ADDENDUM No. 2

Date: October 23, 2012

City of Austin

Project Name Anderson Mill Reservoir Improvements

C.I.P. No. 3960-2207-6824

This Addendum forms a part of Contract and clarifies, corrects or modifies original Bid Documents, dated October 15, 2012. Acknowledge receipt of this addendum in space provided on bid form. Failure to do so may subject bidder to disqualification.

A. Project Manual Revisions:

1. General Requirements, SUMMARY OF WORK, Section 01010

   Delete this Section in its entirety and replace with the attached revised SUMMARY OF WORK, Section 01010.

2. Special Specification, FALL PREVENTION SYSTEM, Section 07721

   Delete this Section in its entirety and replace with the attached revised FALL PREVENTION SYSTEM, Section 07721.

B. Project Plan Revision:

1. Replace Sheet C1, Civil Site Plan with the attached Sheet C1, Civil Site Plan with Addendum No. 2 revisions. The purpose of the revision is to clarify a numbering discrepancy in the Scope of Work items.

2. Sheet C3, Tank Overflow Plan and Profile

   Add the following note, "Bid for summary of work item AM-12 shall be based on the assumption that a 24" RCP pipe stub will exist at the detention pond wall at the time of construction. The exact quantity of 24" RCP pipe shall be determined in the field."

This addendum consists of 12 page(s)/sheet(s).

Approved by OWNER

Approved by ENGINEER/ARCHITECT

CERTIFIED NACE INTERNATIONAL COATING INSPECTOR
EXP. 11/2014
10/23/12
11409

END

PART 1 - GENERAL

1.1 Related Documents:

A. Drawings and general provisions of Contract, including General Conditions, Section 00700, and Supplemental General Conditions, Section 00810, and Division 1 requirements.

1.2. DESCRIPTION OF WORK:

A. The Work of this Contract includes sustainability requirements as shown in the Division 1 Section 01352 and/or 01505 and all other applicable specification sections. It is the intent of the Owner to work in partnership with the Contractor in implementing sustainable construction practices to the greatest extent possible.

B. The work of this contract involves one primary project site, Anderson Mill Elevated Tank, nominal capacity of 3 MG and a secondary site, Jollyville Ground Storage Tank, nominal capacity of 11 MG, located at 7329 McNeil Drive, Austin, Texas 78729.

1. Prepare right-of-way, remove vegetation at perimeter fence around tank, and remove and properly dispose of metal storage building.

2. Remove vegetation from existing pavement.

3. Excavation for sediment removal along perimeter fence and access road.

4. Embankment, fill for erosion repair at valve box.

5. Embankment, fill for low area on East side of tank pedestal.

6. Repair cracks in asphalt drive that leads to tank.

7. Spot repair asphalt.

8. Install concrete headwall for (6) six inch PVC drain line.

9. Install standard precast manholes with precast base.

10. Trench Excavation Safety Protective Systems (all depths).

11. Install Pipe, six (6) inch diameter class 350 ductile iron pipe (All Depths), including excavation, backfill and connections.

12. Install Pipe, twenty four (24) inch diameter C76 Class III RCP (All Depths), including excavation, backfill and connections, includes excavation in rock.

13. Install Pipe, six (6) inch diameter PVC pipe (All Depths), including excavation, backfill and connections.

14. Installation and maintenance of gabion mattress, Revet Matress Twisted Woven Wire at detention pond.

15. Site restoration, native seeding for erosion control Method Fiber Mulch.

16. Installation, maintenance and removal of protective fencing type A chain link.

17. Installation, maintenance and removal of stabilized construction entrance.

18. Installation, maintenance and removal of silt fence for erosion/sedimentation control and contactor limits of construction.

19. Mobilization/Demobilization to accomplish work.

20. Repair concrete mowing strip.

21. Re-secure chain link fence fabric to fence posts.

22. Install CIP sign.

23. Furnish Job Shack for project site.

24. Electrical Modifications and associated welding.

25. Temporary electrical service for construction.

26. Remove and properly dispose of existing CPS system and install new CPS system, includes welding associated with removal and installation.

27. Remove and properly dispose of existing concrete roof top from one (1) pipe vault.

28. Remove and properly dispose of two (2) existing roof hatches on the tank.

29. Remove and properly dispose of one (1) existing roof vent on the tank.

30. Remove and properly dispose of platform grating and support angles in access tube.

31. Remove and properly dispose of existing overflow catchment structure and abandoned overflow piping.

32. Remove and properly dispose of existing top seven (7) feet of tank interior ladder above "Crow's Nest".

33. Remove and properly dispose of guard rails and grating support angles at the intermediate platforms on the access tube inside tank.

34. Modify overflow pipe at base of tank pedestal, includes re-installation of existing overflow flap gate and installation of new concrete catchment structure (reference 410S for concrete structures).

35. Install grating cover over opening in the "Crow's Nest" floor at the ladder, includes installation of deflector plate at opening in "Crow's Nest" floor and installation of new 316 stainless steel grating clips on all interior platforms.

36. Modify platforms in dry riser to provide passage for a medical stretcher.

37. Modify platform on the outside of the dry riser under the (6) six inch torus drain valve, includes modification of hatch at top of tank pedestal.

38. Install ladder extension at the top of the ladder in the access tube.

39. Install hot dipped galvanized carbon steel ladder and hand rails for the bottom pedestal platform at the (6) six inch torus drain valve.

40. Modify six (6) inch torus drain pipe in tank bottom, includes installation of class 350 epoxy primer coated ductile iron drain line for storm drain, two (2)-six (6) inch epoxy primer coated gate valves and drain diverter plate.

41. Install three (3) inch drain piping for tank interior cone, includes installation of one (1)-three (3) inch epoxy primer coated gate valve and drain diverter plate.

42. Install galvanized grating with supporting galvanized structure on one (1) pipe vault where concrete roof top was removed.

43. Remove existing ladder steps from concrete wall inside one (1) pipe vault and install A304 stainless steel ladder includes A304 stainless steel lanyard ring on ladder.

44. Wall and floor seam repair by welding.

45. Corrosion pit repair by plug welding.

46. Corrosion pit repair by patch plate welding.

47. Install A316 stainless steel hand rails and guard rails on interior of tank at tank bowl cone and in tank bowl.

48. Install A304 stainless steel guard rails on exterior of tank roof.

49. Reconnect one (1) roof beam at the roof knuckle and shell in the Jollyville Ground Storage Tank.

50. Install one (1) inch A316 stainless steel pipe nipple with brass ball valve in access tube, includes installation of stainless steel tubing and heat trace.

51. Install (3) three inch washout piping, includes two (2) brass gate valves and fittings.

52. Modify ladder in access tube below tank roof.

53. Install new A316 stainless steel ladder inside tank from “Crow’s Nest” to roof of tank.

54. Install two (2) new A316 stainless steel roof hatches where existing roof hatches were removed.

55. Install two (2) new 304 stainless steel roof vents, mounting hardware to be A304 stainless steel with dielectric washers.

56. Install A316 stainless steel tank interior access ship’s door at “Crow’s Nest”.

57. Install one (1) Aviation Obstruction Light pipe post and two (2) antenna pipe posts.

58. Remove two (2) electrode pipes on roof and install welded cover plates over resulting holes.

59. Install A304L stainless steel lanyard rings on the ladders at each platform inside the dry riser, at the “Crow’s Nest” level inside the access tube, on the grab rails on the roof of the tank, on the dry riser at the six (6) drain below the tank bowl, on the pedestal at the six (6) drain valve at the lower stiffener and on the ladder at the pipe vault, eight (8) total and A316L stainless steel lanyard rings at the “Crow’s Nest” Level and platforms inside the tank, three (3) total.

60. Remove existing safety climb cable and install hot dipped galvanized Saf-T-Climb Rail on ladders inside dry riser and access tube, includes hot dipped galvanized Saf-T-Mounts at the first and second platforms inside the dry riser and at the “Crow’s Nest” level.

61. Remove existing safety climb cable and install new A316 stainless steel Saf-T-Climb Rail on tank interior ladder, includes installation of A316 stainless steel Saf-T-Mounts at two (2) tank interior intermediate platforms.

62. Install carbon steel grab posts on exterior of tank roof at roof hatches, includes A304 stainless steel lanyard rings.

63. Install one (1) removable personnel davit arm on the exterior of the tank roof and one (1) removable personnel davit arm on the upper platform in the dry riser.

64. Interior wet surface preparation (SSPC SP10) and recoating, dehumidification requirements in SS 09871-3, Coating System IW-01.

65. Interior wet surface preparation (SSPC SP3) and coating, Coating System IW-02, for reconnected roof beam in the Jollyville Ground Storage Tank.

66. Propane powered dehumidification of interior of tank during abrasive blasting, coating application and coating curing.

67. Exterior dry surface preparation (SSPC-SP6) and recoating, includes containment shrouding, Coating System EN-01.

68. Interior dry surface spot preparation (SSPC-SP2 and SSPC-SP3) and spot coating application, includes coating application on primer coated pipes and valves inside pedestal, Coating System EN 02.

69. Exterior surface preparation (SSPC-SP6), and recoating, Coating System EN-03 and Caulking System EC-02 for valves and piping in one (1) concrete pipe vault, includes repair of spalled concrete at pipe penetrations in walls of pipe vault.

70. Remove existing grout from base of tank pedestal and base of dry riser between sketch plate and ring wall foundation and install caulk, Caulk System IC-01 and EC-02.

C. The work for the Jollyville Ground Storage Tank is listed in Section 00300 Bid Form items AM-48 and AM-64, and in 01010 Summary of Work items 48 and 64. These Work items shall be completed by the CONTRACTOR and all of the CONTRACTOR's equipment shall be out of the tank, and off the site before the end of the month of February 2013. This Work shall be shown in the CONTRACTOR's progress schedule as being finished before the end of the month of February 2013. The OWNER will only drain the tank of water for the CONTRACTOR to perform the Work items listed, the tank may not be dry of water for this work. The OWNER will not provide a lay down area at the Jollyville Ground Storage Tank site. The CONTRACTOR shall be responsible for all means and methods for repair of the Work items listed. The Work performed at the Jollyville Ground Storage Tank shall not disrupt work being performed by others on the Jollyville Ground Storage Tank site.

D. The contract documents indicate the Work of the contract and related requirements and conditions.

1.2 SUBMITTALS

A. Provide shop drawings and other information as required by Section 01300 for coordination of the work.

1.3 CONTRACTOR'S USE OF CONSTRUCTION SITE

A. CONTRACTOR shall not unreasonably encumber the construction site with materials or equipment. CONTRACTOR shall assume reasonable responsibility for protection of construction site.

1.4 WORK BY OTHERS ON THE ANDERSON MILL ELEVATED TANK PROJECT SITE

A. The following work will be performed on the Anderson Mill Elevated Tank site by others from the Northwest C (NWC) tank site:

1. Duct banks with conductors will be installed from the NWC site over to the Anderson Mill Elevated Tank site. Site restoration will be performed where the duct banks are installed.

2. The electrical power currently serving the Anderson Mill Elevated Tank and site will be disconnected.

3. Connection of controls will be made inside the Anderson Mill Elevated Tank pedestal.

4. New panels will be installed inside the Anderson Mill Elevated Tank pedestal to accommodate a new power source, security and controls.

5. The actuator valve in the pipe vault on the Anderson Mill Elevated Tank site will be removed and replaced with a new valve.

6. A new compatibility masonry fence will be installed and will replace the existing chain link fence along the East property line and will extend to the Northeast corner of the Northeast corner of the property on the Anderson Mill Elevated Tank site.

B. The Anderson Mill Elevated Tank CONTRACTOR shall plan to allow the NWC CONTRACTOR onto the Anderson Elevated Mill Tank site to perform the work listed in 1.4 of the Summary of Work / 01010. The NWC CONTRACTOR's work that is to be performed on the Anderson Mill Elevated Tank site shall be included in the Anderson Elevated Mill Tank CONTRACTOR'S progress schedule. Coordination meetings shall be held with the OWNER, the OWNER'S Representatives, the CONTRACTOR for the Anderson Mill Elevated Tank project and the NWC CONTRACTOR to coordinate this work. The work performed by the NWC CONTRACTOR on the Anderson Mill Elevated Tank site shall not disrupt, delay or otherwise cause stoppage of the Anderson Mill Elevated Tank CONTRACTOR'S work.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END

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SECTION 07721 - FALL PREVENTION SYSTEM

PART 1 – GENERAL

1.1 NEW FALL PREVENTION SYSTEM

A. Summary

1. Fall prevention system shall be manufactured, designed, engineered and shall be installed on the interior and exterior of the tank. The system shall include:
2. A rigid notched carrier rail per ladder.
3. A means of attaching the carriers easily to the ladder.
4. A means of dismounting at platforms, while still connected to the system.
5. A means of dismounting at the top of ladders.
6. 2-Locking mechanisms, which travel on the carrier.
7. 2-full body harnesses with double (split) shock absorbing lanyards to connect the workman to locking mechanism.

B. The complete system shall allow the worker to operate freely in a normal climbing position. The device is to be installed in accordance with the Manufacturer's instructions in such a manner to enable the worker to be attached to the device at all times during the climb without having to remove his or her hands from the ladder to operate the system effectively. This will also enable the worker to be attached safely to the system before rotating onto the ladder.

1.2 PERSONNEL DAVIT ARMS

A. Summary

1. The personnel davit arms shall be manufactured, designed, engineered and shall be installed on the roof of the tank and on the intermediate landing inside the dry riser. The system shall include:
2. Mounting sleeves.
3. Upper and lower masts.
4. Winch and hoists for lifting and lowering personnel.
5. A storage box for storage of the davit arm that will be installed on the roof.

B. The complete system shall allow the worker to operate freely when used as fall prevention. The complete system shall be capable of lifting and/or lowering a person and equipment with a combined weight of 350 pounds.

1.3 RELATED WORK

A. Specifications 01300 and 05120

1.4 SUBMITTALS

A. Acceptable Manufacturers:

1. North Safety Products, Tel: 800-836-8006, Fax 800-585-2654.
2. Miller, Tel: 800-873-5242, Fax: 800-892-4078
3. Approved equal.

1.5 MATERIALS FOR FALL PREVENTION SYSTEM

A. The carrier rail, its components and the ladder-rung clamps shall be 316 SS on the interior of tank.

B. The carrier rail, its components and the ladder-rung clamps shall be hot dipped galvanized on the interior of dry riser and access tube.

C. Bolts, nuts, washers and screws shall be 316 SS on the interior of the tank.

D. Bolts, nuts, washers and screws shall be hot dipped galvanized on the interior of the dry riser and access tube.

E. The Saf-T-Lok sleeve, safety-locking mechanism shall consist of the following:

1. Sleeve: Cast manganese bronze tensile strength of 110,000 P.S.I.
2. Locking Pawl: Tensile strength of 110, 000 P.S.I.
3. Sleeve Springs: Dual stainless steel springs
4. Roller Bearings: Six Steel roller Bearings
5. Snaps and Links: The snap shall be drop forged steel with a proof test of 5000 pounds.

F. Saf-T-Climb Full Body Harness w/ Integrated Belt shall consist of the following:

1. Harness shall be designed to perform optimally with North Safety Products Saf-T-Climb Fall Prevention system for ladders.
2. Harness shall meet ANSI A10.14 1991 and CSA Z259.10.
3. Harness shall be composed of premium 1-3/4” Nylon webbing.
1. Strength of webbing shall be 6,500 lbs.
2. All load bearing components shall be rated to 5,000 lbs. and made of drop forged plated steel.
3. Sliding back “D” ring on full body harness shall be used for fall arrest.
4. Belt shall be manufactured of two layers of one and three quarter (1-3/4) inch webbing with a two (2) inch back support pad.
5. Front “D” ring on belt shall be used for climbing with the Saf-T-Climb system.
6. Harness shall have double (split) bungee cord type shock absorbing lanyard. Lanyard shall be four (4) foot-six (6) inches long un-deployed, with two (2) and one quarter (1/4) inch throat large rebar locking snap hooks on each lanyard.

1.6 MATERIALS FOR PERSONNEL DAVIT ARMS

A. On the roof of the tank the following materials shall be provided:

1. 1 each, A304 stainless steel floor mount sleeve, Miller DH -7SS.
2. 2 each, forty five (45) inch long lower mast extensions, Miller DH-22/45.
3. 1-each, upper mast (with two (2) lower masts, reaches maximum height of one hundred forty six (146) inches), Miller DH-21.
4. 1 each, A 304 stainless steel cap, DH-10SS.
5. 1 each, Manhandler with one hundred (100) feet of stainless steel wire rope, DH-8442SS/100ft.
6. 1 each, Winch adapter for both the Manhandler and the MightyEvac system, Miller DH-19.

7. 1 each low profile weather proof storage utility chest for personnel davit arm, forty eight (48) inches long x twenty four (24) inches wide x eighteen (18) inches high.

B. Inside the dry riser at the intermediate landing the following materials shall be provided:

1. 1 each, zinc plated flush floor mount sleeve, Miller DH -20ZP.
2. 2 each, forty five (45) inch long lower mast extensions, Miller DH-22/45.
3. 1-each, upper mast (with two (2) lower masts reaches maximum height of one hundred forty six (146) inches), Miller DH-21.
4. 1 each, Manhandler with sixty five (65) feet of galvanized wire rope, DH-8442/65ft.
5. 1 each, Winch adapter for both the Manhandler and the MightyEvac system, Miller DH-19.

1.3 TRAINING

A. Contractor shall provide fall prevention training to City of Austin personnel as part of the fall prevention system and devices for this project. This training shall be provided by a firm certified in fall prevention training. CONTRACTOR shall submit information on the training firm and training agenda for approval by the City of Austin prior to scheduling the training. The information shall be submitted after the pre-construction conference, but before substantial completion of the project. Training shall be as scheduled by the City of Austin. This training shall be subsidiary to other bid items in section 07721 Fall Prevention System.

1.4 FABRICATION

A. Fabricate and assemble steel members in shop to greatest extent possible. Fabricate steel members according to AISC specifications referenced in Section 05120 and in Shop Drawings.

1. Comply with fabrication tolerance limits in AISC'S "Code of Standard Practice for Steel Buildings and Bridges" for structural steel.
2. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work. Also, reference the Welding Specification.

PART 2 - EXECUTION

2.1 FIELD QUALITY CONTROL

A. The systems shall be installed as per Manufacturer’s specifications.

PART 3 - MEASUREMENT AND PAYMENT

3.1 Pay Item SS 07721-1, Install A304L stainless steel lanyard rings on the ladders at each platform inside the dry riser, at the “Crow’s Nest” level inside the access tube, on the grab rails on the roof of the tank, on the dry riser at the six (6) drain below the tank bowl, on the pedestal at the six (6) drain valve at the lower stiffener and on the ladder at the pipe vault, eight (8) total and A316L stainless steel lanyard rings at

the “Crow’s Nest” Level and platforms inside the tank, three (3) total Per Each

Pay Item SS 07721-2, Remove existing safety climb cable and install hot dipped galvanized Saf-T-Climb Rail on ladders inside dry riser and access tube, includes hot dipped galvanized Saf-T-Mounts at the first and second platforms inside the dry riser and at the “Crow’s Nest” level Per Lump Sum

Pay Item SS 07721-3, Remove existing safety climb cable and install new A316 stainless steel Saf-T-Climb Rail on tank interior ladder, includes installation of A316 stainless steel Saf-T-Mounts at two (2) tank interior intermediate platforms Per Lump Sum

Pay Item SS 07721-4, Install carbon steel grab posts on exterior of tank roof at roof hatches, includes A304 stainless steel lanyard rings Per Each

Pay Item SS 07721-5, Install one (1) removable personnel davit arm on the exterior of the tank roof and one (1) removable personnel davit arm on the upper platform in the dry riser Per Each

END

A REMOVE ALL VEGETATION AND SEAL ALL CRACKS ON ACCESS ROAD PAVEMENT IN HATCHED AREA. SEE DETAIL SHEET C5 (SCOPE ITEMS AM–2 AND AM–6)

B REMOVE SEDIMENT THAT HAS BUILT UP ON THE MOW STRIP ALONG THE TEMPORARY (SCOPE ITEM, AM–3)

C REMOVE ALL OVERHANGING AND ENCROACHING VEGETATION AND SEDIMENT WITHIN FIVE FEET OF THE PERIMETER SECURITY FENCE AND REMOVE ALL TREE LIMBS WITHIN 20 FT. OF THE TANK (APP 892 LF OF FENCE TOTAL) (SCOPE ITEM AM–1).

D FILL THE HOLE LEFT IN THE PERIMETER MOW STRIP BY UTILITY CREWS WITH CLASS A CONCRETE. SEE PHOTO SHEET C5. (SCOPE ITEM AM–20) 2

E REMOVE ALL ACCUMULATED SEDIMENT AT THE SOUTHEAST PROPERTY CORNER; REVEGETATE ALL DISTURBED AREAS. (SCOPE ITEM AM–3)

F ADD FILL TO THE CONCRETE SLAB COVERING THE YARD VALVE EXCAVATIONS THAT HAVE BEEN UNDERMINED BY EROSION. SEE PHOTO SHEET C–5 (SCOPE ITEM AM–4).

G INSTALL NEW TIE WIRE TO REATTACH EXISTING FENCE FABRIC TO EXISTING LINE POSTS. MATCH SPACING OF EXISTING TIES ON PERIMETER FENCE. (SCOPE ITEM AM–21)

H REMOVE ALL ACCUMULATED SEDIMENT FROM THE END OF THE ACCESS DRIVE AS INDICATED. (SCOPE ITEM AM–3)

I FILL IN LOW SPOT IN THE YARD ON THE RIGHT SIDE OF THE OVERHEAD DOOR. SEE PHOTO SHEET C–5. (SCOPE ITEM AM–5)

J INSTALL 24" TANK OVERFLOW DRAIN AND APPURTENANCES, including GABION MAT. SEE SHEET C3 FOR DETAILS. (SCOPE ITEMS AM–9, AM–12 AND AM–14) 2

K SAW CUT AND REMOVE POTHOLE IN ENTRY DRIVE, FILL TO WITHIN 2" OF THE SURFACE WITH COMPACTED LIMESTONE BASE AND INSTALL 2" ASPHALT PAVEMENT PATCH. (SCOPE ITEM AM–7)

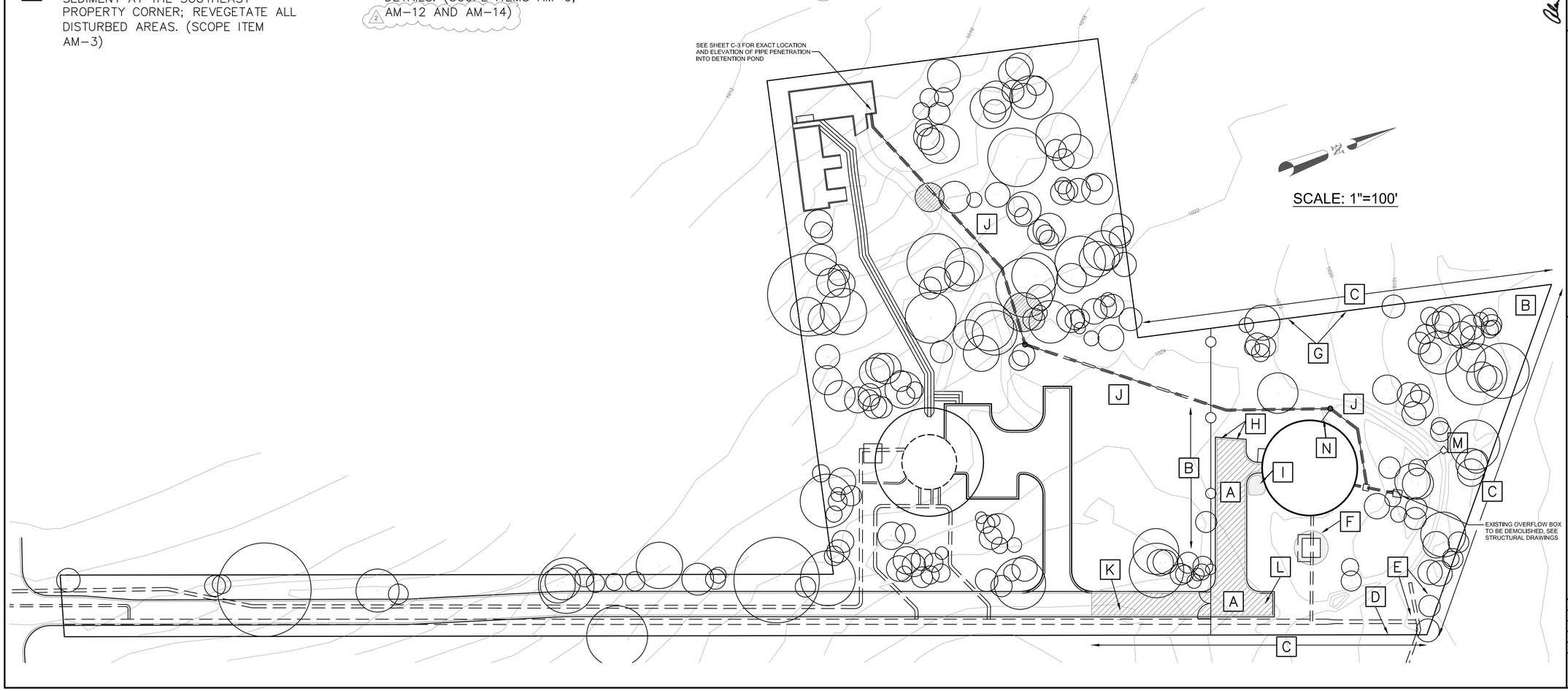
L REMOVE AND DISPOSE OF THE METAL BUILDING TEMPORARILY STORED IN PARKING LOT. SEE PHOTO SHEET C–5. (SCOPE ITEM AM–1)

M INSTALL NEW 6" PVC POND OUTFALL DRAIN WITH CONCRETE HEADWALL ON POND SIDE, EXTEND THROUGH EXISTING OUTFALL. (SCOPE ITEMS AM–8 AND AM–13) 2

N INSTALL 6" DUCTILE IRON DRAIN, CONNECT TO MANHOLE ON DOWNSTREAM END AND PIPE EXISTING TANK ON UPSTREAM END, INCLUDING THRUST RESTRAINT. (SCOPE ITEM AM–11) 2

O INSTALL, MAINTAIN AND REMOVE TEMPORARY EROSION CONTROLS INCLUDING SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCE. REVEGETATE DISTURBED AREAS. SEE SHEET C2 FOR ADDITIONAL DETAILS. (SCOPE ITEMS AM–15, AM–17 AND AM–18). SEE SHEET C–2 FOR LOCATION OF TEMPORARY EROSION CONTROLS 2

P INSTALL, MAINTAIN AND REMOVE TREE PROTECTION FENCING. SEE SHEET C2 FOR ADDITIONAL DETAILS. (SCOPE ITEM AM–16). SEE SHEET C–2 FOR LOCATION OF TREE PROTECTION FENCING.



NO.	DATE	REVISION	APP'D
2	10-23-12	ADDENDUM 2, CORRECT SCOPE NUMBERS	

STATE OF TEXAS · ALAN D. RHAMES · 72089 · REGISTERED PROFESSIONAL ENGINEER · 10-08-12

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AXIOM Engineers Inc

Anderson Mill Elevated Tank Improvements

Reservoir Recoating and Safety Improvements Project

CIVIL SITE PLAN

DESIGNED:	ADR
APPROVED:	ADR
FILE:	C1–SITE–R
JOB NO.:	216–13
DATE:	OCT 2012
SHEET	OF
C1	19