



Post Office Box 207 · Shelby, NC 28151-0207

September 13, 2019

To: All Prospective Bidders

From: Tyler Brooks, Stormwater/Engineering Coordinator

RE: Osborne St. Culvert Replacement

The City of Shelby is accepting bids on a culvert replacement project at 208 Osborne St. in Shelby, NC. The project consists of the replacement of 57 linear feet of 36" RCP pipe.

Sealed bids are due before 2:00 PM on Tuesday, October 1, 2019, at the City of Shelby Utility Operations Center (824 W. Grover St.). Bids will be opened publicly at the City of Shelby Utility Operations Center at approximately 2:10PM after the Allen St. Culvert Replacement bid opening.

Contractor's Responsibilities:

- Remove approximately 57 linear feet of existing 36" RCP pipe and replace with 36" double wall HDPE pipe in the road. The new pipe shall be bedded with wash stone. Two headwalls with wing walls shall be placed on both ends of the pipe.
- The street cut shall be backfilled with at least 8" of ABC stone and 4" of asphalt. All edges shall be clean cut with a saw.
- Contractor will be responsible for cleaning up and disposing of all construction materials from the project site upon completion of the project.
- Project to be constructed per the plans **Osborne Street Culvert Replacement** prepared by Odom Engineering.

All work completed as part of this project will carry a one (1) year warranty beginning at the completion of the project.

A utility locate must be called in prior to work commencing.

The bid award for this project will be based on the "Total Project Bid."

This list is intended to provide the basic scope of work; any incidental work that is related to this project will be the sole responsibility of the Contractor.

The City reserves the right to accept or reject any and/or all bids. **Proof of valid contractor's license (if required based on bid amount) must be submitted as part of the bid package.** A Certificate of Insurance will be required from the low bidder prior to beginning construction.

The project shall be started within 30 days of a Notice to Proceed being issued.

After mobilization, the project must be complete in 14 days (weather days will be accessed as needed).

Liquidated damages in the amount of \$500 per day will be enforced for work not completed by the applicable deadline.

Please call Tyler Brooks at 704-669-2064 if you have any questions during the bidding or construction process.

Submitted by:

Accepted by City of Shelby:

Company: _____ Name and Title: _____

Name: _____ Signature: _____

Title: _____ Date: _____

Total Project Bid: _____

PLANS FOR OSBORNE STREET CULVERT REPLACEMENT

CLEVELAND COUNTY, N.C.

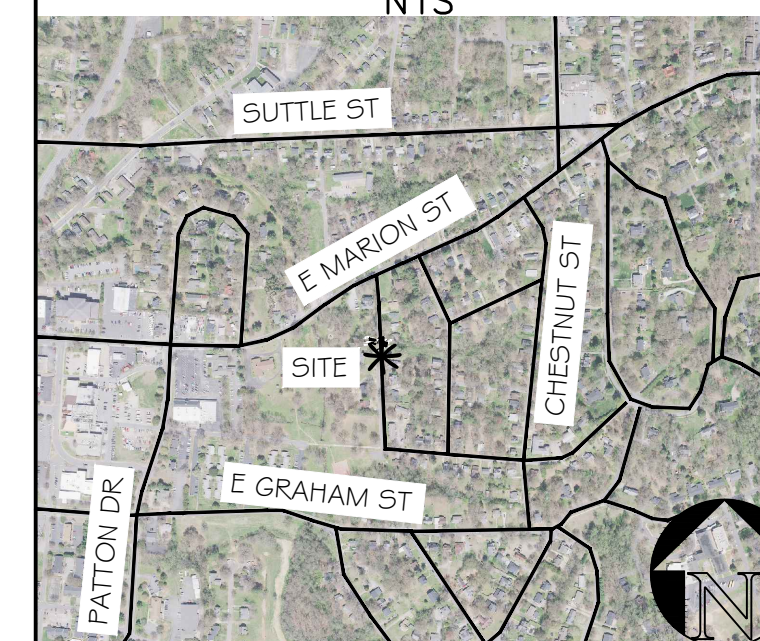
CONTACT INFORMATION:
CITY OF SHELBY

ATTN: TYLER BROOKS, STORMWATER/ENGINEER COORDINATOR
824 GROVER STREET, SHELBY, NC 28150
P.O. BOX 207, SHELBY, NC 28151-0207
TEL.# 704-669-2064



ODOM ENGINEERING, PLLC
ATTN: DAVID ODOM, PE
169 OAK STREET, FOREST CITY, NC 28043
TEL.# 828-247-4495

VICINITY MAP



JOB NUMBER:
19099

GENERAL NOTES:

1. A MANDATORY PRE-CONSTRUCTION MEETING SHALL OCCUR BEFORE ANY CONSTRUCTION BEGINS. A REPRESENTATIVE FROM THE CONTRACTOR'S OFFICE, ODOM ENGINEERING, AND NCDEQ ARO (828-296-4500).
2. CONTRACTOR TO CALL NCDEQ ARO (828-296-4500) AT LEAST 48 HOURS PRIOR TO LAND DISTURBING ACTIVITY IS TO BEGIN.
3. CONTRACTOR IS TO DO SELF-INSPECTIONS PER '15A NCAC 04B .0131 SELF INSPECTIONS'. SEE DETAIL SHEET.
4. GRADED SLOPES AND FILLS SHALL BE PROTECTED WITH A ROLLED EROSION CONTROL PRODUCT IF COMPLETED OUTSIDE THE OPTIMUM GERMINATION SEASONS, WHEN UNFAVORABLE WEATHER CONDITIONS PREVENT ESTABLISHMENT OF VEGETATIVE COVER.
5. CONTRACTOR TO CONTACT ENGINEER IMMEDIATELY UPON DISCOVERING ANY DISCREPANCIES IN THE FIELD NOT SHOWN ON PLANS.
6. ANY ACTIONS OR COST INCREASE ABOVE AND BEYOND CONTRACT WITH OWNER/DEVELOPER SHALL BE APPROVED BY ENGINEER. ANY ADDITIONAL WORK OR COST INCREASE COMPLETED BY CONTRACTOR WITHOUT SAID WRITTEN APPROVAL FROM ENGINEER, SHALL BECOME CONTRACTORS FINANCIAL RESPONSIBILITY AND NOT THE OWNER/DEVELOPER.

DESCRIPTION

REV	1	2	3	4	5	6
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HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF NORTH CAROLINA AS SIGNIFIED BY MY HAND AND SEAL.

DAVID ODOM
ENGINEER
21130
8/18/19

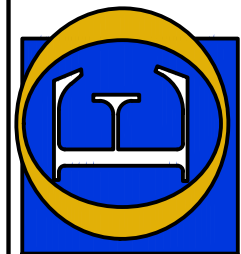
LEGEND		
UTILITY/STRUCTURE	EXISTING	PROPOSED
OVERHEAD ELECTRICAL	— XOHE —	— — — — —
UNDERGROUND ELECTRICAL	— XUGE —	— — — — —
NATURAL GAS	— XG —	— G —
OVERHEAD TELEPHONE	— XOHT —	— — — — —
FIBER OPTIC	— XF0 —	— FO —
SANITARY SEWER	— XS —	— SS —
WATER	— XW —	— W —
FORCEMAIN	— XFM —	— FM —
CULVERT	— — — — —	— — — — —
FIRE HYDRANT		
GATE VALVE		
SEWER MANHOLE		
POWER POLE		
PROPERTY LINE	— — — — —	— — — — —
MAJOR CONTOURS	— — — — —	— — — — —
MINOR CONTOURS	--- 750 ---	--- 750 ---
CULVERT DRAINAGE AREA		
CHANNEL DRAINAGE AREA		
ASPHALT REPAIR AREA		
TEMPORARY SILT FENCE		— SF —
TEMPORARY DITCH/BERM		— TDB —

SHEET INDEX

TITLE	
COVER	1
EXISTING CONDITIONS & DEMOITION	2
PLAN & PROFILE	3
DETAILS	4

STORMWATER PLANS FOR
CULVERT REPLACEMENT AT
207 OSBORNE STREET
SHELBY
CLEVELAND COUNTY, NC
COVER

Odom Engineering PLLC
169 Oak Street, Forest City, N.C. 28043
ph: 828.247.4495 fax: 828.247.4498
N.C. License # 4086



SCALE: N.T.S.
DATE: 08/08/19
DRAWN BY: MJG
CHECKED BY: DWO
PROJECT MGR: DWO
SHEET:
1 OF 4

Drawing name: Z:\2019\19099 - SHELBY STORMWATER AT 207 OSBORNE ST.DWG\19099_OSBORNE_ST_BASE.dwg Plotted on: Aug 28, 2019 - 10:22am

GENERAL STORMWATER NOTES

1. Engineer does not certify that all utilities are shown. Contractor should verify the location of all underground lines prior to bidding the project and to assume the responsibility for underground lines during construction.
2. Screening or sand shall be placed on roads prior to placing trench dirt on roads. Pay item to be piping unit price.
3. Contractor to comply with DOT regulations regarding working on or near roadway (signs, vests, etc.).
4. Contractor to keep all equipment, material, & personnel inside DOT R/W or City R/W.
5. All culverts to pass over or under the water line will have a vertical separation of at least 18".
6. Contractor to line all channels with North American Green (DS 75) temporary liner (or equal) upon completion of construction.
7. Contractor to verify location of all under-ground utilities (i.e., gas and fiber optic).
8. Contractor to stabilize all disturbed areas upon completion of each workday.

JOB NUMBER:

19099

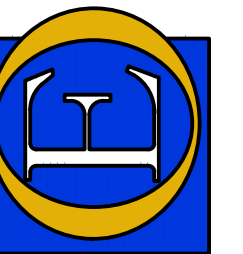
REV	DESCRIPTION
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STORMWATER PLANS FOR
**CULVERT REPLACEMENT AT
 207 OSBORNE STREET**
 SHELBY
 CLEVELAND COUNTY, NC
EXISTING CONDITIONS & DEMOLITION

Odom Engineering PLLC
 100 Oak Street, Forest City, N.C. 28043
 ph: 828.274.4995 fax: 828.274.4998
 NC Permit # 00000



SCALE: 1" = 10'

DATE: 08/09/19

DRAWN BY: MJG

CHECKED BY: DWO

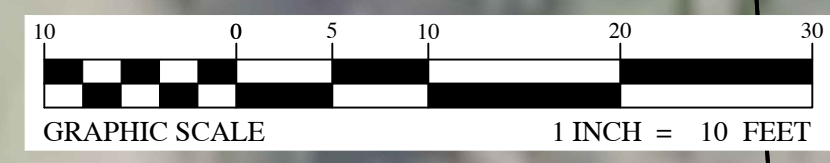
PROJECT MGR: DWO

SHEET:

2 OF 4

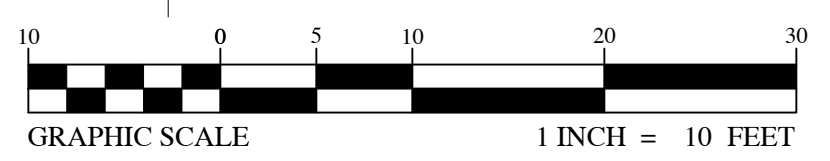
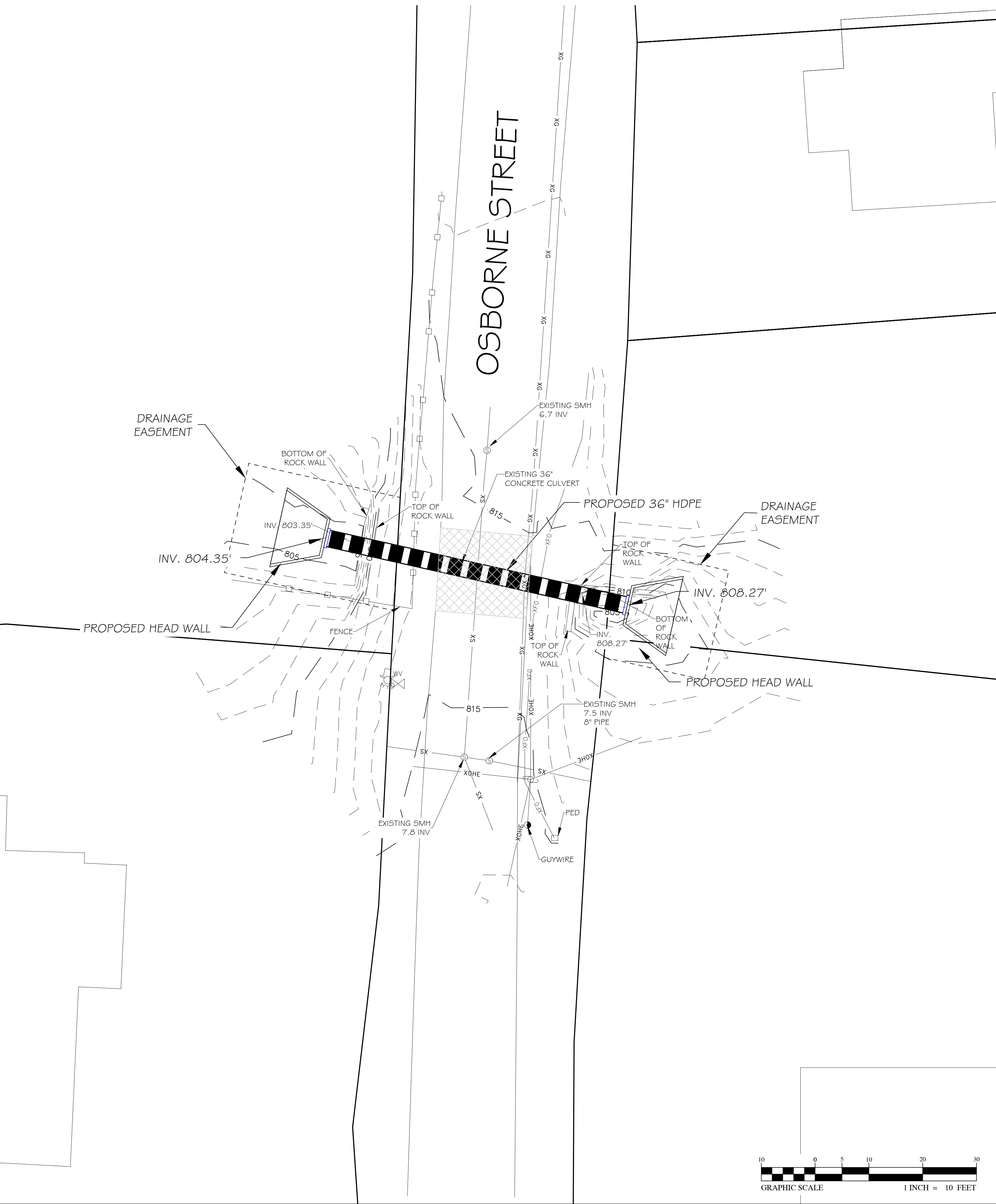
Drawing name: Z:\2019\19099 - SHELBY STORMWATER AT 207 OSBORNE ST.DWG\19099_OSBORNE ST_BASE.dwg Plotted on: Aug 28, 2019 - 10:22am

EXISTING CONDITIONS / DEMOLITION

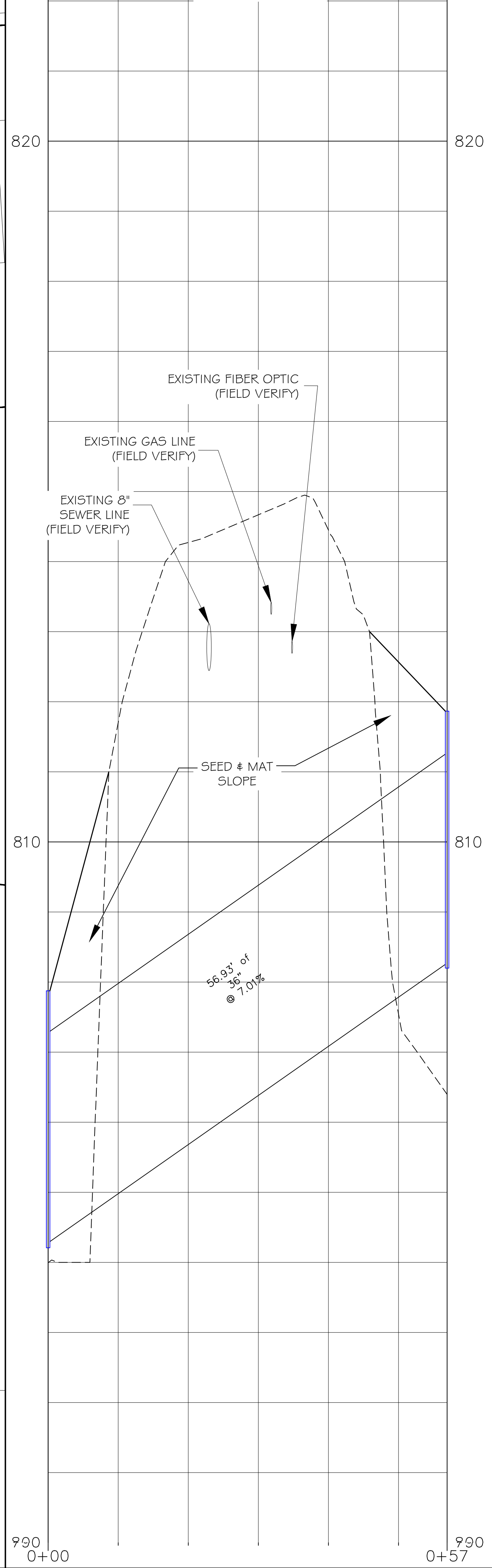


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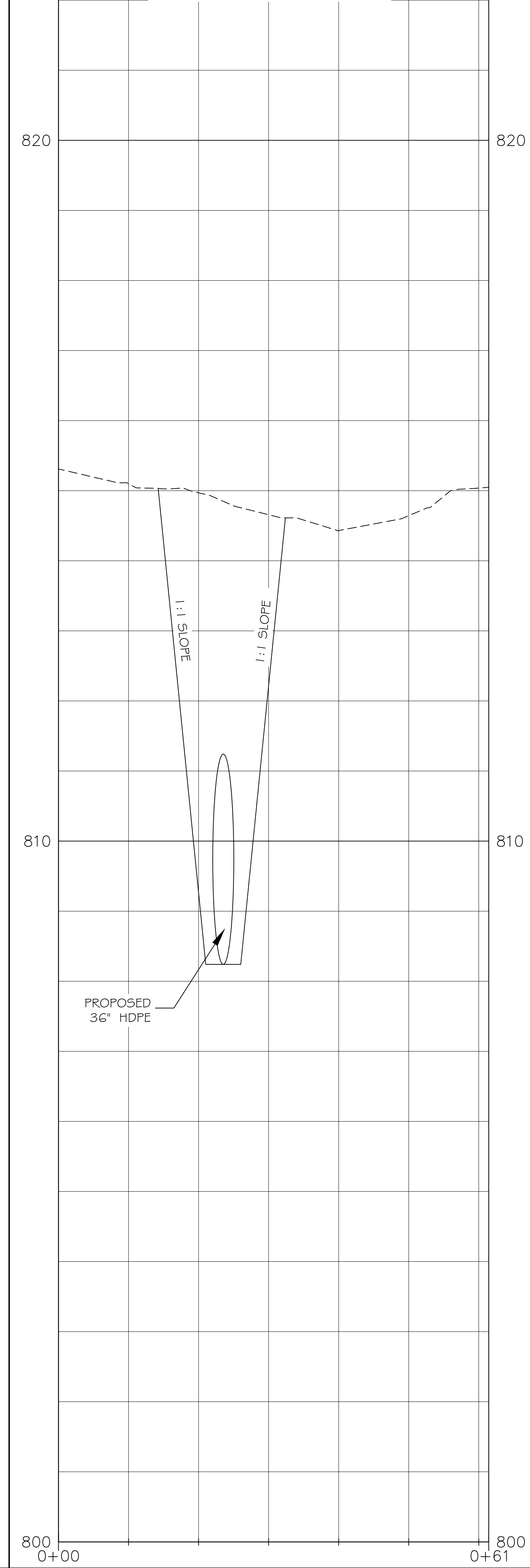
PROPOSED IMPROVEMENTS



PROFILE



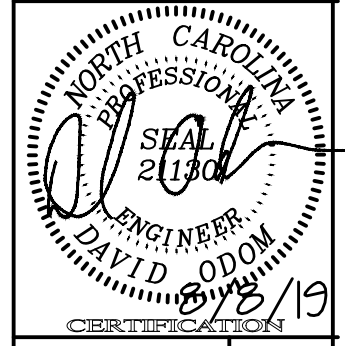
ROAD PROFILE



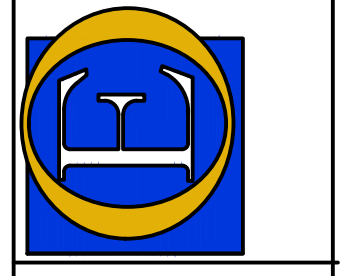
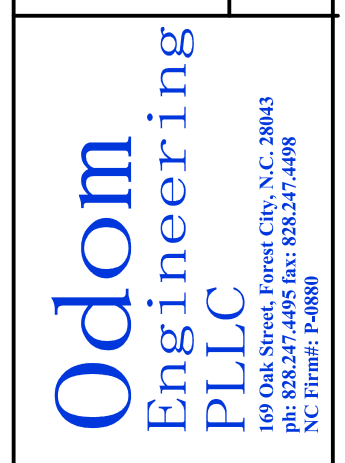
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REV	DATE	BY	DESCRIPTION
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STORMWATER PLANS FOR
**CULVERT REPLACEMENT AT
 207 OSBORNE STREET**
 SHELBY, CLEVELAND COUNTY, NC
PLAN & PROFILE



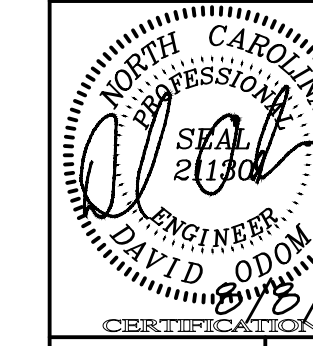
SCALE: 1" = 10'
 DATE: 08/08/19
 DRAWN BY: MJG
 CHECKED BY: DWO
 PROJECT MGR: DWO
 SHEET:
 3 OF 4

DATE	BY

DESCRIPTION

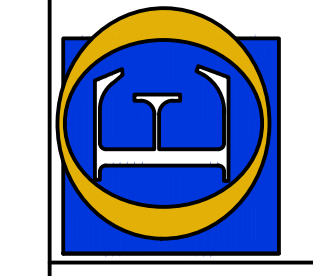
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STORMWATER PLANS FOR
**CULVERT REPLACEMENT AT
 207 OSBORNE STREET
 SHELBY, N.C.**
 CLEVELAND COUNTY, NC

Odom Engineering PLLC
 100 Oak Street, Forest City, N.C. 28043
 ph: 828.247.4498 fax: 828.247.4498
 NC Form 7-000



SCALE: N.T.S.

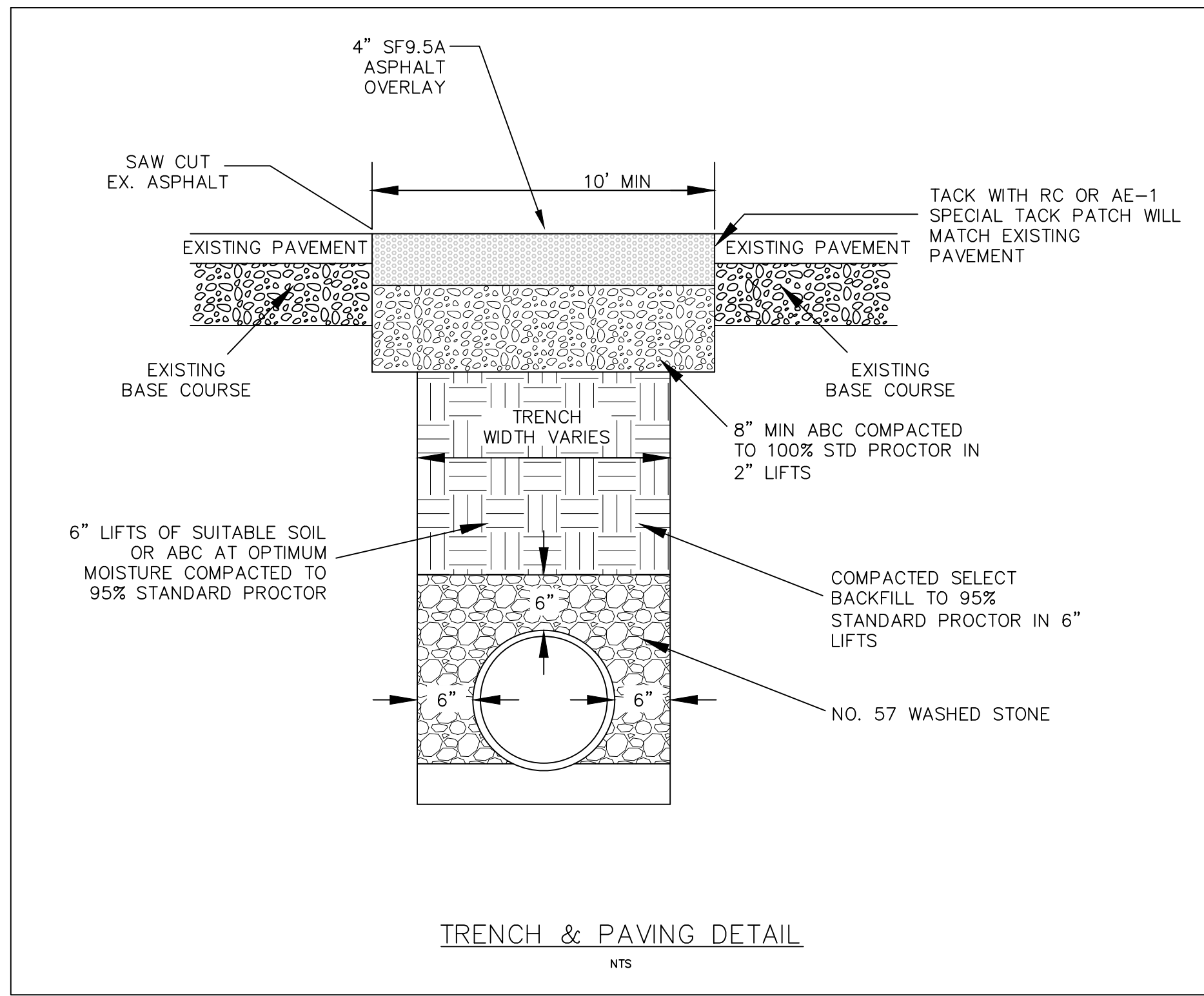
DATE: 08/08/19

DRAWN BY: MJG

CHECKED BY: DWO

PROJECT MGR: DWO

SHEET:



TRENCH & PAVING DETAIL
 NTS

SEEDING

PERMANENT SEEDING

AREAS TO BE SEEDDED:

- TILL OR DISC THE PREPARED AREAS TO BE SEEDDED TO A MINIMUM DEPTH OF FOUR (4) INCHES. REMOVE STONES LARGER THAN THREE (3) INCHES ON ANY SIDE, STICKS, ROOTS AND OTHER EXTRANEOUS MATERIALS THAT SURFACE. IF NOT INCORPORATED DURING THE SOIL PREPARATION PROCESS, ADD PH MODIFIER AND FERTILIZERS AT THE RATE SPECIFIED IN THE SOIL TEST REPORT.
- RE-COMPACT THE AREA UTILIZING A CULTIPACKER ROLLER. THE FINISHED GRADE SHALL BE A SMOOTH EVEN SOIL SURFACE WITH A LOOSE, UNIFORM FINE TEXTURE. ALL RIDGES AND DEPRESSIONS SHALL BE REMOVED AND FILLED TO PROVIDE THE APPROVED SURFACE DRAINAGE. SEEDING OF GRADED AREAS IS TO BE DONE IMMEDIATELY AFTER FINISHED GRADES ARE OBTAINED AND SEEDBED PREPARATION IS COMPLETED.

AREAS TO BE SPRIGGED, SODDED, AND/OR PLANTED:

- AT THE TIME OF PLANTING TILL OR DISC THE PREPARED AREAS TO A DEPTH OF FOUR (4) TO SIX (6) INCHES BELOW THE APPROVED FINISHED GRADE. REMOVE ALL STONES LARGER THAN THREE (3) INCHES ON ANY SIDE, STICKS, ROOTS AND OTHER EXTRANEOUS MATERIALS THAT SURFACE. IF NOT INCORPORATED IN THE RIPPING PROCESS, ADD PH MODIFIER, FERTILIZER, AND OTHER RECOMMENDED SOIL AMENDMENTS.
- RE-COMPACT THE AREA UTILIZING A CULTIPACKER ROLLER AND PREPARE FINAL GRADES AS DESCRIBED ABOVE. INSTALL SPRIGS, SOD AND PLANTS AS DIRECTED IMMEDIATELY AFTER FINE GRADING IS COMPLETE. MULCH, MAT AND/OR TACK AS SPECIFIED.

GRASS-LINED CHANNELS

KY 31 TALL FESCUE	100 LB/AC
KENTUCKY BLUEGRASS	15 LB/AC
RYE (GRAIN)	40 LB/AC
LIME	4000 LB/AC
10-10-10 FERTILIZER	1200 LB/AC
STRAW	4000 LB/AC

ALL OTHER SURFACES

K 31 TALL FESCUE	100 LB/AC
SERICA LESPEDEZA	15 LB/AC
KOBE LESPEDEZA	10 LB/AC
RYE (GRAIN)	40 LB/AC
LIME	4000 LB/AC
10-10-10 FERTILIZER	1000 LB/AC
STRAW	4000 LB/AC

WINTER/EARLY SPRING SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES

MOUNTAINS-ABOVE 2500 FEET:	FEB. 15 - MAY 15
BELOW 2500 FEET:	FEB. 1 - MAY 1
PIEDMONT-JAN. 1 - MAY 1	
COASTAL PLAIN-DEC. 1 - APR. 15	

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SUMMER SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDAGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

SEEDING DATES

MOUNTAINS-MAY 15 - AUG. 15	
PIEDMONT-MAY 1 - AUG. 15	
COASTAL PLAIN-APR. 15 - AUG. 15	

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FALL SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

SEEDING DATES

MOUNTAINS-AUG. 15 - DEC. 15	
COASTAL PLAIN AND PIEDMONT-AUG. 15 - DEC. 30	

SOIL AMENDMENTS

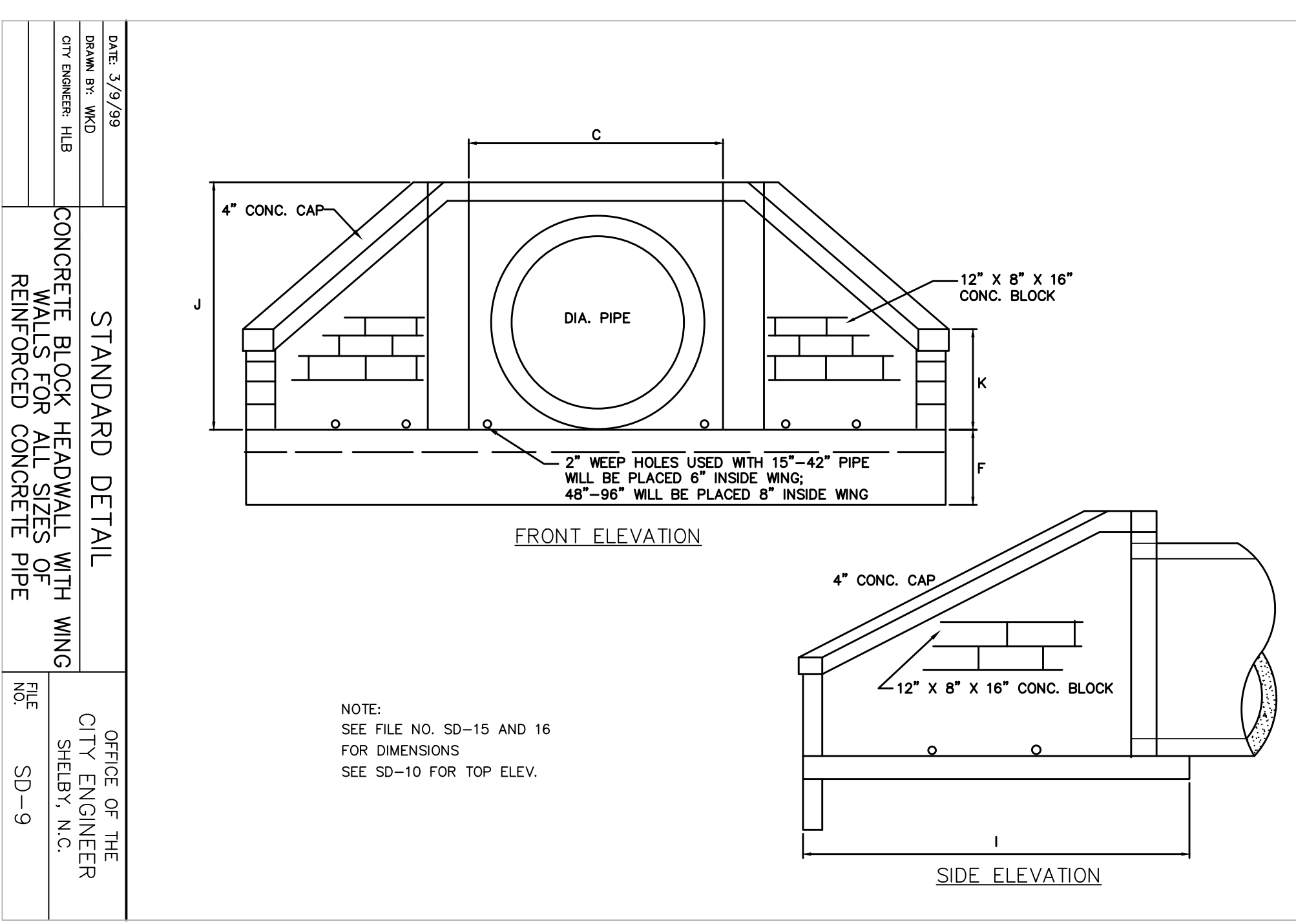
FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH

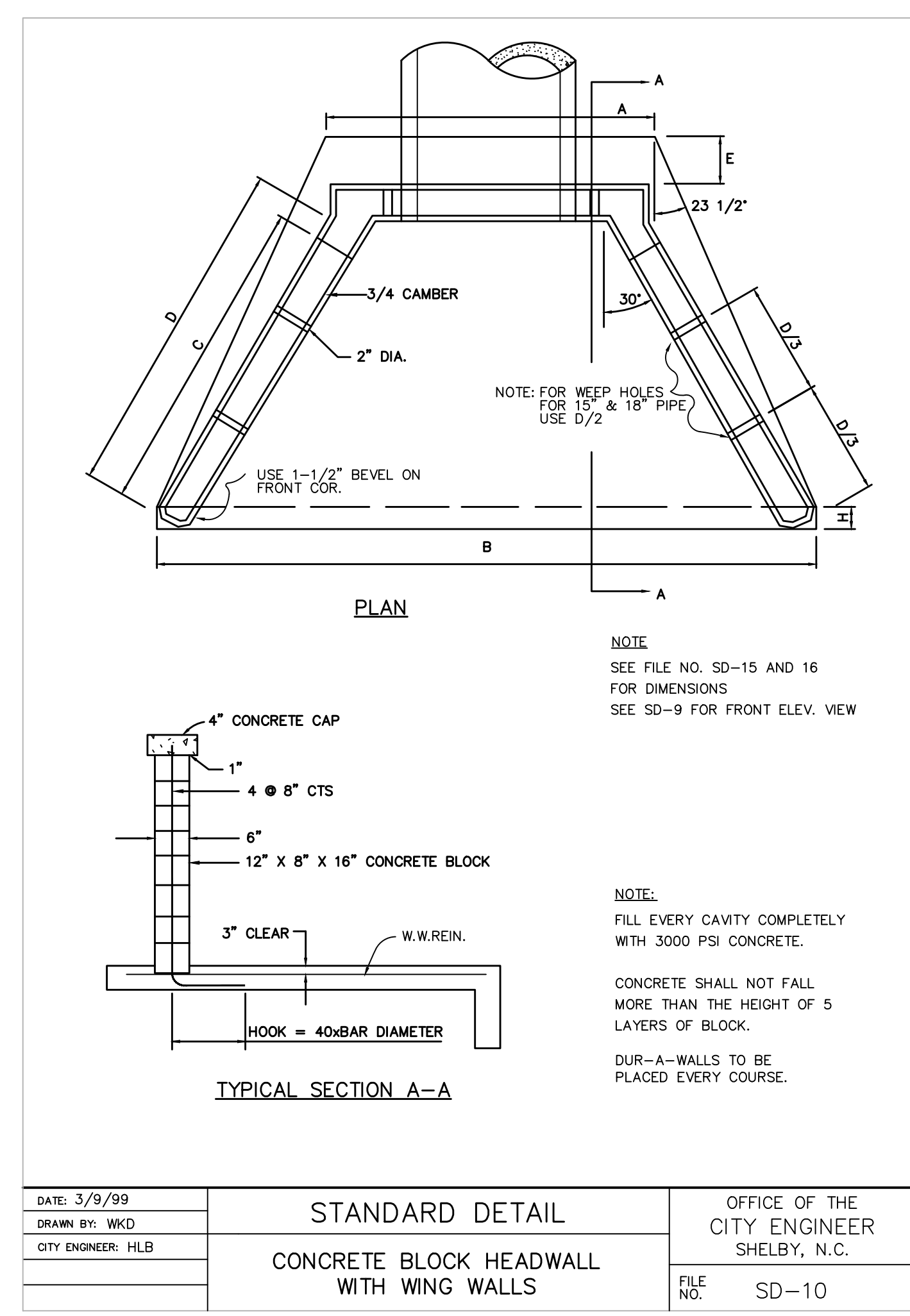
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.



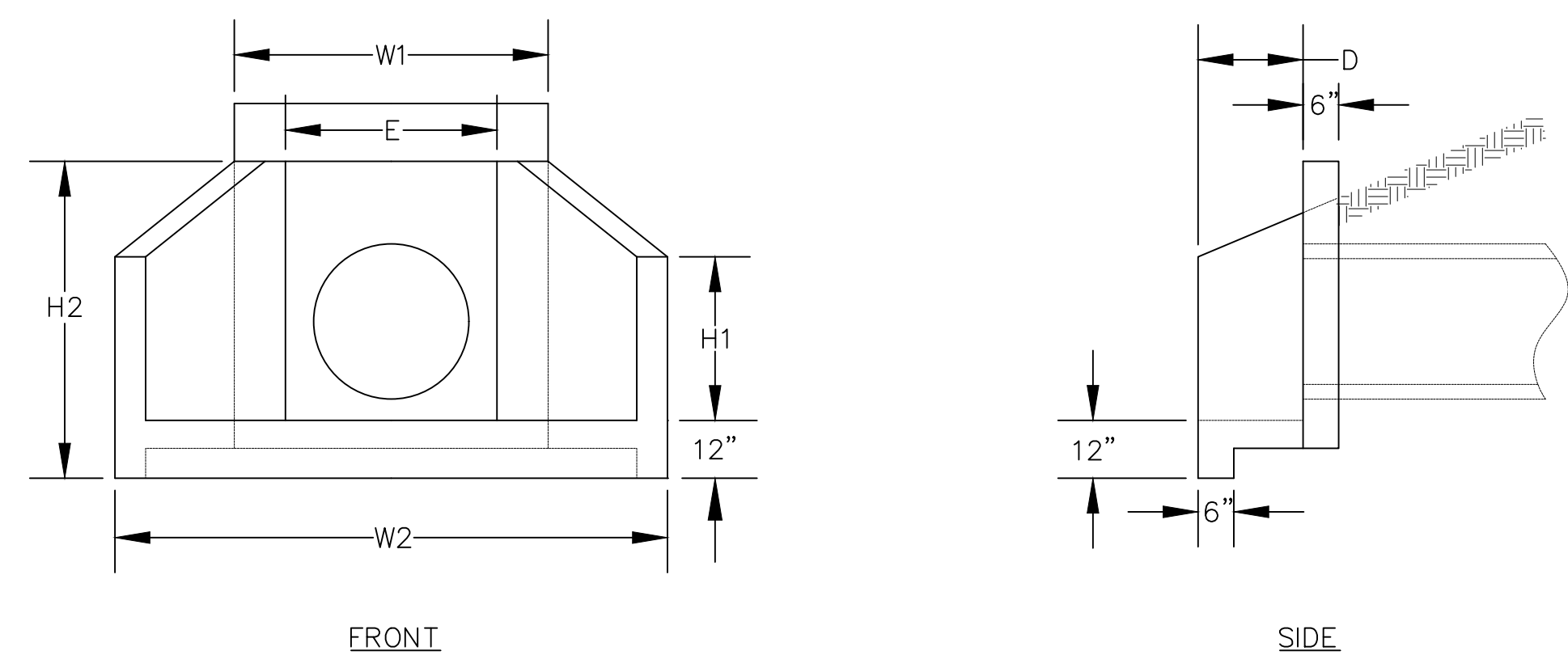
NOTE:
 SEE FILE NO. SD-15 AND 16 FOR DIMENSIONS
 SEE SD-10 FOR TOP ELEV.



NOTE:
 SEE FILE NO. SD-15 AND 16 FOR DIMENSIONS
 SEE SD-9 FOR FRONT ELEV. VIEW

NOTE:
 FILL EVERY CAVITY COMPLETELY WITH 3000 PSI CONCRETE.
 CONCRETE SHALL NOT FALL MORE THAN THE HEIGHT OF 5 LAYERS OF BLOCK.
 DUR-A-WALLS TO BE PLACED EVERY COURSE.

DATE: 3/9/99	STANDARD DETAIL	OFFICE OF THE CITY ENGINEER SHELBY, N.C.
DRAWN BY: WKD	CONCRETE BLOCK HEADWALL WITH WING WALLS	FILE NO. SD-10
CITY ENGINEER: HLB		



NOTES:
 1. ALL CONCRETE SHALL BE 4000 PSI MINIMUM.
 2. REINFORCEMENT STEEL SHALL MEET ASTM-A615 GRADE 60 WITH 2" MINIMUM CLEARANCE.

INSIDE PIPE DIAMETER	REINF.	LBS.	W1	W2	H1	H2	D	E
12", 15", 18"	NO. 4	2060	44"	64"	23"	42 1/2"	18 1/2"	27"
21", 24"	NO. 4	3100	50"	85"	31"	56"	24"	33"
27", 30", 36"	NO. 4	5940	64"	108"	41"	72"	36"	49"
42", 48"	NO. 4	8040	79"	150"	52"	79"	40"	64"
54", 60", 72"	NO. 4, NO. 5	16000	105"	161"	60"	90"	48"	90"

PRECAST CONCRETE HEADWALL