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.:
July 29, 2010	557-14
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)
66075	28
66076	28
66079	28
66080	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
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

Signed: Bertha Dawn

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

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

CONCRETE TEST/PLACEMENT REPORT

Project Name: Terminal Enhancement, Portland Int. Jetport
Project No: 557-14
Weather Conditions: Sunny
Method of Placement: Pump
Admixtures: Mid Range Water Reducer
Placement Location: See attached sketch
Test Cylinder Location: Footing Wall: Y3.8/XM

Date Cylinders Cast: 01-Jul-10
Concrete Supplier: Auburn
General Contractor: Turner
Design Strength: 4,000
Max Agg. Size: 3/4

Date Report Issued: JUL 3 0 2010

4x8 Cylinders	4	Cast by	Erik E. Cohenour	Time	
Load No.	1	Slump (in) ASTM C 143	5.5	Batched @	1:05
Ticket No.	167076	Air (°F)	68	Arrived @	1:25
Truck No.	107	Concrete (°F) ASTM C 1064	78	Total Time	30
Cubic Yds.	10	Air Content (%) ASTM C 231	6.0		

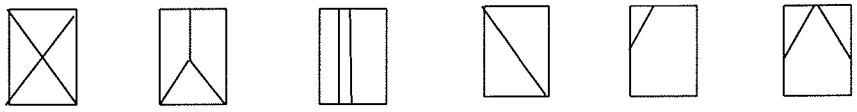
*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1
Date received 02-Jul-10
Condition of Cylinders: Good

Lab No.	Test Date	Avg Dia (in)	Area (in²)	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break type
66074	08-Jul-10	4.015	12.66	7	49,280	3890	6
66075	29-Jul-10	4.022	12.70	28	70,420	5540	2
66076	29-Jul-10	4.022	12.70	28	70,640	5560	2
66077	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	167081	98	10	--	--	--	--	30
3	167082	99	10	--	--	--	--	50
4	167084	101	10	--	--	--	--	41
5	167087	98	10	--	--	--	--	36

Remarks: Curing Temperatures: Max = 85°, Min = 55°
9 Total Loads

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

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

CONCRETE TEST/PLACEMENT REPORT

Project Name: Terminal Enhancement, Portland Int. Jetport
Project No: 557-14
Weather Conditions: Sunny
Method of Placement: Pump
Admixtures: Mid Range Water Reducer
Placement Location: See attached sketch
Test Cylinder Location: Footing: 1ZD - ZC

Date Cylinders Cast: 01-Jul-10
Concrete Supplier: Auburn
General Contractor: Turner
Design Strength: 4,000
Max Agg. Size: 3/4

Date Report Issued: JUL 3 0 2010

4x8 Cylinders	4	Cast by	Erik E. Cohenour	Time	
Load No.	6	Slump (in) ASTM C 143	6.5	Batched @	2:50
Ticket No.	167089	Air (°F)	68	Arrived @	3:10
Truck No.	99	Concrete (°F) ASTM C 1064	79	Total Time	34
Cubic Yds.	10	Air Content (%) ASTM C 231	7.0		

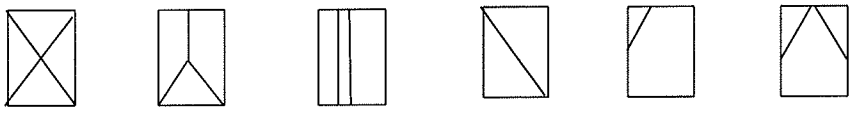
*Concrete sampled by ASTM C 172

Specimen Storage ASTM C 31: Field cure days: 1
Date received 02-Jul-10
Condition of Cylinders: Good

Lab No.	Test Date	Avg Dia (in)	Area (in²)	Age (Days)	Load (lbs)	Compressive Strength (psi)	Break type
66078	08-Jul-10	4.015	12.66	7	47,640	3760	3
66079	29-Jul-10	4.022	12.70	28	68,940	5430	3
66080	29-Jul-10	4.022	12.70	28	65,460	5150	2
66081	HOLD			HOLD			

*Concrete compressive strength by ASTM C 39

Types of Breaks



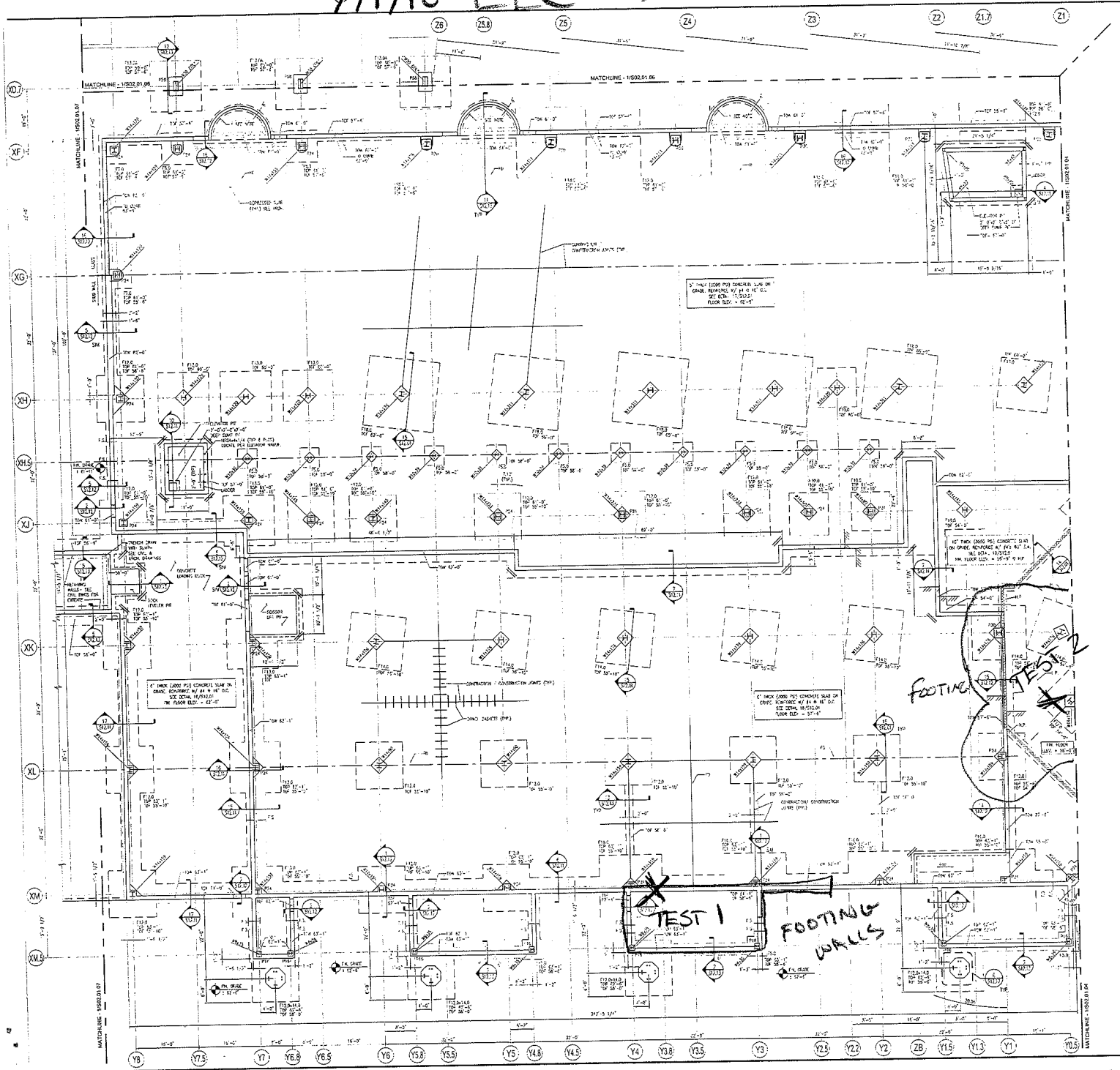
Cone 1 | Cone & Split 2 | Columnar 3 | Shear 4 | Side Fracture 5 | Double Side Fracture 6

Load	Ticket Number	Truck Number	Cubic Yds	Slump (inches)	Air Temp (°F)	Conc Temp (°F)	(%) Air Content	Time (min.)
7	167090	117	10	--	--	--	--	31
8	167092	101	10	--	--	--	--	35
9	167094	98	10	--	--	--	--	40

Remarks: Curing Temperatures: Max = 85°, Min = 55°
9 Total Loads

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

7/1/10 EEC 557-14 PORTLAND JETPORT



FOUNDATION PLAN - LEVEL 1&2 - ZONE 5
SCALE: 1/8" = 1'-0"

1

SHEET NOTES

P.S. INDICATES EXISTING SHEET. SEE DETAIL ON SHEET S12.01.

"EX. X'-X"" (EXAMPLE) INDICATES TOP OF EXISTING ELEVATION, O.C. VERTICAL DISTANCE WITH EXIST. SLAB/S.O.G. ELEVATION (EXAMPLE SLAB/S.O.G. ARE 8'-0" (MIN.) BELOW EXISTING GRADE.

"TOP X'-X" (EXAMPLE) INDICATES TOP OF WALL TOP. WHERE SEE DETAILS IS CONTINUOUS W/ HIGH SIDES.

"TOP X'-X" (EXAMPLE) INDICATES TOP OF PIER THAT TO BE (X'-X" (MIN.))

P.X.X INDICATES PIER TYPE. SEE SCHEDULE ON SHEET S12.01.04

P.S.X INDICATES PIER SHAPE TYPE. SEE SCHEDULE ON SHEET S12.01.04

E.F. INDICATES EXISTING.

CONCRETE SHAFTS TO BE DRILLED IN ACCORDANCE WITH SPECIFICATIONS SECTION 312316.13 - CONCRETE SHAFTS.

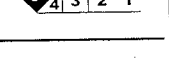
S.S.D. INDICATES SEISMIC SHEAR PIER.

F.D. INDICATES FLOOR DRAIN. SEE ARCH. & MECH. DWGS.

GENERAL NOTES

1. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO BEGINNING OF ANY WORK. IF EXISTING FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS AS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH PROPOSED MODIFICATION FOR REVIEW BY ARCHITECT.
2. CONTRACTOR TO CONFIRM ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF WORK.
3. SEE SHEET S00.00 FOR GENERAL STRUCTURAL NOTES AND DESIGN LOADS
4. SEE SHEET S12.01 FOR TYPICAL FOUNDATION DETAILS
5. CONTRACTOR SHALL COORDINATE ALL FLOOR OPENINGS WITH MECHANICAL DRAWINGS.
6. AT ALL LOCATIONS WHERE FIRING ZONES BENEATH CMU OR CONCRETE WALLS, ENLARGE FOOTINGS AS REQUIRED TO ALLOW AT LEAST CLEARANCE BETWEEN WET AND FOOTING.
7. CONTRACTOR SHALL SUBMIT LAY-OUT FOR SLAB ON GRADE CONSTRUCTION AND CONTRACTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO PLACING CONCRETE.
8. SEE ARCH DWGS FOR DEPRESSED SLAB LOCATIONS AND DEPTHS
9. PROVIDE (2) #5 x 4'-0" LONG HORIZONTAL BARS AT ALL NON-ENTRANCE SLAB CORNERS. SEE DETAILS ON SHEET S 2.01.
10. ALL FOOTINGS TO BE CENTERED ON COL., CONC. WALL OR WALL.
11. 7" SOG SLABS AT BUS EXIT SHALL BE MONOLITHIC WITH SUBBASE MIXED CONCRETE W/ ARCH. & MECH. DWGS.
12. SEE ARCH DWGS FOR WATERPROOFING AND INSULATING REQUIREMENTS AND LOCATIONS.
13. PER GEOTECHNICAL REPORT BY HALEY & ALDRICH THAT FOR FOOTINGS OF 24" TO 72" MINIMUM WIDTH FOOTINGS HAVE BEEN DESIGNED FOR A MINIMUM ALLOWABLE BEARING PRESSURE OF 4,000 PSF. CONTRACTOR SHALL HAVE LICENSED GEOTECHNICAL ENGINEER TO OBSERVE ELIGIBLE BEARING CONDITIONS TO OTHERWISE DESIGNED CAPACITY PRIOR TO PLACEMENT OF FOOTINGS AS BID/ORDERED SUBMIT.
14. SEE SHEET S00.00 FOR GENERAL & MATERIAL NOTES AND DESIGN LOADS
15. REFERENCE S30.00.10 AND SPECIFICATION SECTION 334690 FOR UNDERSLAB DRAINAGE REQUIREMENTS.
16. DUAL-EXCAVATION/REPLACEMENT OF UNSUITABLE SOILS MAY BE REQUIRED BELOW FOUNDATION. REFERENCE DETAIL SHEET S00.00 AND SPECIFICATION SECTION 312300 FOR ADDITIONAL INFORMATION.

KEY PLAN



Portland International Jetport
1001 Westbrook Street
Portland, Maine 04102

Gensler
2020 K Street, NW
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Fax/email 202.721.5201

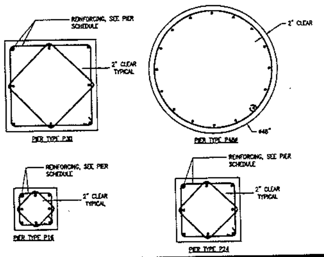
oest ASSOCIATES, INC.
engineers · architects · surveyors · construction managers

No.	Issues	Date & Issue Description	By	Check
--		07/11/08 SCHEMATIC DESIGN	DK	--
--	02	02/22/09 DESIGN DEVELOPMENT	DK	--
--	03	10/16/09 CONSTRUCTION DOCUMENTS	DK	--
--	04	03/12/10 BID DOCUMENTS	DK	--
--	05	10/29/10 ADDENDUM #1	DK	--

Project Name: PWM Terminal Enhancement
Project Number: 08.8305.000
CAD File Name: C:\...\S02.01.05.dwg
Description: FOUNDATION PLAN - LEVEL 1&2 - ZONE 5
Scale: 1/8" = 1'-0"
Ref. North

S02.01.05

7/1/10 FEC 557-14 PORTLAND JETPORT



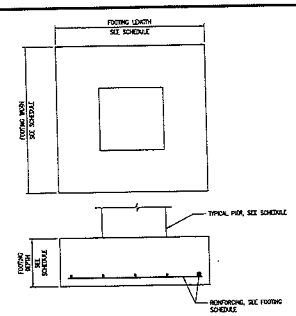
PIER SCHEDULE			
PIER TYPE	PIER DIMENSIONS	VERTICAL REINFORCING	TIES
P16	16" x 16"	(8) #8 VERTICAL BARS	#3 TIES @ 9" O.C.
P24	24" x 24"	(8) #8 VERTICAL BARS	#3 TIES @ 9" O.C.
P30	30" x 30"	(8) #10 VERTICAL BARS	#3 TIES @ 9" O.C.
P40	40" x 24"	(20) #10 VERTICAL BARS	#3 TIES @ 9" O.C.
P48#	48#	(16) #10 VERTICAL BARS	#3 TIES @ 9" O.C.
P56	58" x 42"	(32) #8 VERTICAL BARS	#3 TIES @ 9" O.C.

1. VERTICAL PIER REINFORCING TO BE TIED WITH #3 REBAR AS PER ACI-318 LATEST EDITION AND AS SHOWN.
2. USE (3) #3 TIES WITHIN TOP 5" AT THE TOP OF EACH PIER AND FIRST TIE ABOVE THE FOOTING SHOULD BE = OR < 4" FROM THE TOP OF FOOTING.
3. DOWELS TO BE SAME SIZE AND SPACING OF VERTICAL BARS (PROVIDE TENSION LAP SPLICE).
4. REFER TO ACI-318 FOR COVER REQUIREMENTS.
5. REFER TO SECTIONS FOR WALL REINFORCING.
6. F'C CONCRETE 4000 PSI @ 28 DAYS (NORMAL WEIGHT 150 PCF). FY = 60 KSI.
7. REFER TO PLAN FOR TOP OF PIER ELEVATION.

PIER SCHEDULE & DETAILS 2

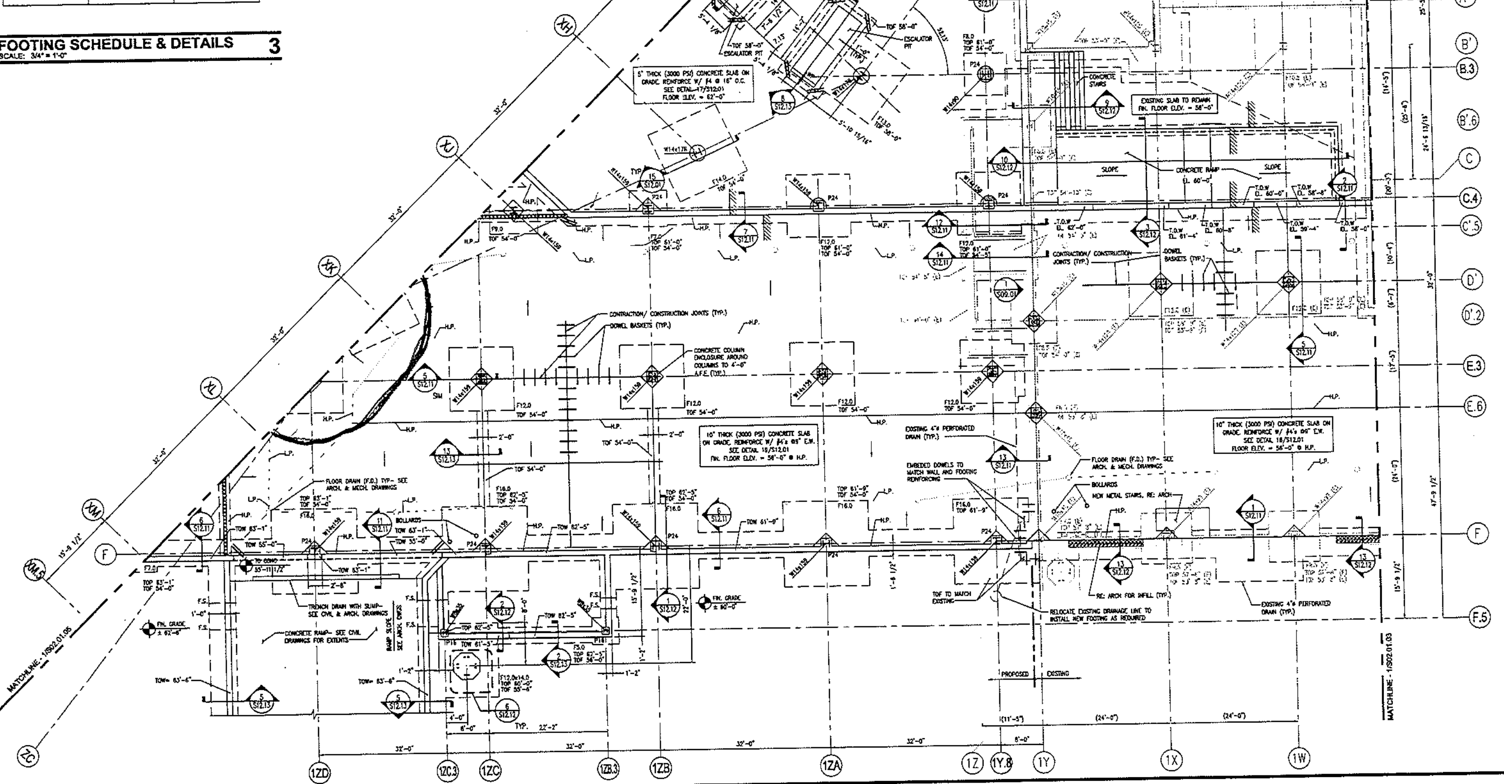
SCALE: 3/4" = 1'-0"

FOOTING SCHEDULE		
FOOTING TYPE	FOOTING DIMENSIONS LxWxD	REINFORCING
F3.0	3'-0" x 3'-0" x 12"	#5 @ 12" E.W.
F5.0	5'-0" x 5'-0" x 12"	#5 @ 12" E.W.
F6.0	6'-0" x 6'-0" x 12"	#4 @ 12" E.W.
F7.0	7'-0" x 7'-0" x 14"	#6 @ 12" E.W.
F8.0	8'-0" x 8'-0" x 16"	#6 @ 12" E.W.
F9.0	9'-0" x 9'-0" x 16"	#5 @ 12" E.W.
F10.0	10'-0" x 10'-0" x 18"	#6 @ 8" E.W.
F12.0	12'-0" x 12'-0" x 20"	#6 @ 6" E.W., T&B
F12.0x14.0	12'-0" x 14'-0" x 18"	#5 @ 8" E.W., T&B
F13.0	13'-0" x 13'-0" x 22"	#6 @ 6" E.W.
F13.0A	13'-0" x 13'-0" x 18"	#6 @ 6" E.W., T&B
F14.0	14'-0" x 14'-0" x 26"	#8 @ 8" E.W.
F16.0	16'-0" x 16'-0" x 28"	#8 @ 8" E.W.
F18.0	18'-0" x 18'-0" x 30"	#8 @ 8" E.W.
F22.0	22'-0" x 22'-0" x 32"	#8 @ 6" E.W.



FOOTING SCHEDULE & DETAILS 3

SCALE: 3/4" = 1'-0"



FOUNDATION PLAN - LEVEL 1&2- ZONE 4 1

SCALE: 1/8" = 1'-0"

SHEET NOTES

- F.S. INDICATES FOOTING STEP, SEE DETAIL ON SHEET S12.01.
- TOF X'-X" (EXAMPLE) INDICATES TOP OF FOOTING ELEVATION. G.C. VERIFY/COORDINATE WITH FINAL GRADES. ALL BOTTOM OF FOOTING ELEVATIONS ARE (-) 4'-0" (MIN.) BELOW FINISHED GRADE.
- TOW X'-X" (EXAMPLE) INDICATES TOP OF WALL. TOW VARIES SEE DETAILS & COORDINATE W/ ARCH DWGS.
- TOP X'-X" (EXAMPLE) INDICATES TOP OF PIER. TOP TO BE 0'-8" (U.N.O.)
- PXX INDICATES PIER TYPE. SEE SCHEDULE ON SHEET S02.01.04
- FXX INDICATES FOOTING TYPE. SEE SCHEDULE ON SHEET S02.01.04
- (E) INDICATES EXISTING.
- * COORDINATE DIMENSION W/ REVOLVING DOOR MANUFACTURER. VERIFY W/ ARCHITECT.
- INDICATES SLAB PITCH
- INDICATES FLOOR DRAIN, SEE ARCH. & MECH DWGS.
- H.P. INDICATES HIGH POINT OF FLOOR SLAB. SEE ARCH. & MEP DRAWINGS FOR REQUIREMENTS.
- L.P. INDICATES LOW POINT OF FLOOR SLAB. SEE ARCH. & MEP DRAWINGS FOR REQUIREMENTS.

GENERAL NOTES

1. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO BEGINNING OF ANY WORK. IF EXISTING FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS AS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH PROPOSED MODIFICATION FOR REVIEW BY ARCHITECT.
2. CONTRACTOR TO CONFIRM ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF WORK.
3. SEE SHEET S00.00 FOR GENERAL STRUCTURAL NOTES AND DESIGN LOADS.
4. SEE SHEET S12.01 FOR TYPICAL FOUNDATION DETAILS
5. CONTRACTOR SHALL COORDINATE ALL FLOOR OPENINGS WITH MECHANICAL DRAWINGS.
6. AT ALL LOCATIONS WHERE PIPING RUNS BENEATH CMU OR CONCRETE WALLS, DEEPEN FOOTINGS AS REQUIRED TO ALLOW 6" (MIN.) CLEARANCE BETWEEN PIPE AND FOOTING.
7. CONTRACTOR SHALL SUBMIT LAY-OUT FOR SLAB ON GRADE CONSTRUCTION AND CONTRACTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO PLACING CONCRETE.
8. SEE ARCH DWGS FOR DEPRESSED SLAB LOCATIONS AND DEPTHS.
9. PROVIDE (2) #3 x 4'-0" LONG REINFORCING BARS AT ALL RE-ENTRANT SLAB CORNERS. SEE DETAILS ON SHEET S12.01.
10. ALL FOOTINGS TO BE CENTERED ON COL. GRID LINE (U.N.O.).
11. FLOOR SLABS AT THIS LEVEL SHALL BE INSTALLED WITH RADIANT HEAT. COORDINATE W/ ARCH & MECH DWGS.
12. SEE ARCH DWGS FOR WATERPROOFING AND INSULATING REQUIREMENTS AND LOCATIONS.
13. PER GEOTECHNICAL REPORT BY HALEY & ALDRICH (H&A FILE NO. 35024-001 DATED 11 NOVEMBER 2006) FOUNDATIONS HAVE BEEN DESIGNED FOR A MAXIMUM ALLOWABLE BEARING PRESSURE OF 3000 PSF. CONTRACTOR SHALL ALLOW OWNER'S GEOTECHNICAL ENGINEER TO OBSERVE SUBGRADE CONDITIONS TO CONFIRM BEARING CAPACITY PRIOR TO PLACEMENT OF FORMS OR REINFORCING STEEL.
14. DIMENSIONS IN PARENTHESIS FOR REFERENCE ONLY.
15. EXISTING BUILDING INFORMATION USED TO PREPARE PLANS OF THIS AREA WERE TAKEN FROM AS-BUILT DRAWINGS PREPARED BY PJDA DATED SEPTEMBER 2005.
16. REFERENCE S02.01.00, AND SPECIFICATION SECTION 334600 FOR UNDERSLAB DRAINAGE REQUIREMENTS.
17. OVER-EXCAVATION/REPLACEMENT OF UNSUITABLE SOILS MAY BE REQUIRED BELOW FOUNDATION BEARING LEVELS; SEE SHEET S00.00 AND SPECIFICATION SECTION 312000 FOR ADDITIONAL INFORMATION.

KEY PLAN

7 6 5 4 3 2 1

Portland International Jetport
1001 Westbrook Street
Portland, Maine 04102

Gensler
2020 K Street, NW
Suite 200
Washington, DC 20006
Telephone 202.721.5200
Facsimile 202.872.8587

NEST ASSOCIATES, INC.
engineers · architects · surveyors · construction managers

Issue	Date & Issue Description	By	Check
01	07/11/08 SCHEMATIC DESIGN	JDE	--
02	09/22/08 DESIGN DEVELOPMENT	JDE	--
03	12/03/08 75% CONSTRUCTION DOCUMENTS	JDE	--
04	01/23/09 95% CONSTRUCTION DOCUMENTS	JDE	--
05	10/26/09 ISSUED FOR PERMIT	JDE	--

Seal/Signature

Project Name: PWM Terminal Enhancement
Project Number: 08.8365.000
CAD File Name: T:\5330101\SHEETS\S02.01.04.DWG
Description: FOUNDATION PLAN - LEVEL 1&2 - ZONE 4
Scale: 1/8" = 1'-0"
Ref. North

S02.01.04