PIE Terminal Improvements Phase III Project Inspection Log:

Threshold Inspections:

Date:	Report No.	Inspector:	Type:	Description	Pass/Fail	Comments:
11/3/2016	Email Note	Jim Mehltretter	Threshold	Reviewed photos of reinforcing steel for chiller slab provided by the CM. Result: Chiller pad reinforcing is approved for concrete placement.	Pass	Concrete to be placed via pump Friday, 11/4/16.
9/9/2016	1	Jim Mehltretter	Threshold	for concrete placement. The contractor was instructed to backfill the undermined existing footing with 1500psi lean concrete at column S30. 2. The contractor has begun demolition of the existing roof nears grids 6 to 8 north of grid E. 3. The contractor will issue an RFI regarding footings along grid E and conflicts with exiting footings.	Reference Description	
9/19/2016	Letter	Jim Mehltretter	Threshold	As requested by Michael Cummings of The American Infrastructure Development, Master Consulting Engineers, Inc. (MCE) inspected the footings and grade beams at column lines 4 and 5 at columns S13, S14, S18 and S19. Reinforcing was installed in accordance with the permitted plans. The work was approved for concrete placement.	Reference Description	
9/28/2016	3	Jim Mehltretter	Threshold	1. Inspected the footings at columns S1, S8, S9, S10, S17, S29 the footing extension at column S18, the footing extension at column S19. The F7.0 footing at column S1 was reinforced with (7)#6 in accordance with the approved shop drawings. Reinforcing was installed in accordance with the permitted plans. The work was approved for concrete placement. 2. At column footing S3 chip and remove the abandoned electrical duct bank currently in the footing excavation.	Reference Description	
10/7/2016	4	Jim Mehltretter	Threshold	1. Inspected the column footings at columns S21 and S22, S23. 2. Inspected and approved the slab on grade at the toilet rooms between grids 6 and 9. 3. Steel erection is ongoing between grids 3 and 6 and grids C and D. The steel beams on grid D are closer to the existing building and will require field modification. Approval was given to filed cut the beams.	Reference Description	
10/13/2016	5	Jim Mehltretter	Threshold	1. Inspected the first lift of wall reinforcing at the west stair. The reinforcing was installed in accordance with the permitted plans. On the west wall there is a drain pipe above the top of footing. RFI 032 specified $4@12" on center ties which were missing from the forms. The contractor will add the bars and photograph.	Reference Description	
10/25/2016	6	Jim Mehltretter	Threshold	Inspected the west stair wall reinforcing to the second floor. The reinforcing was installed in accor dance with the permitted plans. The wall was approved for concrete placement	Description	
11/7/2016	7	Jim Mehltretter	Threshold	1. Inspected the reinforcing installation for the slab on grade located between grids 4 to 7 from A to E and 3 to 4 from grid C to E. The contractor used Speed Dowels between adjacent pours in accordance with the approved submittal. The contractor also drilled and epoxied reinforcing bars into the edge of slab edges previously cast. The contractor will extend the vapor barrier under the pour stop along grid 4 for future slab on grade placement. The reinforcing was approved for concrete placement.	Reference Description	
11/14/2016	8	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for the 2nd lift at the west stair tower. The reinforcing was approved for concrete placement.	Description	
11/22/2016	9	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for the slab on grade pour between the west stair and grid line 6. The reinforcing was approved for concrete placement. 2. inspected the Nelson studs at the mechanical mezzanine between grids 3.1 and 4 and C and D. The stud installation is approved. The wire mesh was not yet installed and there was no bulkhead at the north edge. Concrete placement is not approved until the mesh and bulkhead is installed.	Reference Description	
11/29/2016	10	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for the mezzanine slab pour. The wire fabric was installed. The top reinforcing steel over the south girder in accordance with detail 5-101/S3.03 was missing. The dowels for the house keeping pad in accordance with detail 3-203/S3.02 were missing. The housekeeping pad dowels can be epoxied after the pour. The slab was approved for concrete placement with these items satisfied.	Reference Description	
12/6/2016	11	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for the housekeeping pad at the mezzanine slab; reinforcing was approved for concrete placement. 2. Inspected the installation of the MC18x42.7 channels on both sides along grid line E. The channel was cut near the center of the length to facilitate the installation of the members. The splice was field welded in place. The field weld splice was inspected and approved. The contractor stated that the shoring engineer will be on site 12/7/2016 to inspect the progress of	Reference Description	
12/13/2016	12	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for column S11 and the grade beam GB1 and GB2, reinforcing was approved for concrete placement. 2. Inspected the installation of the MC18x42.7 channels on both sides along grid line E. The shoring was installed in accordance with the signed and sealed shoring drawing. Column footings have not yet been installed. 3. The south wall of the concrete stair tower near grid B 7 was chipped because there was a form blowout while placing the concrete. The contractor chipped the wall and patched the area. The patch was approved.	Reference Description	
12/14/2016	13	Jim Mehltretter	Threshold	1. Inspected the installation of reinforcing steel for column S5 and the wall footing WF2.0, reinforcing was approved for concrete placement. 2. Inspected the pier footings at columns S25, S26, S27 and S28. Reinforcing was approved for concrete placement. 3. Inspected and approved the masonry stem wall along grid A above the slab on grade.	Reference Description	
1/6/2017	14	Jim Mehltretter	Threshold	1. Inspected the shear studs on the second-floor steel beams. The W24x94 from grid 3 to 4 on grid B was missing 4 studs. The W16x26 on grid B from grid 6 to 7 was missing 5 studs on the east end of the beam. The W16x26 purlin between grid 5 and 5.5. and grid A to B had two studs that were welded too close to the edge of the beam. Gave approval to "stick" weld the additional studs to the beams. 2. The installation of the tube column supports for the MC18 on grid E were inspected and approved. The base plates shall be grouted prior to filling the excavation with concrete.	Reference Description	
1/18/2017	15	Jim Mehltretter	Threshold	1. Inspected the shear studs on the second-floor steel beams that were non-conforming per report 14. The W24x94 from grid 3 to 4 on grid B missing 4 studs. The W16x26 on grid B from grid 6 to 7 missing 5 studs on the east end of the beam. The W16x26 purlin between grid 5 and 5.5. and grid A to B had two studs that were welded too close to the edge of the beam. The studs cited above were corrected and approved. 2. The W8x31 beam was welded below the W18x40 on grid C from 6 to 8. The beam installation was approved.	Reference Description	
1/26/2017	16	Jim Mehltretter	Threshold	1. Inspected the slab infill at the mezzanine slab area. There is a 2" high piece of metal deck that protrudes into the slab pour. The piece should be trimmed before the slab is poured. The slab was approved for concrete placement with this fix. 2. Inspected the slab on grade pour at grids 3 to 4 and A to C. Slip dowels were not perpendicular along the construction joint. The dowels should be bend into the correct position. With this fix the slab is approved for concrete placement. 3. Inspected the pour backs around the tube columns along grid E. Wood forms used to place the base plate grout should be removed prior to the pour. The pour backs are approved for concrete placement with this correction.	Reference Description	

1/27/2017	17	Jim Mehltretter	Threshold	1. Inspected and approved the repairs to the masonry wall in the mechanical room. Concrete may be placed in the tie beam. Angle bracing should be added from the roof steel to the top of the wall. The bracing should be coordinated with the ductwork.	Reference Description	
2/10/2017	18	Jim Mehltretter	Threshold	1. Inspected and approved the tube welds and the metal stud installation at the north parapet wall along grid A from grids 3 to 7.	Reference Description	
3/2/2017	19	Jim Mehltretter	Threshold	1. Inspected and approved the tube steel welds at the four roof skylights. 2. Several holes were cut in the block at the east wall of the electrical room. The contractor was instructed to grout the holes solid.	Reference Description	
3/30/2017	20	Jim Mehltretter	Threshold	1. Inspected the north wall of electrical Room 135. The chase way at Room 135 is in conflict with existing construction. Observations indicate that the penetrations must be below the existing concrete tie beam and over an existing opening in the wall. Instructed the contractor to submit a plan and elevation showing the intent for review. 2. Construction is proceeding along grid F, existing columns have been exposed.	Reference Description	
4/26/2017	21	Jim Mehltretter	Threshold	1. Inspected the work in progress along grid F. The existing slab on grade has been cut providing for the new footings. The detail W10/S4.05 will be modified to allow placement of the new footing on top of the existing footing.	Reference Description	
5/10/2017	22	Jim Mehltretter	Threshold	1. Inspected the work in progress along grid F. The footing excavation is complete. The contractor is drilling holes for rebar dowels to be installed in the footing and the face of the existing piers. The footing reinforcing was on site but not yet installed. The C13X31 channels on each side of the existing concrete beam have not been installed. The footing and the slab on grade may be poured at the same time. The mix design shall be submitted for review. The new MC13 columns may bear on the slab on grade. 2. The existing bearing wall has been removed in the last bay on the west end near the electrical room. One shore has been installed, other shores specified in the shop drawing have not been installed. The shoring designer must be contacted ASAP to review the condition.	Reference Description	
5/16/2017	23	Jim Mehltretter	Threshold	1. Inspected the work in progress along grid F. The reinforcing has been installed and approved. The pier reinforcing has been installed and approved. Concrete may be placed. 2. The vapor barrier has not been installed in the footing excavation. Termite spray has not been applied in the footing excavation. The omission of the vapor barrier and termite spray does not affect the integrity of the structure. Their omission may however affect finishes and air quality.	Reference Description	
5/26/2017	24	Jim Mehltretter	Threshold	Exist C-Channel at Col-F Chkpnt-B: Ongoing work at the new footings and columns along grid F	Ongoing	
6/7/2017	25	Jim Mehltretter	Threshold	1. Inspected the steel installation at area B west side along grid F. The steel channels were installed in accordance with the contract documents and were approved. The block bearing walls along grid F on the west side may be demolished as noted in the demo plans. The east side of area B was not completed. The area will be inspected on 6/8.	Reference Description	

Quality Assurance Inspections by Tierra:

Date:	Test No.	Inspector:	Type:		Pass/Fail	Comments:
7/29/2016	1	Tierra	Density	36' W of Structure S-4 (1st Lift of Backfill)	Pass	
7/29/2016	2	Tierra	Density	80' W of Structure S-4 (1st Lift of Backfill)	Pass	
7/29/2016	3	Tierra	Density	90' W of Structure S-4 (2nd Lift of Backfill)	Pass	
7/29/2016	4	Tierra	Density	40' W of Structure S-4 (2nd Lift of Backfill)	Pass	
8/16/2016	5	Tierra	Density	30' W of Gate-8 & 50' S of Roof Drain	Pass	
8/16/2016	6	Tierra	Density	60' N of Gate-39 & 80' W of Electrical Bldg.	Pass	
8/24/2016	7	Tierra	Density	50' N & 20' W of NE Corner of Existing Bldg.	Pass	Finish Subgrade
8/24/2016	8	Tierra	Density	60' N & 60' W of NE Corner of Existing Building	Pass	Finish Subgrade
9/9/2016	MP01	R. Bailey "Rufus"/Tierra	Modified Proctors	Sample MP01 - Footing at Line F-12	N/A	Moisture Density Relationship Tests
9/9/2016	MP02	R. Bailey "Rufus"/Tierra	Modified Proctors	Sample MP02 - Footing at Line F-16	N/A	Moisture Density Relationship Tests
5/2/2017	MP03	R. Bailey "Rufus"/Tierra	Modified Proctors	Sample MP03 - Security Checkpoint-B Footings and Slab Subgrade	N/A	Moisture Density Relationship Tests
9/20/2016	Set No.1	CQC/Tierra	Concrete	Terminal Addition Footings	Pass	
10/11/2016	Set No.2	M. Davis/Tierra	Concrete	Footing	Pass	
10/17/2016	Set No.3	R. Bailey "Rufus"/Tierra	Concrete	Footing at Line D-5	Pass	
10/18/2016	Set No.1	R. Bailey "Rufus"/Tierra	Grout Prisms	Pour Back of Diamonds Around Columns	Pass	
9/28/2016	Set No.4	M. Davis/Tierra	Concrete	Footing	Pass	
10/20/2016	Set No.5	R. Bailey "Rufus"/Tierra	Concrete	Elevator Pit Slab	Pass	
10/4/2016	Set No.6	R. Bailey "Rufus"/Tierra	Concrete	Footing for Elevator Walls	Pass	
11/28/2016	Set No.7	R. Bailey "Rufus"/Tierra	Concrete	Elevator Shaft Walls	Pass	
10/11/2016	Set No.8	R. Bailey "Rufus"/Tierra	Concrete	Slab on Grade @ Men's Restrooms	Pass	
11/4/2016	Set No.9	R. Bailey "Rufus"/Tierra	Concrete	Chiller Slab	Pass	
11/8/2016	Set No.10	R. Bailey "Rufus"/Tierra	Concrete	Concrete pour 10'N and 20'E of SW corner of Phase-1 Buildout.	Pass	
11/8/2016	Set No.11	R. Bailey "Rufus"/Tierra	Concrete	15'S & 20'W of NE corner of Phase-1 Buildout.	Pass	
11/17/2016	Set No.12	R. Bailey "Rufus"/Tierra	Concrete	CMU Cell Grout Stairwell Wall	Pass	
11/22/2016	Set No.13	R. Bailey "Rufus"/Tierra	Concrete	Floor slab at stairwell	Pass	
11/30/2016	Set No.14	K. Magee/Tierra	Concrete	Mezzanine Slab	Pass	
12/6/2016	Set No.15	E. Tirado/Tierra	Concrete	Mezzanine Slab, Gate #7	Pass	
12/15/2016	Set No.16	R. Bailey "Rufus"/Tierra	Concrete	Footings S-5, S-11, S-25, S-26, S-27 & S-28	Pass	
1/27/2017	Set No.17	R. Khan/Tierra	Concrete	Slab on Grade (Phase-1) NE Corner of SOG	Pass	
1/27/2017	Set No.18	R. Khan/Tierra	Concrete	SE Corner of Mezzanine Deck	Pass	
2/3/2017	Set No.19	R. Khan/Tierra	Concrete	Slab on Grade, Diamond Shaped Blockouts Around Columns, NE Corner of Slab	Fail	Per structural engineer this was acceptable at 3,701 PSI vs 4,000 PSI design strength requirement.
4/24/2017	Set No.20	J. Maw/Tierra	Concrete	Fire Hydrant Apron UPS Location	Pass	
5/17/2017	Set No.21	R. Khan/Tierra	Concrete	Area #4 Security Checkpoint-B, Monolithic Slab at Footings	Pass	High Early Mix
12/14/2016	16	Tierra	Density	Density Test -Footing at Grid Line S-5	Pass	
12/14/2016	17	Tierra	Density	Density Test -Footing at Grid Line S-11	Pass	
12/20/2016	18	Tierra	Density	5ft NW of S-5	Pass	
12/20/2016	19	Tierra	Density	4'W of Line between S-5 and S-11	Pass	
12/20/2016	20	Tierra	Density	5'NW of Gate-8 Outside Exit Door	Fail	Contractor to re-work area.
6/15/2017	1	M Shirkey/Ardaman/Tie	Fire Spray Thickness	Underside of Decking Areas: Bounded by Lines A to B and Lines 5 to 6. Bounded by Lines B to C and Lines 5 to 6. Bounded by Lines A to B and Lines 4 to 5.	Pending	QA thickness checks performed but direction with respect to under deck thickness requirement minimums being questioned by Contractor at time test performed.
6/15/2017	2	M Shirkey/Ardaman/Tie	Fire Spray Thickness	Columns: B-6 and D-3 Beams: Bounded by lines B to C and Lines 4 to 5. Bounded by Lines B to C and west of Line 3. Bounded by Lines 3 to 4 and south of LIne E.	Pending	QA thickness checks performed but direction with respect to under deck thickness requirement minimums being questioned by Contractor at time test performed.

6/21/2017	1	M Shirkey/Ardaman/Tie	Fire Spray Thickness	Excerpt from SFRM Report No.1: Most of the tests passed with the following exceptions: 1. Underside of the steel deck: The test representing the area bounded by Lines B to C and Lines 3 to 4. The overall average thickness passed however one individual making up the average was more than 25% below the required thickness. 2. Beam: Bounded by Lines B to C and Lines 4 to 5. The overall average passed however 6 individual readings which made of the average were more than 25% below the required thickness. 3. Beam: Bounded by Lines 3 to 4 and south of Line E. The overall average failed and 9 individual readings which made of the average were more than 25% below the required thickness.	Varies	Summary report of 6/15/17 fire spray testing reports.
10/25/2016	1	Tierra/Ardaman	Ultrasonic Weld Inspections	Ultrasonic inspection of all full penetration, moment welds with a flange thickness of 5/16 or larger. No rejectable indications were noted during the inspection.	Pass	
10/25/2016	1	Tierra/Ardaman	Ultrasonic Weld Inspections	Performed visual inspection of welds at six (6) moment connections with a flange thickness less than 5/16" in thickness. The locations were 126B2-98B2 (3 locations) and 81B2-98B2 (3 locations). The field welds were found to confirm to the visual acceptance criteria found in the American Welding Society (AWS) D1.1 Structural Welding Code.	Pass	