

**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**

City of Portland, Portland Int. Jetport

1001 Westbrook Street

Portland, Maine 04102

Date:	03 January 2011	Project No.:	557-14
Attention:	Mr. Cuyler Feagles (cmf@portlandmaine.gov)		
Re:	Concrete Testing Terminal Enhancement, Portland Int. Jetport Portland, Maine		

We are sending you attached concrete cylinder test results.

Cylinder No. (s)	Age (Days)
67915	31
67946	31
67919	31
67920	31
67923	31
67924	31

**Remarks:**

**Copy To:**

Roy Williams: rsw@portlandmaine.gov  
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Jeff Evans, Amec (jeff.evans@amec.com)

**Signed:** Bertha Dawn

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

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## CONCRETE TEST/PLACEMENT REPORT

<b>Project Name:</b>	Terminal Enhancement, Portland Int. Jetport	<b>Date Cylinders Cast:</b>	03-Dec-10
<b>Project No:</b>	557-14	<b>Concrete Supplier:</b>	Auburn
<b>Weather Conditions:</b>	Partly Cloudy	<b>General Contractor:</b>	Turner
<b>Method of Placement:</b>	Pump	<b>Design Strength:</b>	3,500
<b>Admixtures:</b>	Mid Range Water Reducer, 1% Pozzoloth 122HE	<b>Max Agg. Size:</b>	3/8
<b>Placement Location:</b>	Stairs		
<b>Test Cylinder Location:</b>	See Attached Sketch		

**Date Report Issued:** JAN 03 2011

4x8 Cylinders	4	Cast by	Michael J. Kramlich			
Load No.	1	Slump (in) ASTM C 143	5.75	Time		
Ticket No.	166359	Air (°F)	31		Batched @	9:30
Truck No.	86	Concrete (°F) ASTM C 1064	64		Arrived @	7:00
Cubic Yds.	5	Air Content (%) ASTM C 231	2.8		Total Time	55±

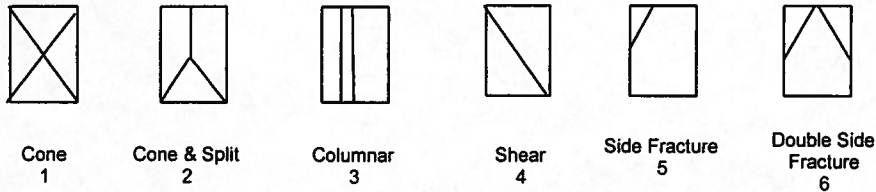
\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 3  
 Date received 06-Dec-10  
 Condition of Cylinders: Good

Lab No.	Test Date	Avg Dia (in)	Area (in <sup>2</sup> )	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break type
67914	10-Dec-10	4.009	12.62	7	47,140	3740	2
67915	03-Jan-11	4.014	12.65	31	61,640	4870	5
67916	03-Jan-11	4.014	12.65	31	63,840	5050	2
67917	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

### Types of Breaks



Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)
2	166363	97	5	--	--	--	--	60±
3	166366	76	5	--	--	--	--	--

Remarks: Curing Temperatures: Max = 78°, Min = 37°

Checked by: *Matthew T. Grady*  
 FOR Matthew T. Grady, Manager of MTS

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## CONCRETE TEST/PLACEMENT REPORT

**Project Name:** Terminal Enhancement, Portland Int. Jetport  
**Project No:** 557-14  
**Weather Conditions:** Clear  
**Method of Placement:** Bucket & Crane  
**Admixtures:** Mid Range Water Reducer, 1% Pozzutec 20+  
**Placement Location:** Elevator Shaft Roof Slabs  
**Test Cylinder Location:** See Attached Sketch

**Date Cylinders Cast:** 03-Dec-10  
**Concrete Supplier:** Auburn  
**General Contractor:** Turner  
**Design Strength:** 3,500  
**Max Agg. Size:** 3/8

**Date Report Issued:** JAN 03 2011

4x8 Cylinders	4	Cast by	Michael J. Kramlich	Time	
Load No.	1	Slump (in) ASTM C 143	5.25	Batched @	10:17
Ticket No.	166377	Air (°F)	38	Arrived @	10:40
Truck No.	76	Concrete (°F) ASTM C 1064	66	Total Time	110±
Cubic Yds.	10	Air Content (%) ASTM C 231	--		

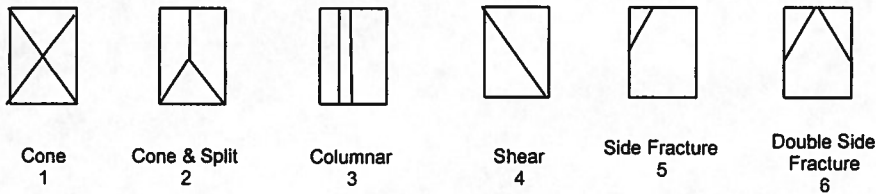
\*Concrete sampled by ASTM C 172

**Specimen Storage ASTM C 31: Field cure days: 3**  
**Date received 06-Dec-10**  
**Condition of Cylinders: Good**

Lab No.	Test Date	Avg Dia (in)	Area (in <sup>2</sup> )	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break type
67918	10-Dec-10	4.009	12.62	7	55,400	4390	5
67919	03-Jan-11	4.014	12.65	31	72,940	5770	5
67920	03-Jan-11	4.014	12.65	31	73,160	5780	5
67921	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

### Types of Breaks



Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)

**Remarks:** Curing Temperatures: Max = 78°, Min = 37°  
 Light weight concrete.

Checked by: *Matthew T. Grady*  
 For: Matthew T. Grady, Manager of MTS

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## CONCRETE TEST/PLACEMENT REPORT

**Project Name:** Terminal Enhancement, Portland Int. Jetport  
**Project No:** 557-14  
**Weather Conditions:** Clear  
**Method of Placement:** Pump  
**Admixtures:** Mid Range Water Reducer, 1% Pozzutec 20+  
**Placement Location:** 5th Level Curbs  
**Test Cylinder Location:** See Attached Sketch

**Date Cylinders Cast:** 03-Dec-10  
**Concrete Supplier:** Auburn  
**General Contractor:** Turner  
**Design Strength:** 3,000  
**Max Agg. Size:** 3/4

**Date Report Issued:** JAN 03 2011

4x8 Cylinders	4	Cast by	Michael J. Kramlich	Time	
Load No.	1	Slump (in) ASTM C 143	4.75	Batched @	12:14
Ticket No.	166384	Air (°F)	40	Arrived @	12:35
Truck No.	97	Concrete (°F) ASTM C 1064	66	Total Time	*90
Cubic Yds.	10	Air Content (%) ASTM C 231	3.8		

\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 3  
 Date received 06-Dec-10  
 Condition of Cylinders: Good

Lab No.	Test Date	Avg Dia (in)	Area (in <sup>2</sup> )	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break type
67922	10-Dec-10	4.009	12.62	7	40,960	3250	2
67923	03-Jan-11	4.014	12.65	31	70,760	5590	2
67924	03-Jan-11	4.014	12.65	31	69,480	5490	2
67925	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

### Types of Breaks



Cone  
1



Cone & Split  
2



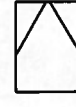
Columnar  
3



Shear  
4



Side Fracture  
5

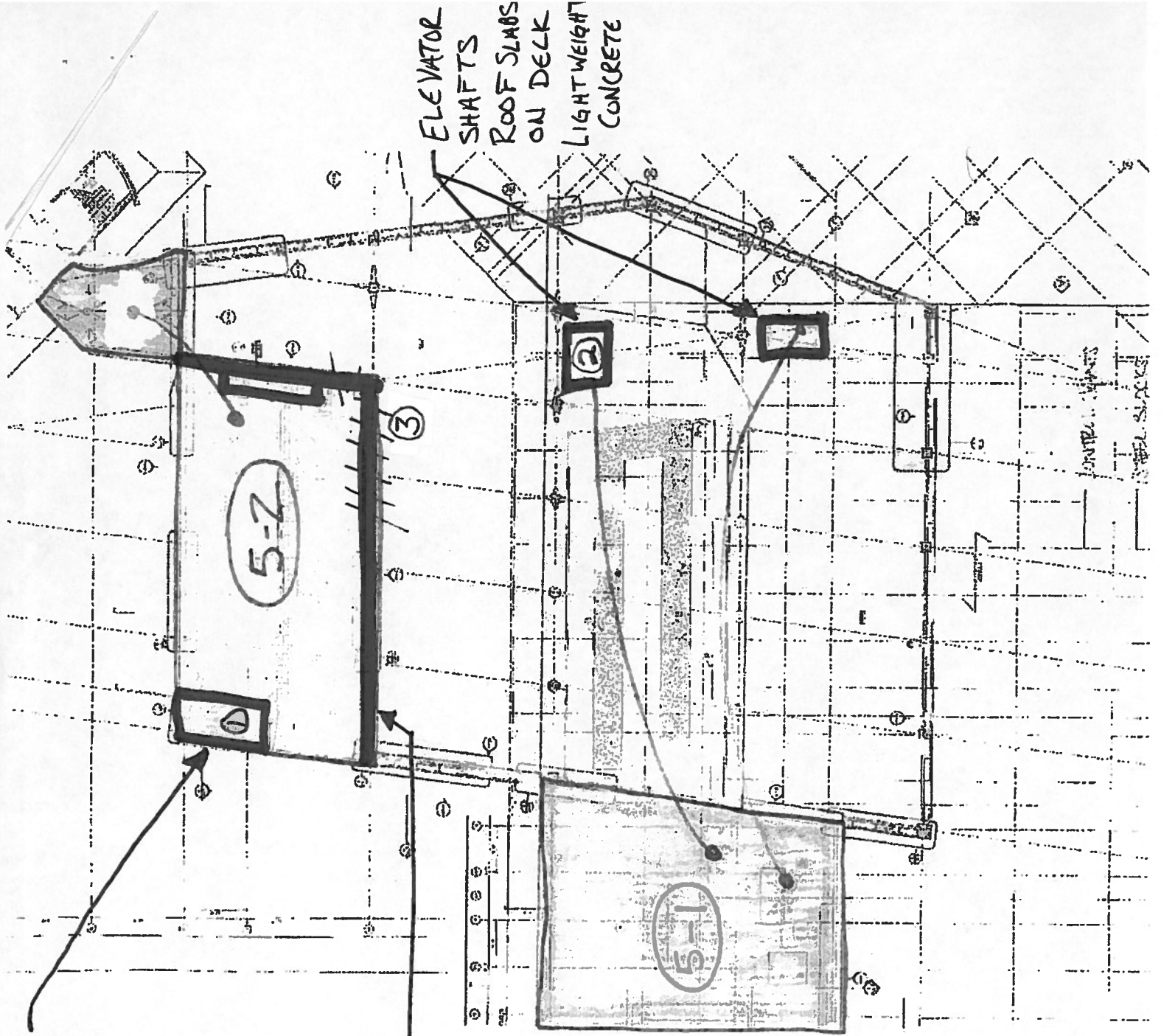


Double Side Fracture  
6

Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)
2	166390	99	5	--	--	--	--	--

**Remarks:** Curing Temperatures: Max = 78°, Min = 37°  
 \*Load 1 was sent away half full.

Checked by: *Don Channing*  
 For Matthew T. Grady, Manager of MTS



STAIRS - TOP  
 TO BOTTOM  
 SAMPLE 1  
 COLLECTED  
 ON 4TH LEVEL  
 LANDING

CURBING

ELEVATOR  
 SHAFTS  
 ROOF SLABS  
 ON DECK  
 LIGHT WEIGHT  
 CONCRETE

PORTLAND INT'L AIRPORT  
 TERMINAL EXPANSION  
 557-14  
 12/3/2010  
 MSK