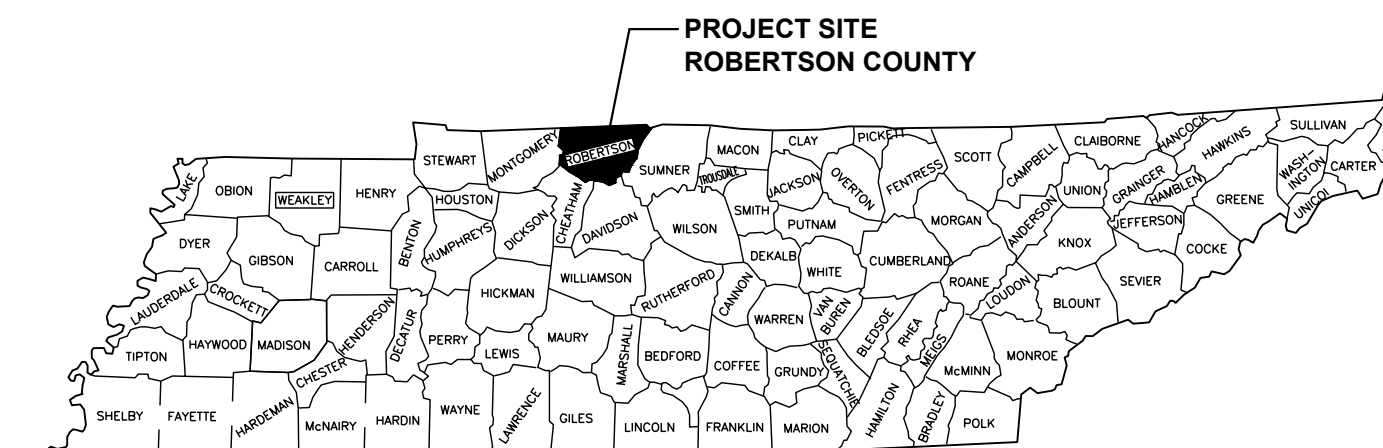


SOUTHERN FORCE MAIN FROM HESTER DR. STATION TO INT. OF DEE CEE RD. AND SCT DR. FOR THE CITY OF WHITE HOUSE WHITE HOUSE, TENNESSEE (ROBERTSON COUNTY)



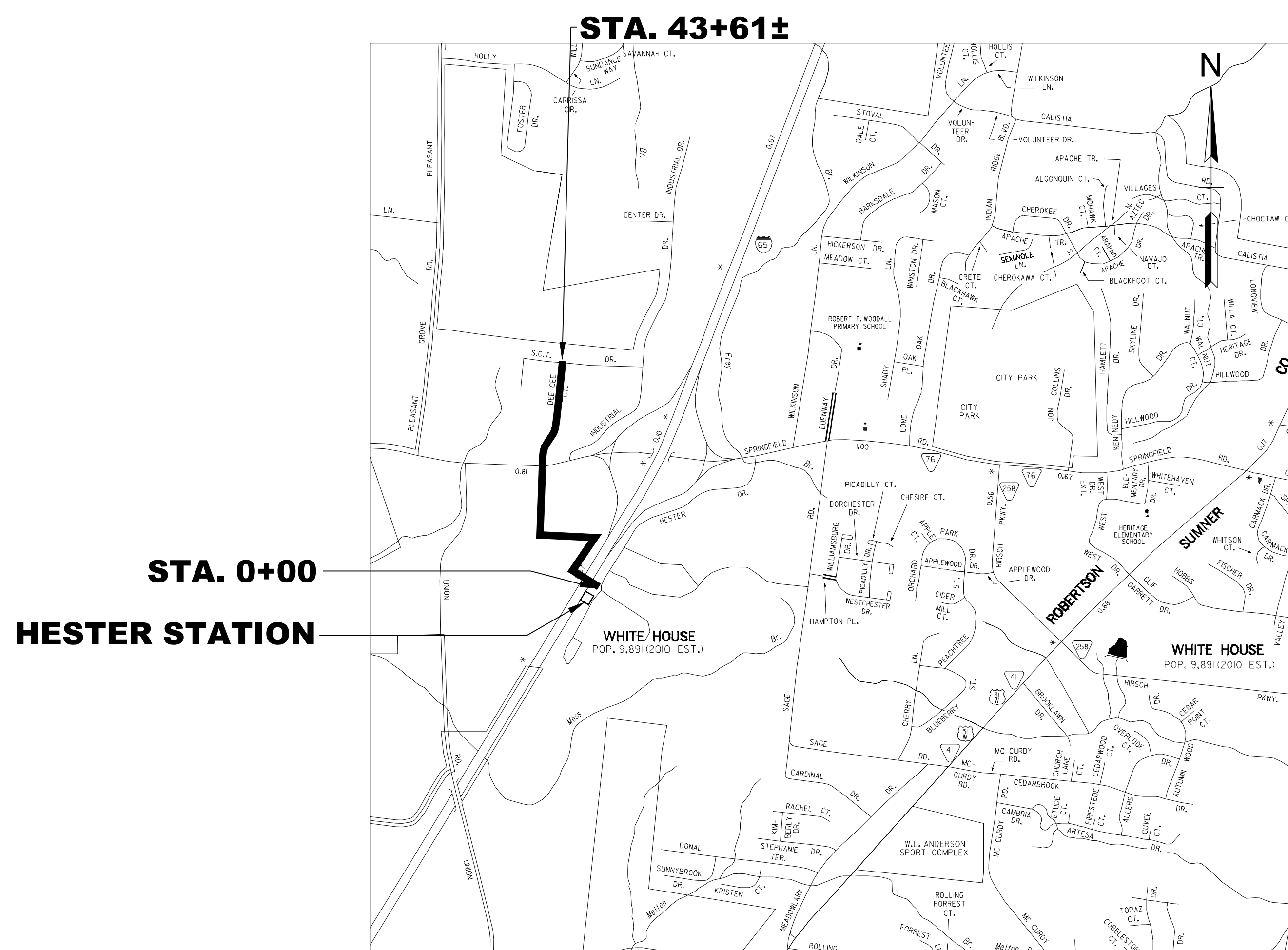
CONTRACTOR'S NOTES:

THE CONTRACTORS WORK TO BE PERFORMED UNDER THIS PROJECT WILL CONSIST OF FURNISHING ALL EQUIPMENT, LABOR, TOOLS AND SUPERVISION NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED WORK AND ALL OTHER RELATED WORK AS LISTED IN THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, UTILITY LOCATIONS, ELEVATIONS, EXISTING INVERTS PRIOR TO CONSTRUCTION, IF A DISCREPANCY IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR REPRESENTATIVE IMMEDIATELY.

ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES AND LAWS. ALL NECESSARY LICENSES AND PERMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

UTILITY OWNERS	
WATER SERVICE	
WHITE HOUSE UTILITY DISTRICT P.O. BOX 608 WHITE HOUSE, TN 37188 615-672-1033	
SANITARY SEWER SERVICE	
CITY WHITE HOUSE 725 INDUSTRIAL DRIVE WHITE HOUSE, TN 37188 615-672-3654	
NATURAL GAS UTILITY SERVICE	
PIEDMONT GAS COMPANY 83 CENTURY BLVD. NASHVILLE, TN 37214 615-734-1760	
ELECTRIC SERVICE	
CUMBERLAND ELECTRIC MEMBERSHIP CORPORATION P.O. BOX 3300 OR 1940 MADISON STREET CLARKSVILLE, TN 37043 931-645-2481	
CABLE/TELEPHONE SERVICE	
COMCAST 660 MAIN STREAM DRIVE NASHVILLE, TN 37228 615-244-7462	
AT&T RM 23C180 333 COMMERCE STREET NASHVILLE, TN 37201-1800 615-214-4841	

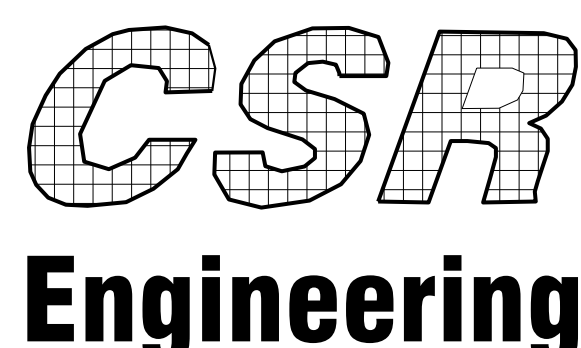


LOCATION MAP

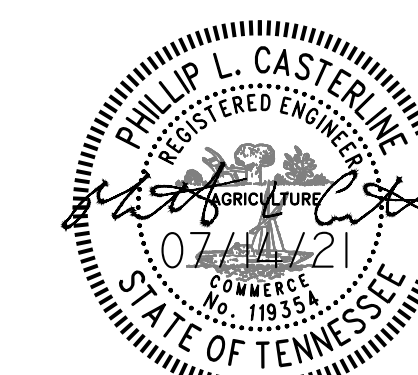
INDEX OF DRAWINGS

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G-001	TITLE SHEET
G-002	GENERAL NOTES
C-101	LINE "FM-1" STA. 0+00 TO STA. 15+00
C-102	LINE "FM-1" STA. 15+00 TO STA. 30+00
C-103	LINE "FM-1" STA. 30+00 TO E.O.L.
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C-601	EPSC PLAN
C-602	EPSC PLAN
C-603	EPSC NOTES AND DETAILS

I CERTIFY THAT THE WASTEWATER PLANS TO WHICH THIS STATEMENT IS ATTACHED ARE DESIGNED TO COMPLY WITH THE STANDARD DESIGN SPECIFICATIONS OF THE WHITE HOUSE WASTEWATER DEPARTMENT



CSR Engineering, Inc.
1116 Main Street
Pleasant View, TN 37146
P: 615.212.2389
F: 615.246.3815
www.csrengineers.com



IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.

LEGEND - EXISTING

TELEPHONE, ELECTRIC OR CABLE PEDESTAL	
SIGN	
LIGHT POLE	
UTILITY POLE	
GUY WIRE AND ANCHOR	
SEWER MANHOLE	
SEWER CLEAN OUT	
CURB INLET	
CATCH BASIN	
WATER METER	
FIRE HYDRANT	
WATER VALVE	
GAS METER	
GAS VALVE	
ELECTRIC JUNCTION BOX	
BENCH MARK	
IRON ROD SET	
IRON ROD FOUND	
CONCRETE MONUMENT	
FINISHED FLOOR ELEVATION	
MAILBOX	
CULVERT	
FENCE	
GUARDRAIL	
WATER LINE	
SEWER LINE	
FORCE MAIN	
GAS LINE	
UNDERGROUND ELECTRIC	
OVERHEAD ELECTRIC	
UNDERGROUND FIBER OPTIC CABLE	
UNDERGROUND TELEPHONE CABLE	
STREAM LINE	
DITCH LINE	
TREE	
WOODS LINE	
SHRUBS OR BUSHES	
CONTOUR LINE	
PROPERTY LINE	
RIGHT-OF-WAY	

LEGEND - PROPOSED

FORCE MAIN	
GATE VALVE	
AIR / VACUUM RELEASE VALVE	

GENERAL NOTES:

- FINISH GRADE TOLERANCES SHALL BE AS NOTED IN THE DETAILED SPECIFICATIONS. THE ENGINEER MAY MAKE GRADE CHANGES AS REQUIRED IN THE FIELD WITHOUT EFFECTING THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION.
- UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF 8" LIFTS, WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER OR CITY REPRESENTATIVE AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2 FT. OF THE SUB-GRADE BELOW ROADWAYS, ASPHALT AND CONCRETE DRIVEWAYS OR PARKING AREAS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D698 OR AASHTO-99 UNLESS SPECIFIED ELSEWHERE.
- ENTIRE AREA TO BE GRADED SHALL BE CLEARED AND GRUBBED. NO FILL SHALL BE PLACED ON ANY AREA THAT HAS NOT BEEN CLEARED AND GRUBBED.
- ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES ETC. SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY UPON THE ENGINEER/CITY REPRESENTATIVE'S APPROVAL. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL EROSION WHICH CHANGES THE FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED AT NO EXTRA COST. ALL SILT WASHED OFF THE PROJECT SITE ONTO ADJACENT PROPERTIES SHALL BE REMOVED AS DIRECTED BY THE ENGINEER/CITY REPRESENTATIVE AT NO EXTRA COST. THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.
- DISPOSABLE MATERIAL
 - CLEARING AND GRUBBING WASTES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE, UNLESS SPECIFIED OTHERWISE.
 - SOLID WASTES TO BE REMOVED, SUCH AS SIDEWALKS, CURBS, PAVEMENT, ECT., MAY BE PLACED IN SPECIFIC DISPOSAL AREAS DELINEATED IN THE PLANS OR REMOVED FROM THE SITE AS REQUIRED BY THE SPECIFICATIONS. THIS MATERIAL SHALL HAVE A MINIMUM COVER OF 2 FT., THE CONTRACTOR SHALL MAINTAIN SPECIFIED COMPACTION REQUIREMENTS IN THESE AREAS. WHEN DISPOSAL SITES ARE NOT PROVIDED, THE CONTRACTOR SHALL REMOVE THE WASTE FROM THE SITE AND PROPERLY DISPOSE OF AT HIS EXPENSE.
 - ABANDONED UTILITIES, SUCH AS CULVERTS, WATER PIPE, HYDRANTS, CASTINGS, PIPE APPURTENANCES, UTILITY POLES, ECT., SHALL BE THE PROPERTY OF THE SPECIFIC UTILITY OWNER OR THE COMPANY HAVING JURISDICTION. BEFORE THE CONTRACTOR CAN REMOVE, DESTROY, SALVAGE, REUSE, SELL OR STORE FOR HIS OWN USE OF ANY ABANDONED UTILITY, HE MUST PRESENT THE OWNER'S WRITTEN PERMISSION FROM THE UTILITY INVOLVED.
- IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL NECESSARY UNDER DRAINS AND STONE AS DIRECTED BY THE ENGINEER. ALL WORK SHALL BE PAID BASED UPON UNITY BIDS, UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL UTILITY SURFACE ACCESSSES.
- THE CONTRACTOR SHALL CONTROL ALL "DUST" BE PERIODIC WATERING AND SHALL PROVIDE ACCESS AT ALL TIMES FOR PROPERTY OWNERS WITHIN THE PROJECT AREA AND FOR EMERGENCY VEHICLES. ALL OPEN DITCHES AND HAZARDOUS AREAS SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE FINISHED SURFACE SHALL BE SMOOTH, FREE OF ALL ROCKS LARGER THAN 3", EQUIPMENT TRACKS, DIRT CLOUDS, BUMPS, RIDGES AND GOUGES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENE TO A DEPTH OF ±4"-6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER/CITY REPRESENTATIVE'S APPROVAL OF THE GRADED SURFACE. HAND SEEDING IN CERTAIN AREAS SHALL BE AUTHORIZED ON A CASE BY CASE BASIS BY THE ENGINEER/CITY REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES.
- THE CONTRACTOR SHALL NOTIFY THE PROPER AUTHORITIES AT LEAST 24 HOURS PRIOR TO ANY ROAD CLOSURES FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO LOCAL NEWSPAPER, RADIO STATION, FIRE DEPARTMENT, CITY POLICE DEPARTMENT, AMBULANCE AND COUNTY EMERGENCY AGENCY. ALL TRAFFIC CONTROL SHALL CONFORM TO THE REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
- THE LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY AND SHALL BE FIELD VERIFIED PRIOR TO THE CONTRACTOR COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY REQUIRED MODIFICATIONS IMMEDIATELY. THE CONTRACTOR SHALL CONTACT EACH UTILITY OWNERS OR TENNESSEE ONE CALL (811) AND HAVE EACH UNDERGROUND UTILITY LOCATED AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- THE NAMES OF PROPERTY OWNERS, PROPERTY LINES, STREET AND ROAD RIGHTS-OF-WAY SHOWN ON THESE PLANS WERE OBTAINED FROM THE ROBERTSON COUNTY GIS MAPS. INFORMATION IS ONLY GENERAL IN NATURE AND IS NOT GUARANTEED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ALL EXISTING DRAINAGE CULVERTS DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE AS SPECIFIED AND DETAILED IN THE CITY OF WHITE HOUSE'S "STANDARD SEWER SYSTEM SPECIFICATIONS" AND "STANDARD SEWER DETAILS" FOUND AT : <http://cityofwhitehouse.com/government/wastewater>

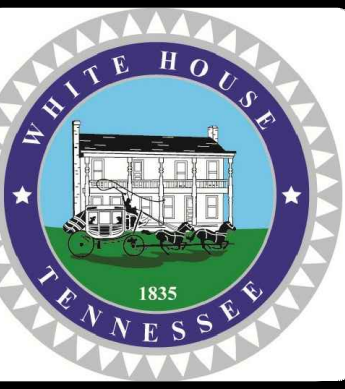
SEWER CONSTRUCTION NOTES:

- ALL CONSTRUCTION OUTSIDE OF RIGHT-OF-WAY SHALL TAKE PLACE WITHIN THE PERMANENT AND TEMPORARY EASEMENTS SHOWN.
- THE CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN ORIGINAL, OR AS NOTED.
- THE CONTRACTOR SHALL BE STRICTLY AND SOLELY LIABLE FOR ANY FINES LEVIED BY ANY REGULATORY AGENCY DUE TO VIOLATION OF WATER QUALITY IN THE STREAMS CAUSED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEANS AS SPECIFIED TO PREVENT TRANSPORT OF SEDIMENT INTO THOSE WATERWAYS AT NO ADDITIONAL COST TO THE OWNER.
- ALL WORK NEAR AND AROUND WATERWAYS SHALL CONFORM TO THE RULES OF STATE OF TENNESSEE.
- CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS PERTAINING TO CONSTRUCTION OPERATIONS.
- SEWER LINES SHALL HAVE A MINIMUM OF 4'-0" OF COVER UNLESS SHOWN OTHERWISE IN THE DRAWINGS.
- WATER AND SEWER LINES SHALL HAVE A MINIMUM OF 10 FT. HORIZONTAL SEPARATION OR A MINIMUM OF 18" VERTICAL SEPARATION WITH THE WATER LINE ABOVE THE SEWER, OR BOTH WATER AND SEWER LINES SHALL BE DUCTILE IRON PIPE FOR 10 FT. EACH SIDE OF THE CROSSING.
- SANITARY AND STORM SEWER LINES SHALL HAVE A MINIMUM OF 12" VERTICAL SEPARATION.
- UNLESS NOTED OTHERWISE, ALL PIPES SHALL BE INSTALLED WITH PUSH-ON JOINTS.
- LEGAL DESCRIPTIONS FOR PROPOSED EASEMENTS BY OTHERS.
- LOCATIONS SHOWN FOR SANITARY SEWER SERVICES ARE ASSUMED. COORDINATE LOCATION OF ALL PROPOSED SEWER SERVICE CONNECTIONS WITH PROPERTY OWNER AND FIELD CONDITIONS.
- CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED MANHOLE TOP ELEVATIONS AND EXISTING MANHOLE INVERTS PRIOR TO CONSTRUCTION AND NOTIFY THE CITY REPRESENTATIVE OF ANY DISCREPANCIES. CONTRACTOR SHALL ADJUST ALL PROPOSED SEWER STRUCTURES TO MATCH FINISHED GRADE ELEVATIONS. COST OF RAISING THE STRUCTURES SHALL BE CONSIDERED INCIDENTAL AND ADDED TO THE COST OF THE MANHOLE.
- MANHOLES AND CASTINGS SHALL MEET THE REQUIREMENTS OF THE CITY AS WELL AS THE PROJECT SPECIFICATIONS.
- ANY FENCING DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIAL IN A WORKMAN LIKE MANNER AND IN ACCORDANCE TO THE SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. THIS DOES NOT INCLUDE ADDITIONAL FENCE CALLED OUT IN THE PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS DURING CONSTRUCTION AND SHALL REPAIR ROADS PER REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION OR THE CITY OF WHITE HOUSE. SAND OR A SIMILAR MATERIAL APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION SHALL BE PLACED AS A PROTECTIVE BARRIER BETWEEN TRACKED EQUIPMENT AND THE ROAD AND CLEANED UP PROPERLY AFTER CONSTRUCTION. A MINIMUM OF 2" OF SAND SHALL BE PLACED ON THE ROAD PRIOR TO STOCKPILING SPOIL MATERIAL ON THE ROAD SURFACE TO FACILITATE CLEANUP.

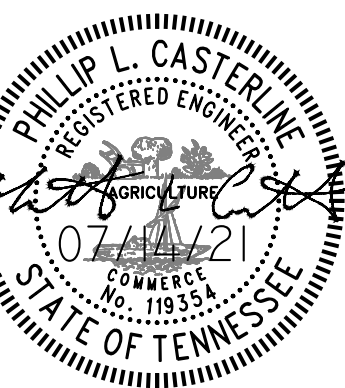
GENERAL CONSTRUCTION NOTE:

ANY BYPASS PUMPING REQUIRED TO PERFORM THE CONTRACT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. BYPASS PUMPING IS NOT A SEPARATE PAY ITEM & BYPASSING OF RAW SEWAGE WILL NOT BE PERMITTED.

CSR Engineering
 CSR Engineering, Inc.
 1116 Main Street
 Pleasant View, TN 37146
 P: 615.212.2389
 F: 615.246.3815
 www.csrengineers.com



GENERAL NOTES
 SOUTHERN FORCE MAIN
 FOR
 THE CITY OF WHITE HOUSE
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



REVISIONS	
NO.	DESCRIPTION

DESIGNER **OJP**
 REVIEWER **PLC**

PROJECT **21-903**

DATE **07/14/2021**

SHEET **G-002**





**LINE "FM-1"
 STA. 0+00 TO 15+00
 SOUTHERN FORCE MAIN
 FOR
 THE CITY OF WHITE HOUSE**
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



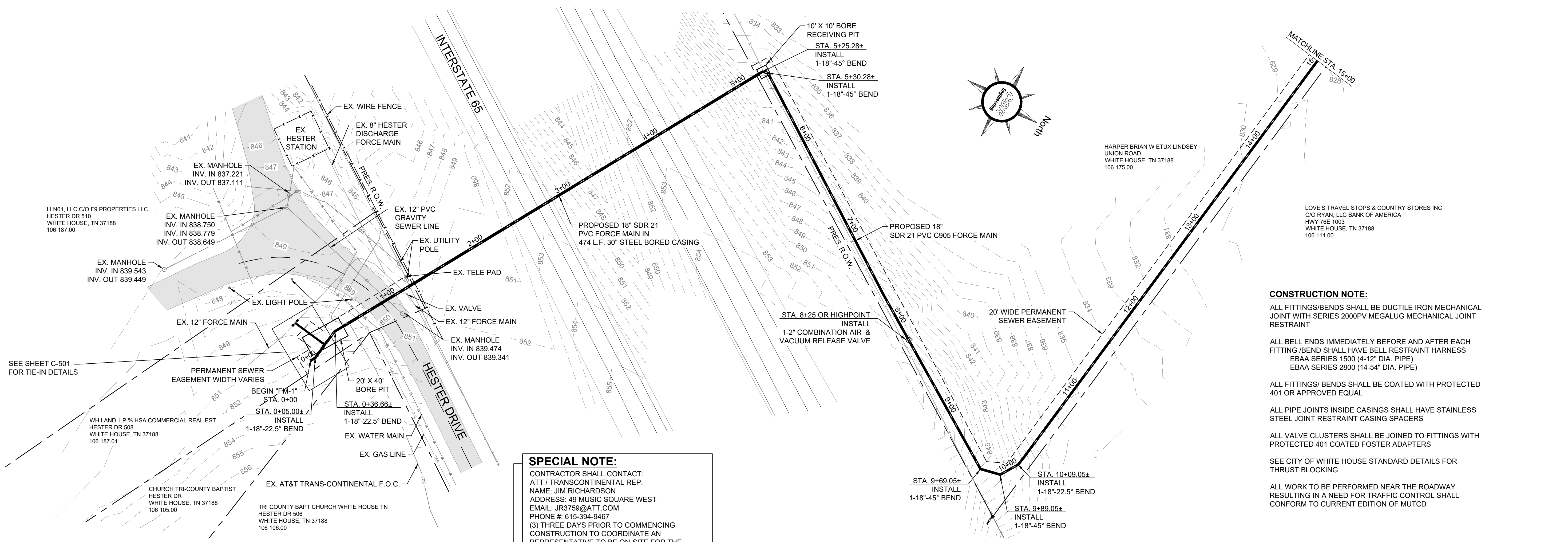
REVISIONS	
NO.	DESCRIPTION

DESIGNER: OJP
 REVIEWER: PLC

PROJECT: 21-903

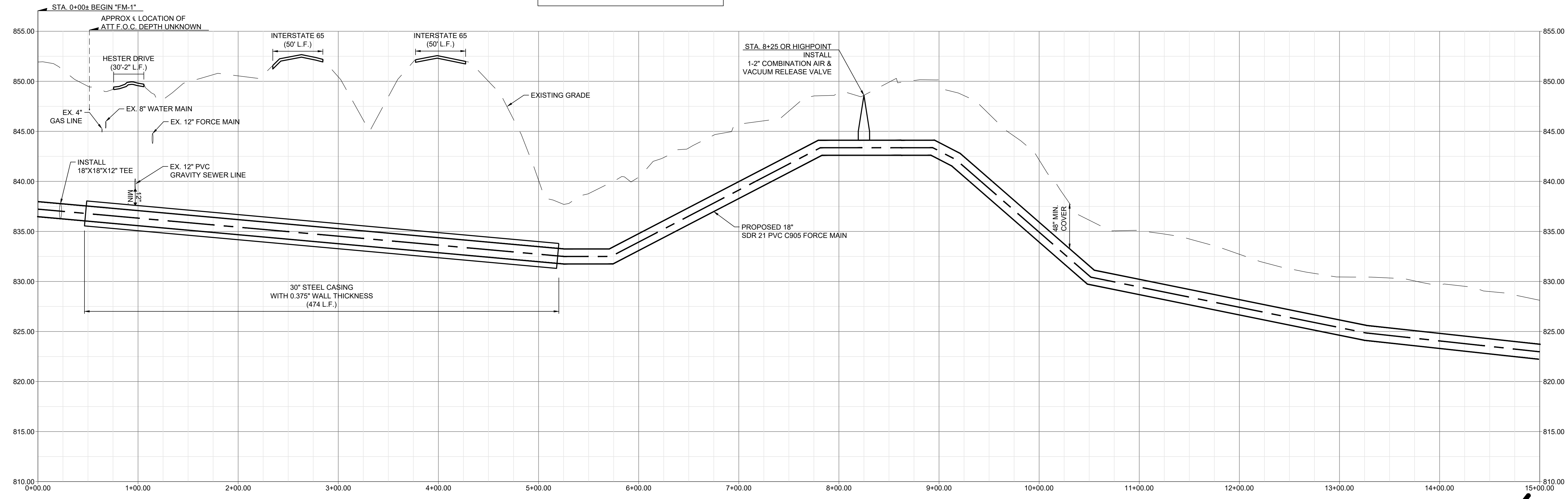
DATE: 07/14/2021

SHEET: C-101



SPECIAL NOTE:
 CONTRACTOR SHALL CONTACT:
 ATT / TRANSCONTINENTAL REP.
 NAME: JIM RICHARDSON
 ADDRESS: 49 MUSIC SQUARE WEST
 EMAIL: JR3759@ATT.COM
 PHONE #: 615-394-9467
 (3) THREE DAYS PRIOR TO COMMENCING CONSTRUCTION TO COORDINATE AN REPRESENTATIVE TO BE ON-SITE FOR THE FIBER OPTIC CABLE CROSSING NEAR STA. 0+50

CONSTRUCTION NOTE:
 ALL FITTINGS/BENDS SHALL BE DUCTILE IRON MECHANICAL JOINT WITH SERIES 2000PV MEGALUG MECHANICAL JOINT RESTRAINT
 ALL BELL ENDS IMMEDIATELY BEFORE AND AFTER EACH FITTING /BEND SHALL HAVE BELL RESTRAINT HARNESS EBAA SERIES 1500 (4-12" DIA. PIPE) EBAA SERIES 2800 (14-54" DIA. PIPE)
 ALL FITTINGS/ BENDS SHALL BE COATED WITH PROTECTED 401 OR APPROVED EQUAL
 ALL PIPE JOINTS INSIDE CASINGS SHALL HAVE STAINLESS STEEL JOINT RESTRAINT CASING SPACERS
 ALL VALVE CLUSTERS SHALL BE JOINED TO FITTINGS WITH PROTECTED 401 COATED FOSTER ADAPTERS
 SEE CITY OF WHITE HOUSE STANDARD DETAILS FOR THRUST BLOCKING
 ALL WORK TO BE PERFORMED NEAR THE ROADWAY RESULTING IN A NEED FOR TRAFFIC CONTROL SHALL CONFORM TO CURRENT EDITION OF MUTCD



NOTE: CONTRACTOR TO VERIFY EX. UTILITY DEPTHS & ADJUST DEPTH OF BORE TO MAINTAIN REQUIRED VERTICAL SEPARATION BETWEEN EX. WATER MAINS AND PROPOSED SAN. SEWER

PROFILE VIEW
 "FM-1"
 HORIZ. SCALE: 1" = 50'
 VERT. SCALE: 1" = 5'



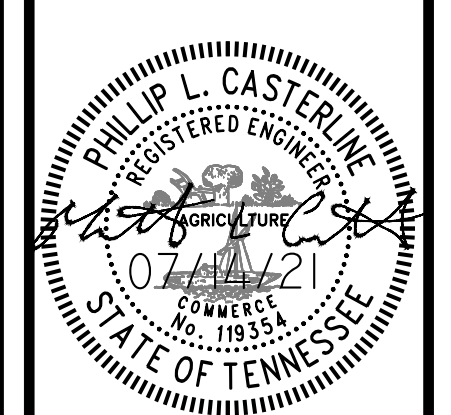
PURPOSE FOR ISSUE: CONSTRUCTION

SCALE: 1"=50'





LINE "FM-1"
STA. 15+00 TO 30+00
SOUTHERN FORCE MAIN
 FOR
THE CITY OF WHITE HOUSE
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



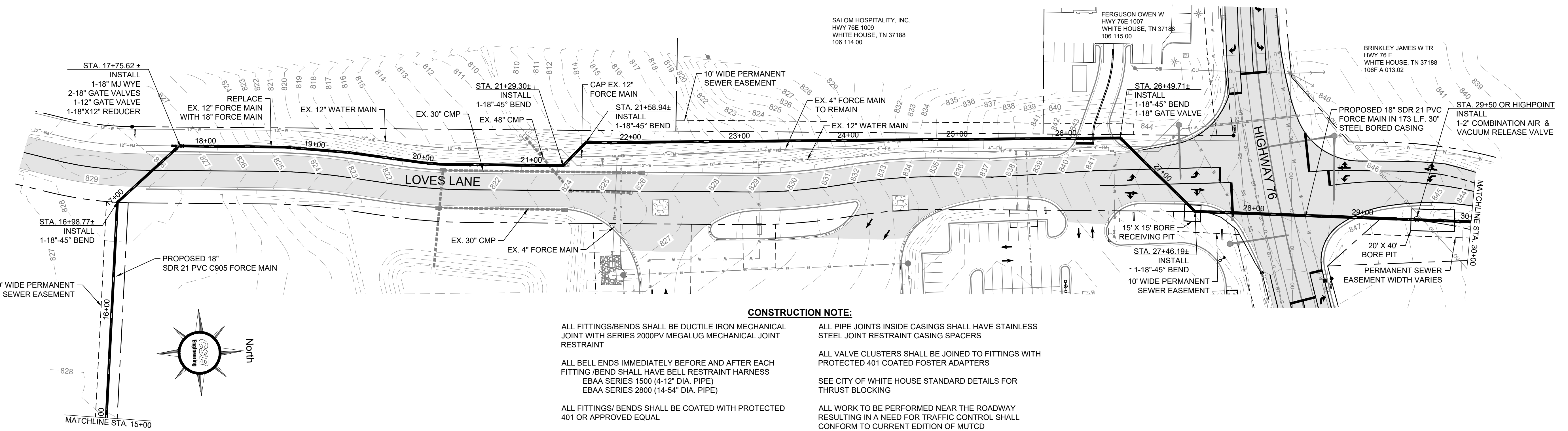
REVISIONS	
NO.	DESCRIPTION

DESIGNER **PLC**
 REVIEWER **PLC**

PROJECT **21-903**

DATE **07/14/2021**

SHEET **C-102**



CONSTRUCTION NOTE:

ALL FITTINGS/BENDS SHALL BE DUCTILE IRON MECHANICAL JOINT WITH SERIES 2000PV MEGALUG MECHANICAL JOINT RESTRAINT

ALL BELL ENDS IMMEDIATELY BEFORE AND AFTER EACH FITTING /BEND SHALL HAVE BELL RESTRAINT HARNESS
 EBAA SERIES 1500 (4-12\"/>

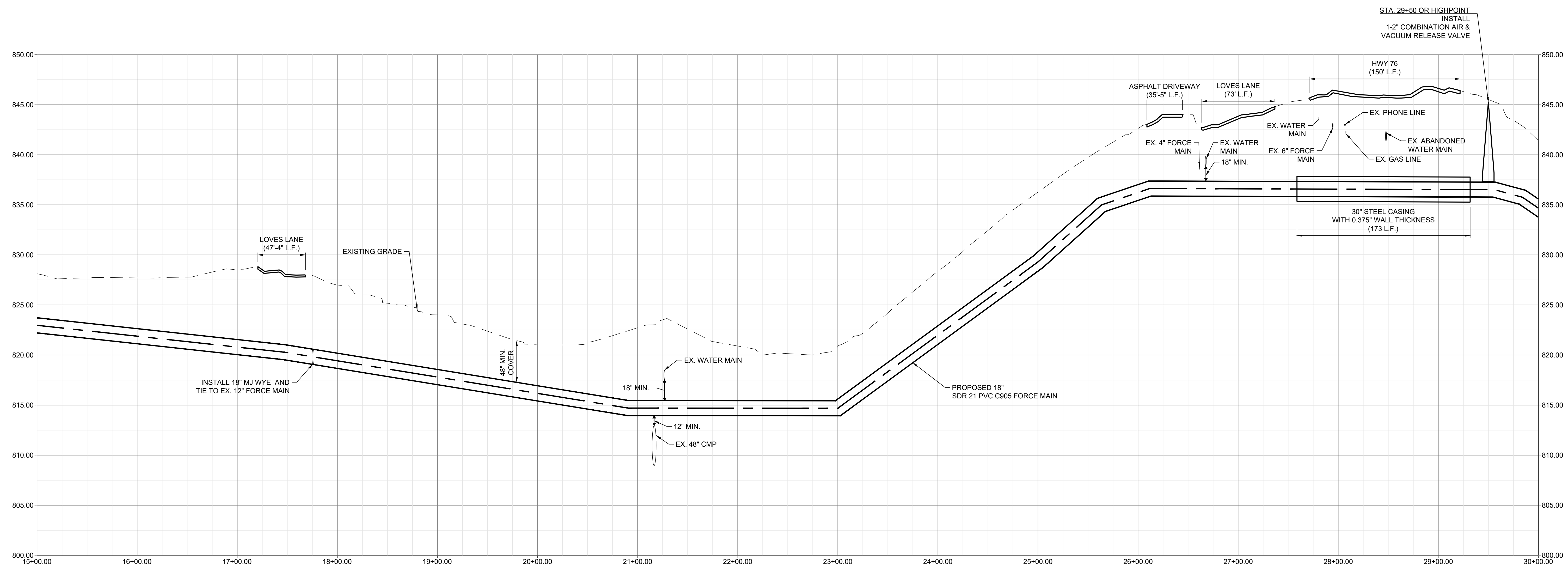
ALL FITTINGS/ BENDS SHALL BE COATED WITH PROTECTED 401 OR APPROVED EQUAL

ALL PIPE JOINTS INSIDE CASINGS SHALL HAVE STAINLESS STEEL JOINT RESTRAINT CASING SPACERS

ALL VALVE CLUSTERS SHALL BE JOINED TO FITTINGS WITH PROTECTED 401 COATED FOSTER ADAPTERS

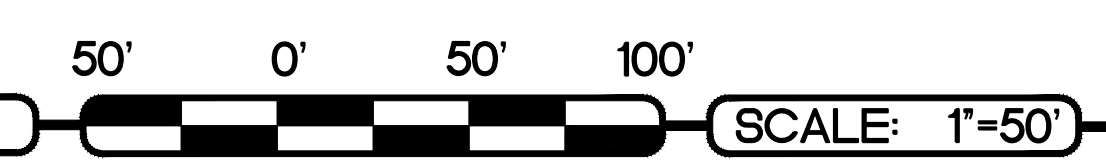
SEE CITY OF WHITE HOUSE STANDARD DETAILS FOR THRUST BLOCKING

ALL WORK TO BE PERFORMED NEAR THE ROADWAY RESULTING IN A NEED FOR TRAFFIC CONTROL SHALL CONFORM TO CURRENT EDITION OF MUTCD



PROFILE VIEW
"FM-1"
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 VERT. SCALE: 1" = 5'

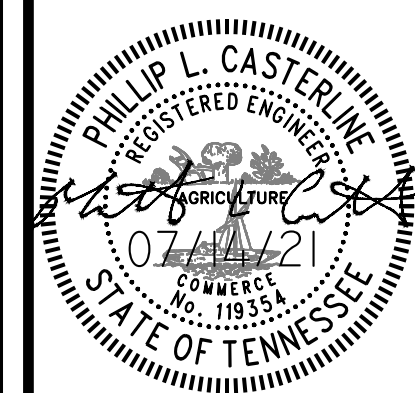
NOTE: CONTRACTOR TO VERIFY EX. UTILITY DEPTHS & ADJUST DEPTH OF BORE TO MAINTAIN REQUIRED VERTICAL SEPARATION BETWEEN EX. WATER MAINS AND PROPOSED SAN. SEWER



PURPOSE FOR ISSUE: CONSTRUCTION



LINE "FM-1"
STA. 30+00 TO E.O.L.
SOUTHERN FORCE MAIN
FOR
THE CITY OF WHITE HOUSE
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



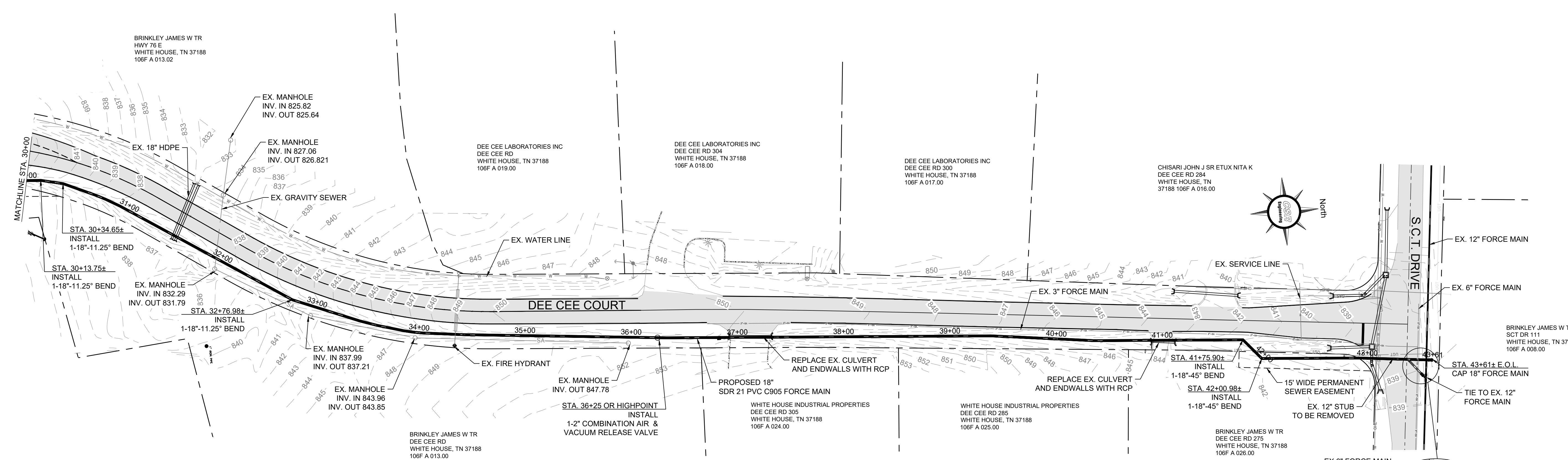
REVISIONS	
NO.	DESCRIPTION

DESIGNER: OJP
 REVIEWER: PLC

PROJECT: 21-903

DATE: 07/14/2021

SHEET: C-103



CONSTRUCTION NOTE:

ALL FITTINGS/BENDS SHALL BE DUCTILE IRON MECHANICAL JOINT WITH SERIES 2000PV MEGALUG MECHANICAL JOINT RESTRAINT

ALL BELL ENDS IMMEDIATELY BEFORE AND AFTER EACH FITTING /BEND SHALL HAVE BELL RESTRAINT HARNESS EBAA SERIES 1500 (4-12" DIA. PIPE) EBAA SERIES 2800 (14-54" DIA. PIPE)

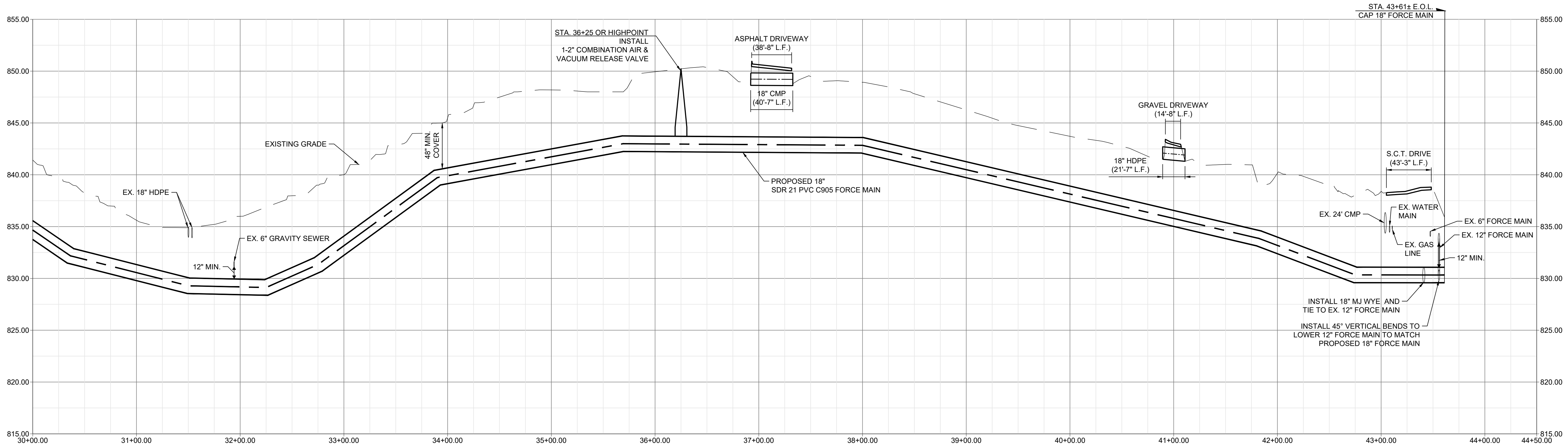
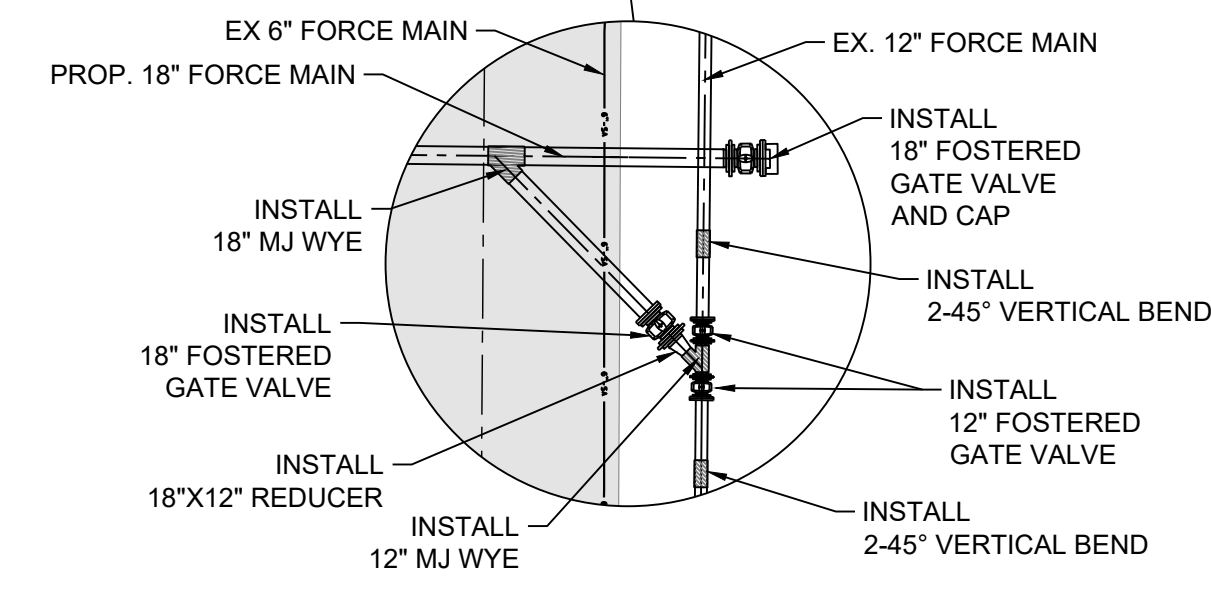
ALL FITTINGS/ BENDS SHALL BE COATED WITH PROTECTED 401 OR APPROVED EQUAL

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ALL WORK TO BE PERFORMED NEAR THE ROADWAY RESULTING IN A NEED FOR TRAFFIC CONTROL SHALL CONFORM TO CURRENT EDITION OF MUTCD



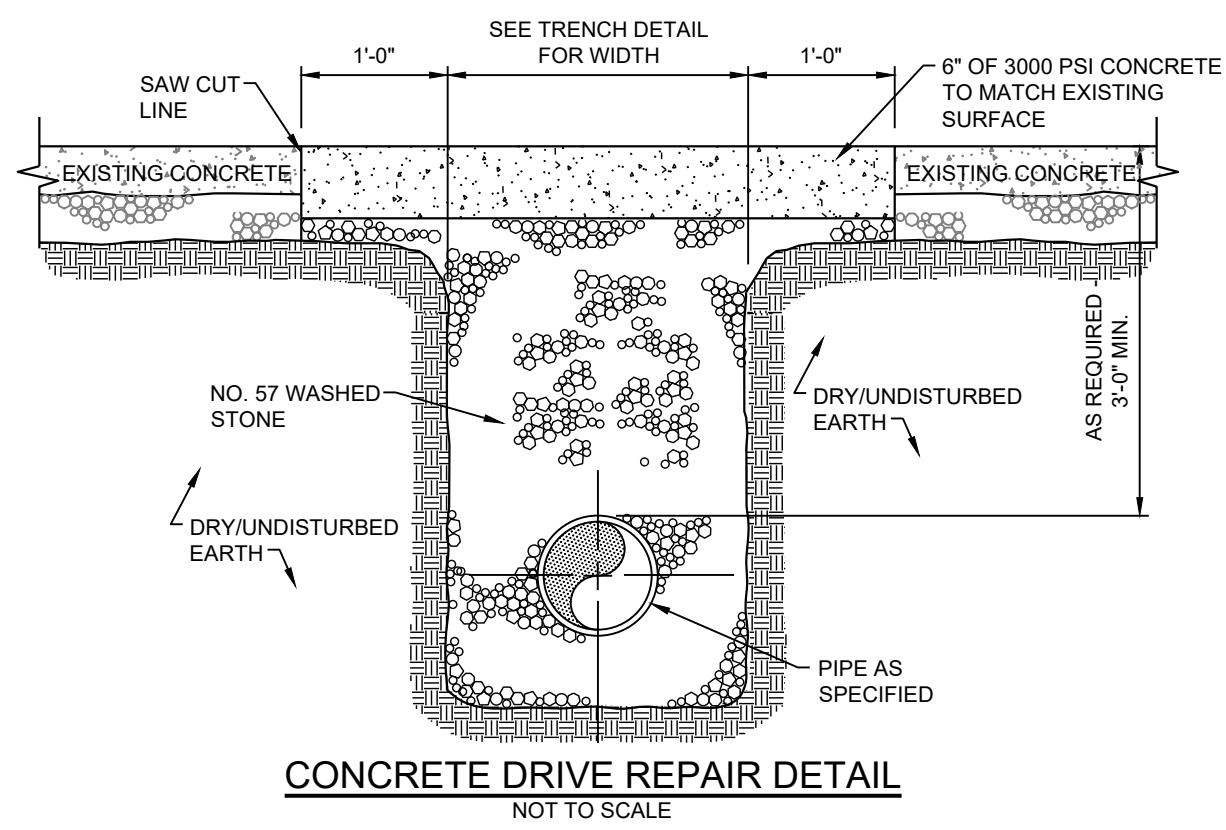
PROFILE VIEW
 "FM-1"
 HORIZ. SCALE: 1" = 50'
 VERT. SCALE: 1" = 5'

NOTE: CONTRACTOR TO VERIFY EX. UTILITY DEPTHS & ADJUST DEPTH TO MAINTAIN REQUIRED VERTICAL SEPARATION BETWEEN EX. WATER MAIN AND PROPOSED SAN. SEWER

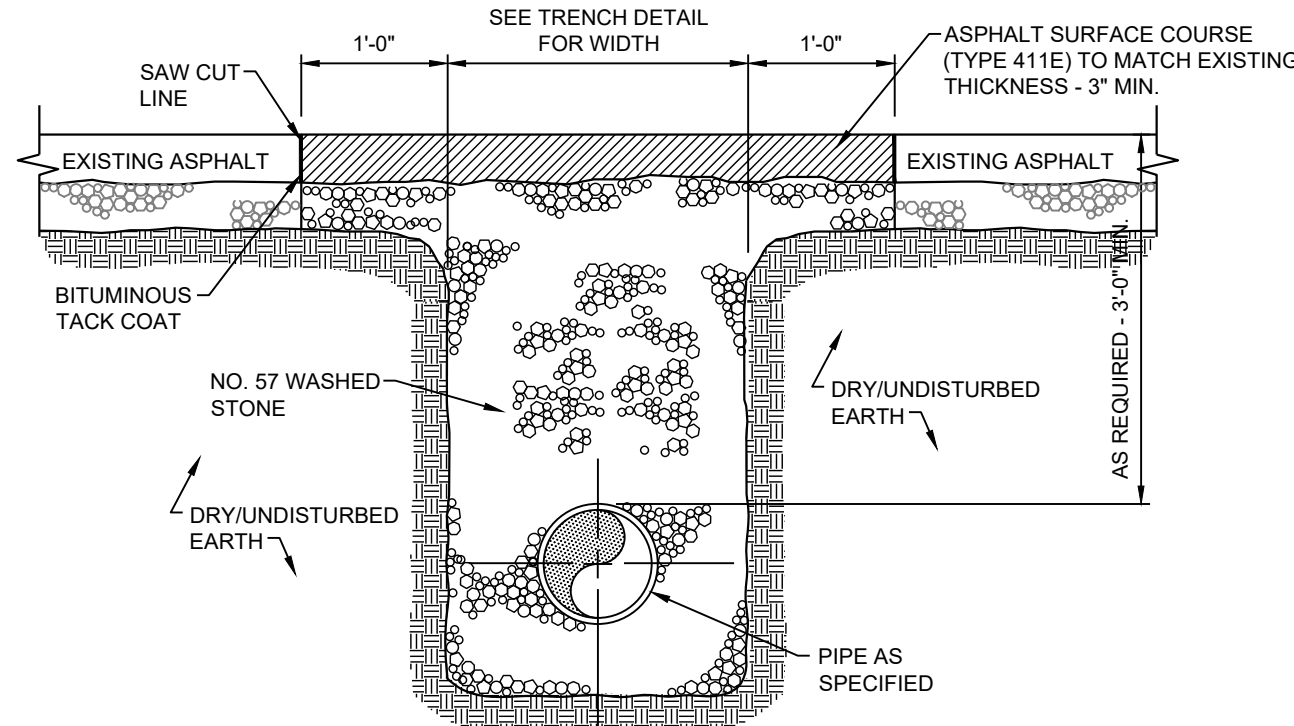


PURPOSE FOR ISSUE: CONSTRUCTION

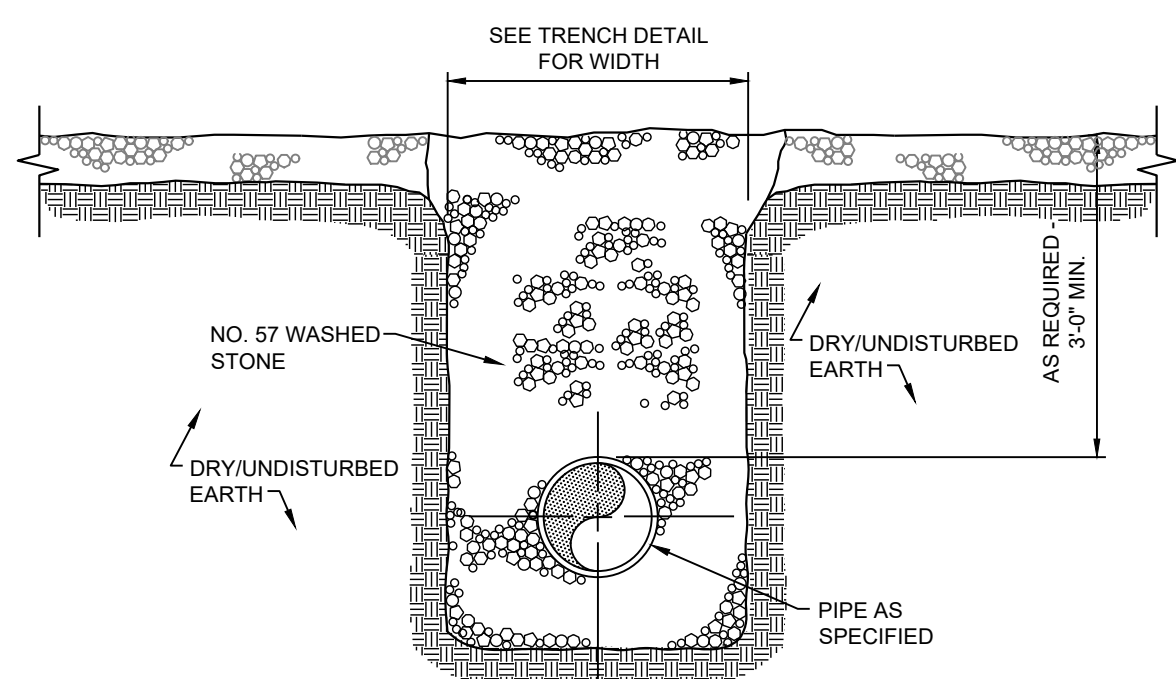




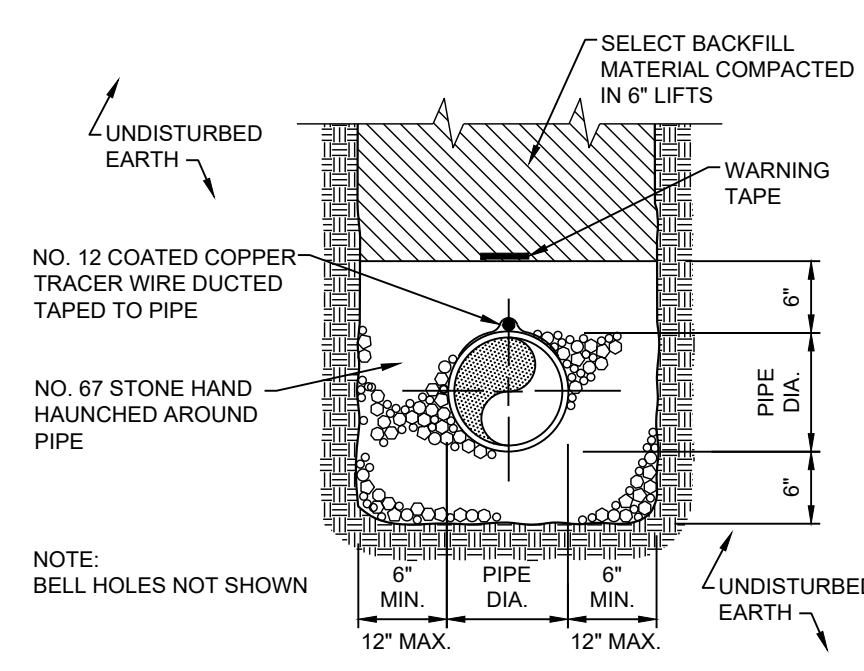
CONCRETE DRIVE REPAIR DETAIL
NOT TO SCALE



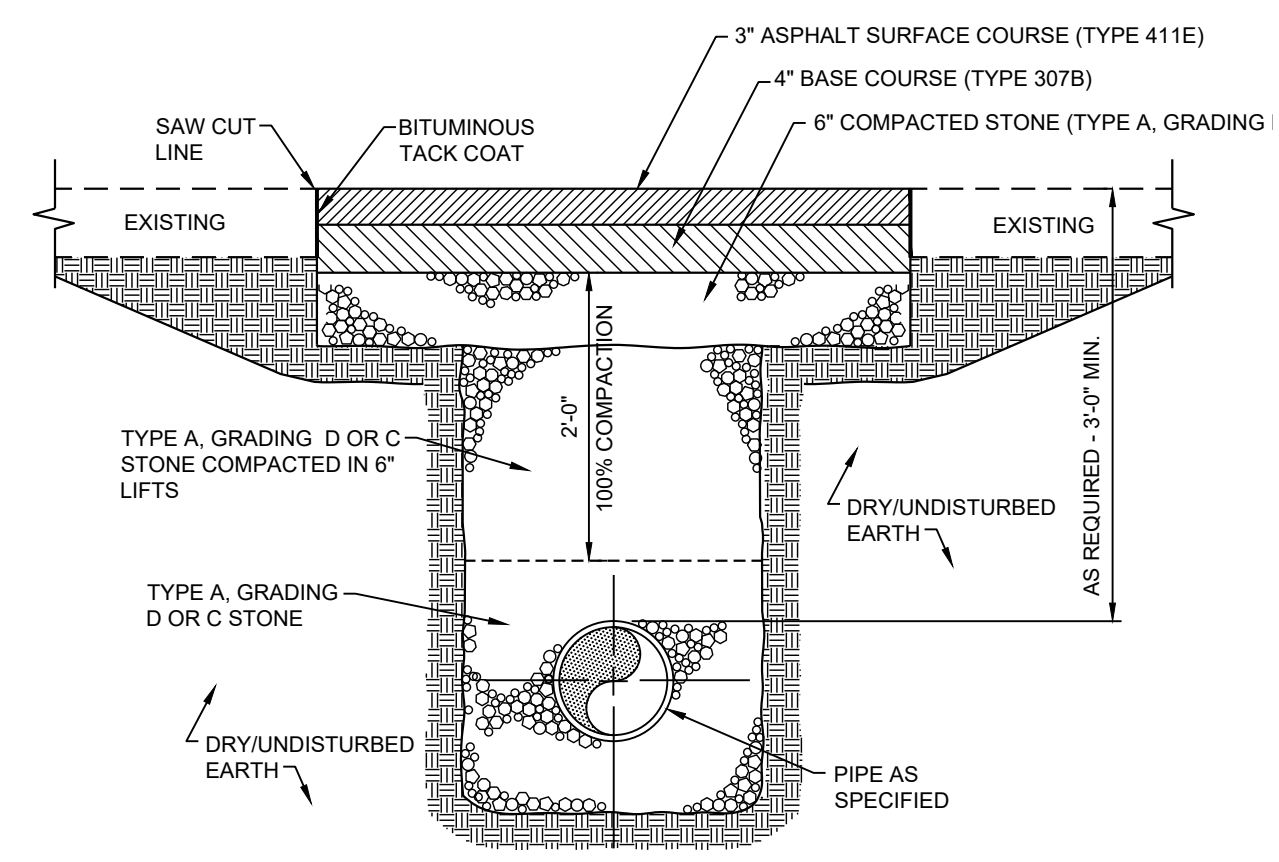
ASPHALT DRIVE REPAIR DETAIL
NOT TO SCALE



GRAVEL DRIVE REPAIR DETAIL
NOT TO SCALE

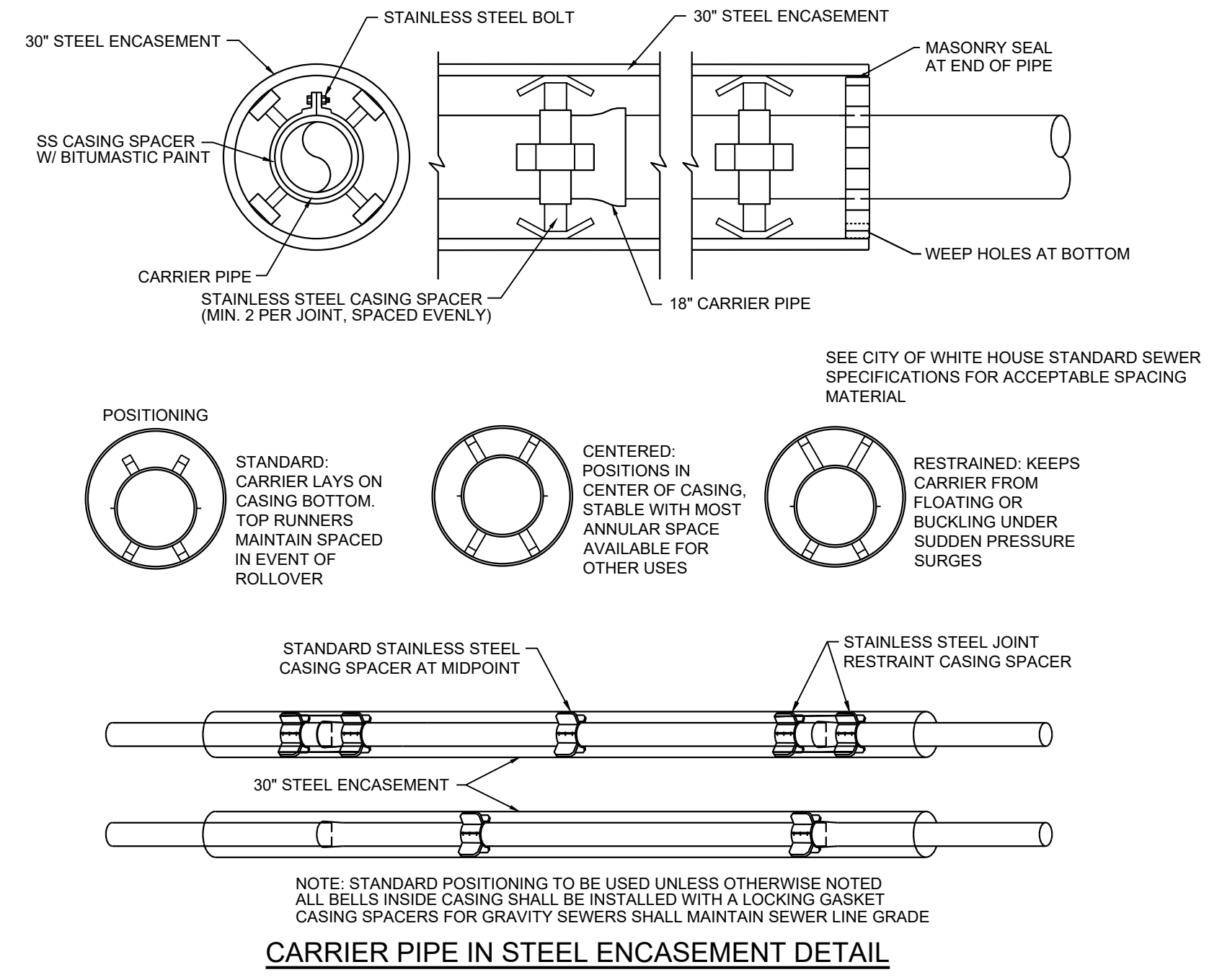


TYPICAL SEWER FORCE MAIN TRENCHING DETAIL
NOT TO SCALE



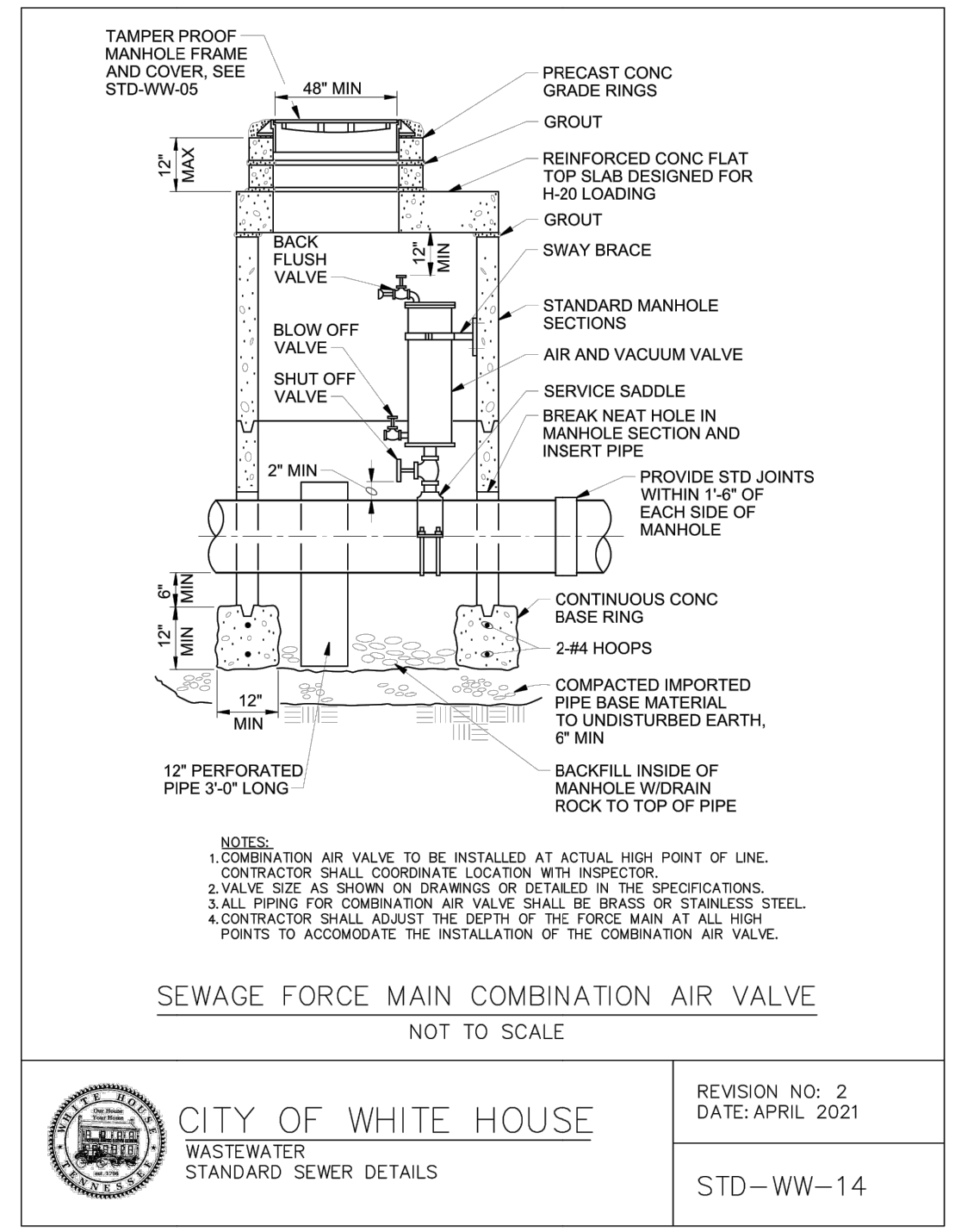
TYPICAL PAVEMENT REPAIRS - PATCH
NOT TO SCALE

NOTE:
1. SAWED EDGES SHALL BE NEAT AND SQUARE AND SAWN WITH A CONCRETE SAW. BROOMED CLEAN OF DUST PRIOR TO TACK COAT BEING APPLIED.
2. CRS-I OR CRS-II TACK COAT SHALL BE APPLIED TO THE EDGES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT ON ANY PAVEMENT MARKINGS DISTURB OR COVERED BY OVERLAY. NO EXTRA PAYMENT WILL BE MADE.



CARRIER PIPE IN STEEL ENCASEMENT DETAIL

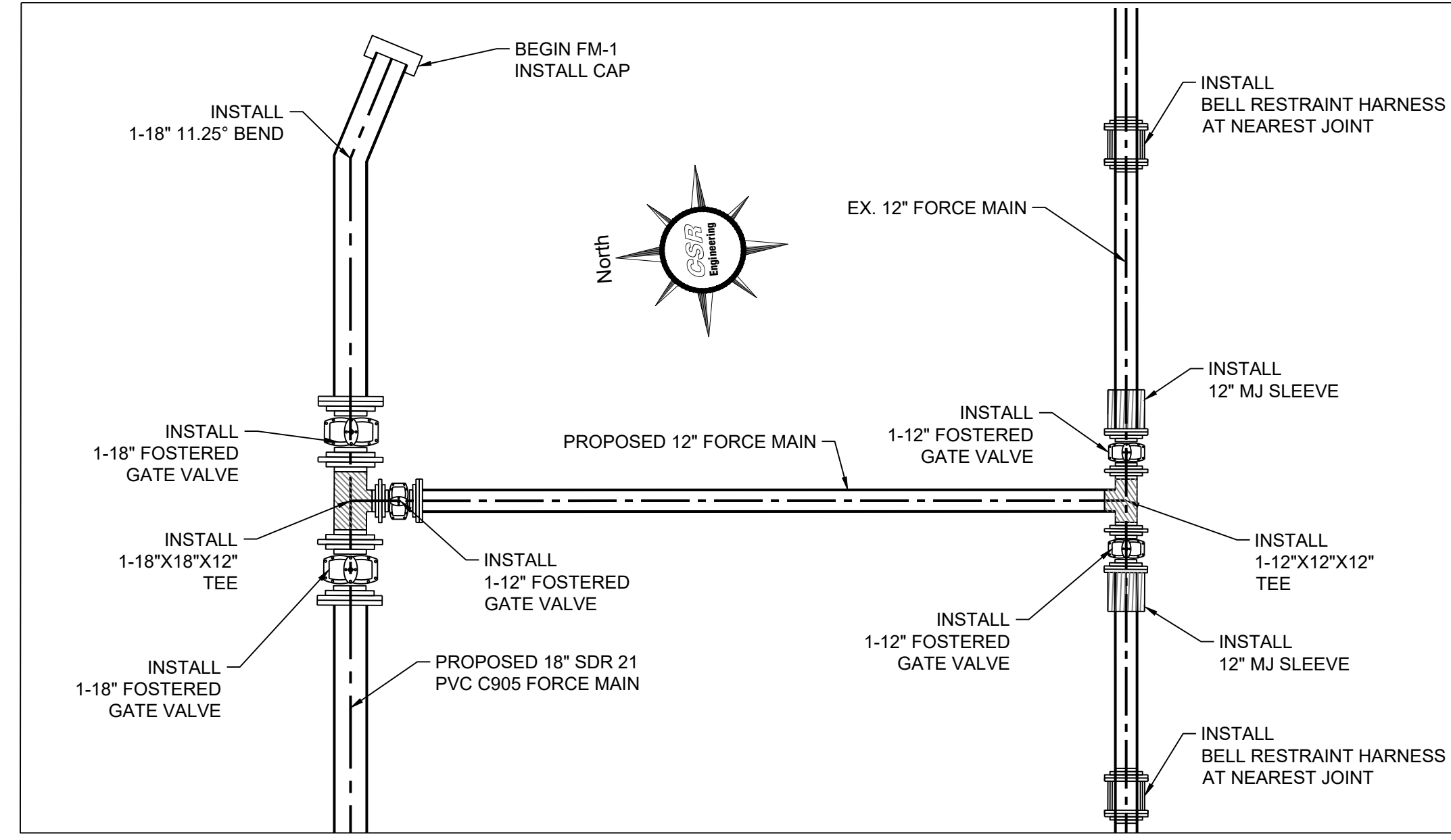
NOTE: STANDARD POSITIONING TO BE USED UNLESS OTHERWISE NOTED. ALL BELLS INSIDE CASING SHALL BE INSTALLED WITH A LOCKING GASKET. CASING SPACERS FOR GRAVITY SEWERS SHALL MAINTAIN SEWER LINE GRADE.



SEWAGE FORCE MAIN COMBINATION AIR VALVE
NOT TO SCALE

CITY OF WHITE HOUSE
WASTEWATER
STANDARD SEWER DETAILS

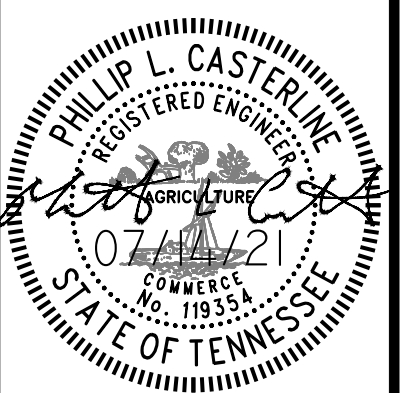
REVISION NO: 2
DATE: APRIL 2021
STD-WW-14



TIE-IN DETAIL (HESTER DRIVE)



DETAILS
SOUTHERN FORCE MAIN
FOR
THE CITY OF WHITE HOUSE
SAGE RD.
WHITE HOUSE, TN 37188
ROBERTSON COUNTY



NO.	DATE	BY	DESCRIPTION

DESIGNER OJP
REVIEWER PLC

PROJECT 21-903

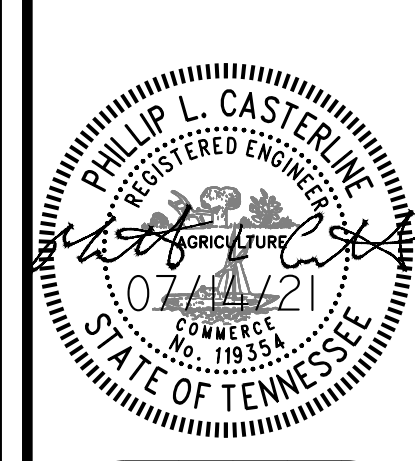
DATE 07/14/2021

SHEET C-501





**EPSC PLAN
 STA. 0+00 TO 30+00
 SOUTHERN FORCE MAIN
 FOR
 THE CITY OF WHITE HOUSE**
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



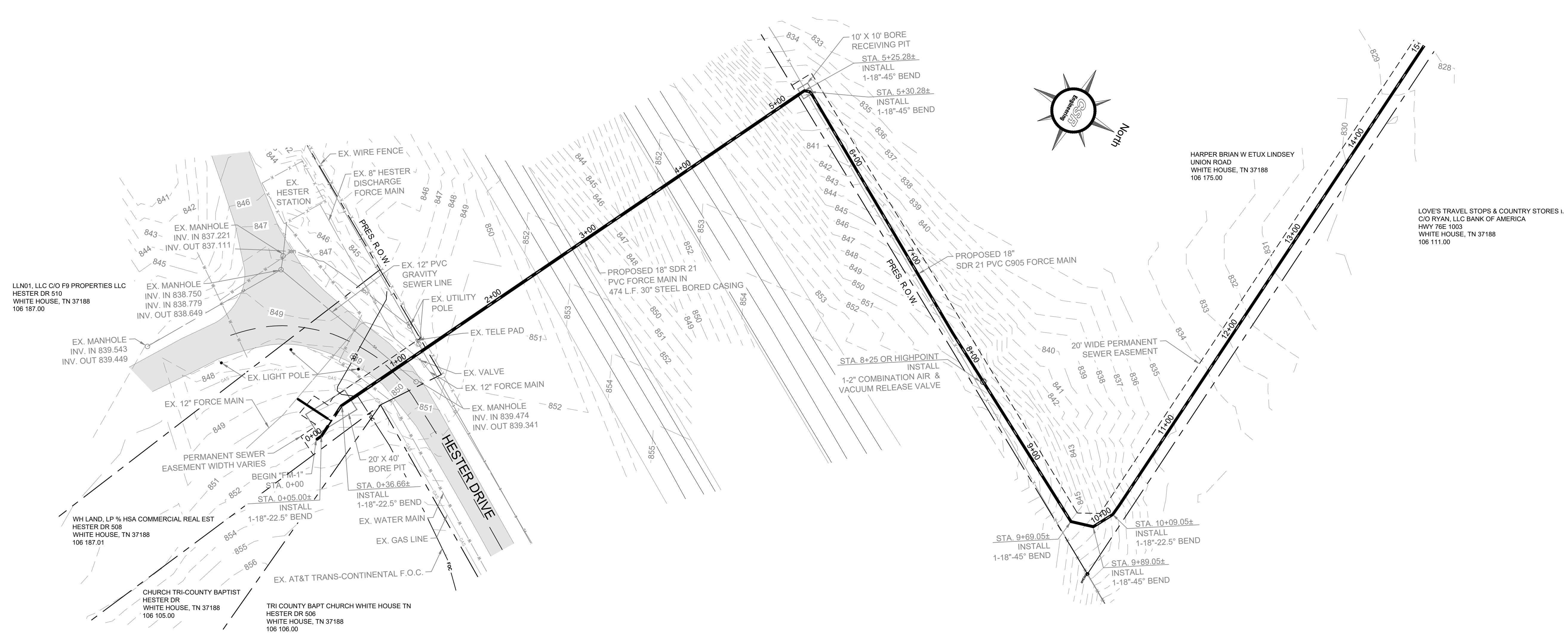
NO.	DATE	BY	DESCRIPTION

DESIGNER **OJP**
 REVIEWER **PLC**

PROJECT **21-903**

DATE **07/14/2021**

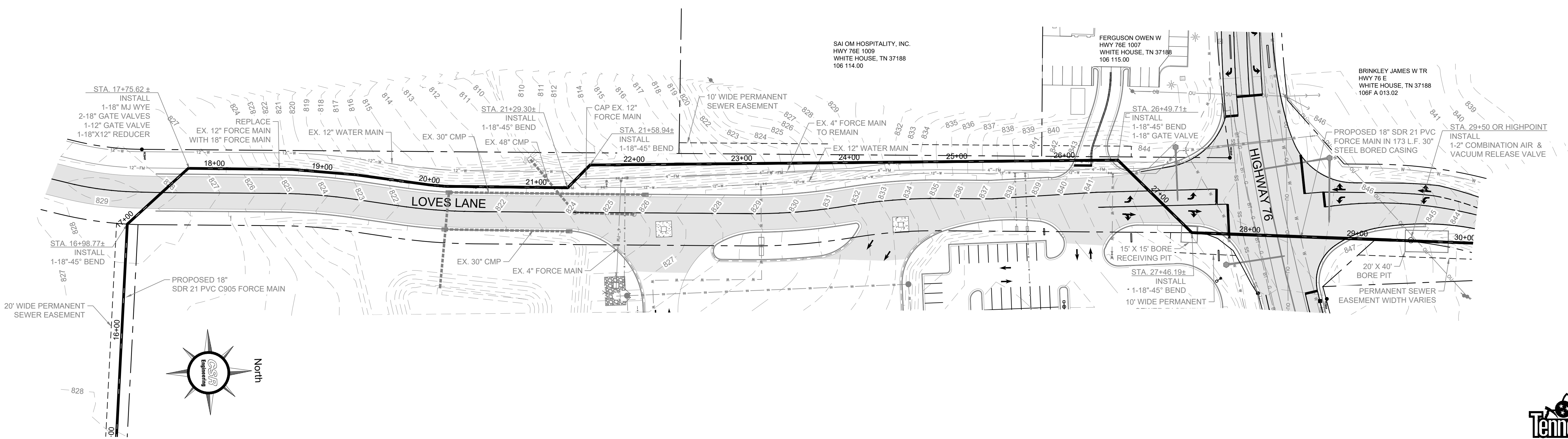
SHEET **C-601**



EPSC LEGEND

- FILTER SOCK CHECK DAM
- SILTY FENCE
- INLET PROTECTION

NOTE: ALL EPSC MEASURES ARE TEMPORARY UNLESS STATED PERMANENT
 ALL DISTURBED SHALL BE PERMANENTLY STABILIZED WITH SEED AND STRAW, UNLESS ON SLOPES 3:1 OR STEEPER, THEN EROSION CONTROL BLANKET SHALL BE INSTALLED AND PROPERLY STAKED.
 NOTE: CHECK DAMS SHALL BE INSTALLED IN THE VICINITY AND DOWN STREAM OF ACTIVE OR RECENTLY ACTIVE EXCAVATION TO PREVENT SEDIMENT TRANSPORT. SPACINGS SHALL BE DETERMINED BY THE SLOPE OF THE SUBJECT DITCH LINE AS SHOWN IN THE DETAIL ON SHEET C-603



PURPOSE FOR ISSUE: CONSTRUCTION





EPSC PLAN
STA. 30+00 TO E.O.L.
SOUTHERN FORCE MAIN
FOR
THE CITY OF WHITE HOUSE
 SAGE RD.
 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



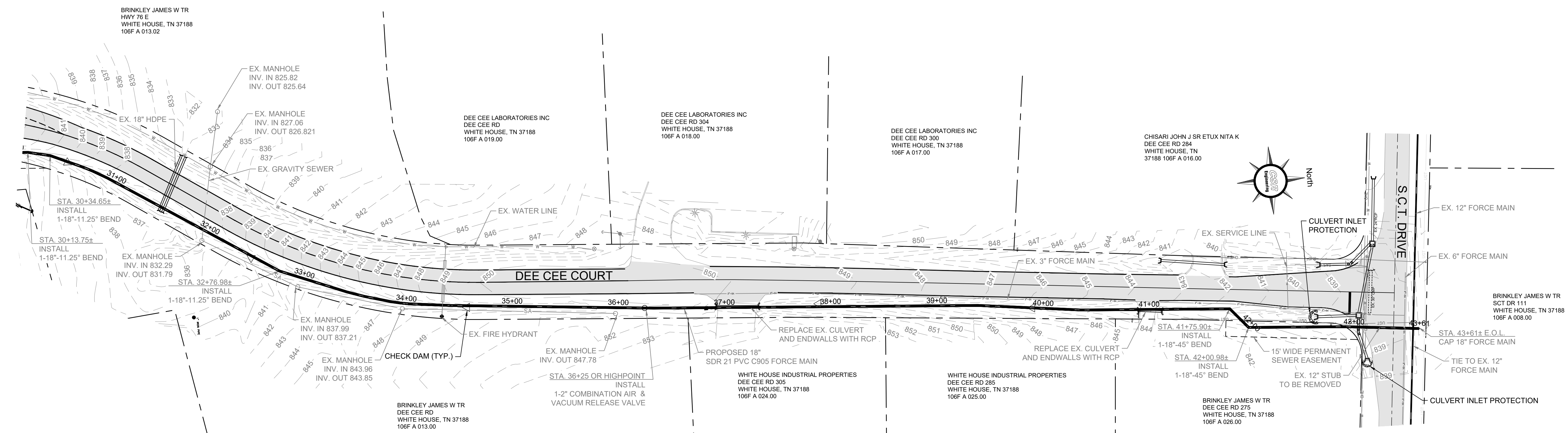
REVISIONS	
NO.	DESCRIPTION

DESIGNER **QJP**
 REVIEWER **PLC**

PROJECT **21-903**

DATE **07/14/2021**

SHEET **C-602**



EPSC LEGEND

- FILTER SOCK CHECK DAM
- SILT FENCE
- INLET PROTECTION

NOTE: ALL EPSC MEASURES ARE TEMPORARY UNLESS STATED PERMANENT

ALL DISTURBED SHALL BE PERMANENTLY STABILIZED WITH SEED AND STRAW, UNLESS ON SLOPES 3:1 OR STEEPER, THEN EROSION CONTROL BLANKET SHALL BE INSTALLED AND PROPERLY STAKED.

NOTE: CHECK DAMS SHALL BE INSTALLED IN THE VICINITY AND DOWN STREAM OF ACTIVE OR RECENTLY ACTIVE EXCAVATION TO PREVENT SEDIMENT TRANSPORT. SPACING SHALL BE DETERMINED BY THE SLOPE OF THE SUBJECT DITCH LINE AS SHOWN IN THE DETAIL ON SHEET C-603



PURPOSE FOR ISSUE: CONSTRUCTION

SCALE: 1"=50'



EROSION, SEDIMENT AND POLLUTION CONTROL NOTES

EROSION CONTROL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE STORMWATER PERMITTING REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER POLLUTION CONTROL, AND THE "TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK" LATEST EDITION.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

MAINTENANCE, EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. 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.

ALL SEDIMENT CONTROLS AND CRITICAL SLOPES 3:1 OR GREATER MUST BE STABILIZED WITHIN 7 CALENDAR DAYS OF DISTURBANCE. ALL OTHER DISTURBED AREAS OF THE PROJECT SITE MUST BE STABILIZED WITHIN 15 CALENDAR DAYS.

ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO MINIMIZE TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS AND ROADS. ANY EARTH, GRAVEL, AND/OR OTHER MATERIAL TRACKED, SPILLED, OR WASHED ONTO ROAD OR ADJACENT PROPERTIES MUST BE IMMEDIATELY REMOVED AND DISPOSED OF IN A PROPER MANNER. FLUSHING WILL NOT BE PERMITTED. ALL MATERIAL MUST BE REMOVED BY MEANS OF SHOVELING AND SWEEPING.

SEDIMENT CONTROL DEVICES ARE TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.

AFTER SITE IS PERMANENTLY STABILIZED AND BEFORE EROSION CONTROL MEASURES ARE REMOVED, THE CONTRACTOR SHALL CLEAN DEBRIS AND SILT FROM ALL STORM SEWERS, STRUCTURES AND DITCHES IN AREA OF WORK.

ALL EXCAVATED MATERIAL SHALL BE PLACED ON HIGH SIDE WHEREVER POSSIBLE AND CONFINED TO AN AREA WHERE IT WILL NOT OBSTRUCT THE NORMAL FLOW OF THE DRAINAGE.

PUMPING OF SEDIMENT LADEN WATER WILL NOT BE ALLOWED UNLESS IT IS FILTERED BY WAY OF AN APPROVED SEDIMENT TRAPPING DEVICE.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING FILTERS AND SILT FENCES CLEAR OF SEDIMENT BUILDUP DURING CONSTRUCTION.

AN INSPECTION OF THE EPSC MEASURES SHALL BE PERFORMED AT LEAST TWICE EVERY CALENDAR WEEK AND DOCUMENTED ON THE TDEC CONSTRUCTION STORMWATER INSPECTION FORM. INSPECTIONS SHALL BE PERFORMED AT LEAST 72 HOURS APART.

BASED ON THE RESULTS OF THE INSPECTION, ANY INADEQUATE CONTROL MEASURES OR CONTROL MEASURES IN DISREPAIR SHALL BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE NEXT RAIN EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED.

ANY SEDIMENT CONTROL DEVICES DISTURBED DURING SITE GRADING AND UTILITY CONSTRUCTION MUST BE RESTORED IMMEDIATELY.

EXPOSE THE SMALLEST AREAS OF SOIL FOR AS SHORT A TIME AS POSSIBLE.

KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS. USE TEMPORARY VEGETATION AND / OR MULCH TO PROTECT BARE AREAS FROM EROSION DURING CONSTRUCTION.

ALL CUT/FILL AREAS TO HAVE A MINIMUM OF 6-INCH DEPTH TOPSOIL COVER. AREAS DRESSED WITH TOPSOIL WILL RECEIVE 12 POUNDS PER 1000 SQUARE FEET OF FERTILIZER, 8 POUNDS OR MORE OF SEED PER 1000 SQUARE FEET (SEE TDOT SEED CHART) AND A STRAW MULCH OF 70% - 80% COVERAGE (APPROXIMATELY 125 POUNDS PER 1000 SQUARE FEET) EXCEPT AS OTHERWISE DETERMINED BY PLAN.

DISTURBED AREAS ARE TO BE GRADED TO DRAIN AS INDICATED ON PLAN TO SEDIMENT BARRIERS DURING AND UPON COMPLETION OF CONSTRUCTION.

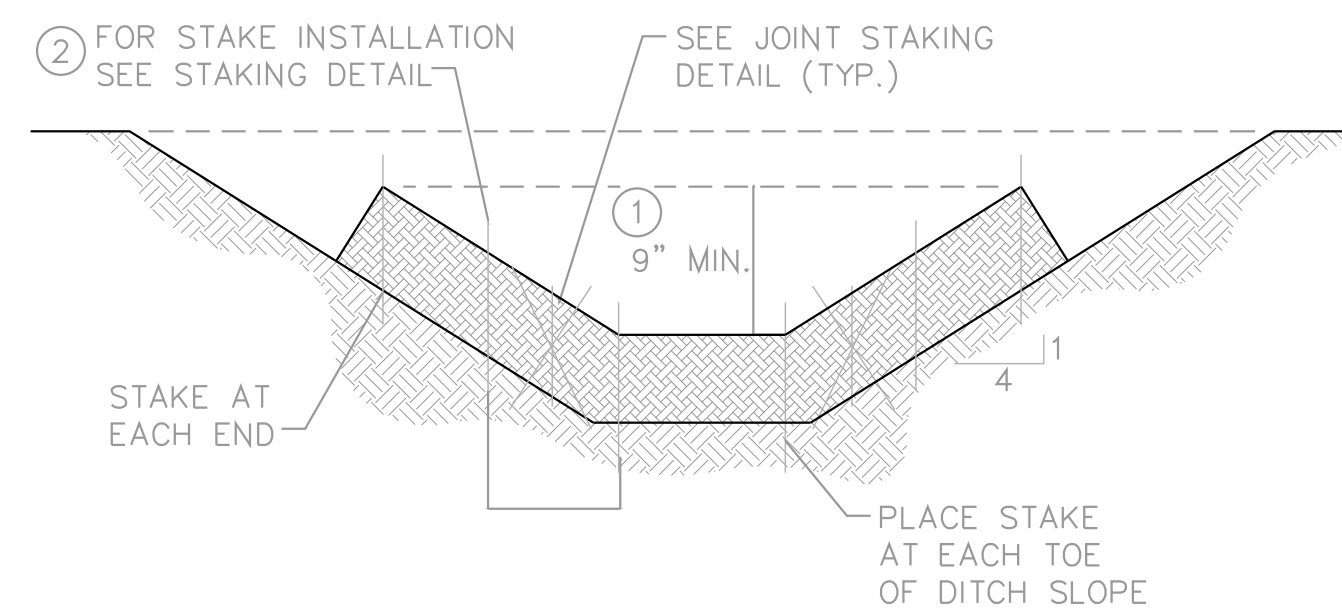
UPON STABILIZATION OF THE PROJECT SITE WITH A GOOD (ACCEPTABLE) STAND OF GRASS AND/OR GROUND COVER, THE EPSC INSTALLATIONS WILL BE REMOVED AND THE AREA DISTURBED WILL BE SEEDED AND MULCHED WITH THE SAME TREATMENT AS OTHER NEW GRASSSED AREAS OF THE PROJECT. ANY AREAS THAT ARE LEFT DISTURBED FOR OVER 14 DAYS, THE CONTRACTOR SHALL STABILIZE WITH TEMPORARY SEEDING AND MULCHING, WITH THE SAME TREATMENT AS OTHER NEW GRASSSED AREAS OF THE PROJECT.

WHEN TWO SECTIONS OF SILT FENCE ARE JOINED TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. SILT FENCE TO BE FASTENED SECURELY EVERY 6" ALONG POST. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE FABRIC. WOOD POSTS, 2"x2" HARDWOOD WITH MIN. CROSS SECTION AREA OF 3 INCHES. STEEL POST, EITHER T OR U TYPE, NOT WEIGHING LESS THAN 1 LB./L.F. SILT FENCE: PER TDOT SECTION S-B.27, AASHTO M 298, CLASS A.

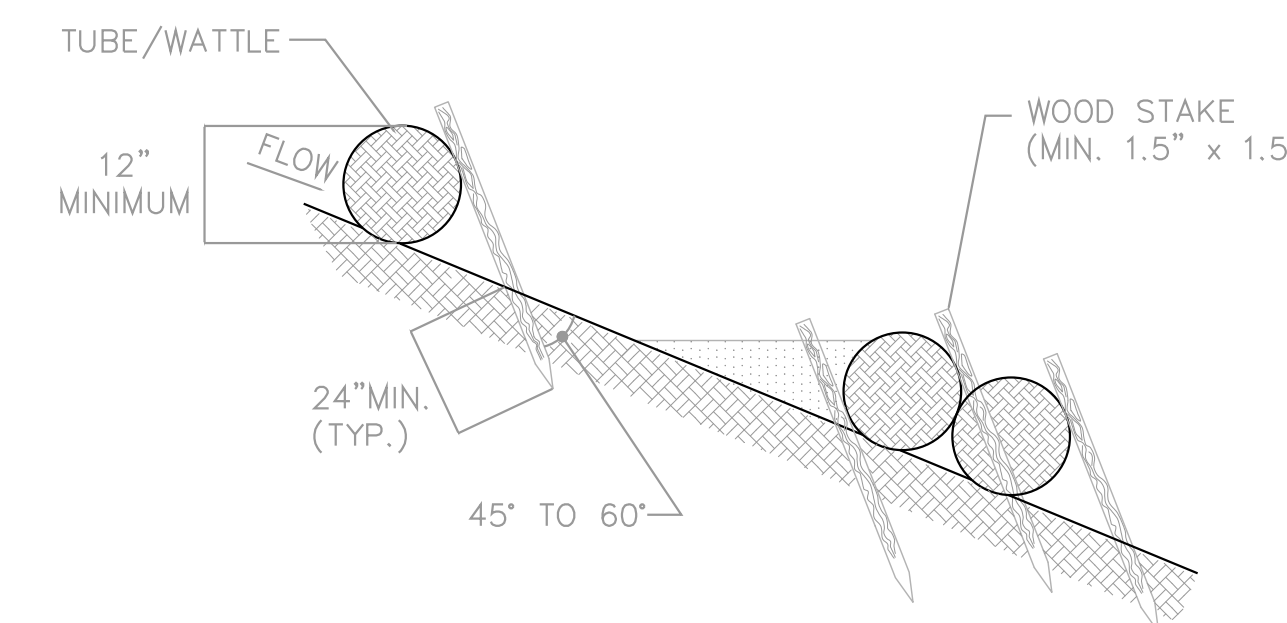
ALL EPSC MEASURES WERE DESIGNED USING A 2 YEAR 24 HOUR STORM PER TDEC.

NOTES:

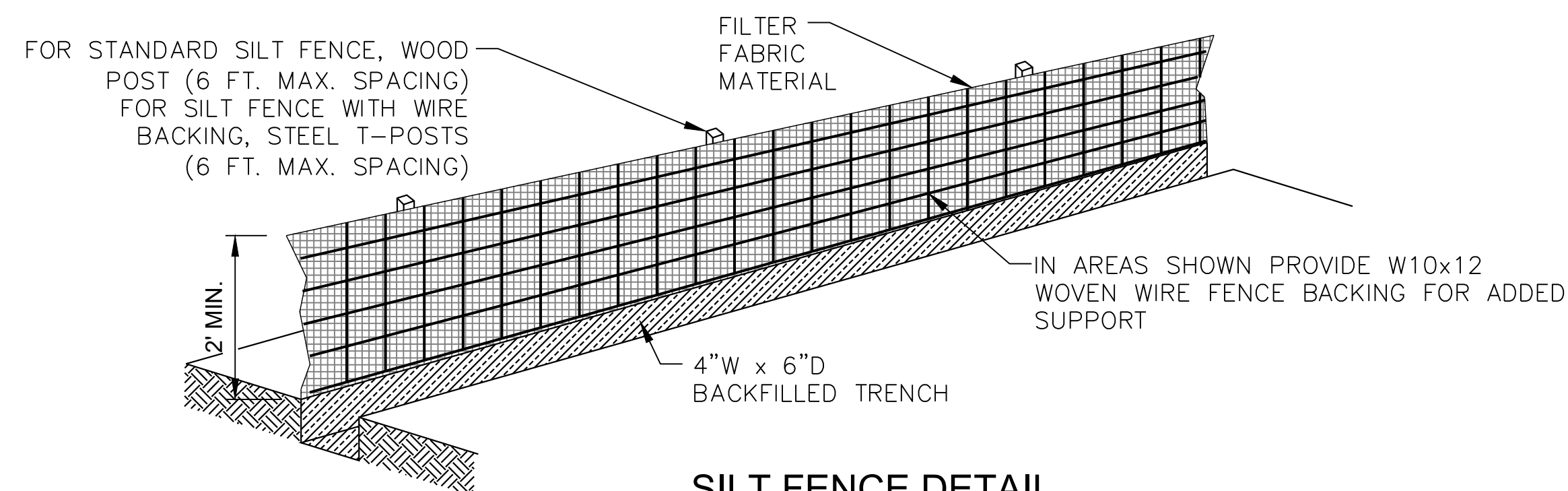
- 1 THE DEPTH AND WIDTH OF THE WEIR SECTION OF THE WATTLE SHALL BE DESIGNED TO PASS THE 2yr/24hr OR 5yr/24hr STORM EVENT WITHOUT OVERTOPPING THE CHANNEL.
- 2 STAKE PER MANUFACTURERS RECOMMENDATIONS



SECTION A-A



SECTION B-B

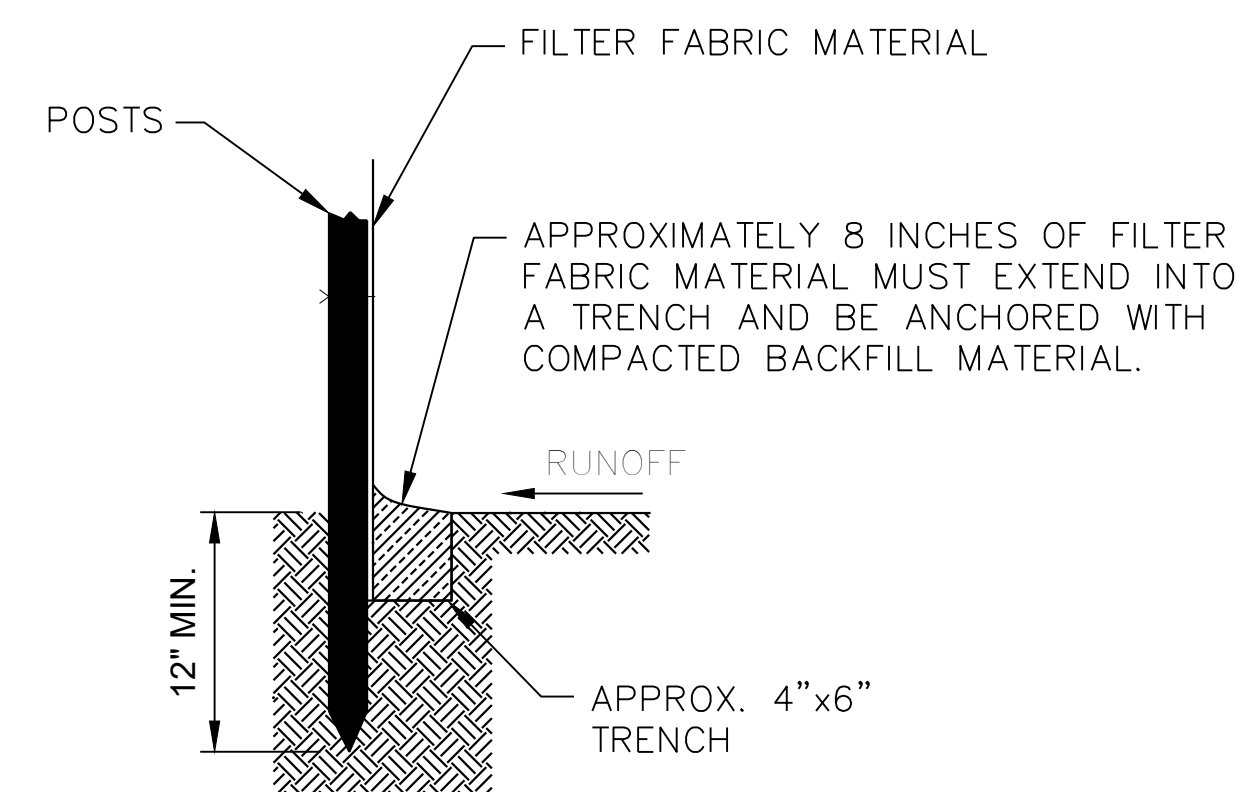


SILT FENCE DETAIL

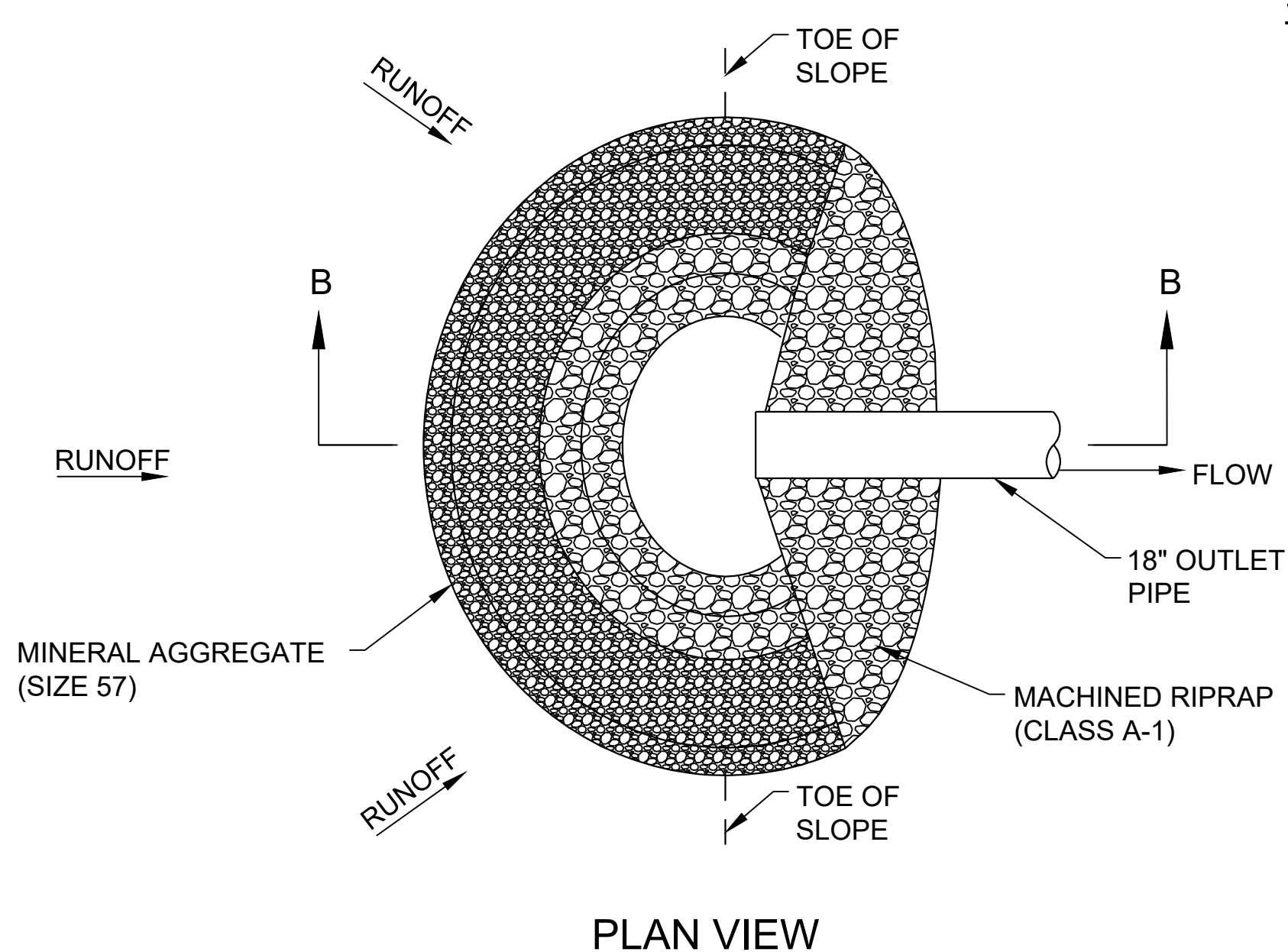
NOT TO SCALE

SILT FENCE MAINTENANCE PLAN

1. CARE SHALL BE TAKEN TO MINIMIZE THE MOVEMENT OF SEDIMENT INTO ALL STORM DRAIN APPURTENANCES AND PUBLIC ROADS UNTIL THE IMPERVIOUS MATERIAL (ROAD/PARKING AREA SURFACE) IS APPLIED.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATIONAL INTEGRITY FOLLOWING EVERY RUNOFF PRODUCING RAINFALL BUT IN NO CASE LESS THAN EVERY WEEK. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN THE MEASURE'S PERFORMANCE AS DESIGNATED.
3. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF SILT FENCE WHEN IT REACHES A MAXIMUM SIX-INCH (6") DEPTH AT THE FENCE. THE FENCE WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER.

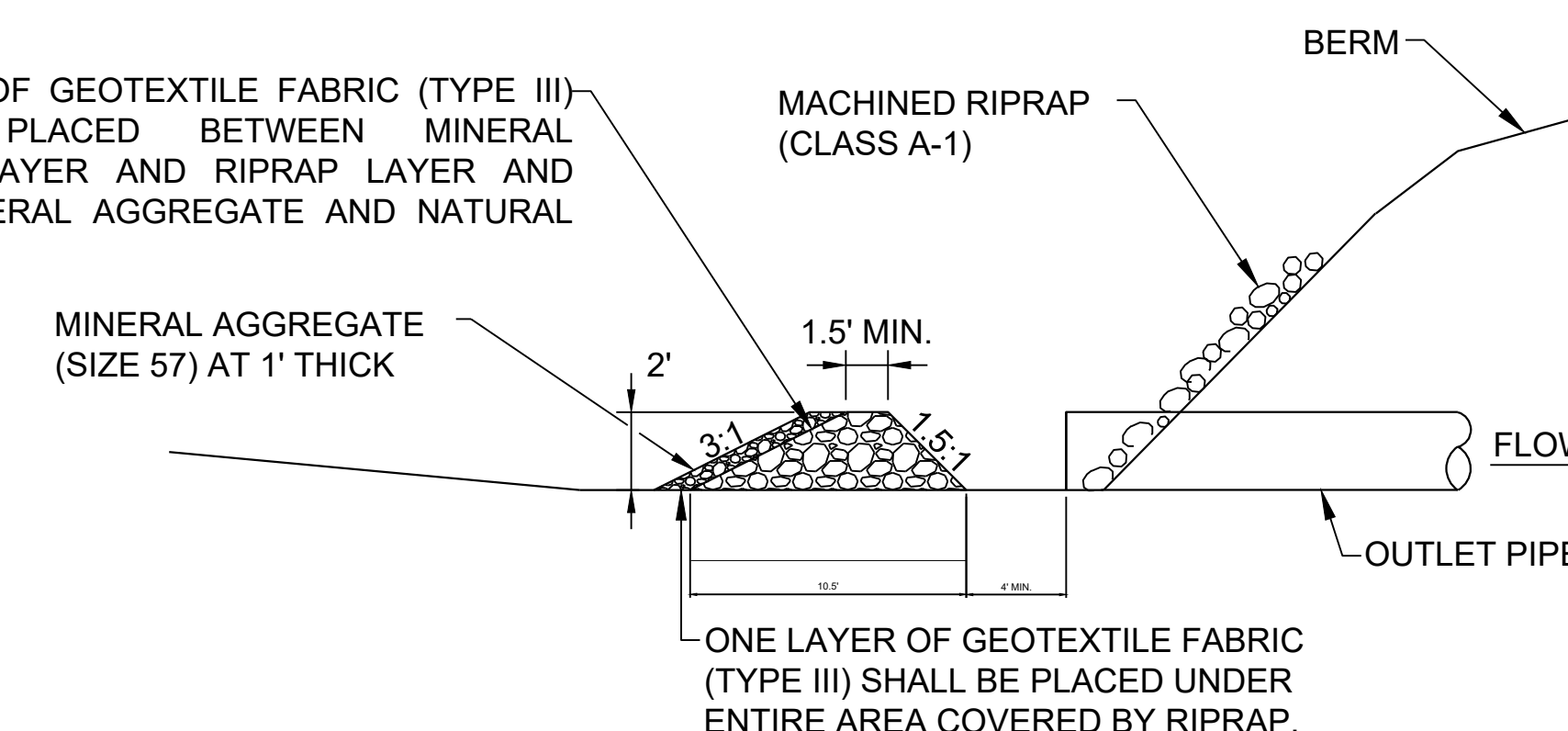


SECTION

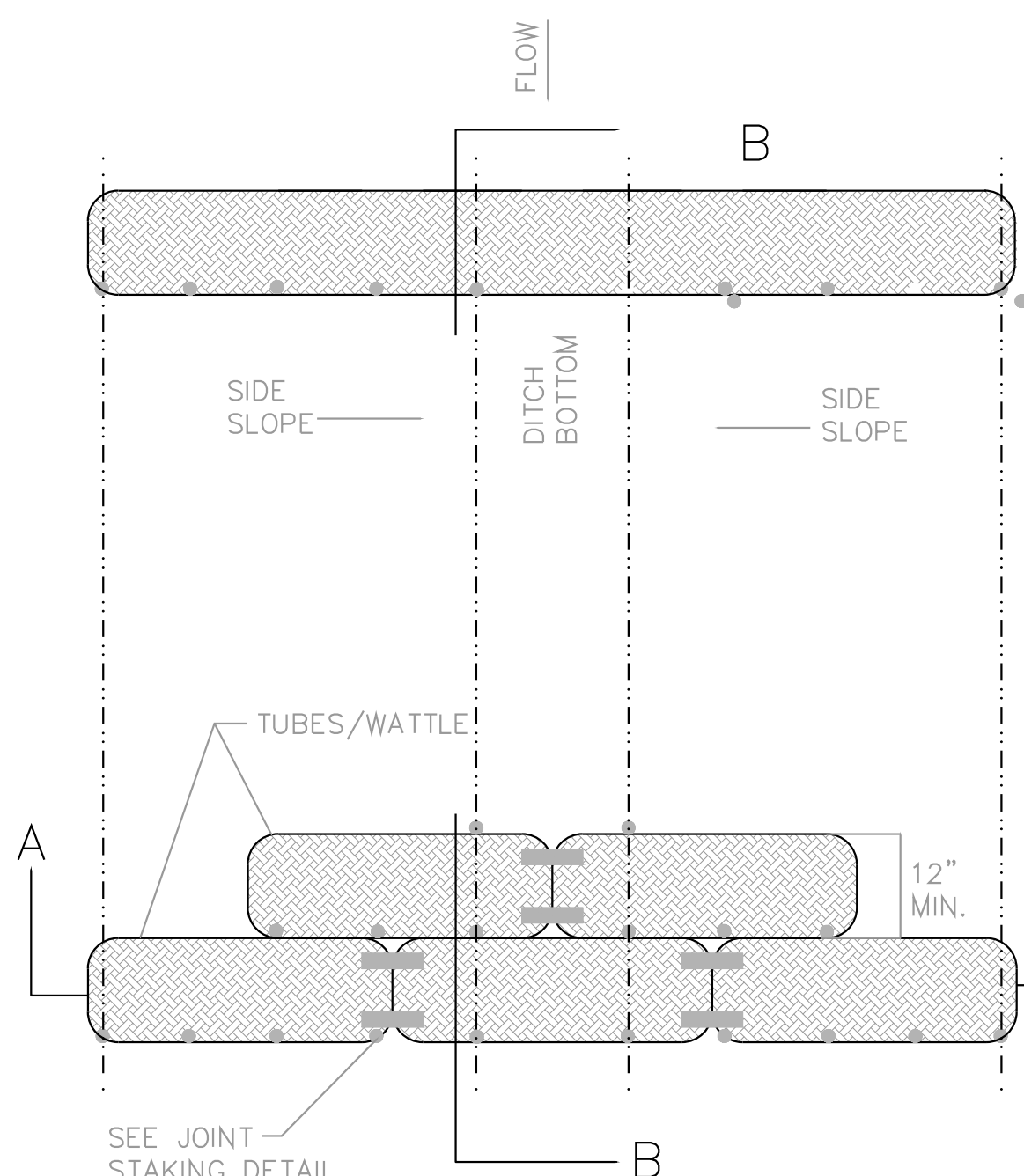


PLAN VIEW

TWO LAYERS OF GEOTEXTILE FABRIC (TYPE III) SHALL BE PLACED BETWEEN MINERAL AGGREGATE LAYER AND RIPRAP LAYER AND BETWEEN MINERAL AGGREGATE AND NATURAL GROUND.



SECTION B-B
INLET PROTECTION DETAIL (PIPE)

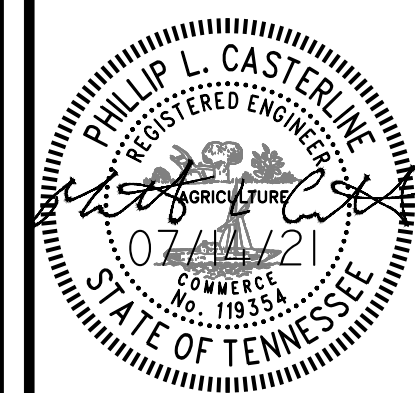


PLAN VIEW FOR DITCH APPLICATION

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 F: 615.246.3815
 www.csrengineers.com



EPSC NOTES AND DETAILS
 SOUTHERN FORCE MAIN
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 WHITE HOUSE, TN 37188
 ROBERTSON COUNTY



NO.	DATE	BY	DESCRIPTION

DESIGNER: OJP
 REVIEWER: PLC

PROJECT: 21-903

DATE: 07/14/2021

SHEET: C-603

