

R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008
200 Int'l Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

LETTER OF TRANSMITTAL

Date:	5 October 2010	Project No.:	557-14
Attention:	Mr. Cuyler Feagles (cmf@portlandmaine.gov)		
Re:	In-Place Density Testing Terminal Enhancement, Portland Int. Jetport Portland, Maine		

City of Portland, Portland Int. Jetport

1001 Westbrook Street

Portland, Maine 04102

We are sending you attached In-Place Density Test Results.

Date(s) Performed:

September 7 through 10, 2010

Test (s) Performed

In-Place Density Testing - Nuclear Method ASTM D6938

- Meets Specification
- Selected Tests Do Not Meet Specification - Noted with an *

Note: Materials descriptions and maximum laboratory dry density values were transmitted under separate cover and are referenced in the attached summaries by the material number.

Remarks:

Copy To: Roy Williams: rsw@portlandmaine.gov
 Jim Stanislaski: jim_stanislaski@gensler.com
 Cliff Takara: clifford_takara@gensler.com
 Lacey Fogg: Lacey.Fogg@amec.com
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 Geoff Mitchell: gemitchell@tcco.com

Signed:

SUMMARY OF IN-PLACE DENSITIES - ASTM D6938
 TERMINAL ENHANCEMENT AT THE PORTLAND INTERNATIONAL JETPORT
 PORTLAND, MAINE
 RWG&A PROJECT NO. 557-14

Client: City of Portland
 Test Date: 9/7/2010
 Technician: MJK
 Gauge Model/Serial Number: L 500

Report Issue Date: **OCT 05 2010**


Lab No.	Soil Description	ASTM D1557 Max Density	ASTM D1557 Opt. Moisture
11152	Type A Gravel	131.8	8.0
11194	Poorly Graded Sand	111.0	11.4

Test No.	Location	Elevation	ASTM D6938 Dry Density (pcf)	ASTM D6938 Water Content (%)	Percent of Max. (%)	Lab. No.
1	Temporary water and sewer lines below parking lot	FG -3'	106.9	3	96	11194
2	Temporary water and sewer lines below parking lot	FG -3'	105.7	4	95	11194
3	Parking lot subgrade	SG	127.6	4	97	11152

Remarks:

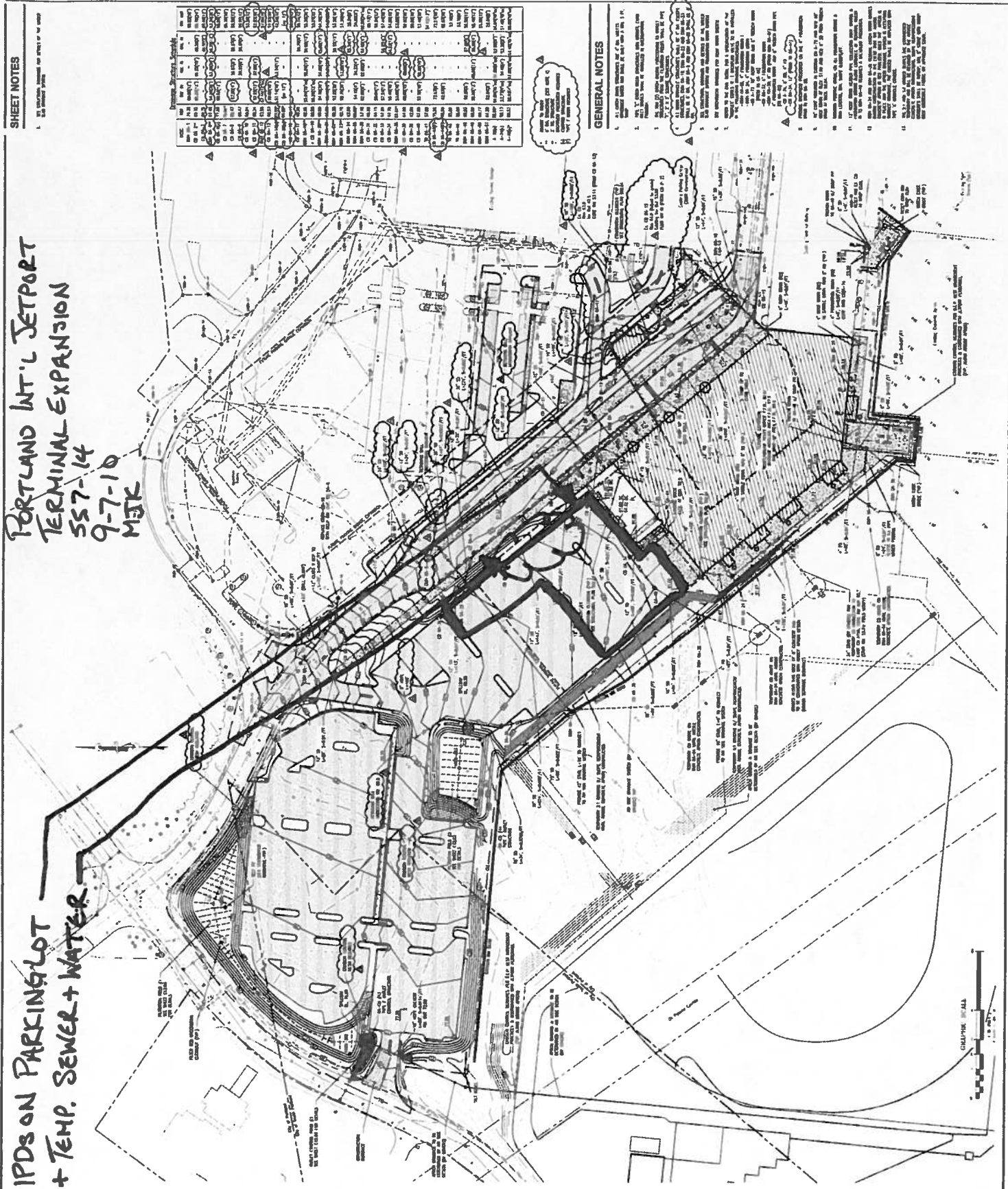
FG = Finish Grade
 FF = Finish Floor
 FGB = Finish Grade of Base
 FGSB = Finish Grade of Subbase
 FGSG = Finish Grade of Subgrade

TOW = Top of Foundation Wall
 BOW = Bottom of Wall
 BOF = Bottom of Footing
 SG = Subgrade

Checked by: 

PORTLAND INT'L AIRPORT
 TERMINAL EXPANSION
 557-14
 9-7-10
 MKK

IPDS ON PARKING LOT
 + TEMP. SEWER + WATER



SHEET NOTES
 1. SEE GENERAL NOTES AND SHEETS OF THIS PROJECT

NO.	DESCRIPTION	DATE
1	REVISION	
2	REVISION	
3	REVISION	
4	REVISION	
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45	REVISION	
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48	REVISION	
49	REVISION	
50	REVISION	

GENERAL NOTES
 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING CODES AND SPECIFICATIONS:
 A. AIAA 1000-2005
 B. AIAA 1000-2005
 C. AIAA 1000-2005
 D. AIAA 1000-2005
 E. AIAA 1000-2005
 F. AIAA 1000-2005
 G. AIAA 1000-2005
 H. AIAA 1000-2005
 I. AIAA 1000-2005
 J. AIAA 1000-2005
 K. AIAA 1000-2005
 L. AIAA 1000-2005
 M. AIAA 1000-2005
 N. AIAA 1000-2005
 O. AIAA 1000-2005
 P. AIAA 1000-2005
 Q. AIAA 1000-2005
 R. AIAA 1000-2005
 S. AIAA 1000-2005
 T. AIAA 1000-2005
 U. AIAA 1000-2005
 V. AIAA 1000-2005
 W. AIAA 1000-2005
 X. AIAA 1000-2005
 Y. AIAA 1000-2005
 Z. AIAA 1000-2005

Portland International
 Jetport
 1001 Westbrook Street
 Portland, Maine 04102

Gensler
 ASOCIATES, INC.
 1000 Massachusetts Avenue
 Cambridge, Massachusetts 02139



DATE: 09/07/10
 SHEET NO.: C02.02
 PROJECT: PORTLAND INTERNATIONAL AIRPORT TERMINAL EXPANSION

SUMMARY OF IN-PLACE DENSITIES - ASTM D6938
 TERMINAL ENHANCEMENT AT THE PORTLAND INTERNATIONAL JETPORT
 PORTLAND, MAINE
 RWG&A PROJECT NO. 557-14

Lab No.	Soil Description	ASTM D1557 Max Density	ASTM D1557 Opt. Moisture
11175	Type D Gravel	129.8	8.4
11194	Poorly Graded Sand	111.0	11.4

Client: City of Portland
 Test Date: 9/8/2010
 Technician: MJK
 Gauge Model/Serial Number: L 500

Report Issue Date: **OCT 05 2010**

Test No.	Location	Elevation	ASTM D6938 Dry Density (pcf)	ASTM D6938 Water Content (%)	Percent of Max. (%)	Lab. No.
1	XD.7/Z3	TOW -3.5'	124.2	4	96	11175
2	XD.7/Z4	TOW -3.5'	122.7	4	95	11175
3	XF/Z3 +15'	FG	122.7	4	95	11175
4	XD.7/Z3	FG -1'	124.3	4	96	11175
5	XD.7/Z4	FG -1'	126.5	4	98	11175
6	XF/Z3 (outside foundation wall)	FG	128.3	4	99	11175
7	XF/Z4	FG	123.6	4	95	11175
8	XF/Z5	FG	123.0	5	95	11175
9	XF/Z6	FG	122.7	4	95	11175
10	XF/Y6.5	FG	124.1	3	96	11175
11	Temp. water line 15' SW & 200' SE of CB OA-31	FG -4'	109.7	4	99	11194
12	Temp. water line 15' SW & 200' SE of CB OA-31	FG -2.5'	106.2	3	96	11194
13	Temp. water line 15' SW & 200' SE of CB OA-31	FG -1'	106.4	3	96	11194

Remarks:

- FG = Finish Grade
- FF = Finish Floor
- FGB = Finish Grade of Base
- FGSB = Finish Grade of Subbase
- FGSG = Finish Grade of Subgrade

- TOW = Top of Foundation Wall
- BOW = Bottom of Wall
- BOF = Bottom of Footing
- SG = Subgrade

Checked by:



PORTLAND INT'L JETPORT
 TERMINAL EXPANSION
 557-14
 9-8-10
 HJK

SHEET NOTES
 1. SEE EXISTING RECORDS FOR DETAILS OF ALL WORK

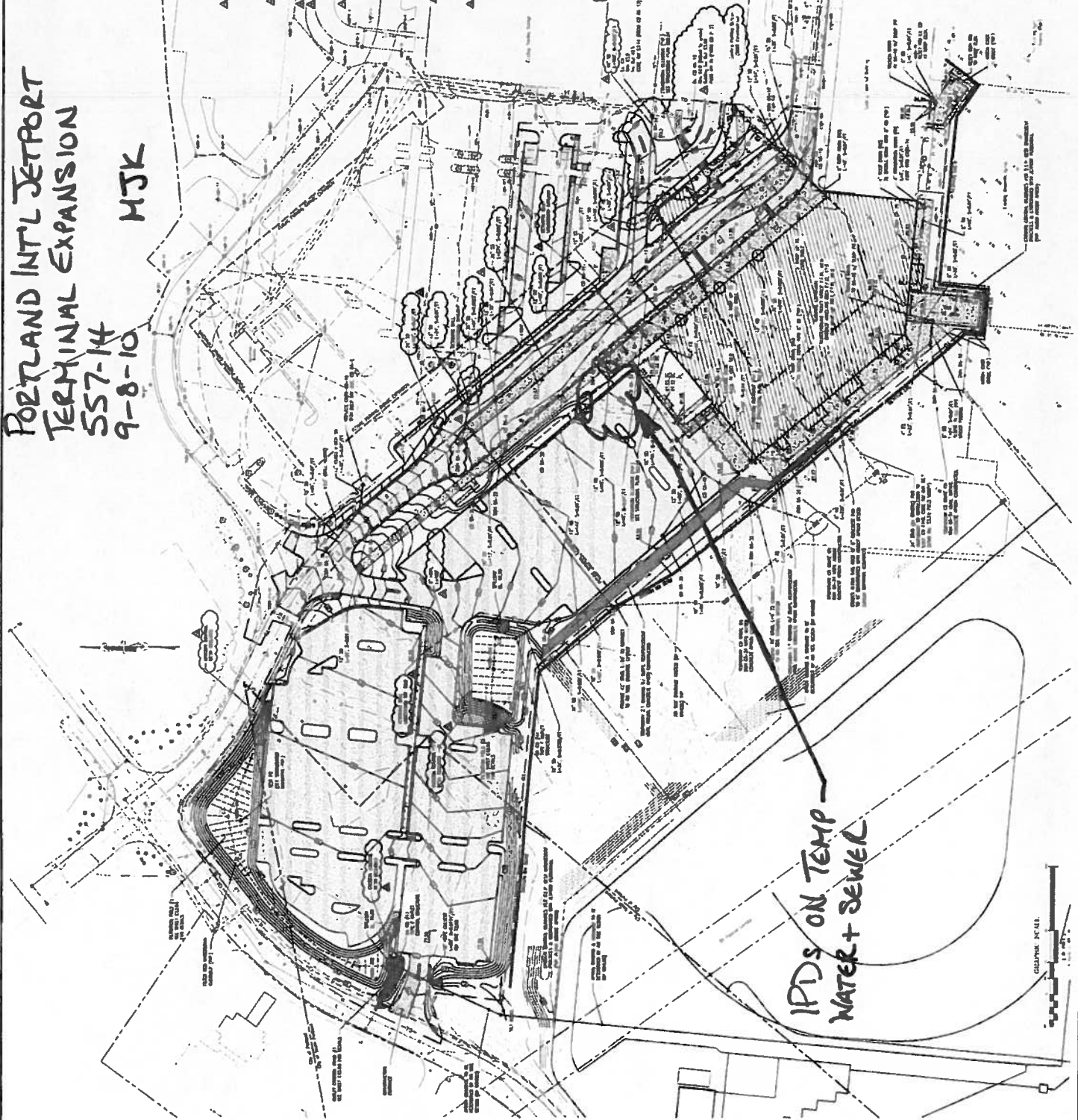
Portland International
 Jetport
 1001 Westbank Street
 Portland, Maine 04102

Gensler
 nest ASSOCIATES, INC.
 1000 BOSTON STREET
 PORTLAND, ME 04102
 TEL: 603.733.1234
 FAX: 603.733.1235

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	09/08/10
2	ISSUED FOR CONSTRUCTION	09/08/10
3	ISSUED FOR CONSTRUCTION	09/08/10
4	ISSUED FOR CONSTRUCTION	09/08/10
5	ISSUED FOR CONSTRUCTION	09/08/10
6	ISSUED FOR CONSTRUCTION	09/08/10
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48	ISSUED FOR CONSTRUCTION	09/08/10
49	ISSUED FOR CONSTRUCTION	09/08/10
50	ISSUED FOR CONSTRUCTION	09/08/10

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PORTLAND SPECIFICATIONS AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY DESIGN MANUAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF PORTLAND AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING UTILITIES AND STRUCTURES AT ALL TIMES.
4. ALL NEW CONSTRUCTION SHALL BE CONSTRUCTED TO A FINISH GRADE OF 1.00.
5. ALL EXISTING CONSTRUCTION SHALL BE MAINTAINED AT ITS EXISTING GRADE UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.
7. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY MEASURES AT ALL TIMES.
9. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF PORTLAND AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE AND BONDING.
11. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CITY OF PORTLAND SPECIFICATIONS AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY DESIGN MANUAL.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF PORTLAND AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY.
13. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING UTILITIES AND STRUCTURES AT ALL TIMES.
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16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.
17. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
18. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY MEASURES AT ALL TIMES.
19. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF PORTLAND AND THE PORTLAND INTERNATIONAL AIRPORT AUTHORITY.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE AND BONDING.



IPDS ON TEMP
 WATER + SEWER

GRAPHIC SCALE
 1" = 100'

SUMMARY OF IN-PLACE DENSITIES - ASTM D6938
 TERMINAL ENHANCEMENT AT THE PORTLAND INTERNATIONAL JETPORT
 PORTLAND, MAINE
 RWG&A PROJECT NO. 557-14

Client: City of Portland
 Test Date: 9/9/2010
 Technician: MJK
 Gauge Model/Serial Number: L 500

Report Issue Date: **OCT 05 2010**


Lab No.	Soil Description	ASTM D1557 Max Density	ASTM D1557 Opt. Moisture
11175	Type D Gravel	129.8	8.4
11194	Poorly Graded Sand	111.0	11.4
11152	Poorly Graded Sand	131.8	8.0

Test No.	Location	Elevation	ASTM D6938 Dry Density (pcf)	ASTM D6938 Water Content (%)	Percent of Max. (%)	Lab. No.
1	Temporary sewer line under parking lot	FG -1'	104.9	5	95	11194
2	Parking lot subgrade	FG	122.8	3	95	11175
3	Parking lot subgrade	FG	125.3	5	95	11152
4	Parking lot subgrade	FG	128.1	6	97	11152
5	Parking lot subgrade	FG	127.9	3	97	11152
6	Parking lot subgrade	FG	125.3	4	95	11152

Remarks:

FG = Finish Grade
 FF = Finish Floor
 FGB = Finish Grade of Base
 FGSB = Finish Grade of Subbase
 FGSG = Finish Grade of Subgrade

TOW = Top of Foundation Wall
 BOW = Bottom of Wall
 BOF = Bottom of Footing
 SG = Subgrade

Checked by: 

SUMMARY OF IN-PLACE DENSITIES - ASTM D6938
 TERMINAL ENHANCEMENT AT THE PORTLAND INTERNATIONAL JETPORT
 PORTLAND, MAINE
 RWG&A PROJECT NO. 557-14

Lab No.	Soil Description	ASTM D1557 Max Density	ASTM D1557 Opt. Moisture
11194	Poorly Graded Sand	111.0	11.4

Client: City of Portland
 Test Date: 9/10/2010
 Technician: MJK
 Gauge Model/Serial Number: L 500

Report Issue Date: **OCT 05 2010**

Test No.	Location	Elevation	ASTM D6938 Dry Density (pcf)	ASTM D6938 Water Content (%)	Percent of Max. (%)	Lab. No.
1	North side of Vavle Pit	FG -4'	107.2	4	97	11194
2	North side of Vavle Pit	FG -3'	105.9	4	95	11194

Remarks:

FG = Finish Grade
 FF = Finish Floor
 FGB = Finish Grade of Base
 FGSB = Finish Grade of Subbase
 FGSG = Finish Grade of Subgrade

TOW = Top of Foundation Wall
 BOW = Bottom of Wall
 BOF = Bottom of Footing
 SG = Subgrade

Checked by:



SUMMARY OF IN-PLACE DENSITIES - BITUMINOUS PAVING
 TERMINAL ENHANCEMENT AT THE PORTLAND INTERNATIONAL JETPORT
 PORTLAND, MAINE
 RWG&A PROJECT NO. 557-14

Client: City of Portland

Test Date: September 10, 2010

Technician: MJK

Gauge Model/Serial Number: PQI

OCT 0 5 2010

Report Issue Date:

Test No.	Location	Elevation	Bulk Density	Percent Compaction (%)
1	Parking Lot (See attached sketch)	FGBi	149.0	94
2	Parking Lot (See attached sketch)	FGBi	148.1	94
3	Parking Lot (See attached sketch)	FGBi	149.1	95
4	Parking Lot (See attached sketch)	FGBi	149.5	95
5	Parking Lot (See attached sketch)	FGBi	149.3	95
6	Parking Lot (See attached sketch)	FGBi	149.0	95
7	Parking Lot (See attached sketch)	FGBi	148.8	95
8	Parking Lot (See attached sketch)	FGBi	148.9	95
9	Parking Lot (See attached sketch)	FGBi	149.8	95
10	Parking Lot (See attached sketch)	FGBi	149.4	95

Remarks: TMD value for 19 mm = 157.1 PCF - Lab #11509

FG = Finish Grade

FGB = Finish Grade of Base

FGSB = Finish Grade of Subbase

FGSG = Finish Grade of Subgrade

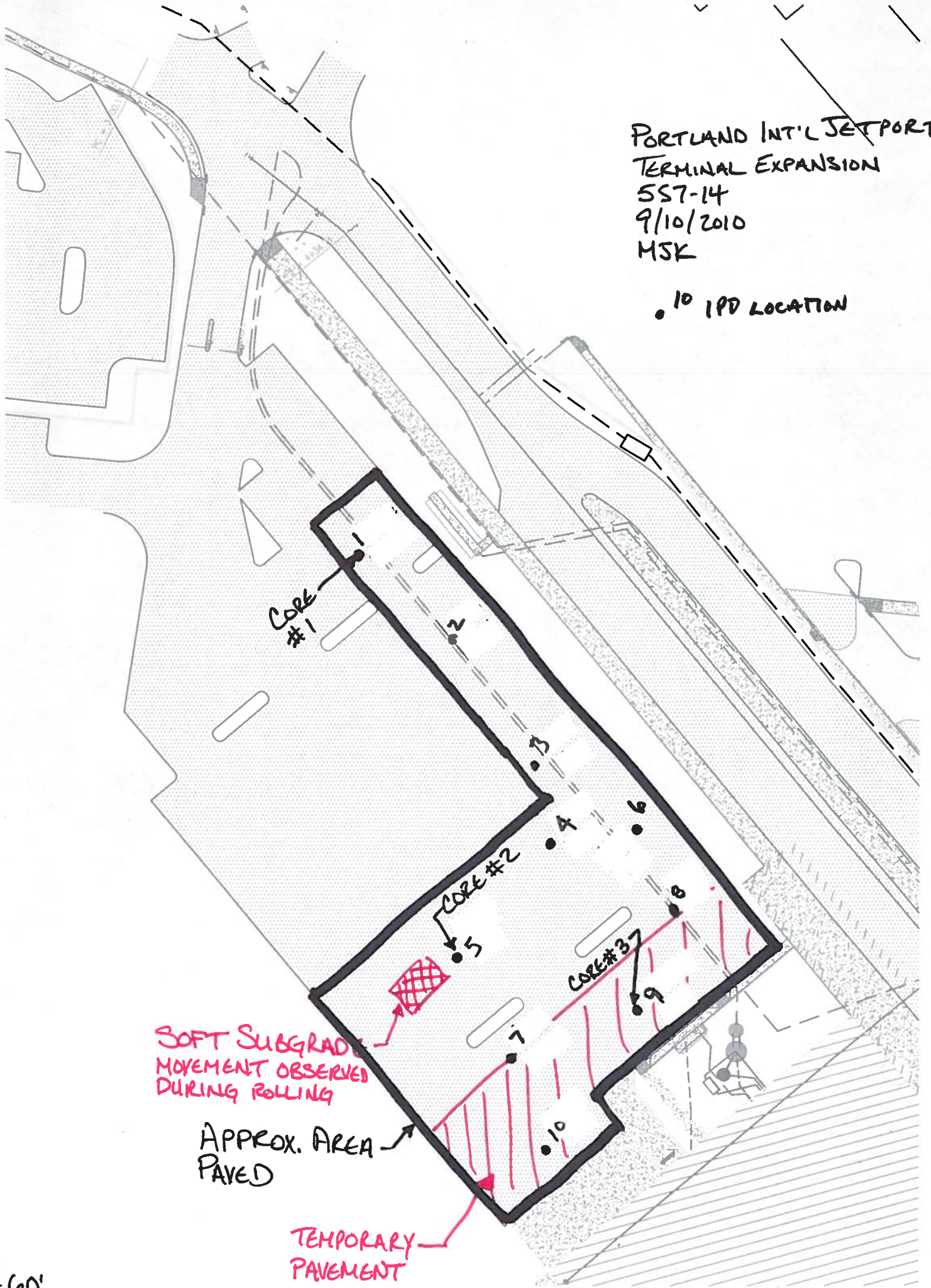
FGBi = Finish Grade of Binder

Checked By:



PORTLAND INT'L AIRPORT
TERMINAL EXPANSION
557-14
9/10/2010
MSK

• 10 IPD LOCATION



SOFT SUBGRADE
MOVEMENT OBSERVED
DURING ROLLING

APPROX. AREA
PAVED

TEMPORARY
PAVEMENT

1" = 60'