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

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

October 8, 2009
Subject: **Trenton, Acadia Welcome Center**
Federal Project No. 16123.50
State Pin No.016123.50
Amendment No. 1

Dear Sir/Ms:

NOTE: All questions concerning this project **MUST** 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:

NOTE: A new Schedule of Items will be issued in an upcoming amendment.

NOTE: Plan sheets will be FedExed/mailed to individuals who purchased plans in the quantity and size ordered.

IN THE SPECIFICATIONS:

1. a. In the Bid Book (pages111 thru 146 in Volume I), **REMOVE** "APPENDIX A TO DIVISION 100" 36 pages dated December 14, 2005 and **REPLACE** with the attached "U.S.A. DOT Federal Transit Administration Contract Requirements" 25 pages undated.

   b. In the Bid Book after page 159, **INSERT** the attached "SUBSURFACE INVESTIGATION AND GEOTECHNICAL EVALUATION", 69 pages undated.

2. DELETE Table of Contents in its entirety. REPLACE with the Table of Contents provided herein.

3. SECTION 015150 – Construction Indoor Air Quality – DELETE Paragraph 1.1C in its entirety. ADD in its place:

   "C. Duct cleaning as specified in Section 233113 – Ductwork, Paragraph 3.10."

4. SECTION 012100 Allowances
   a. DELETE: paragraph 1.2 (C) 1 in its entirety
   b. DELETE: paragraph 1.7 Testing and inspection allowances in its entirety.

c. DELETE: paragraph 3.3 (A) in its entirety.

d. INSERT: in its place paragraph 3.3 “A Allowance No. 1: Not used

e. DELETE: paragraph 3.3 (B) in its entirety

f. INSERT: in its place paragraph 3.3 “B Allowance #2: Not used

5. SECTION 012300 Alternates

   a. DELETE Section 012300-Alternates, in its entirety

   b. ADD in its place, Section 012300-Options, attached.

6. SECTION 012700 unit prices

   a. DELETE: paragraph 3.1 (B) in its entirety.

   b. INSERT: in its place paragraph 3.1 “B. Unit price No.2 drilling in rock substrate including cost of water pipe, electrical cable, and support cable: per linear foot of well depth.”

7. SECTION 015000 Temporary facilities and controls

   a. DELETE: paragraph 3.2 (C) in its entirety

   b. INSERT: in its place paragraph 3.2 “ C. Water Service: Contractor may connect to Owner's existing water service facilities once the new water service is functional. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

      1. See section 332100 water supply wells for testing requirements.”

   c. DELETE: paragraph 3.3 (J) including sub paragraphs 1 through 3 in their entirety.

   d. INSERT: in their place paragraph 3.3 “J. New electric traction Elevator Use: Use of Owner's new electric traction elevator shall not be permitted. Elevators are the property of the owner no one shall charge any fees to allow operation before or after the elevators are certified.

8. SECTION 017700 Closeout procedures.

   a. DELET: Paragraph 3.2 (C) in its entirety

9. Section 111000 – Vehicle Maintenance Equipment

   a. ADD paragraph 2.16 as follows:

“2.16 MAHA MCL MOBILE LIFTING SYSTEM SPECIFICATIONS (OPTION #5)

SCOPE

This specification sets forth the requirements for a four column heavy duty mobile lifting system to lift vehicles by wheel engagement.

GENERAL REQUIREMENTS

- Lifting mechanisms shall be the mechanical ball screw type.
- Lifting mechanisms shall have constant speed mechanical drives to

maintain normal synchronization between columns.

- The lifting system shall also have redundant synchronizing controls.
- Lifting mechanisms shall have a mechanical load brake to sustain raised vehicles.
- Each column shall also have a safety wedge lock as back-up to the load brake that is independent of the lifting mechanism.
- The lifting system shall operate on 3-phase power.
- A four column lifting system shall require a maximum of 30 amps on 208 volts, or a maximum of 15 amps on 460 volts.
- Operator controls shall have membrane type pushbuttons.
- The lifting system shall have an explosion proof rating of Class I, Division II.
- All columns shall be identical.
- Lift carriage forks shall be minimum 12 inches long to provide proper support for full size tires, but no more than 12.5 inches long to avoid contact with the inner tire on a set of duals.
- The lifting system shall be certified for compliance with ANSI/ALI-ALCTV-2006.
- Each column shall be load tested prior to shipment.
- The lifting system shall be manufactured in the USA.

SPECIFIC FEATURES

Capacity: 16,000 pounds per column

Lift Stroke: 69"

Lifting Speed: 39.5" per minute

Tire Seating Capacity:10-20 to12.00-24

Lift Carriage Fork Length: 12.2”

Power: 208, 240, or 480 volts, 3-phase, 60 Hz.

Operating Modes: Lifts shall be operable in the Automatic Mode (all columns), the Group Mode (selected columns), or the Individual Mode.

Synchronization: Synchronization between columns shall be the normal condition due to the column’s mechanical drives. Redundant controls shall provide back-up and shall have the ability to make corrections if de-synchronization should occur, or shut the lift system down if synchronization cannot be re-established.

Lift Height Positioning: The lifts shall be capable of positioning a vehicle at any height within normal travel. Lifts shall not require upward motion

to disengage locks before lowering.

Mechanical Safety Lock: Each column shall have a wedge lock to prevent unintentional lowering in the unlikely event of a failure. The safety device shall be independent of the lifting mechanism. The wedge lock shall remain non-loaded during normal operation.

Column: The column shall be a rolled "H" beam with machined flanges which serve as runways for the lift carriage guide rollers. The web shall have a series of indentations on two inch centers as anchor points for the mechanical safety lock. The column shall have a flexible protection band to shield the lifting mechanism.

Lift Carriage: The lift carriage shall be a box shaped fabrication that surrounds the column and is guided by four flanged steel guide rollers. The rollers shall have lubed-for-life bearings. The rollers shall be replaceable without removing the lift carriage from the column.

Limit Switches: Columns shall have sealed proximity sensors for motion control and obstacle detection.

Mobility: A pallet style jack shall be provided on each column to reposition the lifts. The jack shall be capable of raising the base of the column up to 2.5 inches above the floor The jack shall have an adjustable overload valve to prevent damage to the unit if a vehicle is raised before the jack has been retracted.

Controls: Columns shall have identical control panels with UP & DOWN momentary type push buttons, mode selector push buttons, and a digital display to indicate mode and diagnostic information. Push buttons shall be the membrane type. Each control panel shall be capable of accepting the system power box.

System controls shall monitor the load on each column and shall shut the system down if the load on any column exceeds 120% of its rated capacity.

The lifting system shall include one portable power box with the main ON/OFF switch. The power box shall have a phase monitor to properly set phase rotation.

Drive: A motor/reducer drive shall be mounted at the top of each column. The motor shall be maximum 2.4 HP TEFC with spring set load brake.

Cables: A 50 foot long power cable sheathed in an oil resistant jacket shall be provided for the power box.

Identical interconnecting cables sheathed in yellow, oil resistant jackets shall be provided for connection between columns. Cables shall have quick disconnect plugs on each ends. Plugs shall be IP65 rated. A dummy plug shall be furnished for connection to the last column in the series.

Emergency Lowering:Columns shall be capable of being lowered without power by manually releasing the load brakes.

Finish: Columns shall have a durable powder coated blue finish.

10. SECTION 233113 – Ductwork, Paragraph 2.7 A: ADD the following: "3. FabricAir"

11. Section 332100 – Water Supply Wells

a. DELETE: Paragraph 1.5 in its entirety.

b. INSERT: in its place the following:

" 1.5 BASIS OF DESIGN

A. Install a complete and functional well to 300 foot depth with 50' of 6" ID steel casing at the location indicated on the plans. If water supply well depths, or casing depths vary from basis of design, the Contract Sum will be adjusted according to unit prices listed in "Unit Prices" Article.

B. Furnish all labor for water supply well installation including furnishing and installing casing materials, grout, and all required fittings to comply with minimum performance requirements specified in the Section Text.

C. Furnish and install well pump including water supply piping, pump support cable and all required fittings.

D. The owner reserves the right to determine during the drilling if any one of the requirement is fulfilled (depth or Minimum Supply volume) if it is in their best interest to proceed."

12. Section 332100 – Water Supply Wells

a. DELETE: Paragraph 1.6 in its entirety.

b. INSERT: in its place the following:

"1.6 OPTION#2

A. If for reasons not related to errors or negligence by the contractor the well is not acceptable to the owner fill the well hole with pea stone to within 6' of the top and fill the top 6' with concrete, mobilize to an alternate location on the site, as determined in the field, and bore a new well meeting the specifics of the Basis of Design Well.

B. Pricing for Option #2 shall be as outlined in Division 1 Option Section.

C. Unit price values for differential depth and casing quantities shall be as applied in basis of design well."

ON PLAN SHEETS:

1. DELETE Cover Sheet G-1 in its entirety. ADD in its place Cover Sheet G-1, revised October 5, 2009.

2. In the Plans, **REMOVE** Plan Sheet C-3 and **REPLACE** with the attached Plan Sheet C-3A

3. ADD Sheet C-63 Boundary Plan in its entirety.

4. SHEET C-102 – Utility Plan, DELETE the Electric (E) and Water (W) lines which are designated "Option 1".

5. SHEET C-102 – Utility Plan, DELETE the "Option 2" reference at the Electric (E) and Water (W) lines which extend to the east.

6. ADD Drawings P-500, P-501, P-502, P-503, and P-600 which were listed in the Table of Contents and on Sheet G-1, but were not included in the issued Bid Package.

7. DRAWING P-500 – Detail E1, ADD boiler water make-up feed line as indicated on SKP-1, attached.

8. DRAWING P-501 – Detail A1, at the piping blow up part plan DELETE the following note: "2" PVC80 Pipe from City Water Inlet to Eq-Module Circulation Pump Discharge Line For Pit Fill Pipe Line". ADD in its place: "2" PVC80 NPC to Eq-Module Circulation Pump Discharge Line For Pit Fill Pipe Line".

9. DRAWING P-501 – Detail A1, at the water softener area DELETE the following note: "2" Copper Pipe from City Water to Booster Pump Suction". ADD in its place: "2" Copper NPC to Booster Pump Suction".

10. DRAWING P-503- Schematic A1, At the water softener, DELETE the following note: “Backwash Hose to Sewer”. ADD in its place: “Backwash Hose to Wash Recycle Room Floor Drain.”

11. DRAWING P-600 – Detail A1, ADD size and model reference to the thermostatic mixing valves as indicated on SKP-2, attached.

12. DRAWING ES-100 - DELETE detail marker D3/ES-500 at the underground electrical between the Bus Maintenance Facility and the Fueling Station. ADD in its place a detail marker D2/ES-500.

13. DRAWING ES-500 - At Detail F8, DELETE two 5” conduits for secondary electric service. ADD in their places two 4” conduits for secondary electric service.

14. DRAWING EP-101 – Refer to attached sketch SKE-01 for receptacles and wiring for lifts to be provided under Option #5.

15. DRAWING EP-400 - At Feeder Schedule, DELETE conduit description for Feeder Tag 9. ADD in its place: IN EACH OF (2) 4”.

NOTE: Plan sheets will be FedExed/mailed to individuals who purchased plans in the quantity and size ordered.

THE FOLLOWING QUESTIONS HAVE BEEN RECEIVED:

Note: Items not yet resolved are *italicized* herein, to be addressed by future amendment.

RFI #1

Question #1: Would a standard hole less hydraulic elevator be acceptable? (Note: there would be a very large cost savings)

Response: No. The MRL type elevator was chosen because it is “greener” than hydraulic and this is a LEED project.

Question #2: The elevator floor on shown on A5.21 detail 6, calls for a polished concrete floor and a wood plank system. How much does this weigh, how thick is it going to be, who is to be responsible for this item ie concrete contractor, mason or elevator supplier.

Response: Elevator floor shall be rubber: “Norament 986 Luxor ‘basilica’, 3.5 mil. thickness” or equal. Clarification by addendum is contained herein.

Question #3: You should verify that the vent at the top of the elevator hoistway is necessary. (I do not believe it is required in Maine on a two stop elevator)

Response: *This is being researched and will be addressed by future addendum.*

Question #4: Spec 142100-11 page 709 calls for a speed of 200 fpm. This seems excessive for 13' of travel. We would recommend 100 fpm or maybe 125 fpm.

Response: 100 fpm is acceptable.

Question #5: Note spec 142100-17 page 715 calls for the floor to be vinyl.

Response: Refer to Response #2, above.

Question #6: Spec 142100-5 page 703 references Buy American provisions, then some of the approved manufacturers are not American companies please clarify your requirements.

Response: Kone and Schindler are both American. Otis and Delta-Beckwith are other American manufacturers which would be acceptable. *Will research whether Global Tardif is an American Company and clarify by addendum as necessary.*

Question #7: Spec 142100-4 Lock cylinders per owner's current standard - please clarify what we are to provide.

Response: The referenced lock cylinder is for the door to the elevator control room. Locks need to be coordinated with the Owner.

Question #8: Drawing A5.20 section 02 show the clear overhead as 14'-4" typically 15'-6" clear overhead is required for a MRL is 15' -6" possible?

Response: Per their websites, Kone's EcoSpace minimum overhead is 13 feet for a 8 ft. high car (or 14 feet for a 9 ft. high car), and Shindler's 400A Model with side counterweight requires 13'-9" overhead for the travel speed proposed. The hoist beam could be removed to provide a 15'-0" clearance. However, we do not believe 15' 6" clear overhead is required for an MRL.

RFI #2

Question #1: We recommend that you make changes to your specifications for a mobile 4-post lift system.

Response: An option (Option #5) for the proposed alternate lift is included by Addendum, herein.

RFI #3

Question #1: Good morning. I would like to bid this project as an approved skylight manufacturer. What information do I need to send to you to review?

We have been in business since 1986 and have worked all over the United States with many projects in New England.

Response: ***Outstanding item to be addressed in future amendment.***

Question #2: I have reviewed your specifications and the glass for the skylights in section 086300-6, sec. 2.04 A, refers to Section, 08801. There is no such section, and in Section 08800, entitled Glazing, makes no mention of the skylight glass. Please advise.

Response: ***Outsta****nding item to be addressed in future amendment.*

RFI #4

Question #1: Specification Section 074100-2.02A; Centria panels or an approved equal are specified. We would like to submit the attached ATAS panels as an equal panel. Are these panels acceptable?

Response: We do not find a 'profile panel' in your on-line literature that meets the design intent shown in the drawings. However, your standing-seam roof panels may meet the requirements of metal roofing specified in the documents. *Please forward additional information on your wall and roofing products.*

Question #2: It is recommended that if the building is within 1 mile of salt water that the exterior metal panels be aluminum and not G90 galvanized steel panels. Please advise.

Response: The specified panels depend on their applied coatings and finishes to meet the specified warranty. *Clarification to the specifications will be issued by addendum as required.*

RFI #5

Question #1: On page 221119-4 section 2.6 Thermostatic Mixing Valves there is verbiage on the type, which is a Leonard Valve that we represent, but there is no size. On the drawings P-600 it calls for a Potable and a non-potable unit could someone determine the size of these two valves.

Response: Refer to addendum items contained herein for revisions to Sheet P-600 which add information on model and size for the mixing valves.

RFI #6

Question #1: Bid Line No. 0700, Since there is no Div. 13 how should the bid amount be listed?

Response: Division 13 will not be used under this contract.

Question #2: Section 102.3, Can see no geotechnical report on the web site – is one available?

Response: Geo Tech report is attached herein.

Question #3: Section 104, Any cost for Time Warner Cable or MDOT?

Response: ***Outstanding item to be addressed in future amendment.***

Question #4: 012700-3.1B, Clarify unit of payment.

Response: Unit cost for well drilling in rock substrate including cost of water piping and support cable is per Lineal foot has addressed by amendment herein.

Question #5: Section 105-pg. 40, What is meant by "excessive environmental noise"?

Response: ***Outstanding item to be addressed in future amendment.***

Question #6: Section 107-pg. 43, 3rd paragraph needs to be completed.

Response: ***Outstanding item to be addressed in future amendment.***

Question #7: Section 107-pg. 43, Clarify the status of work at Route 3 since that work impacts the access to this site. When will this access road be completed?

Response: ***Outstanding item to be addressed in future amendment.***

Question #8: C-4 Note 3, Pay Item 202.203 is not listed on bid form.

Response: ***Outstanding item to be addressed in future amendment.***

Question #9: C-14, C-17, Need to clarify what is meant by Option #1 and #2 re the wells. Appears Alternate 1 and 2 need to be linked to these 2 options. There is no price for Alternates #1 and #2. How is the excavation/backfill and installation of water and power to be included?

Response: a. Well Option 1 is no longer viable and option 2 will become "Basis of Design" well location". This revision is addressed by amendment, herein.
Alternates 1 and 2 do not reference wells.
Allowance 1 and Allowance 2 reference the wells and are clarified by amendment herein. The purpose of using an allowance is to provide a fair pricing option for well drilling with an allowance and unit prices for differing site conditions (additional depth of casing or total well depth.)
Water and power to the wells are shown on site plans.

Question #10: Bid Line Item 0140, The 3 culverts total 262 lf.

Response: ***Outstanding item to be addressed in future amendment.***

Question #11: C-405, Using design of stone berm level lip spreader on this page or as detailed in Special Provision 610?

Response: ***Outstanding item to be addressed in future amendment.***

Question #12: 012700, No place on bid form for unit prices.

Response: ***Outstanding item to be addressed in future amendment.***

Question #13: Landscaping, Find no specifications. Section 621 has quantity for 621.128 different than bid form plus 4 items have different group number.

Response: ***Outstanding item to be addressed in future amendment.***

Question #14: Section 652-pg. 77, Is this section applicable to this project?

Response: ***Outstanding item to be addressed in future amendment.***

Question #15: Section 652-pg.78, Is this section applicable to this project?

Response: ***Outstanding item to be addressed in future amendment.***

Question #16: Landscaping, Provide names of certified landscaping subcontractors by MDOT's Environmental Office Landscape Unit.

Response: ***Outstanding item to be addressed in future amendment.***

Question #17: App. A to Div. 100, Section 3 - Buy America provisions only apply to what is listed in this section?

Response: Appendix A has been removed in this amendment.

Question #18: FHWA 1273, Part VI (pg. 139) – is this applicable for this project? If so provide Form FHWA-47.

Response: Appendix A has been removed in this amendment.

Question #19: FHWA 1273, Part VII (pg. 139) – is this applicable for this project?

Response: Appendix A has been removed in this amendment.

Question #20: DEP Approval 16C, Confirm the ILF fee of $ 77,283.36 and the $ 86,046 to Maine National Resource Conservation Fund are not a part of this bid.

Response: ***Outstanding item to be addressed in future amendment.***

Question #21: 012100-1.7, Describes testing allowance but not included in 3.3.

Response: We have deleted this reference by amendment herein.

Question #22: 012100-3.3G, There is no Section 123200.

Response: ***Outstanding item to be addressed in future amendment.***

Question #23: Bid Line Item 0670, Since Allowance No. 6 includes both a Div. 10 and 11 item, clarify how this is to be handled on the bid form. Also, Bid Item 0680 includes part of Allowance 6 and the Bus Wash System.

Response: The bus wash is a bid item under division 11 and is not part of the allowance. Division 10 and Division 11 have been changed in the Schedule of items, herein.

Question #24: 013300-1.5B1d, Clarify cost of $ 50/sheet for plans.

Response: ***Outstanding item to be addressed in future amendment.***

Question #25: 015000-3.3G, Where is project sign to be located?

Response: ***Outstanding item to be addressed in future amendment.***

Question #26: C-10, Cut line at Rt. 3 states work by others – this cut line seems to include the area required to install site lighting per ES-102.

Response: ***Outstanding item to be addressed in future amendment.***

Question #27: Temp. Utilities, Confirm that electrical, telephone will be connected after installation from Rte. 3.

Response: The Contractor is responsible to coordinate installation of temporary services with the utilities. See Section 015000 – Temporary Facilities and Controls.

Question #28: 015000-3.2C, Refers to Owner's existing water service facilities – there are none.

Response : The intent is to allow use of the new water well once it is installed. This is clarified by amendment herein. Also see section 332100 water supply wells Part 3.3 (D).

Question #29: 015000-3.3J, Refers to Owner's existing elevator – there is none.

Response: The intent is to reference the new elevator to be installed. This is addressed by amendment herein.

Question #30: 015000-3.4C, Need specific locations of where plans/specifications may be viewed by subs/suppliers – I know of Construction Summary but they seem to be the only plan agency that has them.

Response: ***Outstanding item to be addressed in future amendment.***

Question #31: 015150-1.1C, States duct cleaning is specified in Div. 15 "Testing, Adjusting and Balancing" – can find no reference in that section.

Response: Requirement for duct cleaning, as applicable, can be found in Section 233113 – Ductwork, Paragraph 3.10.

Question #32: 018113-1.2A3, The draft copy is not at the end of this section.

Response: A draft copy is included herein, for informational purposes.

Question #33: 017700-3.2C, Is a Pest Control exterminator actually required for this project?

Response: Not likely. This is addressed by amendment herein.

Question #34: Web site, Cannot view plans or specifications on line – server times out since files are too large. Can they be broken up into smaller sections, ie. civil, architectural, mechanical, electrical?

Response: ***Outstanding item to be addressed in future amendment.***

Question #35: Plan locations, Clarify exactly where temporary fencing is required related to "outside the drip line of trees" since project building is 3500 feet back from Rte. 3.

Response: ***Outstanding item to be addressed in future amendment.***

RFI #7

Question #1: Bid form has 2 mobilization line items there should only be one.

Question #2: Section 012100 - Allowances - Page 3 why is there an Allowance #1? This is the base bid and if the well is installed accordingly then is the payment. Also this talks about Unit Prices for casing & drilling in rock over what is specified, yet there are no line items for this in the bid form.

Response: See response to RFI 6 question 9

Question #3: Section 012100 - Allowances Page 3 - There is no line item for the contractor to put a bid against for the alternate location. Is this really an allowance or an alternate or a bid item?

Response: See response to RFI 6 question 9.

Question #4: Section 012100 - Allowances - Page 4 - Items C. & D. there is no description of the scope of work to be performed in Division 26.

Response: See section 260500 - Common Work Results for Electrical, Article 1.6.

Question #5: Section 012100 - Allowances - Page 4 - Item F. the value shows $200,000 yet the bid item is for $350,000 and there is no spec for the bus washer which is noted in the item description.

Response: This is addressed by amendment herein, in the revised schedule of items for the bid sheet.

Question #6: Section 012100 - Allowances - Page 4 - Item G. There is no spec section 123200.

Response: See response to RFI 6 question 22

Question #7: The allowance section indicates a change order will be done for the difference in purchase costs vs. allowance value. Is this the way the MDOT wants it to be?

Response: ***Outstanding item to be addressed in future amendment.***

Question #8: Section 012300 - Alternates - Page 1, 1.3, A. Indicates the value is to be shown on the bid form but there is not a bid item. Does the General Requirements section 102 & 103 need to be modified if Alternates are included?

Response: ***Outstanding item to be addressed in future amendment.***

Question #9: Section 012300 - Alternates - Page 1, 1.4, B. Indicates notification is after the Contract award. Is this the correct procedure?

Response: ***Outstanding item to be addressed in future amendment.***

Question #10: Section 012300 - Alternates - Page 2,3.1, A & B. - These are not on the bid form.

Response: ***Outstanding item to be addressed in future amendment.***

Question #11: Section 012600 - Contract Modifications - Page 1 - 1.4,A.2.c. & B.4. indicates supervision is included this is not allowed by Section 109; change word to foreman.

Response: ***Outstanding item to be addressed in future amendment.***

Question #12: Section 012700 - Unit Prices - Page 1 - 1.2,B.,5. why is this in here can't be found in the spec also there is no spec section 14240.

Response: ***Outstanding item to be addressed in future amendment.***

Question #13: Section 12700 - Unit Prices - Page 1 - 1.3, A. indicates to state value on bid form yet there is no place on bid form for the two items listed in 3.1 of this section.

Response: Bid form has been corrected by amendment herein.

RFI #8

Question #1: In section 083323-3, 2.02,A., 2. the specifications read for the R-value of the overhead coiling doors to be 16.0. This is more in line with a sectional door. The usual insulated coiling door is in the R- 5.0 to 8.0 range. Also, in section 083600 Overhead sectional doors I cannot find an indication of an R-value, nor a skin gauge thickness. Is there a benchmark door for this section?

Response: ***Outstanding item to be addressed in future amendment.***

Consider this changes and information prior to submitting your bid on **October 28, 2009.**

Sincerely,

Scott Bickford
Contracts & Specifications Engineer

U.S.A. DOT
Federal Transit Administration
Contract Requirements

BUY AMERICA REQUIREMENTS

49 U.S.C. 5323(j)
49 CFR Part 661

Buy America - The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification (Attachment A) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

ENERGY CONSERVATION REQUIREMENTS

42 U.S.C. 6321 et seq.
49 CFR Part 18

Energy Conservation - The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

CLEAN WATER REQUIREMENTS

33 U.S.C. 1251

Clean Water - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq . The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

LOBBYING

31 U.S.C. 1352
49 CFR Part 19
49 CFR Part 20

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of $100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." (Attachment B). Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

ACCESS TO RECORDS AND REPORTS

49 U.S.C. 5325
18 CFR 18.36 (i)
49 CFR 633.17

Access to Records - The following access to records requirements apply to this Contract:

1. Where the Purchaser is not a State but a local government and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C. F. R. 18.36(i), the Contractor agrees to provide the Purchaser, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

2. Where the Purchaser is a State and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 633.17, Contractor agrees to provide the Purchaser, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor's records and construction sites pertaining to a major

capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at $100,000.

3. Where the Purchaser enters into a negotiated contract for other than a small purchase or under the simplified acquisition threshold and is an institution of higher education, a hospital or other non-profit organization and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 19.48, Contractor agrees to provide the Purchaser, FTA Administrator, the Comptroller General of the United States or any of their duly authorized representatives with access to any books, documents, papers and record of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions.

4. Where any Purchaser which is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 U.S.C. 5325(a) enters into a contract for a capital project or improvement (defined at 49 U.S.C. 5302(a)1) through other than competitive bidding, the Contractor shall make available records related to the contract to the Purchaser, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

5. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

6. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the Purchaser, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

7. FTA does not require the inclusion of these requirements in subcontracts.

Sources of Authority:

[1] 49 USC 5325 (a)

[2] 49 CFR 633.17

[3] 18 CFR 18.36 (i)

FEDERAL CHANGES

49 CFR Part 18

Federal Changes - Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

BONDING REQUIREMENTS

Bid Bond Requirements (Construction)

(a) Bid Security

A Bid Bond must be issued by a fully qualified surety company acceptable to the Maine Department of Transportation and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described hereunder.

(b) Rights Reserved

In submitting this Bid, it is understood and agreed by bidder that the right is reserved by the Maine Department of Transportation to reject any and all bids, or part of any bid, and it is agreed that the Bid may not be withdrawn for a period of [ninety (90)] days subsequent to the opening of bids, without the written consent of the Maine Department of Transportation.

It is also understood and agreed that if the undersigned bidder should withdraw any part or all of his bid within [ninety (90)] days after the bid opening without the written consent of the Maine Department of Transportation, shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance Bonds and Labor and Material Payments Bonds, as provided above, or refuse or be unable to furnish adequate and acceptable insurance, as provided above, he shall forfeit his bid security to the extent of the Maine Department of Transportation damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefore.

It is further understood and agreed that to the extent the defaulting bidder's Bid Bond, Certified Check, Cashier's Check, Treasurer's Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by the Maine Department of Transportation as provided in [Item x "Bid Security" of the Instructions to Bidders]) shall prove inadequate to fully recompense the Maine Department of Transportation for the damages occasioned by default, then the undersigned bidder agrees

to indemnify the Maine Department of Transportation and pay over to the Maine Department of Transportation the difference between the bid security and the Maine Department of Transportation total damages, so as to make the Maine Department of Transportation whole.

The undersigned understands that any material alteration of any of the above or any of the material contained on this form, other than that requested, will render the bid unresponsive.

Performance and Payment Bonding Requirements (Construction)

The Contractor shall be required to obtain performance and payment bonds as follows:

(a) Performance bonds

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the Maine Department of Transportation determines that a lesser amount would be adequate for the protection of the Maine Department of Transportation.

2. The Maine Department of Transportation may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The Maine Department of Transportation may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(b) Payment bonds

1. The penal amount of the payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than $1 million.

(ii) Forty percent of the contract price if the contract price is more than $1 million but not more than $5 million; or

(iii) Two and one half million if the contract price is more than $5 million.

2. If the original contract price is $5 million or less, the Maine Department of Transportation may require additional protection as required by subparagraph 1 if the contract price is increased.

Advance Payment Bonding Requirements

The Contractor may be required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. The Maine Department of Transportation shall determine the amount of the advance payment bond necessary to protect the Maine Department of Transportation.

Warranty of the Work and Maintenance Bonds

1. The Contractor warrants to the Maine Department of Transportation, the Architect and/or Engineer that all materials and equipment furnished under this Contract will be of highest quality and new unless otherwise specified by the Maine Department of Transportation, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards shall be considered defective. If required by the [Project Manager], the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by the Maine Department of Transportation and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to the Maine Department of Transportation. As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment [as provided in Item X below], furnish separate Maintenance (or Guarantee) Bonds in form acceptable to the Maine Department of Transportation written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this Contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT (100%) of the CONTRACT SUM, as adjusted (if at all).

CLEAN AIR

42 U.S.C. 7401 et seq
40 CFR 15.61
49 CFR Part 18

Clean Air - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq . The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS

Davis-Bacon and Copeland Anti-Kickback Acts

(1) **Minimum wages** - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage

determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for

the meeting of obligations under the plan or program.

(v)(A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(2) **Withholding** - The Maine Department of Transportation shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime

contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the Maine Department of Transportation may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) **Payrolls and basic records** - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Maine Department of Transportation for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) **Apprentices and trainees** - (i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on

a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for

the work performed until an acceptable program is approved.

(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) **Compliance with Copeland Act requirements** - The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) **Subcontracts** - The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) **Contract termination: debarment** - A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) **Compliance with Davis-Bacon and Related Act requirements** - All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) **Disputes concerning labor standards** - Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) **Certification of eligibility** - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Contract Work Hours and Safety Standards

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - The Maine Department of Transportation shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts** - The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

NO GOVERNMENT OBLIGATION TO THIRD PARTIES

No Obligation by the Federal Government.

(1) The Purchaser and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

31 U.S.C. 3801 et seq.
49 CFR Part 31 18 U.S.C. 1001
49 U.S.C. 5307

Program Fraud and False or Fraudulent Statements or Related Acts.

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § § 3801 et seq . and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

TERMINATION

49 U.S.C.Part 18
FTA Circular 4220.1E

Termination

a. Termination for Convenience (General Provision) The Maine Department of Transportation may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the Maine Department of Transportation to be paid the Contractor. If the Contractor has any property in its possession belonging to the Maine Department of Transportation, the Contractor will account for the same, and dispose of it in the manner the Maine Department of Transportation directs.

b. Termination for Default [Breach or Cause] (General Provision) If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the Maine Department of Transportation may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by the Maine Department of Transportation that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the Maine Department of Transportation, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

c. Opportunity to Cure (General Provision) The Maine Department of Transportation in its sole discretion may, in the case of a termination for breach or default, allow the Contractor [an appropriately short period of time] in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions

If Contractor fails to remedy to the Maine Department of Transportation's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within [ten (10) days] after receipt by Contractor of written notice from the Maine Department of Transportation setting forth the nature of said breach or default, the Maine Department of Transportation shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude the Maine Department of Transportation from also pursuing all available remedies against Contractor and its sureties for said breach or default.

d. Waiver of Remedies for any Breach In the event that the Maine Department of Transportation elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by the Maine Department of Transportation shall not limit the Maine Department of Transportation's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

h. Termination for Default (Construction) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, the Maine Department of Transportation may terminate this contract for default. The Maine Department of Transportation shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the Maine Department of Transportation may take over the work and compete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Maine Department of Transportation resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Maine Department of Transportation in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if-

1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the Maine Department of Transportation, acts of another Contractor in the performance of a contract with the Maine Department of Transportation, epidemics, quarantine restrictions, strikes, freight embargoes; and

2. the contractor, within [10] days from the beginning of any delay, notifies the (Recipient) in writing of the causes of delay. If in the judgment of the (Recipient), the delay is excusable, the time for completing the work shall be extended. The judgment of the (Recipient) shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Maine Department of Transportation.

GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NONPROCUREMENT)

49 CFR Part 29
Executive Order 12549

Suspension and Debarment

This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the Maine Department of Transportation. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the Maine Department of Transportation, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

PRIVACY ACT

5 U.S.C. 552

Privacy Act

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974,

5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

CIVIL RIGHTS REQUIREMENTS

29 U.S.C. § 623, 42 U.S.C. § 2000
42 U.S.C. § 6102, 42 U.S.C. § 12112
42 U.S.C. § 12132, 49 U.S.C. § 5332
29 CFR Part 1630, 41 CFR Parts 60 et seq.

Civil Rights - The following requirements apply to the underlying contract:

(1) Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:

(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq ., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e

note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(b) Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(c) Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

49 CFR Part 26

Disadvantaged Business Enterprises

a. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.* The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The agency's overall goal for DBE participation is **1.9 %.** A separate contract goal has not been established for this procurement.

b. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract,

which may result in the termination of this contract or such other remedy as the Maine Department of Transportation deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

d. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from the Maine Department of Transportation**.** In addition, is required to return any retainage payments to those subcontractors within 30 days after incremental acceptance of the subcontractor's work by the Maine Department of Transportation and contractor's receipt of the partial retainage payment related to the subcontractor's work.

e. The contractor must promptly notify the Maine Department of Transportation, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of the Maine Department of Transportation.

FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

FTA Circular 4220.1E

Incorporation of Federal Transit Administration (FTA) Terms - The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

Attachment A

BUY AMERICA CERTIFICATION REQUIREMENT

CERTIFICATE OF COMPLIANCE

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 CFR Part 661.5.

Date _____

Signature_____

Company Name_____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Date _____

Signature _____

Company Name _____

Title _____

LOBBYING

APPENDIX A, 49 CFR PART 20

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding $100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq* .)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure.]

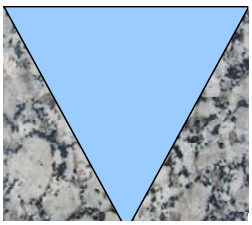
The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq., apply* to this certification and disclosure, if any.

_____ Signature of Contractor's Authorized Official

_____ Name and Title of Contractor's Authorized Official

_____ Date

FGS/CMT



Fessenden Geo-Environmental Services
Construction Materials Testing

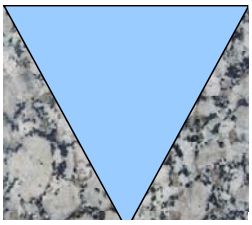
SUBSURFACE INVESTIGATION AND GEOTECHNICAL EVALUATION

PROPOSED ACADIA GATEWAY CENTER

TRENTON, MAINE

Conducted for
Allied Engineering, Inc.
Portland, Maine
February 2008

FGS/CMT



Fessenden Geo-Environmental Services
Construction Materials Testing

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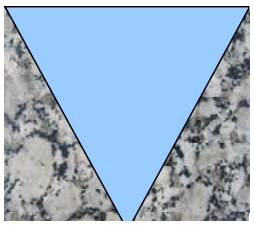

Fessenden Geo-Environmental Services
Construction Materials Testing

Allied Engineering, Inc. February 17, 2008
Attn: Mr. William P. Faucher, P.E.
160 Veranda Street
Portland, Maine 04103

Subject: Subsurface Investigation and Geotechnical Evaluation
Proposed Acadia Gateway Center
Trenton, Maine

1. INTRODUCTION

1.1 General

In accordance with our Agreement, we have conducted a subsurface investigation for the Proposed Acadia Gateway Center in Trenton, Maine. The purpose of the investigation was to explore the subsurface conditions and offer geotechnical recommendations related to foundation design and earthworks associated with the proposed constructions. Details of our findings, geotechnical evaluation, and recommendations are provided in this report and should be carefully reviewed.

This report is subject to the limitations outlined in Appendix A. In the same appendix important information is included about the report.

1.2 Site Description

As shown on Fig. 1 of Appendix B, the proposed Acadia Gateway Center in Trenton is located off Route 3, approximately 7 miles from Ellsworth, Maine. About half of the area of the project is currently vegetated with mature and immature mixed tree growth whereas the rest is open field.

Ground elevations range between about +70 (east end-intersection with Route 3) to about +120 (west end of project). Ground surface elevations at the Visitor's/Welcome Center area range almost between +75 and +80 while at the Bus Transportation Maintenance area elevations range from about +107 and +112.

The proposed access road crosses Crippens Brook located between Station 30+00 and 31+00.

1.3 Proposed Construction

Based on information provided by Allied Engineers, Inc., it is our understanding that the proposed project includes:

(1) An access road over 3000 feet long.

(2) An Intermodal/Welcome Facility Center that comprises one-story buildings including a theater. It is our understanding that the buildings' finished floor elevation is +82 to +83.

(3) Parking Facilities along the access road.

(4) Bus Transportation Maintenance and Operations Building with Parking Facility. It is our understanding that the buildings' finished floor elevation is +112.5 to +113.5.

Fig. 2 to Fig. 4 in Appendix provided by the Maine DOT show the arrangement of the different structures of the project.

2. EXPLORATIONS AND TESTING

2.1 General

Field explorations were made at the site to determine the subsurface conditions and provided samples for laboratory testing.

The boring locations along the access road were selected in the field by FGS/CMT, inc. personnel based on the roadway centerline stakes placed by Maine DOT survey personnel. MDOT also laid out the boring locations surrounding the approximate location of the Welcome Center buildings. Additional borings were requested by FGS/CMT, inc. within the actual building locations to better assess the soft soil conditions found at the site.

Boring locations for the Bus Transportation Maintenance and Operations Building area were staked by Maine DOT personnel. Boring locations for investigating the subsurface conditions in the Parking Facilities along the access road were selected by FGS/CMT, inc. personnel using cloth-taped measurements from the roadway centerline stakes.

The exploration locations as surveyed by the Maine DOT personnel are shown in Figs. 2-4 included in of Appendix B.

2.2 Exploration and Testing

The exploration program included the drilling of:

- 17 seventeen borings (B1-B17) along the Access Road
- 16 sixteen borings (F1-F16) for the Intermodal/Welcome Facility Center
- 10 ten borings (P1-P10) in the various Parking Facilities
- 4 four borings (M1-M4) for the Bus Transportation Maintenance and Operations Building

Borings were drilled by Maine Test Borings, Inc. of Brewer, Maine. Borings B1-B5 and F1-F11 were drilled in the period 12/19/07-12/20/07. The boring program was halted since the

remaining boring locations had not been laid out. The remaining borings were drilled from 01/17/08 to 01/23/08.

Boring depths ranged from 3.0 ft (P-1) to 23.3 ft (F-12). Drilling or probing in various borings encountered refusal depths ranging between 3.0 ft (P1) and 23.3 (F12). Refusal was caused by encountering cobbles, boulders, weathered bedrock or bedrock. The cause of refusal was not determined since rock core sampling was not part of the scoped exploration program.

The borings were drilled using 2 ½" hollow stem augers (HSA). Soil samples were obtained by driving a standard split-spoon sampler two feet into the soil with a 140 lb weight that was dropped 30 inches. The blow counts per six inches were recorded and the six-inch to eighteen-inch interval was used to determine the standard penetration resistance of the soil. In two borings, namely F12 and F13 undisturbed Shelby tube samples were obtained to assess the soft soil conditions.

Logs of the test borings, based on field notes and our observations and testing of soil samples are attached in Appendix C. The surface elevations at the test boring locations in the Welcome Center, as provided by the Maine DOT, are noted on the test boring logs.

2.3 Laboratory Testing

The recovered soil samples were visually examined and classified. Laboratory testing performed on selected samples included: the determination of moisture content, Atterberg Limits, grain size analyses, unconfined compression tests and consolidation tests. The results of laboratory tests are given in Appendix D.

3. SUBSURFACE CONDITIONS

This section summarizes the subsurface soil and groundwater conditions at the site.

3.1 Soil conditions at boring locations

Based on our site observations the native soils in the project area generally consisted of glacial-marine clays over glacial till over bedrock east of Crippens Brook and glacial till over bedrock west of Crippens Brook.

Explorations west of Crippens Brook area (B11-B17, M1-M4, P1-P5)
Test boring results showed that in the investigated locations the subsurface materials below a topsoil cover consisted generally of glacial till covered in places by a layer of sandy silt and at places silty sand. The latter layer was encountered B14, B15, P4, P5 and M4. Based on SPT values (varied between N= 20 and N= 52) materials of this layer may be characterized as a medium dense to dense.

The encountered till was very dense with SPT N-values mainly between N=55 and refusal. SPT spoon sampler refusal was common in the till. Glacial till can be described as an unsorted, non-stratified, heterogeneous mixture of clay, silt, sand-gravel and boulders, mixed and inter-bedded of varying proportions. The moisture content 'w' of till material varied mainly between w=8.5% and w=14.5%.

With the exception of borings P2, B14, B15, refusal was generally encountered, most likely bedrock, within 3.0 to 6.5 feet below ground surface (bgs). In boring M4 broken rock pieces were encountered at 11.5 ft bgs. A few boulders over 5 feet diameter were observed on the surface.

Explorations east of Crippens Brook area (B1-B10, F1-F16, P6-P10)
Test borings encountered glacial marine deposits of the Presumpscot Formation overlying till and eventually bedrock. Surficial layers of topsoil and some sandy silt (assumed to be disturbed by plowing) were found over the silty clay/clayey silt of the Presumpscot.

The topsoil (brown sandy silt/silty sand with some organics), at the exploration locations, was mostly 0.5 to1.5 feet thick.

The Presumpscot Formation generally consisted of brown, desiccated silty clay and at places clayey silt, grading to brown, brown-gray clay over gray clay and gray clay with sand seams. The SPT values varied mainly between N=15 -43 in the upper parts and N=3-6 in the lower parts of the formation.

The SPT values, N, in the brown silt/clay layer varied widely between N=10 and N=70, with the majority of the values concentrated between N=15 and N=48. Large N values ranging between N= 37 and N= 70 were encountered mainly at the upper parts of the brown silt/clay layer at borings F12, F13, F15, F16, B6, B10 and P6-P10. Low SPT values ranging between N= 9 and N=15 were encountered at the lower parts of the brown clay layer in borings F3, F7, F8, F9, F10, F11, and F16. Based on SPT values the brown, brown-gray clay is stiff to hard in the upper parts and stiff to the lower parts of the layer.

Pocket penetrometer testing and unconfined compression tests on spoon samples indicated unconfined uniaxial strength that ranged from more than 4.0 tsf in the upper parts of the layer to about 1.0 tsf in the lower parts of the brown clay. The brown silty clay had moisture contents ranging mostly from 23% to 30%. At places the brown clay exhibited strong inherent layering while in other places contained silty-sandy seams or sand.

Gray clay was drilled at depths starting from 6 to 13 feet bgs in the borings of the Intermodal/Welcome Facility Center area; this clay was encountered in all but borings F1, F2, F4, and F5. N values of the gray clay varied mainly between N=6 and N=10. Gray clay with fine sand seams was encountered under the gray clay in most of the borings of the Intermodal/Welcome Facility Center area. The sand seams lowered the consistency of the clay resulting in STP values that ranged between N=3 and N=6. Based on SPT values the consistency of the gray clay/ gray clay with sandy seams is soft /medium stiff to stiff.
Pocket penetrometer testing and unconfined compression tests on spoon samples indicated unconfined uniaxial strength ranging mainly between 0.50 tsf and 1.5 tsf. Pocket vane shear tests indicated vane shear strength values ranging between 0.36 tsf to 0.95 tsf. Six field shear vane tests in borings F12 and F13 resulted in vane shear strength values ranging between 0.74 tsf and 2.0 tsf for peak strength and between 0.21 tsf and 1.16 tsf for residual strength.
The moisture content of the gray clay and gray clay with sand seams varied between 25% and 33%. The values of liquid limit and plasticity index for the brown and gray ranged as follows: LL= 26-40 and PI= 9-20.

In general, the strength of the clay deposit decreased with the depth.

Hard till was encountered in most of the Intermodal/Welcome Facility Center area borings below the gray clay; till was not encountered in borings F7 or F11. STP values ranged from N=37 to N= refusal; sampler refusal was common in the till. Rod probes conducted in borings F12 and F14 suggest the till is present at these locations at about 21 to 23 feet. Till in borings F10 and F16 was encountered at about 24 feet and 16.5 feet bgs while in boring F5 at 4.8 feet bgs. Till was also encountered in borings B8, B9, B10 and P6 at depths ranging between 3.0 ft and 6.5 ft bgs.

Shallow bedrock was presumably encountered at B3 (1.9 feet bgs) and at F4 (4.1 feet bgs), indicating that a small bedrock ridge probably exists at the easterly end of the project site that extends a short way into the proposed Welcome Facility Center area. In the latter area, refusal (probable bedrock), was also encountered in borings F1 (14.7 feet bgs), F2 (10.5 feet bgs), F3 (14.5 feet bgs), F5 (9.2 feet bgs), F6 (21 feet bgs), and F8 (20.5 feet bgs).

The subsurface conditions described above, are of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs attached should be reviewed for specific information at individual boring locations.

3.2 Groundwater Conditions

Water was observed, in most of the borings, at depths ranging from just below the ground surface to 7.0 ft bgs with the exception in the area of borings F1-F16 where water was observed at depths lower than 10 ft bgs. Nevertheless the brown clay encountered at the upper parts of the ground was found mottled and strongly desiccated at places an indication of seasonal water movement in these parts. Silty sand in B16 had rust streaks just above the bedrock, indicating that groundwater likely fluctuates seasonally.

Water measurements were made at the end of the drilling. The water level observations refer only to the time and location of borings mentioned above. Water levels fluctuate seasonally and may differ at the time of construction. It is anticipated that the ground water might be closer to the ground surface during seasonal wet periods. In addition, because of spatial variations in the type and lateral extend of the materials underlying the site, localized variations in groundwater elevation should be anticipated.

4. EVALUATION AND RECOMMENDATIONS

The following geotechnical recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions encountered.
If there are any further information or changes in these project criteria referring to structures location, foundation and design plans, column loads and grading, a review should be made by FGS/CMT, inc. to determine if modifications to the recommendations are warranted.

Based on the topography of the site, the finished floor elevations of the structures (see section 1.3 of the report) and the subsurface conditions, it is anticipated that engineered fill will be placed at the Intermodal/Welcome Facility Center area (up to 5-6 ft thick) and the Bus Transportation Maintenance and Operations Building area (almost up to 5 ft thick). It is therefore anticipated that foundations for the Intermodal/Welcome Facility Center will rest on brown silt/clay or structural fill while the foundations for the Bus Transportation Maintenance and Operations Building on till, fill or rock.

Site soils are frost susceptible and have poor drainage characteristics. These conditions need to be considered in the design of this project.

4.1 Site Preparation
Based on the topography of the site, initial site preparation should include removing vegetation, topsoil, organics, and other undesirable matter. Leveling the site will require varying amounts of cut and fill. Excavation and fill recommendations are provided in the following sections.

4.2 Excavation
Excavation work will encounter materials susceptible to loss of strength when subjected to construction traffic and excavation activities, particularly during periods of precipitation. Therefore, care must be exercised during construction to minimize the disturbance of the bearing soils. Should the subgrade become yielding or difficult to work, the soft subgrade material should be removed and replaced with compacted structural fill or crushed stone (see section 4.3).

In general the bedrock surface is erratic. We recommend that documentation shall contain a contingency for bedrock removal by blasting. It seems that excavation of rock for foundation or utility construction works is likely required in The Bus Transportation Maintenance and in portions of the Operations Building and Intermodal/Welcome Center Facility areas. Rock excavation might be required along some parts of the access road. In addition, excavation of large boulders for the various structures of the project should not be disregarded.

The contractor should anticipate the need for dewatering in excavations. Ditching with gravity drainage and use of sumps and pumping appear to be adequate.

Once the required depth of excavation is reached, it is recommended that a representative of FGS/CMT, Inc., should be called to visually inspect the cleared surface, particularly within the building footprint. This inspection should occur prior to the placement of any fill or the construction of any footing.

Other subgrade recommendations that apply to the proposed construction include the following:

- subgrade soils are susceptible to disturbance and strength loss due to construction traffic. Equipment and personnel should not be permitted to travel across exposed foundation bearing surfaces.
- subgrades should be protected against freezing
- final excavation to bearing grade should be performed with great care using appropriate equipment. Disturbed bearing areas should be re-compacted or excavated and replaced with compacted structural fill or crushed stone

4.3 Engineered Fill
Fill used beneath the foundation footprint or for bringing the subgrade to the required elevation for placing foundations or subbase materials for pavement or road construction, shall meet the gradation requirements of structural fill. Fill materials should be free from organic matter, contaminants, frozen material, and other deleterious substances. Maximum particle sizes should not exceed two thirds of the proposed loose lift thickness.

In open areas, structural fill beneath roads, slabs and foundations should be placed in loose layers not exceeding 8 inches and compacted by self-propelled compaction equipment. The fill should be placed or conditioned to its optimum moisture content and compacted to at least 95% of its maximum density after ASTM D-1557. In confined areas, maximum particle size and loose layer thickness should be reduced to 3 inches and 6 inches respectively, and the compaction performed by hand-guide equipment.

Structural fill should be clean granular material meeting the following gradation:

STRUCTURAL FILL

Sieve Size	Percent Finer by Weight
4 inch	100
3 inch	60-100
¼ inch	25-90
#40	0-60
#200	0-7.0

Fill soils placed adjacent to the foundations and walls and within 6 inches of floor slab as well as in exterior foundations such as light pole bases should be sound clean granular material meeting the following gradation:

Select Backfill	
Sieve Size	Percent Finer by Weight
4 inch	100
3 inch	90-100
¼ inch	25-90
#40	0-30
#200	0-5.0

Lift thickness should be such that desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment.

Crushed stone shall be used as a cushion layer for pipe bedding for perimeter and underslab foundation drains. It can also be used as drainage material behind walls.

The crushed stone material should comply with the following gradation requirements:

Crushed Stone	
Sieve Size	Percent Finer by Weight
1 inch	100
3/4 inch	60 –100
1/2 inch	10 – 50
3/8 inch	0 – 20
# 4	0 - 5.0

The stone pieces should be free from organic matter, contaminants, frozen material, and other deleterious substances. They will consist of angular, sound, not weathered or altered and not elongated rock pieces. Pieces from schistose rock are not acceptable.

Crushed stone, whenever used for structurally bearing purposes (beneath footings, slabs, pavements) should be compacted to at least 100% of its dry rodded unit weight as determined by ASTM C-29. Care should be taken to avoid 'pumping' effect (bringing water to the surface) on the fine-grained soils

Before the backfilling of any excavated area the exposed subgrade should be observed by a representative of FGS/CMT, inc. or the geotechnical engineer to ensure that it is ready for fill placement.

Filling operations should be continuously observed and documented with field density tests. Samples of fill materials should be submitted to FGS/CMT laboratory for examination and testing prior to placement.

4.4 Foundation Recommendations

Details of the foundation preparation are provided in the following subsections. In addition to the recommendations provided herein, foundation design and construction should be done in accordance with applicable codes and regulatory agency requirements.

Foundation Depth – Native soils at the site are frost susceptible. The depth of frost penetration is estimated to be about 5 ft. Exterior footings of heated buildings or footings of unheated buildings, constructed on engineered fill or native soils, should be placed at least 5 feet below the lowest adjacent ground surface exposed to freezing. Interior footings for heated buildings should be founded a minimum of 3.0 feet below the ground floor slab. Any decrease in these minimum dimensions without proper measures may have an adverse effect on the behavior of the foundation.

Bearing Capacity –

Intermodal/Welcome Facility Center: Based on SPT blow counts, site observations and laboratory test results, the native glaciomarine silty clay is stiff to hard in higher elevations and soft to medium stiff in lower.

For footing design we recommend using a maximum allowable contact pressure of 2,000 psf (pound per square foot) for footings constructed on the brown glaciomarine silty clay or compacted structural fill over it. This bearing pressure is based on the imported fill beneath the footings being compacted to at least 95% of its maximum dry density determined after ASTM D1557.

It is essential that care be taken to limit the introduction of water to the glaciomarine silty clay soils during construction and to limit disturbance of the foundation interface. Should this surface become soft or disturbed and difficult to work, the softened material should be excavated and replaced with compacted structural fill or ¾ inch crushed stone. Otherwise, a reduction in bearing capacity may occur, resulting in an increase in the amount of differential movement of the foundation.

Extreme care should be given not to excavate down to the gray glaciomarine silty clay as the higher water content makes it typically more susceptible to remolding and strength loss. Disturbed gray clay should be removed and the disturbed area should be brought back to grade by placing a sand blanket over the undisturbed material, having

the first layer of structural fill slightly compacted over it, and increasing the compaction effort with each successive layer of structural fill. Alternatively a geofabric sheet might replace the sand blanket without restricting the required compaction energy over the structural fill.

While the loads from the buildings are not known at this time, it is expected that the post-construction settlements due to the loads of one-story buildings and fill will be up to 1.75 inches.

Bus Transportation Maintenance and Operations Building- For footing design we recommend using a maximum allowable contact pressure not exceeding 4,000 psf (pound per square foot) for footings constructed on the till, fill, or rock.

While the loads from the building are not known at this time, post –construction settlements are expected be less than 0.75 inch.

Minimum footing dimension should be 24 inches in width, regardless of the bearing pressure.

In an attempt to minimize potential differential settlements due to variations in the foundation soils and bedrock elevations, the recommendations put forth in the previous and subsequent sections of this report must be followed.

Seismic Considerations - Based on the subsurface conditions encountered in the test borings, the results of in situ and laboratory tests and Table 1615.1 of the International Building Code 2003 (IBC), the site is classified as site class C for seismic-design considerations.

4.5 Other Foundation Considerations

The soils encountered at the site are frost susceptible and have poor drainage characteristics. These conditions need to be considered in the design of this project. Recommendations for these conditions and other foundation details are included in this section.

Foundation Drainage – It is generally good practice to install underdrains along the perimeter of buildings to account for unanticipated changes in climatic conditions and the regional and site hydrogeology and to minimize moisture problems. Therefore, we recommend that exterior and interior underdrains be provided near footing grade along perimeter walls of the buildings. Underdrains should have perforations of 1/4 to 5/8-inch. We recommend that at least 6 inches of crushed stone bedding be provided around the underdrains and that the stone be wrapped with geotextile filter fabric such as Mirafi 140N or of equivalent performance characteristics. The underdrains must have positive gravity outlets or sump pumps should be provided to remove the collected water. Outlets or sump pumps shafts should be inspected on a periodic basis to assure that the drains are functioning as designed.

In addition, particular attention should be given to the development of surface as well as subgrade drainage. Paved areas should be graded to promote surface drainage to away from structures and entrance areas. Subgrade will be sloped to facilitate and enhance water drainage. Although these precautions will reduce frost and moisture

related problems, frost will penetrate into the subgrade and some frost heaving and distress of pavement should be anticipated.

In areas that are not to be paved or occupied by entrance slabs the exterior foundation backfill should be sealed with a surface layer of clayey or loamy soil, at least 12 inches thick, in order minimize the amount of surface water infiltration adjacent to the foundation.

Control Joints - To minimize the impacts of potential differential settlements, it is recommended that control joints be provided in the foundation walls, floor slabs, and masonry building walls to accommodate post-construction deformations and shrinkage in the concrete, as it cures.

Control joints in the floor slabs should be used at intervals of 12 to 15 ft, unless other provisions are made for controlling random cracking. The structural engineer should review the control joint spacing.

For foundation walls control joints should be used in areas where the foundation steps up or down in elevation or where it crosses materials with a contrasting difference in their stiffness characteristics (e.g. soil and rock).

Slab-on- Grade - Slab on-grade for the building should be supported on a 6 inches layer of crushed stone resting on structural fill that is at least 6 inches thick and compacted to at least 95% of its maximum dry density as determined by ASTM D-1557. The crushed stone shall be compacted to at least 100% of its dry rodded unit weight per ASTM C-29. Any existing fill or natural fill underlain the slab shall be proofed rolled prior to placing any structural or crushed stone fill. Proof rolling shall consist of a minimum of three passes in a north-south direction and then three passes in an east-west direction using a large vibratory roller.

The crushed stone layer will act as a capillary break, preventing moisture from being drawn up next to the slab. It will also enhance drainage to the exterior footing drains and under-slab drains and it will provide a firm, dry working surface during construction. We recommend that a vapor retarder be placed directly below the floor slabs to reduce water vapor transmission. In such case a layer of non-woven geotextile fabric placed over the crushed stone will reduce the potential for punctures within the vapor retarder.
The vapor retarder should be placed according to manufacturer's recommendations, including taping all joints and wall connections. Floor suppliers should be consulted for acceptable retarder systems that can be used along with their products. Nevertheless, factors such as cost and special construction considerations suggest that the architect-engineer and owner should be responsible for decision-making on the use of vapor retarding membranes-systems.

Exterior slabs should be isolated from the building. These slabs should be constructed to function as independent units. Movement of these slabs should not be transmitted to the building foundation or superstructure.

Sidewalks and Entrances - The site soils are susceptible to frost heaving. Entrances and sidewalks will be affected by frost action. We recommend these areas to be excavated at least 5.0 feet below finished grade and backfilled with compacted clean

granular fill meeting the select fill or crushed stone gradation specifications. The select fill should extend from the building 8 feet outward or more, at entrances and 4 feet or more, at sidewalk locations.

To reduce the potential for abrupt differential movement due to frost action, transition of select or crushed stone fill thickness should be gradual (3 horizontal to 1 vertical) and be provided from the 5-foot depth to the fill base thickness at the sidewalk and paved areas away from the building. This fill should be placed in 8 in. lifts and compacted to at least 95% of its maximum dry density (ref.: ASTM D-1557). . If this fill is to extend below the seasonal water table, under-drains should be provided at the base of this fill and linked to the building's foundation drain system.

Vehicle Parking Areas - We expect that there will be parking areas subjected primarily to passenger car traffic while some other to bus and/or service truck traffic. Therefore we present for your consideration the following preliminary pavement recommendations:

Section (I)- mainly passenger car traffic

1.5 in. of 9.5 mm MDOT Superpave Mix
2.0 in. of 19 mm MDOT Superpave Mix
6.0 in. MDOT Crushed Aggregate Base, Type A.
15.0 in. MDOT Aggregate Subbase, Type D

Section (II)- areas with truck/bus traffic

1.5 in. of 9.5 mm MDOT Superpave Mix
2.5 in. of 19 mm MDOT Superpave Mix
6.0 in. MDOT Crushed Aggregate Base, Type A.
18.0 in. MDOT Aggregate Subbase, Type D

The asphalt pavement should be compacted to at least 94% of the Theoretical Maximum Density - TMD (ref.: AASHTO T-209). Verification of field-testing should be achieved by use of at least three cores cut per lift of pavement placed.

The Designer based on traffic loads, volume, and the owner's design life requirements and specifications should engineer/select the actual pavement section component thickness. The above sections may be considered as representative of typical local construction practices, and as such, the owner and designer should anticipate the need for periodic maintenance.

All fill placed below the base materials as well as base materials should be compacted to at least 95% of their maximum dry densities as determined by ASTM D-1557.

Particular attention should be given to slope subgrade, subbase and finished pavement surfaces in order to facilitate drainage. Nevertheless, due to frost action it is anticipated that frost penetration into site fills and some pavement distress will take place.

Road Pavement-- Though no data related to traffic and road performance requirements are available we present for your consideration the following preliminary road pavement section:

1.5 in. of 9.5 mm MDOT Superpave Mix
2.5 in. of 19 mm MDOT Superpave Mix
6.0 in. MDOT Crushed Aggregate Base, Type A (2" minus)
18.0 in. MDOT Aggregate Subbase, Type D (6" minus)

The Designer based on traffic loads, volume, and the owner's design life requirements and specifications should engineer/select the actual pavement section component thickness.

Construction During Winter - In case that the foundation construction takes place during winter, foundations and basement slabs must be protected during freezing conditions. No concrete should be placed on frozen ground and once placed the soil beneath the structure has to be protected from freezing.

Site soils are moisture sensitive and subgrades are susceptible to disturbance during wet conditions. Site work and construction activities should take appropriate measures to protect exposed subgades.

Quality Control - It is recommended that the excavation and foundation phases of the work be observed by FGS/CMT inc. to assure consistency with design concepts, specifications and design recommendations of this report. In the event that the subsurface conditions are found to differ from those anticipated at the start of construction FGS/CMT, inc. should be contacted to make any necessary changes to the recommendations found in this report.

5. CLOSING

We request that FGS/CMT, Inc. be provided with the opportunity to view the final design and specifications to determine that our earthwork and foundation recommendations have been properly interpreted and implemented.

It has been a pleasure to assist you in this phase of the project. If you have any questions, please call us

Sincerely
FGS/CMT, inc.

Miltiades Zacas, PhD, P.E.
Senior Geotechnical Engineer

APPENDICES

Appendix A : Limitations – Important information about your Geotechnical Engineering Report

Appendix B : Figures

Appendix C : Test Boring Logs

Appendix D : Laboratory Test Results

Appendix A: Limitations – Important information about your Geotechnical Engineering Report

Limitations

This report has been prepared for the exclusive use of Allied Engineering, Inc. for the specific application to the Proposed Acadia Gateway Center in Trenton, Maine. Copies of the report may be given to contractor(s), with the contract documents, to disclose information relative to the project. Nevertheless, the report has not been prepared to serve as the plans and specifications for actual construction without the appropriate interpretation by the project architect, structural engineer, and/or civil engineer. Reproduction and distribution of this report must be authorized by the client and FGS/CMT, inc.

This work was done in accordance with generally accepted geotechnical principles and practices, with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions for the period in which this work was accomplished. No other warranty, expressed or implied, is made.

The analyses and recommendations contained in this report are preliminary and are based in part upon the data obtained from the referenced subsurface explorations and information provided by others. It is recommended that the architect, civil engineer and structural engineer along with any other design professionals involved in the project carefully review the conditions and characteristics of the proposed construction assumed in this report to ensure they are consistent with the actual planned development. When discrepancies exist, they should be brought to our attention to ensure they do not affect the conclusions and recommendations provided herein have been correctly interpreted.

The results of the investigation indicate subsurface conditions only at the specific locations and times, and only at the depths observed. They do not reflect the actual environmental or stratigraphic variations that may exist between such locations. The validity of the recommendations is based in part on assumptions about the stratigraphy made by FGS/CMT, Inc. If subsurface conditions different from those described are observed during construction, it will be necessary to reevaluate the findings and recommendations of this report.

It must be noted that the findings presented do not represent scientific certainties and are based on professional judgment. The conclusions regarding the condition of the site do not represent a warranty that all areas within the site and beneath structures are of the same quality as those observed, or that the site contains no hazardous substances or latent conditions beyond those detected or observed during the investigation.

FGS/CMT, Inc. is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or the reuse of the subsurface data for engineering analysis by others.

No attempt has been made to verify the findings and recommendations of others, or to verify the compliance of the past or present owners and/or occupants of the property with local, state, or federal laws and regulations.

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one—not even you*—should apply the report for any purpose or project except the one originally contemplated.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions *only* at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an *opinion* about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject To Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations", many of these provisions indicate where geotechnical engineers responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in ASFE exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

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C-103	GRADING, DRAINAGE, AND EROSION AND SEDIMENTATION CONTROL PLAN
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C-402	SITE DETAILS
C-403	DRAINAGE AND UTILITY DETAILS
C-404	WATER DETAILS
C-405	EROSION CONTROL DETAILS
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A0.02	FIRE RATING PARTITION PLANS
A1.01	SITE PLAN
A2.01	FIRST FLOOR PLAN
A2.02	SECOND FLOOR PLAN
A2.03	ROOF PLAN
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A2.06	BUS SHELTER

A3.01	EXTERIOR ELEVATIONS I – ADMINISTRATION BUILDING
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A3.06	BUILDING SECTIONS IV
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A4.07	WALL SECTIONS VII
A4.08	WALL SECTIONS VIII
A4.09	WALL SECTIONS IX
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A4.21	DOOR DETAILS II
A4.22	DOOR DETAILS III
A4.23	DOOR DETAILS IV
A4.24	DOOR DETAILS V
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A4.26	DOOR DETAILS VII
A4.27	DOOR DETAILS VIII
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A7.06	SECOND FLOOR ENLARGED PLAN I
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A7.09	SECOND FLOOR ENLARGED PLAN IV
A7.10	SECOND FLOOR ENLARGED PLAN V
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SB-100	STRUCTURAL PART PLAN – FOUNDATION
SB-101	STRUCTURAL PART PLAN – FOUNDATION
SB-102	RADON AND FOOTING DRAIN PIPING LAYOUT PLANS
SB-200	STRUCTURAL – ENLARGED FOUNDATION PLANS
SB-500	STRUCTURAL – FOUNDATION DETAILS
SB-501	STRUCTURAL – FOUNDATION DETAILS
SF-100	STRUCTURAL PART PLAN – SECOND FLOOR FRAMING
SF-101	STRUCTURAL PART PLAN – MEZZANINE/GIRT FRAMING
SF-102	STRUCTURAL PART PLAN – ROOF FRAMING
SF-103	STRUCTURAL PART PLAN – ROOF FRAMING
SF-400	STRUCTURAL – CANOPY FRAMING PLANS
SF-500	STRUCTURAL – DETAILS
SF-501	STRUCTURAL – CANOPY DETAILS
SF-502	STRUCTURAL – DETAILS
SF-503	STRUCTURAL – DETAILS
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FP-100	FIRE PROTECTION PLAN FIRST FLOOR
FP-101	FIRE PROTECTION PLAN SECOND FLOOR
FP-500	FIRE PROTECTION STORAGE TANK DETAILS
P-000	LEGENDS AND ABBREVIATIONS
PS-100	PLUMBING PART PLAN – UNDERSLAB
PS-101	SANITARY PART PLAN – UNDERSLAB
PS-102	SANITARY PART PLAN – FIRST FLOOR
PS-103	SANITARY PART PLAN – FIRST FLOOR
PS-104	SANITARY PART PLAN – SECOND FLOOR
PS-105	SANITARY PART PLAN – SECOND FLOOR
PS-106	SANITARY PART PLAN – ROOF
PL-100	DOMESTIC PART PLAN – FIRST FLOOR
PL-101	DOMESTIC PART PLAN – FIRST FLOOR
PL-102	DOMESTIC PART PLAN – SECOND FLOOR
PL-103	DOMESTIC PART PLAN – SECOND FLOOR
P-500	PLUMBING DETAILS
P-501	BUS WASH PLUMBING COORDINATION DETAILS
P-502	BUS WASH PLUMBING COORDINATION DETAILS
P-503	BUS WASH PLUMBING COORDINATION DETAILS
P-600	DOMESTIC HOT WATER AND GAS PIPING SCHEMATICS

MH-100	MECHANICAL PART PLAN – FIRST FLOOR
MH-101	MECHANICAL PART PLAN – UPPER LEVEL
MH-102	MECHANICAL PART PLAN – UPPER LEVEL
MH-103	MECHANICAL PART PLAN – ROOF
MH-104	MECHANICAL PART PLAN – ROOF
MH-300	MECHANICAL SECTIONS
MH-600	MECHANICAL SCHEMATICS
MP-100	MECHANICAL PIPING PART PLAN – FIRST FLOOR
MP-101	MECHANICAL PIPING PART PLAN – FIRST FLOOR
MP-102	MECHANICAL PIPING PART PLAN – UPPER LEVEL
E-000	ELECTRICAL LEGENDS AND ABBREVIATIONS
ES-100	SITE ELECTRICAL PART PLAN
ES-101	SITE ELECTRICAL PART PLAN, DETAILS AND SCHEDULE
ES-102	SITE ELECTRICAL PART PLAN
ES-500	SITE ELECTRICAL DETAILS
EL-100	LIGHTING PART PLAN – FIRST FLOOR
EL-101	LIGHTING PART PLAN – FIRST FLOOR
EL-102	LIGHTING PART PLAN – SECOND FLOOR
EL-103	LIGHTING PART PLAN – SECOND FLOOR
EP-100	POWER AND SYSTEMS PART PLAN – FIRST FLOOR
EP-101	POWER AND SYSTEMS PART PLAN – FIRST FLOOR
EP-102	POWER AND SYSTEMS PART PLAN – SECOND FLOOR
EP-103	POWER AND SYSTEMS PART PLAN – SECOND FLOOR
EP-104	ELECTRICAL PLAN ROOF
EP-400	POWER RISER DIAGRAM AND SCHEDULES
LP-100	LIGHTNING PROTECTION PLAN
LP-101	LIGHTNING PROTECTION PLAN
LP-500	LIGHTNING PROTECTION DETAILS

SECTION 012300 - OPTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. If the Contractor discovers any ambiguity, error, omission, conflict, or discrepancy, General Conditions Section 101.3.6 Priority of Conflicting Contract Documents shall control.

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. State of Maine Department of Transportation, "Standard Specifications," Revision December 2002, and any revisions thereto, apply to this Section

1.2 SUMMARY

A. Section includes administrative and procedural requirements for options.

1.3 DEFINITIONS

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

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

1.4 PROCEDURES

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

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

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each Option. Indicate if options have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to options.

C. Execute accepted options under the same conditions as other work of the Contract.

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

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF OPTIONS

A. Option No. 1 NOT USED

B. Option No. 2 Include on the bid sheet a cost for a new water well and piping installation at a location on the site to be determined by the owner if required.
   1. If for reasons not related to errors or negligence by the contractor the “basis of design” well is not acceptable to the owner, include in this option a cost to fill the well hole with pea stone to within 6’ of the top and fill the top 6’ with concrete or abandon the well as required by state standards, mobilize to an alternate site location to be determined by the owner, and drill a second well meeting Basis of design requirements as specified in section 331200 Water supply wells
   2. Under this option the cost of drilling and casing quantities which differ from the basis of design shall comply with basis of design unit pricing.

C. Option No. 3: Thermoplastic PVC standing seam roof system, in lieu of metal standing seam roof system

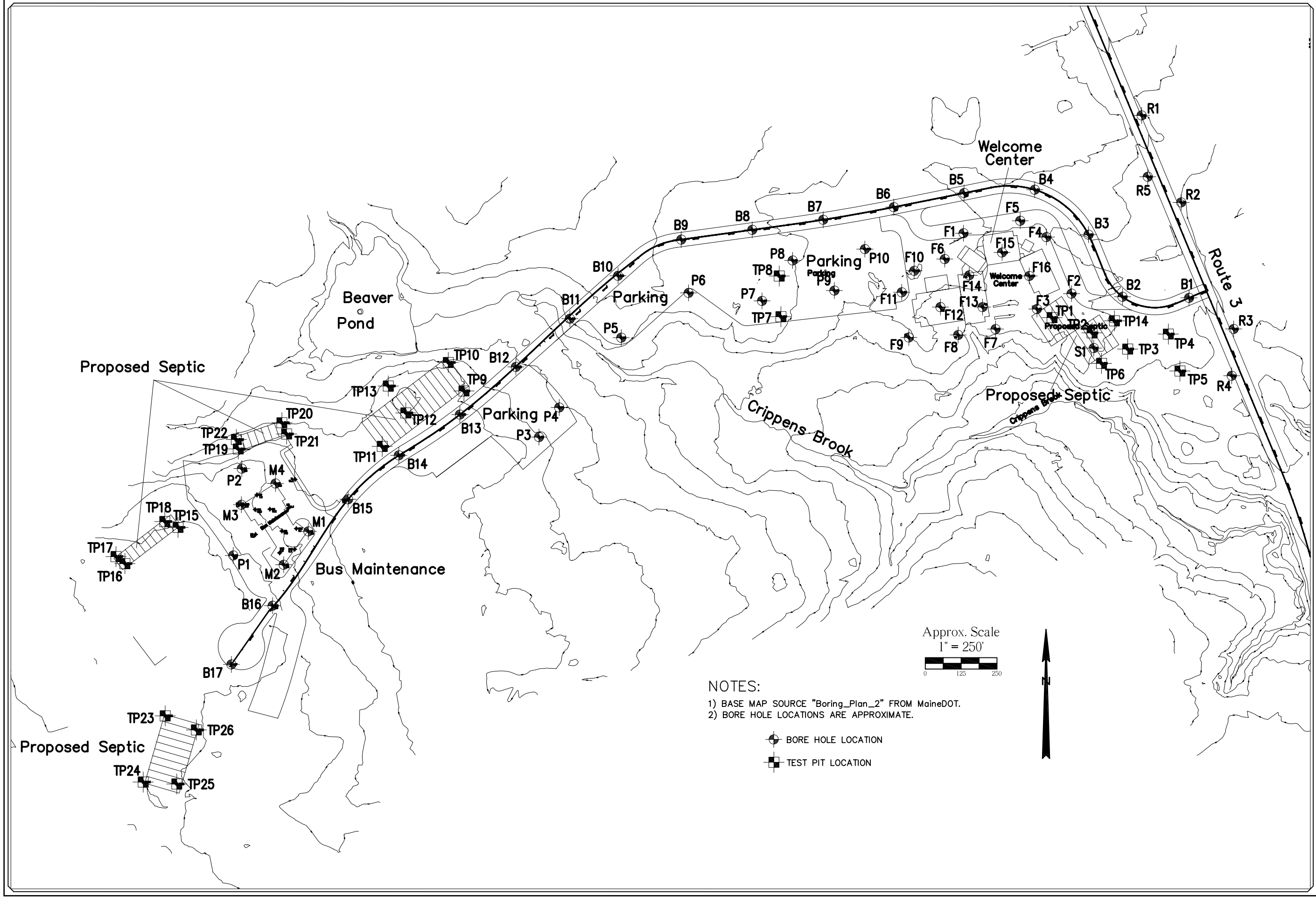
   1. Base Bid: Metal Standing seam roof system as specified in Division 7 Section "076100 Metal Roofing
   2. Option: Provide all labor, material and equipment necessary for thermoplastic (PVC) single-ply membrane roofing system with “standing seam”, such as that manufactured by Sarnafil Inc., “Décor Profile # 5331” Felt back fiberglass reinforced membrane – in lieu of metal roofing at sloped roof

D. Option No. 4 Insulated Translucent Fiberglass (FRP) Sandwich Panel Skylight system in lieu of Metal framed skylights

   1. Base Bid: Metal framed skylights as specified in Division 8 Section 086300 Metal framed skylights.
   2. Option: Provide all labor, material and equipment necessary for Insulated Translucent Fiberglass (FRP) Sandwich Panel Skylight system such as is specified in section (084523) – in lieu of Metal framed Skylights as specified in section 086300 Metal framed skylights.

E. Option No. 5 MAHA MCL Mobile Lifting system in lieu of (M-1) Mobile 4 Post Lift System shall be as manufactured by Rotary Lift,
   1. Base Bid: .(M-1) Mobile 4 Post Lift System shall be as manufactured by Rotary Lift.
   2. Option: Provide all labor, material and equipment necessary for a MAHA MCL Mobile Lifting system as specified in section 111000 vehicle maintenance equipment paragraph 2.16 - in lieu of (M-1) Mobile 4 Post Lift System shall be as manufactured by Rotary Lift as specified in section 111000 vehicle maintenance equipment paragraph 2.01.

END OF SECTION 012300



FGS/CMT
Fessenden Geo-Environmental Services
Construction Materials Testing
PO Box 2097, 136 Maine Avenue
Bangor, Maine 04401
tel. (207) 947-3184 1-877-CMT-TEST
fax. (207) 990 - 1194

Acadia Gateway Center
Trenton, Maine

Site Layout and
Boring and Test Pit Locations

Date: 06/06/08 Drawn By: JAH
File: Acadia Checked By: AAF
Sheet Number: 1

NOTES:

1) TEST PIT LOCATIONS ARE APPROXIMATE.

TEST PIT LOCATION

Approx. Scale
1" = 100'

0 50 100

TP20 TP21 TP22 TP19 TP15 TP18 TP16 TP17 TP26 TP25 TP23 TP24

Proposed Bus Septic

Proposed Reserve Septic

Proposed Visitor Center Septic

Trail

FGS/CMT Inc.
Fessenden Geo-Environmental Services
Construction Materials Testing
PO Box 2097, 136 Maine Avenue
Bangor, Maine 04401
tel. (207) 947-3184 1-877-CMT-TEST
fax. (207) 990 - 1194

Acadia Gateway Center
Trenton, Maine

Test Pit Locations
Septic Areas by Bus Maintenance

Date: 06/06/08 Drawn By: JAH
FileSepticAtBusChecked By:AAF

Sheet Number:
2

NOTES:

1) BASE MAP SOURCE "Boring_Plan_2" FROM MaineDOT.
2) BORE HOLE LOCATIONS ARE APPROXIMATE.

BORE HOLE LOCATION

TEST PIT LOCATION

Approx. Scale
1" = 100'
0 50 100

N

B1 B2 B3 B4 B5 B6 B7 B8
R1 R2 R3 R4 R5
F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16
P7 P8 P9 P10
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP14
S1

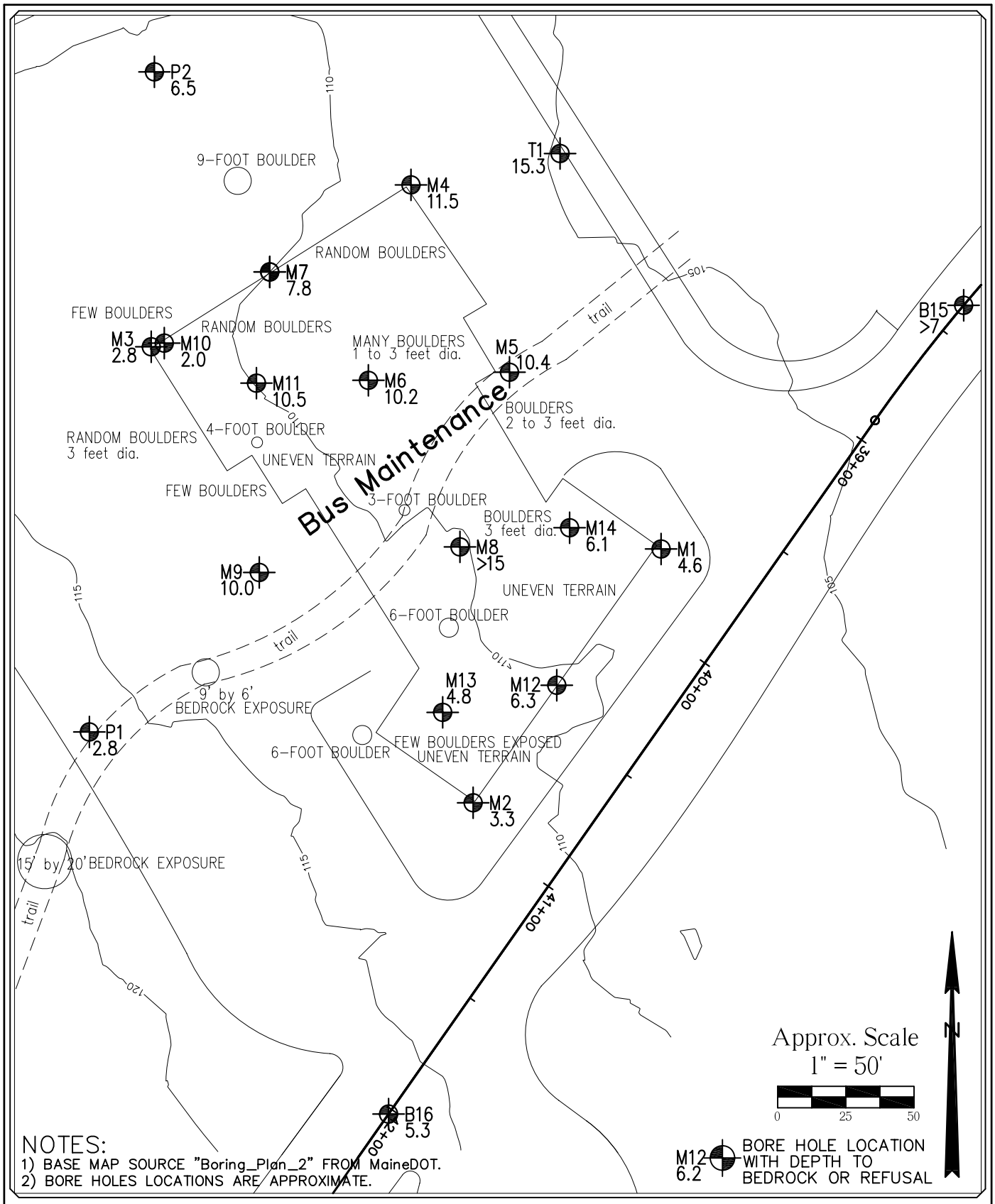
Parking
Welcome Center
Proposed Septic
FOUNDATION
HAND-DUG WELL
Route 3
Crippens Brook

FGS/CMT
Fessenden Geo-Environmental Services
Construction Materials Testing
PO Box 2097, 136 Maine Avenue
Bangor, Maine 04401
tel. (207) 947-3184 1-877-CMT-TEST
fax. (207) 990 - 1194

Acadia Gateway Center
Trenton, Maine

Boring and Test Pit Locations
Welcome Facility Center and Route 3

Date: 06/06/08 Drawn By: JAH
File: Acadia Checked By: AAF
Sheet Number: 3



NOTES:
1) BASE MAP SOURCE "Boring_Plan_2" FROM MaineDOT.
2) BORE HOLES LOCATIONS ARE APPROXIMATE.

Date: 06/06/08 Drawn By: JAH
File: Acadia Checked By: AAF
Sheet Number:
4

Acadia Gateway Center
Trenton, Maine

Boring Locations
Bus Maintenance Area

Fessenden Geo-Environmental Services
Construction Materials Testing
PO Box 2097, 136 Maine Avenue
Bangor, Maine 04401
tel. (207) 947-3184 1-877-CMT-TEST
fax. (207) 990 - 1194
FGS/CMT inc.

Appendix C : Test Boring Logs

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-1
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt
											1.0	w/Some Organics
											2.1	Brown Fine Sandy Silt
	1D	2"	24"		4.0	8	12	19	24			
												Brown Mottled Silty Clay
	2D	2"	24"		7.0	12	14	14	17		7.0	
												Bottom of Boring @ 7.0'
												Dry

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-1

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-2
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt
											1.0	w/Some Organics, w/Trace of Gravel
												Brown Fine Sandy Silt
	1D	2"	24"		4.0	3	6	11	25		2.2	w/Trace of Gravel
											6.0	Brown Mottled Silty Clay
											7.0	Brown Silty Clay w/Fine Sand Layers
	2D	2"	24"		7.0	12	11	10	10			
												Bottom of Boring @ 7.0'
												Dry

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-2

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-3
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA			12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"				
	HAMMER WT.				SURFACE ELEV:	
	HAMMER FALL					

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt
											0.8	w/Some Organics
												Brown Silty Fine Sand
											1.9	w/Some Coarse Sand, w/Trace of Gravel
											3.5	Weathered Rock
												Refusal @ 3.5'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-3

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-4
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt w/Some Organics
												Brown Fine Sandy Silt w/Trace of Clay
	1D	2"	24"		4.0	6	10	10	16		4.0	
											6.0	Brown Silty Clay w/Trace of Fine Sand
											6.5	Brown Silty Fine Sand
	2D	2"	24"		7.0	6	6	11	30		7.0	Brown Silty F/C Sand w/Some Gravel
												Bottom of Boring @ 7.0' Caved @ 6.9' Water @ 6.5'

SAMPLES		SOIL CLASSIFIED BY:	REMARKS:
D = SPLIT SPOON	R = ROCK CORE	XX DRILLER-VISUALLY	
C = 2" SHELBY TUBE	V = VANE TEST	SOIL TECHNICIAN-VISUALLY	
S = 3" SHELBY TUBE		LABORATORY TESTS	
U = 3 1/2" SHELBY TUBE			

HOLE NO. B-4

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-5
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.5	Brown Organic Silt
											2.5	Brown Fine Sandy Silt
	1D	2"	24"		4.0	4	9	12	13			
											6.0	Brown Mottled Silty Clay
	2D	2"	24"		7.0	5	7	5	7		7.0	Brown Silty Fine Sand
												Bottom of Boring @ 7.0'
												Caved @ 6.8' Water @ 5.8'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-5

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-6
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Organics w/Sandy Silt
	1D	2"	24"		4.0	10	22	28	44			Brown Mottled Clay
											5.0	
	2D	2"	24"		7.0	10	13	17	15		7.0	Brown Mottled Clay w/Silt Layers
												Bottom of Boring @ 7.0' Caved & Damp @ 5.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-6

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-7
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Organics w/Sandy Silt
	1D	2"	24"		4.0	7	11	12	14		5.0	Brown Mottled Silty Sandy Clay
											6.5	Brown Sandy Silt w/Clay Layers
	2D	2"	24"		7.0	5	5	5	36		7.0	Brown Coarse Sand w/Trace of Gravel
												Bottom of Boring @ 7.0' Water @ 6.2'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-7

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-8
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Organics w/Sandy Silt
											3.0	Brown Mottled Silty Clay
	1D	2"	18"		3.5	11	11	65				
												Brown Silty Gravelly Sand
	2D	2"	24"		7.0	10	14	7	6		7.0	
												Bottom of Boring @ 7.0'
												Caved @ 5.6' Water @ 5.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-8

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-9
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Sandy Silt w/Organics
	1D	2"	24"		4.0	9	12	14	15			Brown Mottled Silty Clay
											5.5	w/Silt Layers
	2D	2"	19"		6.6	6	12	24	50		6.6	Brown Silty Gravelly Sand
												Refusal @ 6.6'
												Caved @ 4.8' Water @ 1.2'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-9

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-10
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Sandy Silt w/Organics
	1D	2"	24"		4.0	20	20	23	32			Brown Mottled Sandy Silt
											6.0	
	2D	2"	24"		7.0	12	30	40	75		7.0	Brown Silty Gravelly Sand
												Bottom of Boring @ 7.0' Caved @ 3.7' Water @ 2.9'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-10

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-11
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Silty Gravelly Sand w/Organics
	1D	2"	8"		2.7	29	65				2.7	Brown Silty Gravelly Sand
											3.5	Rock
												Refusal @ 3.5'
												Dry

SAMPLES		SOIL CLASSIFIED BY:	REMARKS:
D = SPLIT SPOON	R = ROCK CORE	XX DRILLER-VISUALLY	
C = 2" SHELBY TUBE	V = VANE TEST	SOIL TECHNICIAN-VISUALLY	
S = 3" SHELBY TUBE		LABORATORY TESTS	
U = 3 1/2" SHELBY TUBE			

HOLE NO. B-11

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-12
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/21/2008	1/21/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Silty Gravelly Sand,
											1.0	w/ Rock & Organics
	1D	2"	24"		4.0	19	20	28	65		4.0	Brown Silty Gravelly Sand
	D	2"	0"	0"	5.0	50					5.0	Decomposed Rock
												Refusal @ 5.0'
												Water @ 4.2'

SAMPLES

D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:

XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-12

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-13
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Silty Sandy Gravel w/Organics
												Brown Silty Gravelly Sand,
	1D	2"	24"		4.0	22	38	54	65		4.5	w/Trace of Cobbles
	D	2"	0"	0"	5.0	50					5.0	Decomposed Rock
												Refusal @ 5.0'
												Open Hole: Water @ 1.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-13

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-14
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Sandy Silt w/Organics
	1D	2"	24"		4.0	11	14	15	21		5.5	Brown Mottled Sandy Silt
	2D	2"	24"		7.0	45	42	33	55		7.0	Brown Silty Gravelly Sand, w/Trace of Cobbles
												Bottom of Boring @ 7.0' Caved & Wet @ 4.6'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-14

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-15
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Sandy Silt w/Organics
	1D	2"	24"		4.0	22	25	27	32			Brown Mottled Sandy Silt
	2D	2"	24"		7.0	7	10	10	15		7.0	Bottom of Boring @ 7.0' Caved @ 6.2' Water @ 5.3'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-15

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-16
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Silty Gravelly Sand w/Organics
	1D	2"	20"		3.7	32	50	66	70		5.3	Brown Silty Gravelly Sand
	2D	2"	5"		5.4	125					5.4	Rock
												Refusal @ 5.4'
												Caved & Dry @ 5.1'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-16

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. B-17
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Gravelly Silty Sand w/Organics
	1D	2"	6"		2.5	92						
												Brown Gravelly Silty Sand
											6.5	
	2D	2"	23"		6.9	25	32	23	100		6.9	Decomposed Rock
												Refusal @ 6.9'
												Caved @ 5.8' Water @ 3.9'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. B-17

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-1
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt, w/Some Organics
	1D	2"	24"		4.0	4	6	11	31		2.5	Brown Mottled Clayey Silt, w/Some Fine Sand
	2D	2"	24"		7.0	17	18	16	17		6.5	Brown Mottled Silty Clay, w/Some Fine Sand
											11.0	Brown Silty Fine Sand, w/Trace of Clay & Gravel
	3D	2"	24"		12.0	2	2	4	5		11.5	Gray Mottled Silty Clay
											12.5	Gray Silty Fine Sand, w/Silty Clay Layers
											14.7	Gray Silty Fine-Coarse Sandy Gravel
	4D	2"	4"		15.2	50					15.2	Weathered Rock
												Refusal @ 15.2' Dry in Augers Caved @ 12.7' Water @ 7.9'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-1

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-2
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt,
											0.5	w/Some Organics
												Brown Silty Fine-Medium Sand,
	1D	2"	24"		4.0	13	16	19	32		1.0	w/Trace of Organics
											4.5	Brown Mottled Silty Clay
	2D	2"	24"		7.0	6	7	8	9			
												Brown Silty Fine Sand w/Some Clay,
											9.0	w/Some Silty Fine Sand Layers
											10.5	Brown Fine to Coarse Sandy Gravel
	3D	2"	7"		10.6	20	50				10.8	Weathered Rock
												Refusal @ 10.8'
												Dry in Augers
												Caved @ 10.1' Water @ 9.7'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-2

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-3
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt
											0.5	w/Some Organics
												Brown Fine to Medium Sandy Silt,
	1D	2"	24"		4.0	9	9	14	22		1.5	w/Some Gravel
	2D	2"	24"		7.0	9	11	16	18			Brown Mottled Silty Clay,
											8.0	w/Fine Sand
												Brown Silty Clay,
	3D	2"	24"		12.0	3	6	8	10		11.5	w/Trace of Fine Sand
											13.2	Brown Silty Fine Sand w/Trace of Clay
											14.5	Brown Silty Fine-Coarse Sandy Gravel
	D	2"	0"	0"	15.0	50					15.0	Weathered Rock
												Refusal @ 15.0'
												Dry in Augers
												Caved & Dry @ 9.3'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-3

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F- 4
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Fine Sandy Silt,
											1.5	w/Some Organics
	1D	2"	24"		4.0	12	11	9	24		4.1	Brown Mottled Silty Fine Sandy Clay
											4.9	Weathered Rock
												Refusal @ 4.9'
												Caved & Dry @ 4.2'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F- 4

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F- 5
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.5	Brown Fine Sandy Silt, w/Some Organics
	1D	2"	24"		4.0	7	9	10	15		4.8	Brown Mottled Silty Fine Sandy Clay
	2D	2"	24"		7.0	19	16	21	20		9.2	Brown Silty Fine to Coarse Sandy Gravel
												Refusal @ 9.2' Dry in Augers Caved @ 9.0' Water @ 8.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F- 5

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F- 6
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/19/2007	12/19/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.		BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt, w/Some Organics
	1D	2"	24"		4.0	6	8	9	13		4.0	Brown Mottled Silty Clay, w/Some Fine Sand
	2D	2"	24"		7.0	8	10	15	19			
	3D	2"	24"		12.0	5	7	7	10			Brown Mottled Silty Clay
											13.0	
											14.0	Gray Silty Clay
	4D	2"	24"		15.0	1	2	2	2			
	5D	2"	24"		17.0	1	2	1	1			Gray Silty Clay w/Fine Sand Layers
											17.5	
	6D	2"	12"		21.0	4	59				21.0	Gray Silty Fine-Coarse Sandy Gravel
												Refusal @ 21.0' Dry in Augers Caved & Dry @ 14.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F- 6

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-7
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.5	Brown Silty Fine-Medium Sand, w/Some Organics
	1D	2"	24"		4.0	3	4	6	9		4.5	Brown Mottled Fine Sandy Silt, w/Some Clay
	2D	2"	24"		7.0	12	17	19	22		13.0	Brown Mottled Silty Clay
	3D	2"	24"		12.0	4	7	9	9		19.0	Gray Silty Clay
	4D	2"	18"		17.0	3	4	6			22.0	Gray Silty Clay w/Fine Sand Layers
	5D	2"	24"		22.0	1	3	2	4			Bottom of Boring @ 22.0' Dry in Augers Caved & Dry @ 19.5'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-7

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-8
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt, w/Some Organics
	1D	2"	24"		4.0	10	12	16	27			
	2D	2"	24"		7.0	6	7	8	8		8.0	Brown Mottled Silty Clay w/Some Fine Sand
	3D	2"	24"		12.0	4	4	7	8		13.0	Brown Silty Clay
	4D	2"	24"		17.0	2	2	2	2		19.0	Gray Silty Clay
											20.5	Gray Silty Fine-Coarse Sandy Gravel
	5D	2"	8"		20.7	23	50				20.7	Weathered Rock
												Refusal @ 20.7' Water in Augers @ 19.0' Caved @ 19.4' Water @ 18.4'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-8

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-9
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt, w/Some Organics
	1D	2"	24"		4.0	8	8	16	24		4.5	Brown Mottled Silty Clay, w/Some Fine Sand
	2D	2"	24"		7.0	9	15	21	29		11.0	Brown Mottled Silty Clay
	3D	2"	24"		12.0	4	5	5	6		13.5	Brown Silty Clay, w/Some Fine Sand Layers
											16.4	Gray Silty Clay w/Fine Sand Layers
	4D	2"	24"		17.0	2	2	4	23		17.0	Gray Fine-Coarse Sandy Gravel
												Bottom of Boring @ 17.0' Water in Augers @ 13.9' Caved @ 14.0' Water @ 11.9'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-9

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-10
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.5	Brown Organic Silt
	1D	2"	24"		4.0	6	6	6	7		4.0	Brown Silty Mottled Clay, w/Some Fine Sand Layers
											6.0	Brown Silty Clay
	2D	2"	24"		7.0	2	2	3	5			
	3D	2"	24"		12.0	1	2	4	4			Gray Silty Clay
											15.5	
	4D	2"	24"		17.0	1	2	4	3			
	5D	2"	24"		22.0	1	2	3	2			Gray Silty Clay, w/Some Fine Sand Layers
											23.0	
	6D	2"	24"		24.0	2	2	17	34		24.0	Gray Silty Fine-Coarse Sandy Gravel
												Bottom of Boring @ 24.0' Water in Augers @ 14.2' Caved @ 19.9' Water @ 13.5'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-10

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. F-11
DRILLER Jerry Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		12/20/2007	12/20/2007
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Brown Fine Sandy Silt w/Some Organics
	1D	2"	24"		4.0	4	7	10	15			
	2D	2"	24"		7.0	6	8	10	12		8.5	Brown Mottled Fine Sandy Silty Clay
	3D	2"	24		12.0	4	5	7	8		15.5	Brown Silty Clay
	4D	2"	24"		17.0	2	2	4	4		17.0	Gray Silty Clay, w/Some Fine Sand Layers
												Bottom of Boring @ 17.0' Dry in Augers Caved & Dry @ 14.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. F-11

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. M-1
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
	1D	2"	12"		3.0	50	76					Brown Silty Gravelly Sand, w/Cobbles
											4.6	
												Refusal @ 4.6'
												Caved @ 3.4' Water @ 0.8'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. M-1

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. M-2
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Silty Gravelly Sand
	1D	2"	16"		3.3	30	70	75			3.3	
											4.3	Decomposed Rock
												Refusal @ 4.3'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. M-2

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. M-3
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Rusty Silty Gravelly Sand w/Organics
	1D	2"	7"		2.6	57	50				2.8	Brown Silty Gravelly Sand w/Cobbles
											4.1	Decomposed Rock
												Refusal @ 4.1'
												Caved & Dry @ 4.0'

SAMPLES

D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:

XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. M-3

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. M-4
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Silt
											2.0	Brown Silty Fine Sand, w/Trace of Gravel
	1D	2"	18"		3.5	20	58	100				
	2D	2"	24"		7.0	52	52	30	30			Brown Silty Gravelly Sand, w/Cobbles
											11.5	
	3D	2"	24"		12.0	30	60	66	125		12.0	Broken Rock
												Bottom of Boring @ 12.0' Caved @ 5.9' Water @ 5.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. M-4

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-1
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
												Brown Rusty Silty Sand,
											1.0	w/Organics & Gravel
	1D	2"	10"		2.8	19	90				2.8	Brown Silty Gravelly Sand
											3.0	Rock
												Refusal @ 3.0'
												Caved @ 2.1' Water @ 1.3'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-1

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-2
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
	1D	2"	6"		2.5	75						
												Brown Silty Gravelly Sand
	2D	2"	18"		6.5	49	56	125			6.5	
												Bottom of Boring @ 6.5'
												Caved @ 6.1' Water @ 6.0'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-2

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-3
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	
	1D	2"	12"		3.0	30	100				3.0	Brown Silty Gravelly Sand
											3.6	Broken Rock
												Refusal @ 3.6'
												Dry

SAMPLES

D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:

XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-3

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-4
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Sandy Silt w/Organics
	1D	2"	24"		4.0	11	18	25	25		4.5	Brown Sandy Silt
	2D	2"	17"		6.4	25	50	100			6.4	Brown Silty Gravelly Sand
												Refusal @ 6.4' Caved @ 6.3' Water @ 6.2'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-4

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-5
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/22/2008	1/22/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Brown Sandy Silt w/Organics
												Brown Sandy Silt
	1D	2"	24"		4.0	12	18	21	27		3.5	
											4.5	Brown Sandy Clayey Silt
	D	2"	1"	0"	5.1	50						
	2D	2"	6"		6.2	60					6.2	Brown Silty Gravelly Sand w/Cobbles
												Refusal @ 6.2'
												Caved & Dry @ 5.7'

SAMPLES

D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:

XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-5

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-6
DRILLER Jon Rudnicki	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Topsoil
	1D	2"	24"		4.0	12	32	34	34		5.0	Brown Mottled Clayey Silt, w/Silt Layers
	2D	2"	24"		7.0	11	12	16	42		7.0	Brown Silty Sand
												Bottom of Boring @ 7.0' Caved @ 6.2' Water @ 4.6'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-6

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-7
DRILLER Andy Durant	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Topsoil
	1D	2"	24"		4.0	11	30	40	46			
	2D	2"	24"		7.0	13	19	26	23			Brown Mottled Silty Clay
											7.5	Bottom of Boring @ 7.5' Damp

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-7

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-8
DRILLER Andy Durant	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Topsoil
	1D	2"	24"		4.0	12	24	40	51			Brown Mottled Silty Clay
	2D	2"	24"		7.0	7	15	18	20		7.0	Bottom of Boring @ 7.0' Caved & Dry @ 5.1'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-8

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-9
DRILLER Andy Durant	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											1.0	Topsoil
	1D	2"	24"		4.0	4	10	16	20			Brown Mottled Silty Clay
	2D	2"	24"		7.0	11	19	27	40		7.0	Bottom of Boring @ 7.0' Water @ 6.9'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-9

MAINE TEST BORINGS, INC. BREWER, ME 04412	CLIENT Fessenden GeoEnvironmental Services	SHEET 1 OF 1 HOLE NO. P-10
DRILLER Andy Durant	PROJECT NAME Acadia Visitors' Center	LINE & STATION
MTB JOB NUMBER 07-263	LOCATION Trenton, ME	OFFSET

GROUNDWATER OBSERVATONS		CASING	SAMPLER	CORE BARREL	Start Date	Finish Date
	TYPE	HSA	SS		1/23/2008	1/23/2008
	SIZE I.D.	2-1/2"	1-3/8"			
	HAMMER WT.		140 lb.		SURFACE ELEV:	
	HAMMER FALL		30"			

CASING BLOWS PER FOOT	SAMPLE NO.	O.D.	PEN.	REC.	DEPTH @ BOT.	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	Vane Reading	DEPTH	STRATUM DESCRIPTION
											0.5	Topsoil
												Brown Mottled Silty Clay
	1D	2"	24"		4.0	4	10	29	40		4.0	
												Brown Mottled Sandy Silt
	2D	2"	24"		7.0	4	15	15	23		7.0	
												Bottom of Boring @ 7.0' Caved @ 5.5' Water @ 4.5'

SAMPLES
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3 1/2" SHELBY TUBE
R = ROCK CORE
V = VANE TEST

SOIL CLASSIFIED BY:
XX DRILLER-VISUALLY
SOIL TECHNICIAN-VISUALLY
LABORATORY TESTS

REMARKS:

HOLE NO. P-10

Appendix D : Laboratory Test Results

LABORATORY TEST DATA
AVAILABLE UPON REQUEST

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TRENTON
HANCOCK COUNTY

MAY 01, 2009
ISSUED FOR BID

ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

LOCATION MAP

DRAWING STATUS LIST

DRAWINGS

Sht No.	SHEET TITLE	ISSUE: DESCRIPTION	60% REVIEW	90% REVIEW	ISSUED FOR BID	ADDENDUM #1	-	-	-
		DATE	01-08-2009	02-12-2009	05-01-2009	10-09-2009	-	-	-
G-1	TITLE SHEET		○	○	○	○			
C-1	TYPICAL SECTIONS		○	○	○				
C-2	PIPE ARCH DETAILS				○				
C-3	ESTIMATED QUANTITIES		○	○	○				
C-4	GENERAL NOTES		○	○	○				
C-5~C-9	PLAN / PROFILE		○	○	○				
C-10~C-17	PLAN ONLY		○	○	○				
C-18~C-19	GEOMETRICS AND CURB LAYOUT		○	○	○				
C-20~C-53	CROSS - SECTIONS		○	○	○				
C-54~C-58	LANDSCAPE PLANS				○				
C-59~C-62	ENVIRONMENTAL PLAN VIEW				○				
C-63	BOUNDARY PLAN					○			
C-101	SITE LAYOUT PLAN				○				
C-102	UTILITY PLAN				○				
C-103	GRADING, DRAINAGE AND EROSION AND SEDIMENTATION CONTROL PLAN				○				
C-401	RETAINING WALL PLAN AND PROFILE				○				
C-402	SITE DETAILS				○				
C-403	DRAINAGE AND UTILITY DETAILS				○				
C-404	WATER DETAILS				○				
C-405	EROSION CONTROL DETAILS				○				
A0.01	SYMBOLS, NOTES & ABBREVIATIONS		○	○	○				
A0.02	FIRE RATING PARTITION PLANS	○	○	○					
A1.01	SITE PLAN	○	○	○	○				
A2.01	FIRST FLOOR PLAN	○	○	○	○				
A2.02	SECOND FLOOR PLAN	○	○	○	○				
A2.03	ROOF PLAN	○	○	○	○				
A2.04	FUELING STATION I	○	○	○	○				
A2.05	FUELING STATION II		○	○	○				
A2.06	BUS SHELTER				○				
A3.01	EXTERIOR ELEVATIONS I - ADMINISTRATION BUILDING	○	○	○	○				
A3.02	EXTERIOR ELEVATIONS II - GARAGE	○	○	○	○				
A3.03	BUILDING SECTIONS I	○	○	○	○				
A3.04	BUILDING SECTIONS II	○	○	○	○				
A3.05	BUILDING SECTIONS III	○	○	○	○				
A3.06	BUILDING SECTIONS IV		○	○	○				
A4.01	WALL SECTIONS I	○	○	○	○				
A4.02	WALL SECTIONS II	○	○	○	○				
A4.03	WALL SECTIONS III	○	○	○	○				
A4.04	WALL SECTIONS IV	○	○	○	○				
A4.05	WALL SECTIONS V	○	○	○	○				
A4.06	WALL SECTIONS VI		○	○	○				
A4.07	WALL SECTIONS VII		○	○	○				
A4.08	WALL SECTIONS VIII				○				
A4.09	WALL SECTIONS IX				○				
A4.20	DOOR DETAILS I				○				
A4.21	DOOR DETAILS II				○				
A4.22	DOOR DETAILS III				○				
A4.23	DOOR DETAILS IV				○				
A4.24	DOOR DETAILS V				○				
A4.25	DOOR DETAILS VI				○				
A4.26	DOOR DETAILS VII				○				
A4.27	DOOR DETAILS VIII				○				
A4.30	WINDOW DETAILS I				○				
A4.31	WINDOW DETAILS II				○				
A4.32	WINDOW DETAILS III				○				
A4.33	LOUVER DETAILS I				○				
A4.40	THERMOPLASTIC ROOF DETAILS I				○				
A4.41	THERMOPLASTIC ROOF DETAILS II				○				
A4.42	THERMOPLASTIC ROOF DETAILS III				○				
A4.43	METAL STANDING SEAM ROOF DETAILS I				○				
A4.44	METAL STANDING SEAM ROOF DETAILS II				○				
A4.45	SKYLIGHT I		○	○	○				
A4.46	SKYLIGHT II				○				
A4.47	SKYLIGHT III				○				
A4.48	SKYLIGHT IV				○				
A5.01	STAIR 01 PLANS AND SECTIONS	○	○	○					
A5.02	STAIR 02 PLANS AND SECTIONS	○	○	○					
A5.03	STAIR 03 PLANS AND SECTIONS	○	○	○					
A5.04	STAIR 04 AND FIXED LADDER PLANS AND SECTIONS	○	○	○					
A5.05	STAIR 01 DETAILS	○	○	○					
A5.06	STAIR 02 DETAILS		○	○					
A5.07	STAIR 03 DETAILS			○					
A5.08	STAIR 04 DETAILS			○					
A5.20	ELEVATOR PLANS AND SECTIONS	○	○	○					
A5.21	ELEVATOR PLANS AND SECTIONS			○					
A6.01	FIRST FLOOR REFLECTED CEILING PLAN	○	○	○					
A6.02	SECOND FLOOR REFLECTED CEILING PLAN	○	○	○					
A6.10	FINISH FLOOR PLANS	○	○	○					
A6.11	FIRST FLOOR PARKING LINE PLAN			○					
A7.01	FIRST FLOOR ENLARGED PLAN I	○	○	○					
A7.02	FIRST FLOOR ENLARGED PLAN II	○	○	○					
A7.03	FIRST FLOOR ENLARGED PLAN III	○	○	○					
A7.04	FIRST FLOOR ENLARGED PLAN IV	○	○	○					
A7.05	FIRST FLOOR ENLARGED PLAN V	○	○	○					
A7.06	SECOND FLOOR ENLARGED PLAN I	○	○	○					
A7.07	SECOND FLOOR ENLARGED PLAN II	○	○	○					
A7.08	SECOND FLOOR ENLARGED PLAN III	○	○	○					
A7.09	SECOND FLOOR ENLARGED PLAN IV	○	○	○					

DRAWING STATUS LIST

DRAWINGS

Sht No.	SHEET TITLE	ISSUE: DESCRIPTION	60% REVIEW	90% REVIEW	ISSUED FOR BID	ADDENDUM #1	-	-	-
		DATE	01-08-2009	02-12-2009	05-01-2009	10-09-2009	-	-	-
A7.10	SECOND FLOOR ENLARGED PLAN V		○	○	○				
A7.13	FIRST FLOOR EQUIPMENT PLAN I				○				
A7.14	FIRST FLOOR EQUIPMENT PLAN II				○				
A7.15	ADMINISTRATION BLDG FIRST FLOOR FURNITURE PLAN				○				
A7.16	ADMINISTRATION BLDG SECOND FLOOR FURNITURE PLAN				○				
A7.20	INTERIOR ELEVATIONS I			○	○				
A7.21	INTERIOR ELEVATIONS II	○		○	○				
A7.22	INTERIOR ELEVATIONS III	○		○	○				
A7.23	INTERIOR ELEVATIONS IV	○		○	○				
A7.24	INTERIOR ELEVATIONS V			○	○				
A7.25	INTERIOR ELEVATIONS VI			○	○				
A7.26	INTERIOR ELEVATIONS VII			○	○				
A7.27	INTERIOR ELEVATIONS VIII				○				
A7.30	WOOD PANEL DETAILS				○				
A8.01	FINISH SCHEDULE	○	○	○	○				
A8.02	PARTITION TYPES	○	○	○	○				
A8.03	DOOR SCHEDULE				○				
A8.04	DOOR AND DOOR FRAME ELEVATIONS				○				
A8.05	WINDOW FRAME AND LOUVER ELEVATIONS				○				
S-000	STRUCTURAL - GENERAL NOTES	○	○	○					
S-001	STRUCTURAL - TYPICAL DETAILS	○	○	○					
SB-100	STRUCTURAL PART PLAN - FOUNDATION	○	○	○					
SB-101	STRUCTURAL PART PLAN - FOUNDATION	○	○	○					
SB-102	RADON AND FOOTING DRAIN PIPING LAYOUT PLANS				○				
SB-200	STRUCTURAL - ENLARGED FOUNDATION PLANS				○				
SB-500	STRUCTURAL - FOUNDATION DETAILS	○		○	○				
SB-501	STRUCTURAL - FOUNDATION DETAILS				○				
SF-100	STRUCTURAL PART PLAN - SECOND FLOOR FRAMING	○		○	○				
SF-101	STRUCTURAL PART PLAN - MEZZANINE/GIRT FRAMING	○		○	○				
SF-102	STRUCTURAL PART PLAN - ROOF FRAMING	○		○	○				
SF-103	STRUCTURAL PART PLAN - ROOF FRAMING	○		○	○				
SF-400	STRUCTURAL - CANOPY FRAMING PLANS				○				
SF-500	STRUCTURAL - DETAILS			○	○				
SF-501	STRUCTURAL - CANOPY DETAILS				○				
SF-502	STRUCTURAL - DETAILS				○				
SF-503	STRUCTURAL - DETAILS				○				
SF-504	STRUCTURAL - FUELING STATION AND BUS SHELTER FRAMING PLANS AND DETAILS				○				
FP-100	FIRE PROTECTION PLAN FIRST FLOOR				○				
FP-101	FIRE PROTECTION PLAN SECOND FLOOR				○				
FP-500	FIRE PROTECTION STORAGE TANK DETAILS				○				
P-000	LEGENDS AND ABBREVIATIONS			○	○				
PS-100	PLUMBING PART PLAN ~ UNDERSLAB	○		○	○				
PS-101	SANITARY PART PLAN ~ UNDERSLAB	○		○	○				
PS-102	SANITARY PART PLAN ~ FIRST FLOOR	○		○	○				
PS-103	SANITARY PART PLAN ~ FIRST FLOOR	○		○	○				
PS-104	SANITARY PART PLAN ~ SECOND FLOOR	○		○	○				
PS-105	SANITARY PART PLAN ~ SECOND FLOOR	○		○	○				
PS-106	SANITARY PART PLAN ~ ROOF			○	○				
PL-100	DOMESTIC PART PLAN ~ FIRST FLOOR	○		○	○				
PL-101	DOMESTIC PART PLAN ~ FIRST FLOOR	○		○	○				
PL-102	DOMESTIC PART PLAN ~ SECOND FLOOR	○		○	○				
PL-103	DOMESTIC PART PLAN ~ SECOND FLOOR	○		○	○				
P-500	PLUMBING DETAILS	○	○	○					
P-501	BUS WASH PLUMBING COORDINATION DETAILS		○	○					
P-502	BUS WASH PLUMBING COORDINATION DETAILS		○	○	○	○			
P-503	BUS WASH PLUMBING COORDINATION DETAILS				○	○			
P-600	HOT WATER AND GAS PIPING SCHEMATICS				○	○			
MH-100	MECHANICAL PART PLAN ~ FIRST FLOOR	○	○	○	○				
MH-101	MECHANICAL PART PLAN ~ UPPER LEVEL	○	○	○	○				
MH-102	MECHANICAL PART PLAN ~ UPPER LEVEL	○	○	○	○				
MH-103	MECHANICAL PART PLAN ~ ROOF	○	○	○	○				
MH-104	MECHANICAL PART PLAN ~ ROOF	○	○	○	○				
MH-300	MECHANICAL SECTIONS			○	○				
MH-600	MECHANICAL SCHEMATICS	○	○	○	○				
MP-100	MECHANICAL PIPING PART PLAN ~ FIRST FLOOR	○	○	○	○				
MP-101	MECHANICAL PIPING PART PLAN ~ FIRST FLOOR	○	○	○	○				
MP-102	MECHANICAL PIPING PART PLAN ~ UPPER LEVEL	○	○	○	○				
E-000	ELECTRICAL LEGENDS AND ABBREVIATIONS	○	○	○	○				
ES-100	SITE ELECTRICAL PART PLAN	○	○	○	○				
ES-101	SITE ELECTRICAL PART PLAN, DETAILS AND SCHEDULE	○	○	○	○				
ES-102	SITE ELECTRICAL PART PLAN	○	○	○	○				
ES-500	SITE ELECTRICAL DETAILS				○				
EL-100	LIGHTING PART PLAN ~ FIRST FLOOR	○	○	○	○				
EL-101	LIGHTING PART PLAN ~ FIRST FLOOR	○	○	○	○				
EL-102	LIGHTING PART PLAN ~ SECOND FLOOR	○	○	○	○				
EL-103	LIGHTING PART PLAN ~ SECOND FLOOR	○	○	○	○				
EP-100	POWER AND SYSTEMS PART PLAN ~ FIRST FLOOR	○	○	○	○				
EP-101	POWER AND SYSTEMS PART PLAN ~ FIRST FLOOR	○	○	○	○				
EP-102	POWER AND SYSTEMS PART PLAN ~ SECOND FLOOR	○	○	○	○				
EP-103	POWER AND SYSTEMS PART PLAN ~ SECOND FLOOR	○	○	○	○				
EP-104	ELECTRICAL PLAN ROOF				○				
EP-400	POWER RISER DIAGRAM AND SCHEDULES	○	○	○	○				
LP-100	LIGHTNING PROTECTION PLAN				○				
LP-101	LIGHTNING PROTECTION PLAN				○				
LP-500	LIGHTNING PROTECTION DETAILS				○				

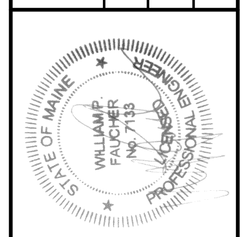
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

PIN: 16123.50



SIGNATURE — P.E. NUMBER 7133

DATE 01 MAY, 2009

PROJECT INFORMATION	
PROGRAM	
PROJECT MANAGER	WPF
DESIGNER	
CONSULTANT	ALLIED ENGINEERING
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

TITLE SHEET

SHEET NUMBER
G-1
OF

Filename: N:\Projects\2007\07010 ~ MDOT Acadia Gateway Facility\00 Drawing Files_Bus Building\07010_Cover.dwg Date: Oct 07, 2009 ~ 5:04pm Division: Username:

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	16,500	
EARTH FROM DRIVES, OLD ROAD, ETC.	0	
GRUBBING IN FILL	6,210	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
MUCK EXCAVATION	0	
CULVERT INLET AND OUTLET DITCHES	0	
PAVEMENT SALVAGE IN FILL	0	
TOTAL COMMON EXCAVATION		22,710

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	11,710	
FILL FOR DRIVES	0	
GRUBBING IN FILL	6,210	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
MUCK EXCAVATION	0	
PAVEMENT SALVAGE IN FILL	0	
TOTAL FILL		17,920

ROCK EXCAVATION FOR ESTIMATE

ROCK EXCAVATION (FROM CROSS SECTIONS)	150	
ROCK EXCAVATION (BOULDERS)	0	
TOTAL ROCK EXCAVATION		150

UNCLASSIFIED EXCAVATION FOR ESTIMATE

TOTAL UNCLASSIFIED EXCAVATION		0

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		22,710
DEDUCTIONS:		
GRUBBING IN CUT	6,630	
GRUBBING IN FILL	6,210	
LOAM SALVAGE IN CUT	0	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
MUCK EXCAVATION	0	
PAVEMENT SALVAGE (CUT & FILL)	0	
(2) TOTAL DEDUCTIONS		12,840
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		9,870
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)		70
TOTAL AVAILABLE NON-ROCK EXCAVATION		9,940

COMPUTATION OF WASTE STORAGE & WASTE MATERIAL

TOTAL AVAIL. WASTE STORAGE AREA (FROM CROSS SECTIONS)		0
GRUBBING IN CUT	6,630	
GRUBBING IN FILL	6,210	
UNDERCUT	0	
MUCK EXCAVATION	0	
TOTAL WASTE MATERIAL TO BE UTILIZED (LOWER OF TOTAL AVAILABLE WASTE STORAGE AREA OR TOTAL WASTE MATERIAL)		12,840
TOTAL WASTE MATERIAL TO BE WASTED (TOTAL WASTE MATERIAL MINUS TOTAL WASTE MATERIAL TO BE UTILIZED)		12,840

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL				17,920
TOTAL AVAIL. NON-ROCK EXCAV.	9,940	x 0.85 =	8,449	
TOTAL AVAIL. ROCK EXCAV.	150	x 1.33 =	200	
TOTAL AVAIL. STR. ROCK EXCAV.	100	x 1.33 =	133	
TOTAL WASTE MATERIAL TO BE UTILI	0	x 1.00 =	0	
(4)TOTAL AVAILABLE EXCAVATION			=	8,782
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXC				9,139

SEE SCHEDULE OF ITEMS IN THE CONTRACT PROPOSAL BOOK FOR BID ITEMS AND QUANTITIES

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PIN
16123.50

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	J. KITTREDGE		
DESIGN-DETAILED	J. COFFIN	J. COFFIN	-------
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	60% REVIEW - JAN 2009	J. COFFIN	01-08-09
REVISIONS 2	90% REVIEW - FEB 2009	J. COFFIN	02-12-09
REVISIONS 3	ISSUED FOR BID	J. COFFIN	05-28-09
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

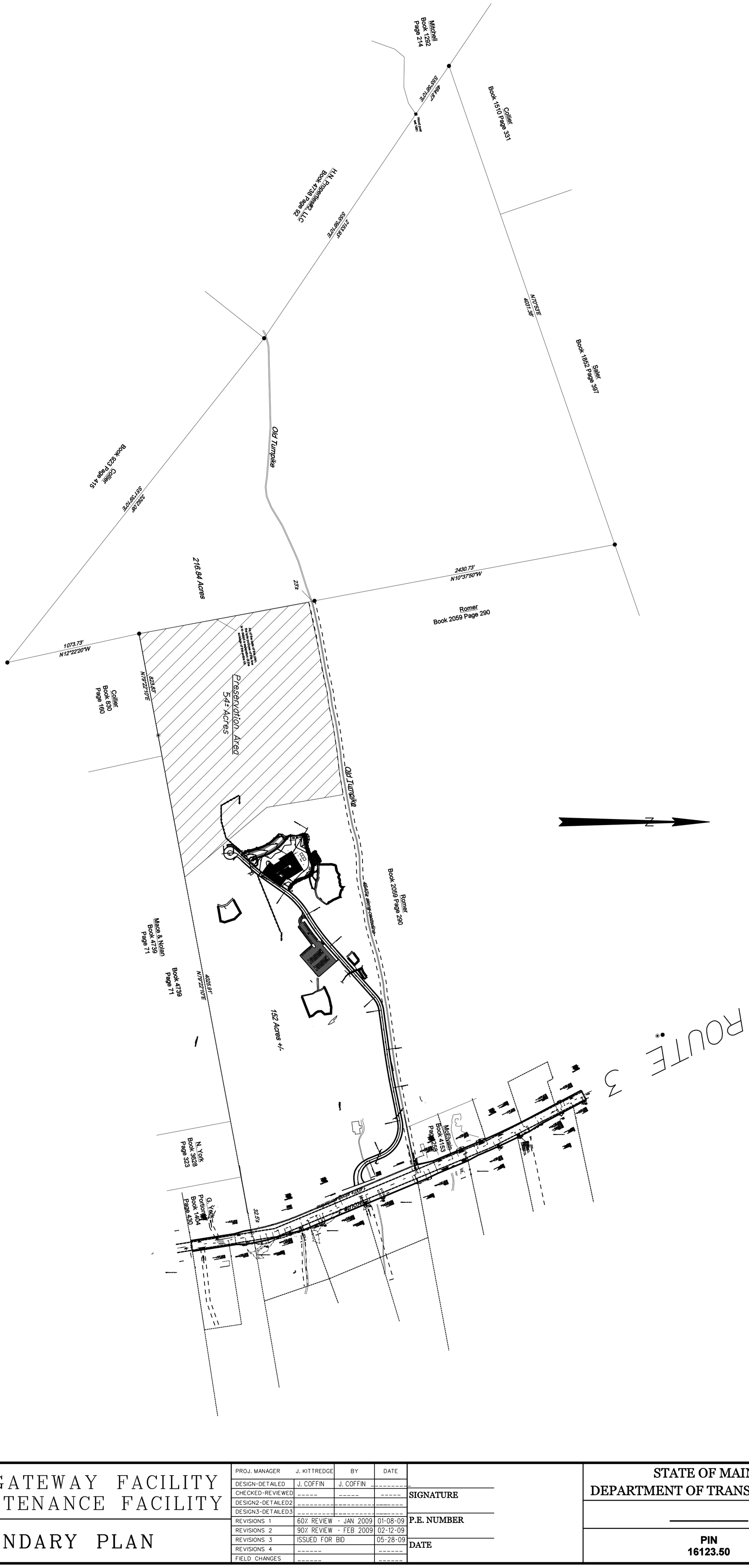
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

EARTHWORK SUMMARY

SHEET NUMBER

C-3A

OF 63



ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

BOUNDARY PLAN

PROJ. MANAGER	J. KITTREDGE	BY	DATE
DESIGN-DETAILED	J. COFFIN	J. COFFIN	_____
CHECKED-REVIEWED	_____	_____	_____
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	60% REVIEW - JAN 2009		01-08-09
REVISIONS 2	90% REVIEW - FEB 2009		02-12-09
REVISIONS 3	ISSUED FOR BID		05-28-09
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

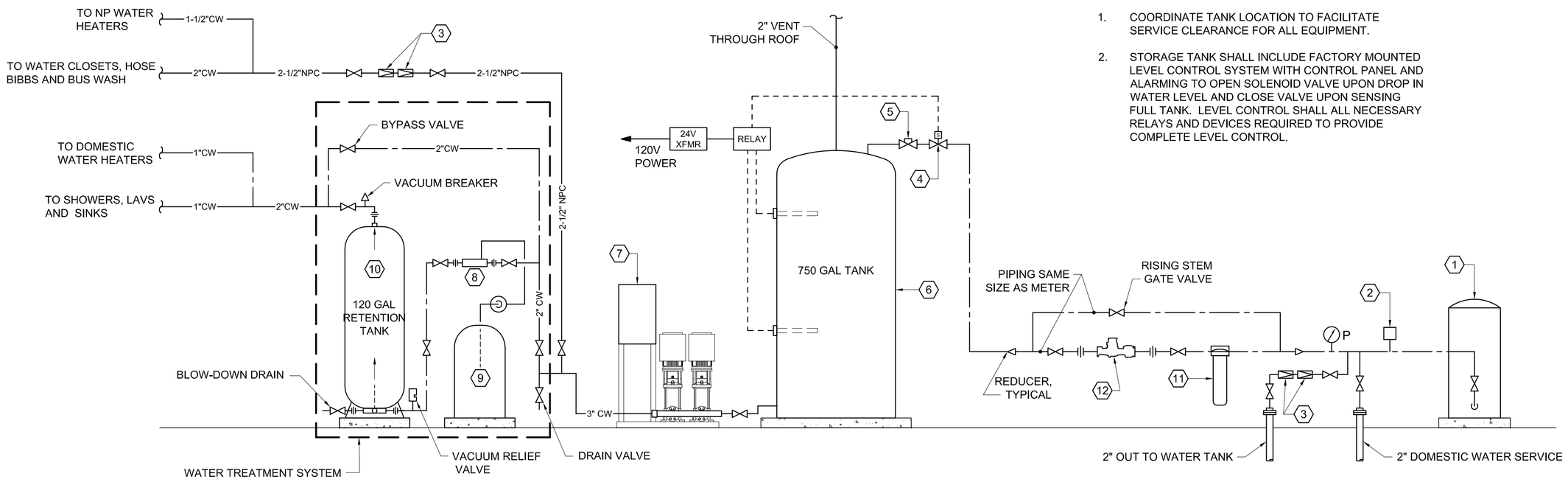
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PIN
16123.50

HIGHWAY PLANS

SHEET NUMBER
C-63
OF 63



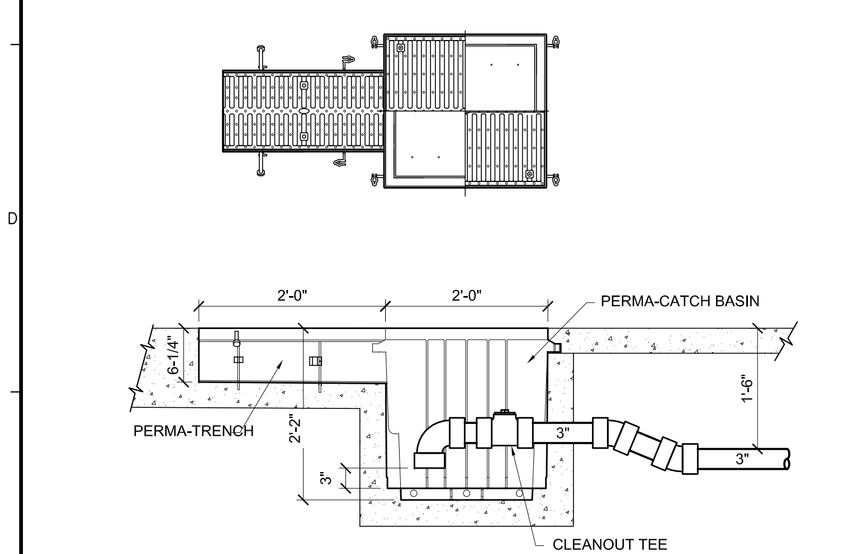
GENERAL NOTES:

1. COORDINATE TANK LOCATION TO FACILITATE SERVICE CLEARANCE FOR ALL EQUIPMENT.
2. STORAGE TANK SHALL INCLUDE FACTORY MOUNTED LEVEL CONTROL SYSTEM WITH CONTROL PANEL AND ALARMING TO OPEN SOLENOID VALVE UPON DROP IN WATER LEVEL AND CLOSE VALVE UPON SENSING FULL TANK. LEVEL CONTROL SHALL ALL NECESSARY RELAYS AND DEVICES REQUIRED TO PROVIDE COMPLETE LEVEL CONTROL.

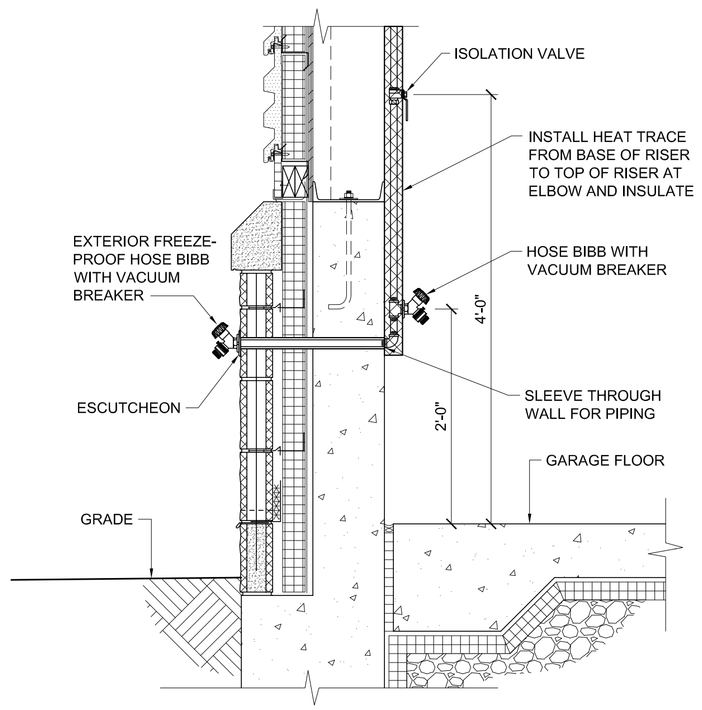
KEY NOTES:

1. WELL-X-TROL MODEL No. WX-251 62 gal. CAPACITY, 34 gal. MINIMUM ACCEPTANCE VOLUME
2. PRESSURE SWITCH, ON AT 20 psi, OFF AT 30 psi.
3. 2-1/2" RPZ BACKFLOW PREVENTER, EQUAL TO WATTS 909QT
4. SOLENOID VALVE SHALL BE PIPE LINE SIZE, BRASS, EQUAL TO ASCO 8210 SERIES, NORMALLY CLOSED, 24v OR 120v ACTUATOR IS ACCEPTABLE. VALVE SHALL BE CONTROLLED VIA COMPACT RELAY CONTROLLER.
5. CALIBRATED BALANCE VALVE SET AT 25 gpm
6. 750 GALLON VERTICAL POLY TANK EQUAL TO AMERICAN TANK COMPANY MODEL No. 0085-045. TANK SHALL BE LISTED AND APPROVED FOR POTABLE USE. INSULATE TANK PER SPECIFICATION.
7. SKID-MOUNTED BOOSTER VARIABLE SPEED. BASIS OF DESIGN SHALL BE EQUAL TO GRUNDFOS HYDRO MPC BOOSTER SET MODEL No. CR(E) 10-5 WITH A CONTROL PANEL MOUNTED ON THE SAME BASE PLATE AS THE PUMPS. ELECTRICAL SHALL BE 480V, 3 PHASE. PUMP CASING SHALL BE CAST IRON WITH 316 SS IMPELLER. PUMPS SHALL BE COMPLETE WITH PNEUMATIC TANK, VFD CONTROLLER, PRESSURE TRANSDUCER AND WIRING. PUMP SHALL OPERATE ON IT'S OWN FACTORY PROVIDED CONTROLS, VIA VFD AND TRANSDUCER. PUMP SHALL MAINTAIN SYSTEM SETPOINT PRESSURE OF 65 PSIG (ADJUSTABLE). PUMP SHALL HAVE BUILT-IN SAFETY TO STOP THE PUMP IF THE STORAGE TANK IS EMPTIED TO A POINT THAT THE PUMP INLET IS NOT IN A FLOODED CONDITION. PUMPS SHALL OPERATE IN A LEAD/LAG CONDITION.
8. STATIC INLINE MIXER, JDMIX, INC MODEL No. DP2-4
9. 30 GAL CHEMICAL SOLUTION TANK AND PUMP SYSTEM, BASIS OF DESIGN STENNER
10. 120 GAL RETENTION TANK, BASIS OF DESIGN WELL MATE MODEL No. UT-120
11. 1-1/2" WHOLE BUILDING FILTER, BIG BLUE No. 20 . INCLUDE (6) PENTEK No. ECP20-20BB PLEATED CELLULOSE 20 MICRON FILTER CARTRIDGES.
12. WATER METER SIZED FOR .5 GPM TO 100 GPM, EQUAL TO OMNI C2 BY SESNUS METERING SYSTEMS.

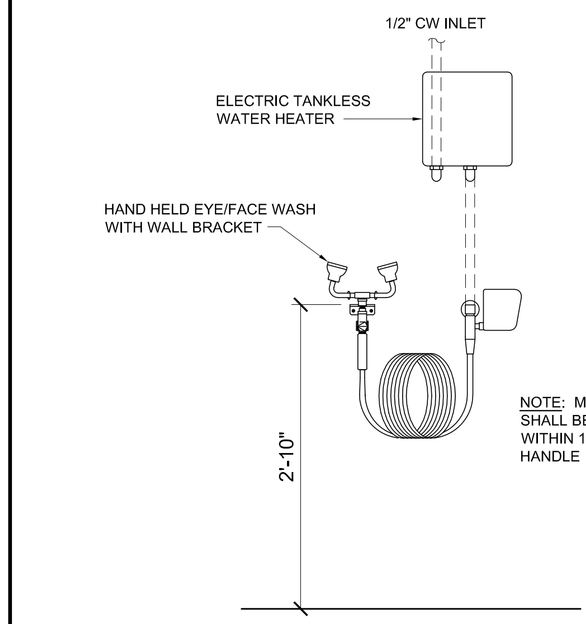
E1 — DOMESTIC WATER ENTRANCE DETAIL — NO SCALE



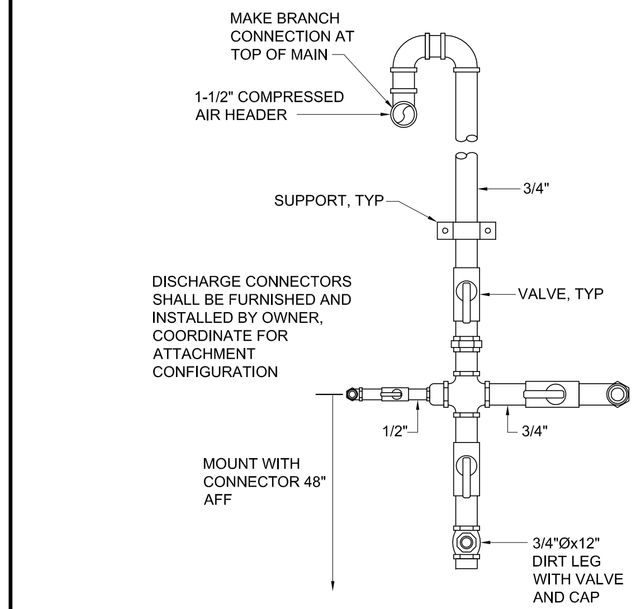
C1 — TRENCH DRAIN DETAIL — NO SCALE



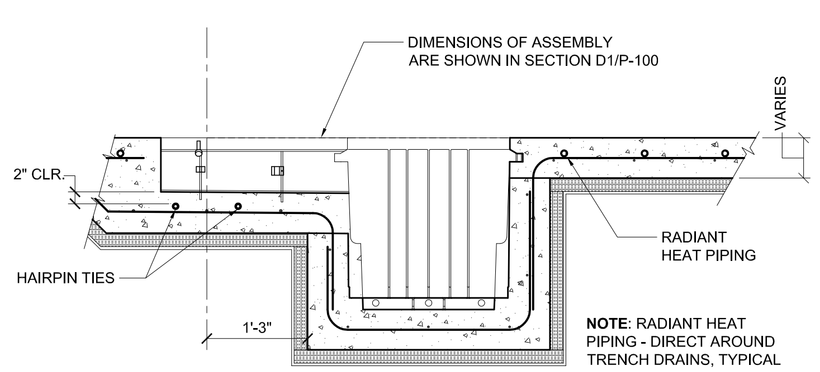
C3 — INTERIOR/EXTERIOR HOSE BIBB DETAIL — NOT TO SCALE



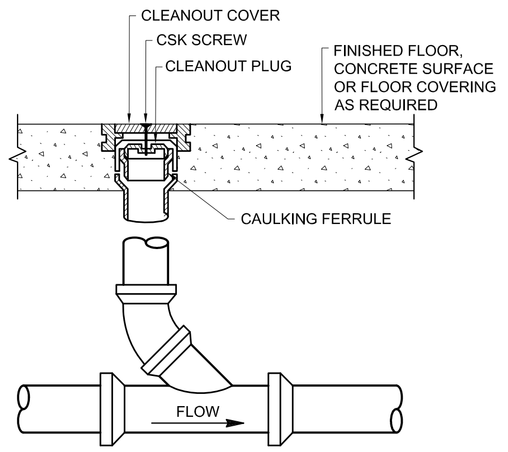
C6 — EMERGENCY EYEWASH DETAIL — NO SCALE



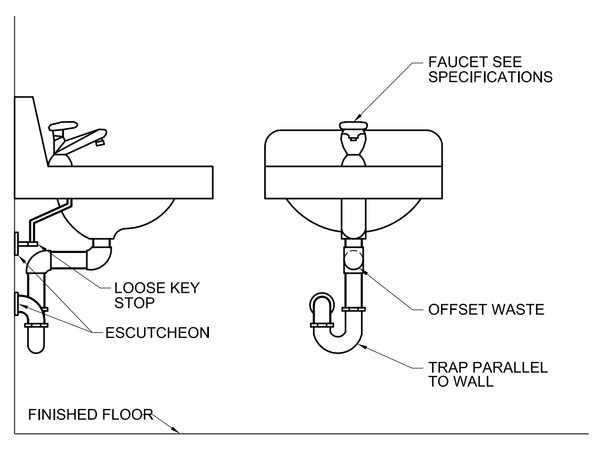
C8 — TYPICAL AIR SERVICE DROP DETAIL — NO SCALE



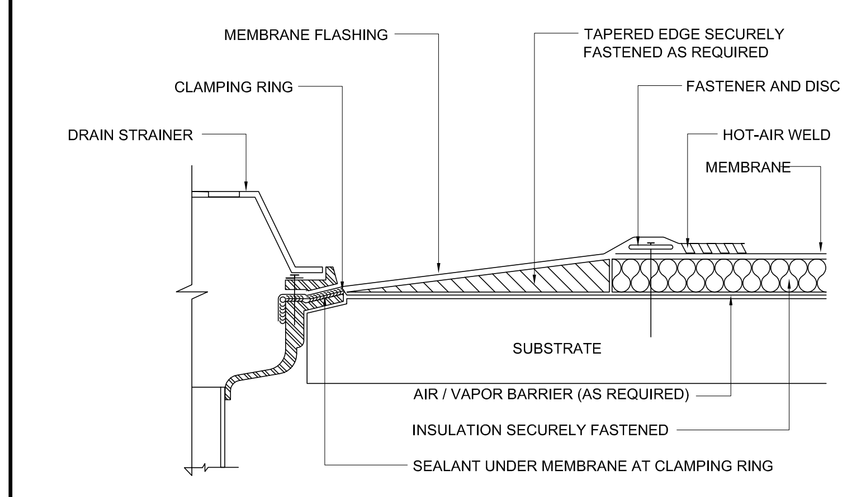
A1 — TRENCH DRAIN SECTION — NO SCALE



A3 — FLOOR CLEANOUT DETAIL — NO SCALE



A5 — DETAIL ~ TYPICAL WHEELCHAIR LAVATORY — NO SCALE



TYPICAL CLAMPING RING STYLE ROOF DRAIN

A8 — ROOF DRAIN DETAIL — NO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE

FED PIN NO:

PIN NO: 16123.50

ANTHONY S. DAVIS No. 8834 — STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE 8834 — P.E. NUMBER

01 MAY, 2009 — DATE

PROJECT INFORMATION			
PROGRAM	–		
PROJECT MANAGER	WPF	–	
DESIGNER	–	ALLIED ENGINEERING	
CONSULTANT	–	–	–
PROJECT RESIDENT	–	–	–
CONTRACTOR	–	–	–
PROJECT COMPLETION DATE	–	–	–

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

PLUMBING DETAILS

SHEET NUMBER
P–500
OF

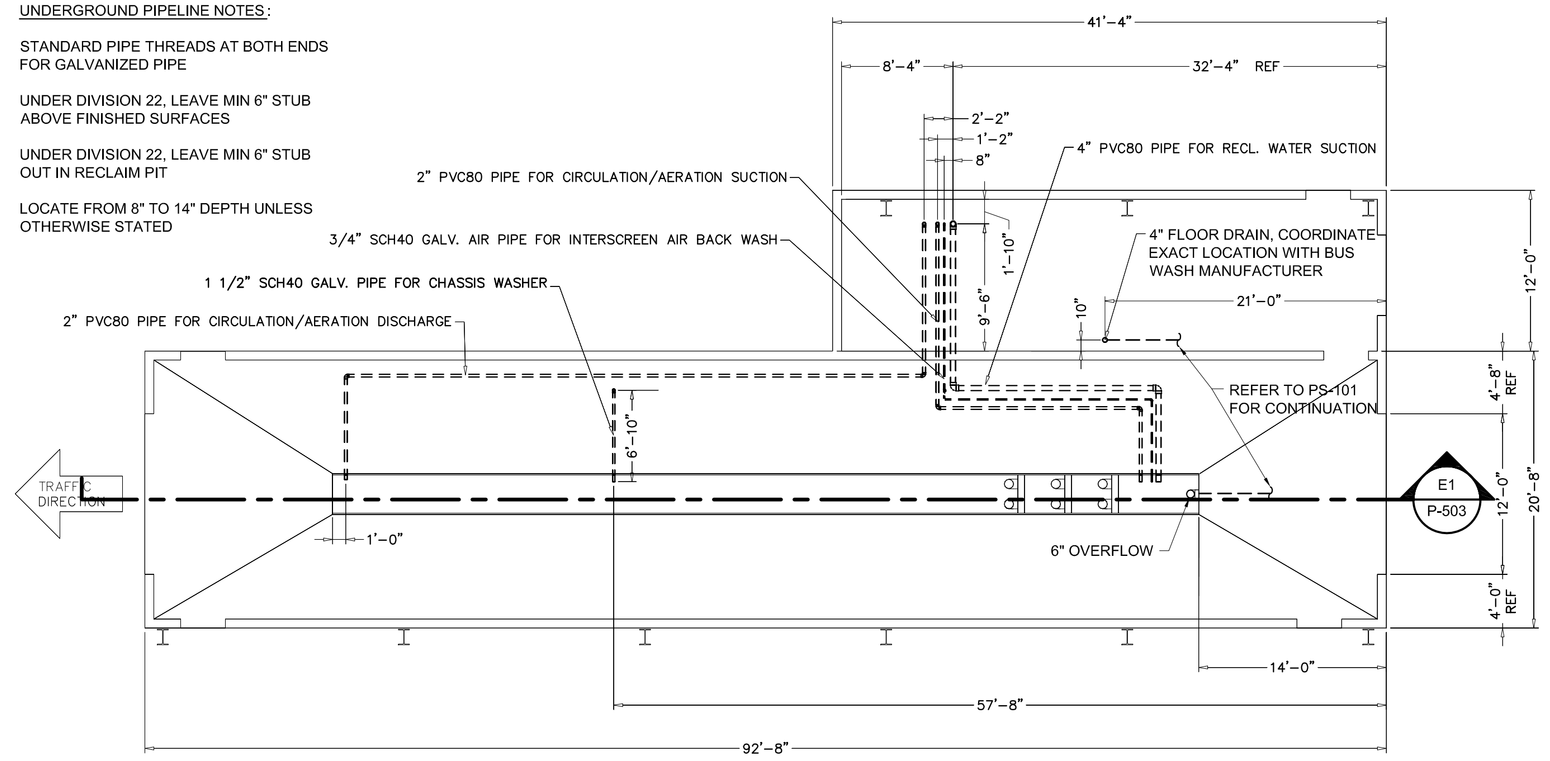
Allied Engineering
Structural Mechanical Electrical Commissioning
160 Veranda Street
Portland, Maine 04103
T: 207.221.2260
F: 207.221.2266
Web: www.allied-eng.com

Allied Project No: 07010 — Cad File: 07010P.DWG

Username: –
Division: –
Date: Aug 03, 2009 – 10:27am
Filename: N:\Projects\2007\07010 ~ MDOT Acadia Gateway Facility\00 Drawing Files_Bus Building\07010_P.dwg

UNDERGROUND PIPELINE NOTES:

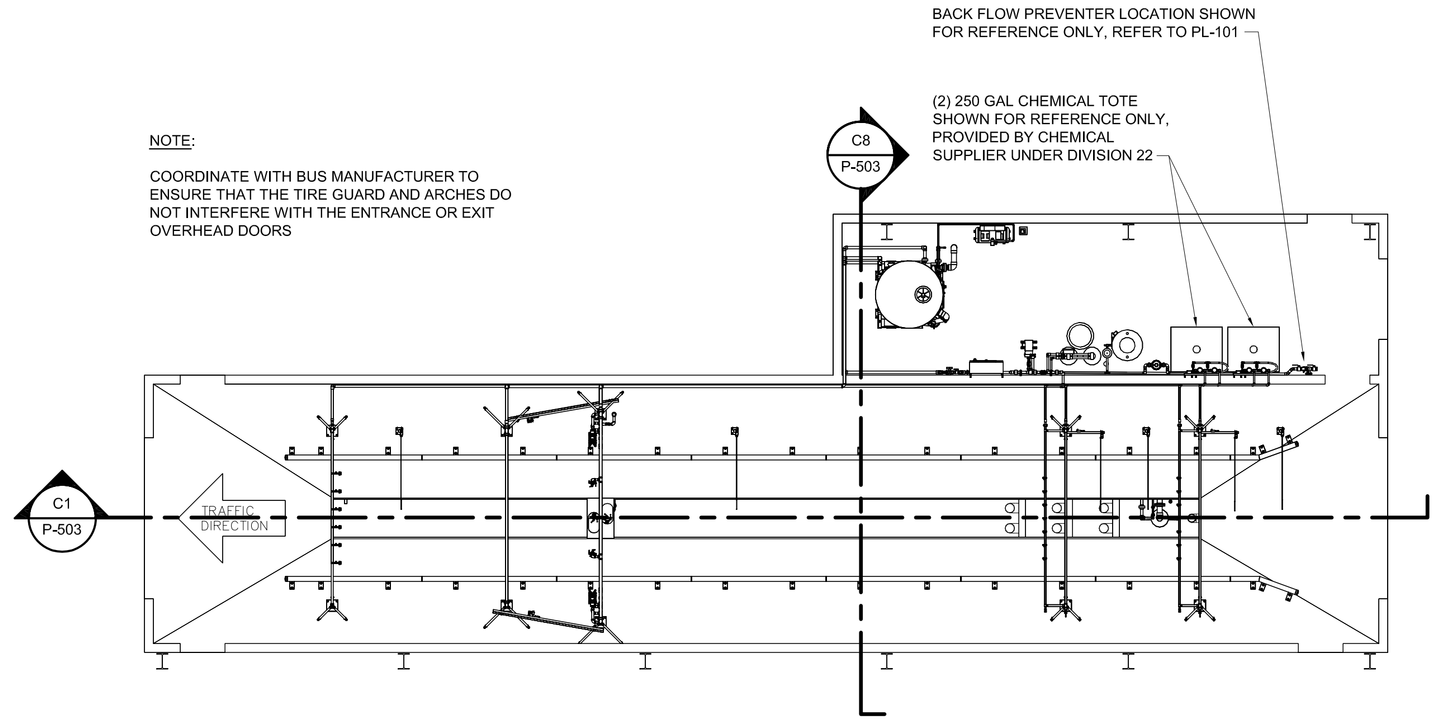
1. STANDARD PIPE THREADS AT BOTH ENDS FOR GALVANIZED PIPE
2. UNDER DIVISION 22, LEAVE MIN 6" STUB ABOVE FINISHED SURFACES
3. UNDER DIVISION 22, LEAVE MIN 6" STUB OUT IN RECLAIM PIT
4. LOCATE FROM 8" TO 14" DEPTH UNLESS OTHERWISE STATED



NOTE:

THE SUMP PUMP AND CIRCULATION/AERATION SUCTION PIPELINES TO BE LOCATED UNDER THE PIT WATER LEVEL FOR FULL LENGTH.

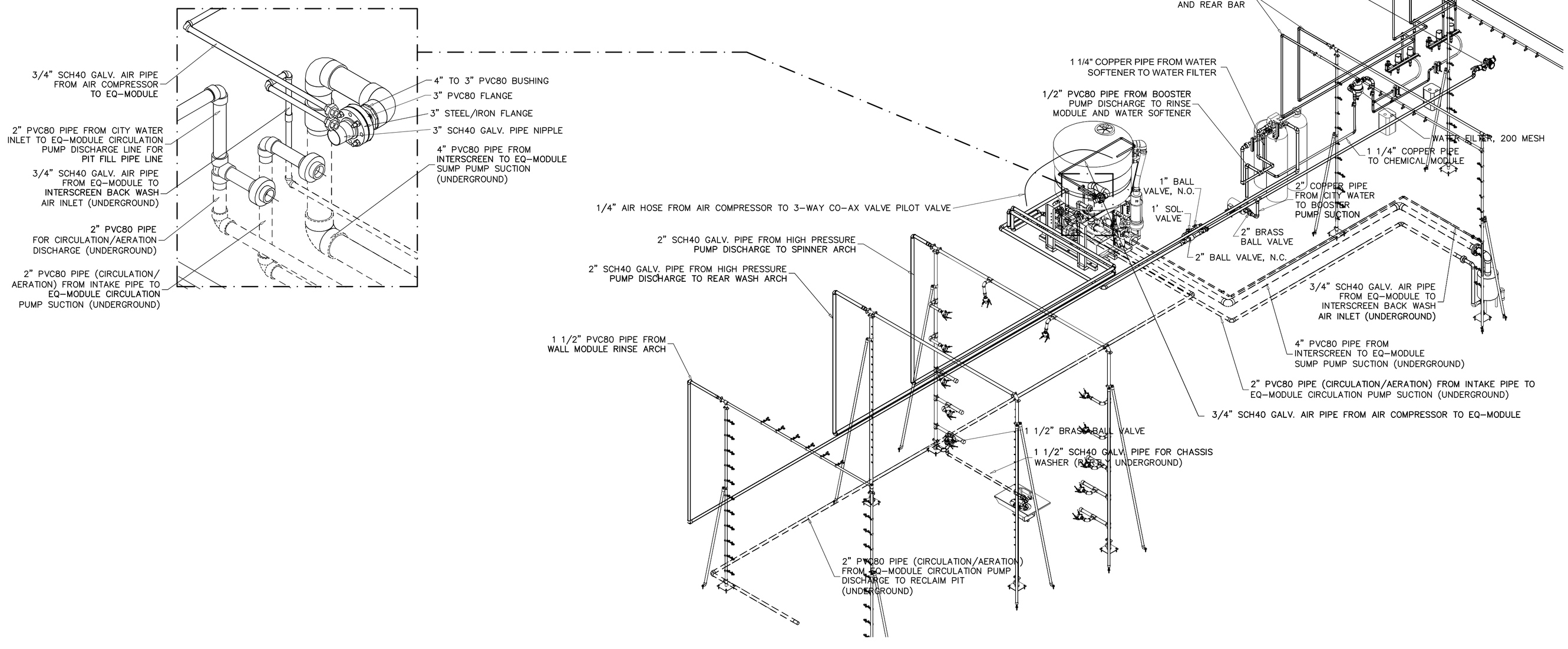
E1	UNDERGROUND PIPING DETAIL
NO SCALE	FOR REFERENCE ONLY



NOTE:

COORDINATE WITH BUS MANUFACTURER TO ENSURE THAT THE TIRE GUARD AND ARCHES DO NOT INTERFERE WITH THE ENTRANCE OR EXIT OVERHEAD DOORS

E6	BUS WASH EQUIPMENT PLAN
NO SCALE	FOR REFERENCE ONLY



A1	PIPING SCHEMATIC
NO SCALE	FOR REFERENCE ONLY

BASIS OF DESIGN NOTE:

BASIS OF DESIGN FOR BUSH WASH SYSTEM IS INTERCLEAN EQUIPMENT, INC. ALL DETAILS AND TRADE COORDINATION ARE BASED ON THE BASIS OF DESIGN MANUFACTURER. ALTERNATE MANUFACTURERS WILL BE CONSIDERED FOR APPROVAL, HOWEVER, STRICT COORDINATION BY ALL TRADES WILL BE REQUIRED TO INSURE COMPLETE INSTALLATION FOR ALL COMPONENTS NECESSARY FOR OPERATION AS SPECIFIED.

1. ALL UNDERGROUND PIPES AND SLEEVES PROVIDED BY DIVISION 22.
2. PIPES MUST BE SECURELY FASTENED AT MAX 3' INTERVALS AND MAX 1' FROM ANY ELBOW.
3. REFER TO P-502 AND P-503 FOR ADDITIONAL COORDINATION REQUIREMENTS.

A9	GENERAL NOTES
	THIS SHEET ONLY

ABOVE GROUND PIPES

UNDERGROUND PIPES

A9	LEGEND
NO SCALE	THIS SHEET ONLY

Allied Engineering
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Web: www.allied-eng.com

Allied Project No: 07010 | Cad File: 07010_Pbus.DWG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE

FED PIN NO:

PIN NO: 16123.50

ANTHONY S. DAVIS No. 8834 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

8834 P.E. NUMBER

01 MAY, 2009 DATE

PROJECT INFORMATION	
PROGRAM	–
PROJECT MANAGER	WPF
DESIGNER	–
CONSULTANT	ALLIED ENGINEERING
PROJECT RESIDENT	–
CONTRACTOR	–
PROJECT COMPLETION DATE	–

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

BUS WASH PLUMBING COORDINATION DETAILS

SHEET NUMBER

P-501

OF

Filename: – Date: – Division: – Username: –

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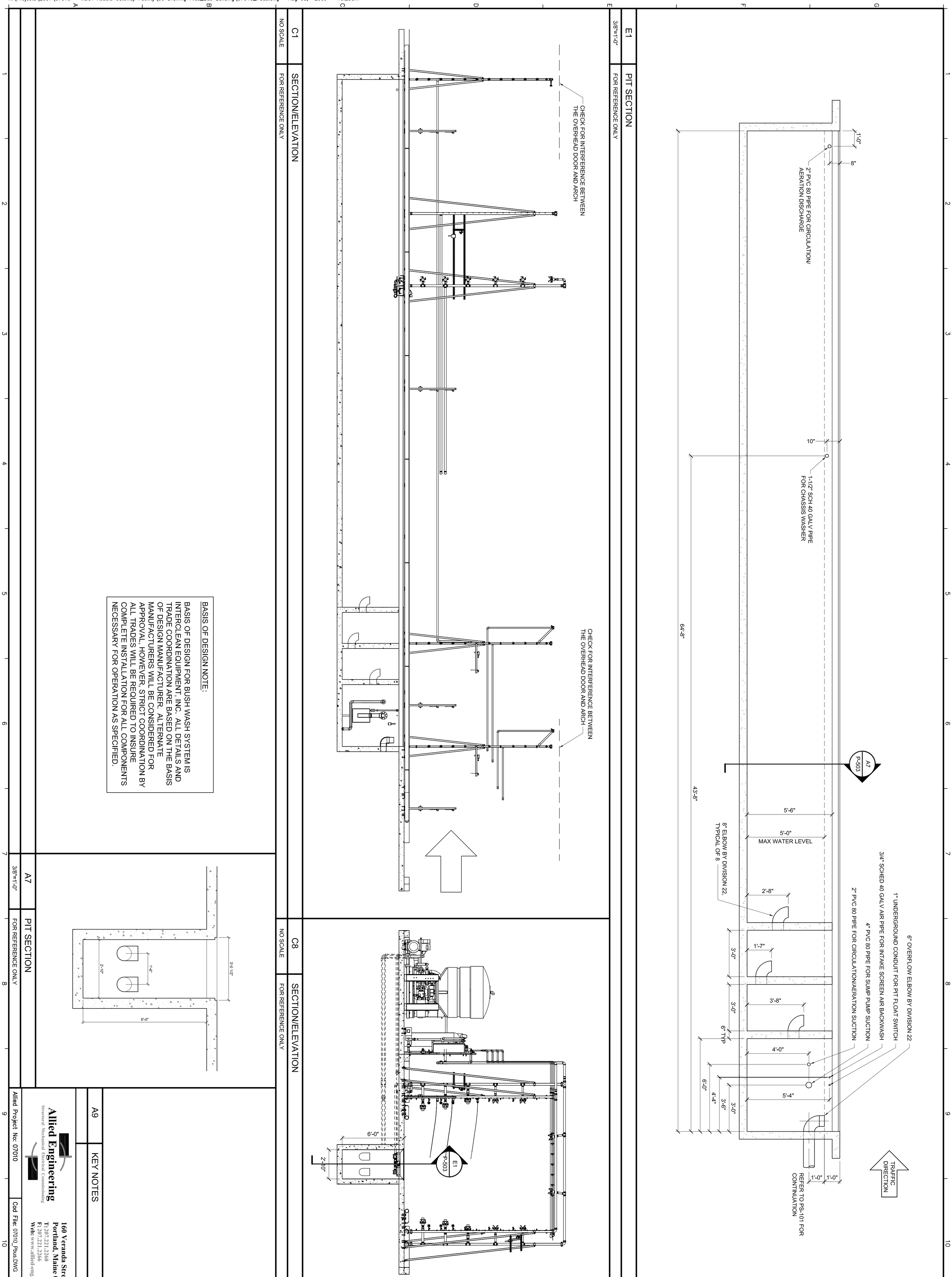

E1 — PIT SECTION
3/8"=1'-0"
FOR REFERENCE ONLY

C1 — SECTION/ELEVATION
NO SCALE
FOR REFERENCE ONLY

C8 — SECTION/ELEVATION
NO SCALE
FOR REFERENCE ONLY

A7 — PIT SECTION
3/8"=1'-0"
FOR REFERENCE ONLY

A9 — KEY NOTES

BASIS OF DESIGN NOTE:

BASIS OF DESIGN FOR BUSH WASH SYSTEM IS INTERCLEAN EQUIPMENT, INC. ALL DETAILS AND TRADE COORDINATION ARE BASED ON THE BASIS OF DESIGN MANUFACTURER. ALTERNATE MANUFACTURERS WILL BE CONSIDERED FOR APPROVAL. HOWEVER, STRICT COORDINATION BY ALL TRADES WILL BE REQUIRED TO INSURE COMPLETE INSTALLATION FOR ALL COMPONENTS NECESSARY FOR OPERATION AS SPECIFIED.

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Allied Project No: 07010
Cad File: 07010_Pbus.DWG

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

BUS WASH PLUMBING COORDINATION DETAILS

PROJECT	INFORMATION
PROGRAM	–
PROJECT MANAGER	WPF
DESIGNER	–
CONSULTANT	ALLIED ENGINEERING
PROJECT RESIDENT	–
CONTRACTOR	–
PROJECT COMPLETION DATE	–

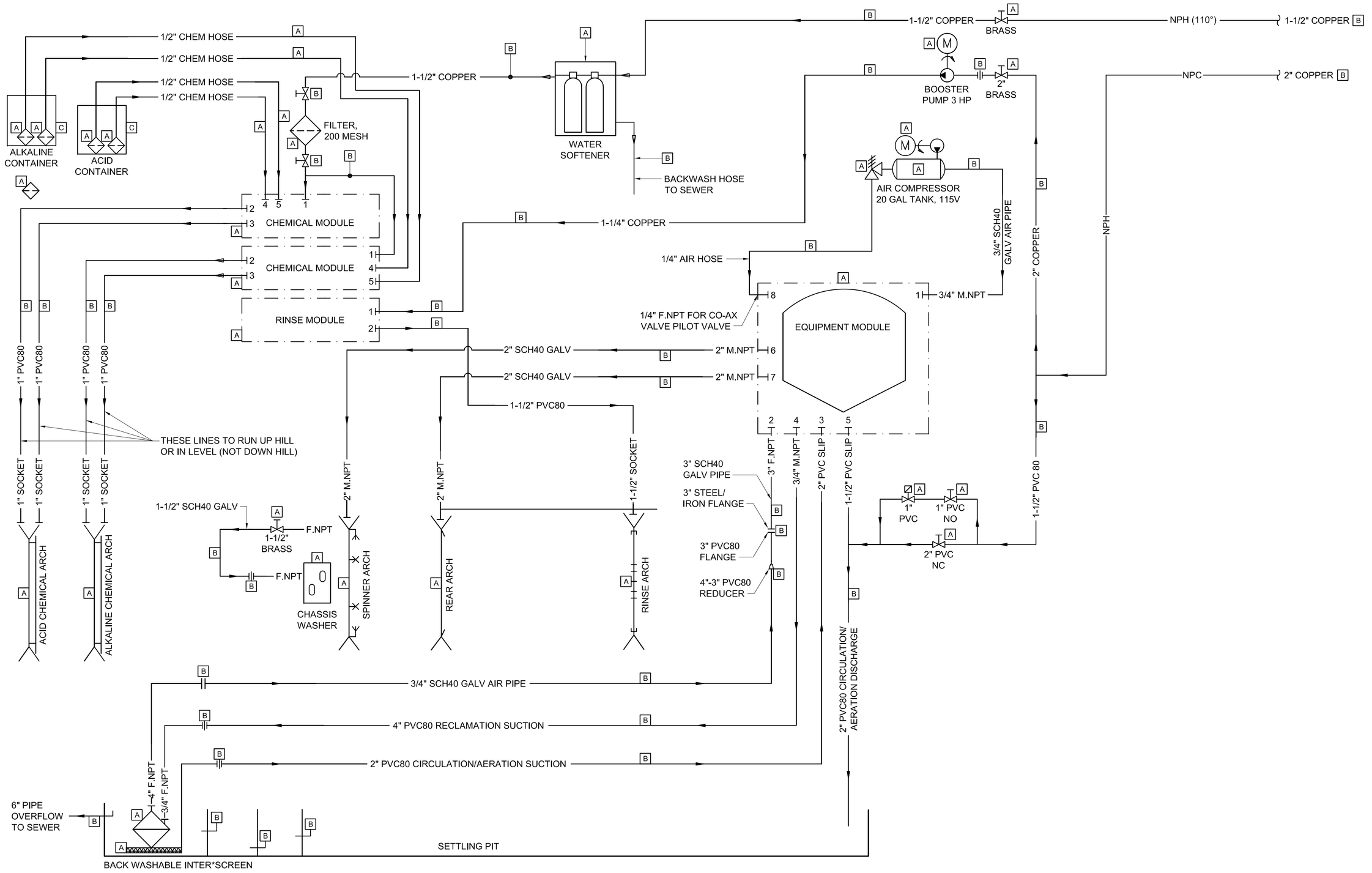
SIGNATURE
8834
P.E. NUMBER
01 MAY, 2009
DATE

STATE OF MAINE
ANTHONY S. DAVIS
No. 8834
LICENSED PROFESSIONAL ENGINEER

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE
FED PIN NO:
PIN NO: 16123.50

SHEET NUMBER P-502 OF



BASIS OF DESIGN NOTE:

BASIS OF DESIGN FOR BUSH WASH SYSTEM IS INTERCLEAN EQUIPMENT, INC. ALL DETAILS AND TRADE COORDINATION ARE BASED ON THE BASIS OF DESIGN MANUFACTURER. ALTERNATE MANUFACTURERS WILL BE CONSIDERED FOR APPROVAL, HOWEVER, STRICT COORDINATION BY ALL TRADES WILL BE REQUIRED TO INSURE COMPLETE INSTALLATION FOR ALL COMPONENTS NECESSARY FOR OPERATION AS SPECIFIED.

1. PIPES MUST BE SECURELY FASTENED AT MAX 3' INTERVALS AND MAX 1' FROM ANY ELBOW.
2. PRELIMINARY DRAWING FOR REFERENCE ONLY, NOT INTENDED FOR MANUFACTURING OR INSTALLATION.
3. THIS DRAWING IS USED WITH PERMISSION FROM INTERCLEAN EQUIPMENT, INC.

C9 | GENERAL NOTES | THIS SHEET ONLY

- [A] PROVIDED BY BUS WASH MANUFACTURER
- [B] PROVIDED BY DIVISION 22
- [C] PROVIDED BY CHEMICAL PROVIDER, UNDER DIVISION 22. COORDINATE WITH BUS WAS MANUFACTURER
- BALL VALVE
- SOLENOID VALVE
- CHECK VALVE
- PRESSURE RELIEF VALVE
- UNION
- FLANGE
- PUMP
- PRESSURE GAUGE

A9 | SCHEMATIC LEGEND | NO SCALE | THIS SHEET ONLY

A1 | BUS WASH PLUMBING SCHEMATIC | NO SCALE | FOR REFERENCE ONLY

Allied Engineering
Structural Mechanical Electrical Commissioning
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Allied Project No: 07010 | Cad File: 07010_Pbus.DWG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE

FED PIN NO:

PIN NO: 16123.50

ANTHONY S. DAVIS No. 8834 — STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

8834 P.E. NUMBER

01 MAY, 2009 DATE

PROJECT INFORMATION	
PROGRAM	–
PROJECT MANAGER	WPF
DESIGNER	–
CONSULTANT	ALLIED ENGINEERING
PROJECT RESIDENT	–
CONTRACTOR	–
PROJECT COMPLETION DATE	–

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

BUS WASH PLUMBING
COORDINATION DETAILS

SHEET NUMBER
P-503
OF

Filename: – Date: – Division: – Username: –
N:\Projects\2007\07010 - MDOT Acadia Gateway Facility\00 Drawing Files_Bus Building\07010_Pbus.dwg Aug 03, 2009 - 10:22am

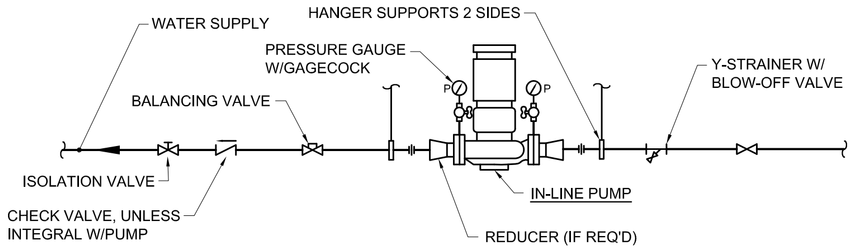
PLUMBING PUMP SCHEDULE

TAG	SERVES	MAKE & MODEL	TYPE	GPM	HEAD	ELECTRICAL		BASIN						NOTES
						MOTOR HP	VOLTS/PH (60 Hz.)	DIA.	HEIGHT	GAL.	INLET TYPE	INLET SIZE	DISCH SIZE	
DP-1	DHW RECIRC	TACO IL 0011	IN LINE	1.5	26	1/8	115/1	---------	---------	---------	---------	3/4"	3/4"	
DP-2	NPH RECIRC	TACO IL 0011	IN LINE	2	26	1/8	115/1	---------	---------	---------	---------	3/4"	3/4"	1
SP-1	ELEV SUMP	ZOELLER M152	SUBMERSIBLE	53	15	0.4	115/1	18"	30"		HOLE IN BASIN COVER	3	1-1/2"	2, 3

NOTES:

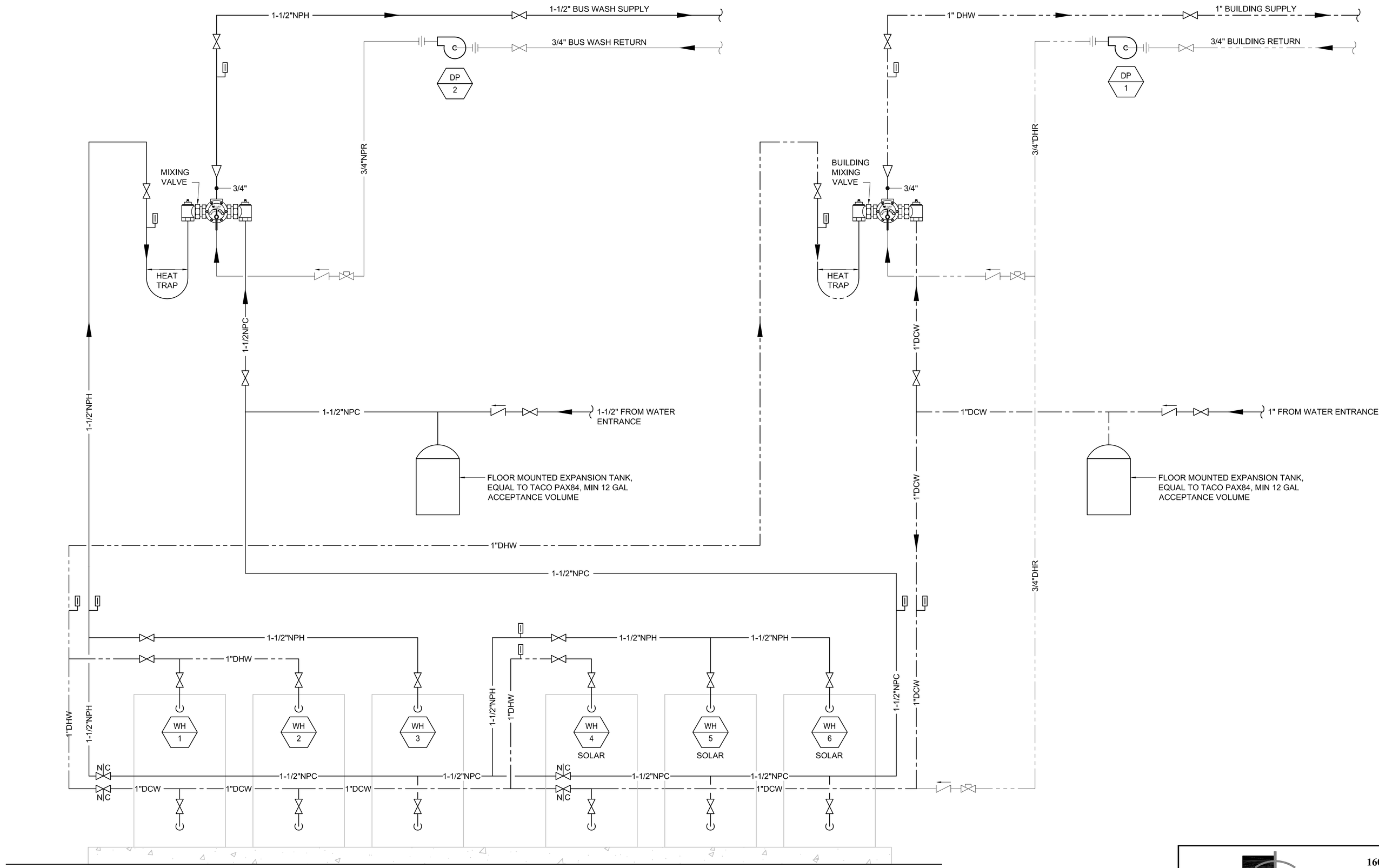
1. POWER SUPPLY TO STARTER/CONTACTOR AND DISC SWITCH BY DIV 26. WIRE PUMP IN SERIES WITH AN IMMERSION AQUASTAT; WIRING FROM SWITCH TO AQUASTAT AND PUMP BY DIV 23.
2. PLUG CONNECTION, COORDINATE WITH DIV 26.
3. PROVIDE OIL SMART SYSTEM

F3 PUMP SCHEDULE



F8 IN-LINE PUMP DETAIL

NO SCALE VERTICAL/HORIZONTAL



A1 DHW HEATING PIPING SCHEMATIC

NO SCALE

Allied Engineering
Structural Mechanical Electrical Commissioning
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F: 207.221.2266
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Allied Project No: 07010 | Cad File: 07010P.DWG

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DATE

FED PIN NO:

PIN NO: 16123.50

STATE OF MAINE ANTHONY S. DAVIS No. 8834 LICENSED PROFESSIONAL ENGINEER

ANTHONY S. DAVIS SIGNATURE 8834 P.E. NUMBER 01 MAY, 2009 DATE

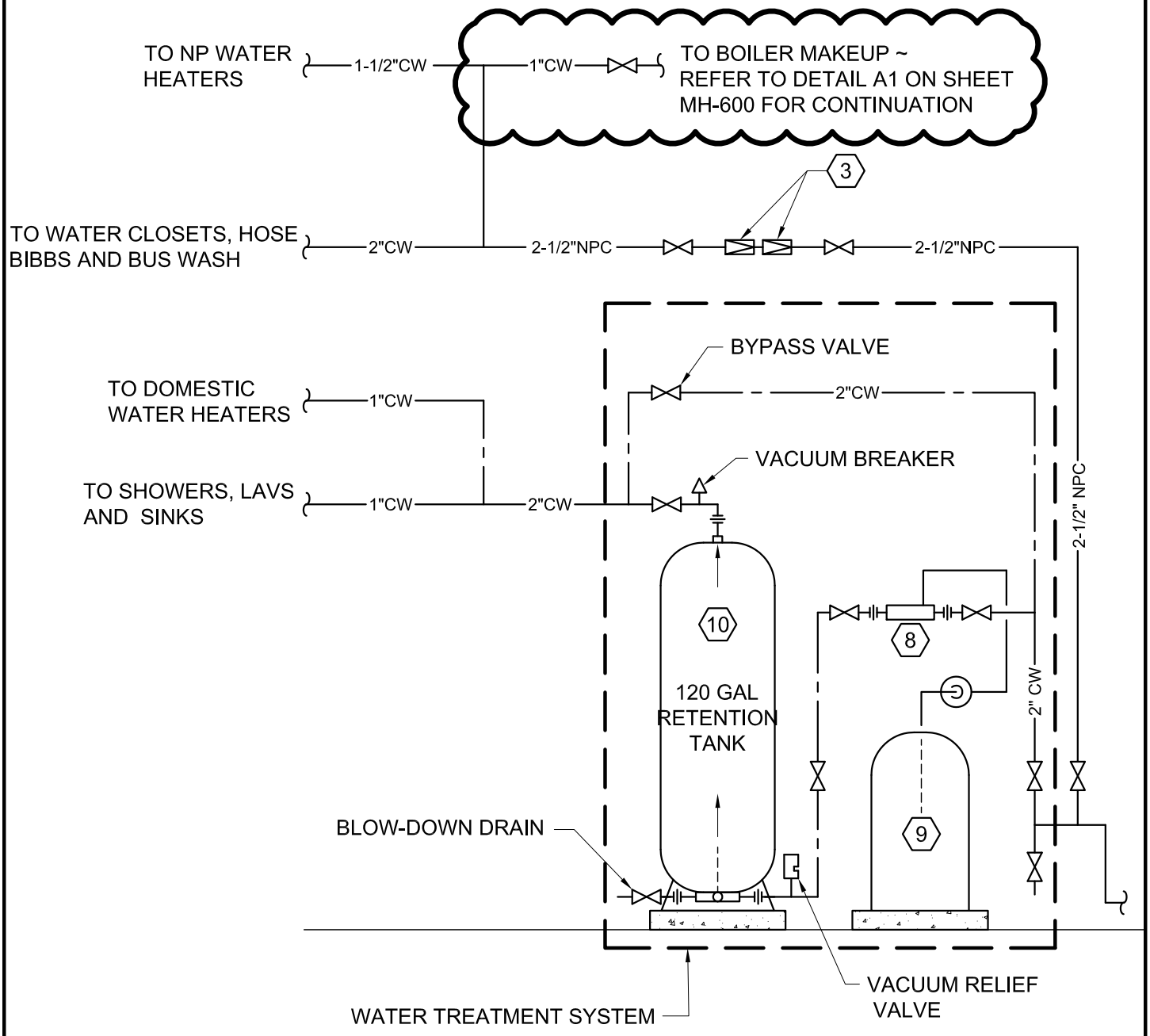
PROJECT INFORMATION		
PROGRAM	–	
PROJECT MANAGER	WPF	
DESIGNER	–	ALLIED ENGINEERING
CONSULTANT	–	–
PROJECT RESIDENT	–	–
CONTRACTOR	–	–
PROJECT COMPLETION DATE	–	–

MAINE DEPARTMENT OF TRANSPORTATION
ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

DOMESTIC HOT WATER AND GAS PIPING SCHEMATICS

SHEET NUMBER
P-600
OF

Username: –
Division: –
Date: –
Filename: – N:\Projects\2007\07010 ~ MDOT Acadia Gateway Facility\00 Drawing Files_Bus Building\07010_P.dwg Aug 03, 2009 – 10:26am



SKP-01

REVISION TO DETAIL E1/P-500
DOMESTIC WATER ENTRANCE DETAIL

MDOT ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

Scale: NONE	Project No: 07010
Date: 10-07-2009	CAD File: 07010_P.DWG

Allied Engineering
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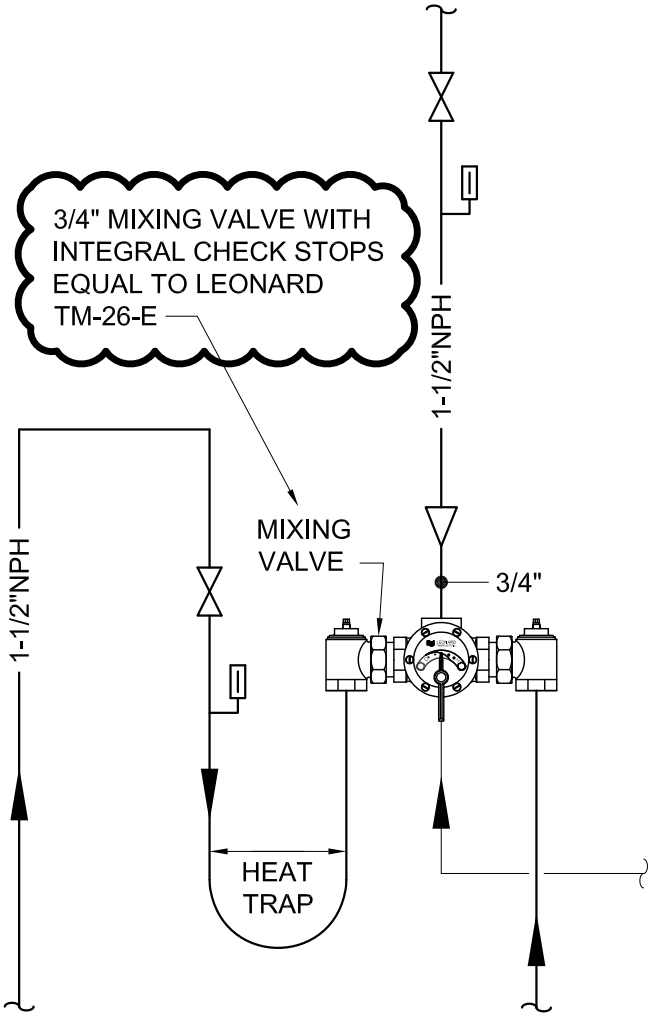

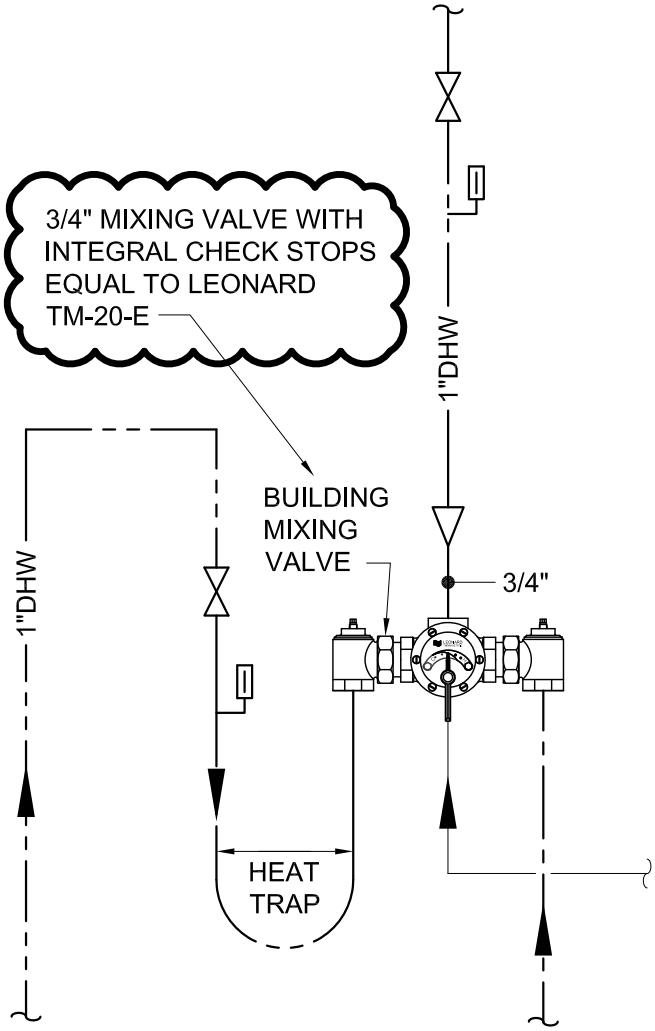

SKP-02

REVISION TO A1/P-600
DHW HEATING PIPING SCHEMATIC

MDOT ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

Scale: NONE	Project No: 07010
Date: 10-07-2009	CAD File: 07010_P.DWG

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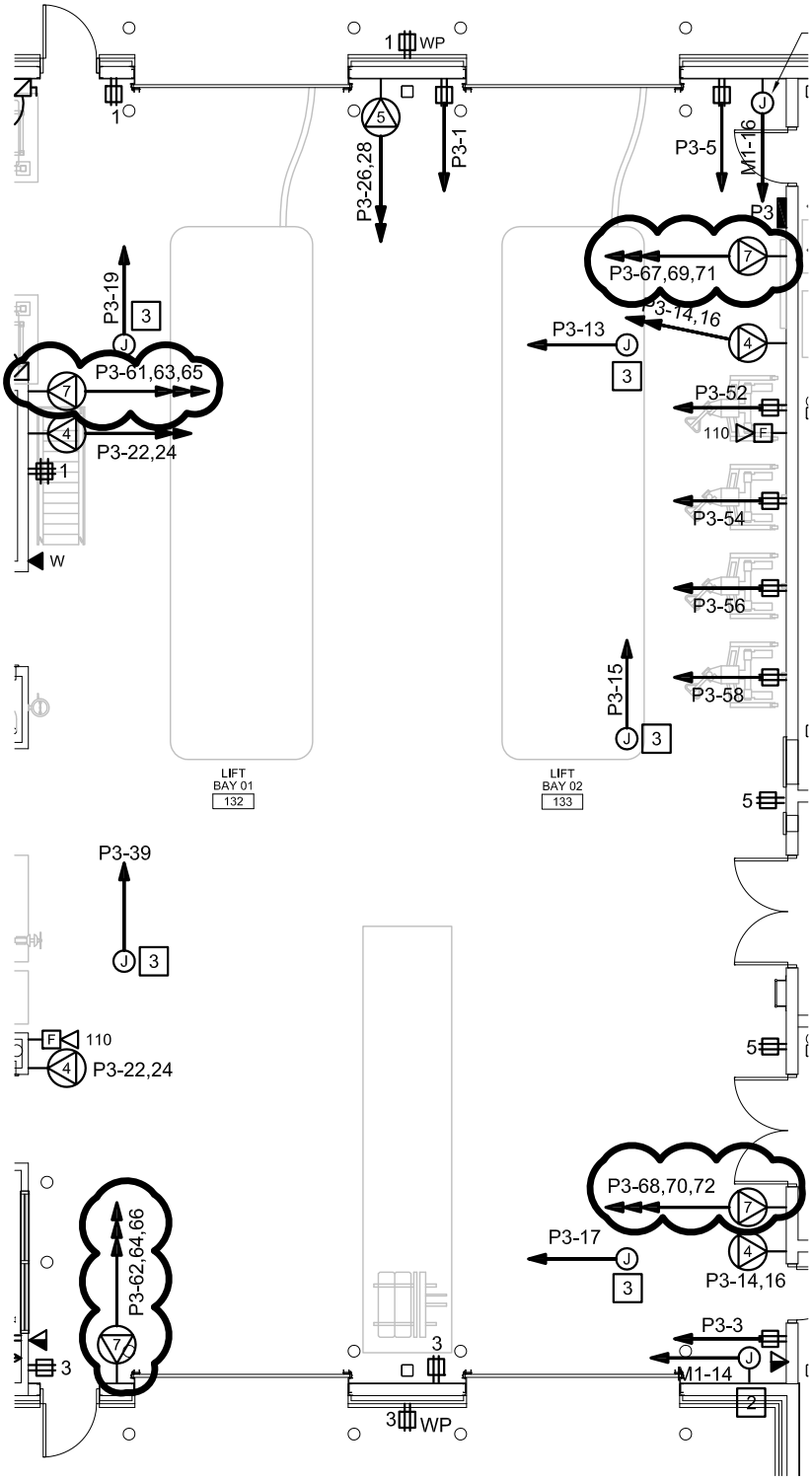

30A, 250V, 3ϕ, 4 WIRE TWIST LOCK SINGLE RECEPTACLE NEMA L15-30; (3)#10+(1)#10G TO 30A, 3P CIRCUIT BREAKER INDICATED

SKE-01

ADD LIFT OUTLETS UNDER OPTION #5

MDOT ACADIA GATEWAY FACILITY
BUS MAINTENANCE FACILITY

Scale: 3/32"=1'-0"	Project No: 07010
Date: 10-07-2009	CAD File: 07010_EP.DWG

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