

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:	September 29, 2010	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)
67160	7
67166	7
67172	7
67178	7
67184	7

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  
 Shaun Winner: swinner@tcco.com  
 Phil Coleman: pcoleman@tcco.com  
 Elizabeth O'Toole: eotoole@tcco.com  
 TMM@portlandmaine.gov  
 ldobson@portlandmaine.gov  
 rdixon@tcco.com  
 gemitchell@tcco.com  
 Remi Delcourt (remi@auburnconcrete.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>	22-Sep-10
<b>Project No:</b>	557-14	<b>Concrete Supplier:</b>	Auburn
<b>Weather Conditions:</b>	Sunny	<b>General Contractor:</b>	Turner
<b>Method of Placement:</b>	Pump	<b>Design Strength:</b>	3,500
<b>Admixtures:</b>	Mid Range Water Reducer	<b>Max Agg. Size:</b>	3/8
<b>Placement Location:</b>	4th Floor: Slab on Deck, 3rd floor slab on deck 4-1, 3-1		
<b>Test Cylinder Location:</b>	See attached sketch - 4th floor		

**Date Report Issued:** SEP 30 2010

4x8 Cylinders	6	Cast by	Erik E. Cohenour	Time
Load No.	4	Slump (in) ASTM C 143	7	Batched @
Ticket No.	180798	Air (°F)	66	Arrived @
Truck No.	98	Concrete (°F) ASTM C 1064	72	Total Time
Cubic Yds.	10	Air Content (%) ASTM C 231	3.25	45±

\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1  
Date received 23-Sep-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
67160	29-Sep-10	4.020	12.69	7	37,140	2930	6
67161	20-Oct-10			28			
67162	20-Oct-10			28			
67163	24-Sep-10	4.016	12.67	2	31,320	2470	5
67164	HOLD			HOLD			
67165	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.)
1	180792	98	rejected	--	--	--	--	90
2	180794	106	rejected	2.50	--	--	--	90
3	180797	83	10	--	--	--	--	--
5	180799	106	10	--	--	--	--	--
6	180802	116	10	--	--	--	--	--
7	180803	83	10	--	--	--	--	--

**Remarks:** 23 Total Loads, Unit weight 122.6 pcf  
Unless noted, truck times not observed due to location. Trucks averaged ~15 min at pump, 20-25 minutes travel time and 5 - 10 minutes on site waiting.

Mix adjusted @ plant on Load 4 - water added on-site checked by:  
"as needed".

*Matthew T. Grady*  
Matthew T. Grady, Manager of MTS

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## CONCRETE TEST/PLACEMENT REPORT

<b>Project Name:</b>	Terminal Enhancement, Portland Int. Jetport	<b>Date Cylinders Cast:</b>	22-Sep-10
<b>Project No:</b>	557-14	<b>Concrete Supplier:</b>	Auburn
<b>Weather Conditions:</b>	Sunny	<b>General Contractor:</b>	Turner
<b>Method of Placement:</b>	Pump	<b>Design Strength:</b>	3,500
<b>Admixtures:</b>	Mid Range Water Reducer	<b>Max Agg. Size:</b>	3/8
<b>Placement Location:</b>	4th Floor: Slab on Deck, 3rd floor slab on deck 4-1, 3-1		
<b>Test Cylinder Location:</b>	See attached sketch - 4th floor		

**Date Report Issued:**

SEP 30 2010

4x8 Cylinders	6	Cast by	Erik E. Cohenour	Time
Load No.	8	Slump (in) ASTM C 143	7	Batched @
Ticket No.	180805	Air (°F)	70	Arrived @
Truck No.	99	Concrete (°F) ASTM C 1064	73	Total Time
Cubic Yds.	10	Air Content (%) ASTM C 231	3	

\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1

Date received 23-Sep-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
67166	29-Sep-10	4.020	12.69	7	37,300	2940	5
67167	20-Oct-10			28			
67168	20-Oct-10			28			
67169	24-Sep-10	4.016	12.67	2	32,660	2580	6
67170	HOLD			HOLD			
67171	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

### Types of Breaks



Cone  
1



Cone & Split  
2



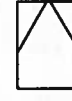
Columnar  
3



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.)
9	180807	106	10	--	--	--	--	--
10	180809	83	10	--	--	--	--	--
11	180811	86	10	--	--	--	--	--

Remarks: 23 Total Loads, unit weight 123.6 pcf

Unless noted, truck times not observed due to location. Trucks averaged ~15 min at pump, 20-25 minutes travel time and 5 - 10 minutes on site waiting.

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

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**CONCRETE TEST/PLACEMENT REPORT**

**Project Name:** Terminal Enhancement, Portland Int. Jetport **Date Cylinders Cast:** 22-Sep-10  
**Project No:** 557-14 **Concrete Supplier:** Auburn  
**Weather Conditions:** Sunny **General Contractor:** Turner  
**Method of Placement:** Pump **Design Strength:** 3,500  
**Admixtures:** Mid Range Water Reducer **Max Agg. Size:** 3/8  
**Placement Location:** 4th Floor: Slab on Deck, 3rd floor slab on deck 4-1, 3-1  
**Test Cylinder Location:** See attached sketch - 4th floor

**Date Report Issued:** SEP 30 2010

4x8 Cylinders	6	Cast by	Michael J. Kramlich	Time	
Load No.	12	Slump (in) ASTM C 143	7	Batched @	10:54
Ticket No.	180812	Air (°F)	72	Arrived @	11:15
Truck No.	99	Concrete (°F) ASTM C 1064	75	Total Time	40
Cubic Yds.	10	Air Content (%) ASTM C 231	3		

\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1  
 Date received 23-Sep-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
67172	29-Sep-10	4.020	12.69	7	43,620	3440	5
67173	20-Oct-10			28			
67174	20-Oct-10			28			
67175	24-Sep-10	4.016	12.67	2	33,040	2610	5
67176	HOLD			HOLD			
67177	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

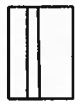
**Types of Breaks**



Cone  
1



Cone & Split  
2



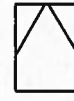
Columnar  
3



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.)
13	180816	106	10	--	--	--	--	--
14	180817	97	10	--	--	--	--	--
15	180818	86	10	--	--	--	--	--
16	180820	84	10	--	--	--	--	--

Remarks: 23 Total Loads, Unit weight 123.6 pcf  
 Unless noted, truck times not observed due to location. Trucks averaged ~15 min at pump, 20-25 minutes travel time and 5 - 10 minutes on site waiting.

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

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## CONCRETE TEST/PLACEMENT REPORT

<b>Project Name:</b>	Terminal Enhancement, Portland Int. Jetport	<b>Date Cylinders Cast:</b>	22-Sep-10
<b>Project No:</b>	557-14	<b>Concrete Supplier:</b>	Auburn
<b>Weather Conditions:</b>	Sunny	<b>General Contractor:</b>	Turner
<b>Method of Placement:</b>	Pump	<b>Design Strength:</b>	3,500
<b>Admixtures:</b>	Mid Range Water Reducer	<b>Max Agg. Size:</b>	3/8
<b>Placement Location:</b>	4th Floor: Slab on Deck, 3rd floor slab on deck 4-1, 3-1		
<b>Test Cylinder Location:</b>	See attached sketch - 4th floor		

**Date Report Issued:** SEP 30 2010

4x8 Cylinders	6	Cast by	Erik E. Cohenour	Time
Load No.	17	Slump (in) ASTM C 143	7.5	Batched @
Ticket No.	180822	Air (°F)	77	Arrived @
Truck No.	97	Concrete (°F) ASTM C 1064	73	Total Time
Cubic Yds.	10	Air Content (%) ASTM C 231	3.25	45

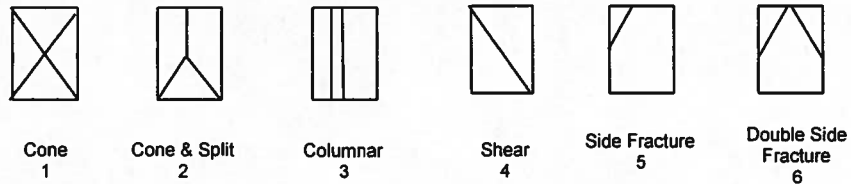
\*Concrete sampled by ASTM C 172

**Specimen Storage ASTM C 31: Field cure days: 1**  
Date received 23-Sep-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
67178	29-Sep-10	4.020	12.69	7	38,520	3040	6
67179	20-Oct-10			28			
67180	20-Oct-10			28			
67181	24-Sep-10	4.016	12.67	2	35,620	2810	2
67182	HOLD			HOLD			
67183	HOLD			HOLD			

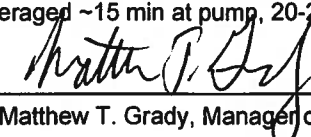
\*Concrete compressive strength by ASTM C 39

### Types of Breaks



Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)
18	180823	116	10	--	--	--	--	--
19	180827	106	10	--	--	--	--	--
20	180828	94	10	--	--	--	--	--
21	180829	97	10	--	--	--	--	--

**Remarks:** 23 Total Loads, Unit weight 123.2 pcf  
Unless noted, truck times not observed due to location. Trucks averaged ~15 min at pump, 20-25 minutes travel time and 5 - 10 minutes on site waiting.

Checked by:   
Matthew T. Grady, Manager of MTS

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<b>Project Name:</b>	Terminal Enhancement, Portland Int. Jetport	<b>Date Cylinders Cast:</b>	22-Sep-10
<b>Project No:</b>	557-14	<b>Concrete Supplier:</b>	Auburn
<b>Weather Conditions:</b>	Sunny	<b>General Contractor:</b>	Turner
<b>Method of Placement:</b>	Pump	<b>Design Strength:</b>	3,500
<b>Admixtures:</b>	Mid Range Water Reducer	<b>Max Agg. Size:</b>	3/8
<b>Placement Location:</b>	4th Floor: Slab on Deck, 3rd floor slab on deck 4-1, 3-1		
<b>Test Cylinder Location:</b>	See attached sketch - 3rd floor		

**Date Report Issued:** SEP 30 2010

4x8 Cylinders	3	Cast by	Michael J. Kramlich	Time	
Load No.	22	Slump (in) ASTM C 143	5.75	Batched @	2:06
Ticket No.	180830	Air (°F)	76	Arrived @	2:30
Truck No.	76	Concrete (°F) ASTM C 1064	73	Total Time	45
Cubic Yds.	10	Air Content (%) ASTM C 231	3.25		

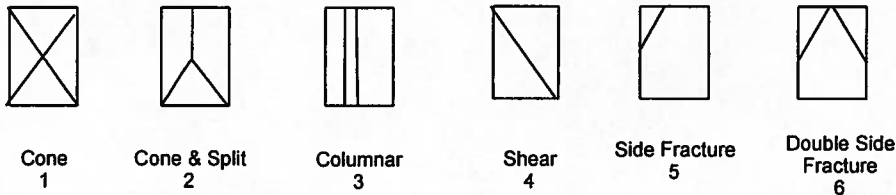
\*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1  
 Date received 23-Sep-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
67184	29-Sep-10	4.020	12.69	7	40,900	3220	5
67185	20-Oct-10			28			
67186	HOLD			HOLD			

\*Concrete compressive strength by ASTM C 39

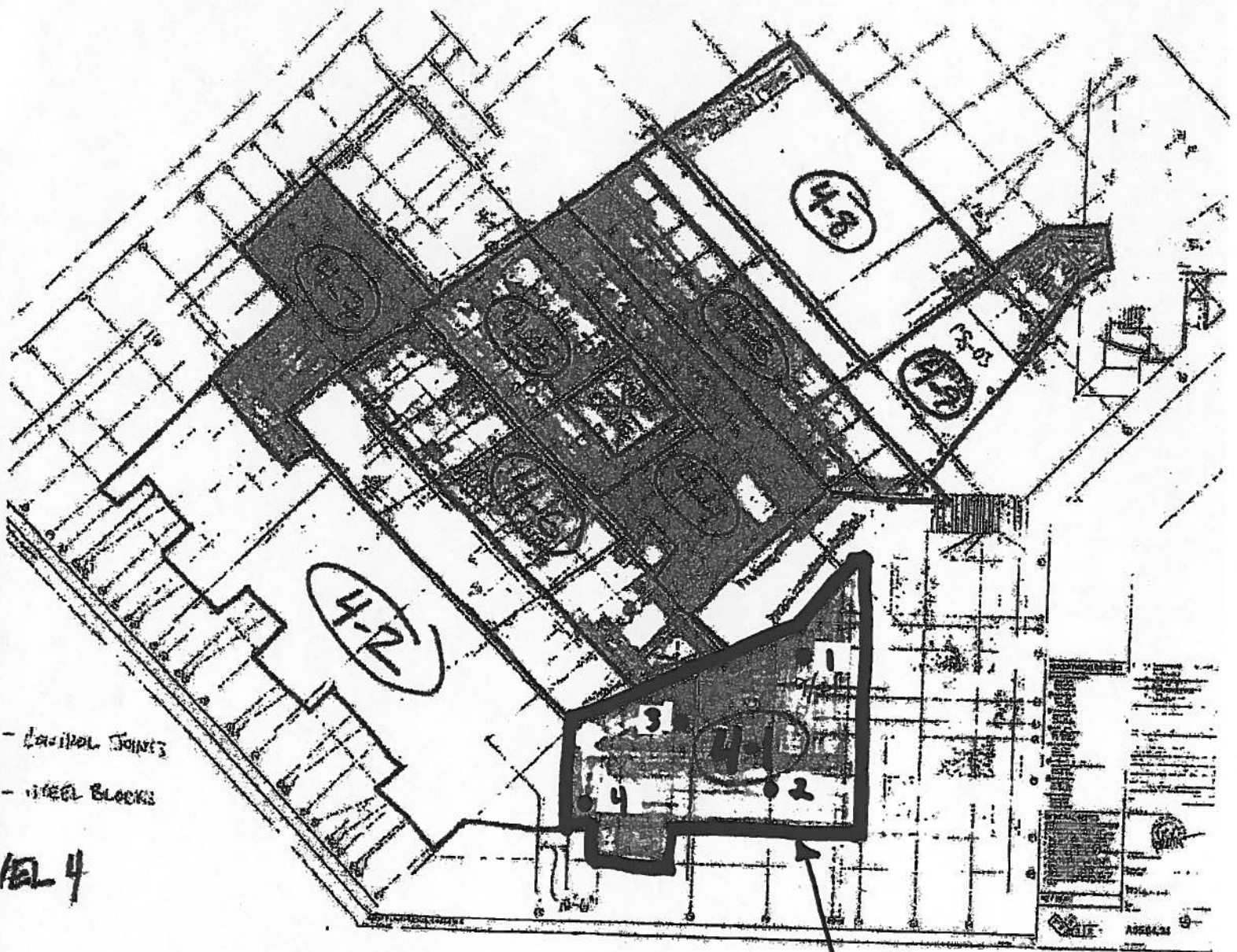
### Types of Breaks



Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)
23	180832	96	10	--	--	--	--	--

Remarks: 23 Total Loads, Unit weight 123.2 pcf  
 Unless noted, truck times not observed due to location. Trucks averaged ~15 min at pump, 20-25 minutes travel time and 5 - 10 minutes on site waiting.

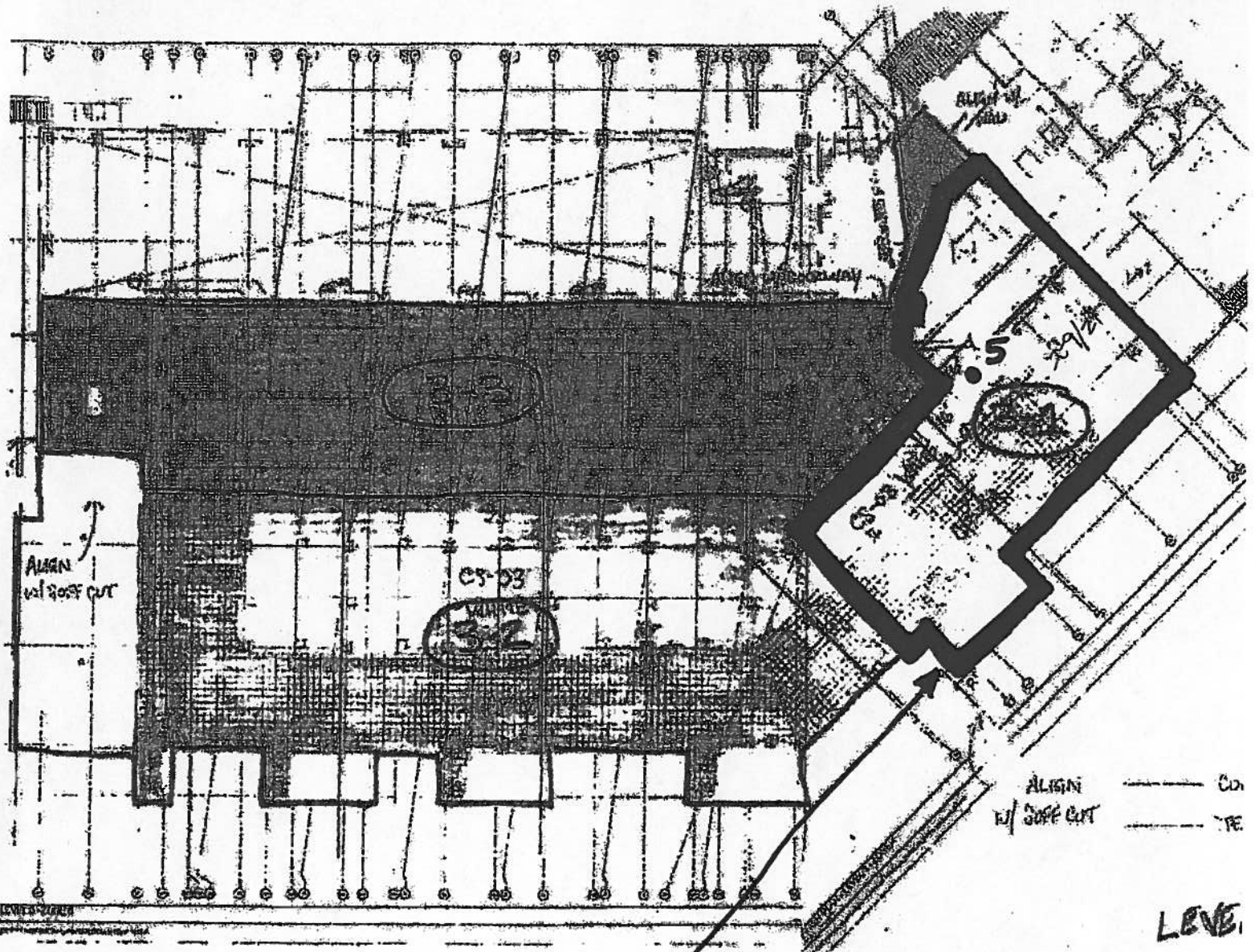
Checked by: Matthew T. Grady  
 Matthew T. Grady, Manager of MTS



LIGHTWEIGHT CONCRETE PLACEMENT  
 4TH FLOOR  
 W/ TEST LOCATIONS

PORTLAND INT'L JETPOR  
 TERMINAL EXPANSION  
 557-14  
 9-22-10  
 MSJC





LIGHTWEIGHT CONCRETE PLACEMENT  
 3RD FLOOR  
 W/ TEST LOCATIONS

PORTLAND INT'L JETPORT 3  
 TERMINAL EXPANSION  
 557-14  
 9-22-10  
 MSK