

FLETCHER CREEK EAST (WN106375S) BANK STABILIZATION / GRADE CONTROL CITY OF MEMPHIS SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) MEMPHIS, TENNESSEE

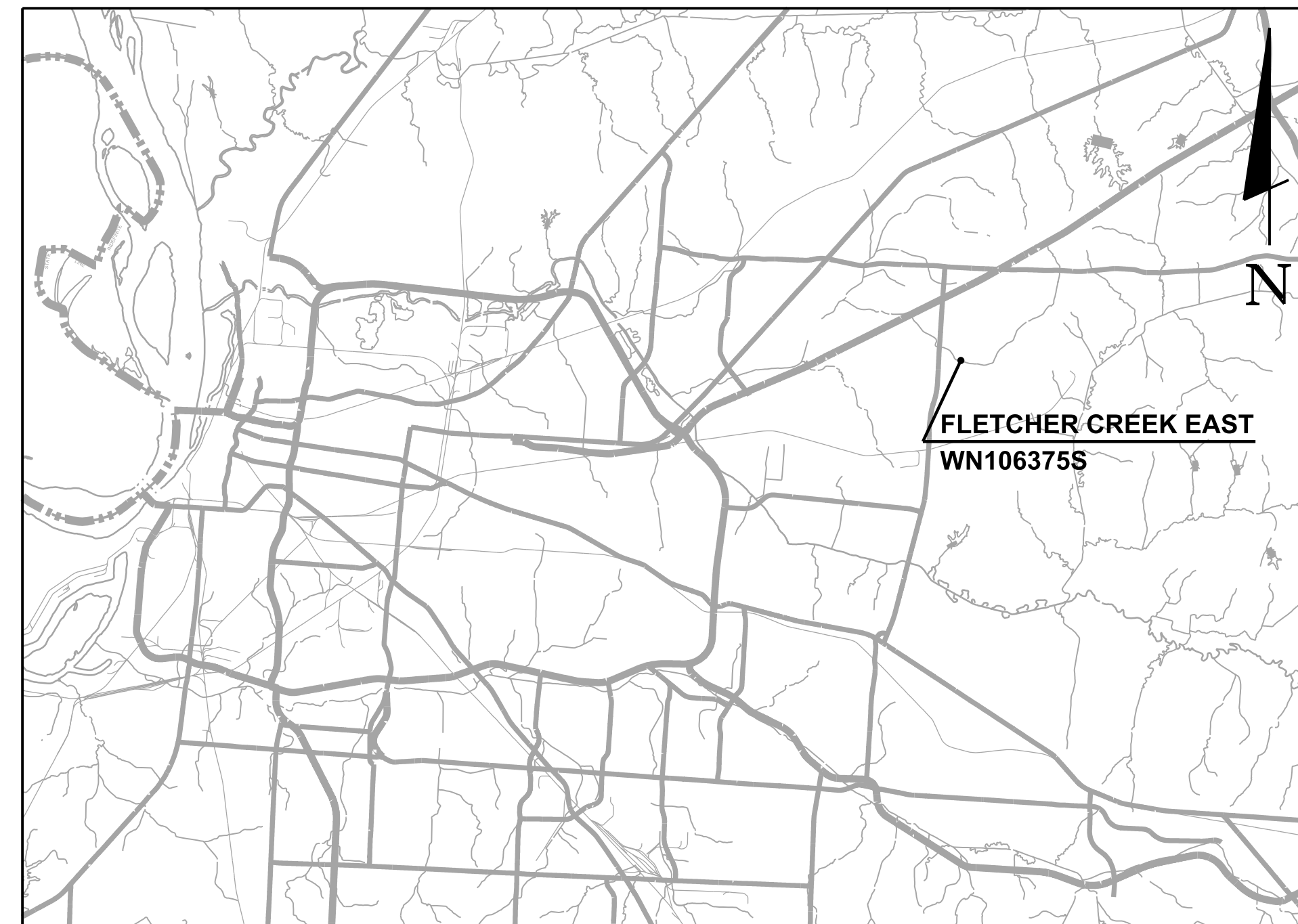
CITY COUNCIL

PATRICE ROBINSON, CHAIRWOMAN
 FRANK COLVETT JR, VICE CHAIRMAN
 RHONDA LOGAN, COUNCILWOMAN
 JAMITA SWEARENGEN, COUNCILWOMAN
 WORTH MORGAN, COUNCILMAN
 EDMUND FORD SR, COUNCILMAN
 MICHALYN EASTER-THOMAS, COUNCILWOMAN
 JB SMILEY JR, COUNCILMAN
 CHEYENNE JOHNSON, COUNCILWOMAN
 MARTAVIUS JONES, COUNCILMAN
 CHASE CARLISLE, COUNCILMAN
 J FORD CANALE, COUNCILMAN
 DR JEFF WARREN, COUNCILMAN

CITY ENGINEER

MANNY BELEN, P.E.

JIM STRICKLAND, MAYOR



LOCATION MAP

NOT TO SCALE

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
C0.01	CIVIL COVER SHEET
C0.31	EXISTING CONDITIONS
C1.01	SITE PLAN AND PROFILE
C2.41	EROSION CONTROL PLAN PHASE I
C2.51	EROSION CONTROL PLAN PHASE II
C3.01	UTILITY PLAN AND PROFILE
C6.01	CROSS SECTIONS
C7.01	CIVIL DETAILS
C7.02	CIVIL DETAILS
C7.21	EROSION CONTROL DETAILS
C7.22	EROSION CONTROL DETAILS



C0.01



GENERAL NOTES:

1. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
2. GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
3. ALL RIP RAP TO EXTEND TO BOTTOM OF DITCH AND FULLY PROTECT THE BANK AND EDGES OF OTHER EROSION CONTROL DEVICES.
4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
5. NEWLY CUT OR FILLED EMBANKMENTS SHALL BE SODDED OR SEEDED AND MULCHED TO ADEQUATELY PREVENT SOIL EROSION. STAKE SOD SLOPES 3:1 OR GREATER.
6. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
7. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
8. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED (TYP). SUBMIT TEST RESULTS TO SARP10.
9. ALL AREAS TO BE FILLED SHALL BE PROPERLY CLEARED AND STRIPPED PRIOR TO BEGINNING THE FILLING OPERATION.
10. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
11. ALL RIP-RAP SHALL BE PLACED ON NON-WOVEN GEOTEXTILE, OR APPROVED EQUAL.
12. ALL WORK SHALL BE DONE IN DRY CONDITIONS. CONTRACTOR SHALL MAKE PROVISIONS TO KEEP STORM WATER, LATERAL WATER AND GROUND WATER OUT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DEWATER THE SITE AS NECESSARY SO THAT PLACEMENT OF ALL RIP-RAP, OR GROUTING OF ANY RIP-RAP WILL BE IN DRY CONDITIONS.
13. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL PROJECT TESTING. SOIL AND OTHER MATERIAL TESTING SHALL BE PERFORMED BY A LICENSED GEOTECHNICAL FIRM.
14. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING. SURVEY DATA SHALL BE PROVIDED BY A REGISTERED LAND SURVEYOR

TYPICAL CONSTRUCTION NOTES:

1. ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES, ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TVA, CALL 1-800-351-1111. FOR SEWER AND/OR WATER SERVICE LOCATIONS, CALL 901-529-8025.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT 901-636-2462 A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION, UNLESS OTHERWISE NOTED ON PLANS. SOD SLOPES AND MULCH ALL OTHER AREAS.
6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
7. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SEDIMENT RELEASE INTO EXISTING DRAINAGE SYSTEM AND/OR ONTO ADJACENT PROPERTIES.
8. THE CONTRACTOR SHALL MAINTAIN BARRICADES, FENCES, GUARDS, AND FLAGMEN AS REASONABLY NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AT OR NEAR THE PROJECT SITE DURING CONSTRUCTION. ALL CONSTRUCTION MATERIAL, INCLUDING WITHOUT LIMITATION MUD, SILT, DIRT, AND GRAVEL SHALL BE KEPT OFF EXISTING STREETS AT ALL TIMES. IN THE EVENT SUCH MUD, SILT, DIRT, GRAVEL, OR OTHER CONSTRUCTION MATERIAL IS WASHED, BLOWN, OR CARRIED INTO AN EXISTING STREET, THE DEVELOPER SHALL TAKE IMMEDIATE STEPS TO REMOVE SUCH MATERIALS. IF THE DEVELOPER DOES NOT REMOVE SUCH MATERIALS AFTER NOTIFICATION BY THE CITY, AND THE CITY DEEMS IT NECESSARY TO CLEAN THE AFFECTED STREETS, THE DEVELOPER AGREES TO REIMBURSE THE CITY FOR ALL SUCH EXPENSES.
9. ALL STREETS SHALL BE KEPT CLEAR AND FREE OF DIRT AND DEBRIS.
10. ALL CONSTRUCTION ACTIVITY SHALL BEGIN NO EARLIER THAN 7:00 A.M. AND END NO LATER THAN 6:00 P.M., MONDAY THRU SATURDAY, AND NO CONSTRUCTION ACTIVITY SHALL BE PERMITTED ON SUNDAYS.
11. CONTRACTOR SHALL RESTORE OFF-SITE ACCESS ROUTES AND ALL DISTURBED AREAS TO ORIGINAL BEFORE-START-OF-WORK CONDITION.

FLOOD HAZARD NOTE:

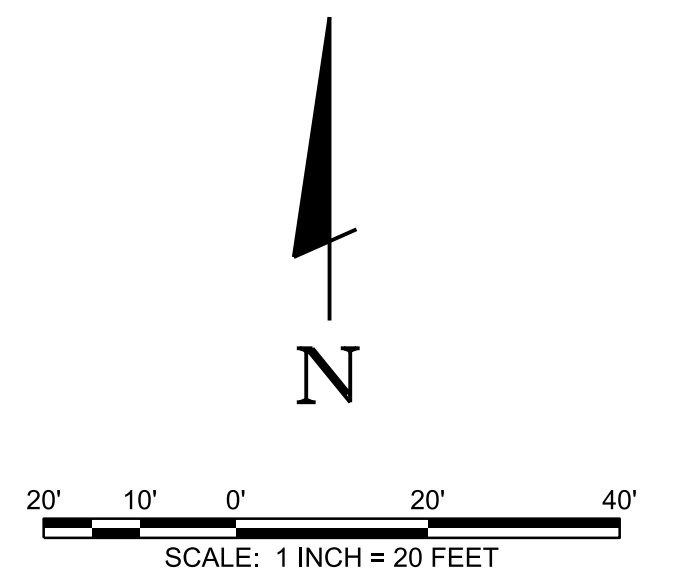
THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT) AS DETERMINED BY DETAILED METHODS AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0316G, DATED FEBRUARY 06, 2013. THE NEAREST BFE IS 290.5.
 STREAM WATER FLOW WILL BE 6138 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

BENCHMARK NOTE:

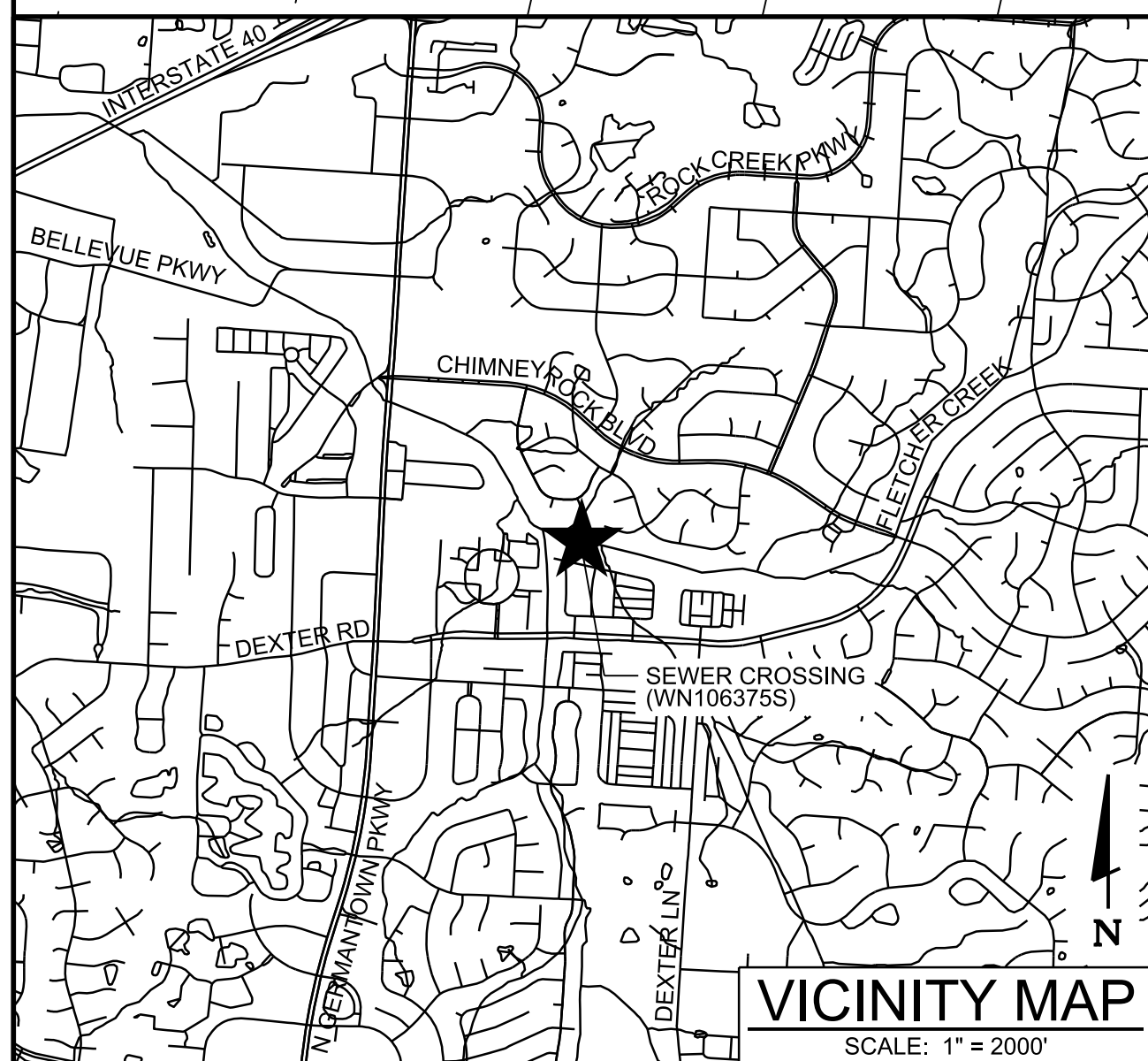
CITY OF MEMPHIS BENCHMARK #130 - CHIMNEYROCK BLVD. & KINGS CROSS LN: CITY MONUMENT IS LOCATED ON THE SE COR., AT P.I. OF FRONT OF S/WALK AT S. END OF H/CAP RAMP, 4' NE OF A MTL. ST. SIGN, 50' W. OF NW COR. HOUSE # 8391. ELEV. 308.05

LEGEND:

- EXISTING PROPERTY BOUNDARY
- EXISTING MINOR CONTOUR
- 250- EXISTING MAJOR CONTOUR
- SA- EXISTING SANITARY SEWER LINE
- ⊙ EXISTING MANHOLE



811 Know what's below
 Call before you dig.
 811
 www.call811.com



REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



**FLETCHER CREEK EAST
 BANK STABILIZATION/GRADE CONTROL**
 CORDOVA, TENNESSEE
 DEVELOPER: SARP10
 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

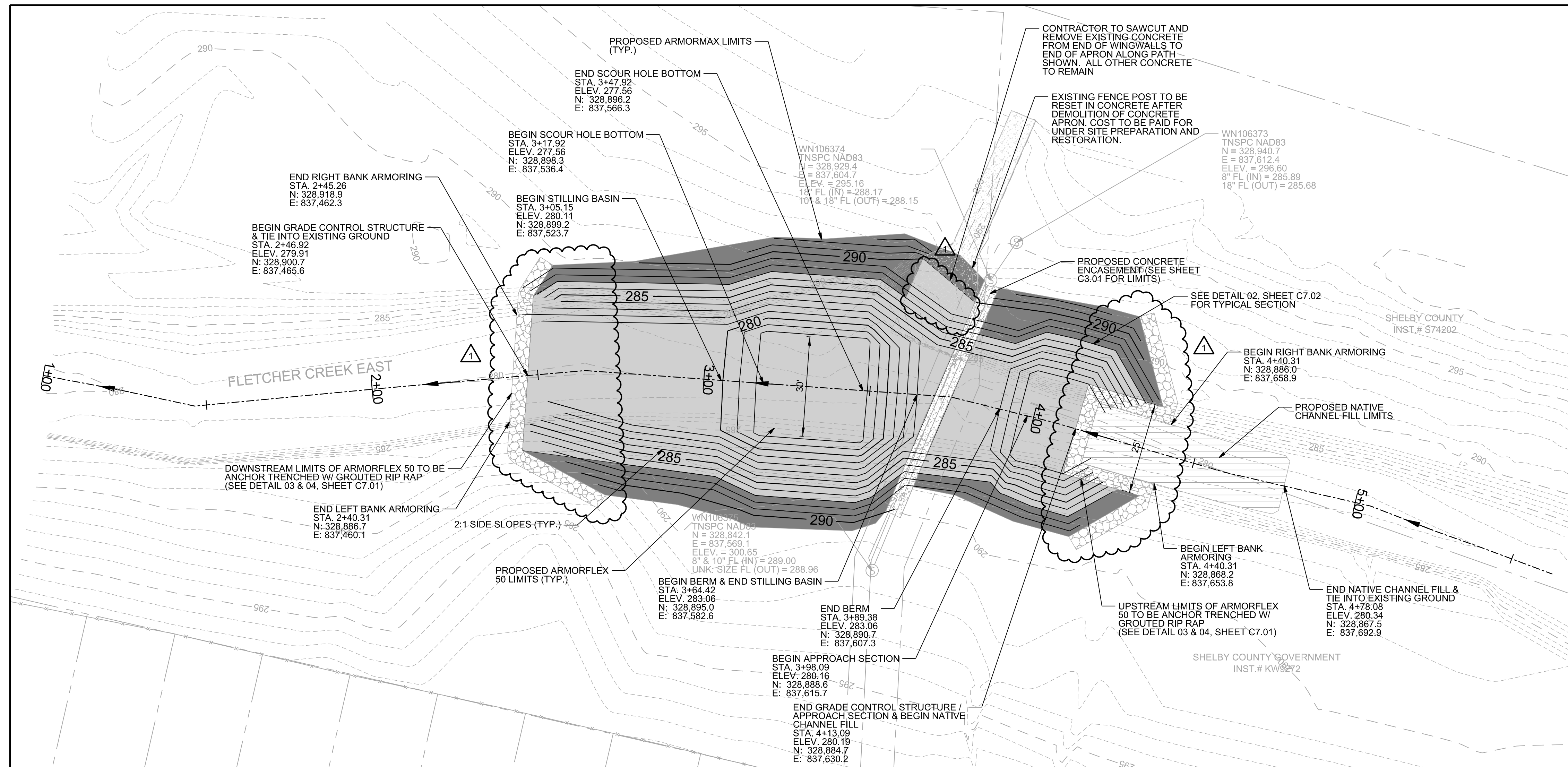
SEWER-BASIN: WN-10
 DRAIN-BASIN: FLETCHER-CREEK
 SHEET 2 OF 11
 CO.31

**EXISTING-CONDITIONS
 FLETCHER-CREEK-EAST
 BANK-STABILIZATION/GRADE-CONTROL**
 CORDOVA, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
 DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
 REVIEWED

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020 3:58:59 PM MTPerkins



GRADING AND DRAINAGE NOTES:

1. A MINIMUM OF 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT (901) 636-2462.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING ML&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, CALL 1-800-351-1111. FOR SEWER LOCATIONS CALL 923-8025.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED BY THE SOILS REPORT. SUBMIT TEST RESULTS TO SARP10.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION, GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION, NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.

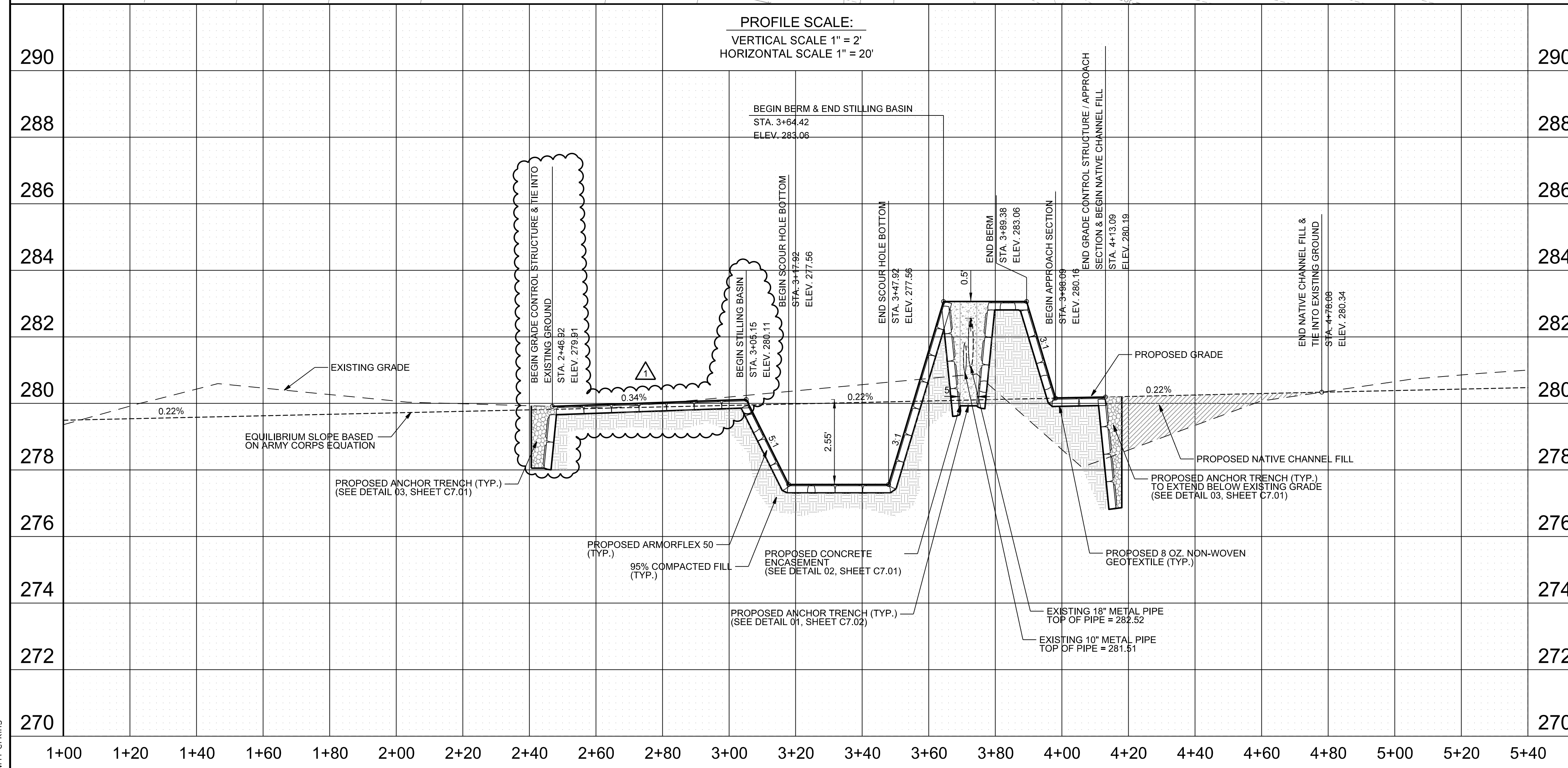
FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0316G, DATED FEBRUARY 06, 2013. THE NEAREST BFE IS 290.5.

STREAM WATER FLOW WILL BE 6138 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

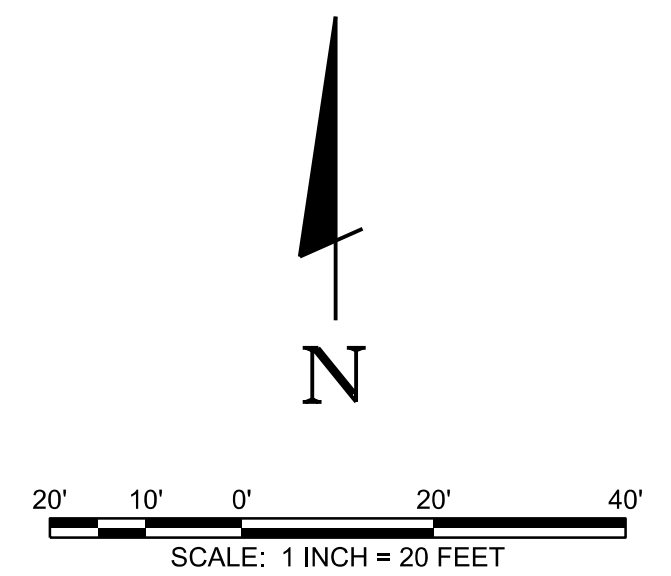
BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK #130 - CHIMNEYROCK BLVD. & KINGS CROSS LN: CITY MONUMENT IS LOCATED ON THE SE COR., AT P.I. OF FRONT OF S/WALK AT S. END OF H/CAP RAMP, 4' NE OF A MTL. ST. SIGN, 50' W. OF NW COR. HOUSE # 8391. ELEV. 308.05



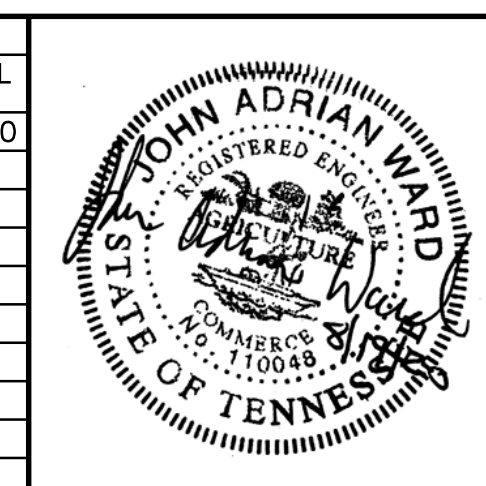
LEGEND:

- EXISTING MINOR CONTOUR
- - - EXISTING MAJOR CONTOUR
- SA EXISTING SANITARY SEWER LINE
- ⊙ EXISTING MANHOLE
- PROPOSED MINOR CONTOUR
- - - PROPOSED MAJOR CONTOUR
- - - PROPOSED STREAM CENTERLINE
- N E COORDINATE
- PROPOSED NATIVE CHANNEL FILL LIMITS
- PROPOSED ARMORFLEX 50 LIMITS
- PROPOSED ARMORMAX LIMITS



811 Know what's below
Call before you dig.
811
www.call811.com

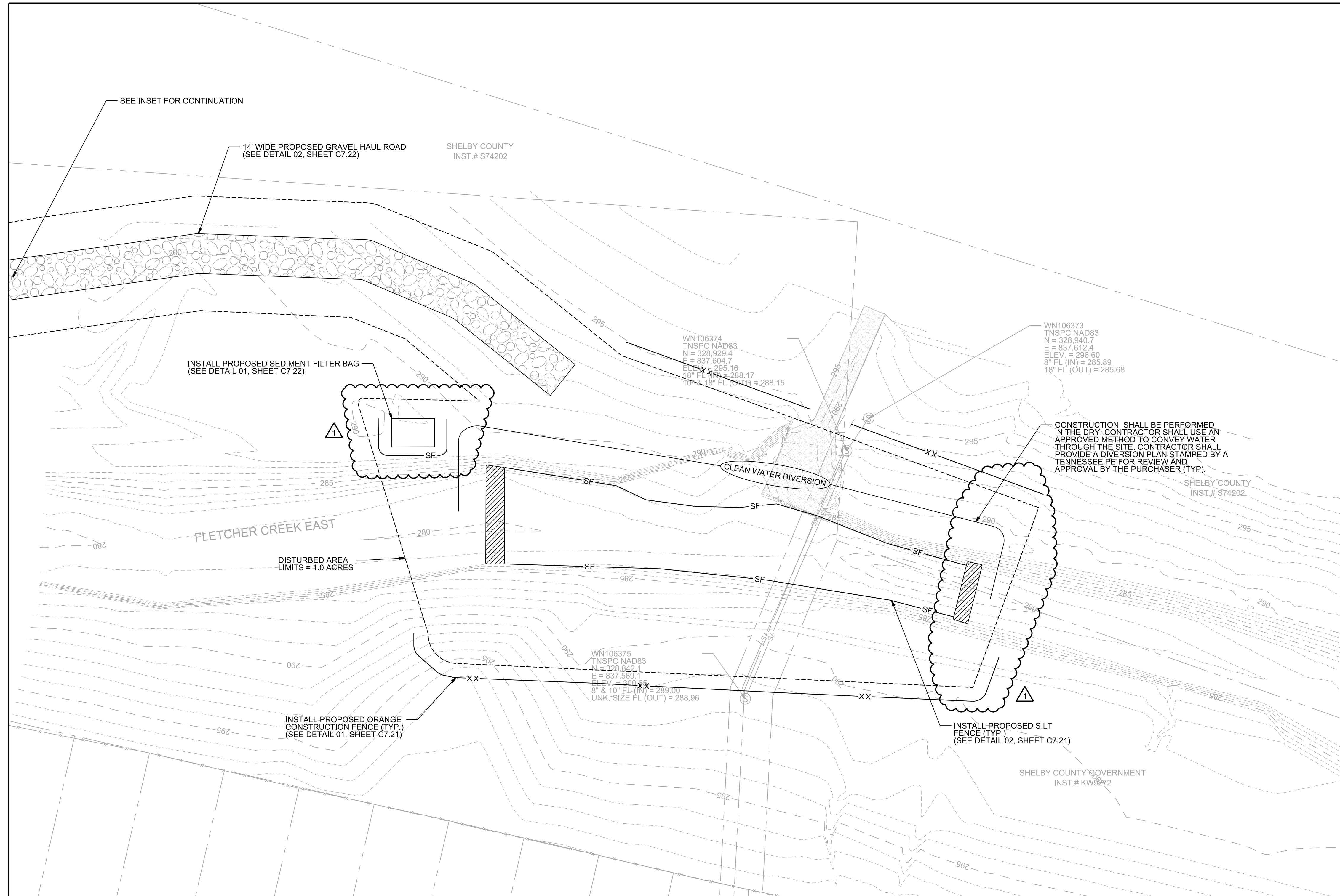
REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK
SHEET 3 OF 11
SITE-PLAN-AND-PROFILE
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE
SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

FLETCHER CREEK EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

8/19/2020
2:47:41 PM
MTPerkins



PHASE I SEQUENCING NOTES:

1. INSTALL CONSTRUCTION EXIT AND HAUL ROAD AS SHOWN. THIS WILL BE THE FIRST BMP INSTALLED ON SITE.
2. INSTALL ORANGE CONSTRUCTION FENCE
3. SILT FENCE TO BE INSTALLED ALONG TOE OF SLOPE AS SHOWN.
4. PERFORM REQUIRED EXCAVATION AND UTILITY WORK.
5. FILL EXISTING CHANNEL VALLEY TO INVERT SHOWN, IF WATER ACCUMULATES BEHIND THE GRADE CONTROL STRUCTURE DURING FILLING OPERATIONS, THE TRAPPED WATER WILL BE PUMPED THROUGH A SEDIMENT FILTER BAG BEFORE IT LEAVES THE SITE.

EROSION CONTROL NOTES:

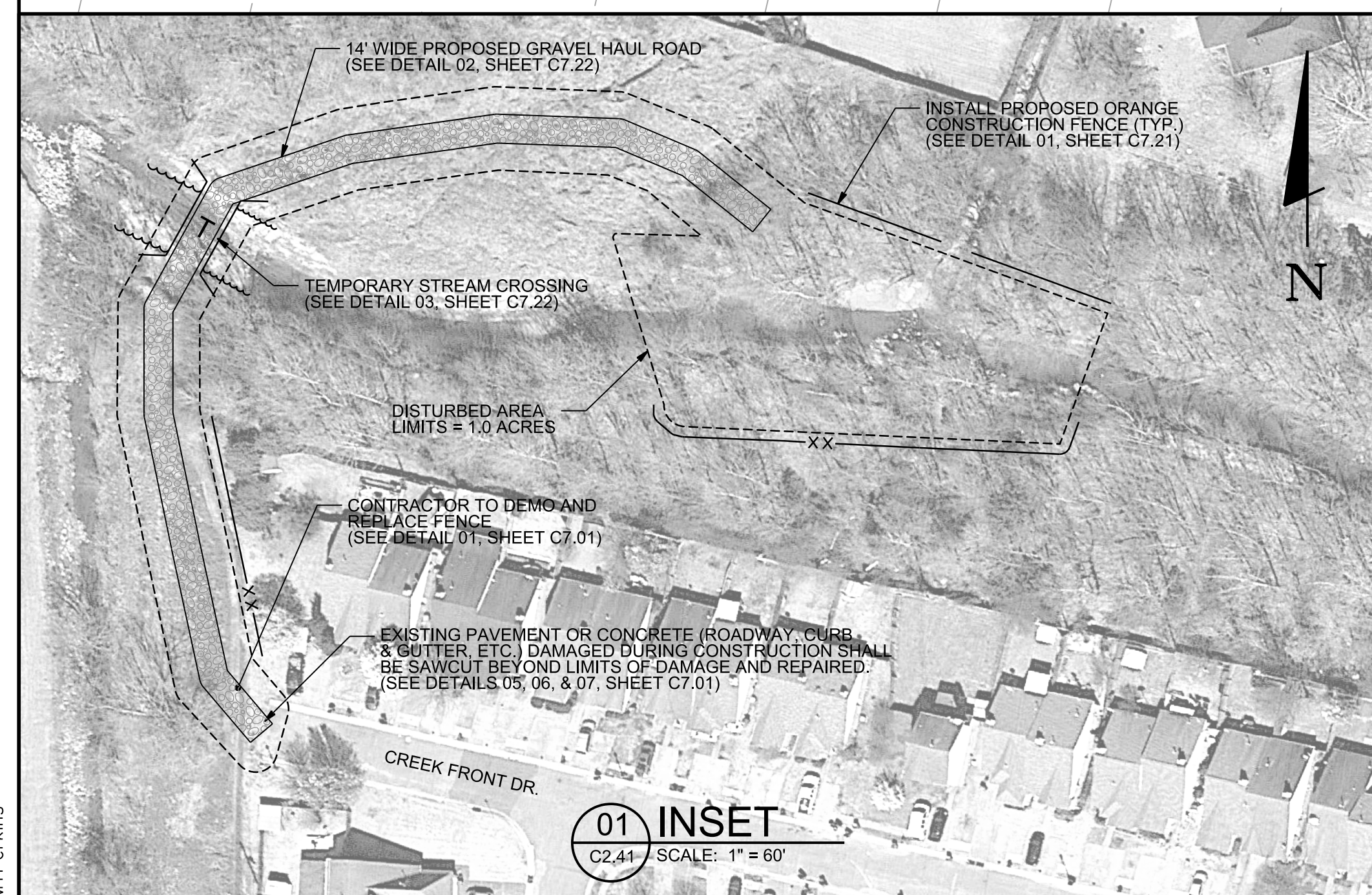
1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 1.0 ACRES.
11. CONTRACTOR TO PROVIDE HYDRAULIC CALCULATIONS FOR TEMPORARY STREAM CROSSING FOR REVIEW AND APPROVAL BY THE PURCHASER.
11. GRADING AND UTILITY WORK IS TO BE PERFORMED IN THE DRY. CONTRACTOR TO USE CLEAN WATER DIVERSION. SAND BAG BERM SHALL BE INCLUDED IN THE COST OF THE "CLEAN WATER DIVERSION". CONTRACTOR SHALL SUBMIT A PLAN STAMPED BY A TENNESSEE PE FOR REVIEW AND APPROVAL BY THE PURCHASER/ENGINEER.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0316G, DATED FEBRUARY 06, 2013. THE NEAREST BFE IS 290.5.
 STREAM WATER FLOW WILL BE 6138 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

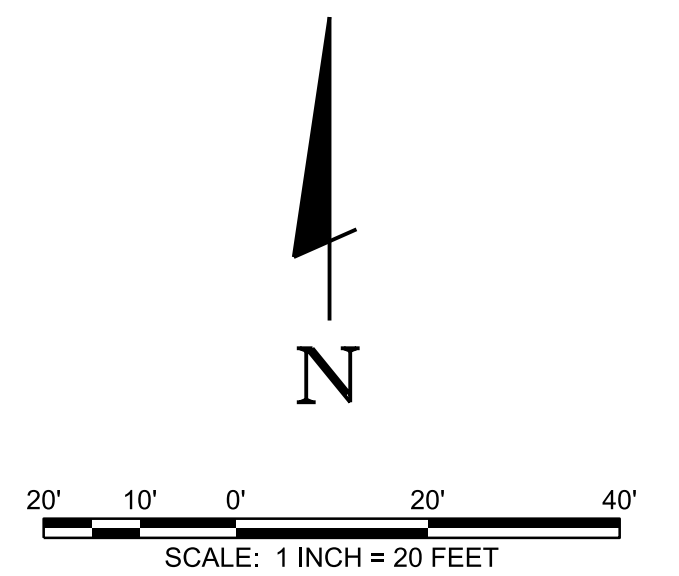
BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK #130 - CHIMNEYROCK BLVD. & KINGS CROSS LN: CITY MONUMENT IS LOCATED ON THE SE COR., AT P.I. OF FRONT OF SWALK AT S. END OF H/CAMP, 4' NE OF A MTL. ST. SIGN, 50' W. OF NW COR. HOUSE # 8391. ELEV. 308.05



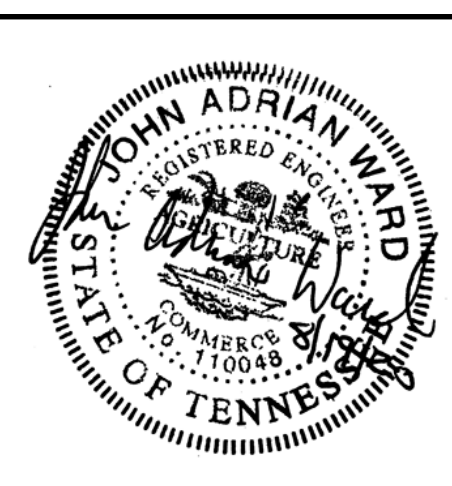
LEGEND:

- EXISTING MINOR CONTOUR
- - - - EXISTING MAJOR CONTOUR
- XX- ORANGE CONSTRUCTION FENCE
- SF - SILT FENCE
- - - - DISTURBED AREA LIMITS
- [Hatched Box] SANDBAG BERM
- [Stippled Box] CONSTRUCTION EXIT



811 Know what's below
Call before you dig.
 811
 www.call811.com

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



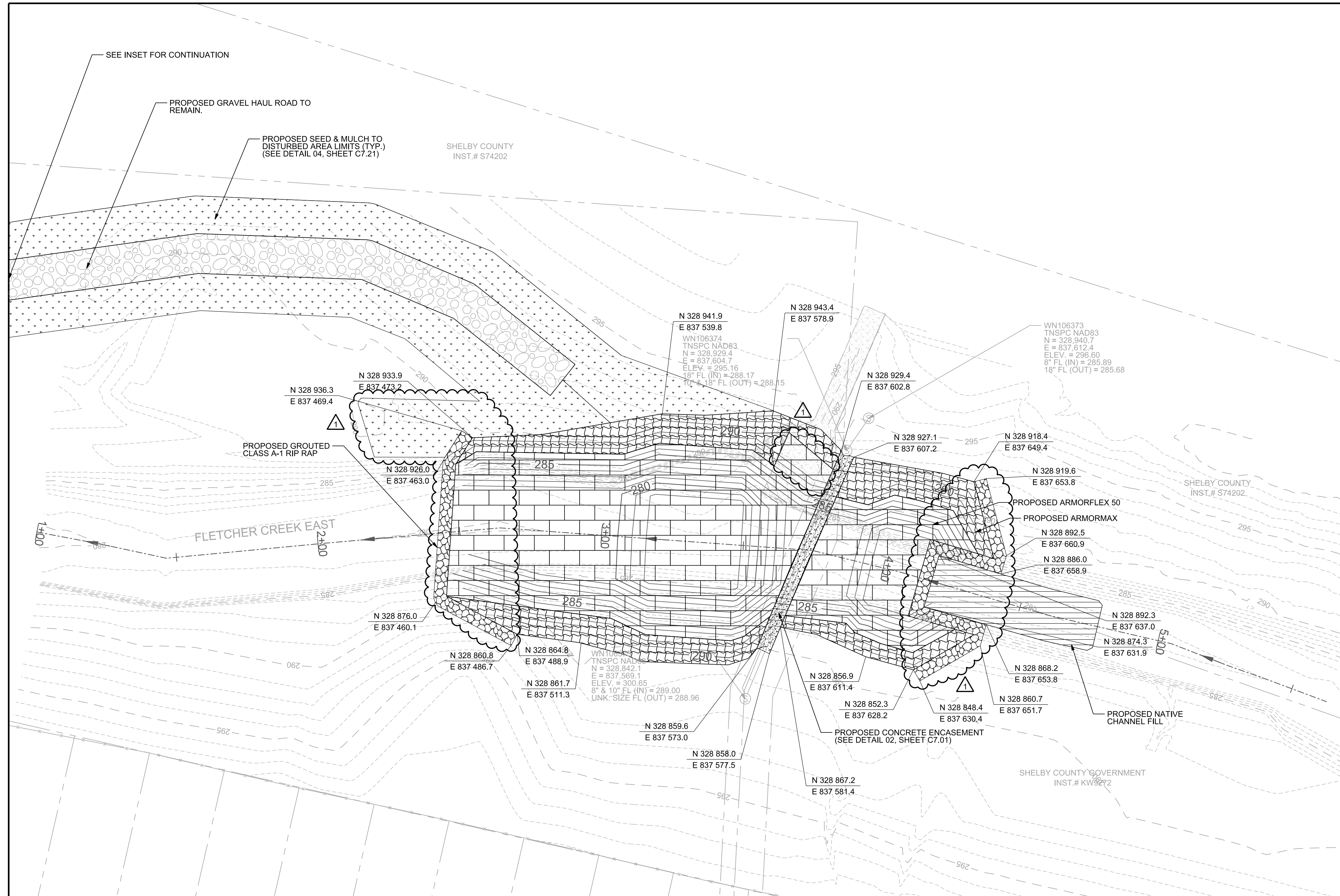
SEWER-BASIN: WN-10
 DRAIN-BASIN: FLETCHER-CREEK
 SHEET 4 OF 11

EROSION-CONTROL-PLAN-PHASE-I
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
 CORDOVA, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
 DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
 REVIEWED

FLETCHER CREEK EAST
 BANK STABILIZATION/GRADE CONTROL
 CORDOVA, TENNESSEE
 DEVELOPER: SARP10
 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE



PHASE II SEQUENCING NOTES:

1. MAINTAIN BMPS INSTALLED DURING PHASE I.
2. STABILIZE SITE AS SHOWN. ALL OTHER DISTURBED AREAS NOT RECEIVING GROUTED CLASS A-1 RIP-RAP OR NATIVE MATERIAL WILL BE SEEDED AND MULCHED.
3. REMOVE BMPS WHEN SITE IS STABLE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 1.0 ACRES.

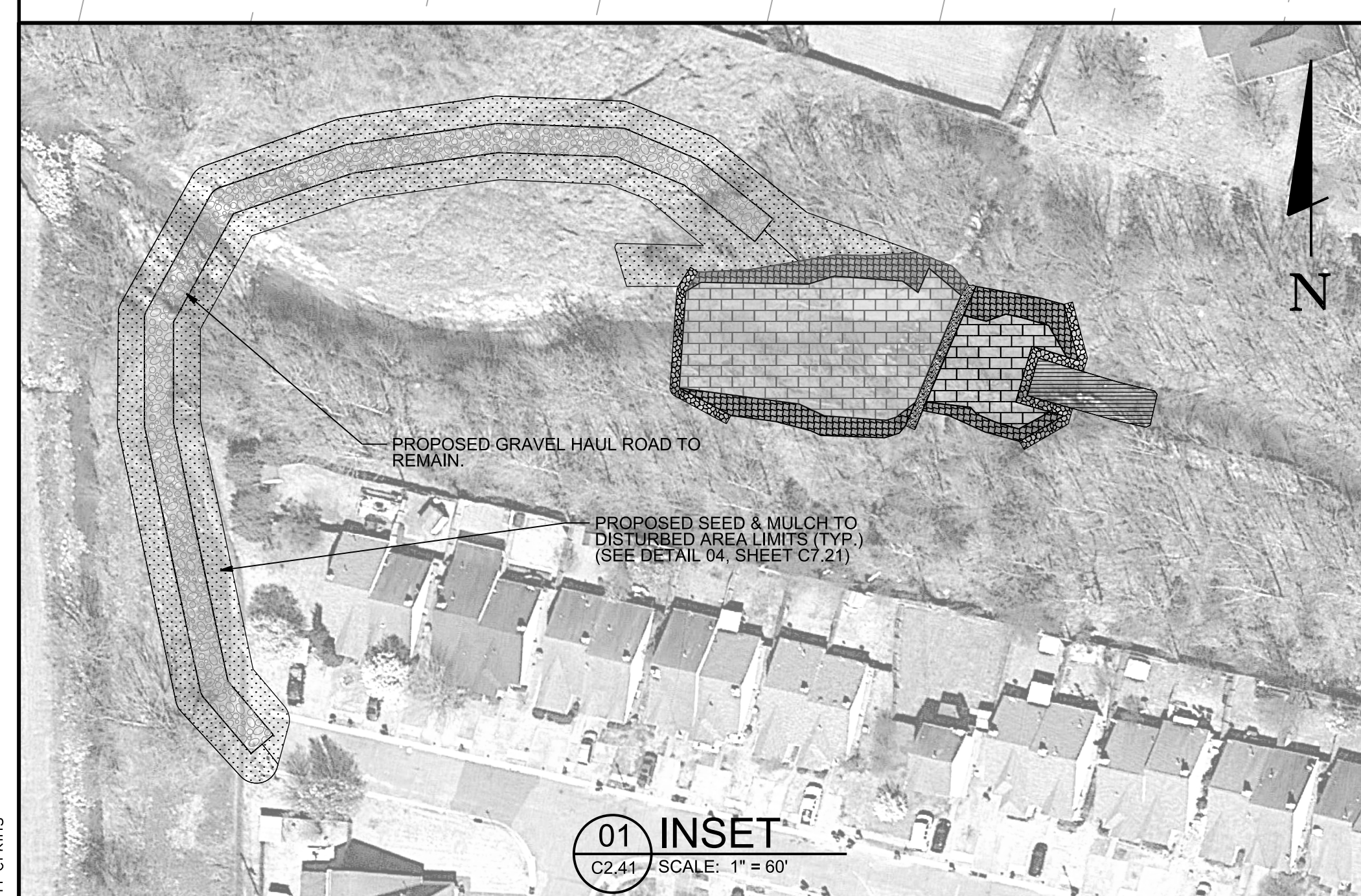
FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0316G, DATED FEBRUARY 06, 2013. THE NEAREST BFE IS 290.5.

STREAM WATER FLOW WILL BE 6138 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

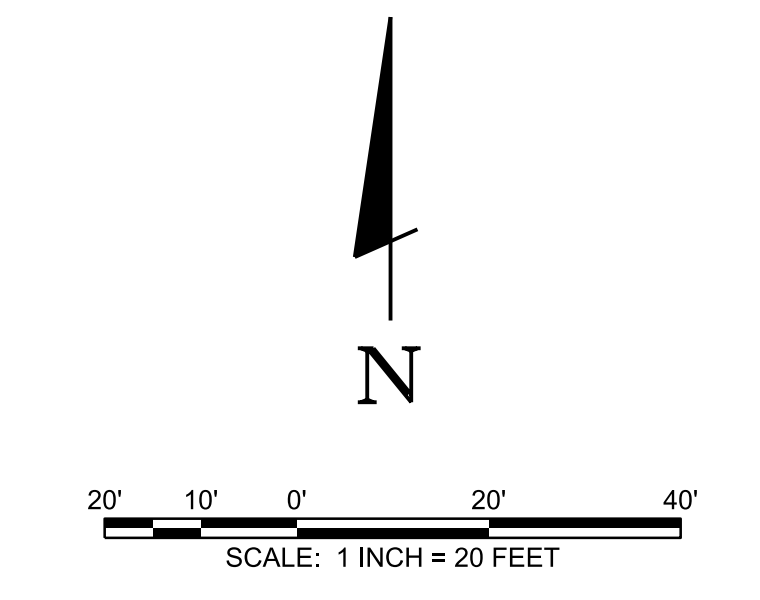
BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK #130 - CHIMNEYROCK BLVD. & KINGS CROSS LN: CITY MONUMENT IS LOCATED ON THE SE COR., AT P.I. OF FRONT OF S/WALK AT S. END OF H/CAP RAMP, 4' NE OF A MTL. ST. SIGN, 50' W. OF NW COR. HOUSE # 8391. ELEV. 308.05



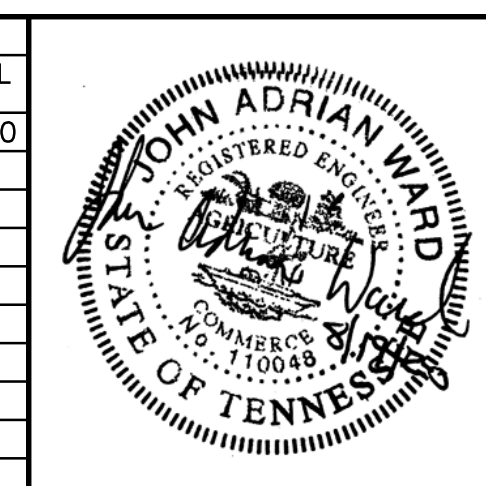
LEGEND:

- EXISTING MINOR CONTOUR
- 250- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 250- PROPOSED MAJOR CONTOUR
- [Pattern] PROPOSED GROUTED CLASS A-1 RIP-RAP
- [Pattern] PROPOSED NATIVE CHANNEL FILL
- [Pattern] PROPOSED ARMORFLEX 50
- [Pattern] PROPOSED ARMORMAX
- [Pattern] PROPOSED SEED & MULCH
- [Pattern] PROPOSED GRAVEL HAUL ROAD



811 Know what's below
Call before you dig.
811
www.call811.com

ITEM NO.	REVISION	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1		8/19/2020



SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK
SHEET 5 OF 11

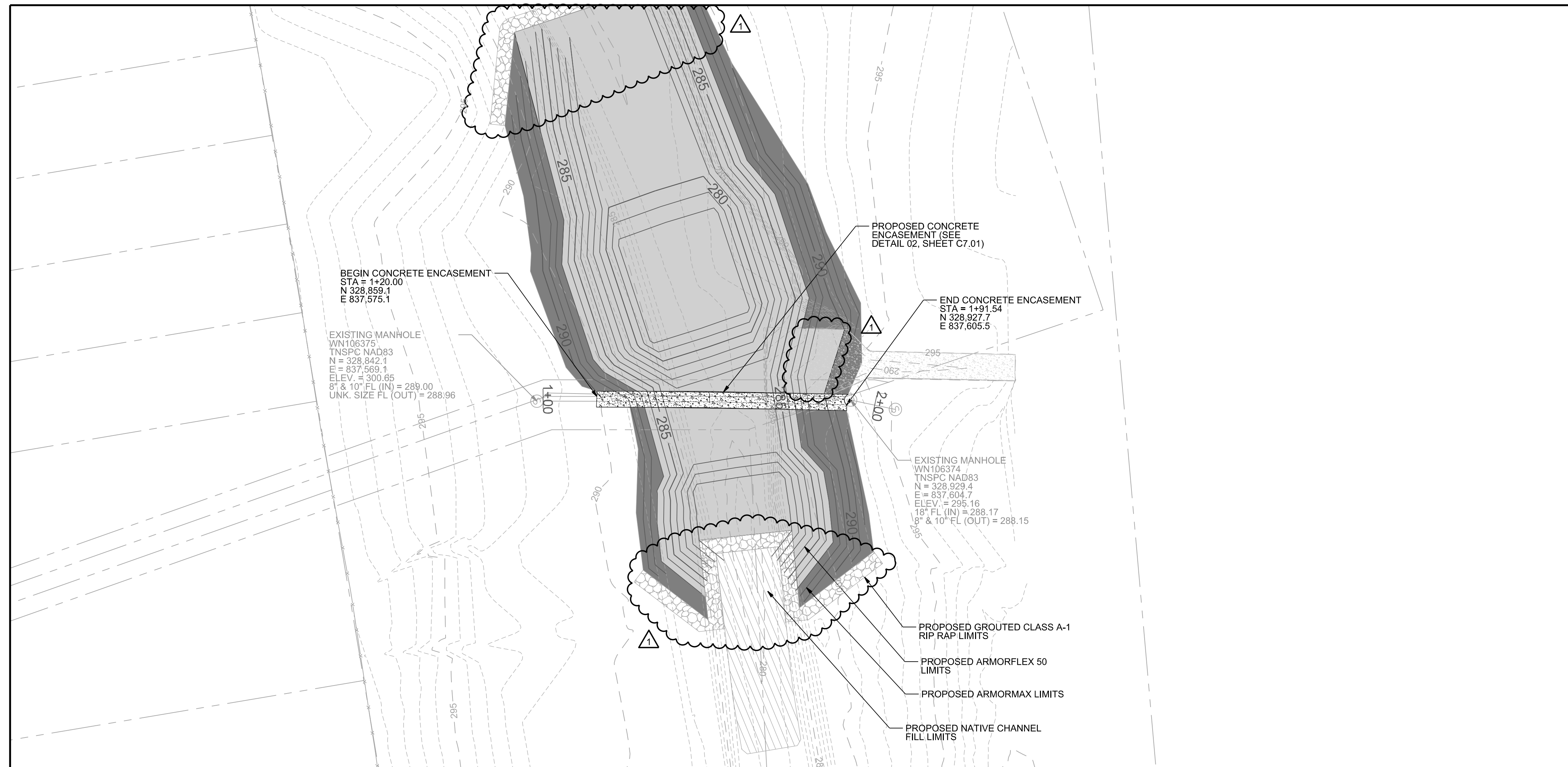
**EROSION-CONTROL-PLAN-PHASE-II
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE**

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED

FLETCHER CREEK EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

8/19/2020 3:22:30 PM MTPerkins



SANITARY SEWER NOTES:

- ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF SARP10.
- AFTER COMPLETION OF THE SANITARY SEWER, THE CONTRACTOR IS RESPONSIBLE FOR THE TELEVISIONING OF THE LINES PRIOR TO FINAL ACCEPTANCE. THE VIDEOTAPING MUST BE COORDINATED WITH THE SARP10. ALL COSTS WILL BE BORNE BY THE CONTRACTOR.
- UPON COMPLETION OF CONSTRUCTION OF SEWER IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE SARP10 WITH A COMPLETE SET OF AS-BUILT PLANS ON MOIST ERASABLE MYLARS IN REVERSE AND IN DIGITAL (*.DWG) FORMAT. SEWER PLANS SHALL BE SEALED BY A LICENSED PROFESSIONAL ENGINEER OR A REGISTERED LAND SURVEYOR.
- COST FOR HANDLING LIVE SANITARY SEWER FLOW TO BE MERGED INTO THE TOTAL PRICE BID AND NO ADDITIONAL PAYMENT WILL BE ALLOWED. FLOW MUST BE BYPASSED INTO OTHER LIVE SANITARY SEWER MANHOLE.
- CONTRACTOR TO PROTECT EXISTING SANITARY SEWER LINES DURING THE INSTALLATION OF THE GROUDED RIP RAP AND CONCRETE ENCASUREMENT. ANY DAMAGE TO THE EXISTING LINES WILL BE REPLACED AT THE CONTRACTORS EXPENSE.

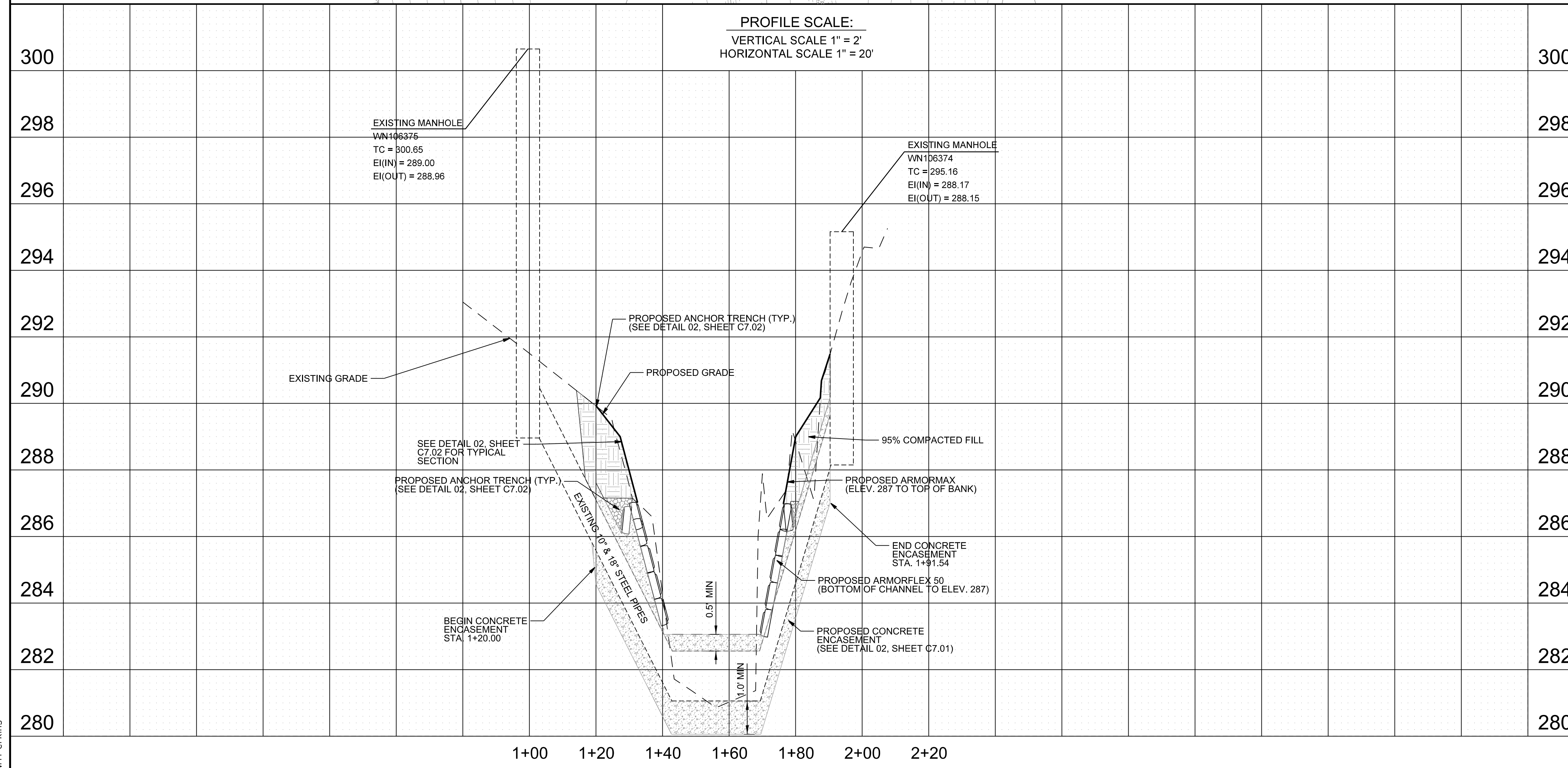
FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0316G, DATED FEBRUARY 06, 2013. THE NEAREST BFE IS 290.5.

STREAM WATER FLOW WILL BE 6138 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

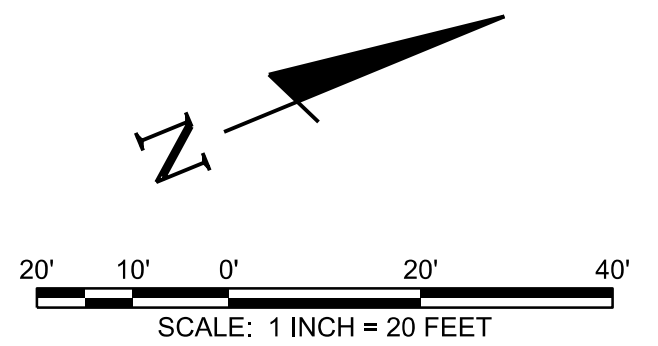
BENCHMARK NOTE:

CITY OF MEMPHIS BENCHMARK #130 - CHIMNEYROCK BLVD. & KINGS CROSS LN; CITY MONUMENT IS LOCATED ON THE SE COR., AT P.I. OF FRONT OF S/WALK AT S. END OF H/CAP RAMP, 4' NE OF A MTL. ST. SIGN, 50' W. OF NW COR. HOUSE # 8391. ELEV. 308.05



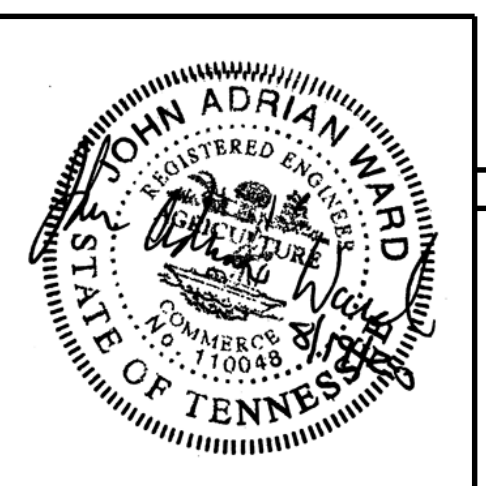
LEGEND:

- EXISTING MINOR CONTOUR
- 250- EXISTING MAJOR CONTOUR
- SA- EXISTING SANITARY SEWER LINE
- (S) EXISTING MANHOLE
- PROPOSED MINOR CONTOUR
- 250- PROPOSED MAJOR CONTOUR
- - - - - PROPOSED SEWER CENTERLINE
- N
E COORDINATE
- [Pattern] PROPOSED GROUDED CLASS A-1 RIP RAP LIMITS
- [Pattern] PROPOSED NATIVE CHANNEL FILL LIMITS
- [Pattern] PROPOSED ARMORFLEX 50 LIMITS
- [Pattern] PROPOSED ARMORMAX LIMITS



811 Know what's below
Call before you dig.
811
www.call811.com

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



FLETCHER CREEK EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK
SHEET 6 OF 11

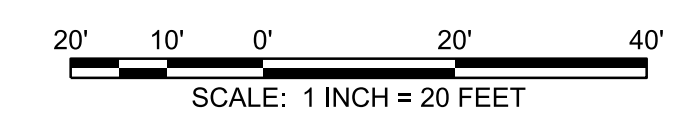
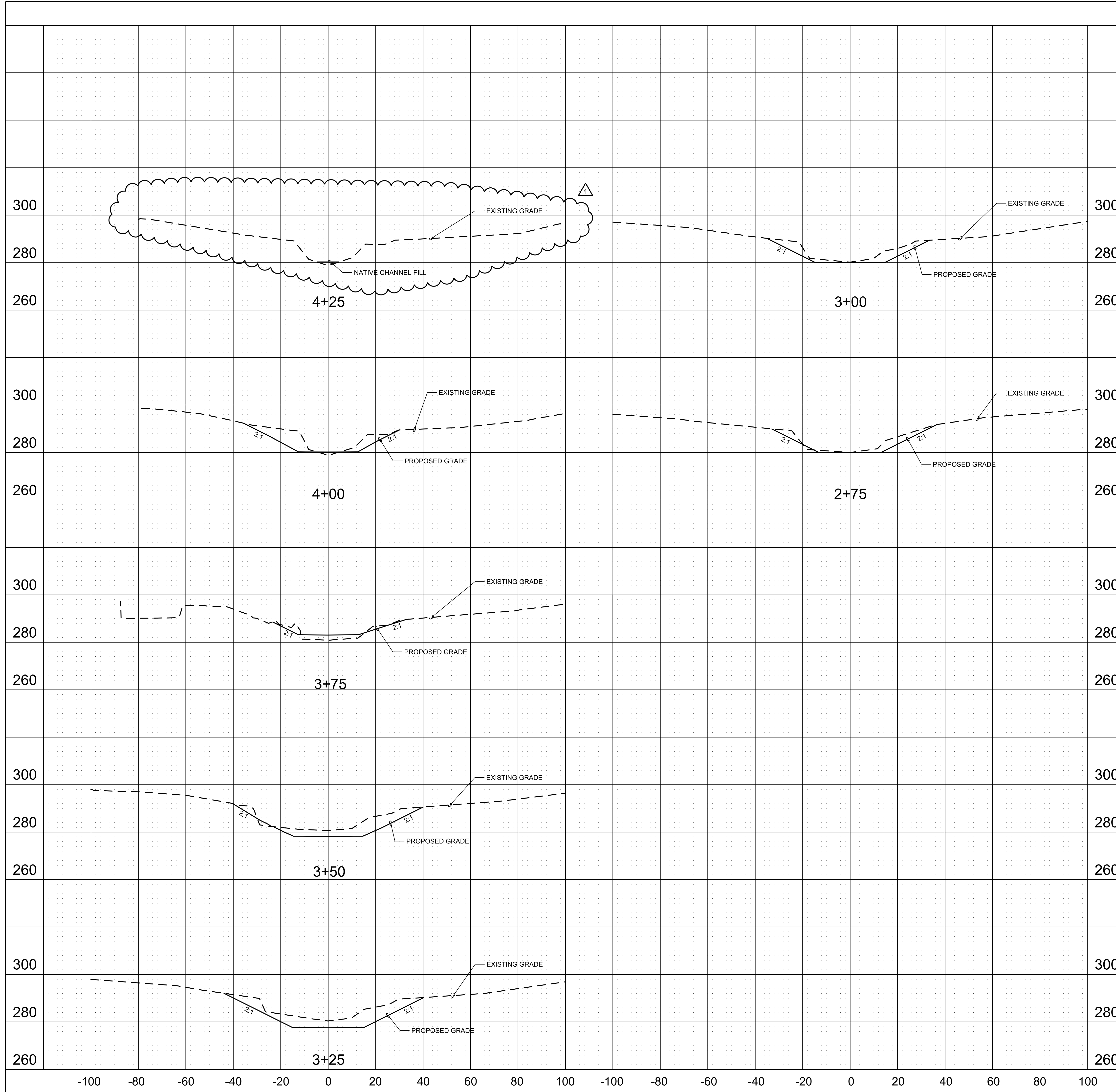
UTILITY-PLAN-AND-PROFILE
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED

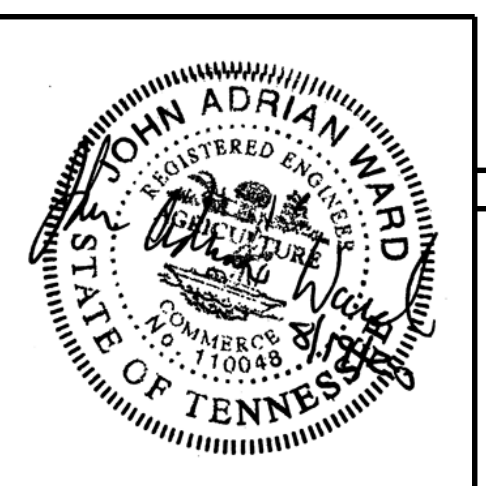
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

C3.01

8/19/2020 3:15:13 PM MTPerkins



REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



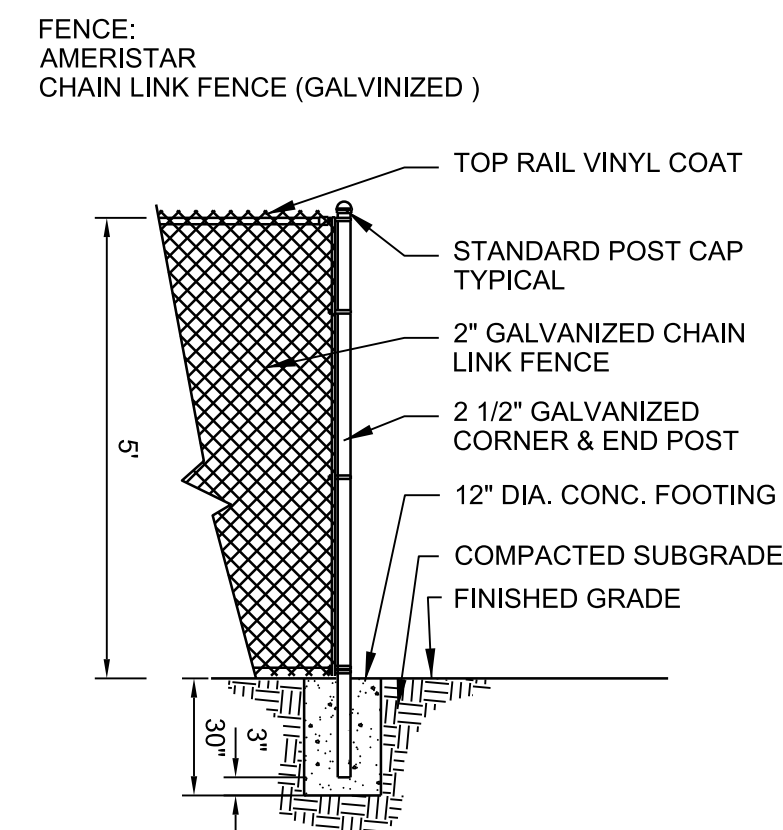
SEWER-BASIN: WN-10
 DRAIN-BASIN: FLETCHER-CREEK
 SHEET 7 OF 11

**CROSS-SECTIONS
 FLETCHER-CREEK-EAST
 BANK-STABILIZATION/GRADE-CONTROL
 CORDOVA, TENNESSEE**

FLETCHER CREEK EAST
 BANK STABILIZATION/GRADE CONTROL
 CORDOVA, TENNESSEE
 DEVELOPER: SARP10
 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

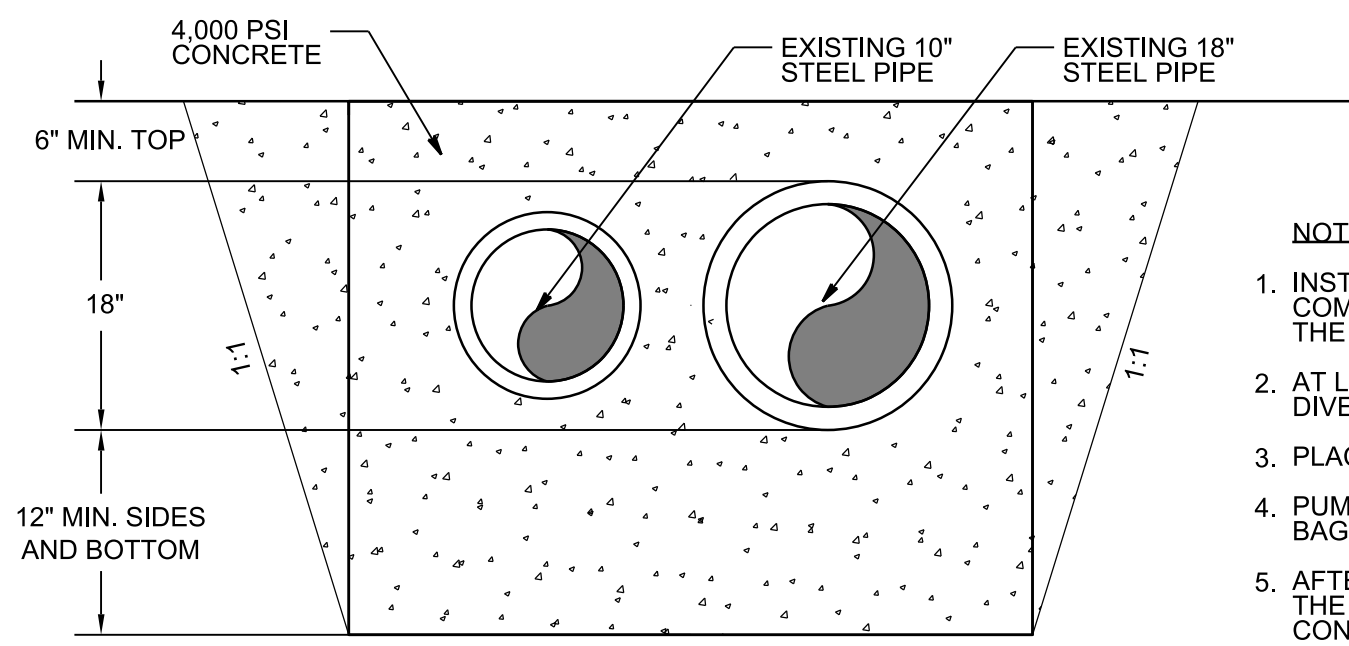
SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
 DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
 REVIEWED: _____
 DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

8/19/2020 3:22:52 PM MTPerkins



NOTE:
COST TO RESET POST TO BE COVERED UNDER "SITE PREPARATION AND RESTORATION".

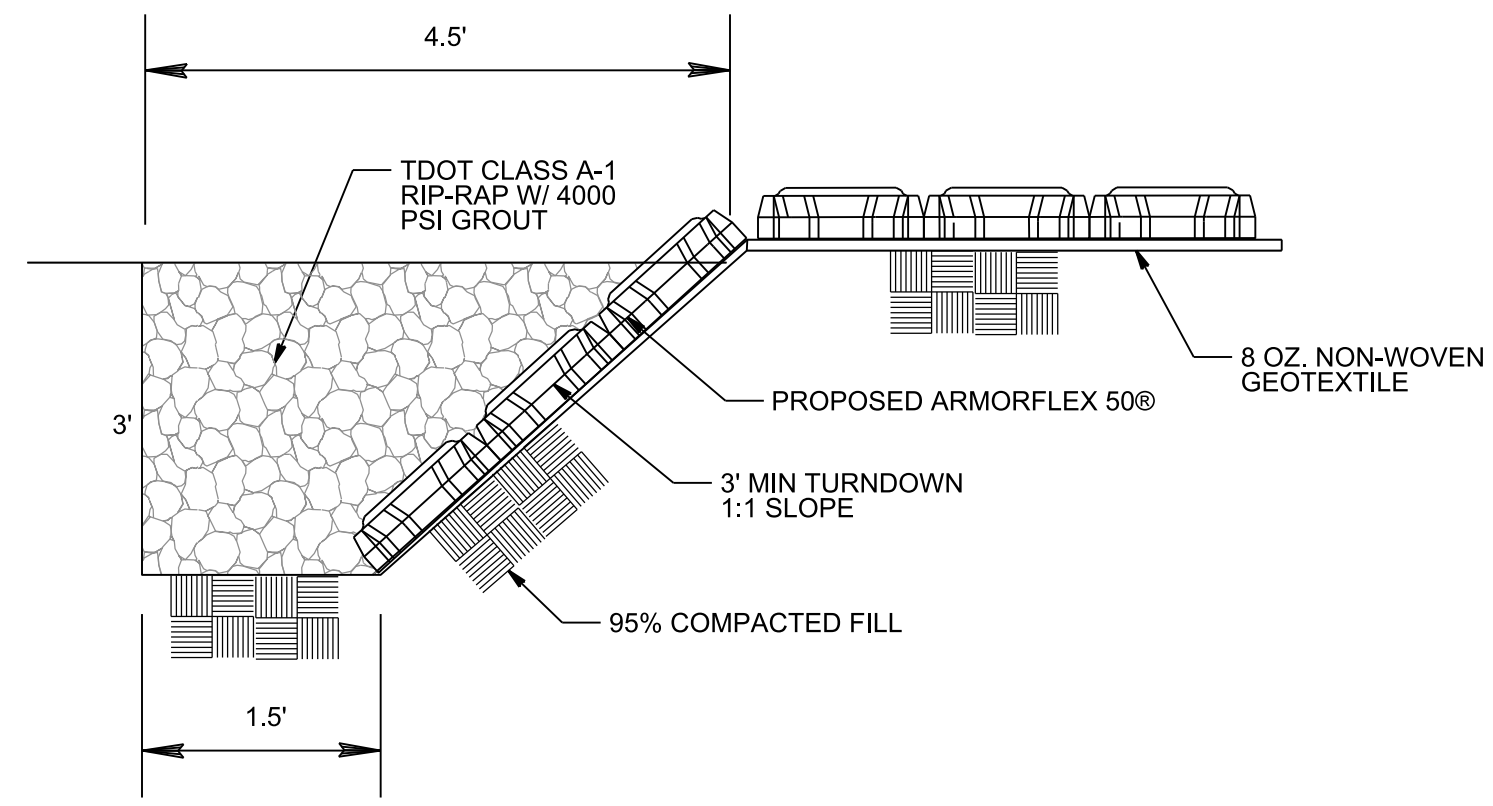
01 CHAIN LINK FENCE DETAIL
C7.01 SCALE: N.T.S.



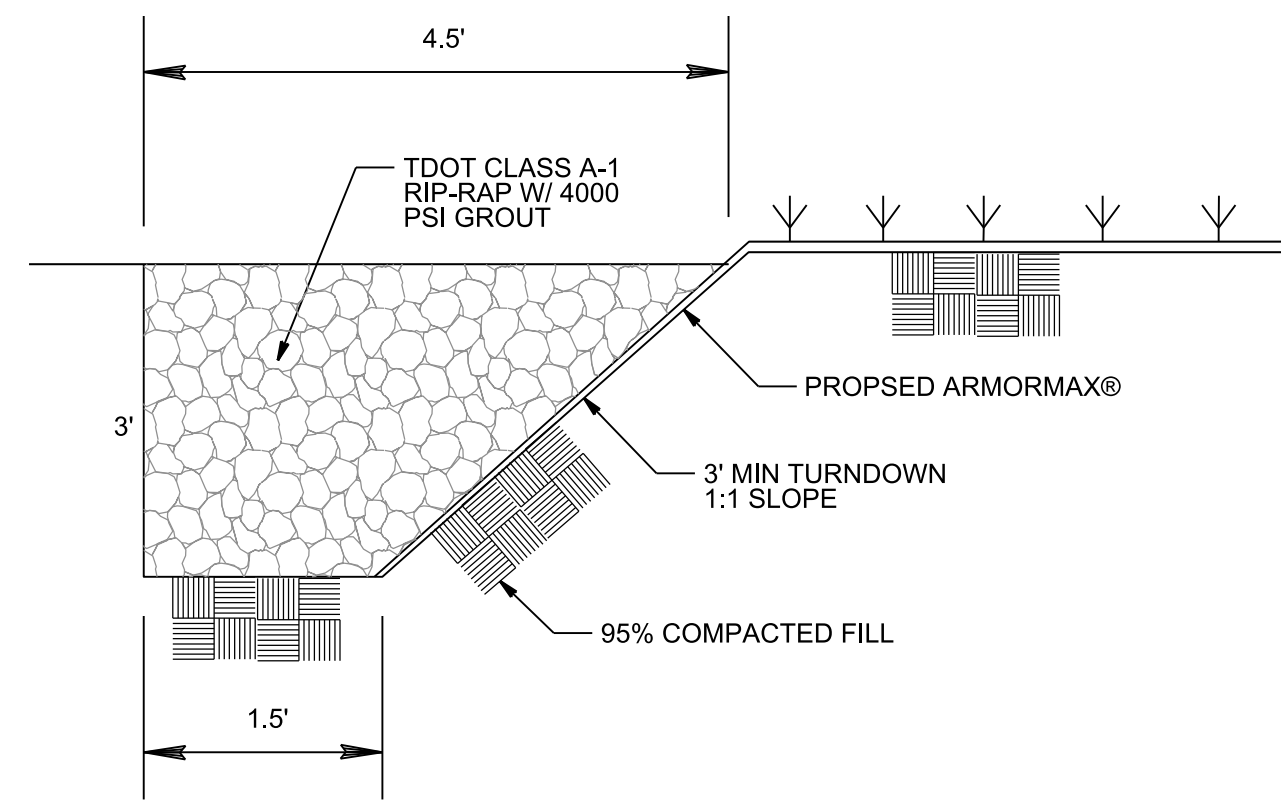
- NOTES:
1. INSTALL ALL EROSION CONTROL NECESSARY TO COMPLETE CROSSING PRIOR TO EXCAVATION IN THE STREAM CHANNEL.
 2. AT LOW FLOW CONDITIONS, BYPASS PUMP OR DIVERT STREAM FLOW AROUND EXCAVATION.
 3. PLACE SILT FENCE ON EACH SIDE OF CHANNEL.
 4. PUMP ANY TRAPPED WATER TO A SEDIMENT FILTER BAG.
 5. AFTER INSTALLING PIPE AND CONCRETE, CONSTRUCT THE CHANNEL TO THE PROPOSED GRADES AND CONTOURS AND STABILIZE WITH GROUTED RIP-RAP.

SECTION

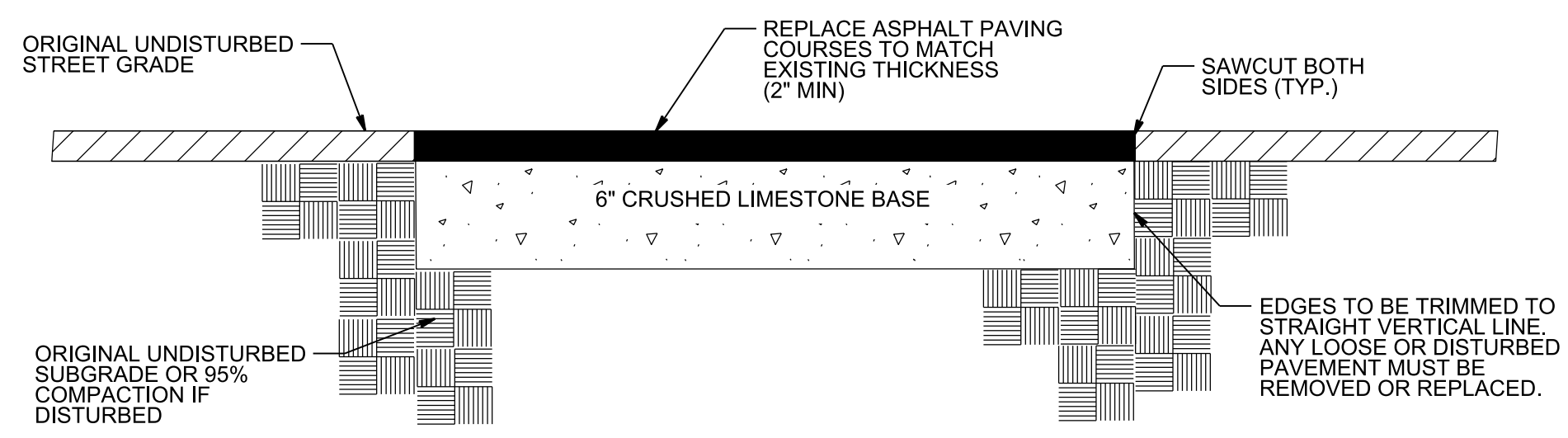
02 CONCRETE ENCASEMENT DETAIL
C7.01 SCALE: N.T.S.



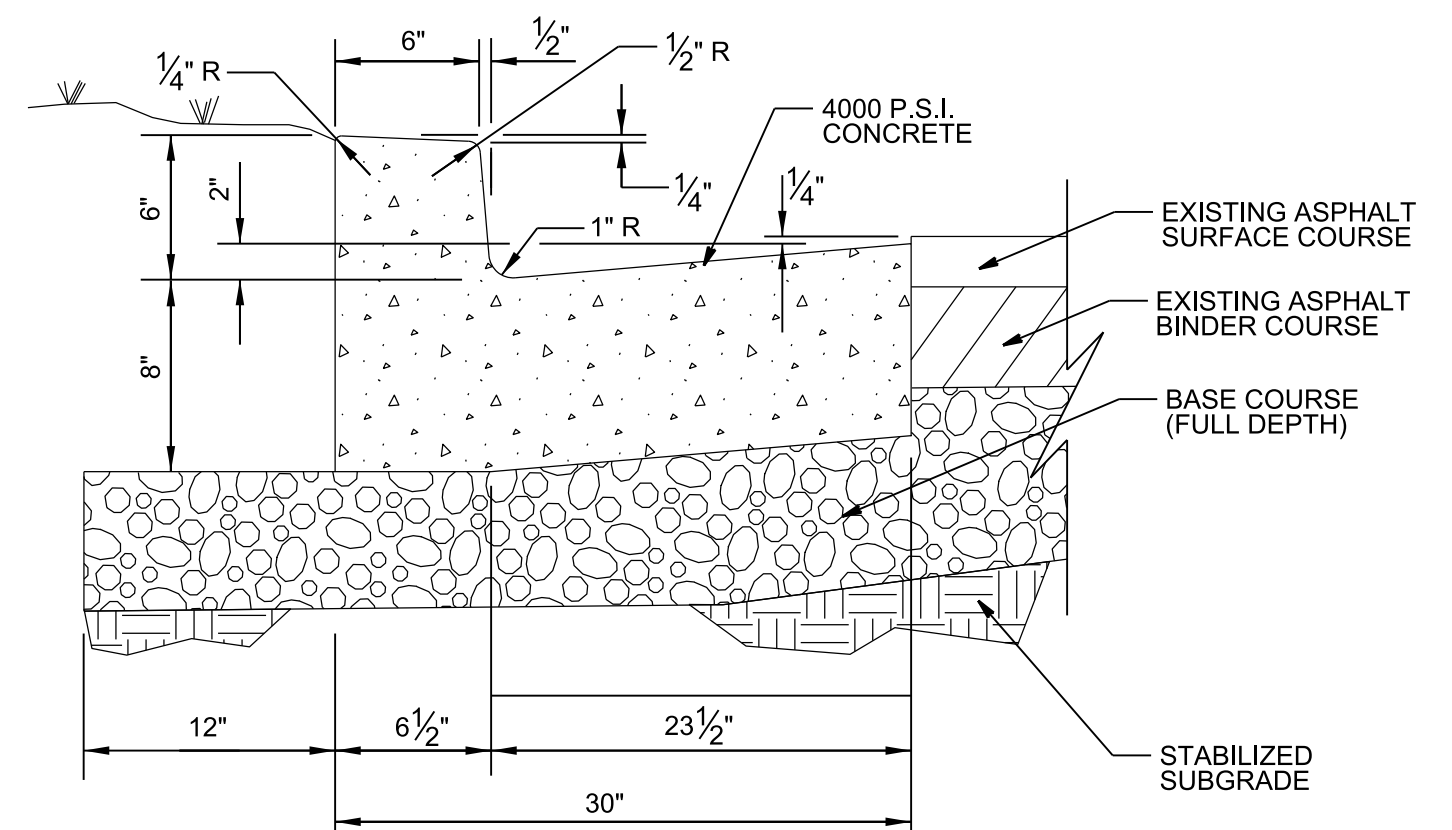
TYPICAL ARMORFLEX 50 ANCHOR TRENCH - UPSTREAM & DOWNSTREAM EDGES
C7.01 SCALE: N.T.S.



TYPICAL ARMORMAX ANCHOR TRENCH - UPSTREAM & DOWNSTREAM EDGES
C7.01 SCALE: N.T.S.

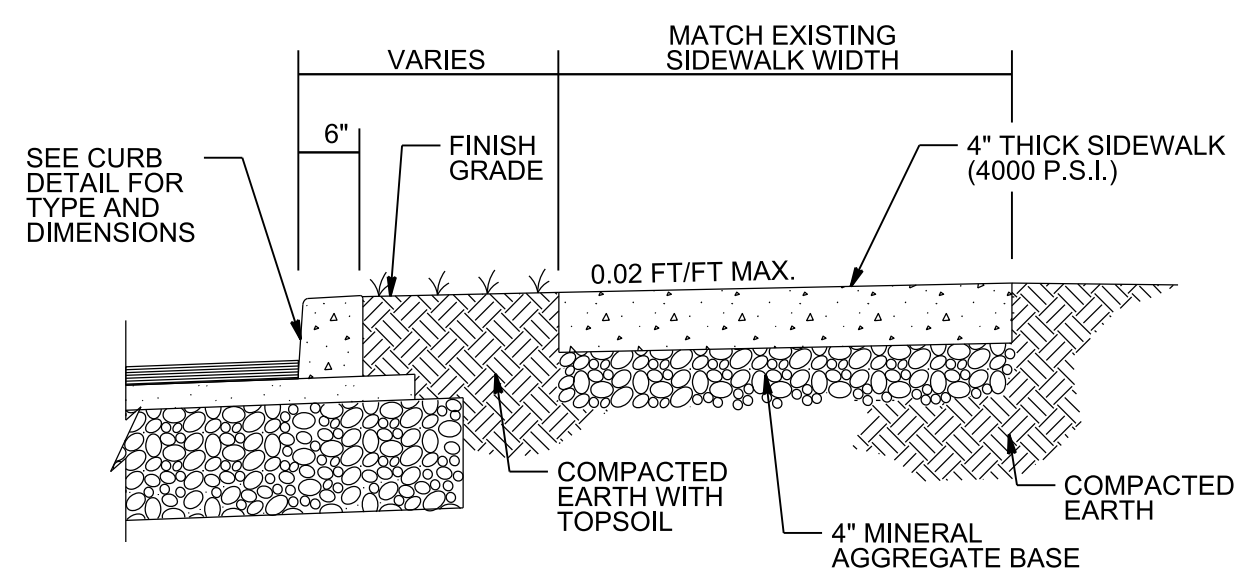


05 TYPICAL PAVEMENT REPAIR DETAIL
C7.01 SCALE: N.T.S.



- NOTES:
1. PREFORMED 1/2" EXPANSION JOINTS SHALL BE EQUALLY SPACED AT 30" MAX. CENTERS, WITH 1/4" CONTRACTION JOINTS EQUALLY SPACED AT 10" MAX. CENTERS BETWEEN EXPANSION JOINTS.
 2. EXACT CURB DIMENSIONS MAY BE ALTERED SLIGHTLY TO FIT STANDARD EXTRUDED CURB MACHINES, BUT SUCH VARIANCES MUST BE APPROVED BY THE ENGINEER.
 3. SEE PAVING DETAILS FOR PAVEMENT SECTIONS, SUBBASE, SUBGRADE, AND COMPACTION REQUIREMENTS.

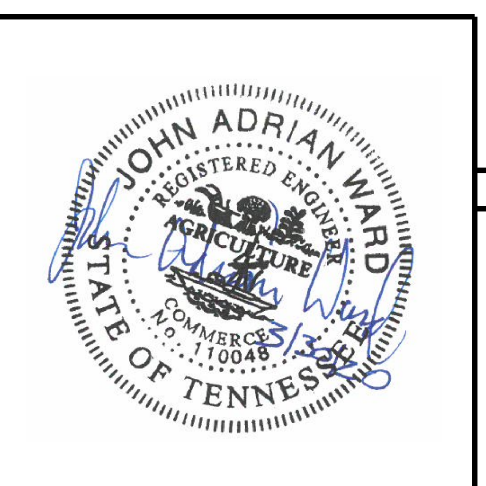
06 TYPICAL CURB & GUTTER REPAIR DETAIL
C7.01 SCALE: N.T.S.



- NOTES:
1. PREFORMED 1/2" EXPANSION JOINTS SHALL BE EQUALLY SPACED AT 24" MAX. CENTERS, WITH 1/4" CONTRACTION JOINTS EQUALLY SPACED AT 8" MAX. CENTERS BETWEEN EXPANSION JOINTS.

07 TYPICAL SIDEWALK REPAIR DETAIL
C7.01 SCALE: N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



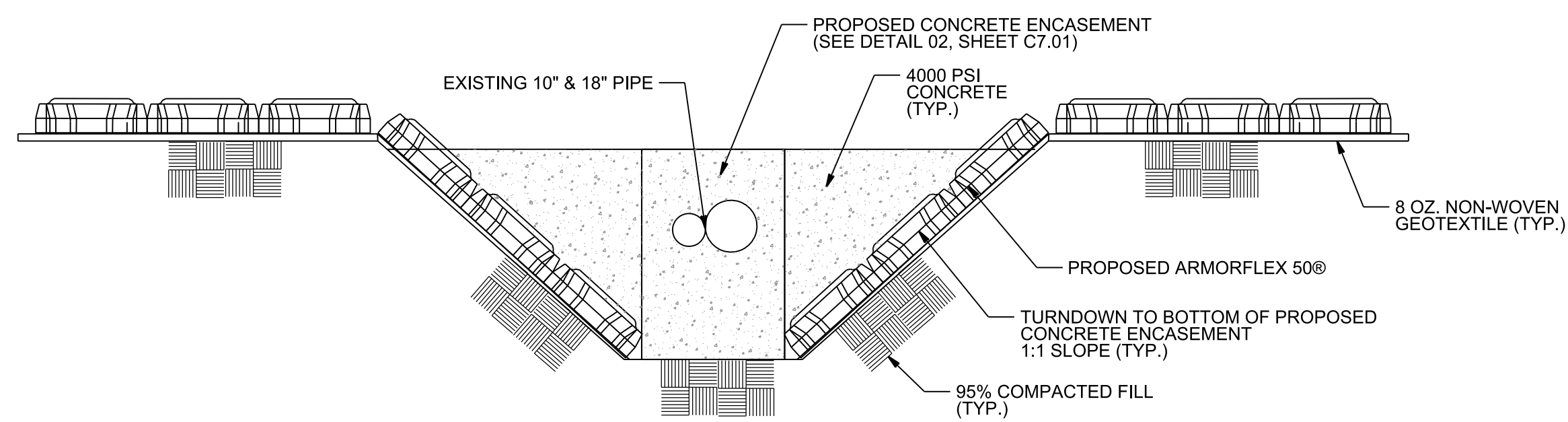
SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK
SHEET 8 OF 11
C7.01

CIVIL-DETAILS
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE

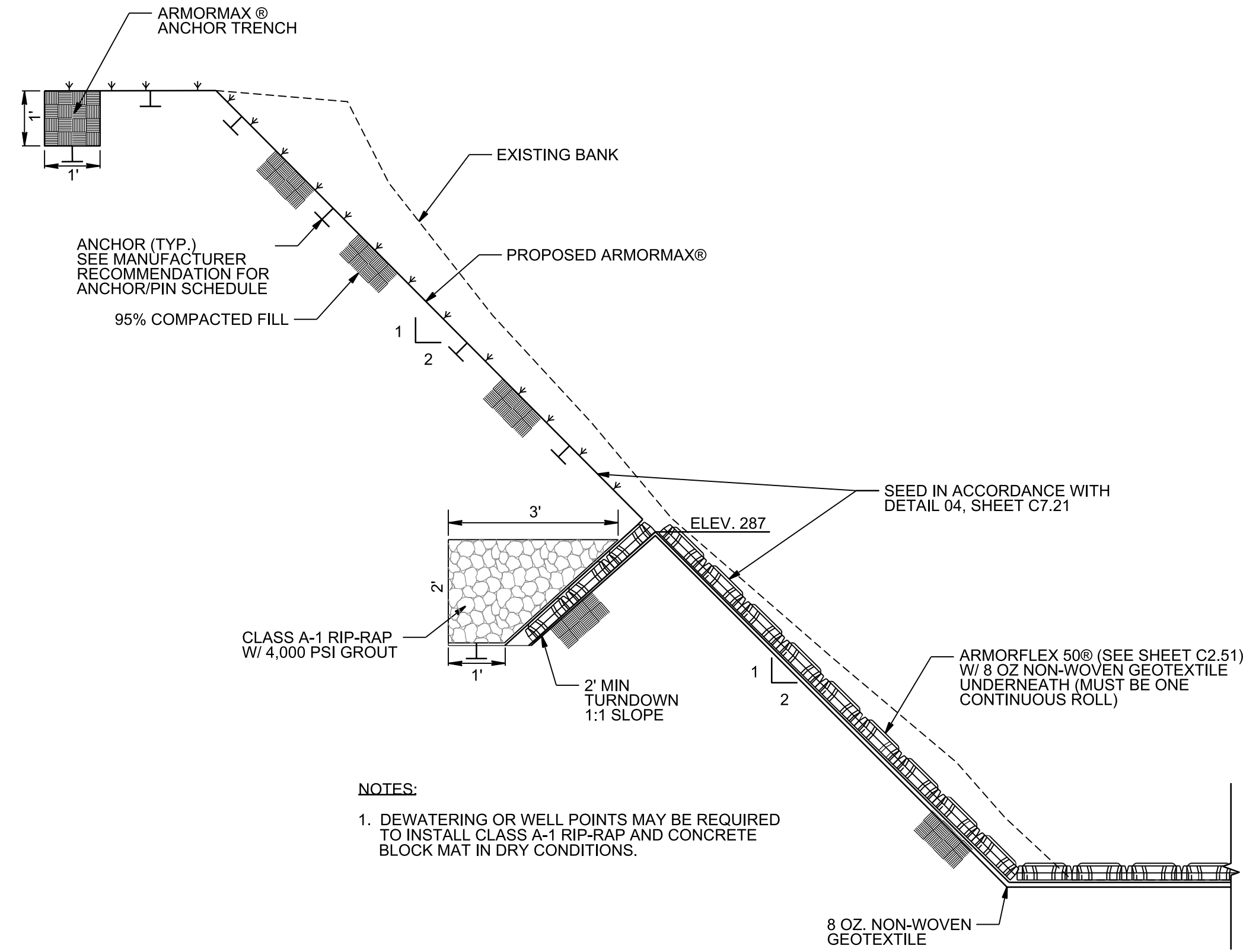
FLETCHER CREEK-EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020 3:59:25 PM MTPerkins



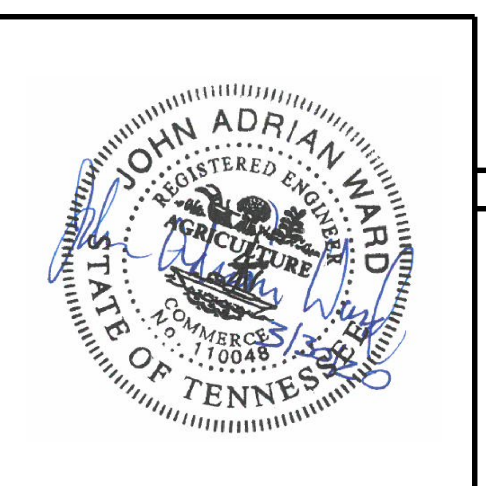
01
C7.02 **TYPICAL ARMORFLEX 50 ANCHOR TRENCH - CONCRETE ENCASEMENT**
SCALE: N.T.S.



02
C7.02 **TYPICAL SECTION - ARMORMAX & ARMORFLEX 50**
SCALE: N.T.S.

NOTES:
1. DEWATERING OR WELL POINTS MAY BE REQUIRED TO INSTALL CLASS A-1 RIP-RAP AND CONCRETE BLOCK MAT IN DRY CONDITIONS.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



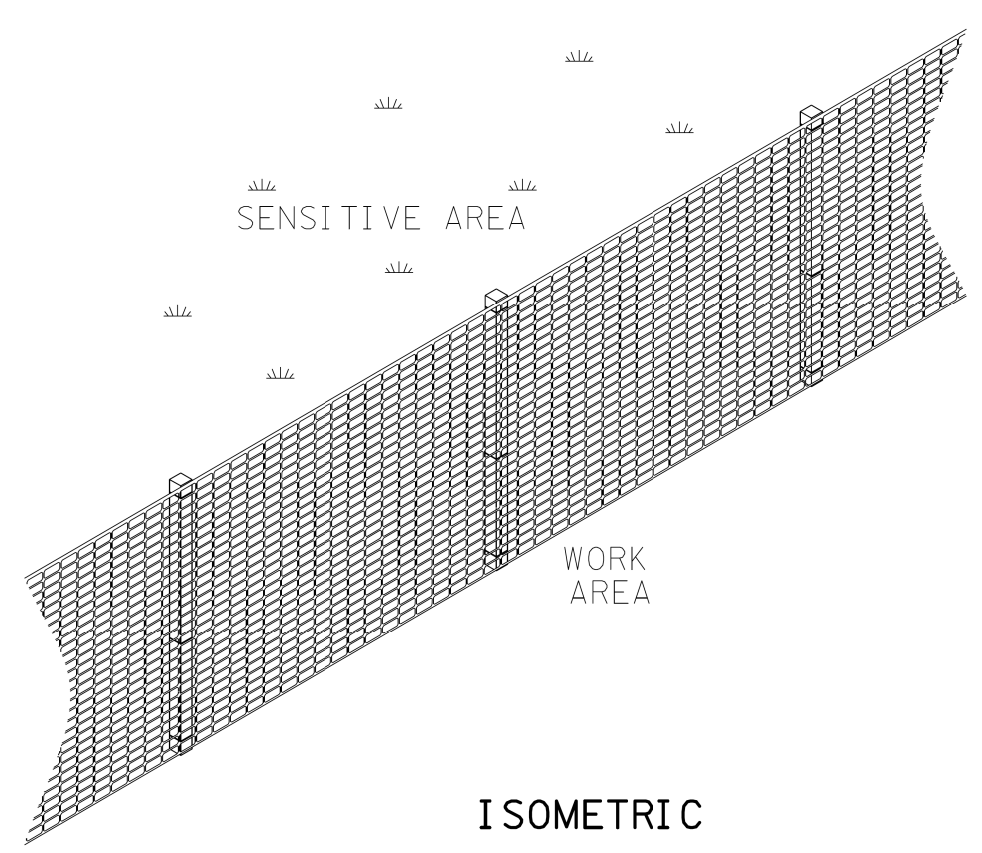
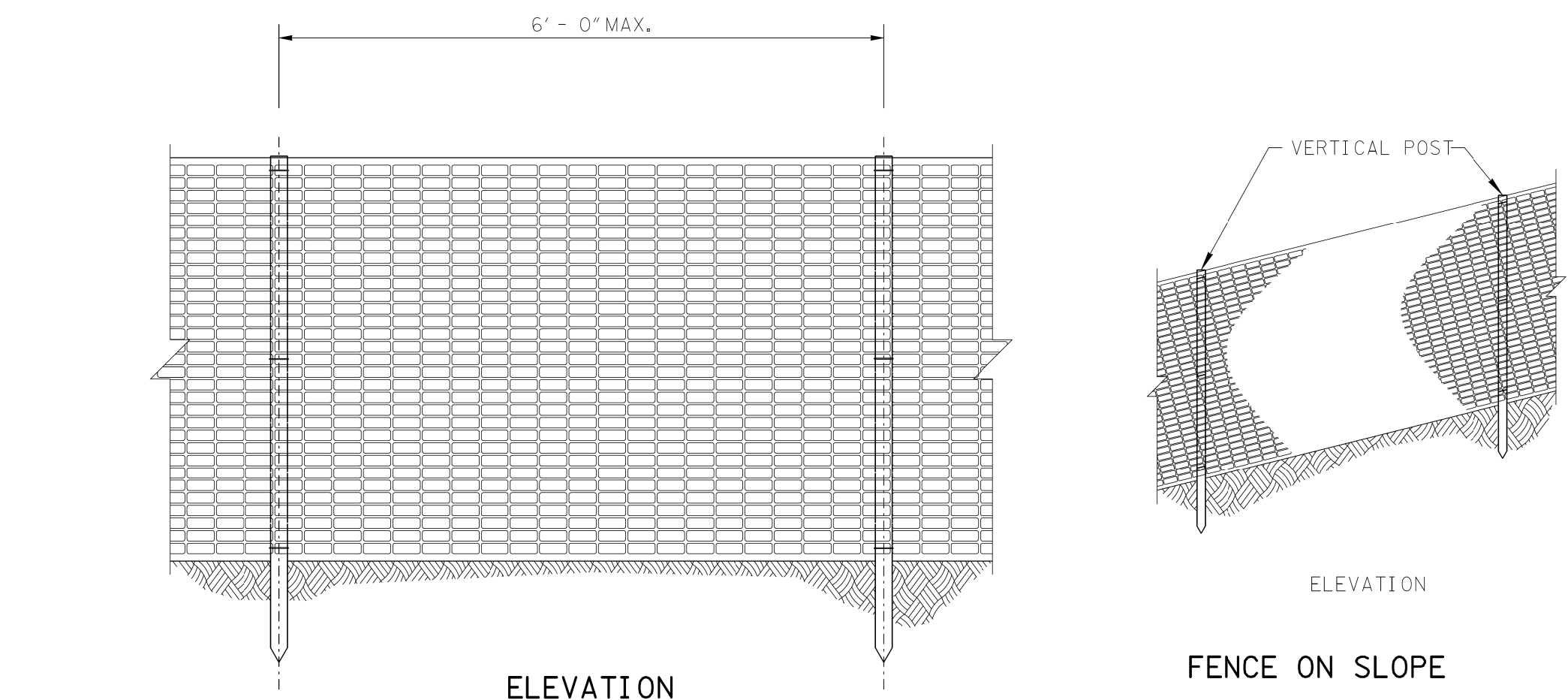
SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK
C7.02

SHEET 9 OF 11
CIVIL-DETAILS
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE

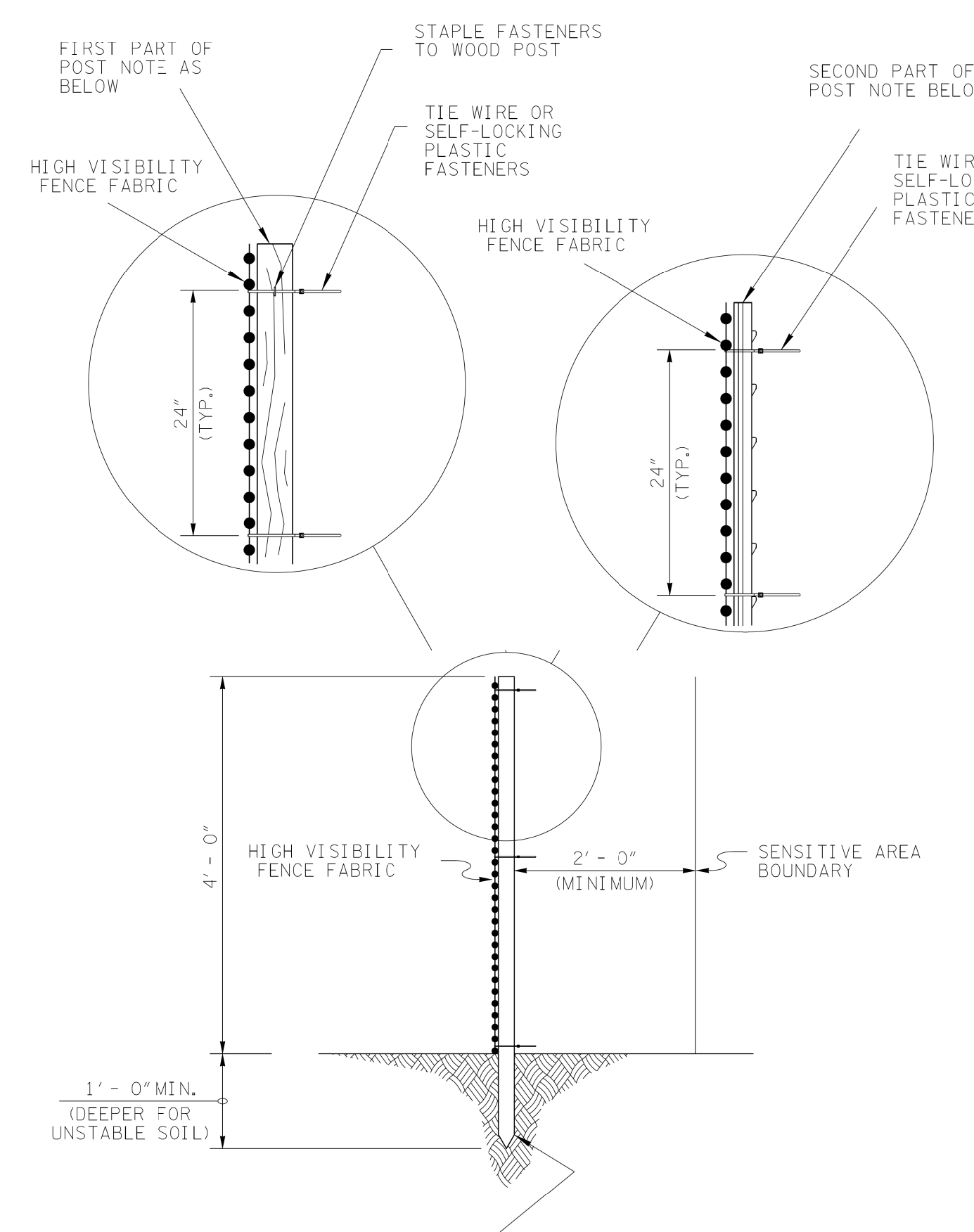
FLETCHER CREEK-EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

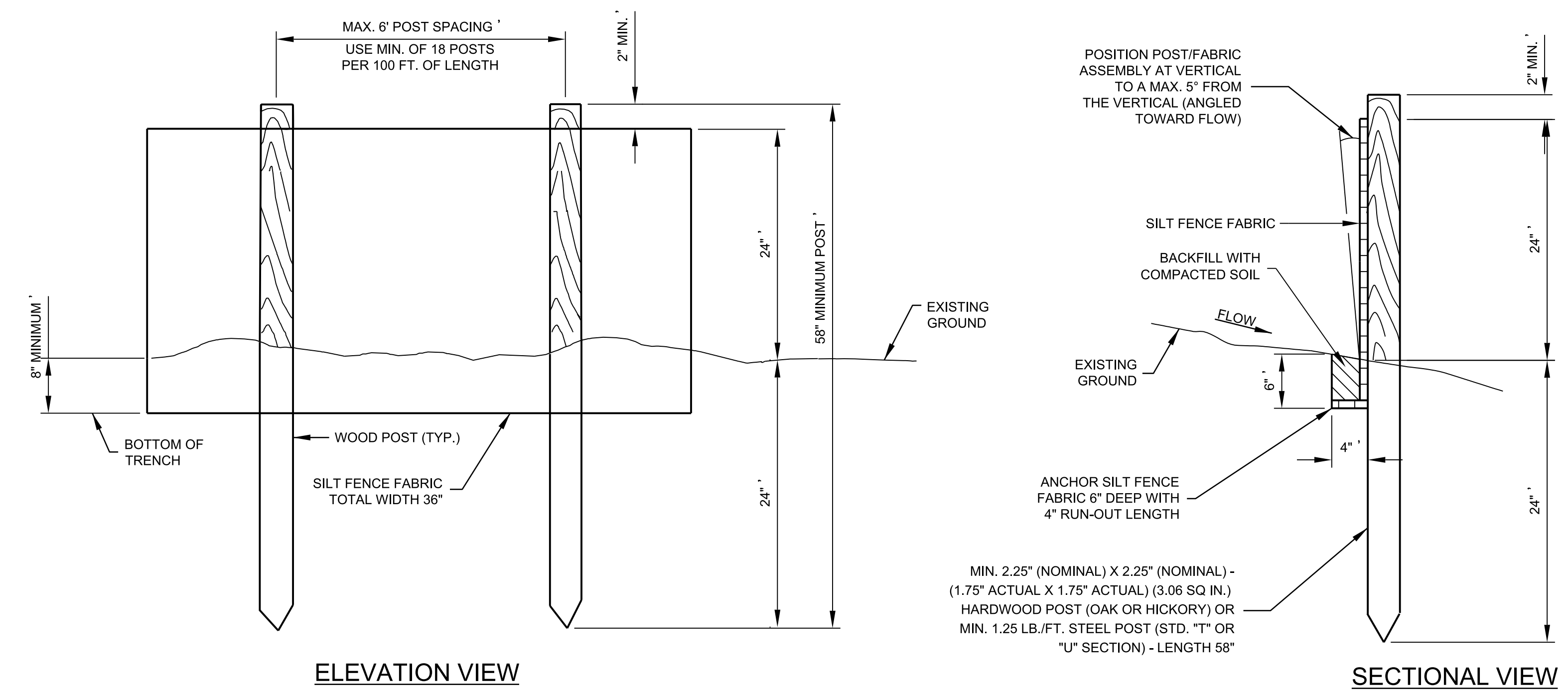
2/13/2020
3:59:26 PM
MTPerkins



- GENERAL NOTES**
1. HIGH VISIBILITY FENCE IS INTENDED TO BE PLACED TO PREVENT DISTURBANCE OF SENSITIVE AREAS, THEIR BUFFERS, AND OTHER AREAS REQUIRED TO BE LEFT UNDISTURBED DURING CONSTRUCTION. IT MAY ALSO BE USED TO MARK APPROVED CLEARING LIMITS AND TO CONTROL VEHICLE ACCESS TO AND ON THE PROJECT SITE.
 2. HIGH VISIBILITY FENCE FABRIC SHALL BE MACHINED PRODUCED ORANGE COLORED MESH MANUFACTURED FROM POLYPROPYLENE OR POLYETHYLENE. IT SHALL BE FULLY STABILIZED ULTRAVIOLET RESISTANT.
 3. HIGH VISIBILITY FENCE FABRIC MAY BE MADE FROM RECYCLED MATERIALS. MATERIALS SHALL NOT CONTAIN BIODEGRADABLE FILLER MATERIALS THAT CAN DEGRADE THE PHYSICAL OR CHEMICAL CHARACTERISTICS OF THE FINISHED FABRIC.
 4. HIGH VISIBILITY FENCE FABRIC SHALL HAVE A MINIMUM 4 FOOT WIDTH AND SHALL BE FURNISHED IN ONE CONTINUOUS WIDTH AND SHALL NOT BE SPLICED TO CONFORM TO THE SPECIFIED WIDTH DIMENSION.
 5. STEEL POST SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB./FT. POST SHALL BE HOT-DIPPED GALVANIZED OR PAINT. STEEL POST MAY BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. IF POSTS AND ANCHOR PLATES USED THEY SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.
 6. HIGH VISIBILITY FENCE FABRIC SHALL BE FASTENED TO THE POST USING TIE WIRE OR SELF-LOCKING PLASTIC FASTENERS WITH A MAXIMUM FASTENERS SPACING OF 2 FEET. WHEN WOOD POSTS ARE USED THE FASTENERS SHALL BE STAPLED TO THE POST.
 7. HIGH VISIBILITY FENCE THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONSTRUCTORS EXPENSE ON THE SAME DAY THE DAMAGE OCCURS.
 8. HIGH VISIBILITY FENCE SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:
707-08.11 HIGH VISIBILITY CONSTRUCTION FENCE, PER LF
PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION MAINTENANCE, AND REMOVAL OF HIGH VISIBILITY FENCE.



01 CONSTRUCTION FENCE DETAIL
C7.21 SCALE: N.T.S.



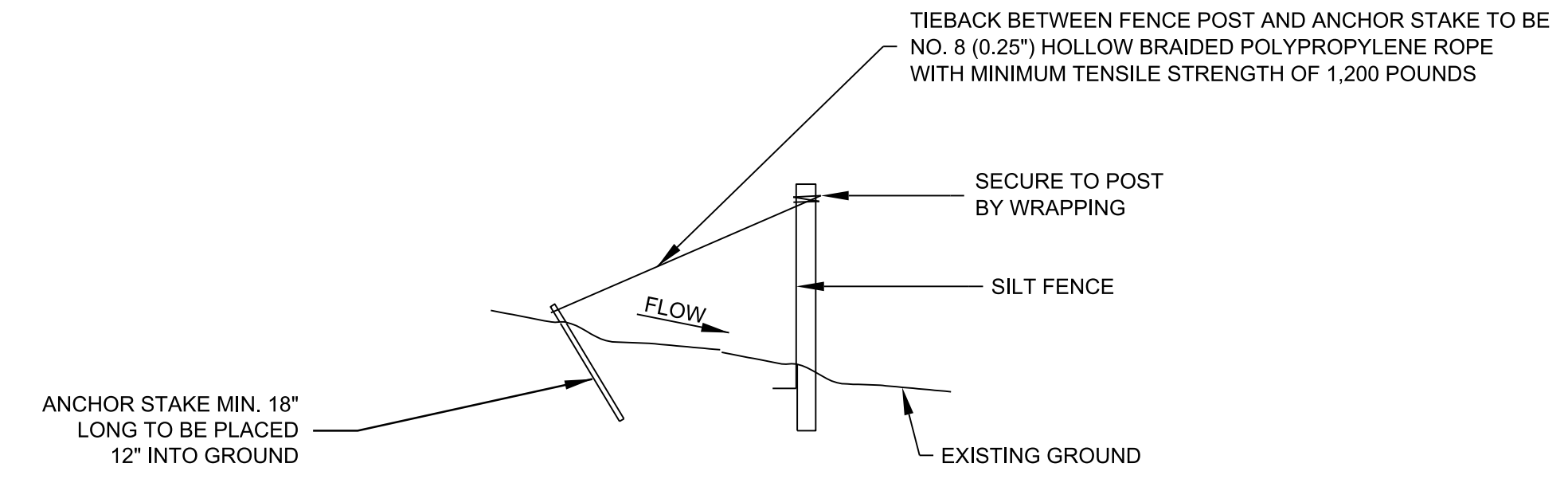
ELEVATION VIEW

SECTIONAL VIEW

MIN. 2.25" (NOMINAL) X 2.25" (NOMINAL) - (1.75" ACTUAL X 1.75" ACTUAL) (3.06 SQ IN.)
HARDWOOD POST (OAK OR HICKORY) OR
MIN. 1.25 LB./FT. STEEL POST (STD. "T" OR "U" SECTION) - LENGTH 58"

SILT FENCE NOTES

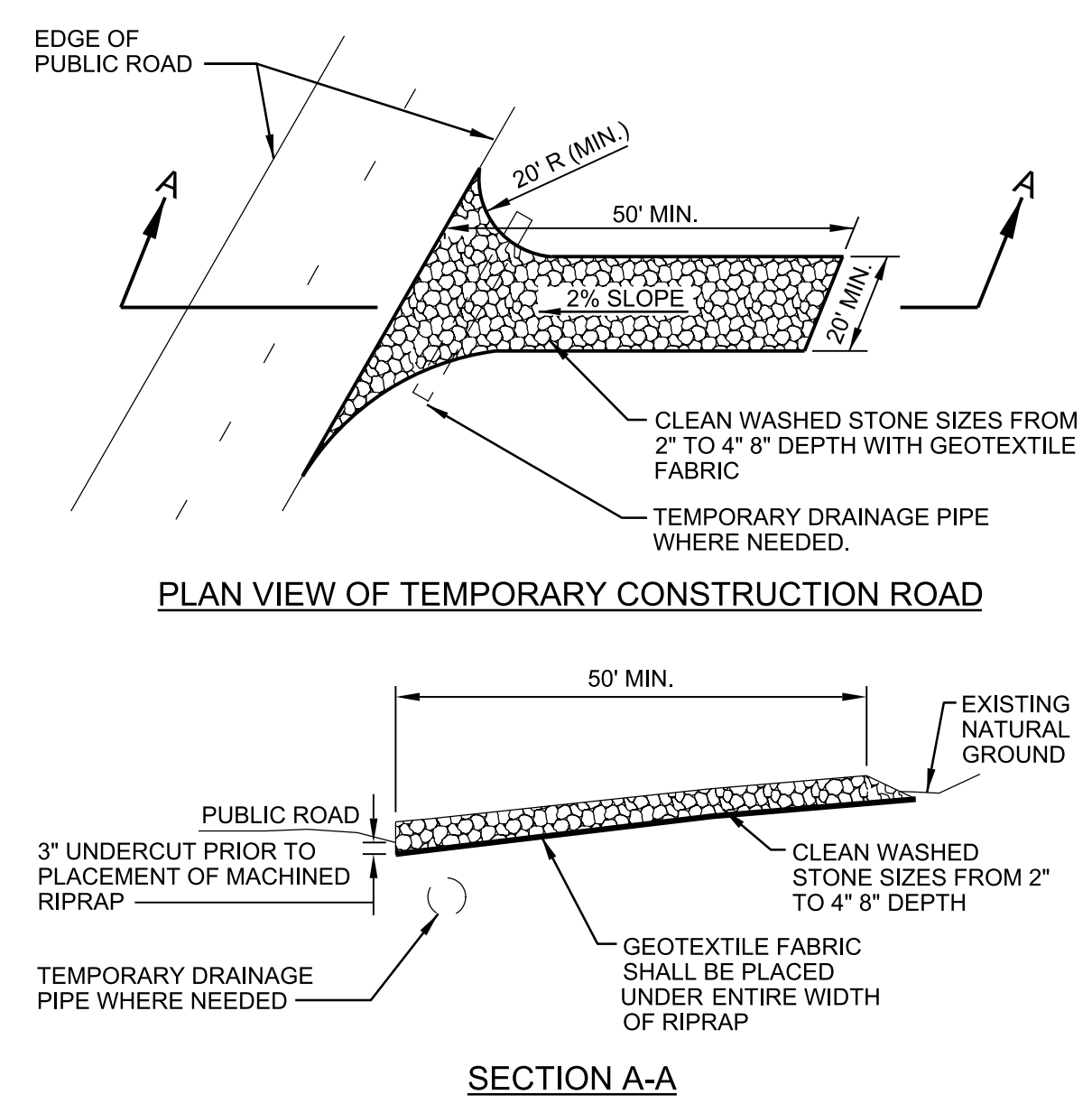
1. FILTER CLOTH SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION: M288, SEDIMENT CONTROL, SELF SUPPORTED.
2. THE FILTER MATERIAL SHALL BE STAPLED TO THE STAKES. HEAVY DUTY WIRE STAPLES WITH 1/2 INCH WIDTH SHALL BE USED AND EVENLY SPACED WITH AT LEAST FOUR PER POST FOR SILT FENCES AND THREE (3) PER POST FOR FILTER BARRIERS. FILTER MATERIAL SHALL NOT BE STAPLED TO EXISTING TREES.
3. MINIMUM (2" NOMINAL X 2" NOMINAL) - (1.5" ACTUAL X 1.5" ACTUAL) (2.25 SQ. IN.) HARDWOOD POST (OAK OR HICKORY) - LENGTH 48" OR MINIMUM 1.33 LB./FT. STEEL POST (STD. OR U SECTION).
4. WHEN STEEL POSTS ARE USED THEY SHALL HAVE A PROTECTION FOR FASTENING WIRE TO THEM. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST FIVE PER POST.
5. BINDING WIRE OR TWINE SHALL REMAIN ON STRAW BALES.
6. PLACE STRAW BALES ON ALL DOWN STREAM SIDES OF ALL SILT FENCES.
7. STRAW BALES TO BE PLACED END TO END UP AGAINST THE SILT FENCE.
8. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN 12" DEEP.
9. INSTALL FENCE ALONG CONTOUR (NEVER UP AND DOWN SLOPE).
10. SILT FENCE SHALL BE MAINTAINED UNTIL CONTRIBUTING AREA IS STABILIZED WITH PAVEMENT OR VEGETATION. ALL FENCING SHALL BE REMOVED AFTER STABILIZATION AND DISPOSED OF IN AN APPROVED LANDFILL.



SILT FENCE TIEBACK FOR STEEL POSTS OR WOOD POSTS

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS, COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE)

02 SILT FENCE DETAIL
C7.21 SCALE: N.T.S.



03 TEMPORARY CONSTRUCTION EXIT DETAIL
C7.21 SCALE: N.T.S.

CONSTRUCTION SPECIFICATIONS

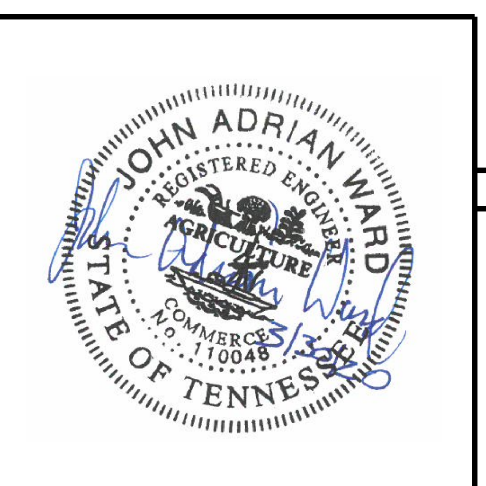
1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 20 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FABRIC SHALL BE 12 OZ./S.Y. NON-WOVEN.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

PERMANENT COVER SEEDING MIXTURES			
KIND	GROUP A % BY WEIGHT	GROUP B % BY WEIGHT	GROUP C % BY WEIGHT
LESPEDEZA (COMMON OR KOREAN)	20	-	-
SERICEA LESPEDEZA	15	-	50
KY. 31 FESCUE	40	55	30
ENGLISH RYE	15	20	15
WHITE DUTCH CLOVER	5	5	5
WEEPING LOVE GRASS	5	5	-
REDTOP	-	15	-
TOTAL	100	100	100

TIME OF SOWING & SEEDING MIXTURE REQUIRED	
FEBRUARY 1 TO AUGUST 1	USE GROUP A ONLY
MONTH OF AUGUST ONLY	USE EITHER GROUP A OR GROUP B
SEPTEMBER 1 TO DECEMBER 1	USE GROUP B ONLY
DECEMBER 1 TO FEBRUARY 1	DO NOT SOW ANY SEED
FEBRUARY 1 TO DECEMBER 1	USE GROUP C ONLY WHEN SPECIFIED ON PLANS OR CONTRACT DOCUMENTS

04 COVER SEEDING MIXTURES
C7.21 SCALE: N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK

C7.21

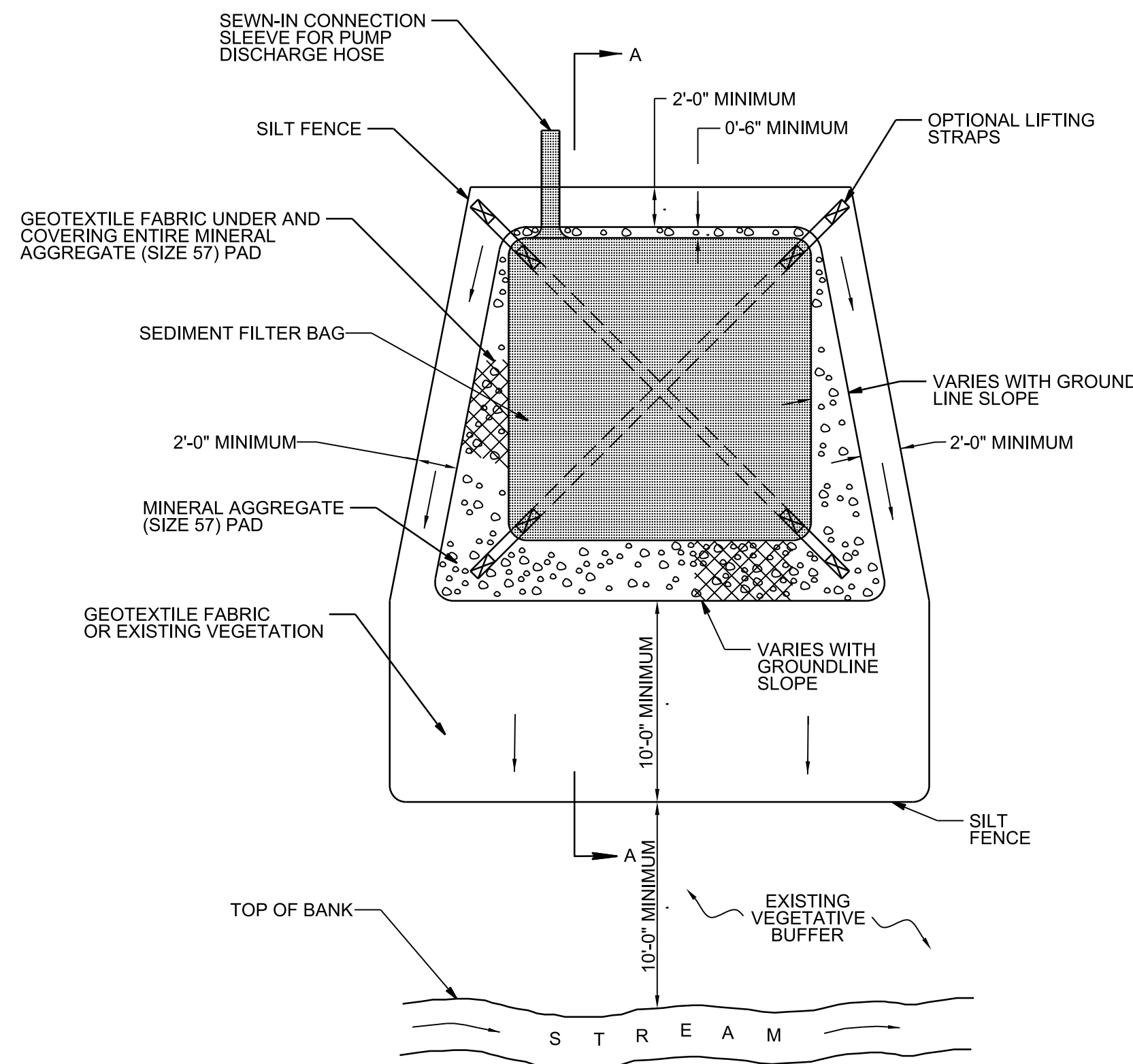
SHEET 10 OF 11

**EROSION-CONTROL-DETAILS
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL**
CORDOVA, TENNESSEE

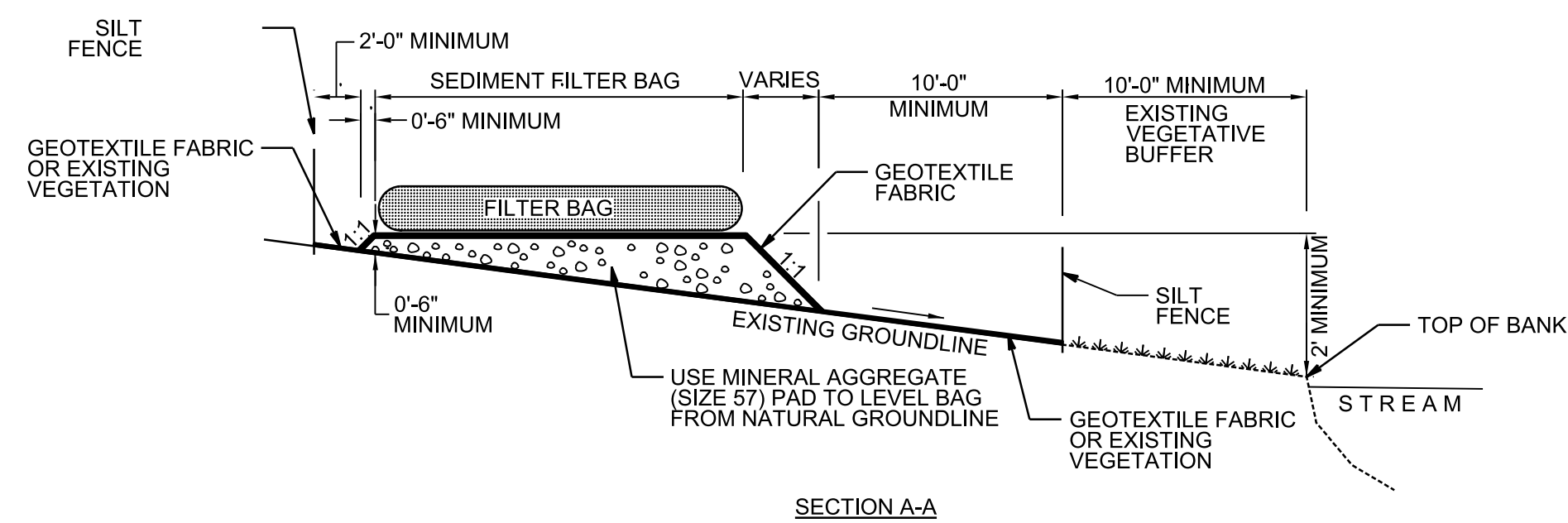
FLETCHER CREEK EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: N.T.S.
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020 3:59:27 PM MPerkins

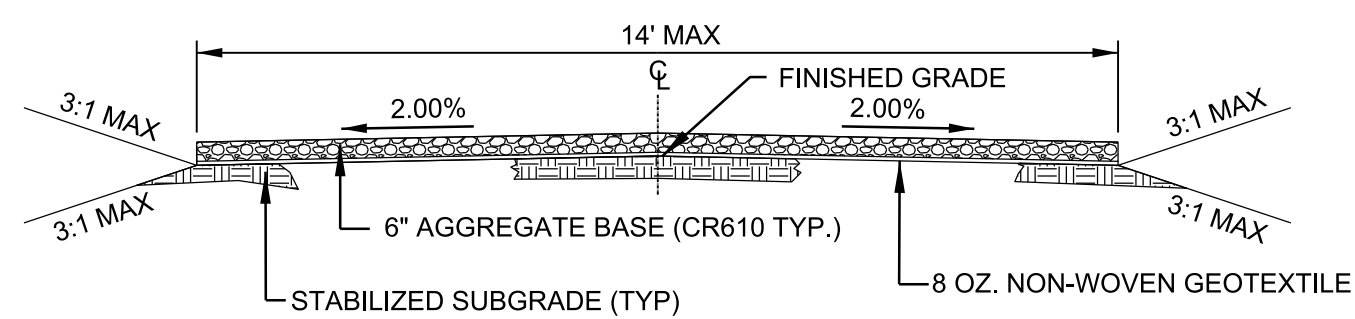


PLAN VIEW



SECTION A-A

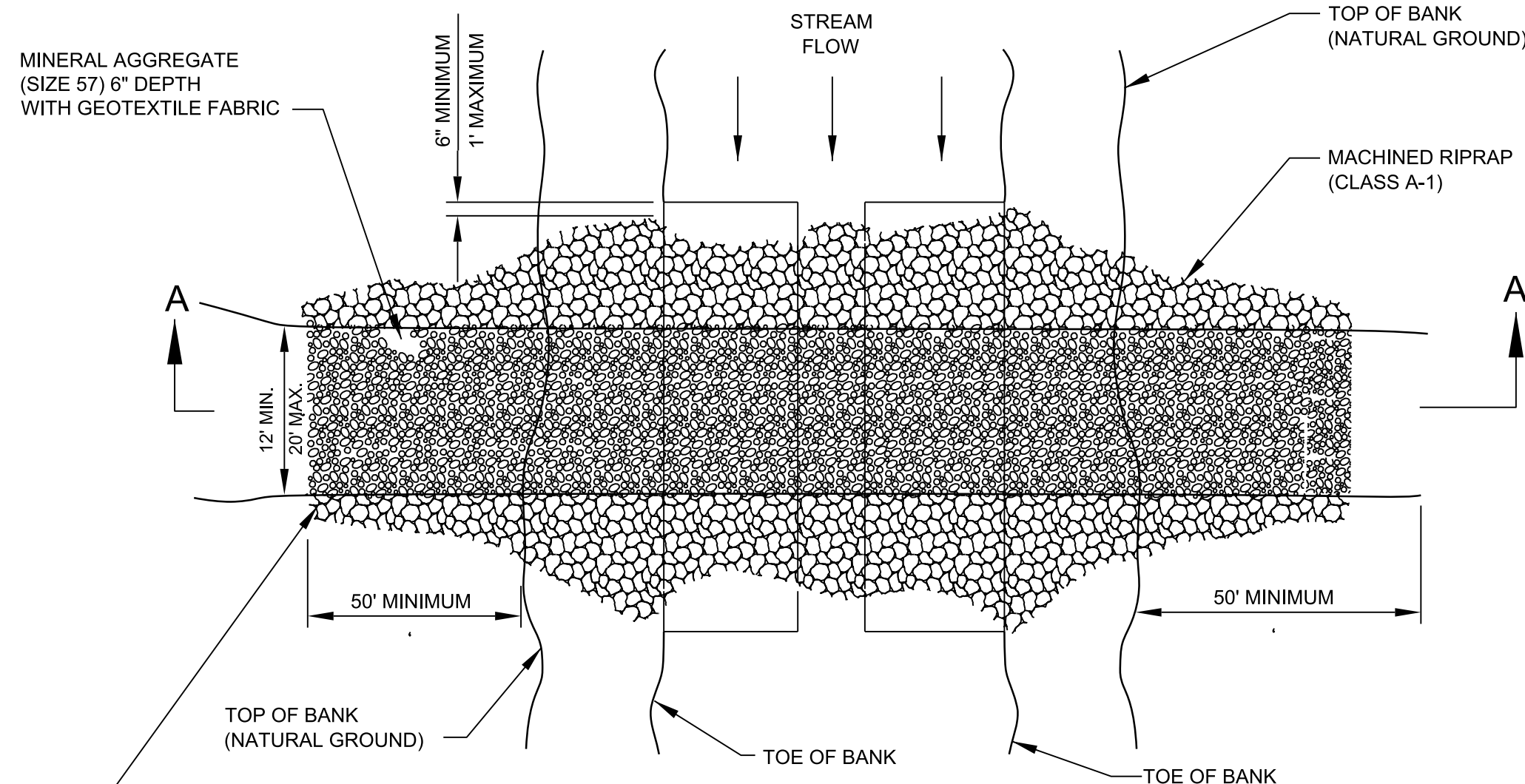
01 SEDIMENT FILTER BAG DETAIL
C7.22 SCALE: N.T.S.



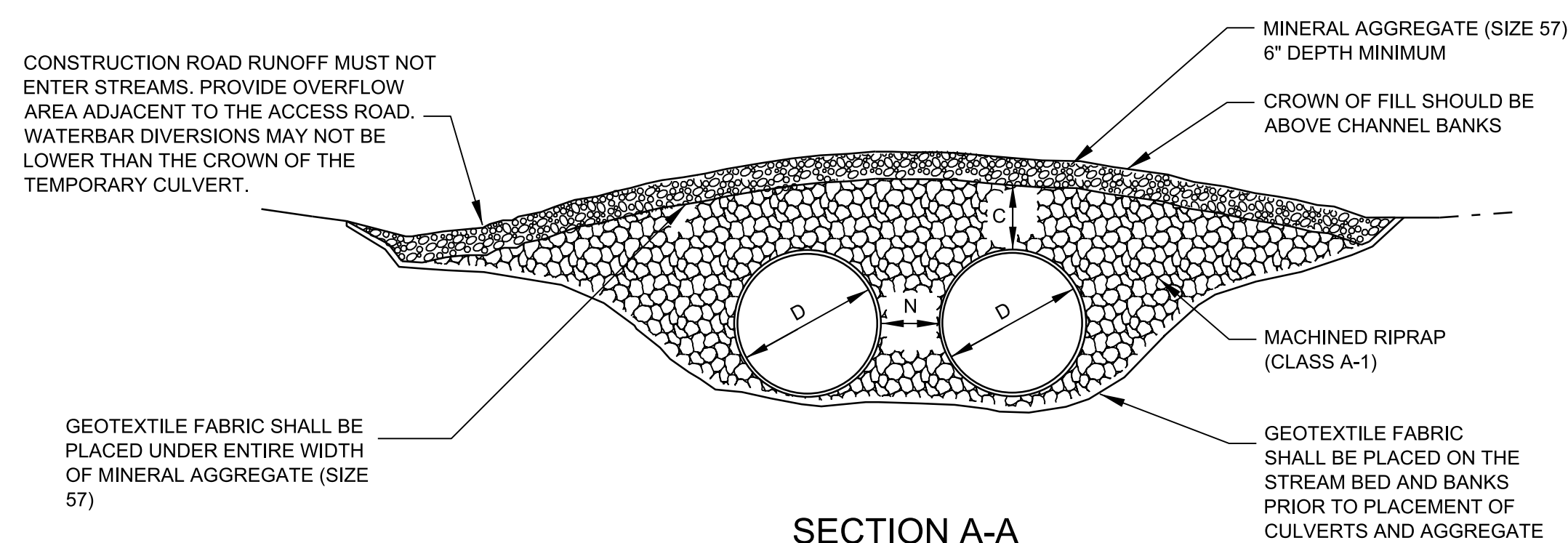
NOTES:

1. PLACE CR610 (TYP.) IN TWO COMPACTED LIFTS TO 100% STANDARD PROCTOR ASTM D698.
2. PLACE SEPARATION GEOTEXTILE FABRIC BETWEEN SUBGRADE AND AGGREGATE BASE.
3. FILL TO ACHIEVE SUBGRADE ELEVATION. SUBGRADE TO BE PLACED ON STABLE EXISTING GROUND AFTER IT HAS BEEN GRUBBED, STRIPPED, AND PROOFROLLED TO SHOW STABILITY.
4. IF UNSTABLE, UNDERCUT AS NEEDED AND APPROVE BY ENGINEER.
5. SIDE SLOPES NO STEEPER THAN 1V:3H AND VEGETATE AS NEEDED FOR EROSION PROTECTION.
6. HAUL ROAD TO BE PAID FOR UNDER "CONSTRUCTION EXIT".

02 TYPICAL HAUL ROAD DETAIL
C7.22 SCALE: N.T.S.



PLAN VIEW OF TEMPORARY CULVERT CROSSING



SECTION A-A

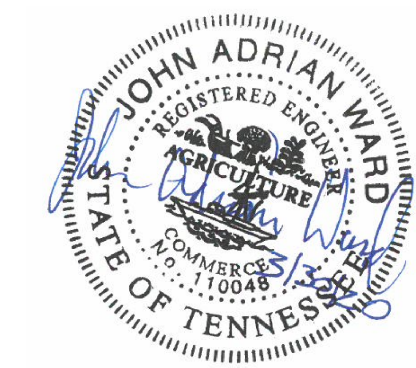
CONSTRUCTION ROAD RUNOFF MUST NOT ENTER STREAMS. PROVIDE OVERFLOW AREA ADJACENT TO THE ACCESS ROAD. WATERBAR DIVERSIONS MAY NOT BE LOWER THAN THE CROWN OF THE TEMPORARY CULVERT.

C = 1/2 DIAMETER OF PIPE OR 18" WHICHEVER IS GREATER
N = 1/2 DIAMETER OF PIPE OR 12" WHICHEVER IS GREATER
D = 36"

TEMPORARY CULVERT CROSSING SELECTION						
PIPE DIAMETER (INCHES)	AVERAGE CHANNEL SLOPE					
	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%
36	46.8	50.4	49.5	47.8	46.6	45.8
RIPRAP	B	B	B	B	B/C	B/C

03 TEMPORARY CULVERT CROSSING DETAIL
C7.22 N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SEWER-BASIN: WN-10
DRAIN-BASIN: FLETCHER-CREEK

SHEET 11 OF 11

EROSION-CONTROL-DETAILS
FLETCHER-CREEK-EAST
BANK-STABILIZATION/GRADE-CONTROL
CORDOVA, TENNESSEE

FLETCHER CREEK EAST
BANK STABILIZATION/GRADE CONTROL
CORDOVA, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: N.T.S.
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

C7.22

CYPRESS CREEK (WS011088S) BANK STABILIZATION / GRADE CONTROL CITY OF MEMPHIS SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) MEMPHIS, TENNESSEE

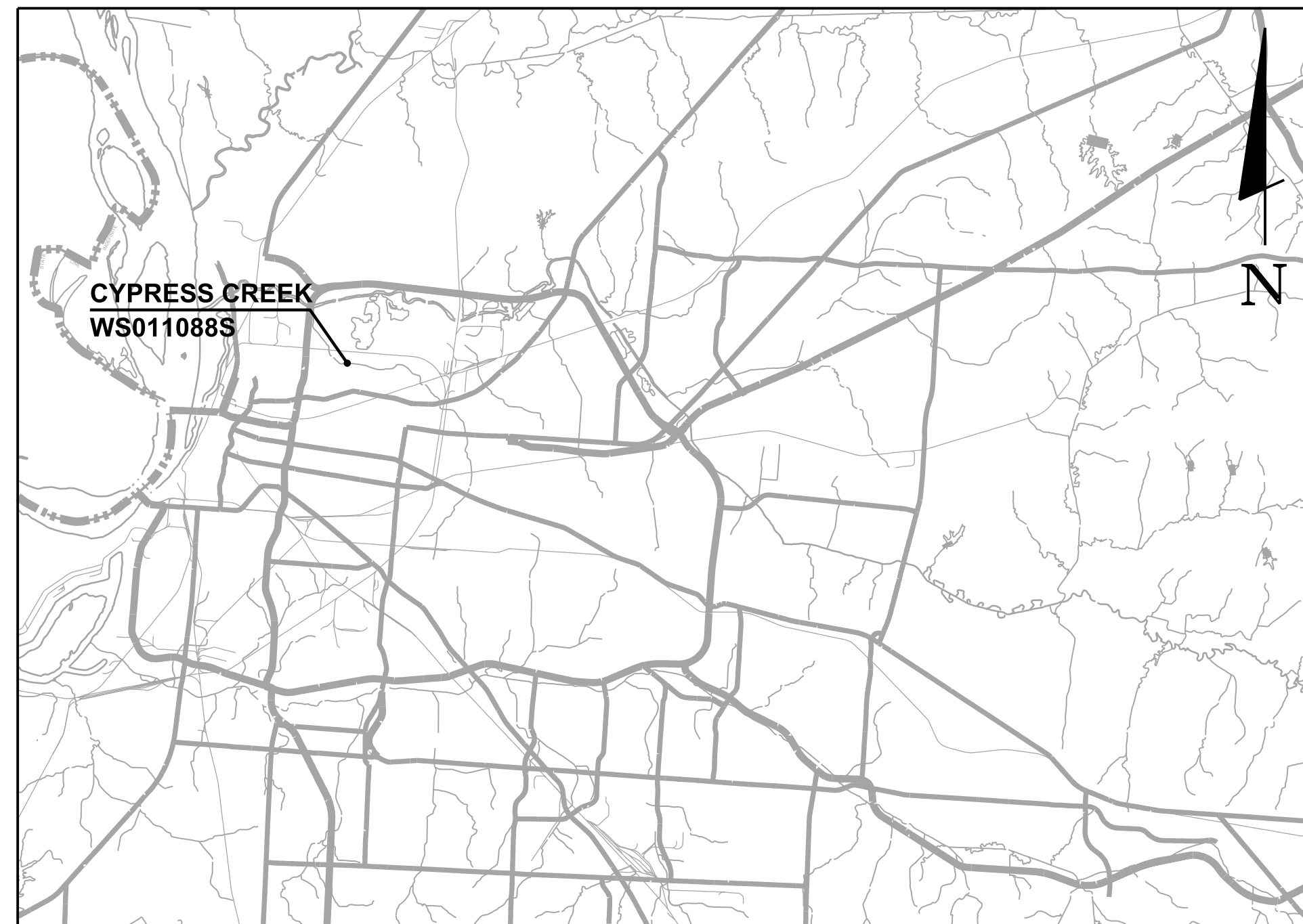
CITY COUNCIL

PATRICE ROBINSON, CHAIRWOMAN
 FRANK COLVETT JR, VICE CHAIRMAN
 RHONDA LOGAN, COUNCILWOMAN
 JAMITA SWEARENGEN, COUNCILWOMAN
 WORTH MORGAN, COUNCILMAN
 EDMUND FORD SR, COUNCILMAN
 MICHALYN EASTER-THOMAS, COUNCILWOMAN
 JB SMILEY JR, COUNCILMAN
 CHEYENNE JOHNSON, COUNCILWOMAN
 MARTAVIUS JONES, COUNCILMAN
 CHASE CARLISLE, COUNCILMAN
 J FORD CANALE, COUNCILMAN
 DR JEFF WARREN, COUNCILMAN

CITY ENGINEER

MANNY BELEN, P.E.

JIM STRICKLAND, MAYOR

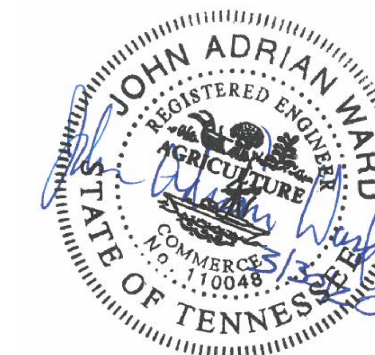


LOCATION MAP

NOT TO SCALE

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
C0.01	CIVIL COVER SHEET
C0.31	EXISTING CONDITIONS
C1.01	SITE PLAN AND PROFILE
C2.41	EROSION CONTROL PLAN PHASE I
C2.51	EROSION CONTROL PLAN PHASE II
C3.01	UTILITY PLAN AND PROFILE
C7.01	CIVIL DETAILS
C7.21	EROSION CONTROL DETAILS
C7.22	EROSION CONTROL DETAILS

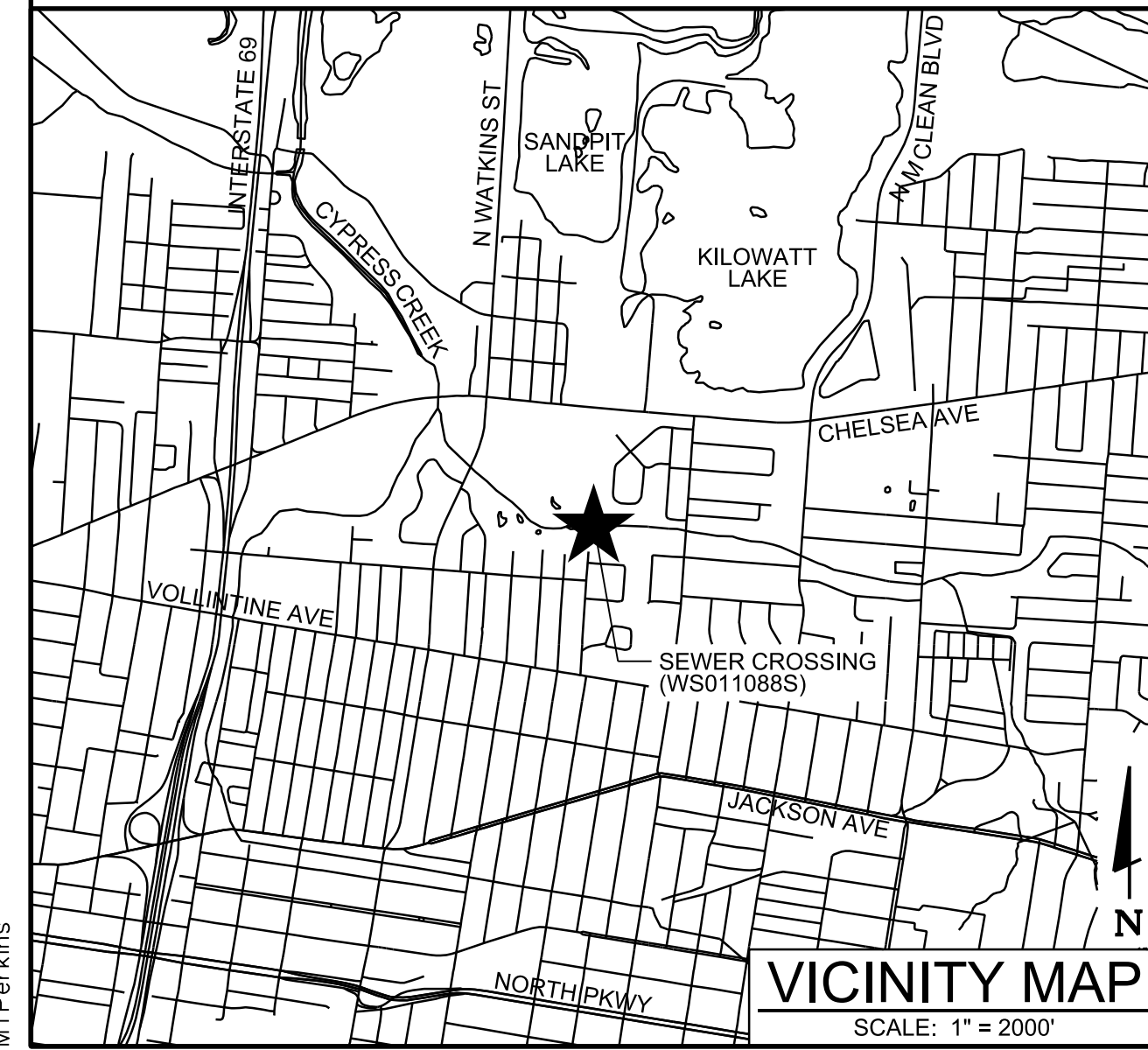


C0.01



CITY OF MEMPHIS & SHELBY COUNTY
FLOOD CONTROL
NO INST.

CITY OF MEMPHIS & SHELBY COUNTY
NO INST.



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
2. GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
3. ALL RIP RAP TO EXTEND TO BOTTOM OF DITCH AND FULLY PROTECT THE BANK AND EDGES OF OTHER EROSION CONTROL DEVICES.
4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
5. NEWLY CUT OR FILLED EMBANKMENTS SHALL BE SODDED OR SEEDED AND MULCHED TO ADEQUATELY PREVENT SOIL EROSION. STAKE SOD SLOPES 3:1 OR GREATER.
6. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
7. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
8. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED (TYP). SUBMIT TEST RESULTS TO SARP10.
9. ALL AREAS TO BE FILLED SHALL BE PROPERLY CLEARED AND STRIPPED PRIOR TO BEGINNING THE FILLING OPERATION.
10. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
11. ALL RIP-RAP SHALL BE PLACED ON NON-WOVEN GEOTEXTILE, OR APPROVED EQUAL.
12. ALL WORK SHALL BE DONE IN DRY CONDITIONS. CONTRACTOR SHALL MAKE PROVISIONS TO KEEP STORM WATER, LATERAL WATER AND GROUND WATER OUT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DEWATER THE SITE AS NECESSARY SO THAT PLACEMENT OF ALL RIP-RAP, OR GROUTING OF ANY RIP-RAP WILL BE IN DRY CONDITIONS.
13. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL PROJECT TESTING. SOIL AND OTHER MATERIAL TESTING SHALL BE PERFORMED BY A LICENSED GEOTECHNICAL FIRM.
14. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING. SURVEY DATA SHALL BE PROVIDED BY A REGISTERED LAND SURVEYOR

TYPICAL CONSTRUCTION NOTES:

1. ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TVA, CALL 1-800-351-1111. FOR SEWER AND/OR WATER SERVICE LOCATIONS, CALL 901-529-8025.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT 901-636-2462 A MINIMUM OF 24 HOURS AS REQUIRED TO PREVENT EROSION, UNLESS OTHERWISE NOTED ON PLANS. SOD SLOPES AND MULCH ALL OTHER AREAS.
5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION, UNLESS OTHERWISE NOTED ON PLANS. SOD SLOPES AND MULCH ALL OTHER AREAS.
6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
7. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SEDIMENT RELEASE INTO EXISTING DRAINAGE SYSTEM AND/OR ONTO ADJACENT PROPERTIES.
8. THE CONTRACTOR SHALL MAINTAIN BARRICADES, FENCES, GUARDS, AND FLAGMEN AS REASONABLY NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AT OR NEAR THE PROJECT SITE DURING CONSTRUCTION. ALL CONSTRUCTION MATERIAL, INCLUDING WITHOUT LIMITATION, MUD, SILT, DIRT, AND GRAVEL SHALL BE KEPT OFF EXISTING STREETS AT ALL TIMES. IN THE EVENT SUCH MUD, SILT, DIRT, GRAVEL, OR OTHER CONSTRUCTION MATERIAL IS WASHED, BLOWN, OR CARRIED INTO AN EXISTING STREET, THE DEVELOPER SHALL TAKE IMMEDIATE STEPS TO REMOVE SUCH MATERIALS. IF THE DEVELOPER DOES NOT REMOVE SUCH MATERIALS AFTER NOTIFICATION BY THE CITY, AND THE CITY DEEMS IT NECESSARY TO CLEAN THE AFFECTED STREETS, THE DEVELOPER AGREES TO REIMBURSE THE CITY FOR ALL SUCH EXPENSES.
9. ALL STREETS SHALL BE KEPT CLEAR AND FREE OF DIRT AND DEBRIS.
10. ALL CONSTRUCTION ACTIVITY SHALL BEGIN NO EARLIER THAN 7:00 A.M. AND END NO LATER THAN 6:00 P.M., MONDAY THRU SATURDAY, AND NO CONSTRUCTION ACTIVITY SHALL BE PERMITTED ON SUNDAYS.
11. CONTRACTOR SHALL RESTORE OFF-SITE ACCESS ROUTES AND ALL DISTURBED AREAS TO ORIGINAL BEFORE-START-OF-WORK CONDITION.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MODERATE RISK AREAS BETWEEN THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT WITH REDUCED FLOOD RISK DUE TO LEVEE DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0270F, DATED SEPTEMBER 28, 2007.

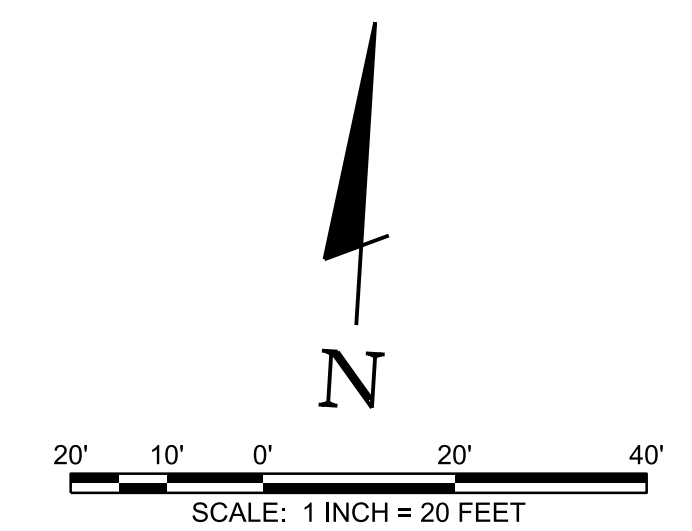
STREAM WATER FLOW WILL BE 4020 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

BENCHMARK NOTE:

CITY OF MEMPHIS BM #971 - WATKINS ST. & LEXINGTON CIRCLE NORTH: CITY MONUMENT IS LOCATED ON THE SW COR., AT B/CURB AT ER ON WATKINS ST. SIDE. ELEVATION: 235.02

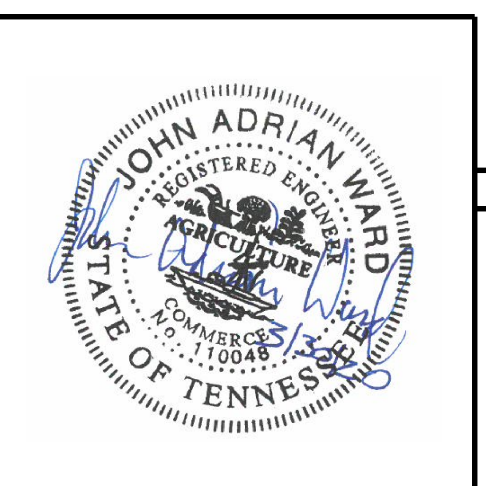
LEGEND:

- EXISTING PROPERTY BOUNDARY
- EXISTING MINOR CONTOUR
- 250- EXISTING MAJOR CONTOUR
- SA- EXISTING SANITARY SEWER LINE
- ⊙ EXISTING MANHOLE
- ⊙ EXISTING RIP RAP



811 Know what's below
Call before you dig.
811
www.call811.com

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



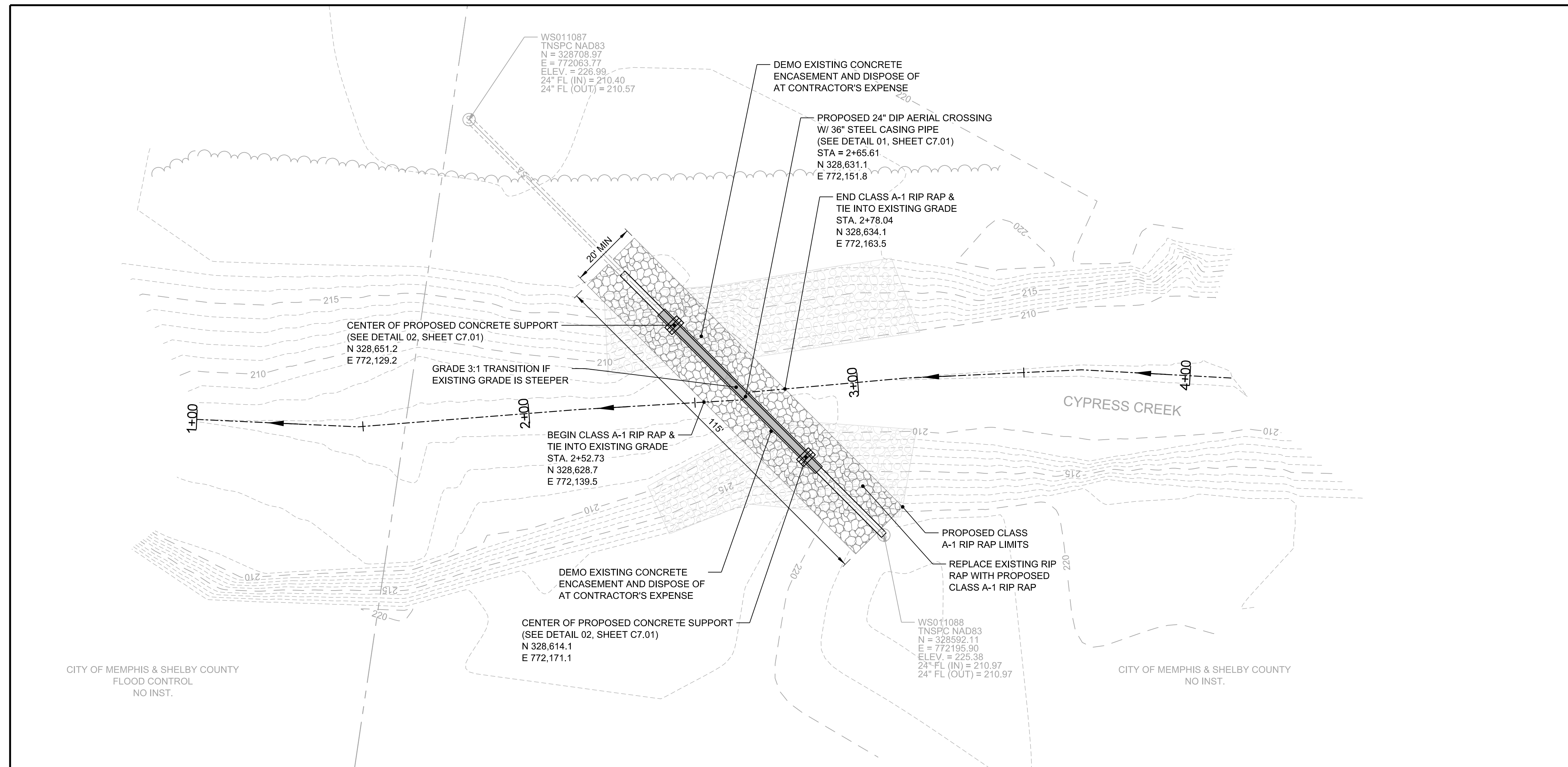
CYPRESS CREEK
BANK STABILIZATION/GRADE CONTROL
MEMPHIS, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: WS-01
DRAIN-BASIN: CYPRESS-CREEK
SHEET 2 OF 9

EXISTING-CONDITIONS
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020
4:06:53 PM
MTPerkins



GRADING AND DRAINAGE NOTES:

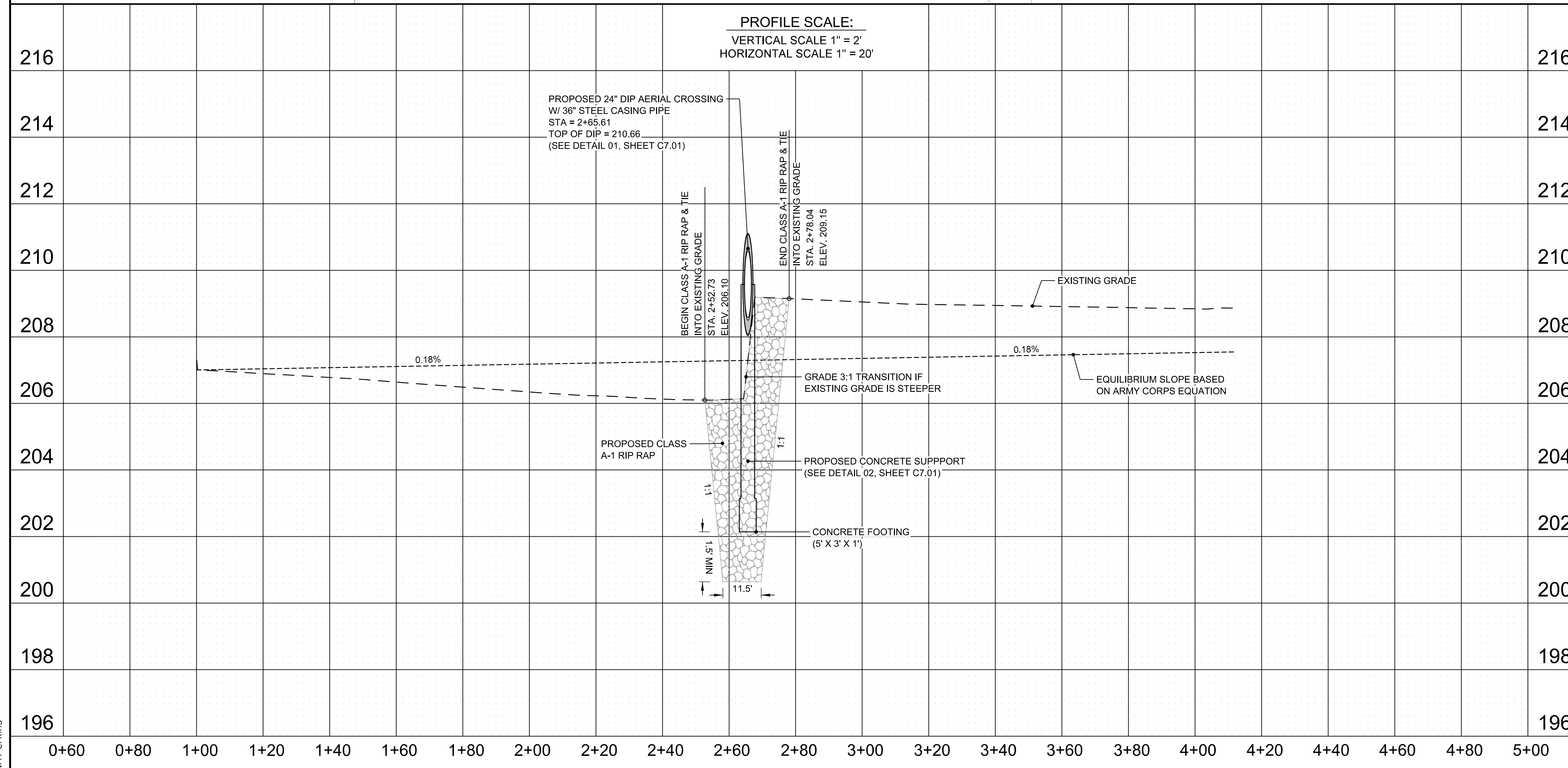
1. A MINIMUM OF 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT (901) 636-2462.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, CALL 1-800-351-1111. FOR SEWER LOCATIONS CALL 529-8025.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED BY THE SOILS REPORT. SUBMIT TEST RESULTS TO SARP10.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION, NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MODERATE RISK AREAS BETWEEN THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT WITH REDUCED FLOOD RISK DUE TO LEVEE DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0270F, DATED SEPTEMBER 28, 2007.
 STREAM WATER FLOW WILL BE 4020 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

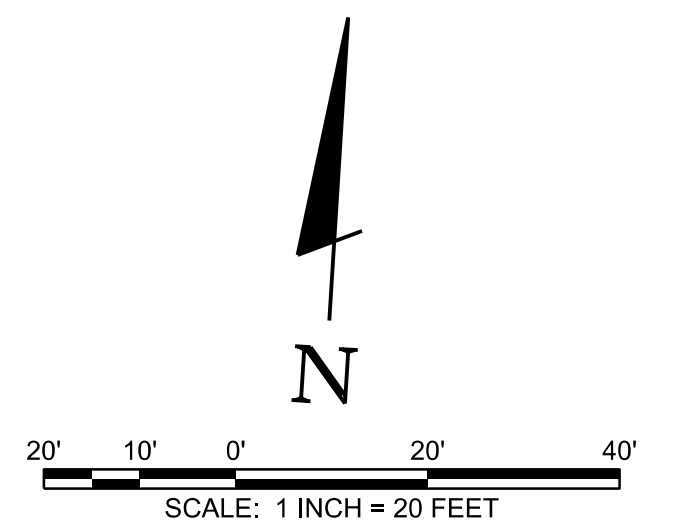
BENCHMARK NOTE:

CITY OF MEMPHIS BM #971 - WATKINS ST. & LEXINGTON CIRCLE NORTH: CITY MONUMENT IS LOCATED ON THE SW COR., AT B/CURB AT ER ON WATKINS ST. SIDE. ELEVATION: 235.02



LEGEND:

- - - - - EXISTING MINOR CONTOUR
- - - - - EXISTING MAJOR CONTOUR
- SA - EXISTING SANITARY SEWER LINE
- ⊙ EXISTING MANHOLE
- - - - - PROPOSED STREAM CENTERLINE
- N
E
COORDINATE
- EXISTING RIP RAP LIMITS
- PROPOSED CLASS A-1 RIP RAP LIMITS



811 Know what's below
 Call before you dig.
 811
 www.call811.com

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



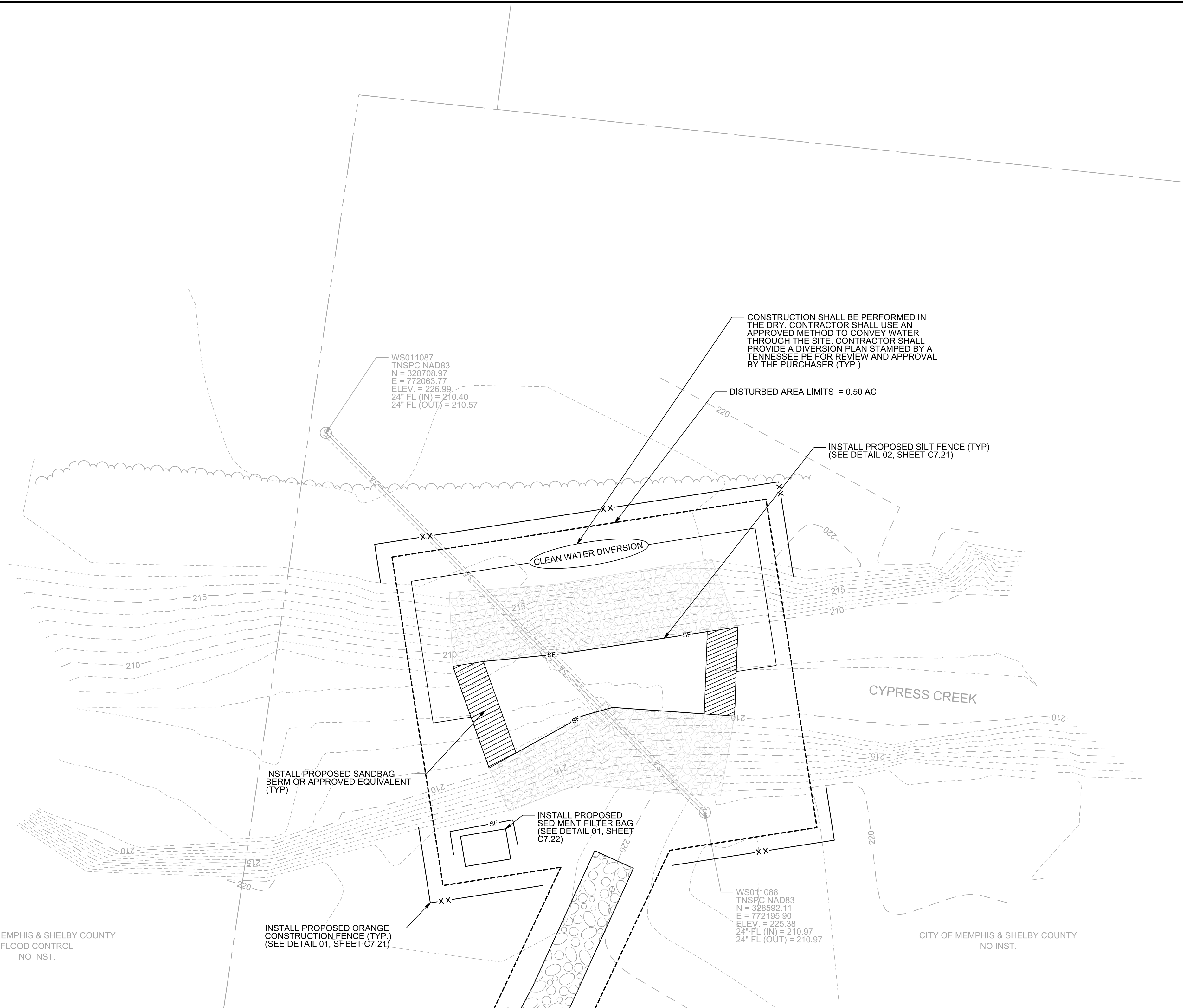
SEWER-BASIN: WS-01
 DRAIN-BASIN: CYPRESS-CREEK
 SHEET 3 OF 9

SITE-PLAN-AND-PROFILE
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
 MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
 DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
 REVIEWED

CYPRESS CREEK
 BANK STABILIZATION/GRADE CONTROL
 MEMPHIS, TENNESSEE
 DEVELOPER: SARP10
 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE



PHASE I SEQUENCING NOTES:

1. INSTALL CONSTRUCTION EXIT AND HAUL ROAD AS SHOWN. THIS WILL BE THE FIRST BMP INSTALLED ON SITE.
2. INSTALL ORANGE CONSTRUCTION FENCE
3. SILT FENCE TO BE INSTALLED ALONG TOE OF SLOPE AS SHOWN.
4. PERFORM REQUIRED EXCAVATION AND UTILITY WORK.
5. PLACE RIP RAP AS SHOWN. IF WATER ACCUMULATES IN THE WORK AREA, THE TRAPPED WATER WILL BE PUMPED THROUGH A SEDIMENT FILTER BAG BEFORE IT LEAVES THE SITE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 0.50 ACRES.
11. GRADING AND UTILITY WORK IS TO BE PERFORMED IN THE DRY. CONTRACTOR TO USE CLEAN WATER DIVERSION. SAND BAG BERM SHALL BE INCLUDED IN THE COST OF THE "CLEAN WATER DIVERSION". CONTRACTOR SHALL SUBMIT A PLAN STAMPED BY A TENNESSEE PE FOR REVIEW AND APPROVAL BY THE PURCHASER/ENGINEER.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MODERATE RISK AREAS BETWEEN THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT WITH REDUCED FLOOD RISK DUE TO LEVEE DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0270F, DATED SEPTEMBER 28, 2007.

STREAM WATER FLOW WILL BE 4020 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

BENCHMARK NOTE:

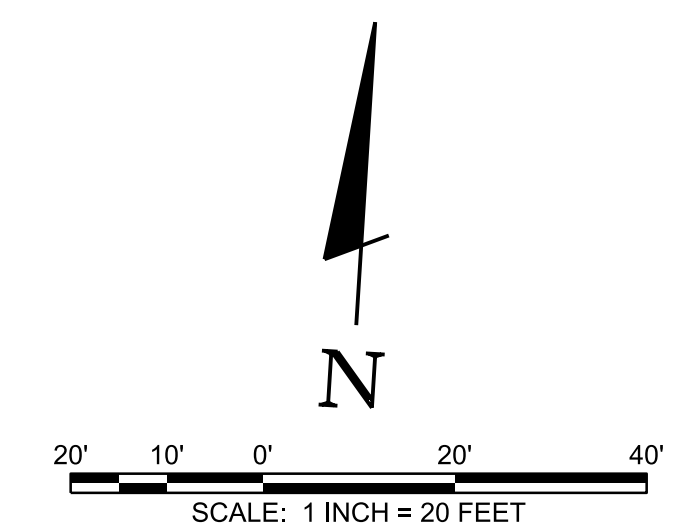
CITY OF MEMPHIS BM #971 - WATKINS ST. & LEXINGTON CIRCLE NORTH: CITY MONUMENT IS LOCATED ON THE SW COR., AT B/CURB AT ER ON WATKINS ST. SIDE. ELEVATION: 235.02

CITY OF MEMPHIS & SHELBY COUNTY
FLOOD CONTROL
NO INST.

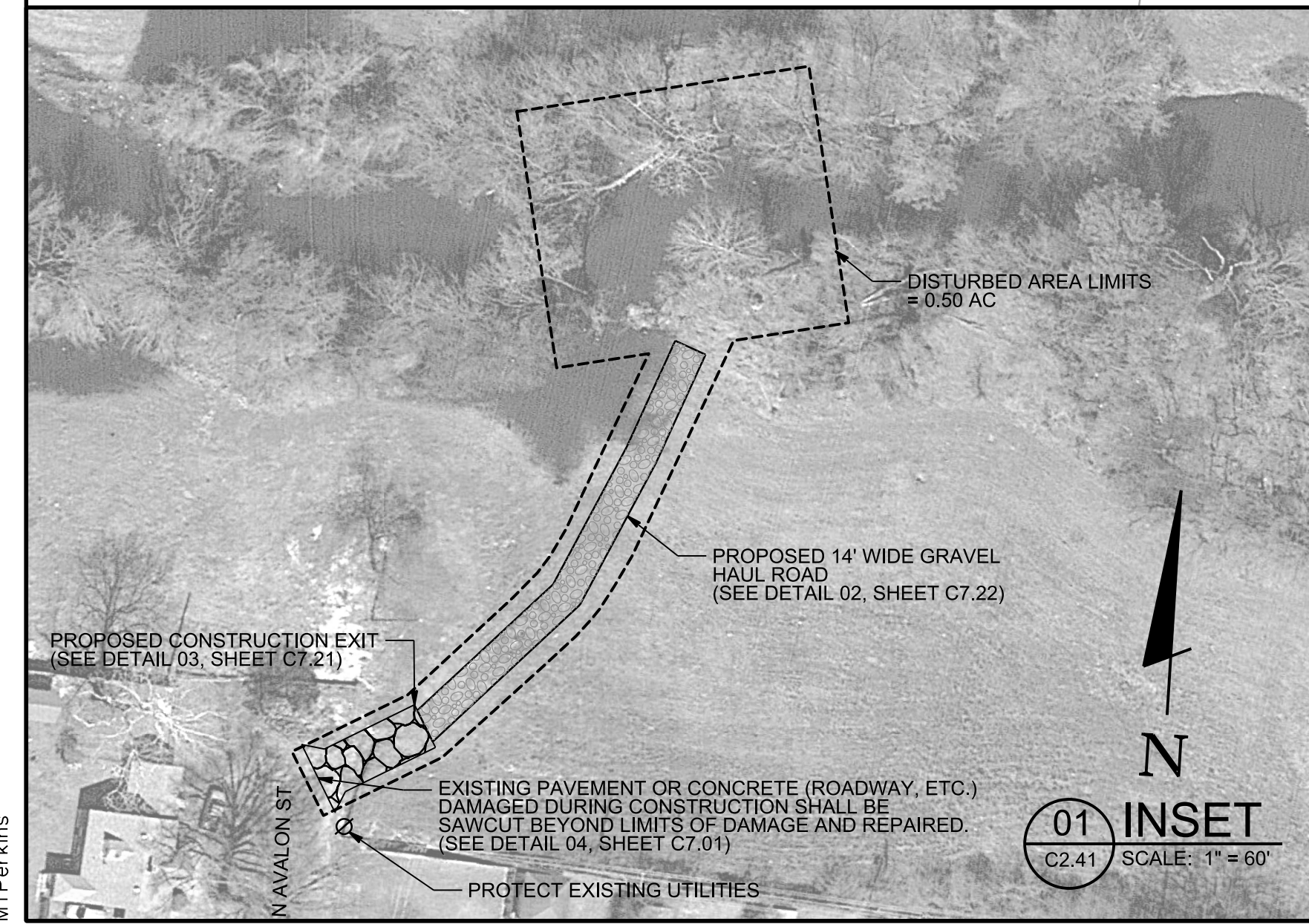
CITY OF MEMPHIS & SHELBY COUNTY
NO INST.

LEGEND:

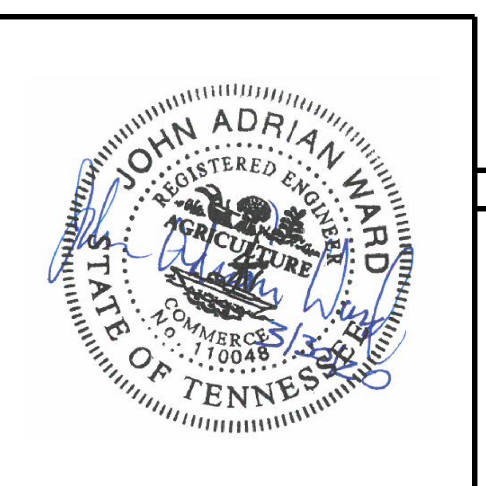
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- XX- ORANGE CONSTRUCTION FENCE
- SF - SILT FENCE
- DISTURBED AREA LIMITS
- [Hatched Box] SANDBAG BERM
- [Stippled Box] CONSTRUCTION EXIT



811 Know what's below
Call before you dig.
811
www.call811.com



REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



**CYPRESS CREEK
BANK STABILIZATION/GRADE CONTROL**
MEMPHIS, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: WS-01
DRAIN-BASIN: CYPRESS-CREEK
SHEET 4 OF 9

**EROSION-CONTROL-PLAN-PHASE-I
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
MEMPHIS, TENNESSEE**

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED: _____
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020
4:06:59 PM
MTPerkins

PHASE II SEQUENCING NOTES:

1. MAINTAIN BMPS INSTALLED DURING PHASE I.
2. STABILIZE SITE AS SHOWN. ALL OTHER DISTURBED AREAS NOT RECEIVING CLASS A-1 RIP-RAP OR NATIVE MATERIAL WILL BE SEEDED AND MULCHED. DISTURBED SLOPED BANKS WILL HAVE TURF REINFORCED MAT.
3. REMOVE BMPS WHEN SITE IS STABLE.

EROSION CONTROL NOTES:

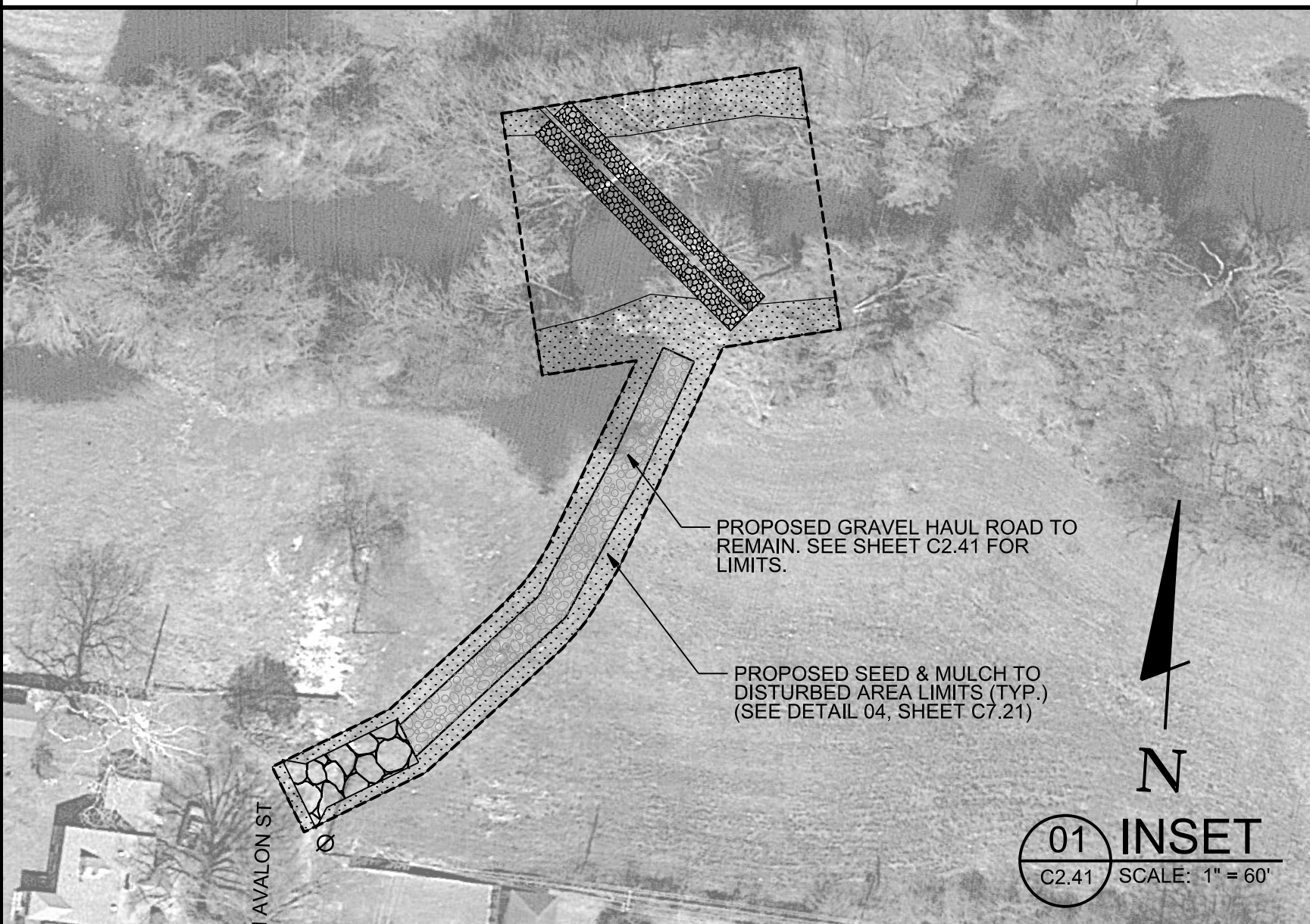
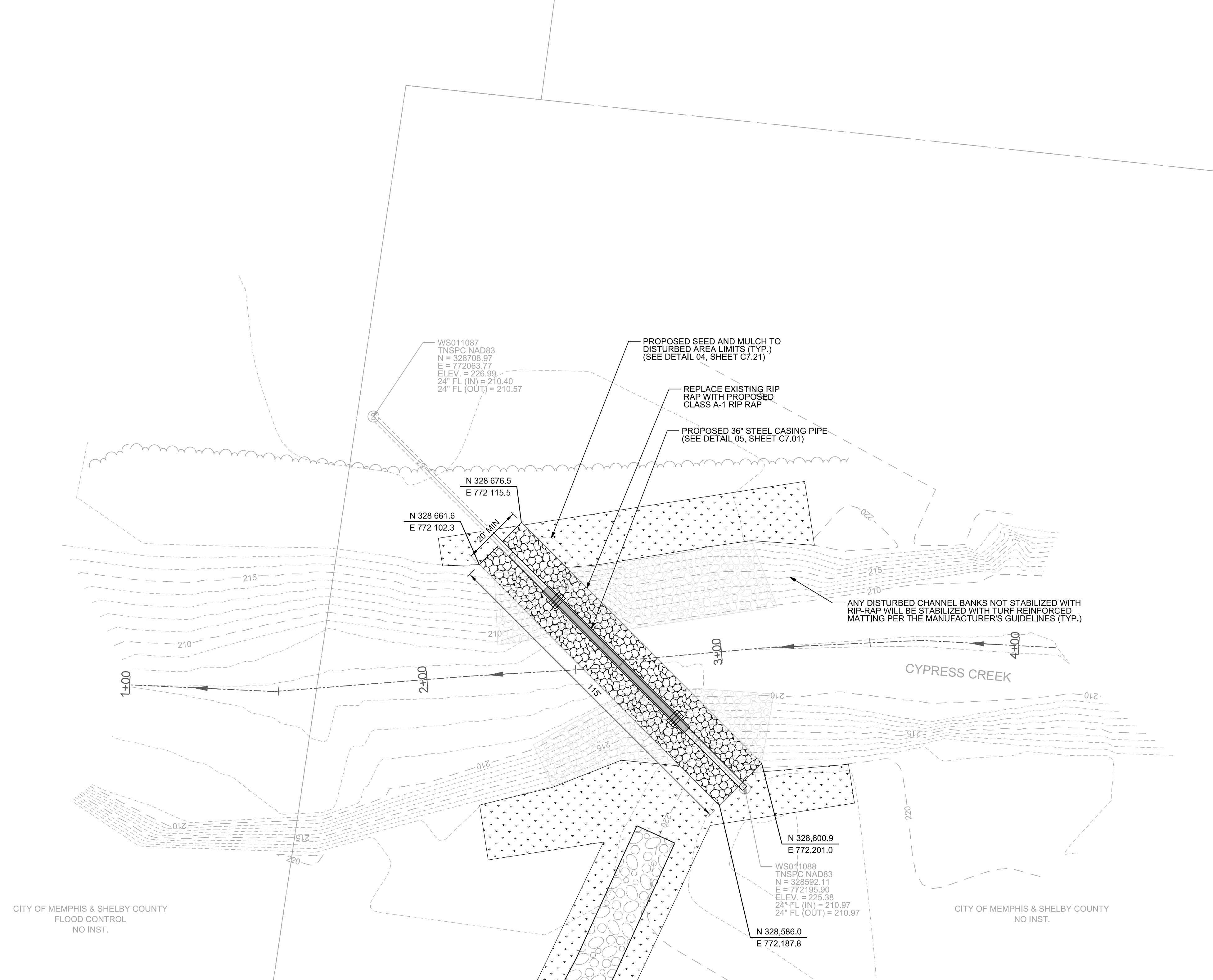
1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL, AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 0.50 ACRES.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "X" (MODERATE RISK AREAS BETWEEN THE 1-PERCENT AND 0.2 PERCENT ANNUAL CHANCE FLOOD EVENT WITH REDUCED FLOOD RISK DUE TO LEVEE DETERMINED BY DETAILED METHODS) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0270F, DATED SEPTEMBER 28, 2007.
 STREAM WATER FLOW WILL BE 4020 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

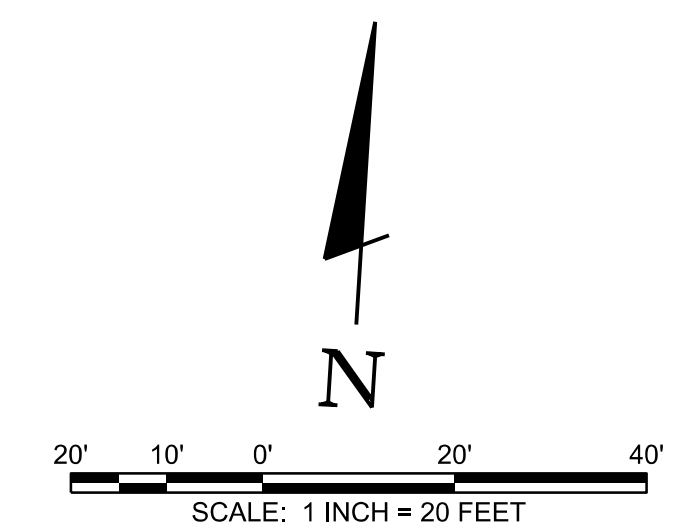
BENCHMARK NOTE:

CITY OF MEMPHIS BM #971 - WATKINS ST. & LEXINGTON CIRCLE NORTH: CITY MONUMENT IS LOCATED ON THE SW COR., AT B/CURB AT ER ON WATKINS ST. SIDE. ELEVATION: 235.02



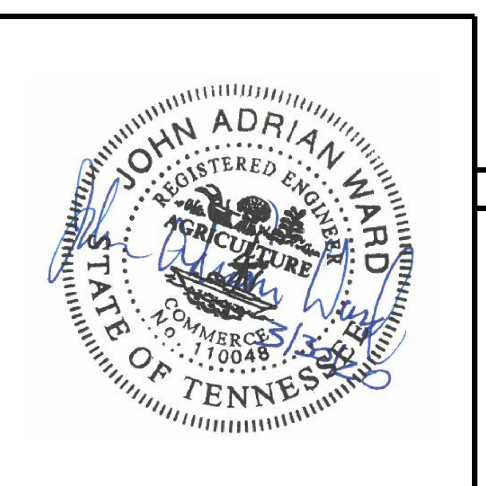
LEGEND:

- EXISTING MINOR CONTOUR
- - - - EXISTING MAJOR CONTOUR
- N E COORDINATE
- [Pattern] EXISTING RIP RAP
- [Pattern] PROPOSED CLASS A-1 RIP RAP
- [Pattern] PROPOSED SEED & MULCH



811 Know what's below
 Call before you dig.
 811
 www.call811.com

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



CYPRESS CREEK
 BANK STABILIZATION/GRADE CONTROL
 MEMPHIS, TENNESSEE
 DEVELOPER: SARP10
 ENGINEER: BARGE DESIGN SOLUTIONS, INC.

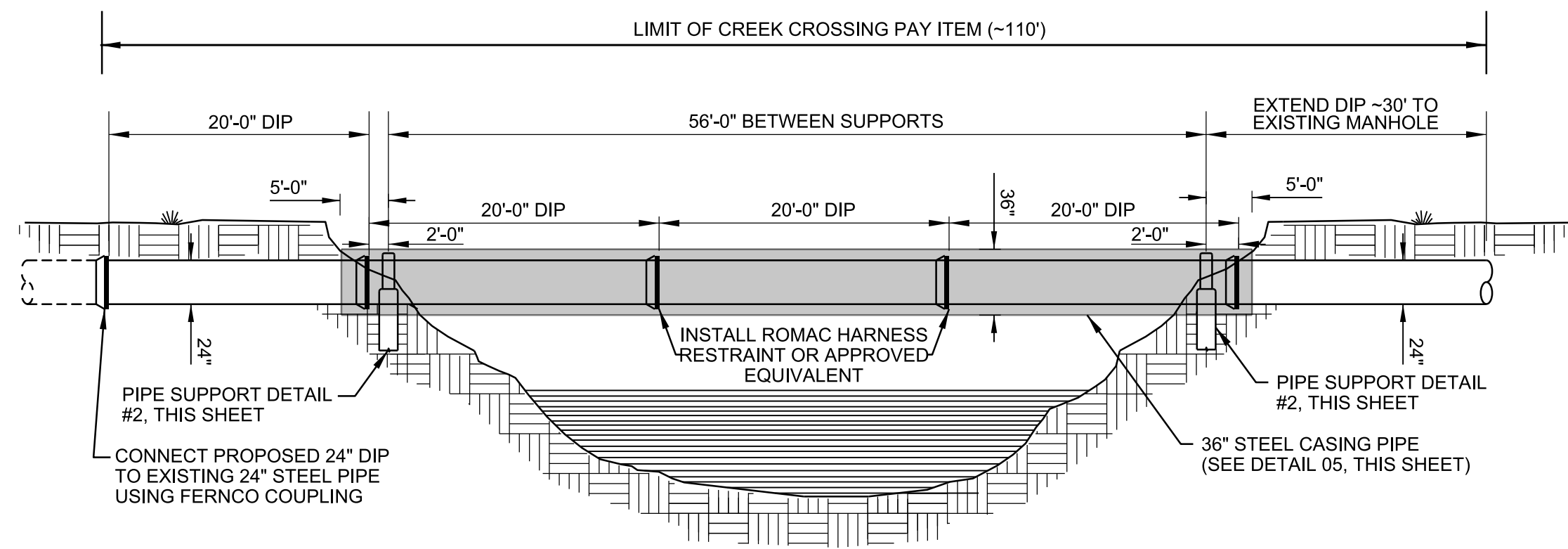
SEWER-BASIN: WS-01
 DRAIN-BASIN: CYPRESS CREEK
 SHEET 5 OF 9
EROSION-CONTROL-PLAN-PHASE-II
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
 MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
 DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
 REVIEWED

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

C2.51

2/3/2020 3:40:38 PM MTPerkins

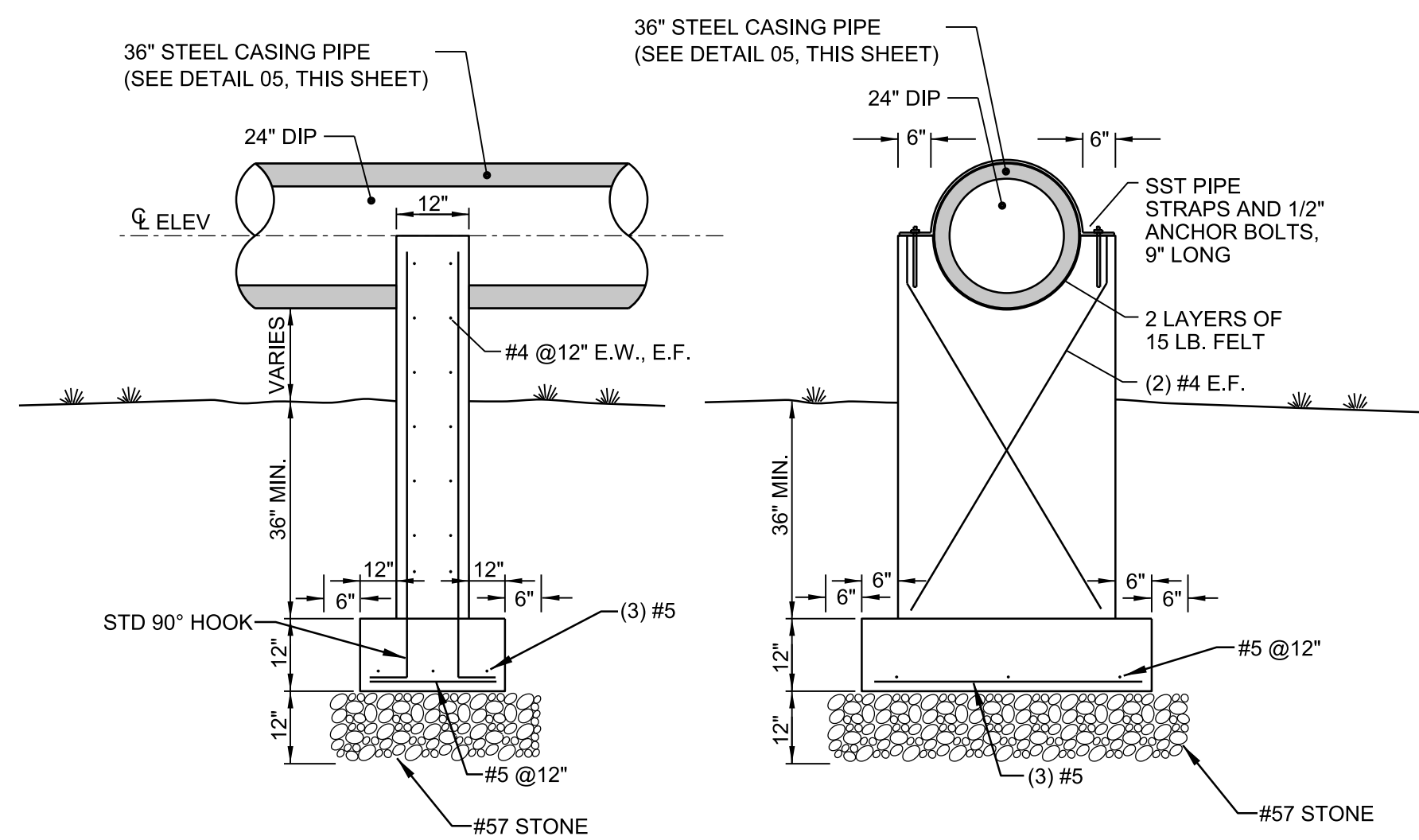


NOTES:

1. ABOVE GRADE PUSH-ON JOINTS SHALL BE RESTRAINED WITH ROMAC OR EQUAL.
2. "BACK OUT" JOINTS PER MANUFACTURER'S RECOMMENDATION TO ALLOW FOR THERMAL EXPANSION AND CONTRACTION.
3. TIE UNDERGROUND JOINTS TO EXISTING PIPE USING ROMAC 501 COUPLING.
4. INSULATE EXPOSED PIPING WITH OWENS CORNING EVOLUTION PAPER FREE ASJ. JOHNS MANVILLE MICRO-LOK HP, OR EQUAL. THE 1 INCH THICK FIBERGLASS INSULATION WITH VAPOR RETARDER JACKET SHALL HAVE SELF SEALING LONGITUDINAL ADHESIVE LAP SEAL, BUTT STRIPS AND VAPOR BARRIER MASTIC AT EXPOSED ENDS, AT EACH FITTING AND EVERY FOURTH JOINT TO ISOLATE WATER INCURSION. INSULATION SHALL BE FINISHED WITH 0.4 MM MINIMUM THICKNESS ALUMINUM JACKET. ALUMINUM JACKET SECTIONS SHALL HAVE 2 TO 3 INCH OVERLAPS, HELD IN PLACE WITH METAL BANDS, SHED WATER AND BE COMPLETELY SEALED.
5. DETAIL IS ONLY A TYPICAL DEPICTION. SEE PLAN AND PROFILE FOR ACTUAL LOCATION OF PIPE SUPPORTS.
6. DURING EXCAVATION OF PIPE SUPPORTS, ANY GROUNDWATER SHALL BE PUMPED TO A TEMPORARY SEDIMENTATION BASIN OR FILTER BAG.

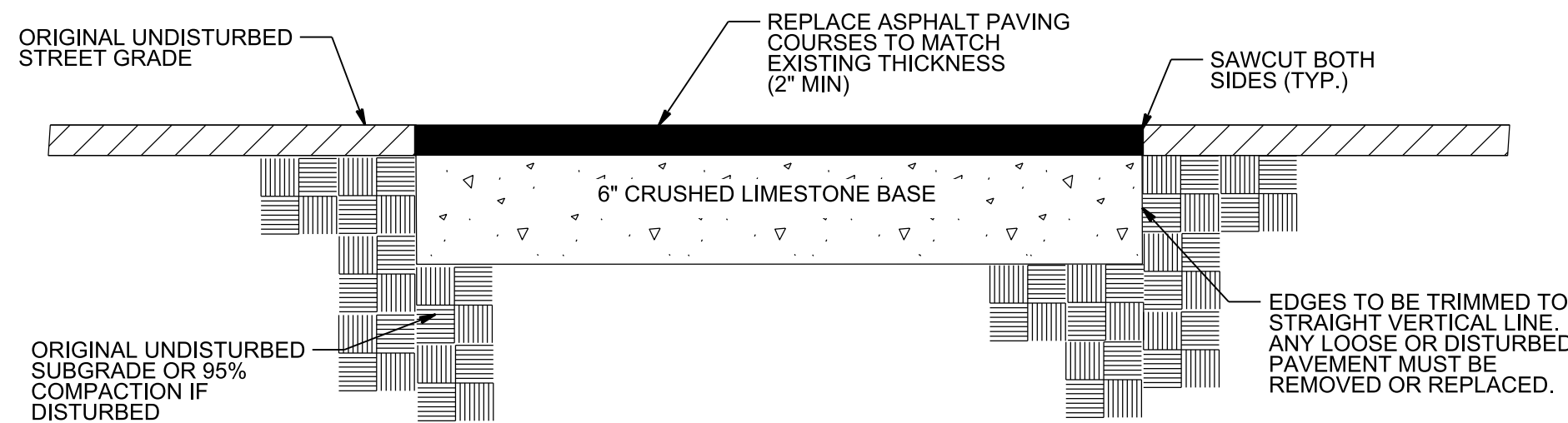
01 AERIAL CREEK CROSSING DETAIL

C7.01 SCALE: N.T.S.



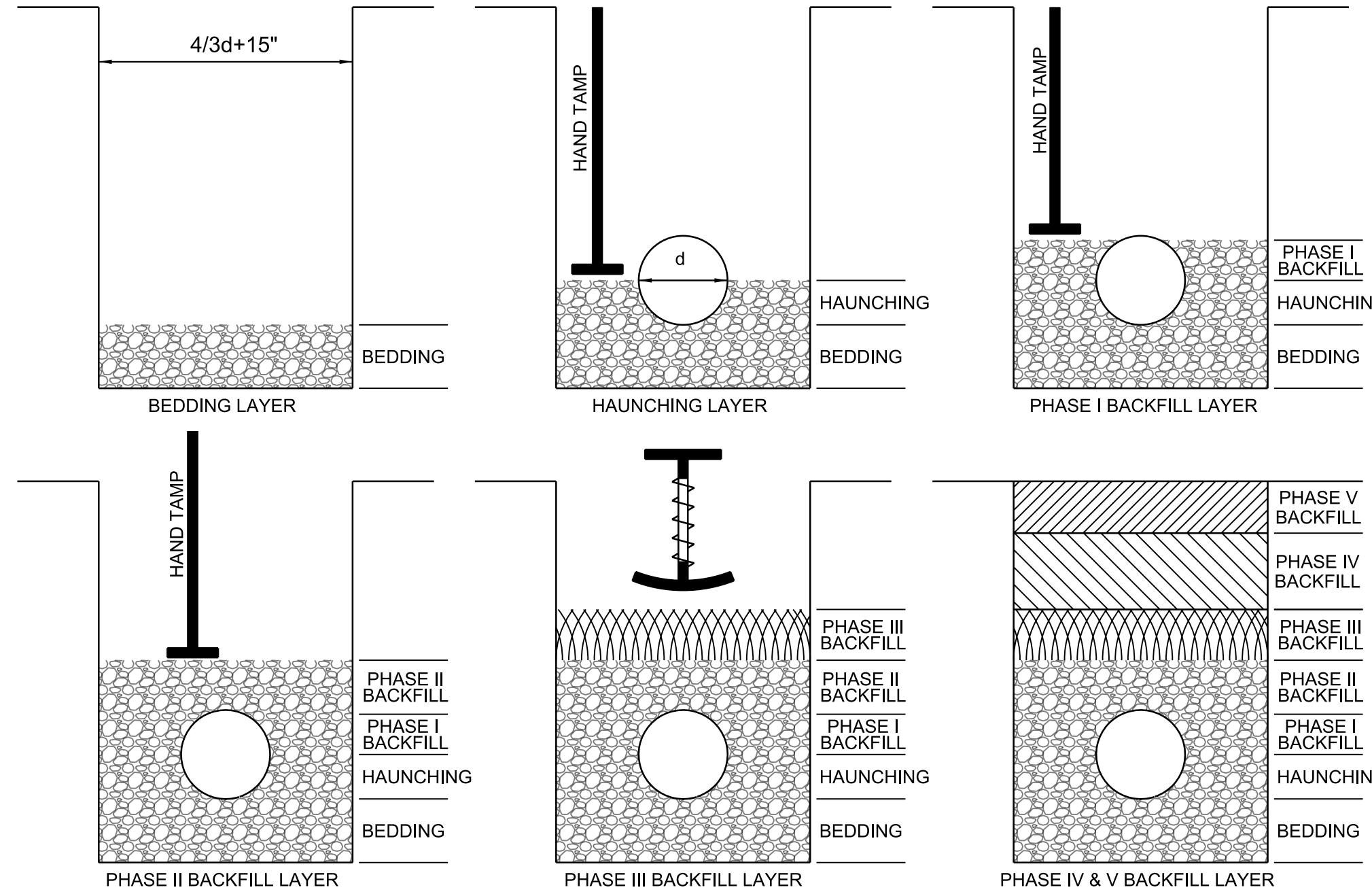
02 CONCRETE PIPE SUPPORTS DETAIL

C7.01 SCALE: N.T.S.



04 TYPICAL PAVEMENT REPAIR DETAIL

C7.01 SCALE: N.T.S.



BEDDING AND BACKFILL OF TRENCHES UNDER UNIMPROVED AREAS

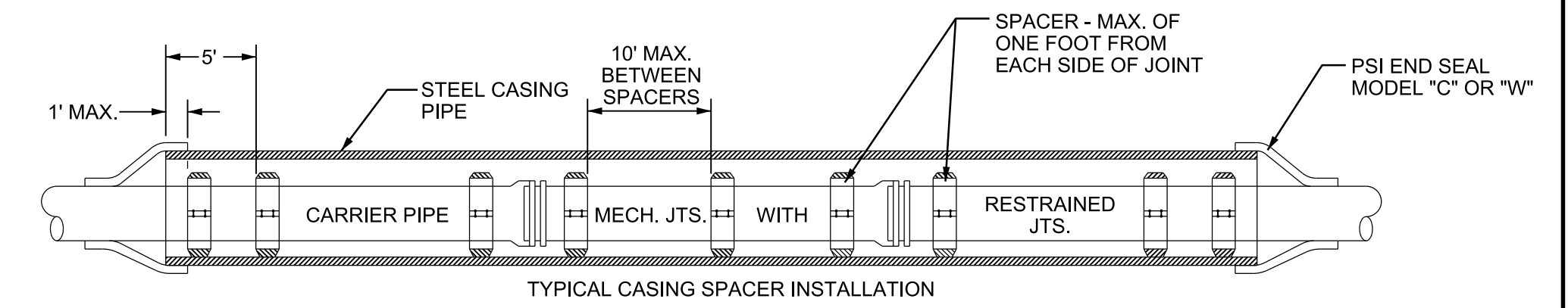
LAYER	DEPTH	MATERIAL
BEDDING	4" MIN	#67 CRUSHED LIMESTONE. SEE NOTES (1)(2). WELL COMPACTED.
HAUNCHING	d/2	#67 CRUSHED LIMESTONE STONE TAMPED IN 6" MAXIMUM LAYERS. SEE NOTE (2). WELL COMPACTED W/SIDE TAMPER HAND TAMPER.
PHASE I BACKFILL	d/2	CRUSHED LIMESTONE OR RECYCLED CRUSHED CONCRETE TAMPED IN 6" MAXIMUM LAYERS. SEE NOTE (3). WELL COMPACTED W/SIDE TAMPER HAND TAMPER.
PHASE II BACKFILL	6"	CRUSHED LIMESTONE OR RECYCLED CRUSHED CONCRETE. SEE NOTE (3). WELL COMPACTED W/HAND TAMPER.
PHASE III BACKFILL	6"	SELECT EARTH MATERIAL. SEE NOTE (4). WELL COMPACTED W/PNEUMATIC OR MECHANICAL TAMPER.
PHASE IV BACKFILL	VARIES	SELECT EARTH MATERIAL TAMPED IN 12" MAXIMUM LAYERS. SEE NOTE (4). COMPACTED TO 95% PER ASTM D698
PHASE V BACKFILL	12"	SELECT EARTH MATERIAL. SEE NOTE (4). COMPACTED TO 95% PER ASTM D698 *SEE COVER SEEDING MIXTURE (DETAIL 04, SHEET C7.21) FOR UPPER 2-4" OF SOIL FOR TOPSOIL, MULCH, ETC.

TABLE NOTES:

- (1) SEE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND UTILITY AND TRENCHING SPECIFICATION FOR SPECIAL FOUNDATION PREPARATION.
- (2) INSTALL CRUSHED LIMESTONE ASTM D-448-54 TABLE 1, #67 FOR BEDDING AND HAUNCHING MATERIAL. THE QUANTITY OF CRUSHED LIMESTONE FOR BEDDING AND HAUNCHING IS PART OF THE "24" DIP" LINE ITEM AND NO SEPARATE PAYMENT WILL BE MADE.
- (3) INSTALL EITHER CRUSHED LIMESTONE OR RECYCLED CRUSHED CONCRETE FOR PHASE I & II BACKFILL PER CITY OF MEMPHIS SPECIFICATIONS.
- (4) INSTALL SELECT EARTH MATERIAL FOR PHASE III, IV, & V BACKFILL UNDER UNIMPROVED AREAS PER CITY OF MEMPHIS SPECIFICATIONS.

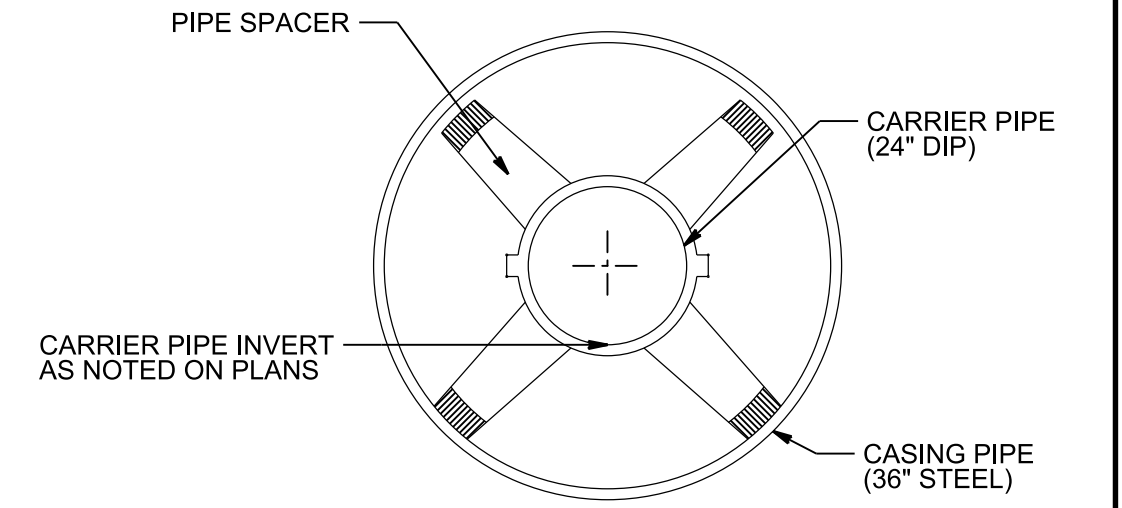
03 TRENCH BACKFILL DETAILS

C7.01 SCALE: N.T.S.



NOTES:

1. CASING PIPE SHALL BE CARBON STEEL WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 35,000 PSI.
2. CASING PIPE WALL THICKNESS SHALL BE SCHEDULE 20 IN ACCORDANCE WITH ASME/ANSI B36.10.
3. CARRIER PIPE SHALL BE DIP WITH RESTRAINED JOINTS.
4. SPACERS SHALL BE NON-METALLIC TYPE, RANGER II MADE BY PIPELINE SEAL AND INSULATOR, INC.
5. END SEALS SHALL BE MODEL "C" OR "W" AS MADE BY PIPELINE SEAL AND INSULATOR, INC.
6. CASINGS TO EXTEND A MINIMUM OF 5' BEYOND THE EDGE OF CONCRETE SUPPORT.
7. CASINGS ARE TO BE SIZED TO PROVIDE A MINIMUM OF 2" ANNULAR SPACE BETWEEN THE OUTSIDE OF THE CARRIER PIPE AND THE INTERIOR OF THE CASING PIPE.
8. MINIMUM CASING SIZES DO NOT ACCOUNT FOR LONGITUDINAL SLOPE OF GRAVITY PIPES.
9. CASING SPACERS SHALL BE BOLTED CIRCULAR STAINLESS STEEL BANDS.
10. RUNNERS SHALL BE GLASS FILLED POLYMER WITH BEVELED ENDS.
11. ALL CARRIER PIPES THAT WILL BE PRESSURIZED SHALL HAVE BELL RESTRAINTS THROUGHOUT CASING PIPE.



CARRIER PIPE DIA.	MIN. CASING PIPE DIA.
NOM. PIPE SIZE	PIPE OD
4"	6.86
6"	8.75
8"	11.05
10"	13.015
12"	15.30
14"	17.85
16"	20.00
18"	22.10
24"	29.88

NOTE: MINIMUM CASING PIPE WALL THICKNESS IS SCHEDULE 20.

05 STEEL CASING PIPE DETAIL

C7.01 SCALE: N.T.S.

ITEM NO.	REVISION DESCRIPTION OF CHANGE	APPROVAL DATE

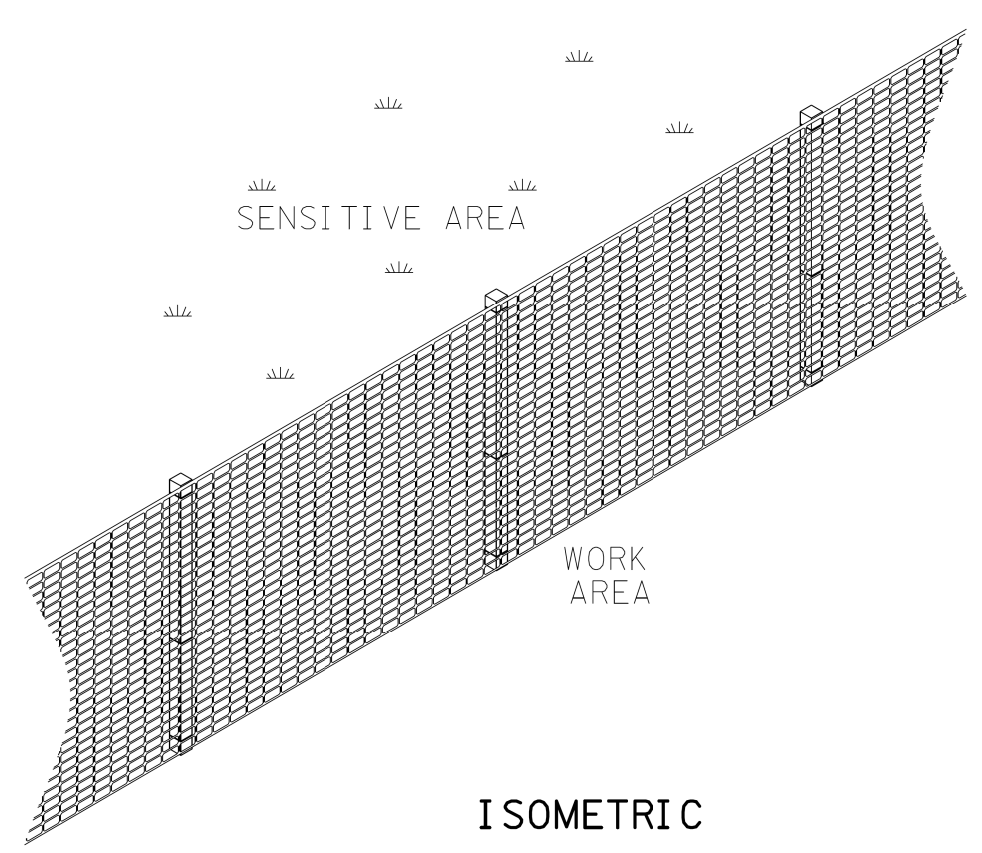
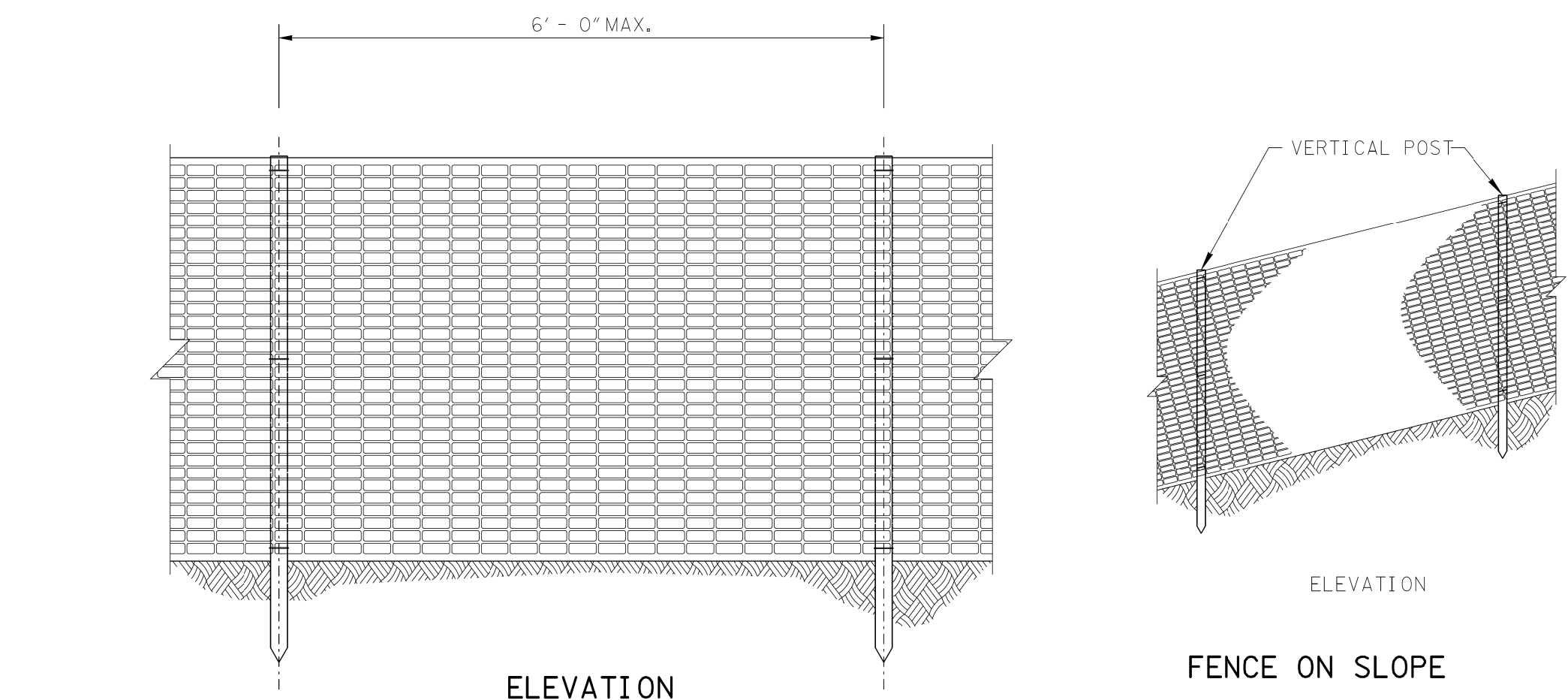


SEWER-BASIN: WS-01
DRAIN-BASIN: CYPRESS-CREEK
SHEET 7 OF 9
CIVIL-DETAILS
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
MEMPHIS, TENNESSEE

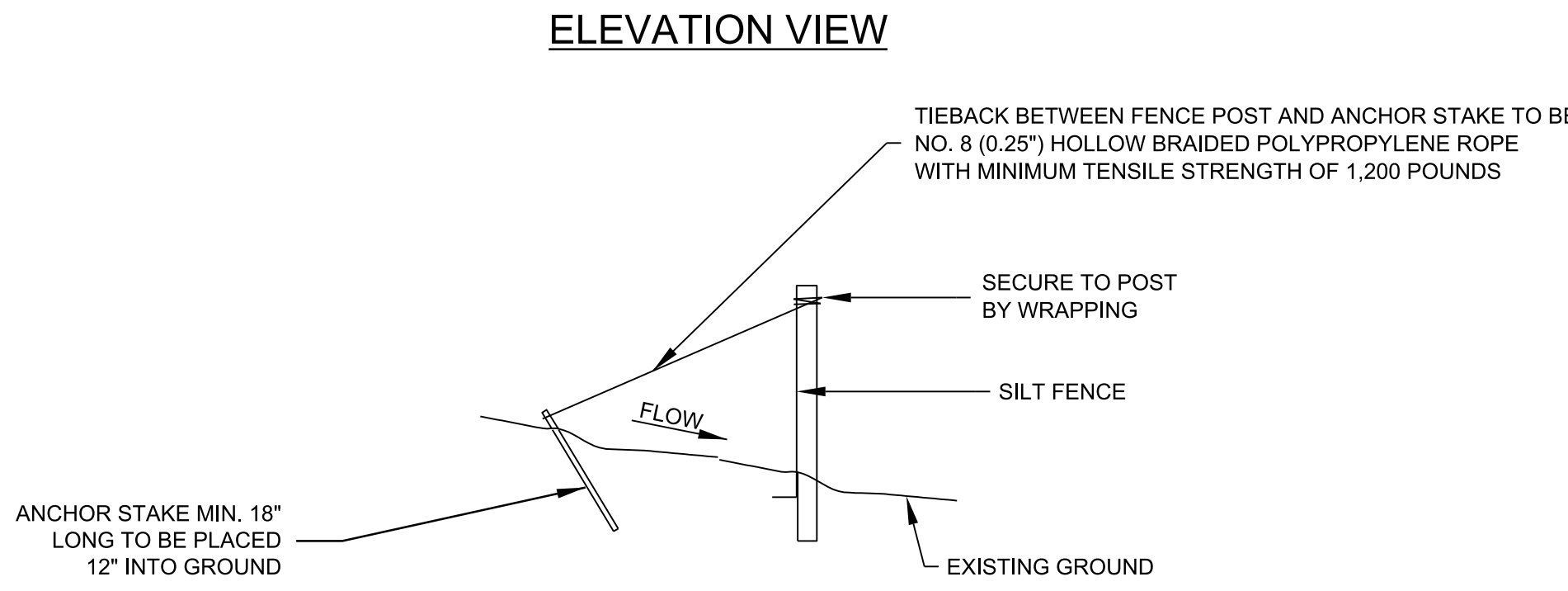
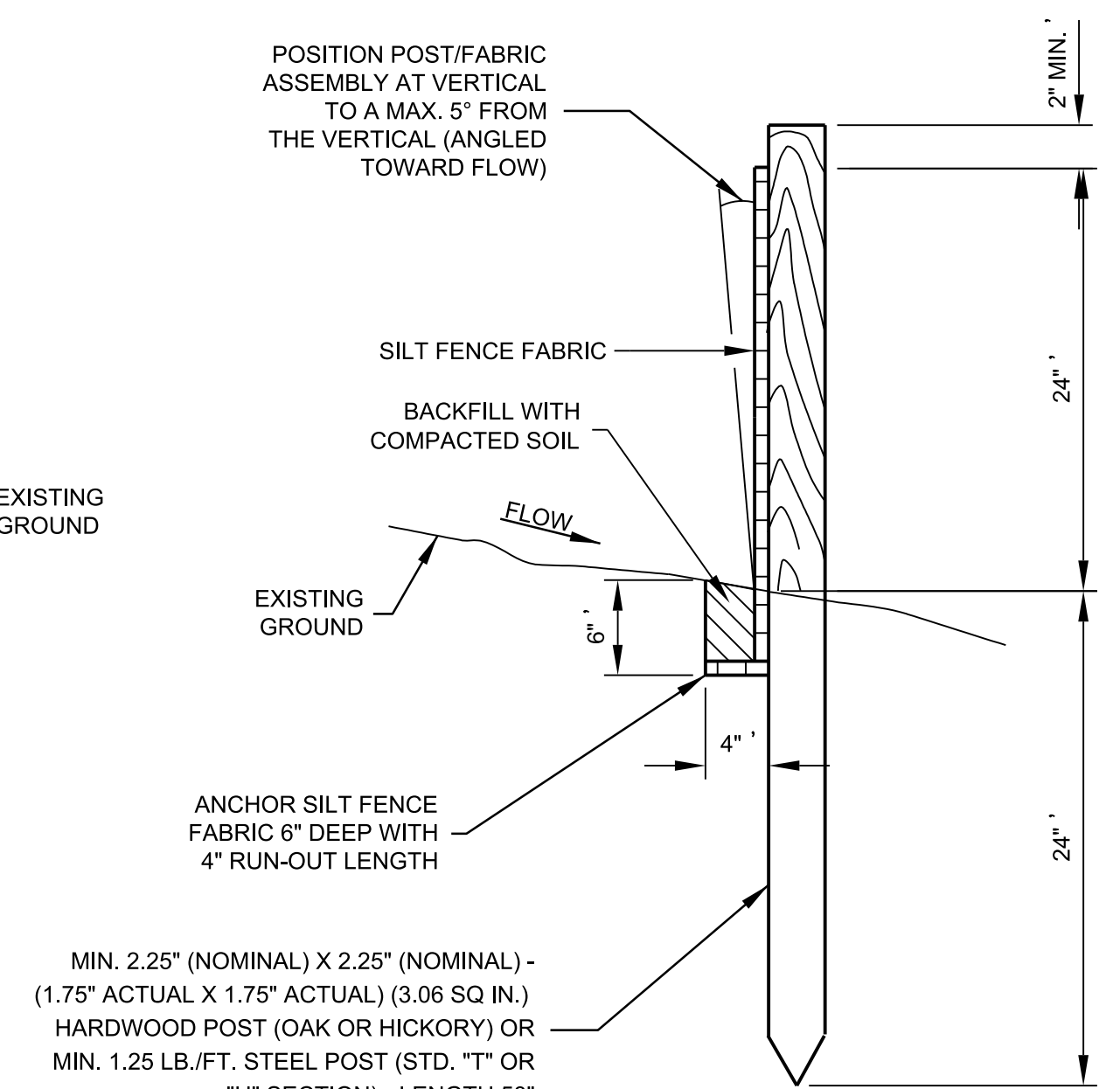
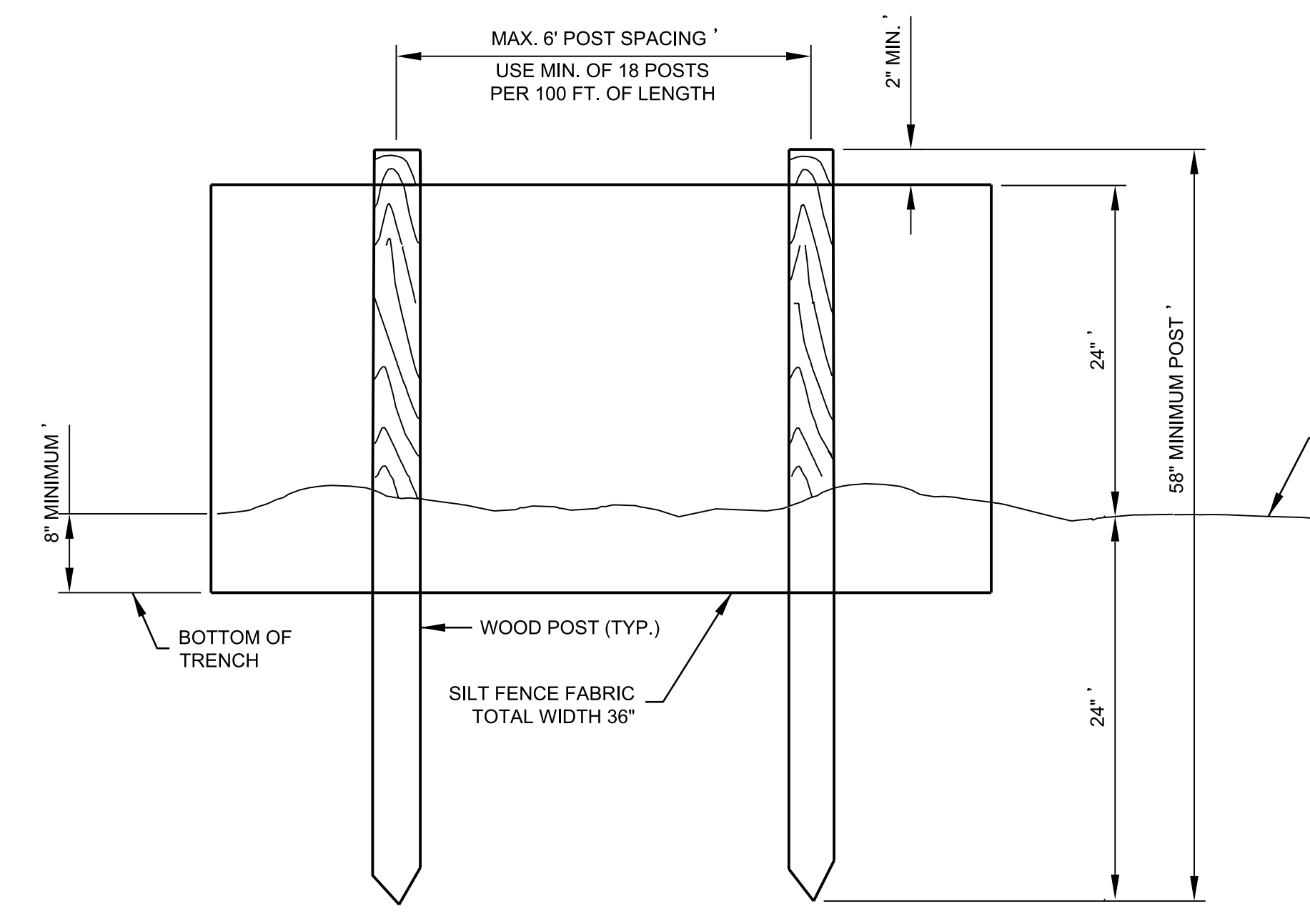
CYPRESS CREEK
BANK STABILIZATION/GRADE CONTROL
MEMPHIS, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: 1" = 20'
REVIEWED

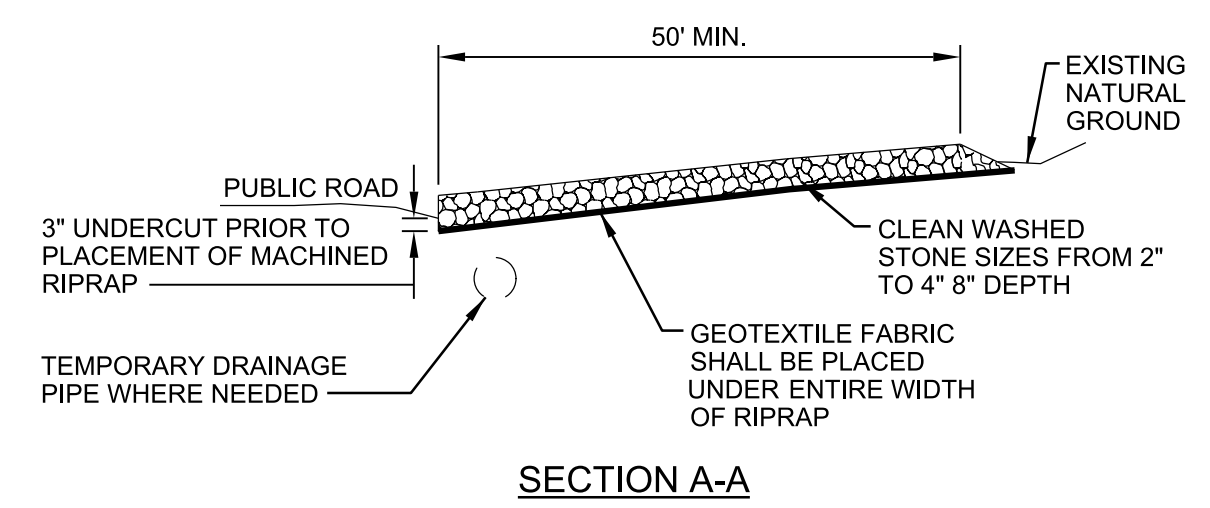
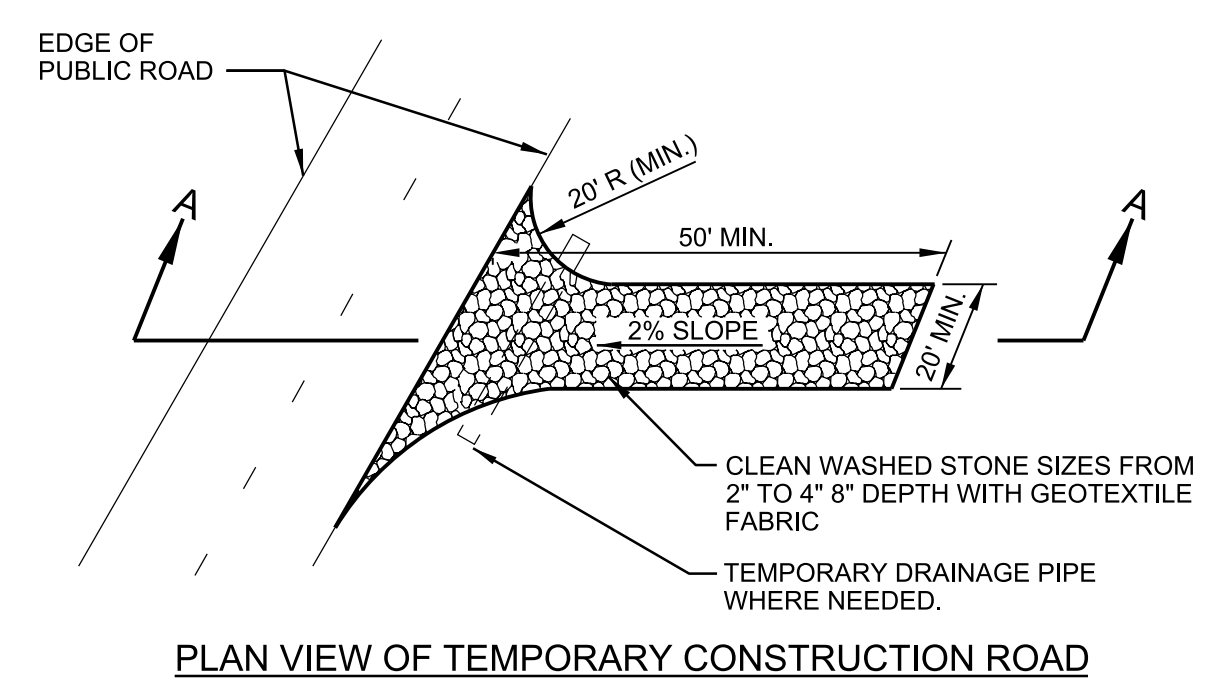
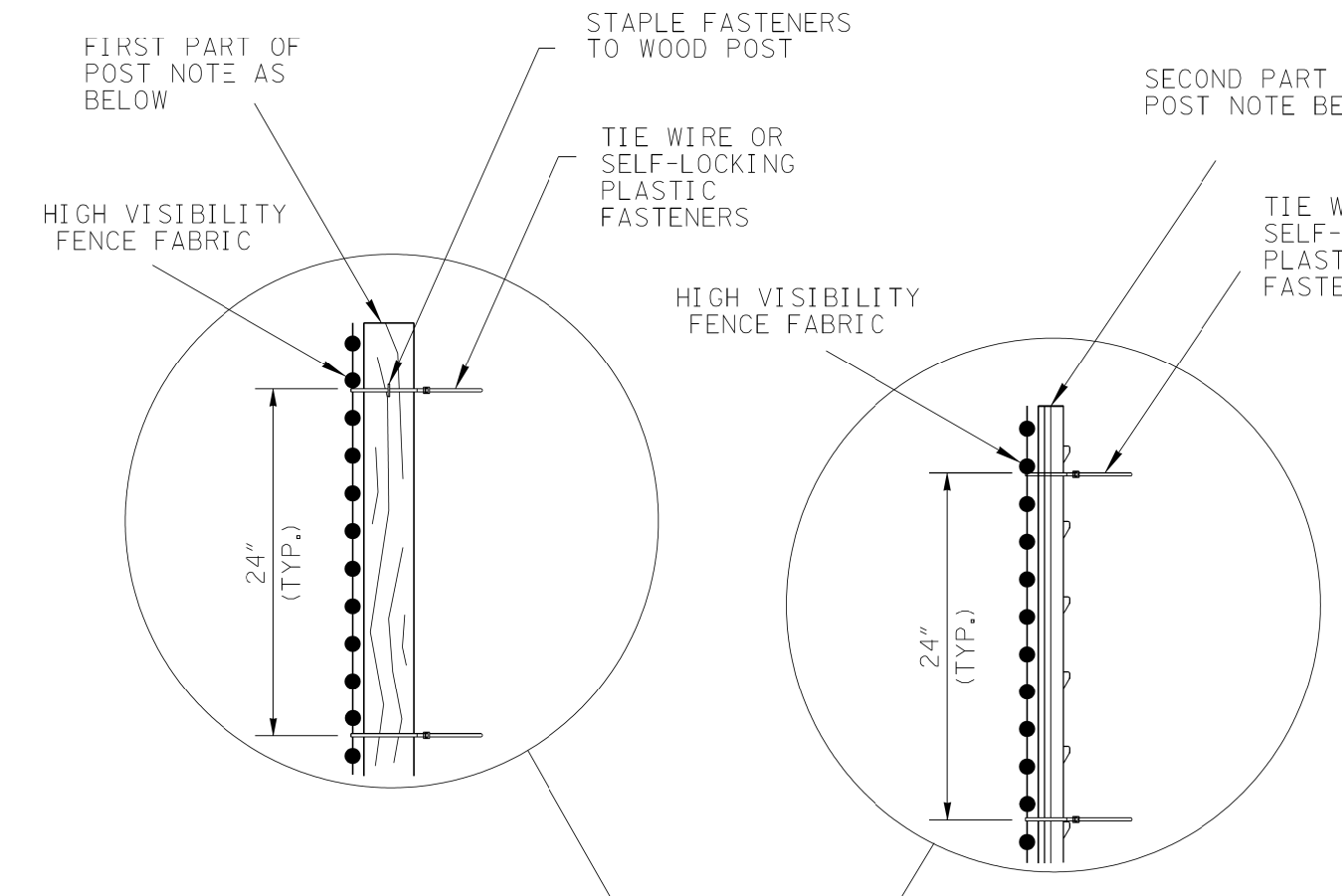
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE



- GENERAL NOTES**
- HIGH VISIBILITY FENCE IS INTENDED TO BE PLACED TO PREVENT DISTURBANCE OF SENSITIVE AREAS, THEIR BUFFERS, AND OTHER AREAS REQUIRED TO BE LEFT UNDISTURBED DURING CONSTRUCTION. IT MAY ALSO BE USED TO MARK APPROVED CLEARING LIMITS AND TO CONTROL VEHICLE ACCESS TO AND ON THE PROJECT SITE.
 - HIGH VISIBILITY FENCE FABRIC SHALL BE MACHINED PRODUCED ORANGE COLORED MESH MANUFACTURED FROM POLYPROPYLENE OR POLYETHYLENE. IT SHALL BE FULLY STABILIZED ULTRAVIOLET RESISTANT.
 - HIGH VISIBILITY FENCE FABRIC MAY BE MADE FROM RECYCLED MATERIALS. MATERIALS SHALL NOT CONTAIN BIODEGRADABLE FILLER MATERIALS THAT CAN DEGRADE THE PHYSICAL OR CHEMICAL CHARACTERISTICS OF THE FINISHED FABRIC.
 - HIGH VISIBILITY FENCE FABRIC SHALL HAVE A MINIMUM 4 FOOT WIDTH AND SHALL BE FURNISHED IN ONE CONTINUOUS WIDTH AND SHALL NOT BE SPLICED TO CONFORM TO THE SPECIFIED WIDTH DIMENSION.
 - STEEL POST SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB./FT. POST SHALL BE HOT-DIPPED GALVANIZED OR PAINT. STEEL POST MAY BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. IF POSTS AND ANCHOR PLATES USED THEY SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.
 - HIGH VISIBILITY FENCE FABRIC SHALL BE FASTENED TO THE POST USING TIE WIRE OR SELF-LOCKING PLASTIC FASTENERS WITH A MAXIMUM FASTENERS SPACING OF 2 FEET. WHEN WOOD POSTS ARE USED THE FASTENERS SHALL BE STAPLED TO THE POST.
 - HIGH VISIBILITY FENCE THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONSTRUCTORS EXPENSE ON THE SAME DAY THE DAMAGE OCCURS.
 - HIGH VISIBILITY FENCE SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:
707-08.11 HIGH VISIBILITY CONSTRUCTION FENCE, PER LF
PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION MAINTENANCE, AND REMOVAL OF HIGH VISIBILITY FENCE.



- SILT FENCE NOTES**
- FILTER CLOTH SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION: M288, SEDIMENT CONTROL, SELF SUPPORTED.
 - THE FILTER MATERIAL SHALL BE STAPLED TO THE STAKES. HEAVY DUTY WIRE STAPLES WITH 1/2 INCH WIDTH SHALL BE USED AND EVENLY SPACED WITH AT LEAST FOUR PER POST FOR SILT FENCES AND THREE (3) PER POST FOR FILTER BARRIERS. FILTER MATERIAL SHALL NOT BE STAPLED TO EXISTING TREES.
 - MINIMUM (2" NOMINAL X 2" NOMINAL) - (1.5" ACTUAL X 1.5" ACTUAL) (2.25 SQ. IN.) HARDWOOD POST (OAK OR HICKORY) - LENGTH 48" OR MINIMUM 1.33 LB./FT. STEEL POST (STD. OR U SECTION).
 - WHEN STEEL POSTS ARE USED THEY SHALL HAVE A PROTECTION FOR FASTENING WIRE TO THEM. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST FIVE PER POST.
 - BINDING WIRE OR TWINE SHALL REMAIN ON STRAW BALES.
 - PLACE STRAW BALES ON ALL DOWN STREAM SIDES OF ALL SILT FENCES.
 - STRAW BALES TO BE PLACED END TO END UP AGAINST THE SILT FENCE.
 - ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN 12" DEEP.
 - INSTALL FENCE ALONG CONTOUR (NEVER UP AND DOWN SLOPE).
 - SILT FENCE SHALL BE MAINTAINED UNTIL CONTRIBUTING AREA IS STABILIZED WITH PAVEMENT OR VEGETATION. ALL FENCING SHALL BE REMOVED AFTER STABILIZATION AND DISPOSED OF IN AN APPROVED LANDFILL.



- CONSTRUCTION SPECIFICATIONS**
- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
 - THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET.
 - THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
 - THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 20 FEET, WHICH EVER IS GREATER.
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FABRIC SHALL BE 12 OZ./S.Y. NON-WOVEN.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

01 CONSTRUCTION FENCE DETAIL
C7.21 SCALE: N.T.S.

03 TEMPORARY CONSTRUCTION EXIT DETAIL
C7.21 SCALE: N.T.S.

02 SILT FENCE DETAIL
C7.21 SCALE: N.T.S.

KIND	PERMANENT COVER SEEDING MIXTURES		
	GROUP A % BY WEIGHT	GROUP B % BY WEIGHT	GROUP C % BY WEIGHT
LESPEDEZA (COMMON OR KOREAN)	20	-	-
SERICEA LESPEDEZA	15	-	50
KY. 31 FESCUE	40	55	30
ENGLISH RYE	15	20	15
WHITE DUTCH CLOVER	5	5	5
WEEPING LOVE GRASS	5	5	-
REDTOP	-	15	-
TOTAL	100	100	100

TIME OF SOWING & SEEDING MIXTURE REQUIRED	
FEBRUARY 1 TO AUGUST 1	USE GROUP A ONLY
MONTH OF AUGUST ONLY	USE EITHER GROUP A OR GROUP B
SEPTEMBER 1 TO DECEMBER 1	USE GROUP B ONLY
DECEMBER 1 TO FEBRUARY 1	DO NOT SOW ANY SEED
FEBRUARY 1 TO DECEMBER 1	USE GROUP C ONLY WHEN SPECIFIED ON PLANS OR CONTRACT DOCUMENTS

04 COVER SEEDING MIXTURES
C7.21 SCALE: N.T.S.

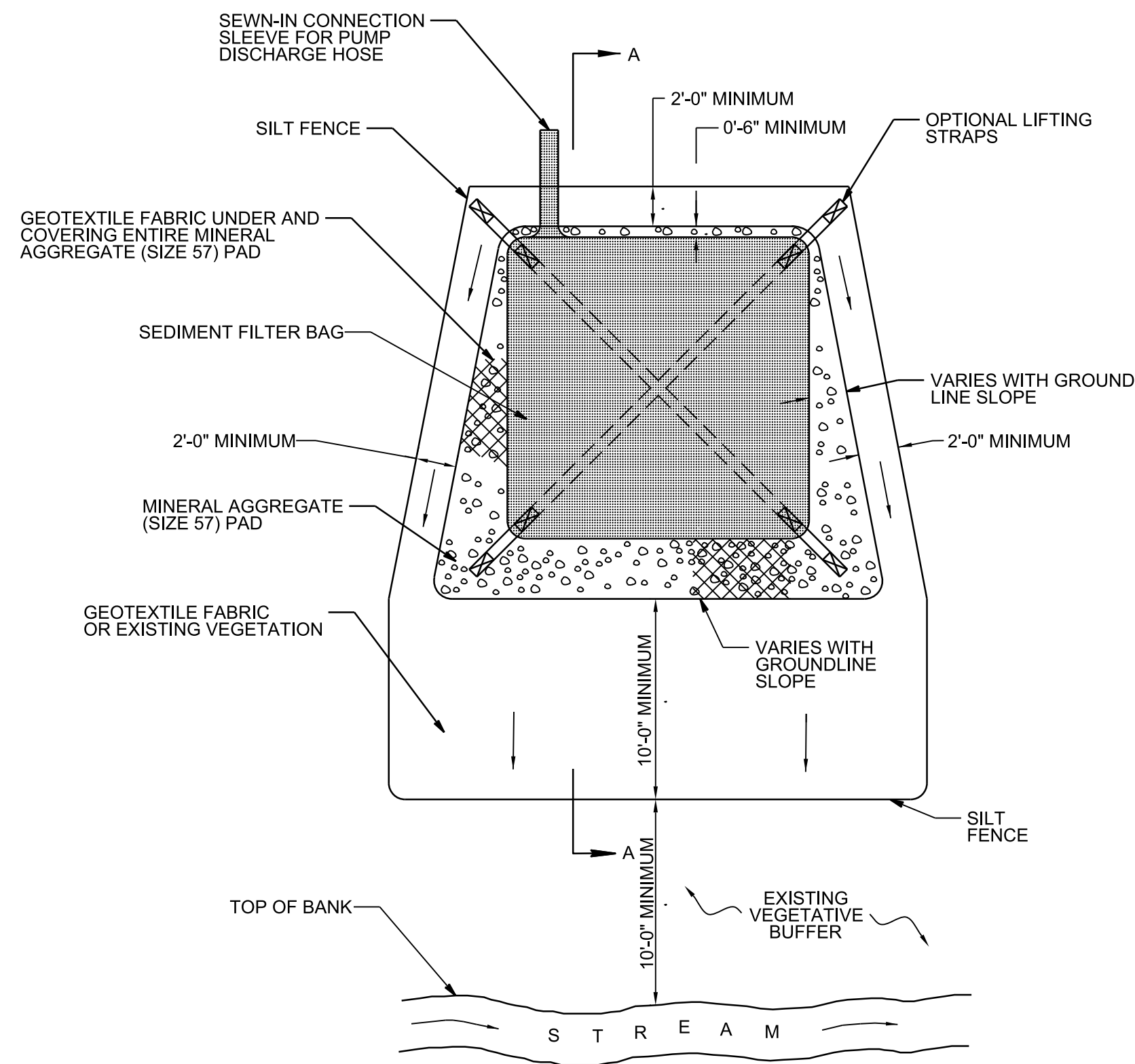
REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



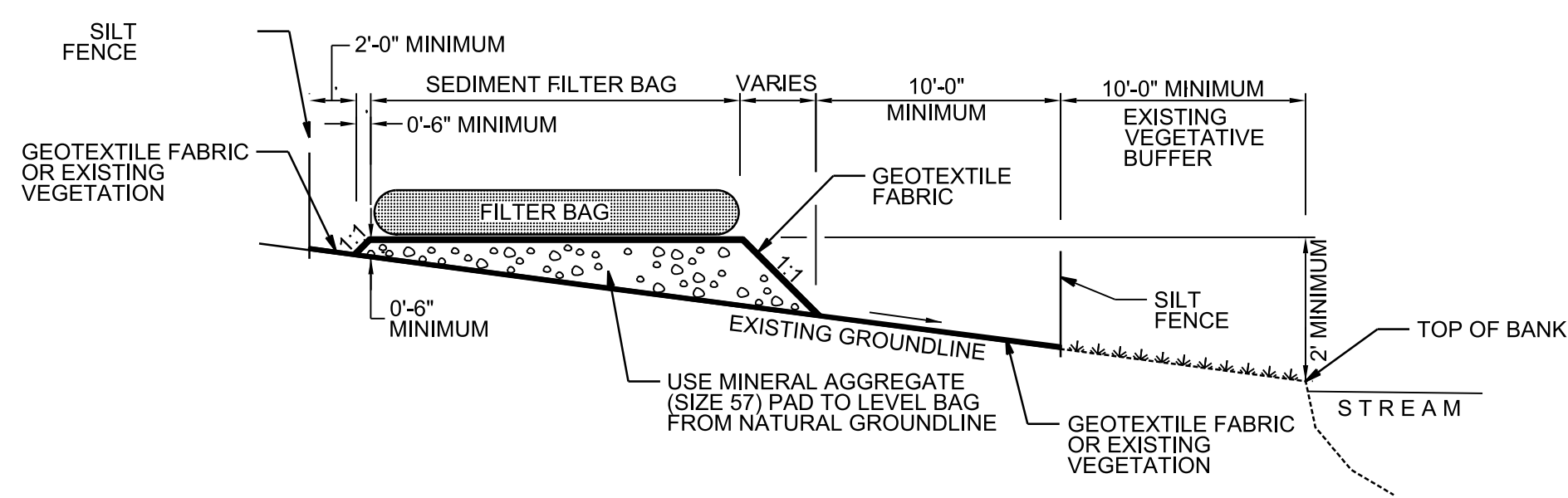
CYPRESS CREEK
BANK STABILIZATION/GRADE CONTROL
MEMPHIS, TENNESSEE
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: WS-01
DRAIN-BASIN: CYPRESS-CREEK
SHEET 8 OF 9
EROSION-CONTROL-DETAILS
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
MEMPHIS, TENNESSEE
SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: N.T.S.
DEVELOPER: SARPID REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

C7.21

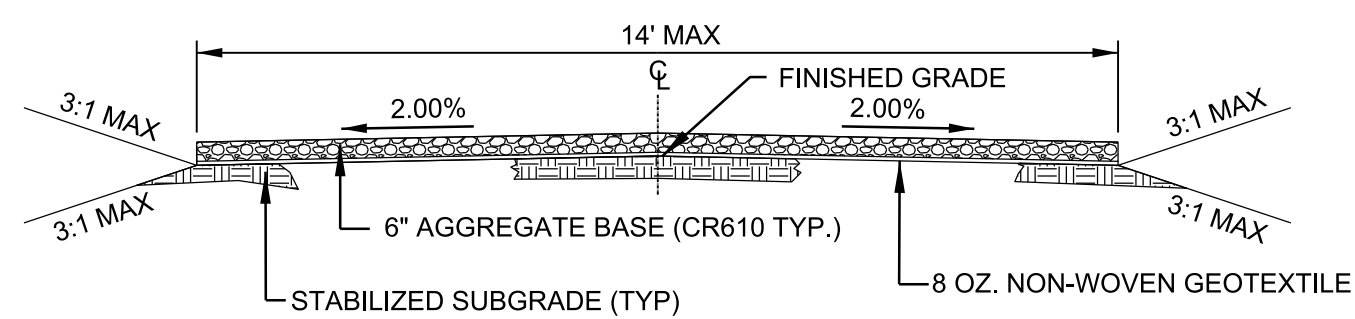


PLAN VIEW



SECTION A-A

01 SEDIMENT FILTER BAG DETAIL
C7.22 SCALE: N.T.S.



NOTES:

1. PLACE CR610 (TYP.) IN TWO COMPACTED LIFTS TO 100% STANDARD PROCTOR ASTM D698.
2. PLACE SEPARATION GEOTEXTILE FABRIC BETWEEN SUBGRADE AND AGGREGATE BASE.
3. FILL TO ACHIEVE SUBGRADE ELEVATION. SUBGRADE TO BE PLACED ON STABLE EXISTING GROUND AFTER IT HAS BEEN GRUBBED, STRIPPED, AND PROOFROLLED TO SHOW STABILITY.
4. IF UNSTABLE, UNDERCUT AS NEEDED AND APPROVE BY ENGINEER.
5. SIDE SLOPES NO STEEPER THAN 1V:3H AND VEGETATE AS NEEDED FOR EROSION PROTECTION.
6. HAUL ROAD SHALL BE PAID FOR UNDER "CONSTRUCTION EXIT".

02 TYPICAL HAUL ROAD DETAIL
C7.22 SCALE: N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



SEWER-BASIN: WS-01
DRAIN-BASIN: CYPRESS-CREEK
C7.22

SHEET 9 OF 9

EROSION-CONTROL-DETAILS
CYPRESS-CREEK
BANK-STABILIZATION/GRADE-CONTROL
MEMPHIS, TENNESSEE

CYPRESS CREEK
BANK STABILIZATION/GRADE CONTROL
MEMPHIS, TENNESSEE
DEVELOPER: SARP10
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02
DESIGN BY: BARGE DATE: 07/19 SCALE: N.T.S.
REVIEWED
DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE

2/13/2020
4:09:38 PM
MTPerkins