

GOVERNOR

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

> November 13, 2009 Subject: **Trenton, Acadia Welcome Center** Federal Project No: 16123.50 State Pin No: 016123.50 **Amendment No. 7**

DAVID A. COLE COMMISSIONER

Dear Sir/Ms:

NOTE: All questions concerning this project <u>MUST</u> be faxed to 624-3431 in accordance with the "Notice To Contractors". This is the only method by which questions may be submitted.

Make the following changes to the Bid Documents:

In the Bid Book (page 1), "NOTICE TO CONTRACTORS" **CHANGE** the bid opening date from November 18, 2009 (changed in Amendment #3) to read "<u>November 25,</u> <u>2009</u>". Make this change in pen and ink.

In the Bid Book (page 1), "NOTICE TO CONTRACTORS", in the paragraph that begins "For general information regarding Bidding and …", **CHANGE** the fifth sentence to read as follows; "Questions received after 12:00 noon on Monday November 16, 2009 will not be answered." Make this change in pen and ink.

IN THE SPECIFICATIONS:

A. Section 08 45 23, make the following changes:

Delete Paragraph 2.03 A. 2. a.: Add new Paragraph 2.03 A. 2. a. as follows:

2.03 PANEL COMPONENTS

- A. Face Sheets
 - 2. Flammability of interior face sheets:
 - a. Flamespread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flamespread rating no greater than 50 and smoke developed no greater than 250 when tested in accordance with UL 723.

Delete Paragraph 2.03 A. 4. a.: Add new Paragraph 2.03 A. 4. a. as follows:

4. Appearance:



a. Exterior face sheets: Smooth, 0.070" thick and translucent **crystal** in color.

Delete Paragraph 2.03 A. 5. Add new Paragraph 2.03 A.5. as follows:

5. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact equal to 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, 5 lb. free-falling ball per UL 972.

Delete Paragraph 2.04 A. 2 - 4. Add new Paragraph 2.04 A. 2 - 4 as follows:

- 2. Light transmission: 23%
- 3. Solar heat gain coefficient: .20.
- 4. Complete insulated panel system shall have NFRC certified U- factor of .30.

Delete Paragraph 2.04 E. Add new Paragraph 2.04 E. as follows:

E. Skylight system shall pass Class A Roof Burning Brand Test by ASTM E-108.

Delete Paragraph 2.05 B. Add new Paragraph 2.05 B. as follows:

B. Finish: Exposed aluminum to be manufacturer's factory applied finish that meets the performance requirements of AAMA 2606 (Fluoropolymer)

At the end of the specifications (after page 1300), **ADD** the attached "ACADIA GATEWAY, LEED NC 2.2", 5 pages undated.

ON PLAN SHEETS:

- A. **DRAWING ES-102**: **DELETE** Key Note #1 in its entirety. **ADD** its place, Key Note #1 as follows: "Underground primary electrical wiring furnished and installed by Bangor Hydro Electric. Conduits furnished and installed by Division 26."
- B. **DRAWING ES-102**: **DELETE** Key Note #2 in its entirety. **ADD** its place, Key Note #2 as follows: "Coordinate termination location and schedule with Telephone/CATV company and the Route 3 roadwork Contractor."
- C. **DRAWING ES-102**: **DELETE** Key Note #4 in its entirety. **ADD** its place, Key Note #4 as follows: "Coordinate termination location and schedule with Bangor Hydro Electric Company and the Route 3 roadwork Contractor."

- D. DRAWING ES-102: DELETE Key Note #5 in its entirety. ADD its place, Key Note #5 as follows: "Provide 1" conduit to handhole for future roadway sign. Coordinate Electrical work impact by Route 3 project with Route 3 roadwork Contractor. Refer to Drawing C-10 for matchline indicating limit of Route 3.
- E. At the end of the plans, **ADD** the attached drawings, Figure No. CSK-2, titled "Utility Protection Bollards", 2 pages.

PREVIOUSLY NOTED ITEMS:

<u>RFI #9</u>

Question: Section 096500 Resilient Flooring 2.02 Specifies Dodge-Regupol rubber flooring. The finish Schedule on Drawing AS.OJ specifies RU8TL-Ol as Rappe ESD and RUBTL-02as Centiva. Please clarify.

Response: Refer to drawing A8.01 – changes to RUBTL-01 and RUBTL-02, issued with Amendment #2; also refer to additional changes to A8.01, updated as part of Amendment 4.

<u>RFI #95</u>

Question #1: Regarding Seeding Items 618.1401and 618.143 and the Special Provision Item 717.03; The Special Provision does not clearly state which seed mix is to be used for which pay Item. Please note which seed pay item is used for each seed mix.

Response: 618.1401 is Method 2 618.143 is Special Provision 717.03, Acadia Meadow Mix

Question #2: Also, the Special Provision states that mulching (with fiber) shall be incidental to the seeding pay item, yet item 619.1201 for mulching is noted with a quantity. Please clarify if mulching will be paid for separately or as an incidental to the seeding item.

Response: For 618.1401 Method 2 mulching will be a separate pay item For 618.143 Special Provision 717.03 Acadia Meadow Mix mulching is incidental.

Question #3: The *Acadia Meadow Mix* cost is also considerably more than both the #2 *Mix* and the *Special Grass Seed Mix*. Could you please pay for both of these mixes under different special seed mix pay items and not confuse this issue of substitution?

Response: 618.143 will be for Special Provision 717.03 Acadia Meadow Mix. The use of no Method 3 mix is anticipated.

Question #4: Regarding Planting items, 621.;There are several species of Cornus noted on plans that are not listed in the pay items list. They are

- Cornus ammomum 36 ea 18-24"
- Cornus sericea 143 ea 18-24"

- Cornus flaviramea 48 ea 15-18"
- There are 12 Amelanchier tree form, but the pay item noted them as 6-8" clump form
- There is also a discrepancy of 1 Betula nigra, 6-8' single stem

Response: The Schedule of Items will take precedence over the plan and plan lists.

Question #5:Could you please clarify which takes precedence, the landscape plan, the Plant list on the plan, or Schedule of items.

Response: The Schedule of Items will take precedence.

<u>RFI # 112</u>

Question#4: In Section 084523 101B, where are the details that show this option #2?

Response: see RFI 122 response to question 6 in amendment 6

<u>RFI #119</u>

Question: There is a conundrum in the bidding requirements for the mobile lifting system. The base bid specifies a Mobile 4 Post System made by Rotary Lift. Option 5 is for a similar lifting system made by Maha. Pricing for Option 5 is to be an increase or decrease from the base bid for the Rotary Lift. The problem is that the Rotary Lift is included in the Division 11 Equipment Allowance. Since the Rotary Lift is not bid, how do bidders show an increase or decrease in the price for the Maha Lift?

Response: The equipment is an allowance not in the Base bid and the alternate lift is an option. The cost change will only be selected if the option to the equipment allowance is selected.

THE FOLLOWING QUESTIONS HAVE BEEN RECEIVED:

<u>RFI 120</u>

Question: Drawings show a 2 $\frac{1}{2}$ " x ??" curtainwall on exterior elevations. This project has no curtainwall specifications. Interior elevations show 1 $\frac{3}{4}$ " x 4 $\frac{1}{2}$ " storefront which is not in the Aluminum Entrances and Storefront specification. Basis of design is a 2" x 4 $\frac{1}{2}$ " thermally broken storefront which is not on the drawings. Are we safe to assume that you're looking for a 2" x 4 $\frac{1}{2}$ " thermally broken system as specified on the exterior and a 1 $\frac{3}{4}$ " x 4 $\frac{1}{2}$ " non-thermally broken system on the interior? If not, could you please provide a curtainwall specification?

Response: Basis of design is a 2" x 4 ¹/₂ thermally broken storefront for all storefront components. There are no curtain walls required.

<u>RFI 121</u>

Question: RFI #58 – Response Request. Morin Corp wall panel info product cut sheets & finishes for substitution request.

Response: Item will be addressed in future amendment

<u>RFI 122</u>

Question: Amendment #2 called for Ultima 1911 HRC 24"x 24"x ³/₄. (refer to page 6 of 24) If we take the Armstrong book, Ultima 1911 HRC is a 24" x 48" tile and Ultima 1912 HRC is a 24" x 24" tile. Please provide which we are to supplt.

Response: Item will be addressed in future amendment

<u>RFI 123</u>

Question: Regarding Seeding Items 618.1401 and 618.143 and Special Provision Item 717.03. The Special Provision does not clearly state which seed mix is to be used for which pay item. Please note which seed pay item is used for each seed mix.

Response: Item will be addressed in future amendment

<u>RFI 124</u>

Question: LP-100 doesn't indicate lighting protection for the following: Should we add lightning protection per these details?

- a. Detail F7 for seven exhaust fans and five gravity roof vents
- b. Detail D7 for four condensing units
- c. detail F9 for two thru roof vents

Response: Lightning protection per the details for the equipment listed above is required by the Contract Documents if the items are not located within a zone of protection or are located higher than adjacent air terminals.

<u>RFI 125</u>

Question 1:Specification section 074100/ 2.01 (A) requires 40% post consumer recycled content for the metal panels. The specified Centria panels contain "an average post-consumer recycled content of 23.5% per Centria's Concept Series Product data sheet. Is this still acceptable?

Response: Yes. Total recycled content is about 30% (23.5% postconsumer and 6.4% is post industrial). This will provide a significant contribution to total recycled content requirements in the project. This is an acceptable Product

Question 2: Question not recognized in addendum. Will owner accept the building earlier than the October 2011 Completion date

Response: See response to RFI 81 Question 1

Question 3: Specification section 033000 p/2.13/(M) references Synthetic fiber. Where if at all is this product used?

Response: All interior slabs on-grade and elevated slabs are to receive Synthetic fiber

Question 4: Specification section 033000 /1.10 (D) References Water and oil repellent. Where if at all is this to be used.

Response: Rooms: 124, 125, 126, and 133 through 140 inclusive are to receive water and Oil repellent.

<u>RFI #126</u>

Question 1: Is it our understanding that all equipment operators will be paid the higher wage rate while working on any operation on the building (North West) side of the match line depicted on C-101. If this is true, it will substantially increase cost of the site work package for the building. Where typically the wage rates only apply for equipment operators working within 5 ft of the building as was in the original scope of work. Should the operators' wages only be at the higher rate when working within 5 ft of the building? Please advise.

Response: See response to RFI 77 in this amendment

Question2: In Addendum No. 2 RFI #17 states that the retaining wall shall be carried under item 0830 Div. 31 Earthwork, however, the specifications call for it under Div. 32 Exterior Improvements. Please clarify.

Response: The cost for the Retaining wall should be carried under Division 32

Question 3: It is understood that the electrical on the building (North West) side of the matchline is to be covered under the appropriate divisions. There is a good deal of electrical and utility work along the roadway leading onto the site. Should this be covered under the divisions or should there be a MDOT line item for the sight lights, conduit, etc. along the roadway?

Response: See RFI Question #2 in Amendment #4.

<u>RFI #127</u>

Question: A 2.05 indicates six light fixtures for fuel island, but EP-100 indicate only four fixtures. Which is correct?

Response: The light fixtures shall be located as indicated on Drawing **EP-100.**

<u>RFI #128</u>

Question: I have not found any reference to insurance requirements of this project. Is the Contractor expected to carry the cost of a Builder Risk Policy? If so, then will it be for the entire cost or can the site work be removed?

Response: Insurance requirements can be found in Section 110 of the Standard Specification.

<u>RFI #129</u>

Question 1: I have a question regarding Division 10, Section 102113. In paragraph 2.02 manufacturers of toilet compartments you specify Bradley, Scranton, or approved equal. We would like to know if you would accept General Partitions as an approved equal?

Response: *General Partitions* is allowed as an approved equal. However, please submit a substitution request form for any toilet partition products you wish to submit that meet or exceed the specification requirements included in Section 10 21 13.

Question 2: Another question regarding Section 102813. If I understand Addendum 6, you would now like the contractor to furnish the toilet tissue dispensers, and the paper towel dispenser/waste receptacles.

Response: Basis of Design Product: Bobrick model B-6999 Surface-Mounted dispenser, or equal

<u>RFI #130</u>

Question: #1: Furniture. Confirming that all in Section 123200 is included in the Allowance.

Response: All furniture is included in the ALLOWANCE.

Question #2: A7.30. New plan in Amendment 2 not listed in that document.

Response: A7.30 (Revised 10/15/09) should have been listed in Amendment 2. It clarifies details of "Plyboo" wood paneling, a bamboo plywood product.

Question #3: A8.05. Louver L3 indicates framing details: LH2, LJ2, and LS2. These are not included on A4.33.

Response: Response: Head, jamb and sill details for L3 are same as L1 and L2, as shown on A4.09.

Question #4: Pipe Bollards. Bollards on 3/A204 show 12" but 10" on E7/SF504.

Response: Refer to response to RFI #75, question 4 - 10" diameter bollards shall be provided

Question #5: Section 260943. Amendment 4-Item H: this deleted manufacturers – any replacements?

Response: Intent was to delete Paragraph 2.1 (B) but not the subparagraphs 1 through 7 that will become sub-paragraphs of 2.1(A).

Question #6: RFI #29-Question 14: this referred back to our #32 – original #32 stated there was no raft copy of the LEED form in the specifications as stated in Sec. 018113 1.2A3.

Response: Summary sheet is attached herein.

Question #7: RFI #64 – Question #3: Your explanation is in conflict with your response to RFI 29 #13 (our RFI #48). It should be determined by the owner/design team if a temporary pole line can be installed. If the answer is yes, it needs to be located on the plans since this site is heavily impacted by DEP and other permitting bodies. The use of a temporary pole line along Old Turnpike Road is outside the limits of construction. Also, 015000 3.3B&C state clearly that the temporary road must remain within the construction limits which means it comes in the same as the permanent road.

Response: We see no conflict. Both questions stand as answered.

Question #8: PB -2e: If testing is left up to the GC to include, either the taxpayer will pay for the inflated testing \$ to be included by the GC or the GC will be hurt because he did not include enough \$. All our projects of significant scope include a testing allowance as a means of fairness to both the owner and the contractor.

Response: See Amendment #4, PB-2e response.

Question #9: PB-2g: response stated no change in cutoff date for submitting questions for amendments. At the prebid meeting, the response to my question was realization the

date needed to be pushed back. Notice to Contractors state that is the Monday 12:00 noon before the bid. Obviously from experience with this project, that date must be pushed back to the previous week in order for the owner/design team to respond and get the information to all the bidders (including plans) by at least the Friday before the bid date.

Response: Question date cutoff has been changed.

Question #10: RFE #29-Question 15: response to our RFI #50 states entire project for this OJT line item but Item Description 660.21 is covered in the DOT Standard Specifications that the earthwork contractors are using as a basis of bidding.

Response: The general contractor will carry OJT accounting for the general contractor and their subcontractors.

Question #11:Page 19, RFI #55: you are clear that AISC is required for the manufacturer. Confirming that per 051200 1.6B, the erector is also required to be AISC certified. We strongly recommend this requirement for quality control.

Response: The specification states it is a requirement.

Question #12: Amendment 3 was clear that there must be a Highway prequalified subcontractor for this project. Are we to use the list dated 10/21/09 or will this be revised?

Response: The website is updated as new contractors are added or removed for *General* prequalification. *Project Specific* prequalifications are not listed on the web page. Subcontractors qualified specifically for this project will have a letter from the DOT showing this.

<u>RFI #131</u>

Question: Our Substitution Request Form and enclosures follow regarding translucent daylighting for the above captioned project

Response: Proposed substitution request is accepted

RFI #132

Question: 042000-2.03, B states that exterior walls shall be random coursing to simulate random Ashlar stone as exterior wall base band. The drawings show exterior CMU to be laid in running bond. Your response in Addendum #6 was that Ashlar Pattern shall be provided as specified in noted section. In order for everyone to be pricing the same thing we need to be provided with a 32 square foot repeating pattern layout using the specified Split Faced CMU.

Response: Please provide random coursing as stated in 04 20 00 – 2.03. For pricing use 4" x 8" x 16" Split Faced CMU for 50% of required quantities; use 4" x 8" x 8" (cut blocks) for 25% of required quantities; use 4" x 8" x 12" (cut blocks) for remaining 25% of required quantities

RFI #133

Question: Request for Substitution for bus wash

Response: Yes, based upon conversation with provided reference and review of submitted materials, Hydro-Chem Systems, Inc. is an approved manufacturer for the bus wash system. The system shall meet the specified intent for layout, configuration, versatility, etc.

<u>RFI #134</u>

Question 1: In Amendment #6, the response to RFI #84 reads like the pavement quantities in Bid Item #0070, 0080, 0090 will be used to do the paving for the building site area. Is this correct or does the building paving fall under the pricing for Div. 32?

Response: Yes. It is correct.

Question 2: If the response to RFI #84 is correct, this brings up the question as to whether the Bid Items #0200 & 0210 Granite Curbing are to be used for building site area curbing.

Response: Bid Items #0200 & 0210 Granite Curbing are also to be used for building site area curbing.

<u>RFI #135</u>

Question 1: Can the manufacture of the canopy use Bolted connections vs. the field welded spec'd? The concern with welding these areas is the galvanized steel will need to be cleaned and the galvanized paint brushed on. A bolt thru connection would be a cleaner and faster application.

Response: No, please use welded connections as shown

Question 2: Who will be providing the roof system for the Kiosk?

Response: Section 076100 includes metal standing seam roofing system. If you mean Bus Shelter refer to drawing A2.06, details 4, 5, 6,

10 and 12. If you mean Fueling Station refer to drawings A2.04 'Fuel Station Notes, details 3 and 4; and A2.05 details 2, 3, 5 and 6.

Question 3: Who will provide and install the Backer Plates onto the building where the awning braces will be secured?

Response: Division 5 Metals section 055000 Metal Fabrications

<u>RFI #136</u>

Question: Reference question #10 on Amendment #5 and Response. Please confirm use of 8" Glazed units, Glazed on 2 sides. Please note Manufacturers installation instructions. Recommend not using double faced Glazed units.

Response: Yes, 8" double f where 2-sided glazed units must be reinforced as bearing walls, block shall be installed aligning one side side facing bus wash or maintenance bays; second side alignment facing service rooms is less critical.

<u>RFI #137</u>

Question: Will ThyssenKrupp Elevator be considered an approved equal manufacturer?

Response: Yes

RFI #138

Question:#1 Addendum #6 allows for early completion date if all contractual obligations are met. If the building is accepted by the owner for an early completion , will owner assume thew cost for the permanment utilities and building insurance at that time.

Response: Yes.

Question #2: Addendum #6 page 14 RFI #73 Question 1 is asking weather or not the general contractor is required to carry builders risk insurance for the duration of the project. The answer refers to a maintenance bond. Please clarify General Contractor or owner to provide builders risk insurance

Response: Builders risk insurance is not required.

<u>RFI #139</u>

Question#1: The Radon Piping is shown in plan view on Sheet No. SB-102 and Section Views/Details on Sheet No. SB-500. What are the elevations of the piping system, the

pipe size, and the bedding material? Is the system active or passive? The specifications are missing (they were not included in with the site or the plumbing specifications).

Response: As noted on SB-102, the horizontal piping shall be 4" diameter. Risers shall be sized at 6" diameter. Run pipes at 6" below slab, with 6" stone bedding all around. This system is passive. Fans, although not in this contract, will be added in the future if testing indicates the need.

Question#2: What is the frost depth for this project? On Sheet No. SB-500 and Detail A7it shows the frost depth as 4'-6". In the specifications for Excavation 312316it states "at least 5.0 ft . below the lowest adjacent exterior grade for frost protection." In the Geotechnical Evaluation , under Foundation Depth "The depth of frost penetration is estimated to be about 5 Ft." and "...should be placed at least 5 feet below..."

Response: Assume frost depth @5'

Question#3: What type of paint products do you want on the exterior eMU walls at the Fueling Station? Nothing is addressed in the Exterior Paint Schedule in the Painting Specifications.

Response: Use Waterborne Acrylic Epoxy finish, such as Tnemec, HB Tnemec-Tufcoat, Series 113., with Tnemec, Envirofill, Series 130 primer. Please refer to Section 09 91 00, Paragraph 3.08 C for paint specification.

Question#4: The yellow parking lines for the buses shown on Sheet No. A6 .11 refer to the specifications. Do we use the Section 321723.13 Painted Pavement Marking, from the Site specifications for the interior of the building?

Response:YES

Question#5: In the specifications under Gypsum Board Systems the only types listed were the Georgia Pacific Tough rock and Type X, for fire-rated assemblies. The Partition Types shown on Sheet A8.02 do not list the Tough rock on any of the interior partitions. Does the entire project require the abuse resistant sheetrock, or should it be used only in certain areas, or not at al 1?

Response: Yes, use 'Toughrock' or equal throughout unless for firerated assemblies

Question#6: Is there a White Board on the South wall in the Maintenance Office, Room132? If so what size is it?

Response: Yes there is a White Board in Room 132. Provide 4' x 8' White Board as per Specifications.

Question#7: On Sheet No. A7.04, Bus Garage First Floor Plan, on the AD Line between A.2 and A.3 there is a 4'H x 5'W Bulletin Board. On the Sheet A7.27 and building section view "2 Building Section - Lift Bays ", the Bulletin Board is not shown. Is one required and what is the specification?

Response: Delete Bulletin Board shown in Lift Bays.

Question#8: There are no bollards or fencing shown around your 18,000 Gallon LP Tank. Do you require any protection around this tank?

Response: Yes, tank requires bollards and fencing. Bollard location and installation detail are depicted on CSK2 attached in this amendment. Refer to Sheet A1.01 for extent of fencing. Refer to Civil Drawings for additional details

Question#9: The Chain Link Fence Door & Partition to the Parts Storage Room 125 are not listed in the specifications. What type of fence material, and what size is the pipe in both the horizontal and vertical directions?

Response: See extent of chain link fence on sheet A7.03 (Floor to Deck). See door Type 6 on A8.04. Use 2" minimum diam. round galvanized pipe, commercial-grade; fencing: use steel wire fabric with metallic-coated wire having a diameter of 0.192 inch.; mesh size 2". Use manufacturer's standard mounting hardware and fasteners. Verify all dimensions in field.

Question#10: The Foundation Plan shown on Sheet No. 38-101 shows the floor slab control joints. The Foundation Notes on Sheet No. S-000 states that the slab control joints to not exceed 12'-0" on-center in both directions. Therefore, should there be a control joint along the AB line from A1 to A7?

Response: Please read the entire note :unless otherwise noted control joint shall be spaced.....

<u>RFI #140</u>

Question: How will trench ledge and open (mass) ledge be paid for when encountered on the building site?

Response: Item will be addressed in future amendment

<u>RFI #141</u>

Question: How will unsuitable subgrade material that needs to be replaced be paid for 312316, 3.3C.

Response: Item will be addressed in future amendment

<u>RFI #142</u>

Question #1: Please clarify the primer requirements for the structural steel when it leaves the fabrication shop.

A. Comply with Division 09

B. SSPC-Paint 25, Type II, zinc oxide, alkyd, linseed oil primer. Since Section 099100.3.01A refers back to Structural Steel, is it correct to assume that the structural steel will leave the fabrication shop primed with a product complying with 051200.2.3.B?

Response: Use B

Question #2: Please verify the roof framing at the Fuel Station Canopy. There are additional members shown on Architectural drawing A2.05 that are not shown on structural drawing SF-504. There are also a few differing tube sizes shown between the two drawings.

Response: Per Amendment#2, RFI#18: Use structural Drawings for framing requirements at Bus Fueling Station and Bus Shelter.

Question #3: Please verify the Bus Shelter Framing. Many dimensions, configurations and tube sizes disagree between structural drawing SF-504 and architectural drawing A2.06.

Response: Per Amendment#2, RFI#18: Use structural Drawings for framing requirements at Bus Fueling Station and Bus Shelter.

<u>RFI #143</u>

Question: Line No. 0110,509.20 aluminum alloy structural plate arch, plans call for headwall but there is no detail or information on Plan C-2 requiring headwalls. Are the headwalls included in the work for item 509.20 and what are they made of?

Response: Item will be addressed in future amendment

<u>RFI #144</u>

Question: Div. 31 Earthworks, Section 312316.26 Rock Removal, Paragraph 1.4A says payment will be in Div/Unit prices. Could you clarify? I could not find anything in Div. 1 or Amendments to date, and will those be a quantity to base bid on? There is very little Geo-tech information at the employee parking/retaining wall area to go on, and cuts to subgrade elevations and for storm drain lines could be substantial.

Response: Item will be addressed in future amendment

<u>RFI #145</u>

Question: Section 312316.28 in the Volume 2 specifications states that rock removal will be handled on unit price, yet there is no unit price item for rock on the building site. There is no indication that rock is incidental to the site either. This is an item of major importance. We feel that there is not enough geotechnical information to fairly quantify rock. Unit prices should apply for the building site.

Response: Item will be addressed in future amendment

<u>RFI #146</u>

Question: Request for Substitution for PSiSC toilet partitions.

Response: Item will be addressed in future amendment

<u>RFI #147</u>

Question #1: Section 03 3000: What product is to be used for the concrete floor hardener?

Response: Item will be addressed in future amendment

Question #2: Bike Rack : see no specifications.

Response: Item will be addressed in future amendment

Question #3: 033000-3.170: Verify that floor and slab flatness and levelness will be measured. This is very expensive testing and usually seen only on highly critical floor areas that require flatness. It would appear this type of project does not have that degree of need.

Response: Item will be addressed in future amendment

Consider these changes and information prior to submitting your bid on **November** <u>25</u>, 2009.

Sincerely,

Rei Al FOR

Scott Bickford Contracts & Specifications Engineer



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ACADIA GATEWAY LEED NC 2.2 LEED NC 2.2 LEED Credit Summary & Strategies Issued: January 22, 2009 Revisions: February 11, 2009; February 26, 2000; March 20, 2000; April 10, 2000; May 8, 2009; May 13, 2009 386 Fore Street **suite 401** Portland, Maine 04101 207.347.5066 fax 207.347.6039 www.fore-solutions.com
 Architect (AECOM) AECOM Architects

 MEP Engineer - (AEI-M) Allied Engineering

 Structural (AEI) Allied Engineering

 Electrical (AEI-E) Allied Engineering

 Civil (GP) Gorrill Palmer

 Contractor (TBD) TBD

 LEED Consultant - (FS) Fore Solutions
 Commissioning - (Cx) Allied Engineering

 Owner (MDOT) Maine DOT

Ye	s ?	No			LEED Intent and Requirements Summary	Standard	LEED Strategy	Responsibility
9		5			Sustainable Sites			
				~				
ľ				D/C	SS Prereq 1: Construction Activity Pollution Prevention Create and Erosion and Sedimentation Control Plan (ESC) for all construction activities according to the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent. The plan shall prevent: 1. soil loss during construction by stormwater runoff 2. wind erosion including protecting topsoil by stockpiling for reuse 3. sedimentation of storm sewer/ receiving stream 4. polluting the air with dust/particulate matter.	2003 EPA Construction general permit OR Local erosion and sedimentation control standards and codes, whichever is more stringent	Need Civil drawings and ESC plan noted	Contractor (TBD) / GP
		1	1	D/C	SS Credit 1: Site Selection			
					Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: • USDA Prime farmland • Previously undeveloped land whose elevation is lower than 5 feet above the elevation of the 100-year flood as defined by FEMA • land specifically identified as habitat for any species on Federal or State threatened or endangered lists • Within 100 feet of any wetlands • Previously undeveloped land that is within 50 feet of a water body • land which prior to acquisition for the project was public parkland	US Code of Federal Regulations (farmland and wetlands), FEMA (flood plain), Clean Water Act (water bodies)	Site is within a few feet of wetlands; Credit not targeted	N/A
		1	1	D/C	SS Credit 2: Development Density & Community Connectivity			
					Option 1- Development Density - use a previously developed site with a minimum density of 60,000 square feet per acre net. OR Option 2- Community Connectivity - use a previously developed site within 1/2 mile of a residential zone/ neighborhood w/avg. density of 10 units per acre net AND within 1/2 mile of at least 10 basic services (bank, day care, cleaners etc) w/ pedestrian access from the building.	none	Not Targeted	N/A
		1		D/C	SS Credit 3: Brownfield Redevelopment	ASTM E1002 07 Phase II		
1	-		1,	D/C	contaminated by means of ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program OR defined as a brownfield from state or federal agency SS Credit 4 1: Alternative Transportation Public Transportation Access	Environmental Site Assessment	Not Targeted	N/A
					Public Transportation Access: Locate project within 1/2 mile of existing, planned, or funded commuter rail, light rail, or subway station OR within 1/4 mile of one or more stops for two or more public or campus bus lines	none	AGC Phase I bus maintenance facility will be bus station until subsequent phases are built; There will be a bus shelter at the commuter Park and Ride to It less than a 1/4 mile back up the road from the Admin. building. NEED to show TWO bus lines from the site. What are different lines that go from this commuter lot?	AEI
1			1.	D/C	SS Credit 4.2: Alternative Transportation, Bicycle Storage & Changing Rooms			
			<u> </u>		For commercial or institutional buildings, provide secure bike storage for at least 5% of building users (peak period) AND shower and changing facilities for 0.5% of Full- Time Equivalent (FTE), all within 200 yards of the building entrance OR for residential buildings, covered bike storage for at least 15% of building occupants (no showers/changing).	none	Location of locked bicycle storage has been noted in a meeting and is on a progress set; employees are able to have (1) male and (1) female shower / changing room noted on plans	AECOM
1			1	D/C	SS Credit 4.3: Alternative Transportation, Low Emission and Fuel-Efficient Veh	icles		
					<u>Option 1</u> : provide low-emitting and fuel-efficient vehicles for 3% FTE AND provide preferred parking OR <u>Option 2</u> ; provide preferred parking for low-emitting and fuel- efficient vehicles for 5% of total parking capacity or <u>Option 3</u> : alternative-fuel refueling stations for 3% of the total parking capacity for the site.	none	Option #3 is most appropriate with LP gas. Whole fleet of buses is LP gas. Sufficient employee & visitor parking will be for FEV for Option #2; Fueling stations and FEV spaces are on progress set.	AEI
1				D/C	SS Credit 4.4: Alternative Transportation, Parking Capacity			
_					<u>Option 1</u> (non-residential): size parking capacity to meet local zoning, AND provide preferred carpool parking for 5% of total parking spaces OR <u>Option 2</u> (non- residential): if project provides parking for less that 5% FTE, provide preferred parking for carpool for 5% total parking spaces OR <u>Option 3</u> (residential): size parking to meet local zoning, AND provide infrastructure for shared vehicle usage OR Option 4 (all): provide no new parking.	none	NEED calculation of Zoning Requirements for parking. Need to add designated carpool parking spaces to meet Option 1 of LEED credit.	AEI/GP
		1	[D/C	SS Credit 5.1: Site Development, Protect or Restore Habitat			
					Option 1: Greenfield Sites: limit all site disturbance to 40 ft beyond building perimeter, 10 - 25ft from other development (see reference guide). Option 2: Previously Degraded or Developed sites: protect 50% or more of the site area (excluding footprint) with native vegetation.	none	Discussion with Gorrill Palmer indicates that we will not meet the do- not-disturb-area distances; Need do- not-disturb areas noted on construction drawings; Lawn areas noted in Landscaping PDR; can this be minimized?	GP
1			1	D/C	SS Credit 5.2: Site Development, Maximize Open Space			
					<u>Option 1</u> : Reduce the development footprint and/or provide vegetated open space to exceed the local zoning's open space requirement for the site by 25% OR <u>Option</u> 2: if no local zoning requirements exist provide open space area equal to the building footprint OR <u>Option 3</u> : where a zoning ordinance exists but none for open space, and the project is located in an urban area (SS c2) designate 20% of the project site area to open space. [for all 3 options, pedestrian oriented hardscape and vegetated roof areas can contribute if project is in a urban area].	none	Option 1 is planned; Preliminary analysis shows we exceed zoning by more than 25%.	GP
1				D/C	SS Credit 6.1: Stormwater Design, Quantity Control			
	11	1					1	



Yes ?	No		LEED Intent and Requirements Summary	Standard	LEED Strategy	Primary Responsibility
			Quantity Control- Implement a stormwater management plan to either prevent post- development peak discharge rate/quantity from exceeding pre-develop peak rate/quantity for the 1 & 2-year 24hr design storms OR include stream channel protection strategy & quantity control strategies. If existing imperviousness is greater than 50%, develop a stormwater plan that results in 25% decrease from 2- year 24hr design storm.	none	Doing nearby stream protection strategies such as vegetated buffer area, bio- swales, rain gardens; Curbs will be used.	GP
1		D/C	SS Credit 6.2: Stormwater Design, Quality Control			
			Quality Control- Stormwater management plan must reduce impervious cover, promote infiltration, capture & treat runoff from 90% average annual rainfall using BMPs. BMPs must require removal of 80% post-development TSS, & be based on similar state/local requirements or in-field performance monitoring data.	Guidance Specifying Management Measures for Non-Point Pollution in Coastal Waters, 1993	Note all BMPs for rainwater quality; temporary plantings during construction? Silf fencing, catch basin silt raps; information from 6.1 and 6.1 were sent to Jeff Coffin.	GP
	1	D/C	SS Credit 7.1: Heat Island Effect, Non-Roof			
_			Option 1:Provide any combination of the following for 50% of hardscape: shade (within 5 years of occupancy), paving materials with a Solar Reflectance Index (SRI) of at least 29, &/or an open grid paving system OR <u>Option 2</u> : place at least 50% of parking under cover (roofs must have an SRI of at 29+).	none	NOT Feasible with large amount of asphalt and few shade trees	N/A
1		D/C	SS Credit 7.2: Heat Island Effect, Roof			
			<u>Option 1</u> : For a minimum of 75% of the roof, use roofing materials w/an SRI >/= SR78 for Low-Sloped Roof(<= 2:12) and SR29 for Steep-Sloped Roof (> 2:12). <u>Option 2</u> : 50% "green" roof OR <u>Option 3</u> : High albedo+ "green" roof= (Area SRI roof/0.75) + (area green Roof/ 0.5)<=total roof area.	ASTM E1980-01, ASTM E408-71, ASTM E903-96, ASTM E1918-87, ASTM C1371-04, ASTM C1549-04	Label areas low and steep slope; label roofing materials; labelSRI values	AECOM
1		D/C	SS Credit 8: Light Pollution Reduction	ASHRAE/JESNA 90 1-2004	Auto-shut-off planned for non husiness	
			opaque building interior surfaces before exiting out windows OR non-emergency int. lights automatically off for non business hrs. w/ manual override for after hrs use AND Exterior Lighting: Only light areas for safety and comfort. Do not exceed 80% of the lighting power densities for ext. areas and 50% for building facades and landscape features (ASHRAE/IESNA Standard 90.1-2004, Exterior Lighting Section, without amendments) (reqs differ for zone classifications- see reference guide).	ASI IKALILISIK 90. 1-2004	hours with manual override; all full cut-off outside; low level lighting (bollard) and low FC	AEI
4 1			Water Efficiency			
		D/O	ME Condit 4.4. Water Efficient Landscanian Daduat by 50%			
		DIC	We Credit 1.1: Water Efficient Landscaping, Reduce by 50% Reduce potable water consumption for irrigation by 50% from a calculated mid- summer base-line case. Consider soli/climate analysis to determine appropriate plant material and design landscape with native or adapted plants to reduce or eliminate irrigation requirements. Where irrigation is required, use high-efficiency equipment and/or climate-based controllers. Reductions apply to: plant species factor, irrigation efficiency, use of captured rainwater, use of recycled wastewater, use of water treated by public agency for non-potable uses.	none	No long term irrigation planned	GP
•		0/0	Do not use any potable water use for irrigation OR install landscaping that irrigation	none		
			that does not require a permanent irrigation system. Temporary irrigation systems for plant establishment are allowed if removed within 1 year of installation.		No irrigation	GP
1		D/C	WE Credit 2: Innovative Wastewater Technologies			
			OPTION 1: Reduce potable water use for building sewage conveyance by 50% OR OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on site.	none	Bus wash CANNOT help in this credit; low flush fixtures likely will not achieve 50% reduction from baseline	AEI - M
1		D/C	WE Credit 3.1: Water Use Reduction, 20% Reduction	EPAct 1992		
			meeting the Energy Policy Act of 1992 fixture performance requirements. Calcs include the following fixtures: WCs, urinals, lavatory faucets, showers, and kitchen sinks.		Likely could reach 40% for exemplary performance; Jay send flush and flow fixture recommendations;	AEI - M
1		D/C	WE Credit 3.2: Water Use Reduction, 30% Reduction	ED4 1 4000		
	_		Policy Act of 1992).	EPACt 1992	See above	AEI - M
8 3	6		Energy and Atmosphere			
Y		D/C	EA Prereq 1: Fundamental Commissioning of the Building Energy Systems Engage a commissioning team or agent to verify and ensure that fundamental building energy systems are designed, installed and calibrated to operate as intended through best practice commissioning procedures. The following systems must be commissioned; HVAC&R, lighting and daylighting controls, domestic hot water, and renewable energy systems.	none	Matt Minor of Allied to provide commissioning; per 3-10-09 email from Tony Davis, the LEED commissiong requirements will be included in the commissioning spec section; HAVE OPR and BOD in hand;	AEI - M
Υ		D/C	EA Prereq 2: Minimum Energy Performance			
			Design the building to comply with the mandatory provisions of ASHRAE/IESNA Standard 90.1-2004 (without amendments) AND the prescriptive requirements or performance requirements (Section 11) of ASHRAE/IESNA Standard 90.1-2004 (without amendments).	ASHRAE/IESNA 90.1-2004	Allied to ensure	AEI - M
Y		D/C	EA Prereq 3: Fundamental Refrigerant Management			
			Zero use of CFC-based refrigerants in new base building HVAC&R systems. Phase out CFCs in existing HVAC equipment.	none	ок	AEI - M
8	2	D/C	EA Credit 1: Optimize Energy Performance	ASHRAE//ESNA 00 1 2004		
			Demonstrate a 10.3%-42% improvement rating from baseline building performance to proposed building performance per ASHRAE/ IESNA Standard 90.1-2004 with a whole building project simulation. (1-10 pts based on 3.5% increments) (see the reference guide for two alternative compliance paths to this credit)	ASHKAE/IESNA 90.1-2004	report from Allied states we are at 35% better than ASHRAE for 8 points.	AEI - M
1	2	D/C	EA Credit 2: On-Site Renewable Energy			
-						



Yes ? No)	LEED Intent and Requirements Summary	Standard	LEED Strategy	Primary Responsibility
		Use on-site renewable energy systems to offset building energy cost. Use the building annual energy cost calculated in EA credit 1 or the DOE CBECS survey to establish electricity use. 2.5%=1pt., 7.5%=2pt., 12.5%=3pt.	ASHRAE/IESNA 90.1-2004	Solar hot water planned for bus area and showers. Re-capturing heat is NOT feasible per AEI	N/A
		EA Credit 3: Enhanced Commissioning Prior to the start of the Construction Documentation phase, designate an independent (3rd party) CxA to: 1. Review design of owner's Owner Project Requirements (OPR) & Basis of Design (BOD) prior to mid-construction documents phase & 2. Review contractor's submittals for compliance with OPR, BOD. and 3. Review building operation within 10 months after substantial completion with O&M staff and occupants. Additionally, CxA or team member must 1.develop a systems manual on commissioned systems for future operating staff & 2.verify that requirements for training operating personnel & building occupants are completed.	none	Cost issue; Not Targeted	N/A
	D /C	Do not use refrigerants & Management Do not use refrigerants & HVAC&R that minimize or eliminate emission of compounds that contribute to ozone depletion AND do not install fire suppression systems that contain ozone depleting compounds.	none	Calculation based on refrigerant load; Need calculation	AEI - M
1	D/C	EA Credit 5: Measurement & Verification Develop and implement a Measurement and Verification (M&V) plan covering no less than one year of post-construction occupancy. The plan shall be consistent with Option D (Calibrated Simulation) or Option B (Energy Conservation Measure Isolation) of IPMVP Volume III, April 2003.	IPMVP Volume III	Not Targeted	N/A
	D/C	EA Credit 6: Green Power Provide at least 35% of electricity from renewable sources by engaging in minimum 2-year renewable energy contract.	Center for Resource Solutions' Green-e Product Certification Requirements	Prices are very low right nowl; 2/10ths of a cent per kWh. What is totalCan decide at the end of construction if needed	AEI - M / MDOT
4 4 5		Materials and Resources			
Y	D/C	MR Prereq 1: Storage & Collection of Recyclables Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	none	spaces noted on plans for areas for short term (under counter etc.) and longer term storage of recycling before being trucked off site:	AECOM
1	D/C	MR Credit 1.1Building Reuse, Maintain 75% of Existing Walls, Floors & Roof Maintain at least 75% (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material).	none	Not Targeted	N/A
1	D/C	MR Credit 1.2: Building Reuse, Maintain 100% of Existing Walls, Floors & Roof Maintain an additional 20% of Existing Walls, Floors, and Roof (95% total, based on area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non- structural roofing material).	none	Not Targeted	N/A
1	D/C	MR Credit 1.3: Building Reuse, Maintain 50% of Interior Non-Structural Elemen	its		
	-	Maintain 50% of Interior Non-Structural Elements. If the project includes an addition to an existing building double the s.f. of the existing building, this credit is n/a.	none	Not Targeted	N/A
1	D/C	MR Credit 2.1: Construction Waste Management, Divert 50% from Disposal Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris.	none	Easily achievable.	TBD
1	D/C	MR Credit 2.2: Construction Waste Management, Divert 75% from Disposal	none		
				This is targeted and was recently done in the same area on another project.	TBD
1	D/C	MR Credit 3.1: Materials Reuse, 5%			
	1	5% salvaged, returbished or reused: Use salvaged, returbished or reused materials such that the sum of these materials constitutes at least 5%, based on cost, of the total value of materials (excluding MEP components).	none	Not Targeted	N/A
	D/C	MRC Credit 3.2: Materials Reuse,10% 10% salvaged, refurbished or reused: Use salvaged, refurbished or reused materials for an additional 5% beyond MR credit 3.1 (10% total, based on cost) of building materials.	none	Not Targeted	N/A
1	D/C	MR Credit 4.1: Recycled Content, 10% (post-consumer + ½ pre-consumer)			
	_	The sum of post-consumer recycled content + 1/2 of the pre-consumer content must constitute at least 10% (based on cost) of the total value of materials in the project. Recycled content: % of material recycled (by weight) X total cost of material. Acceptable components consistent with MR3.1.	International STD, ISO14021- 1999, Envt Labels and Declarations - Self Declared Envt Claims	OK; spec language sent from Fore to Allied and AECOM; Consider fly ash content of about 10% in concrete spec.	TBD
1	D/C	MR Credit 4.2: Recycled Content, 20% (post-consumer + ½ pre-consumer) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes and additional 10% beyond MR credit 4.1 (Total of 20%, based on cost) of the total value of the materials in the project.	International STD, ISO14021- 1999, Envt Labels and Declarations - Self Declared Envt Claims	harder to achieve without specifying particular products at certain % of recycled content;	TBD
1	D/C	MR Credit 5.1: Regional Materials, 10% Extracted, Process. & Manf. Regionally Use building materials that have been extracted, harvested or recovered, and manufactured, within 500 miles of the project site for a min. of 10% (based on cost) of the total materials value. If only a % of the material is extracted / harvested/ recovered and manufactured locally, then only that %/by weight) shall contribute to the regional value. Acceptable components consistent with MR3.1.	none	OK; local stone façade versus split face block??; concrete; gyp board from USG?	TBD
		Page 3 of 5	I	I	I



Yes	?	No		LEED Intent and Requirements Summary	Standard	LEED Strategy	Primary Responsibility
	1		D/C	MR Credit 5.2: Regional Materials, 20% Extracted, Process. & Manf. Regionally			
				Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for an additional 10% beyond MR credit 5.1 (Total of 20%, based on cost) of the total materials value.	none	Specifications have targeted 20% regional.	TBD
	1		D/C	MR Credit 6: Rapidly Renewable Materials			
				Use rapidly renewable materials (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	none	Not sure; Some flooring bamboo?	TBD
	1		D/C	MR Credit 7: FSC Certified Wood			
				50% of wood-based materials and products need to be cert. in acc. with the Forest Stewardship Council's (FSC) Principles and Criteria. Included components: structural and gen. dimensional framing, flooring, sub-flooring, wood doors and finishes, etc. Furniture may be included, providing it is included consistently in MR Credits 3-7.	Forest Stewardship Council's Principles and Criteria	NEED 50% of all wood going into building to be FSC certified. Though there is not a lot of wood going into building, we might be able to get 50% of the proposed wood FSC;	TBD
13	2			Indoor Environmental Quality			
Y			D/C	EQ Prereg 1: Minimum IAQ Performance			
_				Meet sections 4 through 7 of ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation designated using the Ventilation Rate Procedure or local code, whichever is more stringent. Naturally ventilated buildings: meet ASHRAE 62.1-2004, paragraph 5.1.	ASHRAE 62.1 -2004	OK per Allied	AEI - M
Y			D/C	EQ Prereq 2: Environmental Tobacco Smoke (ETS) Control			
				Smoke (ETS). Zero exposure of nonsmokers to ETS by prohibition of smoking in the building OR provide a designated smoking room designed to effectively contain, capture, & remove ETS from the building OR follow guidelines for minimizing ETS pathways between individual residential units.	2001/ASTIME27/3-05, CA 2001 Energy Efficiency Standards for low-rise buildings	No smoking in building; Smokng area noted across driveway near parking area; Separation of smoking areas; affects negatively pressurized spaces	AECOM
1			D/C	EQ Credit 1: Outdoor Air Delivery Monitoring			
				performance to ensure that ventilation systems anather provide rectack on ventilation system performance to ensure that ventilation systems anintain design minimum ventilation requirements. [For mechanically ventilated spaces use direct outdoor airflow measurement device. For naturally ventilated spaces install CO2 monitoring].	ASHRAE 02.1 - 2004	CO2 and OA monitoring devices planned	AEI - M
1			D/C	EQ Credit 2: Increased Ventilation			
				In mechanically ventilated spaces, breathing zone outdoor air ventilation rates at 30% above minimum required by ASHRAE 62.1-2004 [as determined in EQpre1]. Natural ventilation systems to meet recommendations of Carbon Trust "Good Practice Guide 237" [1998]. Prove natural ventilation via diagrams & calcs showing compliance with CIBSE App Manual 10:2005 OR a model showing compliance w/ASHRAE.	ASHRAE 62.1 - 2004, Carbon Trust Good Practice Guide 237, CIBSE App. Manual 10: 2005	AEI believes this is feasible due to offsetting exhaust and pressure differential needed betwen admin and maintenance space. What is idling policy to prevent fumes from entering?	AEI - M
1			D/C	EQ Credit 3.1: Construction IAQ Management Plan, During Construction			
				During construction meet or exceed the recommended Design Approaches of the Sheet Metal & Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995 & Protect stored on-site or installed absorptive materials from moisture damage. If air handlers used during construction, filtration media with a MERV value of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. All filtration media to be replaced immediately prior to occupancy.	SMACNA; ANSI/ASHRAE 52.1-1999	Need to see IAQ Plan; Exterior exhausted temporary heat;	TBD
1			D/C	EQ Credit 3.2: Construction IAQ Management Plan, Before Occupancy			
				After construction ends install new filtration media and perform building flush-out where mechanical cooling is operated, OR if occupancy is desired prior to completion, flush-out daily before and after occupancy, and ventilate at increased rates during occupancy. OR conduct baseline IAQ testing, after construction ends using testing protocols from the United States Environmental Protection Agency "Compendium of Methods for the Determination of Air Pollutants in Indoor Air."	US EPA "Compendium of Methods for the Determination of Air Pollutants in Indoor Air"	Flush out planned; NEED Flush out plan to be drafted between contractor, Cx and Fore Solutions; Maintenance area is a Regularly Occupied Area to require flush out; Storage area does NOT need flush out	TBD / Cx
1				EQ Credit 4.1: Low-Emitting Materials, Adhesives & Sealants			
				Adhesives & Sealants must meet or exceed the VOC limits of South Coast Air Quality Management District Rule #1168. Aerosol Adhesives must meet Green Seal Standard for Commercial Adhesives GS-36-Oct, 19 2000.	South Coast Air Quality Mgmt District Rule#1168, Green Seal Standard GS-36	Noted in specs	TBD
1				EQ Credit 4.2: Low-Emitting Materials, Paints & Coatings	Green Seal Standard CS 11		
				VOC limits in Green Seal Standard GS-11. For Anti-corrosive & anti-rust paints, consistence of the VOC limits of anti-rust paints (on interior ferrous metal substrates) do not exceed VOC limit of 250 g/L [Green Seal GC-03]. Clear wood finishes, floor coatings, stains, & shellacs applied to interior elements: do not exceed VOC limits in SCAQMD Rule 1113.	and GC-03	noted in specs	TBD
1				EQ Credit 4.3: Low-Emitting Materials, Flooring			
				All carpet installed shall meet the Carpet and Rug Institute's Green Label Plus req. All carpet cushion shall meet the Carpet and Rug Institute Green Label req. All carpet adhesive: VOC limit of 50 g/L.	Carpet and Rug Institute, Green Label Plus Testing Program	Noted in specs	TBD
1				EQ Credit 4.4: Low-Emitting Materials, Composite Wood & Agrifiber Products	none		
 ,			I _	resins. Laminating adhesives used to fabricate on-site & shop-applied composite wood & agrifiber assemblies shall contain no added urea-formaldehyde resins.		Noted in specs	TBD
	1		D/C	EQ Credit 5: Indoor Chemical & Pollutant Source Control Employ a permanent entryway system (i.e., grills or grates) to capture dirt.	ANSI/ASHRAE 52.1-1999		
				particulate matter, etc. from entering the building at all high volume entryways, & where chemical use occurs exhaust each space to create negative pressure & deck- to-deck partitions w/self-closing doors or hard lid celling. In mechanically ventilated buildings, MERV 13 filtration media prior to occupancy for both return & outside air to be delivered as supply air.		MERV 13 needed; What is effect on pressure and energy;	AEI - M / AECOM
1			D/C	EQ Credit 6.1: Controllability of Systems, Lighting			



Yes ?	N	lo		LEED Intent and Requirements Summary	Standard	LEED Strategy	Primary
				Lighting: Provide individual lighting controls for 90% (minimum) of the building occupants AND Provide lighting system controllability for all shared multi-occupant spaces.	none	task lighting planned for offices and individual controls. Conference room to have separate controls;	AEI - M
1			D/C	EQ Credit 6.2: Controllability of Systems, Thermal Comfort			
				Provide individual comfort controls for 50% (minimum) of the building occupants. Operable windows can be used in lieu of comfort controls for areas 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable windows must meet ASHRAE 62.1-2004 paragraph 5.1 Natural Ventilation. AND Provide comfort system controls for all shared multi-occupant spaces. Consult ASHRAE Standard 55-2004 to include the primary factors of air temperature, radiant temperature, air speed, and humidity.	ANSI/ASHRAE 62.1-2004, ANSI/ASHRAE 55-2004	Operable windows and thermostats needed. Combination can help achieve this credit.	AEI - M
1			D/C	EQ Credit 7.1: Thermal Comfort, Design			
	1	_		Design: Design HVAC systems and the building envelope to meet ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy.	ANSI/ASHRAE 55-2004	Design meets this per AEI	AEI - M
1			D/C	EQ Credit 7.2: Thermal Comfort, Verification			
				Agree to implement a thermal comfort survey with-in a period of six to 18 months after occupancy. If the survey results indicate more than 20% dissatisfaction agree to remediation.	ANSI/ASHRAE 55-2004	This is relatively simple with a small office population; Fore Solutions has sample survey.	AEI - M
1			D/C	EQ Credit 8.1: Daylight & Views, Daylight 75% of Spaces			
				<u>OPTION 1</u> - (calculation) Achieve a minimum glazing factor of 2% in a minimum of 75% of all regularly occupied areas. <u>OR OPTION 2</u> - (simulation) Demonstrate, through computer simulation, that a minimum daylight illumination level of 25 footcandles has been achieved in a minimum of 75% of all regularly occupied areas. Modeling must demonstrate 25 horizontal footcandles under clear sky conditions, at noon, on the equinox, at 30 inches above the floor. <u>OR Option 3</u> - Daylight Measurement. Demonstrate through actual measurements that required footcandle levels have been met.	none	Glazing factor calc; NEED Glazing factor worksheet	AEI - M
1			D/C	EQ Credit 8.2: Davlight & Views. Views for 90% of Spaces			
				Provide drawings and a narrative highlighting direct line of sight zone. Include calculations demonstrating that 90% of these zones have direct lines of site to perimeter glazing.	none	Need analysis; Confirm bunk room dormer windows moved down roofline	AECOM
5	Т			Innovation and Design			
1	Ť		D/C	ID Credit 1.1: Innovation in Design			
				Green Education		Park Service and MDOT both offered resources to help identify strategies to highlight the green aspects of the project for educational purposes	MDOT and Park Service
1			D/C	ID Credit 1.2: Innovation in Design			
				Green Power?		See potential proposals from REC brokers	AEI / MDOT
1			D/C	ID Credit 1.3: Innovation in Design			
				40% Water Use Reduction		AEI did template and we do achieve this	AEI - M
1			D/C	ID Credit 1.4: Innovation in Design			
			P 10	Bus Wash Water Recycling		AEI has designed an innovative wash system by which 88% of the needed fresh water for washing busses is reused, thereby reducing potable water usage by 88%	AEI - M
1			D/C	LEED® Accredited Professional			
	-			LEED AP on project team.			FS
43 10	1	6					

69 Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points



