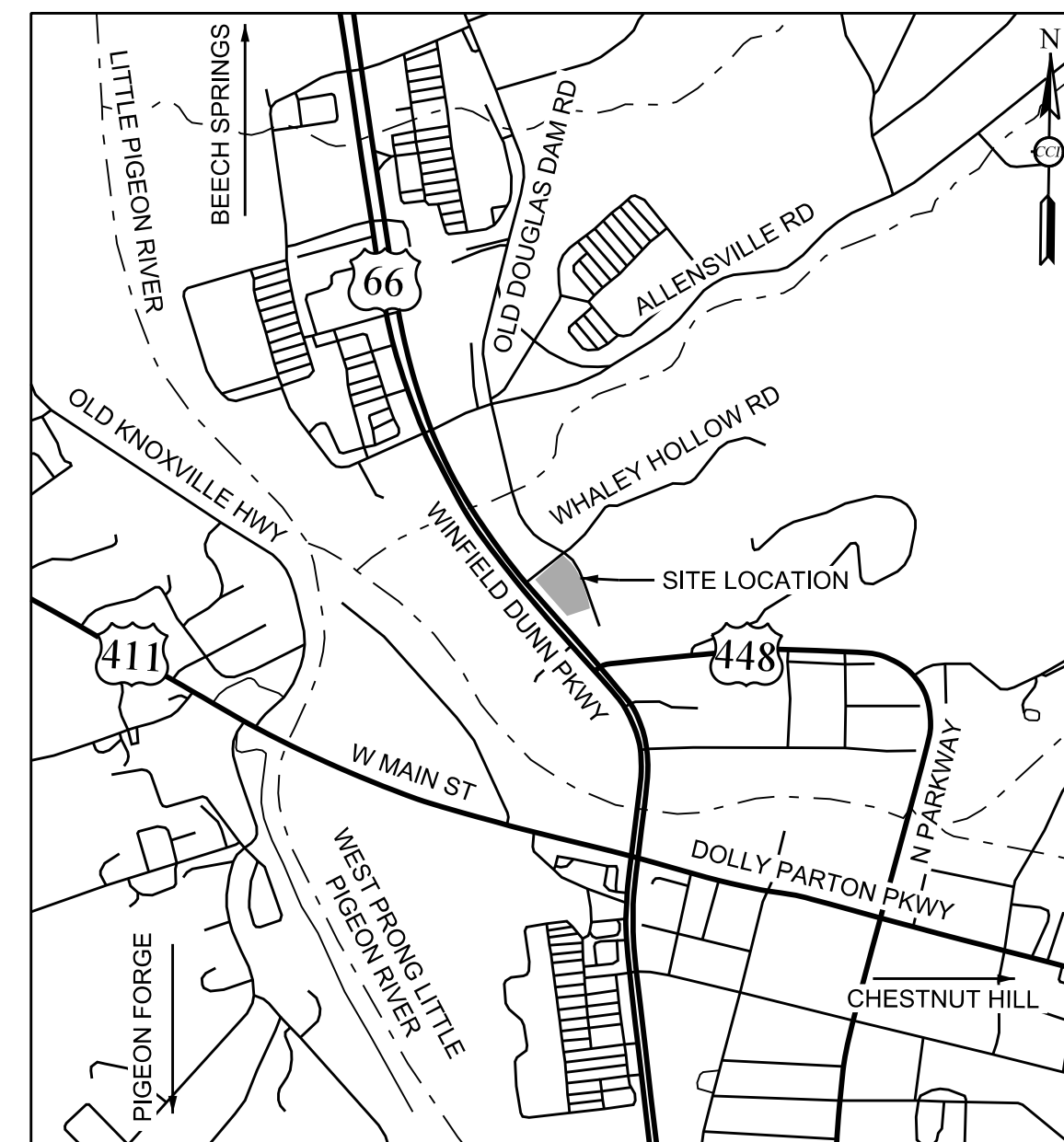


SITE WORK CONSTRUCTION DOCUMENTS FOR A NEW EXPRESS OIL CHANGE WINFIELD DUNN PARKWAY AND OLD DOUGLAS DAM ROAD SEVIERVILLE, TN

INDEX OF SHEETS

| <u>SHEET NO.</u> | <u>SHEET NAME</u> |
|------------------|--|
| C0.0 | COVER SHEET |
| C0.1 | DEMOLITION & INITIAL EROSION AND SEDIMENT CONTROL PLAN |
| C1.0 | LAYOUT PLAN |
| C2.0 | UTILITY PLAN |
| C3.0 | GRADING PLAN |
| C3.1 | DRAINAGE PLAN |
| C3.2 | UNDERGROUND DETENTION DETAILS AND SPECIFICATIONS |
| C3.3 | UNDERGROUND DETENTION DETAILS AND SPECIFICATIONS |
| C3.4 | UNDERGROUND DETENTION DETAILS AND SPECIFICATIONS |
| C4.0 | INTERMEDIATE - FINAL EROSION AND SEDIMENT CONTROL PLAN |
| C5.0 | CONSTRUCTION DETAILS AND SECTIONS I |
| C5.1 | CONSTRUCTION DETAILS AND SECTIONS II |
| C5.2 | CONSTRUCTION DETAILS AND SECTIONS III |
| C5.3 | CONSTRUCTION DETAILS AND SECTIONS IV |

ATTACHMENTSALTA/NSPS SURVEY BY MICHAEL SUTTLES
ATTACHMENTSLANDSCAPE PLAN BY PLOT STUDIO



VICINITY MAP

322 & 326 Old Douglas Dam Road
Sevierville, TN 37876
PPIN: 0496A013.00,
0496A014.00,
0496A015.00
Zoning District: AC (C-4)

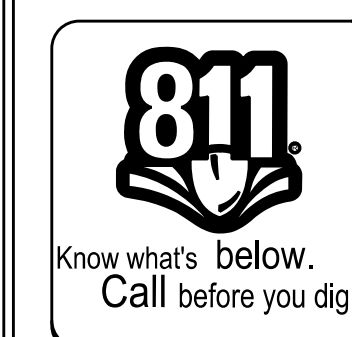
LIST OF CONTACTS

| | | |
|--|---|--|
| OWNER EXPRESS OIL CHANGE & TIRE ENGINEERS Phone: (205) 397-1142 Contact: Justin Duck 1880 Southpark Dr Birmingham, Alabama 35244 | CIVIL ENGINEERING CIVIL CONSULTANTS, INC. Phone: (205) 655-1991 Contact: Nicholas Ostrye, PE 3528 Vann Road, Suite 105 Birmingham, Alabama 35235 | SURVEYOR MICHAEL SUTTLES Phone: (865) 804-4500 Contact: Michael Suttles, PLS 3208 Teaster Ln Pigeon Forge, TN 37863 |
| ARCHITECT AHO ARCHITECTS, LLC Phone: (205) 983-6000 Contact: Stephanie Vaughn 1855 Data Dr, Suite 150 Hoover, Alabama 35244 | LANDSCAPE ARCHITECT PLOT STUDIO Phone: (205) 478-5388 Contact: Matt Phillips, PLA 204 Main Street, Suite 125 Trussville, Alabama 35173 | GEOTECHNICAL ENGINEER ECS SOUTHEAST, LLC Contact: John D Godfrey Jr., P.E. Phone: (615) 885-4983 318 Seaboard Ln, Suite 208 Franklin, TN 37067 |
| POWER DISTRIBUTION SEVIER COUNTY ELECTRIC SYSTEM Phone: (865) 453-2887 Contact: Jeff Hedrick 315 E Main Street Sevierville, TN 37862 | SANITARY SEWER PROVIDER SEVIERVILLE WATER DEPARTMENT Phone: (865) 591-0480 Contact: Barbara Mattern 2295 McCroskey Island Rd, Sevierville, TN 37876 | NATURAL GAS SEVIER COUNTY UTILITY DISTRICT Contact: James Greene Phone: (865) 453-3272 420 Robert Henderson Rd Sevierville, TN 37862 |
| FIRE PROTECTION SEVIERVILLE FIRE DEPARTMENT Phone: (865) 868-1709 Contact: JC Green 1162 Dolly Parton Pkwy Sevierville, TN 37862 | BUILDING INSPECTOR CITY OF SEVIERVILLE Contact: Charles Valentine Phone: (865) 453-5504 120 Gary Wade Pkwy Sevierville, TN 37862 | WATER PROVIDER SEVIERVILLE WATER DEPARTMENT Contact: Barbara Mattern Phone: (865) 591-0480 2295 McCroskey Island Rd, Sevierville, TN 37876 |



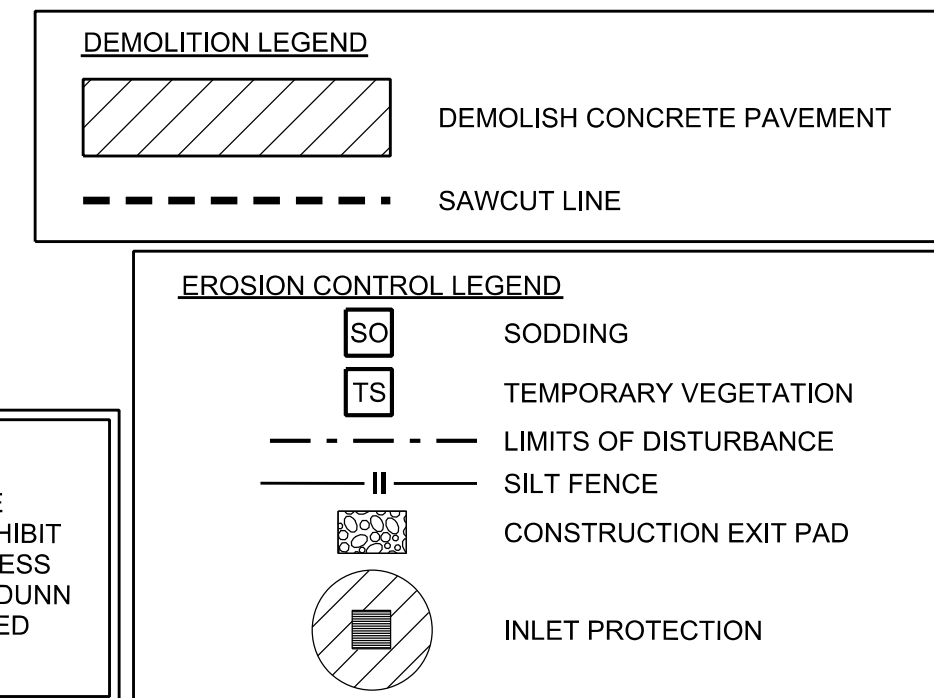
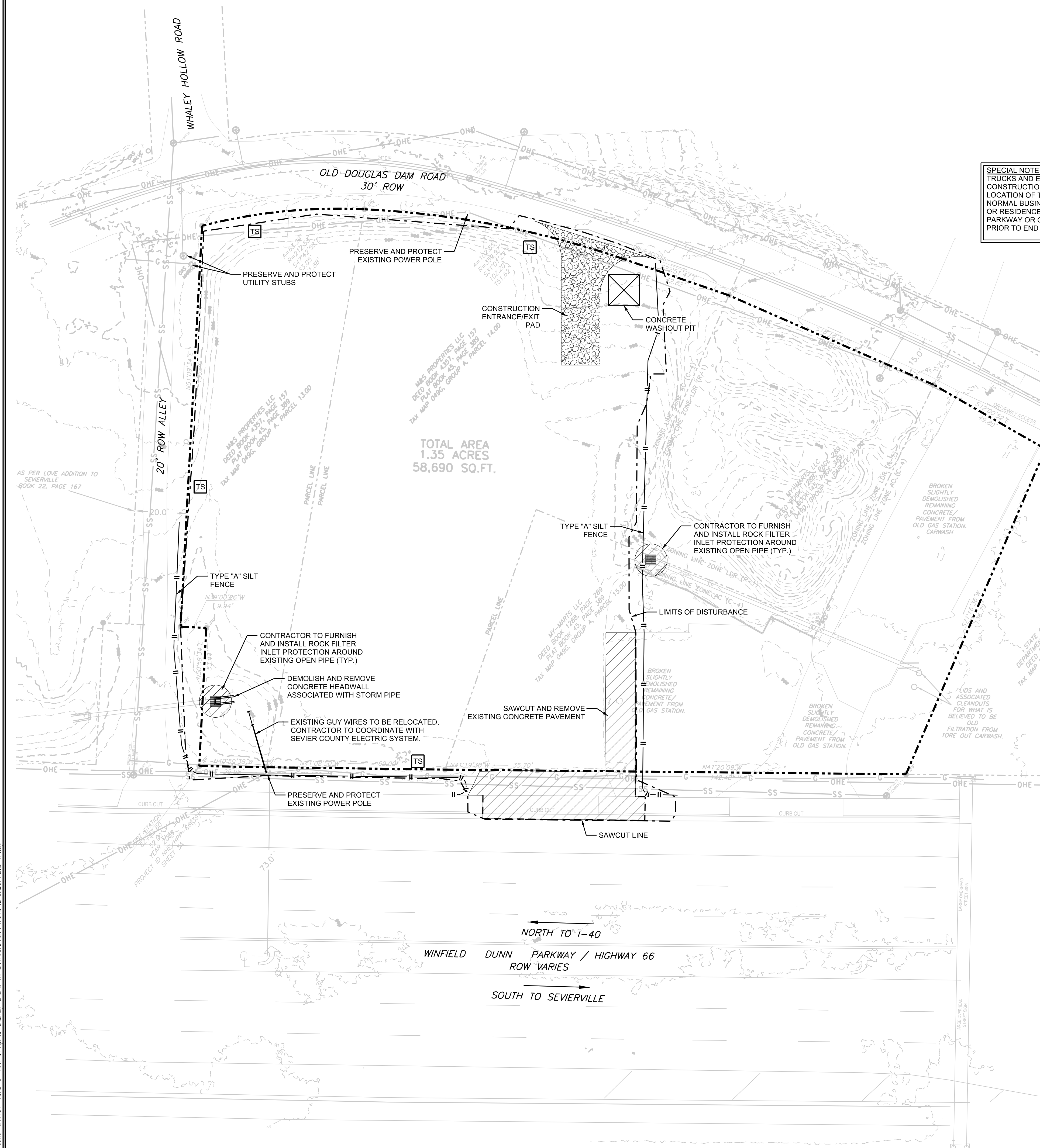
3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccipe.com

CAUTION NOTICE TO CONTRACTOR:
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



ISSUED FOR PERMIT
08/14/2024

C0.0



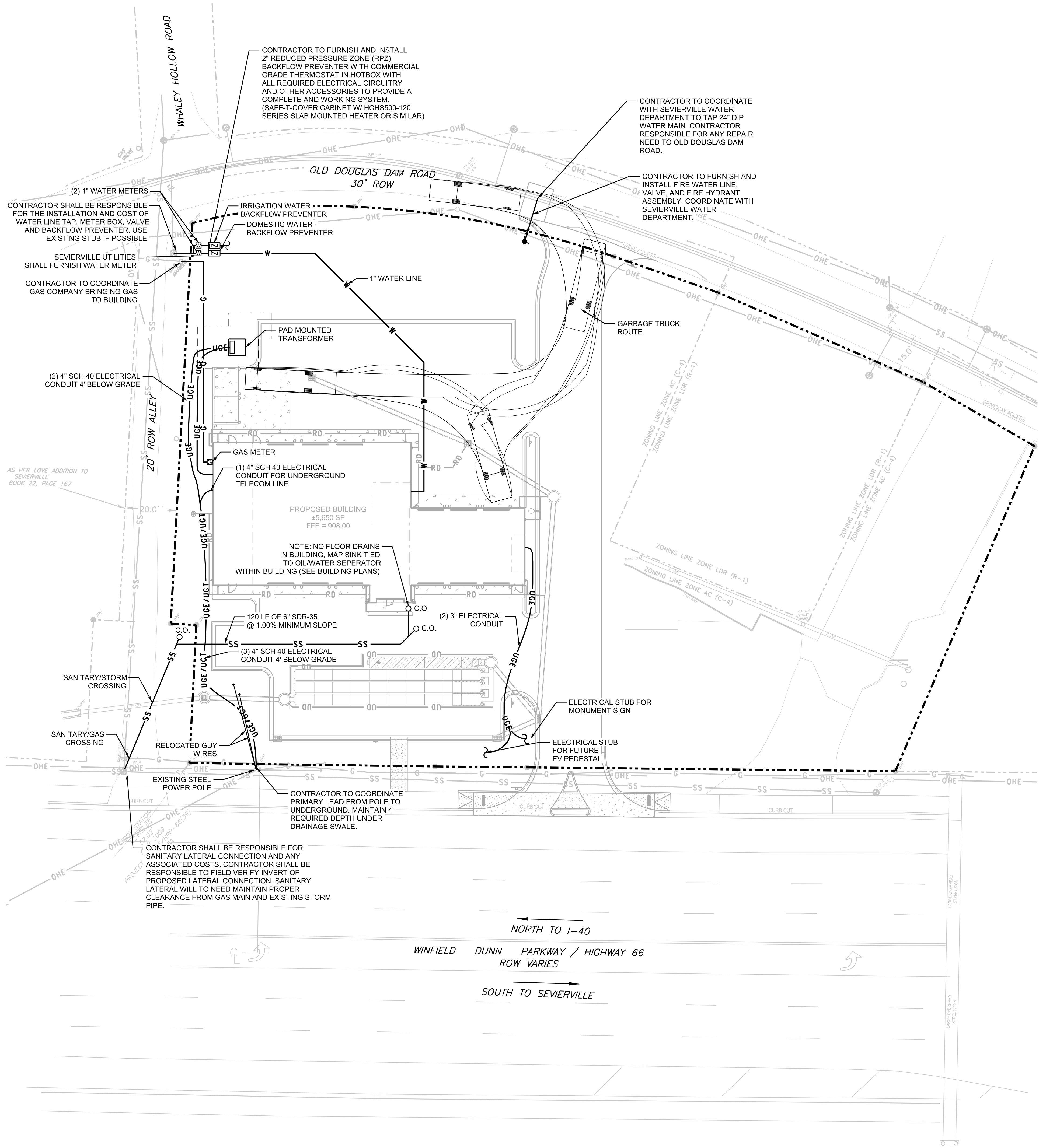
SPECIAL NOTE:
TRUCKS AND EQUIPMENT SHOULD UTILIZE WASHPAD OR CONSTRUCTION EXIT PAD WHILE SOILS ARE EXPOSED. THE LOCATION OF THE PAD/PADS IS TO NOT CONFLICT OR PROHIBIT NORMAL BUSINESS OPERATIONS OF ANY ADJACENT BUSINESS OR RESIDENCE. ANY SEDIMENT TRACKED ONTO WINFIELD DUNN PARKWAY OR OLD DOUGLAS DAM ROAD ARE TO BE CLEANED PRIOR TO END OF DAY.

1. INSTALL PERIMETER SEDIMENT BARRIER AND CONSTRUCTION EXIT PAD.
2. CLEAR, GRUB, STRIP AND STOCKPILE TOPSOIL.
3. INSTALL SILT FENCE AROUND TOPSOIL STOCKPILE, IMMEDIATELY TEMPORARILY SEED STOCKPILE, BUT IN NO CASE MORE THAN 14 DAYS AFTER LAST DISTURBANCE. PERMANENTLY SEED STOCKPILE AFTER 30 DAYS OF INACTIVITY.
4. INSPECT, MAINTAIN, MOVE AND REPAIR TEMPORARY SEDIMENT CONTROL DEVICES AS REQUIRED THROUGHOUT THE CONSTRUCTION DURATION.

1. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) GENERAL CONSTRUCTION STORM WATER NPDES PERMIT, INCLUDING, BUT NOT LIMITED TO INSTALLATION OF BMP'S, MONITORING OF BMP PERFORMANCE, REPORT PREPARATION, REPORT FILING, AND PERMIT RENEWAL OR TERMINATION. CONTRACTOR SHALL SUBMIT MONITORING REPORTS TO OWNER AND SITE ENGINEER WITHIN 72 HOURS OF THE MONITORING EVENT.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENT CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT OR SEDIMENT FROM LEAVING THE SITE. SILT OR SEDIMENT WILL NOT BE ALLOWED BEYOND CONTROL LIMITS. THE CONTRACTOR SHALL PREVENT THE ESCAPE OF SILT OR SEDIMENT FROM THE SITE BY INSTALLING EROSION CONTROL MEASURES IN ADDITION TO THOSE SHOWN ON PLANS AS NECESSARY AND CONDUCTING PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY TO PREVENT SILT OR SEDIMENT FROM ESCAPING THE SITE AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO EACH RAIN EVENT AND REPAIR AND MAINTAIN AS NECESSARY. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION AND SEDIMENT CONTROL DEVICES WHICH BECOME INEFFECTIVE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL EROSION CONTROL DEVICES OR MEASURES AS DEEMED NECESSARY BY THE ENGINEER, OWNER OR REGULATORY AUTHORITIES TO COMPLY WITH CONSTRUCTION DOCUMENTS OR GOVERNING AUTHORITY.
4. CONTRACTOR SHALL REMOVE THE BUILD UP OF SILT AND SEDIMENT FROM BEHIND SILT FENCE AND INLET FILTERS WHEN SILT AND SEDIMENT HAS REACHED 1/3 THE TOTAL HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICE.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS AND PERMITS.
6. ALL EROSION CONTROL MEASURES SHALL MEET THE GUIDELINES SET FORTH IN THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, A STORMWATER PLANNING AND DESIGN MANUAL FOR CONSTRUCTION ACTIVITIES, FOURTH EDITION", PREPARED BY THE DIVISION OF WATER RESOURCES OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATIONS (TDEC), PUBLISHED AUGUST 2012.
7. CONTRACTOR SHALL INSTALL, MAINTAIN AND INSPECT ALL EROSION AND SEDIMENT DEVICES AND MEASURES IN ACCORDANCE WITH THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, A STORMWATER PLANNING AND DESIGN MANUAL FOR CONSTRUCTION ACTIVITIES, FOURTH EDITION", PREPARED BY THE DIVISION OF WATER RESOURCES OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATIONS (TDEC), PUBLISHED AUGUST 2012.
8. THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE OUTSIDE THE LIMITS OF CONSTRUCTION CAUSED BY THE CONTRACTOR OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED TO ITS ORIGINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
9. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE AS REQUIRED BY THE ENGINEER, PLANS, AND CITY OF SEVIERVILLE REPRESENTATIVE. SILTATION CONTROL MEASURE SHALL BE INSPECTED MONTHLY AS WELL AS AFTER EACH RAIN EVENT, ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY AND NO FURTHER WORK WILL PROCEED UNTIL SAID DEFICIENCIES ARE CORRECTED TO THE CITY OF SEVIERVILLE OR ENGINEER'S APPROVAL.
10. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
11. IF SEDIMENT ESCAPES THE SITE IT SHALL BE RECOVERED, RETURNED TO THE SITE, AND SPREAD IN LANDSCAPE AREAS AND SEEDED.
12. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

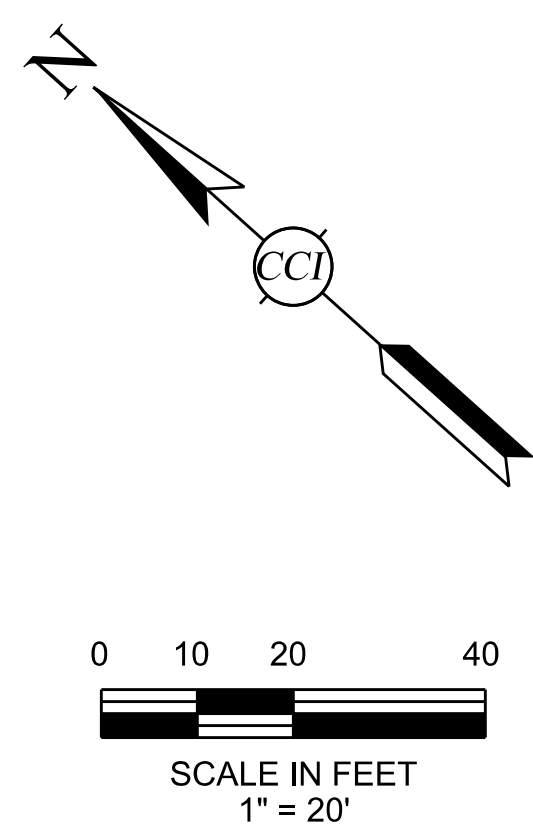
1. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE ADEQUACY AND INSTALLATION OF ALL TEMPORARY SHORING & BRACING SYSTEMS USED DURING THE PERFORMANCE OF THIS WORK.
2. WORK SHALL BE PERFORMED BY SKILLED AND PROPERLY EQUIPPED PERSONNEL. PROMPTLY REPAIR DAMAGES TO EXISTING FACILITIES INTENDED TO REMAIN CAUSED BY DEMOLITION OPERATIONS.
3. REMOVE EXISTING IMPROVEMENTS AND VEGETATION TO THE EXTENT NECESSARY FOR THE PROPER INSTALLATION OF NEW CONSTRUCTION AND JUNCTION WITH EXISTING WORK. CUT BACK FINISHED SURFACES TO STRAIGHT, PLUMB, OR LEVEL LINES AS REQUIRED.
4. WHERE OPENINGS ARE CUT OVERSIZED OR AT IMPROPER LOCATIONS AS DETERMINED BY THE ENGINEER, REPLACE THE EXCESS REMOVED MATERIAL AS INSTRUCTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
5. COORDINATE DEMOLITION WITH OTHER TRADES TO ASSURE THE PROPER SEQUENCE, LIMITS, METHODS AND TIME OF PERFORMANCE. SCHEDULE WORK SO AS TO IMPOSE A MINIMUM HARDSHIP ON THE PERFORMANCE OF WORK OF OTHER TRADES.
6. WORK NOT MENTIONED TO BE REMOVED THAT INTERFERES WITH NEW CONSTRUCTION SHALL BE CUT AND REMOVED TO PROVIDE FOR PROPER INTERFACE WITH NEW CONSTRUCTION, OR PATCHING AND REPAIR, AS REQUIRED. COORDINATE WITH ARCHITECT AND/OR ENGINEER PRIOR TO REMOVAL.
7. ALL MATERIALS SHALL BE DISPOSED OF IN AN APPROPRIATE OFF-SITE LOCATION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR BOTH DEMOLITION WORK AND WASTE MATERIAL DISPOSAL.
8. CONTRACTOR IS RESPONSIBLE TO REPAIR DAMAGE TO SEVIER COUNTY, CITY OF SEVIERVILLE, TDOT AND ADJACENT PROPERTY OWNER'S INFRASTRUCTURE TO THE SATISFACTION OF THE OWNER.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER TREATMENT AND HANDLING OF ANY HAZARDOUS MATERIALS INCLUDING BUT NOT LIMITED TO LEAD PAINT AND ASBESTOS.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR DEPTH OF ANY EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



LEGEND

| | |
|--------------------|--|
| SS | SANITARY SEWER LINE |
| • C.O. | CLEANOUT |
| W | WATER LINE |
| W | WATER METER |
| W | RPZ BACKFLOW PREVENTER |
| G | NATURAL GAS LINE |
| G | GAS METER |
| UGE / UGT | UNDERGROUND ELECTRIC / UNDERGROUND TELEPHONE |
| UGE | UNDERGROUND ELECTRIC |
| Transformer symbol | TRANSFORMER |



UTILITY NOTES:

- PRIOR TO INSTALLING ANY UTILITIES OR STORM DRAINAGE, THE CONTRACTOR SHALL EVALUATE ALL UTILITY CROSSING ELEVATIONS IN ORDER TO DETERMINE THE CROSSING REQUIREMENTS. UTILITIES THAT REQUIRE LOWERING IN ORDER TO MAINTAIN MINIMUM COVERING REQUIREMENTS SHALL BE INSTALLED PRIOR TO THE SHALLOWER UTILITY BEING INSTALLED. CONTRACTOR SHALL INCLUDE ALL MATERIALS AND INSTALLATION COSTS ASSOCIATED WITH ANY AND ALL REQUIRED LOWERINGS IN THE PRICE FOR THE RESPECTIVE UTILITY.
- THE SITEWORK CONTRACTOR SHALL MAKE ARRANGEMENTS WITH ALL APPLICABLE UTILITY COMPANIES FOR THE DISCONNECT OF UTILITY SERVICES TO EXISTING STRUCTURES PRIOR TO THEIR DEMOLITION, INCLUDING POWER, TELEPHONE, CABLE TV, FIBER OPTIC, NATURAL GAS, WATER AND SANITARY SEWER AS NECESSARY.
- CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL BUILDING ENTRANCES, TO INCLUDE SANITARY SEWER SERVICE, DOMESTIC & IRRIGATION SERVICE, ELECTRICAL TELEPHONE & GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES SUCH THAT PROPER DEPTHS ARE ACHIEVED, AS WELL AS COORDINATING WITH THE APPROPRIATE UTILITIES AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF SEVIERVILLE SPECIFICATIONS.

WATER NOTES:

- REFERENCE GENERAL NOTES, SHEET C1.0.
- ALL DOMESTIC LEADS TO BUILDING SHALL END 5 FT. OUTSIDE THE FACE OF BUILDING WALL, UNLESS NOTED, AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
- DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
- THE CONTRACTOR SHALL COORDINATE ALL UTILITY INSPECTIONS WITH THE GOVERNING AUTHORITIES PRIOR TO COVERING TRENCHES DURING INSTALLATION.
- SITE CONTRACTOR SHALL COORDINATE TAPS WITH SEVIERVILLE WATER SYSTEMS/CITY OF SEVIERVILLE.
- CONTRACTOR SHALL MAINTAIN A 24" HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN WATER SERVICE AND OTHER UTILITIES.
- PIPE SIZES 3" AND SMALLER SHALL BE TYPE-K COPPER. FITTINGS SHALL BE BRONZE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SEVIERVILLE WATER SYSTEMS/CITY OF SEVIERVILLE REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL BUILDING ENTRANCES, TO INCLUDE SANITARY SEWER SERVICE, DOMESTIC & IRRIGATION SERVICE, ELECTRICAL TELEPHONE & GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH THAT PROPER DEPTH, ARE ACHIEVED, AS WELL AS COORDINATING WITH THE APPROPRIATE UTILITIES AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.

POWER NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL UNDERGROUND CONDUIT ASSOCIATED WITH POWER DISTRIBUTION AND SERVICE.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING TRANSFORMER PAD TO THE POWER COMPANY STANDARD DIMENSIONS, AND ENSURING THAT THE PROPER CLEARANCES ARE PROVIDED ON ALL SIDES AND ABOVE THE TRANSFORMER.
- ALL BENDS FOR POWER AND COMMUNICATIONS CONDUITS (HORIZONTAL AND VERTICAL) SHALL BE LONG SWEEPING ELLS.
- POWER CONDUITS SHALL BE INSTALLED WITH A MINIMUM OF 4 FEET OF COVER FROM FINISHED GRADE TO TOP OF THE CONDUIT.
- ALL CONDUITS SHALL BE PROVIDED WITH PULL STRING.
- THE SITE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PULLING ALL SECONDARY CONDUCTORS AS WELL AS MAKING THE ASSOCIATED SECONDARY TERMINATIONS WITHIN THE TRANSFORMER UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO ELECTRICAL PLANS FOR SECONDARY SERVICE ROUTING AND CONNECTIONS.
- THERE SHALL BE NO MORE THAN 360° OF BENDS (HORIZONTAL AND VERTICAL COMBINED) BETWEEN RISER POLE AND PAD-MOUNTED TRANSFORMER.

SANITARY SEWER NOTES:

- REFERENCE GENERAL NOTES AND ARCHITECTURAL/PLUMBING PLANS.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF SEVIERVILLE SEWER REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY CITY OF SEVIERVILLE SEWER A MINIMUM OF 48 HOURS PRIOR TO COMMENCING SEWER CONSTRUCTION.
- DIMENSIONS SHOWN ARE TO THE CENTERLINE OF PIPE OR TO CENTERLINE OF MANHOLE.
- ALL CLEANOUTS SHALL BE A SHALL BE FLUSH WITH EXISTING/PROPOSED GRADE ELEVATIONS.
- POTABLE WATER PIPING SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM SANITARY SEWER LINES. THE DISTANCE SHALL BE MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE. WHERE CROSSINGS ARE NECESSARY, CASE ONE OF THE PIPES WITH A CONTINUOUS PIPE OF SUFFICIENT LENGTH. LOCATED SUCH THAT A MINIMUM FIVE (5)-FOOT SEPARATION EXISTS BETWEEN EACH END OF THE CASING PIPE AND THE UNCASED PIPE. POTABLE WATER PIPING CROSSING SANITARY SEWER LINES SHALL BE LAID TO PROVIDE MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE POTABLE WATER PIPING AND THE OUTSIDE OF THE SEWER LINE. THE 18 INCH SEPARATION SHALL APPLY WHETHER THE POTABLE WATER PIPING IS OVER OR UNDER THE SEWER LINE. LAY POTABLE WATER PIPING AT CROSSINGS OF SEWER LINES SO A FULL LENGTH OF PIPE IS CENTERED ON THE SEWER LINE WHENEVER POSSIBLE.
- SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH CITY OF SEVIERVILLE SEWER REQUIREMENTS.



CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com

CCI
PLANNING
& ENGINEERING

SEAL: NICHOLAS J. OSTROM
REGISTERED ENGINEER
08/14/2024
STATE OF TENNESSEE
ENGINEER'S EXPIRATION DATE: 08/14/2028
TN REG. NO.: 136511

UTILITY PLAN

A NEW EXPRESS OIL CHANGE
FOR
SEVIERVILLE, TN

EXPRESS OIL CHANGE & TIRE ENGINEERS

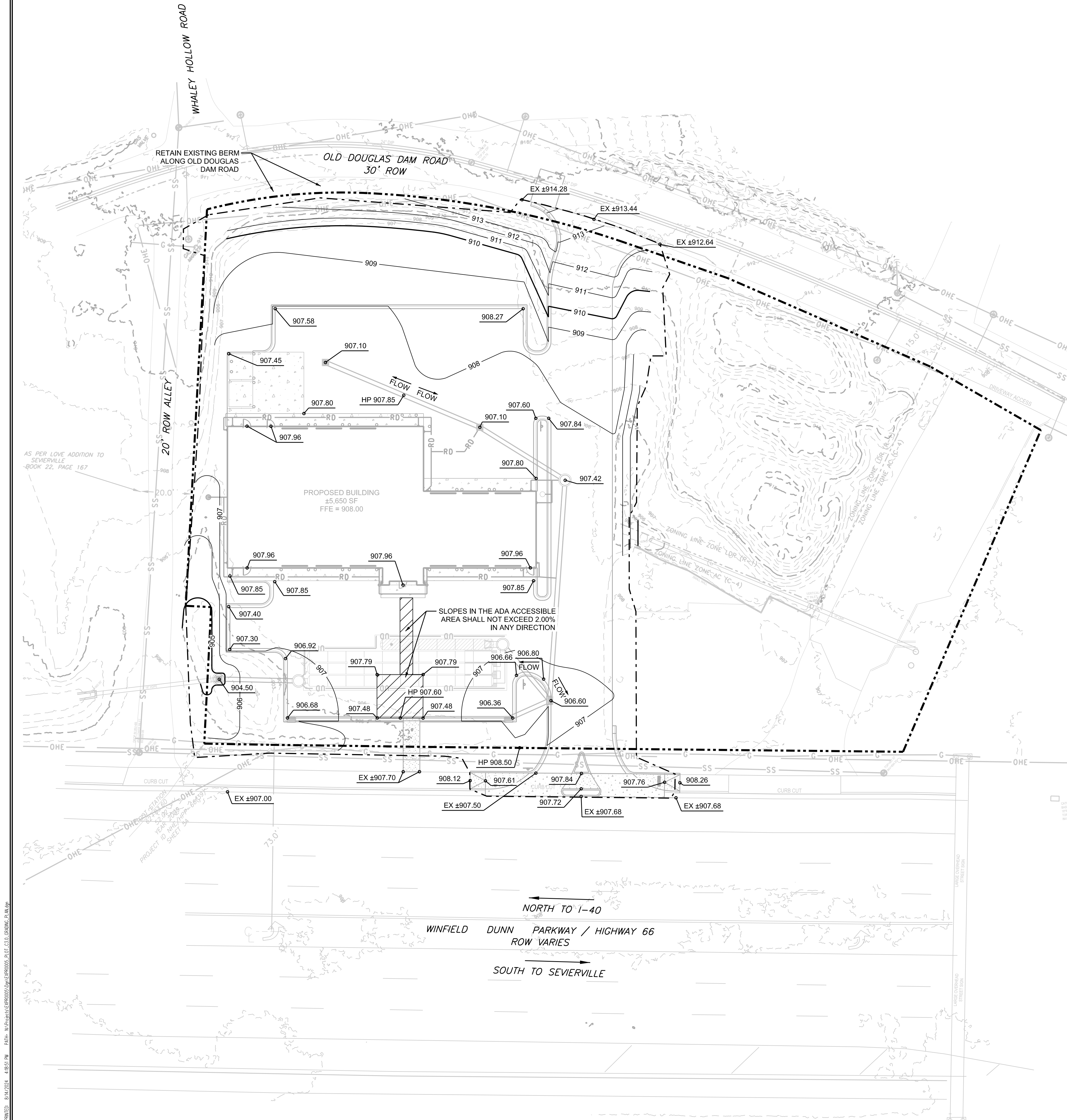
PROJECT: EXP0005
DATE: 08/14/2024
BY: BSS
CHECKED: NJO
SCALE: 1" = 20'

| NO. | DESCRIPTION | REV. | DATE |
|-----|------------------|------|------|
| 0 | ISSUE FOR PERMIT | | |

DRAWING NO.

C2.0

PRINTED: 11/11/2024 4:28:51 PM P:\24- W\240415\PROJECTS\240415\240415_010_GROUND PLAN.dwg



GRADING AND EARTHWORK NOTES AND SPECIFICATIONS:

- REFERENCE GENERAL NOTES. (SHEET C1.0)
- EARTHWORK SHALL BE PERFORMED ON AN UNCLASSIFIED BASIS.
- CONTRACTOR SHALL REFERENCE THE "GEOTECHNICAL ENGINEERING REPORT" PREPARED BY ECS SOUTHEAST LLP, DATED FEBRUARY 16, 2024 (THE REPORT) FOR THE EXPRESS OIL CHANGE - SEVIERVILLE PROJECT. CONTRACTOR SHALL OBTAIN AND BECOME VERY FAMILIAR WITH THESE REQUIREMENTS AND SHALL IMPLEMENT THEM FOR MATTERS INCLUDING BUT NOT LIMITED TO: PROOFROLLING, UNDERCUTTING, SUITABLE SOILS, LIQUID LIMIT, PLASTICITY INDEX, COMPACTION, SOIL MOISTURE CONTENT, SOIL DRY DENSITY AND SOIL TESTING.
- ALL PROPOSED SPOT ELEVATIONS SHOWN ADJACENT TO CURB ARE TO EDGE OF PAVEMENT ELEVATION UNLESS OTHERWISE NOTED.
- GRADES SHOWN ARE FINISH GRADES. FOR SUBGRADE ELEVATIONS IN PAVED AREAS, REFERENCE SECTIONS AND DETAILS.
- THE LOCATION AND ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, SHOULD NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES AND UTILITIES PRIOR TO CONSTRUCTION. ANY DEVIATIONS FROM PLAN INFORMATION SHOULD BE DISCUSSED WITH ENGINEER AND OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY CONTACTS 48 HOURS PRIOR TO EXCAVATION IN AREAS WHERE UTILITIES MAY EXIST.
- THE SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND UTILITIES WITH HIS WORK. ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, STORM SEWER, ELECTRICAL CONDUIT, IRRIGATION SLEEVES, AND ANY OTHER MISCELLANEOUS) SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF BASE COURSE MATERIAL.
- STRIP TOPSOIL FROM THE SITE WHERE EXCAVATION OR GRADING IS INDICATED AND STOCKPILE SEPARATELY FROM OTHER EXCAVATED MATERIAL. WHERE SUFFICIENT SUITABLE EXISTING ON-SITE NATURAL FRIABLE, WELL DRAINED TOPSOIL FREE OF SUBSOIL, STUMPS, ROCKS LARGER THAN 1" DIAMETER, WEEDS, TOXIC SUBSTANCES AND OTHER MATERIAL DETRIMENTAL TO PLANT GROWTH IS NOT AVAILABLE ON SITE CONTRACTOR SHALL PROVIDE BORROW MATERIAL SUITABLE FOR USE AS TOPSOIL. THE AREAS SHALL BE PLANTED AND MULCHED, FERTILIZED AND WATERED AS REQUIRED BY THE LANDSCAPE DESIGN. ROCKS GREATER THAN 1" DIAMETER MUST BE REMOVED. ALL SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDINGS OR PAVEMENT SHALL BE GRADED SMOOTH AND RECEIVE FOUR (4") INCHES OF TOPSOIL.
- FILL SLOPES SHALL BE OVERFILLED AND THEN CUT BACK TO REQUIRED GEOMETRY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE FINISHED GRADING INCLUDING PLACEMENT OF SOILS AS NECESSARY TO ACHIEVE THE FINISHED GRADES INDICATED ON THE GRADING PLANS. ALL SURFACES SHALL BE SMOOTH WITH PROPER TRANSITIONS BETWEEN GRADIENTS. ALL FINISHED TOPSOIL ELEVATIONS SHALL BE A MINIMUM OF 1" BELOW THE FINISHED ELEVATION OF ADJACENT WALKS AND BACK OF CURB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CAREFULLY ESTABLISH PROPER FINISHED GRADE ELEVATIONS IN THE FIELD SO AS TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND EXTERIOR MECHANICAL AND ELECTRICAL FIXTURES AND EQUIPMENT AND ANY OTHER MOISTURE SENSITIVE AREAS.
- THE EXPANDED LIMITS OF THE PROPOSED CONSTRUCTION AREAS SHOULD BE WELL DEFINED, INCLUDING THE LIMITS OF THE FILL ZONES FOR BUILDINGS, PAVEMENTS, AND SLOPES, ETC., AT THE TIME OF FILL PLACEMENT. GRADE CONTROLS SHOULD BE MAINTAINED THROUGHOUT THE FILLING OPERATIONS.
- AT THE END OF EACH WORK DAY, ALL FILL AREAS SHOULD BE GRADED TO FACILITATE DRAINAGE OF ANY PRECIPITATION AND THE SURFACE SHOULD BE SEALED BY USE OF A SMOOTH-DRUM ROLLER TO LIMIT INFILTRATION OF SURFACE WATER. DURING PLACEMENT AND COMPACTION OF NEW FILL AT THE BEGINNING OF EACH WORKDAY, THE CONTRACTOR MAY NEED TO SCARIFY EXISTING SUBGRADES TO A DEPTH ON THE ORDER OF 4 INCHES SO THAT A WEAK PLANE WILL NOT BE FORMED BETWEEN THE NEWFILL AND THE EXISTING SUBGRADE SOILS.
- POSITIVE SITE DRAINAGE SHOULD BE MAINTAINED DURING EARTHWORK OPERATIONS IN AN EFFORT TO MAINTAIN THE INTEGRITY OF THE SITE SURFACE SOIL. WHEN WET, THE SITE SOILS MAY DEGRADE QUICKLY WITH DISTURBANCE FROM CONTRACTOR OPERATIONS AND WILL BE EXTREMELY DIFFICULT TO STABILIZE FOR FILL PLACEMENT. CONSEQUENTLY, THE CONTRACTOR SHOULD BE PREPARED TO IMPLEMENT AGGRESSIVE MECHANICAL OR CHEMICAL DRYING, DEPENDING UPON THE ACTUAL SITE CONDITIONS. IF POSSIBLE MASS GRADING FOR THE PROJECT SHOULD BE PERFORMED DURING THE DRIER SUMMER MONTHS TO HELP FACILITATE FAVORABLE MOISTURE CONDITIONS FOR THE SITE SOILS. IF WATER MUST BE ADDED TO RAISE THE MOISTURE CONTENT OF THE SOIL, IT SHOULD BE UNIFORMLY APPLIED AND THOROUGHLY MIXED INTO THE SOIL.



CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com

CCI
PLANNING
& ENGINEERING

NICHOLAS J. OSTRY
REGISTERED ENGINEER
STATE OF TENNESSEE
EXPIRATION DATE: 08/14/24
ENGINEER'S SEAL NO. 136511

GRADING PLAN
A NEW EXPRESS OIL CHANGE
FOR
SEVIERVILLE, TN
EXPRESS OIL CHANGE & TIRE ENGINEERS

| NO. | DESCRIPTION | REV. | DATE |
|-----|------------------|------|------------|
| 0 | ISSUE FOR PERMIT | | 08/14/2024 |

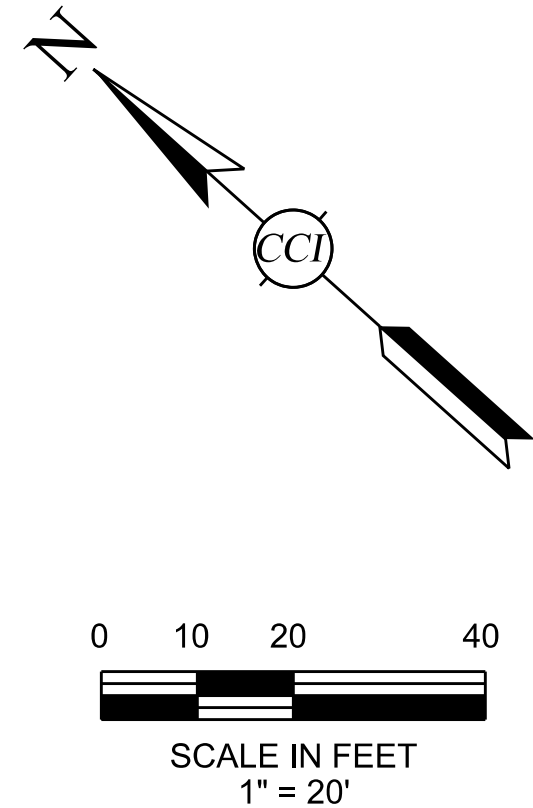
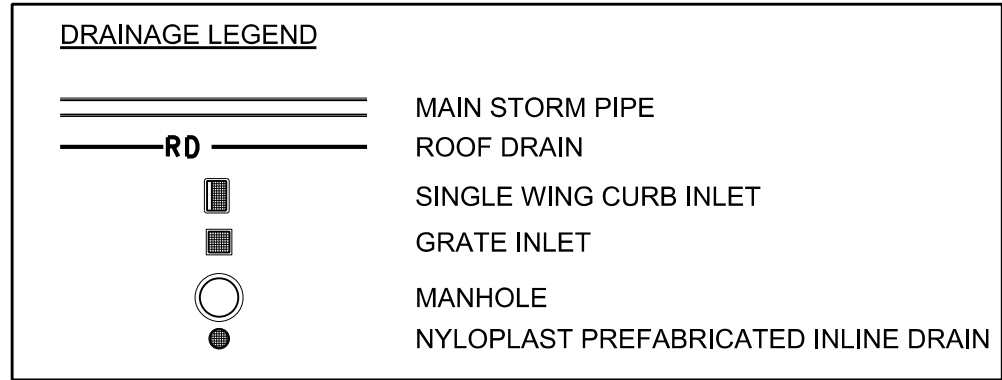
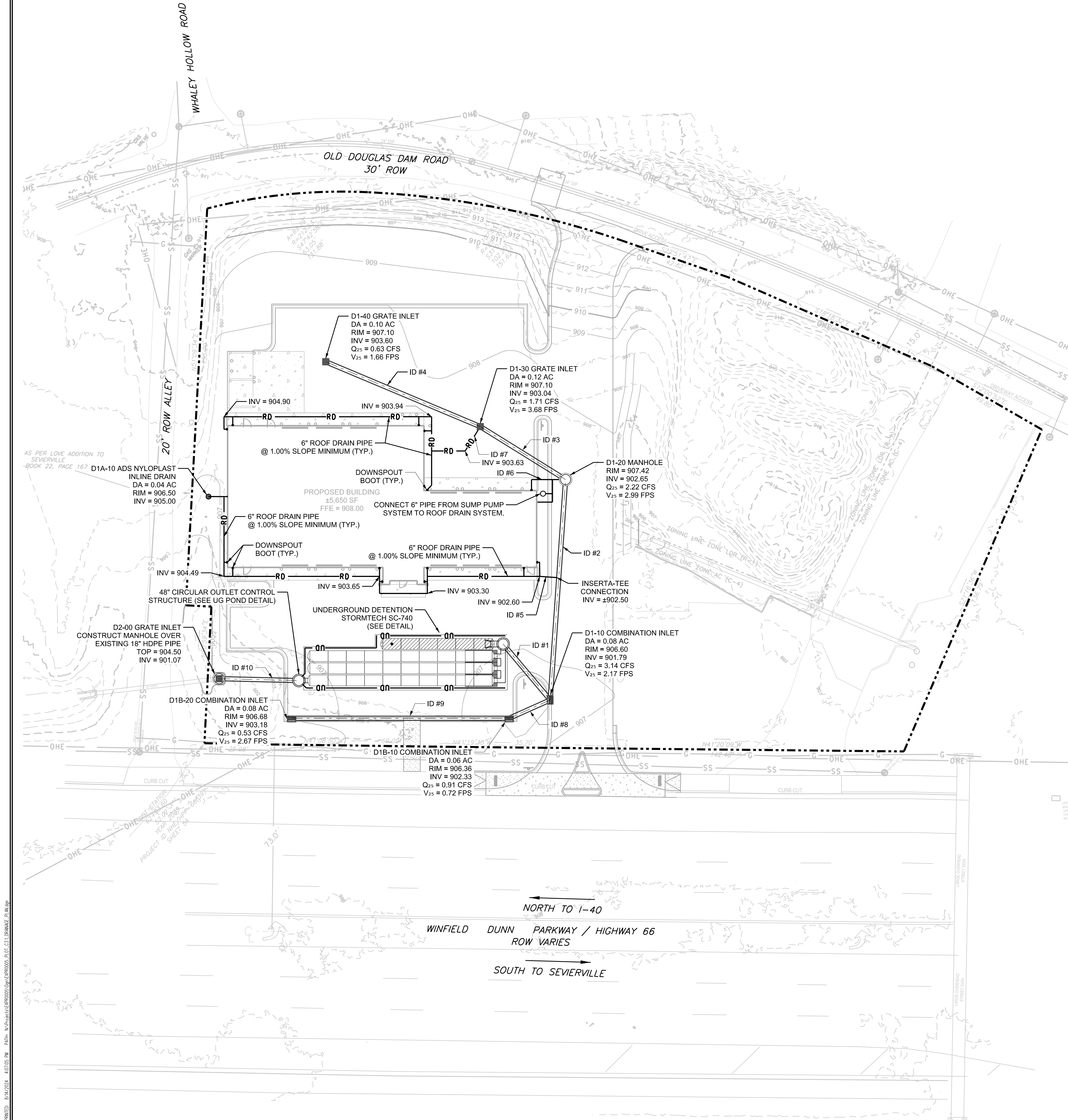
| BY | CHKD BY | REV. | DATE |
|-----|---------|------|------------|
| BSS | NJO | | 08/14/2024 |

| PROJECT | DATE | CHECKED | BY | SCALE |
|---------|------------|---------|-----|----------|
| EXP0005 | 08/14/2024 | | NJO | 1" = 20' |

DRAWING NO.

C3.0

PRINTED: 14/11/2024 4:02:05 PM P:\24- W\Projects\2024\24-0000\24-0000_PLOT_C31.DWG C:\1.DWG C:\1.DWG



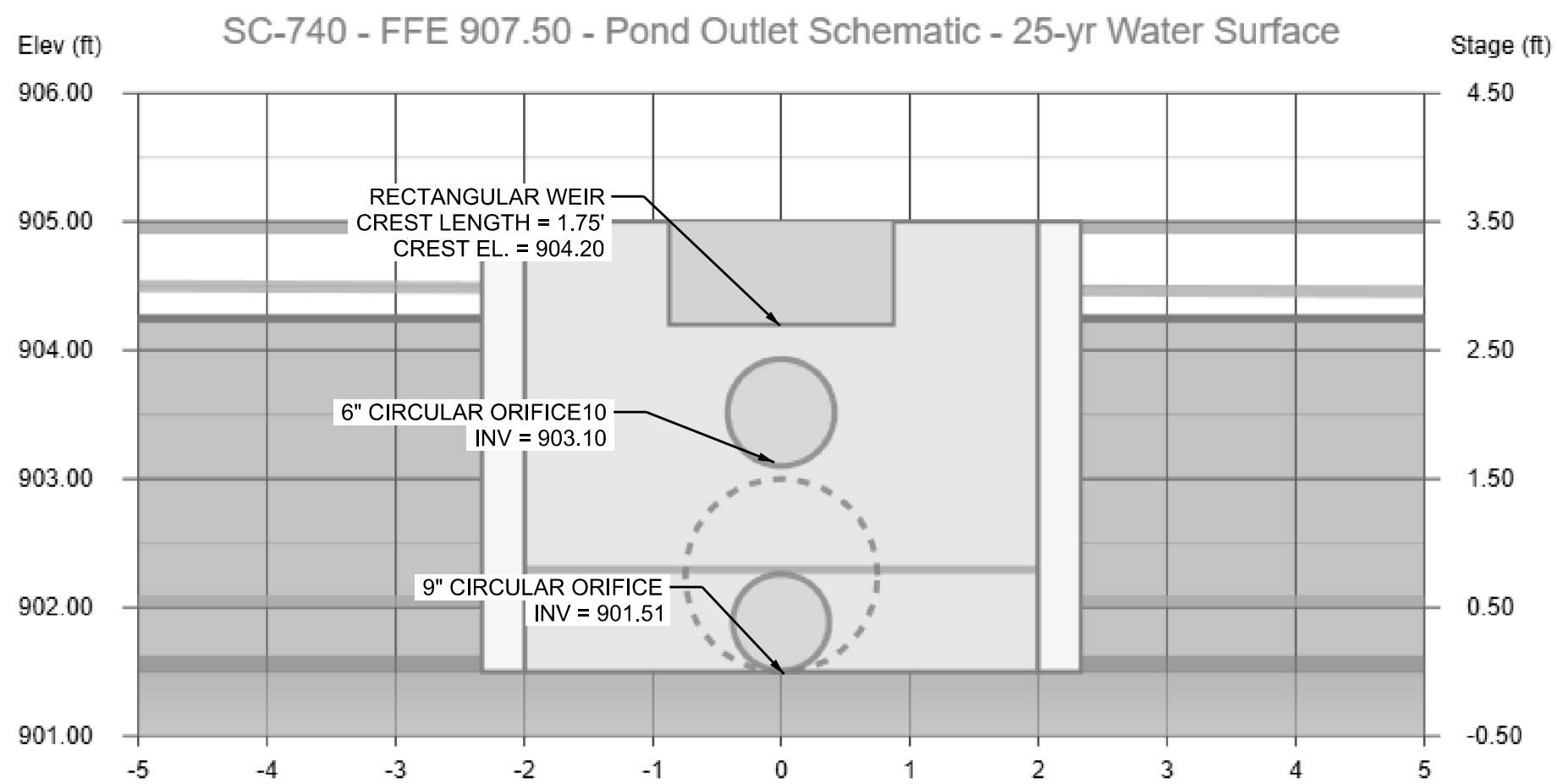
STORM DRAINAGE NOTES

- REFERENCE GENERAL AND LAYOUT NOTES. (SEE SHEET C1.0)
- ALL STORM PIPE SHALL BE EITHER:
 - REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, B OR C WALL, CLASS OF PIPE SHALL BE A MINIMUM OF CLASS III. CIRCULAR PIPE JOINTS SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT, WHICH MUST BE SEALED WITH WATER-TIGHT RUBBER GASKETS CONFORMING TO ASTM C443.
 - HIGH DENSITY POLYETHYLENE (HDPE) WITH WATERTIGHT JOINTS, AND MEET THE REQUIREMENTS OF AASHTO M284 TYPE S AND AASHTO M252 TYPE S (SMOOTH INTERIOR, CORRUGATED EXTERIOR). PIPE SHALL BE INSTALLED PER THE REQUIREMENTS OF ASTM D2321 AND AASHTO SECTION 30.
- ALL PIPE ENTERING STORM SEWER STRUCTURES SHALL BE GROUTED TO ASSURE THE CONNECTION AT THE STRUCTURE IS WATER TIGHT.
- ALL STORM SEWER MANHOLES AND RISERS SHALL BE PRECAST AND MEET THE SPECIFICATIONS OF ASTM C76.
- ALL STORM SEWER MANHOLE LIDS OR GRATE INLETS IN PAVED AREAS SHALL BE FLUSH WITH THE PAVEMENT AND SHALL HAVE H-20 TRAFFIC BEARING LIDS.
- ALL STORM SEWER MANHOLE LIDS SHALL BE LABELED "STORM SEWER".
- ALL STORM DRAINAGE PIPE AND STRUCTURES SHALL BE CLEANED OF SILT, TRASH AND DEBRIS PRIOR TO DEMOBILIZATION FROM THE SITE. NO OBJECTS LARGER THAN 1/2 INCH OR SEDIMENT ACCUMULATION GREATER THAN 1/2 INCH SHALL BE IN ANY STORM PIPE OR STRUCTURE AT TURNOVER TO OWNER.
- CONTRACTOR IS TO BEGIN STORM DRAINAGE CONSTRUCTION FROM THE MOST DOWN STREAM POINT OF THE SYSTEM.
- THE TOP RING OF ALL MANHOLE SECTIONS FOR CURB INLETS, YARD INLETS OR GRATE INLETS SHALL HAVE # 57 STONE, FILTER FABRIC, AND WEEP HOLES.
- GRATE INLET SHALL BE EJ V-5724 OR EQUIVALENT UNLESS OTHERWISE NOTED.
- COMBINATION INLETS SHALL BE EJ 7030 OR EQUIVALENT UNLESS OTHERWISE NOTED.

TABULATION OF PIPES

| ID | FROM | TO | DIA (IN.) | LENGTH (FT.) | MATERIAL | SLOPE (%) | NOTES |
|----|-------------|--------|-----------|--------------|------------|-----------|--|
| 1 | UGD | D1-10 | 18 | 28.54 | PIPE | 1.02% | BEGINNING OF D1 PIPE LINE |
| 2 | D1-10 | D1-20 | 18 | 86.27 | PIPE | 1.00% | |
| 3 | D1-20 | D1-30 | 18 | 39.20 | PIPE | 0.99% | |
| 4 | D1-30 | D1-40 | 18 | 65.44 | PIPE | 0.86% | END OF D1 PIPE LINE |
| 5 | INSERTA-TEE | D1A-10 | 6 | 181.00 | ROOF DRAIN | 1.00% | ROOF DRAIN LATERALS FOR FRONT SIDE OF BUILDING CONNECTING TO D1A |
| 6 | D1-20 | RD | 6 | 30.00 | ROOF DRAIN | 1.00% | ROOF DRAIN LATERALS FOR SIDE OF BUILDING |
| 7 | D1-30 | RD | 6 | 140.00 | ROOF DRAIN | 1.00% | ROOF DRAIN LATERALS FOR BACK OF BUILDING |
| 8 | D1-10 | D1B-10 | 18 | 17.57 | PIPE | 3.07% | BEGINNING OF D1B LINE |
| 9 | D1B-10 | D1B-20 | 18 | 84.92 | PIPE | 1.00% | END OF D1B LINE |
| 10 | UG POND | D2-00 | 18 | 31.12 | PIPE | 1.41% | UG POND OUTLET PIPE |

AN ADDITIONAL 50 LF OF 6" ROOF DRAIN LATERAL PIPE NEEDED FOR CONNECTION FROM DOWNSPOUT BOOT TO ASSOCIATED ROOF DRAIN SYSTEM



CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com

CCI
PLANNING
& ENGINEERING

NICHOLAS J. OSTRY
REGISTERED ENGINEER
No. 13561
STATE OF TENNESSEE
ENGINEER'S SEAL

DRAINAGE PLAN

A NEW EXPRESS OIL CHANGE
FOR
SEVIERVILLE, TN

EXPRESS OIL CHANGE & TIRE ENGINEERS

PROJECT: EXP0005
DATE: 08/14/2024
BY: BSS
CHECKED BY: NJO
SCALE: 1" = 20'

REVISIONS

| NO. | DESCRIPTION | DATE |
|-----|------------------|------|
| 0 | ISSUE FOR PERMIT | |

DRAWING NO.

C3.1



EXPRESS OIL CHANGE
SEVIERVILLE, TN, USA

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

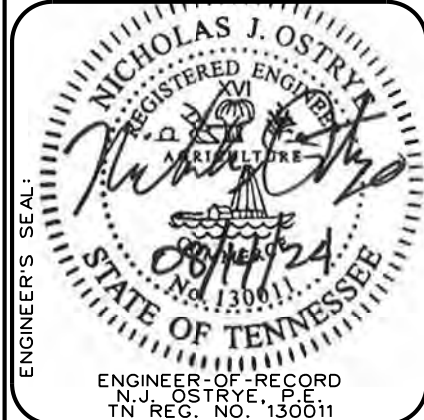
- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



UNDERGROUND DETENTION DETAILS AND SPECIFICATIONS

A NEW EXPRESS OIL CHANGE
SEVIERVILLE, TN
FOR
EXPRESS OIL CHANGE & TIRE ENGINEERS

DATE: 08/14/2024
PROJECT: EXPR0005
DRAWN BY: BSS
CHECKED BY: NJO
SCALE: N.T.S.

| NO. | DESCRIPTION | REVISIONS |
|-----|------------------|-----------|
| 0 | ISSUE FOR PERMIT | |

DRAWING NO. C3.2

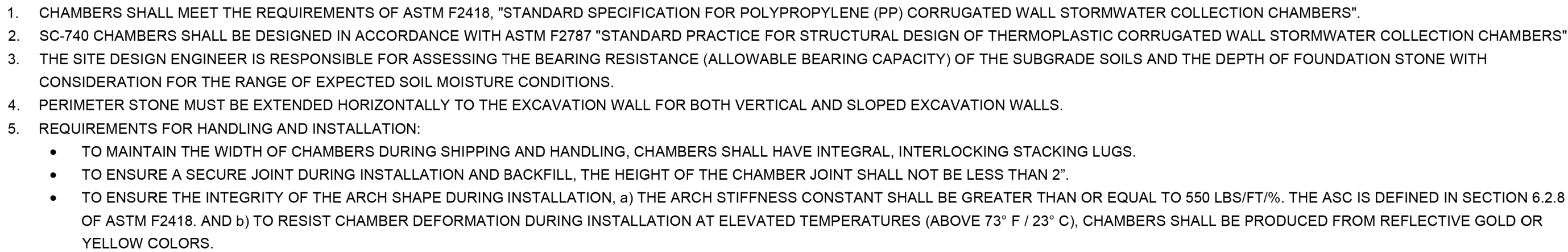
| MATERIAL LOCATION | | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|-------------------|--|--|---|--|
| D | FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER. | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| C | INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| B | EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| A | FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3} |

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".

2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.

3. WHEN 6" LIFTS MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBGRADE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



A NEW EXPRESS OIL CHANGE
SEVIERVILLE, TN

FOR
EXPRESS OIL CHANGE & TIRE ENGINEERS

| | | | | |
|------------------|----------------------|---------------|-----------------|---------------|
| DATE: 08/14/2024 | PROJECT NO: EXPR0005 | DRAWN BY: BSS | CHECKED BY: NJO | SCALE: N.T.S. |
|------------------|----------------------|---------------|-----------------|---------------|

| | | | | |
|-----|------------------|-----|------------|------------|
| 0 | ISSUE FOR PERMIT | BSS | NJO | 08/14/2024 |
| NO. | DESCRIPTION | BY | CHECKED BY | REV. DATE |
| | DEVIATIONS | | | |

REFERENCES

DRAWING NO

C3.4



| | | |
|---------------------------------|-----------------------|------------------------------|
| SIZE (W X H X INSTALLED LENGTH) | 51.0" X 30.0" X 85.4" | (1295 mm X 762 mm X 2169 mm) |
| CHAMBER STORAGE | 45.9 CUBIC FEET | (1.30 m³) |
| MINIMUM INSTALLED STORAGE* | 74.9 CUBIC FEET | (2.12 m³) |
| WEIGHT | 75.0 lbs. | (33.6 kg) |

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

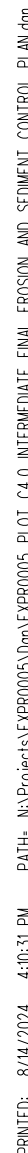
PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

| PART # | STUB | A | B | C |
|-----------------------------|--------------|----------------|----------------|----------------|
| SC740EPE06T / SC740EPE06TPC | 6" (150 mm) | 10.9" (277 mm) | 18.5" (470 mm) | --- |
| SC740EPE06B / SC740EPE06BPC | | | --- | 0.5" (13 mm) |
| SC740EPE08T / SC740EPE08TPC | | | 8" (200 mm) | 12.2" (310 mm) |
| SC740EPE08B / SC740EPE08BPC | --- | 0.6" (15 mm) | | |
| SC740EPE10T / SC740EPE10TPC | 10" (250 mm) | 13.4" (340 mm) | | |
| SC740EPE10B / SC740EPE10BPC | | | --- | 0.7" (18 mm) |
| SC740EPE12T / SC740EPE12TPC | | | 12" (300 mm) | 14.7" (373 mm) |
| SC740EPE12B / SC740EPE12BPC | --- | 1.2" (30 mm) | | |
| SC740EPE15T / SC740EPE15TPC | 15" (375 mm) | 18.4" (467 mm) | | |
| SC740EPE15B / SC740EPE15BPC | | | --- | 1.3" (33 mm) |
| SC740EPE18T / SC740EPE18TPC | | | 18" (450 mm) | 19.7" (500 mm) |
| SC740EPE18B / SC740EPE18BPC | --- | 1.6" (41 mm) | | |
| SC740ECEZ | 24" (600 mm) | 18.5" (470 mm) | | |

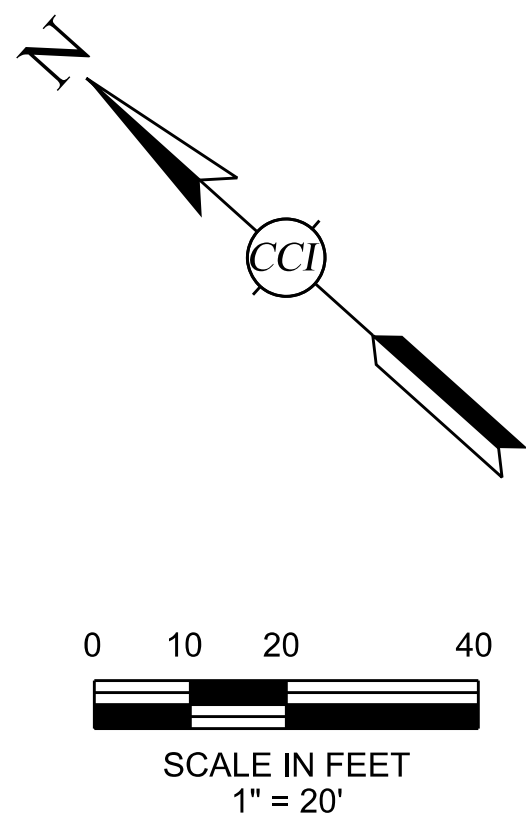
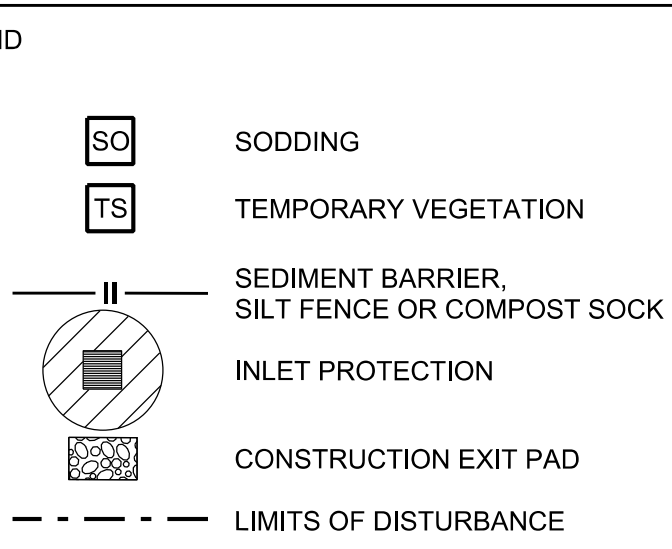
ALL STUBS, EXCEPT FOR THE SC740ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740ECEZ THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL



SPECIAL NOTE:
TRUCKS AND EQUIPMENT SHOULD UTILIZE WASHPAD OR CONSTRUCTION EXIT PAD WHILE SOILS ARE EXPOSED. THE LOCATION OF THE PAD/PADS IS TO NOT CONFLICT OR PROHIBIT NORMAL BUSINESS OPERATIONS OF ANY ADJACENT BUSINESS OR RESIDENCE. ANY SEDIMENT TRACKED ONTO WINFIELD DRIVE PARKWAY OR OLD DOUGLAS DAM ROAD ARE TO BE CLEANED PRIOR TO END OF DAY.



INTERMEDIATE EROSION CONTROL SEQUENCE

1. REMOVE SOFT, YIELDING OR UNSUITABLE MATERIAL.
2. BEGIN GRADING FOR ROADWAYS AND PADS, MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
3. PROVIDE INLET PROTECTION IMMEDIATELY FOLLOWING INLET INSTALLATION AND MAINTAIN WHILE SOIL SUBGRADE IS EXPOSED

FINAL EROSION CONTROL SEQUENCE:

1. PROVIDE SODDING OF NON PAVED DISTURBED AREAS ON SITE.
2. AFTER ALL AREAS ARE STABILIZED, REMOVE CONSTRUCTION ENTRANCES, SILT BARRIERS, AND OTHER TEMPORARY SEDIMENT CONTROL DEVICES.

EROSION & SEDIMENT CONTROL NOTES:

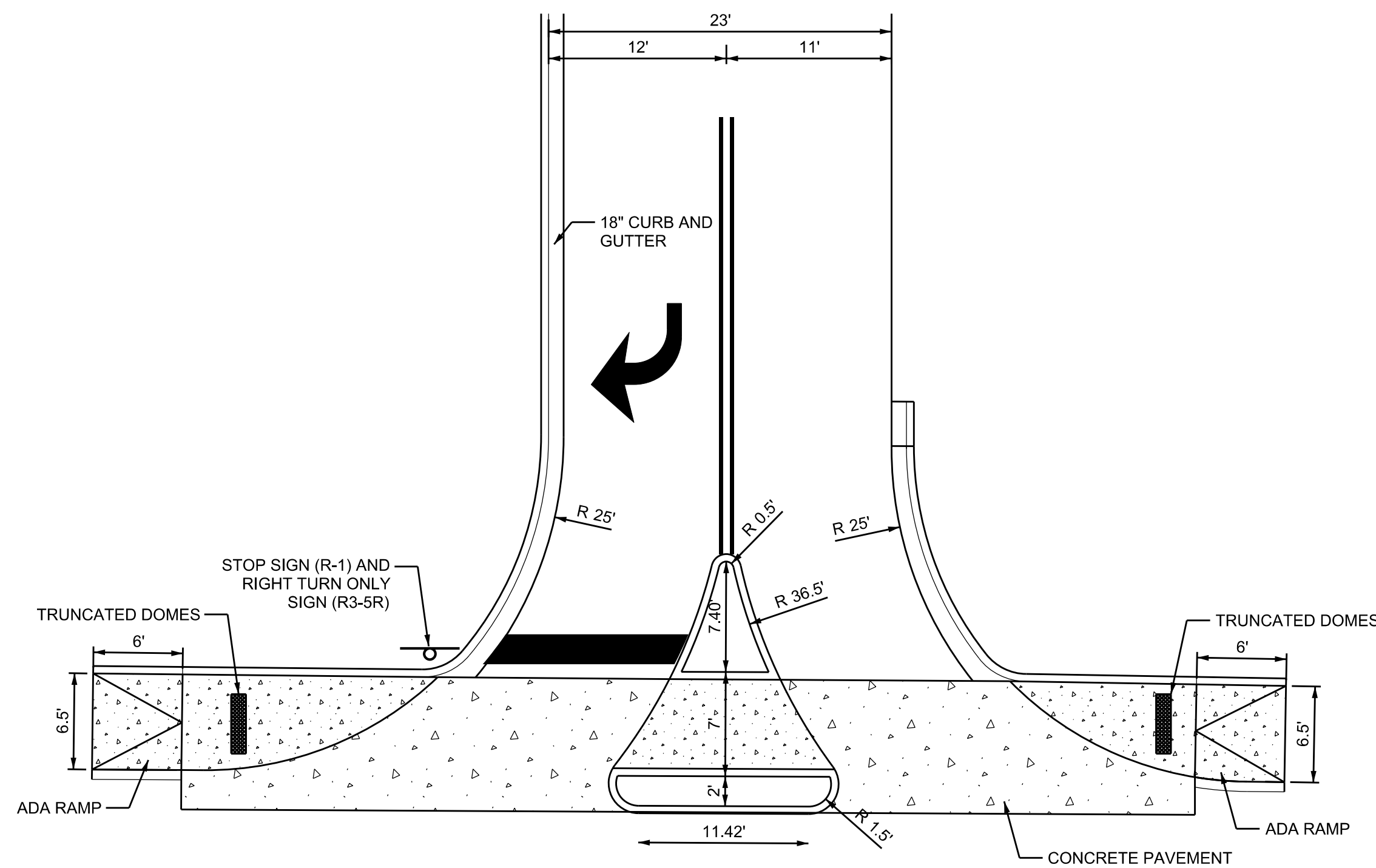
1. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) GENERAL CONSTRUCTION STORM WATER NPDES PERMIT INCLUDING, BUT NOT LIMITED TO INSTALLATION OF BMP'S, MONITORING OF BMP PERFORMANCE, REPORT PREPARATION, REPORT FILING, AND PERMIT RENEWAL OR TERMINATION. CONTRACTOR SHALL SUBMIT MONITORING REPORTS TO OWNER AND SITE ENGINEER WITHIN 72 HOURS OF THE MONITORING EVENT.
2. CONTRACTOR SHALL OBTAIN ANY REQUIRED NPDES PERMIT FOR ALL GRADING AND OTHER LAND DISTURBING ACTIVITIES PRIOR TO BEGINNING CONSTRUCTION.
3. THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENT CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT OR SEDIMENT FROM LEAVING THE SITE. SILT OR SEDIMENT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS. THE CONTRACTOR SHALL PREVENT THE RENEWAL OF SILT OR SEDIMENT FROM THE SITE BY INSTALLING EROSION CONTROL MEASURES IN ADDITION TO THOSE SHOWN ON PLANS AS NECESSARY AND CONDUCTING PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY TO PREVENT SILT OR SEDIMENT FROM ESCAPING THE SITE AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL AND MAINTAIN, REPAIR OR REPLACE AS NECESSARY. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION AND SEDIMENT CONTROL DEVICES WHICH BECOME INEFFECTIVE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL EROSION CONTROL DEVICES OR MEASURES AS DEEMED NECESSARY BY THE ENGINEER, OWNER OR REGULATORY AUTHORITIES TO COMPLY WITH CONSTRUCTION DOCUMENTS OR GOVERNING AUTHORITY.
5. CONTRACTOR SHALL REMOVE THE BUILD UP OF SILT AND SEDIMENT FROM BEHIND SILT FENCE AND INLET FILTERS WHEN SILT AND SEDIMENT HAS REACHED 1/3 THE TOTAL HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICE.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS AND PERMITS.
7. ALL EROSION CONTROL MEASURES SHALL MEET THE GUIDELINES SET FORTH IN THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, A STORMWATER PLANNING AND DESIGN MANUAL FOR CONSTRUCTION ACTIVITIES, FOURTH EDITION" PREPARED BY THE DIVISION OF WATER RESOURCES OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATIONS (TDEC), PUBLISHED AUGUST 2012.
8. CONTRACTOR SHALL INSTALL, MAINTAIN AND INSPECT ALL EROSION AND SEDIMENT DEVICES AND MEASURES IN ACCORDANCE WITH THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, A STORMWATER PLANNING AND DESIGN MANUAL FOR CONSTRUCTION ACTIVITIES, FOURTH EDITION" PREPARED BY THE DIVISION OF WATER RESOURCES OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATIONS (TDEC), PUBLISHED AUGUST 2012.
9. THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE OUTSIDE THE LIMITS OF CONSTRUCTION CAUSED BY THE CONTRACTOR OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED TO ITS ORIGINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
10. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE AS REQUIRED BY THE ENGINEER, PLANS, AND CITY OF SEVIERVILLE REPRESENTATIVE. SILTATION CONTROL MEASURE SHALL BE INSPECTED PER THE NPDES PERMIT REQUIREMENTS. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY AND NO FURTHER WORK WILL PROCEED UNTIL SAID DEFICIENCIES ARE CORRECTED TO THE CITY OF SEVIERVILLE OR ENGINEER'S APPROVAL.
11. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
12. IF SEDIMENT ESCAPES THE SITE IT SHALL BE RECOVERED, RETURNED TO THE SITE, AND SPREAD IN LANDSCAPE AREAS AND SEEDED.
13. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

CAUTION NOTICE TO CONTRACTOR

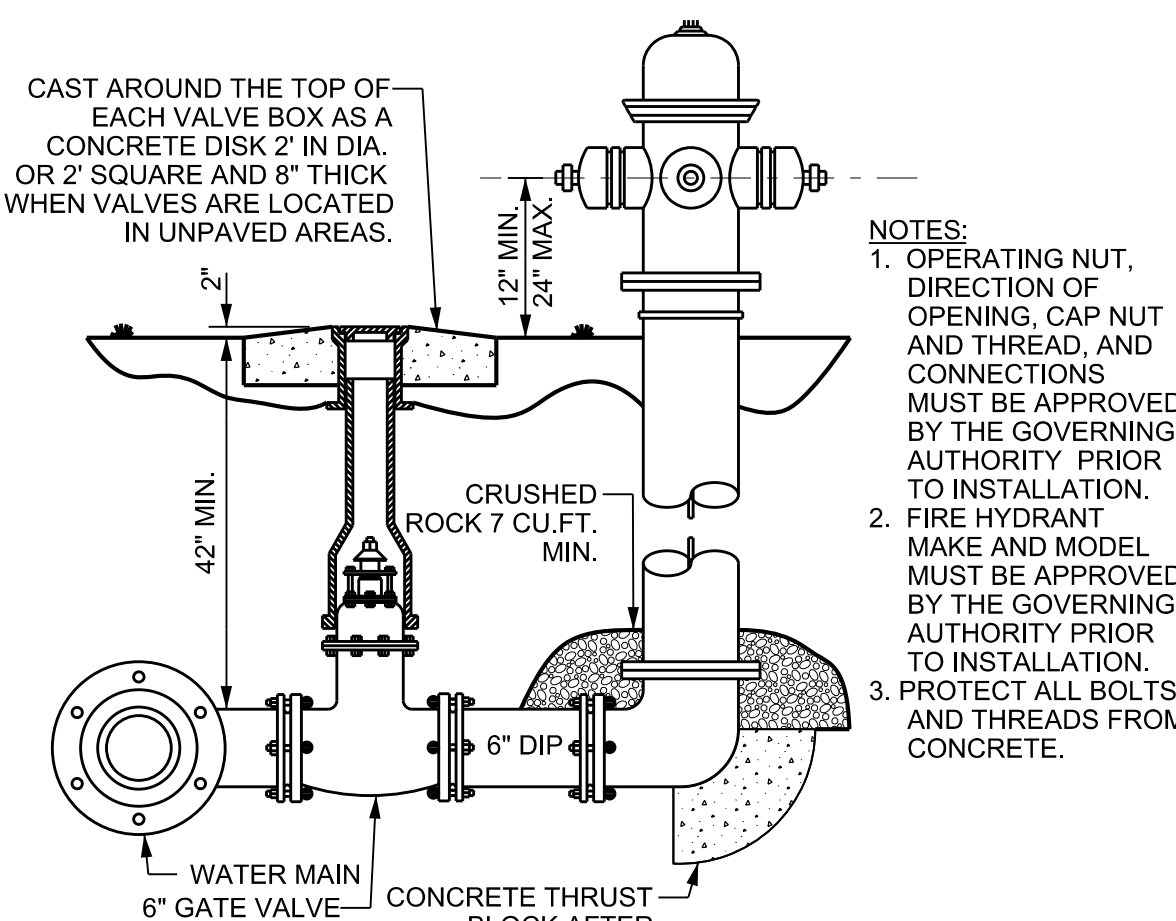
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



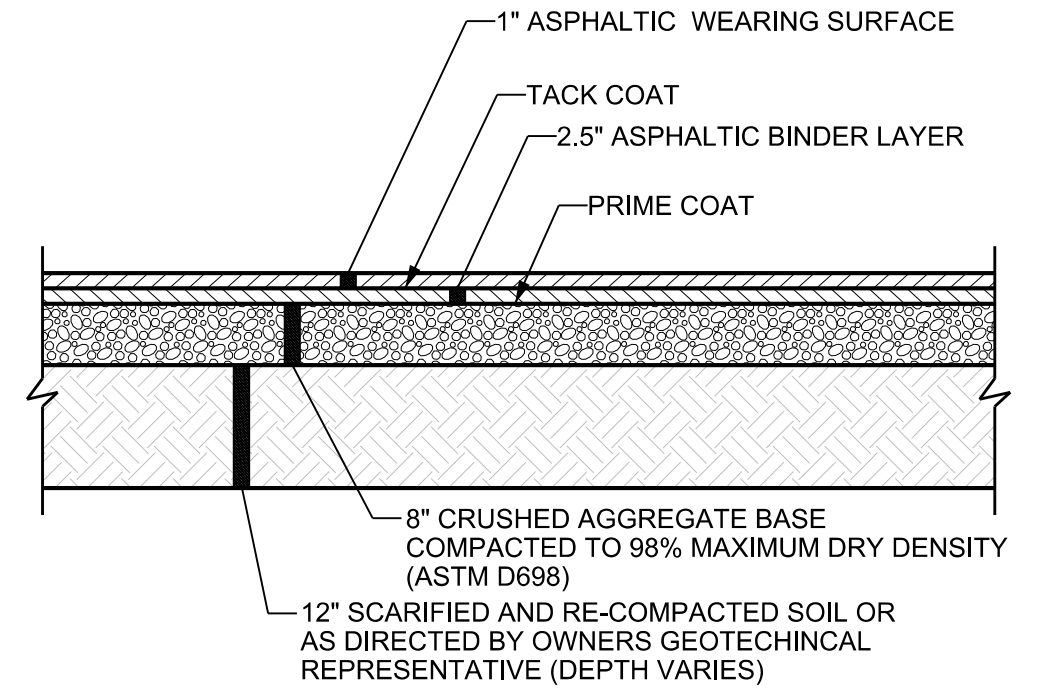
PRINTED: 14/01/2024 4:10:06 PM P:\24-1\BSS\PROJECTS\24-1\24-1\CONSTRUCTION DETAILS AND SECTIONS.DWG



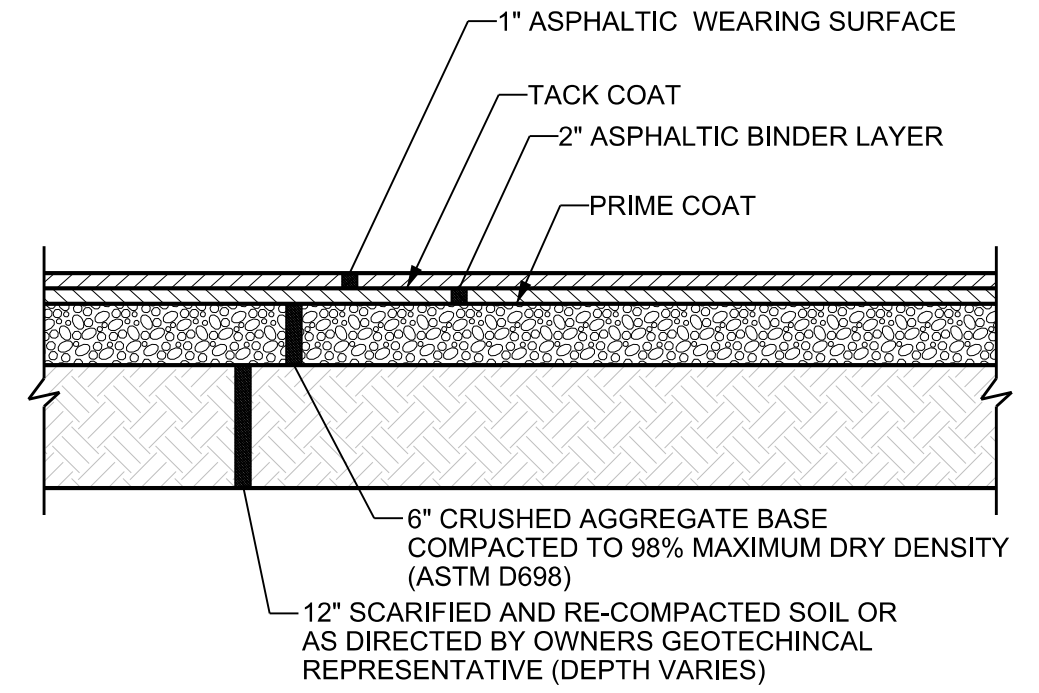
RIGHT-IN-RIGHT-OUT ENTRANCE DETAIL
N.T.S.



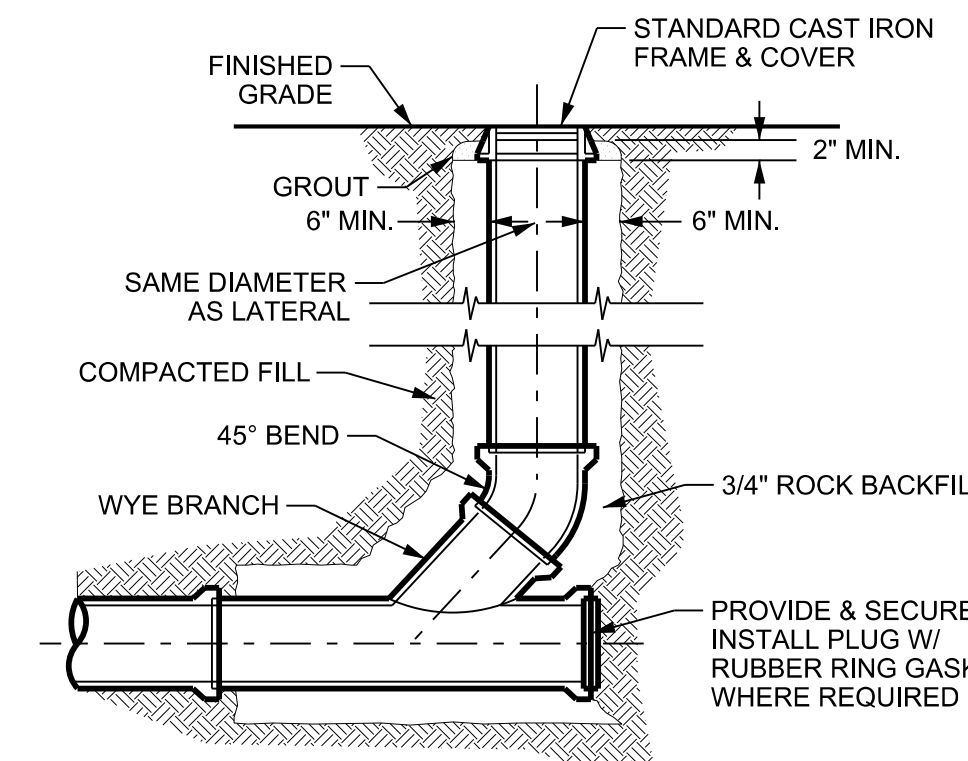
FIRE HYDRANT ASSEMBLY
N.T.S.



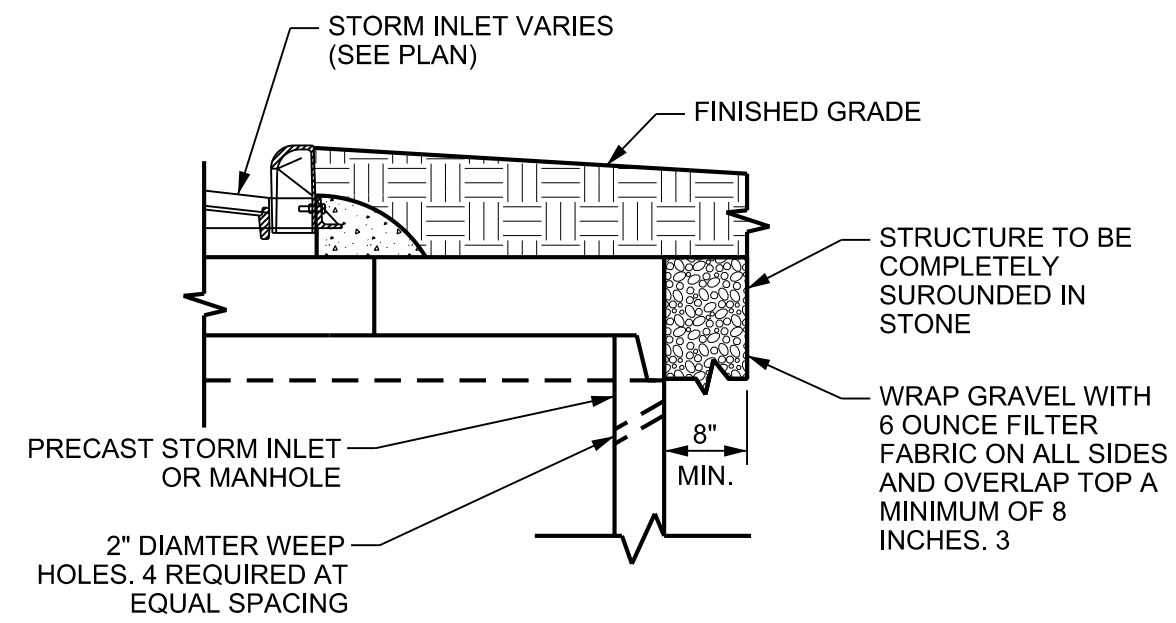
HEAVY DUTY ASPHALT PAVING SECTION
N.T.S.



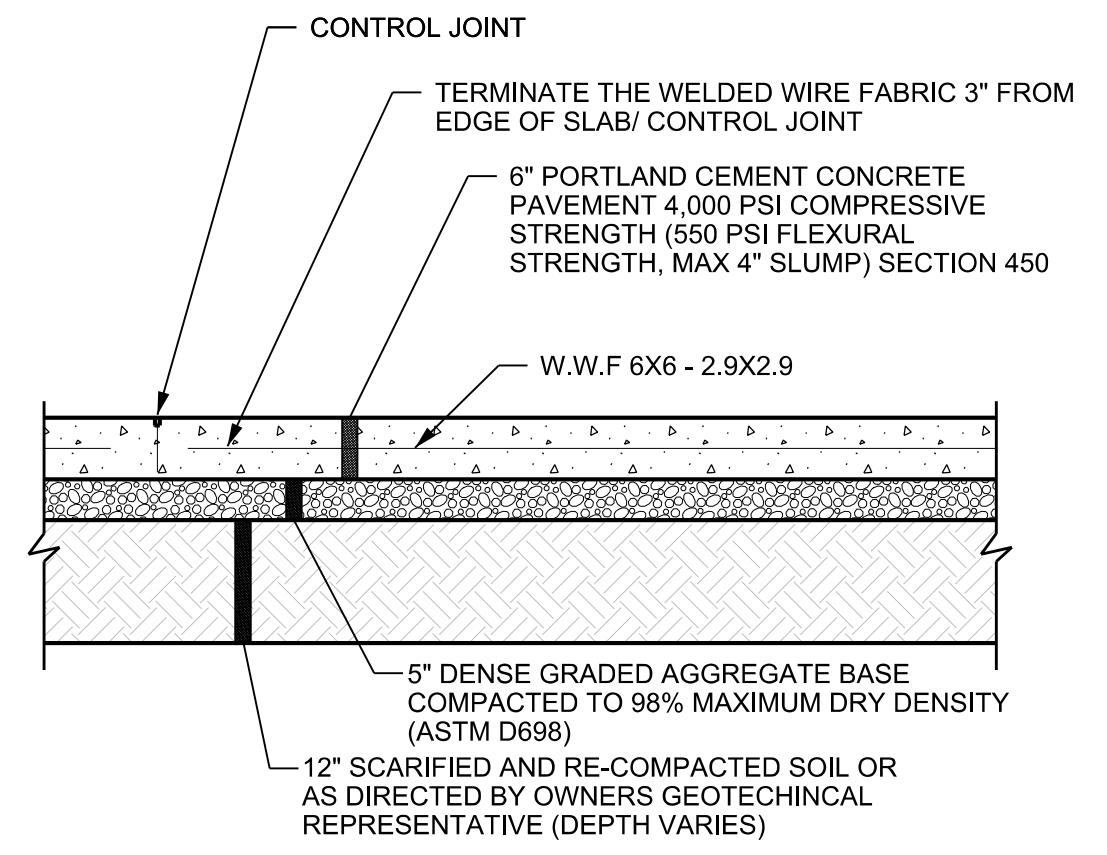
STANDARD DUTY ASPHALT PAVING SECTION
N.T.S.



CLEANOUT DETAIL
N.T.S.

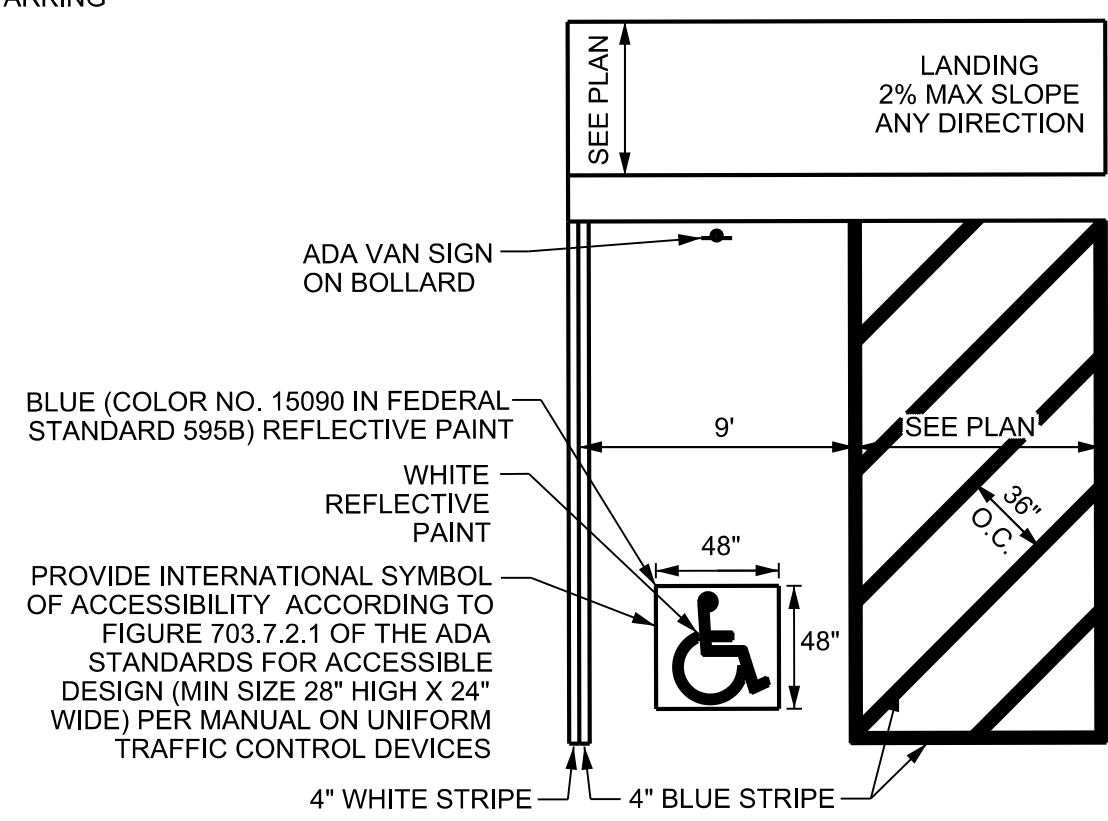


STORM INLET AND MANHOLE
WEEP HOLE DETAIL
N.T.S.

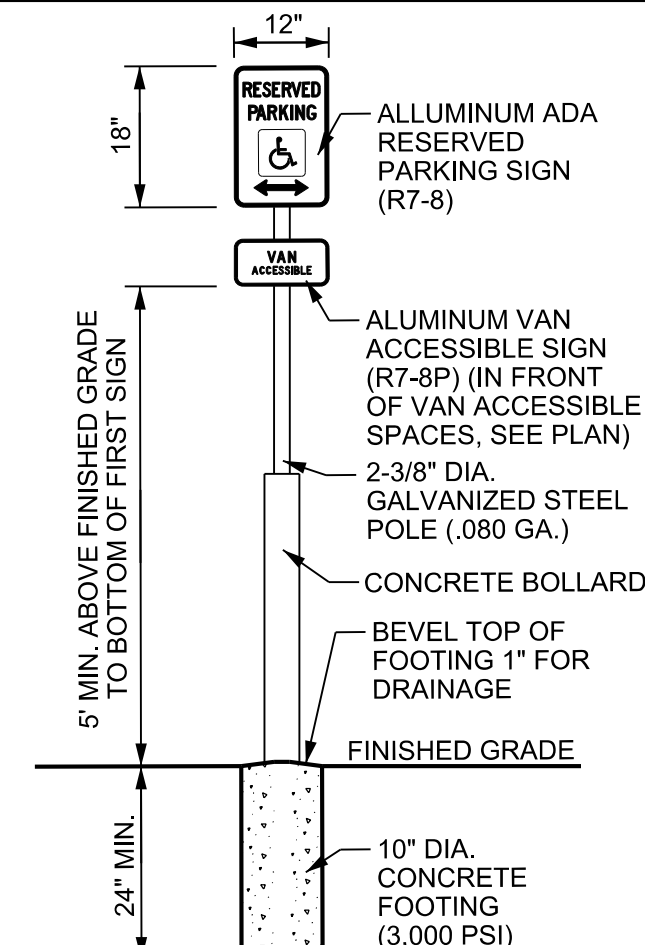


CONCRETE PAVING SECTION
N.T.S.

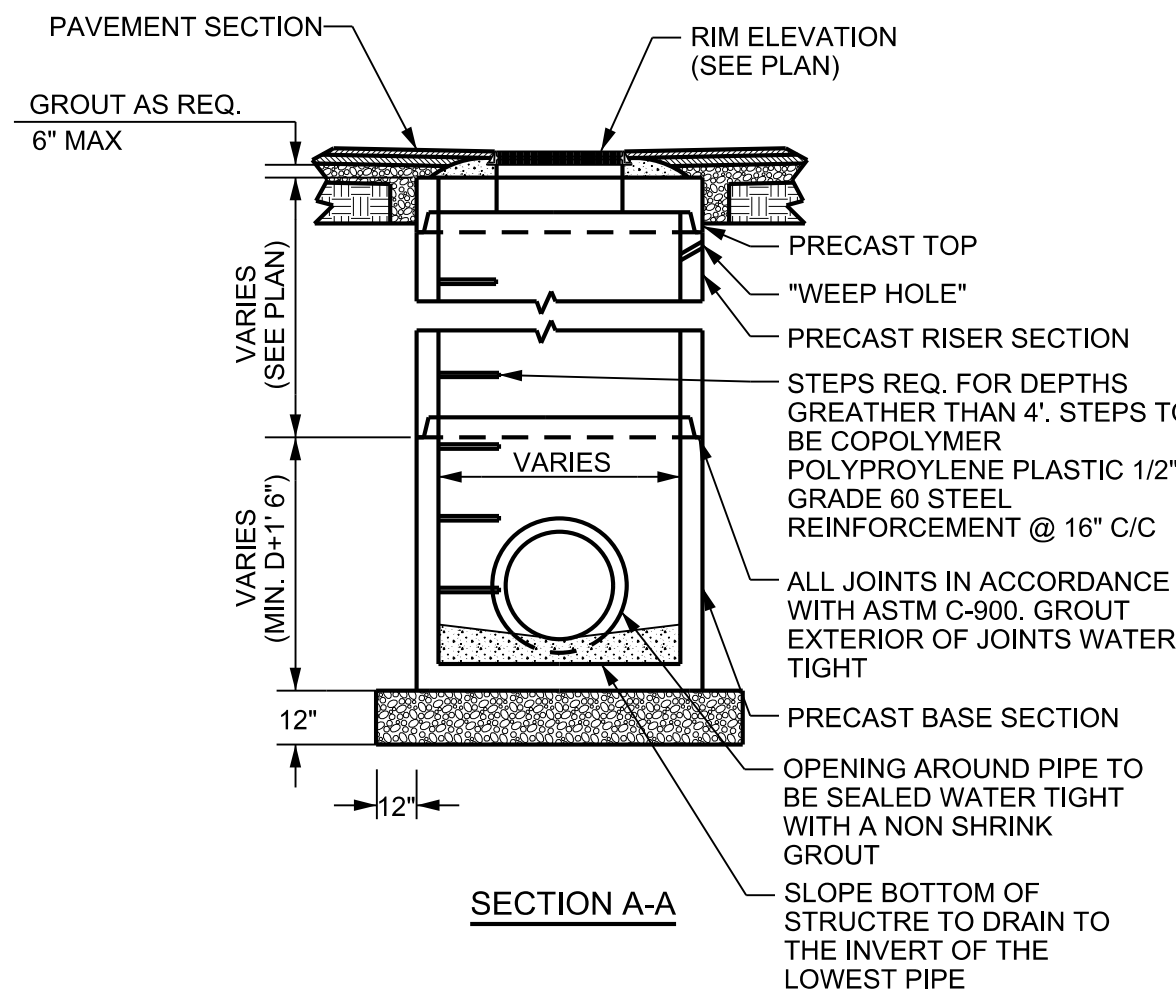
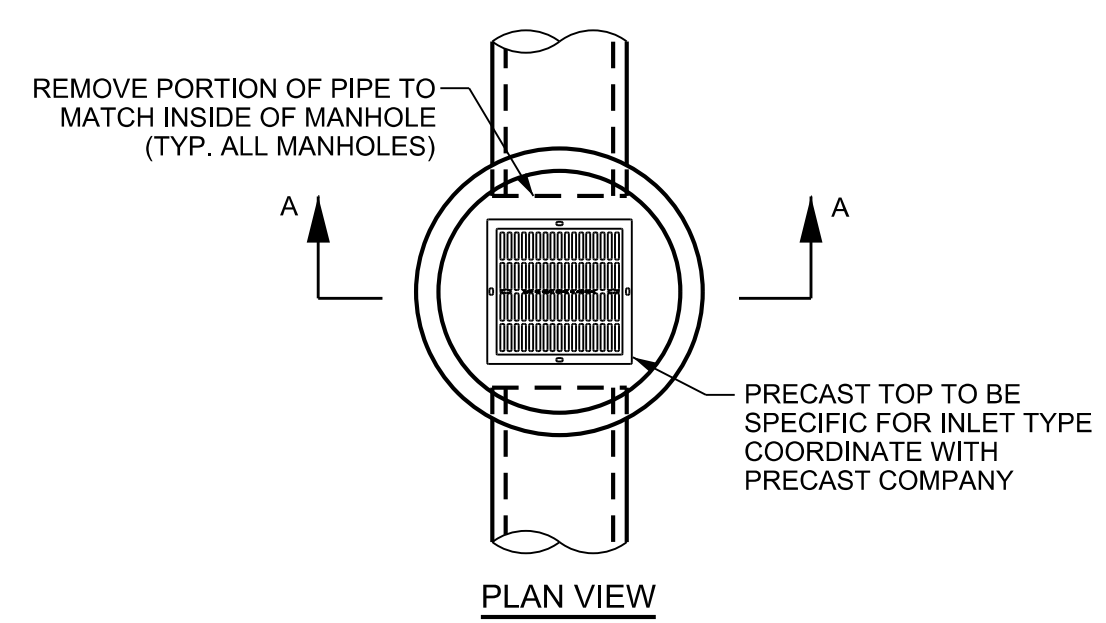
NOTE:
2% MAX RUNNING SLOPE IN ANY
DIRECTION IN THE ADA PARKING
SPACE OR ADA AISLE.



ADA PARKING DETAIL
N.T.S.

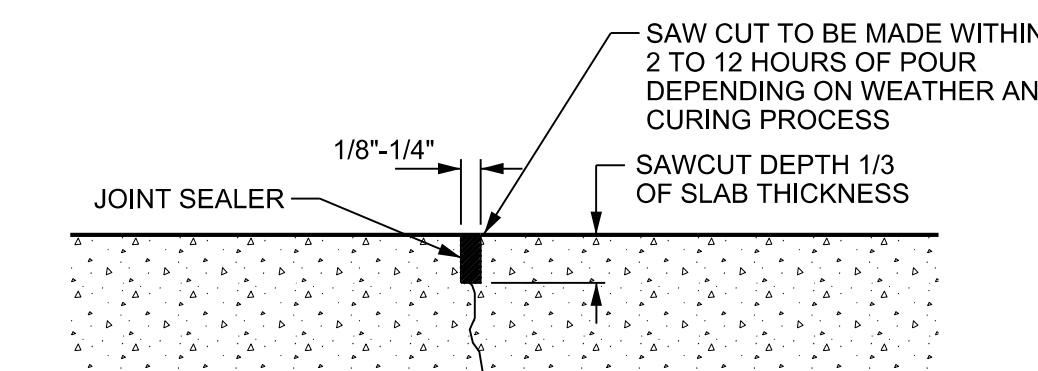


ADA SIGNAGE

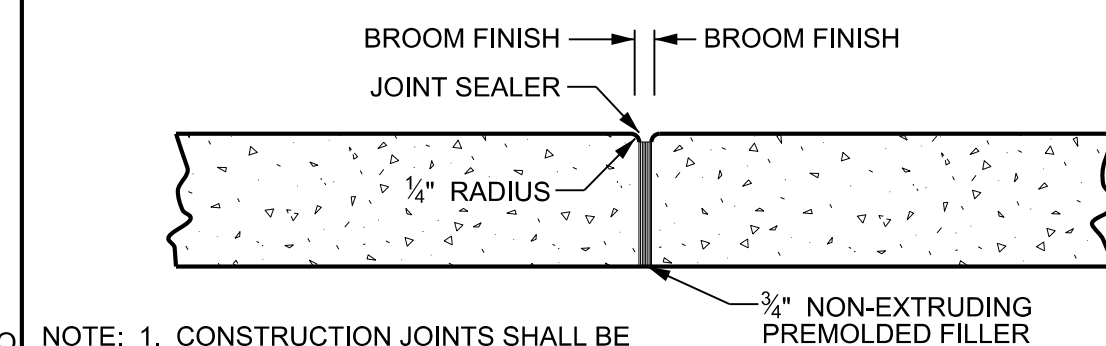


GRATE INLET NOTES:
1. GRATE INLETS SHALL BE EJ V5636 GRATE AND V5636 FRAME.
2. CONTRACTOR SHALL PROVIDE ENGINEER WITH SHOP DRAWINGS OF ALL STRUCTURES PRIOR TO INSTALLATION.
3. WORKING POINT FOR COORDINATES TO BE CENTER OF STRUCTURE. SEE PLAN.
4. MINIMUM MANHOLE DIAMETER TO BE THE EFFLUENT PIPE OUTSIDE DIAMETER PLUS 12" OR 48", WHICHEVER IS GREATER.

GRATE INLET OVER PRECAST STRUCTURE
N.T.S.

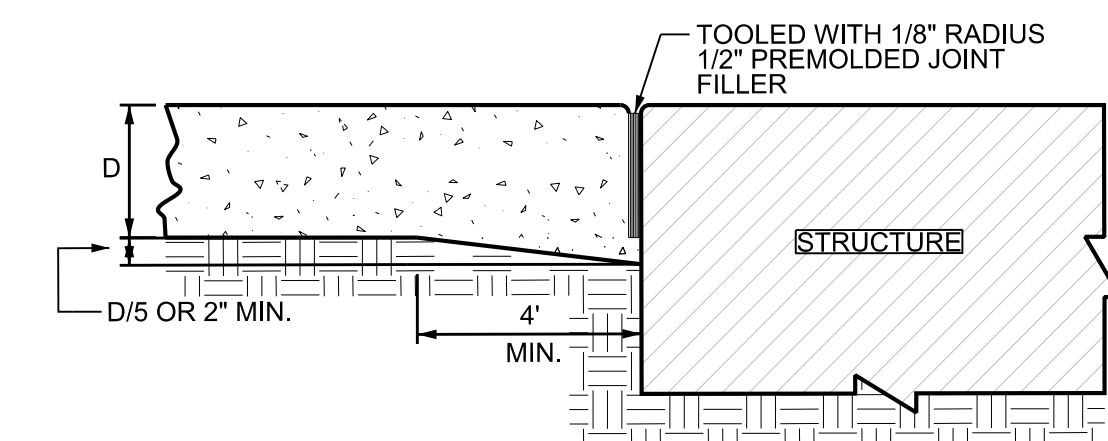


SAWED CONTROL JOINT
N.T.S.

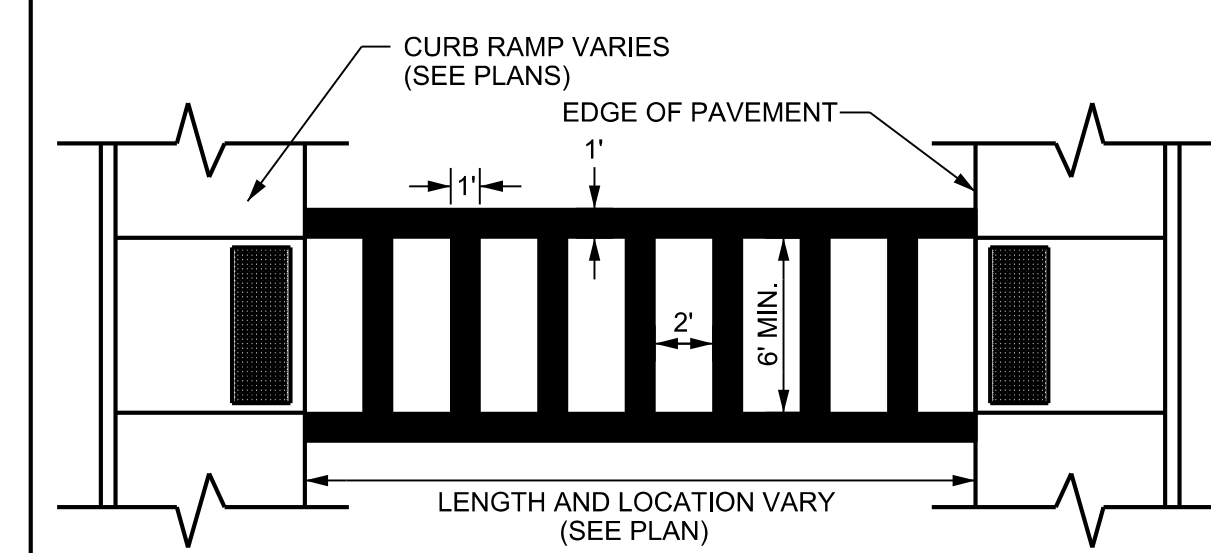


NOTE: 1. CONSTRUCTION JOINTS SHALL BE CONSTRUCTED AS REQUIRED.
2. ALL SEAL RESERVOIRS AND CONTRACTION JOINTS SHALL BE SAWED.
3. PLACE JOINTS @ 25' O.C. OR AS NOTED ON DRAWINGS.

EXPANSION JOINT
N.T.S.

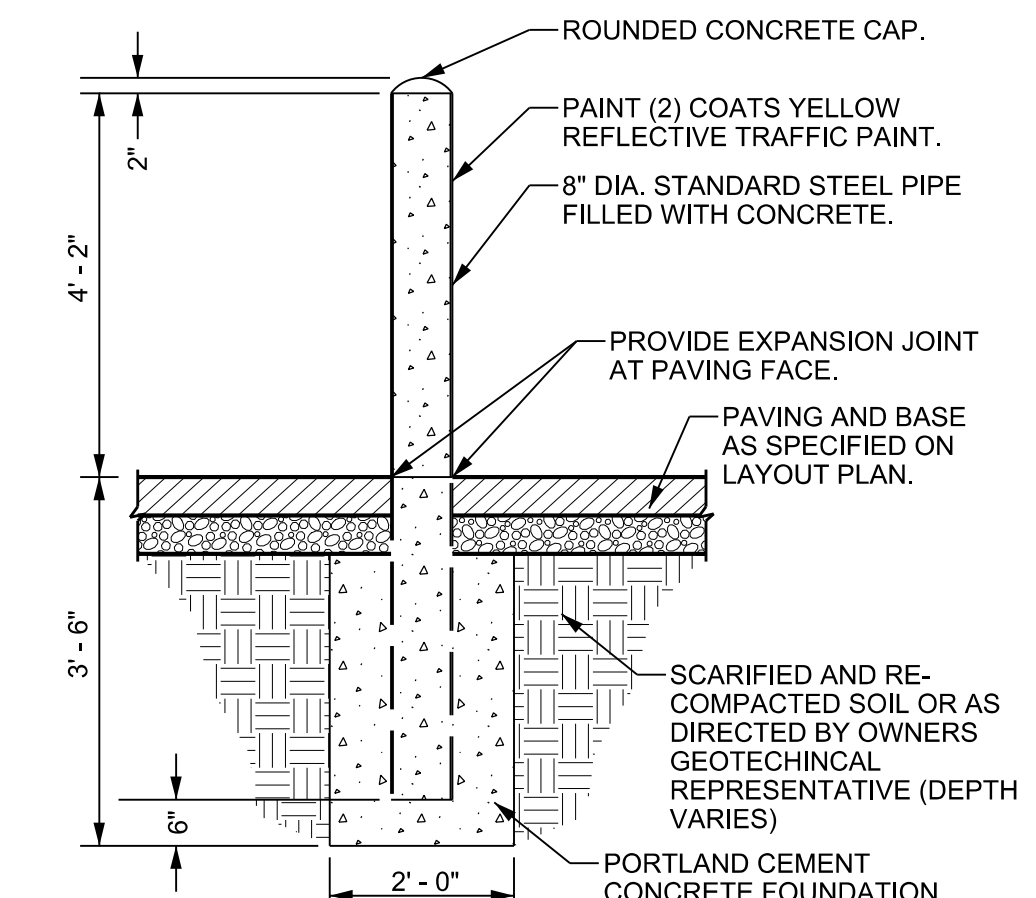


THICKENED ISOLATION JOINT AT STRUCTURE
N.T.S.

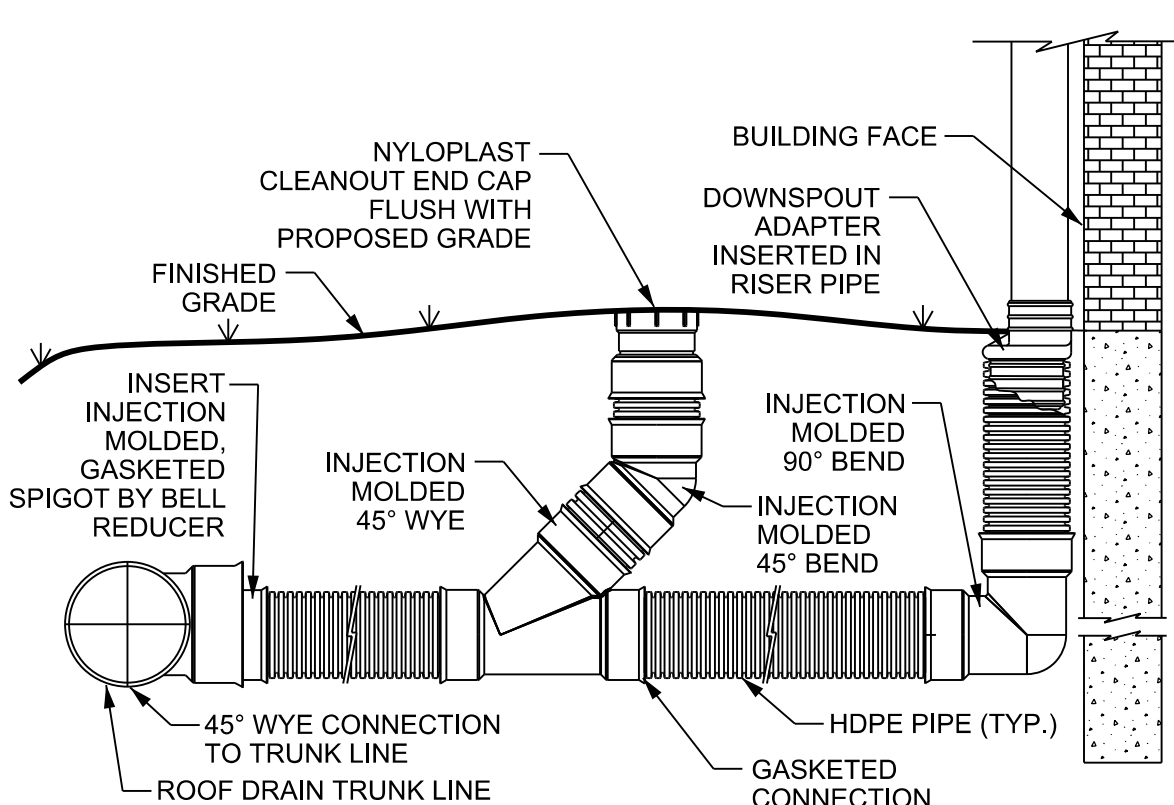


NOTE:
1. ALL CROSSWALK MARKINGS SHALL BE THERMOPLASTIC AND SOLID WHITE IN COLOR.

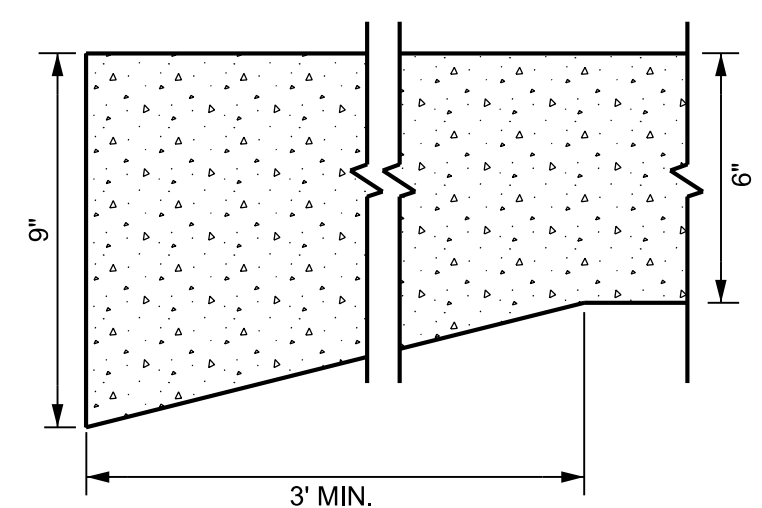
LADDER-TYPE CROSSWALK DETAIL
N.T.S.



BOLLARD DETAIL
N.T.S.



ROOF DRAIN LATERAL DETAIL
N.T.S.



NOTES:
1. PROVIDE THICKENED EDGE AT ALL LOCATIONS WHERE NEW PAVEMENT ABUTS EXISTING ASPHALT PAVEMENT AT SAWCUT LINES.
2. PROVIDE THICKENED EDGE AT THE END OF DAYS POURS AND BEGINNING OF NEW POURS.

RIGID PAVEMENT THICKENED EDGE
N.T.S.

3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com

CCI
PLANNING
& ENGINEERING

NICHOLAS J. OSTROY
REGISTERED ENGINEER
No. 13561
STATE OF TENNESSEE
ENGINEER'S SEAL
EXPIRATION DATE: 12/31/2024
Tennessee Record
No. 13561

FILE: CONSTRUCTION DETAILS AND SECTIONS I
A NEW EXPRESS OIL CHANGE
FOR SEVIERVILLE, TN
EXPRESS OIL CHANGE & TIRE ENGINEERS

PROJECT NO. EXP0005
DATE: 08/14/2024
BY: BSS
CHECKED BY: NJO
SCALE: N.T.S.

| NO. | DESCRIPTION | REVISIONS |
|-----|------------------|-----------|
| 0 | ISSUE FOR PERMIT | |

DRAWING NO. **C5.0**

| Species | Rate (lb/acre) |
|---|------------------|
| Oats | 30 |
| Winter wheat | 30 |
| Seeding dates | |
| East | Aug 15 - Dec 15 |
| Middle | Aug. 15 - Dec 30 |
| West | Aug. 15 - Dec 30 |
| 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. If necessary to extend temporary cover beyond June 15, overseed with 50 lb/ac crimson clover in late February or early March. | |

Figure 7.8-3 Temporary Seeding Recommendations for Fall

| Species | Rate (lb/acre) |
|--|-------------------|
| Oats | 60 |
| Brown top millet | 30 |
| Seeding dates | |
| East | May 15 - Aug. 15 |
| Middle | May 1 - Aug. 15 |
| West | 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. | |

Figure 7.8-2 Temporary Seeding Recommendation for Summer

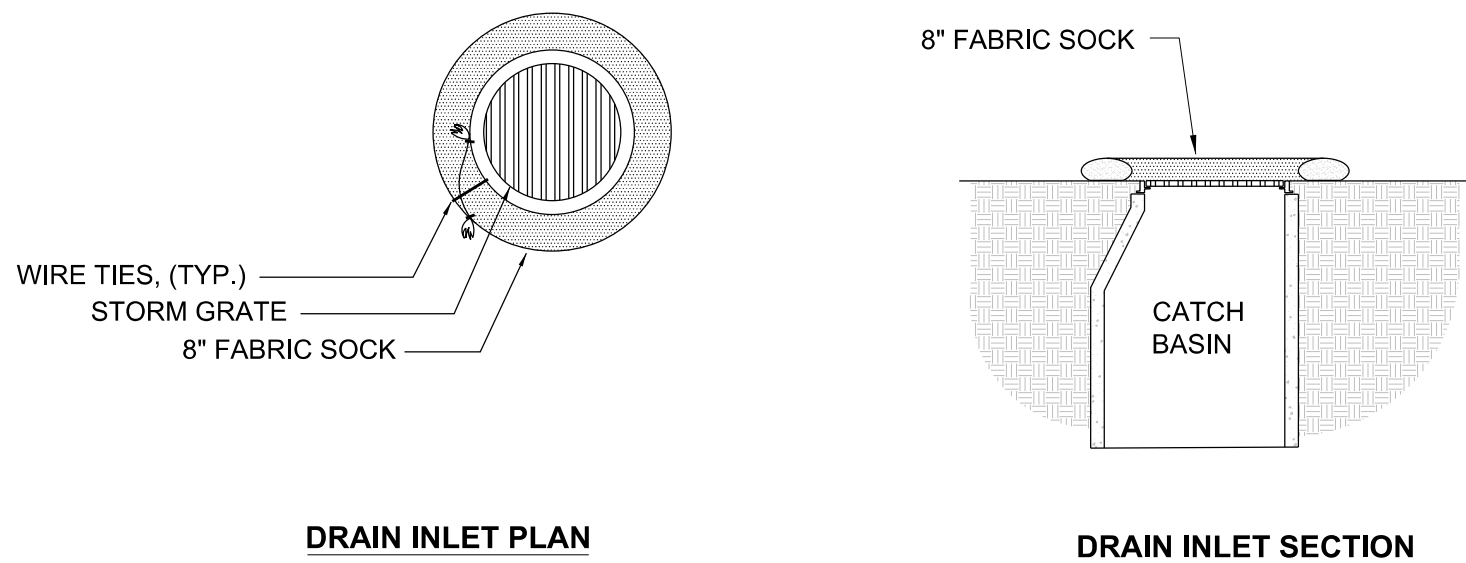
| Species | Rate (lb/acre) |
|--|-----------------------------------|
| Rye | 120 |
| Seeding dates | |
| East | Above 2500 feet: Feb. 15 - May 15 |
| | Below 2500 feet: Feb. 1 - May 1 |
| Middle | Jan. 1 - May 1 |
| West | Dec. 1 - Apr. 15 |
| Soil amendments | |
| Follow recommendations of soil tests 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. | |

Figure 7.8-1 Temporary Seeding Recommendation for Late Winter and Early Spring

NOTES:

1. PLANTINGS SHOULD BE MADE DURING THE SPECIFIED PLANTING PERIOD IF POSSIBLE.
2. GRADE AND LOOSEN HARD, CRUSTED, OR COMPACTED SOIL TO A DEPTH OF 6" TO 8" WITH APPROPRIATE TILLAGE EQUIPMENT.
3. AVOID PREPARING THE SEEDBED UNDER EXCESSIVELY WET CONDITIONS.
4. INCORPORATE LIME AND FERTILIZER DURING SEEDBED PREPARATION. FOLLOW THE DESIGN PLAN OR SOIL TEST RECOMMENDATION. IF NEITHER OR AVAILBLE USE: GROUND AGRICULTURAL LIME - 2 TONS/ACRE ON CLAYEY SOILS (APPROX. 90 LBS/1,000 FT²)
1 TON/ACRE SANDY SOILS (APPROX. 45 LBS/FT²)
COMPLETE FERTILIZER: 18-24-24 OR EQUIVALENT - APLY 400 LBS/ACRE (APPROX. 9 LBS/1,000 FT²)
NITROGEN FERTILIZER: - WHEN VEGETATION HAS EMERGED TO A STAND AND IS GROWING, 30-40 LBS/ACRE (APPROX. 0.8 LBS/1,000 FT²)
5. INCORPORATE LIME AND FERTILIZER TO A DEPTH OF AT LEAST 6" WITH A DISK OR ROTARY TILLER ON SLOPES OF UP TO 3:1.
6. FERTILIZER SHOULD NOT BE ADDED TO THE SEED MIXTURE DURING HYDROSEEDING.
7. WHEN USING A DRILL SEEDER, PLANT SEED 1/4" - 1/2" DEEP.
8. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1" DEEP AND GRASSES AND LEGUME SEED NO MORE THAN 1 1/2" DEEP.
9. UNIFORMLY SPREAD ORGANIC MULCHES TO PROVIDE AT LEAST 75% GROUND COVER.
10. USE EROSION CONTROL BLANKETS RATHER THAN MULCH ON SLOPES GREATER THAN 5:1 AND VERTICAL HEIGHTS OF 2 FEET OR GREATER.
11. TEMPORARY STABILIZATION REQUIRED WHEN PROJECT IS INACTIVE FOR 7 OR MORE DAYS.

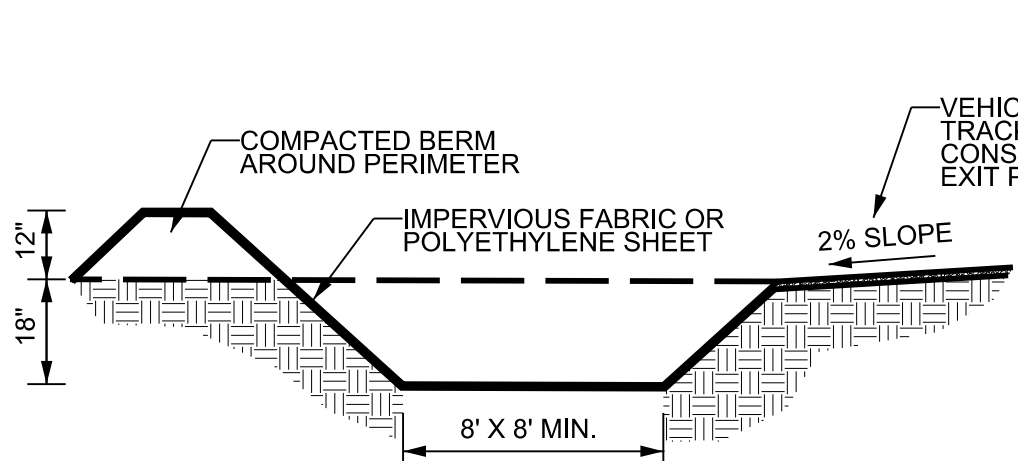
TS TEMPORARY SEEDING
N.T.S.



- NOTES:
1. FILL FABRIC SOCK WITH COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
 2. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
 3. #4 REBAR STAKES TO BE DRIVEN 12" MINIMUM INTO GRAVEL BASE

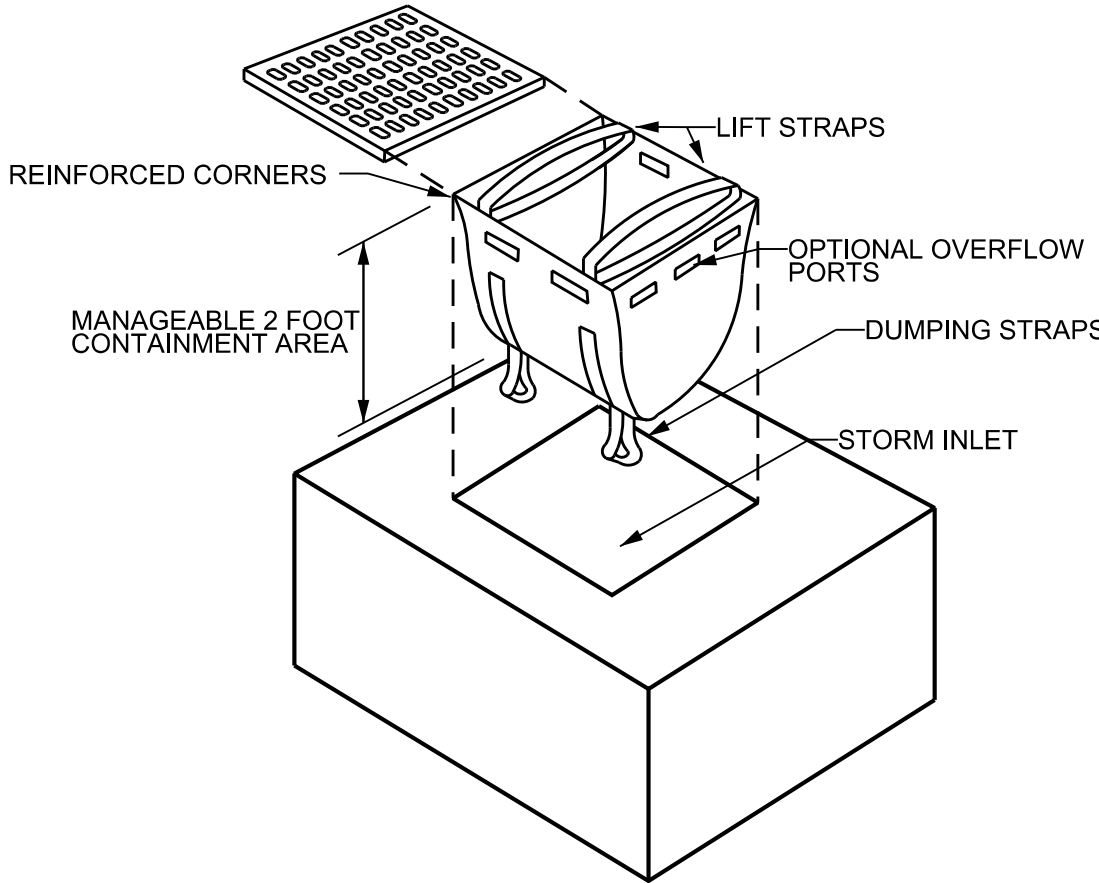
WOOD CHIP & COMPOST INLET PROTECTION

NTS



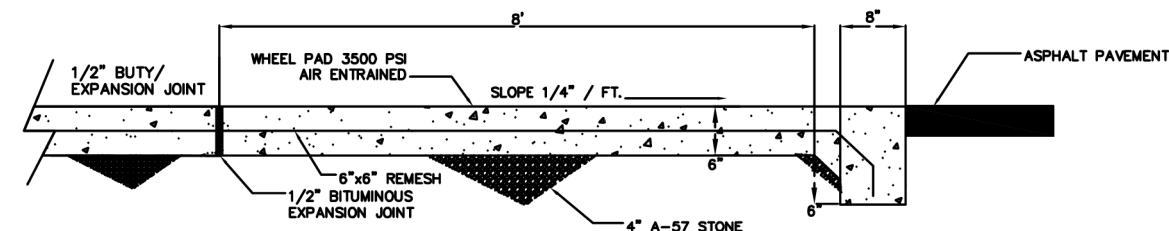
- NOTES:
1. INSTALL CONCRETE WASHOUT PIT WHERE SHOWN ON EROSION CONTROL PLAN.
 2. LINE PIT WITH IMPERVIOUS FABRIC OR POLYETHYLENE SHEET. ANCHOR FABRIC INTO GROUND OUTSIDE OF PIT.
 3. PIT MUST BE EXCAVATED ONCE SEDIMENT DEPTH REACHES 12".
 4. ALLOW WATER TO EVAPORATE COMPLETELY PRIOR TO EXCAVATING PIT.
 5. WASHOUT PIT MAY NOT BE LOCATED WITHIN 50' TO DRAIN INLETS OR SURFACE WATER.

CONCRETE WASHOUT PIT
N.T.S.

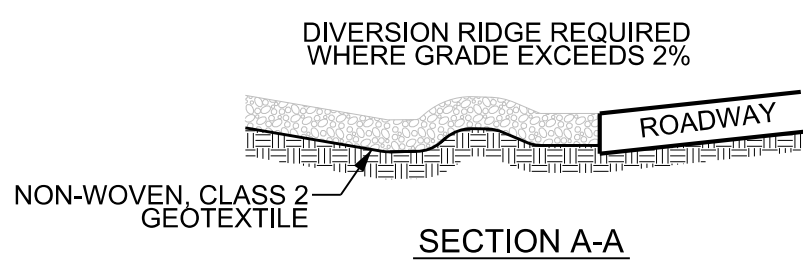
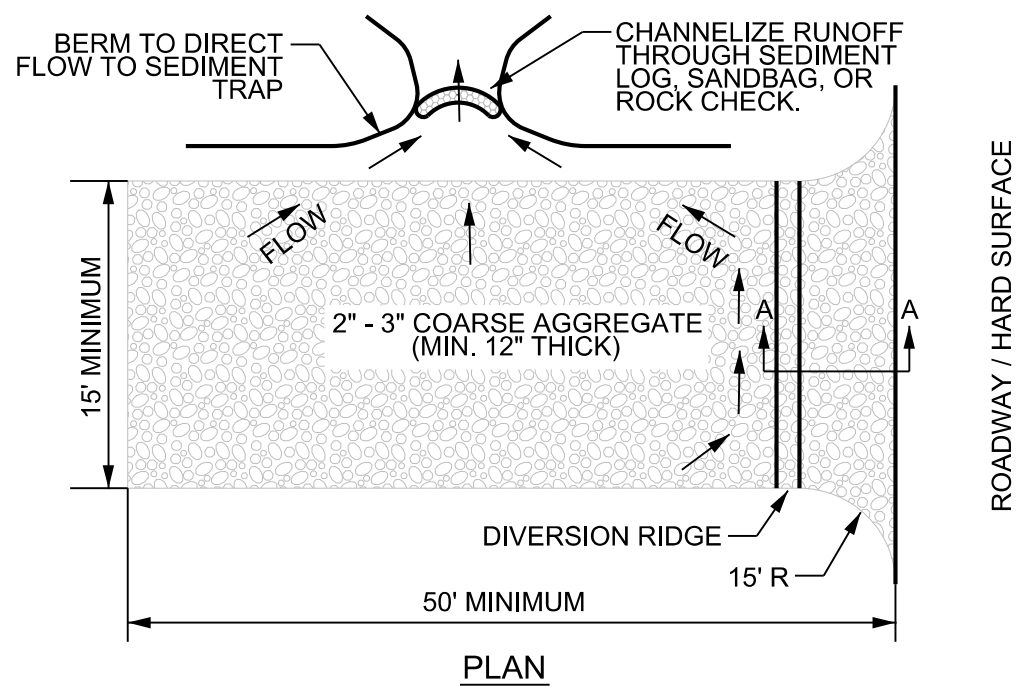
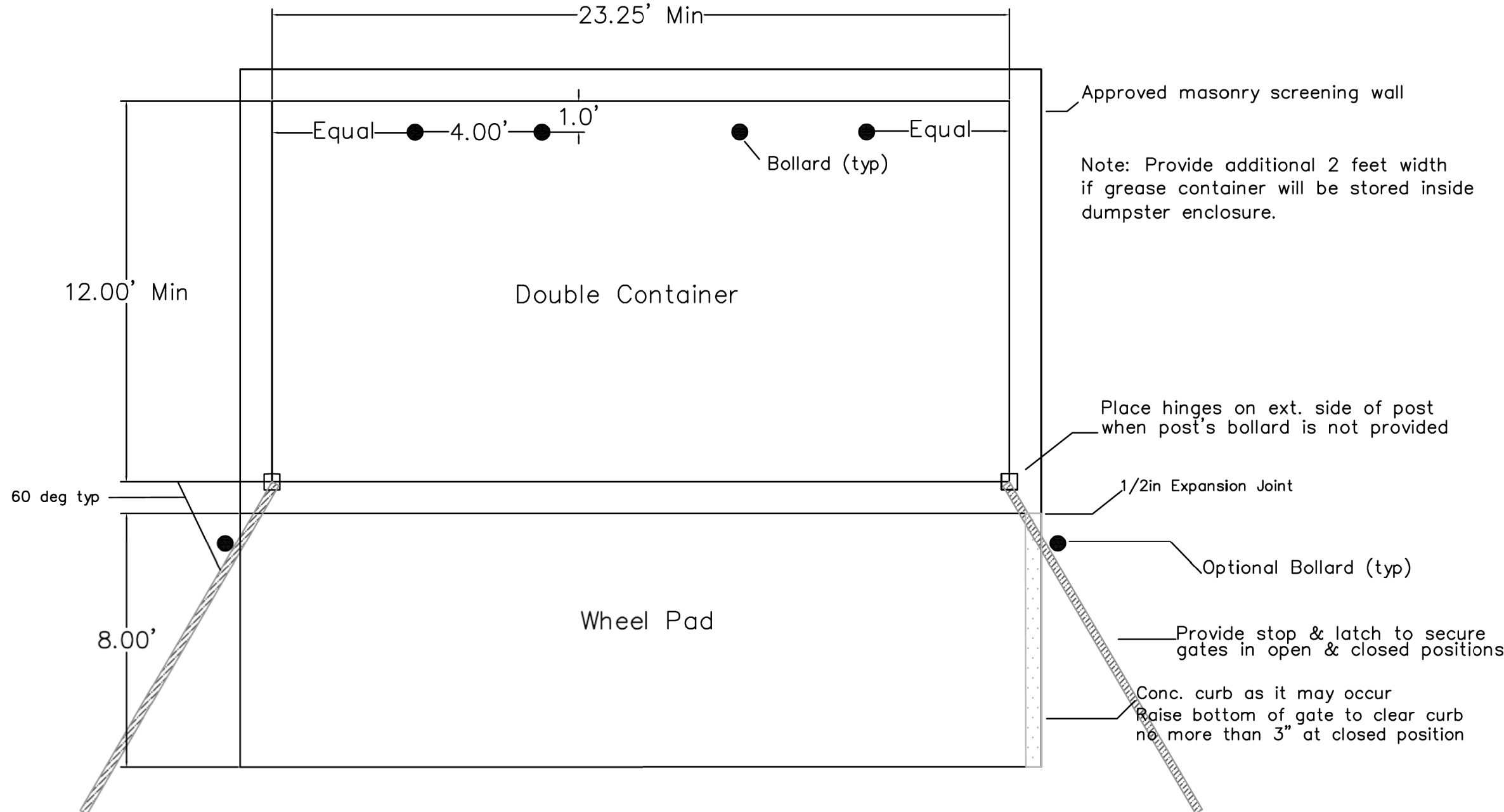


IP DANDY SACK DETAIL
N.T.S.

Dumpster Pad Details



N.T.S.



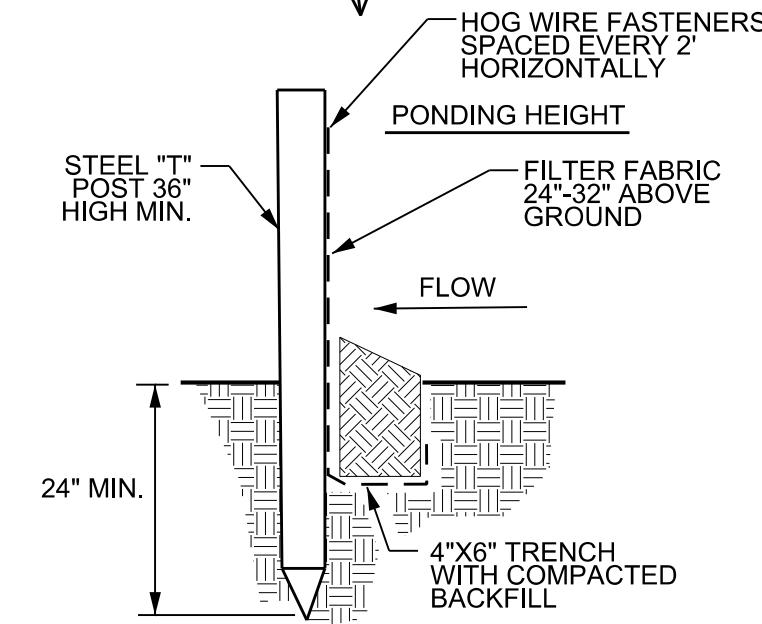
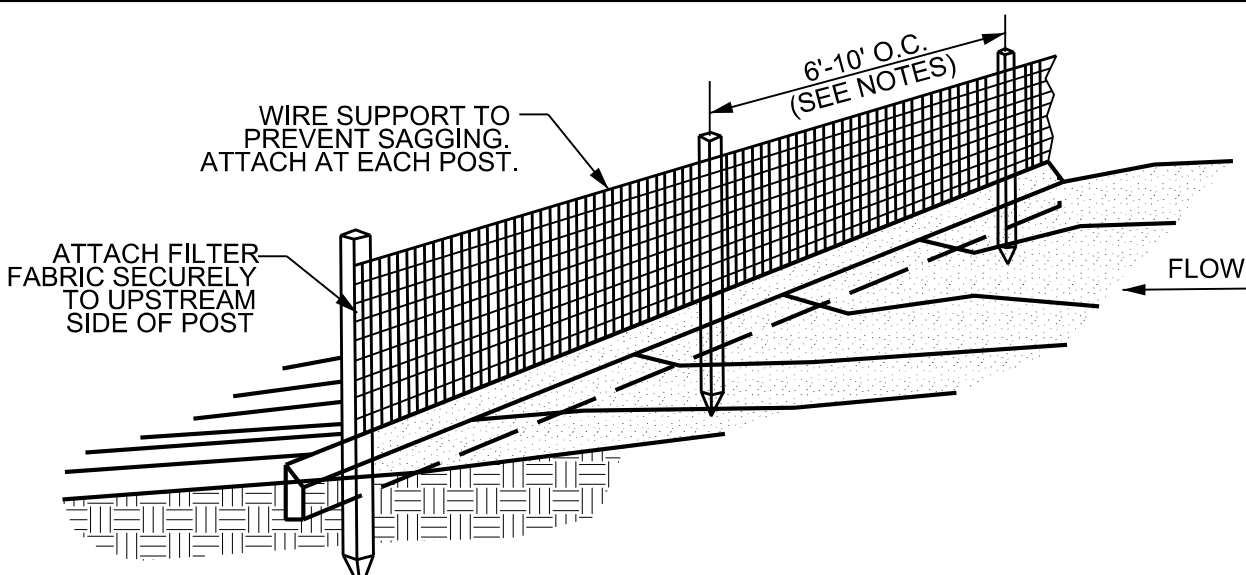
NOTES:

1. EXIT PAD SHOULD BE BUILT WITH COARSE GRAVEL AND STONE THAT ARE SUFFICIENT TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY AND PREVENT PAD FROM SINKING INTO SOIL.
2. SITES WITH HEAVY CLAY SOILS MAY REQUIRE THE INSTALLATION OF A WASH RACK.
3. PADS MAY NEED TO BE EXTENDED PAST THE MINIMUM REQUIREMENT TO BE EFFECTIVE.
4. ALL RUNOFF FROM CONSTRUCTION ROADS SHOULD BE DIVERTED TO SEDIMENTATION TRAPS TO RETAIN SEDIMENT ON SITE.

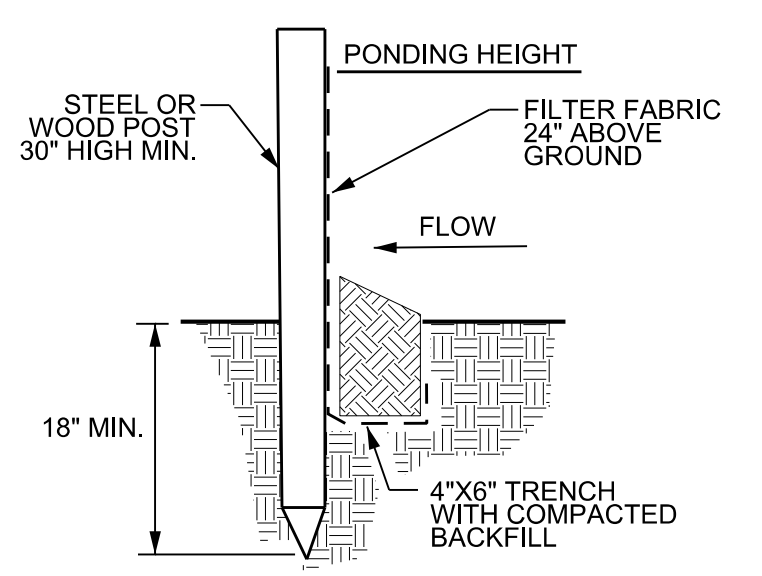
INSPECTION AND MAINTENANCE:

1. INSPECT CONSTRUCTION EXIT PADS EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT THAT EXCEEDS 1/2" OF PRECIPITATION OR AFTER HEAVY USE.
2. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. REPLACE STONE AS NECESSARY.
3. MAKE DAILY INSPECTIONS DURING WET WEATHER CONDITIONS. RE-GRADE STONE TO INSURE RUNOFF IS DIRECTED TOWARDS SEDIMENT TRAP.
4. WASH OR REPLACE STONE AS NEEDED AND/OR AS DIRECTED BY THE QUALIFIED INSPECTOR. THE STONE SHALL BE WASHED OR REPLACED WHENEVER THE PAD FAILS TO PREVENT MUD FROM BEING TRACKED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF THE STONE.
5. IMMEDIATELY REMOVE SEDIMENT OR STONES TRACKED OR WASHED ONTO PUBLIC ROADS. THE ADJACENT PUBLIC ROAD SHALL AT LEAST BE CLEAR FROM SEDIMENT AND STONE AT THE END OF EVERY WORK DAY.

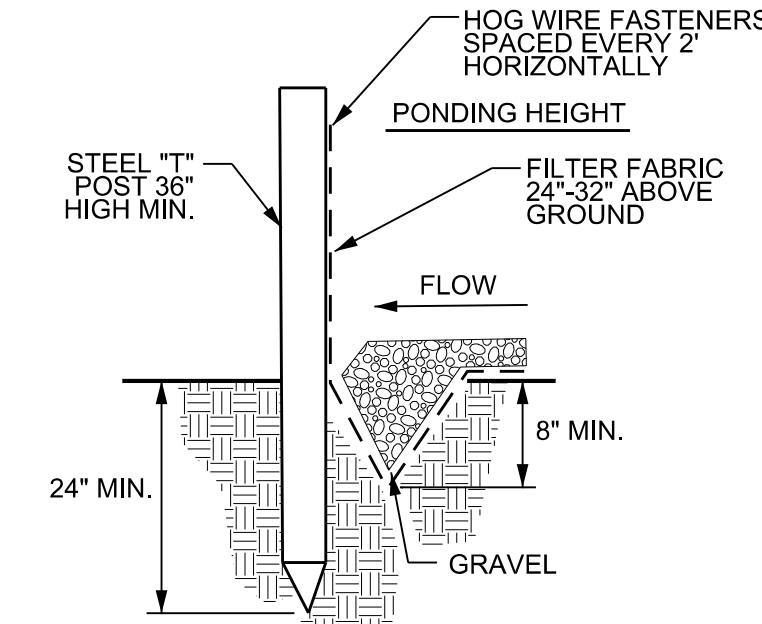
CEP CONSTRUCTION EXIT PAD
N.T.S.



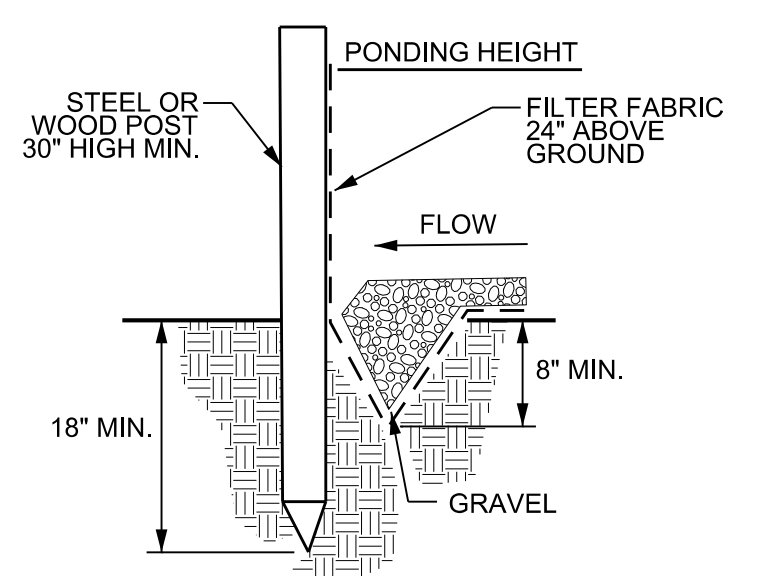
COMPACTED SOIL TRENCHING
(TYPE A FENCING) DETAIL



COMPACTED SOIL TRENCHING
(TYPE B FENCING) DETAIL



GRAVEL TRENCHING
(TYPE A FENCING) DETAIL



GRAVEL TRENCHING
(TYPE B FENCING) DETAIL

| SILT FENCE GEOTEXTILE FABRIC REQUIREMENTS PER AASHTO M288 | | | |
|---|-------------|------------|------------|
| REQUIREMENT | TEST METHOD | TYPE A | TYPE B |
| GRAB STRENGTH | | | |
| MACHINE DIRECTION | ASTM D4632 | 400 N | 550 N |
| X-MACHINE DIRECTION | ASTM D4632M | 400 N | 450 N |
| PERMITIVITY | ASTM D4491 | 0.05 SEC-1 | 0.05 SEC-1 |
| APPARENT OPENING SIZE | ASTM D4751 | 0.60 MM | 0.60 MM |
| ULTRAVIOLET STABILITY | ASTM D4355 | 70% | 70% |

NOTES:

1. SILT FENCE SHALL BE PLACED ALONG SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. REMOVED SEDIMENT SHALL BE PLACED IN AREAS THAT IT CAN BE PROPERLY STABILIZED.
 3. TYPE A FENCE SHALL BE 14 GAUGE 6" X 8" LOOP GEOTEXTILE FABRIC OVER POSTS AND WIRE.
 4. TIE BACKS SHOULD BE USED AT POINTS OF POSSIBLE CONCENTRATION.
 5. TYPE A SILT FENCE SHALL UTILIZE 10' MAX O.C. POST SPACING. TYPE B SILT FENCE SHALL UTILIZE 6' MAX O.C. POST SPACING.
- INSPECTION AND MAINTENANCE:
1. INSPECT FENCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT THAT EXCEEDS 1/2" OF PRECIPITATION.
 2. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOME INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY.
 3. REMOVE TRAPPED SEDIMENT ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE.
 4. REMOVE ALL SILT FENCES WITHIN 30 DAYS AFTER THE FINAL STABILIZATION OF THE SITE.

| SLOPE LIMITATIONS FOR SILT FENCE | |
|----------------------------------|-------------------------------|
| LAND SLOPE | MAX. SLOPE LENGTH ABOVE FENCE |
| < 2% | 100 |
| 2% - 5% | 75 |
| 5% - 10% | 50 |
| 10% - 20%* | 25 |
| >20%* | 15 |

*IN AREAS WHERE THE SLOPE IS GREATER THAN 10% A FLAT AREA LENGTH OF 10 FEET BETWEEN THE TOE OF THE SLOPE TO THE FENCE SHOULD BE PROVIDED.

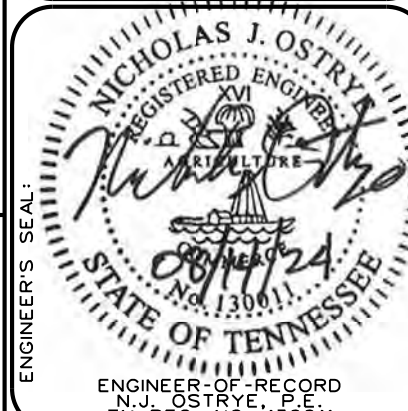
CONSTRUCTION DETAILS AND SECTIONS II

A NEW EXPRESS OIL CHANGE

FOR SEVIERVILLE, TN

EXPRESS OIL CHANGE & TIRE ENGINEERS

3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com



N.T.S.

SCALE:

NJO

BY:

BSS

DRWN:

PROJECT:

NO:

DATE:

REV. DATE:

NJO

BY:

BSS

REVISIONS

NO.

DESCRIPTION

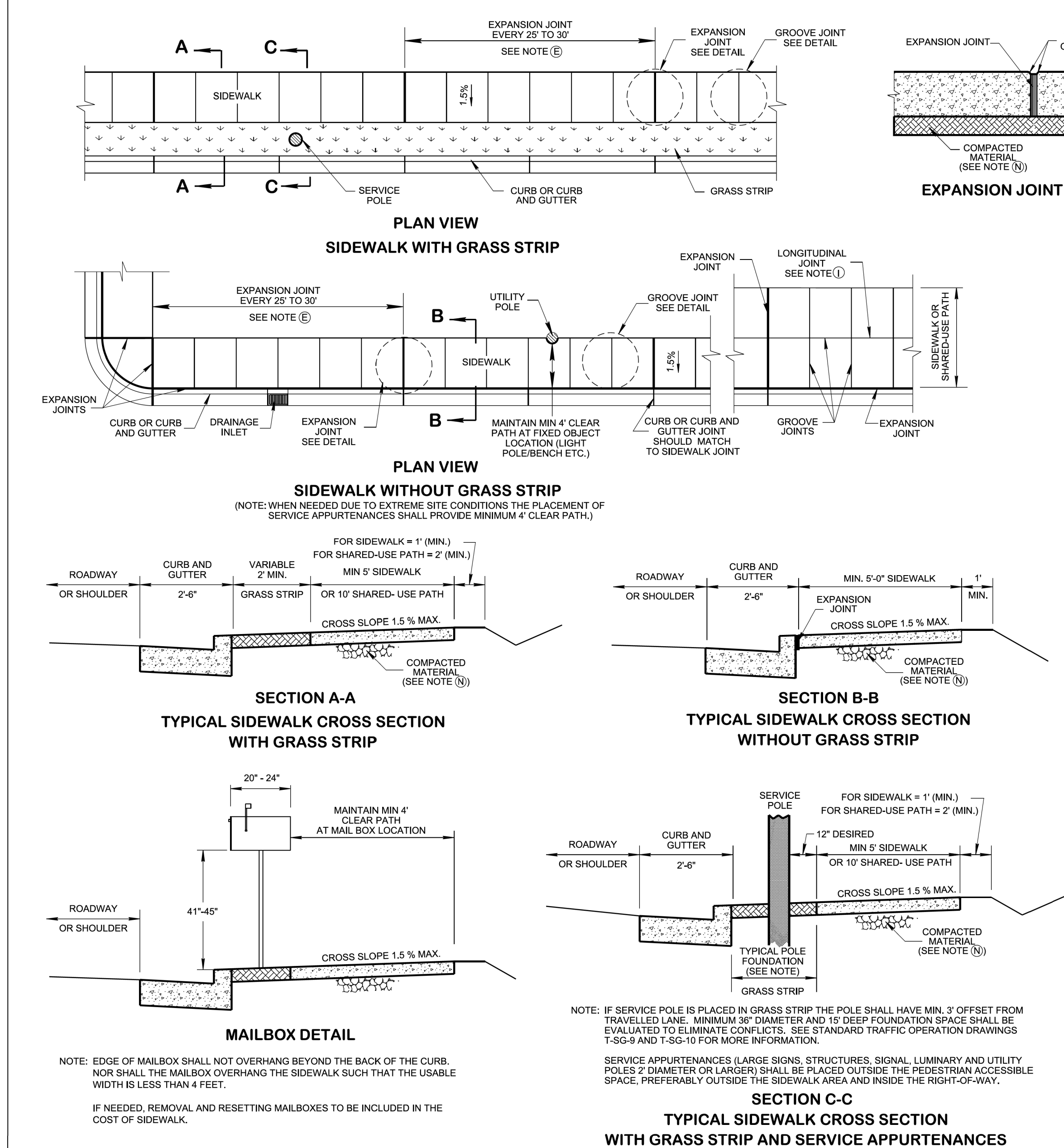
0

ISSUE FOR PERMIT

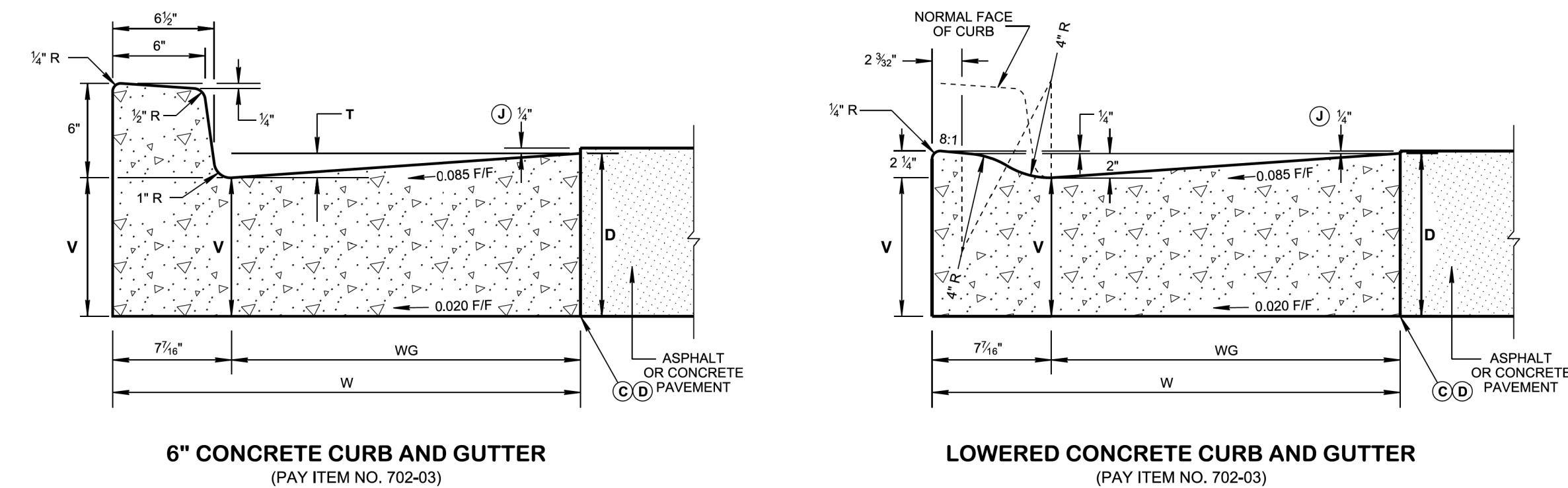
DRAWING NO.

C5.1

PRINTED: 11/11/2024 4:20:21 PM P:\24-1\24-1\PROJECTS\24-1\24-1\CONSTRUCTION DETAILS AND SECTIONS.dgn



NOT TO SCALE



| CONCRETE CURB AND GUTTER TABLE | | | | |
|--------------------------------|---------------------------|--------------------------------|--|---|
| TYPE | TOTAL WIDTH (W) IN INCHES | WIDTH OF GUTTER (WG) IN INCHES | VERTICAL DROP (T) OF GUTTER AT FLOW LINE | VERTICAL DEPTH (V) OF GUTTER AT FLOW LINE |
| 6-30 | 30 | 22 1/4" | 2 | D - 1 1/2" |
| 6-36 | 36 | 28 1/4" | 2 1/2 | D - 1 7/8" |

✱ VERTICAL DEPTH (V) MUST ALWAYS EXCEED SIX (6) INCHES.

| QUANTITIES FOR CURB AND GUTTER | | | |
|--------------------------------|---------------------------|-------------------------------------|--|
| DEPTH (D) OF GUTTER IN INCHES | TOTAL WIDTH (W) IN INCHES | 6" CONCRETE CURB AND GUTTER (CY/LF) | LOWERED CONCRETE CURB AND GUTTER (CY/LF) |
| 8 | 30 | 0.06409 | 0.05711 |
| | 36 | 0.07780 | 0.07085 |
| 9 | 30 | 0.07181 | 0.06483 |
| | 36 | 0.08706 | 0.08011 |
| 10 | 30 | 0.07953 | 0.07254 |
| | 36 | 0.09632 | 0.08934 |
| 11 | 30 | 0.08724 | 0.08026 |
| | 36 | 0.10558 | 0.09860 |
| 12 | 30 | 0.09496 | 0.08799 |
| | 36 | 0.11484 | 0.10786 |

6" DETACHED CONCRETE CURB
(PAY ITEM NO. 702-01)

| QUANTITIES FOR DETACHED CURB | |
|------------------------------|----------------------------|
| HEIGHT OF CURB | CUBIC YARD PER LINEAR FOOT |
| 6" | 0.02950 |
| LOWERED CURB | 0.02534 |

EXPANSION JOINT DETAIL

HAND TOOL GROOVE JOINT DETAIL

REFERENCED STANDARD DRAWINGS

SEE T-M-4, FOR CROSS WALK MARKING
SEE MM-CR SERIES FOR CURB RAMP DETAILS
SEE MM-BPR-1, FOR PEDESTRIAN RAIL REQUIREMENTS & S-PL-6, FOR GUARDRAIL PLACEMENT
SEE MM-SW-2, FOR ALTERNATE DETAILS FOR CONCRETE SIDEWALK (REHABILITATION)
SEE RP-SC-1, FOR 6" SLOPING CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
SEE RP-VC-10 OR 11, FOR VERTICAL CONCRETE CURB AND CONCRETE CURBS AND GUTTER DETAILS
SEE MM-PM-1 THRU MM-PM-5, FOR BIKE LANE/ROUTE PAVEMENT MARKINGS
SEE RP-D-15 & 16 FOR CONCRETE DRIVEWAYS
SEE MM-TS-2 FOR PEDESTRIAN FACILITY LATERAL OFFSETS/ BUFFER GUIDANCE.
SEE MM-TS-3 FOR SHARED USE TYPICAL SECTIONS

GENERAL NOTES

(A) ALWAYS PLACE SIDEWALK AS FAR AS AWAY FROM THE TRAVELLED WAY WHEN POSSIBLE. FOR SPECIFICATIONS SEE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.

(B) WHERE IT BECOMES NECESSARY TO REMOVE PARTS OF EXISTING CONCRETE SIDEWALKS OR RAMPS, THE RESULTING EDGES SHALL BE CUT TO A NEAT LINE, AND ANY OFFSETS IN SUCH LINES SHALL BE MADE AT RIGHT ANGLES.

(C) SIDEWALK WIDTHS DO NOT INCLUDE THE SIX INCH CURB WIDTH OF PROPOSED TOP OF CURB.

(D) MAXIMUM SIDEWALK CROSS SLOPE IS 1.5 %. ALL SIDEWALKS SHALL HAVE A BROOM FINISH AND SHALL BE 4" THICK UNLESS THE PLANS CALL FOR 6" THICKNESS. THE CONCRETE SHALL BE CLASS "A" AT 3000 PSI. ALL COST TO BE INCLUDED IN ITEM NO. 701-01.01, CONCRETE SIDEWALK (4"), S.F. OR 701-01.02, CONCRETE SIDEWALK (6"), S.F.

(E) EXPANSION JOINTS ARE TO BE PLACED 25 TO 30 FEET APART DEPENDING ON TRANSVERSE JOINT MARKINGS AND NEED TO MATCH CURB EXPANSION JOINT WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB, OR AS DIRECTED BY THE ENGINEER WHERE THE PROPOSED SIDEWALK IS IN CONTACT WITH THE STREET RETURNS, ON BUILDING LINES PRODUCED AT STREET INTERSECTIONS WHERE WALKS LEAD TO HOUSE OR OTHER ENTRANCES AND AN OTHER LOCATIONS WHERE STRESSES MAY DEVELOP. THE COST OF ALL EXPANSION JOINTS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PROPOSED SIDEWALK.

(F) CONCRETE JOINT MATERIAL TO BE FLUSH WITH THE SIDEWALK SURFACE, ONE INCH PREFORMED FILLER IN ACCORDANCE WITH SECTION 701.06 OF THE STANDARD SPECIFICATIONS.

(G) ONE INCH EXPANSION JOINTS ARE TO BE PLACED WHERE THE PROPOSED SIDEWALK IS IN CONTACT WITH CIRCULAR CURBS, BUILDINGS AND/OR RETAINING WALLS.

(H) HALF INCH EXPANSION JOINTS ARE TO BE USED AT ALL OTHER LOCATIONS.

(I) LONGITUDINAL JOINT MARKINGS WILL NOT BE REQUIRED ON SIDEWALKS THAT ARE 5 FEET OR LESS IN WIDTH. ONE LONGITUDINAL JOINT MARKING WILL BE REQUIRED ON SIDEWALKS OVER 5 FEET BUT LESS THAN 9 FEET IN WIDTH. TWO LONGITUDINAL JOINT MARKINGS WILL BE REQUIRED ON SIDEWALKS OVER 9 FEET BUT LESS THAN 12 FEET IN WIDTH.

(J) TRANSVERSE JOINT MARKERS ARE TO BE MADE TO FORM BLOCKS AS NEARLY TO SQUARE AS PRACTICAL.

(K) WHEN LEAVING A SQUARE OPENING IN THE SIDEWALK, THE LENGTH OF THE SIDE OF THE SQUARE OPENING SHOULD BE EQUAL TO THE DIAMETER OF THE FIXED OBJECT PLUS SIXTEEN INCHES. IT WILL BE BORDERED BY HALF INCH EXPANSION JOINT.

(L) WHEN NEW SIDEWALK IS PLACED ADJACENT TO EXISTING SIDEWALK THE CONTRACTOR SHALL CORRECT ALL ABRUPT CHANGES AND SLOPES TO PROVIDE A SMOOTH TRANSITION FROM THE LIMIT OF CONSTRUCTION TO EXISTING PEDESTRIAN FACILITY.

(M) DIVIDE THE SURFACE OF SIDEWALKS INTO BLOCKS USING A GROOVING TOOL. SPACE THE GROOVES APPROXIMATELY 5 FEET APART TO PRODUCE SQUARE BLOCKS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

(N) SHAPE AND COMPACT THE SUBGRADE TO A FIRM, EVEN SURFACE IN REASONABLY CLOSE CONFORMITY WITH THE GRADE AND CROSS-SECTION SHOWN ON THE PLANS. REMOVE ALL SOFT AND YIELDING MATERIAL, REPLACE IT WITH ACCEPTABLE MATERIAL, AND COMPACT IT AS DIRECTED BY THE ENGINEER.

(Replaced Std Dwg RP-S-7)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION
DETAILS FOR CONCRETE SIDEWALK
01-07-2019 MM-SW-1

REV. 06-28-19: REVISED GENERAL NOTES (B), (C), (G) & (I) ALONG WITH DETAIL NOTES FOR "TYPICAL SIDEWALK CROSS SECTION WITH GRASS STRIP AND SERVICE APPURTENANCES" AND "SIDEWALK CONSTRUCTION DETAILS WITHOUT GRASS STRIP", ADDED NOTE TO MAILBOX DETAIL.

REV. 03-01-2023: SIDEWALK PLAN VIEWS AND GROOVE JOINT DETAIL WERE ADDED, REMOVED GENERAL NOTE (C) AND ADDED GENERAL NOTES (J) AND (K) SIDEWALK CONSTRUCTION DETAIL WAS REMOVED, SECTION C-C NOTE WAS REVISED.

REV. 07-07-2023: REVISED MAILBOX DETAIL AND NOTE.

GENERAL NOTES

(A) FOR SPECIFICATIONS SEE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, SECTION 702 - CEMENT CONCRETE CURB, GUTTER AND COMBINED CURB AND GUTTER.

(B) THE FRONT FACE OF THE CONCRETE CURBS FOR ALL DEGREES OF CURVATURE SHALL CONFORM TO THE CONTOUR OF THE CURVE AND NO CHORD SECTIONS WILL BE PERMITTED.

(C) CONCRETE EXPANSION JOINT MATERIAL IS TO BE 1/2" IN THICKNESS AT ALL LOCATIONS. ALL MATERIAL IS TO BE PRE-MOLDED FIBER IN ACCORDANCE WITH SECTION 905 - JOINT MATERIALS OF THE STANDARD SPECIFICATIONS.

(D) EXPANSION JOINTS ARE TO BE PLACED AS FOLLOWS:
1. AT TANGENT POINTS OF CIRCULAR CURBS.
2. BETWEEN CURBS AND ABUTTING RIGID OBJECTS.
3. AT OTHER PLACES WHERE STRESSES MAY DEVELOP.
4. TO LINE UP WITH PAVEMENT JOINTS WHERE THE ADJACENT PAVEMENT IS CONCRETE.
5. THE MAXIMUM SPACING IS TO BE 100 FEET.
6. BETWEEN CONCRETE CURBS OR CURB AND GUTTERS AND CONCRETE PAVEMENT. IT IS NOT REQUIRED WHEN CURBS OR CURB AND GUTTERS ARE ADJACENT TO ASPHALT.

(E) CONTRACTION JOINTS ARE TO BE SPACED AT 10 FEET. THE SPACING OF 10 FEET MAY BE REDUCED FOR CLOSURES, BUT NOT LESS THAN 6 FEET.

(F) EDGES OF JOINTS SHALL BE FINISHED ON 1/4" RADII.

(G) ALL COST OF JOINTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS.

(H) THE UNIT PRICE BID FOR CONCRETE CURB, CONCRETE CURB AND GUTTER AND CONCRETE PAVEMENT WILL INCLUDE ANY CIRCULAR SECTION REQUIRED TO BE BUILT CONFORMING TO SECTIONS SHOWN ON THIS SHEET.

(I) PAYMENT WILL BE AS FOLLOWS:
ITEM NO. 702-01, CONCRETE CURB, PER C.Y.
ITEM NO. 702-03, CONCRETE COMBINED CURB AND GUTTER, PER C.Y.

(J) THE 1/4" HEIGHT IS FOR WHEN ASPHALT PAVEMENT IS ADJACENT TO CONCRETE CURB AND GUTTER ONLY. CONCRETE PAVEMENT WILL BE FLUSH WITH THE TOP OF THE GUTTER.

LOWERED CONCRETE CURB NOTES

(K) TO BE BUILT AS COMBINED CURB AND GUTTER, DETACHED CURB OR INTEGRAL CURB AS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

(L) FOR DETACHED CURB, OMIT RADIUS AT FLOW LINE.

(M) TO BE USED FOR PROPOSED RAMP OPENINGS.

(Replaced Std Dwg RP-NMC-10)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION
VERTICAL CONCRETE CURB AND GUTTER (FOR 8" TO 12" GUTTER DEPTH)
05-15-2018 RP-VC-10

3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccoe.com

CCI
PLANNING & ENGINEERING

NICHOLAS J. OSTRY
REGISTERED ENGINEER
STATE OF TENNESSEE
ENGINEER NO. 13501
TN REG. NO. 13501

CONSTRUCTION DETAILS AND SECTIONS III

A NEW EXPRESS OIL CHANGE
SEVIERVILLE, TN

EXPRESS OIL CHANGE & TIRE ENGINEERS

FILE

DRAWING NO.

C5.2

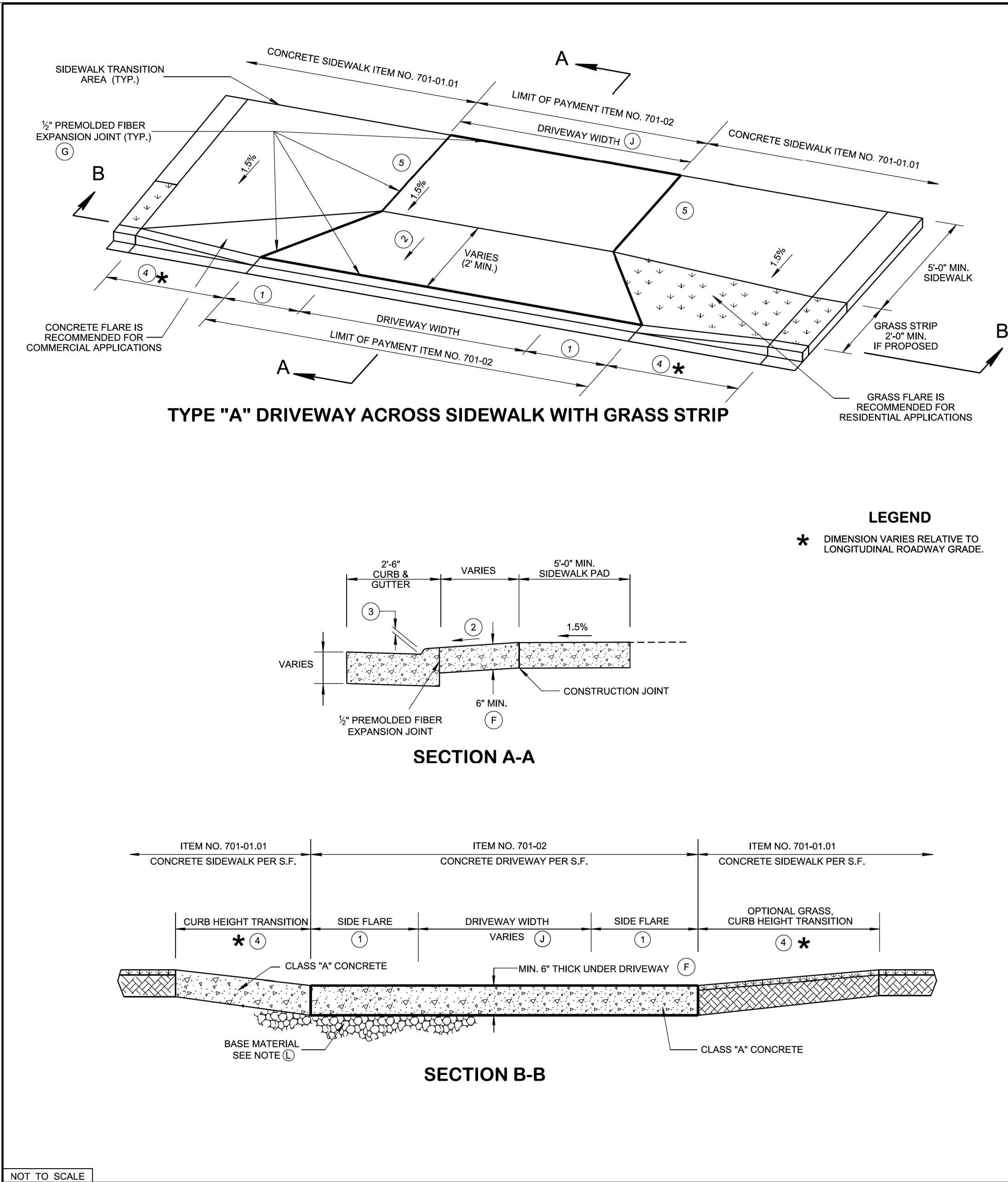
REVISIONS

DATE 08/14/2024 **BY** BSS **CHECKED** NJO **SCALE** N.T.S.

PROJECT EXP0005 **DRAWN** BSS **ISSUE FOR PERMIT** 0 **NO.**

DESCRIPTION

7/16/2021 7:49:55 AM
P:\StdDraw\DESIGN STANDARDS\Standards Library\Standard Roadway Drawings - CURRENT\In Progress\10-104.00 Roadway, Pavement Appurtenances and Fence IP104.02 Intersections IP1RPD15-2



FOOTNOTES

- 1 SIDE FLARE WIDTH SHOULD BE A MINIMUM 7'-0" FOR COMMERCIAL DRIVEWAYS. SIDE FLARE WIDTH SHOULD BE A MINIMUM 5'-0" FOR RESIDENTIAL DRIVEWAYS.
- 2 DRIVEWAY RAMP GRADE VARIES. 15% MAX. (10% RECOMMENDED) APRON GRADE FOR RESIDENTIAL DRIVEWAYS. 8% MAX. (5% RECOMMENDED) APRON GRADE FOR COMMERCIAL DRIVEWAYS.
- 3 HEIGHT OF LOWERED CURB SHALL BE 2.25 INCHES. SEE STD DWG RP-VC-10 & RP-VC-11.
- 4 THE SLOPE OF THE SIDEWALK AND/OR CURB HEIGHT TRANSITION VARIES TO A MAXIMUM OF 8.33% LENGTH OF TRANSITION IS RELATIVE TO THE LONGITUDINAL ROADWAY GRADE.
- 5 COMMERCIAL DRIVEWAY ENTRANCE TYPICALLY (MAX. 40' WIDE) MAY REQUIRE DETECTABLE WARNING SURFACES IF ENTRANCE SERVES MORE THAN 400 VEHICLES PER DAY. SEE STD. DWG. NOS. MM-CR- SERIES FOR DETAILS.
- 6 3R PROJECTS MAY REQUIRE SLOPE CORRECTION, PARALLEL CROSS-WALK MARKINGS (ESPECIALLY AT TWO WAY DRIVEWAY ENTRANCES), AND DETECTABLE DOME SURFACE TO MAINTAIN CONTINUITY AT COMMERCIAL DRIVE ENTRANCES. ADDITIONAL SIGNS (WATCH FOR PED) MAY BE ADDED AT DRIVEWAYS BY THE DIRECTION OF AN ENGINEER IF NEEDED.

GENERAL NOTES

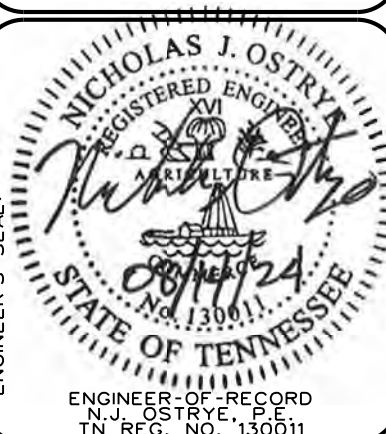
- A THIS TYPE OF DRIVEWAY IS PREFERRED OVER THE LOWERED TYPE AS SHOWN ON RP-D-16 BECAUSE THE ELEVATION OF THE SIDEWALK REMAINS A CONSTANT FOR PEDESTRIANS.
- B 5'-0" MINIMUM SIDEWALK WITH A MAXIMUM CROSS SLOPE OF 1.5% THROUGH DRIVEWAYS.
- C DESIGNER TO CHECK GUTTER FLOW DEPTH AT DRIVEWAY LOCATIONS TO ASSURE THAT THE DESIGN FLOW DOES NOT OVERTOP THE SIDEWALK AREA. IF OVERTOPPING OCCURS, PLACE AN INLET AT THE UPSTREAM SIDE OF THE DRIVEWAY OR PERFORM OTHER DESIGN MITIGATION.
- D THE SLOPE OF THE LANDING AREA SHALL NOT EXCEED 1.5% IN THE SIDEWALK AREA.
- E DRIVEWAYS TO BE BUILT COMPLETE OR IN PART AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- F ALL DRIVEWAYS TO BE 6" UNIFORM THICKNESS, UNLESS OTHERWISE SHOWN ON PLANS.
- G EXPANSION JOINTS ARE TO BE PLACED AS INDICATED ON THE PLANS. WHEN THE BACK OF THE DRIVEWAY ABUTS AGAINST A CONCRETE DRIVEWAY OR BUILDING, AN ADDITIONAL EXPANSION JOINT WILL BE PLACED AT THAT LOCATION.
- H THE ROADWAY DESIGNER SHALL CONSIDER THE USE OF A CATCH BASIN ON EITHER SIDE OF THE DRIVEWAY. CAREFUL CONSIDERATION TO THE PLACEMENT OF CATCH BASINS SHALL BE TAKEN IF THE DRIVEWAY IS IN A VERTICAL SAG CURVE.
- I PAY ITEMS:
ITEM NO: 303-01, MINERAL AGGREGATE, TYPE A BASE, GRADING D, PER TON.
ITEM NO: 701-01.01, CONCRETE SIDEWALK (4"), PER S.F.
ITEM NO: 701-02, CONCRETE DRIVEWAY, PER S.F.
ITEM NO: 701-02.02, CONCRETE DRIVEWAY (8"), PER S.F.
ITEM NO: 702-03, CONCRETE COMBINED CURB AND GUTTER, PER C.Y.
- J TYPICAL DRIVEWAY WIDTHS ARE 12' (14' TWO WAY) FOR RESIDENTIAL AND 24' (40' MAX.) FOR COMMERCIAL. REFER TO SECTION 5 (ACCESS DESIGN) IN THE MANUAL FOR CONSTRUCTING DRIVEWAY ENTRANCES ON STATE HIGHWAY (2015).
- K ALL SIDEWALKS SHALL HAVE A MINIMUM CONCRETE THICKNESS OF 4". THE SIDEWALK TRANSITION THICKNESS IS DEPENDENT UPON THE DRIVEWAY AND SIDEWALK THICKNESSES. THE COST OF THE SIDEWALK TRANSITION WILL BE INCLUDED IN THE PAY ITEM NO. OF 701-01.01.
- L MINIMUM 4" MINERAL AGGREGATE BASE MATERIAL ITEM NO. 303-01 SHALL BE INSTALLED UNDER NEW CONCRETE DRIVEWAYS. SITE SPECIFIC PAVEMENT DESIGN MAY BE REQUIRED FOR COMMERCIAL DRIVEWAYS USED AS A DELIVERY ACCESS AS WELL. A DRIVEWAY PAVEMENT DESIGN WITH 6" CONCRETE PAVEMENT AND 4" AGGREGATE DEPTH MAY BE LIMITED TO LIGHT COMMERCIAL VEHICULAR TRAFFIC.

REV. 7-15-08: UPDATED SIDEWALK DIMENSIONS.
REV. 4-8-16: ADDED ITEM NUMBERS, UPDATED SLOPES AND DIMENSIONS, UPDATED NOTES.
REV. 07-16-18: ADDED NOTES TO CONC. FLARE AND GRASS FLARE IN ISOMETRIC VIEW. ADDED GENERAL NOTE (5). CHANGED REFERENCED STD. DWG. FROM RP-AMC-10 TO RP-VC-10. ADDED NOTE (6) AND RENUMBERED THE REST. ADDED SPECIAL NOTE, REDREW SHEET.
REV. 01-07-19: CORRECTED SPELLING, REDREW SHEET.
REV. 10-16-20: ADDED GENERAL NOTE (8). ADDED MINERAL AGGREGATE ITEM NUMBER AND REFERENCE NOTE ON SECTION B-B.
REV. 06-15-21: REVISED AND MERGED GENERAL NOTES (2) AND (3). ADJUSTED LOCATION OF GENERAL NOTE NOS. REVISED GENERAL NOTES (5) (6) AND (1). ADDED PAY ITEM NOS. 701-01.01, 701-02.02 AND 702-03.

APPROVED BY FHWA
(ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE
STANDARD
DRAWING
DEPARTMENT OF TRANSPORTATION
DETAILS OF
STANDARD
CONCRETE
DRIVEWAYS

02-15-2007 RP-D-15



CONSTRUCTION DETAILS AND SECTIONS IV

A NEW EXPRESS OIL CHANGE
FOR
SEVIERVILLE, TN
EXPRESS OIL CHANGE & TIRE ENGINEERS

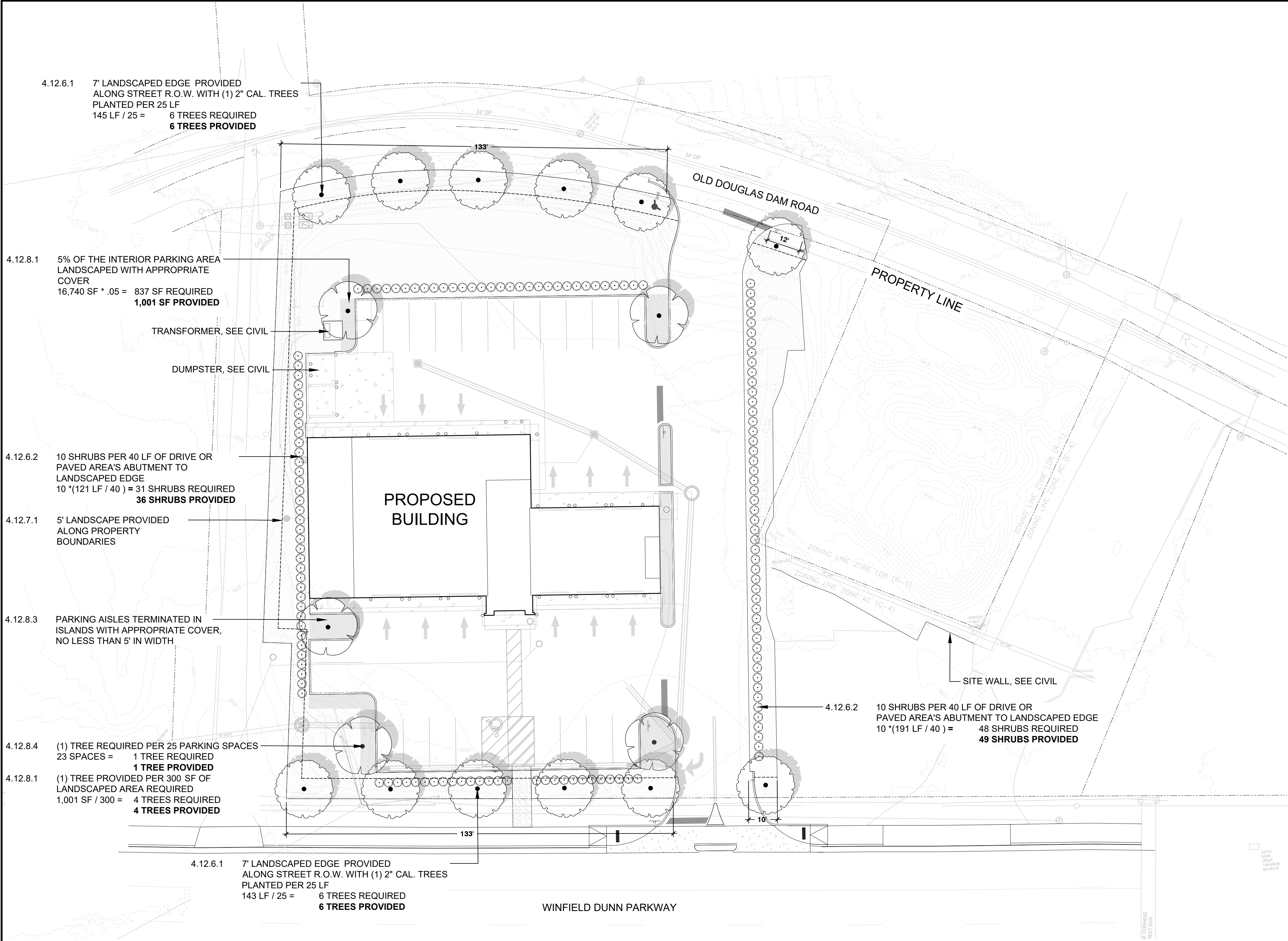
| NO. | DESCRIPTION | BY | CHECKED | DATE | REV. | DATE |
|-----|------------------|-----|---------|------------|------|------|
| 0 | ISSUE FOR PERMIT | BSS | NJO | 08/14/2024 | | |

DRAWING NO. C5.3




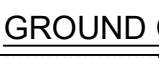
3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccope.com



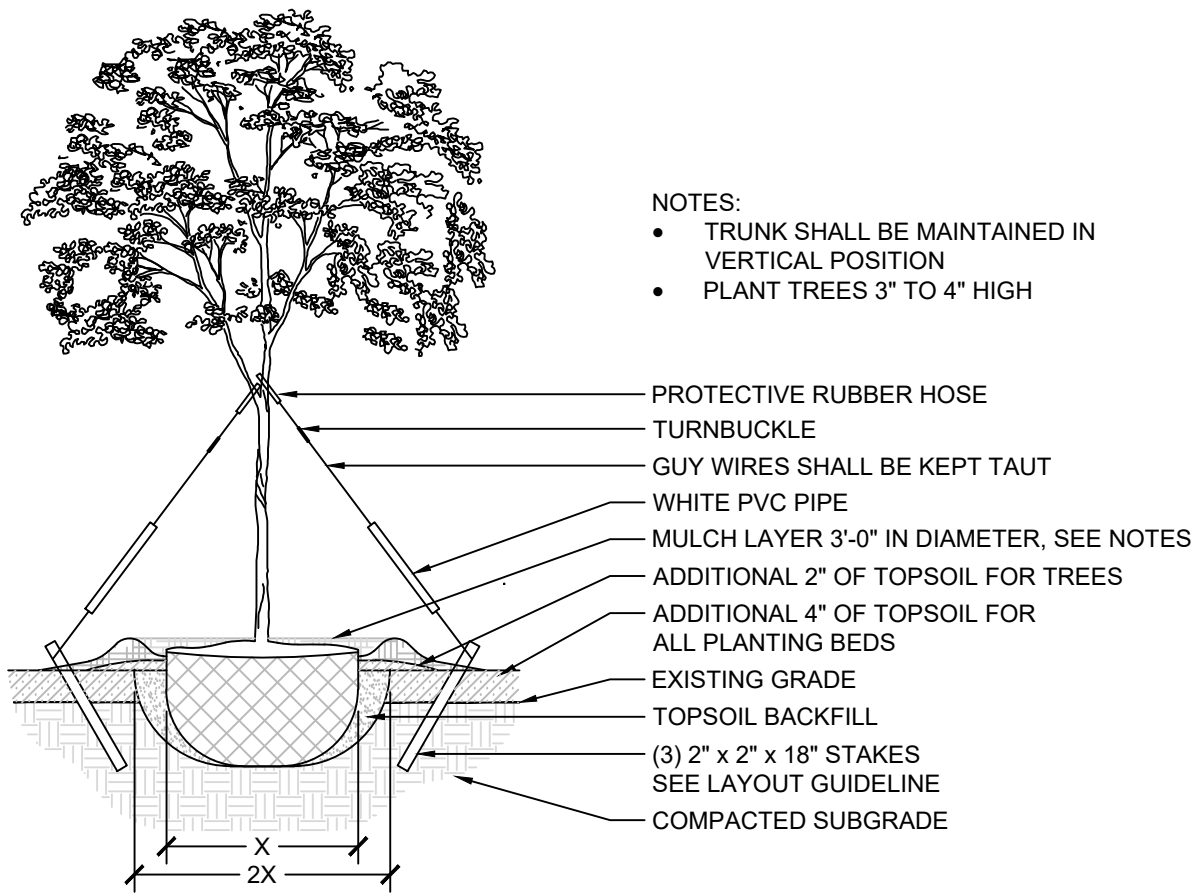
PLOTSTUDIO1572933 Monday, August 5, 2024 C:\USERS\PLOTSTUDIO\1572933\PLOT STUDIO DROPBOX\PLOT\PROJECTS\24003 - CCI - SEVIERVILLE EOWORKING\AUTOCAD\X-LANDSCAPE.DWG



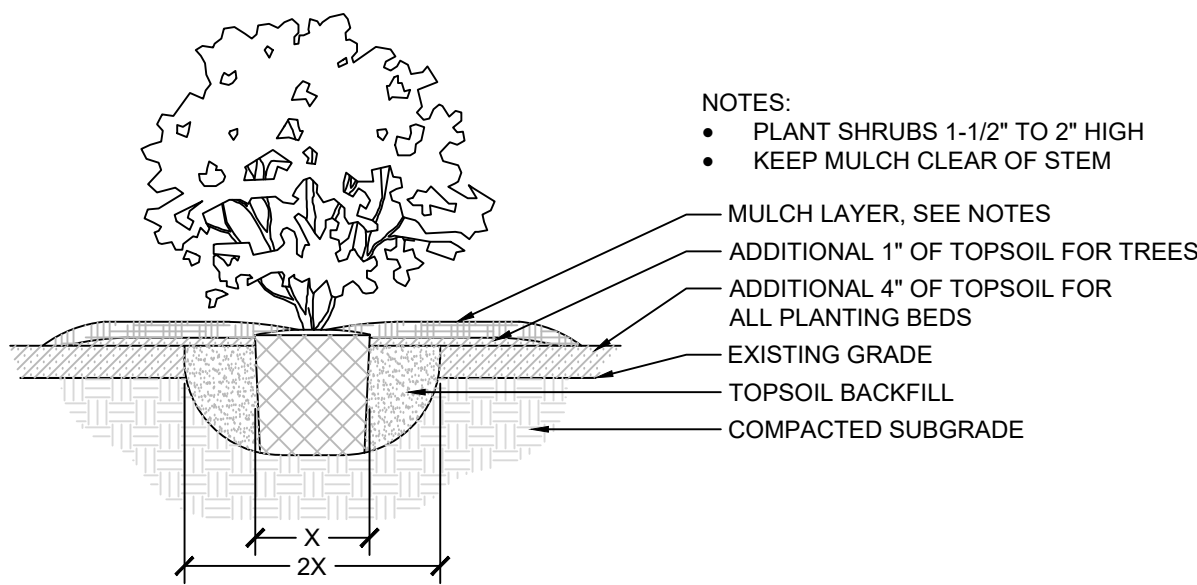
PLANT SCHEDULE

| <u>SYMBOL</u> | <u>CODE</u> | <u>BOTANICAL / COMMON NAME</u> | <u>SIZE</u> | <u>CONTAINER</u> | <u>QTY</u> | <u>REMARKS</u> | |
|---|-------------|--|-------------|------------------|----------------|--|------------------------|
| TREES | | | | | | | |
|  | QP | Carpinus caroliniana / American Hornbeam | 2" Cal. | B&B | 12 | 2" Caliper, 10'-12' Ht., Strong Central Leader, Full and Healthy | |
|  | UP | Quercus phellos / Willow Oak | 2" Cal. | B&B | 5 | 2" Caliper, 10'-12' Ht., Strong Central Leader, Full and Healthy | |
| SHRUBS | | | | | | | |
|  | IG | Ilex glabra 'Shamrock' / Shamrock Inkberry Holly | 3 gal. | Pot | 143 | 24" Ht. x 24" Sprd., Full and Healthy | |
| <u>SYMBOL</u> | <u>CODE</u> | <u>BOTANICAL / COMMON NAME</u> | <u>SIZE</u> | <u>CONTAINER</u> | <u>SPACING</u> | <u>QTY</u> | <u>REMARKS</u> |
| GROUND COVERS | | | | | | | |
|  | CD | Cynodon dactylon x transvaalensis 'DT-1' / Tiftuf Bermudagrass | sod | | | 11,487 sf | Full Pieces, Weed Free |

| Landscape Code Calculations | | | |
|-----------------------------|---|------------------------------------|--|
| 4.12.6.1 | 7' LANDSCAPED EDGE PROVIDED ALONG STREET R.O.W. WITH (1) 2" CAL. TREES PLANTED PER 25 LF. | | |
| | OLD DOUGLAS DAM RD. | 145 LF / 25 = | 6 TREES REQUIRED 6 TREES PROVIDED |
| | WINFIELD DUNN PARKWAY | 143 LF / 25 = | 6 TREES REQUIRED 6 TREES PROVIDED |
| 4.12.6.2 | 10 SHRUBS REQUIRED PER 40 LF OF DRIVE OR PARKING'S ABUTMENT TO LANDSCAPED EDGE. | | |
| | SITE WEST | 10 * (121 LF / 40) = | 31 SHRUBS REQUIRED 36 SHRUBS PROVIDED |
| | SITE EAST | 10 * (191 LF / 40) = | 48 SHRUBS REQUIRED 49 SHRUBS PROVIDED |
| 4.12.8.1 | 5% OF THE INTERIOR OF PARKING AREA LANDSCAPED + (1) TREE FOR EVERY 300 SF OF LANDSCAPED AREA. | | |
| | 16,740 SF SITE AREA * .05 = | 837 SF OF LANDSCAPED AREA REQUIRED | 1,001 SF OF LANDSCAPED AREA PROVIDED |
| | 1,001 SF LANDSCAPED AREA / 300 = | | 4 TREES REQUIRED 4 TREES PROVIDED |
| 4.12.8.4 | (1) TREE PROVIDED PER 25 PARKING SPACES. | | |
| | 24 SPACES = | | 1 TREE REQUIRED 2 TREES PROVIDED |



TYPICAL TREE PLANTING - SECTION

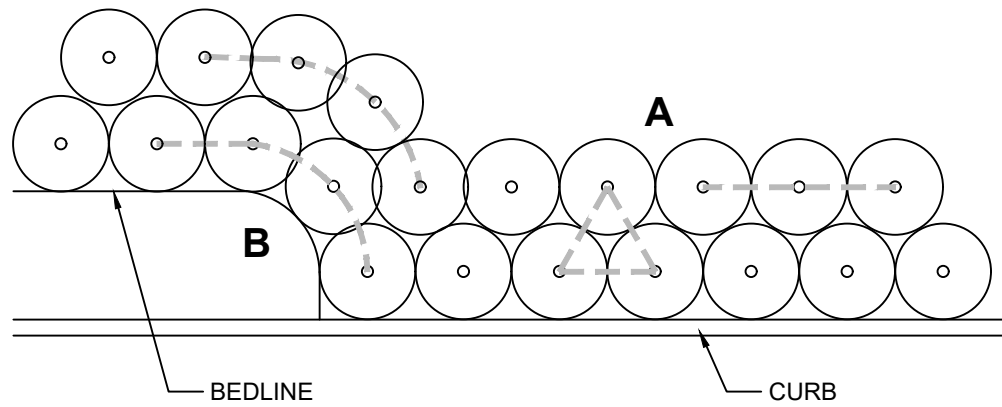


TYPICAL SHRUB PLANTING

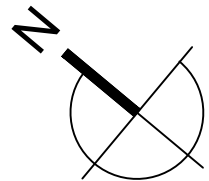
SHRUB LAYOUT GUIDELINES:

A. SHRUBS AND GROUNDCOVERS ADJACENT TO STRAIGHT EDGES SHALL BE TRIANGULARLY SPACED IN ROWS PARALLEL TO THE STRAIGHT EDGE

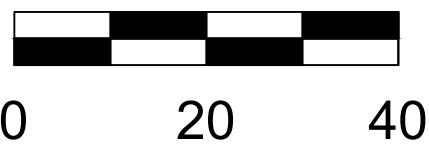
B. SHRUBS AND GROUNDCOVERS ADJACENT TO CURVED EDGES SHALL BE PLANTED IN ROWS PARALLEL TO THE CURVED EDGE. CURVED EDGES TO BE VERY SMOOTH RADI.



TYPICAL SHRUB SPACING



SCALE: 1" = 20'



204 MAIN ST, STE 125
TRUSSVILLE, AL 35173
205.478.5388

| REVISION | | |
|----------|------|-------------|
| NO | DATE | DESCRIPTION |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

EXPRESS OIL CHANGE

EXPRESS OIL CHANGE & TIRE ENGINEERS

1880 SOUTHPARK DR.
BIRMINGHAM, AL 35244

DATE: 08/5/2024
DRAWN BY: GH
REVIEWED BY: MP
JOB NUMBER: 24003

SHEET TITLE: LANDSCAPE CODE PLAN

LANDSCAPE PLAN

ISSUE FOR PERMIT



LA5.00