R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4, Saco, ME 04072 207-286-8008

200 International Drive, Suite 170, Portsmouth, NH 03801 603-427-0244

LETTER OF TRANSMITTAL

Date:	Project No.:
8 July 2011	0557-014
Attention: Mr. Cuyler Feagles (cmf@portlandmaine.gov)	
Re: Concrete Testing Terminal Enhancement, Portland Int. Jetport Portland, Maine	

City of Portland, Portand Int. Jetport

1001 Westbrook Street

Portland, Maine 04102

We are sending you attached concrete cylinder test results.

Cylinder No. (s)	Age (Days)
68536	28
68537	28
68540	28
68541	28
68544	28
68545	28

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
Mike Fusco: mfusco@tcco.com
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Elizabeth O'Toole: eotoole@tcco.com
TMM@portlandmaine.gov
ldobson@portlandmaine.gov
rdixon@tcco.com
gemitchell@tcco.com
Remi Delcourt (remi@auburnconcrete.com)
Jeff Evans, Amec (jeff.evans@amec.com)

Signed: Bertha Dawn

If enclosures are not as noted, kindly notify us at once.

R.W. GILLESPIE & ASSOCIATES

86 Industrial Park Road, Suite 4, Saco, ME 04072 (207) 286-8008
200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

CONCRETE TEST/PLACEMENT REPORT

Project Name:	Terminal Enhancement at the Portland Jetport	**Date Cylinders Cast:**	10-Jun-11
Project No:	0557-014	**Concrete Supplier:**	Auburn Concrete
Weather Conditions:	Partly Cloudy, Warm	**General Contractor:**	Turner
Method of Placement:	Pump	**Design Strength:**	4500 PSI
Admixtures:	Glenium 7500, Micro Air	**Max. Aggregate Size:**	3/4 In.

Placement Location: Apron; KM - XM + 30'/Y4-Y7, Loading Dock Slab, Sidewalk; Entrance Intersection-180' SE of Int.

Test Cylinder Location: Set #1 : XM.5/Y4.5 (Apron)

JUL 12 2011

Date Report Issued:

4x8 Cylinders	4	Cast By	Michael J Kramlich	Time	
Load No.	2	Slump (in) ASTM C 143	6.25	Batched @	8:19 AM
Ticket No.	179159	Air (°F)	65	Arrived @	8:44 AM
Truck No.	94	Concrete (°F)	63	Total Time	35 ±
Cubic Yds.	10	Air Content (%) ASTM C 231	5.7		

*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field Cure Days: 3

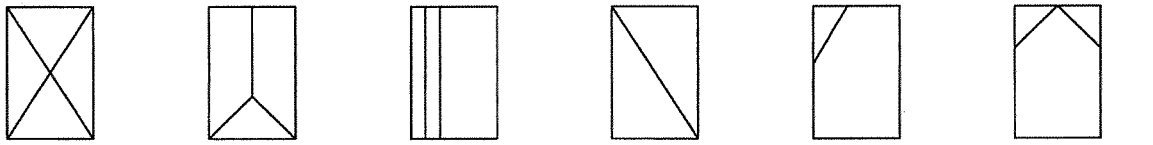
Date Received: 13-Jun-11

Condition of Cylinders: Good

Lab No.	Test Date	Ave Dia (in)	Ave Area (in^2)	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break Type
68535	17-Jun-11	4.011	12.64	7	63235	5000	2
68536	8-Jul-11	4.016	12.67	28	81480	6430	2
68537	8-Jul-11	4.016	12.67	28	83320	6580	5
68538	HOLD			H			

*Concrete compressive strength by ASTM C 39

Types of Breaks



Cone 1 | Cone & Split 2 | Columnar 3 | Shear 4 | Side Fracture 5 | Double Side Fracture 6

Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min)
*1	179158	96	10	7.25	--	--	--	35±
3	179160	84	10	--	--	--	--	40±
4	179162	86	10	--	--	--	--	40±
5	190110	94	10	--	--	--	--	45±
6	190111	84	10	--	--	--	--	35±

Remarks: Total loads = 15
Curing Temperatures: High = 78°, Low = 46°
*Load 1 was rejected by S. Winner (TCCO)

Checked by: Mathew T. Grady, Manager of MTS

R.W. GILLESPIE & ASSOCIATES

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200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

CONCRETE TEST/PLACEMENT REPORT

Project Name:	Terminal Enhancement at the Portland Jetport	**Date Cylinders Cast:**	10-Jun-11
Project No:	0557-014	**Concrete Supplier:**	Auburn Concrete
Weather Conditions:	Partly Cloudy, Warm	**General Contractor:**	Turner
Method of Placement:	Pump	**Design Strength:**	4500 PSI
Admixtures:	Glenium 7500, Micro Air	**Max. Aggregate Size:**	3/4 In.

Placement Location: Apron; KM - XM + 30'/Y4-Y7, Loading Dock Slab, Sidewalk; Entrance Intersection-180' SE of Int.

Test Cylinder Location: Set #2 :Apron;Y7/M+20'

JUL 12 2011

Date Report Issued:

4x8 Cylinders	4	Cast By		Michael J Kramlich	Time	
Load No.	7	Slump (in)	ASTM C 143	6.25	Batched @	10:10 AM
Ticket No.	190112	Air (°F)		68	Arrived @	10:35 AM
Truck No.	86	Concrete (°F)		67	Total Time	50 ±
Cubic Yds.	10	Air Content (%)	ASTM C 231	7.0		

*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field Cure Days: 3

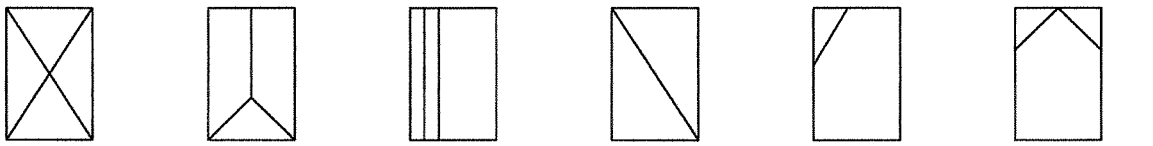
Date Received: 13-Jun-11

Condition of Cylinders: Good

Lab No.	Test Date	Ave Dia (in)	Ave Area (in^2)	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break Type
68539	17-Jun-11	4.011	12.64	7	65720	5200	2
68540	8-Jul-11	4.016	12.67	28	83985	6630	2
68541	8-Jul-11	4.016	12.67	28	84030	6630	2
68542	HOLD			H			

*Concrete compressive strength by ASTM C 39

Types of Breaks



Cone 1 | Cone & Split 2 | Columnar 3 | Shear 4 | Side Fracture 5 | Double Side Fracture 6

Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min)
8	190113	98	10	7.25	--	--	--	40±
9	190114	84	10	--	--	--	--	40±
10	190115	86	10	--	--	--	--	45±
11	190118	84	10	--	--	--	--	40±
12	190119	86	2	--	--	--	--	30±
13	190120	94	8	--	--	--	--	50±

Remarks: Total loads = 15
Curing Temperatures: High = 78°, Low = 46°

Checked by: Mathew T. Grady

Mathew T. Grady, Manager of MTS

R.W. GILLESPIE & ASSOCIATES

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200 International Drive, Suite 170, Portsmouth, NH 03801 (603) 427-0244

CONCRETE TEST/PLACEMENT REPORT

Project Name:	Terminal Enhancement at the Portland Jetport	**Date Cylinders Cast:**	10-Jun-11
Project No:	0557-014	**Concrete Supplier:**	Auburn Concrete
Weather Conditions:	Partly Cloudy, Warm	**General Contractor:**	Turner
Method of Placement:	Pump	**Design Strength:**	4500 PSI
Admixtures:	Glenium 7500, Micro Air	**Max. Aggregate Size:**	3/4 In.

Placement Location: Apron; KM - XM + 30'/Y4-Y7, Loading Dock Slab, Sidewalk; Entrance Intersection-180' SE of Int.

Test Cylinder Location: Set #3 : NW End of Sidewalk

Date Report Issued: JUL 12 2011

4x8 Cylinders	4	Cast By		Michael J Kramlich	Time	
Load No.	14	Slump (in)	ASTM C 143	2.75	Batched @	3:00 PM
Ticket No.	190121	Air (°F)		73	Arrived @	3:24 PM
Truck No.	116	Concrete (°F)		69	Total Time	45 ±
Cubic Yds.	9	Air Content (%)	ASTM C 231	6.0		

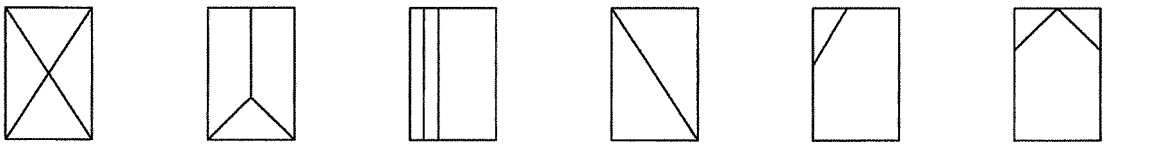
*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field Cure Days: 3
Date Received: 13-Jun-11
Condition of Cylinders: Good

Lab No.	Test Date	Ave Dia (in)	Ave Area (in^2)	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break Type
68543	17-Jun-11	4.011	12.64	7	69040	5460	3
68544	8-Jul-11	4.016	12.67	28	88765	7010	5
68545	8-Jul-11	4.016	12.67	28	88305	6970	6
68546	HOLD			H			

*Concrete compressive strength by ASTM C 39

Types of Breaks



Cone 1 | Cone & Split 2 | Columnar 3 | Shear 4 | Side Fracture 5 | Double Side Fracture 6

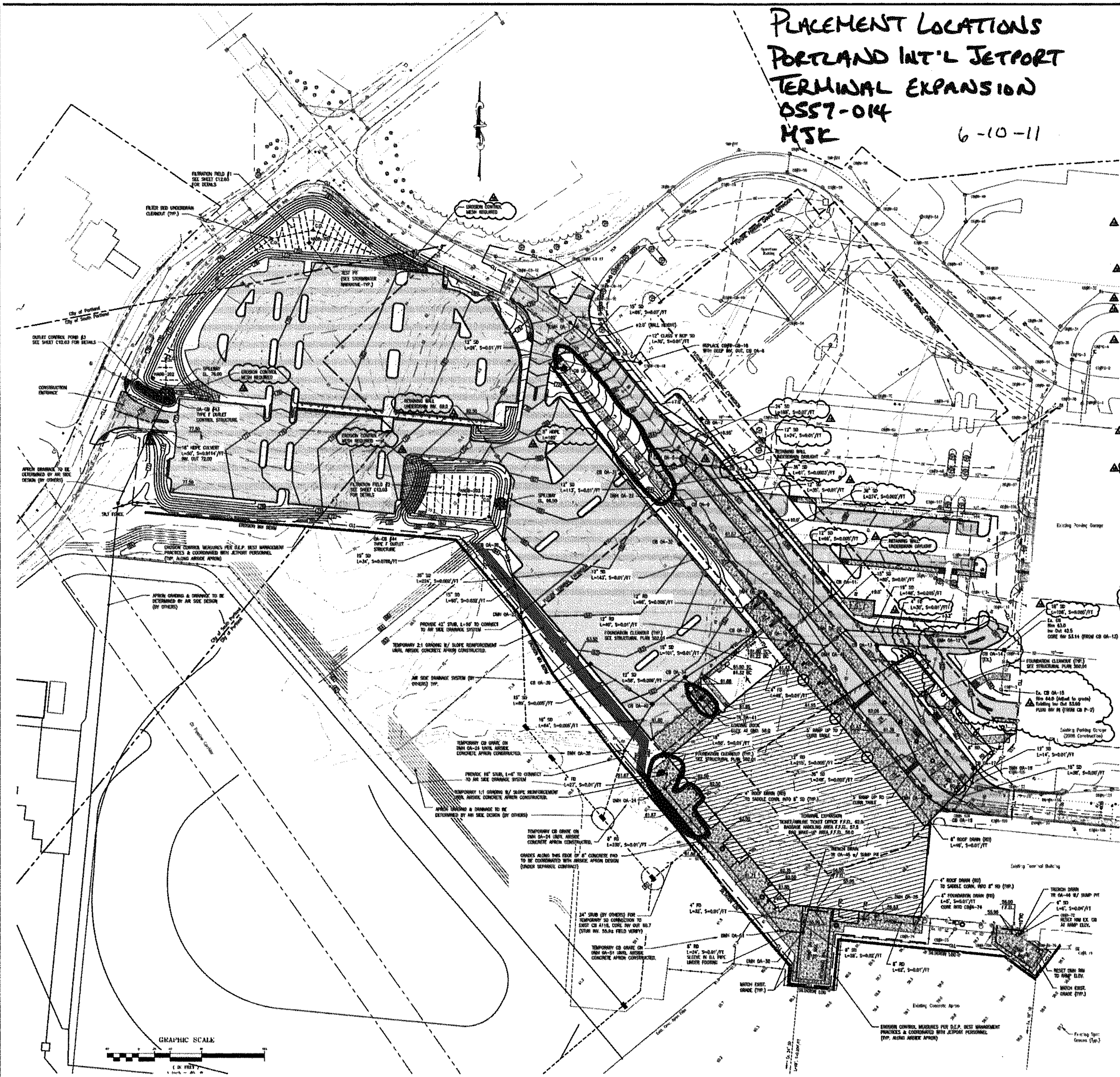
Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min)
15	190122	98	8	--	--	--	--	--

Remarks: Total loads = 15
Curing Temperatures: High = 78°, Low = 46°

Checked by: Matthew T. Grady

Mathew T. Grady, Manager of MTS

PLACEMENT LOCATIONS
PORTLAND INT'L JETPORT
TERMINAL EXPANSION
0557-014
MJK
6-10-11



SHEET NOTES

1. SEE STRUCTURAL DRAWINGS FOR DETAILS OF THE UNDER SLAB DRAINAGE SYSTEM.

Drainage Structure Schedule

- * ADJUST TO GRADE
- ** 6' DIA. STRUCTURE (SEE NOTE 4)
- \# 2' SQ. STRUCTURE
- ^ BACKFLOW PREVENTER REQUIRED
- (X) EXISTING STRUCTURE
- (F) TYPE F BASIN REQUIRED

GENERAL NOTES

1. ALL CATCH BASIN STRUCTURES ARE 4' DIA. UNLESS OTHERWISE NOTED AND SHALL BE BUILT WITH A MIN. 3 FT. SUMP.
2. TYPE "E" CATCH BASIN STRUCTURES WITH GRANITE CURB INLET STONES SHALL BE INSTALLED IN INTERNATIONAL PARKWAY.
3. THE TWO (2) CATCH BASINS FUNCTIONING AS OUTLET STRUCTURES FROM THE FILTRATION FIELDS SHALL BE TYPE "F", 2' X 2' SQUARE STRUCTURES.
4. ALL DRAIN MANHOLE STRUCTURES SHALL BE 4' DIA. EXCEPT STRUCTURES, DMH OA-18, DMH OA-22 AND DMH OA-23 SHALL BE 6' DIA. DMH OA-5 AND DMH OA-20 SHALL BE 8' DIA.
5. SEE STRUCTURAL DRAWINGS FOR DETAILS OF THE UNDER SLAB DRAINAGE SYSTEM AND FOUNDATION DRAIN SYSTEM.
6. SEE MECHANICAL DRAWINGS FOR ROOF DRAIN SYSTEM.
7. REFER TO THE CIVIL DETAIL FOR A SPECIFICATION OF THE "TIDEFLEX" SERIES TF-1 BACKFLOW VALVE TO BE INSTALLED IN THE FOLLOWING DRAINAGE STRUCTURES:
   - DMH OA-35, 4" FOUNDATION DRAIN 1
   - DMH OA-24, 4" FOUNDATION DRAIN
   - CB A-72, 10" ROOF DRAIN AND 6" TRENCH DRAIN (FROM TR OA-46)
   - CB OA-33, 4" FOUNDATION DRAIN
   - DMH OA-30, 8" RD (FROM DMH OA-51) 4" FOUNDATION DRAIN AND 6" TRENCH DRAIN PIPE (TR OA-45)
   - CB A-74, 8" RD, 4" FD
   - CB OA-34, 12" (FROM TR OA-41)
8. PROVIDE BACKFLOW PREVENTER ON THE 4" FOUNDATION DRAIN IN DMH OA-20.
9. 10" CORE REQUIRED IN EXISTING CB A-72 FOR NEW 10" ROOF DRAIN AT ELEV. 51.08 AND NEW 6" SD FROM TRENCH DRAIN AT ELEV. 52.84.
10. MAINTAIN POSITIVE GRADE ON ALL FOUNDATION DRAINS & RAIN LEADERS. MIN. SLOPE 0.005FT/FT.
11. 12" ROOF DRAIN HEADER PIPE COLLECTING ROOF DRAINS & FOUNDATION DRAINS ALONG ENTRANCE OF TERMINAL WHICH IN TO DMH OA-49 REQUIRES A BACKFLOW PREVENTER.
12. DMH OA-24 AND DMH OA-35 REQUIRE CATCH BASIN GRATES DURING CONSTRUCTION IN THE EVENT THAT THE AIRSIDE CONCRETE APRON IS NOT FINALIZED. ONCE THE APRON IS IN PLACE AND THE APRON DRAINAGE SYSTEM IS ACCEPTING SURFACE DRAINAGE, THE GRATES SHALL BE REPLACED WITH TYPE "A" MANHOLE COVERS.
13. THE 2:1 AND 1:1 GRADED SLOPES ARE CONSIDERED TEMPORARY AND WILL BE REMOVED BY THE AIRSIDE CONCRETE APRON CONTRACTORS. SLOPE REINFORCEMENT MEASURES SHALL BE RIPRAP, MIN. 6" STONE WITH MIRAFI 600X GEOTEXTILE FABRIC OR APPROVED EQUAL.

Portland International Jetport
1001 Westbrook Street
Portland, Maine 04102

Gensler

oest ASSOCIATES, INC.
engineers • architects • surveyors • construction managers

Issue	Date & Issue Description	By	Check
— 1	07/11/08 SCHEMATIC DESIGN	WJW	AML
— 2	09/22/08 DESIGN DEVELOPMENT	WJW	AML
— 3	12/03/08 75% CONSTRUCTION DOCUMENTS	WJW	AML
— 4	01/23/09 95% CONSTRUCTION DOCUMENTS	WJW	AML
— 5	10/26/09 ISSUED FOR PERMIT	WJW	FEM
2 6	11/12/09 ADDENDUM #2	WJW	FEM
4 7	01/12/10 BULLETIN #1	WJW	TM
8 8	05/03/10 BULLETIN #10	WJW	TM

STATE OF MAINE PROFESSIONAL ENGINEER
2010

Project Name: PWM Terminal Enhancement

Description: SITE GRADING & DRAINAGE PLAN

Scale: 1" = 40'

C02.02

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