SDA
NJ SCHOOLS DEVELOPMENT AUTHORITY

Bovis
Lend Lease

Addendum No. 4

DATE: September 2, 2009

PROJECT #: Marshall Street Elementary School
Paterson, NJ
SDA Contract #PA-0006-C03

The following revisions to the Bid Documents by Addendum #4 are:

A. CHANGES TO THE FRONT-END:

1. The Bid Due Date has been extended to September 22, 2009 at 2:00 PM.

B. CHANGES TO THE SPECIFICATIONS:

1. ADD to Specification Section 05310 Steel Deck the following acceptable manufacturer: CSi Metal Dek Group.

2. ADD to Specification Section 09654 Wood Athletic Flooring the following acceptable manufacturer: Horner – Safe Panel System.

3. CHANGE Specification Section 11481 Scoreboards paragraphs 1.1.A and 2.3.A shall be revised to read ...two (2)...in lieu of one (1). Two scoreboards are to be provided and located per Electrical Drawing EP-4.

   ADD to Specification Section 11481 Scoreboards the following acceptable manufacturer: Sportable Scoreboards.

4. ADD to Specification Section 12320 Pre-Manufactured Plastic Laminate Casework the following acceptable manufacturer: Case Systems

5. ADD new Specification Section 16146 Addressable Fixture Lighting Control, 10 pages attached. This spec covers lighting control for the classrooms.

6. ADD to Specification Section 13130 Pedestrian Bridge the following acceptable manufacturer: Echo Bridge, Inc.

C. CHANGES TO THE DRAWINGS

1. REPLACE the Addendum #3 drawing A-10.0 with the enclosed drawing A-10.0 dated 9/1/09. Scoreboard modifications are clouded with revision 4.

2. **REPLACE the following original bid set drawings dated 7/6/09 with the updated drawings dated 9/1/09. All drawings indicated multiple corrections, changes and clarifications and are noted with revision 4 mark-ups:**
   S-1A, S-1B, S-1C, S-1D, S-2A, S-2C, S-3A, S-3B, S-6, S-8A, S-8B (11 drawings)

3. **REPLACE the following original bid set drawings dated 7/6/09 with the enclosed drawings dated 9/1/09. All drawings indicated multiple corrections, changes and clarifications and are noted with revision 4 mark-ups:**
   FP-10, P-6, P-11, P-17, HVAC-3, HVAC-4, HVAC-8, HVAC-9, HVAC-11, HVAC-23, HVAC-26, E-1, E-2, E-3, E-5, EL-8, EP-8, EP-9, E-9, EL-10, E-11, E-14, ES-1, ES-2, ES-3, ES-4, ES-5, ES-6, ES-7, ES-8, and ES-9 (31 drawings)

4. **REPLACE the Sketch SKA-4 previously issued in Addendum #3 with the enclosed SKA-4 dated 9/1/09, Typical Vertical Pipe Enclosure Detail. This detail is to be used for all exposed vertical piping depending on the adjacent construction type.**

5. **ADD Sketch SKS-4: Concrete Stair Reinforcing at Gymnasium.**

6. **ADD Sketch SKS-5: Typical concrete stair/retaining wall reinforcing detail.**

7. **DELETE Sketch SKA-5. Refer to Specification Section 02791 Playground Protective Surfacing. Delete reference to "Detail A" on Drawing 11/A-06.**

8. **REPLACE detail 10 on Drawing R-1 (Addendum #1) with the attached Figure No. 1 "Fig R-1, Detail 10 revision" dated 9/3/09.**

D. CLARIFICATIONS

1. **Q:** Unit Prices 1 and 3 discuss removal of "contaminated" fill. What is the contaminant that should be included? A cost for disposal varies greatly from contaminant to contaminant.
   A: Gasoline and heating oil underground storage tanks were removed from the former Superior automotive site. Residual gasoline (benzene, toluene, ethyl benzene, xylene, and methyl tertiary-butyl ether) and heating oil (total petroleum hydrocarbons) impacts are present in the soil based on soil field screening results and the groundwater investigation completed to date.

2. **Q:** Please confirm the extent of terrazzo.
   A: No terrazzo is required.

3. **Q:** Please advise where the Exterior Insulation and Finish System is located.
   A: No EIFS is required.

4. **Q:** Closed Loop Geothermal Water System & Heat Exchanger, Specification 15999, Page 6, Part 2.4 Thermally Enhanced Cementitious Grout, Paragraph C states that the grout must have a thermal conductivity rating of 1.3 BTU/hr-ft-°F. Mix 111 is the only NJDEP approved grouting material that can be used on the project. Field testing has placed the nominal thermal conductivity rating of Mix 111 at 1.2 BTU/hr-ft-°F. Will this be acceptable since it is the only option available for thermally enhanced cementitious grout that will meet State regulations?
   A: Correct, the thermal conductivity rating of Mix 111 is 1.2 BTU/hr-ft-°F and is acceptable.

5.

Q: Closed Loop Geothermal Water System & Heat Exchanger, Specification 15999, Page 10, Part 3.3 Testing, Paragraph A stipulates pressure testing and a thermal conductivity test. A formation thermal conductivity test was previously completed for the project and was used as the basis of design for the geothermal loop system. Is the intent of this specification to test the thermal conductivity of grout, the geology, or both? Please clarify this specification since it appears to confuse the issues of pressure testing the loop system and testing the thermal conductivity of the grouting material. This issue requires added attention to detail since drilling additional boreholes does not appear to be an option given the lack of space on the site.

A: Response (CEG): Part 3.3 Testing shall be as follows:

All circuits of closed loop ground heat exchanger including main headers in vault shall be pressure tested (using the hydrostatic pressure test method II) to 130 PSI. For 24 hours the testing agency shall then drop the pressure to 80 PSI and take pressure readings as follows:

a. 5 reading at 2 minute intervals.

b. 5 reading at 4 minute intervals.

c. 6 reading at 10 minute intervals.

The testing agency shall submit graph plots of the results of the test to the Engineer.

6.

Q: Summary of work, Specification 01010, Page 4, Paragraph 16 calls for dewatering of contaminated or impacted areas and include the removal of 21,000 gallons of contaminated water. Does this include the water that will be generated by the Geothermal drilling operation? Based on the test bore report in Addendum #2, the water generated by the geothermal drilling could exceed 100 gallons per minute on each of the 70 bores that are drilled.

In addition, Section 15999, Part 1.1, Paragraph D stipulates, "The contractor shall provide proper containment, processing and disposal of the soil cuttings and purge water accumulated during the well installation in accordance with the NJDEP Soil & Liquid Disposal Regulations".

A: The contractor shall provide necessary means to provide proper containment and removal of the water generated from the geothermal drilling. All uncontaminated dewatering shall be included in the base contract. Dewatering of contaminated water in the amount of 21,000 gallons is included in the base contract. Dewatering of contaminated water over or under the 21,000 gallons shall be by unit price as descibed in the base bid documents.

This addendum shall be considered part of the Bid Documents issued in connection with the referenced project. Should information conflict with the Bid Documents, this Addendum shall supersede the relevant information in the Bid Documents.

End of Addendum No. 4

NJ Schools Development Authority **9/2/09**
Jack Coco, Project Manager

SDA
NJ SCHOOLS DEVELOPMENT AUTHORITY

Bovis
Lend Lease

Addendum No. 4

DATE: September 2, 2009

PROJECT #: Marshall Street Elementary School
Paterson, NJ
Contract #PA-0006-C03

Acknowledgement of Receipt of Addendum

Contractor must acknowledge the receipt of the Addendum by signing in the space provided below and returning via fax to 609-951-0038. Signed acknowledgement must be received prior to the Bid Due Date. Acknowledgement of the Addendum must be made in Section E.6 of the Price Proposal Submission.

_____	_____
Signature	**Print Name**
_____	_____
Company Name	**Date**

SECTION 16146
ADDRESSABLE FIXTURE LIGHTING CONTROL

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Distributed fluorescent lighting control system.

B. Related Sections:
   1. Section 16140 - Wiring Devices
   2. Section 16511 – Interior Lighting
   3. Section 16145 – Lighting Control Devices

1.2 REFERENCES

A. American National Standards Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE)
   1. C62.41-1991 – Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.

B. ASTM International (ASTM)
   1. D4674 -02a Standard Test Method for Accelerated Testing for Color Stability of Plastics Exposed to Indoor Fluorescent Lighting and Window-Filtered Daylight.

C. Canadian Standards Association (CSA).
   1. CSA C22.2 # 14 Industrial Control Equipment
   2. CSA C22.2 # 184 Solid-State Lighting Controls

D. International Electrotechnical Commission.
   1. (IEC) 801-2 Electrostatic Discharge Testing Standard.
   2. IEC/EN 60669-2-1 Switches for household and similar fixed electrical installations - electronic switches.

E. International Organization for Standardization (ISO)
   1. 9001:2000 – Quality Management Systems.

F. National Electrical Manufacturers Association (NEMA)
   1. WD1 (R2005) - General Color Requirements for Wiring Devices.

G. Underwriters Laboratories, Inc. (UL):
   1. 508 (1999) - Standard for Industrial Control Equipment.
   2. 924 (2003) - Emergency Lighting and Power Equipment
   3. 935 (2005) - Fluorescent Ballasts
   4. 1472 (1996) - Solid-State Dimming Controls.

1.3 SYSTEM DESCRIPTION

A. Central dimming control system
   1. Handheld lighting control software and programmers.
   2. Low voltage wall stations and sensors.
   3. Solid-state high frequency fluorescent dimming ballasts.

1.4 SUBMITTALS

A. Specification Conformance Document: Indicate whether the submitted equipment:
   1. Meets specification exactly as stated.
   2. Meets specification via an alternate means and indicate the specific methodology used.

B. Shop Drawings; include:
   1. Schematic of system.

C. Product Data: Catalog cut sheets with performance specifications demonstrating compliance with specified requirements.

1.5 CLOSEOUT SUBMITTALS

A. Lighting Control System Manufacturer to provide commissioning documentation that details the start-up procedure being performed including a process to follow, details on tests performed and an area that documents any test results.

1.6 QUALITY ASSURANCE

A. Manufacturer: Minimum 10 years experience in manufacture of architectural lighting controls.

B. Manufacturer's Quality System: Registered to ISO 9001:2000 Quality Standard, including in-house engineering for product design activities.

C. Lighting control system components:
   1. Listed by UL specifically for the required loads. Provide evidence of compliance upon request.

1.7 PROJECT CONDITIONS

A. Do not install equipment until following conditions can be maintained in spaces to receive equipment:
   1. Ambient temperature: 0 degrees to 40 degrees C (32 degrees to 104 degrees F).
   2. Relative humidity: Maximum 90 percent, non-condensing.
   3. Lighting control system must be protected from dust during installation.

1.8 WARRANTY

A. Ballast warranty is specified in section 16511 – Interior Lighting.

B. Provide manufacturer's warranty covering 5 years with Lutron startup on EcoSystem modules from date of purchase.

C. Provide manufacturer's Enhanced 8 Year Limited Warranty for daylight sensors, occupancy sensors, wall stations, bus supply, and infrared receivers:
   1. 8-year limited parts warranty for the replacement of defective lighting components from the date of system startup completion.
   2. 2-year Silver Level Support and Maintenance Plan that covers 100 percent parts and labor from the date of the system startup completion.

D. Provide manufacturer's full 4 year warranty covering 100 percent parts and 100 percent labor from the date of system startup completion.
   1. Silver Level Support and Maintenance Plan: includes 100 percent parts and labor coverage, 24 hours per day, 7 days per week telephone technical support, and can be renewed annually.
   2. Gold Level Support and Maintenance Plan: includes 100 percent parts and labor coverage, 24 hours per day, 7 days per week telephone technical support, annual renewal option, 72-hour on-site response time, an annual scheduled maintenance visit and an upgrade of initial 2-year Silver Level Support and Maintenance Plan to Gold Level Support and Maintenance Plan.
   3. Platinum Level Support and Maintenance Plan: includes 100 percent parts and labor coverage, 24 hours per day, 7 days per week telephone technical support, annual renewal option, 24-hour on-site response time, an annual scheduled maintenance visit and an upgrade of initial 2-year Silver Level Support and Maintenance Plan to Platinum Level Support and Maintenance Plan.

1.9 MAINTENANCE

A. Make ordering of new equipment for expansions, replacements, and spare parts available to end user.

B. Make new replacement parts available for minimum of 10 years from date of manufacture.

PART 2- PRODUCTS

2.1 MANUFACTURERS

A. Basis of design product: Lutron EcoSystem or subject to compliance and approval with specified requirements of this section, one of the following:
   1. Lutron EcoSystem or equal
   2. Wattstopper or equal
   3. Clipsal or equal

2.2 GENERAL ECOSYSTEM PERFORMANCE

A. Daylight Harvesting, Occupant Detection, and Personal Control to control lighting with the following hierarchy:
   1. Emergency (Highest priority): Ignores all other inputs.
   2. Programming: During system programming, sensor inputs are ignored.
   3. Occupant sensor: Allows lights to be on/off.

4. Daylight sensor: Imposes a high end limit for light output.
5. Personal control: Fine tune light levels up to the daylight sensor limit.

B. Response to a single sensor can be unique on fixture by fixture basis.

C. Power failure recovery – All devices return to their previous light level prior to power loss.

D. All programmable devices have integral power failure memory to maintain settings for a minimum of 10 years during power loss.

E. Wall station and sensor replacement is accomplished without programming.

2.3 ECOSYSTEM BUS SUPPLY

A. General
1. Connect without interface to:
   a. Occupancy sensors.
   b. Building management / integration contact closure outputs.
   c. Fire alarm or security system contact closures.
   d. Emergency lighting interface [Lutron LUT-ELI] listed to UL 924.
2. Supports one or two independent links of up to 64 ballasts per link.
3. Integral fault protection to prevent bus supply failure in the event of a mis-wire.
4. LED status indicators:
   a. Bus supply is powered.
   b. Bus supply operating properly.
   c. Bus communication.
   d. Emergency condition active / non-active.
5. Configuration switches:
   a. Override bus to full light output.
   b. Override bus to low end.
   c. Override bus to off.
   d. Closure inputs normally open/closed.
6. Enable/disable system programming (lockout).
7. Stores and automatically replaces settings of single-ballast replacements.

B. Field Mounted EcoSystem Bus Supply
1. Integral clip for mounting on DIN rail.

C. Wall Mounted EcoSystem Bus Supply
1. Provide digital bus power supply in a pre-assembled NEMA listed enclosure with terminal blocks listed for field wiring.

2.4 ECOSYSTEM DIMMING BALLAST AND SWITCHING MODULES

A. Product: C5-BMF-2A, C5-BMJ-16A, C5-XPJ-16A (As required for the specific application)

B. General
1. Continuous 3-Wire signal dimming to Lutron 3-Wire electronic dimming ballast.
2. Connect without interface to:
   a. Occupant sensor (motion detector).
   b. Daylight sensor.
   c. Personal control input (wall station or infrared receiver).
3. Generate digital communication commands to distribute ballast and sensor data on the digital bus.
4. If power is interrupted and subsequently returned, lights automatically return to the setting prior to power interruption.
5. Each ballast modules responds independently to:
   a. Up to 32 occupant sensors.
   b. Up to 64 personal control inputs.
   c. 2 daylight sensors.
6. Unique internal reference number visibly displayed on module cover.
7. Averages 2 independent daylight harvesting inputs internally.
8. Responds to digital load shed command
   a. Sets high end trim.
   b. Automatically scales light output proportional to load shed command.
      1) Example: If light output is at 30% and a load shed command of 10% is received, the ballast automatically sets the maximum light output at 90% and lowers current light output by 3% to 27%.
9. Electrical: Dimmer to meet limited short circuit test as defined in UL 20.
10. Provide integral fault protection to prevent ballast module failure in the event of a mis-wire.

D. 2 Amp (BMF) 3-Wire Ballast Module
1. Ballast module to integrate up to 2 amps of Lutron 3-wire electronic dimming ballast into an EcoSystem control system as a single zone.]

E. 16 Amp (BMJ) 3-Wire Ballast Module
1. Ballast module to integrate up to 16 amps of Lutron 3-wire electronic dimming ballast into an EcoSystem control system as a single zone.]

F. 16 Amp (XPJ) Switching Ballast Module
1. Module to integrate up to 16 amps of high in-rush lighting load (magnetic fluorescent ballast, electronic fluorescent ballast, HID, incandescent, magnetic low-voltage, electronic low-voltage, neon/cold cathode and motor loads) into an EcoSystem control system as a single zone.]

2.5 LOW-VOLTAGE WALL STATIONS

A. Product: EcoSystem 1B – Lutron Model CC-1BRL-WH

B. General:
1. Class 2 (low voltage).
2. Integral IR receiver for programming.

3. Immediate local LED response upon button activation to indicate that a system command has been requested.
4. Wall stations can be replaced without reprogramming.
5. Color:
   a. Match NEMA WD1, Section 2 White.
   b. Color variation in same product family: Maximum ΔE=1, CIE L*a*b color units.
   c. Visible parts: Exhibit ultraviolet color stability when tested with multiple actinic light sources as defined in ASTM D4674. Provide proof of testing upon request.

C. One Button Control
   1. Toggle on/off and master raise/lower control for group of fixtures.
   2. "Press and Hold" button programming for creating and modifying groups.

2.6 SENSORS

A. Ceiling and Wall Mount Occupancy/Vacancy Sensors
   1. Product: LOS-CDT-2000R-WH.
   2. Sensing mechanism:
      a. Dual technology:
         1) Utilize multiple segmented lens, with internal grooves to eliminate dust and residue build-up.
         2) Utilize an operating frequency of 32kHz or 40kHz that shall be crystal controlled to operate within plus or minus 0.005% tolerance.
   3. Connect directly to EcoSystem ballast and modules without the need of a power pack or other interface
   4. Sensors shall turn off or reduce lighting automatically after reasonable time delay when a room or area is vacated by the last person to occupy the space
   5. Sensor shall accommodate all conditions of space utilization and all irregular work hours and habits.
   6. Sensors shall be UL listed
   7. Sensors shall be fully adaptive and adjust their sensitivity and timing to ensure optimal lighting control for any use of the space
   8. Sensors shall have field adjustable controls for time delay and sensitivity to override any adaptive features.
   9. Power failure memory:
      a. Controls incorporate non-volatile memory. Should power be interrupted and subsequently restored, settings and learned parameters saved in protected memory shall not be lost.
   10. Provide all necessary mounting hardware and instructions.
   11. Sensors shall be Class 2 devices.
   12. Indicate viewing directions on mounting bracket for all Ceiling mount sensors.
   13. Provide customizable mask to block off unwanted viewing areas for all ceiling mounted sensors using infrared technology.
   14. Provide swivel mount base for all wall mount sensors.
   15. [Provide an internal additional isolated relay with Normally Open, Normally Closed and Common outputs for use with HVAC control, Data Logging and other control options.]

B. Sensor Power Packs
   1. For ease of mounting, installation and future service, power pack(s) shall be able to mount through a 1/2" knock-out in a standard electrical enclosure and be an integrated, self-contained unit consisting internally of an isolated load switching control relay and a transformer to provide low-voltage power. Transformer shall provide power to a minimum of three (3) sensors.
   2. Power pack shall be plenum rated
   3. Control wiring between sensors and control units shall be Class 2, 18-24 AWG, stranded U.L. Classified, PVC insulated or TEFLON jacketed cable suitable for use in plenums, where applicable

C. Infrared Receivers
   1. Use Class 2 wiring for low voltage communication
   2. Can be replaced without reprogramming
   3. 360 degree reception of wireless infrared remote controls
   4. Immediate local LED response upon reception of hand held transmitter communication
   5. Constructed with plastic meeting UL94 HB
   6. Mountable on lighting fixtures or recessed acoustical ceiling tiles
   7. Constructed via sonic welding
   8. Color:
      a. Match NEMA WD1, Section 2 White
      b. Color variation in same product family: Maximum $\Delta E=1$, CIE L*a*b color units
      c. Visible parts: Exhibit ultraviolet color stability when tested with multiple actinic light sources as defined in ASTM D4674. Provide proof of testing upon request.

D. Interior Daylight Sensors
   1. Use Class 2 wiring for low voltage communication
   2. Can be replaced without reprogramming
   3. Open-loop basis for daylight sensor control scheme
   4. Stable output over temperature from 0° to 40° C
   5. Partially shielded for accurate detection of available daylight to prevent fixture lighting and horizontal light component from skewing sensor detection
   6. Provide linear response from 0 to 500 foot-candles
   7. Integral IR receiver for programming
   8. Constructed with plastic meeting UL94 HB
   9. Mountable on lighting fixtures or recessed acoustical ceiling tiles
   10. Constructed via sonic welding
   11. Color:
      a. Match NEMA WD1, Section 2 White
      b. Color variation in same product family: Maximum $\Delta E=1$, CIE L*a*b color units
      c. Visible parts: Exhibit ultraviolet color stability when tested with multiple actinic light sources as defined in ASTM D4674. Provide proof of testing upon request.

2.7 HAND HELD PROGRAMMER

A. General

1. Wireless programming for all system settings.
2. Secured via pass code.
3. Replace ballast via serial number.
4. Only operates as a lighting control device.
5. Non-volatile memory stores lighting control software for minimum of 10 years for power loss.
6. Stores not system specific configuration settings

2.8 POWER INTERFACES

A. Product: PHPM-WBX-DV-WH.

B. Electrical:
1. Phase independent of control input.
2. Dimmer to meet limited short circuit test as defined in UL 20.

C. Diagnostics and Service: Replacing power interface does not require re-programming of system or processor.

2.9 ACCESSORIES

A. Infrared Transmitters:
1. Provide wireless remote control capable of recalling "on" plus "off", one favorite scene, and of fine-tuning light levels with master raise/lower.
2. Designed for use in conjunction with compatible infrared receiver and lighting control; dependent on that receiver, not transmitter.
3. Operate up to 25 feet (7.5 meters) within line-of-sight to that receiver.
4. "Learnable" by other variable frequency remote controls.

2.10 SOURCE QUALITY CONTROL

A. Perform full-function testing on all completed assemblies at end of line. Statistical sampling is not acceptable.

B. Diagnostics and Service – Tiered control scheme for dealing with component failure that minimizes loss of control for occupant.
1. Bus failure: Lights go to emergency level for safety.
2. Failure of one sensor type: Ballast still controllable via other sensors.
3. Ballast failure: Only impacts one fixture – remainder of system operates as programmed.

PART 3- EXECUTION

3.1 INSTALLATION

A. Install equipment in accordance with manufacturer's installation instructions.

B. Provide complete installation of system in accordance with Contract Documents.

C. Provide equipment at locations and in quantities indicated on Drawings. Provide any additional equipment required to provide control intent.

D. Ensure that daylight sensor placement minimizes sensors view of electric light sources; ceiling mounted and fixture-mounted daylight sensors shall not have direct view of luminaries.

E. Systems Integration:
   1. Equipment Integration Meeting Visit
      a. Facility Representative to coordinate meeting between Facility Representative, Lighting Control System Manufacturer and other related equipment manufacturers to discuss equipment and integration procedures.]

3.2 STARTUP AND PROGRAMMING

A. Provide factory-certified field service engineer to ensure proper system installation and operation under following parameters:
   1. Qualifications for factory-certified field service engineer:
      a. Minimum experience of 2 years training in the electrical/electronic field.
      b. Certified by the equipment manufacturer on the system installed.
   2. Site visit activities:
      a. Verify connection of power feeds and load circuits.
      b. Verify connection of controls.
      c. Verify system operation control by control, circuit by circuit.
      d. Obtain sign-off on system functions.
      e. Demonstrate and educate Owner's representative on system capabilities, operation and maintenance

B. Tech Support
   1. Provide factory direct technical support hotline 24 hours per day, 7 days per week.

C. After Hours Start-up
   1. Provide factory certified Field Service Engineer to perform manufacturer's start-up procedures outside normal working hours (Monday through Friday, 7a.m. to 5 p.m.)]

3.3 FIELD QUALITY CONTROL

A. Manufacturer Services
   1. Aim and Focus
      a. Facility Representative to coordinate on-site meeting with Lighting Control System Manufacturer and Lighting Design Consultant to make required lighting adjustments to the system for conformance with the Lighting Design Consultant's original design intent.]

3.4 CLOSEOUT ACTIVITIES

A. Training Visit

1. Lighting Control System Manufacturer to provide 1 day additional on-site system training to site personnel.

B. On-site Walkthrough
   1. Lighting Control System Manufacturer to provide a factory certified Field Service Engineer to demonstrate system functionality to the Commissioning Agent.

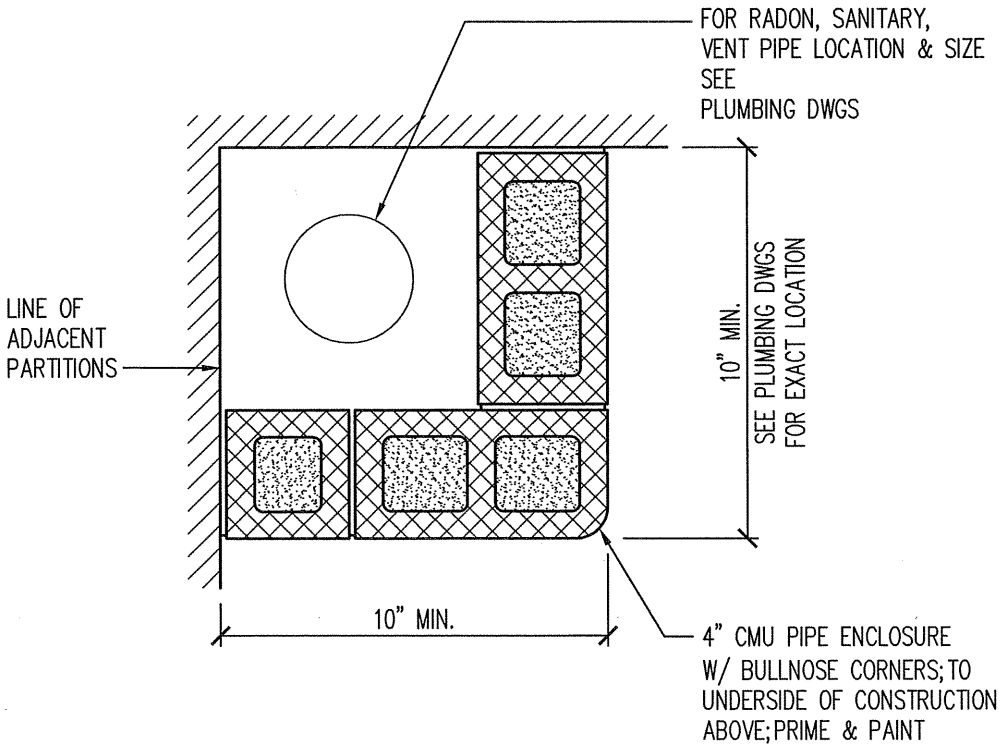
3.5 MAINTENANCE

A. Capable of providing on-site service support within 24 hours anywhere in continental United States and within 72 hours worldwide except where special visas are required.

B. Offer renewable service contract on yearly basis, to include parts, factory labor, and annual training visits. Make service contracts available up to ten years after date of system startup.

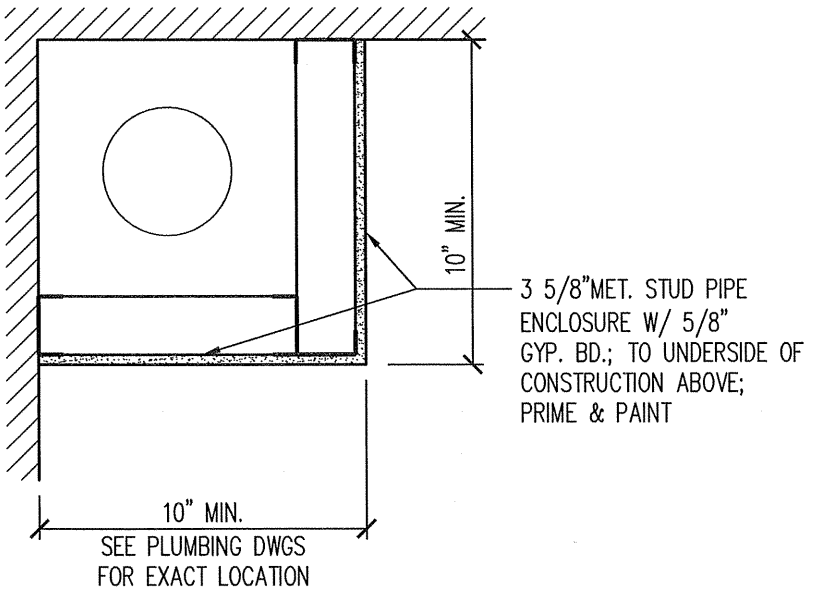
C. System Optimization Visit
   1. Lighting Control System Manufacturer to visit site 6 months after system start-up to evaluate system usage and discuss opportunities to make efficiency improvements that will fit with the current use of the facility.

END OF SECTION



4 | PLAN DETAIL

SCALE: 1" = 1'-0"



5 | PLAN DETAIL

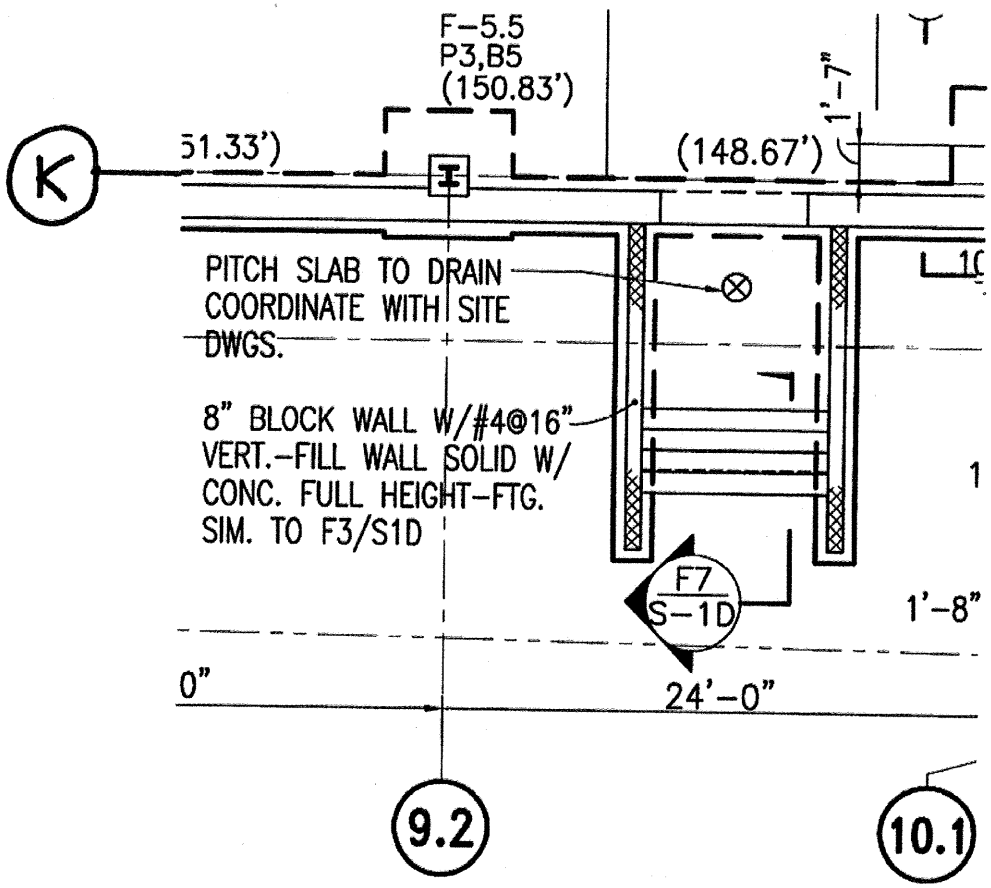
SCALE: 1" = 1'-0"

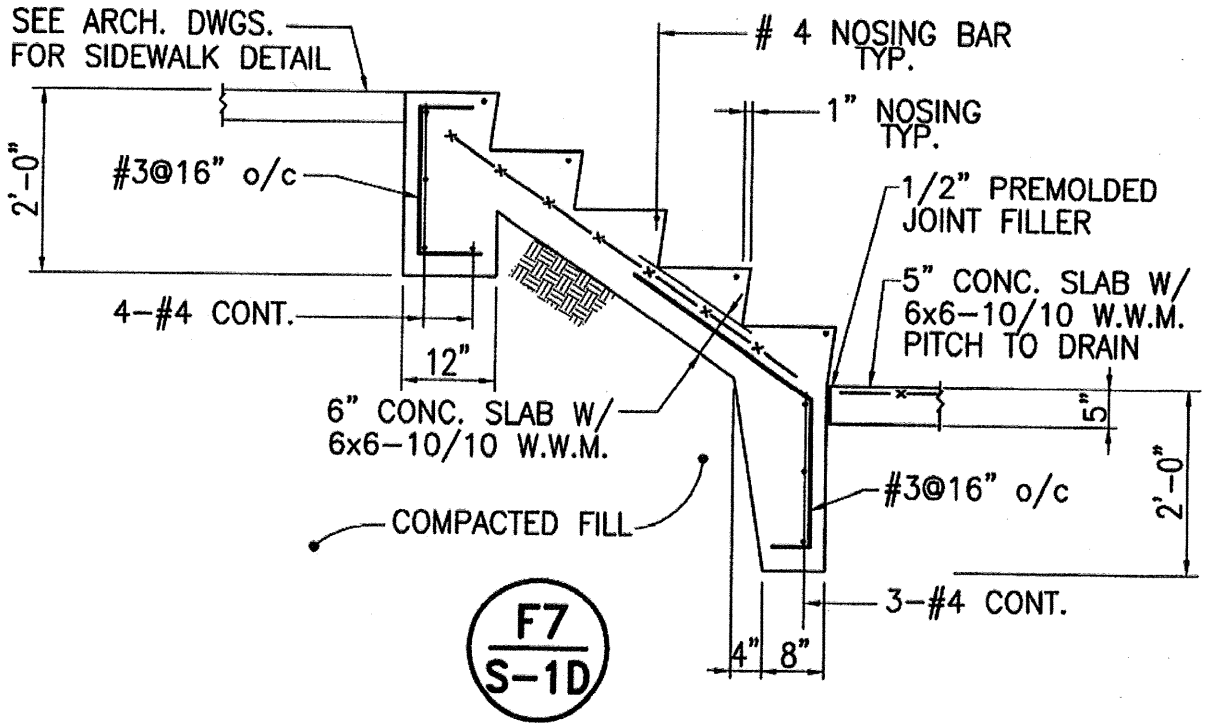
DesignIdeasGroup
architecture + planning, llc

15 Bethany Street
New Brunswick, NJ 08901
T: 732.249.6242 F: 732.247.1825

60 West Broad Street
Bethlehem, PA 18018
T: 610.807.0420 F: 610.807.0602

Project:	Project no.:	Chkd. by:	Date:
MARSHALL STREET ELEMENTARY SCHOOL PATERSON, NJ	2003-007	CC	09/01/09
Owner: NJ SDA WEST STATE STREET TRENTON,NJ	**Scale:** 1"=1'-0"	**Dwn. by:** BH	**Dwg. No.:** **SKA-4** ADDENDUM #4





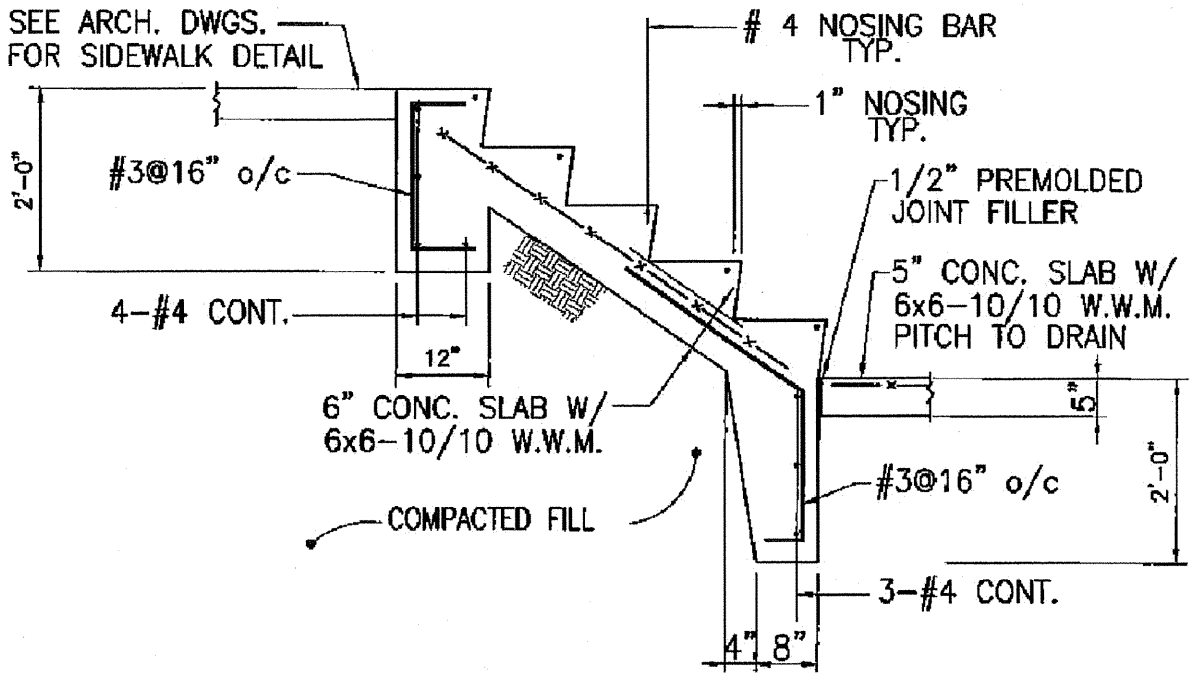
SCALE: NOT TO SCALE

DesignIdeasGroup
architecture + planning, llc

15 Bethany Street
New Brunswick, NJ 08901
T: 732.249.6242 F: 732.247.1825

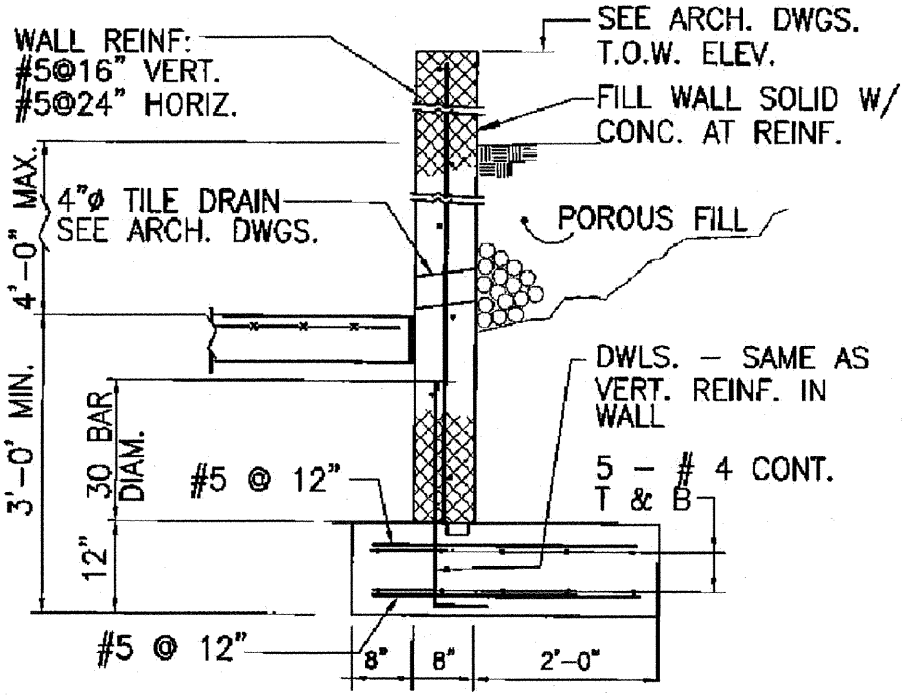
60 West Broad Street
Bethlehem, PA 18018
T: 610.807.0420 F: 610.807.0602

Project: MARSHALL STREET ELEMENTARY SCHOOL PATERSON, NJ	Project no.: 2003-007	Chkd. by: NB	Date: 09/01/09
Owner: NJ SDA WEST STATE STREET TRENTON,NJ	Scale: 1 1/2"=1'-0"	Dwn. by: BH	Dwg. No.: **SKS-4** ADDENDUM #4



TYPICAL EXTERIOR CONCRETE STAIR DETAIL

CO-ORDINATE EXACT LOCATION W/ ARCH. DWGS.



TYPICAL EXTERIOR PLANTER WALL DETAIL

CO-ORDINATE EXACT LOCATION W/ ARCH. DWGS.

8-28-09

SCALE: NOT TO SCALE

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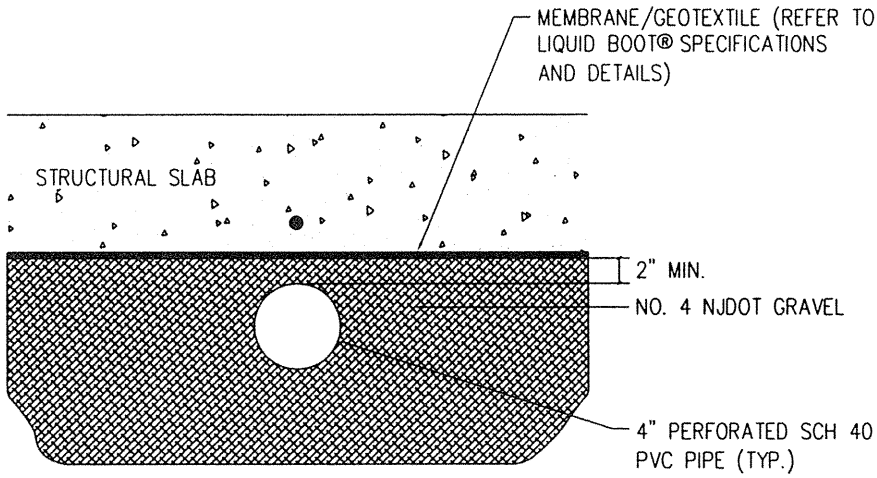
Project: MARSHALL STREET ELEMENTARY SCHOOL PATERSON, NJ	Project no.: 2003-007	Chkd. by: NB	Date: 09/01/09
Owner: NJ SDA WEST STATE STREET TRENTON,NJ	Scale: 1 1/2"=1'-0"	Dwn. by: BH	Dwg. No.: **SKS-5** ADDENDUM #4



10/R-1 VENTILATION SYSTEM DETAIL

WHITMAN CERTIFICATE OF AUTHORIZATION No. 24GA28009500	MARSHALL ST. ELEMENTARY SCHOOL PROJECT CITY OF PATERSON PASSAIC COUNTY, NEW JERSEY	
	FIG R-1, DETAIL 10 REVISION	
PROJECT MANAGER: B.S.	DRAWN BY: M.S.	PROJECT NO: 07-01-39TL
CHECKED BY: B.S.	DATE: 9/3/2009	FIGURE NO: 1