
Project	OCEAN GATEWAY PARKING GARAGE	Report No.	18
Location	PORTLAND, MAINE	Period From	17 September 2007
		To	21 September 2007
Client	RIVERWALK, LLC.	Page	1 of 2
Contractor	LEDGEWOOD CONSTRUCTION (CM) SHAW BROTHERS CONSTRUCTION (EARTHWORK) G. DONALDSON CONSTRUCTION (PILE DRIVING)	File No.	30322-030

Note: Contractor's activities were partially conducted prior to Field Representatives arrival at the site as noted.

I. CONTRACTOR'S ACTIVITIES:

Monday, September 17, 2007 (70 degrees, sunny at 1130)

1. Shaw Bros. previously (prior to Field Representatives arrival at site) installed waterproofing (Procor® 75 Spray Grade) and 2-in. thick insulation board on the interior (parking garage) side of the foundation wall along column line 2.8 (see Figure 1 and photographs).
2. Shaw Bros. previously (prior to Field Representatives arrival at site) spread lifts of granular fill in the area bound by column lines 1.9/2.1, 2.8, D and H (see Figure 1 and photographs). The area was backfilled up to pavement subgrade level (between approximately El. 17 and El. 20 depending on location) with one or two (depending on location) 12-in. thick (loose measure) lifts. Each lift was compacted using a BOMAG BW172D-2 smooth drum vibratory roller prior to Field Representatives arrival at site (see Field Representative's Activities, Item No. 3).
3. Shaw Bros. previously (prior to Field Representatives arrival at site) installed the portion of perimeter foundation drain south of column line A, between column line 1 and column line 1.9/2.1 (see Figure 1).
4. Shaw Bros. began spreading a lift of granular fill up to pavement subgrade level in the area bound by column lines 1, 1.9/2.1, D and H with a CAT D5C bulldozer (see Figure 1 and photographs). The fill material consisted of granular soil imported to the site from Shaw Bros. Dayton Pit. The material was placed in one, approximate 8 to 10-in. (loose measure) lift up to pavement subgrade level (between approximately El. 19 and El. 26, depending on location).

II. FIELD REPRESENTATIVE'S ACTIVITIES:

General

1. Haley & Aldrich Field Representative performed part-time monitoring of construction activities on Monday, September 17. Field Representative was not on site Tuesday, September 18 through Friday, September 21. Field Representative documented the activities noted above and shown on the attached figures.
2. Discussed activities and construction schedule with contractors (Ledgewood and Shaw Bros.). Field Representative time on site was closely coordinated with Ledgewood and Shaw Bros.
3. Took digital photographs of construction activities. Select photographs are attached, additional photographs can be provided upon request.

Monday, September 17, 2007

1. Field Representative collected one sample of granular material imported to the site from Shaw Bros. H-Pit for gradation and modified proctor compaction tests. The samples were transported to R.W. Gillespie Associates (RWG) in Saco, Maine for testing. Shaw Bros. proposed to use this material as Type D subbase gravel per the project specifications. Results of the laboratory tests are provided in the attachment. This information will be used to measure in-situ density of compacted lifts of subbase gravel.
2. Field Representative spoke with Bill Plourde (Ledgewood) regarding the date of completion for the removal of the support of excavation system. Mr. Plourde indicated that G. Donaldson completed the removal of the system on Wednesday, 12 September.
3. Field Representative spoke with Bill Plourde (Ledgewood) regarding surveying reference points on top of the support of excavation system west of column line 1. Mr. Plourde indicated that he had not received the survey data from CCB yet. Mr. Plourde indicated he would forward the data to Field Representative upon receipt.

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4. Field Representative spoke with representatives from Shaw Bros. regarding the methodology used during fill placement in the area described under Contractor's Activities, Item No. 2 on Monday and shown on Figure 1. Field Representative confirmed that the granular fill was placed and compacted in approximate 12-in. thick (loose measure) lifts. Field Representative confirmed that each lift of granular fill within 2 to 3 ft of the foundation wall along column line 2.8 was compacted with 4 to 5 passes of a self-propelled vibratory plate compactor. The remaining portion of the fill was compacted with 3 passes of a BOMAG BW172D-2 smooth drum vibratory roller. Field Representative used a Humboldt 5001EZ nuclear density gauge to measure relative compaction of the top 12-in. of previously placed material (approximately El. 18 to El. 20). In-situ density tests indicated the top 12 in. of fill material met the minimum compaction specifications (see Table 1, test nos. 143 to 145 for results and Figure 1 for density test locations).
5. Field Representative spoke with representatives from Shaw Bros. regarding the methodology used to install the portion of the perimeter foundation drain described under Contractor's Activities, Item No. 3 on Monday and shown on Figure 1. Field Representative confirmed that the portion of the underslab drain consisted of a 4-in. diameter perforated HDPE plastic pipe and was installed with the perforations oriented down and laid flat. The pipe was embedded in a minimum of 4-in. of ¾-in. crushed stone (all around) and was completely wrapped in geosynthetic separation fabric (Mirafi 140N). The pipe was installed at the invert elevation shown on the plans (El. 15.5). The perimeter drain was backfilled with granular fill imported to the site from Shaw Bros. Dayton Pit.
6. Field Representative observed placement of granular fill in the area described under Contractor's Activities, Item No. 4 on Monday and shown on Figure 1. Field Representative confirmed that one lift of material was being placed approximately 8 to 10-in. thick (loose measure). Field Representative did not observe compaction of granular fill. In-situ density testing was not considered necessary due to the minimal amount of fill placed.

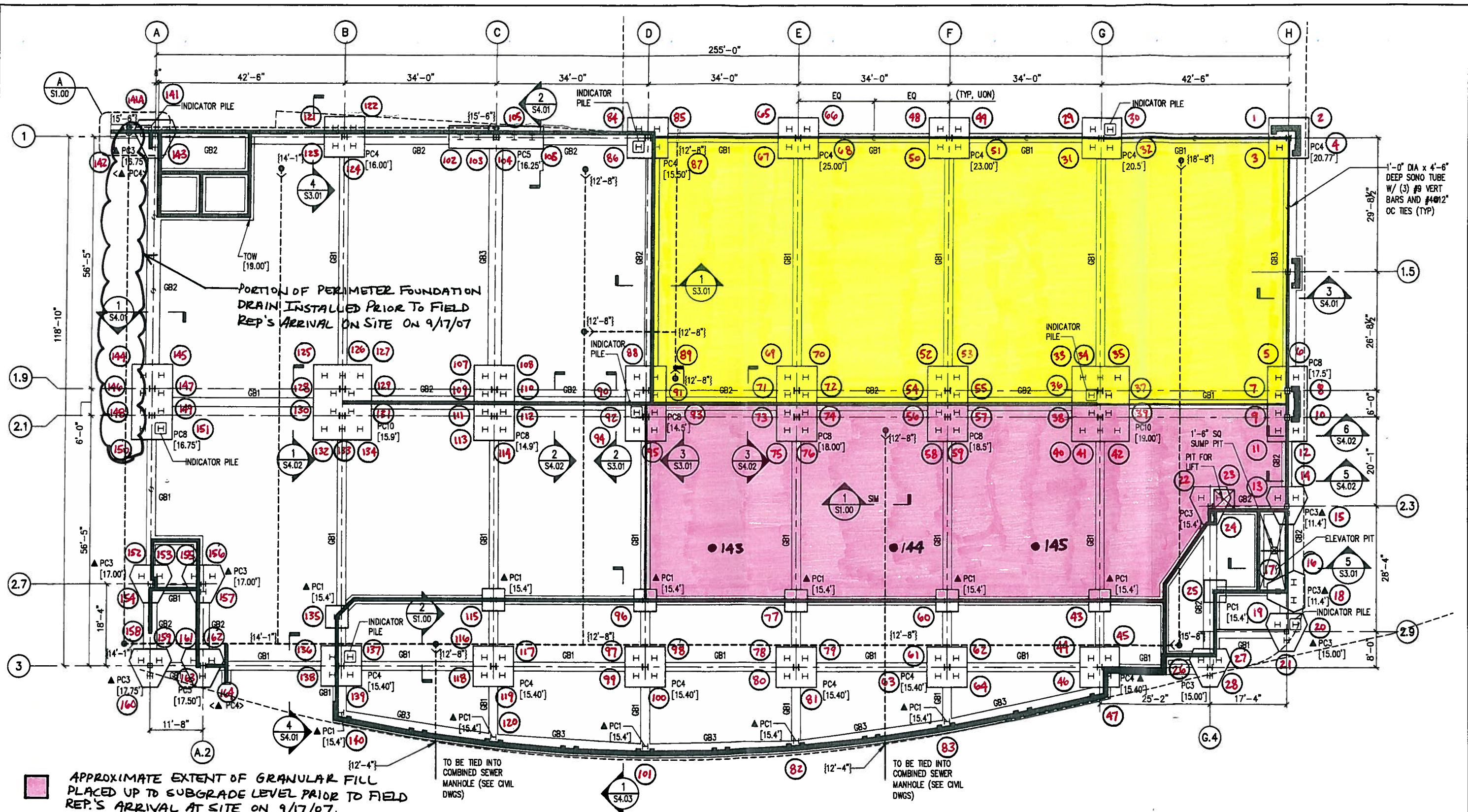
ATTACHMENTS:

1. Foundation Plan (Figure 1)
2. Weekly Summary of Field Unit Weight Test (1 page)
3. Laboratory Test Results (2 pages)
4. Photograph Summary (2 pages)

<u>Field Representative(s)</u>	<u>Total Weekly Time</u>
B. Steinert	2.75

Distribution: Drew Swenson, Riverwalk, LLC. (email)
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 Steve Pitts & Bob Parsons, LedgeWood Construction (email)
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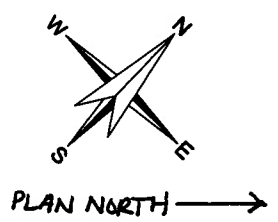
S:\30322\2007_0124 - CURRENT RES. FIG 210007_0322_BCS_COMMONPLANS.DWG



- APPROXIMATE EXTENT OF GRANULAR FILL PLACED UP TO SUBGRADE LEVEL PRIOR TO FIELD REP'S ARRIVAL AT SITE ON 9/17/07.
- APPROXIMATE EXTENT OF GRANULAR FILL PLACED UP TO SUBGRADE LEVEL AND OBSERVED BY FIELD REP. ON 9/17/07
- DESIGNATION AND APPROXIMATE LOCATION OF IN-SITU DENSITY TEST

TO BE TIED INTO COMBINED SEWER MANHOLE (SEE CIVIL DWGS)

FOUNDATION PLAN
3/32"=1'-0"



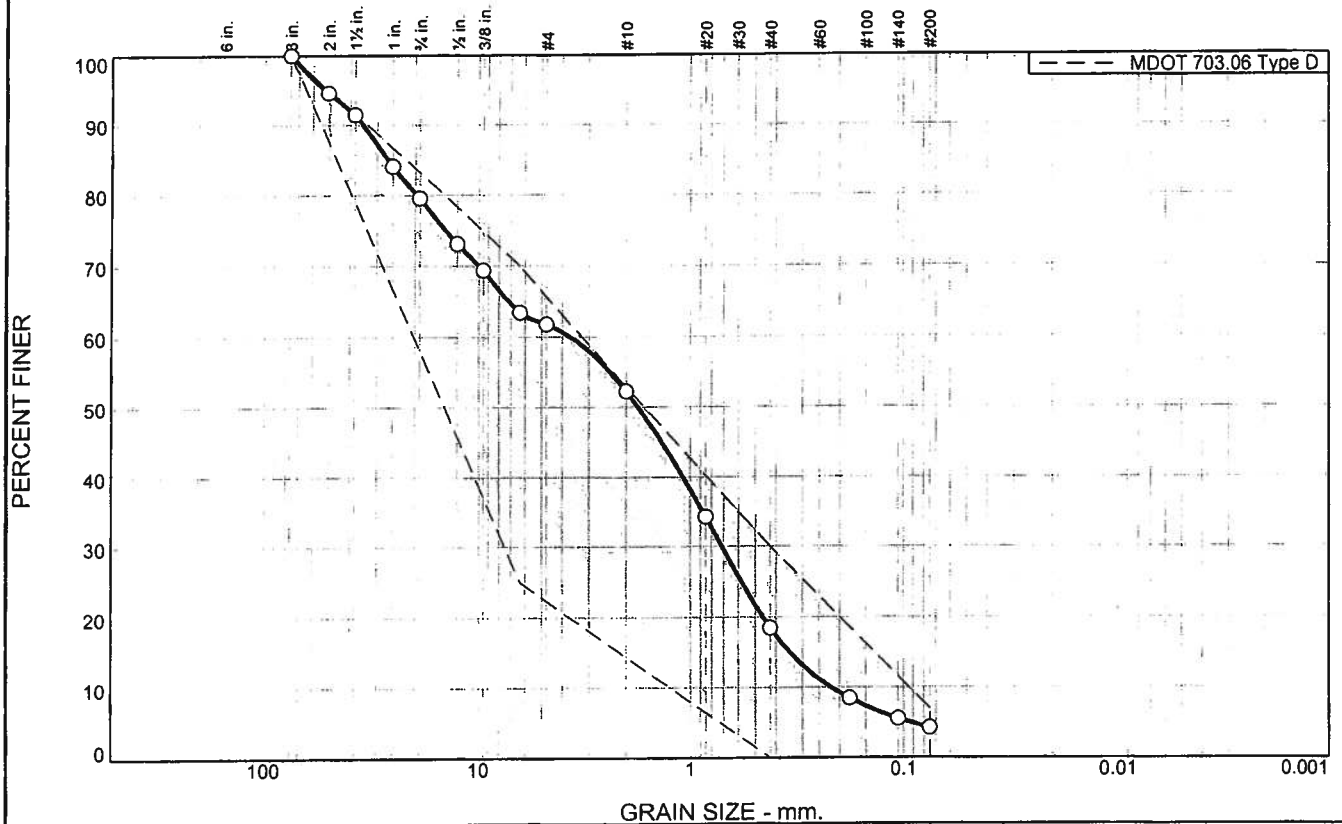
HALEY & ALDRICH OCEAN GATEWAY PARKING GARAGE
MIDDLE STREET
PORTLAND, MAINE

FOUNDATION PLAN (SHEET NO. S1.00)
WEEKLY FIELD REPORT NO.: 18

SCALE: AS SHOWN
APRIL 2007 9/22/2007

FIGURE I

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	20.4	17.8	9.6	33.8	14.2	4.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0	100.0 - 100.0	
2"	94.6		
1 1/2"	91.5		
1"	84.1		
3/4"	79.6		
1/2"	73.1		
3/8"	69.4	25.0 - 70.0	
1/4"	63.5		
#4	61.8		
#10	52.2		
#20	34.3		
#40	18.4	0.0 - 30.0	
#80	8.4		
#140	5.5		
#200	4.2	0.0 - 7.0	

Soil Description

Imported Subbase Gravel - poorly graded sand with gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D₈₅= 26.6541 D₆₀= 3.6527 D₅₀= 1.7592
D₃₀= 0.7126 D₁₅= 0.3451 D₁₀= 0.2209
C_u= 16.53 C_c= 0.63

Classification

USCS= SP AASHTO=

Remarks

Moisture content: 3.0%

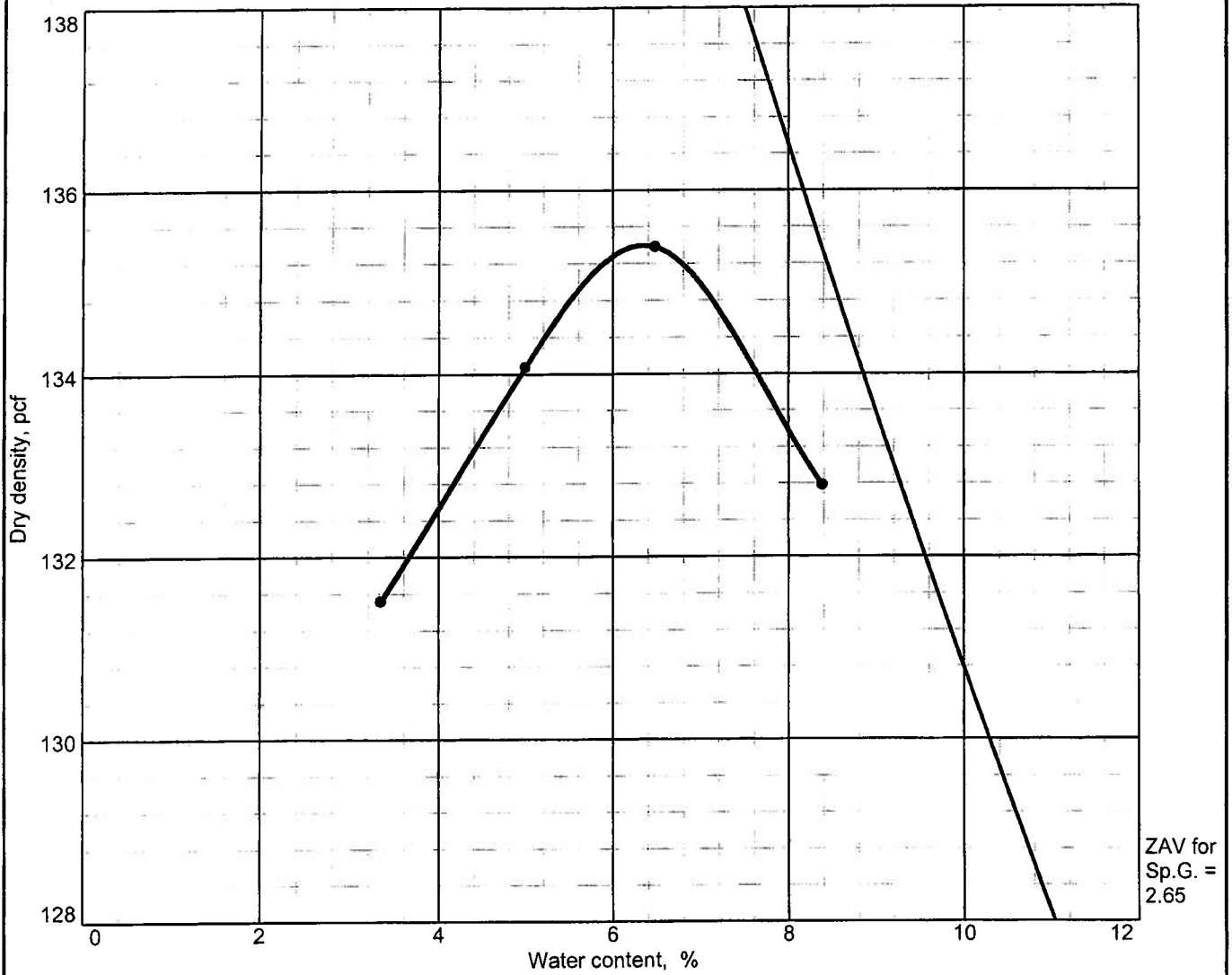
* MDOT 703.06 Type D

Sample No.: S-2 Source of Sample: Shaw Bros. - H Pit Date: 10/2/07
Location: Stockpile Elev./Depth:

R.W. Gillespie & Associates, Inc. Saco, Maine	Client: Haley & Aldrich, Inc. Project: Ocean Gateway Parking Garage Project No: 956-06 Lab # 9815
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Tested By: JJH/DCH Checked By: MTG *MTG*

Moisture-Density Test Report



Test specification: ASTM D 1557-02 Method C Modified
 Oversize correction applied to each point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 In.	% < No.200
	USCS	AASHTO						
	SP		3.0%					4.2

ROCK CORRECTED TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 135.4 pcf Optimum moisture = 6.4 %	Imported Subbase Gravel - poorly graded sand with gravel
Project No. 956-06 Client: Haley & Aldrich, Inc. Project: Ocean Gateway Parking Garage ● Location: Stockpile	Remarks: Teted by: TJB/DCH <div style="text-align: right;"><i>MAG</i></div>
R.W. Gillespie & Associates, Inc. Saco, Maine	
	Lab # 9815



Photograph 1. Granular fill previously placed up to subgrade level between column line 1.9/2.1 and 2.8 with insulation board and waterproofing visible on the above grade wall along column line 2.8, looking south (9/17/07).



Photograph 2. Granular fill previously placed up to subgrade level between column line 1.9/2.1 and 2.8 with insulation board and waterproofing visible on the above grade wall along column line 2.8, looking south (9/17/07).



Photograph 3. Spreading a lift of granular fill up to subgrade elevation between column line 1 and column line 1.9/2.1 near column line D with a CAT D5C bulldozer, looking northeast (9/17/07).



Photograph 4. Spreading a lift of granular fill up to subgrade elevation between column line 1 and column line 1.9/2.1 near column line D with a CAT D5C bulldozer, looking east (9/17/07).

Haley & Aldrich, Inc.