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**CONTRACTOR RESPONSIBILITIES:**

- 1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.
B. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.
C. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
2. DURING CONSTRUCTION:
A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS AND WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.
E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.
F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, CONTRACTOR SHALL, AT THEIR OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.
G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.
I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND METRO NASHVILLE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.
J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.
K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.
L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.
M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.
N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.
O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.
R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY THE CONTRACTOR, THEIR SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF THEIR EMPLOYEES.
U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.
V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT THEIR RISK UNTIL SITE IS ACCEPTED, AND THEY WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. THEY SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER REGULATIONS, ETC.
X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.
Y. REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF CONTRACTOR'S WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
Z. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

**DEMOLITION INFORMATION:**

- 1. NOTIFICATIONS:
THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
2. DISPOSAL GUIDELINES:
A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.
B. REMOVE EXISTING PAVED AREAS TO FULL DEPTH INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.
C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE WITH APPROVED BACKFILL MATERIAL AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.
D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. TREE PROTECTION GUIDELINES:
PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

- 4. UTILITIES:
A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.
B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

**SITE INFORMATION:**

- 1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:
A. WHERE A DETAIL, SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.
B. EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.
C. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE.
E. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

**EROSION AND SEDIMENT CONTROL INFORMATION:**

- 1. COMPREHENSIVE:
A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.
D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES.
E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
G. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

**ADA COMPLIANCE:**

- A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.
C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.
F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

**CONCRETE INFORMATION (SITE WORK ONLY):**

- 1. PRODUCT CRITERIA:
A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33.
B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.
C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER.
D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520, 3/4" - 540, 1/2" - 590, 3/8" - 610.
2. CURING CRITERIA:
A. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.
B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.1R-89 TABLE 5.2.7A.
C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED.
D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.
E. CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

**REINFORCING STEEL INFORMATION (SITE WORK ONLY):**

- 1. PRODUCT CRITERIA:
A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.
B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8".
C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO ASTM A-706.

**PAVEMENT INFORMATION:**

- 1. PAVEMENT:
A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, TDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN INFORMATION AND REQUIREMENTS.
C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS OTHERWISE NOTED.
2. SIGNING AND STRIPING:
A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.
B. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

**STORM SEWER NOTES:**

- 1. REINFORCED CONCRETE (RCP) PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS.
2. FILL HEIGHTS OVER 13' OR LESS THAN 3' REQUIRE CLASS IV OR CLASS V RCP STORM PIPE.
3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH METRO NASHVILLE PUBLIC WORKS SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 478.
4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER METRO NASHVILLE PUBLIC WORKS STANDARD DETAIL FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS: 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH- (102-MM-) MINIMUM WIDTH FLANGE AND 28-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER."
5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.
6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.
7. ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30.
8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE STRUCTURES.
9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES.
10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND DETENTION SYSTEMS.
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

**CLEARING AND GRUBBING:**

- A. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED ON THE PLANS.
B. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.
C. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.
D. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN.
E. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.
F. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK
G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.
E. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.
F. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUIRE TREE WELLS WITHIN THE GRADING LIMITS.
G. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR DAYS.

**GRADING NOTES:**

- A. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF TOPSOIL MATERIAL.
B. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.
C. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
D. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
E. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.
F. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION.
G. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR DAYS OF ACHIEVING OPTIMUM SUBGRADE COMPACTION.
H. CONTRACTOR SHALL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE TESTS AS REQUIRED.
I. CONTRACTOR SHALL HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB SITE.
J. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.
K. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVISE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.
L. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS.
M. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE CONTRACTOR.
N. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:
• D421-58, DRY PREPARATION OF SOIL SAMPLES FOR GRAIN-SIZE ANALYSIS AND DETERMINATION OF SOIL CONSTANTS.
• D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS.
• D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200 SIEVE.
• D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT
• D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM) DROP.
O. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.
P. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
Q. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING WITH LOAD TICKETS, PHOTOGRAPHS, LOG BOOK, VIDEO RECORDING AND OTHER MEANS AS NECESSARY TO VERIFY THE INSTALLATION OF STORMWATER BEST MANAGEMENT PRACTICES REQUIRED BY THE LOCAL MUNICIPALITY AND JURISDICTION. AS-BUILT TOPOGRAPHY AND UTILITY PLANS HAVING BEEN PREPARED BY A QUALIFIED LAND SURVEYOR ARE REQUIRED TO BE SUBMITTED TO KIMLEY-HORN AT THE CONCLUSION OF THE PROJECT FOR VERIFICATION OF DESIGN INTENT. ANY MODIFICATIONS TO THE GRADING AND UTILITY SYSTEMS REQUIRED, NOT PREVIOUSLY APPROVED BY THE OWNER AND ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR.

**BID SET**



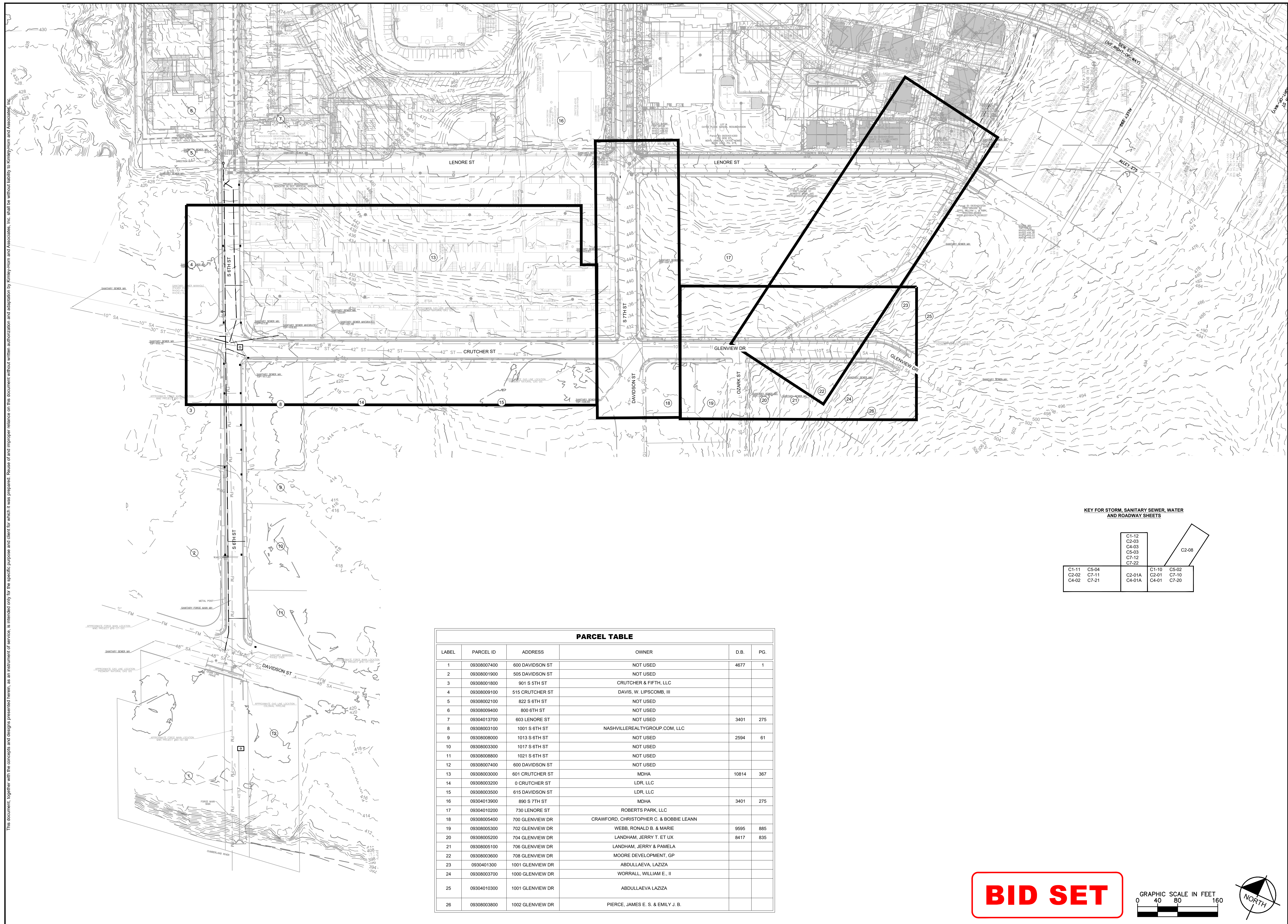
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Table with columns for REVISIONS, DATE, and BY. Includes fields for DESIGNED BY (MKF), DRAWN BY (LEB), CHECKED BY (ZJD), and DATE (06/16/2022).

KIMLEY-HORN PROJECT NO. 118109018

GENERAL NOTES SHEET NUMBER C0-01



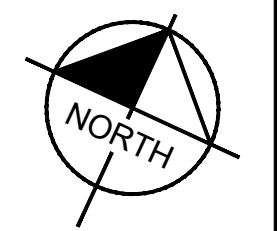
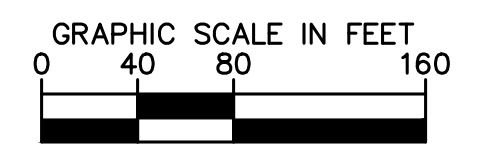
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KEY FOR STORM, SANITARY SEWER, WATER AND ROADWAY SHEETS

C1-11	C5-04	C1-10	C5-02
C2-02	C7-11	C2-01	C7-10
C4-02	C7-21	C4-01A	C4-01
			C7-20
			C2-08

PARCEL TABLE					
LABEL	PARCEL ID	ADDRESS	OWNER	D.B.	PG.
1	09308007400	600 DAVIDSON ST	NOT USED	4677	1
2	09308001900	505 DAVIDSON ST	NOT USED		
3	09308001800	901 S 5TH ST	CRUTCHER & FIFTH, LLC		
4	09308009100	515 CRUTCHER ST	DAVIS, W. LIPSCOMB, III		
5	09308002100	822 S 6TH ST	NOT USED		
6	09308009400	800 6TH ST	NOT USED		
7	09304013700	603 LENORE ST	NOT USED	3401	275
8	09308003100	1001 S 6TH ST	NASHVILLEREALTYGROUP.COM, LLC		
9	09308008000	1013 S 6TH ST	NOT USED	2594	61
10	09308003300	1017 S 6TH ST	NOT USED		
11	09308008800	1021 S 6TH ST	NOT USED		
12	09308007400	600 DAVIDSON ST	NOT USED		
13	09308003000	601 CRUTCHER ST	MDHA	10814	367
14	09308003200	0 CRUTCHER ST	LDR, LLC		
15	09308003500	615 DAVIDSON ST	LDR, LLC		
16	09304013900	890 S 7TH ST	MDHA	3401	275
17	09304010200	730 LENORE ST	ROBERTS PARK, LLC		
18	09308005400	700 GLENVIEW DR	CRAWFORD, CHRISTOPHER C. & BOBBIE LEANN		
19	09308005300	702 GLENVIEW DR	WEBB, RONALD B. & MARIE	9595	885
20	09308005200	704 GLENVIEW DR	LANDHAM, JERRY T. ET UX	8417	835
21	09308005100	706 GLENVIEW DR	LANDHAM, JERRY & PAMELA		
22	09308003600	708 GLENVIEW DR	MOORE DEVELOPMENT, GP		
23	09304013000	1001 GLENVIEW DR	ABDULLAeva, LAZIZA		
24	09308003700	1000 GLENVIEW DR	WORRALL, WILLIAM E., II		
25	09304010300	1001 GLENVIEW DR	ABDULLAeva LAZIZA		
26	09308003800	1002 GLENVIEW DR	PIERCE, JAMES E. S. & EMILY J. B.		

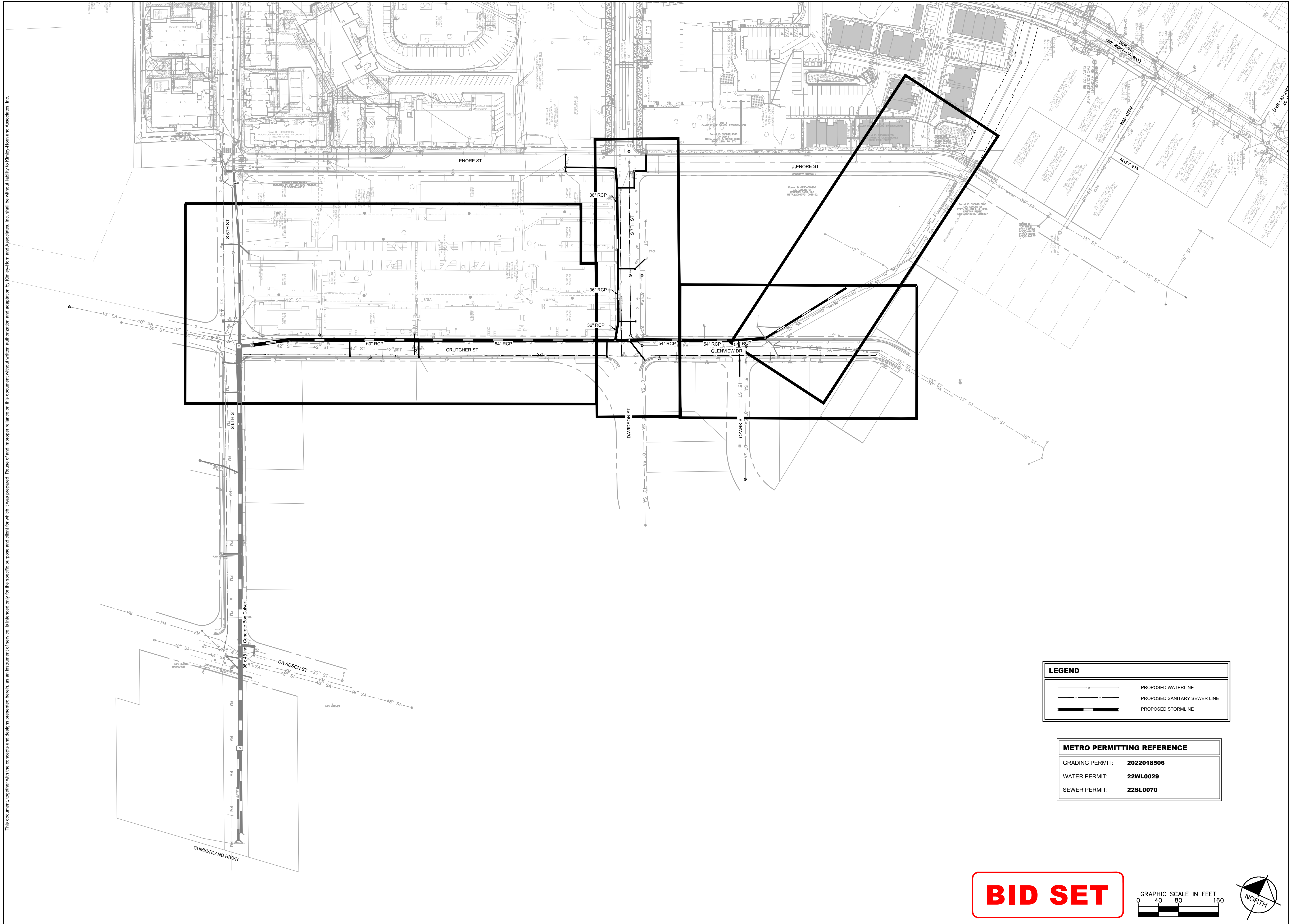
**BID SET**



DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO. 118109018	
OVERALL KEY MAP	
SHEET NUMBER	
<b>C1-00</b>	



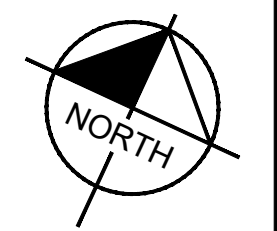
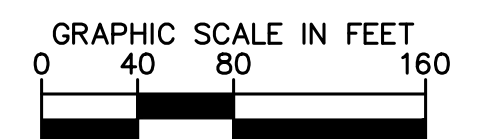
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LEGEND	
	PROPOSED WATERLINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED STORMLINE

METRO PERMITTING REFERENCE	
GRADING PERMIT:	2022018506
WATER PERMIT:	22WL0029
SEWER PERMIT:	22SL0070

**BID SET**



**Kimley»Horn**  
 214 OceanSide Drive, Nashville, TN 37204  
 Main: 615.564.2701 | www.kimley-horn.com  
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**CAYCE UTILITY PHASE 1B**  
**MDHA**  
 NASHVILLE, TN

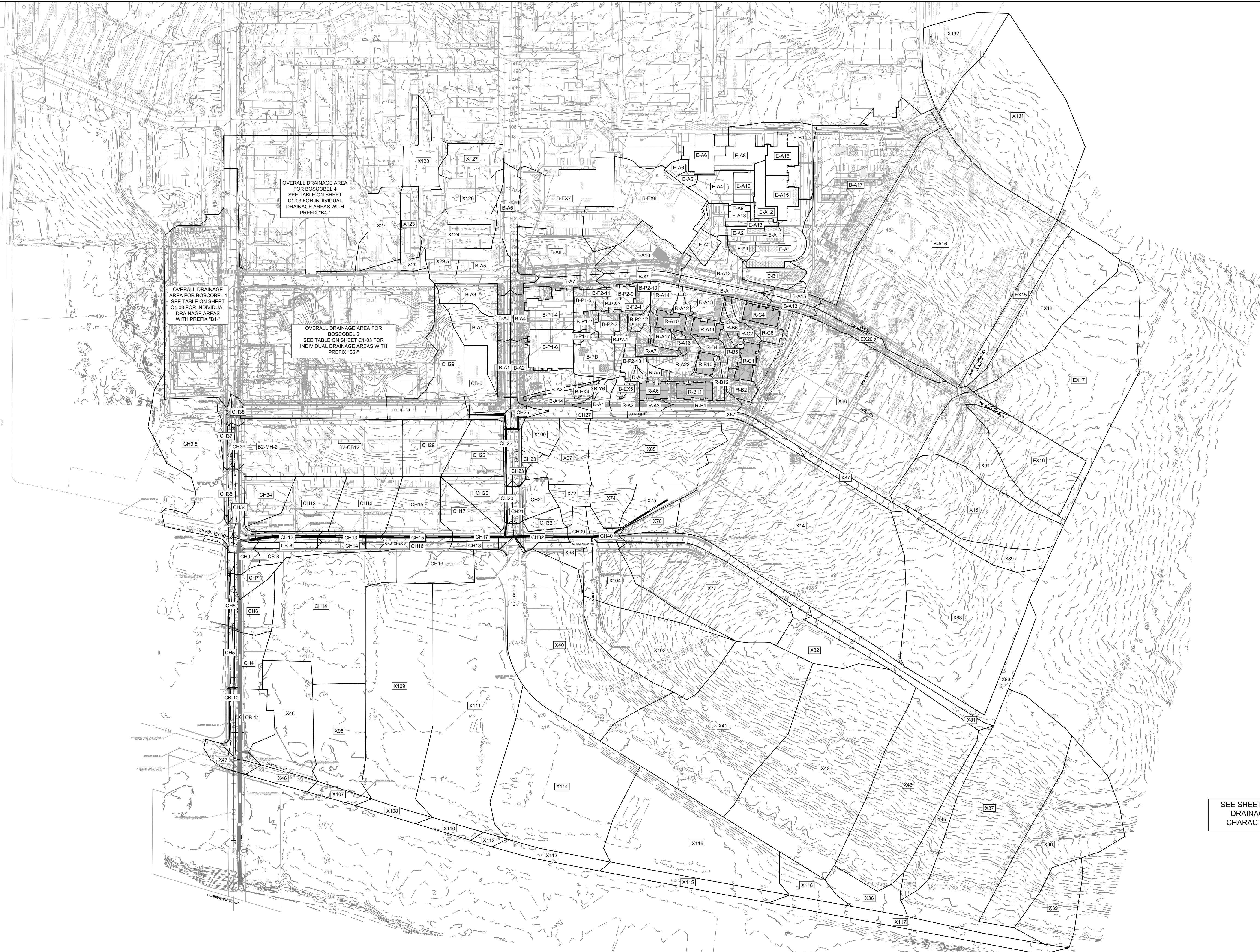


NO.	DATE	BY	REVISIONS
1			
2			
3			
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5			
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7			
8			
9			
10			

DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018

OVERALL UTILITY LAYOUT  
 SHEET NUMBER  
**C1-01**

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OVERALL DRAINAGE AREA FOR BOSCOBEL 4  
SEE TABLE ON SHEET C1-03 FOR INDIVIDUAL DRAINAGE AREAS WITH PREFIX "B4."

OVERALL DRAINAGE AREA FOR BOSCOBEL 1  
SEE TABLE ON SHEET C1-03 FOR INDIVIDUAL DRAINAGE AREAS WITH PREFIX "B1."

OVERALL DRAINAGE AREA FOR BOSCOBEL 2  
SEE TABLE ON SHEET C1-03 FOR INDIVIDUAL DRAINAGE AREAS WITH PREFIX "B2."

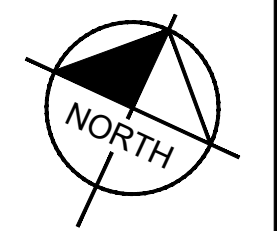
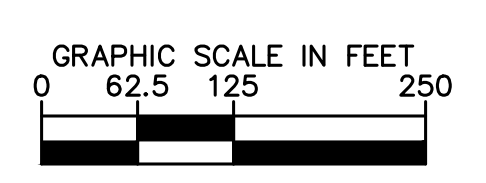
SEE SHEET C1-03 FOR DRAINAGE AREA CHARACTERISTICS



NO.	DATE	BY	REVISIONS

DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018

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LABEL	OUTFLOW ELEMENT	AREA (AC)	RUNOFF COEFFICIENT	Tc	FLOW - 10 YEAR CFS	FLOW - 100 YEAR CFS
B-A1	B-A1	0.134	0.90	5	0.85	1.18
B-A2	B-A2	0.399	0.80	5	2.24	3.13
B-A3	B-A3	0.111	0.90	5	0.70	0.98
B-A4	B-A4	0.209	0.80	5	1.17	1.64
B-A5	B-A5	0.183	0.90	5	1.16	1.62
B-A6	B-A6	0.389	0.90	5	2.46	3.43
B-A7	B-A7	0.156	0.90	5	0.99	1.38
B-A8	B-A8	0.63	0.80	15	2.46	3.49
B-A9	B-A9	0.17	0.90	5	1.08	1.50
B-A10	B-A10	0.511	0.80	10	2.35	3.33
B-A11	B-A11	0.179	0.90	5	1.13	1.57
B-A12	B-A12	0.358	0.80	5	2.01	2.80
B-A13	B-A13	0.091	0.90	5	0.57	0.80
B-A14	B-A14	0.188	0.70	5	0.92	1.29
B-A15	B-A15	0.113	0.75	5	0.60	0.83
B-A16	B-A16	5.81	0.65	10	21.73	30.76
B-EX4	B-EX4	0.028	0.50	5	0.10	0.14
B-EX5	B-EX5	0.017	0.50	5	0.06	0.09
B-EX7	B-EX7	0.964	0.80	15	3.76	5.35
B-EX8	B-EX8	1.277	0.70	15	4.36	6.20
B-P1-1	B-P1-1	0.038	0.70	5	0.19	0.26
B-P1-2	B-P1-2	0.078	0.70	5	0.38	0.53
B-P1-3	B-P1-5	0.092	0.90	5	0.58	0.81
B-P1-4	B-P1-4	0.29	0.90	5	1.83	2.56
B-P1-6	B-P1-6	0.322	0.90	5	2.04	2.84
B-P2-1	B-P2-1	0.094	0.90	5	0.59	0.83
B-P2-10	B-P2-10	0.049	0.90	5	0.31	0.43
B-P2-11	B-P2-11	0.052	0.90	5	0.33	0.46
B-P2-11	B-P2-11	0.007	0.70	5	0.03	0.05
B-P2-12	B-P2-12	0.047	0.90	5	0.30	0.41
B-P2-13	B-P2-13	0.165	0.90	5	1.04	1.45
B-P2-2	B-P2-2	0.094	0.90	5	0.59	0.83
B-P2-3	B-P2-3	0.056	0.90	5	0.35	0.49
B-P2-3	B-P2-3	0.013	0.70	5	0.06	0.09
B-P2-4	B-P2-4	0.047	0.70	5	0.23	0.32
B-P2-6	B-P2-9	0.061	0.90	5	0.39	0.54
B-PD	B-PD	0.301	0.75	5	1.59	2.22
B-Y6	B-Y6	0.018	0.75	5	0.10	0.13
B-Y7	B-Y7	0.039	0.75	5	0.21	0.29
B2-CB11	B2-MH-2	0.552	0.75	5	2.91	4.05
B2-CB12	B2-CB12	1.118	0.75	5	5.89	8.22
B2-DA1	B1-AD2	0.458	0.95	5	3.06	4.27
B2-DA10	B2-CB11	0.121	0.95	5	0.81	1.12
B2-DA11	B2-CB12	0.166	0.95	5	1.11	1.55
B2-DA12	B2-CB14	0.206	0.95	5	1.37	1.92
B2-DA13	B2-CB13	0.222	0.95	5	1.48	2.07
B2-DA16	B2-BIO	2.458	0.75	5	12.95	18.06
B2-DA2	B1-CB1	0.124	0.95	5	0.82	1.15
B2-DA4	B2-CB5A	0.516	0.95	5	3.45	4.81
B2-DA8	B2-CB4A	0.111	0.95	5	0.74	1.04
B2-DA9	B2-CB3A	0.053	0.95	5	0.35	0.49
B4-1	B2-CB10	0.253	0.87	5	1.55	2.16
B4-15	B2-EX	0.351	0.43	5	1.06	1.48
B4-16	B2-EX	0.323	0.55	5	1.25	1.74
B4-17	B2-EX	1	0.95	5	6.67	9.31
B4-18	B2-CB8	0.05	0.85	5	0.30	0.42
B4-19	B2-EX	0.161	0.91	5	1.03	1.44
B4-20	B2-CB9	0.146	0.83	5	0.85	1.19
B4-22	B2-CB8	0.045	0.80	5	0.25	0.35
B4-23	B2-CB15	0.249	0.82	5	1.43	2.00
B4-24	B2-CB7	0.106	0.81	5	0.60	0.84
B4-25	B2-CB10	0.124	0.59	5	0.51	0.72
CH4	CH4.5	0.125	0.64	5	0.56	0.79
CH4	CH6	0.198	0.62	5	0.86	1.20
CH5	CH8	0.062	0.90	5	0.39	0.54
CH6	CH7	0.148	0.63	5	0.65	0.91
CH8	CH9.5	1.403	0.85	5	5.43	7.74
CH12	CH12	0.125	0.90	5	0.79	1.10
CH12	CH12	0.589	0.75	5	3.10	4.33
CH13	CH13	0.123	0.90	5	0.78	1.08
CH13	CH13	0.571	0.75	5	3.01	4.19
CH14	CH14	0.077	0.90	5	0.49	0.68
CH14	CH14	2.207	0.65	15	7.00	9.95
CH15	CH15	0.131	0.90	5	0.83	1.16
CH15	CH15	0.48	0.75	5	2.53	3.53

CH16	CH16	0.085	0.90	5	0.54	0.75
CH16	CH16	0.485	0.75	5	2.56	3.57
CH17	CH17	0.125	0.90	5	0.79	1.10
CH18	CH18	0.074	0.90	5	0.47	0.65
CH19	CH17	0.306	0.75	5	1.61	2.25
CH20	CH20	0.059	0.90	5	0.37	0.52
CH20	CH20	0.322	0.75	5	1.70	2.36
CH21	CH21	0.067	0.90	5	0.42	0.59
CH22	CH22	0.493	0.75	5	2.60	3.62
CH22	CH22	0.088	0.90	5	0.55	0.77
CH23	CH23	0.098	0.90	5	0.62	0.86
CH23	CH23	0.052	0.80	5	0.29	0.41
CH24	CH24	0.068	0.90	5	0.43	0.6
CH25	CH25	0.091	0.90	5	0.57	0.8
CH27	CH27	0.113	0.90	5	0.71	1.00
CH29	CH29	0.555	0.75	5	2.92	4.08
CH34	CH34	0.345	0.75	5	1.82	2.53
CH34	CH34	0.184	0.90	5	1.16	1.62
CH35	CH35	0.084	0.90	5	0.53	0.74
CH36	CH36	0.094	0.90	5	0.59	0.83
CH37	CH37	0.132	0.90	5	0.83	1.16
CH38.5	CH38.1	0.052	0.90	5	0.33	0.46
CM-2	X76	0.19	0.65	5	0.87	1.21
CM-3	CH8	0.024	0.90	5	0.15	0.21
CM-6	CH29	0.531	0.75	5	2.80	3.90
CM-7	CH29	0.276	0.80	5	1.55	2.17
CM-9	CH11	0.253	0.80	5	1.42	1.99
CM-10	CH9	0.113	0.90	5	0.72	1.00
CM-11	B-A3	0.255	0.75	5	1.34	1.87
CM-12	B-A1	0.374	0.75	5	1.97	2.75
CM-13	CH30	0.364	0.75	5	1.92	2.67
CM-15	CH21	0.205	0.80	5	1.15	1.61
CM-16	CH39	0.123	0.80	5	0.69	0.96
CM-17	CH32	0.117	0.80	5	0.66	0.91
CM-19	CH4	0.284	0.80	5	1.60	2.22
CM-20	CH41	0.08	0.90	5	0.51	0.71
CM-21	CH5	0.069	0.90	5	0.43	0.60
CM-22	CH3.5	0.42	0.80	5	2.36	3.29
CM-23	CH32	0.113	0.70	5	0.56	0.78
CM-24	X132	0.824	0.65	5	3.76	5.25
CM-25	X131	2.945	0.65	5	13.45	18.75
DA-3	B1-AD3	0.177	0.79	5	0.98	1.37
DA-4	B1-AD3	0.122	0.95	5	0.81	1.13
DA-5	B1-NP15	0.11	0.95	5	0.73	1.02
DA-6	B1-NP15	0.122	0.95	5	0.81	1.13
DA-7	B1-NP15	0.11	0.95	5	0.73	1.02
DA-8	B1-NP11	0.122	0.95	5	0.81	1.13
DA-9	B1-NP11	0.11	0.95	5	0.73	1.02
DA-10	B1-AD4	0.147	0.77	5	0.80	1.11
DA-11	B1-AD5	0.084	0.89	5	0.53	0.73
DA-12	B1-AD6	0.015	0.95	5	0.10	0.14
DA-13	B1-AD9	0.25	0.87	5	1.53	2.13
DA-14	B1-AD19	0.008	0.68	5	0.04	0.06
DA-15	B1-NP14	0.009	0.57	5	0.03	0.05
DA-16	B1-AD20	0.053	0.79	5	0.30	0.41
DA-17	B1-NP13	0.033	0.30	5	0.07	0.10
DA-18	B1-NP18	0.009	0.57	5	0.03	0.05
DA-19	B1-AD21	0.049	0.77	5	0.27	0.37
DA-20	B1-NP17	0.032	0.30	5	0.07	0.09
DA-21	B1-AD3	0.009	0.87	5	0.05	0.07
DA-22	B1-AD4	0.009	0.82	5	0.05	0.07
DA-23	B1-AD5	0.087	0.87	5	0.53	0.74
DA-24	B1-NP15	0.019	0.30	5	0.04	0.05
DA-25	B1-NP11	0.019	0.30	5	0.04	0.05
E-A1	E-A1	0.073	0.90	5	0.46	0.65
E-A1	E-A1	0.353	0.80	5	1.98	2.77
E-A2	E-A2	0.394	0.90	5	2.49	3.47
E-A4	E-A4	0.226	0.70	5	1.11	1.55
E-A5	E-A5	0.043	0.70	5	0.21	0.30
E-A6	E-A6	0.053	0.70	5	0.26	0.36
E-A6	E-A6	0.204	0.90	5	1.29	1.80
E-A8	E-A8	0.236	0.90	5	1.49	2.08
E-A9	E-A9	0.024	0.90	5	0.15	0.21
E-A9	E-A9	0.012	0.90	5	0.07	0.10
E-A10	E-A10	0.114	0.90	5	0.72	1.01
E-A11	E-A11	0.047	0.90	5	0.30	0.42
E-A12	E-A12	0.152	0.90	5	0.96	1.34

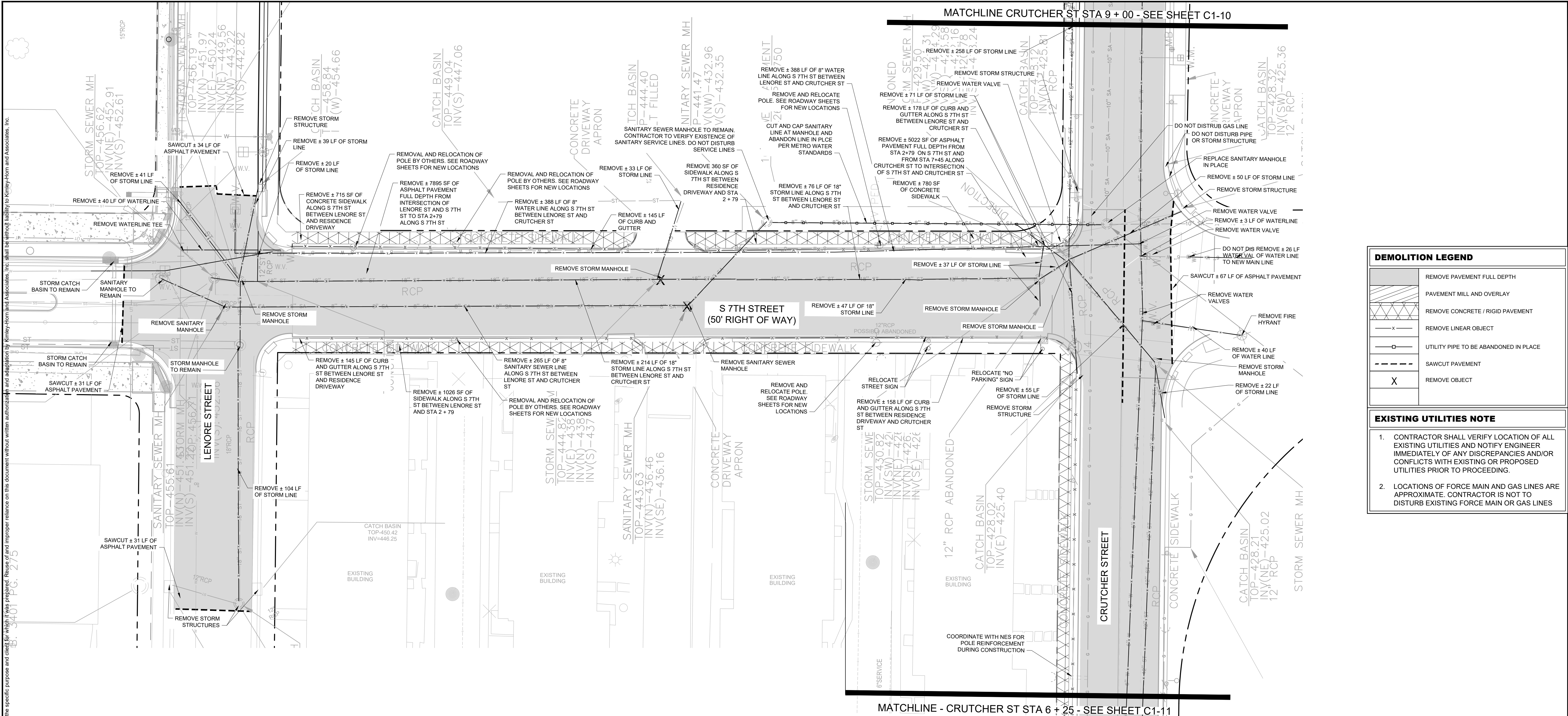
E-A13	E-A13	0.042	0.90	5	0.27	0.37
E-A13	E-A13	0.025	0.90	5	0.16	0.22
E-A15	E-A15	0.189	0.90	5	1.20	1.67
E-A16	E-A16	0.186	0.90	5	1.18	1.64
E-B1	E-B1	0.247	0.50	5	0.87	1.21
E-B1	E-B1	0.471	0.50	10	1.36	1.92
EX15	EX15	0.506	0.90	10	2.62	3.71
EX16	EX16	1.028	0.65	10	3.85	5.44
EX17	EX17	3.005	0.65	10	11.24	15.91
EX18	EX18	1.375	0.65	10	5.14	7.28
EX20	EX20	0.234	0.90	5	1.48	2.07
R-A1	R-A1	0.109	0.80	5	0.61	0.85
R-A2	R-A2	0.156	0.80	5	0.88	1.22
R-A3	R-A3	0.045	0.90	5	0.28	0.40
R-A5	R-A5	0.081	0.90	5	0.51	0.71
R-A6	R-A6	0.027	0.90	5	0.17	0.24
R-A7	R-A7	0.095	0.80	5	0.53	0.74
R-A10	R-A10	0.087	0.90	5	0.55	0.77
R-A11	R-A11	0.084	0.90	5	0.53	0.74
R-A12	R-A12	0.052	0.70	5	0.26	0.36
R-A13	R-A13	0.19	0.70	5	0.93	1.30
R-A14	R-A14	0.139	0.70	5	0.68	0.95
R-A16	R-A16	0.037	0.90	5	0.23	0.33
R-A17	R-A17	0.113	0.90	5	0.71	1.00
R-A20	R-A6	0.086	0.90	5	0.54	0.76
R-A22	R-A22	0.223	0.90	5	1.41	1.97
R-B1	R-B1	0.251	0.90	5	1.59	2.21
R-B2	R-B2	0.113	0.80	5	0.64	0.89
R-B4	R-B4	0.114	0.90	5	0.72	1.01
R-B5	R-B5	0.087	0.90	5	0.55	0.77
R-B6	R-B6	0.062	0.90	5	0.39	0.55
R-B10	R-B10	0.064	0.90	5	0.40	0.56
R-B11	R-B11	0.106	0.90	5	0.67	0.93
R-B12	R-B12	0.07	0.90	5	0.44	0.62
R-C1	R-C1	0.108	0.90	5	0.68	0.95







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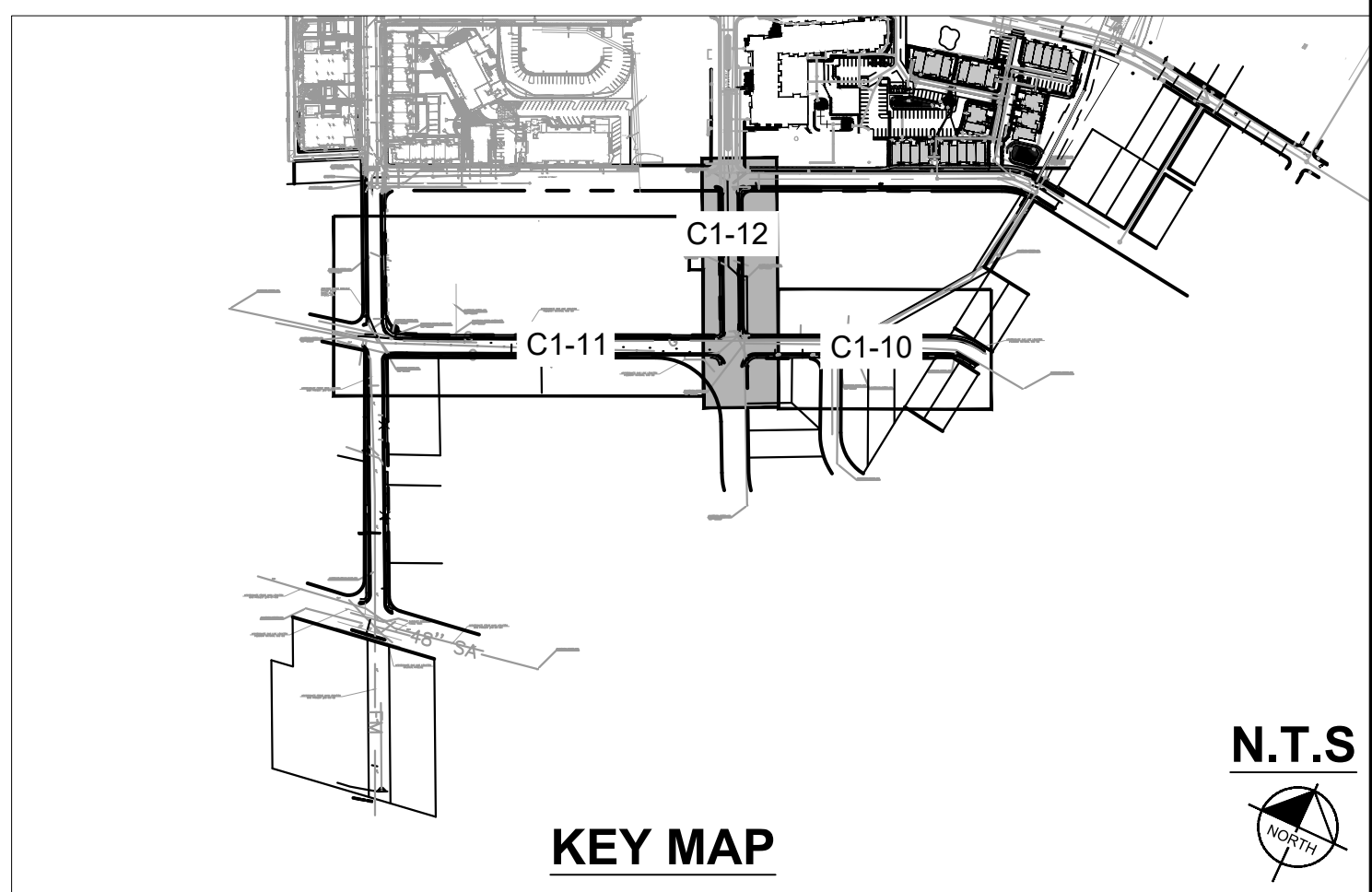


**DEMOLITION LEGEND**

	REMOVE PAVEMENT FULL DEPTH
	PAVEMENT MILL AND OVERLAY
	REMOVE CONCRETE / RIGID PAVEMENT
	REMOVE LINEAR OBJECT
	UTILITY PIPE TO BE ABANDONED IN PLACE
	SAWCUT PAVEMENT
	REMOVE OBJECT

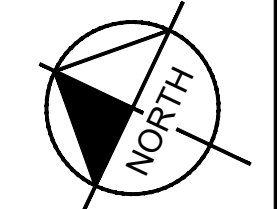
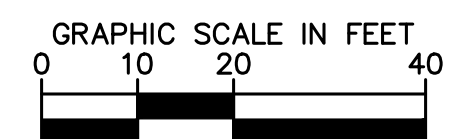
**EXISTING UTILITIES NOTE**

- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.
- LOCATIONS OF FORCE MAIN AND GAS LINES ARE APPROXIMATE. CONTRACTOR IS NOT TO DISTURB EXISTING FORCE MAIN OR GAS LINES



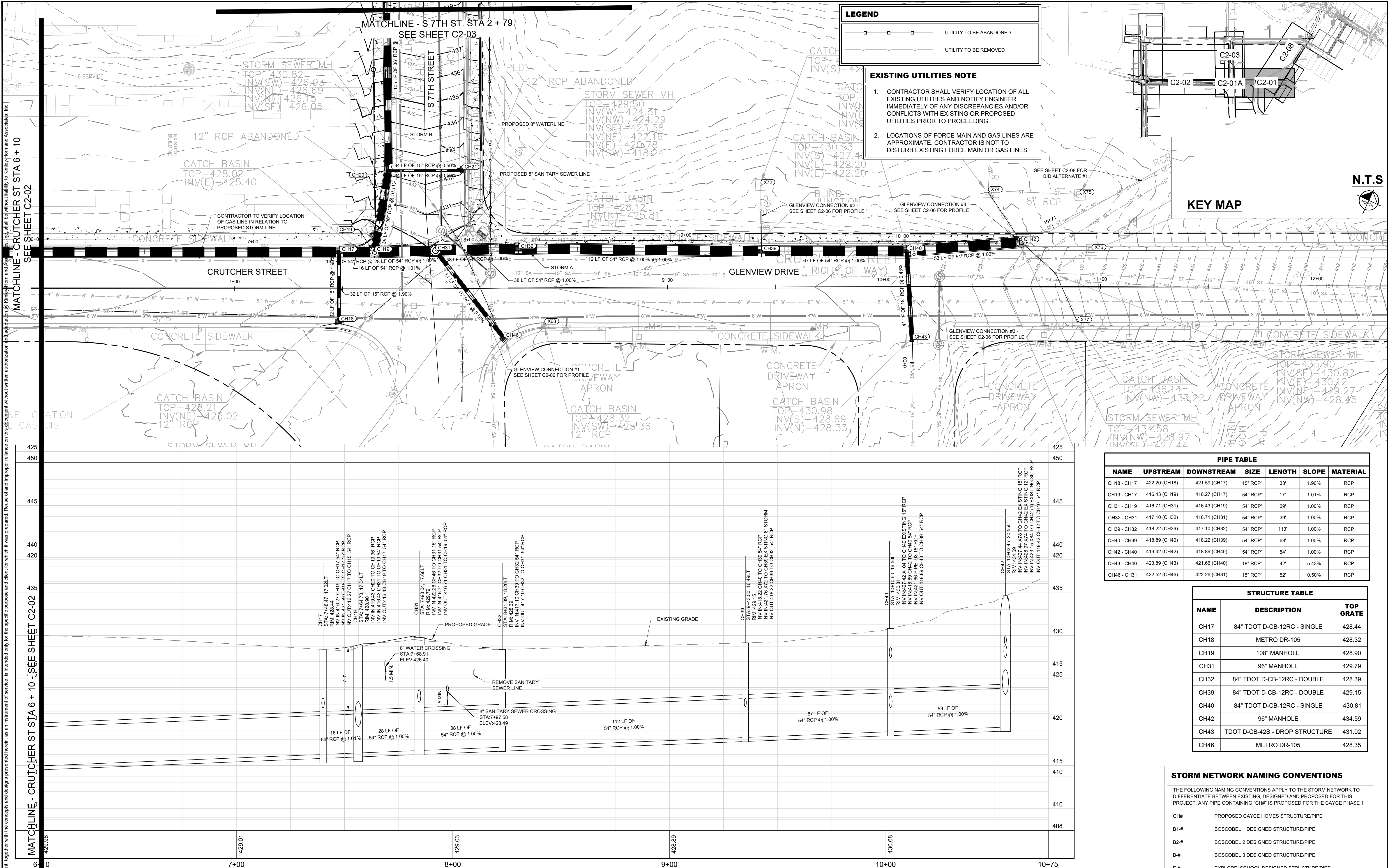
**SEE DEMOLITION NOTES, SHEET C0-01.**

**BID SET**



NO.	DATE	REVISIONS
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DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018



**LEGEND**

- UTILITY TO BE ABANDONED
- UTILITY TO BE REMOVED

**EXISTING UTILITIES NOTE**

- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.
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**KEY MAP**

N.T.S.

**PIPE TABLE**

NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
CH18 - CH17	422.20 (CH18)	421.59 (CH17)	15" RCP	33'	1.90%	RCP
CH19 - CH17	416.43 (CH19)	416.27 (CH17)	54" RCP	17'	1.01%	RCP
CH31 - CH19	416.71 (CH31)	416.43 (CH19)	54" RCP	29'	1.00%	RCP
CH32 - CH31	417.10 (CH32)	416.71 (CH31)	54" RCP	39'	1.00%	RCP
CH39 - CH32	418.22 (CH39)	417.10 (CH32)	54" RCP	113'	1.00%	RCP
CH40 - CH39	418.89 (CH40)	418.22 (CH39)	54" RCP	68'	1.00%	RCP
CH42 - CH40	419.42 (CH42)	418.89 (CH40)	54" RCP	54'	1.00%	RCP
CH43 - CH40	423.89 (CH43)	421.66 (CH40)	18" RCP	42'	5.43%	RCP
CH46 - CH31	422.52 (CH46)	422.26 (CH31)	15" RCP	52'	0.50%	RCP

**STRUCTURE TABLE**

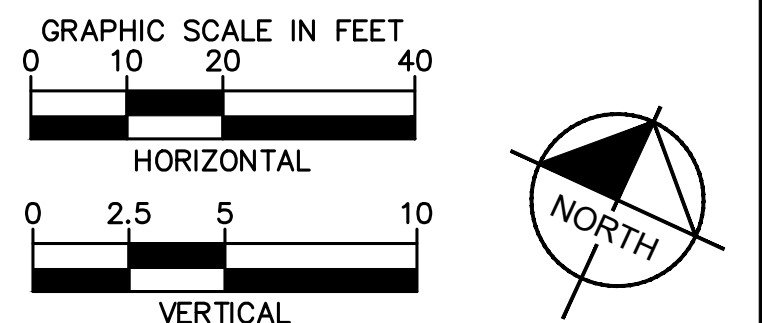
NAME	DESCRIPTION	TOP GRATE
CH17	84" TDOT D-CB-12RC - SINGLE	428.44
CH18	METRO DR-105	428.32
CH19	108" MANHOLE	428.90
CH31	96" MANHOLE	429.79
CH32	84" TDOT D-CB-12RC - DOUBLE	428.39
CH39	84" TDOT D-CB-12RC - DOUBLE	429.15
CH40	84" TDOT D-CB-12RC - SINGLE	430.81
CH42	96" MANHOLE	434.59
CH43	TDOT D-CB-42S - DROP STRUCTURE	431.02
CH46	METRO DR-105	428.35

**STORM NETWORK NAMING CONVENTIONS**

THE FOLLOWING NAMING CONVENTIONS APPLY TO THE STORM NETWORK TO DIFFERENTIATE BETWEEN EXISTING, DESIGNED AND PROPOSED FOR THIS PROJECT. ANY PIPE CONTAINING "CH#" IS PROPOSED FOR THE CAYCE PHASE 1

CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCOBEL 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCOBEL 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCOBEL 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLORE! SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
X# AND EX-#	EXISTING STORM STRUCTURE/PIPE

**BID SET**



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**CAYCE UTILITY PHASE 1B**  
**MDHA**  
 NASHVILLE, TN

**REVISIONS**

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DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018

**STORM PLAN AND PROFILE**

SHEET NUMBER  
**C2-01**

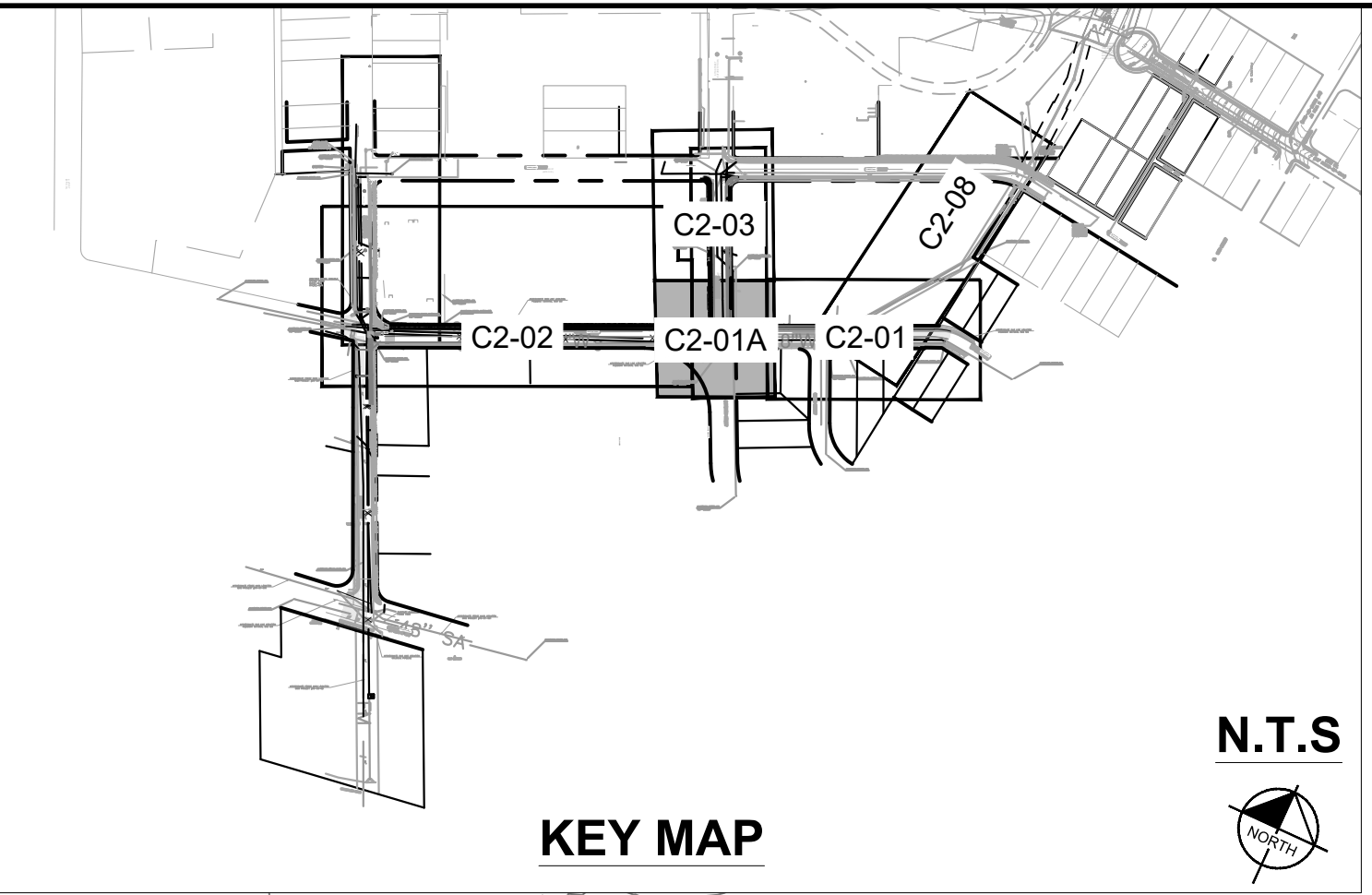
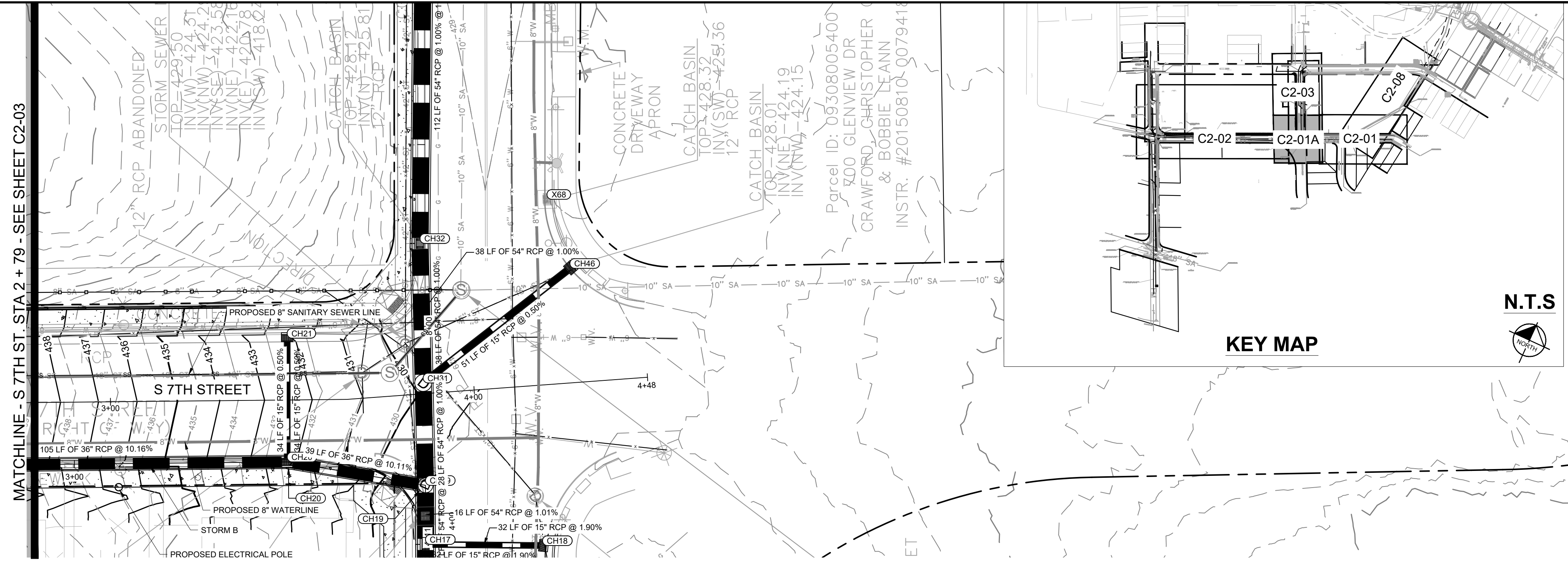
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STORM NETWORK NAMING CONVENTIONS	
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CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCOBEL 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCOBEL 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCOBEL 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLORE! SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
XR# AND EX-#	EXISTING STORM STRUCTURE/PIPE

LEGEND	
	UTILITY TO BE ABANDONED
	UTILITY TO BE REMOVED

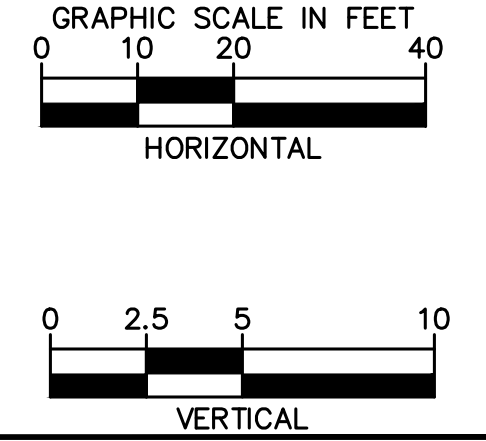
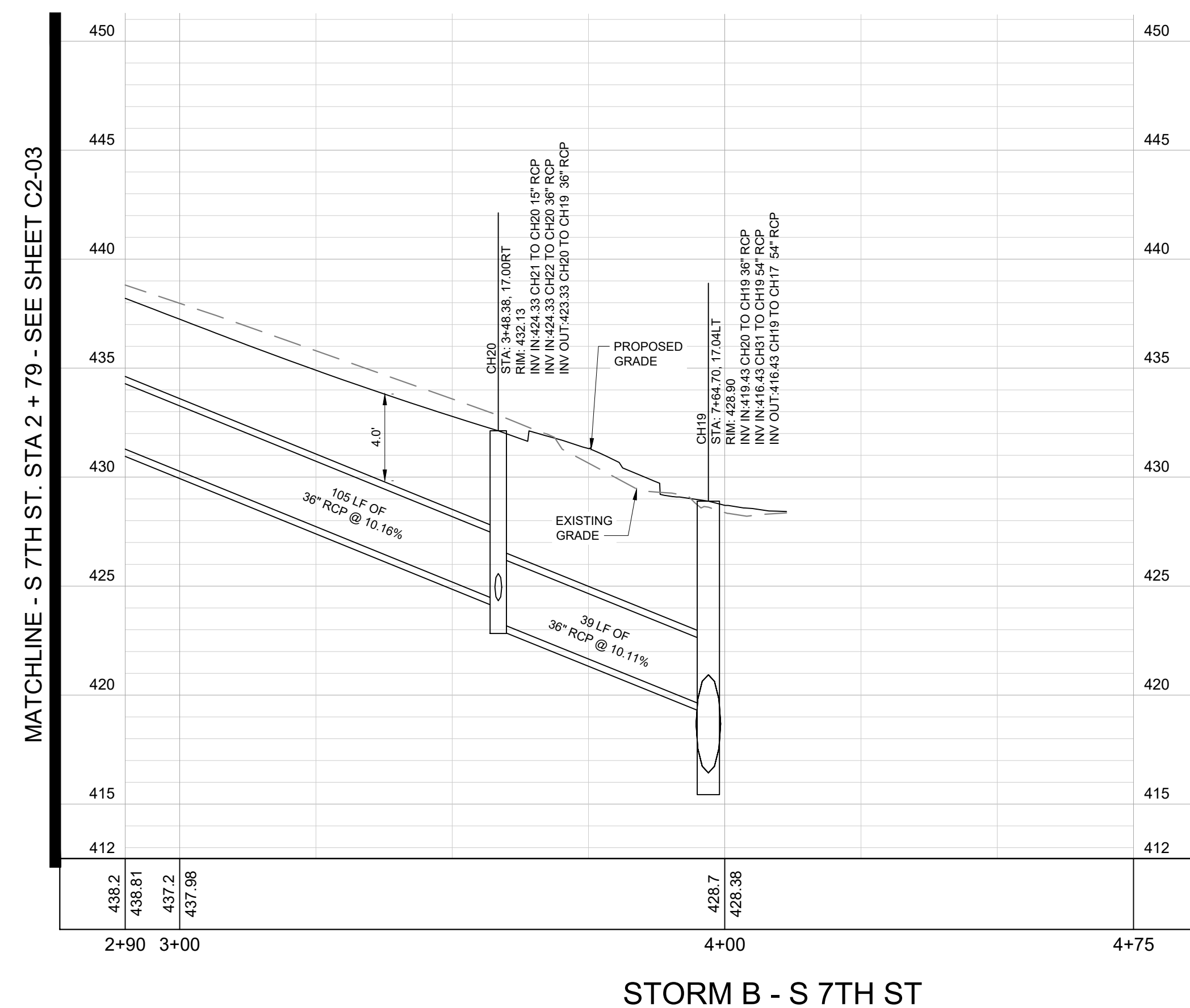
  

EXISTING UTILITIES NOTE	
1.	CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.
2.	LOCATIONS OF FORCE MAIN AND GAS LINES ARE APPROXIMATE. CONTRACTOR IS NOT TO DISTURB EXISTING FORCE MAIN OR GAS LINES



PIPE TABLE						
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
CH17 - CH15	416.27 (CH17)	412.46 (CH15)	54" RCP	375'	1.02%	RCP
CH18 - CH17	422.20 (CH18)	421.59 (CH17)	15" RCP	33'	1.90%	RCP
CH19 - CH17	416.43 (CH19)	416.27 (CH17)	54" RCP	17'	1.01%	RCP
CH20 - CH19	423.33 (CH20)	419.43 (CH19)	36" RCP	39'	10.11%	RCP
CH21 - CH20	424.50 (CH21)	424.33 (CH20)	15" RCP	35'	0.50%	RCP
CH22 - CH20	434.97 (CH22)	424.33 (CH20)	36" RCP	105'	10.16%	RCP
CH31 - CH19	416.71 (CH31)	416.43 (CH19)	54" RCP	29'	1.00%	RCP
CH32 - CH31	417.10 (CH32)	416.71 (CH31)	54" RCP	39'	1.00%	RCP
CH39 - CH32	418.22 (CH39)	417.10 (CH32)	54" RCP	113'	1.00%	RCP
CH46 - CH31	422.52 (CH46)	422.26 (CH31)	15" RCP	52'	0.50%	RCP

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
CH17	84" TDOT D-CB-12RC - SINGLE	428.44
CH18	METRO DR-105	428.32
CH19	108" MANHOLE	428.90
CH20	60" TDOT D-CB-12RB - SINGLE	432.13
CH21	METRO DR-110	432.10
CH32	84" TDOT D-CB-12RC - DOUBLE	428.39
CH46	METRO DR-105	428.35



BID SET

NOTE: STRUCTURE STATION AND OFFSET DATA REFERENCED TO CENTERLINE ALIGNMENT

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CAYCE UTILITY PHASE 1B

MDHA

NASHVILLE, TN

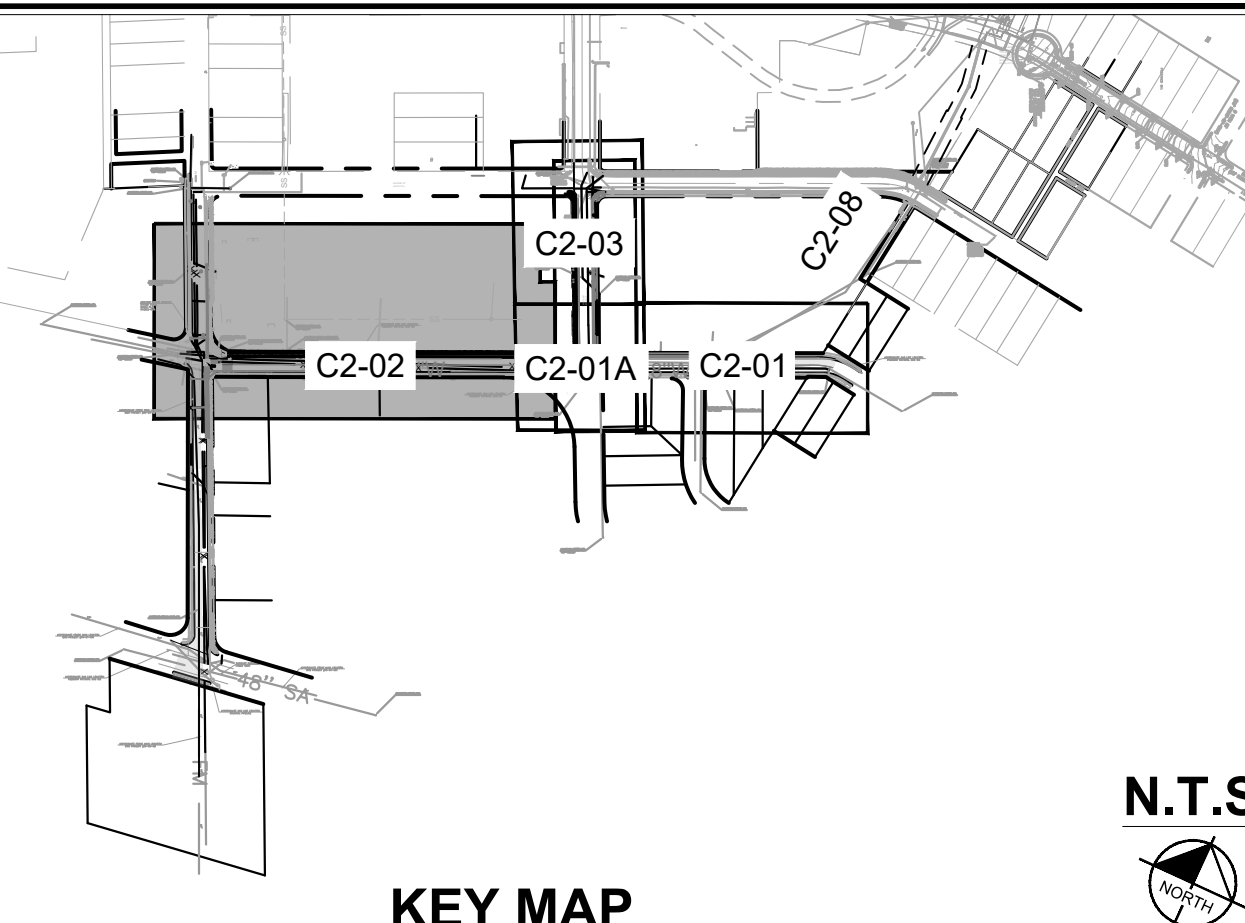
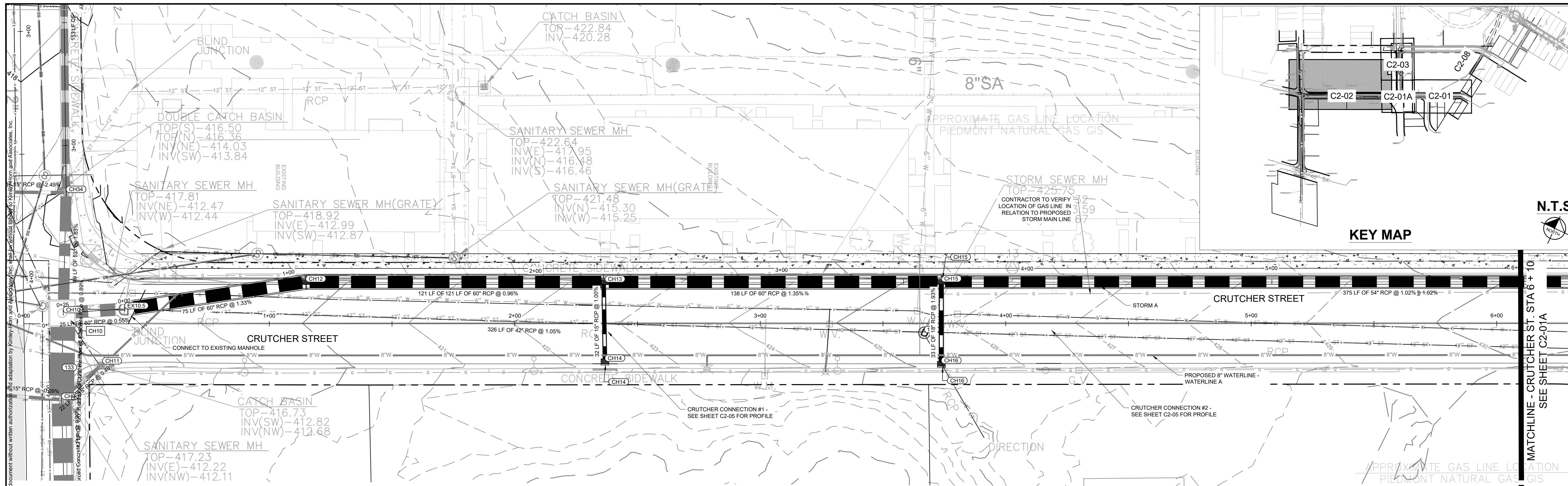


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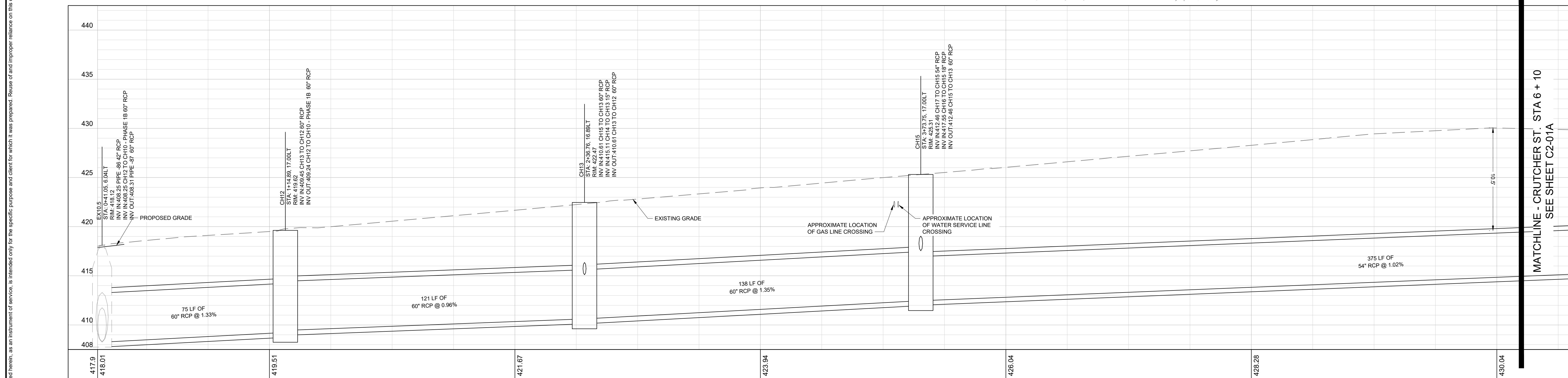
DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

STORM PLAN AND PROFILE

SHEET NUMBER  
**C2-01A**



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STORM A - GLENVIEW DRIVE/ CRUTCHER STREET

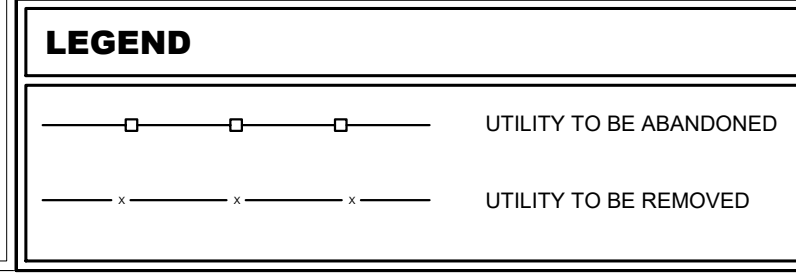
NOTE: STRUCTURE STATION AND OFFSET DATA REFERENCED TO CENTERLINE ALIGNMENT

**STORM NETWORK NAMING CONVENTIONS**

THE FOLLOWING NAMING CONVENTIONS APPLY TO THE STORM NETWORK TO DIFFERENTIATE BETWEEN EXISTING, DESIGNED AND PROPOSED FOR THIS PROJECT. ANY PIPE CONTAINING "CH" IS PROPOSED FOR THE CAYCE PHASE 1

CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCOBEL 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCOBEL 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCOBEL 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLORE! SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
X# AND EX-#	EXISTING STORM STRUCTURE/PIPE

- EXISTING UTILITIES NOTE**
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.
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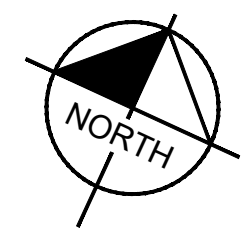
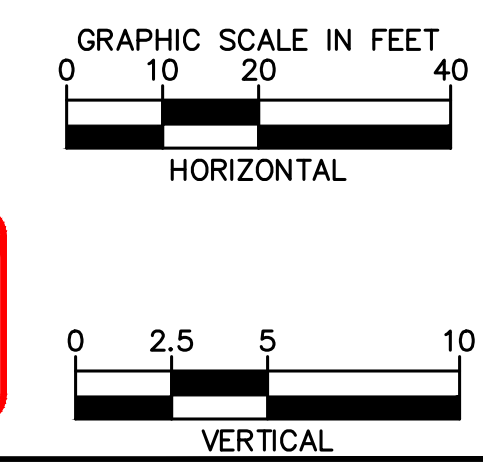
**PIPE TABLE**

NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
CH12 - EX10.5	409.24 (CH12)	408.25 (EX10.5)	60" RCP	75'	1.33%	RCP
CH13 - CH12	410.61 (CH13)	409.45 (CH12)	60" RCP	122'	0.96%	RCP
CH14 - CH13	415.43 (CH14)	415.11 (CH13)	15" RCP	33'	1.00%	RCP
CH15 - CH13	412.46 (CH15)	410.61 (CH13)	60" RCP	138'	1.35%	RCP
CH16 - CH15	418.19 (CH16)	417.55 (CH15)	18" RCP	34'	1.93%	RCP
CH17 - CH15	416.27 (CH17)	412.46 (CH15)	54" RCP	375'	1.02%	RCP

**STRUCTURE TABLE**

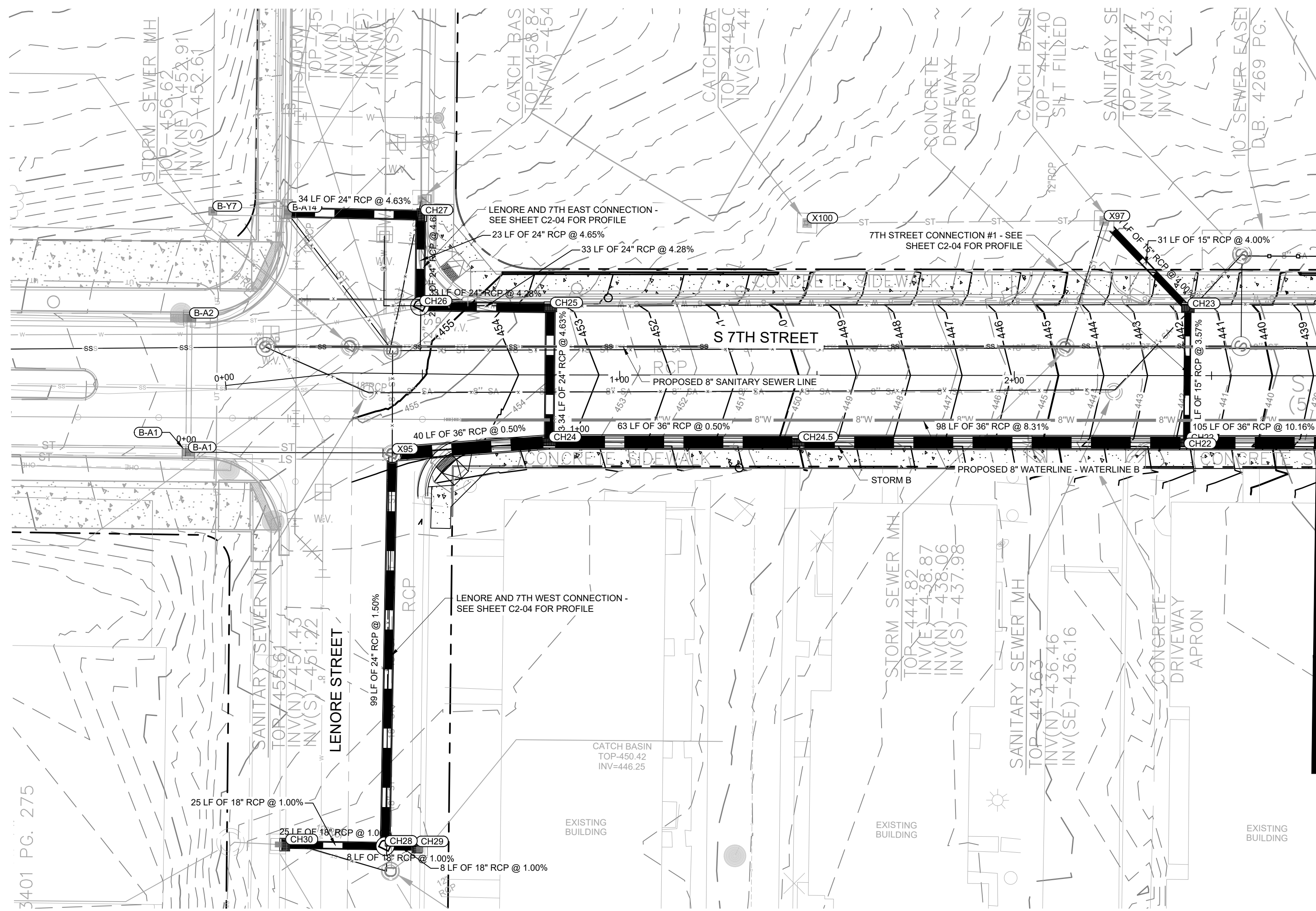
NAME	DESCRIPTION	TOP GRATE
CH13	84" TDOT D-CB-12RC - DOUBLE	422.47
CH14	METRO DR-105	422.37
CH15	84" TDOT D-CB-12RC - DOUBLE	425.31
CH16	METRO DR-105	425.33

**BID SET**



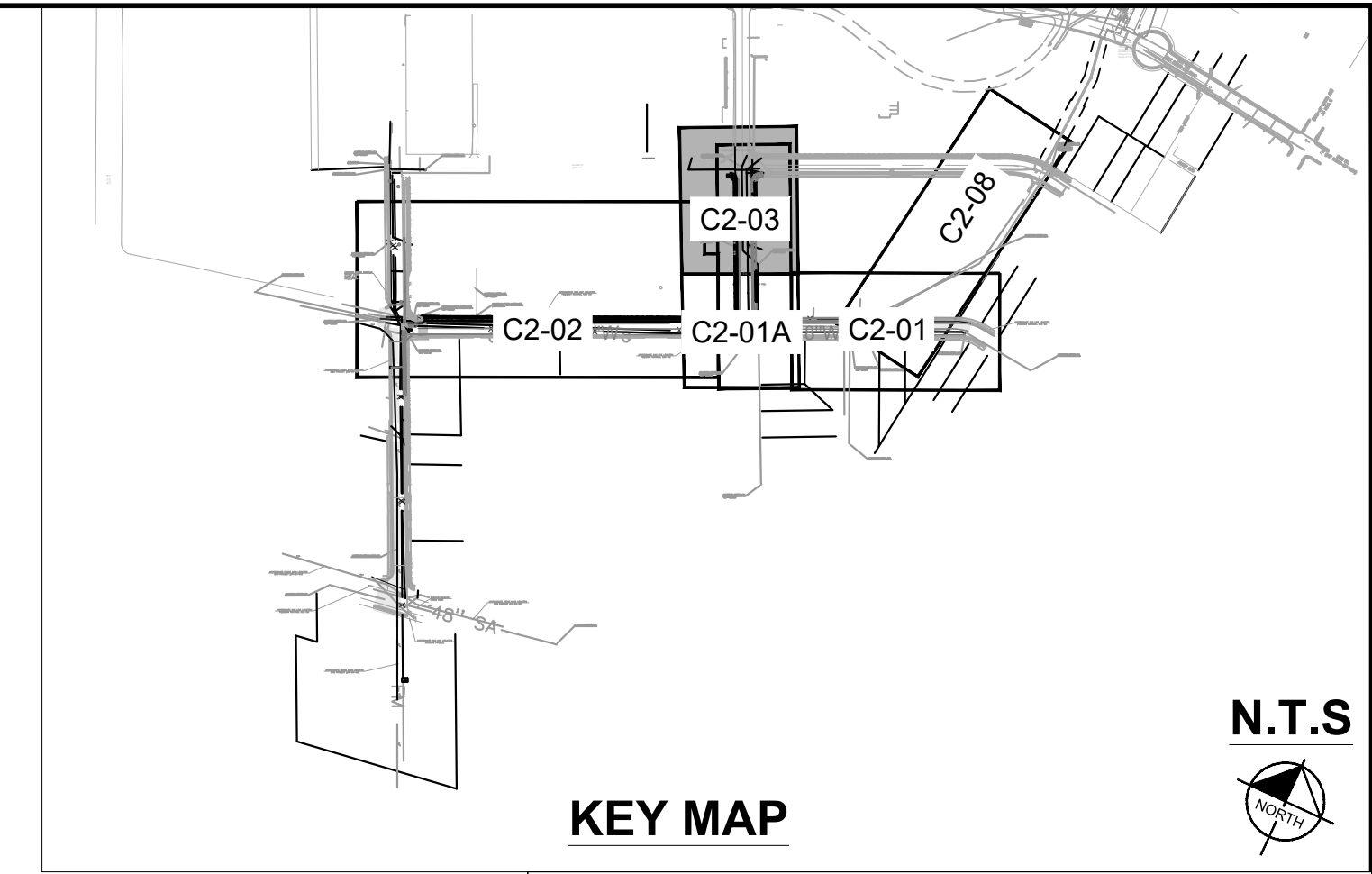
DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018
STORM PLAN AND PROFILE	
SHEET NUMBER	C2-02

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MATCHLINE - S 7TH ST.  
STA 2 + 79  
SEE SHEET C2-01

MATCHLINE - S 7TH ST.  
STA 2 + 79 -  
SEE SHEET C2-02



KEY MAP

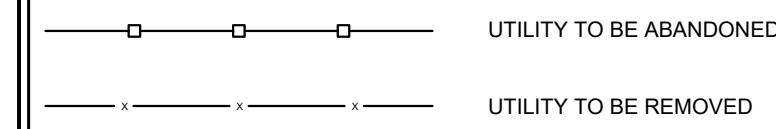
N.T.S.

**STORM NETWORK NAMING CONVENTIONS**

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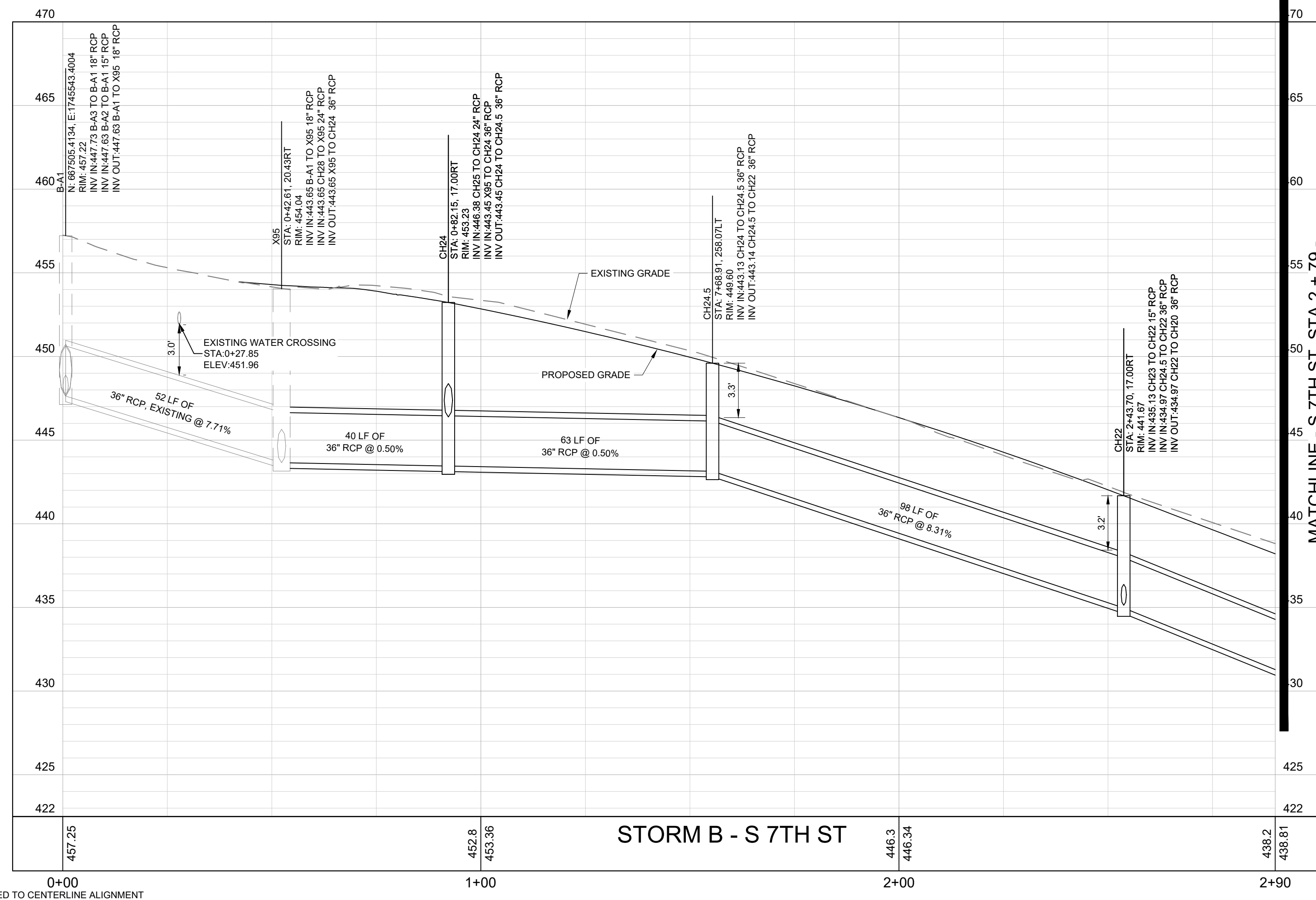
CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCobel 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCobel 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCobel 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLORE SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
X# AND EX-#	EXISTING STORM STRUCTURE/PIPE

**LEGEND**



**EXISTING UTILITIES NOTE**

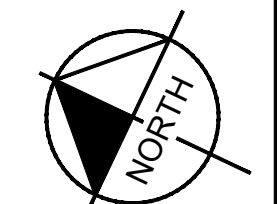
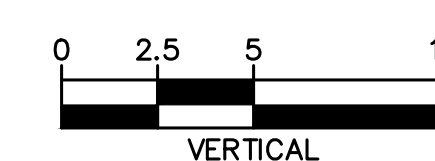
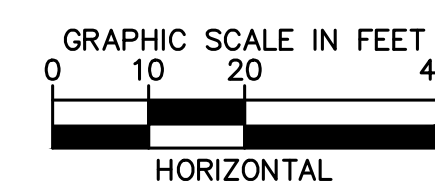
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MATCHLINE - S 7TH ST. STA 2 + 79 -  
SEE SHEET C2-02

PIPE TABLE						
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
B-A14 - CH27	452.00 (B-A14)	450.44 (CH27)	24" RCP*	34'	4.63%	RCP
CH22 - CH20	434.97 (CH22)	424.33 (CH20)	36" RCP*	105'	10.16%	RCP
CH23 - CH22	436.34 (CH23)	435.13 (CH22)	15" RCP*	35'	3.57%	RCP
CH24 - CH24.5	443.45 (CH24)	443.13 (CH24.5)	36" RCP*	64'	0.50%	RCP
CH24.5 - CH22	443.14 (CH24.5)	434.97 (CH22)	36" RCP*	99'	8.31%	RCP
CH25 - CH24	447.95 (CH25)	446.38 (CH24)	24" RCP*	35'	4.63%	RCP
CH26 - CH25	449.37 (CH26)	447.95 (CH25)	24" RCP*	34'	4.28%	RCP
CH27 - CH26	450.44 (CH27)	449.37 (CH26)	24" RCP*	24'	4.65%	RCP
CH28 - X95	445.14 (CH28)	443.65 (X95)	24" RCP*	100'	1.50%	RCP
CH29 - CH28	445.85 (CH29)	445.77 (CH28)	18" RCP*	6'	1.00%	RCP
CH30 - CH28	446.02 (CH30)	445.77 (CH28)	18" RCP*	26'	1.00%	RCP
X95 - CH24	443.65 (X95)	443.45 (CH24)	36" RCP*	40'	0.50%	RCP
X97 - CH23	437.57 (X97)	436.34 (CH23)	15" RCP*	31'	4.00%	RCP

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
CH22	60" TDOT D-CB-12RB - SINGLE	441.67
CH23	TDOT D-CB-12RA - SINGLE	441.67
CH24	60" TDOT D-CB-12RB - SINGLE	453.23
CH24.5	60" TDOT D-CB-12RB - SINGLE	449.60
CH25	METRO DR-105	453.21
CH26	60" MANHOLE	456.64
CH27	METRO DR-105	458.79
CH28	60" MANHOLE	450.84
CH29	METRO DR-110	451.01
CH30	METRO DR-110	451.28



**BID SET**

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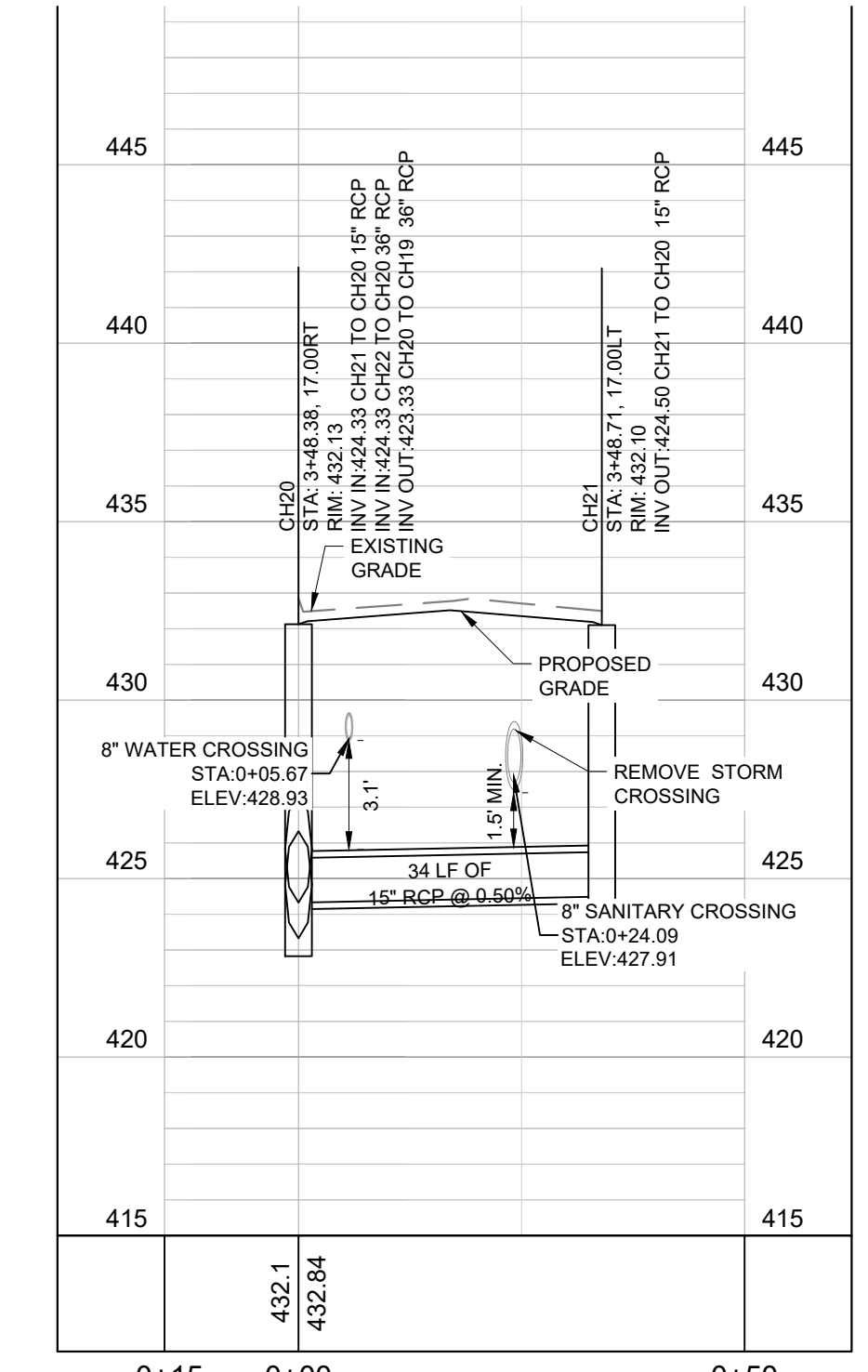
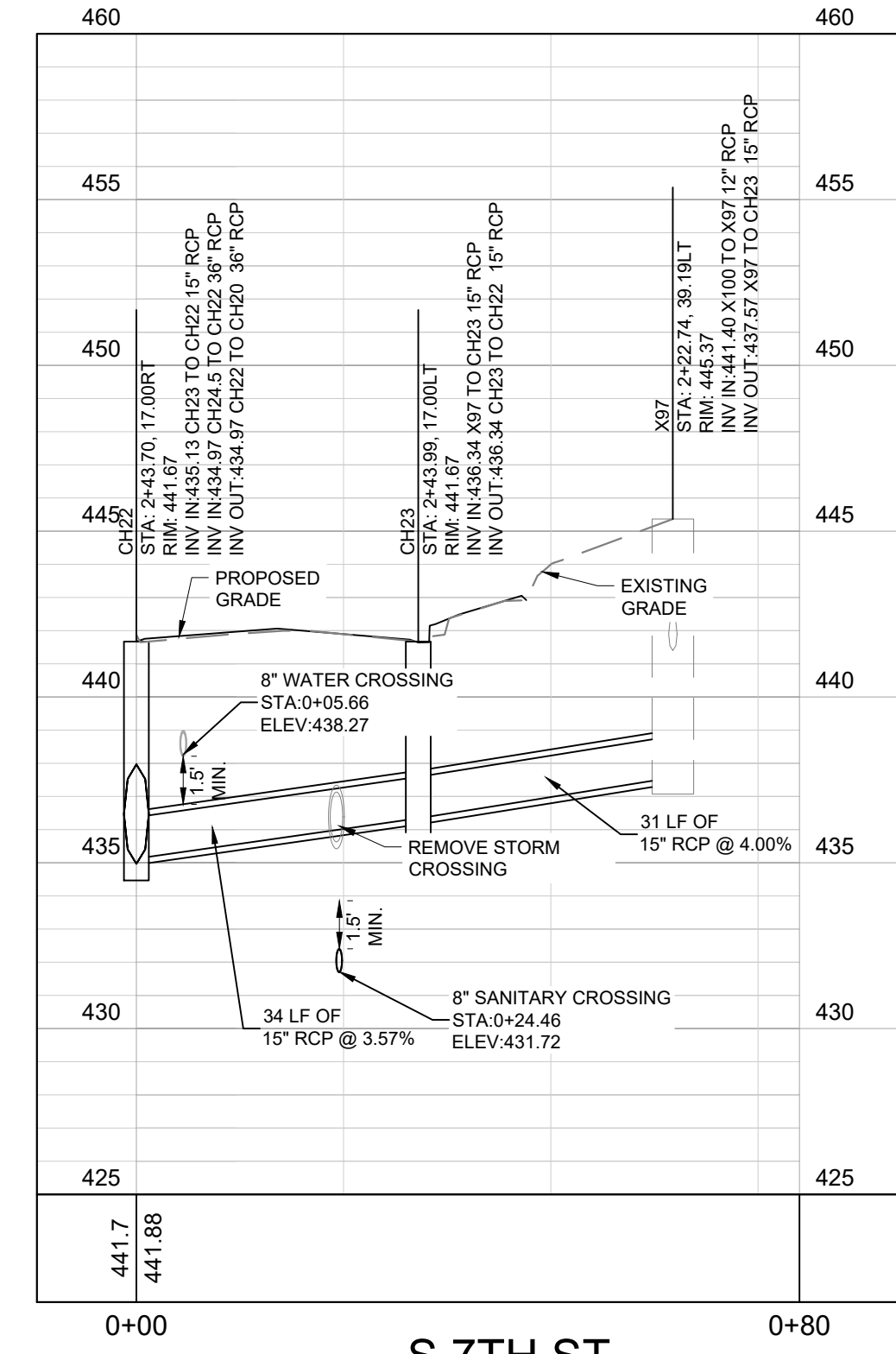
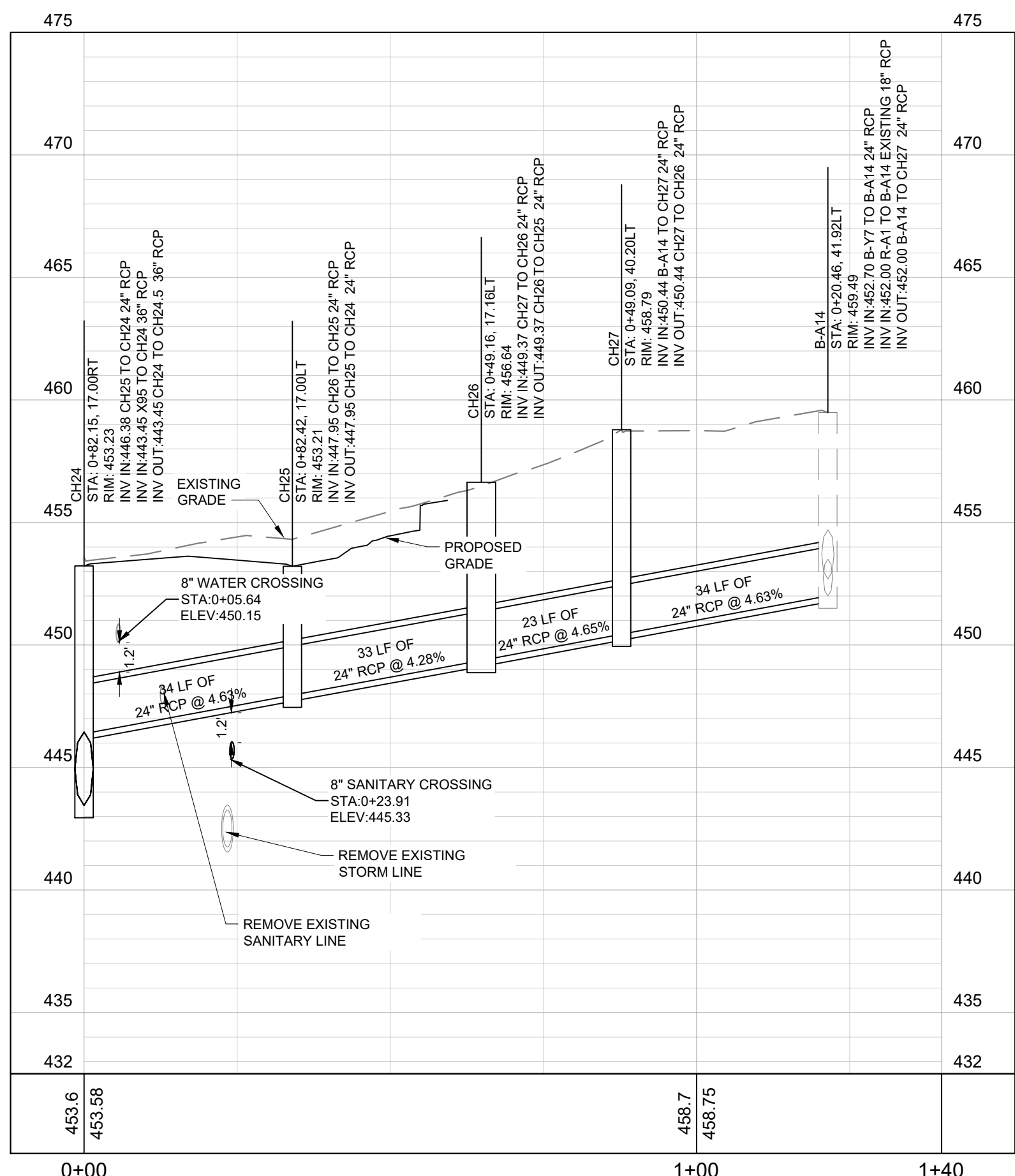
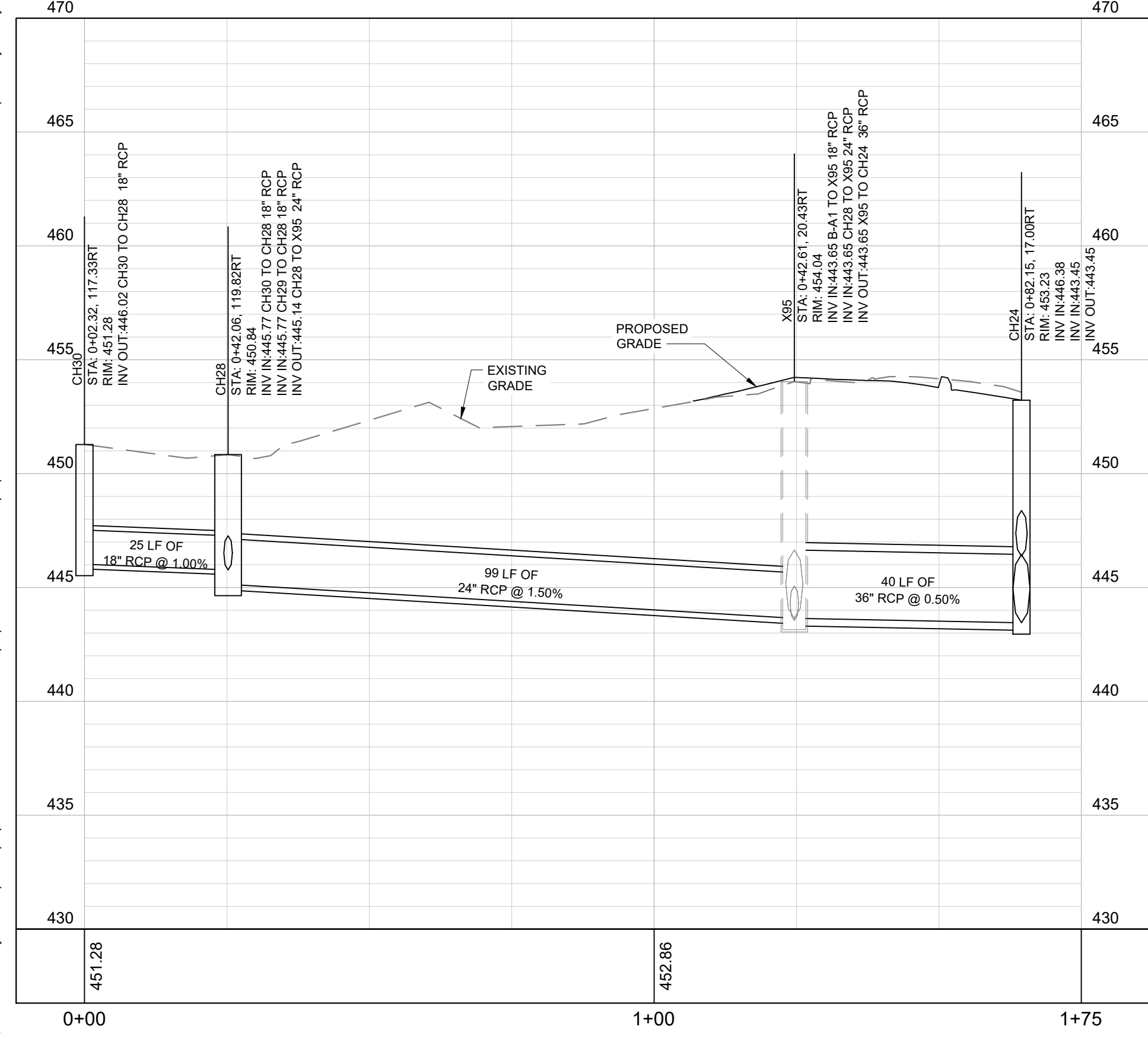
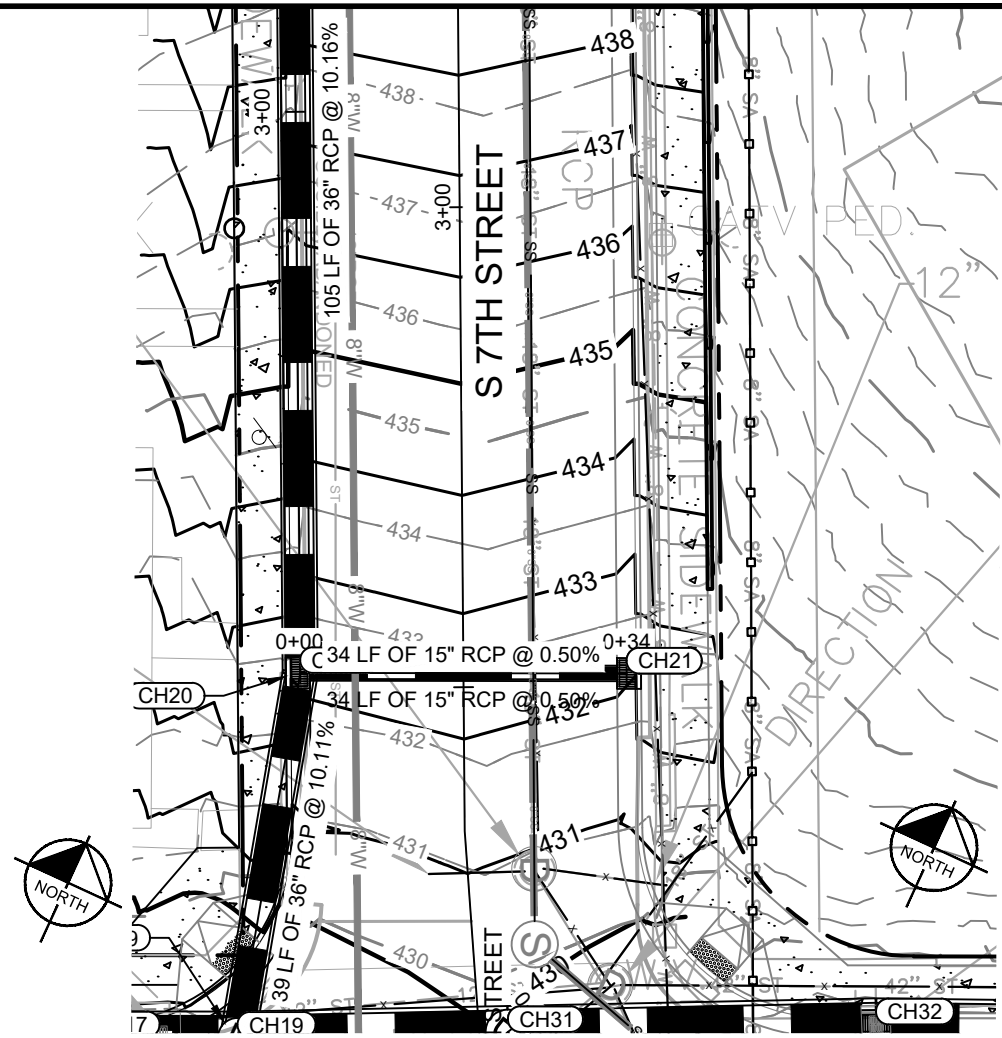
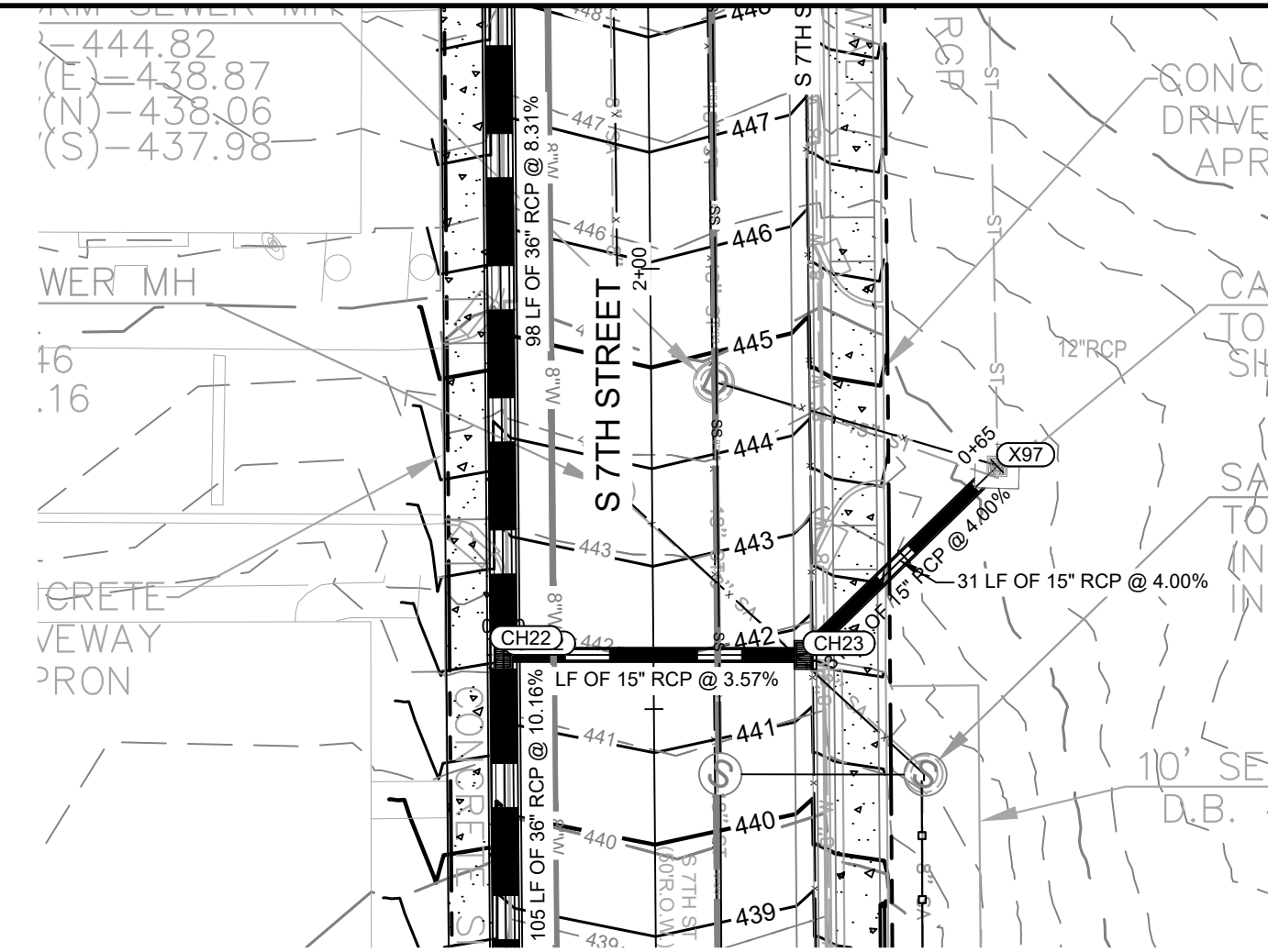
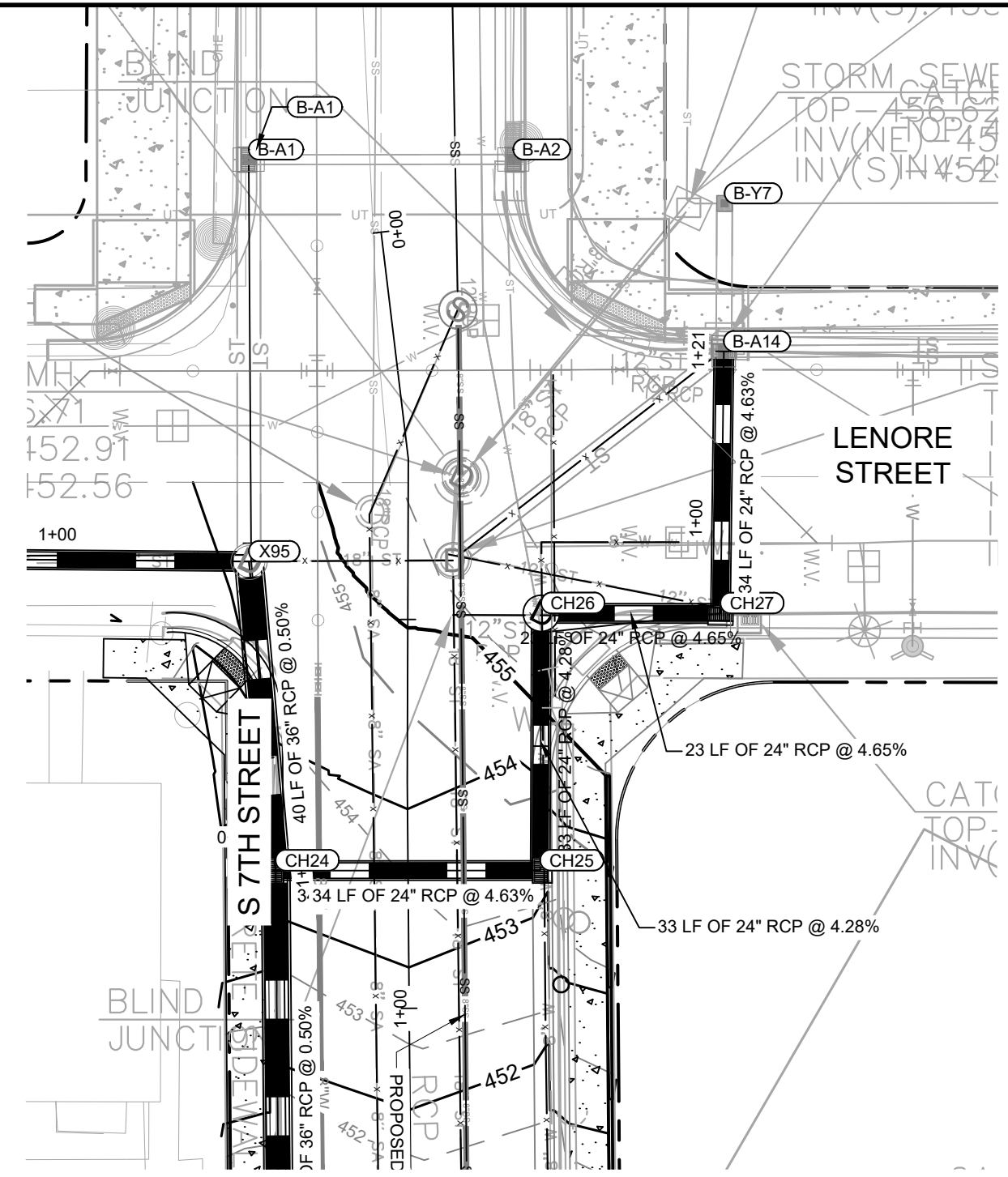
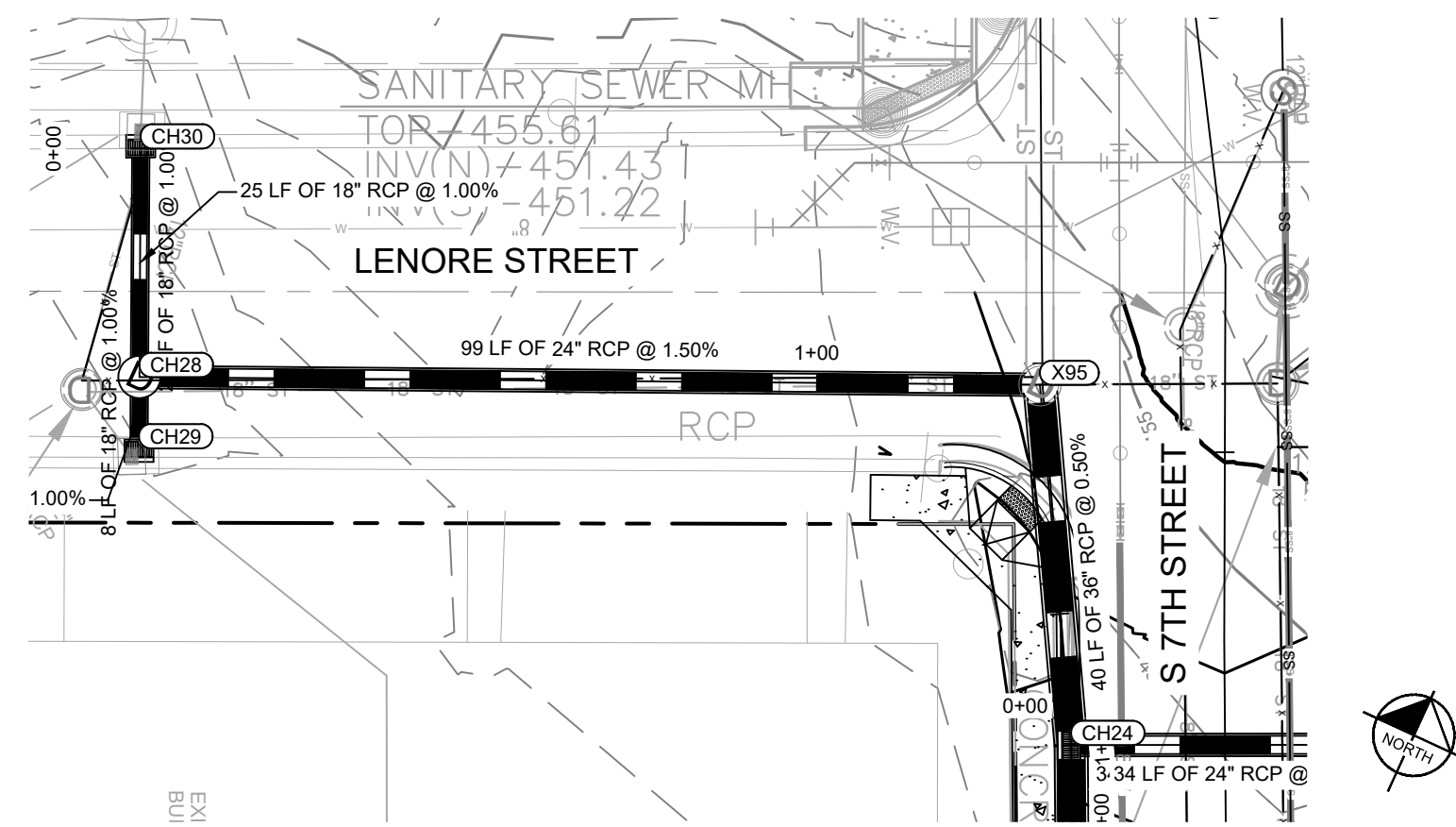
CAYCE UTILITY PHASE 1B  
MDHA  
NASHVILLE, TN



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DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018  
STORM PLAN AND PROFILE  
SHEET NUMBER C2-03

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LENORE STREET AND S 7TH ST  
CONNECTION - WEST  
SEE SHEET C2-03

LENORE STREET AND S 7TH ST  
CONNECTION - EAST  
SEE SHEET C2-03

S 7TH ST -  
CONNECTION 1  
SEE SHEET C2-03

S 7TH ST -  
CONNECTION 2  
SEE SHEET C2-00

**LEGEND**

	UTILITY TO BE ABANDONED
	UTILITY TO BE REMOVED

**STORM NETWORK NAMING CONVENTIONS**

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CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCABEL 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCABEL 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCABEL 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLOREI SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
X# AND EX-#	EXISTING STORM STRUCTURE/PIPE

- EXISTING UTILITIES NOTE**
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.
  - LOCATIONS OF FORCE MAIN AND GAS LINES ARE APPROXIMATE. CONTRACTOR IS NOT TO DISTURB EXISTING FORCE MAIN OR GAS LINES

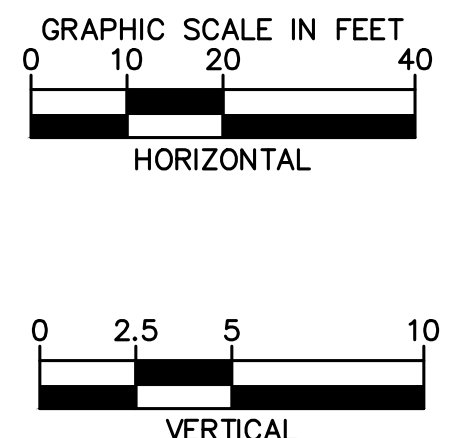
**PIPE TABLE**

NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
B-A14 - CH27	452.00 (B-A14)	450.44 (CH27)	24" RCP	34'	4.63%	RCP
CH21 - CH20	424.50 (CH21)	424.33 (CH20)	15" RCP	35'	0.50%	RCP
CH23 - CH22	436.34 (CH23)	435.13 (CH22)	15" RCP	35'	3.57%	RCP
CH25 - CH24	447.95 (CH25)	446.38 (CH24)	24" RCP	35'	4.63%	RCP
CH26 - CH25	449.37 (CH26)	447.95 (CH25)	24" RCP	34'	4.28%	RCP
CH27 - CH26	450.44 (CH27)	449.37 (CH26)	24" RCP	24'	4.65%	RCP
CH28 - X95	445.14 (CH28)	443.65 (X95)	24" RCP	100'	1.50%	RCP
CH29 - CH28	445.85 (CH29)	445.77 (CH28)	18" RCP	8'	1.00%	RCP
CH30 - CH28	446.02 (CH30)	445.77 (CH28)	18" RCP	26'	1.00%	RCP
X95 - CH24	443.65 (X95)	443.45 (CH24)	36" RCP	40'	0.50%	RCP
X97 - CH23	437.57 (X97)	436.34 (CH23)	15" RCP	31'	4.00%	RCP

**STRUCTURE TABLE**

NAME	DESCRIPTION	TOP GRADE
CH20	60" TDOT D-CB-12RB - SINGLE	432.13
CH21	METRO DR-110	432.10
CH22	60" TDOT D-CB-12RB - SINGLE	441.67
CH23	TDOT D-CB-12RA - SINGLE	441.67
CH24	60" TDOT D-CB-12RB - SINGLE	453.23
CH25	METRO DR-105	453.21
CH26	60" MANHOLE	456.64
CH27	METRO DR-105	458.79
CH28	60" MANHOLE	450.84
CH29	METRO DR-110	451.01
CH30	METRO DR-110	451.28

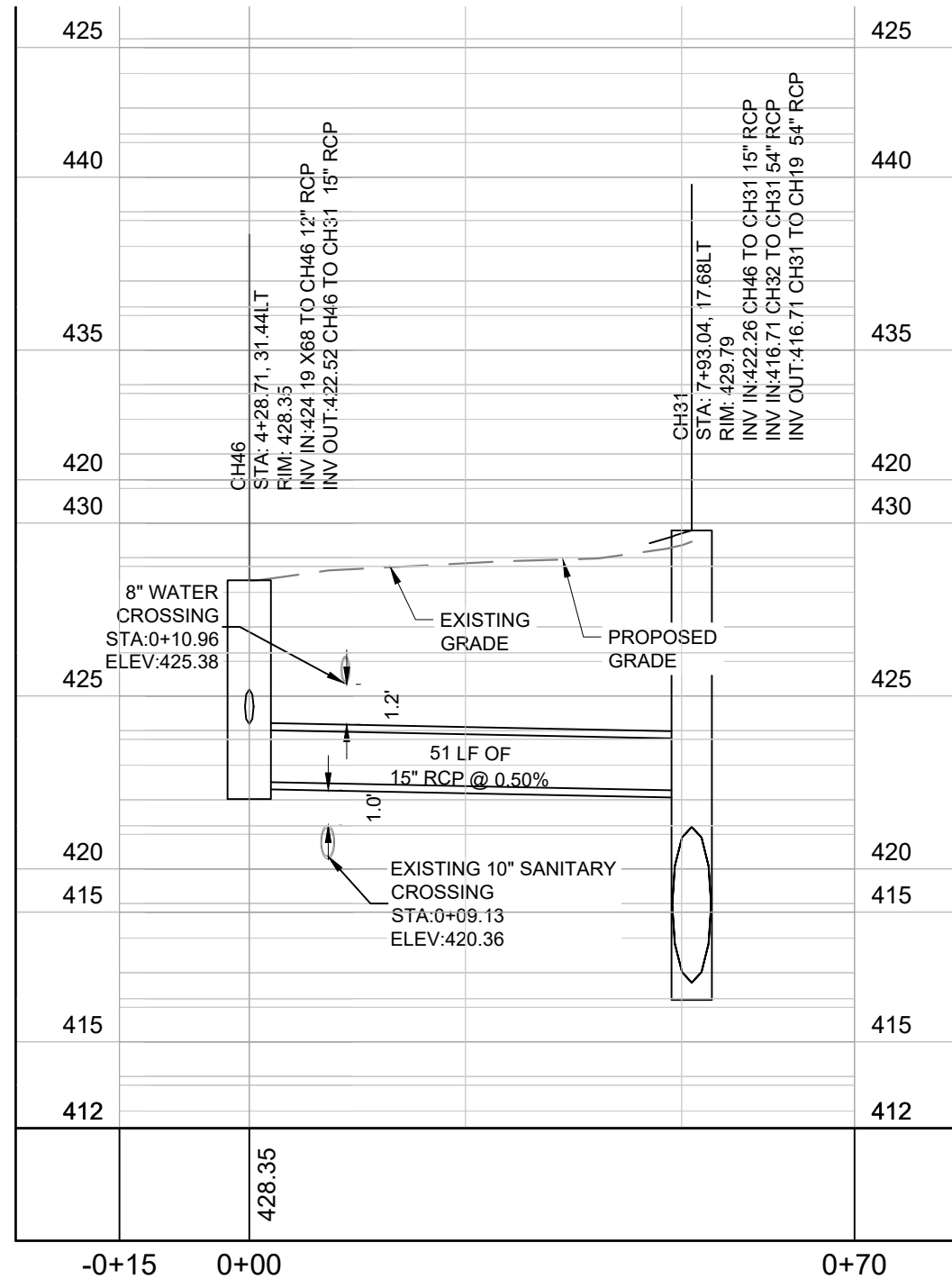
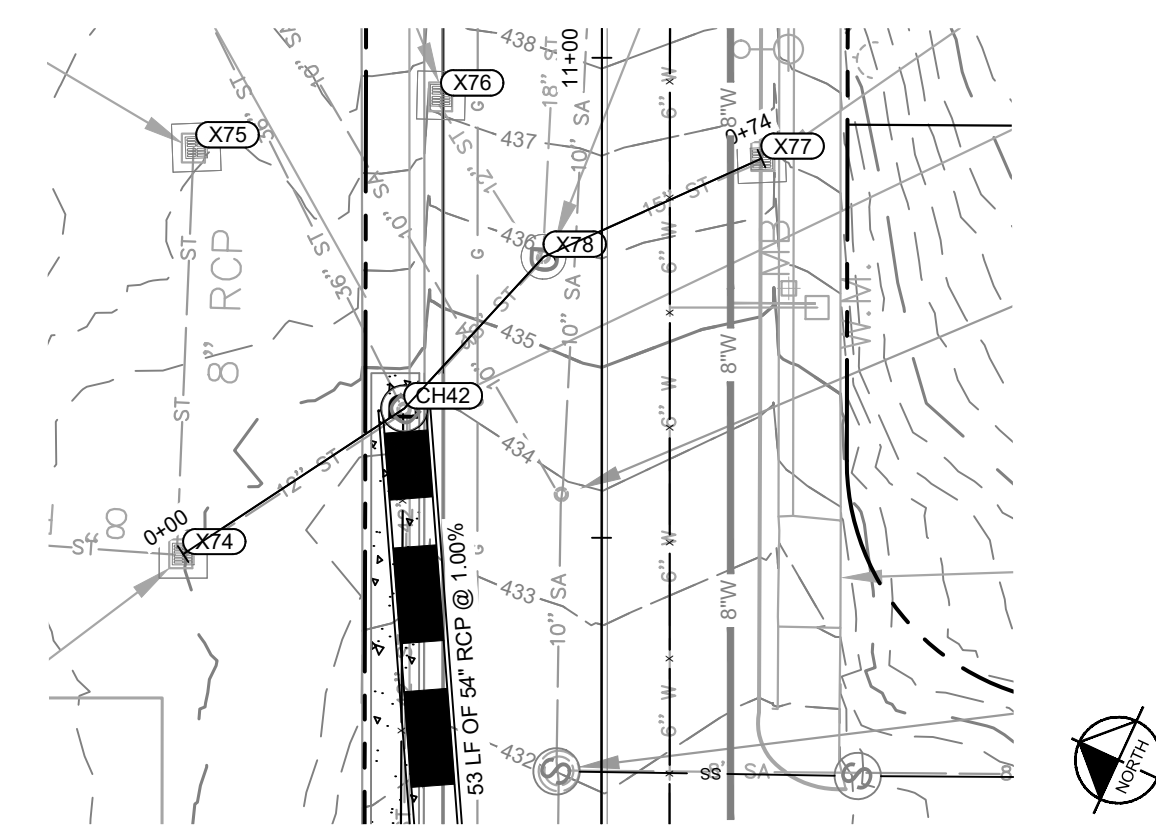
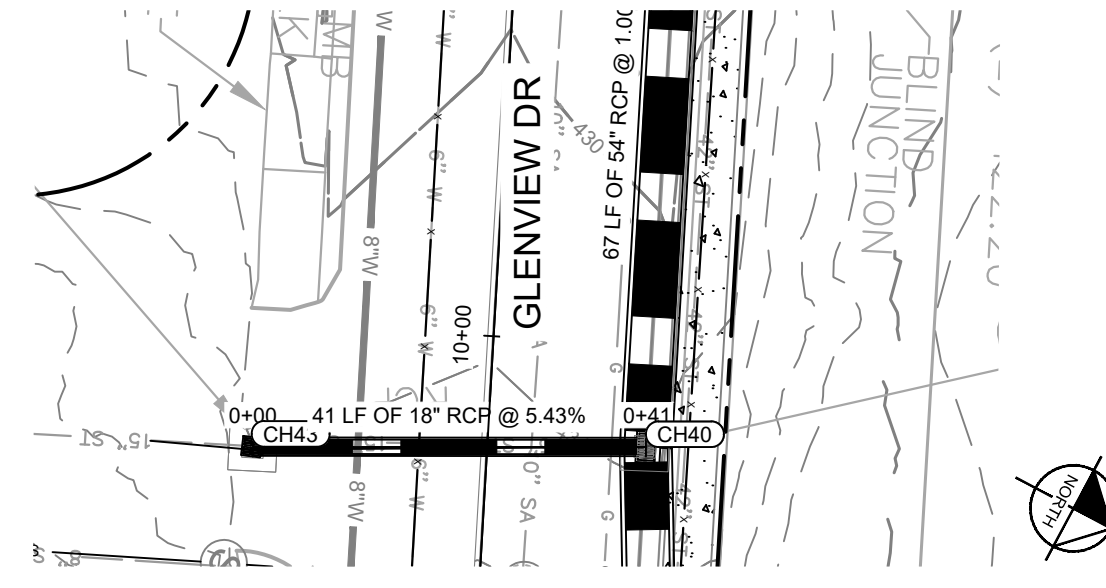
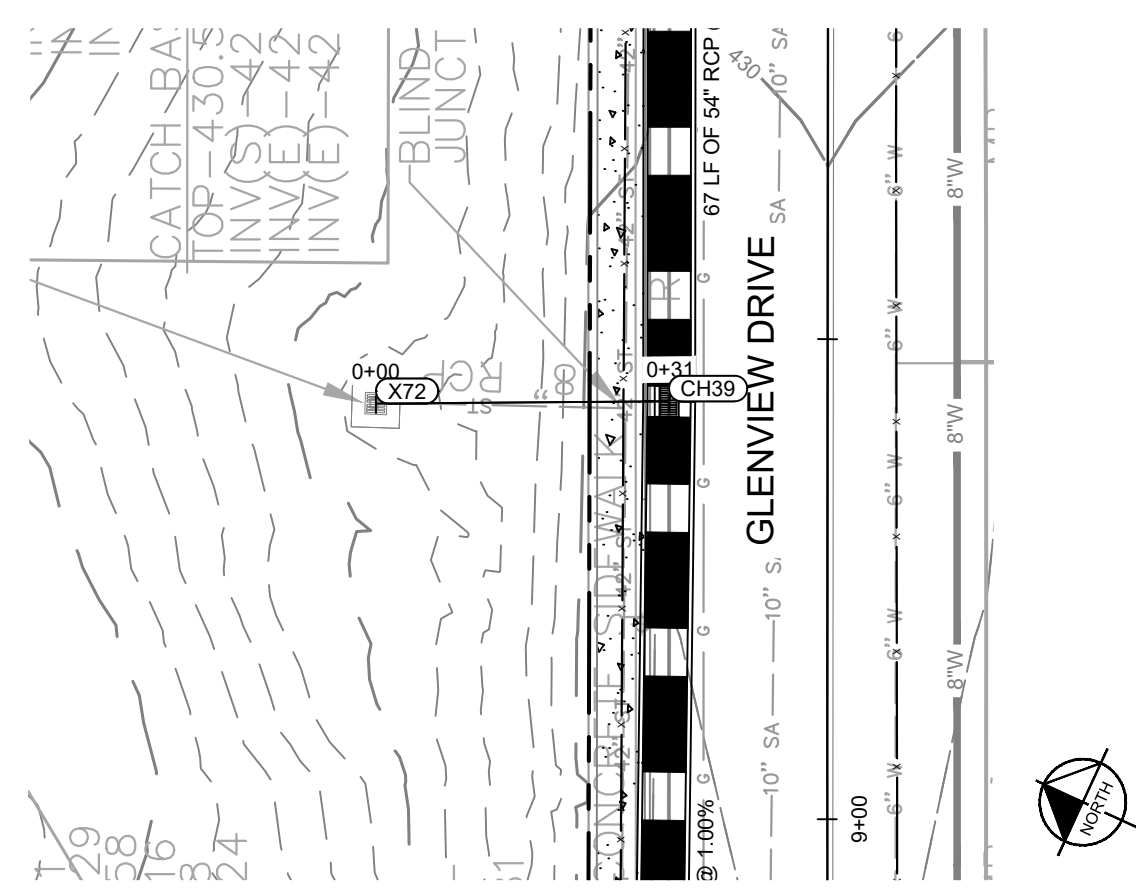
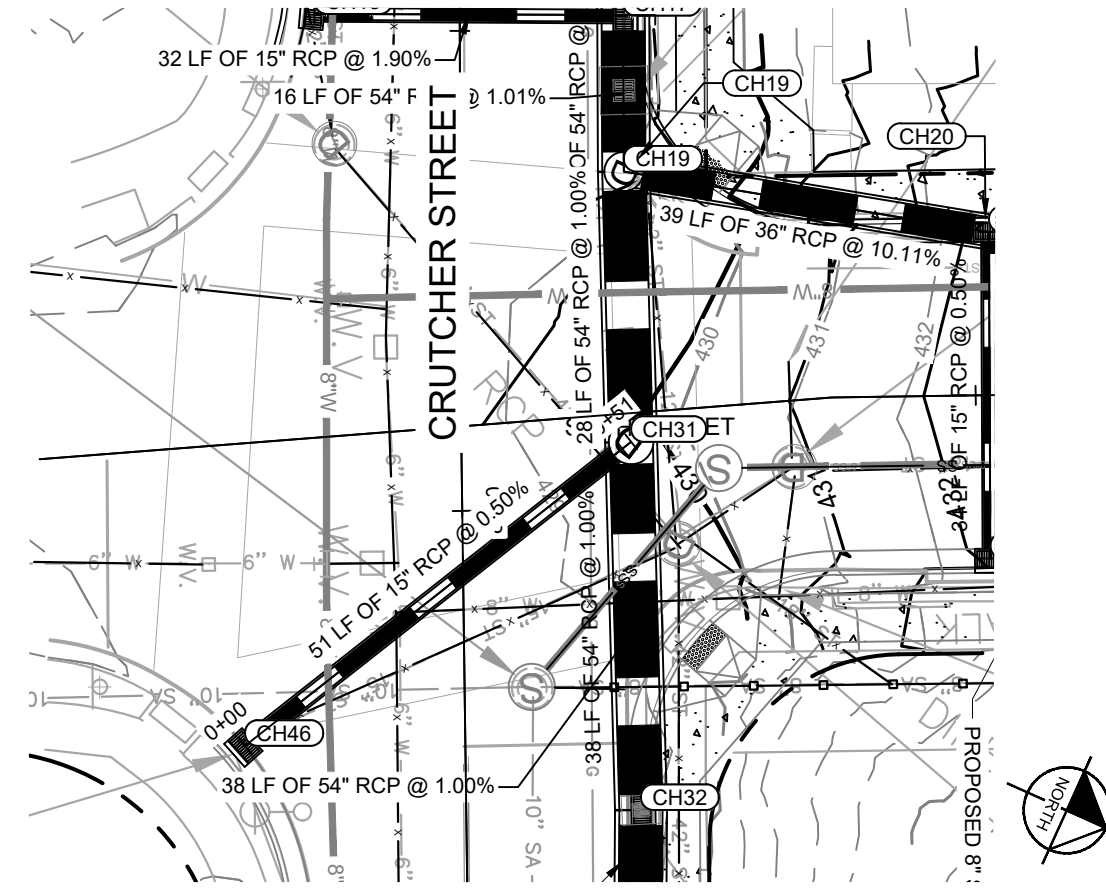
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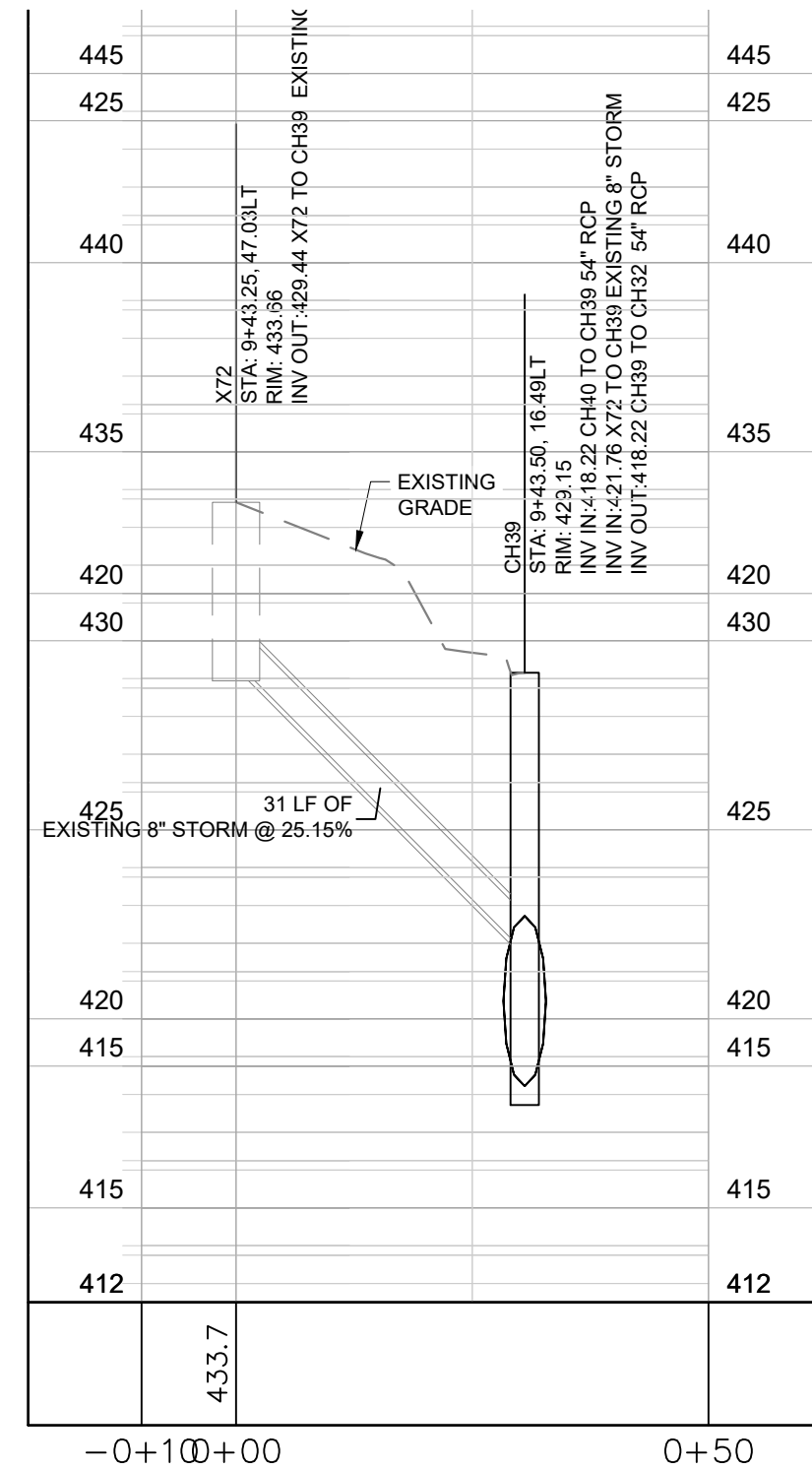
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DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.:	118109018
STORM PLAN AND PROFILE S - S 7TH ST CONNECTIONS	
SHEET NUMBER	<b>C2-04</b>



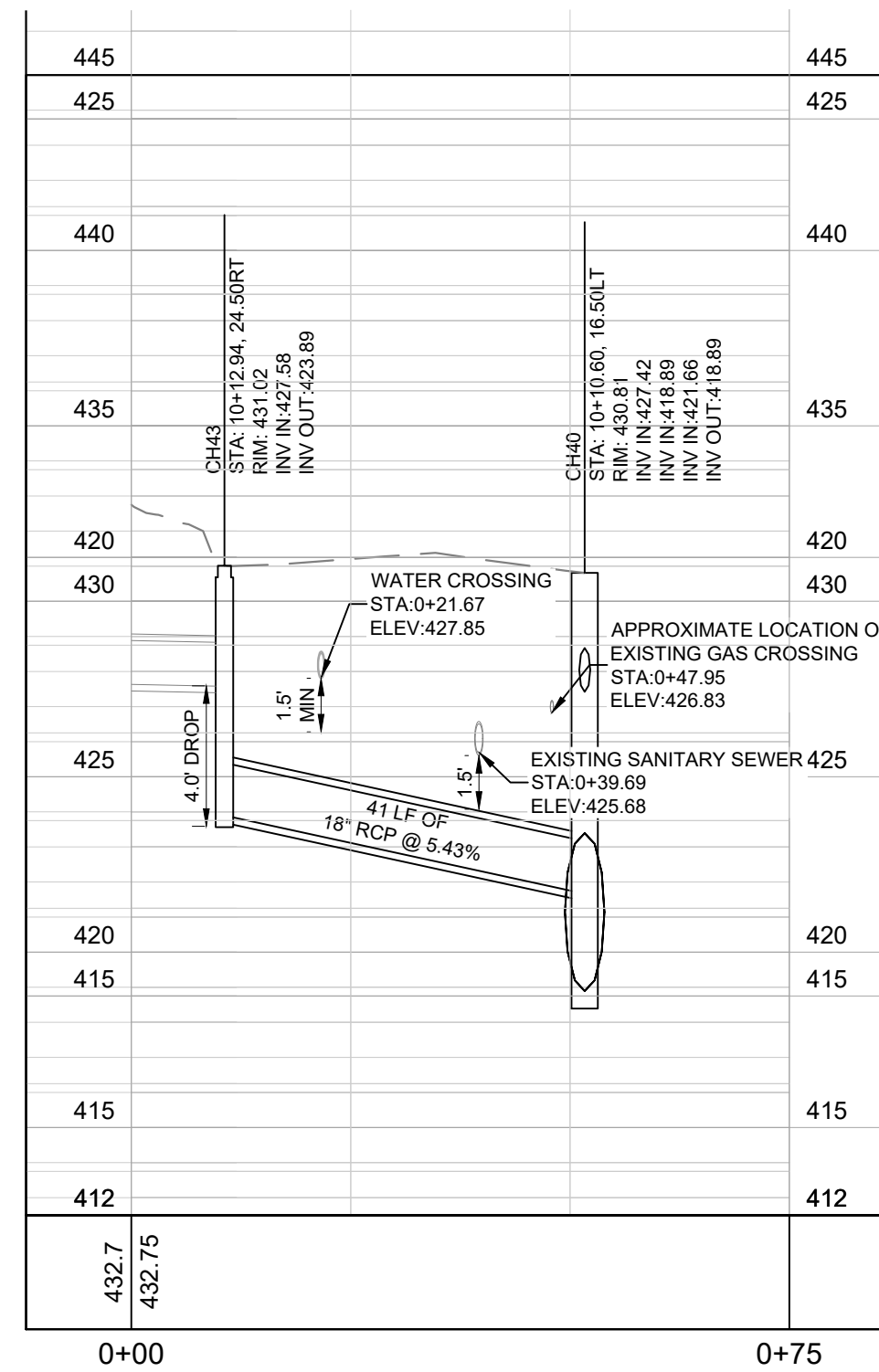
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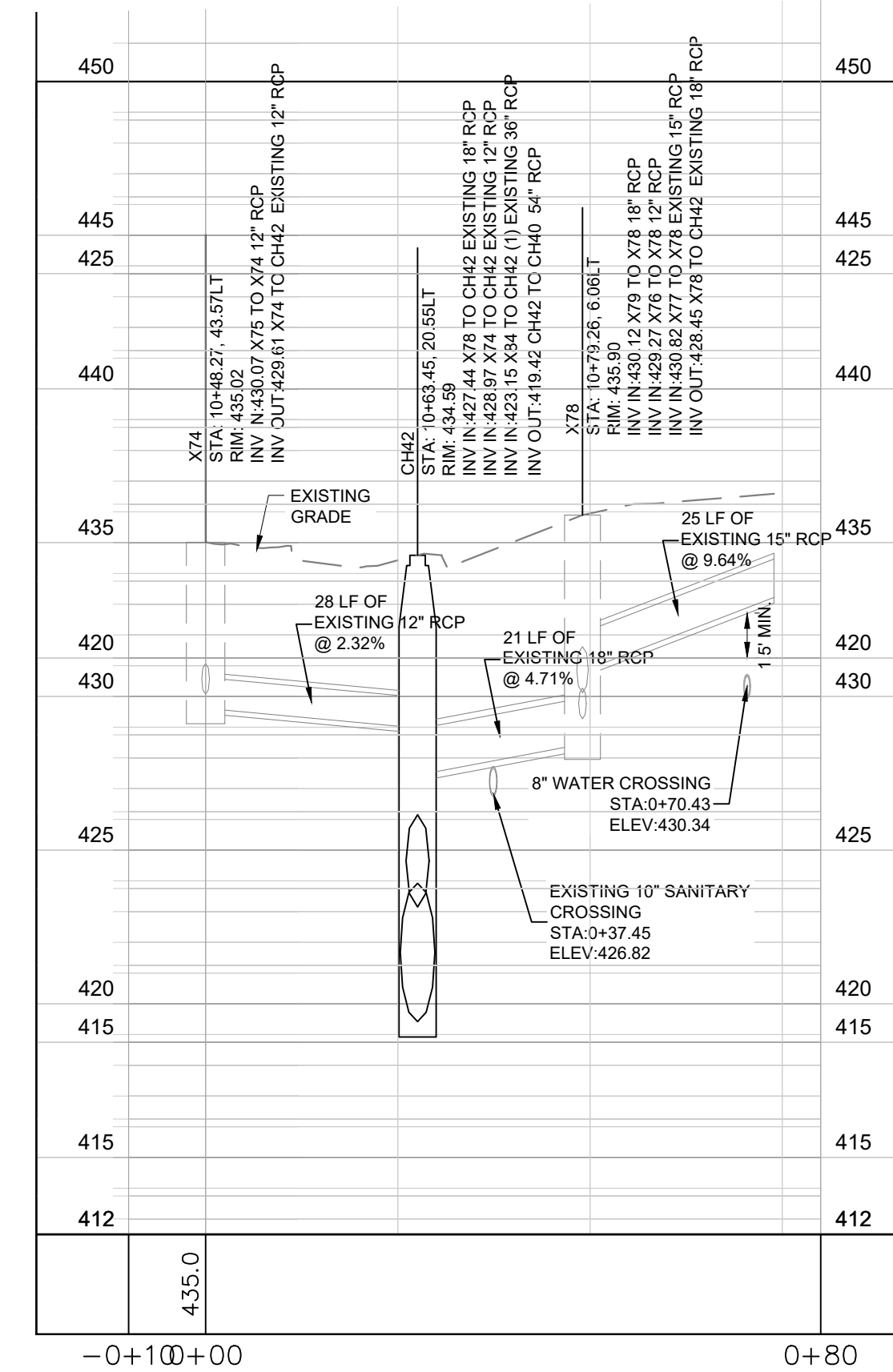
**GLENVIEW DR-  
CONNECTION 1  
SEE SHEET C2-01**



**GLENVIEW DR-  
CONNECTION 2  
SEE SHEET C2-01**



**GLENVIEW DR-  
CONNECTION 3  
SEE SHEET C2-01**



**GLENVIEW DR-  
CONNECTION 4  
SEE SHEET C2-01**

NOTE: STRUCTURE STATION AND OFFSET DATA REFERENCED TO CENTERLINE ALIGNMENT

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**LEGEND**

	UTILITY TO BE ABANDONED
	UTILITY TO BE REMOVED

**STORM NETWORK NAMING CONVENTIONS**

THE FOLLOWING NAMING CONVENTIONS APPLY TO THE STORM NETWORK TO DIFFERENTIATE BETWEEN EXISTING, DESIGNED AND PROPOSED FOR THIS PROJECT. ANY PIPE CONTAINING "CHP" IS PROPOSED FOR THE CAYCE PHASE 1

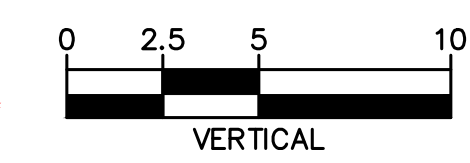
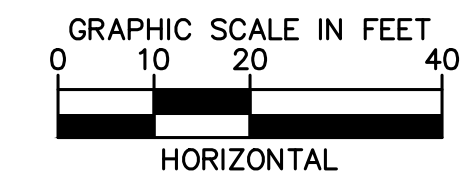
CH#	PROPOSED CAYCE HOMES STRUCTURE/PIPE
B1-#	BOSCOBEL 1 DESIGNED STRUCTURE/PIPE
B2-#	BOSCOBEL 2 DESIGNED STRUCTURE/PIPE
B-#	BOSCOBEL 3 DESIGNED STRUCTURE/PIPE
E-#	EXPLORE! SCHOOL DESIGNED STRUCTURE/PIPE
R-#	RED OAKS TOWNHOMES DESIGNED STRUCTURE/PIPE
M-#	MARTHA O'BRYAN DESIGNED STRUCTURE/PIPE
X# AND EX-#	EXISTING STORM STRUCTURE/PIPE

**PIPE TABLE**

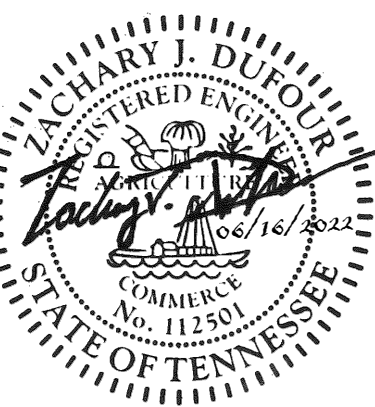
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
CH43 - CH40	423.89 (CH43)	421.66 (CH40)	18" RCP	42'	5.43%	RCP
CH46 - CH31	422.52 (CH46)	422.26 (CH31)	15" RCP	52'	0.50%	RCP

**STRUCTURE TABLE**

NAME	DESCRIPTION	TOP GRADE
CH31	96" MANHOLE	429.79
CH32	84" TDOT D-CB-12RC - DOUBLE	428.39
CH39	84" TDOT D-CB-12RC - DOUBLE	429.15
CH40	84" TDOT D-CB-12RC - SINGLE	430.81
CH42	96" MANHOLE	434.59
CH43	TDOT D-CB-42S - DROP STRUCTURE	431.02



**BID SET**



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DATE	
REVISIONS	
No.	1 2 3 4 5 6 7 8 9 10
DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018

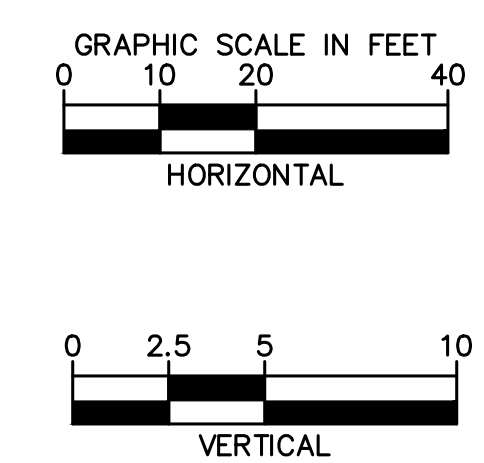
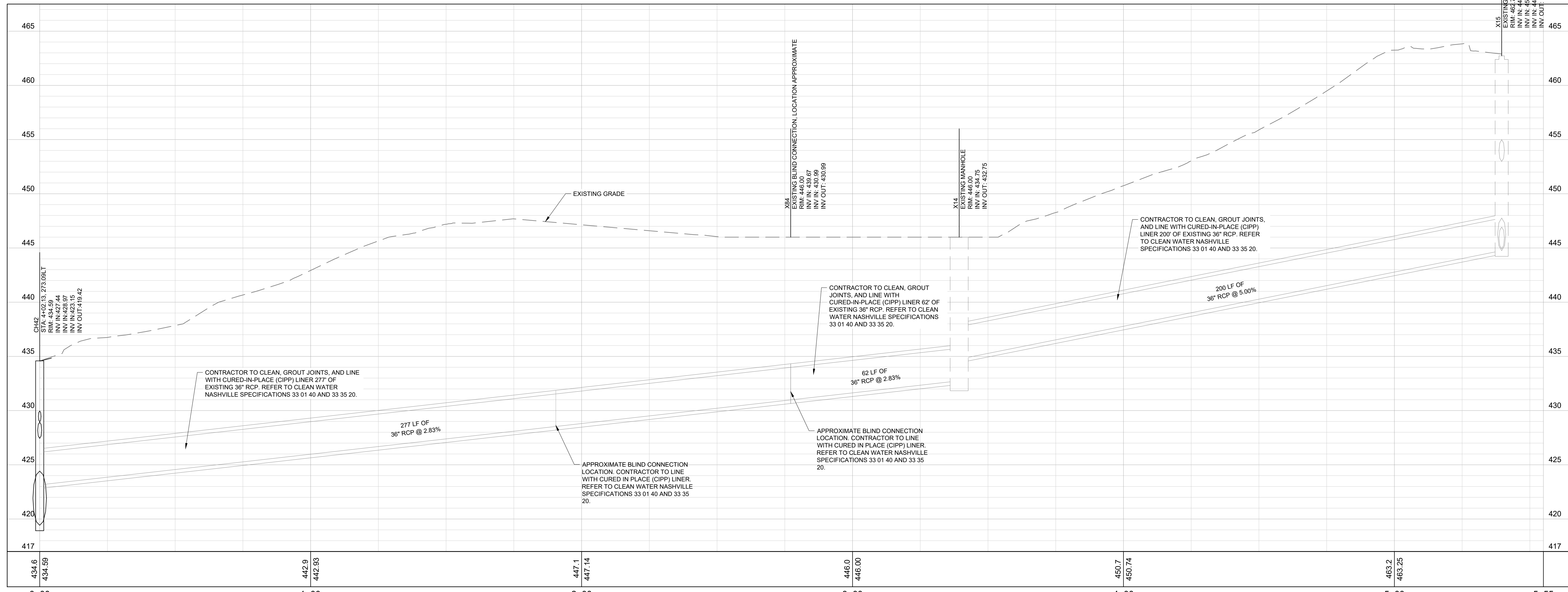
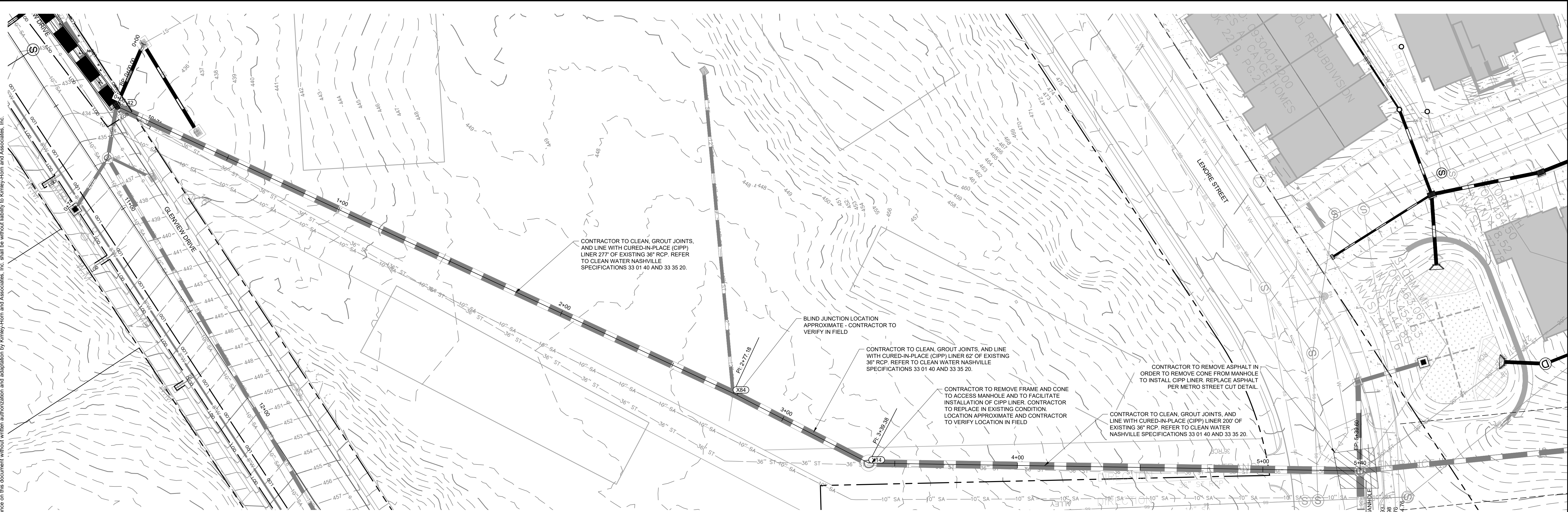
STORM PLAN AND  
PROFILE S - GLENVIEW  
DR CONNECTIONS

SHEET NUMBER  
**C2-06**





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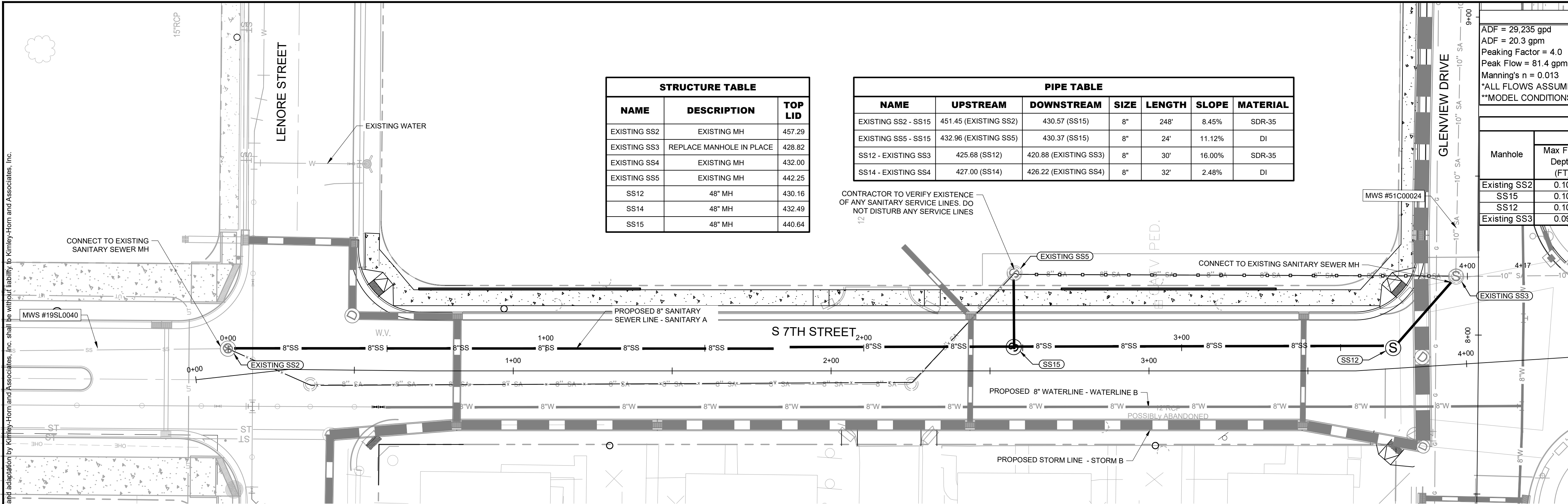
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DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

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NAME	DESCRIPTION	TOP LID
EXISTING SS2	EXISTING MH	457.29
EXISTING SS3	REPLACE MANHOLE IN PLACE	428.82
EXISTING SS4	EXISTING MH	432.00
EXISTING SS5	EXISTING MH	442.25
SS12	48" MH	430.16
SS14	48" MH	432.49
SS15	48" MH	440.64

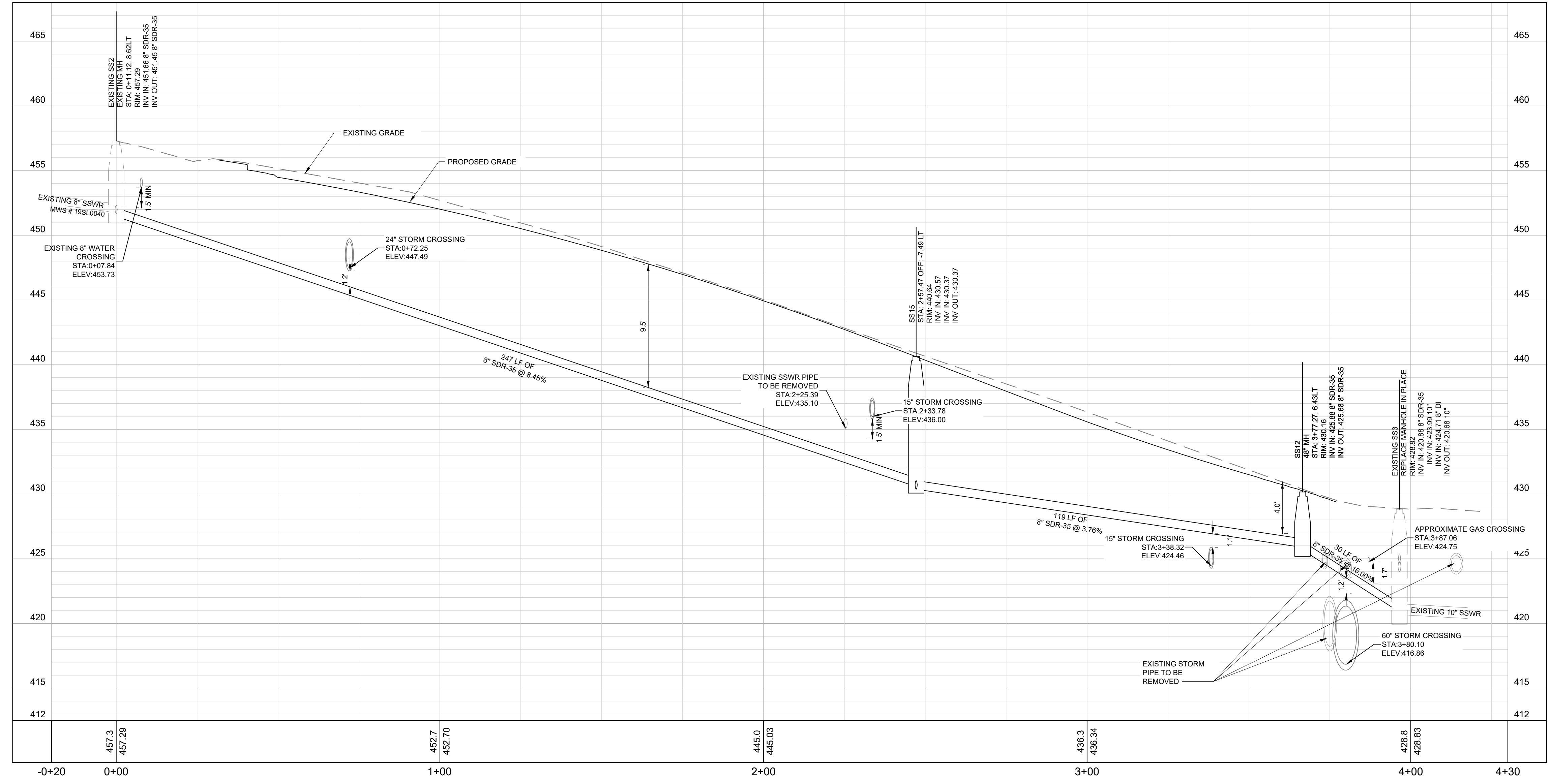
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
EXISTING SS2 - SS15	451.45 (EXISTING SS2)	430.57 (SS15)	8"	248'	8.45%	SDR-35
EXISTING SS5 - SS15	432.96 (EXISTING SS5)	430.37 (SS15)	8"	24'	11.12%	DI
SS12 - EXISTING SS3	425.68 (SS12)	420.88 (EXISTING SS3)	8"	30'	16.00%	SDR-35
SS14 - EXISTING SS4	427.00 (SS14)	426.22 (EXISTING SS4)	8"	32'	2.48%	DI

CONTRACTOR TO VERIFY EXISTENCE OF ANY SANITARY SERVICE LINES. DO NOT DISTURB ANY SERVICE LINES

HGL Calculation Assumptions									
ADF = 29,235 gpd									
ADF = 20.3 gpm									
Peaking Factor = 4.0									
Peak Flow = 81.4 gpm									
Manning's n = 0.013									
*ALL FLOWS ASSUMED TO ENTER THE MH UPSTREAM OF EX SS3									
**MODEL CONDITIONS ASSUME THE CONNECTION TO THE EXISTING SYSTEM IS NOT SURCHARGED									

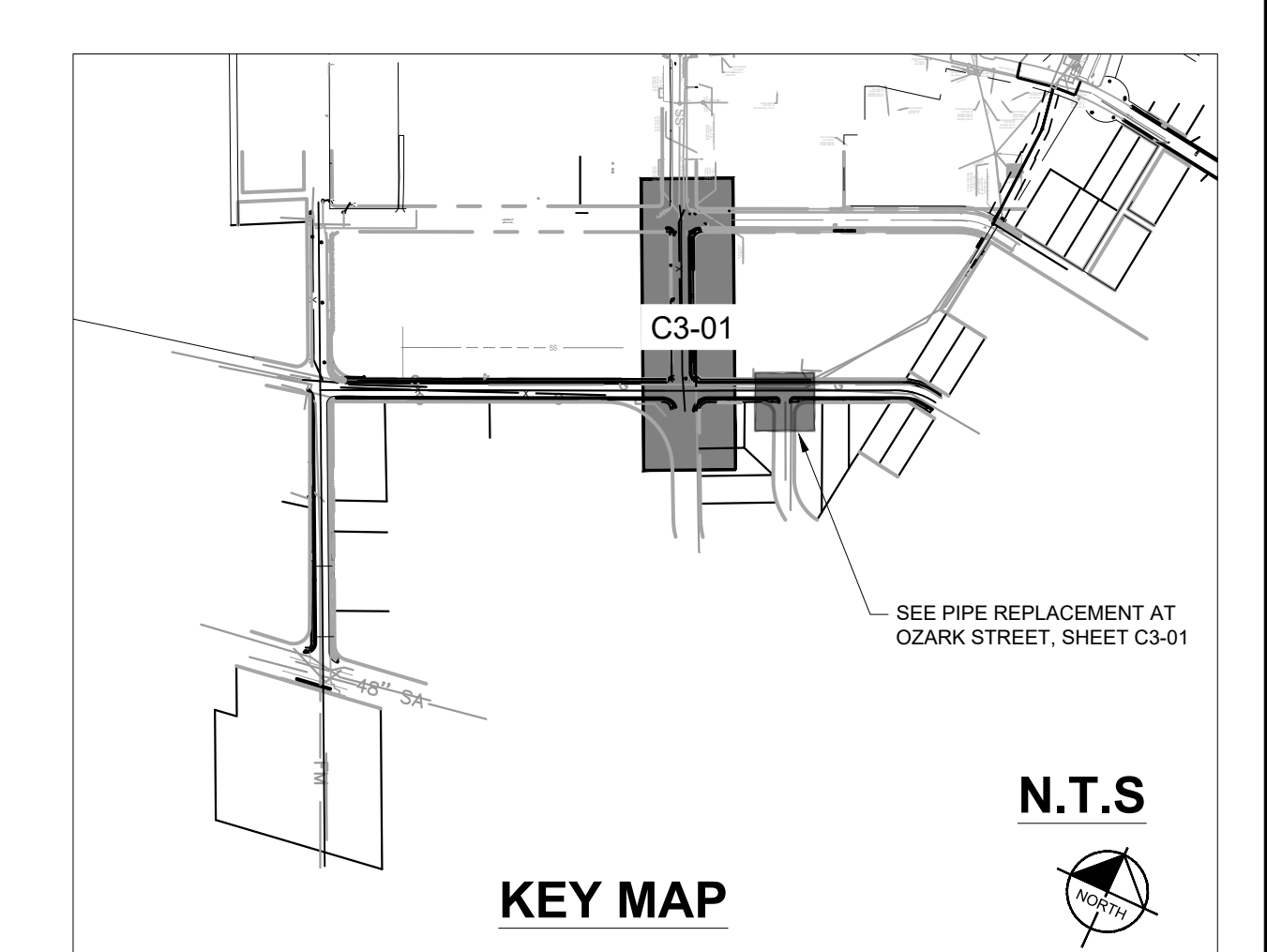
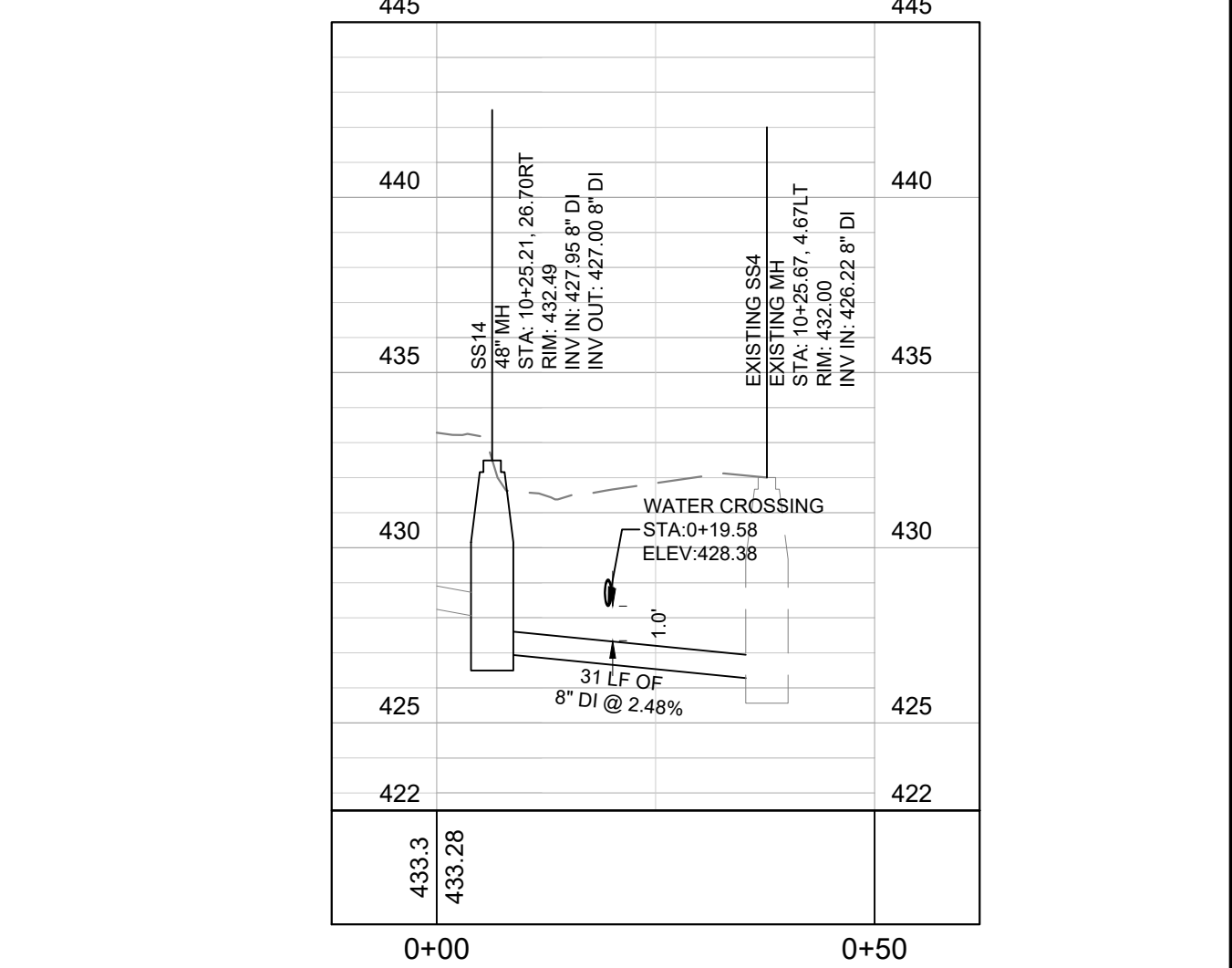
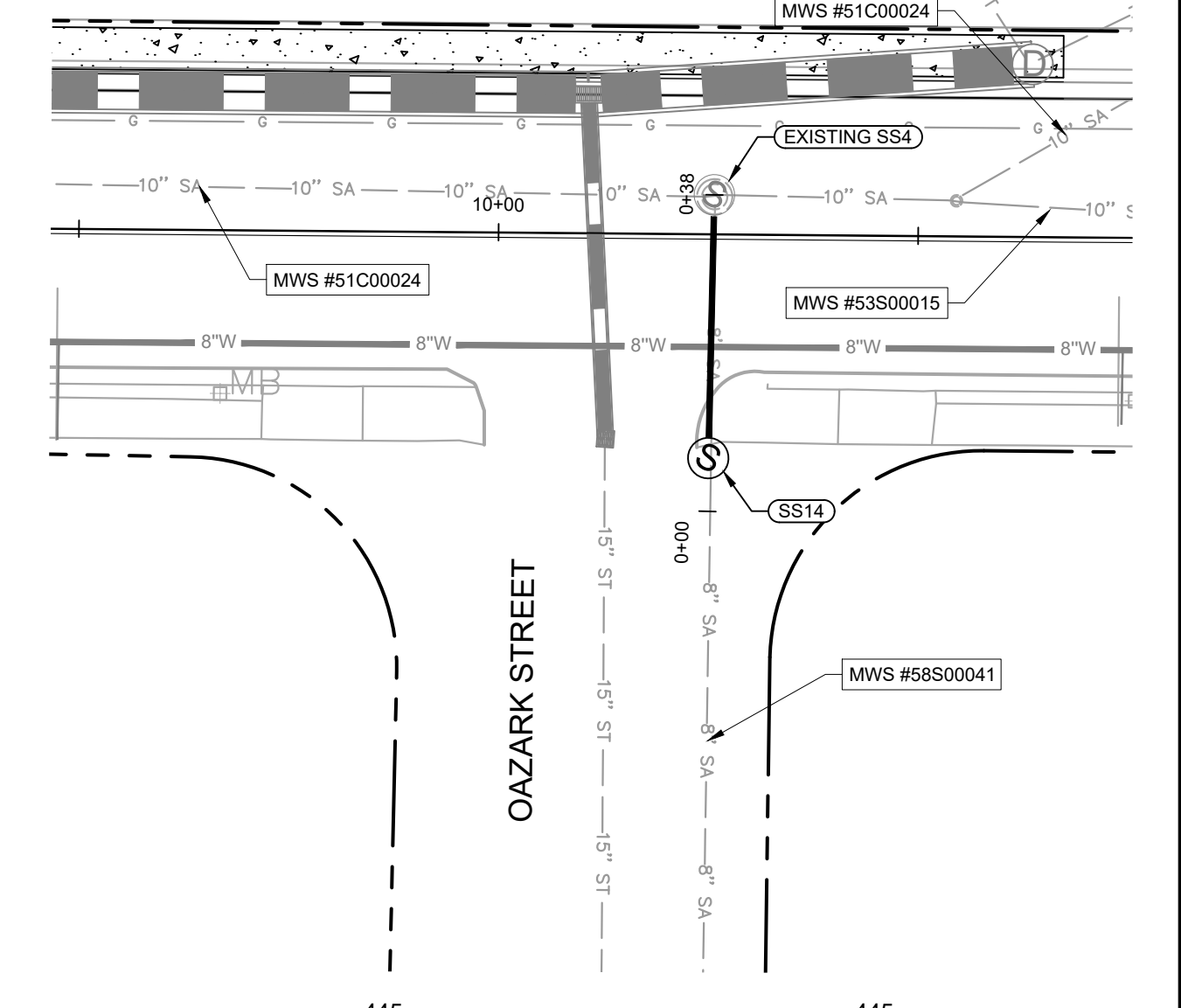
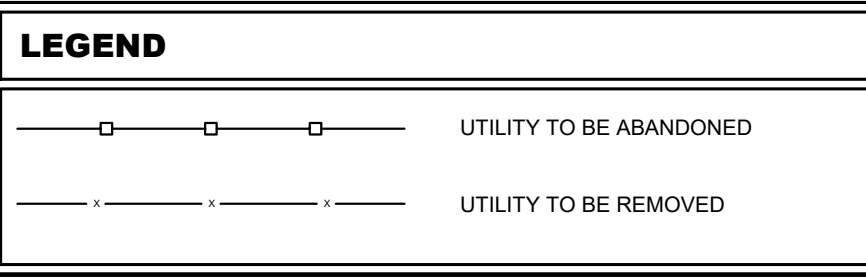
Manhole	Average Daily Flow					Peak Daily Flow					Proposed Invert Out (FT MSL)
	Max Flow Depth (FT)	% Full	Velocity (fps)	Max HGL (FT MSL)	Max Flow Depth (FT)	% Full	Velocity (fps)	Max HGL (FT MSL)			
	Existing SS2	0.10	15%	0.92	451.55	0.20	30%	1.37	451.65	451.45	
SS15	0.10	15%	3.51	430.47	0.20	30%	5.29	430.57	430.37		
SS12	0.10	15%	2.62	425.78	0.20	30%	3.98	425.88	425.68		
Existing SS3	0.09	13%	4.33	420.77	0.18	27%	6.63	420.86	420.68		



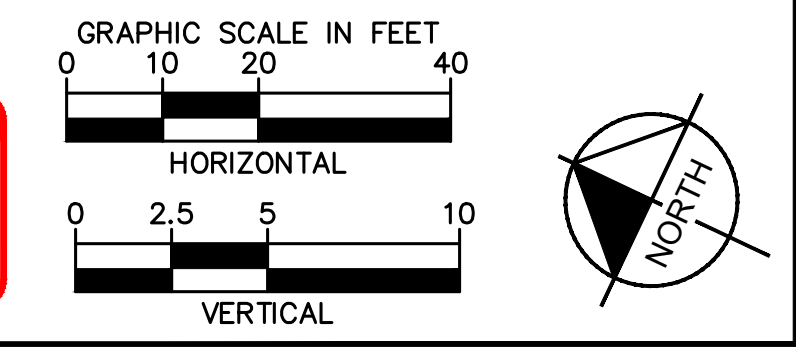
SANITARY A - 7TH STREET

**EXISTING UTILITIES NOTE**

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**CAYCE UTILITY PHASE 1B**  
**MDHA**  
**NASHVILLE, TN**

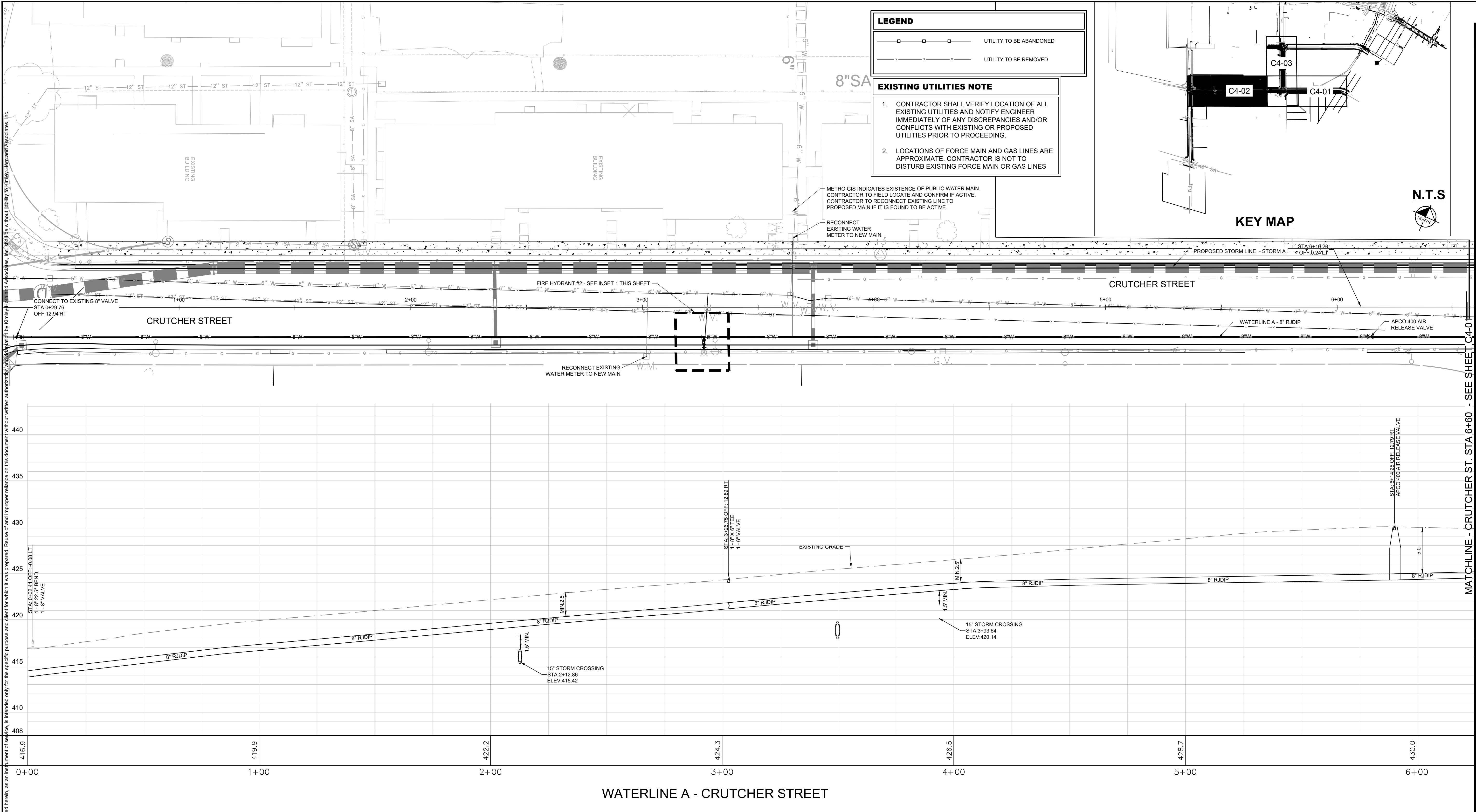


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DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018
SANITARY SEWER PLAN AND PROFILE	
SHEET NUMBER	<b>C3-01</b>



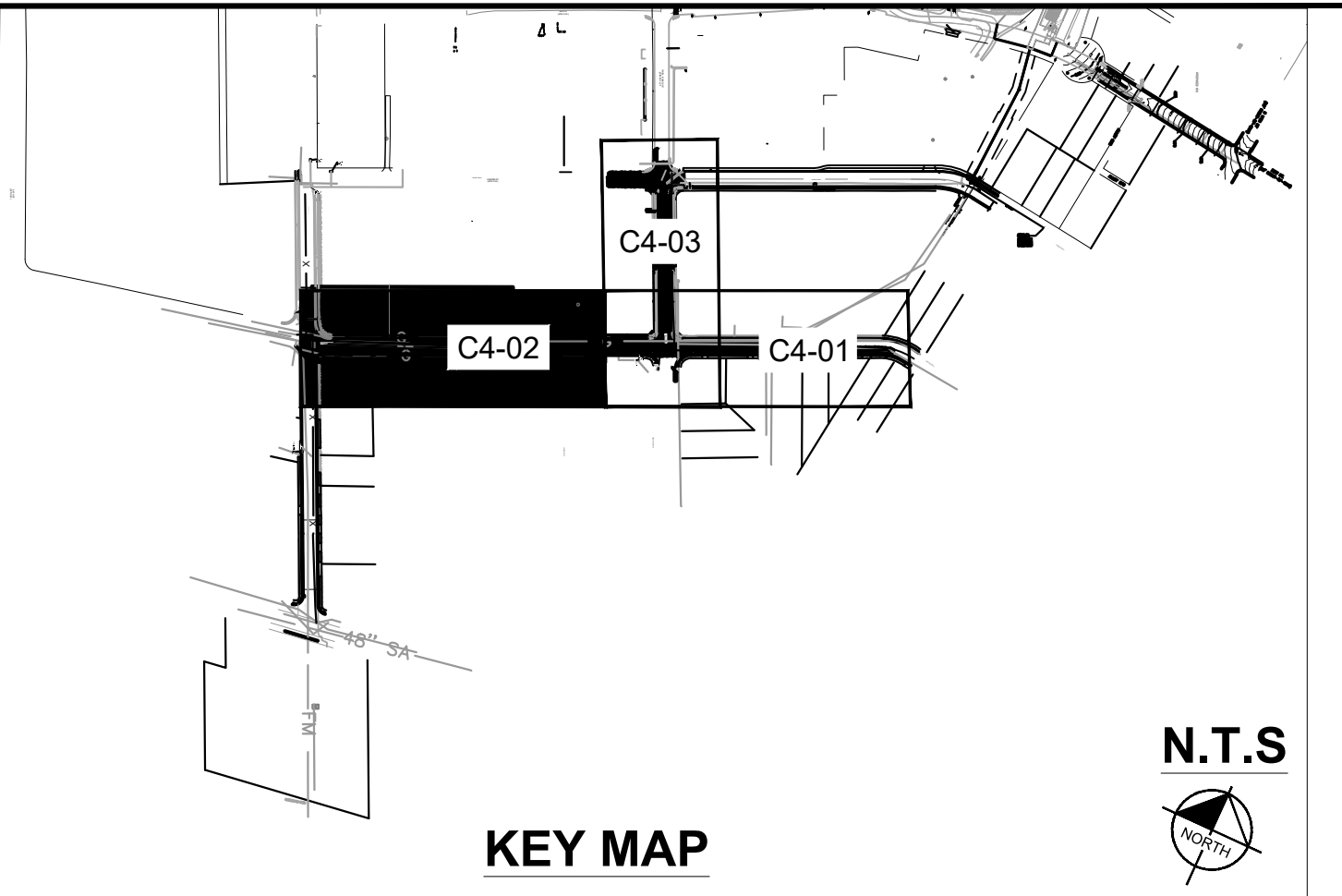


**LEGEND**

- UTILITY TO BE ABANDONED
- UTILITY TO BE REMOVED

**EXISTING UTILITIES NOTE**

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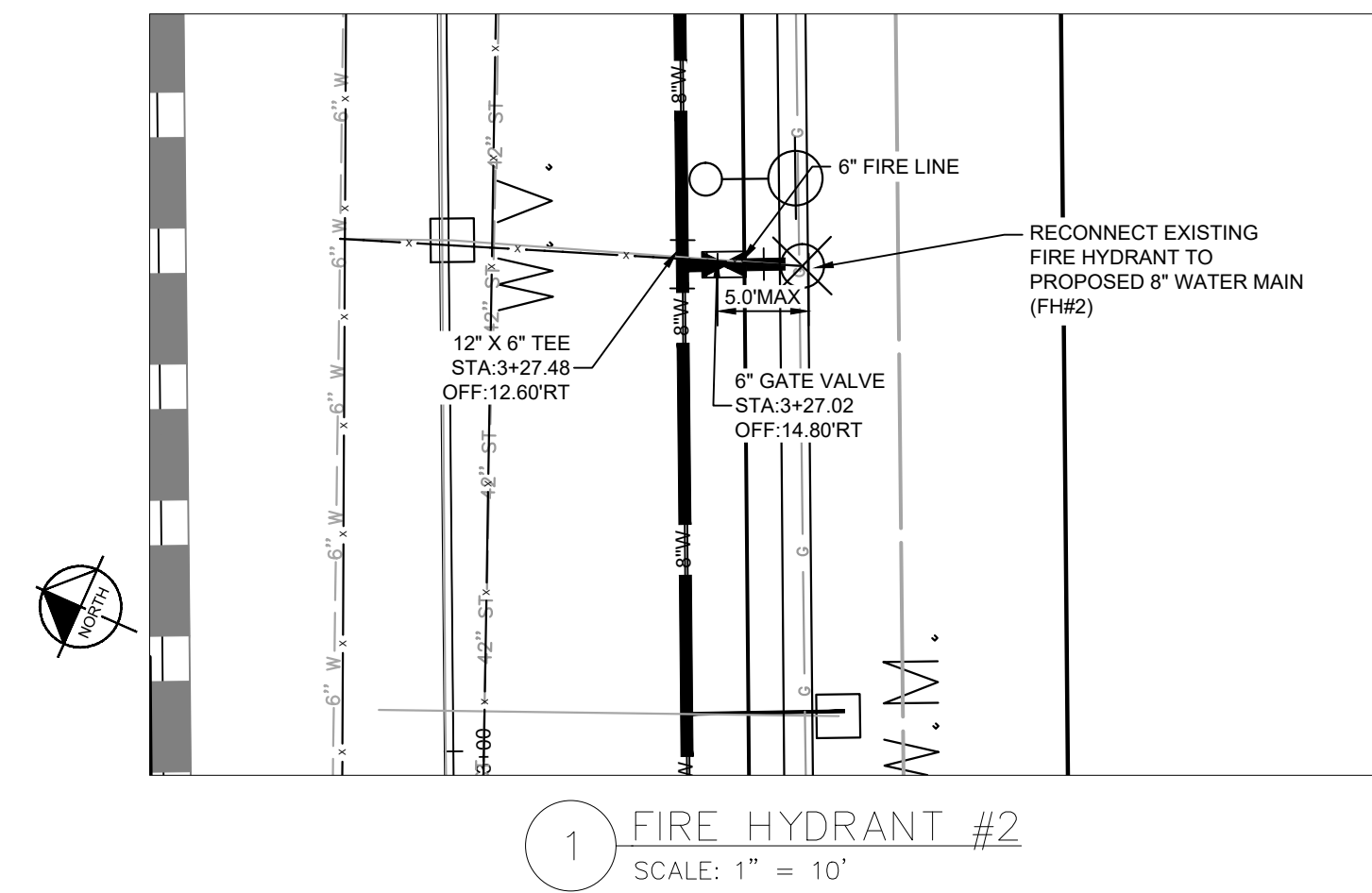
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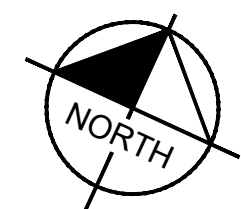
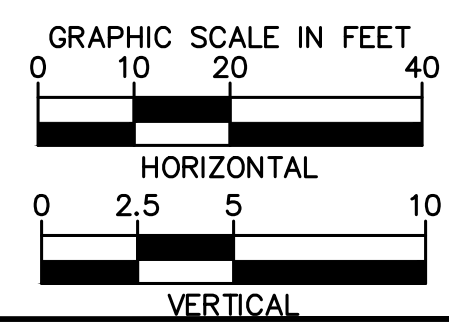
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 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018



NOTE: STRUCTURE STATION AND OFFSET DATA REFERENCED TO CENTERLINE ALIGNMENT

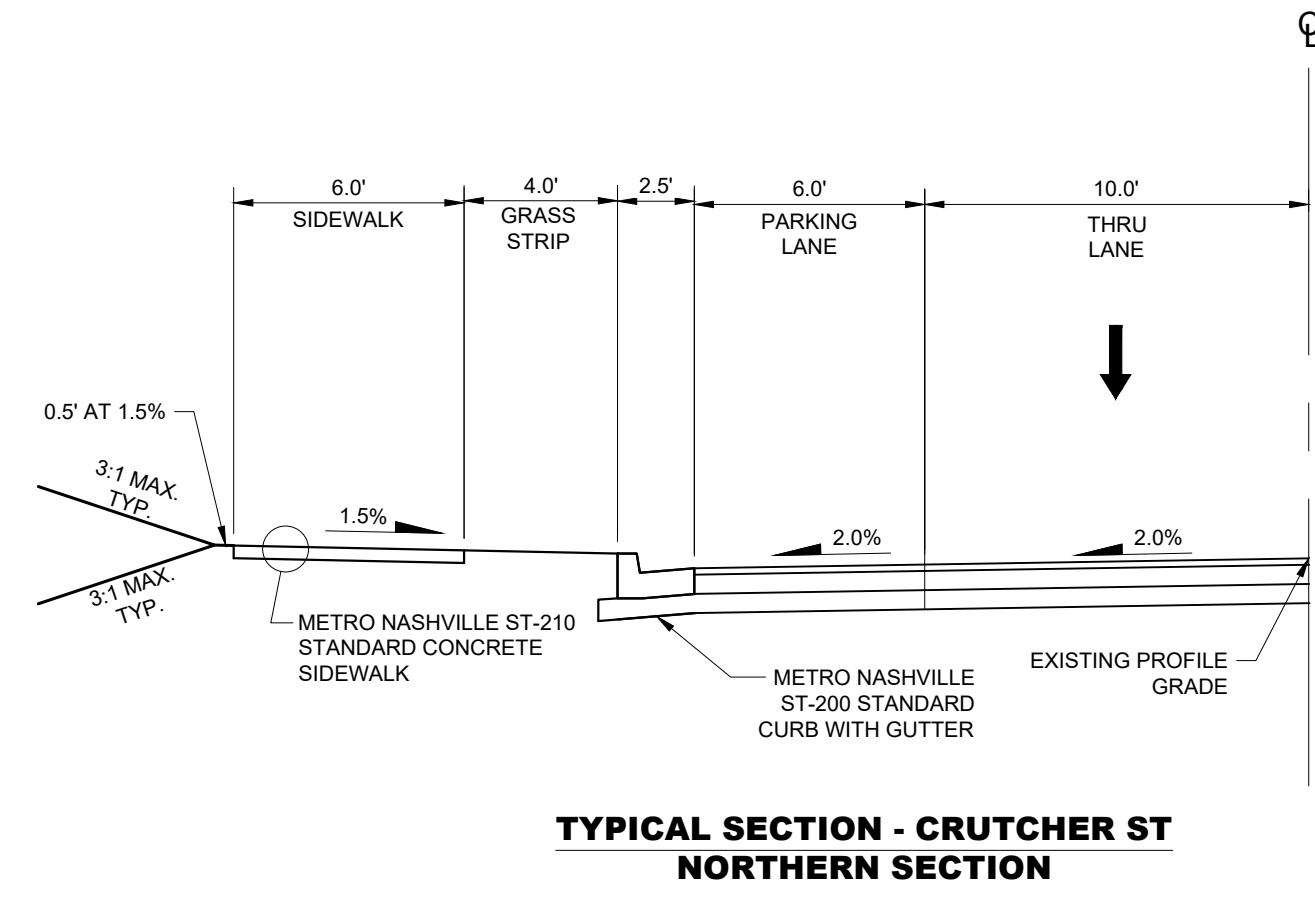
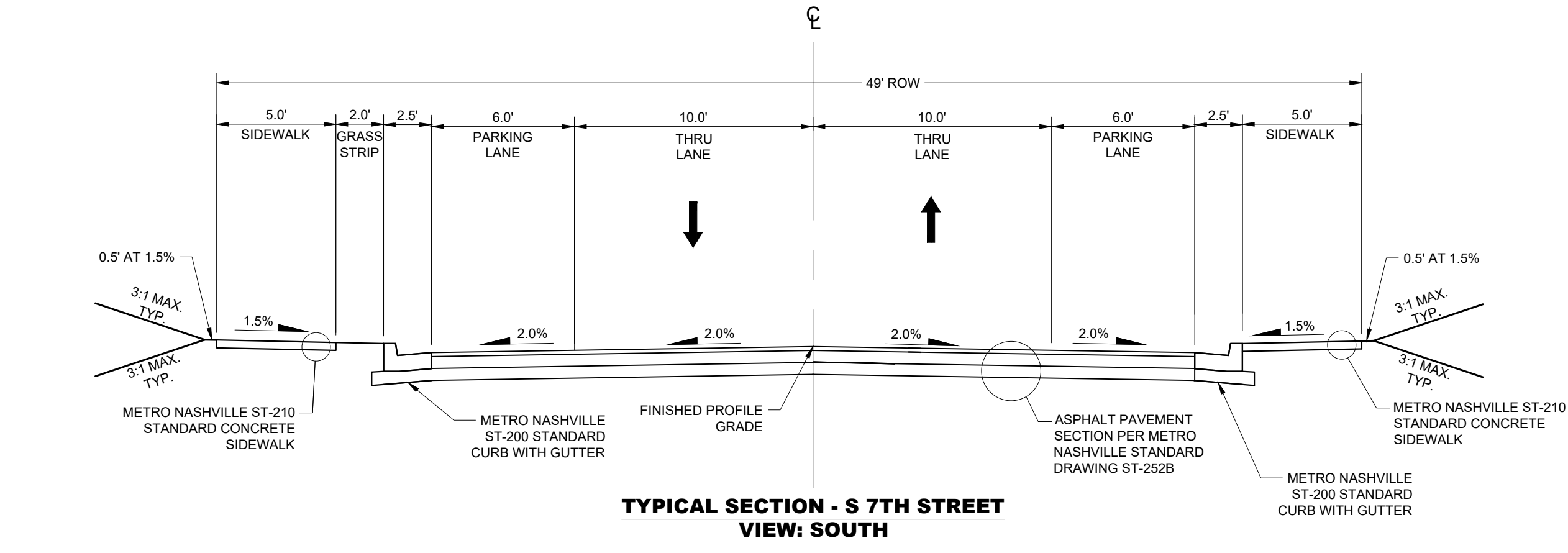
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WATER PLAN AND PROFILE  
 SHEET NUMBER  
**C4-02**



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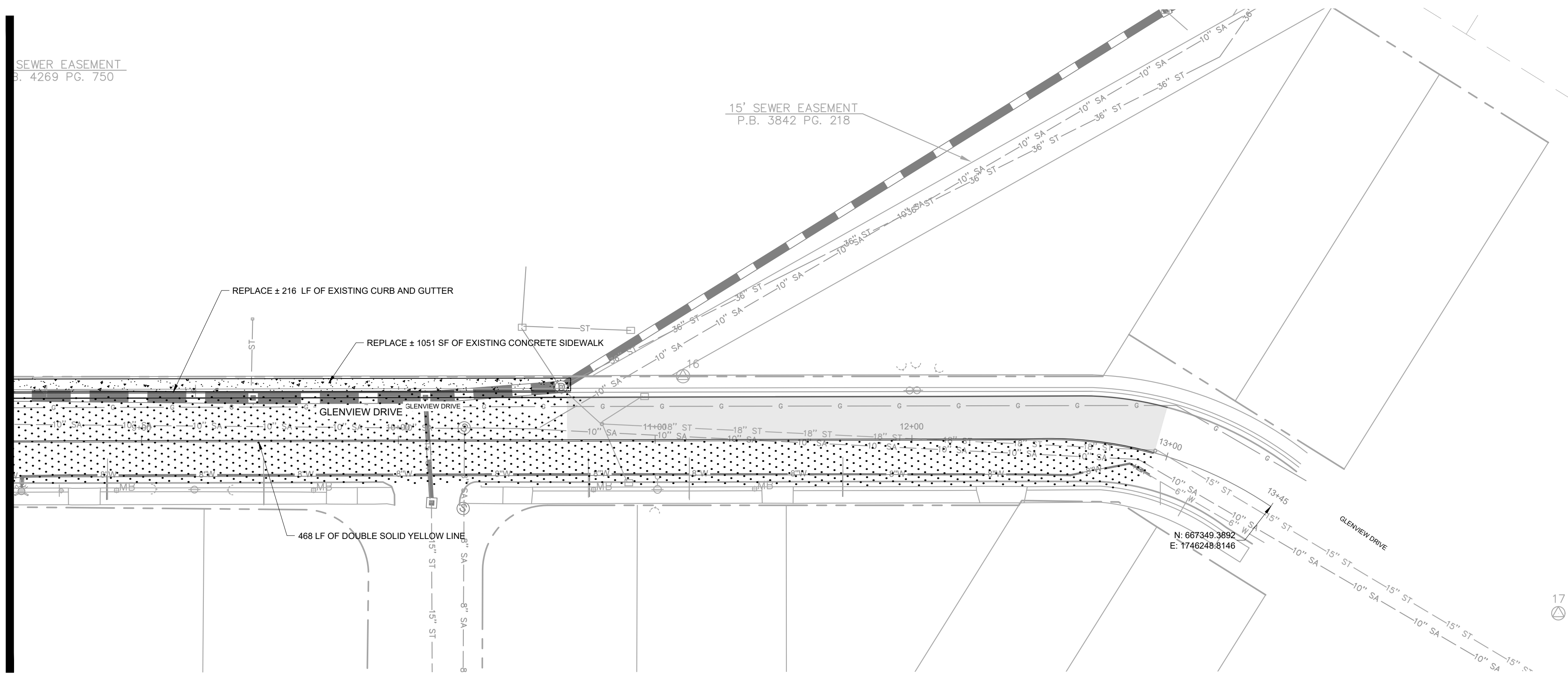
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ROADWAY TYPICAL SECTIONS  
 SHEET NUMBER  
**C5-01**

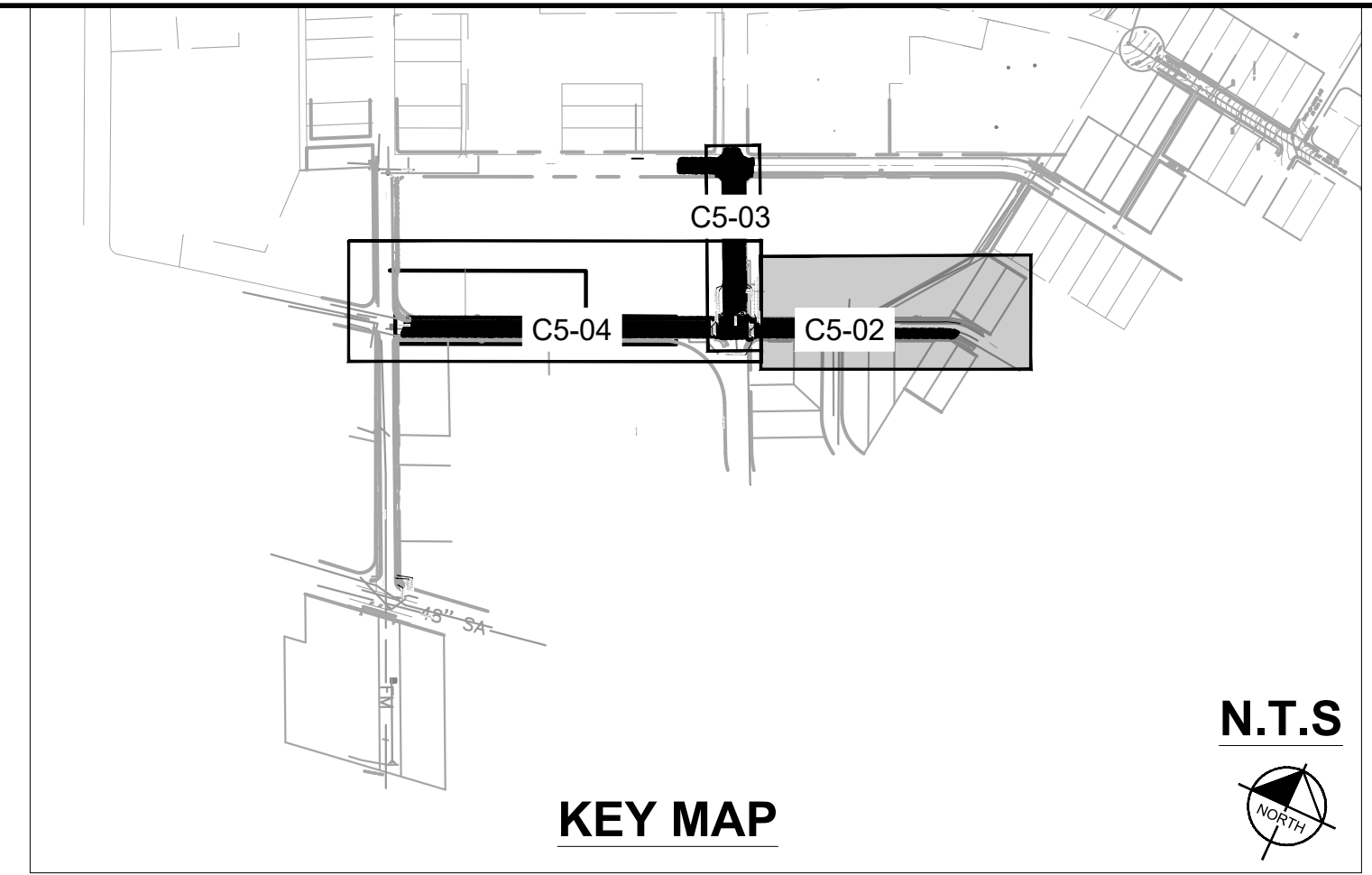
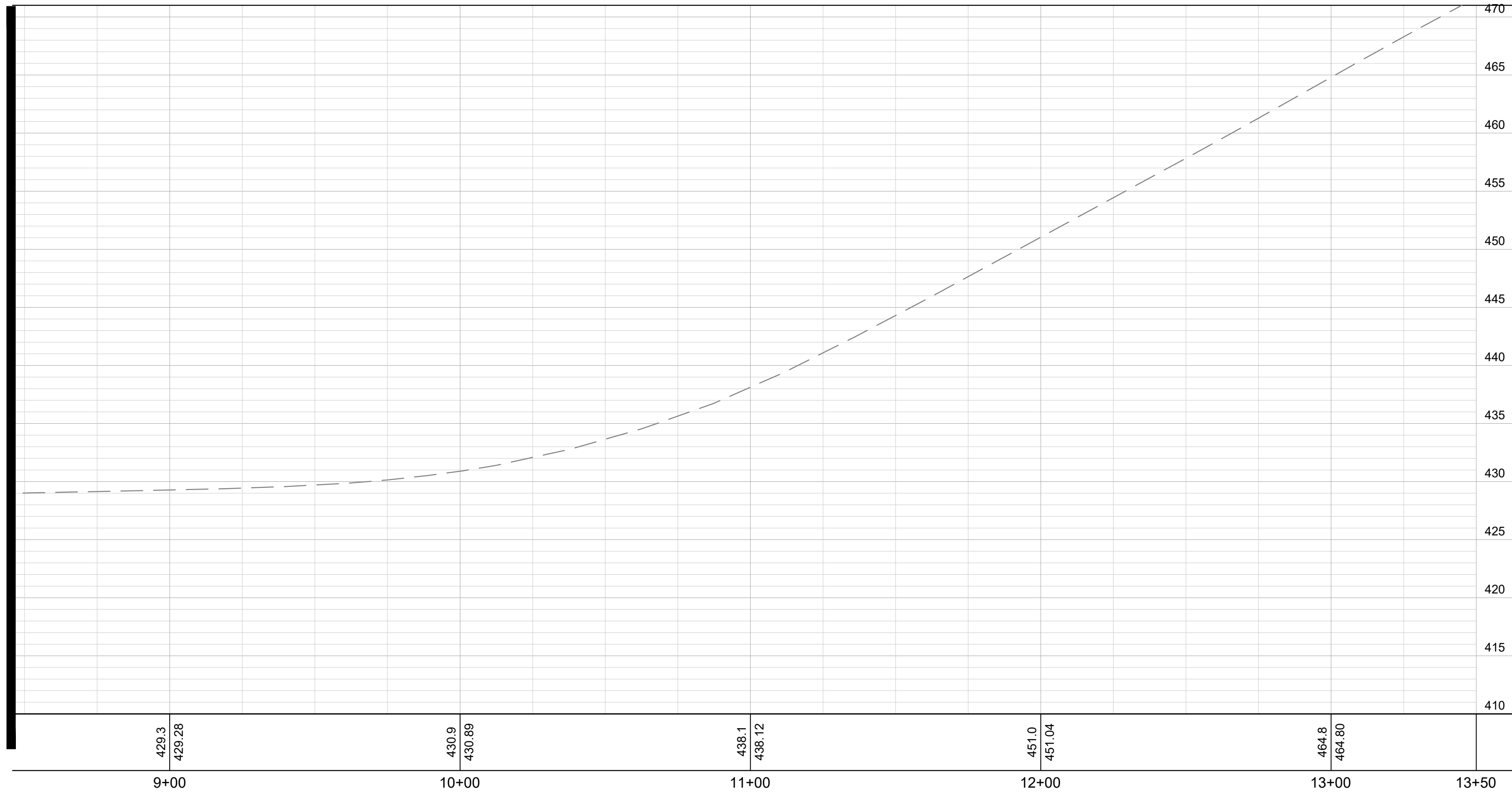
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MATCHLINE - CRUTCHER ST. STA 8+50 - SEE SHEET C5-04



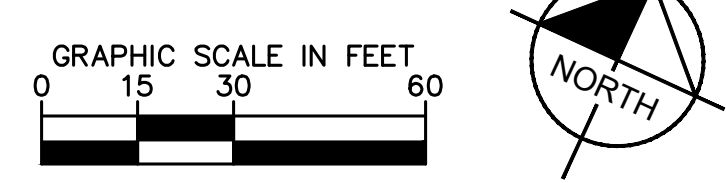
MATCHLINE - CRUTCHER ST. STA 8+50 - SEE SHEET C5-04



HATCH LEGEND	
	FULL DEPTH ASPHALT PAVEMENT (METRO PUBLIC WORKS ST-252B)
	CONCRETE SIDEWALK (METRO PUBLIC WORKS ST-210)
	1.5" MILL AND OVERLAY

KEYNOTE LEGEND	
	ACCESSIBLE PEDESTRIAN CURB RAMP WITH TRUNCATED DOME MAT

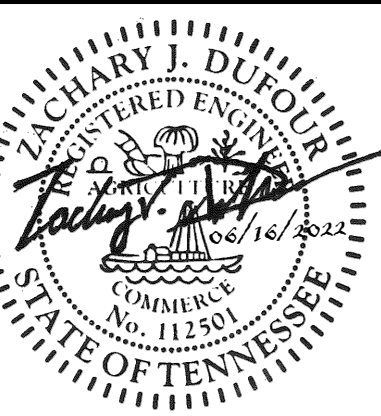
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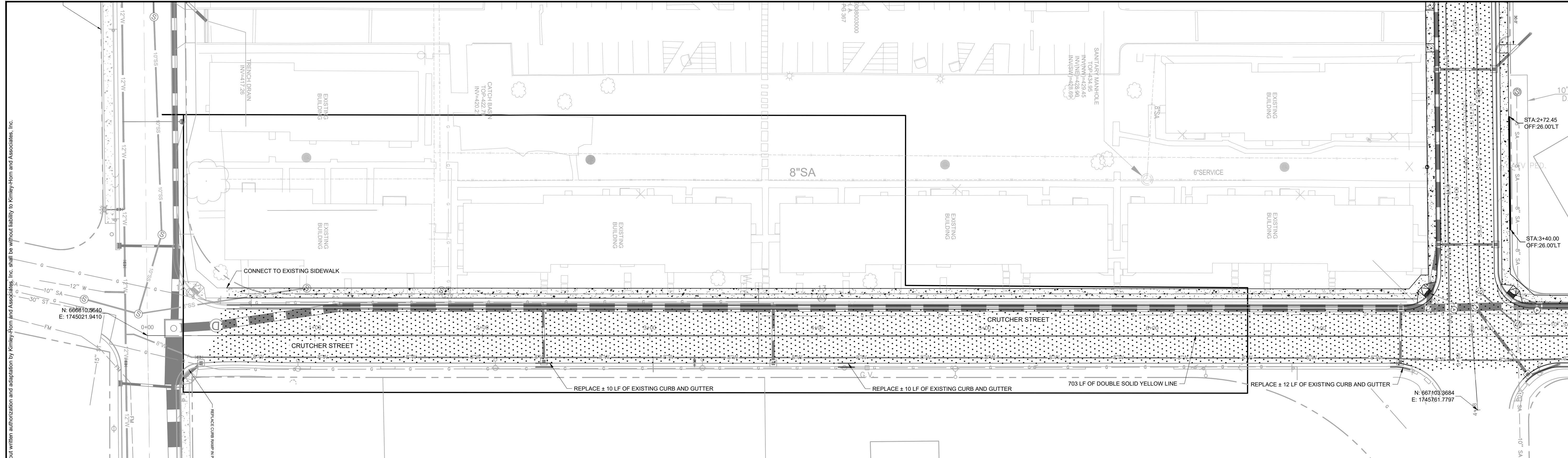
ROADWAY PLAN AND PROFILE - GLENVIEW DRIVE

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**C5-02**





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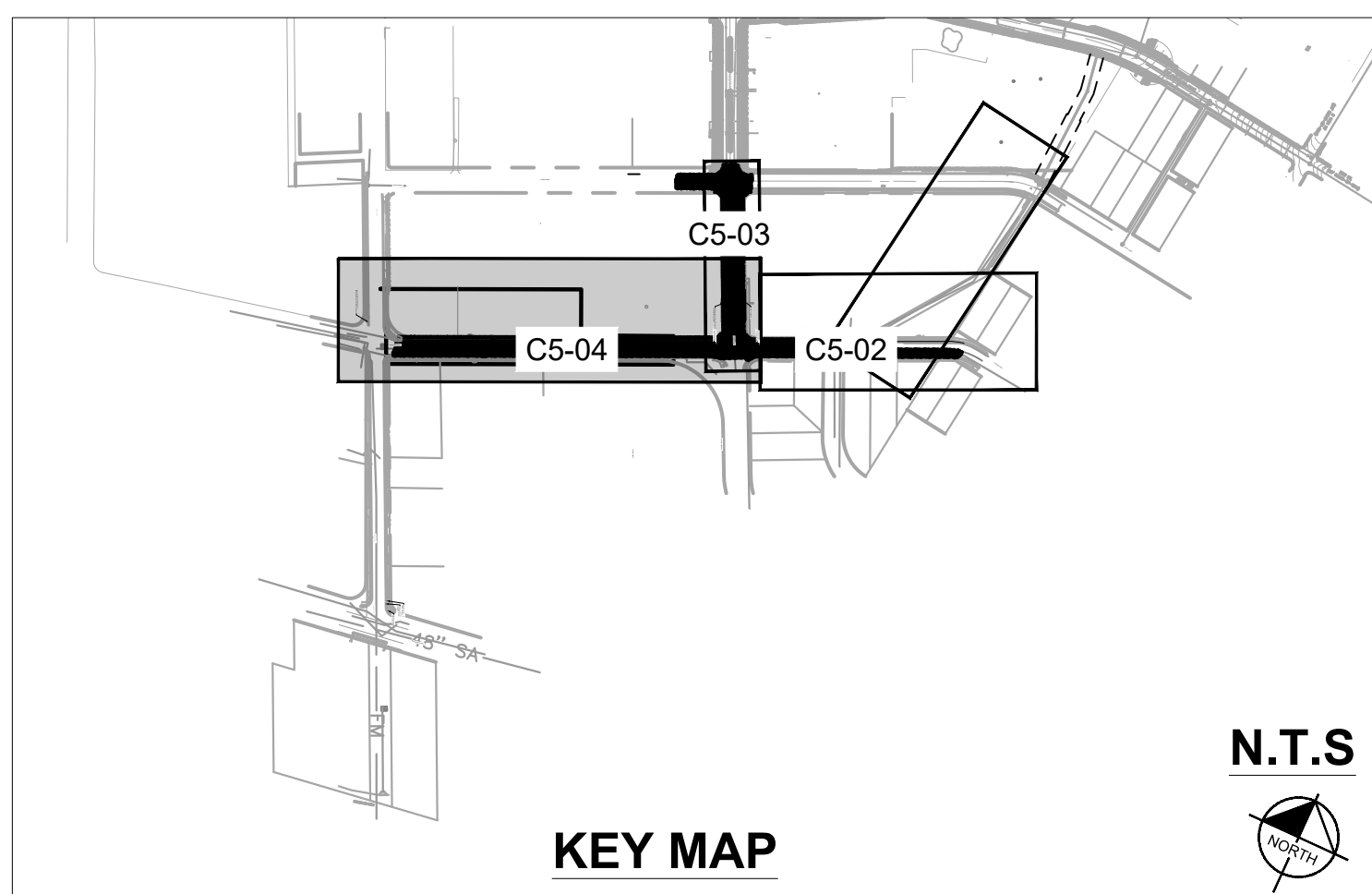
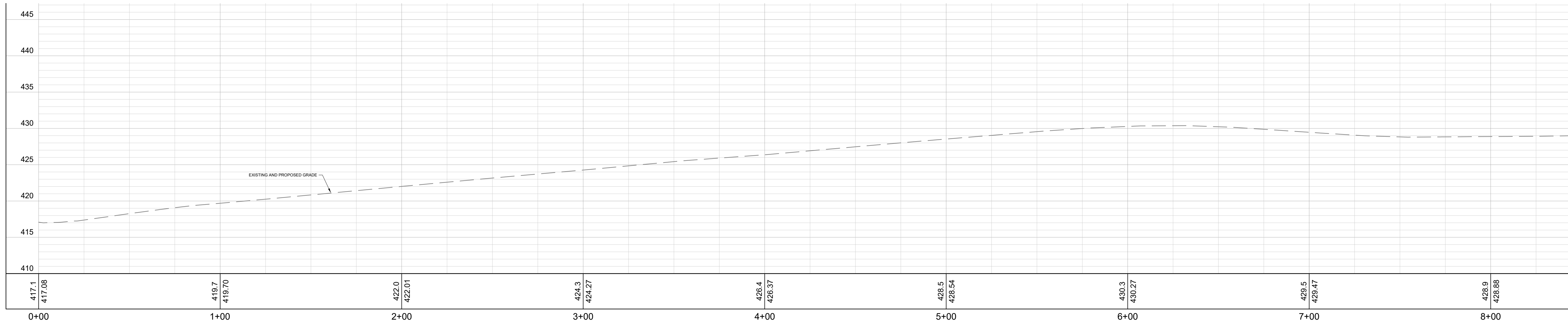


MATCHLINE - CRUTCHER ST - STA 8+50  
SEE SHEET C5-02

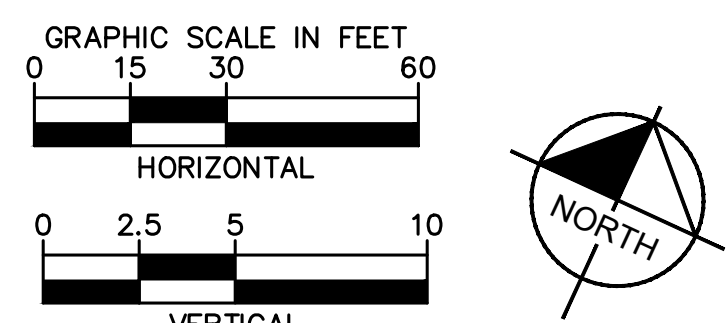
MATCHLINE - CRUTCHER ST - STA 8+50  
SEE SHEET C5-02

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**CAYCE UTILITY PHASE 1B**  
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	FULL DEPTH ASPHALT PAVEMENT (METRO PUBLIC WORKS ST-252B)
	CONCRETE SIDEWALK (METRO PUBLIC WORKS ST-210)
	1.5" MILL AND OVERLAY



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ROADWAY PLAN AND PROFILE - CRUTCHER STREET  
SHEET NUMBER **C5-04**

S. 7TH STREET CROSS SECTIONS

**LINETYPE LEGEND**

	EXISTING GRADE SURFACE
	PROPOSED PROPERTY BOUNDARY - SEE SITE GRADING PLAN FOR PROPERTY GRADING

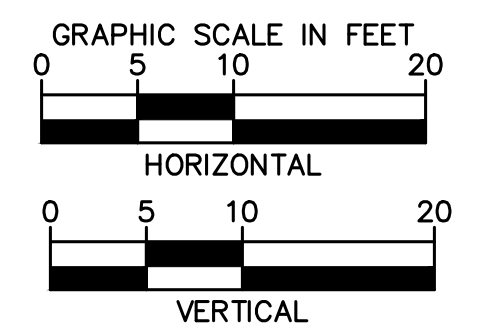
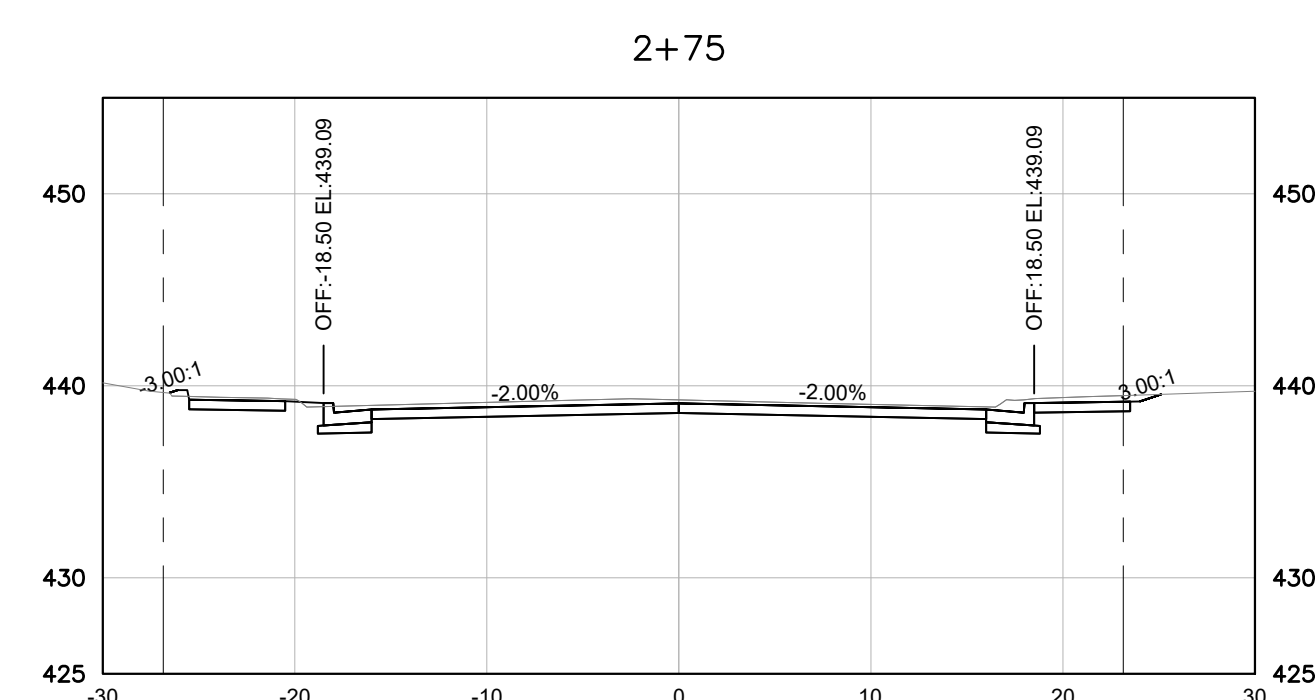
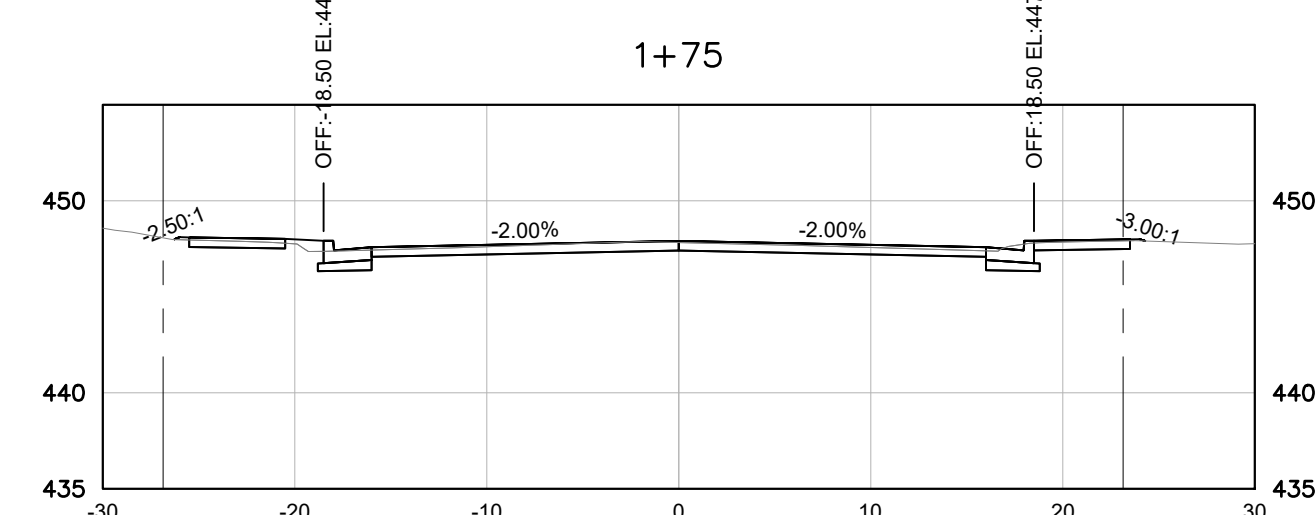
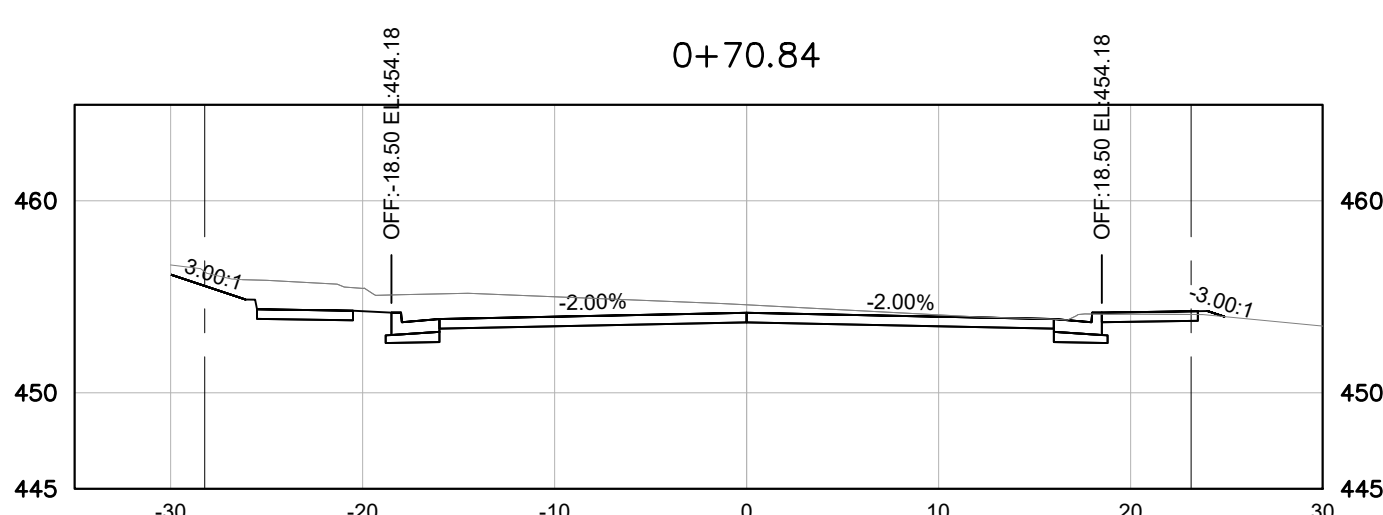
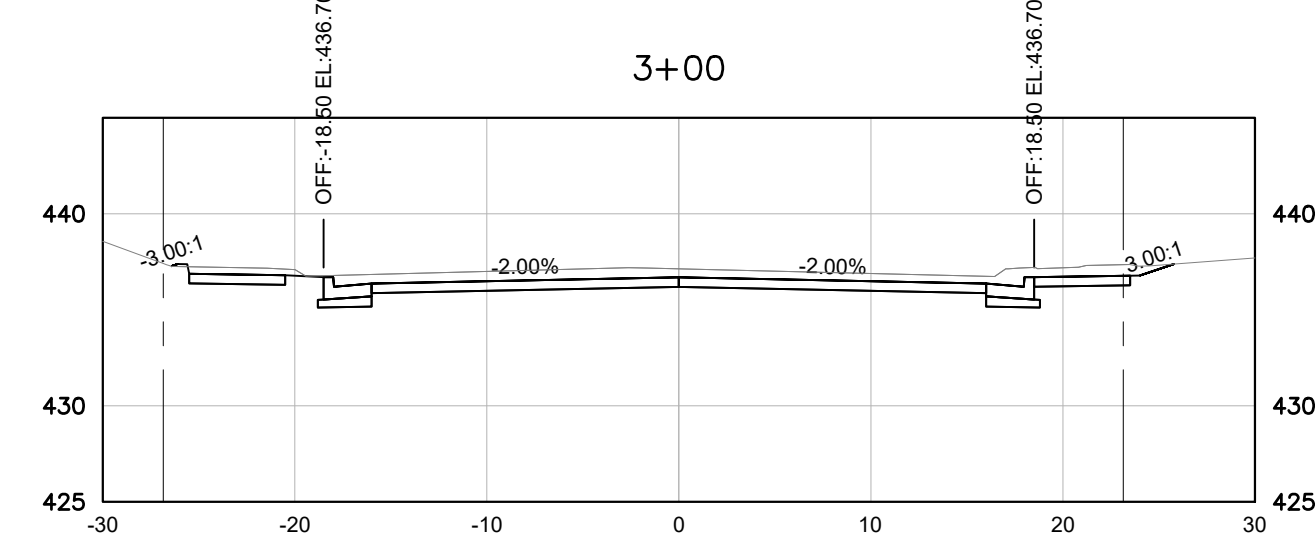
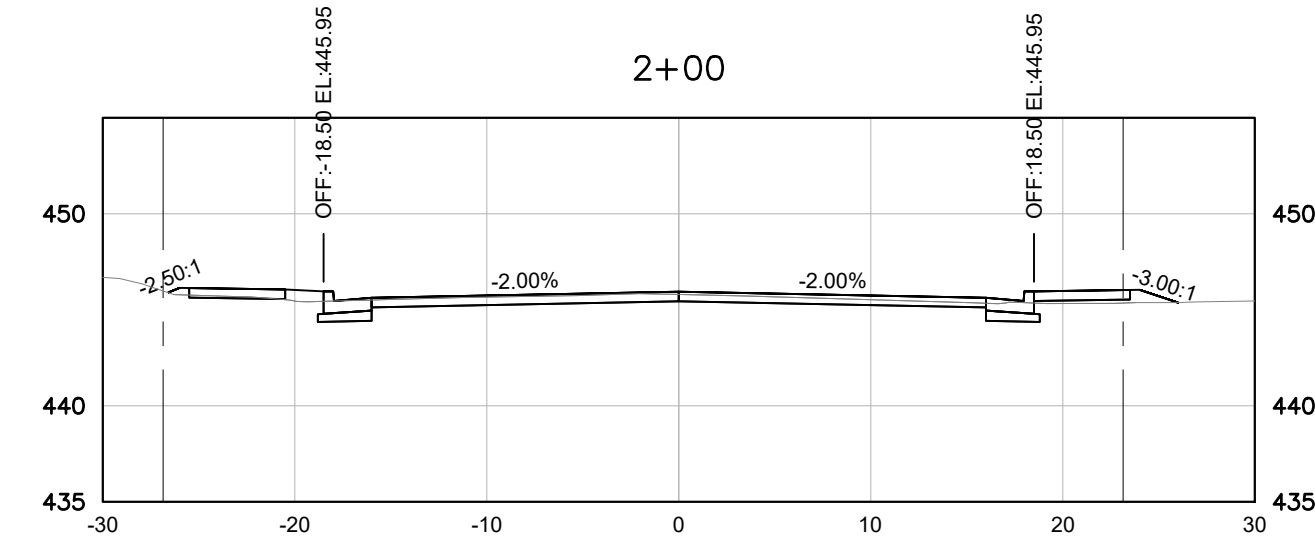
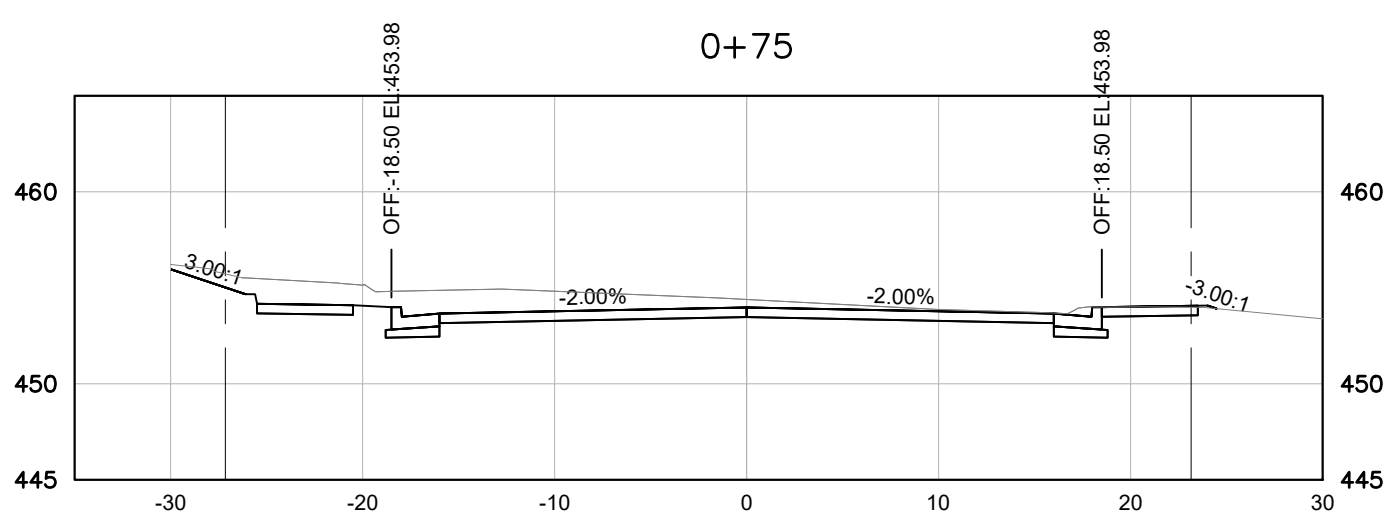
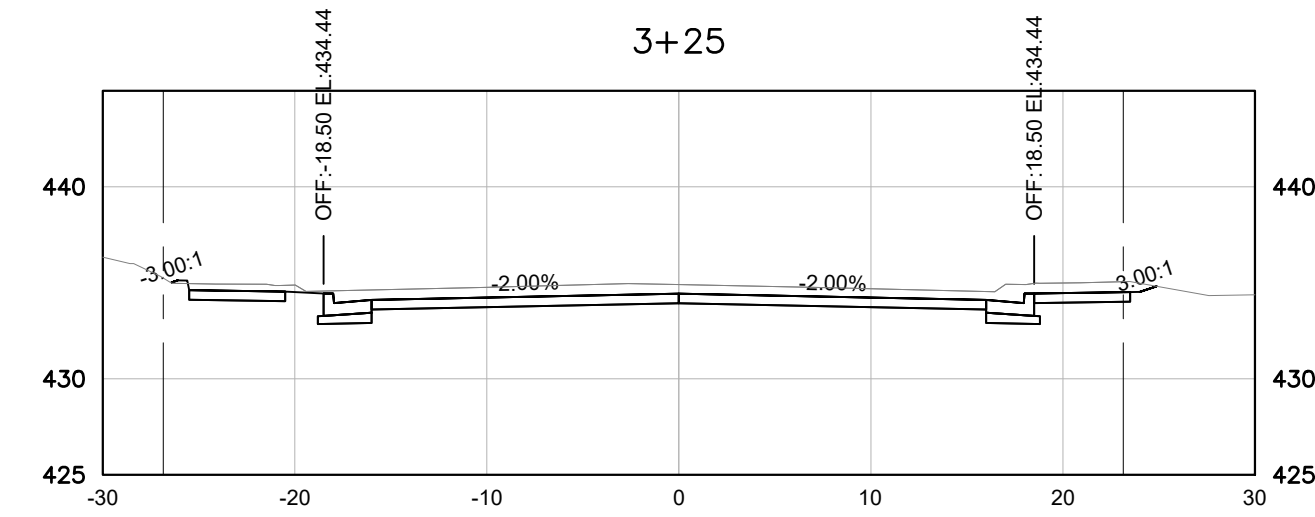
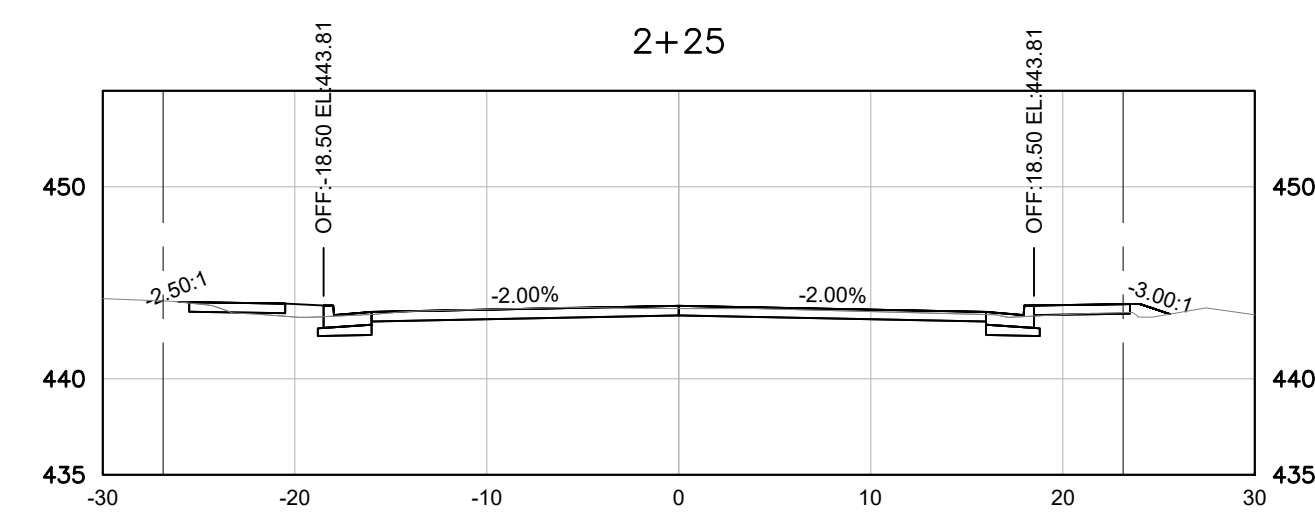
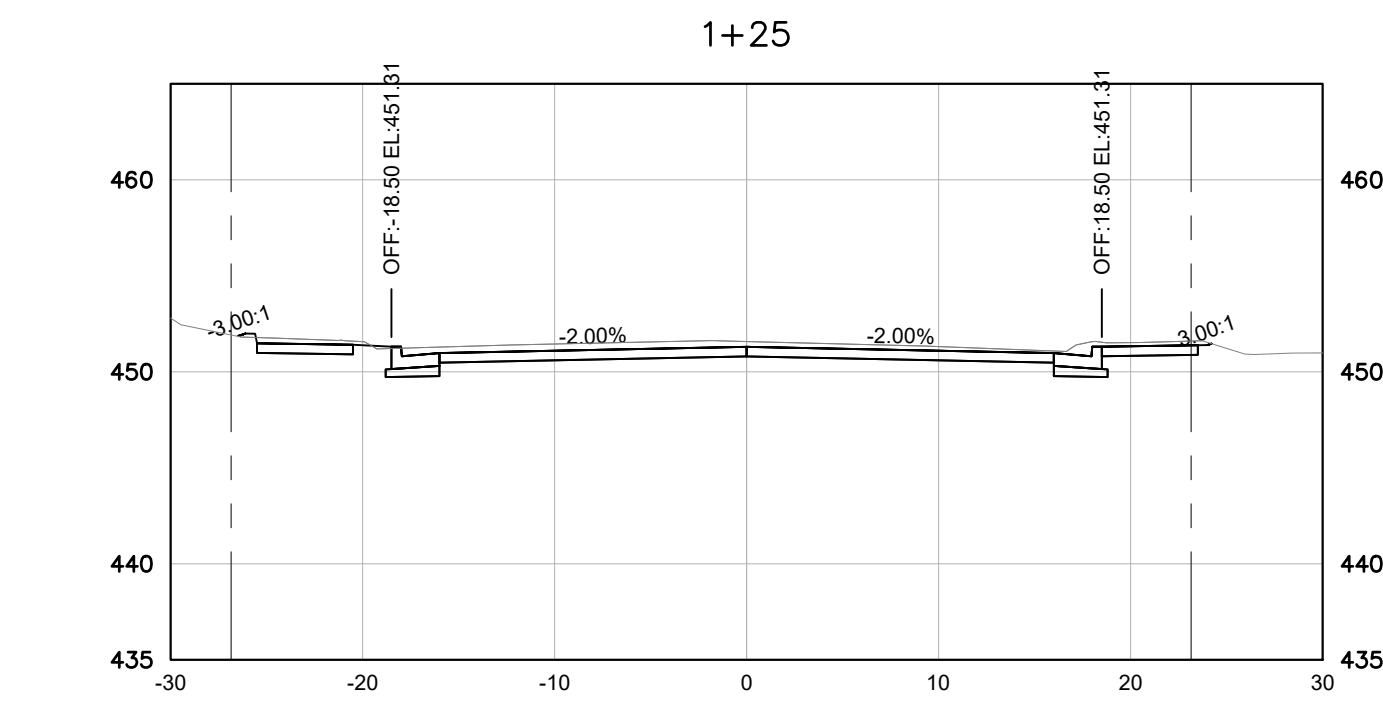
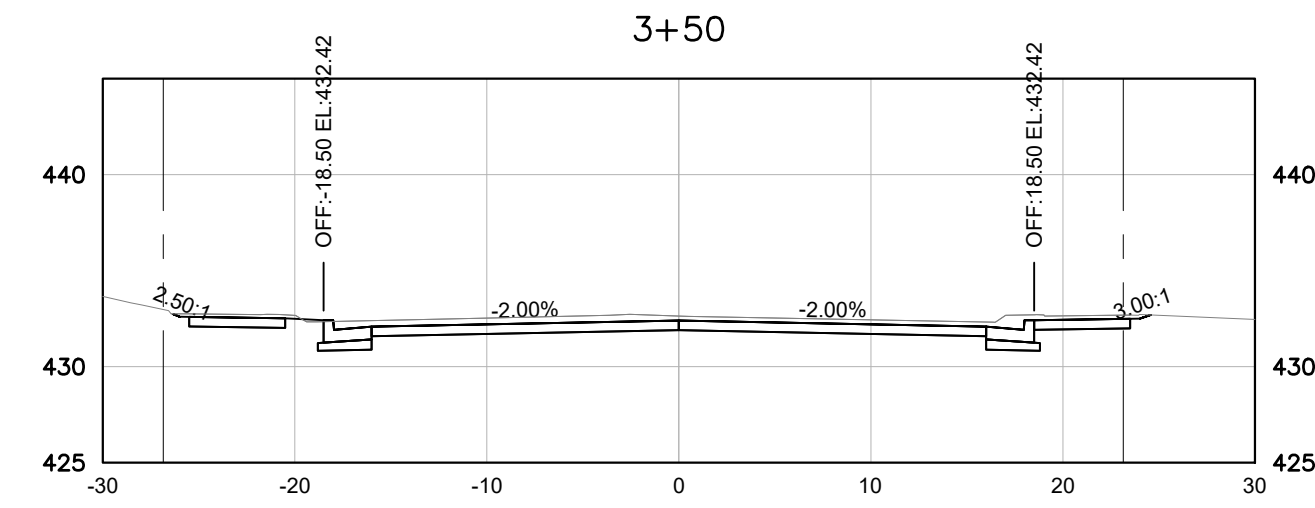
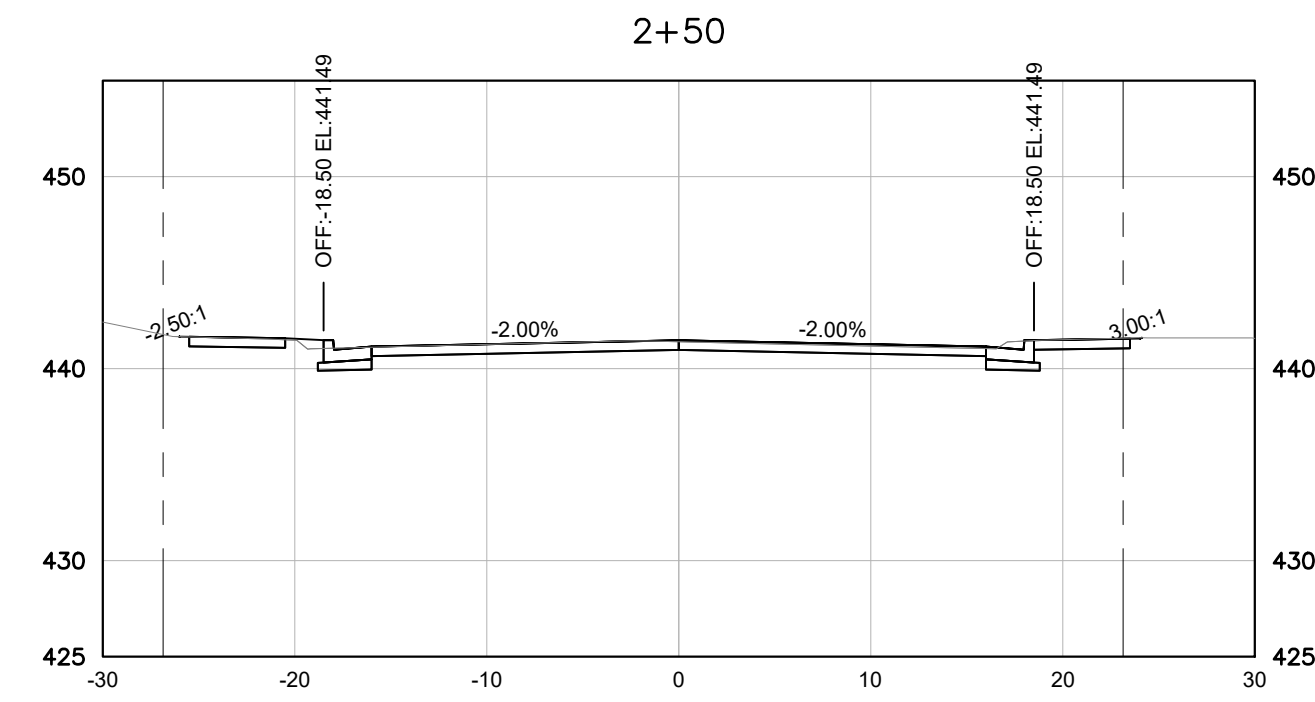
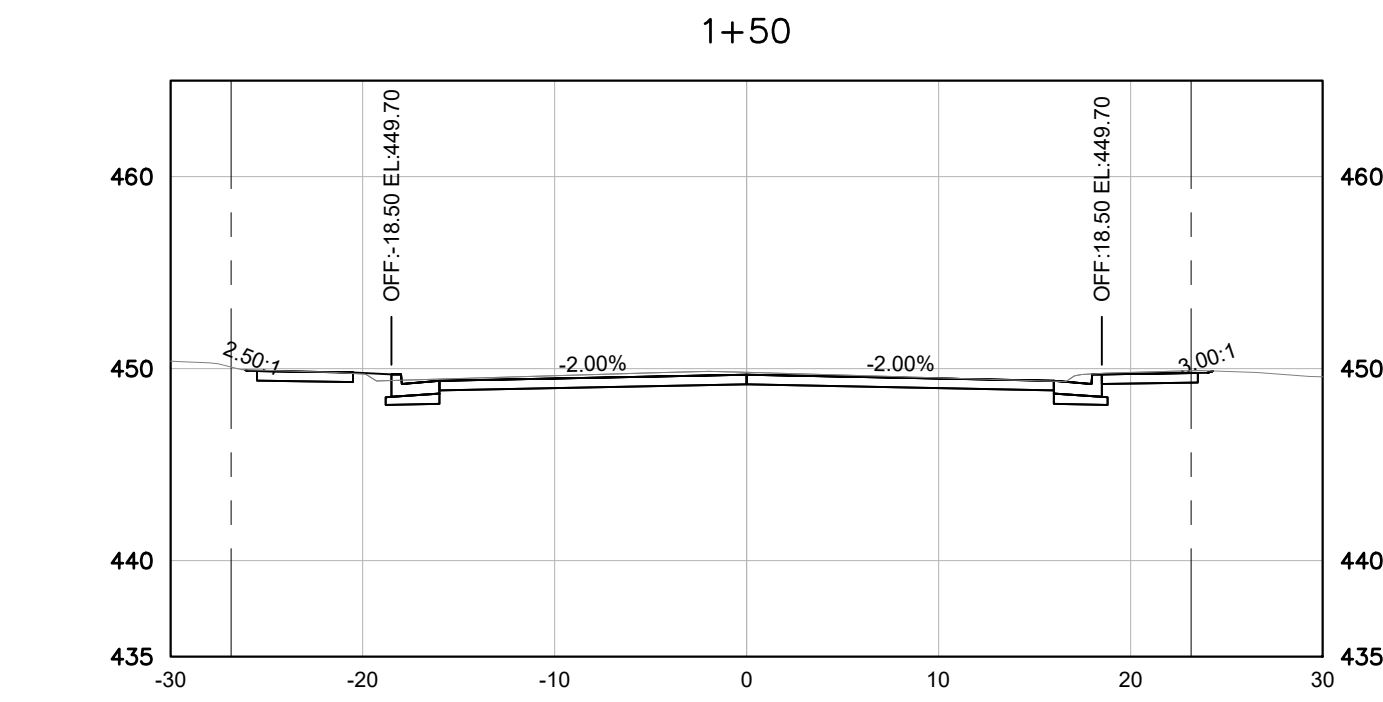
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CAYCE UTILITY PHASE 1B

MDHA

NASHVILLE, TN



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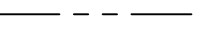
DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

S 7TH STREET CROSS SECTIONS

SHEET NUMBER  
**C6-01**

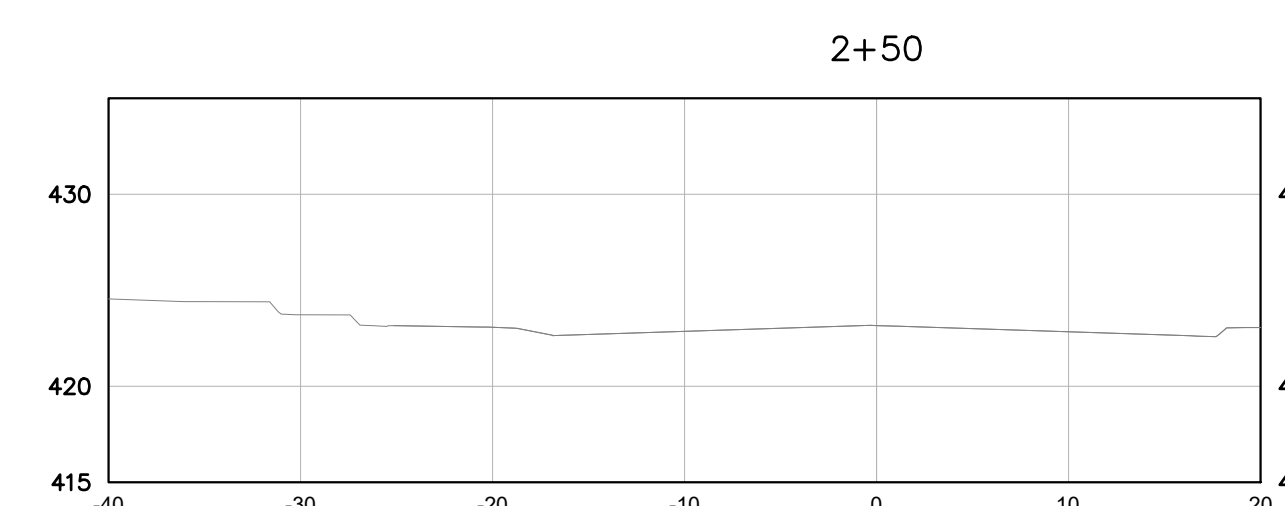
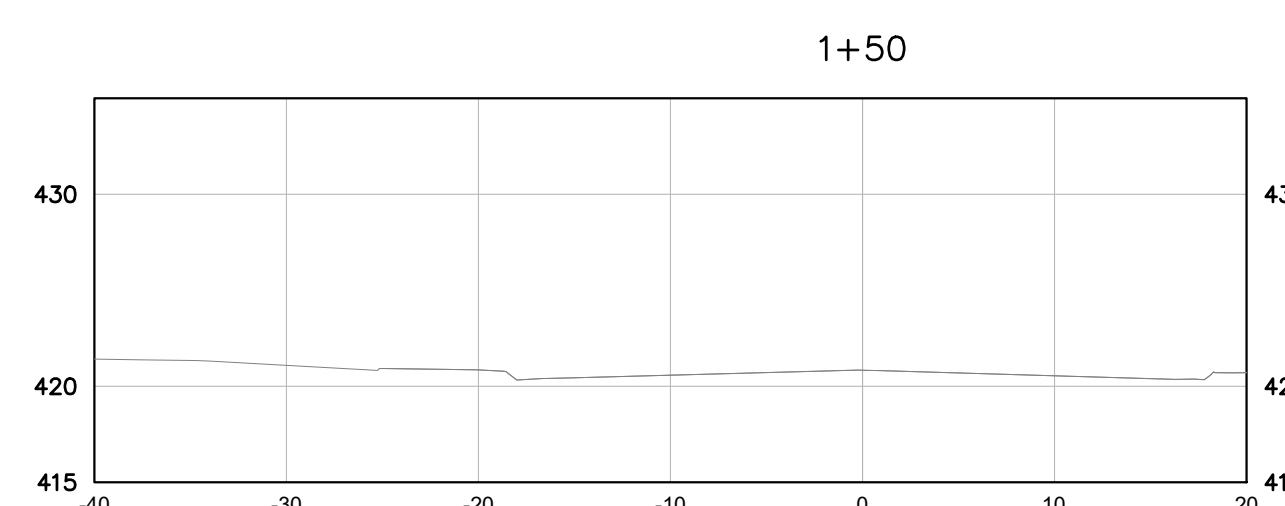
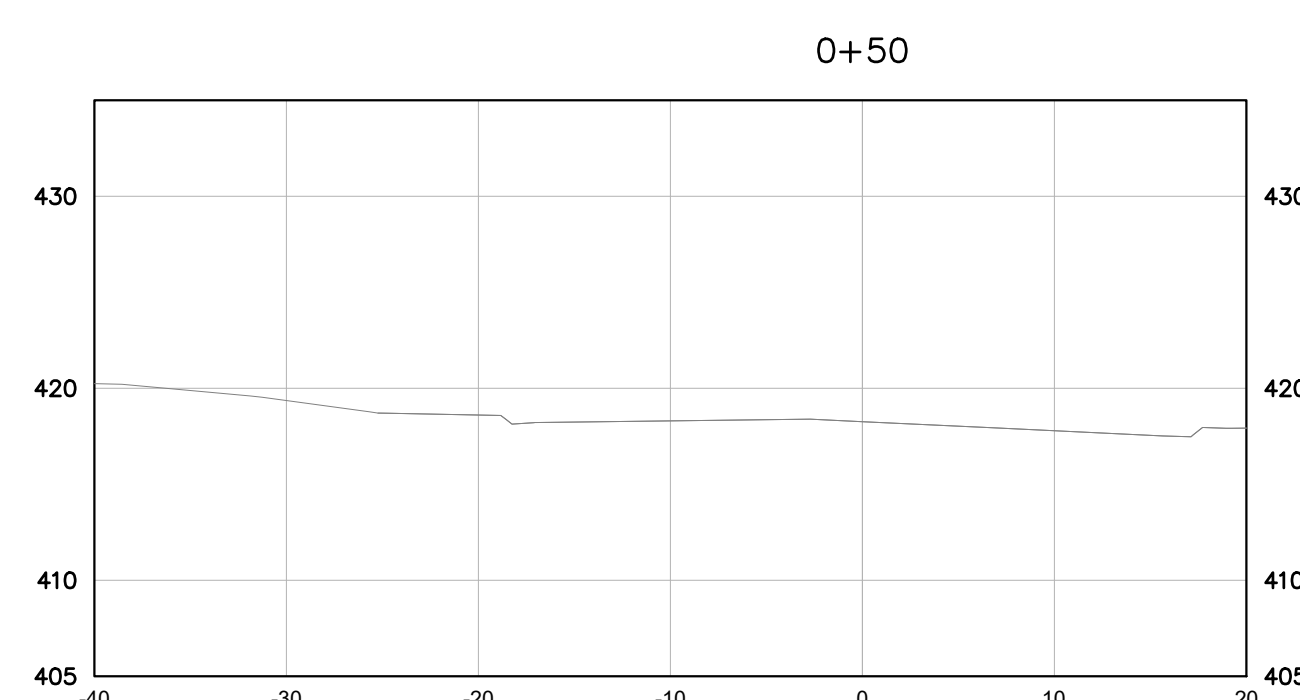
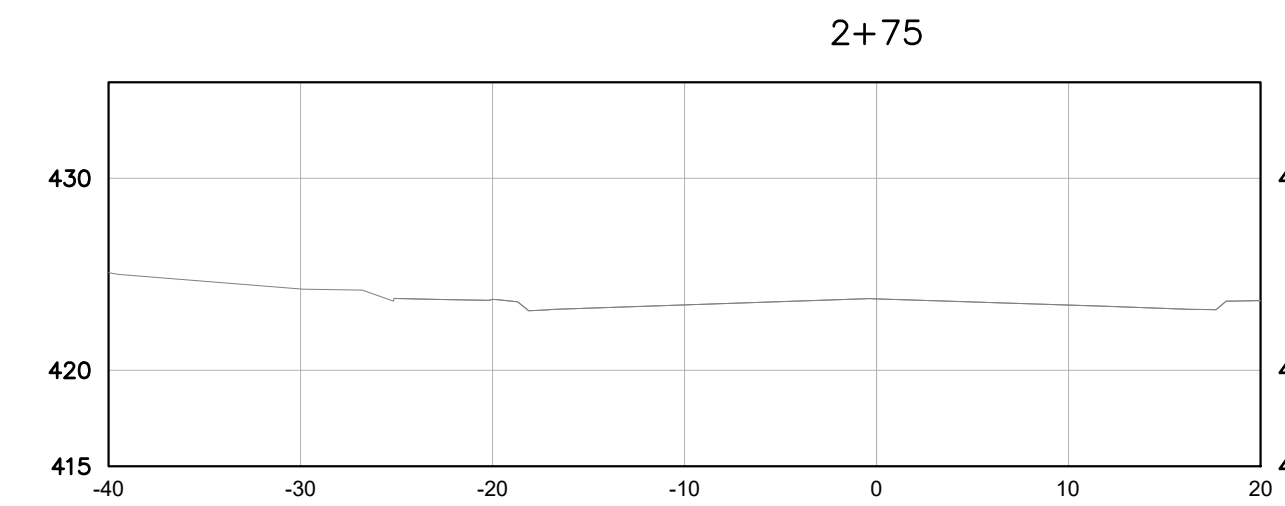
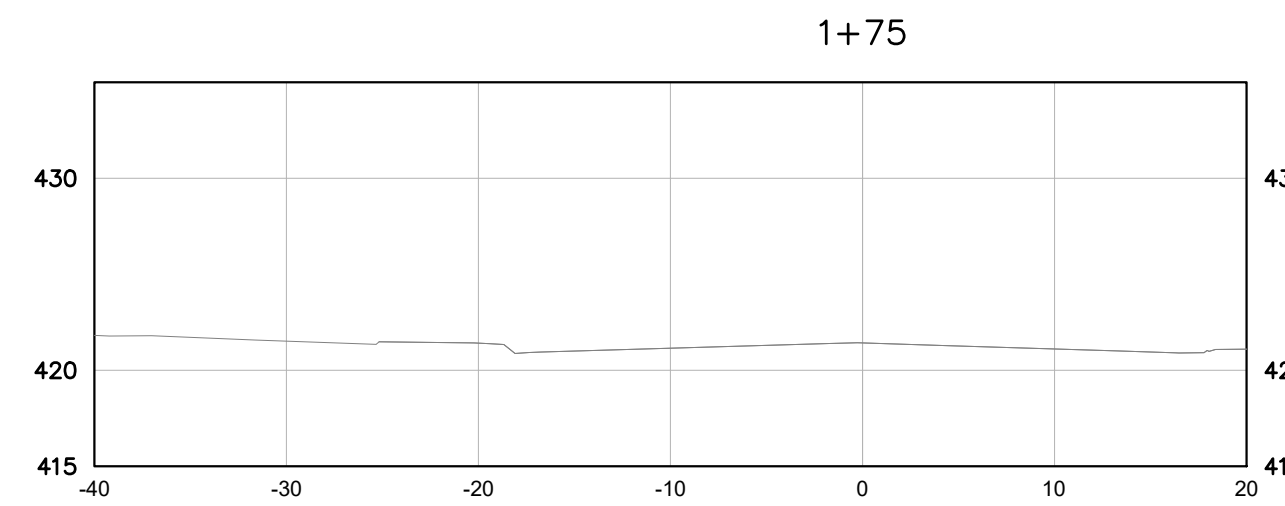
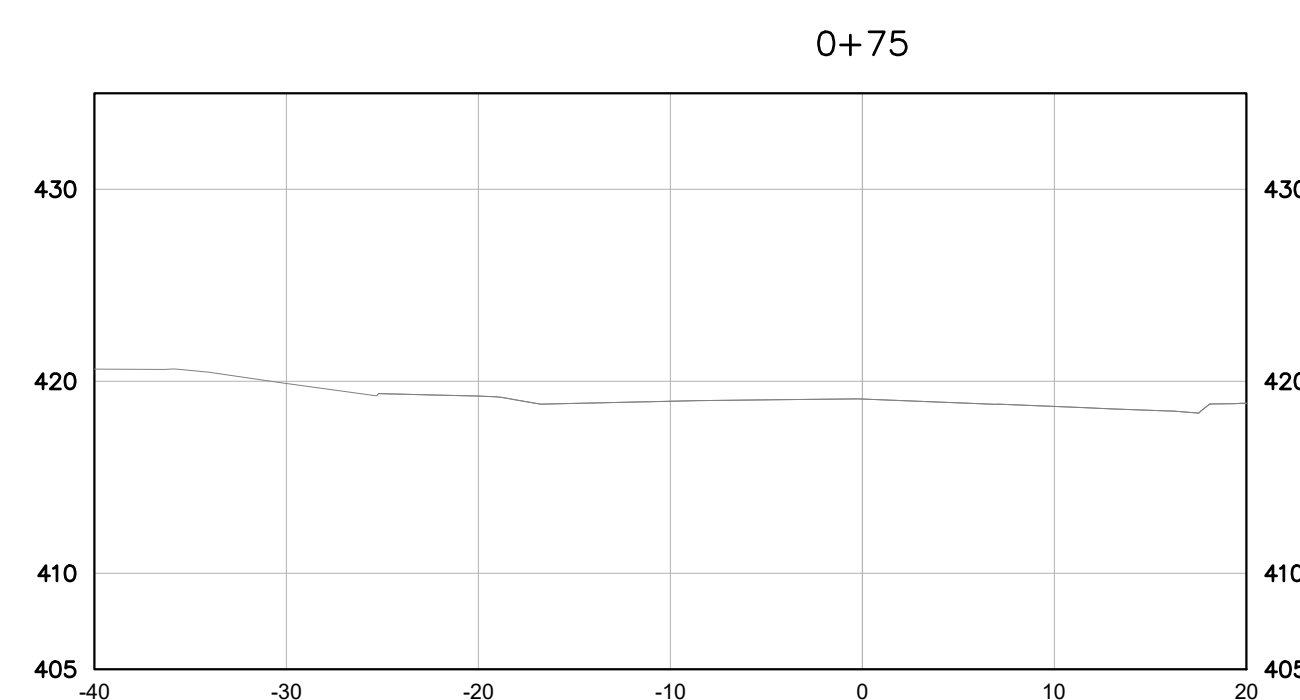
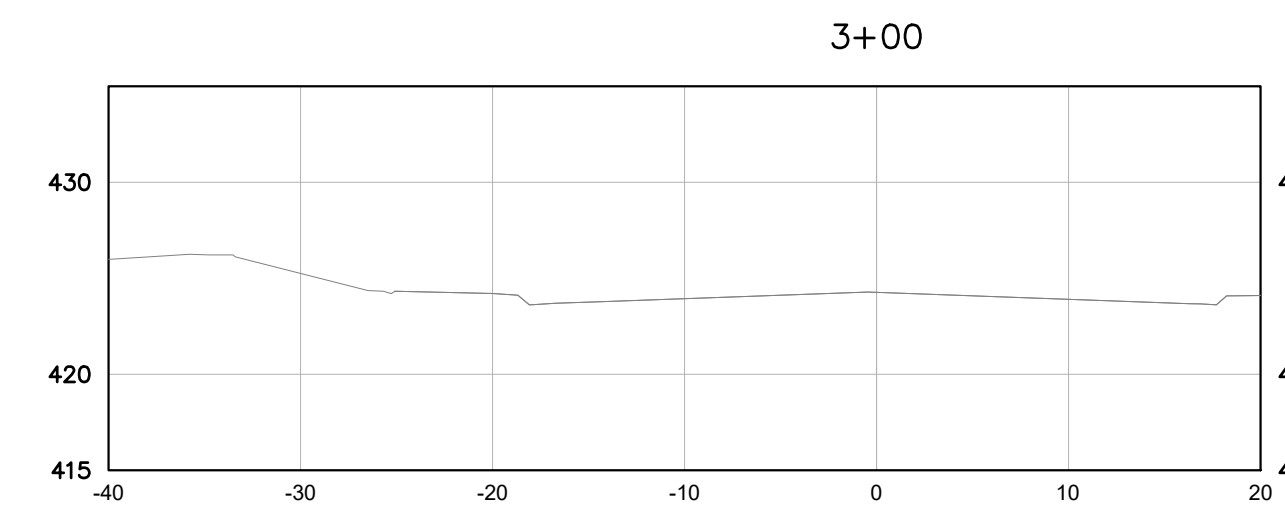
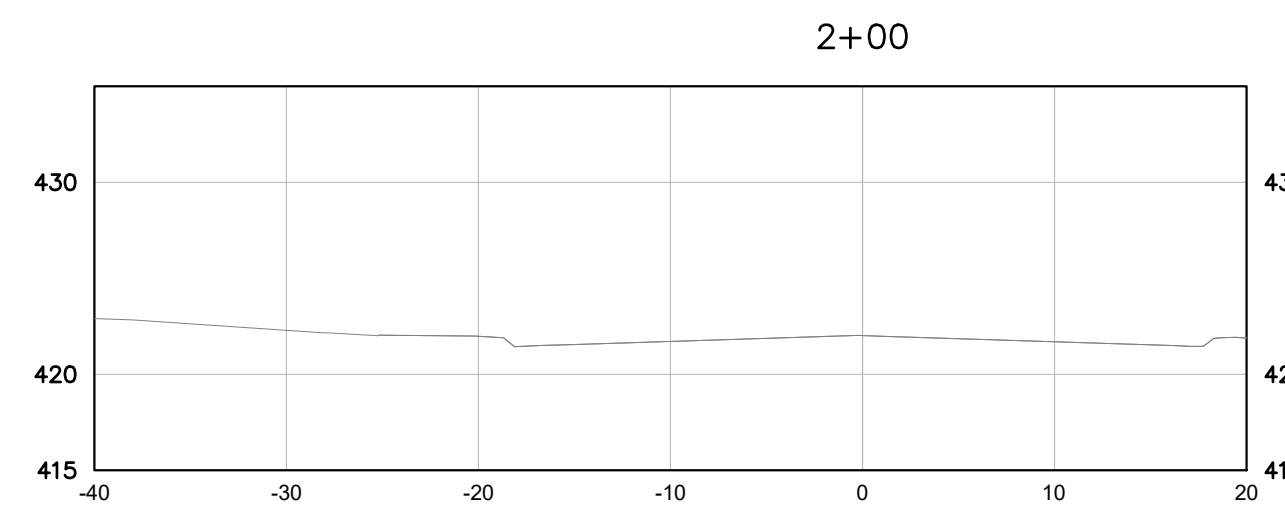
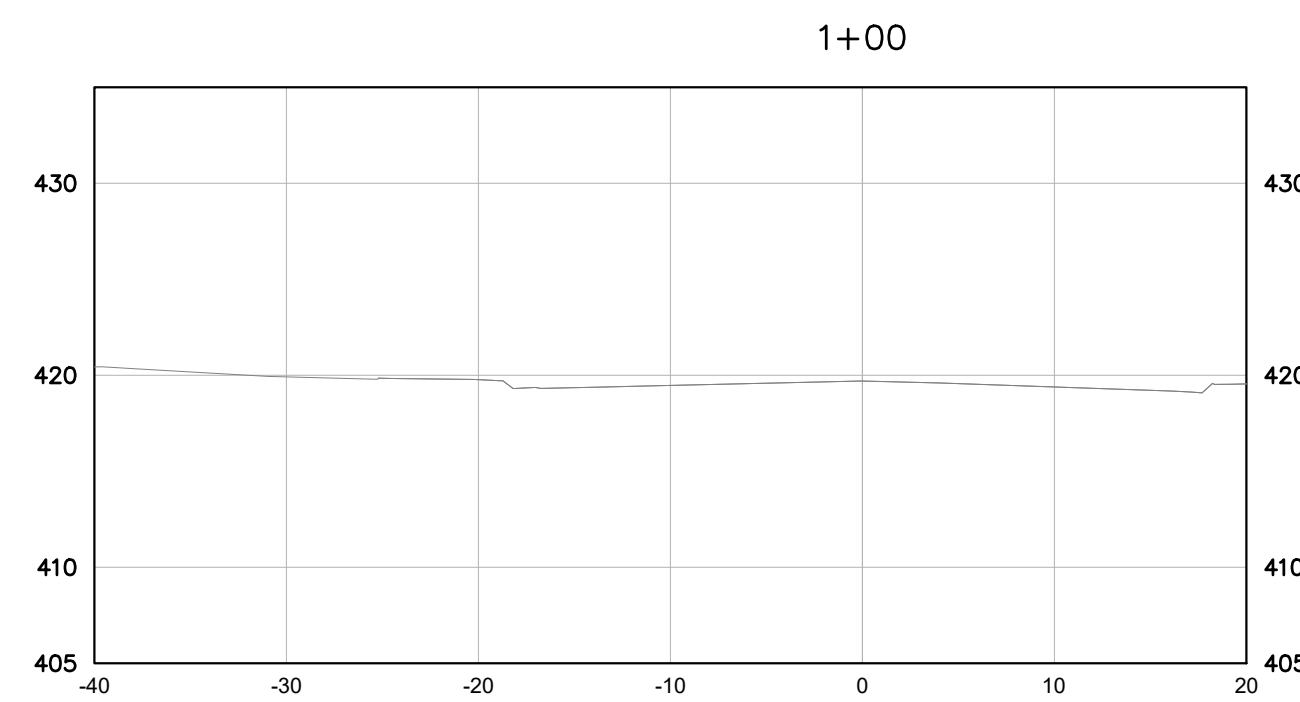
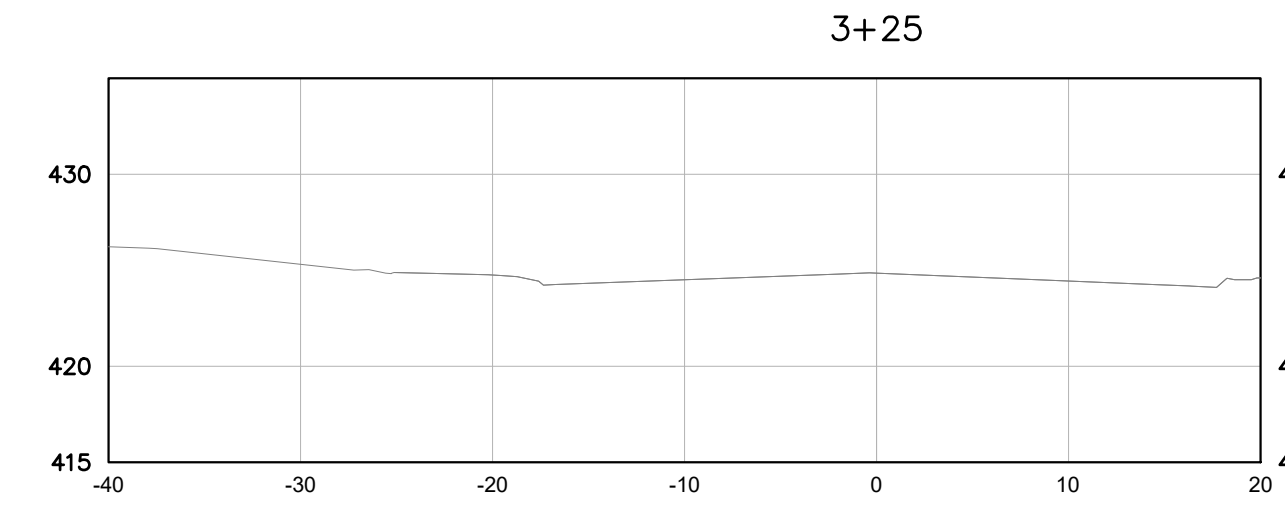
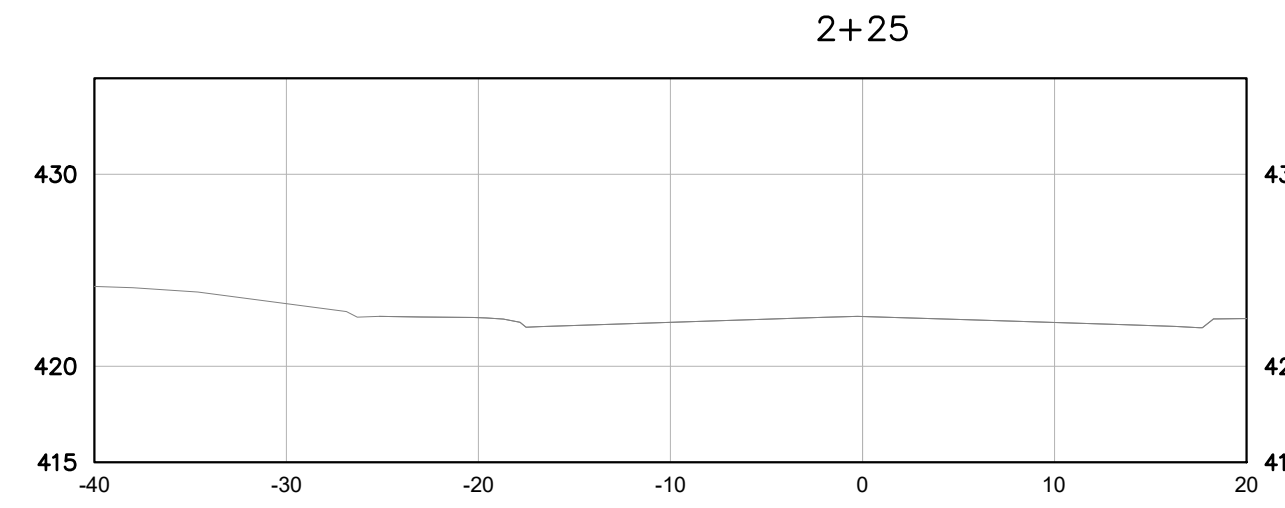
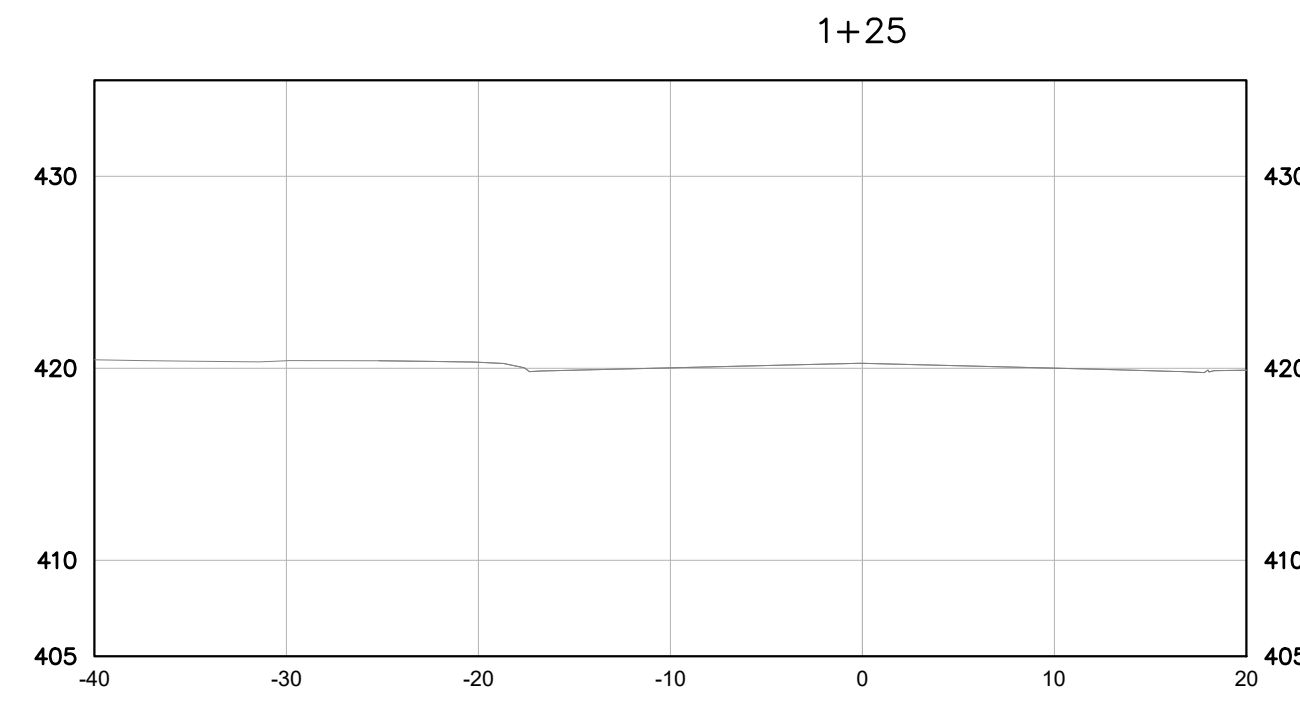
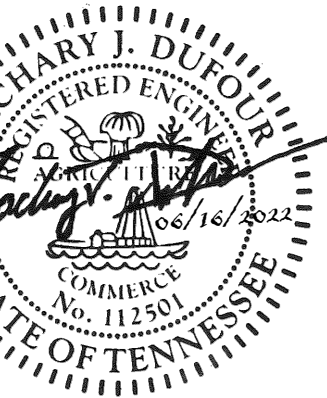
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**CRUTCHER STREET CROSS SECTIONS**

LINETYPE LEGEND	
	EXISTING GRADE SURFACE
	PROPOSED PROPERTY BOUNDARY - SEE SITE GRADING PLAN FOR PROPERTY GRADING

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**MDHA**  
 NASHVILLE, TN



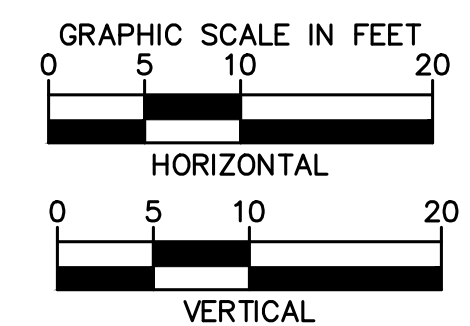
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DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018

CRUTCHER STREET CROSS SECTIONS

SHEET NUMBER **C6-02**

**BID SET**



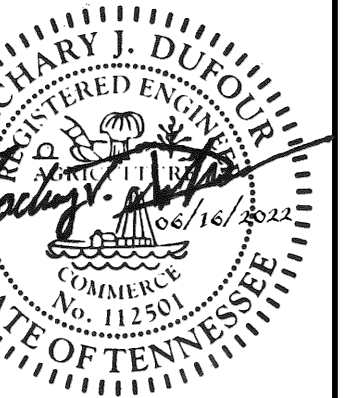
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CRUTCHER STREET CROSS SECTIONS (CONTINUED)

LINETYPE LEGEND	
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	PROPOSED PROPERTY BOUNDARY - SEE SITE GRADING PLAN FOR PROPERTY GRADING

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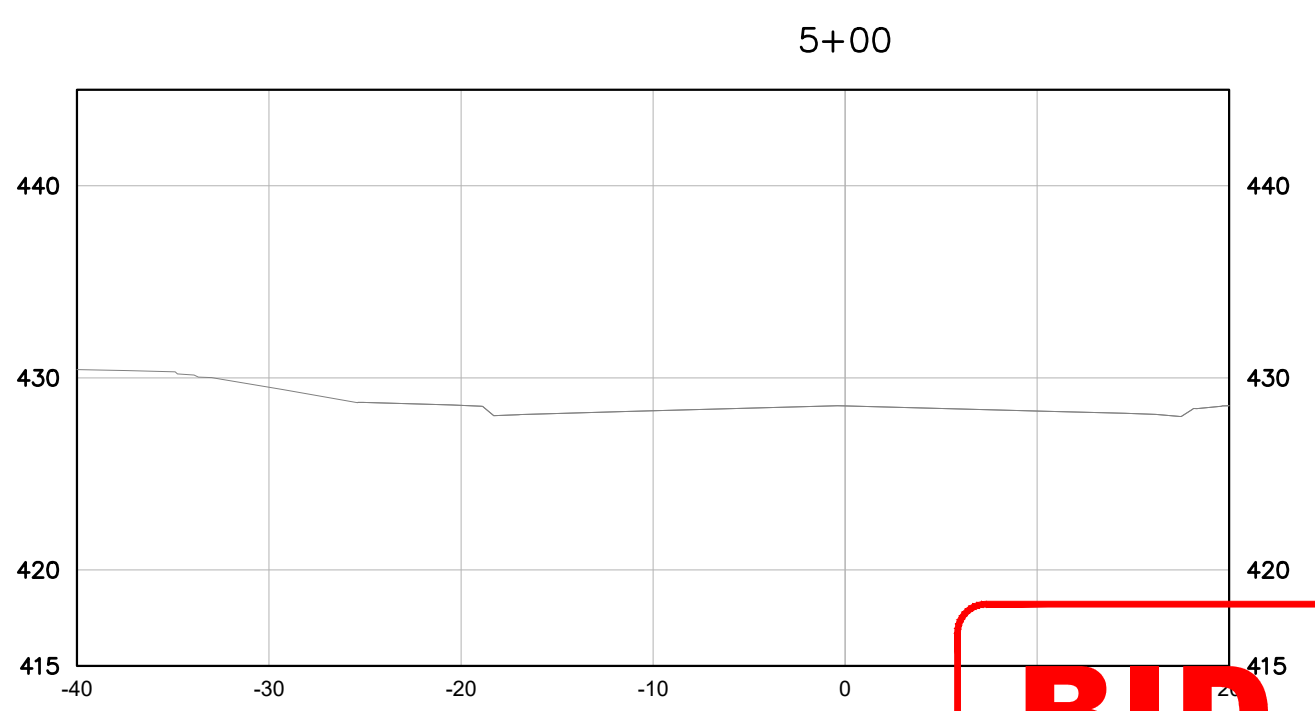
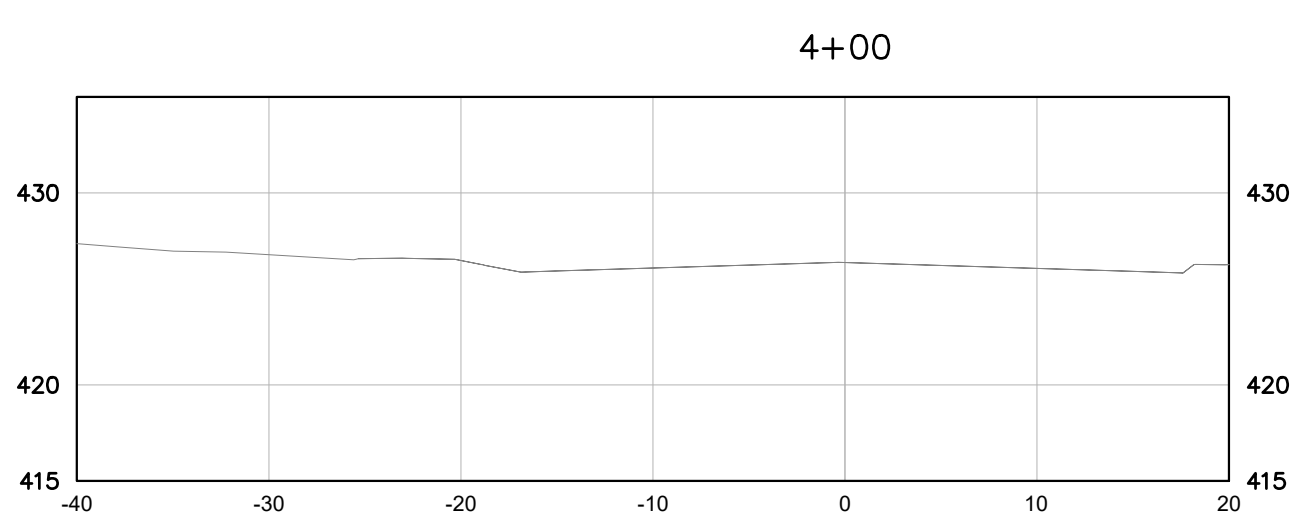
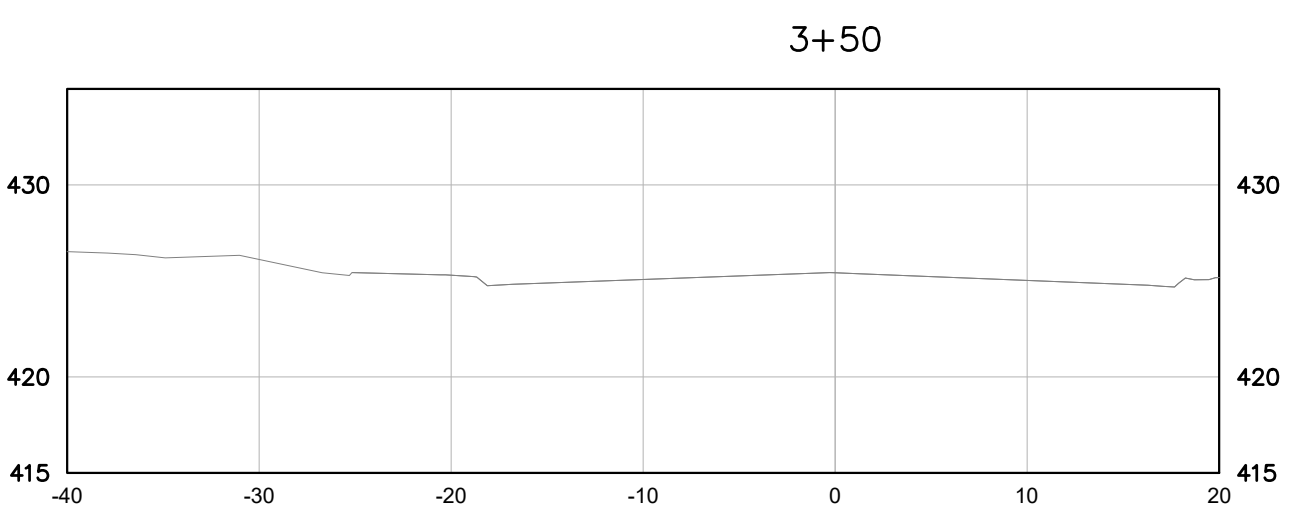
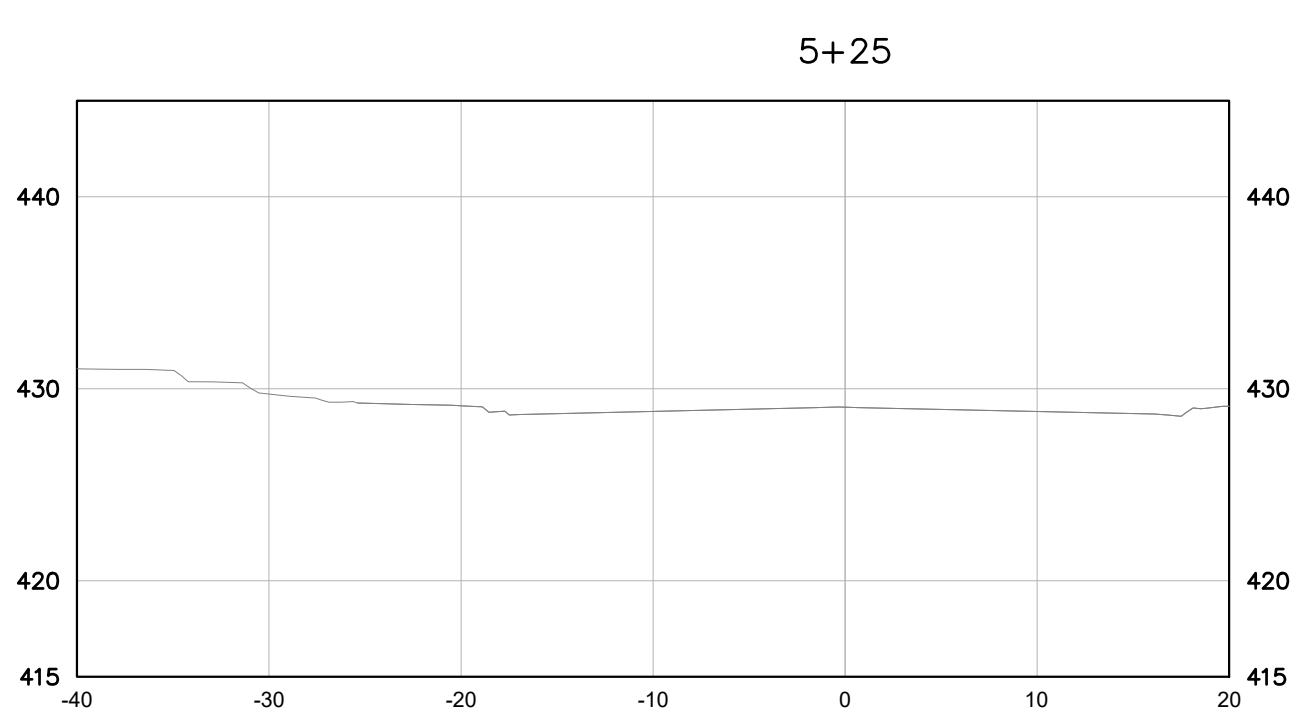
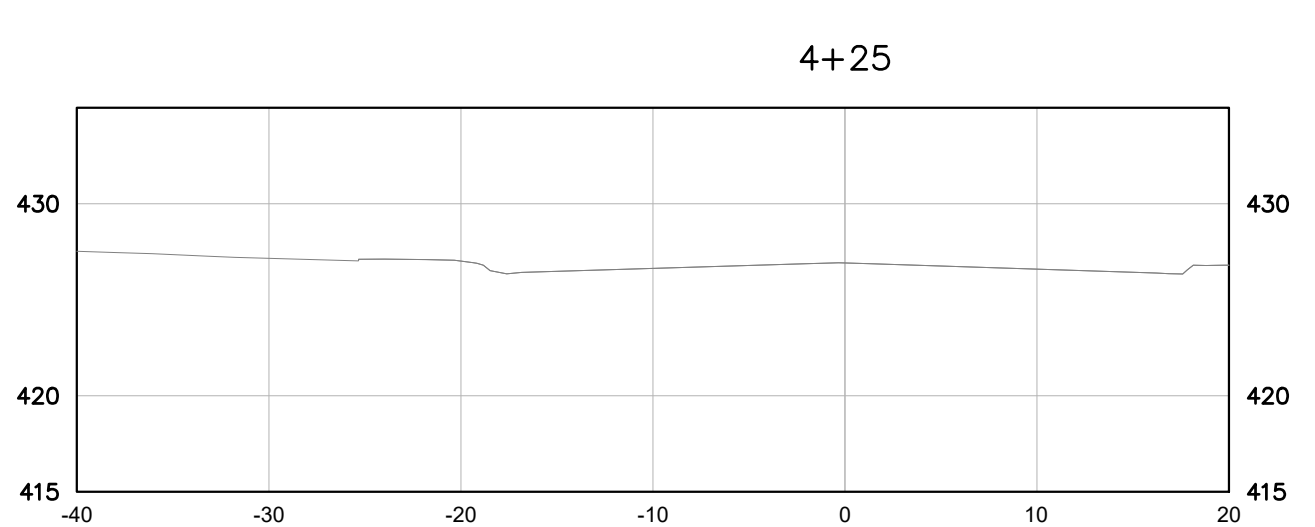
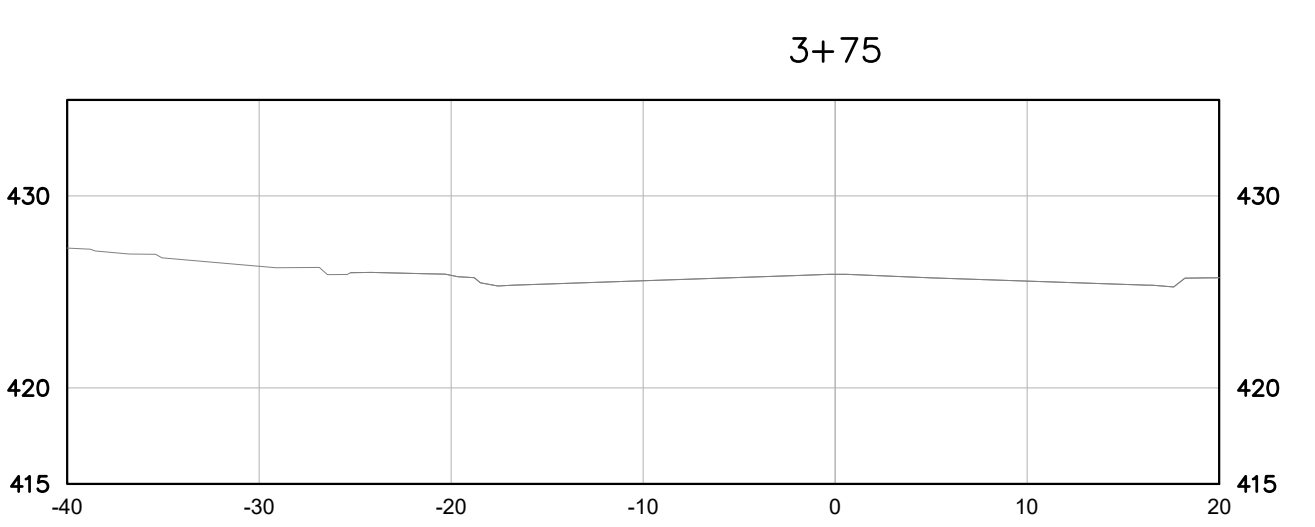
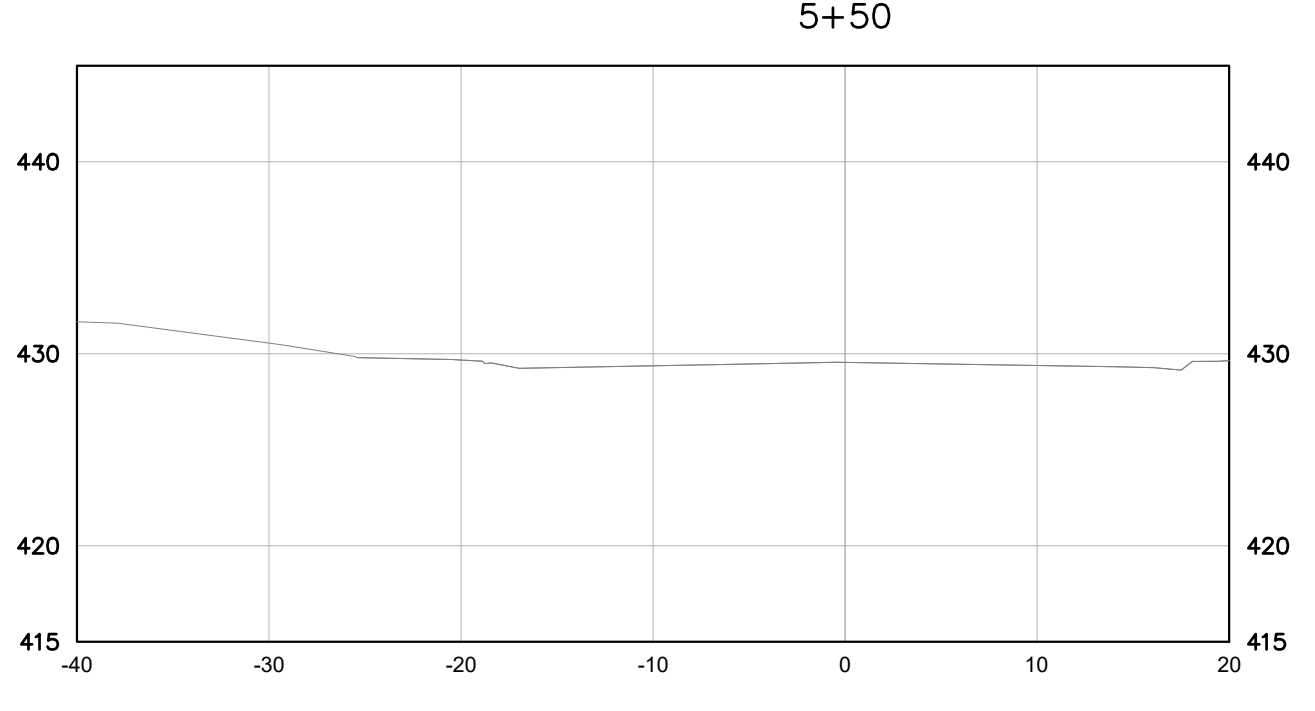
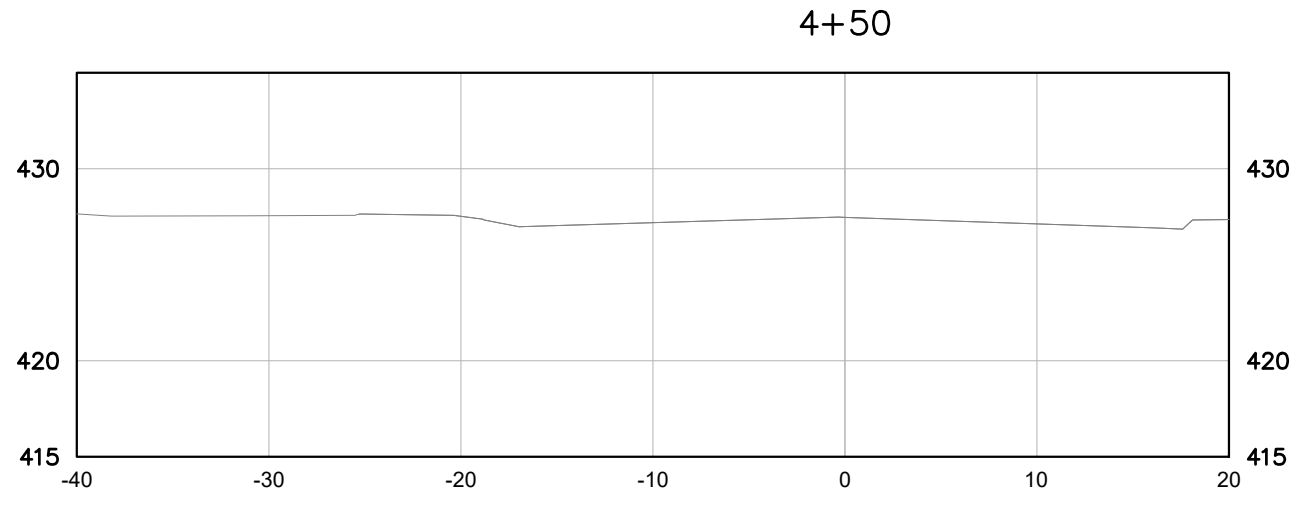
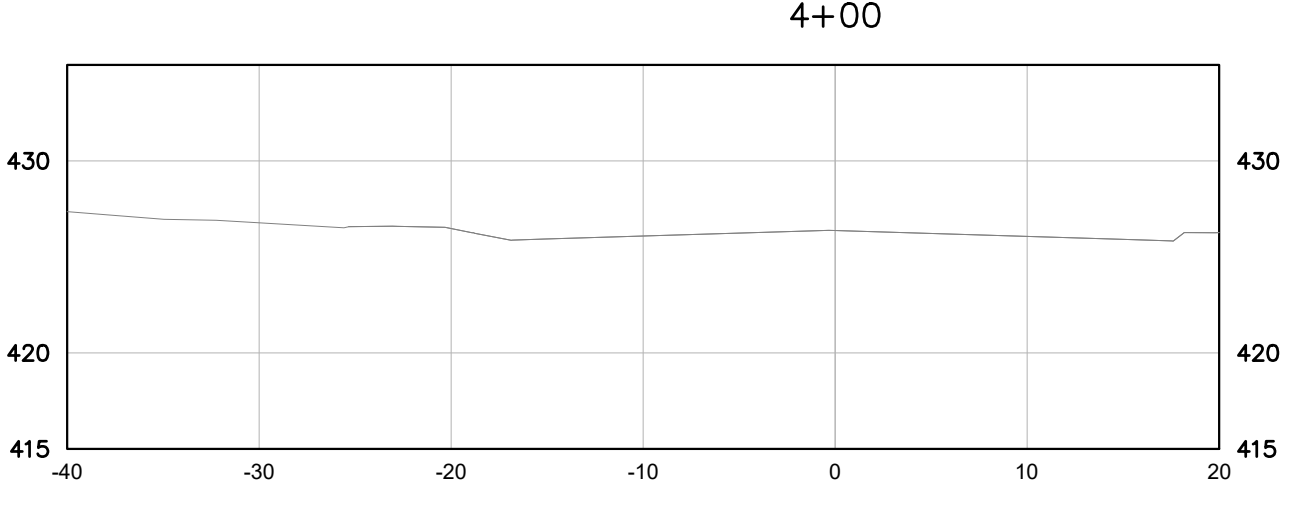
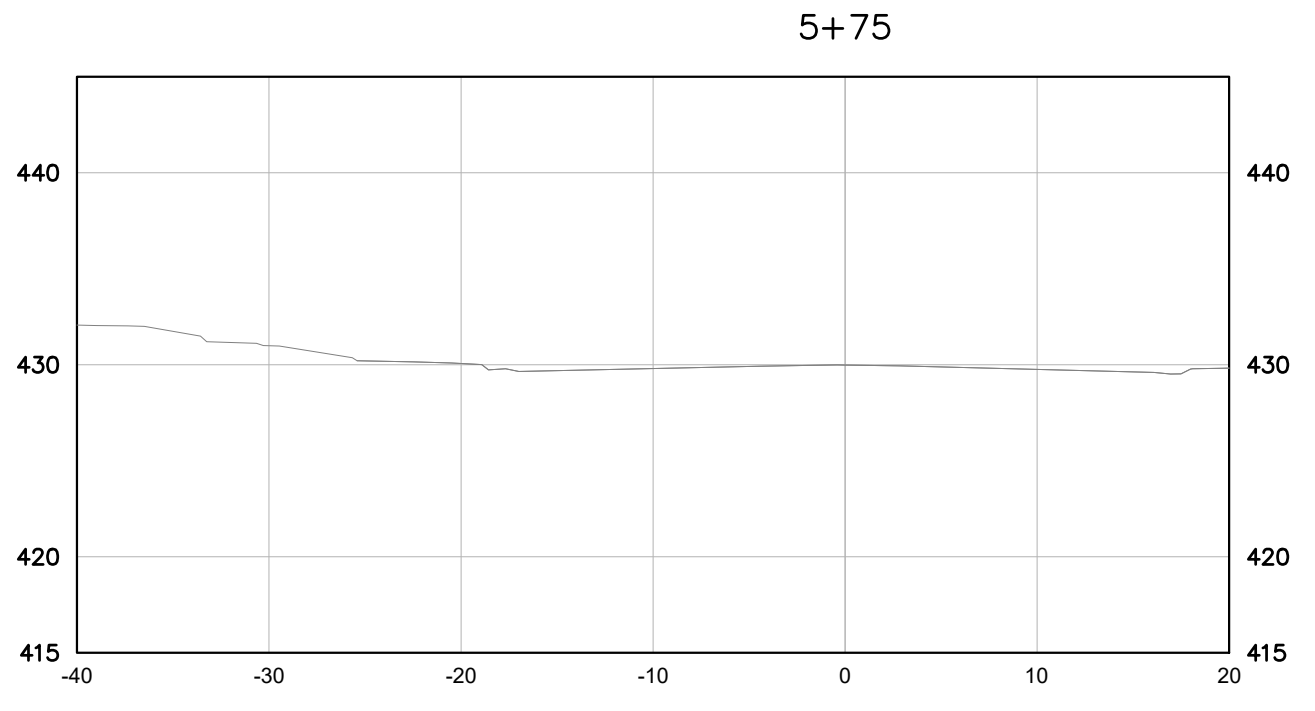
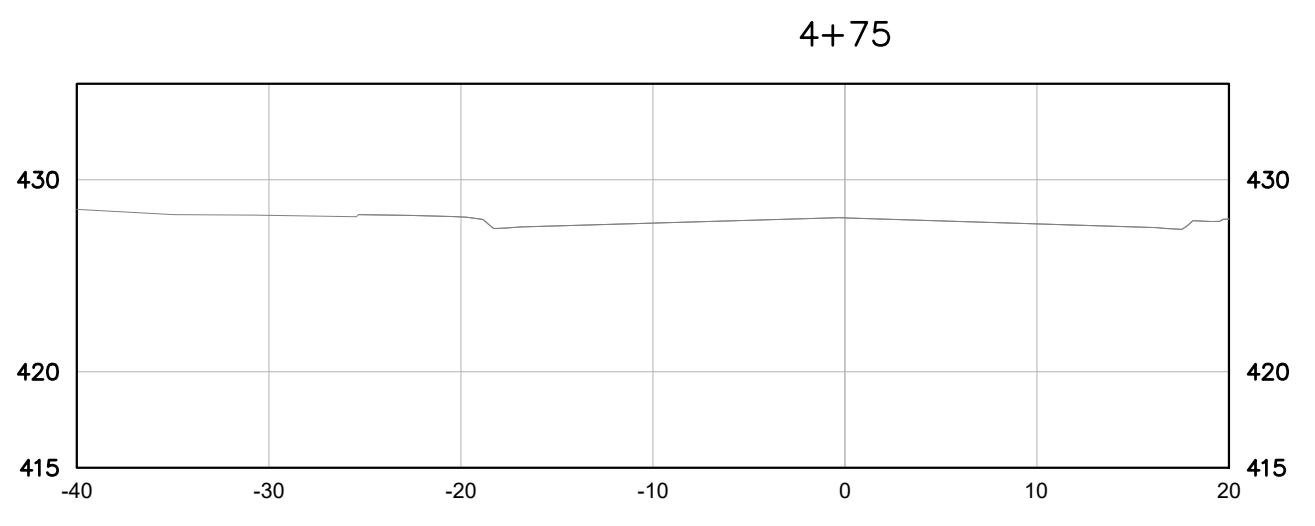


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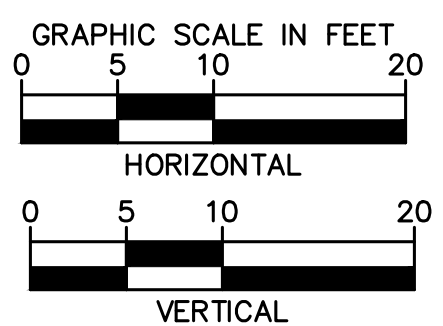
DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018

CRUTCHER STREET  
 CROSS SECTIONS

SHEET NUMBER  
**C6-03**


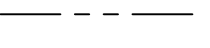


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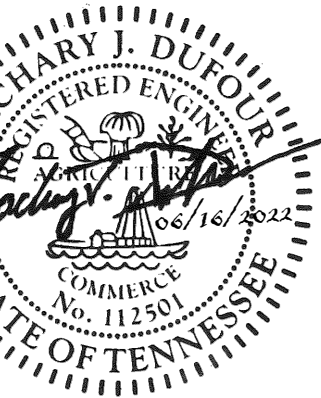
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**CRUTCHER STREET CROSS SECTIONS (CONTINUED)**

LINETYPE LEGEND	
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	PROPOSED PROPERTY BOUNDARY - SEE SITE GRADING PLAN FOR PROPERTY GRADING

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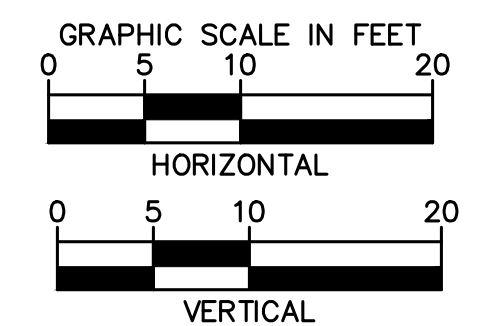
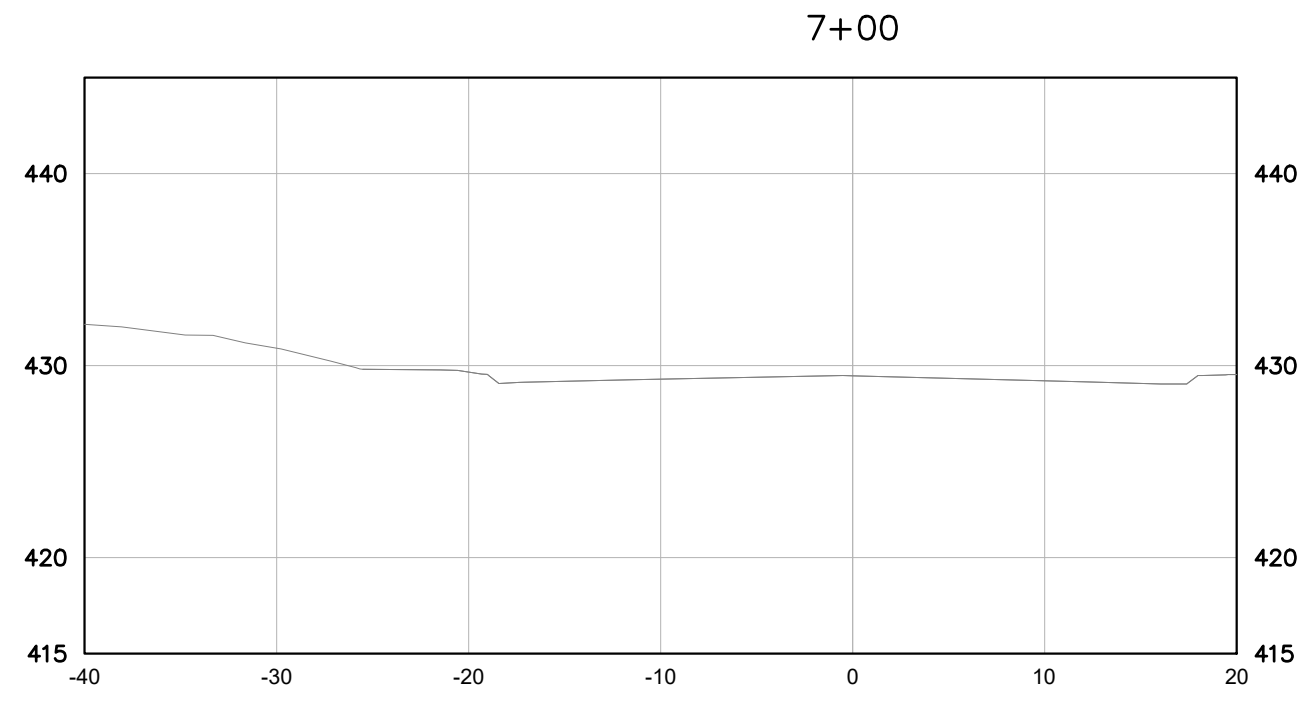
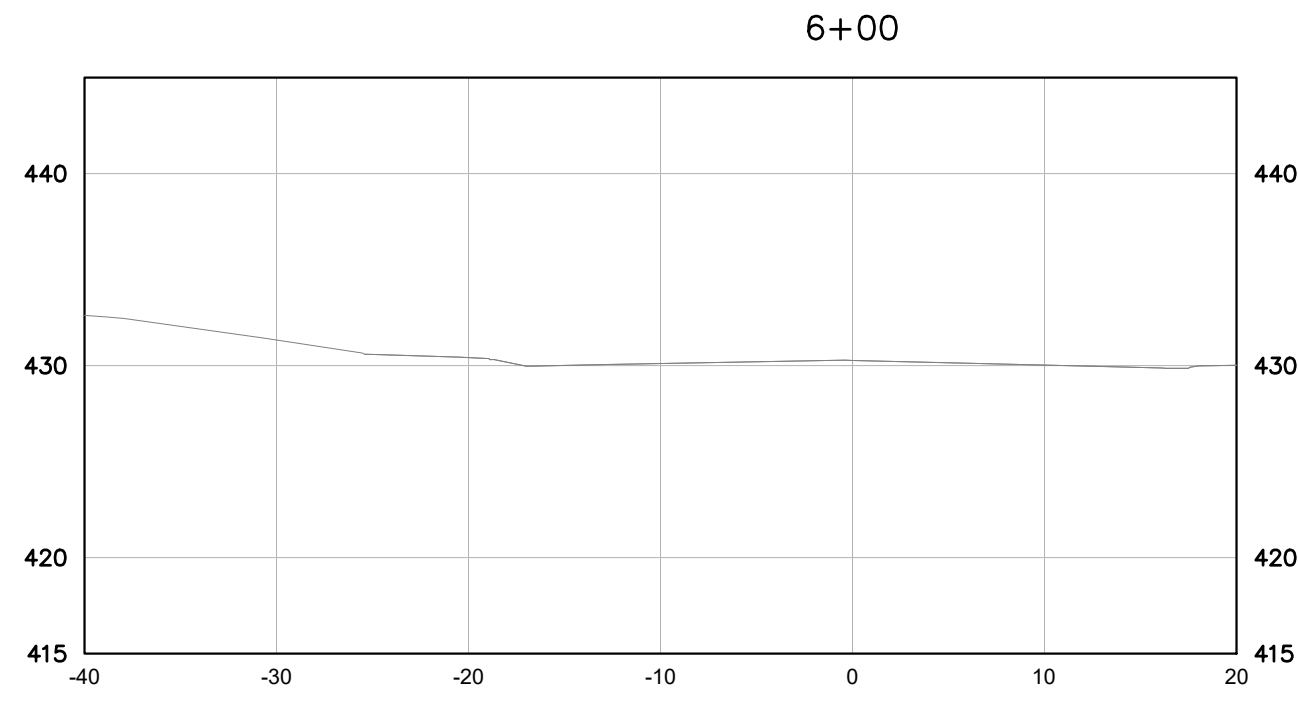
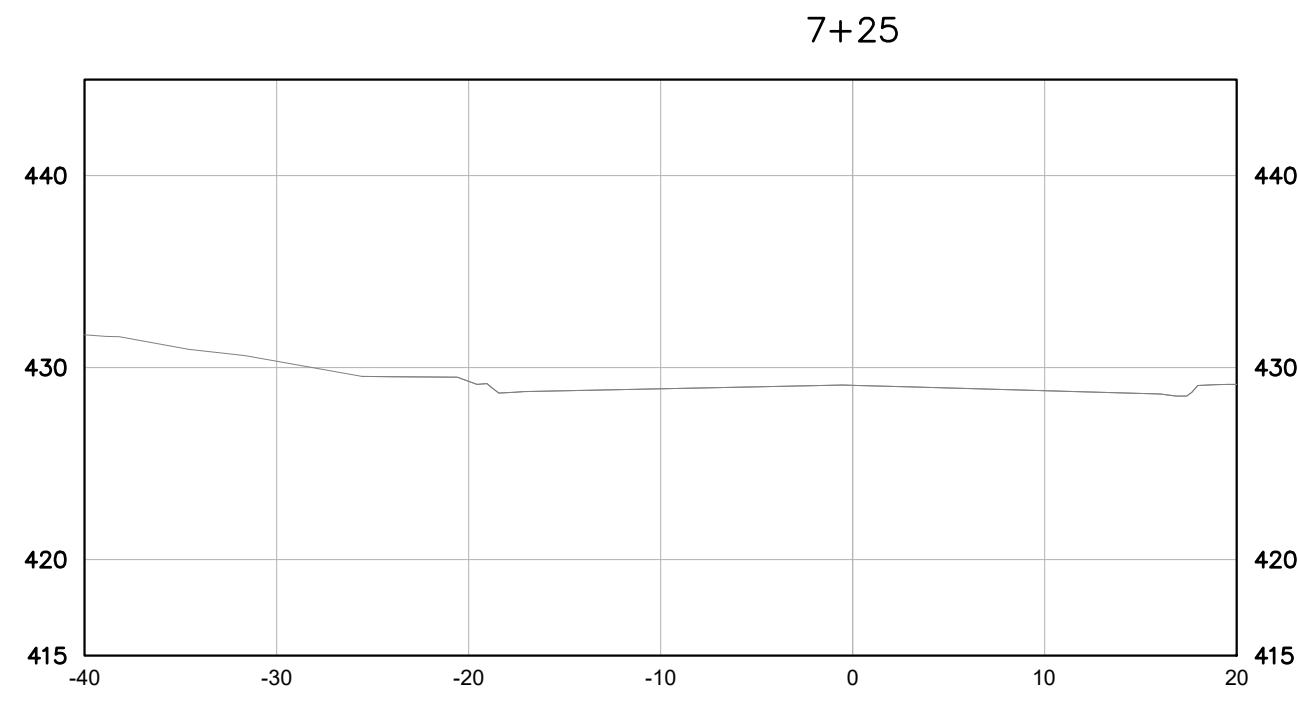
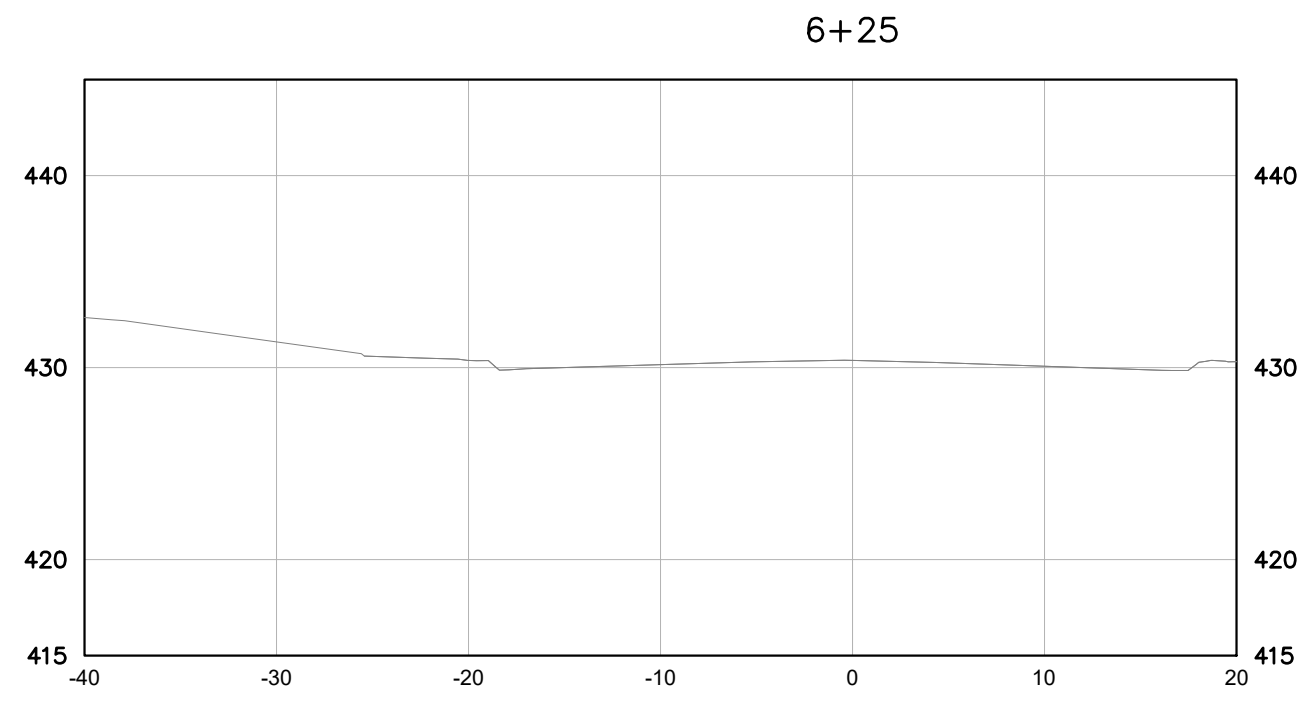
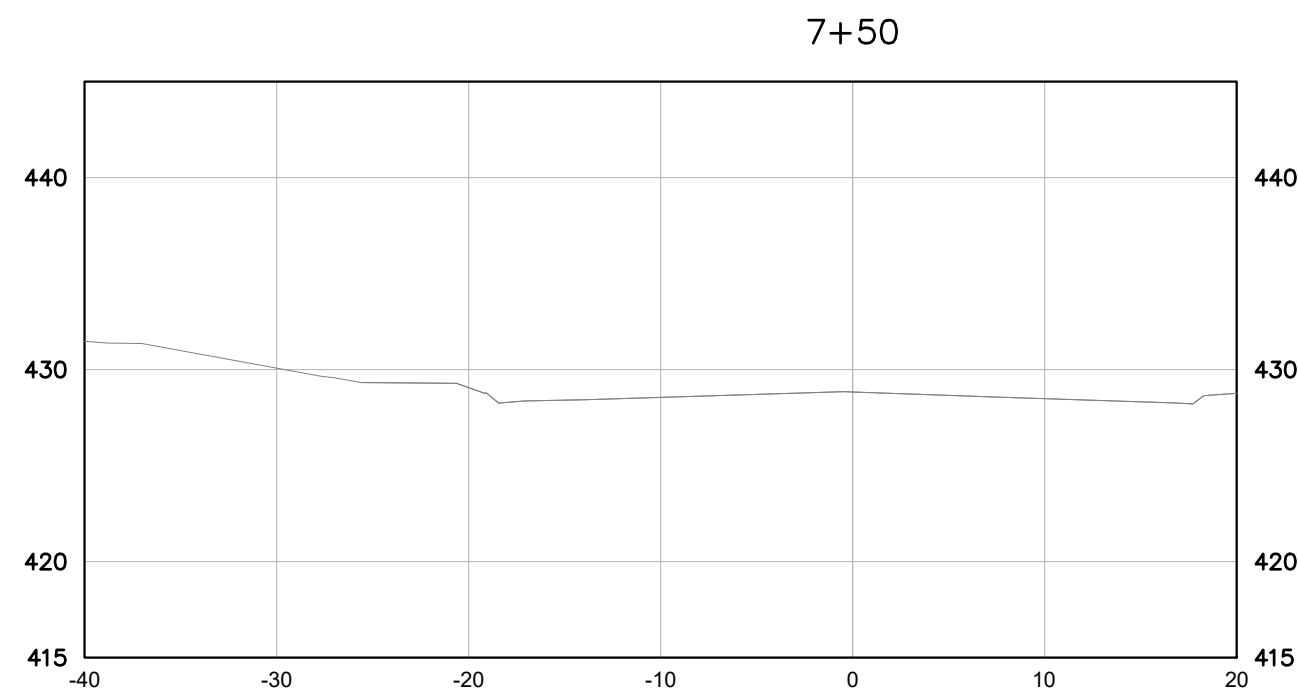
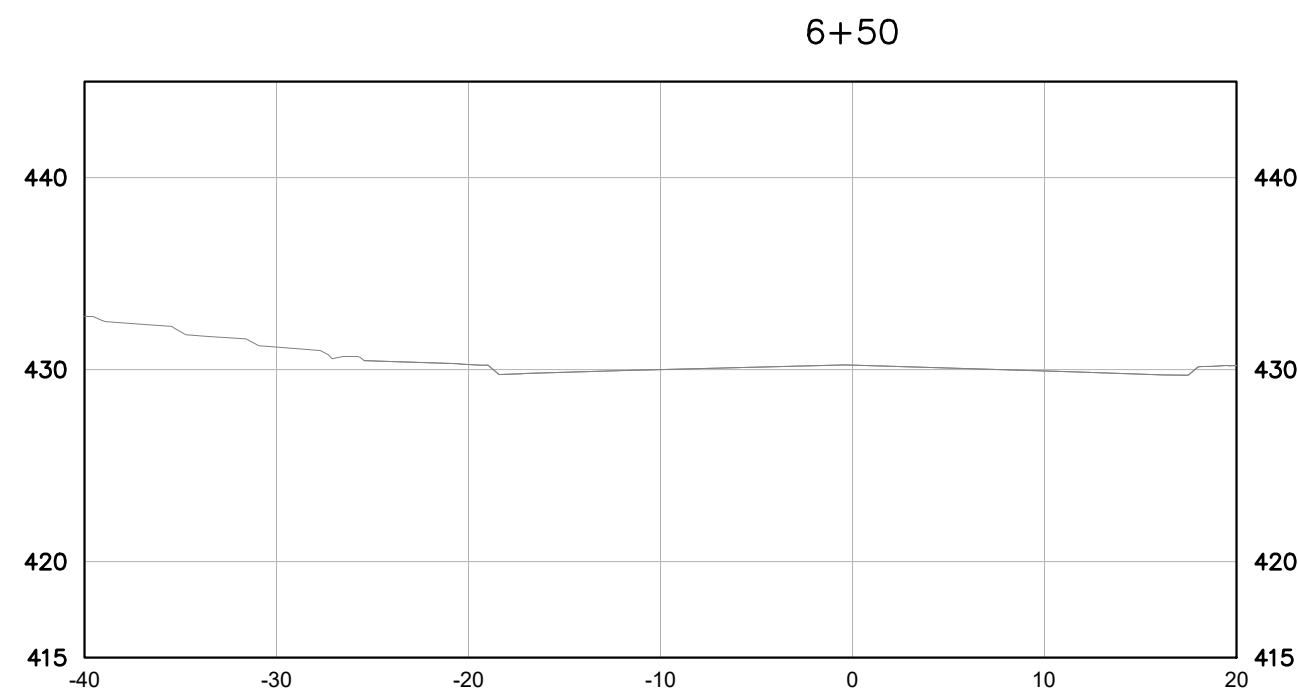
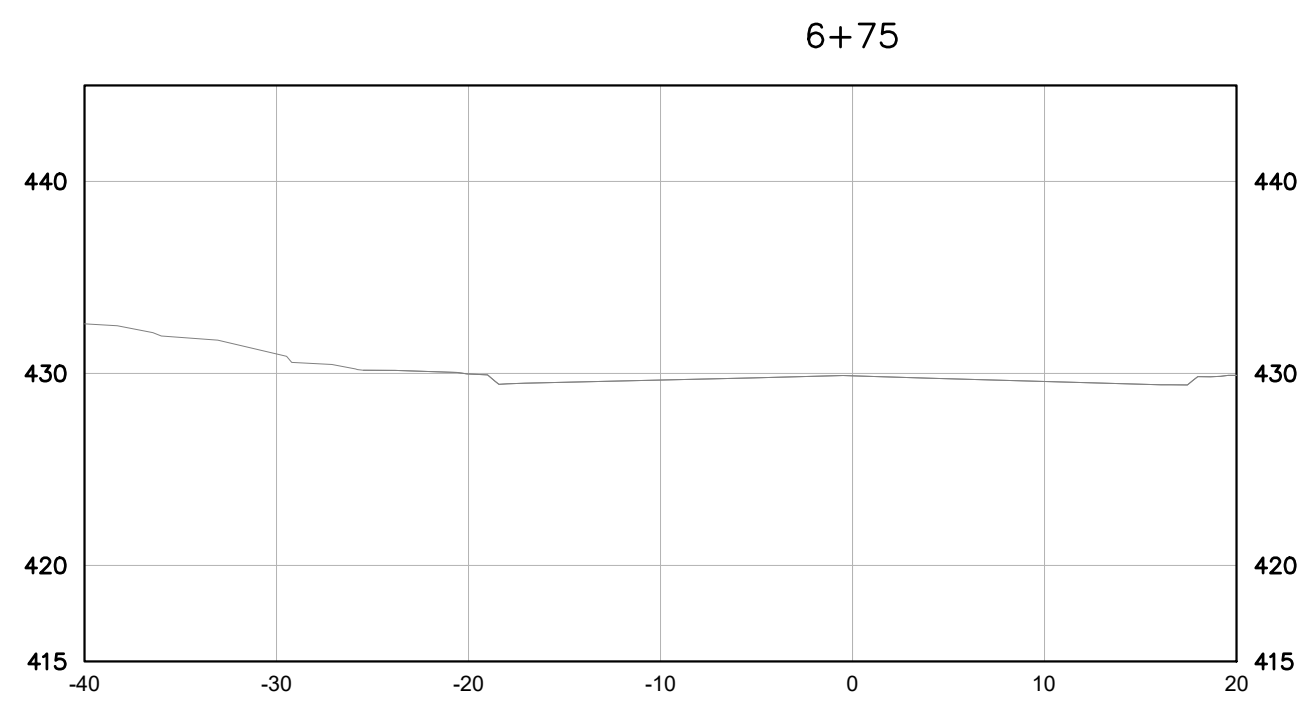


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 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
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CRUTCHER STREET CROSS SECTIONS

SHEET NUMBER  
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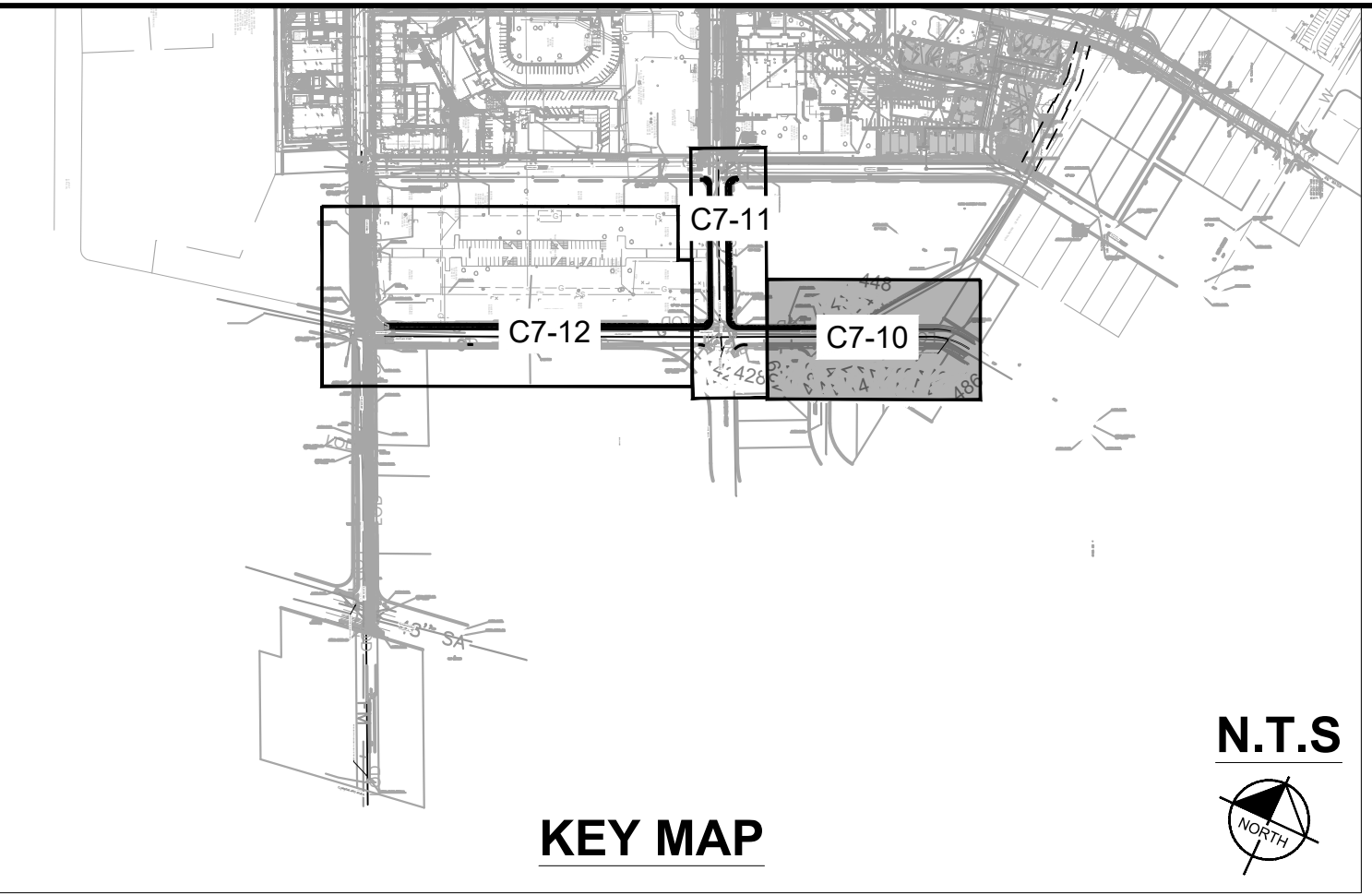
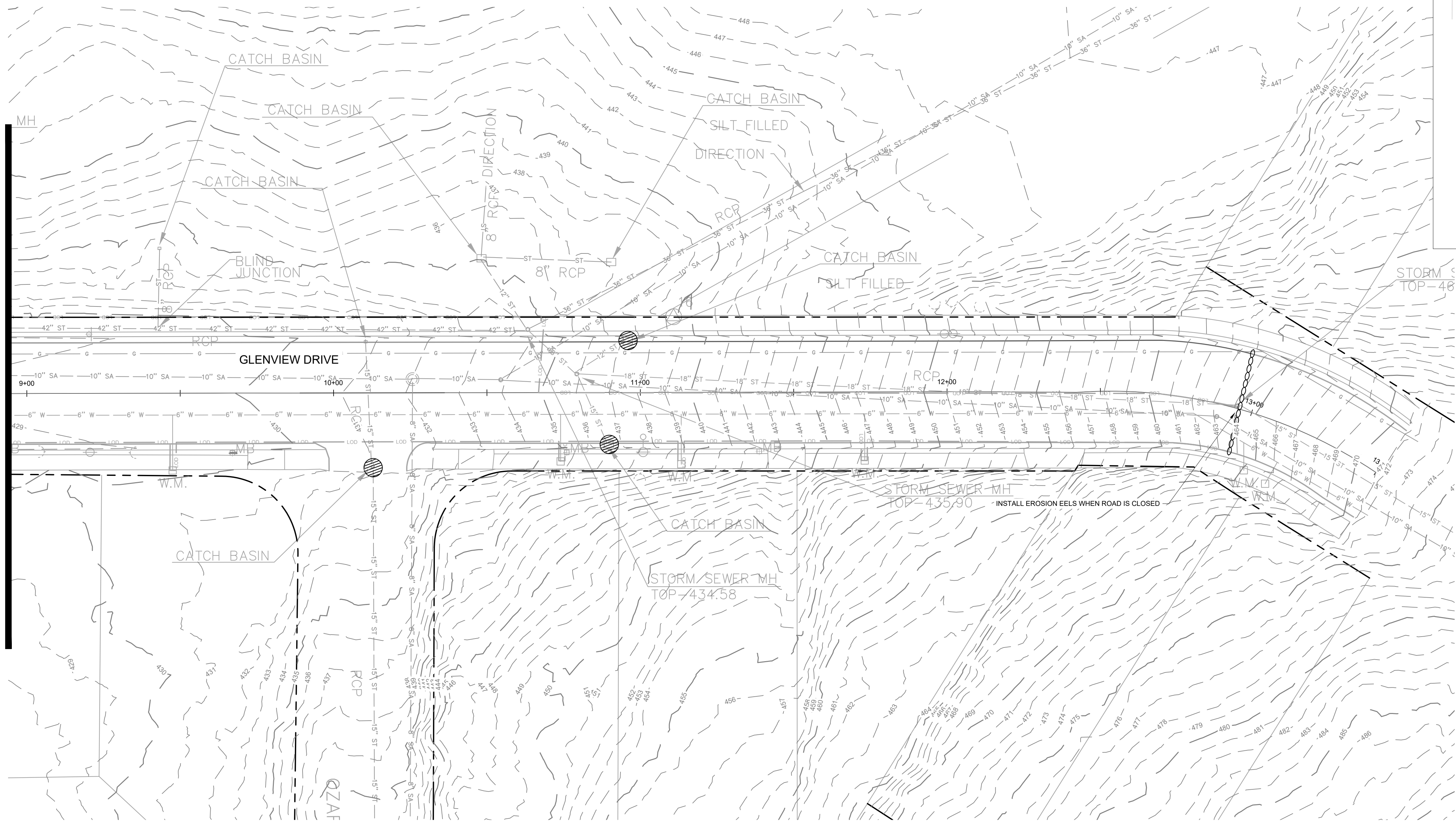


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MATCHLINE - STATION 8+95.00 - SEE SHEET C7-11



**EROSION CONTROL NOTES**

- PERIMETER EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO GRADING.
- STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCKPILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
- ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
- CONSTRUCT SILT BARRIERS AND OTHER PERIMETER CONTROL MEASURES BEFORE BEGINNING GRADING OPERATIONS.
- MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
- REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
- PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
- DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
- STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES.
  - WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
  - ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL. DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
- CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETINGS. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
- SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.
- INLET PROTECTION WITHIN THE ROW SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS BEEN COMPLETED AND THE DRAINAGE AREA HAS BEEN STABILIZED.

**EROSION CONTROL CONSTRUCTION SEQUENCE**

- PHASE I:**
- CONTRACTOR TO SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH METRO WATER SERVICES.
  - CONTRACTOR TO INSTALL CONSTRUCTION EXIT, SILT FENCE, TREE PROTECTION FENCING, COIR WATTLE, INLET PROTECTION ON EXISTING INLETS, AND CONCRETE WASHOUTS. CLEAR ONLY THE ABSOLUTE MINIMUM AREA NECESSARY TO INSTALL THESE PERIMETER BMPs.
  - AFTER PERIMETER BMPs ARE INSTALLED, CONTRACTOR SHALL SCHEDULE AN INSPECTION BY EPSC AND METRO WATER SERVICES.
  - CONTRACTOR MUST PASS EROSION INSPECTION AND BE GRANTED A GRADING PERMIT.
  - PERIMETER MEASURES ARE TO BE IN PLACE BEFORE GRADING CAN BE DONE.
  - CONTRACTOR WILL BE REQUIRED TO CONTINUOUSLY MAINTAIN AND REPAIR ALL ONSITE EROSION CONTROL BMPs DURING PROJECT CONSTRUCTION.
- PHASE II:**
- BEGIN GRADING THE SITE.
  - TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION, IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING/GRADING ACTIVITY.
  - IMMEDIATELY PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
  - INSTALL PROPOSED UTILITIES INCLUDING PROPOSED STORM INLETS WITH PROTECTION.
  - CONSTRUCT REMAINING SITE ACCORDING TO APPROVED PLANS, OR AS INSTRUCTED BY THE EROSION CONTROL INSPECTOR.
  - PERMANENTLY STABILIZE SITE.
  - UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
  - FINISH INSTALLING PERMANENT STORMWATER BMPs SHOWN ON PHASE 2 EROSION CONTROL PLANS.

**METRO STORMWATER NOTES**

- FEMA NOTE:**  
THIS LOT DOES NOT LIE IN AN AREA DESIGNATED AS A SPECIAL FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP #470370202H, EFFECTIVE 04/05/2017.
- CONSTRUCTION SCHEDULE:**
- PRE-CONSTRUCTION MEETING
  - INSTALLATION OF EROSION CONTROL MEASURES
  - EROSION INSPECTION BY EPSC AND METRO
  - ISSUANCE OF GRADING PERMIT
  - CONSTRUCTION
- CONSTRUCTION SHALL BE COMPLETED WITHIN 12 MONTHS OF THE GRADING PERMIT BEING ISSUED. IF CONSTRUCTION IS NOT COMPLETE IN THAT AMOUNT OF TIME, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY FOR AN EXTENSION OF THE GRADING PERMIT.
- TDEC NOTICE OF COVERAGE NOTICE:**  
THIS PROJECT DOES DISTURB MORE THAN 1 ACRE AND IS REQUIRED TO APPLY FOR A NOTICE OF COVERAGE UNDER THE TENNESSEE GENERAL CONSTRUCTION PERMIT FROM TDEC.
- TENNESSEE CONSTRUCTION GENERAL PERMIT - TBD
- THE TOTAL DISTURBED AREA IS ±1.42 AC ACRES.

**EROSION CONTROL LEGEND**

	IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-50
	SF	SILT FENCE - REFER TO DETAIL SHEET C3-50
	EE	EROSION EELS - REFER TO DETAIL SHEET C3-50
	MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-50
	CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-50
	TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-50
	LOD	LIMITS OF DISTURBANCE
	CS	CONSTRUCTION SIGN

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**CAYCE UTILITY PHASE 1B**

**MDHA**

NASHVILLE, TN



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3	02/10/2021	ZJD
4	03/23/2021	ZJD
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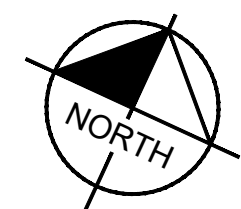
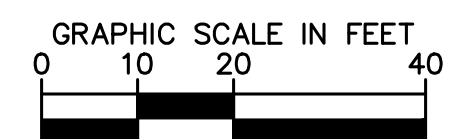
DATE: 06/16/2022

KIMLEY-HORN PROJECT NO. 118109018

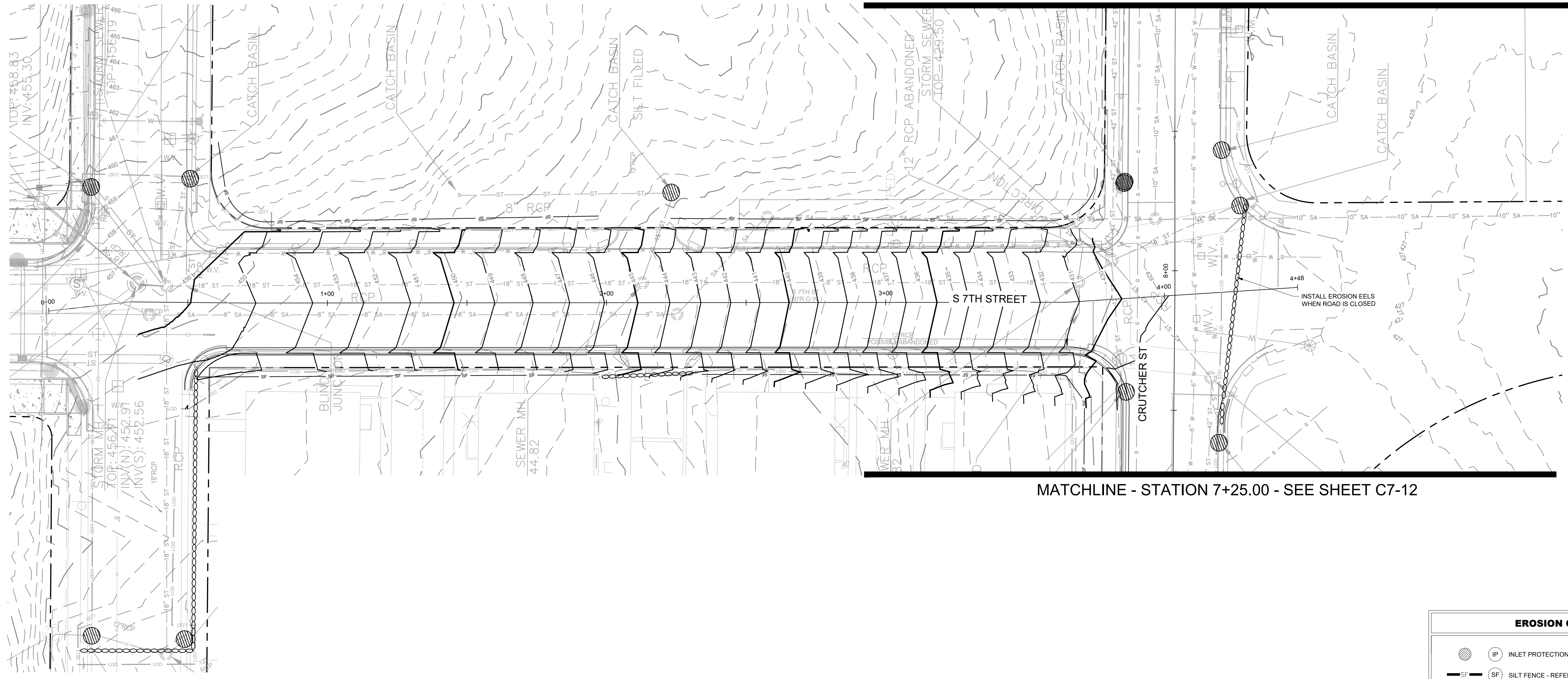
EROSION CONTROL PLAN - PHASE 1

SHEET NUMBER **C7-10**

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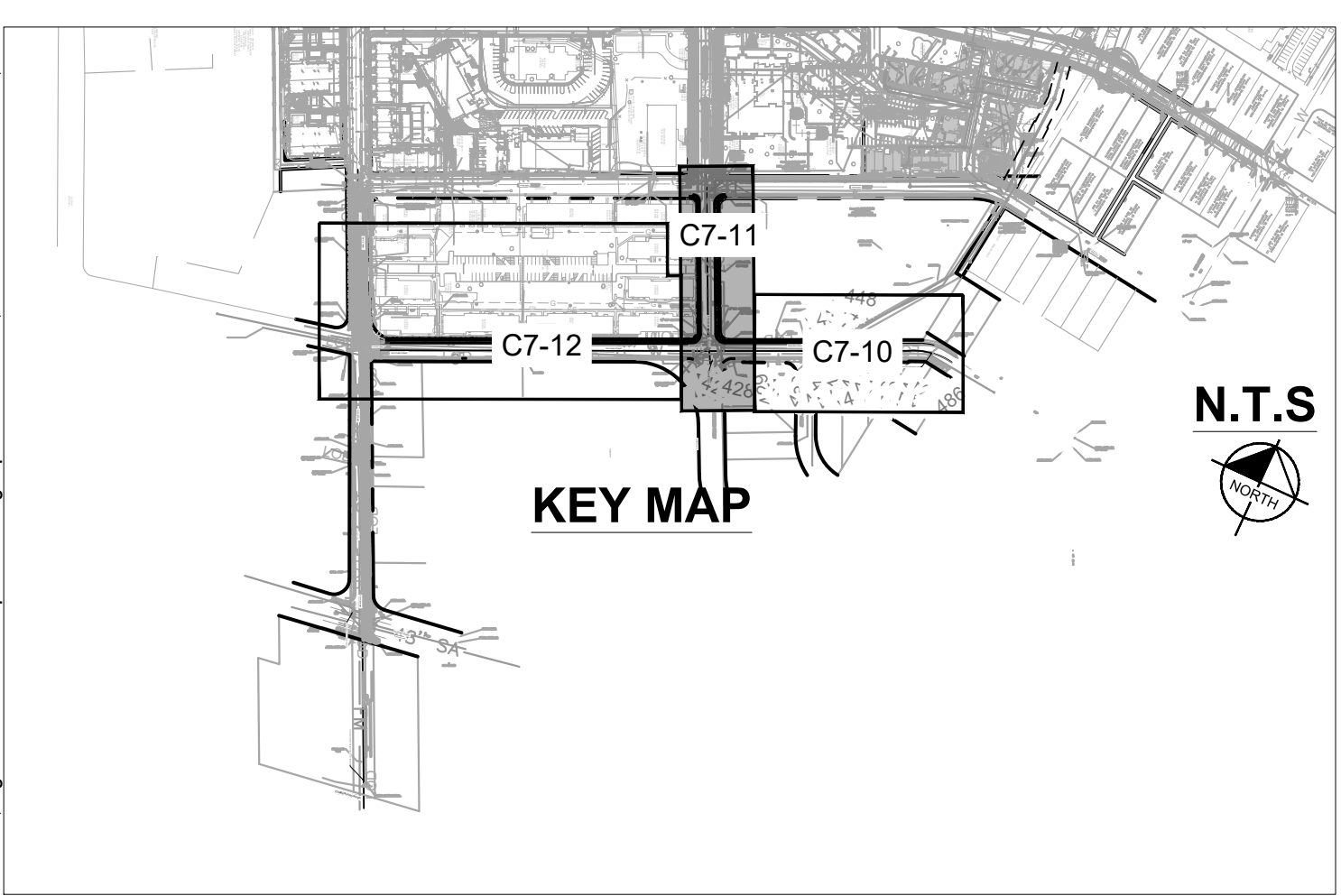


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MATCHLINE - STATION 8+95.00 - SEE SHEET C7-10

MATCHLINE - STATION 7+25.00 - SEE SHEET C7-12



KEY MAP

N.T.S

EROSION CONTROL LEGEND	
	IP INLET PROTECTION - REFER TO DETAIL SHEET C3-50
	SF SILT FENCE - REFER TO DETAIL SHEET C3-50
	EE EROSION EELS - REFER TO DETAIL SHEET C3-50
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	CONSTRUCTION SIGN

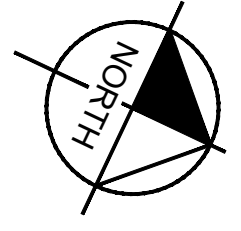
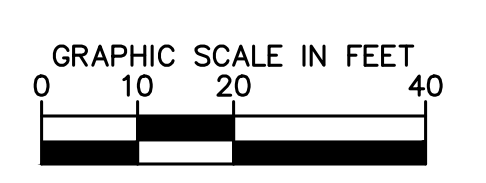


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DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.	118109018

EROSION CONTROL PLAN - PHASE 1  
SHEET NUMBER  
**C7-11**

**BID SET**

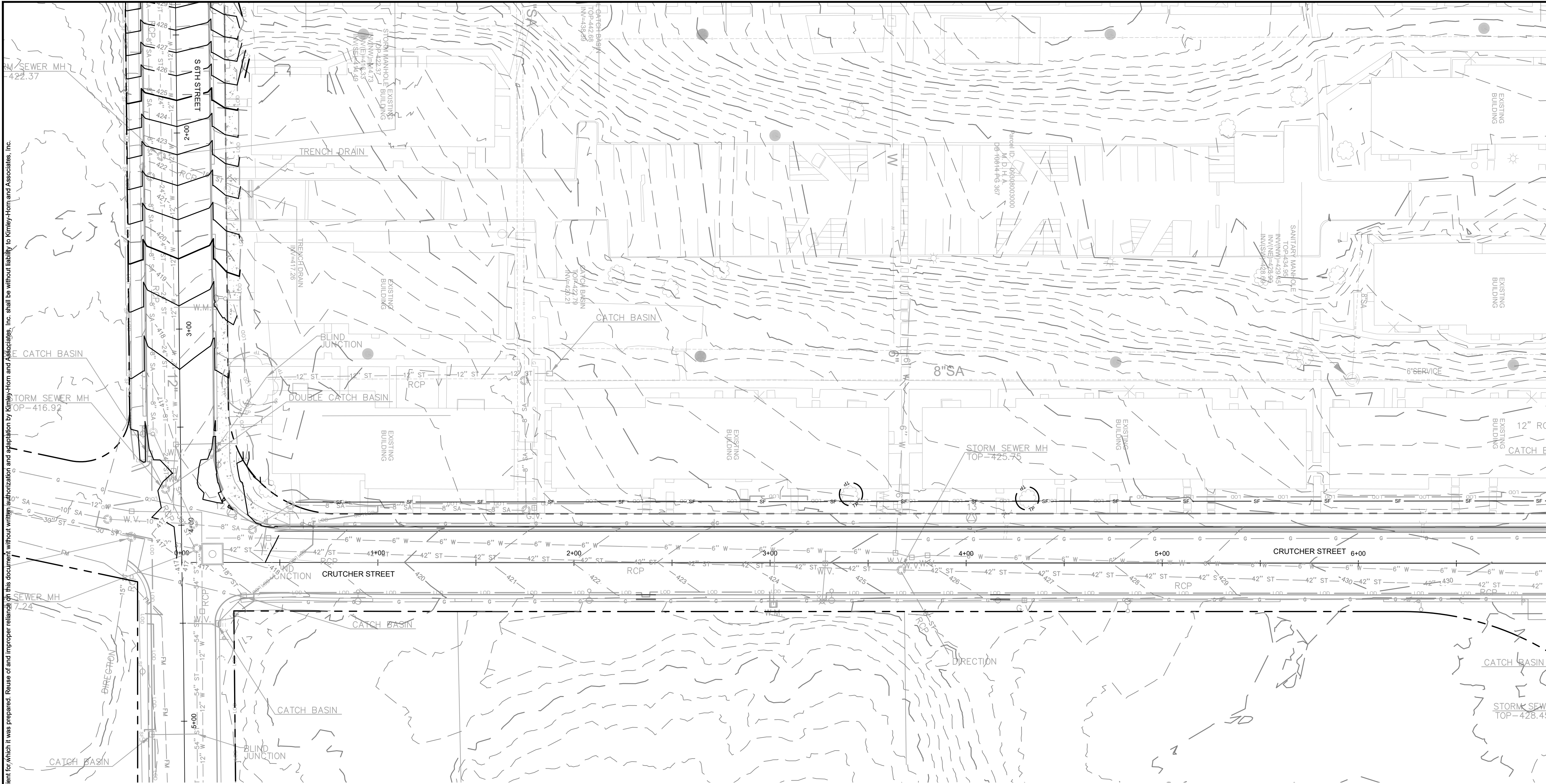


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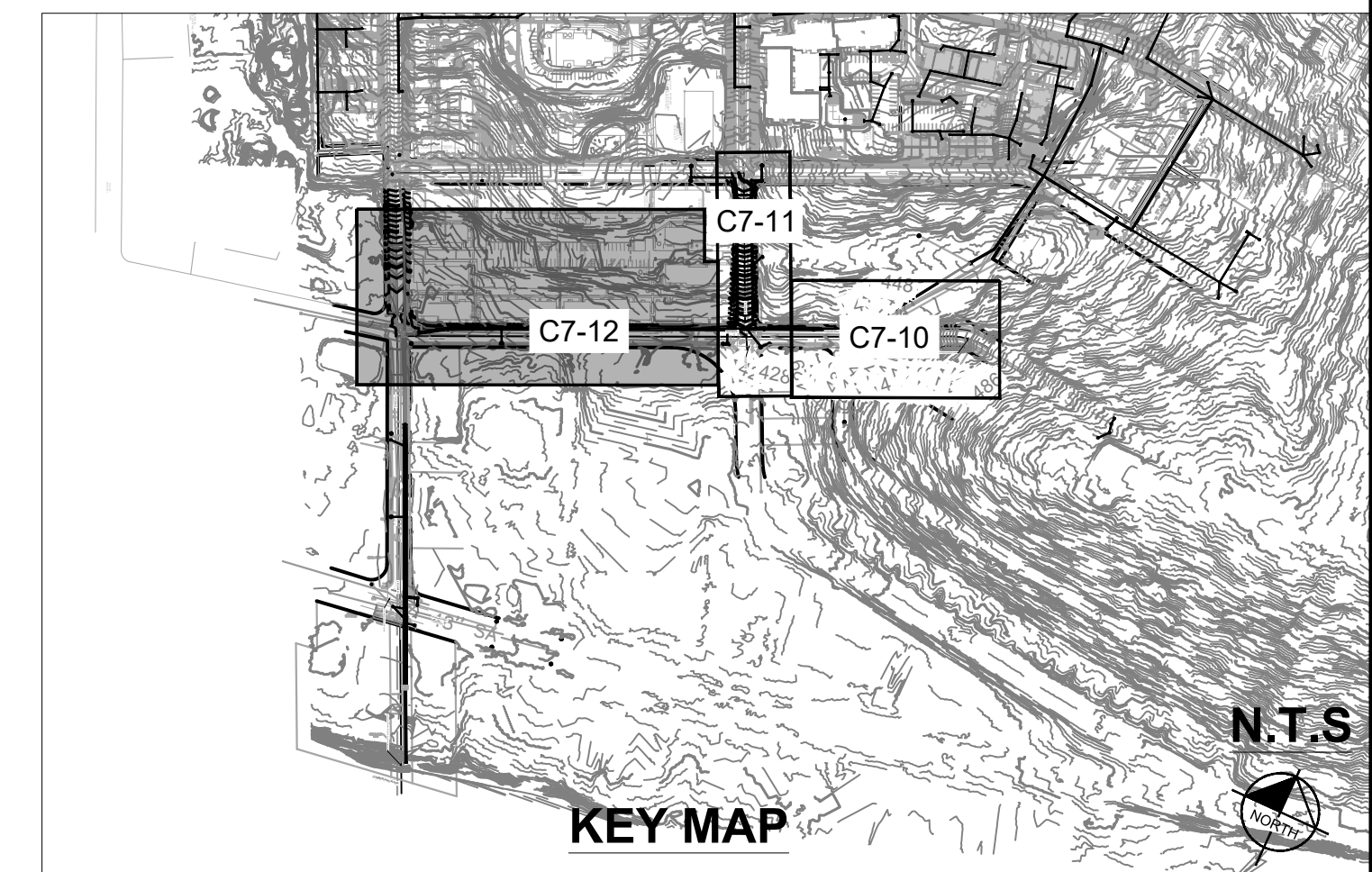


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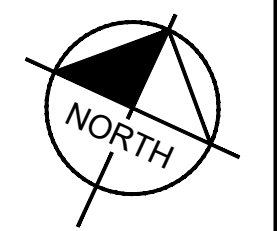
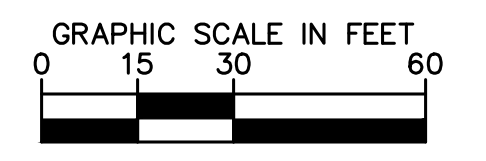


EROSION CONTROL LEGEND	
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MATCHLINE - STATION 7+25.00 - SEE SHEET C7-11



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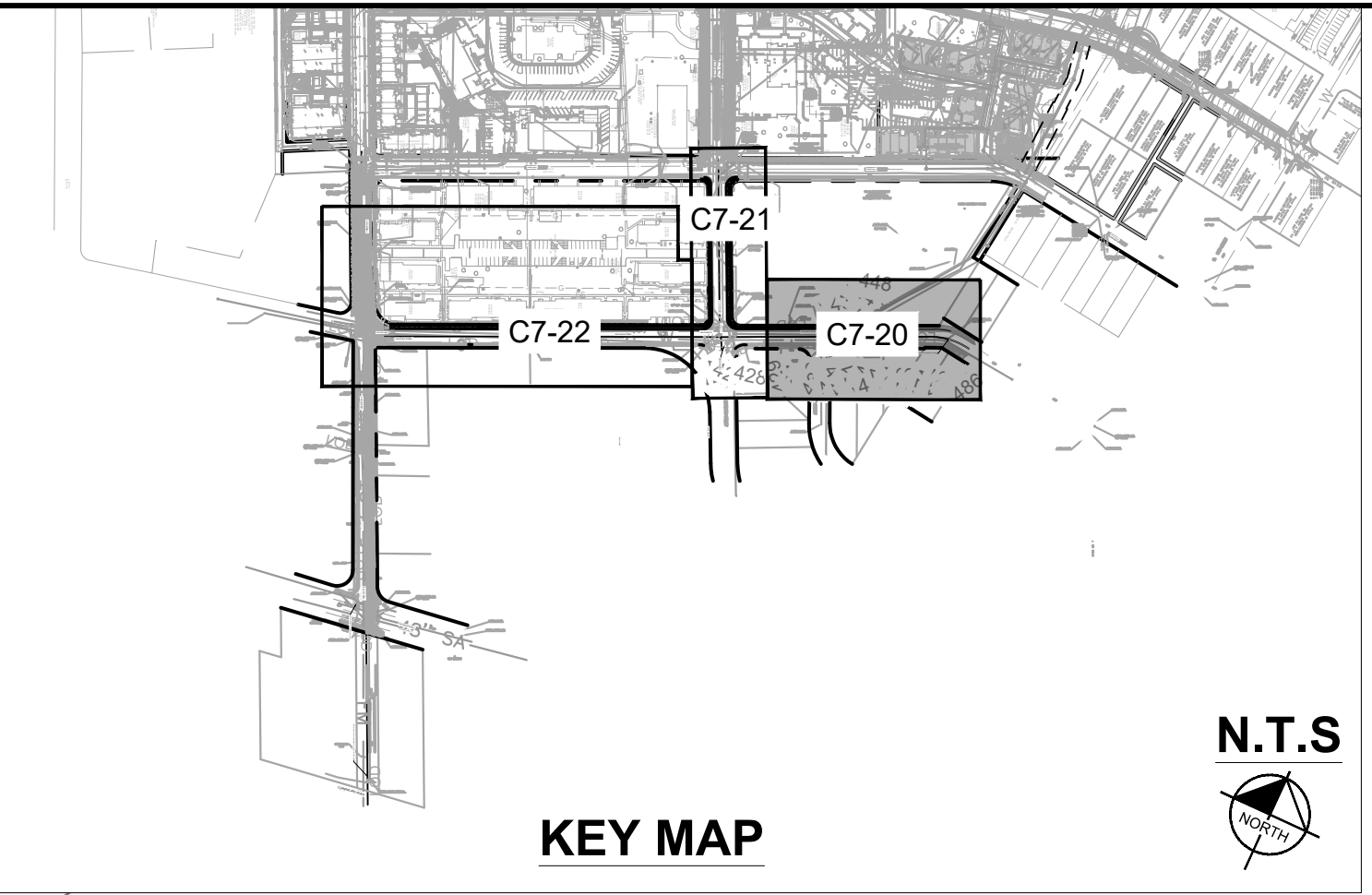
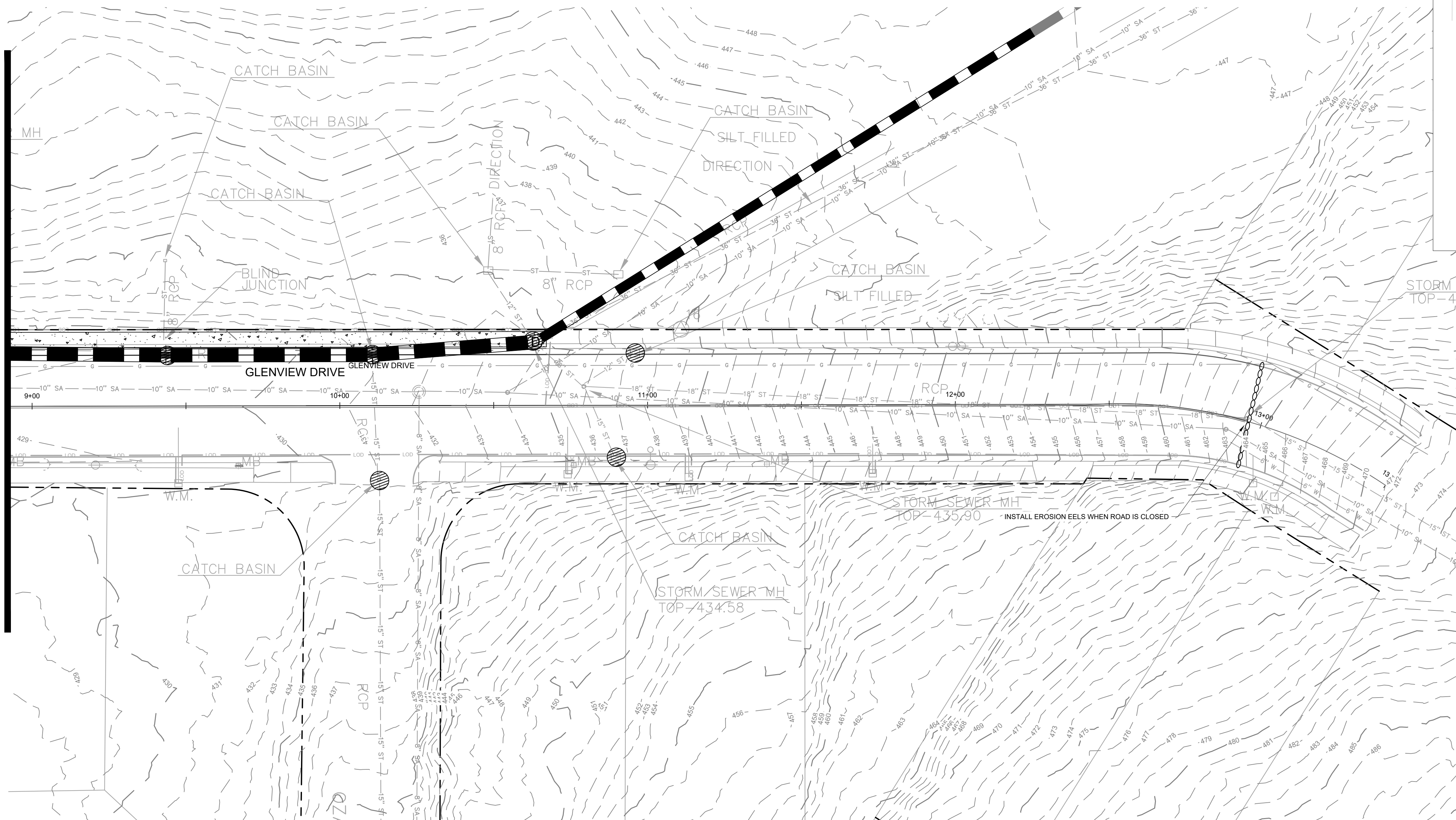
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EROSION CONTROL  
PLAN - PHASE 1

SHEET NUMBER  
**C7-12**

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**EROSION CONTROL NOTES**

- PERIMETER EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO GRADING.
- STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS. STOCKPILE LOCATIONS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO GRADING ACTIVITIES. EROSION & SEDIMENT CONTROL PRACTICE SHALL BE INSTALLED PRIOR TO STOCKPILE OPERATIONS.
- ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
- CONSTRUCT SILT BARRIERS AND OTHER PERIMETER CONTROL MEASURES BEFORE BEGINNING GRADING OPERATIONS.
- MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED (WITHIN 15 DAYS OF ACHIEVED FINAL GRADES) UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. STEEP SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING.
- REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- CLEAN SILT BARRIERS WHEN THEY ARE APPROXIMATELY 50% FILLED WITH SEDIMENT OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SILT BARRIERS SHALL BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND, WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
- PROVIDE TEMPORARY CONSTRUCTION ACCESSSES AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
- DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
- STABILIZATION MEASURES (SEED & MULCH, TRIM WHERE INDICATED) SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, EXCEPT IN THE FOLLOWING TWO CASES:
  - WHERE THERE IS SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE OR WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 15 DAYS. TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
  - ALL EROSION CONTROL MEASURES SHALL BE CHECKED TWICE WEEKLY DURING PROLONGED RAINFALL. DAILY CHECKING IS NECESSARY. DOCUMENTATION OF ALL CHECKS AND CORRECTIVE MEASURES SHALL BE KEPT AT THE PROJECT. A MONITORING REPORT CAN BE FOUND IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
- CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT REFUELING IN ACCORDANCE WITH TDEC'S STANDARDS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITEE.
- SEE ADDITIONAL EROSION CONTROL NOTES ON SHEET C0-01.
- INLET PROTECTION WITHIN THE ROW SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS BEEN COMPLETED AND THE DRAINAGE AREA HAS BEEN STABILIZED.

**EROSION CONTROL CONSTRUCTION SEQUENCE**

- PHASE I:**
- CONTRACTOR TO SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH METRO WATER SERVICES.
  - CONTRACTOR TO INSTALL CONSTRUCTION EXIT, SILT FENCE, TREE PROTECTION FENCING, COIR WATTLE, INLET PROTECTION ON EXISTING INLETS, AND CONCRETE WASHOUTS. CLEAR ONLY THE ABSOLUTE MINIMUM AREA NECESSARY TO INSTALL THESE PERIMETER BMPs.
  - AFTER PERIMETER BMPs ARE INSTALLED, CONTRACTOR SHALL SCHEDULE AN INSPECTION BY EPSC AND METRO WATER SERVICES.
  - CONTRACTOR MUST PASS EROSION INSPECTION AND BE GRANTED A GRADING PERMIT.
  - PERIMETER MEASURES ARE TO BE IN PLACE BEFORE GRADING CAN BE DONE.
  - CONTRACTOR WILL BE REQUIRED TO CONTINUOUSLY MAINTAIN AND REPAIR ALL ONSITE EROSION CONTROL BMPs DURING PROJECT CONSTRUCTION.
- PHASE II:**
- BEGIN GRADING THE SITE.
  - TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION, IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING/GRADING ACTIVITY.
  - IMMEDIATELY PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
  - INSTALL PROPOSED UTILITIES INCLUDING PROPOSED STORM INLETS WITH PROTECTION.
  - CONSTRUCT REMAINING SITE ACCORDING TO APPROVED PLANS, OR AS INSTRUCTED BY THE EROSION CONTROL INSPECTOR.
  - PERMANENTLY STABILIZE SITE.
  - UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
  - FINISH INSTALLING PERMANENT STORMWATER BMPs SHOWN ON PHASE 2 EROSION CONTROL PLANS.

**METRO STORMWATER NOTES**

**FEMA NOTE:**  
THIS LOT DOES NOT LIE IN AN AREA DESIGNATED AS A SPECIAL FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP #47037C02042H, EFFECTIVE 04/05/2017.

**CONSTRUCTION SCHEDULE:**

- PRE-CONSTRUCTION MEETING
- INSTALLATION OF EROSION CONTROL MEASURES
- EROSION INSPECTION BY EPSC AND METRO
- ISSUANCE OF GRADING PERMIT
- CONSTRUCTION

CONSTRUCTION SHALL BE COMPLETED WITHIN 12 MONTHS OF THE GRADING PERMIT BEING ISSUED. IF CONSTRUCTION IS NOT COMPLETE IN THAT AMOUNT OF TIME, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY FOR AN EXTENSION OF THE GRADING PERMIT.

**TDEC NOTICE OF COVERAGE NOTE:**  
THIS PROJECT DOES DISTURB MORE THAN 1 ACRE AND IS REQUIRED TO APPLY FOR A NOTICE OF COVERAGE UNDER THE TENNESSEE GENERAL CONSTRUCTION PERMIT FROM TDEC.

TENNESSEE CONSTRUCTION GENERAL PERMIT - TBD

THE TOTAL DISTURBED AREA IS ±1.42 AC ACRES.

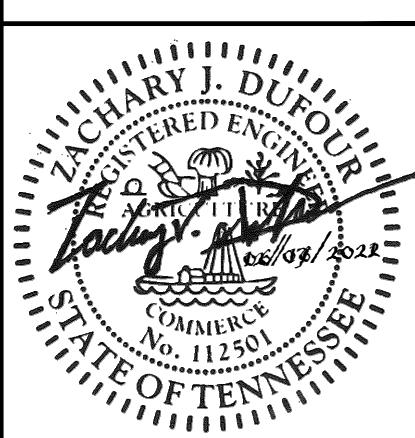
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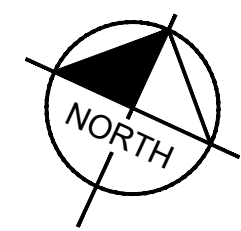
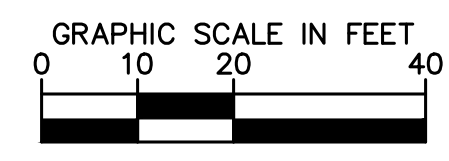


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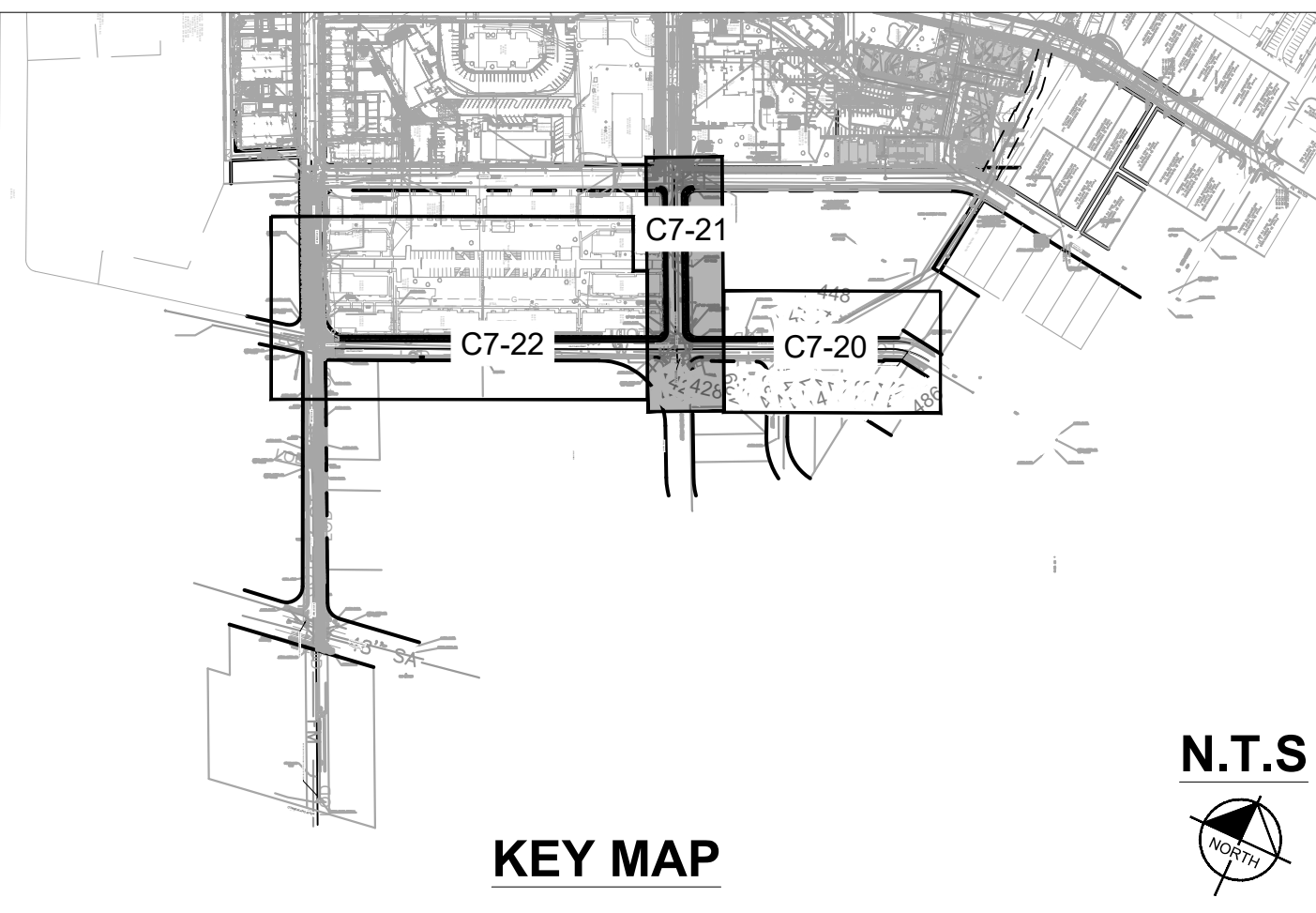
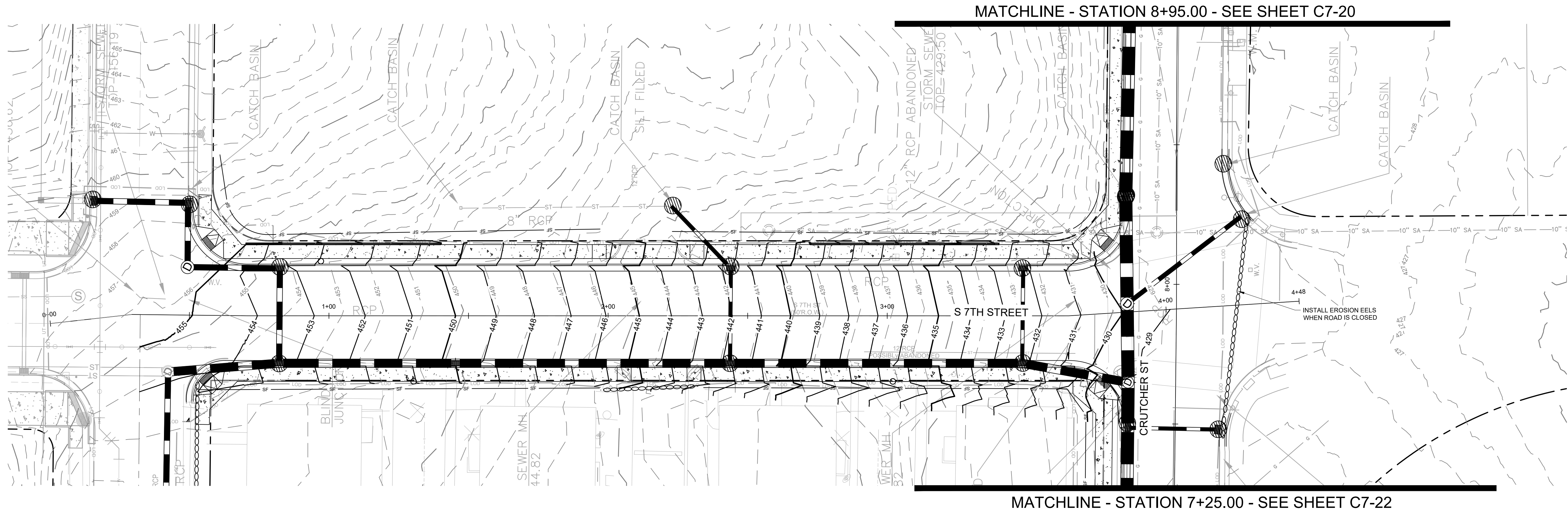
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DRAWN BY: \_\_\_\_\_  
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KIMLEY-HORN PROJECT NO. 118109018

**EROSION CONTROL PLAN - PHASE 2**  
SHEET NUMBER **C7-20**

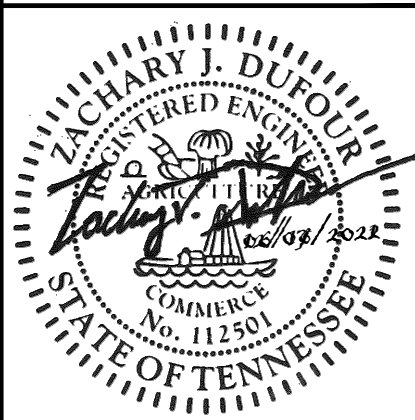
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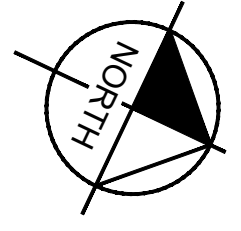
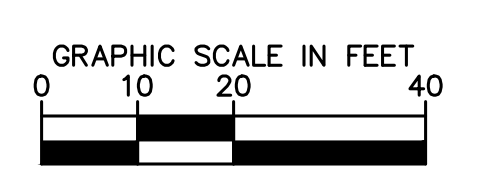
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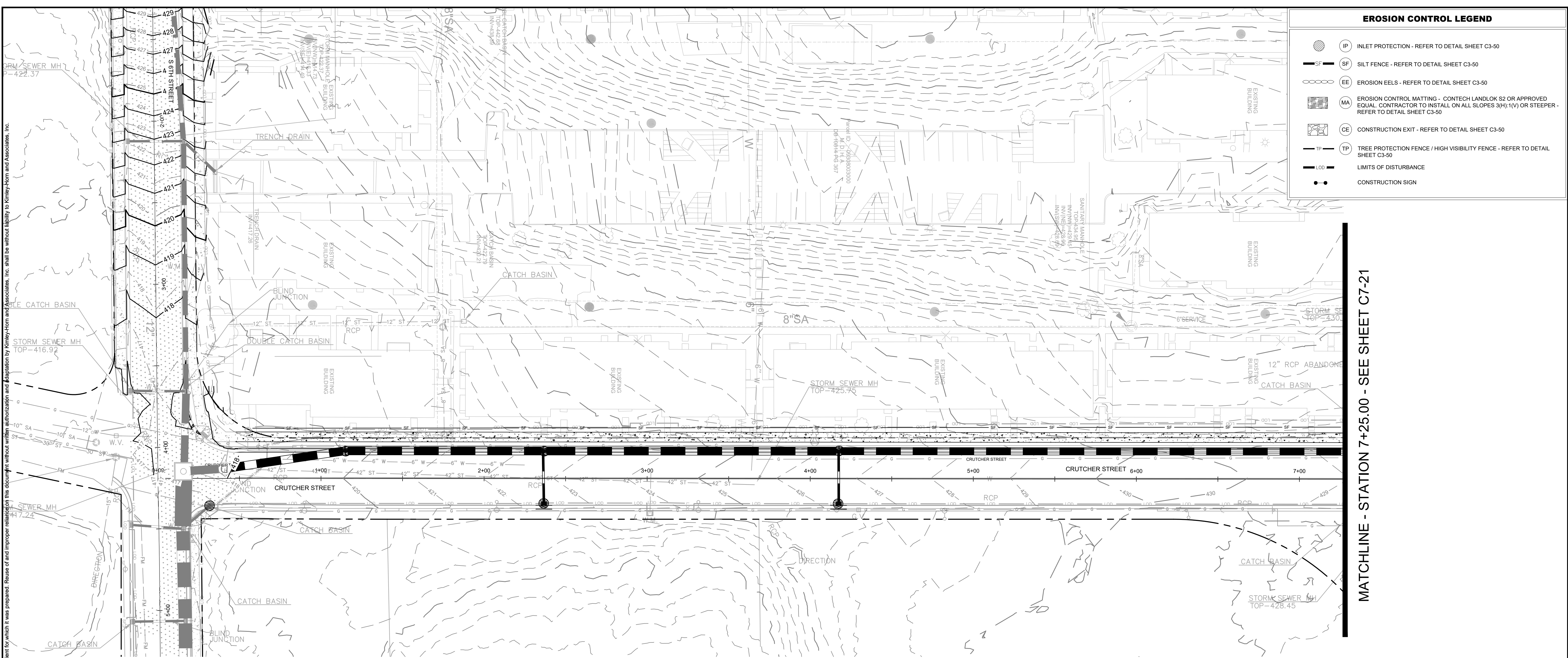
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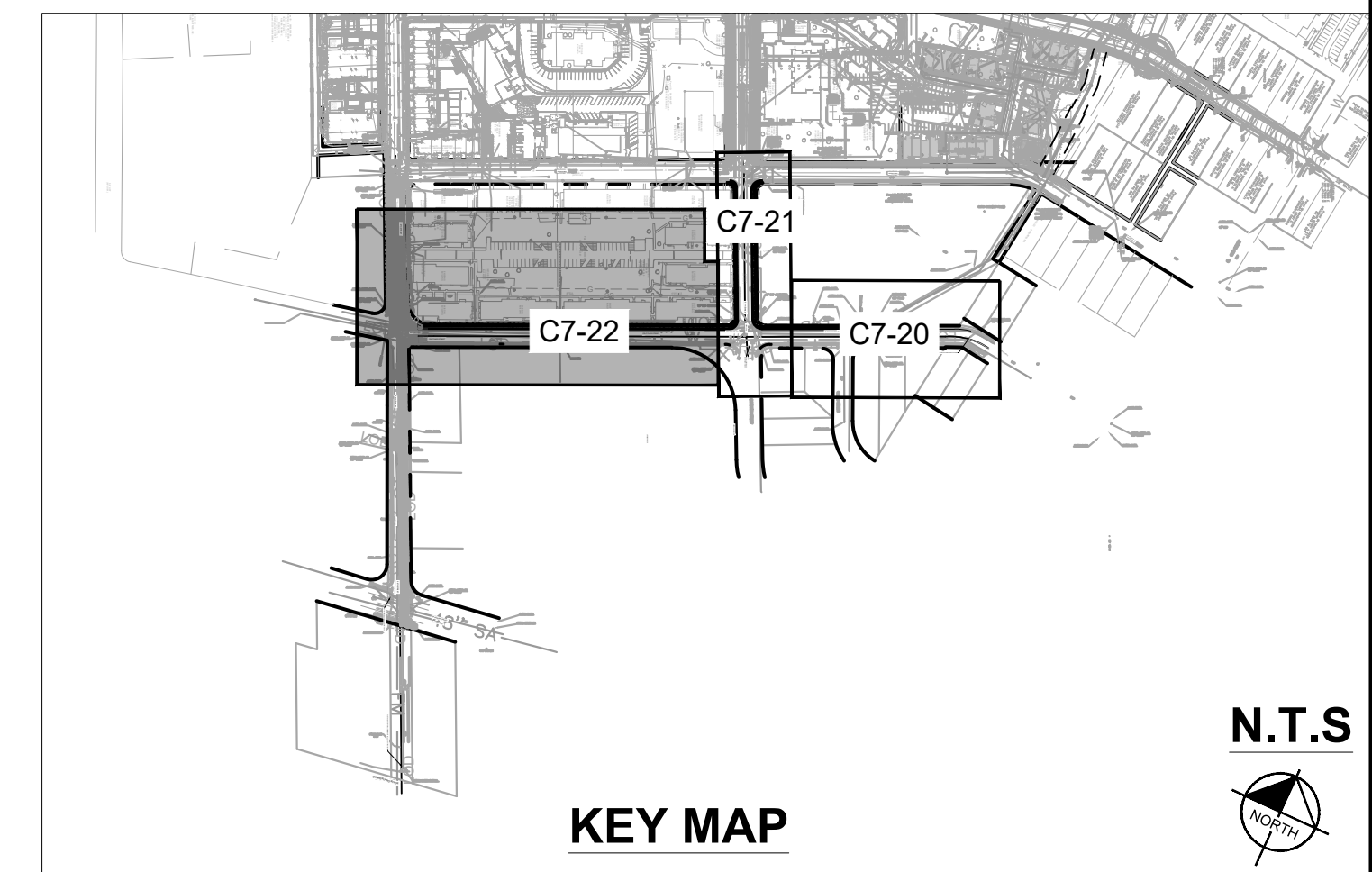


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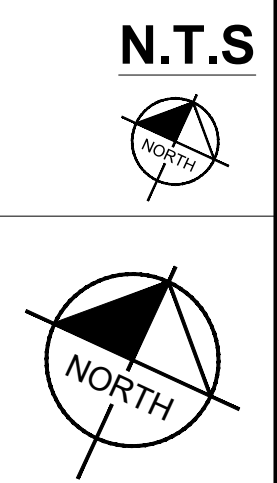
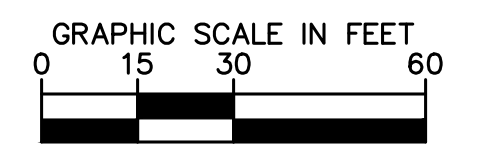


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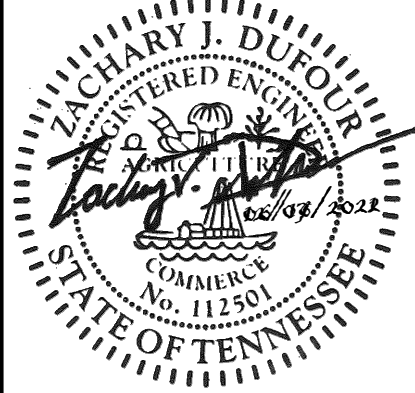
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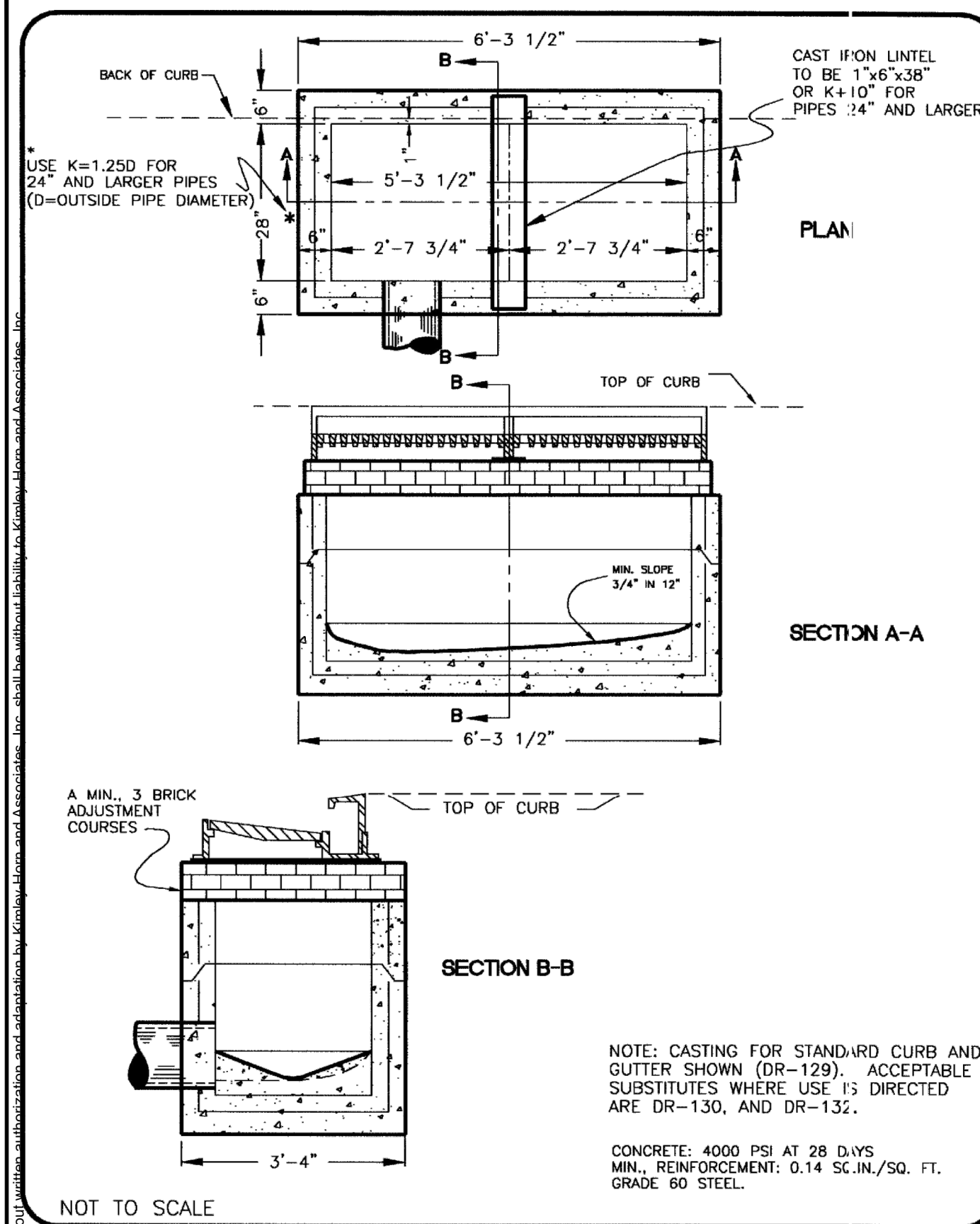
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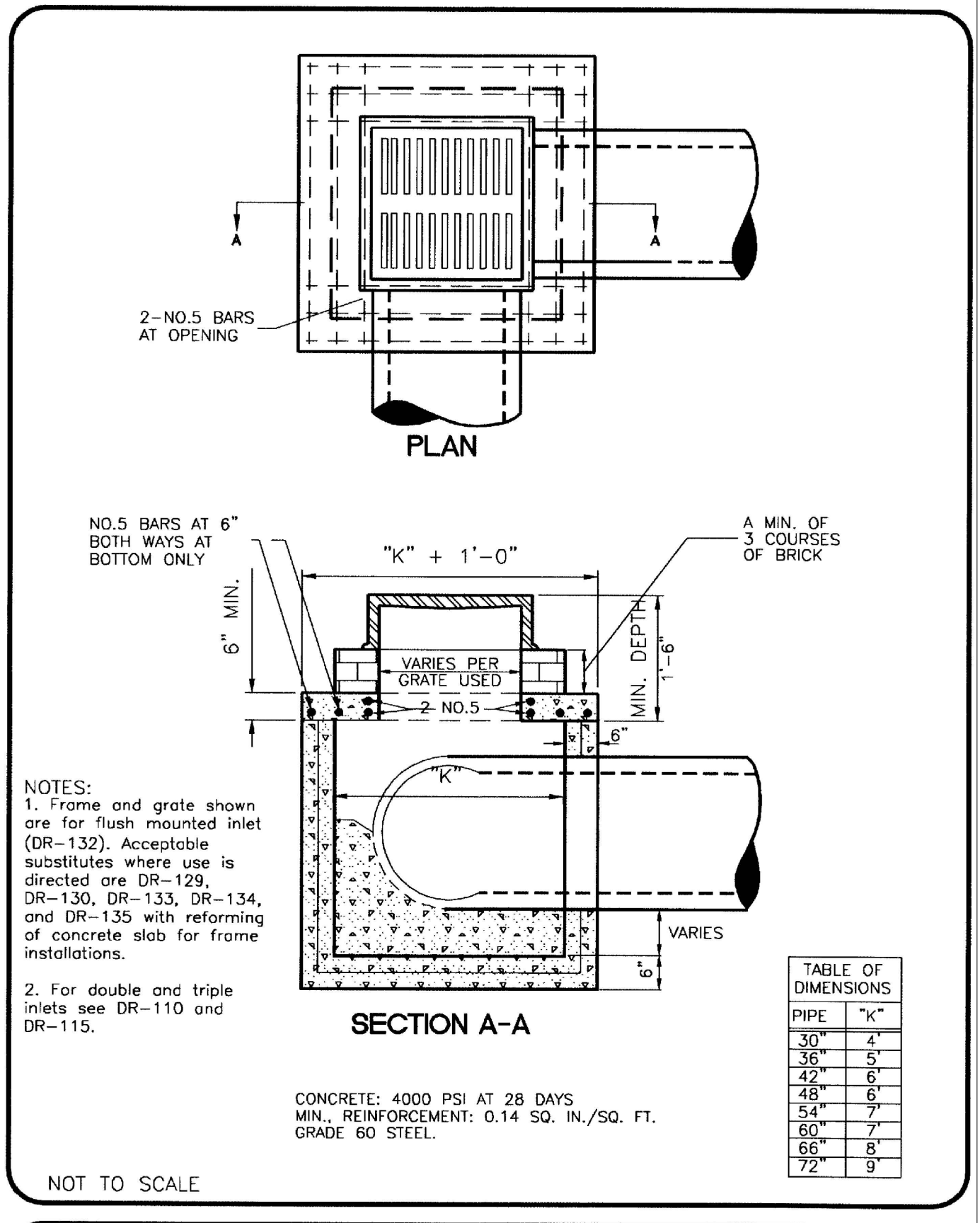
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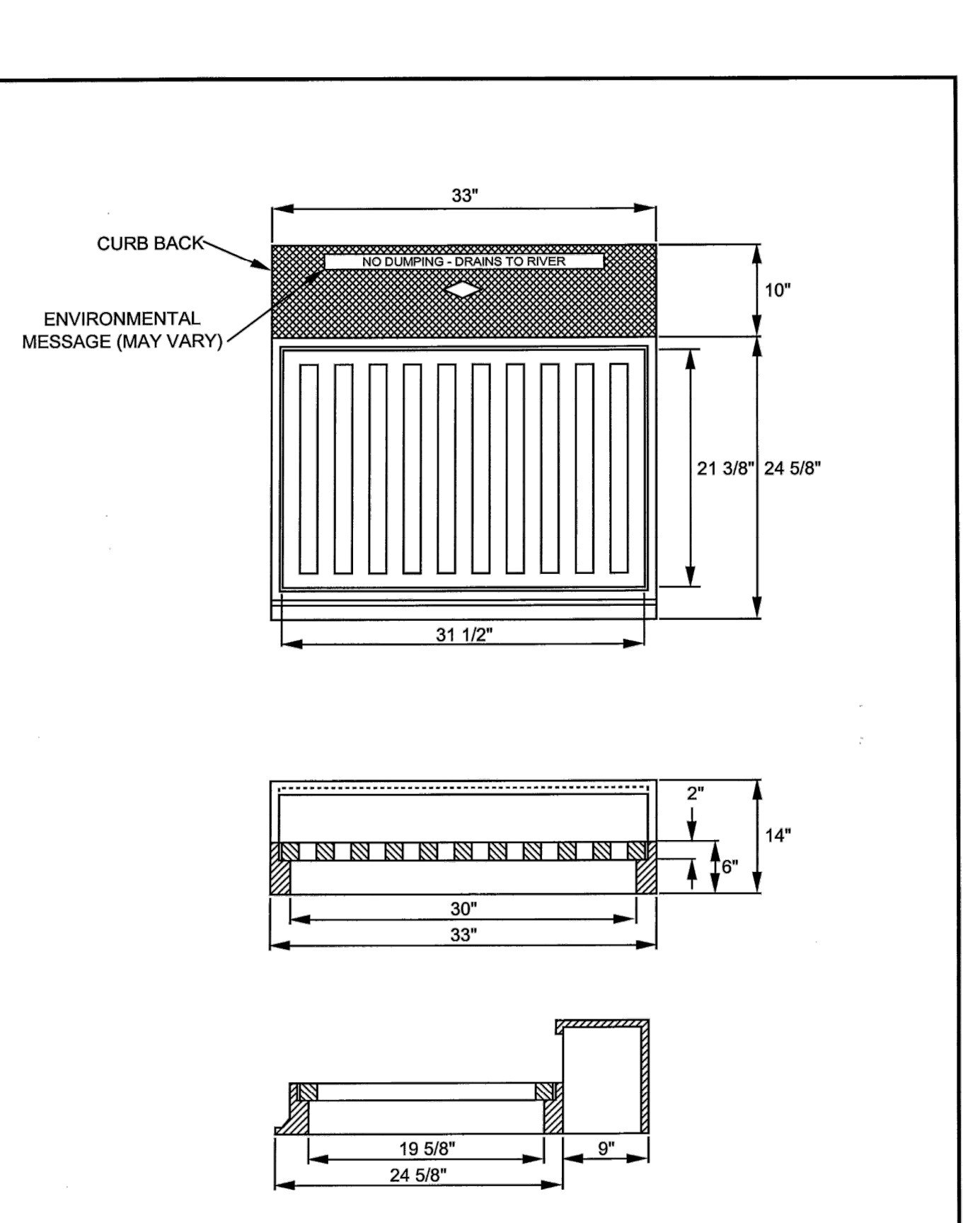
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PLAN - PHASE 2  
SHEET NUMBER  
**C7-22**



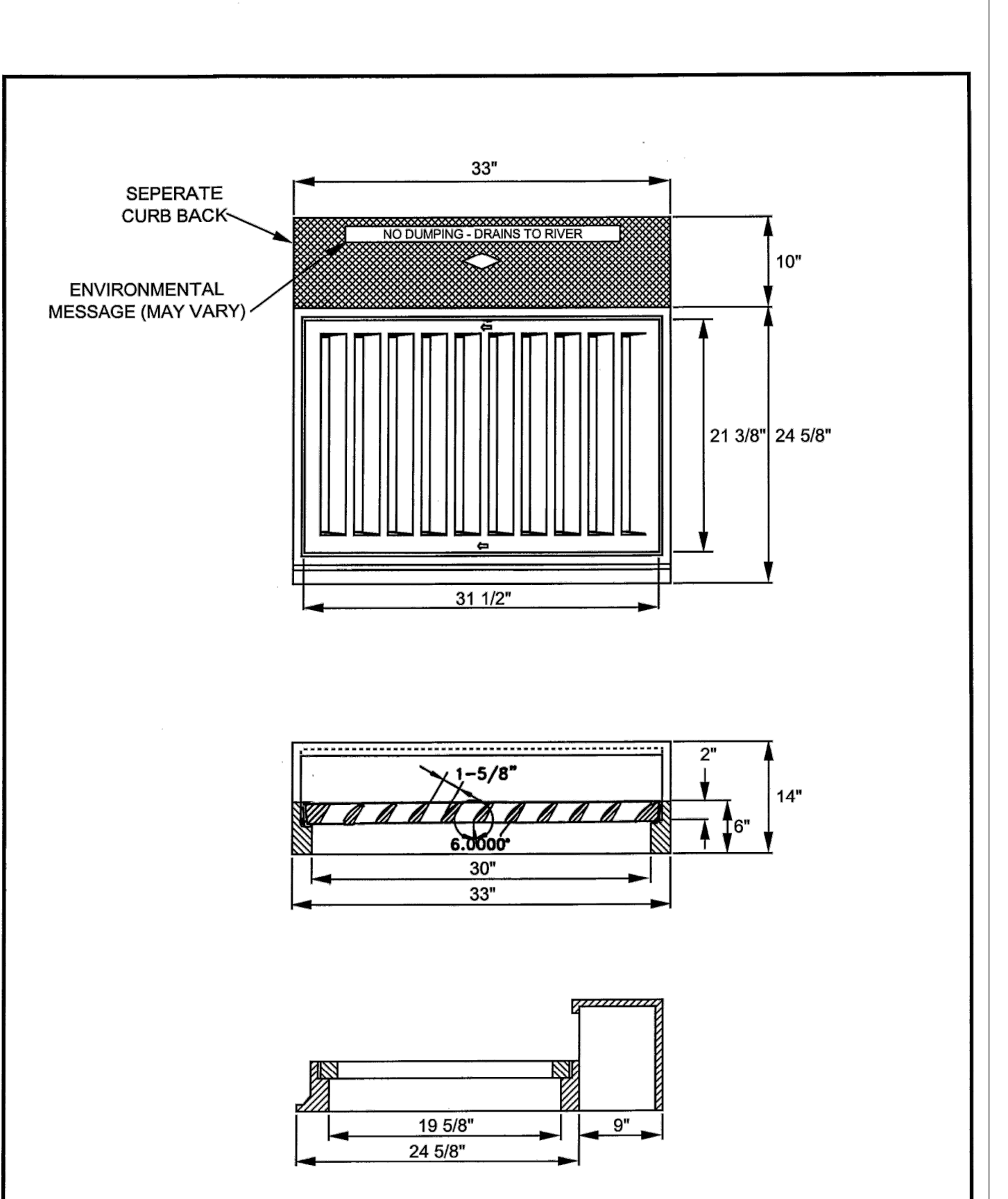
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**DOUBLE INLET (PRECAST)**  
 DWG. NO. DR-110  
 ASST. DIR. ENG. *[Signature]* DATE: *3/1/00*  
 DIRECTOR: *[Signature]* DATE: *3/1/00* REVISED: 02/14/00



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS  
**COMBINATION INLET (PRECAST)**  
 DWG. NO. DR-120  
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 DIRECTOR: *[Signature]* DATE: *3/1/00* REVISED: 02/08/00



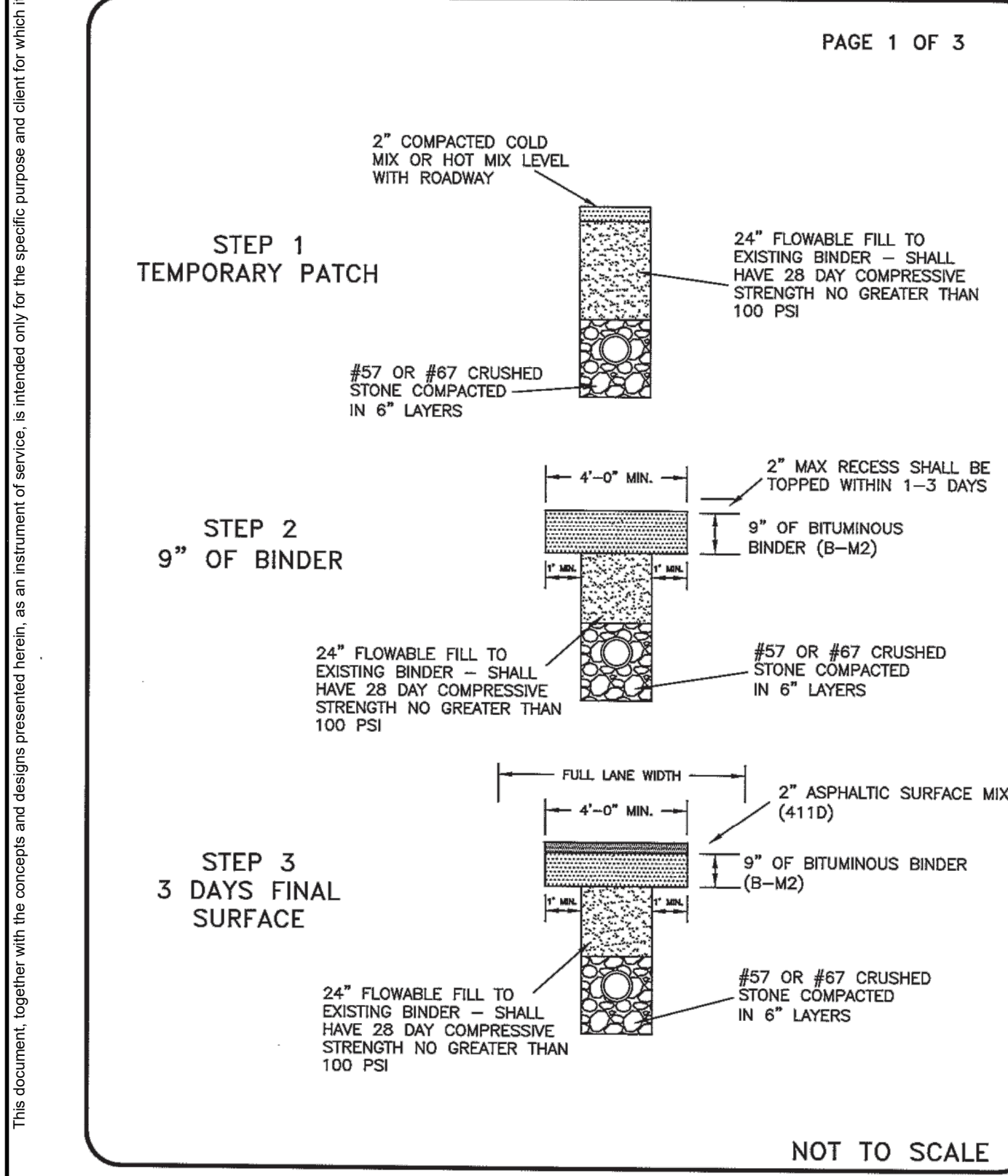
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 AVAILABLE IN MULTIPLE UNITS  
 TRAFFIC DUTY  
 OPEN AREA = 1.98 SQUARE FT



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 1024 Harrison Street, Nashville, TN 37203  
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 www.jbouchard.com email: foundry@bouchard.com  
**3101-V CURB INLET**  
 AVAILABLE IN MULTIPLE UNITS  
 TRAFFIC DUTY  
 OPEN AREA = 1.88 SQUARE FT

3101 TO BE USED AT CATCH BASINS IN A SAG (LOW POINT)

3101V TO BE USED AT CATCH BASINS ON GRADE



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS  
**RECESSED TRENCH REPAIR WITH FLOWABLE FILL**  
 DWG. NO. ST-271b  
 DIR. OF ENG. *[Signature]* DATE: *7/15/15* CREATED: 07/15/15

GENERAL NOTES PAGE 2 OF 3

- PRIOR TO PLACEMENT OF CRUSHED STONE OR FLOWABLE FILL THE DEPARTMENT OF PUBLIC WORKS PERMITS OFFICE WILL BE NOTIFIED AND AN INSPECTION OF THE TRENCH WILL BE MADE BY A REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS PERMITS OFFICE. AT THE COMPLETION OF THE INSTALLATION OF THE CRUSHED STONE OR FLOWABLE FILL THE DEPARTMENT OF PUBLIC WORKS PERMITS OFFICE WILL BE NOTIFIED AND AN INSPECTION OF THE BACKFILL WILL BE MADE BY A REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS. AFTER ACCEPTANCE OF THE BACKFILL BY THE REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS PERMITS OFFICE, THE ASPHALT PAVEMENT CAN BE APPLIED.
- INSPECTION PERSONNEL OF THE DEPARTMENT OF PUBLIC WORKS SHALL BE NOTIFIED BY CONTRACTOR/PERMITEE AT LEAST TWO (2) DAYS PRIOR TO REQUEST FOR INSPECTION.
- THE WORK PERFORMED SHALL BE FREE FROM WORKMANSHIP DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF ACCEPTANCE BY THE DEPARTMENT OF PUBLIC WORKS PERMIT OFFICE.
- EXISTING PAVEMENTS, BASES, CURBS & GUTTERS AND SIDEWALKS SHALL BE CUT AND BROUGHT TO A NEAT LINE BY USE OF AN AIR HAMMER, SAW OR OTHER SUITABLE EQUIPMENT. EXPANSION JOINTS REMOVED SHALL BE REPLACED.
- THE MINIMUM WIDTH TO BE TRIMMED ON EACH SIDE OF THE TRENCH LINE, AS SEEN IN THE SECTION MAY BE WAIVED OR AMENDED UPON APPROVAL OF THE METRO INSPECTOR, HOWEVER, A MINIMUM WIDTH OF REPLACEMENT SHALL BE 4'-0" TO ALLOW FOR A ROLLER.
- IF PERMANENT PAVEMENT REPAIRS CANNOT BE MADE WITHIN THREE (3) DAYS, THEN TEMPORARY REPLACEMENT SHALL BE MADE WITH 2" COLD MIX PERMANENT PAVEMENT REPAIR TO BE COMPLETED WITHIN THE REQUIRED TIME PERIOD AS PER METRO CODE 13.20.
- ALL EXCAVATIONS MADE WITHIN PUBLIC RIGHT-OF-WAY REQUIRE EXCAVATIONS AND STREET CLOSURE PERMITS FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO COMMENCING WORK AS PER METRO CODE 13.20.
- FLOWABLE FILL WILL BE REQUIRED ON ALL ARTERIALS, COLLECTORS AND DOWNTOWN STREETS. FLOWABLE FILL SHALL MEET THE REQUIREMENTS IN TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 204, EXCEPT AS MODIFIED BY PUBLIC WORKS TECHNICAL SPECIFICATIONS 02225, LATEST REVISION.
- IN THE EVENT OF ANY CONFLICT, DISCREPANCY, OR INCONSISTENCY AMONG THE PLANS AND THESE STANDARD DETAILS, THE REQUIREMENTS OF THE STANDARD DETAILS SHALL GOVERN.
- ALL REPAIRS SHALL INCLUDE FULL LANE WIDTH RESURFACING EXCEPT WHEN UTILIZING INFRARED TECHNOLOGY. SEE INFRARED SPECIFICATIONS ATTACHED. THERE WILL BE A MAXIMUM OF 40 FT LONGITUDINAL REPAIR WHEN USING INFRARED TECHNOLOGY ON AN EXCAVATED PATCH.
- ALL REPAIRS SHALL UTILIZE A 1-FOOT CUTBACK ON ALL SIDES EXCEPT THE EDGE OF PAVEMENT.

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS  
**RECESSED TRENCH REPAIR WITH FLOWABLE FILL NOTES**  
 DWG. NO. ST-271b  
 DIR. OF ENG. *[Signature]* DATE: *7/15/15* CREATED: 07/15/15

GENERAL NOTES CONTINUED: PAGE 3 OF 3

- NEW UTILITY CUTS WILL BE MILLED AND PAVED TO ANY EXISTING UTILITY CUT OR DAMAGED PAVEMENT WITHIN 10- FEET. IF EXISTING CUT OR DAMAGED PAVEMENT IS LESS THAN 10- FEET IN LENGTH, THE EXISTING CUT OR DAMAGED PAVEMENT SHALL ALSO BE MILLED AND PAVED.
- ASPHALT REPAIR ADJACENT TO CURB AND GUTTER ALONG A ROADWAY GREATER THAN 24- INCHES SHALL HAVE FULL LANE WIDTH PAVING.
- WHEN GRADED STONE (I.E. #57, #67, #78 STONE) IS USED THERE IS GENERALLY NO COMPACTION EQUIPMENT REQUIRED. THE MATERIAL DOES, HOWEVER, NEED TO BE PUT IN THE TRENCH IN APPROXIMATELY 12- INCH LIFTS.
- GRADED STONE PLACED IN TRENCH SHOULD BE CAPPED WITH 8 TO 12- INCHES OF PUG MIX (MIX IS ESSENTIALLY TYPE A BASE, GRADE D, OR MORE COMMONLY KNOWN AS "CRUSHER RUN"). SEE TDOT STANDARD SPECIFICATION 303.07.
- TYPE "A" BASE, GRADE "D" CAN BE USED FOR THE ENTIRE BACKFILL AND COMPACTION BY MECHANICAL METHODS IN NO MORE THAN 6- INCH LIFTS AS PROVIDED IN SECTION 204.11 OF TDOT STANDARD SPECIFICATIONS.
- THE PUG MIX SHOULD BE COMPACTIONED IN 6- INCH LIFTS WITH A STEEL SHELL ROLLER OR OTHER MECHANICAL VIBRATORY COMPACTION EQUIPMENT. SEE TDOT STANDARD SPECIFICATIONS 303.08 AND 303.09. MATERIAL SHOULD BE ALLOWED TO CURE UNTIL ALL THE MOISTURE IS GONE FROM STONE (USUALLY 24- 48 HOURS).
- THE TRENCH SHOULD THEN HAVE 11- INCHES OF BINDER PLACED LEVEL WITH THE ROADWAY IN A MINIMUM OF TWO (2) LIFTS AND COMPACTIONED WITH MECHANICAL COMPACTION EQUIPMENT.
- ASPHALT SURFACE MATERIAL SHOULD BE PLACED AT 2- INCH THICKNESS AND COMPACTIONED WITHIN 1- 3 DAYS AFTER THE BINDER IS PLACED.
- INTERSECTION REPAIRS WILL ONLY REQUIRE FULL LANE WIDTH PAVING.
- FOR ANY DISCREPANCIES OR VARIATIONS FROM SPECIFICATIONS, OBTAIN APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.
- ALL FILL SHALL MEET MANUFACTURING SPECIFICATIONS, IF APPLICABLE.

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS  
**RECESSED TRENCH REPAIR WITH FLOWABLE FILL NOTES**  
 DWG. NO. ST-271b  
 DIR. OF ENG. *[Signature]* DATE: *7/15/15* CREATED: 07/15/15

**BID SET**

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**CAYCE UTILITY PHASE 1B**  
**MDHA**  
 NASHVILLE, TN

BY: *[Signature]*  
 DATE: *06/16/2022*

NO.	1	2	3	4	5	6	7	8	9	10
DATE										

DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018

STORMWATER DETAILS

SHEET NUMBER  
**C8-00**

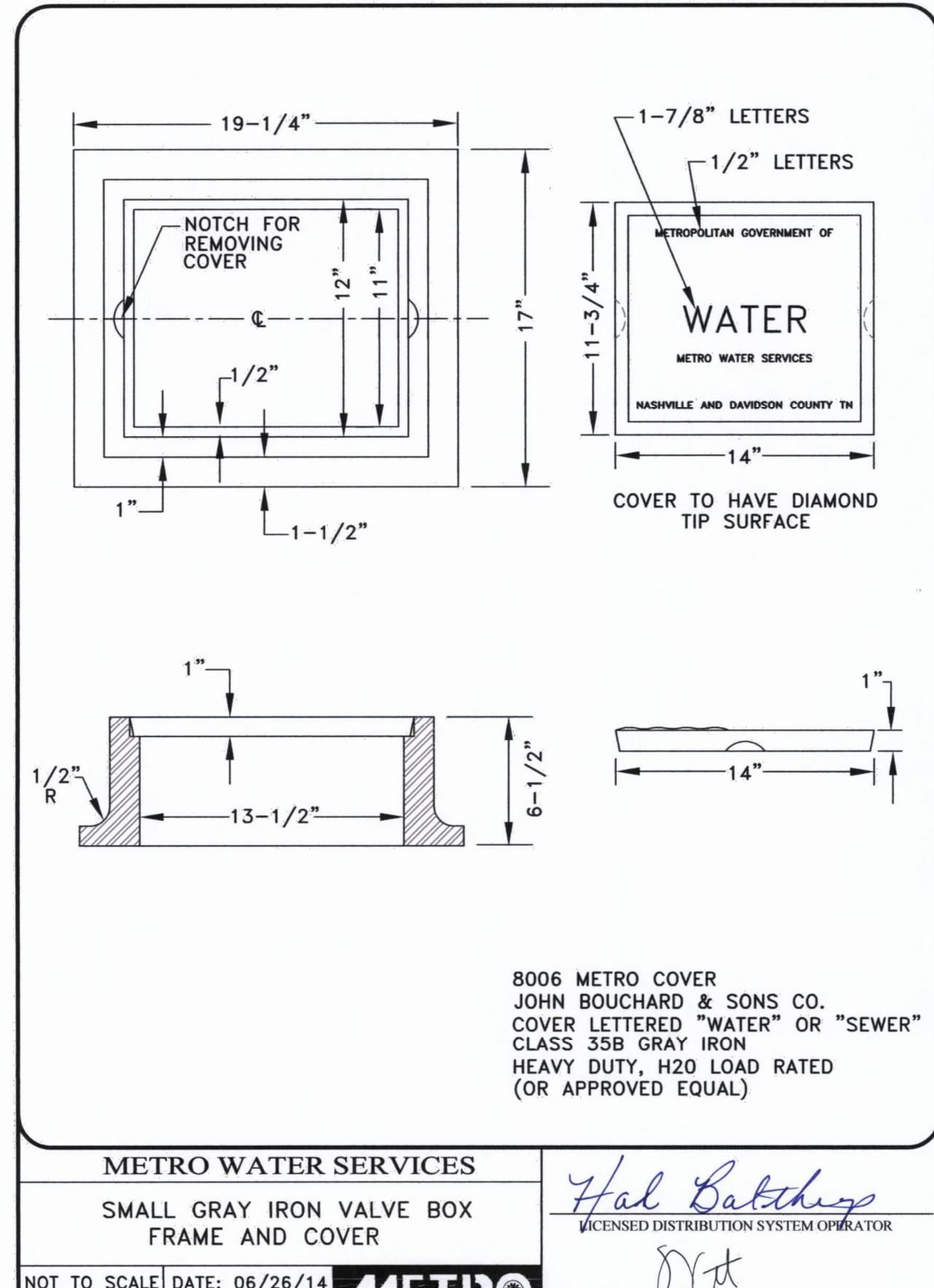
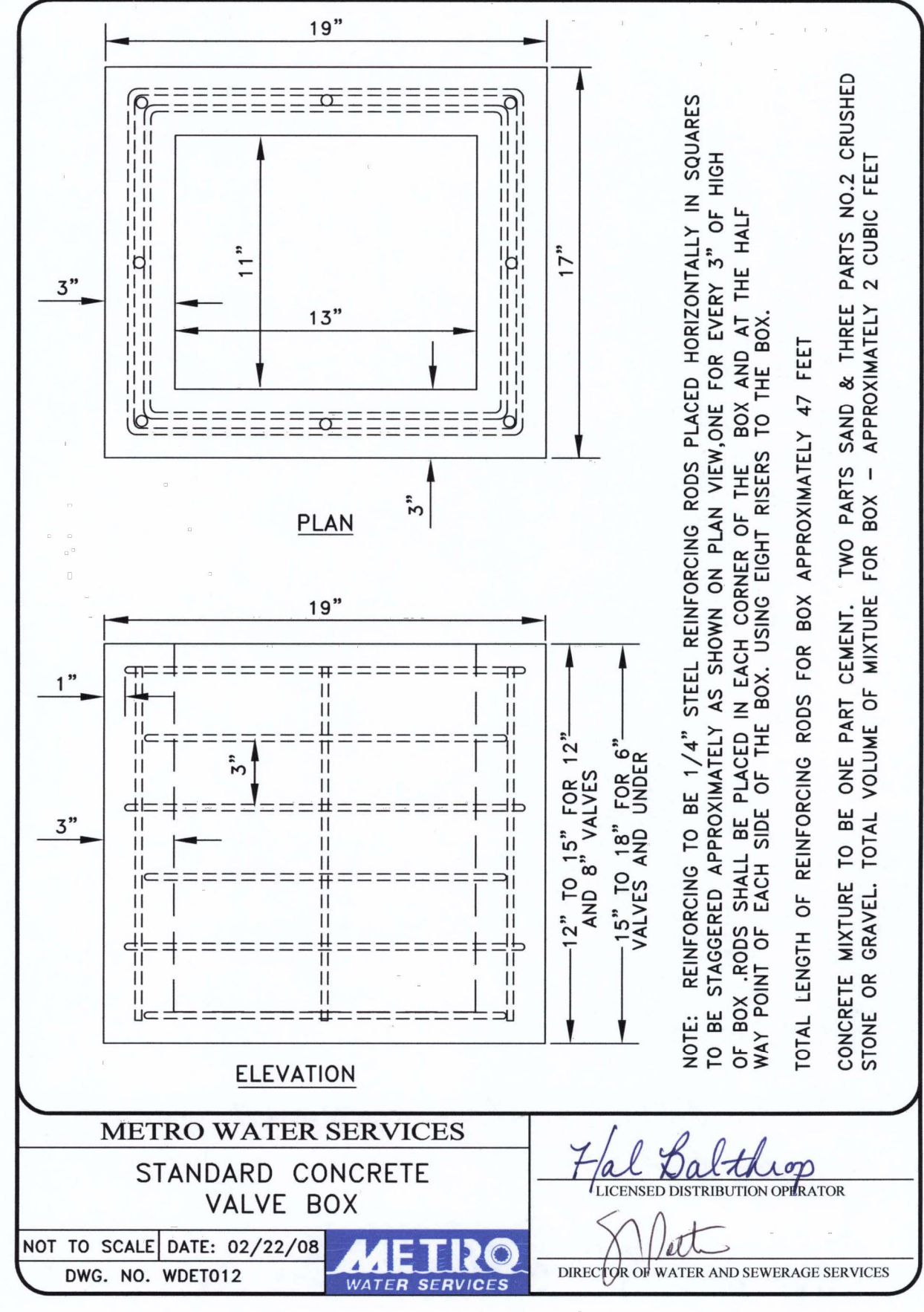
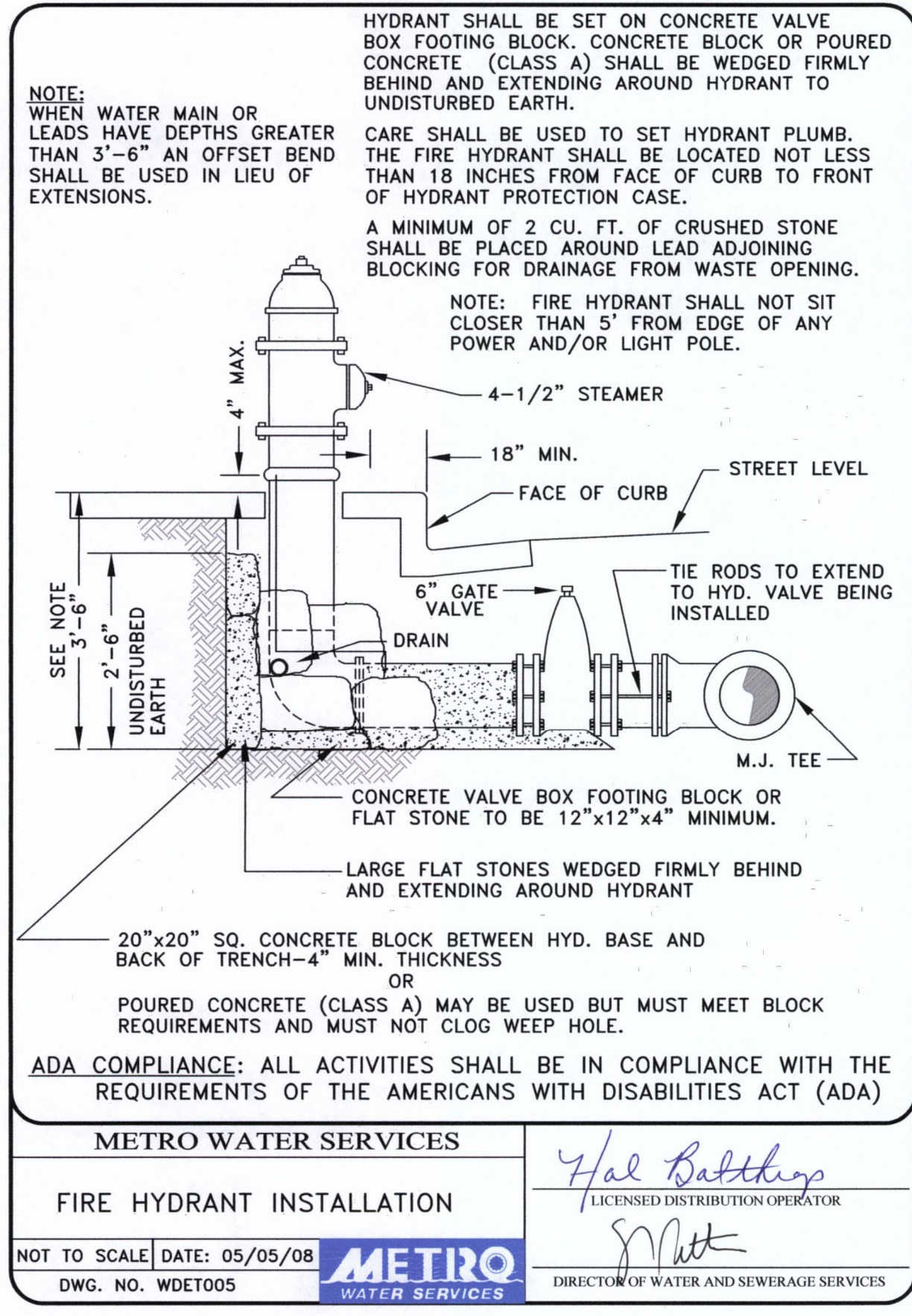
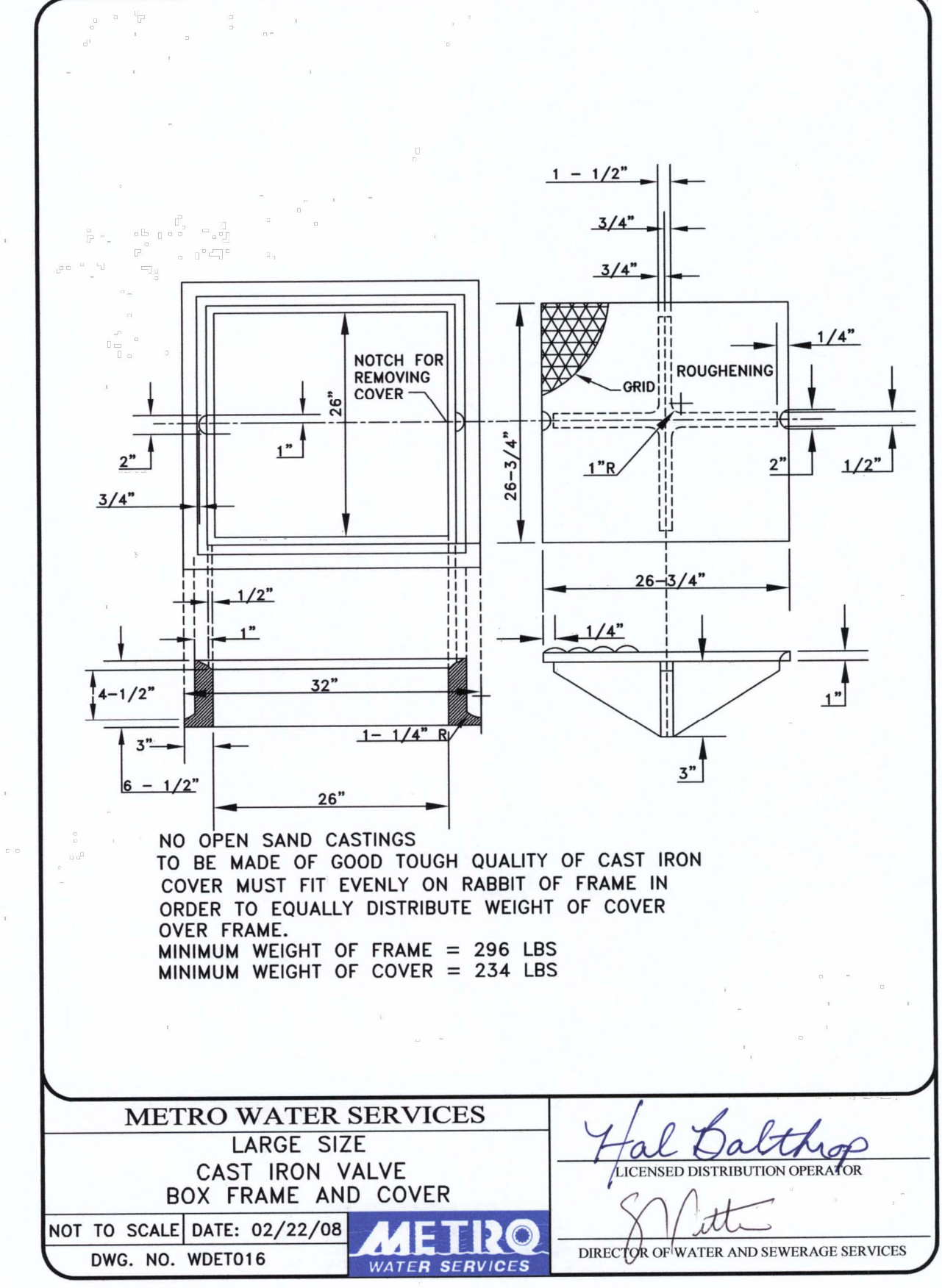
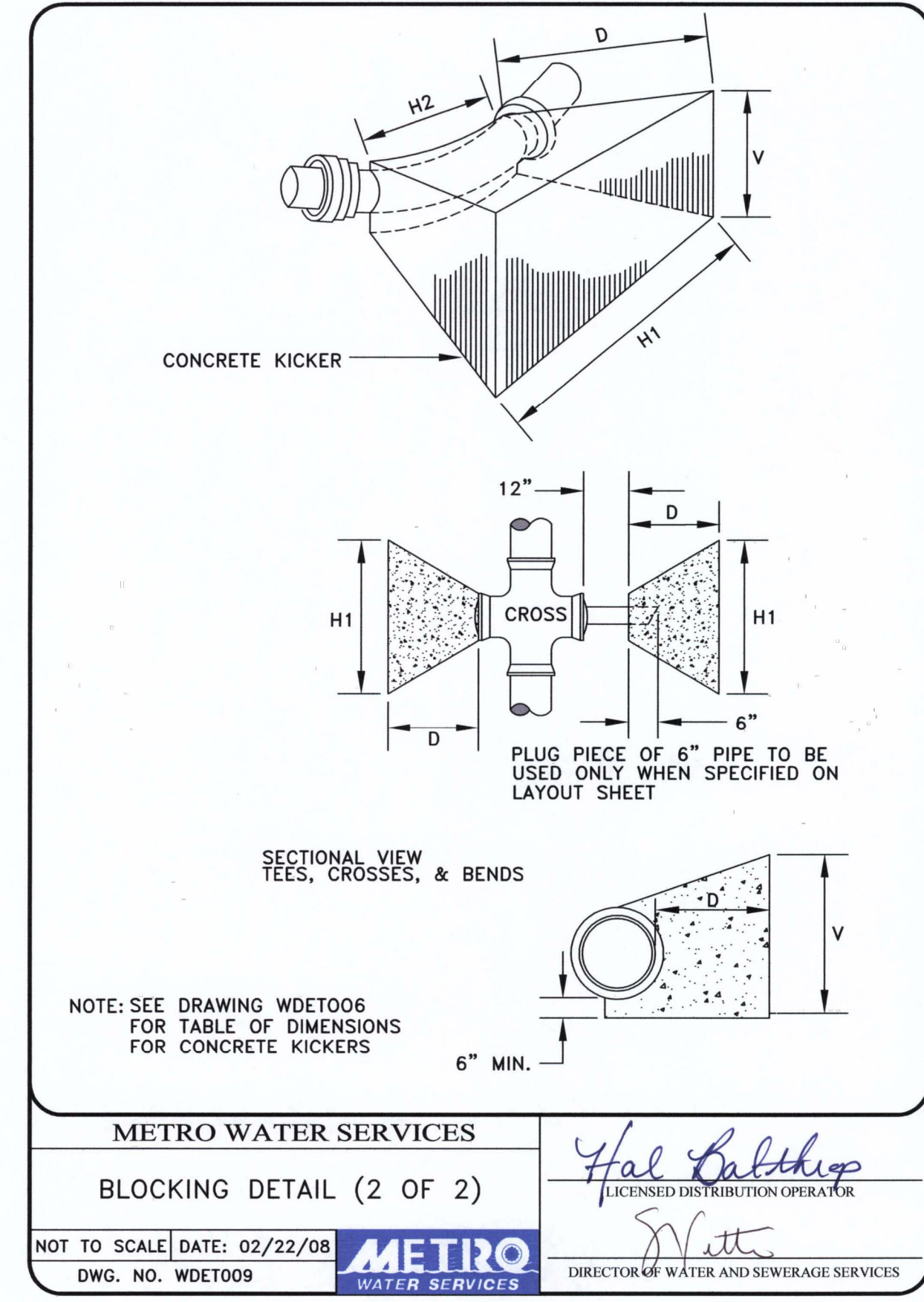
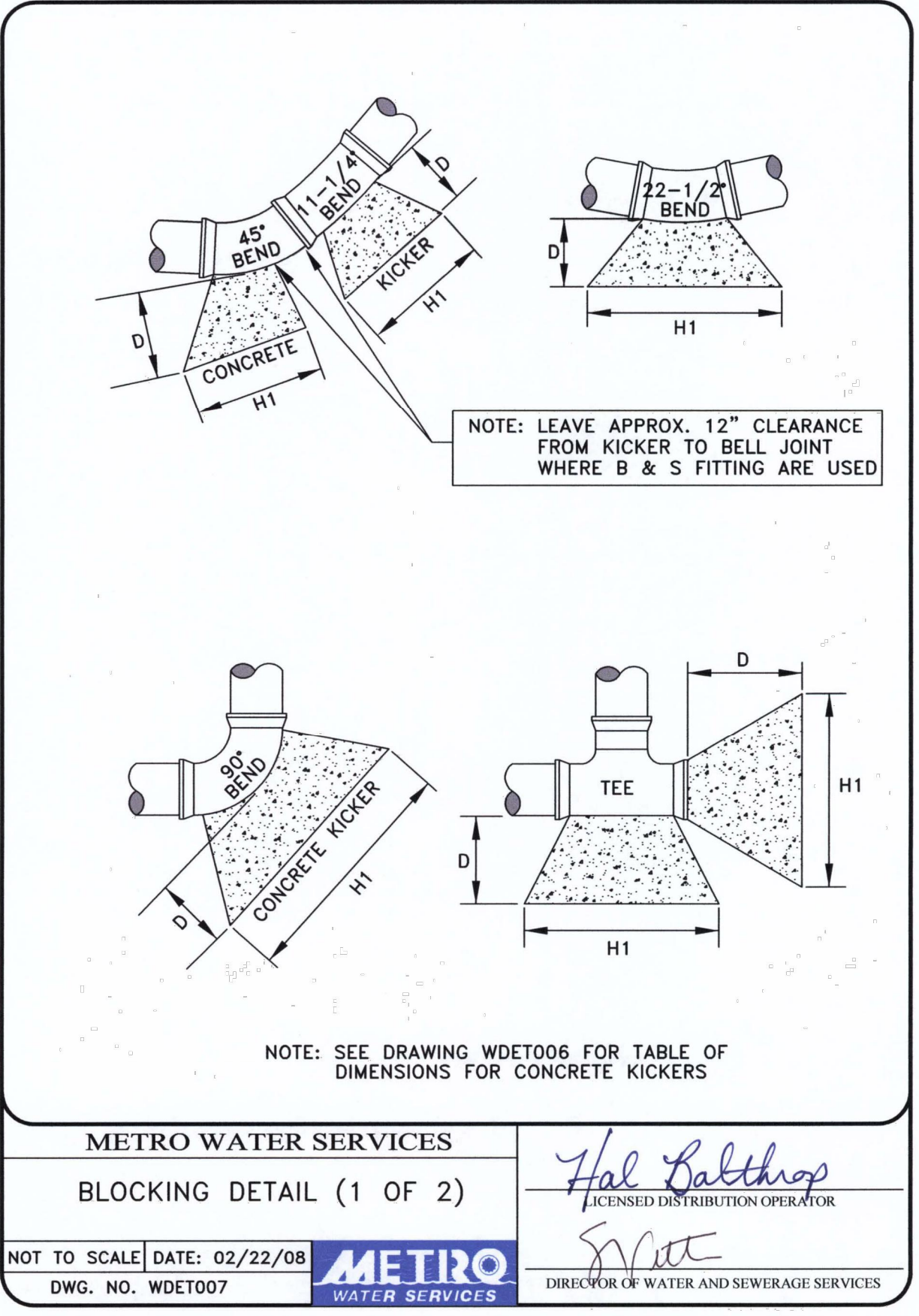


TABLE OF DIMENSIONS FOR CONCRETE KICKERS

SIZE OF PIPE (in.)	2" & 2-1/4"	3" & 4"	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
H1	18"	24"	24"	36"	48"	54"	66"					
H2	10"	12"	16"	18"	24"	30"	34"	36"	38"	42"	52"	58"
V	12"	12"	18"	18"	24"	24"	36"					
D	18"	18"	18"	18"	24"	24"	24"	24"	24"	24"	24"	24"
CU. FT.	1.90	2.25	3.50	5.05	7.15	13.40	22.50					
BENDS												
H1	18"	24"	30"	39"	54"	54"	69"					
H2	10"	12"	16"	18"	24"	32"	32"	48"	48"	60"	72"	96"
V	12"	12"	18"	18"	24"	24"	36"	48"				
D	18"	18"	18"	18"	24"	24"	24"	24"	24"	24"	24"	24"
CU. FT.	1.90	2.25	4.05	7.30	10.25	18.15	29.00					
45° BENDS												
H1	18"	18"	24"	30"	24"	42"	48"					
H2	6"	8"	10"	11"	18"	18"	30"	30"	40"	48"	48"	72"
V	12"	12"	16"	18"	21"	24"	36"					
D	18"	18"	18"	18"	24"	24"	24"	24"	24"	24"	24"	24"
CU. FT.	1.50	1.60	3.20	3.95	4.60	9.60	17.00					
22-1/2° BENDS												
H1	18"	18"	24"	24"	24"	24"	36"					
H2	6"	8"	10"	11"	18"	18"	30"	30"	36"	42"	48"	72"
V	12"	12"	16"	18"	21"	24"	27"					
D	18"	18"	18"	18"	24"	24"	24"	24"	24"	24"	24"	24"
CU. FT.	1.50	1.60	3.20	3.40	4.60	6.80	11.80					
11-1/4° BENDS												
H1	18"	18"	24"	24"	24"	24"	27"					
H2	6"	8"	10"	11"	18"	18"	24"	30"	40"	42"	48"	48"
V	12"	12"	16"	16"	21"	21"	27"					
D	18"	18"	18"	18"	24"	24"	24"	24"	24"	24"	24"	24"
CU. FT.	1.50	1.60	3.20	3.40	4.60	6.10	9.10					



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CAYCE UTILITY PHASE 1B  
MDHA  
NASHVILLE, TN



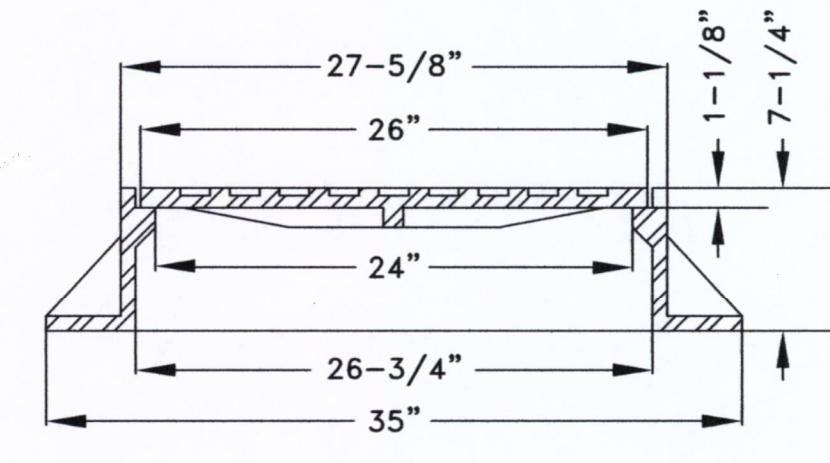
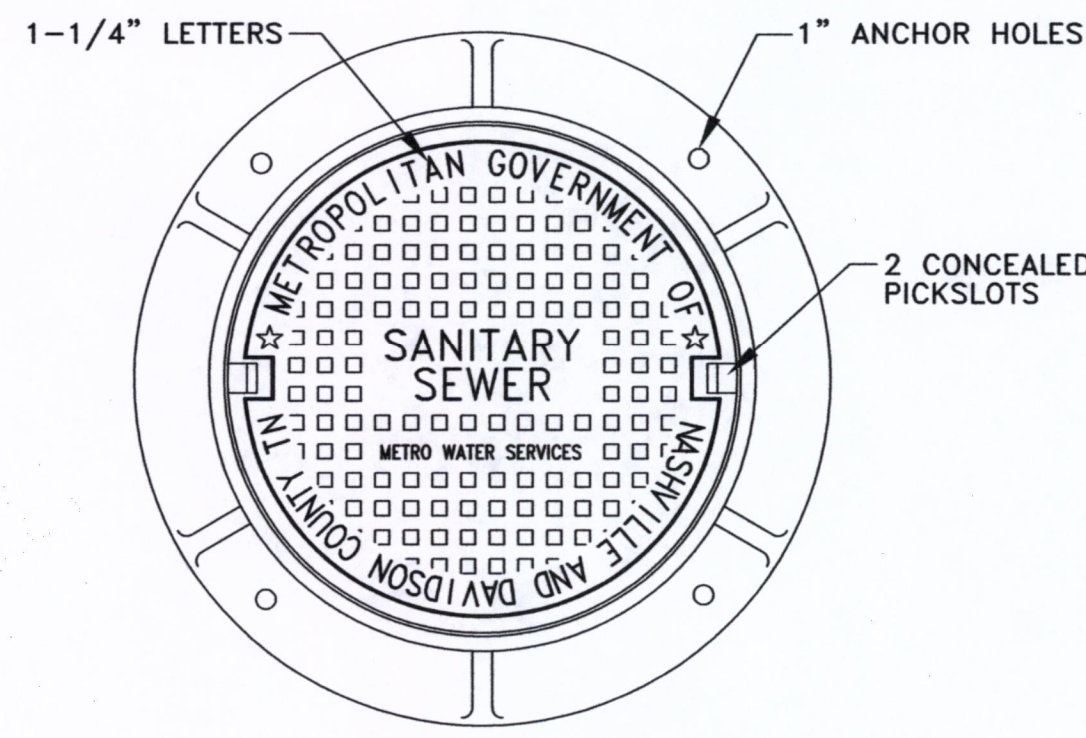
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DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

WATER AND SEWER DETAILS  
SHEET NUMBER  
**C8-01A**

**BID SET**

This document is



1150 METRO COVER  
 JOHN BOUCHARD & SONS CO.  
 COVER LETTERED "SANITARY SEWER" OR "STORM DRAIN"  
 CLASS 35B GRAY IRON  
 HEAVY DUTY, H2O LOAD RATED  
 (OR APPROVED EQUAL)

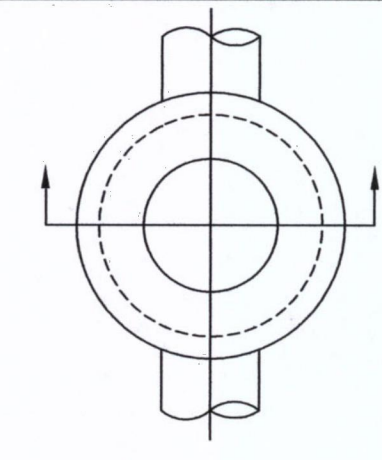
METRO WATER SERVICES  
 STANDARD MANHOLE  
 FRAME AND COVER

*Hal Baldrey*  
 LICENSED COLLECTION SYSTEM OPERATOR

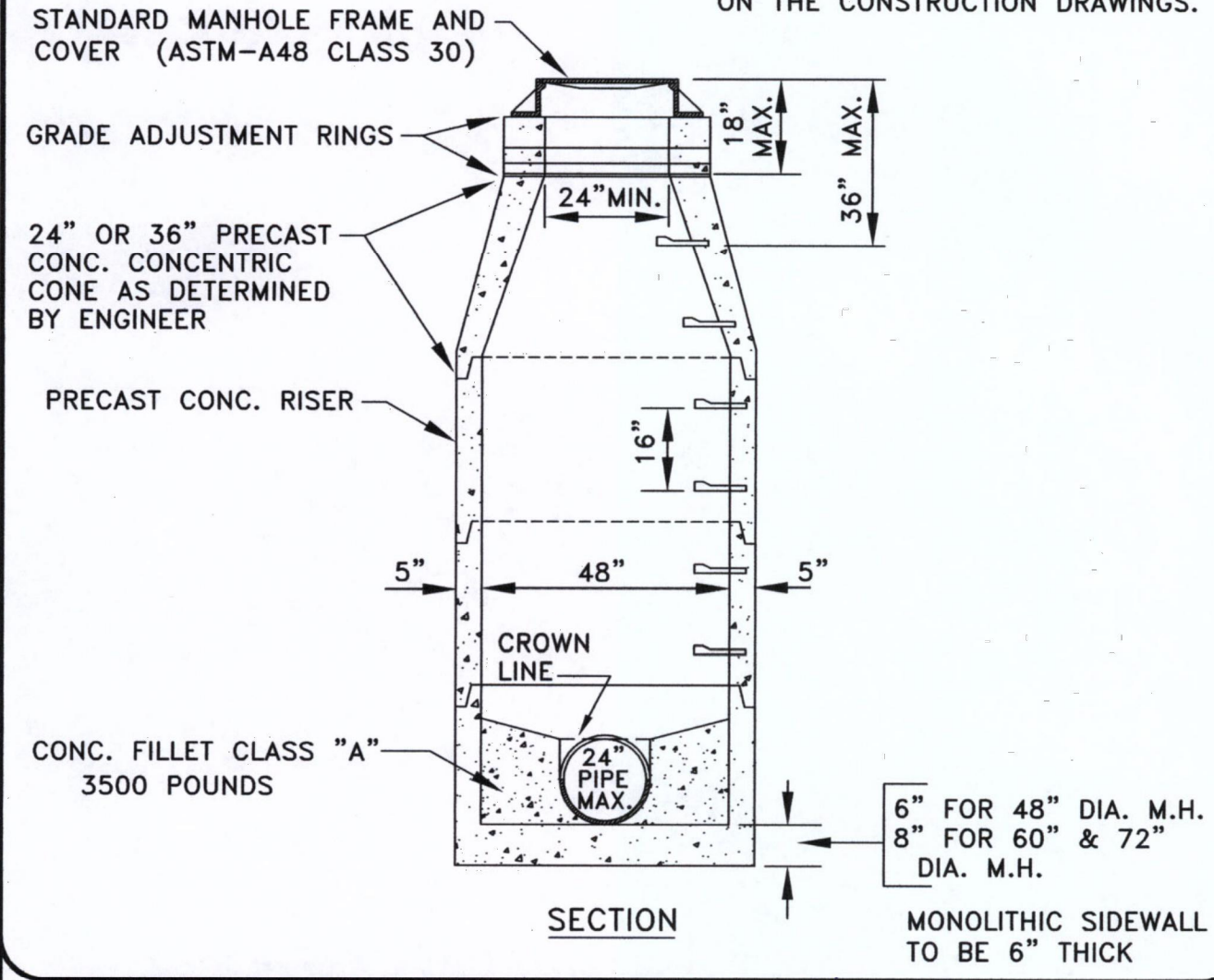
NOT TO SCALE DATE: 11/08/13  
 DWG. NO. SDET001



DIRECTOR OF WATER AND SEWERAGE SERVICES



NOTE:  
 STANDARD FRAME AND COVER SHALL  
 BE INSTALLED ON STANDARD  
 MANHOLE UNLESS NOTED OTHERWISE  
 ON THE CONSTRUCTION DRAWINGS.



METRO WATER SERVICES  
 STD. PRECAST CONC.  
 MANHOLE DETAIL

*Hal Baldrey*  
 LICENSED COLLECTION OPERATOR

NOT TO SCALE DATE: 05/05/08  
 DWG. NO. SDET003



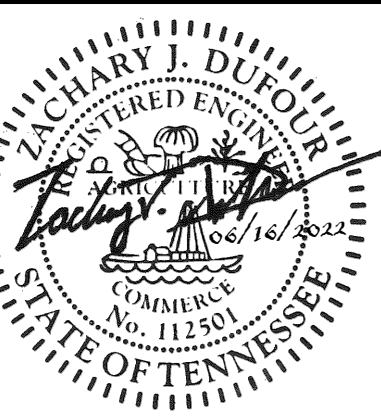
DIRECTOR OF WATER AND SEWERAGE SERVICES

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CAYCE UTILITY PHASE 1B  
 MDHA  
 NASHVILLE, TN



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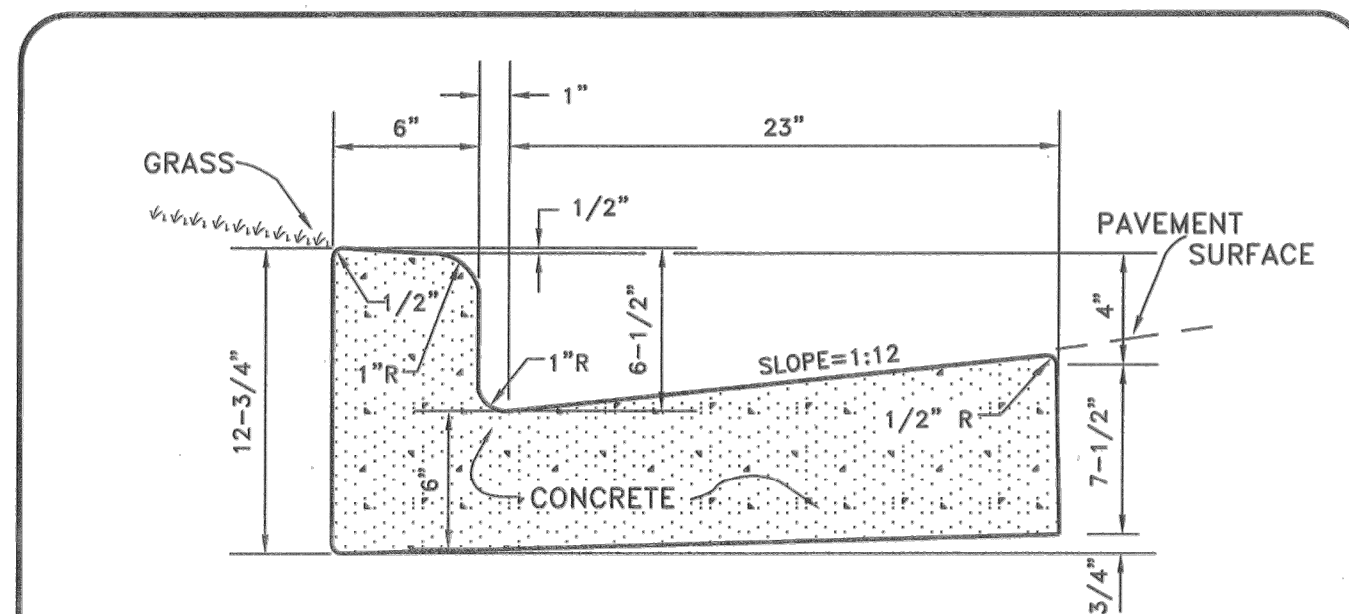
DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO.  
 118109018

WATER AND SEWER  
 DETAILS

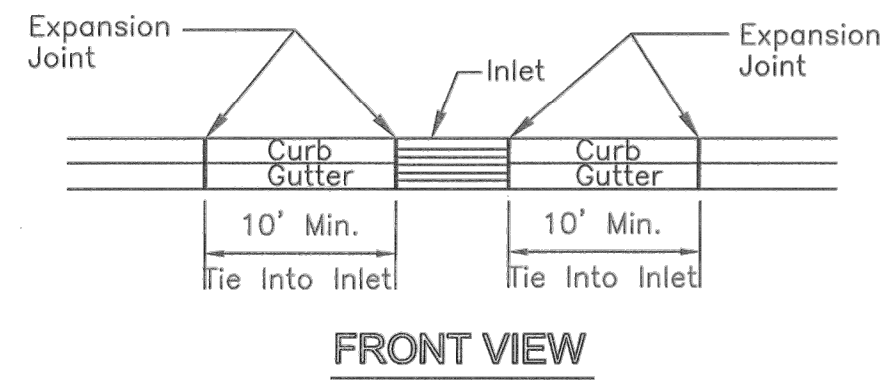
SHEET NUMBER  
**C8-01B**

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TYPICAL CROSS - SECTION



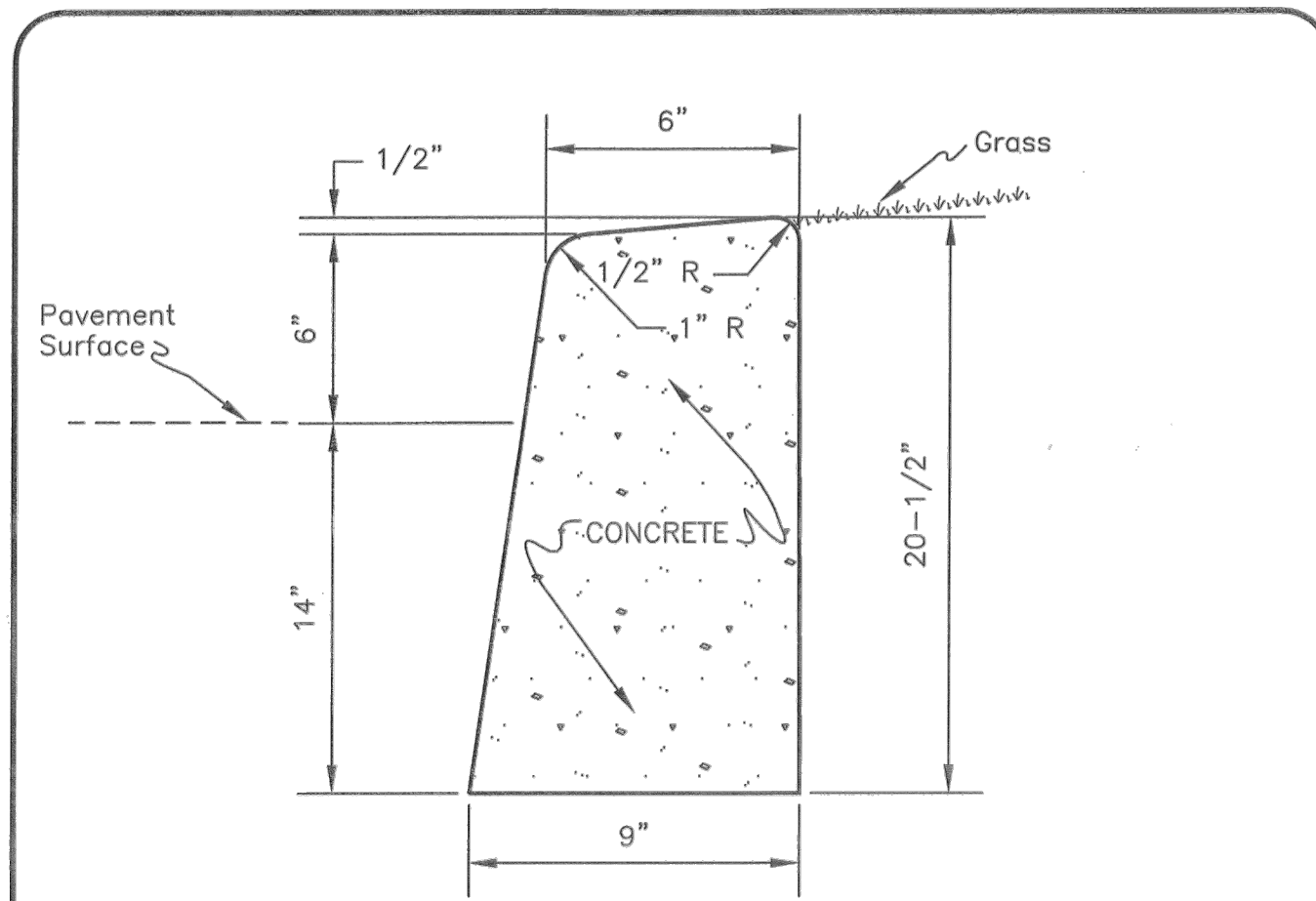
FRONT VIEW

GENERAL NOTES

- Expansion joints to be spaced a maximum of 100 feet apart or as directed by the Engineer.
- Expansion joints will also be required at tangent points, ramps, and inlets.
- Contraction joints are to be cut into curb and gutter every 10 feet to a depth of D/4, where D equals the thickness of the section. The spacing of 10 feet may be reduced at closures but no section of curb and gutter shall be less than 10 feet.
- There will be a minimum of 10 feet tie in at curb inlets on each side of the tie in. An expansion joint will be used on each side of the tie in.
- Cost of contraction joints to be included in the unit bid price for concrete curb with gutter.

NOT TO SCALE

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	STANDARD CURB WITH GUTTER	DWG. NO. ST-200
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 07/21/00 REVISED: 05/02/03



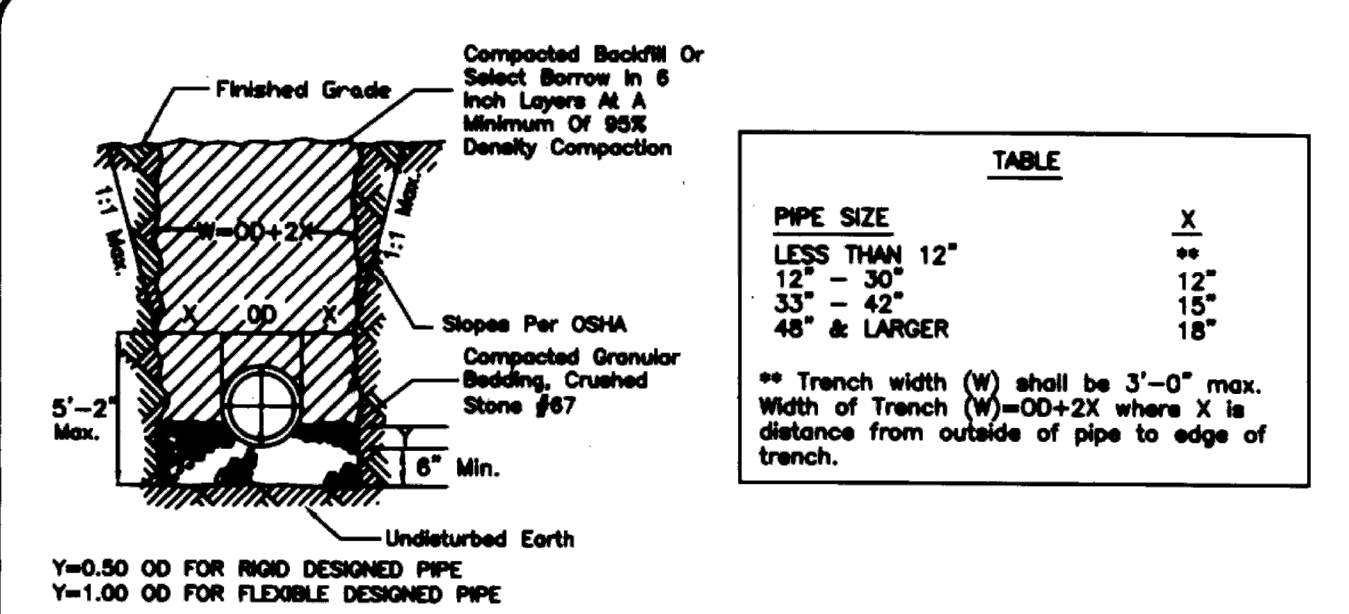
TYPICAL CROSS - SECTION

GENERAL NOTES

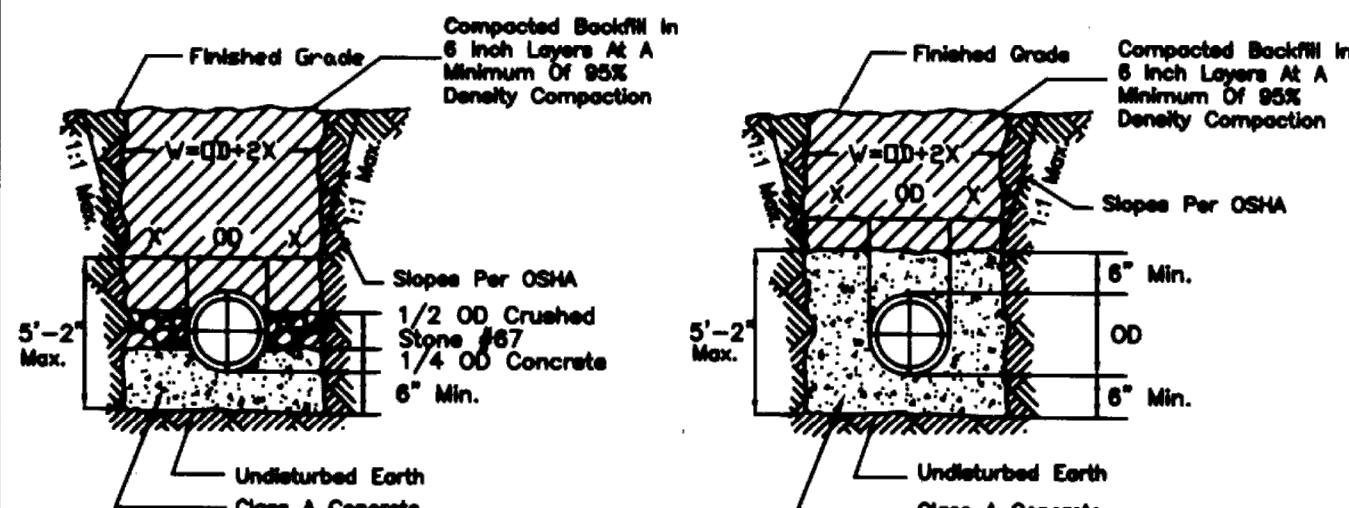
- Expansion joints to be spaced a maximum of 100 feet apart or as directed by the Engineer.
- Expansion joints will also be required at tangent points, ramps, and inlets.
- Contraction joints are to be cut into curb every 10 feet to a depth of D/4, where D equals the thickness of the section. The spacing of 10 feet may be reduced at closures but no section of curb shall be less than 10 feet.
- Cost of contraction joints to be included in the unit bid price for concrete curb.

NOT TO SCALE

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	CONCRETE POST CURB	DWG. NO. ST-201
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 07/24/00 REVISED: 05/02/03



STANDARD TRENCH



CONCRETE CRADLE

CONCRETE ENCASEMENT

GENERAL NOTES

- CONCRETE FOR CRADLES AND ENCASEMENTS TO HAVE F<sub>c</sub> = 3000 PSI AT 28 DAYS.
- POUR CONCRETE AGAINST UNDISTURBED EARTH.
- FOR CONTINUOUS CONDUIT IN TRENCH CONDITIONS THE WIDTH OF TRENCH (W) SHALL BE OD+2X MAXIMUM.
- THE WIDTH OF TRENCH FOR ALL OTHER PIPE DIAMETERS SHALL BE ACCORDING TO TABLE.
- BACKFILL MATERIAL IN ROADWAY SHALL BE CRUSHED STONE #67 COMPACTED IN 6" LAYERS FOR THE FULL DEPTH OF THE TRENCH.

NOT TO SCALE

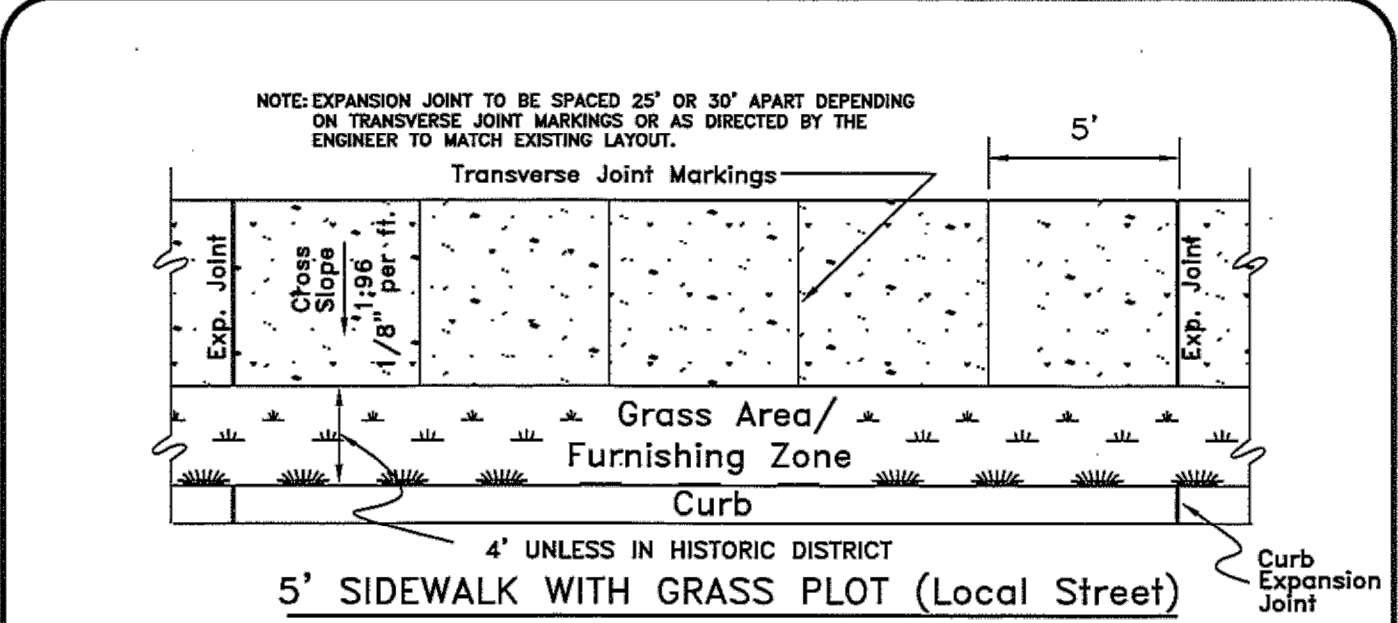
METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	TRENCH BACKFILL	DWG. NO. DR-180
ASST. DIR. ENG.: <i>Mark May</i>	DATE: 1/20/01	REVISED: 12/01/00
DIRECTOR: <i>Russell</i>	DATE: 1-2-01	



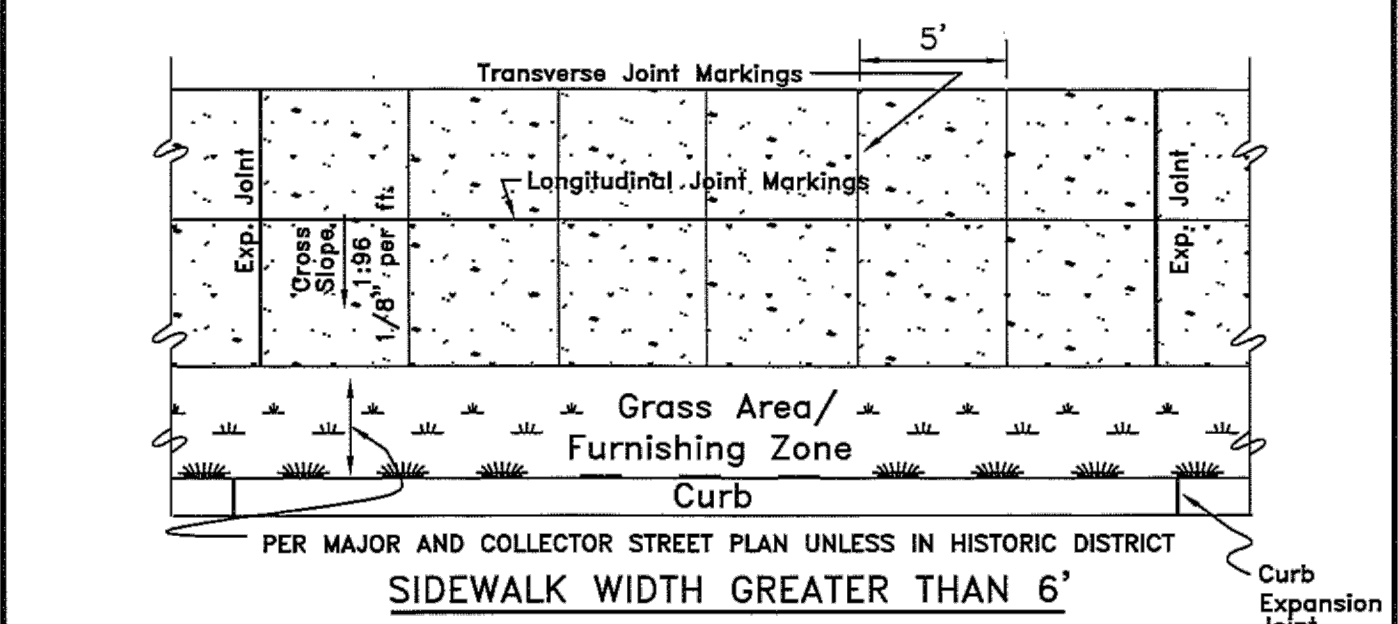
NOTES:

- CURB RAMPS SHALL BE PROVIDED TO ALLOW ALL USERS TO MAKE THE TRANSITION IN GRADE FROM THE STREET TO THE SIDEWALK.
- CURB RAMPS SHALL BE CONSTRUCTED TO THE DIMENSIONS AND FINISHED ELEVATIONS AS SPECIFIED IN THE PLANS AND/OR CONTRACT DOCUMENTS AND SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. SURFACE TEXTURE OF THE CURB RAMP SHALL BE STABLE, FIRM, AND SLIP-RESISTANT. THE SURFACE SHALL BE COARSE BROOMED FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. CARE SHALL BE TAKEN TO ASSURE AN UNIFORM GRADE ON THE CURB RAMP. LONGITUDINAL AND TRANSVERSE JOINT MARKINGS SHALL NOT BE ALLOWED ON THE LANDINGS OR RAMPS.
- DRAINAGE AND UTILITY STRUCTURES SHALL NOT BE PLACED IN CURB RAMP OR LANDING.
- THE GUTTER LINE PROFILE OF THE STREET SHALL BE MAINTAINED THROUGHOUT THE AREA OF THE CURB RAMP.
- THE FURNISHING ZONE BUFFERS PEDESTRIANS FROM THE ADJACENT ROADWAY, AND IS ALSO THE AREA WHERE ELEMENTS SUCH AS STREET TREES, SIGNAL POLES, UTILITY POLES, STREET LIGHTS, CONTROLLER BOXES, HYDRANTS, SIGNS, PARKING METERS, DRIVEWAY APRONS, GRATES, HATCH COVERS, AND STREET FURNITURE ARE PROPERLY LOCATED.

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	STANDARD CURB RAMP NOTES	DWG. NO. ST-215
ASST. DIR. ENG.: <i>Mark May</i>	DATE: 11/21/00	REVISED: 11/10/00
DIRECTOR: <i>Russell</i>	DATE: 11-20-00	



5' SIDEWALK WITH GRASS PLOT (Local Street)



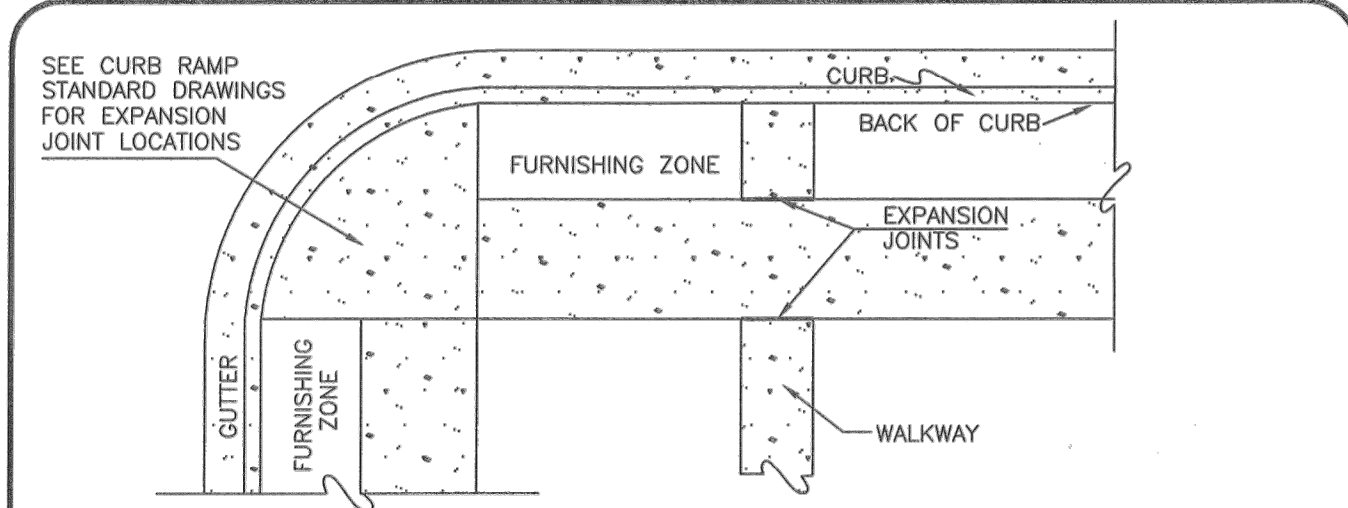
SIDEWALK WIDTH GREATER THAN 6'

GENERAL NOTES

- SIDEWALKS SHALL BE A MINIMUM OF 4 INCHES IN THICKNESS.
- MAXIMUM CROSS SLOPE FOR SIDEWALKS SHALL NOT EXCEED 1:48 (VERTICAL-HORIZONTAL).
- IN HISTORIC DISTRICTS THE STANDARD SHALL BE THE PREVAILING CHARACTERISTIC OF THE BLOCK FACE.
- SIDEWALK SHALL BE CONSTRUCTED OF WHITE CONCRETE, BRICK, OR EXPOSED AGGREGATE PER METRO DEPARTMENT OF PUBLIC WORKS TECHNICAL SPECIFICATIONS, SECTION 02522.
- IF APPROVED THE FURNISHING ZONE MAY CONTAIN LANDSCAPE MATERIALS SUCH AS CONCRETE, BRICK, OR PAVERS.
- COMPACTED STONE BASE, PUG MILL MIX, 4" THICK SHALL BE APPLIED TO SUB GRADE PRIOR TO INSTALLING SIDEWALK.
- FURNISHING ZONE IS AN AREA FOR OBSTRUCTIONS IN THE SIDEWALK. EXAMPLES ARE OUTDOOR CAFES, POWER POLES, FIRE HYDRANTS, SIGNS, ETC.
- IN THE EVENT OF ANY CONFLICT, DISCREPANCY, OR INCONSISTENCY AMONG THE PLANS AND THESE STANDARD DETAILS, THE REQUIREMENTS OF THE STANDARD DETAILS SHALL GOVERN.

NTS

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	SIDEWALK CONSTRUCTION	DWG. NO. ST-210
DIR. OF ENG.: <i>Russell</i>	DATE: 9/12/17	REVISED: 05/02/03 REVISED: 11/24/03 REVISED: 06/23/04 REVISED: 09/11/17



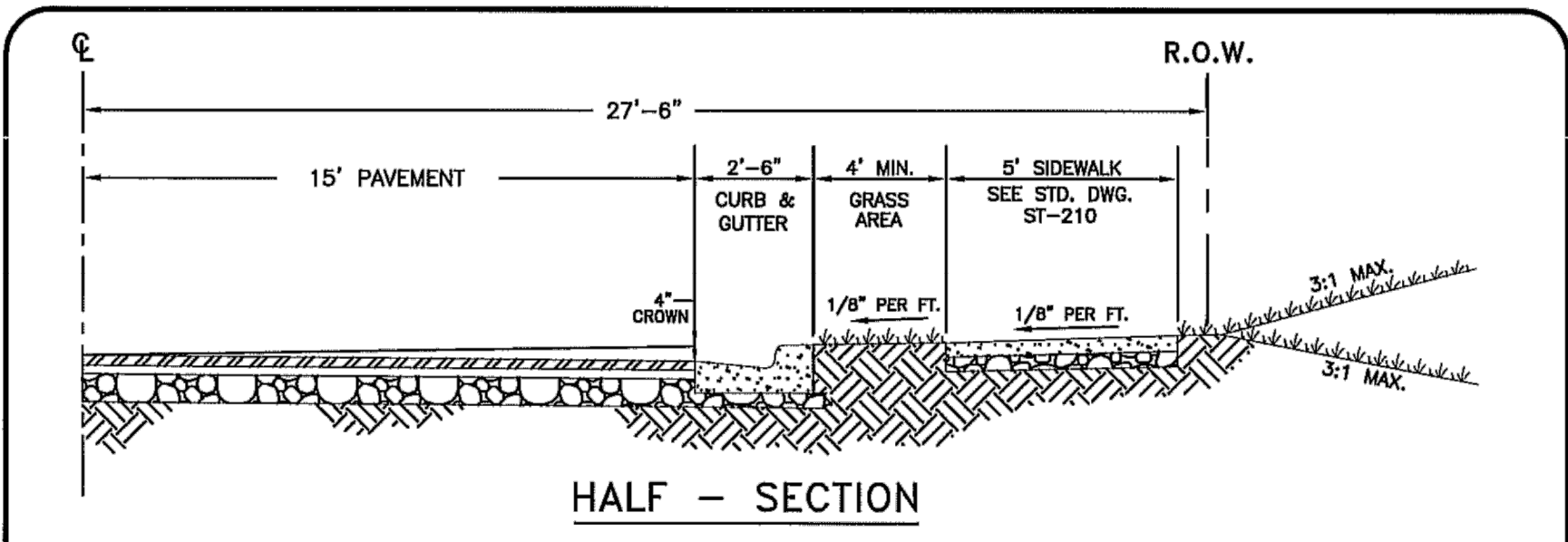
TYPICAL EXPANSION JOINT DETAIL

- EXPANSION JOINTS TO BE PLACED AS SHOWN ON THIS DRAWING OR AS DIRECTED BY THE ENGINEER, AT CURB RETURNS, WHERE BUILDINGS ARE ADJACENT TO SIDEWALKS, AND AT WALKWAYS.
- COST OF ALL EXPANSION JOINTS TO BE INCLUDED IN UNIT BID PRICE FOR SIDEWALKS.
- ONE-HALF INCH EXPANSION JOINTS TO BE USED IN ALL LOCATIONS.
- THIS METRO STANDARD DRAWING IS FOR THE EXPANSION JOINTS IN SIDEWALKS. SEE OTHER METRO STANDARD DRAWINGS FOR CURB RAMP PLACEMENT, SIDEWALK DETAILS, OBSTRUCTIONS, ETC.
- THE EXPANSION JOINT MATERIAL SHALL BE RECYCLED MATERIAL 1/2" THICK AS MANUFACTURED BY J.D. RUSSELL COMPANY, 1-800-889-8872, WWW.JDRUSSELL.COM, OR APPROVED EQUAL.

NOT TO SCALE

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	STANDARD EXPANSION JOINT FOR CONCRETE SIDEWALK	DWG. NO. ST-209
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 03/01/02 REVISED: 05/02/03

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	RESIDENTIAL STREET PARKING BOTH SIDES (55' R.O.W.)	DWG. NO. ST-252B
DIR. OF ENG.: <i>Mark May</i>	DATE: 2/7/09	REVISED: 11/11/09



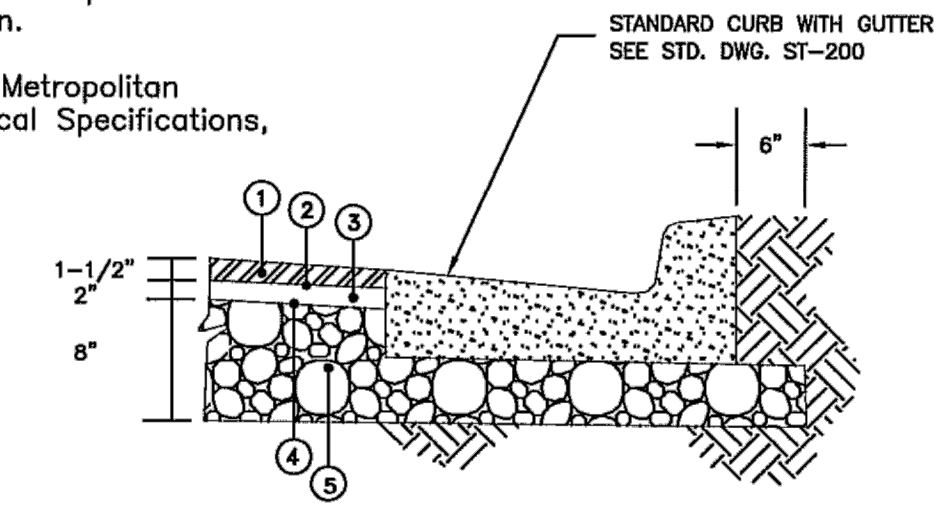
HALF - SECTION

- General Notes
- Placement of sidewalks shall be in accordance with the Subdivision Regulations of the Metropolitan Planning Commission, latest revision.
  - Construction shall conform to the Metropolitan Department of Public Works Technical Specifications, latest revision.

PAVEMENT SCHEDULE

- 1-1/2" ASPHALTIC CONCRETE SURFACE (411D)
- TACK COAT (SS-1)
- 2" BITUMINOUS BINDER (B-M2)
- PRIME COAT (RS-2)
- 8" STONE (GRADING D PUG MILL MIX)

PAVEMENT COURSES



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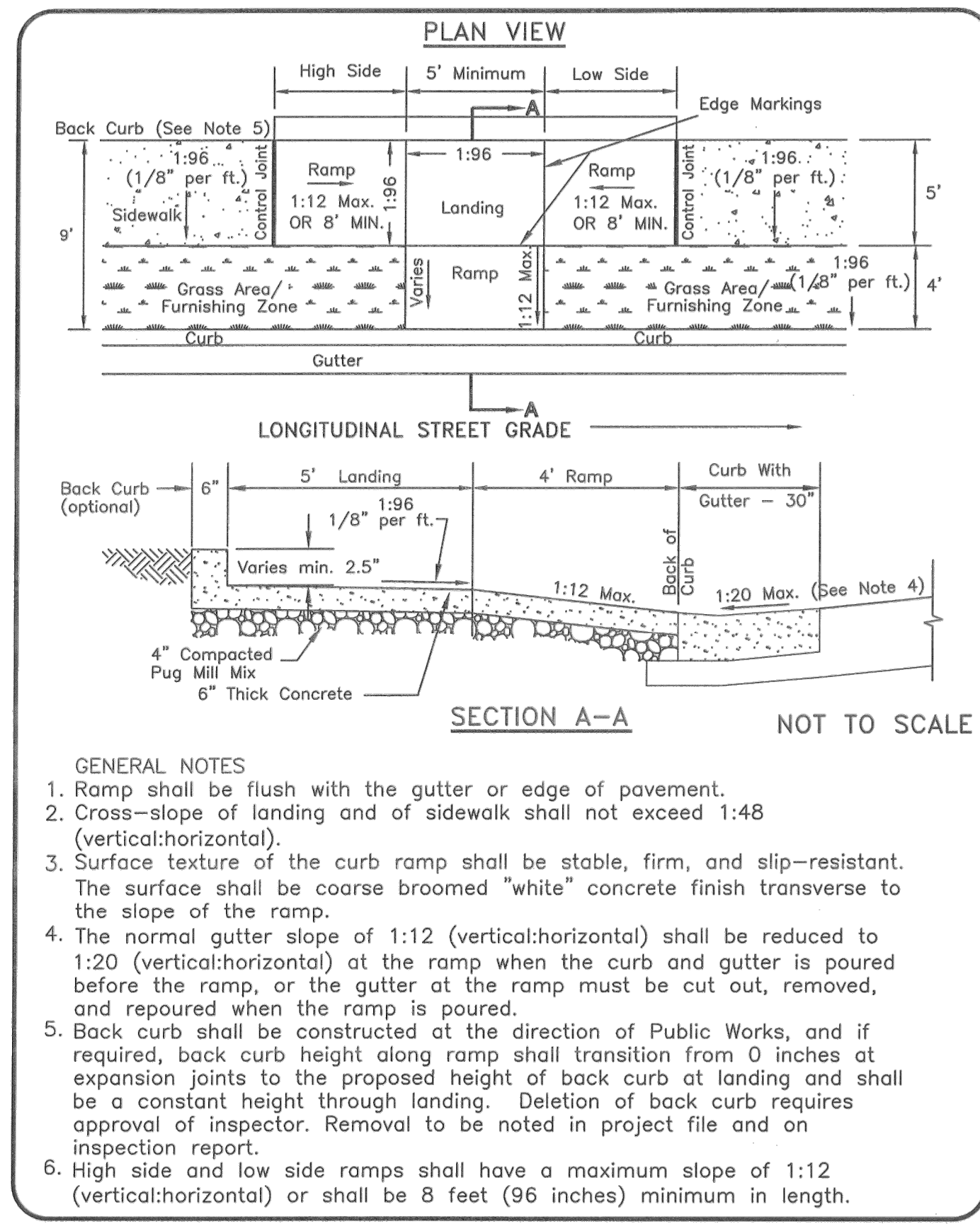
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**CAYCE UTILITY PHASE 1B**  
**MDHA**  
 NASHVILLE, TN



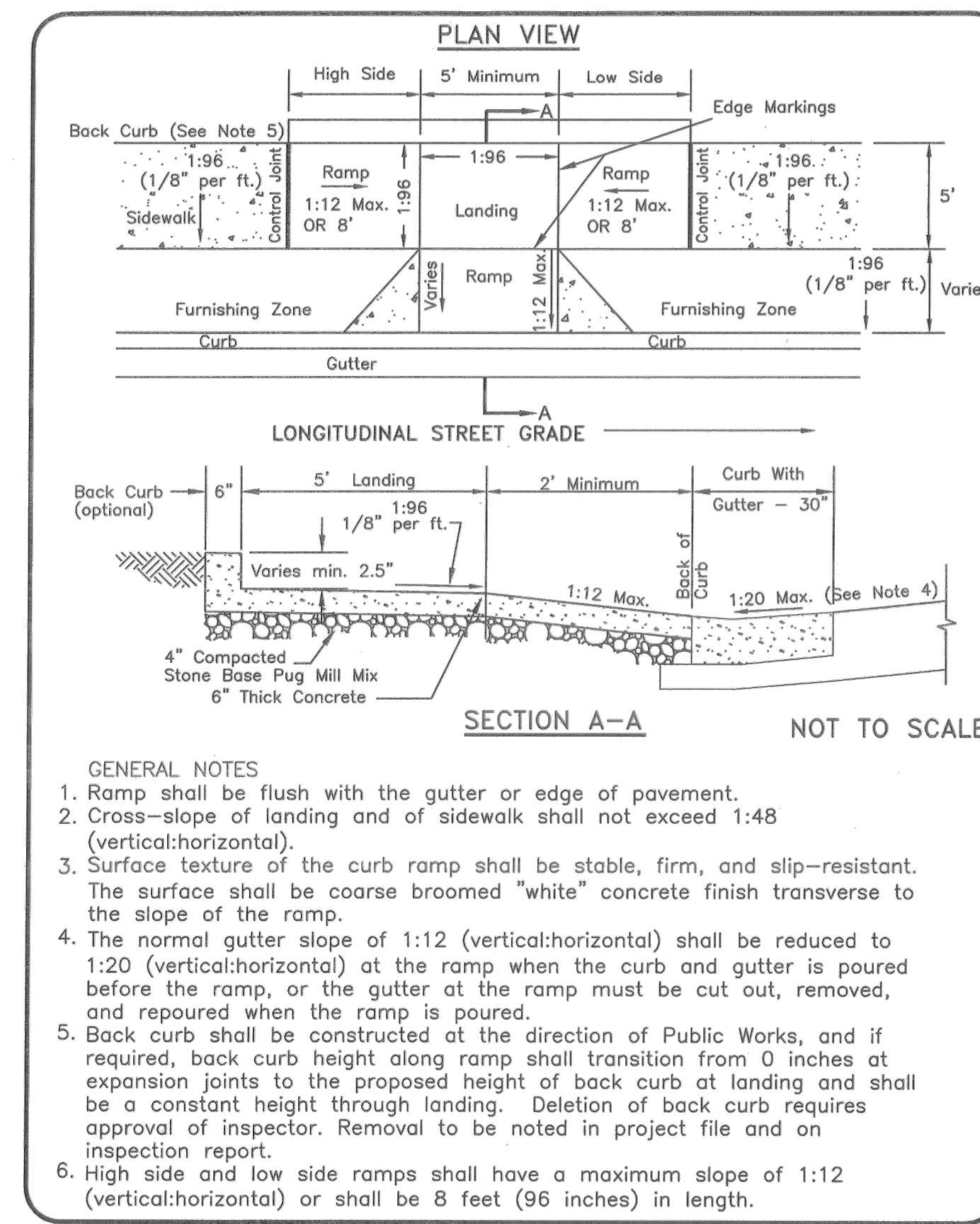
DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO. 118109018	
ROADWAY DETAILS	
SHEET NUMBER	
<b>C8-02A</b>	



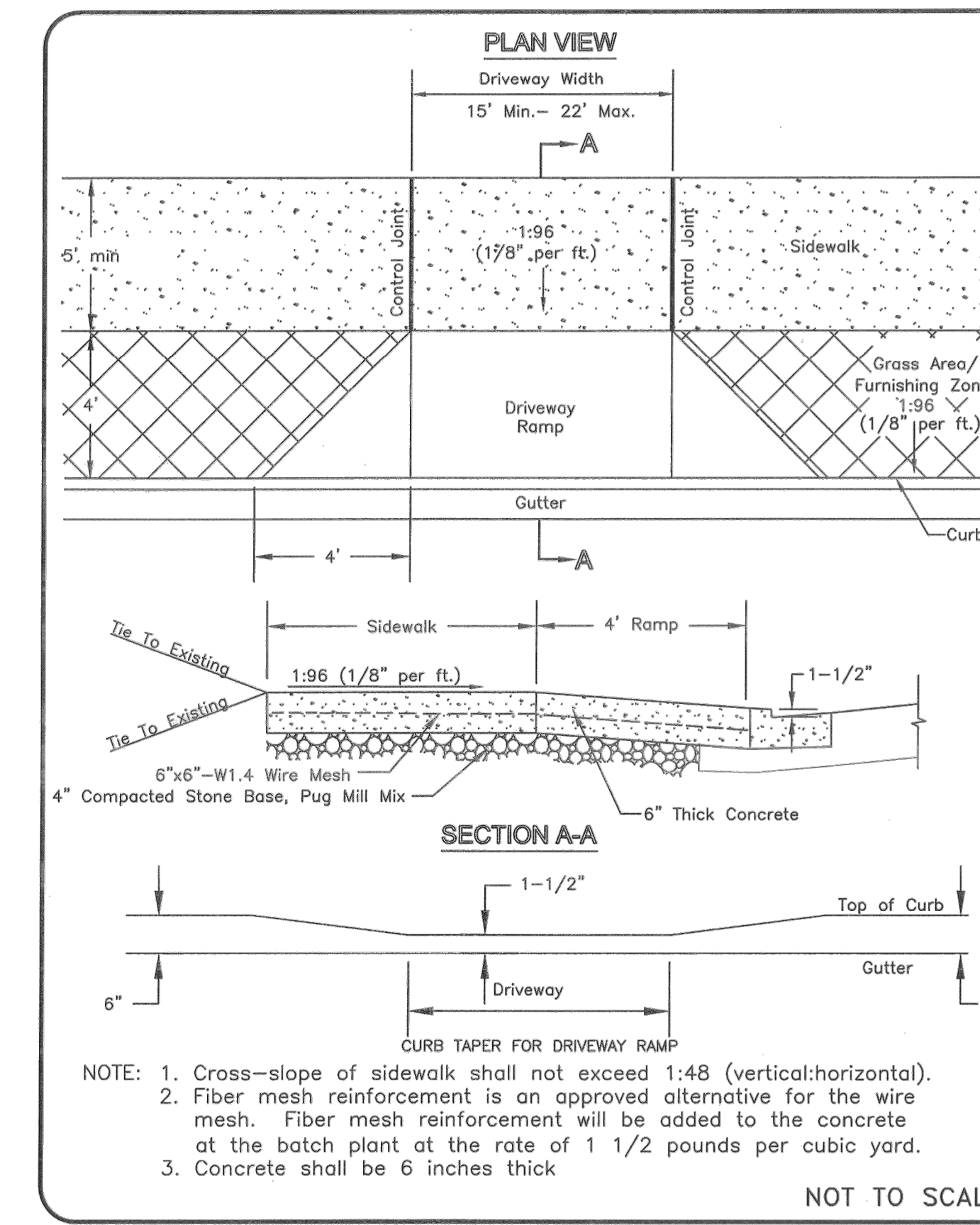
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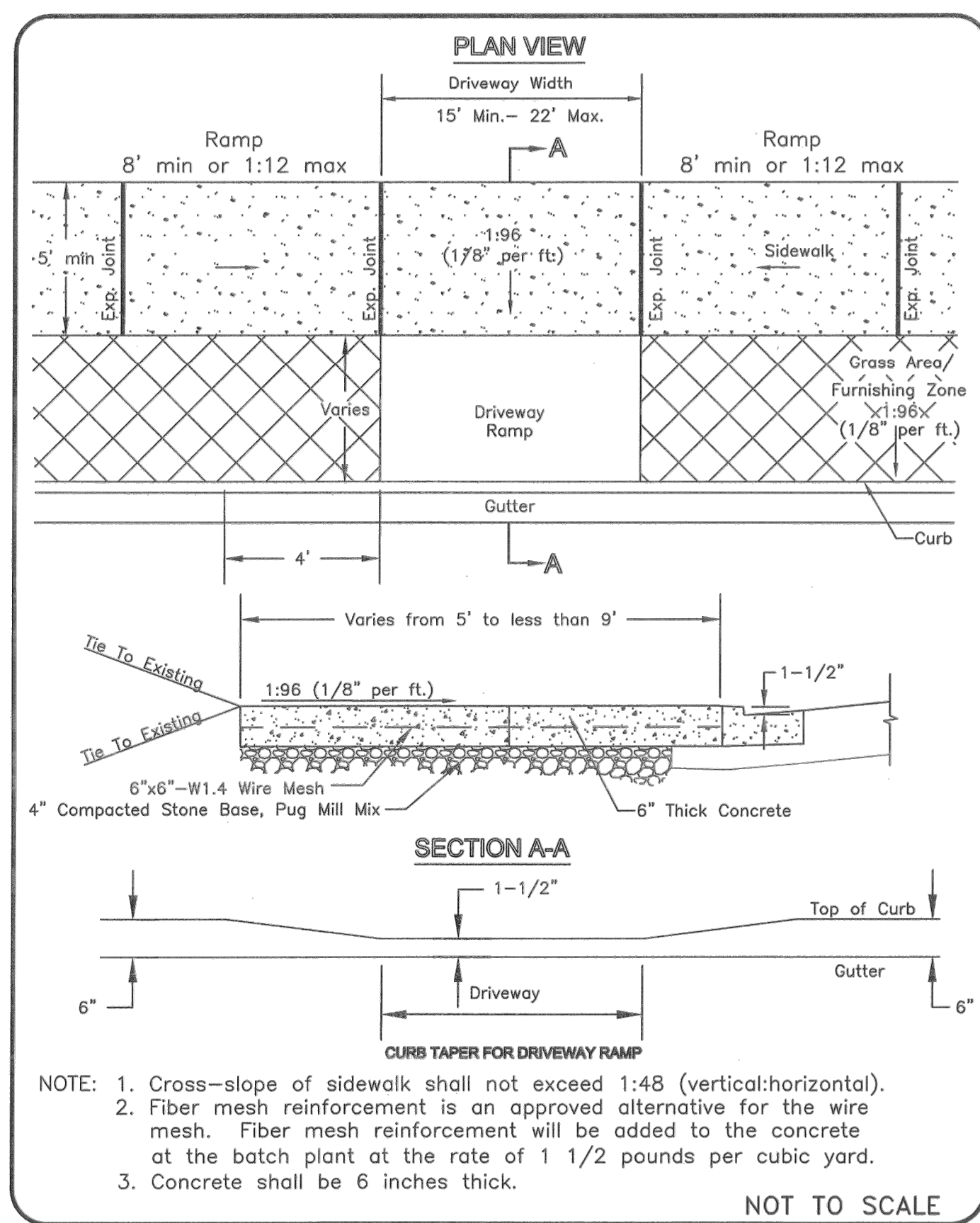
METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	NEW CONSTRUCTION CURB RAMP	DWG. NO. ST-320
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 07/18/02 REVISED: 05/08/03



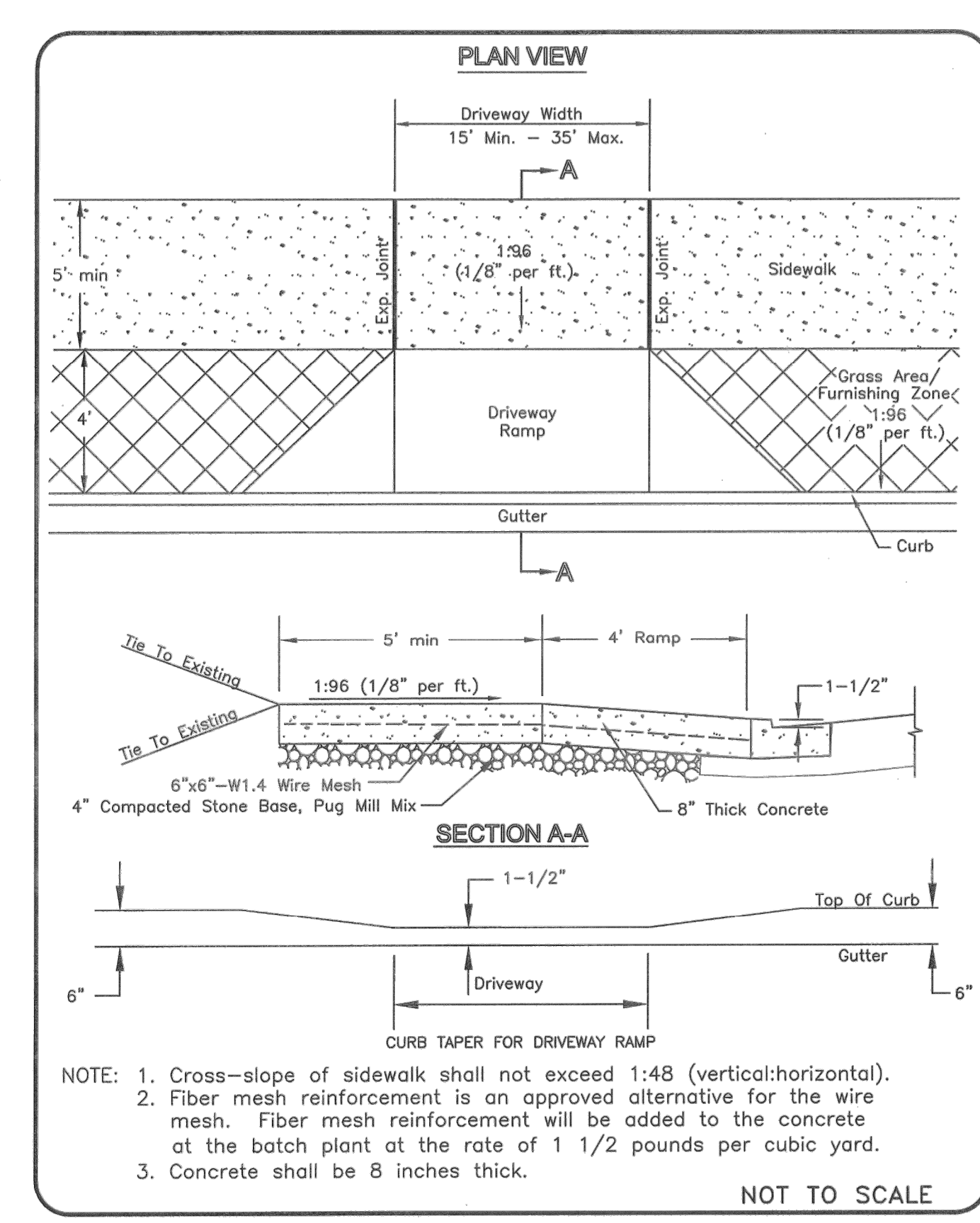
METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	ALTERATION CONSTRUCTION CURB RAMP WITH SIDEWALK LESS THAN 9 FEET	DWG. NO. ST-321
DIR. OF ENG.: <i>Mark May</i>	DATE: 7/15/04	REVISED: 06/30/03 REVISED: 07/31/02 REVISED: 05/08/03



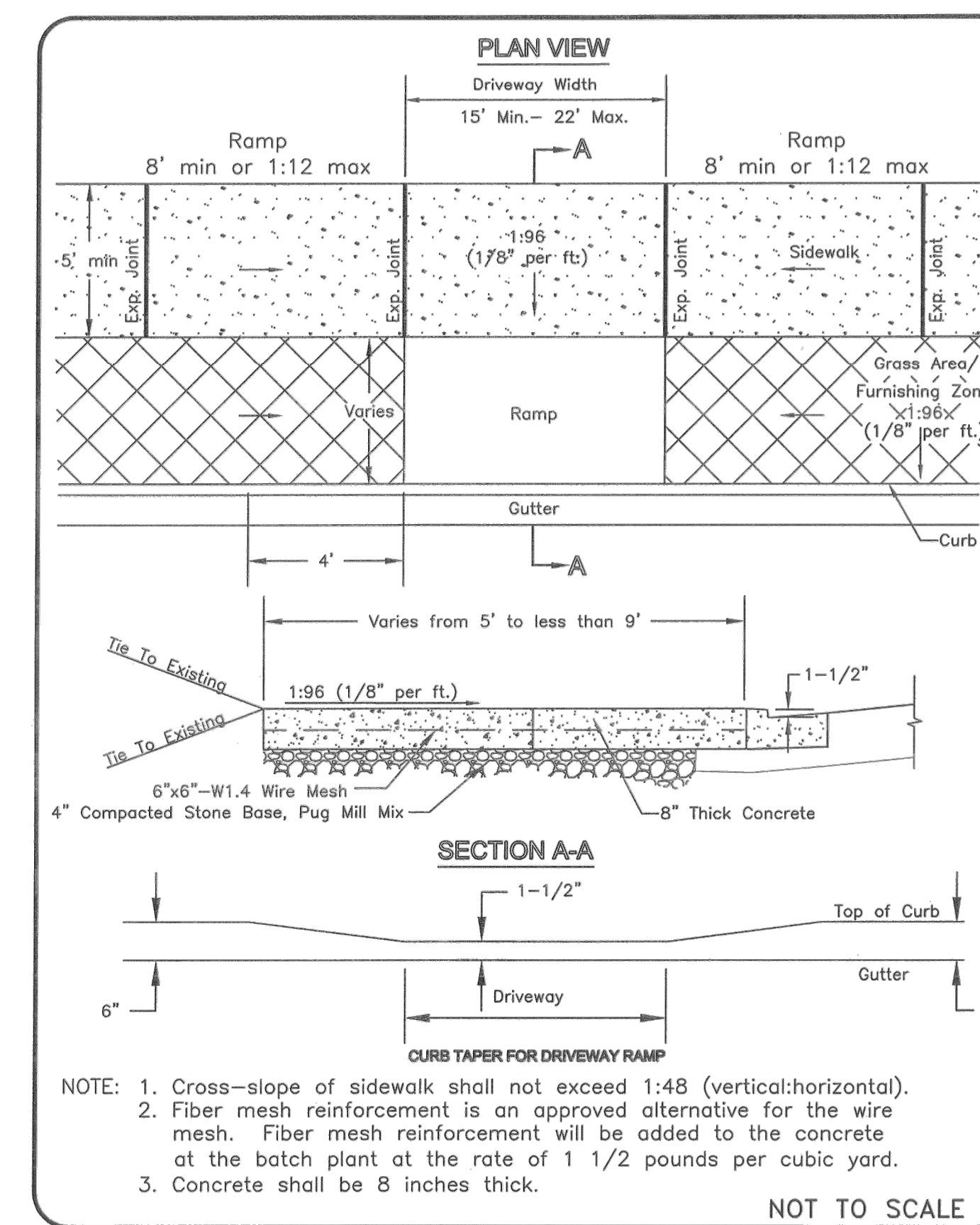
METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	NEW CONSTRUCTION RESIDENTIAL DRIVEWAY RAMP	DWG. NO. ST-322
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 07/27/02 REVISED: 05/08/03



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	ALTERATION CONSTRUCTION RESIDENTIAL DRIVEWAY RAMP WITH SIDEWALK LESS THAN 9 FEET	DWG. NO. ST-323
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 01/27/03 REVISED: 05/08/03



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	NEW CONSTRUCTION COMMERCIAL DRIVEWAY RAMP	DWG. NO. ST-324
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 07/27/02 REVISED: 05/08/03



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	ALTERATION CONSTRUCTION COMMERCIAL DRIVEWAY RAMP WITH SIDEWALK LESS THAN 9 FEET	DWG. NO. ST-325
DIR. OF ENG.: <i>Mark May</i>	DATE: 5/12/03	REVISED: 01/27/03 REVISED: 05/08/03

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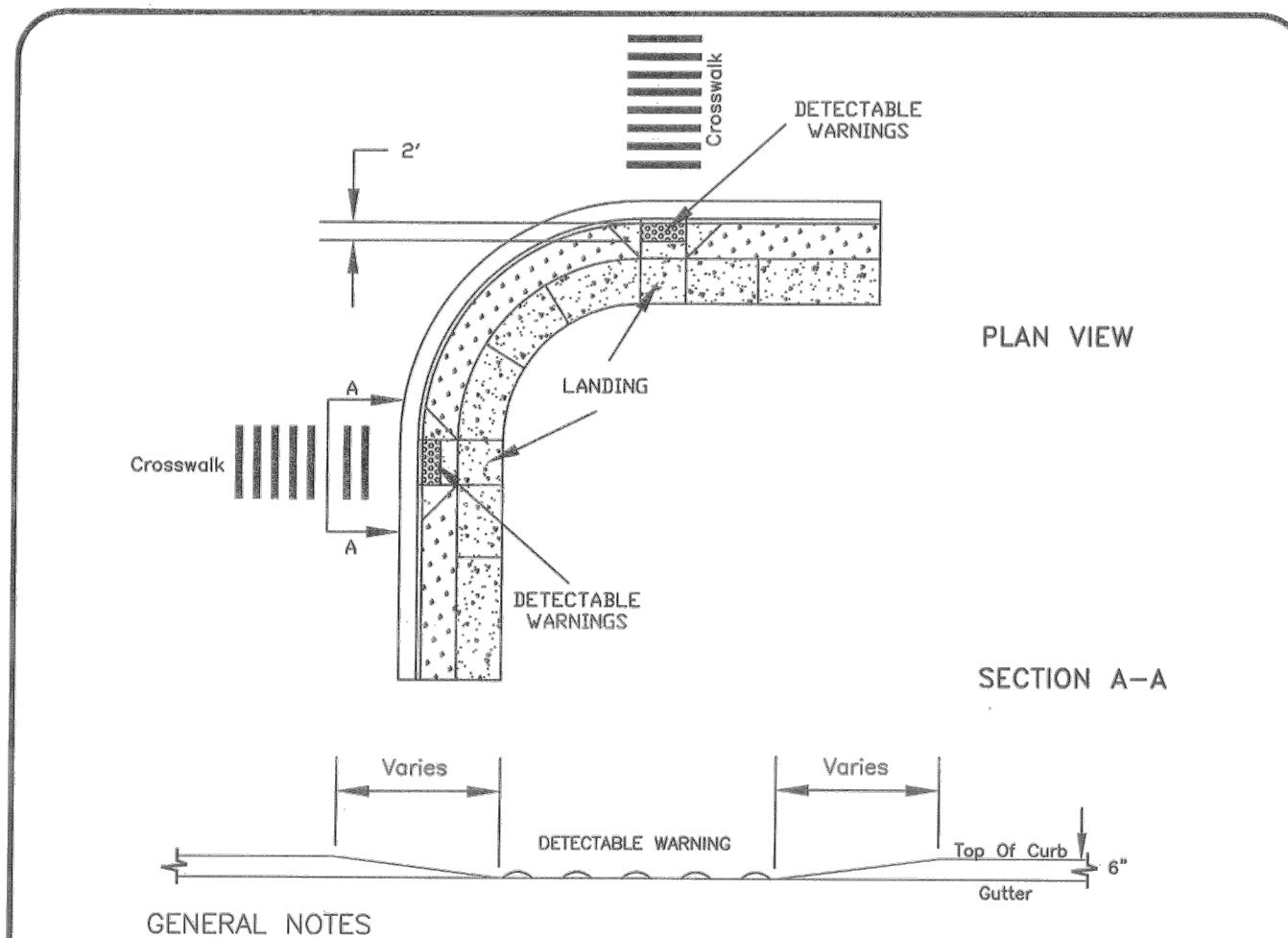
DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/16/2022
KIMLEY-HORN PROJECT NO.:	118109018

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REVISIONS									

ROADWAY DETAILS

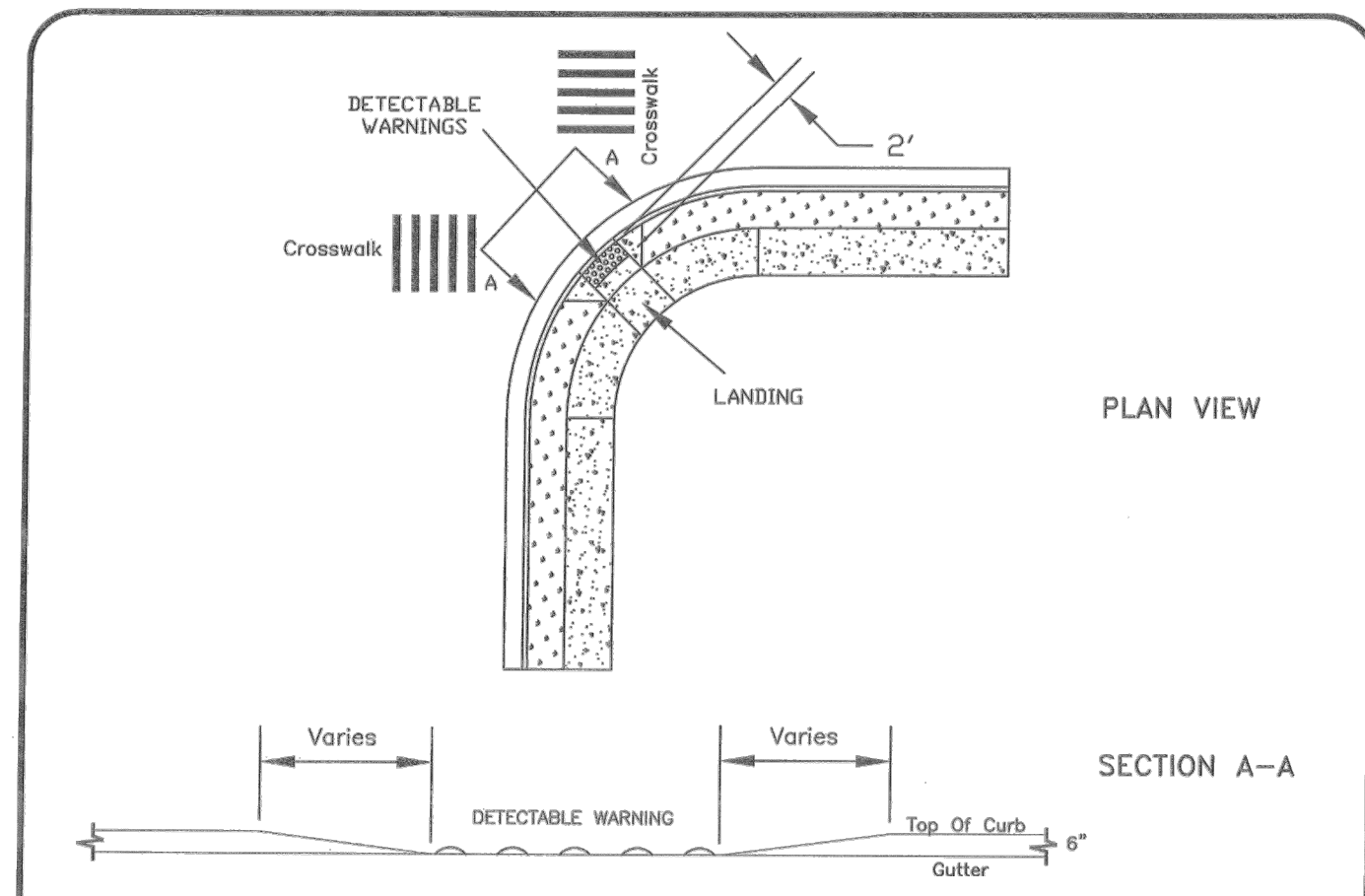
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- GENERAL NOTES
1. FOR CURB RADIUS EQUAL TO OR LESS THAN 25'.
  2. SEE CURB RAMP STANDARD DRAWINGS FOR CONSTRUCTION DETAILS.
  3. ALL MARKINGS TO CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  4. THE LAYOUT, SIZE, DIMENSIONS, HEIGHT OF THE DETECTABLE WARNINGS SHALL MEET THE LATEST DESIGN STANDARDS AS ISSUED BY THE ACCESS BOARD.
  5. THE DETECTABLE WARNINGS AND INSTALLATIONS SHALL MEET THE MPW SPECIFICATION 02523.
  6. IN THE EVENT OF ANY CONFLICT, DISCREPANCY, OR INCONSISTENCY AMONG THE PLANS AND THESE STANDARD DETAILS, THE REQUIREMENTS OF THE STANDARD DETAILS SHALL GOVERN.
  7. THE COLOR OF THE DETECTABLE WARNING STRIP SHALL BE "SAFETY YELLOW".
- NOT TO SCALE

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	DETECTABLE WARNINGS AT CURB RETURNS WITH RADIUS 25' OR LESS	DWG. NO. ST-329
DIR. OF ENG.: <i>Mark Macy</i>	DATE: 6/17/05	REVISED: 06/17/05 REVISED: 08/13/04 REVISED:



- GENERAL NOTES
1. FOR CURB RADIUS GREATER THAN 25'.
  2. SEE CURB RAMP STANDARD DRAWINGS FOR CONSTRUCTION DETAILS.
  3. ALL MARKINGS TO CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  4. THE LAYOUT, SIZE, DIMENSIONS, HEIGHT OF THE DETECTABLE WARNINGS SHALL MEET THE LATEST DESIGN STANDARDS AS ISSUED BY THE ACCESS BOARD.
  5. THE DETECTABLE WARNINGS AND INSTALLATIONS SHALL MEET THE MPW SPECIFICATION 02523.
  6. IN THE EVENT OF ANY CONFLICT, DISCREPANCY, OR INCONSISTENCY AMONG THE PLANS AND THESE STANDARD DETAILS, THE REQUIREMENTS OF THE STANDARD DETAILS SHALL GOVERN.
  7. THE COLOR OF THE DETECTABLE WARNING STRIP SHALL BE "SAFETY YELLOW".
- NOT TO SCALE

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	DETECTABLE WARNINGS AT CURB RETURNS WITH RADIUS GREATER THAN 25'	DWG. NO. ST-330
DIR. OF ENG.: <i>Mark Macy</i>	DATE: 6/17/05	REVISED: 06/17/05 REVISED: 08/13/04 REVISED:

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DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/16/2022  
 KIMLEY-HORN PROJECT NO. 118109018

ROADWAY DETAILS

SHEET NUMBER  
**C8-02C**

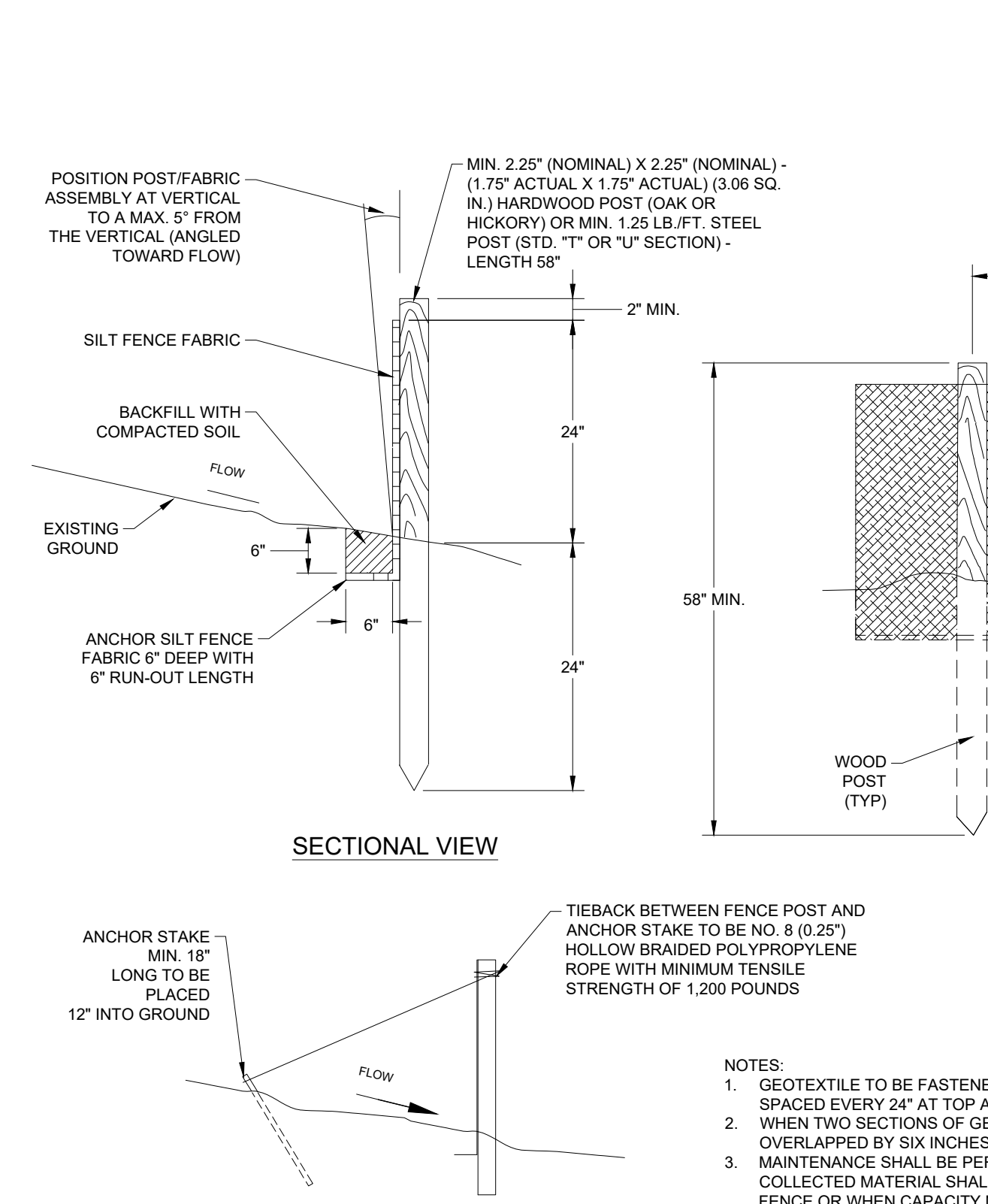
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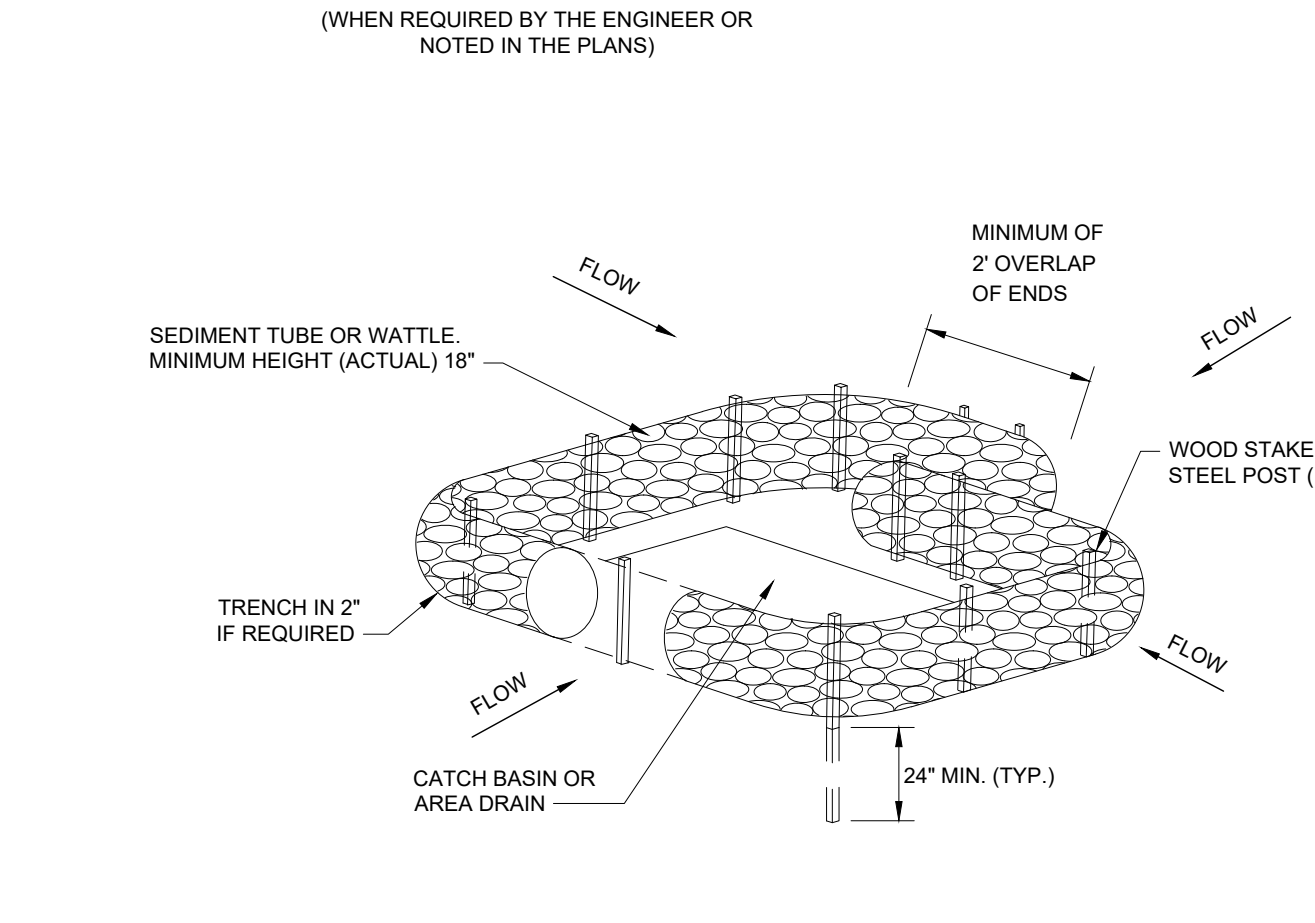
LOW MAINTENANCE AREAS - SLOPES, POOR AND SHALLOW SOILS		
<b>PREFERRED RATE/MIX (LB/AC PLS)</b> 15 BROWNTOP MILLET (NURSE CROP) 5 LITTLE BLUESTEM 2 SWITCH GRASS 2 TALL DROPSEED 5 SIDCOATS GRAMMA 2 BLACK-EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER	<b>SEEDING DATES</b> BEST AUG. 25 - SEP. 15 FEB. 15 - MAY 30	<b>MARGINAL</b> SEP. 15 - OCT. 25 MAR. 21 - MAY 30
<b>LOW MAINTENANCE AREAS - SLOPES, SOILS &gt; 6" DEEP</b>		
<b>PREFERRED RATE/MIX (LB/AC PLS)</b> 15 BROWNTOP MILLET (NURSE CROP) 5 PURPLETOP 5 LITTLE BLUESTEM 5 VIRGINIA WILD RYE 2 BLACK-EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER	<b>SEEDING DATES</b> BEST AUG. 25 - SEP. 15 FEB. 15 - MAY 30	<b>MARGINAL</b> SEP. 15 - OCT. 25 MAR. 21 - APR. 15
<b>HIGH MAINTENANCE AREAS - LAWNS, ETC.</b>		
<b>PREFERRED RATE/MIX (LB/AC PLS)</b> 15 BROWNTOP MILLET (NURSE CROP) 2 PARTRIDGE PEA 45 RED FESCUE 45 HARD FESCUE 25 CHEWING FESCUE	<b>SEEDING DATES</b> BEST AUG. 30 - OCT. 15	<b>MARGINAL</b> FEB. 15 - APR. 15

- NOTES:**
- MIXES INDICATED ABOVE ARE FOR THE REGION II PLANTING AREA (MIDDLE TENNESSEE).
  - PERMANENT STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER. REFER TO LANDSCAPE PLANS FOR PERMANENT STABILIZATION PRACTICES AND AREAS TO RECEIVE SOD.
  - SLOPES STEEPER THAN 3:1 SHALL RECEIVE LOW MAINTENANCE PERMANENT STABILIZATION SUCH AS WEEPING LOVEGRASS OR OTHER NATIVE GROUND COVER AS PROPOSED BY THE LANDSCAPE CONTRACTOR.

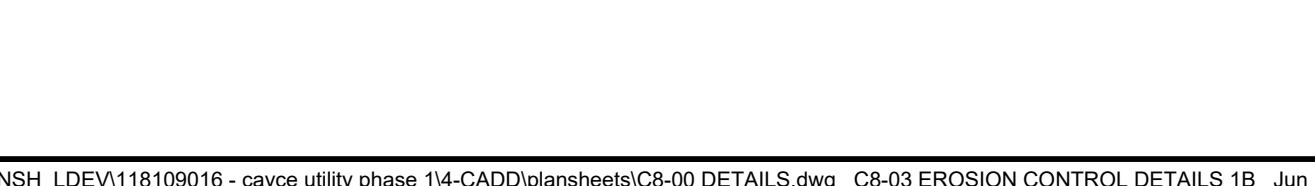
**1 PERMANENT STABILIZATION**  
SCALE: NOT TO SCALE



**5 SILT FENCE**  
SCALE: NOT TO SCALE



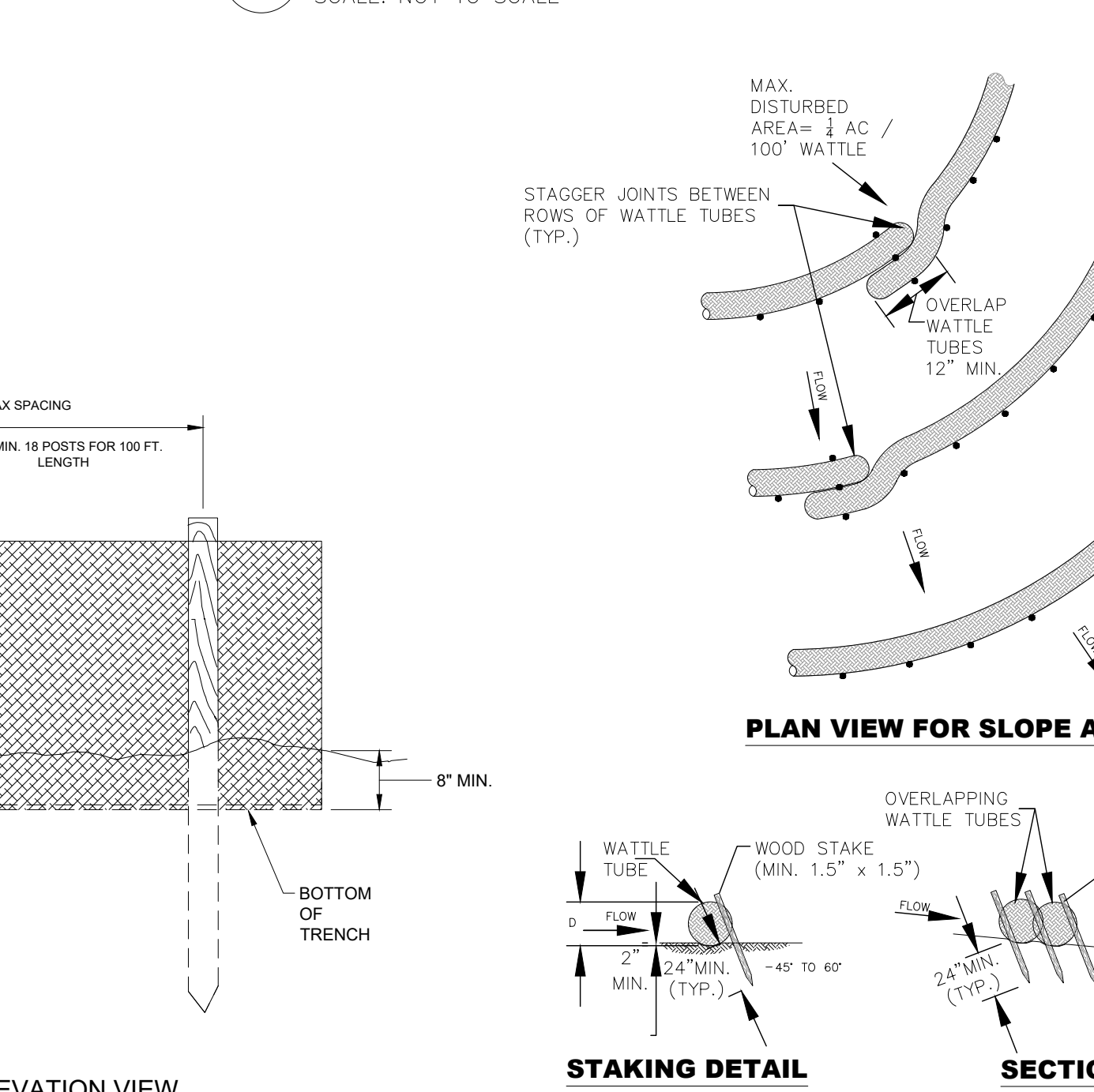
**9 INLET PROTECTION**  
SCALE: NOT TO SCALE



LATE WINTER/EARLY SPRING PLANTING		SUMMER PLANTING	
<b>SPECIES</b> RYE	<b>RATE (LB/ACRE)</b> 120	<b>SPECIES</b> BROWN TOP MILLET	<b>RATE (LB/ACRE)</b> 60
<b>SEEDING DATES</b> EAST ABOVE 2500 FEET: FEB. 15 - MAY 15 MIDDLE BELOW 2500 FEET: FEB. 1 - MAY 1 WEST JAN. 1 - MAY 1 DEC. 1 - APR. 15		<b>SEEDING DATES</b> EAST MAY 15 - AUG. 15 MIDDLE MAY 1 - AUG. 15 WEST APR. 15 - AUG. 15	
<b>MAINTENANCE</b> REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.		<b>MAINTENANCE</b> REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	
<b>FALL PLANTING</b>		<b>ALL SEASON NOTES</b>	
<b>SPECIES</b> OATS WINTER WHEAT	<b>RATE (LB/ACRE)</b> 30 30	<b>SOIL AMENDMENTS</b> FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.	
<b>SEEDING DATES</b> EAST AUG. 15 - DEC. 15 MIDDLE AUG. 15 - DEC. 30 WEST AUG. 15 - DEC. 30		<b>MULCH</b> APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.	
<b>MAINTENANCE</b> REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC CRIMSON CLOVER IN LATE FEBRUARY OR EARLY MARCH.			

- NOTES:**
- TEMPORARY STABILIZATION MEASURES SHALL BE DONE IN ACCORDANCE WITH TDEC EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION OR NEWER.

**2 TEMPORARY STABILIZATION**  
SCALE: NOT TO SCALE



**6 EROSION EELS**  
SCALE: NOT TO SCALE



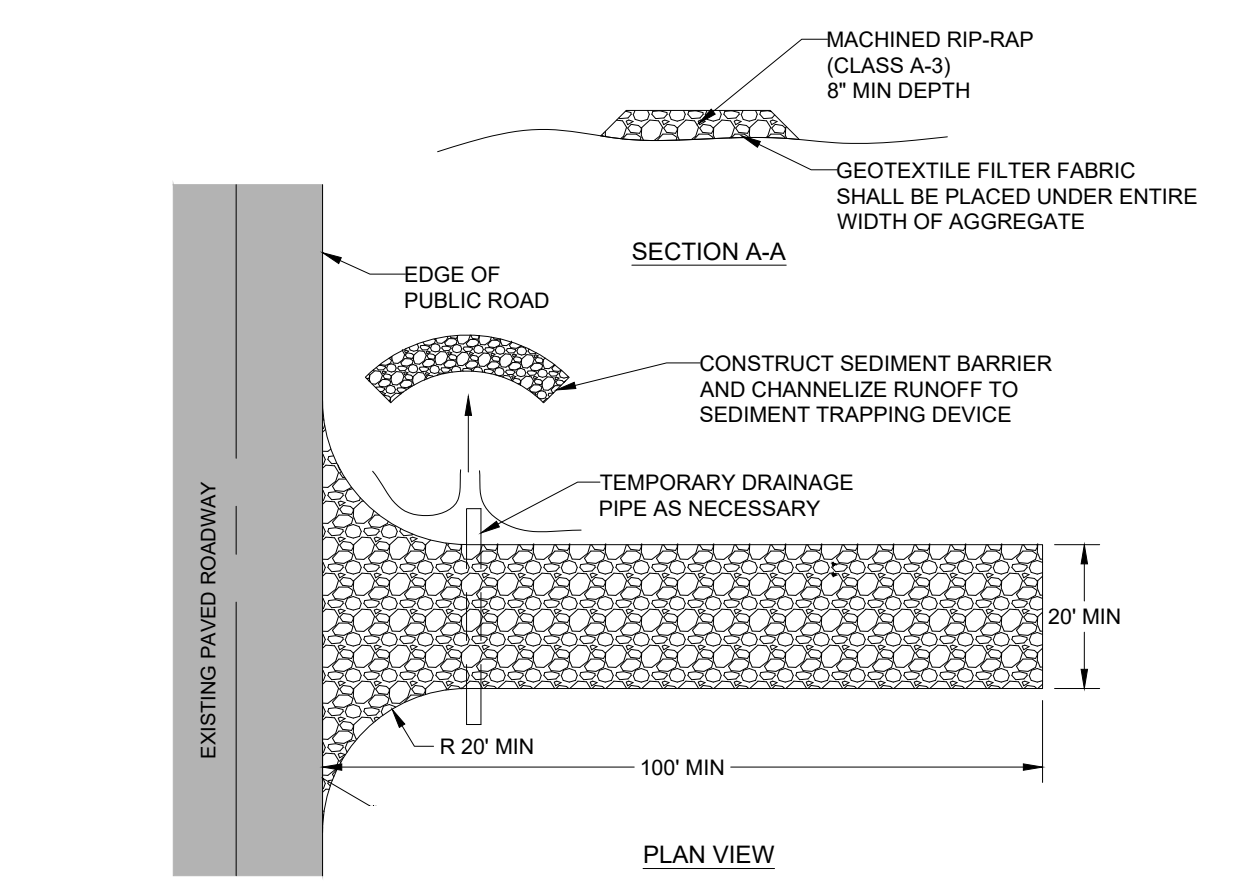
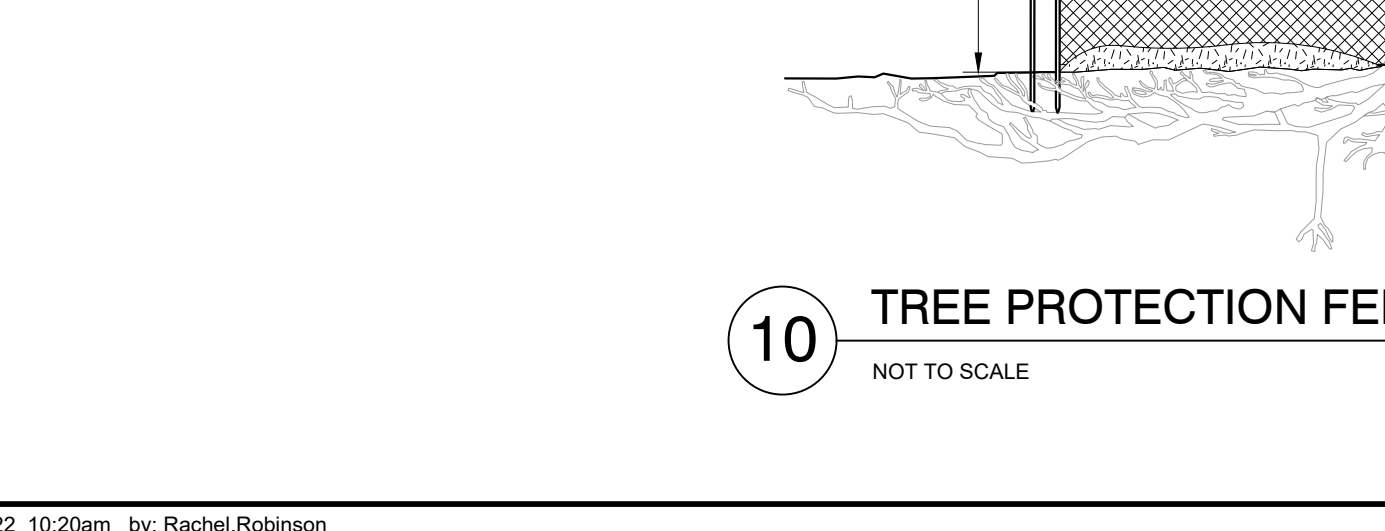
**7 CONCRETE WASHOUT**  
SCALE: NOT TO SCALE



**8 CATCH BASIN PROTECTION**  
SCALE: NOT TO SCALE

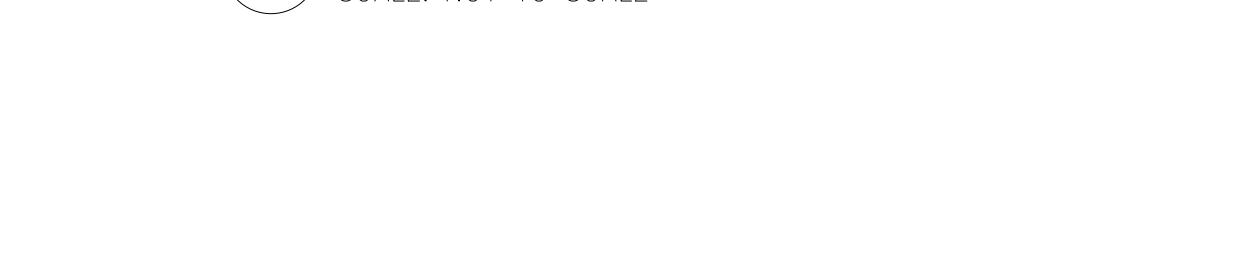


**10 TREE PROTECTION FENCING**  
NOT TO SCALE

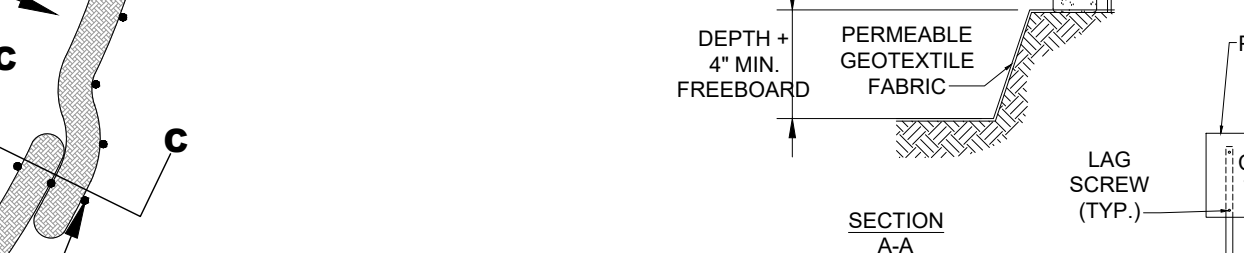


- NOTES:**
- CONSTRUCTION ENTRANCE TO BE PLACED AT ALL POINTS OF INGRESS AND EGRESS
  - CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY RE-DRESSED WITH AGGREGATE

**3 CONSTRUCTION ENTRANCE**  
SCALE: NOT TO SCALE



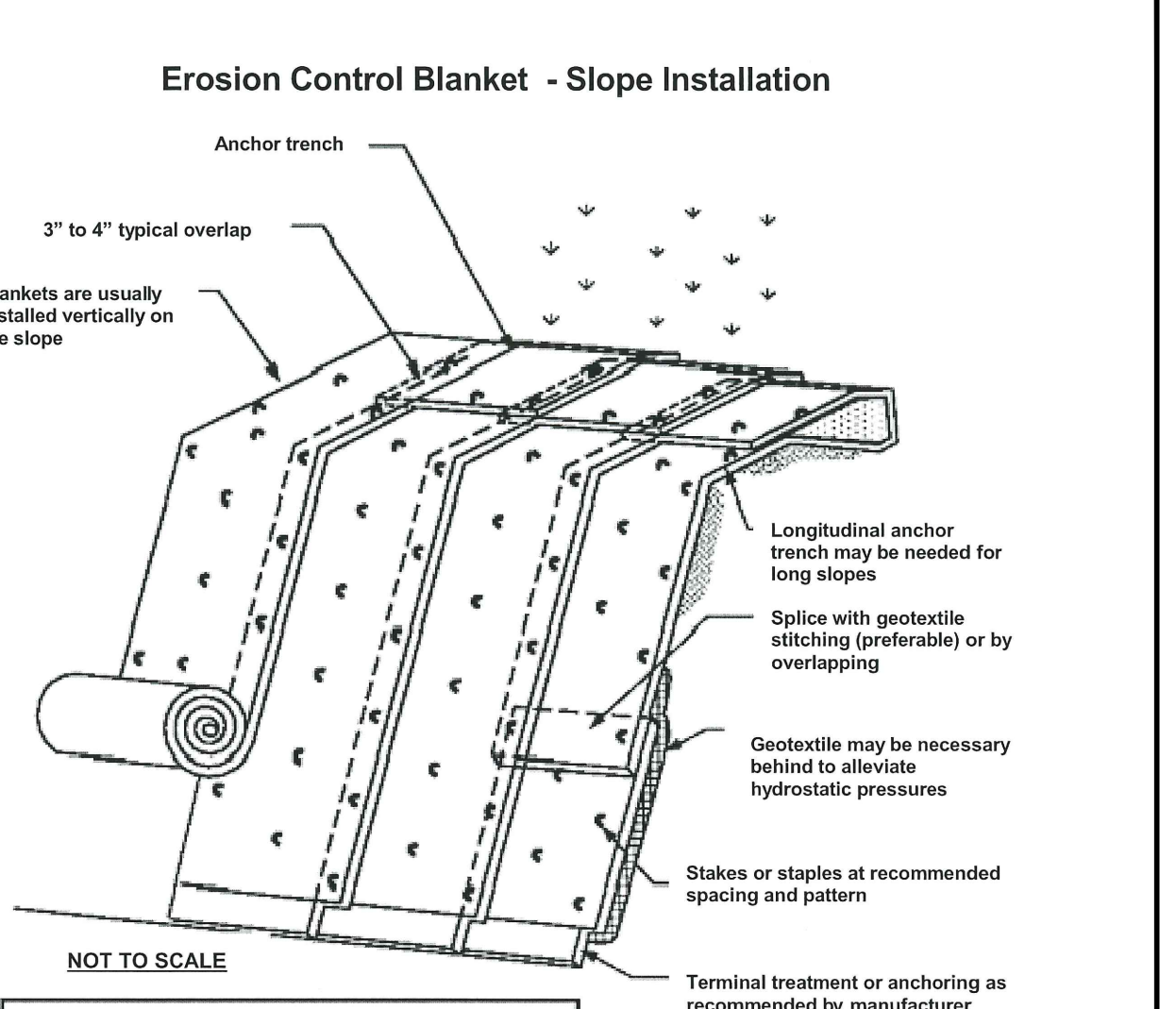
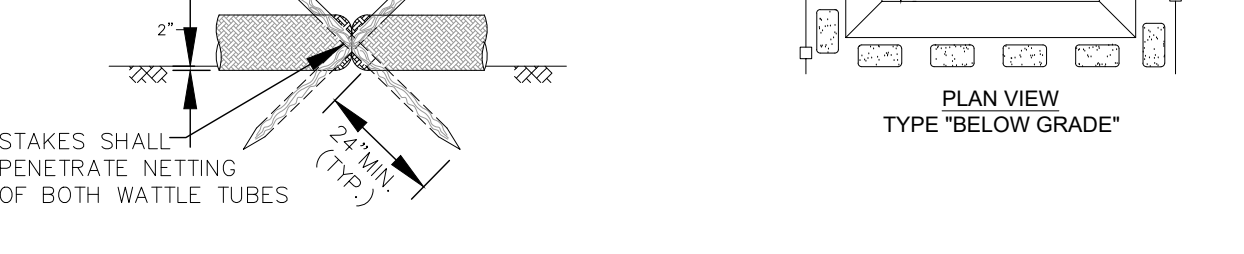
**4 EROSION CONTROL MATTING**  
SCALE: NOT TO SCALE



**9 INLET PROTECTION**  
SCALE: NOT TO SCALE



**10 TREE PROTECTION FENCING**  
NOT TO SCALE

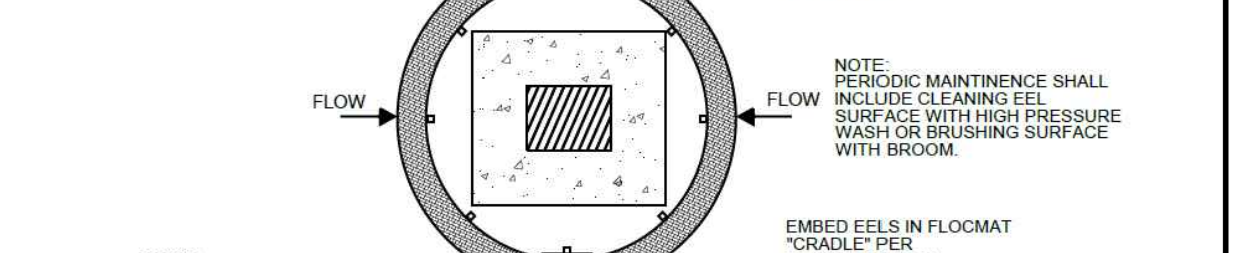


- NOTES:**
- Blankets are usually installed vertically on the slope.
  - Longitudinal anchor trench may be needed for long slopes.
  - Splice with geotextile stitching (preferable) or by overlapping.
  - Geotextile may be necessary behind to alleviate hydrostatic pressures.
  - Stakes or staples at recommended spacing and pattern.
  - Terminal treatment or anchoring as recommended by manufacturer.

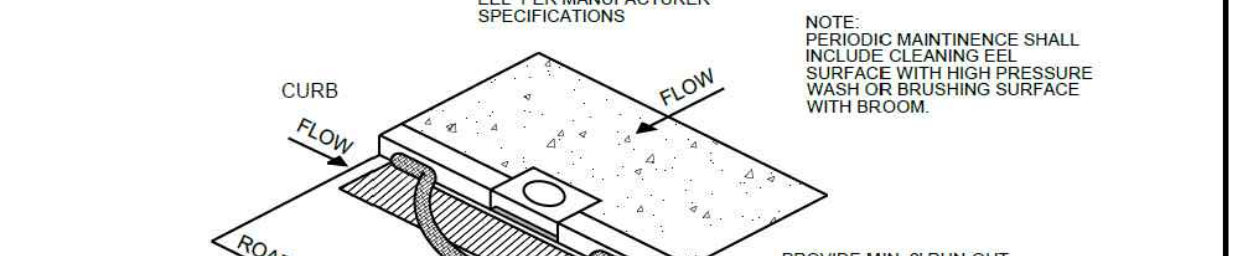
**4 EROSION CONTROL MATTING**  
SCALE: NOT TO SCALE



**6 EROSION EELS**  
SCALE: NOT TO SCALE



**7 CONCRETE WASHOUT**  
SCALE: NOT TO SCALE



**8 CATCH BASIN PROTECTION**  
SCALE: NOT TO SCALE



**9 INLET PROTECTION**  
SCALE: NOT TO SCALE

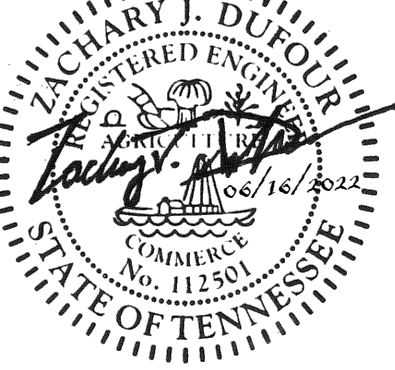


**10 TREE PROTECTION FENCING**  
NOT TO SCALE



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**MDHA**  
NASHVILLE, TN



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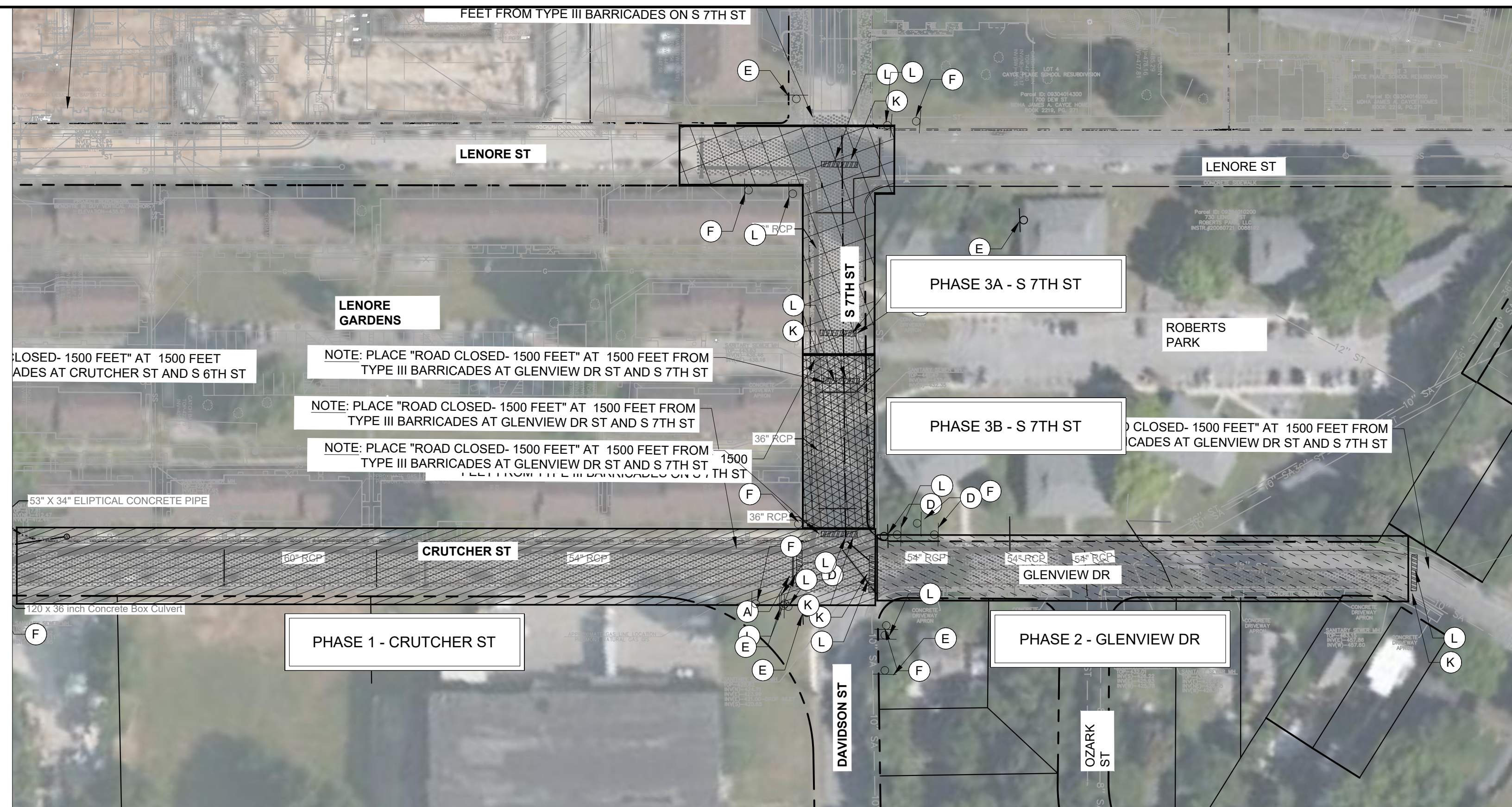
DESIGNED BY: KKF  
DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

**EROSION CONTROL DETAILS**

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- MAINTENANCE OF TRAFFIC GENERAL NOTES**
- TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THIS MAINTENANCE OF TRAFFIC PLAN, AND/OR AS DIRECTED BY METRO NASHVILLE PUBLIC WORKS.
  - CONSTRUCTION WORK HOURS SHALL BE IN ACCORDANCE WITH THE METRO NASHVILLE CODE OF ORDINANCES. NIGHT WORK MAY BE PERFORMED UPON APPROVAL BY MDHA AND WITH A PERMIT FROM THE METRO NASHVILLE CODES DEPARTMENT.
  - THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO MDHA AND METRO NASHVILLE PUBLIC WORKS PRIOR TO INSTALLATION OF TRAFFIC CONTROL DEVICES FOR EACH PHASE.
  - DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES. THE MINIMUM LANE WIDTH SHOULD BE 10 FEET.
  - THE CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE ENTRANCES AND DRIVEWAYS AT ALL TIMES. THE CONTRACTOR MAY REQUEST A DRIVEWAY CLOSURE FROM MDHA WITH 7 DAYS NOTICE. MDHA CANNOT GUARANTEE APPROVAL OF A DRIVEWAY CLOSURE REQUEST. IF A DRIVEWAY CLOSURE IS APPROVED BY MDHA AND THE AFFECTED PROPERTY OWNER, THE CONTRACTOR SHALL MINIMIZE THE DURATION OF ANY BLOCKAGE TO PRIVATE ENTRANCES AND DRIVEWAYS AND THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY UNLESS DIRECTED OTHERWISE BY THE OWNER.
  - ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT TIME HOURS.
  - PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WHERE EXISTING SIDEWALKS ARE PRESENT. WHEN NECESSARY, PEDESTRIANS SHALL BE APPROPRIATELY DIRECTED WITH ADVANCED WARNING SIGNS, PLACED AT INTERSECTIONS, TO CROSS TO THE OPPOSITE SIDE OF THE ROADWAY IN ORDER TO PREVENT CONFLICT WITH MIDLICK WORK SITES.
  - BICYCLE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WHERE EXISTING BICYCLE FACILITIES ARE PRESENT.
  - PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH THE MUTCD.
  - ADEQUATE PROVISIONS FOR PERSONS WITH DISABILITIES SHALL BE PROVIDED AT ALL TIMES PER ADA REQUIREMENTS WHERE EXISTING ACCESSIBLE FACILITIES ARE PRESENT.
  - ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES.
  - ACCESS TO BUILDINGS FOR FIREFIGHTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANES) SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
  - CONTRACTOR MAY WORK ON CONSTRUCTION PHASES IN ANY ORDER. CONTRACTOR MAY WORK ON MULTIPLE CONSTRUCTION PHASES SIMULTANEOUSLY PROVIDED THAT NO MORE THAN ONE ROAD CLOSURE IS IN PLACE AT ANY TIME, INCLUDING ROAD CLOSURES FOR SEPARATE CONSTRUCTION PROJECTS IN THE CAYCE HOMES NEIGHBORHOOD.
  - WORK REQUIREMENTS SPECIFIC TO EACH PHASE ARE LISTED BELOW.
    - PHASE 1 - CRUTCHER ST
      - CONTRACTOR TO MAINTAIN DRIVEWAY ACCESS ON THE SOUTH SIDE OF THE STREET
    - PHASE 2 - GLENVIEW DRIVE
      - CONTRACTOR TO MAINTAIN DRIVEWAY ACCESS ON THE SOUTH SIDE OF THE STREET
    - PHASE 3A - S 7TH ST
      - ACCESS TO ROBERTS PARK SHALL BE PROVIDED AT ALL TIMES.
      - SOUTHBOUND LANE (WESTERN HALF) OF S 7TH ST MAY BE CLOSED LEAVING ONE WAY TRAFFIC IN THE NORTHBOUND LANE
      - NORTHERN HALF OF ROAD (NORTH OF ROBERTS PARK DRIVEWAY) MAY BE CLOSED LEAVING TWO WAY TRAFFIC SOUTH OF DRIVEWAY
    - PHASE 3B - S 7TH ST
      - ACCESS TO ROBERTS PARK SHALL BE PROVIDED AT ALL TIMES.
      - SOUTHERN HALF OF S 7TH ST (SOUTH OF ROBERTS PARK DRIVEWAY) MAY BE CLOSED LEAVING TWO WAY TRAFFIC NORTH OF DRIVEWAY
      - LONG TERM CLOSURE OF LENORE GARDENS DRIVEWAY IS PERMITTED PROVIDED THAT FULL ACCESS IS MAINTAINED AT THE ALTERNATE DRIVEWAY ALONG S 6TH ST

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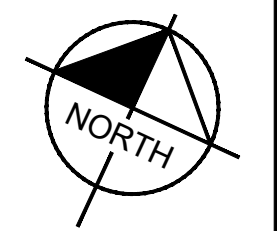
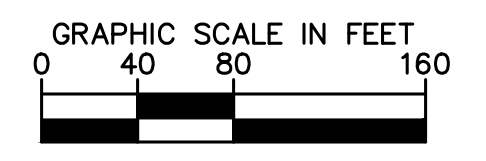


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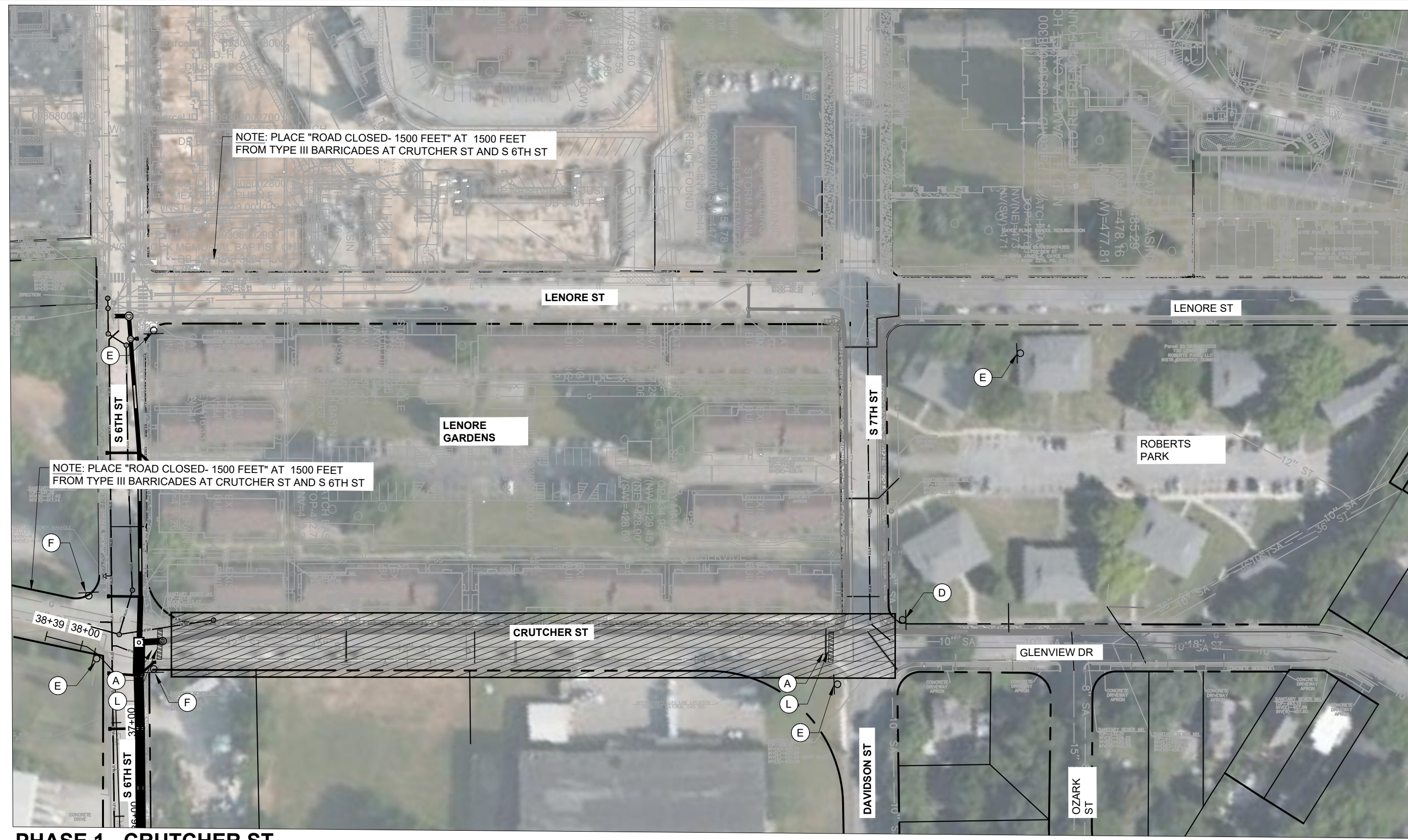
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DRAWN BY: LEB  
CHECKED BY: ZJD  
DATE: 06/16/2022  
KIMLEY-HORN PROJECT NO. 118109018

CONSTRUCTION PHASING  
SHEET NUMBER  
**C9-00**

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**PHASE 1 - CRUTCHER ST**



**PHASE 2 - GLENVIEW DR**

**KEYNOTE LEGEND**

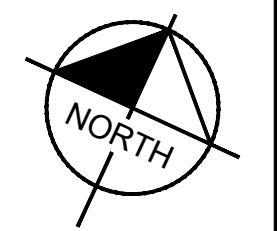
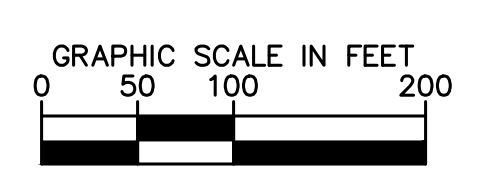
(A) NOT USED	(I) NOT USED
(B) NOT USED	(J) NOT USED
(C) NOT USED	(K) ROAD CLOSED LOCAL TRAFFIC ONLY
(D) DETOUR ←	(L) [BARRICADE SYMBOL]
(E) DETOUR →	(M) NOT USED
(F) DETOUR ↑	(N) NOT USED
(G) NOT USED	(O) NOT USED
(H) NOT USED	



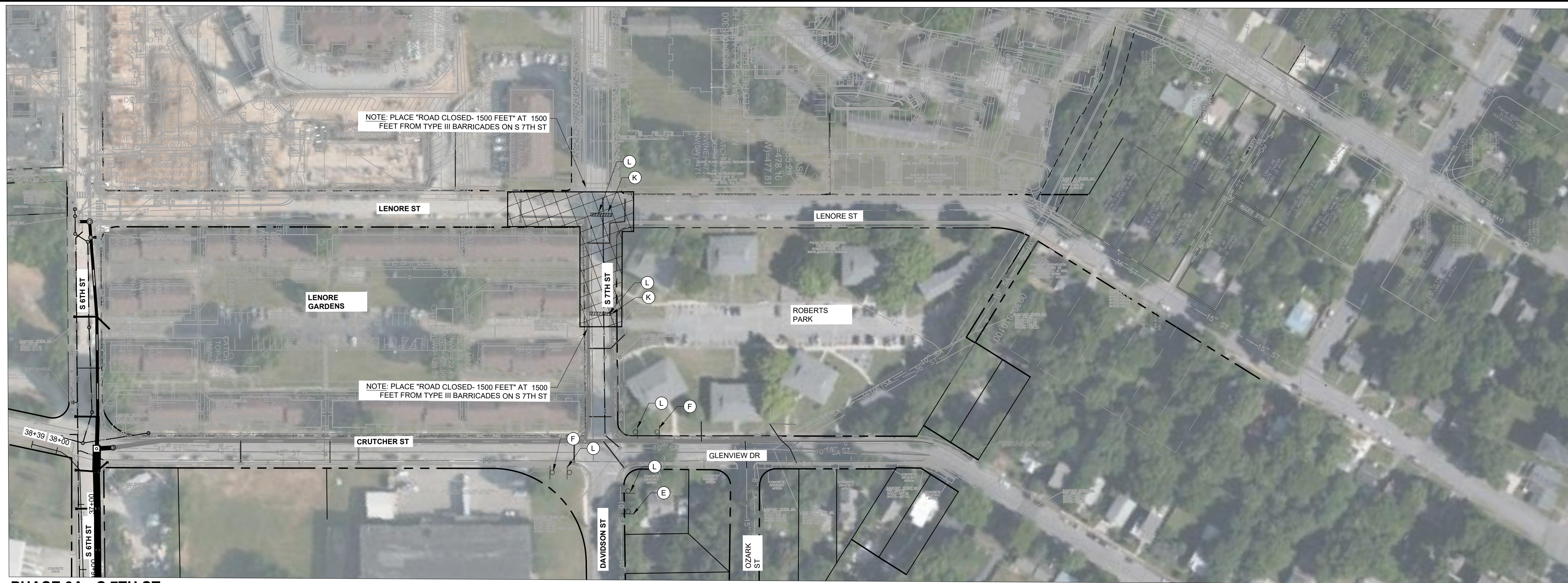
NO.	DATE	BY	REVISIONS
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: KKF  
 DRAWN BY: LEB  
 CHECKED BY: ZJD  
 DATE: 06/26/2022  
 KIMLEY-HORN PROJECT NO. 118109018

**BID SET**



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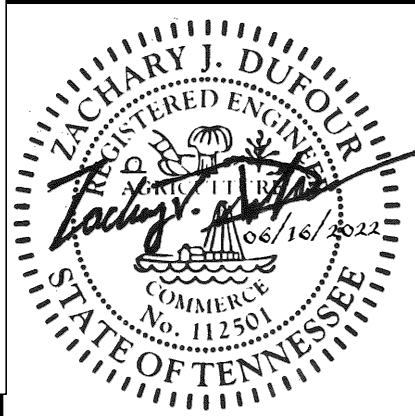
**PHASE 3A - S 7TH ST**



**PHASE 3B - S 7TH ST**

**KEYNOTE LEGEND**

- (A) NOT USED
- (B) NOT USED
- (C) NOT USED
- (D) 
- (E) 
- (F) 
- (G) NOT USED
- (H) NOT USED
- (I) NOT USED
- (J) NOT USED
- (K) 
- (L) 
- (M) NOT USED
- (N) NOT USED
- (O) NOT USED



NO.	DATE	BY	REVISIONS
1			
2			
3			
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10			

DESIGNED BY:	KKF
DRAWN BY:	LEB
CHECKED BY:	ZJD
DATE:	06/26/2022
KIMLEY-HORN PROJECT NO. 118109018	

MAINTENANCE OF TRAFFIC
SHEET NUMBER <b>C9-02</b>

**BID SET**

