BOTTOM
WF26	2'-6" CONTINUOUS	12"	3-#5 CONTINUOUS BOTTOM
WF30	3'-0" CONTINUOUS	12"	3-#5 CONTINUOUS BOTTOM
WF36	3'-6" CONTINUOUS	12"	4-#5 CONTINUOUS BOTTOM, #4@16" TRANSVERSE
WF36A	3'-6" CONTINUOUS	16"	4-#5 CONTINUOUS BOTTOM, #5@12" TOP AND BOTTOM TRANSVERSE, HOOKED
WF40	4'-0" CONTINUOUS	12"	4-#5 CONTINUOUS BOTTOM, #4@16" TRANSVERSE
WF50	5'-0" CONTINUOUS	14"	5-#5 CONTINUOUS BOTTOM, #4@8" TRANSVERSE
WF50A	5'-0" CONTINUOUS	16"	5-#5 CONTINUOUS TOP AND BOTTOM, #4@8" TRANSVERSE TOP AND BOTTOM

SPREAD FOOTING SCHEDULE

MARK	SIZE	THICKNESS	REINFORCEMENT
F36	3'-6"x3'-6"	12"	4-#5 EACH WAY BOTTOM
F40	4'-0"x4'-0"	12"	4-#5 EACH WAY BOTTOM
F46	4'-6"x4'-6"	12"	5-#5 EACH WAY BOTTOM
F50	5'-0"x5'-0"	12"	5-#5 EACH WAY BOTTOM
F56	5'-6"x5'-6"	14"	6-#5 EACH WAY BOTTOM
F60	6'-0"x6'-0"	14"	6-#5 EACH WAY BOTTOM
F66	6'-6"x6'-6"	14"	7-#5 EACH WAY BOTTOM
F6048	6'-0"x4'-8"	16"	6-#5 EACH WAY BOTTOM
F70	7'-0"x7'-0"	14"	7-#6 EACH WAY BOTTOM
F76	7'-6"x7'-6"	14"	8-#6 EACH WAY BOTTOM
F76A	7'-6"x7'-6"	16"	8-#6 EACH WAY BOTTOM
F80	8'-0"x8'-0"	14"	8-#6 EACH WAY BOTTOM
F86	8'-6"x8'-6"	16"	9-#7 EACH WAY BOTTOM
F90	9'-0"x9'-0"	16"	9-#7 EACH WAY BOTTOM
F90A	9'-0"x9'-0"	16"	9-#7 EACH WAY TOP AND BOTTOM
F96	9'-6"x9'-6"	16"	10-#7 EACH WAY BOTTOM
F96A	9'-6"x9'-6"	18"	10-#7 EACH WAY TOP AND BOTTOM, HOOKED EACH END
F100	10'-0"x10'-0"	16"	10-#7 EACH WAY BOTTOM
F100A	10'-0"x10'-0"	24"	10-#7 EACH WAY TOP AND BOTTOM, HOOKED EACH END
F106	10'-6"x10'-6"	18"	11-#7 EACH WAY BOTTOM
F110	11'-0"x11'-0"	20"	11-#8 EACH WAY BOTTOM
F110A	11'-0"x11'-0"	24"	11-#8 EACH WAY TOP AND BOTTOM, HOOKED EACH END
F120A	12'-0"x12'-0"	24"	12-#8 EACH WAY TOP AND BOTTOM, HOOKED EACH END
F10680	10'-6"x8'-0"	18"	8-#7 LONG WAY BOTTOM 11-#7 SHORT WAY BOTTOM
F12650	12'-6"x5'-0"	16"	5-#7 LONG WAY TOP AND BOTTOM, HOOKED EACH END 13-#7 SHORT WAY TOP AND BOTTOM
F12080	12'-0"x8'-0"	22"	5-#7 LONG WAY TOP AND BOTTOM, HOOKED EACH END 13-#7 SHORT WAY TOP AND BOTTOM
F12090	12'-0"x9'-0"	16"	9-#7 LONG WAY TOP AND BOTTOM, HOOKED EACH END 13-#7 SHORT WAY TOP AND BOTTOM
F16090	16'-0"x9'-0"	30"	9-#9 LONG WAY TOP AND BOTTOM, HOOKED EACH END 16-#9 SHORT WAY TOP AND BOTTOM, HOOKED EACH END
F174102	17'-4"x10'-2"	18"	10-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 18-#8 SHORT WAY TOP AND BOTTOM, HOOKED EACH END
F174110	17'-4"x11'-0"	24"	11-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 18-#8 SHORT WAY TOP AND BOTTOM, HOOKED EACH END
F186114	18'-6"x11'-4"	22"	12-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 19-#8 SHORT WAY TOP AND BOTTOM
F186120	18'-6"x12'-0"	22"	12-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 19-#8 SHORT WAY TOP AND BOTTOM
F188106	18'-8"x10'-6"	20"	12-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 19-#8 SHORT WAY TOP AND BOTTOM
F192130	19'-2"x13'-0"	24"	13-#9 LONG WAY TOP AND BOTTOM, HOOKED EACH END 20-#9 SHORT WAY TOP AND BOTTOM
F199110	19'-9"x11'-0"	20"	12-#8 LONG WAY TOP AND BOTTOM, HOOKED EACH END 20-#8 SHORT WAY TOP AND BOTTOM, HOOKED EACH END
F216140	21'-6"x14'-0"	26"	14-#9 LONG WAY TOP AND BOTTOM, HOOKED EACH END 22-#9 SHORT WAY TOP AND BOTTOM
F239130	23'-9"x13'-0"	24"	13-#9 LONG WAY TOP AND BOTTOM, HOOKED EACH END 24-#9 SHORT WAY TOP AND BOTTOM

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MASONRY PIER SCHEDULE

MARK	WIDTH	VERTICAL REINFORCEMENT	REMARKS
MP20	20"	2-#6	
MP28	28"	2-#6	
MP30	30"	4-#5	
MP32	32"	4-#5	
MP40	40"	4-#6 EACH FACE	
MP40A	40"	4-#5	

NOTES:
1. MASONRY PIERS SHALL BE GROUTED SOLID.
2. REINFORCEMENT EXTENDS FULL HEIGHT OF THE PIER.
3. VERTICAL REINFORCEMENT SHALL BE PLACED TO AVOID LINTELS AND BEARING PLATES.
4. NO MASONRY CONTROL JOINTS ARE PERMITTED IN THE MASONRY PIERS.
5. VERTICAL REINFORCEMENT SHALL BE CONTINUOUS. SEE GENERAL NOTES FOR SPLICING REQUIREMENTS.

LINTEL SCHEDULE

MARK	SIZE	BEARING PLATE	REMARKS
L1	W8x21 WITH BOTTOM PLATE	6"x6"x1/2"	
L1A	W8x21 WITH HUNG PLATE	6"x6"x1/2"	
L2	W8x28 WITH BOTTOM PLATE	8"x10"x1"	
L3	W16x36 WITH HUNG PLATE	8"x10"x1"	
L4	W8x24 WITH HUNG PLATE	6"x6"x1/2"	

NOTES:
1. REFER TO MASONRY NOTES ON SHEET S001 FOR LINTELS NOT REFERENCED ON PLANS.
2. INSTALL LOOSE ANGLE LINTELS OVER ALL MECHANICAL DUCT OPENINGS THROUGH MASONRY WALLS. REFER TO MASONRY NOTES ON SHEET S001 FOR SIZE.
3. BEARING PLATE SIZE APPLIES TO EACH END UNLESS NOTED OTHERWISE. FIRST DIMENSION OF BERING PLATE SHALL BE PARALLEL TO BEAM SPAN.
4. REFER TO SHEET S302 AND S303 FOR LINTEL CONFIGURATIONS AND BEAM BEARING DETAILS.
5. FIRST COURSE OF CMU ABOVE STEEL BEAM SHALL BE GROUTED SOLID.
6. LINTELS WITH HUNG PLATE SHALL HAVE BOTTOM OF BEAM LOCATED 8" ABOVE OPENING UNLESS NOTED OTHERWISE.
7. LINTELS WITH CLEAR SPANS GREATER THAN 6'-4" SHALL HAVE 1/2" DIAMETER x 4" LONG HEADED STUDS WELDED TO THE TOP FLANGE AT 24"o.c.
8. LINTELS SHALL BE POSITIONED AT THE CENTERLINE OF THE CMU WALL UNLESS NOTED OTHERWISE.

BEARING PLATE SCHEDULE

MARK	SIZE	REMARKS
BP1	10"x16"x1"	
BP2	6"x8"x5/8"	
BP3	7"x7"x5/8"	
BP4	6"x6"x1/2"	

NOTES:
1. REFER TO SHEET S302 FOR BEAM BEARING DETAILS.
2. FIRST DIMENSION SHALL BE ORIENTED PARALLEL TO BEAM SPAN UNLESS NOTED OTHERWISE.

ARCHITECTS
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NYIKOS-GARCIA ASSOCIATES
7146 STARMOUNT WAY
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SEAL

PROFESSIONAL CERTIFICATION:
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NUMBER: 14479
EXPIRATION DATE: JUNE 22, 2023

PROJECT NAME:

CROSS COUNTRY ELEMENTARY /MIDDLE SCHOOL

6100 CROSS COUNTRY BLVD
BALTIMORE, MD 21215

50% CONSTRUCTION DOCUMENTS SUBMISSION
22 OCTOBER 2021
FOR REVIEW ONLY NOT FOR CONSTRUCTION

ATI PROJECT NO: 21-006

MARK	DATE	DESCRIPTION
1	11/08/2021	GMP 2- RFI 1

DRAWN BY: DK

CHECKED BY: CZ

SCHEDULES

S201

SHEET _____ OF _____