

OWNER / DEVELOPER  
F&S LAND DEVELOPMENT, LLC  
460 AUSLEY ROAD  
FUQUAY-VARINA, NORTH CAROLINA 27526  
CONTACT NAME: DREW STEPHENSON  
PHONE:(919) 730-7802  
STEPHENSONBUILDERSINC@GMAIL.COM

CIVIL ENGINEER



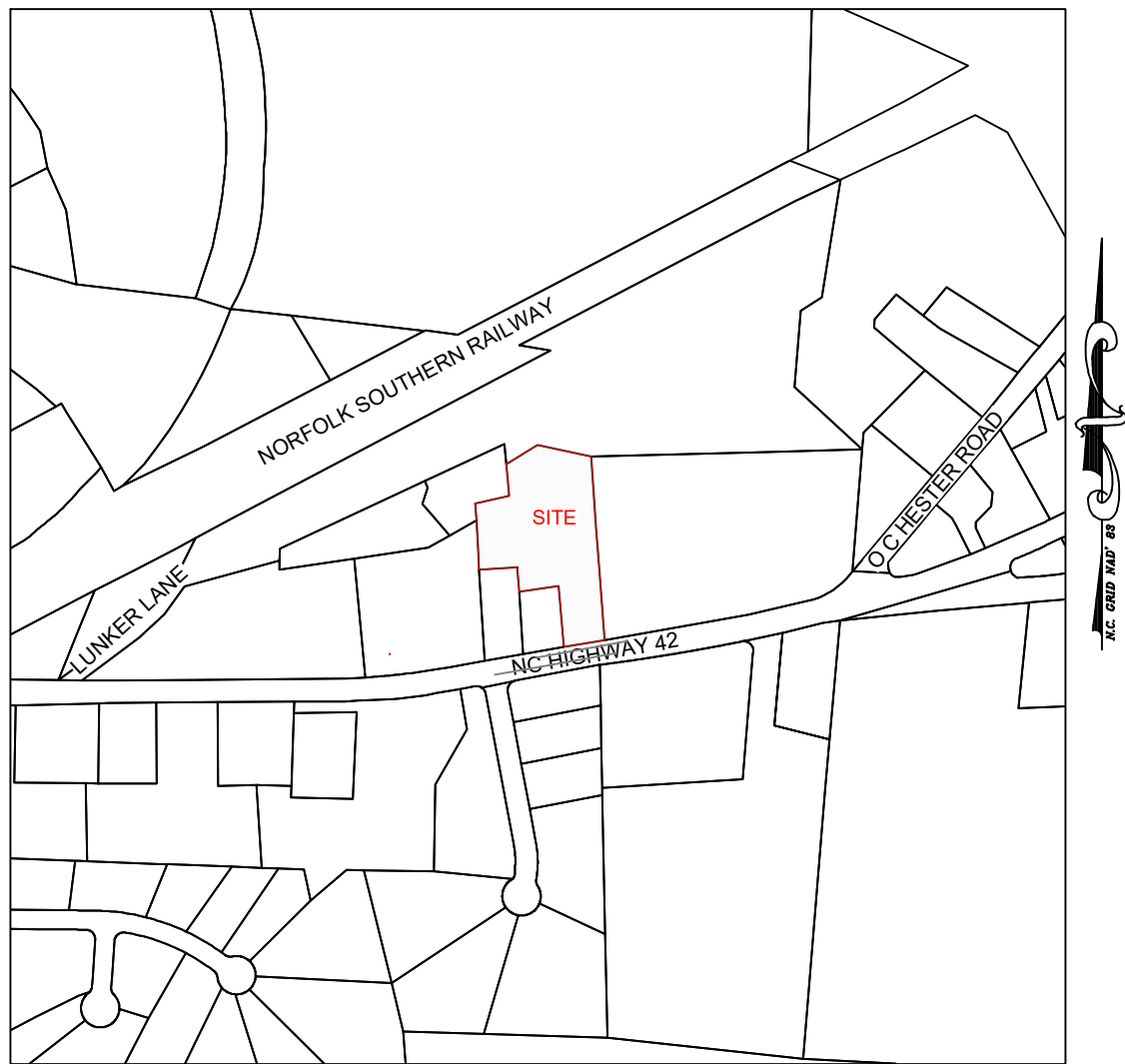
RED LINE ENGINEERING, P.C. (C-3075)  
123 RALEIGH STREET  
FUQUAY-VARINA, NORTH CAROLINA 27526  
CONTACT NAME: GARY J. MCCABE, PE  
PHONE:(919) 779-6851  
EMAIL: GARY.MCCABE@RENC.COM

SURVEYOR

BENTON W. DEWAR AND ASSOCIATES  
PROFESSIONAL LAND SURVEYOR, PA (C-1705)  
5920 HONEYCUTT ROAD  
HOLLY SPRINGS, NORTH CAROLINA 27540  
CONTACT NAME: BEN DEWAR, PLS  
PHONE:(919) 552-9813  
EMAIL: BENTONDEWAR@GMAIL.COM

42 BUSINESS PARK  
INDUSTRIAL FLEX BASE  
CONSTRUCTION DRAWINGS  
(SITE 2507-0001)

12719 NC HIGHWAY 42  
(P.I.N. 0646-10-2128)  
HOLLY SPRINGS, NORTH CAROLINA 27540



VICINITY MAP  
SCALE: 1"=500'

| SITE PLAN INFORMATION:                |                                                                                                                                                                   |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. NAME:                              | 42 BUSINESS PARK                                                                                                                                                  |
| 2. STREET ADDRESS:                    | 12719 NC HIGHWAY 42<br>HOLLY SPRINGS, NORTH CAROLINA 27526                                                                                                        |
| 3. P.I.N.:                            | 0646-10-2128                                                                                                                                                      |
| 4. EXISTING LAND USE:                 | VACANT                                                                                                                                                            |
| 5. PROPOSED LAND USE:                 | ASSEMBLING, PROCESSING, INDUSTRIES, WHOLESALE, AND WAREHOUSE<br><br>*SPECIAL USE PERMIT FOR LIGHT INDUSTRIAL FLEX APPROVED UNDER PERMIT #BOA2409-0001 ON 11/12/24 |
| 6. TOTAL NUMBER OF LOTS:              | 1                                                                                                                                                                 |
| 7. TOTAL SITE AREA:                   | 107,177 SF (2.46 ACRES)                                                                                                                                           |
| 8. DISTURBED AREA:                    | 2.47 ACRES                                                                                                                                                        |
| 9. CURRENT/PROPOSED ZONING:           | RA-30 (RESIDENTIAL/AGRICULTURAL ZONING DISTRICT)                                                                                                                  |
| 10. EXISTING BUILDINGS USE & SF:      | NONE                                                                                                                                                              |
| 11. PROPOSED BUILDING SF:             | 16,000 SF (GROSS)                                                                                                                                                 |
| 12. PROPOSED BUILDING LOT COVERAGE:   | 14.84%                                                                                                                                                            |
| 13. BUILDING SETBACKS:                | FRONT - 35 FT.<br>SIDE - 10 FT.<br>REAR - 25 FT.<br>CORNER - 20 FT.                                                                                               |
| 14. MAX BUILDING HEIGHT:              | 85 FT                                                                                                                                                             |
| 15. PROPOSED BUILDING HEIGHT:         | 35 FT                                                                                                                                                             |
| 16. INSIDE CITY LIMITS:               | NO                                                                                                                                                                |
| 17. INSIDE FLOOD HAZARD BOUNDARY:     | NO (PER FEMA MAP #3720064500J) EFFECTIVE DATE: 10/03/2006                                                                                                         |
| 18. PARKING REQUIRED:                 | 1 SPACE / 500 SF<br>16,000 SF GROSS X 1 / 500 = 32 SPACE MINIMUM REQUIRED                                                                                         |
| 19. TOTAL PARKING PROVIDED:           | 43 SPACES (41 REGULAR + 2 ADA)                                                                                                                                    |
| 20. PROPOSED IMPERVIOUS SURFACE AREA: | EXISTING<br>PROPOSED<br>TOTAL IMPERVIOUS                                                                                                                          |
| 21. WATERSHED / RIVER BASIN:          | AVENTS CREEK / CAPE FEAR RIVER BASIN                                                                                                                              |
| 22. DEED BOOK / PAGE                  | 4245 / 1914                                                                                                                                                       |
| 23. BOOK OF MAPS / PAGE               | 2025 / 338                                                                                                                                                        |

Owner's Consent Form:

As the owner of record, I hereby formally consent to the proposed development shown on this site plan and all regulations and requirements of the Harnett County Ordinances.

Signature \_\_\_\_\_ Date 1/16/2026

HARNETT REGIONAL WATER STANDARD NOTES:

- WATERLINE CONSTRUCTION AND TIE-IN WILL NEED TO BE COORDINATED AND INSPECTED BY HRW CONSTRUCTION INSPECTOR CHAD EVERETT AND BRANDON WEST 910-984-6352.
- NCDOT UTILITIES MANUAL DATED 2022 SECTION 3.4.9.1 REQUIRES FIRE HYDRANTS TO BE LOCATED AT THE BACK OF DITCH. WATER METERS WILL ALSO NEED TO BE LOCATED AT THE BACK OF THE DITCH. THE WATER LINE IS LOCATED AT THE FRONT OF DITCH.
- APPROVAL OF THIS PLAT/PLAN DOES NOT GUARANTEE WATER CAPACITY. CURRENT/FUTURE CAPACITY MAY NOT BE AVAILABLE. THIS DEVELOPMENT MAY REQUIRE ADDITIONAL IMPROVEMENTS TO THE EXISTING WATER SYSTEM TO MEET FUTURE WATER DEMANDS PRIOR TO A PRELIMINARY PLAT, CONSTRUCTION PLAN AND/OR FINAL PLAT APPROVAL.
- MAIL KIOSK, OPEN SPACE AND DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION. (HOA)

NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C, HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

CIVIL PLANS SHEET INDEX

- C0.0 COVER SHEET
- C1.0 NOTES, LEGENDS, VICINITY MAP, & ABBREVIATIONS
- C2.0 EXISTING CONDITIONS & DEMOLITION PLAN
- C3.0 OVERALL SITE & EMERGENCY VEHICLE ACCESS PLAN
- C4.0 EROSION CONTROL PLAN - PHASE I
- C4.1 EROSION CONTROL PLAN - PHASE II
- C4.2 NPDES STABILIZATION PLAN
- C5.0 OVERALL GRADING & STORMWATER MANAGEMENT PLAN
- C5.1 ENLARGED FINE GRADING PLAN
- C5.2 PROPOSED STORMWATER PLAN & PROFILE
- C6.0 PROPOSED UTILITY PLAN
- C7.0 SITE DETAILS
- C8.0 EROSION CONTROL DETAILS
- C8.1 EROSION CONTROL MAINTENANCE REQUIREMENTS
- C9.0 UTILITY DETAILS
- C10.0 SCM DETAILS
- C11.0 REQUIRED LANDSCAPE IMPROVEMENTS
- C12.0 PROPOSED LIGHTING PLAN

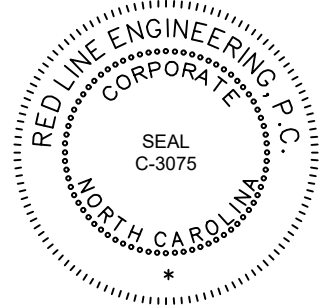
SUPPLEMENTAL DISCIPLINE SHEET INDEX

- SURVEYING
- S1.0 BOUNDARY & EXISITNG CONDITIONS SURVEY

| SANITARY SEWER DEMAND SUMMARY:<br>(PER NC 02T RULES)                                                                                                                                                                                                           |                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 1. BUILDING 2A (BASKETBALL TRAINING FACILITY)                                                                                                                                                                                                                  | 100 GPD / LOADING BAY<br>8 UNITS<br>800 GPD |
| TOTAL ESTIMATED SANITARY SEWER DEMAND                                                                                                                                                                                                                          | 800 GPD                                     |
| (NOTE: THERE IS NO FOOD SERVICE OR FOOD PREPARATION ANTICIPATED AT THIS TIME. IF FOOD SERVICE OR PREPARATION IS NEEDED, A GREASE INTERCEPTOR WILL BE REQUIRED AT THAT TIME. THE ADDITION OF FOOD SERVICE WOULD REQUIRE FURTHER APPROVALS FROM HARNETT COUNTY.) |                                             |



06/18/26 10:27:26 AM



FINAL DRAWING  
RELEASED FOR  
CONSTRUCTION

THIS ORIGINAL SHEET IS 24"X36". OTHER DIMENSIONS INDICATE IT HAS BEEN ALTERED. ALL INFORMATION REPRESENTED ON THIS SHEET IS THE PROPERTY OF RED LINE ENGINEERING, P.C. UNDER PENALTY OF LAW, THIS INFORMATION SHALL NOT BE DUPLICATED IN WHOLE OR WHOLE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM RED LINE ENGINEERING, P.C. 2025 ©



F&S LAND DEVELOPMENT LLC  
12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
COVER SHEET

| PRE VS POST PEAK RUNOFF SUMMARY |           |            |           |
|---------------------------------|-----------|------------|-----------|
|                                 | PRE (CFS) | POST (CFS) | SCM (CFS) |
| 1 YR / 24 HR                    | 2.39      | 5.34       | 0.34      |
| 2 YR / 24 HR                    | 3.88      | 7.30       | 0.70      |
| 10 YR / 24 HR                   | 8.72      | 13.02      | 7.65      |
| 25 YR / 24 HR                   | 12.01     | 16.65      | 8.72      |
| 100 YR / 24 HR                  | 17.87     | 22.70      | 10.38     |

A PRIMARY SCM (INFILTRATION BASIN) IS PROPOSED FOR THIS SITE. THE PROPOSED SCM CONTROLS THE PEAK RUNOFF RATES TO BELOW THE PRE-DEVELOPED CONDITIONS FOR THE 1, 2, 10, 25 & 100 YEAR 24 HOUR STORM EVENTS. AS SUCH, NO FURTHER DOWNSTREAM ANALYSIS IS REQUIRED.



Know what's below.  
Call before you dig.

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

|              |  |
|--------------|--|
| PROJECT NO.: |  |
| DRAWN BY:    |  |
| REVIEWED BY: |  |

SHEET NUMBER:

C0.0

OF 19 SHEETS

GENERAL NOTES

- (1) BOUNDARY & TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY BENTON W. DEWAR AND ASSOCIATES PROFESSIONAL LAND SURVEYOR (C-1705), PERFORMED BY BENTON W. DEWAR, P.L.S. (L-3040), DATED JANUARY 24, 2025. INFORMATION PROVIDED FOR ENGINEERING DESIGN PURPOSES ONLY. NOT FOR SALE OR RECORDATION. ENGINEER MAKES NOT GUARANTEES OR WARRANTIES AS TO THE ACCURACY OF SURVEY INFORMATION PROVIDED BY OTHERS. PLEASE CONTACT SURVEYOR DIRECTLY WITH ANY QUESTIONS REGARDING SURVEY DATA.
- (2) CONTRACTOR SHALL FIELD VERIFY LOCATION, SIZE, MATERIAL AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES **PRIOR TO COMMENCING CONSTRUCTION**. ELEVATIONS INDICATED ON PLANS SHOWN AS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS **PRIOR TO COMMENCING CONSTRUCTION**.
- (3) CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL OF ANY POTENTIAL CHANGE ORDERS PRIOR TO PROCEEDING WITH CONSTRUCTION OF THE SUBJECT IMPROVEMENTS. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK AND EXPENSE. NO CHANGE ORDERS WILL BE APPROVED FOR REWORK FOR MISINTERPRETATION OF PLANS & THE DESIGN INTENT, FAILURE OF THE CONTRACTOR TO MANAGE, SCHEDULE AND COORDINATE SUBS OR FOR FAILURE OF THE CONTRACTOR OR THEIR SUBS TO REVIEW AND UNDERSTAND THE FULL SET OF CONSTRUCTION DOCUMENTS. IF THE CONTRACTOR OR THEIR SUB HAS A QUESTION REGARDING THE DESIGN INTENT, THEY SHOULD SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE OWNER, ARCHITECT & ENGINEER(S) AND RECEIVE WRITTEN RESOLUTION BEFORE PROCEEDING.
- (4) CONTRACTOR IS RESPONSIBLE FOR SCHEDULING REQUIRED INSPECTIONS AND TESTING REGARDING SITE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO COMPACTION TESTING, INFILTRATION TESTING, PRESSURE TESTING, LEAK TESTING, VACUUM TESTING, ETC.
- (5) CONTRACTOR SHALL MAINTAIN ACCURATE AS-BUILT RECORDS FOR THE OWNER, ARCHITECT & ENGINEER(S) AND SHALL NOTATE ALL DEVIATIONS FROM THE APPROVED PLANS IN RED. CONTRACTOR SHALL PROVIDE SEALED AS-BUILT SURVEY (IN PDF AND DWG FORMAT) OF ALL UTILITIES, IMPERVIOUS AREAS, STORMWATER INFRASTRUCTURE, AND STORMWATER CONTROL MEASURES PRIOR TO FINAL INSPECTIONS BY ENGINEER. ACCORDING TO THE HARNETT COUNTY STANDARDS ALL WATER AND SEWER STRUCTURES, VALVES AND FITTINGS MUST BE LOCATED HORIZONTALLY AND VERTICALLY IN TABLE FORMAT ON AS-BUILT SURVEY PRIOR TO FINAL INSPECTIONS AND CERTIFICATION BY THE ENGINEER.
- (6) CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIALS GENERATED THROUGH ALL CONSTRUCTION RELATED ACTIVITIES. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH NPDES STABILIZATION TABLE.
- (8) WATER & SANITARY SEWER SERVICES TO BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE TOWN OF CLAYTON CONSTRUCTION STANDARDS, SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF APPROVAL.
- (9) ACCORDING TO THE SEDIMENTATION POLLUTION CONTROL ACT OF 1973 (NORTH CAROLINA GENERAL STATUTE 113A 51-86) THIS PROJECT IS SUBJECT TO AN APPROVED SEDIMENTATION AND EROSION CONTROL PLAN. TOTAL DISTURBED AREA EXCEEDS ONE (1) ACRE, THEREFORE, A NCDEQ EROSION CONTROL PERMIT IS REQUIRED.
- (10) ANY CONFLICT(S) SHALL BE SUBMITTED BY CONTRACTOR, IN WRITING, TO BOTH ENGINEER. WRITTEN CLARIFICATION/RESOLUTION MUST BE RECEIVED BY CONTRACTOR FROM ENGINEER **PRIOR** TO COMMENCING CONSTRUCTION.
- (11) CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL SUBCONTRACTORS ARE PROVIDED AND FAMILIAR WITH THE FULL SET OF CONSTRUCTION DOCUMENTS. THE OWNER & ENGINEER(S) WILL NOT BE LIABLE FOR LACK OF COORDINATION OF CONTRACTOR AND THEIR SUBCONTRACTORS. CONTRACTOR SHALL BARE ANY AND ALL EXPENSES RESULTING FROM REWORK OR ADDITIONAL WORK DUE TO LACK OF PROPER COORDINATION OR FAMILIARITY WITH APPROVED PLANS.
- (12) LATERAL SEPARATION OF SEWERS OR WATER MAINS. WATER MAINS SHALL BE LAID AT LEAST TEN (10) FEET Laterally FROM EXISTING OR FUTURE SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A TEN (10) FOOT LATERAL SEPARATION -- IN WHICH CASE:
- (A) THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION ON THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER; OR
- (B) THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER.
- (14) CROSSING A WATER MAIN OVER A SEWER. WHENEVER NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN EIGHTEEN (18) INCH SEPARATION -- IN WHICH CASE, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE CROSSING.
- (15) CROSSING A WATER MAIN UNDER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE POINT(S) OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

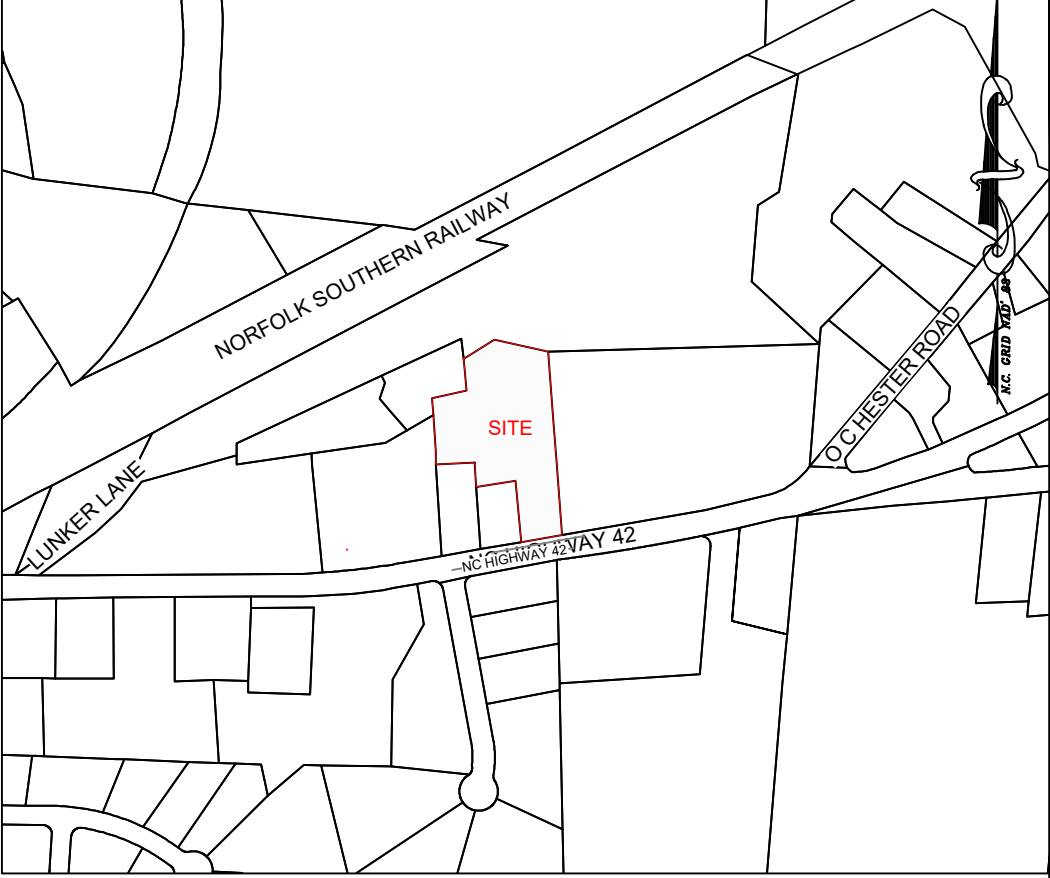
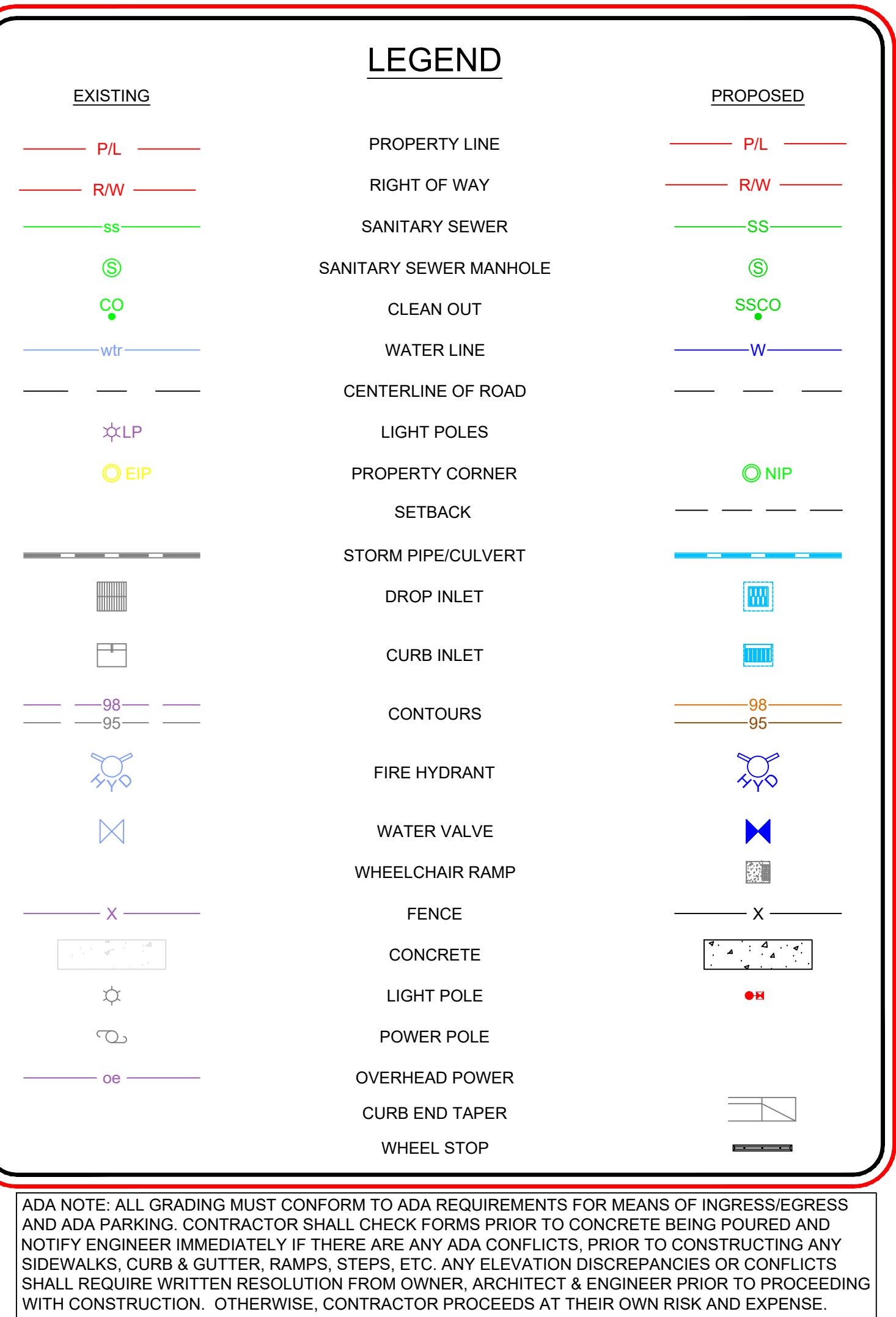
HARNETT COUNTY DEPARTMENT OF PUBLIC UTILITIES UTILITY NOTES - WATER

- A. THE FIRE MARSHAL'S OFFICE SHALL APPROVE ALL HYDRANT TYPES AND LOCATIONS IN NEW SUBDIVISIONS. HOWEVER, HARNETT REGIONAL WATER (HRW) PREFERS THE CONTRACTORS TO INSTALL ONE OF THE FOLLOWING FIRE HYDRANTS:
1. MUELLER - SUPER CENTURIUM 250 4-423 MODEL WITH A 5/2" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
2. AMERICAN DARLING - MARK B-84-B MODEL WITH A 5/2" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
3. WATEROUS - PACER B-67-250 MODEL WITH A 5/2" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE) OR APPROVED EQUAL FOR STANDARDIZATION.
- \*ALL FIRE HYDRANTS LISTED ABOVE MUST HAVE \*AMERICAN NATIONAL FIRE HOSE CONNECTION SCREW THREADS" NSTNH HOSE THREADS.
- B. FIRE HYDRANTS ARE INSTALLED AT CERTAIN ELEVATIONS. ANY GRADE CHANGE NEAR ANY FIRE HYDRANT, WHICH IMPEDES ITS OPERATION, SHALL BECOME THE RESPONSIBILITY OF THE UTILITY CONTRACTOR FOR CORRECTION. CORRECTIONS WILL BE MONITORED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND THE HARNETT COUNTY FIRE MARSHAL.
- C. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND PROVIDE THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE WATER LINE SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OF THE PROPOSED WATER LINES THAT WILL SERVE THIS PROJECT.
- D. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. CHAD EVERETTE, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM - 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.
- E. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW AND THE UTILITY CONTRACTOR WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR

- CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE REGISTERED LAND SURVEYOR (RLS) SHOULD STAKE OUT ALL LOT CORNERS AND THE GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OF THE WATER LINE(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING AND UTILITY CONSTRUCTION.
- F. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE EXTENSION(S), AND ASSOCIATED WATER SERVICES IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- G. THE WATER MAIN(S), FIRE HYDRANTS, SERVICE LINES, METER SETTERS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED IN STRICT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER (HRW). THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED WATER MAIN(S), WATER SERVICE LINES AND ALL ASSOCIATED METER SETTERS AND METER BOXES FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW WATER MAIN(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION (NCDEQ, DEH, PWS) AND ACCEPTED BY HRW.
- H. PRIOR TO ACCEPTANCE, ALL SERVICES WILL BE INSPECTED TO ENSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL METER BOXES MUST BE FLUSH WITH THE GROUND LEVEL AT FINISH GRADE AND THE METER SETTERS MUST BE A MINIMUM OF 8" BELOW THE METER BOX LID. METER SETTERS SHALL BE CENTERED IN THE METER BOX AND SUPPORTED BY BRICK, BLOCK OR STONE.
- I. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S) CONSTRUCTED IN HARNETT COUNTY. THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE

- PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.
- J. POTABLE WATER MAINS CROSSING OTHER UTILITIES AND NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN THE POTABLE WATER MAIN AND ALL OTHER UTILITIES. NCDEQ REQUIRES THE NEW WATER MAINS TO BE INSTALLED UNDER THE STORM WATER LINES. THE POTABLE WATER MAIN SHALL BE INSTALLED WITH TWENTY-FOUR (24") INCHES OF VERTICAL SEPARATION AND WITH DUCTILE IRON PIPE WHEN DESIGNED TO BE PLACED UNDER A NONPOTABLE WATER LINE SUCH AS SANITARY SEWER OR STORM SEWER LINES. IF THESE SEPARATIONS CANNOT BE MAINTAINED THEN THE WATER MAIN SHALL BE INSTALLED WITH DUCTILE IRON PIPE. BOTH THE POTABLE WATER MAIN AND THE NON-POTABLE WATER LINE MUST BE CAST IRON OR DUCTILE IRON PIPE (DIP) IF THE STATE MINIMUM SEPARATIONS CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE MUST BE LAID SO THE MECHANICAL JOINTS ARE AT LEAST (10") FEET FROM THE POINT WHERE THE POTABLE WATER MAIN CROSSES THE NON-POTABLE WATER LINE.
- K. POTABLE WATER MAINS INSTALLED PARALLEL TO NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF TEN (10") FEET BETWEEN THE POTABLE WATER MAIN AND SANITARY SEWER MAINS, SEWER LATERALS AND SERVICES. THE HORIZONTAL SEPARATION BETWEEN THE POTABLE WATER MAIN AND ANY OTHER UTILITY OR STORM SEWER SHALL NOT BE LESS THAN FIVE (5) FEET. THE POTABLE WATER MAIN MUST BE DUCTILE IRON PIPE IF THIS HORIZONTAL SEPARATION OF TEN (10") FEET CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST TEN (10") FEET BEYOND THE POINT WHERE THE MINIMUM REQUIRED HORIZONTAL SEPARATION OF TEN (10") FEET CAN BE RE-ESTABLISHED.
- L. METER SETTERS SHALL BE INSTALLED IN PAIRS ON EVERY OTHER LOT LINE WHERE POSSIBLE TO LEAVE ADEQUATE SPACE FOR OTHER UTILITIES TO BE INSTALLED AT A LATER TIME. THE METER SETTERS SHALL BE INSTALLED AT LEAST ONE (1") FOOT INSIDE THE RIGHT-OF-WAY AND AT LEAST THREE (3') TO FIVE (5') FEET FROM THE PROPERTY LINE BETWEEN THE LOTS.
- M. HRW REQUIRES THAT METER BOXES FOR 1/2" SERVICES SHALL BE 12" WIDE X 17" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH CAST IRON LIDS/COVERS. METER BOXES FOR 1" SERVICES SHALL BE 17" WIDE X 21" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS. METER BOXES FOR 2" SERVICES SHALL BE 20" WIDE X 32" LONG ABS PLASTIC BOXES AT LEAST 20" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS.
- N. MASTER METERS MUST BE INSTALLED IN CONCRETE VAULTS SIZED FOR THE METER ASSEMBLY AND ASSOCIATED APPURTENANCES SO AS TO PROVIDE AT

- LEAST EIGHTEEN (18") INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE CONCRETE VAULT AND THE BOTTOM OF THE METER SETTER. THE MASTER METER MUST BE PROVIDED TEST PORTS IF THE METER IS NOT EQUIPPED WITH TEST PORTS FROM THE MANUFACTURER IN ACCORDANCE WITH THE HRW ESTABLISHED STANDARD SPECIFICATIONS AND DETAILS. DUCTILE IRON PIPE MUST BE USED FOR THE MASTER METER VAULT PIPING AND VALVE VAULT PIPING. THE UTILITY CONTRACTOR MUST PROVIDE SHOP DRAWINGS FOR THE METER VAULTS TO HRW PRIOR TO ORDERING THE CONCRETE VAULTS.
- O. THE UTILITY CONTRACTOR WILL INSTALL POLYETHYLENE SDR-9 WATER SERVICE LINES THAT CROSS UNDER THE PAVEMENT INSIDE A SCHEDULE 40 PVC CONDUIT TO ALLOW FOR REMOVAL AND REPLACEMENT IN THE FUTURE. TWO (2) INDEPENDENT 3/4" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - TWO (2)" INCH SCHEDULE 40 PVC CONDUIT OR TWO (2) INDEPENDENT 1" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) - THREE (3)" INCH SCHEDULE 40 PVC CONDUIT, BUT EACH WATER SERVICE SHALL BE TAPPED DIRECTLY TO THE WATER MAIN. SPLIT SERVICES ARE NOT ALLOWED BY HRW. IF SIDEWALKS ARE PROPOSED, THE CONDUIT MUST EXTEND PAST THE SIDEWALK.
- P. THE WATER MAIN(S), FIRE HYDRANTS, GATE VALVES, SERVICE LINES, METER SETTERS AND ASSOCIATED APPURTENANCES MUST BE RATED FOR 200 PSI AND HYDROSTATICALLY PRESSURE TESTED TO 200 PSI. THE HYDROSTATIC PRESSURE TEST(S) MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR MUST NOTIFY HRW WHEN THEY ARE READY TO BEGIN FILLING IN LINES AND COORDINATE WITH HARNETT REGIONAL WATER TO WITNESS ALL PRESSURE TESTING.
- Q. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE(S) PRIOR TO MAKING THE TAP ON THE EXISTING WATER MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE IN HARNETT COUNTY. ALL NEW WATER LINE EXTENSIONS MUST BEGIN WITH A RESILIENT WEDGE TYPE GATE VALVE SIZED EQUAL TO THE DIAMETER OF THE NEW WATER LINE EXTENSION IN ORDER TO PROVIDE A MEANS OF ISOLATION BETWEEN HARNETT REGIONAL WATER'S EXISTING WATER MAINS AND THE NEW WATER LINE EXTENSIONS UNDER CONSTRUCTION.
- R. ALL WATER MAINS WILL BE CONSTRUCTED WITH SDR-21 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE RATED FOR AT LEAST 200 PSI OR GREATER. ALL PIPES MUST BE PROTECTED DURING LOADING, TRANSPORT, UNLOADING, STAGING, AND INSTALLATION. PVC PIPE MUST BE PROTECTED FROM EXTENDED EXPOSURE TO SUNLIGHT PRIOR TO INSTALLATION.
- S. ALL WATER MAINS WILL BE FLUSHED AND DISINFECTED IN STRICT ACCORDANCE WITH THE STANDARD



VICINITY MAP  
SCALE: 1"=200'  
ABBREVIATIONS

|       |                                |
|-------|--------------------------------|
| AC    | ACRE                           |
| B-B   | BACK OF CURB-BACK OF CURB      |
| BO    | BLOWOFF VALVE                  |
| BOC   | BACK OF CURB                   |
| BOW   | BOTTOM OF WALL                 |
| CATV  | CABLE PEDESTAL                 |
| CI    | CURB INLET                     |
| EG    | DROP INLET                     |
| FES   | EXISTING GRADE                 |
| FFE   | FLARED END SECTION             |
| FG    | FINISHED GRADE                 |
| FP    | FLAG POLE                      |
| FW    | FIRE WATER                     |
| GW    | GUY WIRE                       |
| HDPE  | HIGH DENSITY POLYETHYLENE PIPE |
| INV.  | INVERT                         |
| LF    | LINEAR FEET                    |
| LP    | LIGHT POLE                     |
| PIV   | POST INDICATOR VALVE           |
| PP    | POWER POLE                     |
| R/W   | RIGHT OF WAY                   |
| RCP   | REINFORCED CONCRETE PIPE       |
| SB    | UNDERGROUND SIGNAL BOX         |
| SDM   | STORM DRAIN MANHOLE            |
| SF    | SQUARE FEET                    |
| SMH   | SEWER MANHOLE                  |
| SP    | TRAFFIC SIGNAL POLE            |
| TB    | TELEPHONE BOX                  |
| TERRA | TERRACOTTA PIPE                |
| TBOC  | TOP BACK OF CURB               |
| TOS   | TOP OF SLAB                    |
| TOW   | TOP OF WALL                    |
| WV    | WATER VALVE                    |
| YI    | YARD INLET                     |
| YL    | YARD LIGHT                     |

- SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED OR VERIFIED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.). THE UTILITY CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO THE SATISFACTION OF THE RELATED UTILITY COMPANY.
- Y. THE UTILITY CONTRACTOR SHALL PROVIDE HRW WITH AT LEAST ONE (1) FIRE HYDRANT WRENCH AND ONE (1) BREAK-AWAY FLANGE KIT FOR EVERY SUBDIVISION WITH FIRE HYDRANTS DEVELOPED IN HARNETT COUNTY. THESE ITEMS MUST BE PROVIDED TO HRW BEFORE THE FINAL INSPECTION WILL BE SCHEDULED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. IN ADDITION, THE UTILITY CONTRACTOR SHALL INSTALL A 4" X 4" CONCRETE VALVE MARKER AT THE EDGE OF THE RIGHT-OF-WAY TO IDENTIFY THE LOCATION OF EACH GATE VALVE INSTALLED IN THE NEW WATER SYSTEM WITH THE EXCEPTION OF THE FIRE HYDRANT ISOLATION VALVES. THE CONTRACTOR SHALL MEASURE THE DISTANCE FROM THE CENTER OF THE CONCRETE MARKER TO THE CENTER OF THE VALVE BOX. THIS DISTANCE (IN LINEAR FEET) SHALL BE STAMPED ON THE BRASS PLATE LOCATED ON THE TOP OF THE CONCRETE VALVE MARKER. IN LIEU OF INSTALLING THE CONCRETE VALVE MARKERS, THE UTILITY CONTRACTOR MAY PROVIDE AT LEAST TWO MEASUREMENTS FROM TWO INDEPENDENT PERMANENT ABOVE GROUND STRUCTURES TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS TO IDENTIFY THE VALVE LOCATIONS. THE PROFESSIONAL ENGINEER (PE) MUST INCLUDE THESE MEASUREMENTS IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.
- Z. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE DAMAGE FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE WATER SYSTEM IMPROVEMENTS HAVE BEEN ACCEPTED BY HARNETT REGIONAL WATER. HARNETT REGIONAL WATER WILL PROVIDE MAINTENANCE AND REPAIRS WHEN REQUESTED AND BILL THE DEVELOPER AND/OR UTILITY CONTRACTOR IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW WATER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE WATER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. THE FINAL INSPECTION OF WATER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.
- AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO ENSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD

CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION. SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ASSESSED TO THE DEVELOPER.

NOTE: CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY CONFLICTS, INCONSISTENCIES OR AMBIGUITIES EXIST BETWEEN CIVIL DRAWINGS & SPECIFICATIONS. IF HIDDEN SITE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION/DEMOLITION, CONTRACTOR SHALL OBTAIN WRITTEN RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK.

STORMWATER STRUCTURE NOTE: ELEVATIONS, PIPE LENGTHS AND SLOPES REFERENCED IN THE STORM PIPE TABLE AND STORM STRUCTURE TABLE ARE APPROXIMATE AND MAY HAVE BEEN ROUNDED. DEPENDING ON SUPPLIER OF PIPES AND STRUCTURES, SOME ELEVATIONS MAY REQUIRE FIELD ADJUSTMENT. IF THE CONTRACTOR FINDS A CONFLICT OR ERROR IN THE ELEVATIONS WITHIN THESE TABLES OR WITH SUPPLIER CUT SHEETS, THEY MUST CONTACT THE ENGINEER IMMEDIATELY AND OBTAIN WRITTEN RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE CONTRACTOR PROCEEDS AT THEIR OWN RISK AND EXPENSE.

NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C, HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

NOTH CAROLINA PROFESSIONAL ENGINEER  
SEAL  
032614  
J. MCCABE

06/18/26 10:27:26 AM

RED LINE ENGINEERING, P.C.  
SEAL  
C-3075  
CORPORATE

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RED LINE ENGINEERING, P.C. (C-3075)  
FLOUJAY VARNIA, NORTH CAROLINA 27526  
PHONE: (919) 778-8851  
WWW.RLENC.COM

F&S LAND DEVELOPMENT LLC

12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA 27526

42 BUSINESS PARK INDUSTRIAL FLEX BASE  
NOTES, LEGENDS, AND ABBREVIATIONS

REVISIONS:

DATE:

1 PER NC DOT/HRW

03/23/26

2 PER HRW

05/14/26

3 PER HRW

06/18/26

ISSUED FOR:

DATE:

REVIEW/PERMIT

07/22/25

NC DOT & HRW

01/14/26

PROJECT NO.:

DRAWN BY:

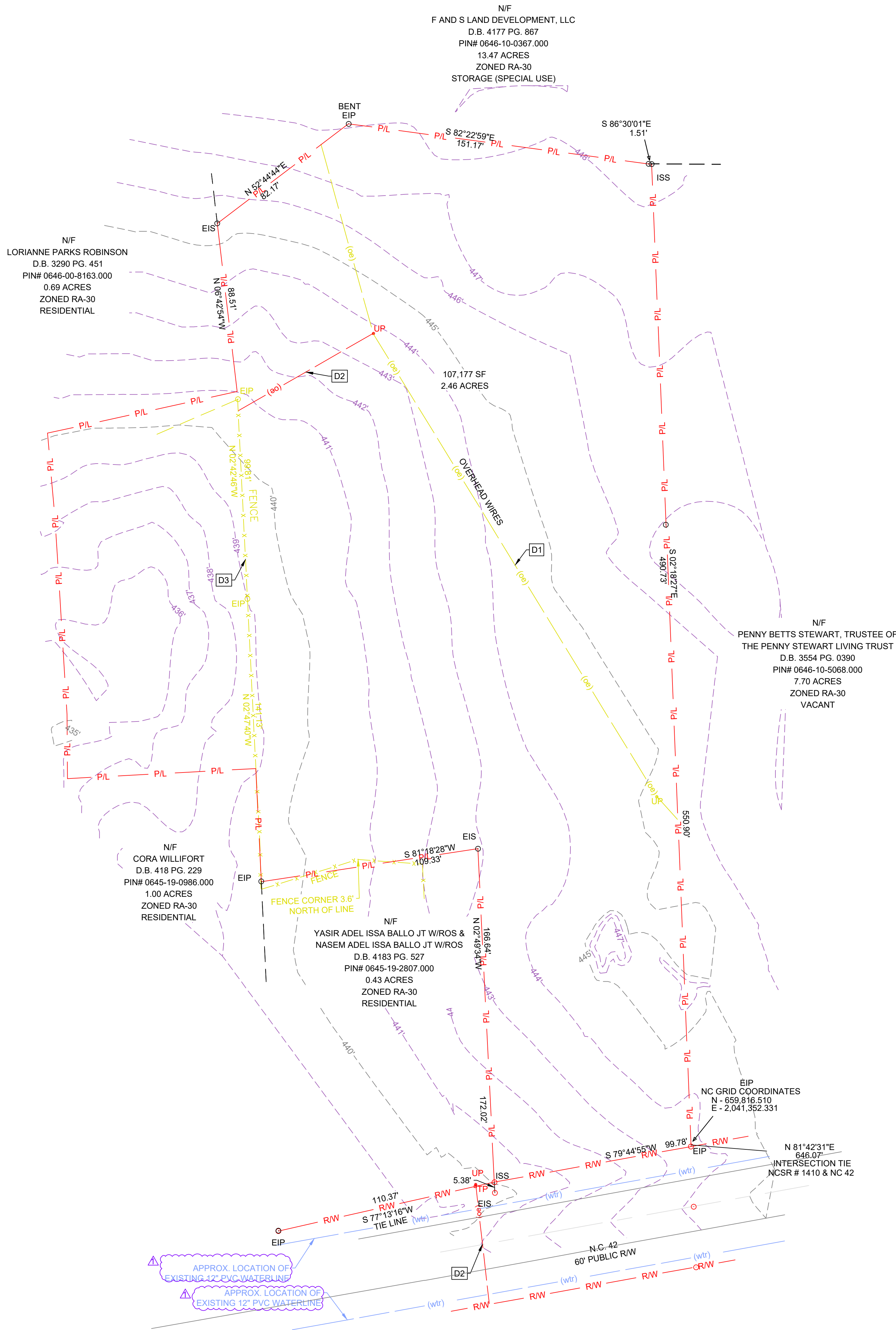
REVIEWED BY:

SHEET NUMBER:

C1.0

OF 19 SHEETS

445'  
440'  
439'



| EXISTING CONDITIONS & DEMO PLAN KEYNOTES |                                                   |
|------------------------------------------|---------------------------------------------------|
| D1                                       | EXISTING OVERHEAD ELECTRICAL WIRES TO BE REMOVED. |
| D2                                       | EXISTING OVERHEAD ELECTRICAL WIRES TO REMAIN.     |
| D3                                       | EXISTING FENCE TO BE REMOVED                      |

STORMWATER EXEMPTION NOTE: PROJECT IS NOT LOCATED WITHIN A PHASE 2 POST-CONSTRUCTION STORMWATER REGULATED AREA.

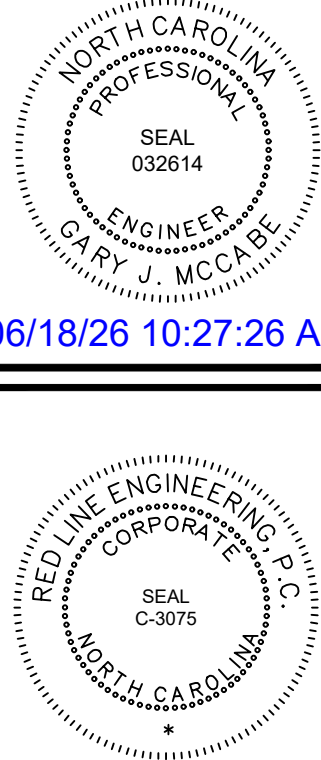
NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C, HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE HARNETT COUNTY AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

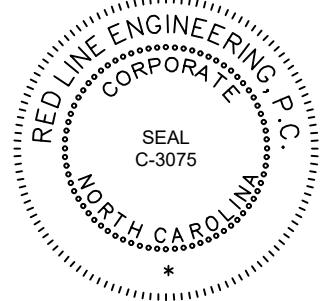
NOTE: CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IMMEDIATELY IF ANY CONFLICTS, INCONSISTENCIES OR AMBIGUITIES EXIST BETWEEN ARCHITECTURAL, P.M.E., STRUCTURAL & CIVIL DRAWINGS & SPECIFICATIONS. IF HIDDEN SITE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION/DEMOLITION, CONTRACTOR SHALL OBTAIN WRITTEN RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK.



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F&S LAND DEVELOPMENT LLC

12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526

42 BUSINESS PARK INDUSTRIAL FLEX BASE  
EXISTING CONDITIONS AND DEMOLITION PLAN

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

|              |  |
|--------------|--|
| PROJECT NO.: |  |
| DRAWN BY:    |  |
| REVIEWED BY: |  |

SHEET NUMBER:

C2.0

OF 19 SHEETS

N/F  
F AND S LAND DEVELOPMENT, LLC  
D.B. 4177 PG. 867  
PIN# 0646-10-0367.000  
13.47 ACRES  
ZONED RA-30  
STORAGE (SPECIAL USE)

N/F  
LORIANNE PARKS ROBINSON  
D.B. 3290 PG. 451  
PIN# 0646-00-8163.000  
0.69 ACRES  
ZONED RA-30  
RESIDENTIAL

N/F  
CORA WILLIFORT  
D.B. 418 PG. 229  
PIN# 0645-19-0986.000  
1.00 ACRES  
ZONED RA-30  
RESIDENTIAL

N/F  
YASIR ADEL ISSA BALLO JT W/ROS &  
NASEM ADEL ISSA BALLO JT W/ROS  
D.B. 4183 PG. 527  
PIN# 0645-19-2807.000  
0.43 ACRES  
ZONED RA-30  
RESIDENTIAL

N/F  
PENNY BETTS STEWART, TRUSTEE OF  
THE PENNY STEWART LIVING TRUST  
D.B. 3554 PG. 0390  
PIN# 0646-10-5068.000  
7.70 ACRES  
ZONED RA-30  
VACANT

SCALE: 1" = 30'  
30' 0 30'  
SCALE OF MAP MAY VARY  
DUE TO METHODS OF REPRODUCTION.

06/18/26 10:27:26 AM

RED LINE ENGINEERING, P.C.  
CORPORATE  
SEAL  
C-3075  
NORTH CAROLINA  
J. MCCABE  
ENGINEER

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RED LINE ENGINEERING, P.C. (C-3075)  
RED LINE ENGINEERING, P.C. (C-3075)  
FLOUAY VARIANA, NORTH CAROLINA 27526  
PHONE - (919) 779-8851  
WWW.RELENC.COM

| SITE PLAN KEYNOTES |                                                                                                                                                                                                                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S1                 | INSTALL HEAVY DUTY ASPHALT IN DRIVE AISLE AND PARKING STALLS AS SHOWN (SEE DETAIL SHEET C7.0).                                                                                                                                             |
| S2                 | PROPOSED 16,000 SF BUILDING                                                                                                                                                                                                                |
| S3                 | INSTALL 9' X 18' ADA COMPLIANT PARKING SPACE WITH 9' STRIPED AISLE AND SIGNAGE AS SHOWN (PER HARNETT COUNTY STANDARDS).                                                                                                                    |
| S4                 | PROPOSED 6 FT WIDE STRIPED WALKWAY ADJACENT TO PARKING LOT.                                                                                                                                                                                |
| S5                 | INSTALL 24" THERMOPLASTIC STOP BAR STRIPING AS SHOWN PER LATEST NCDOT & MUTCD STANDARDS (TYP)(SEE DETAIL ON C7.0).                                                                                                                         |
| S6                 | INSTALL 6' WIDE CONCRETE SIDEWALK FROM PARKING TO BUILDING (SEE DETAIL ON SHEET C7.0).                                                                                                                                                     |
| S7                 | INSTALL 8" THICK REINFORCED CONCRETE SLAB FOR DUMPSTER ACCESS. DOWEL NEW SLAB INTO EXISTING SLAB. CUT CONTROL JOINTS AT 10 FT O.C. INSTALL EXPANSION JOINTS ABUTTING ALL OTHER CONCRETE OR MASONRY STRUCTURES. (SEE DETAILS ON SHEET C7.0) |
| S8                 | PROPOSED MASONRY DUMPSTER ENCLOSURE. COLOR AND MATERIALS SHALL BE SIMILAR TO COLOR(S) AND MATERIAL(S) OF BUILDING (SEE DETAILS ON SHEET C7.0).                                                                                             |
| S9                 | INSTALL STOP SIGN AS SHOWN PER LATEST NCDOT & MUTCD STANDARDS (TYP)(SEE DETAIL ON C7.0).                                                                                                                                                   |
| S10                | FIRE TRUCK WHEEL PATH (LADDER TRUCK)                                                                                                                                                                                                       |
| S11                | INSTALL CONCRETE WHEEL STOP 30" FROM SIDEWALK/CURB TO TIRE SIDE OF WHEEL STOP.                                                                                                                                                             |
| S12                | PROPOSED PRIVATE ROAD, ROAD NAME OPTIONS TO BE SUBMITTED BY OWNER AND APPROVED BY E-911.                                                                                                                                                   |
| S13                | PROPOSED MAIL KIOSK (SEE TYPICAL KIOSK DETAIL ON SHEET C7.0).                                                                                                                                                                              |
| S14                | INSTALL 30" CURB & GUTTER (SEE DETAIL ON SHEET C7.0).                                                                                                                                                                                      |

F&S LAND DEVELOPMENT LLC  
12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
OVERALL SITE & EMERGENCY VEHICLE ACCESS PLAN

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

|              |  |
|--------------|--|
| PROJECT NO.: |  |
| DRAWN BY:    |  |
| REVIEWED BY: |  |

SHEET NUMBER:

C3.0  
OF 19 SHEETS



Know what's below.  
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MONUMENT SIGN NOTE: MONUMENT SIGN  
TO BE SETBACK AT LEAST 20' FROM THE  
RIGHT-OF-WAY INTERSECTION AND  
PERMITTED SEPARATELY (BY OTHERS).

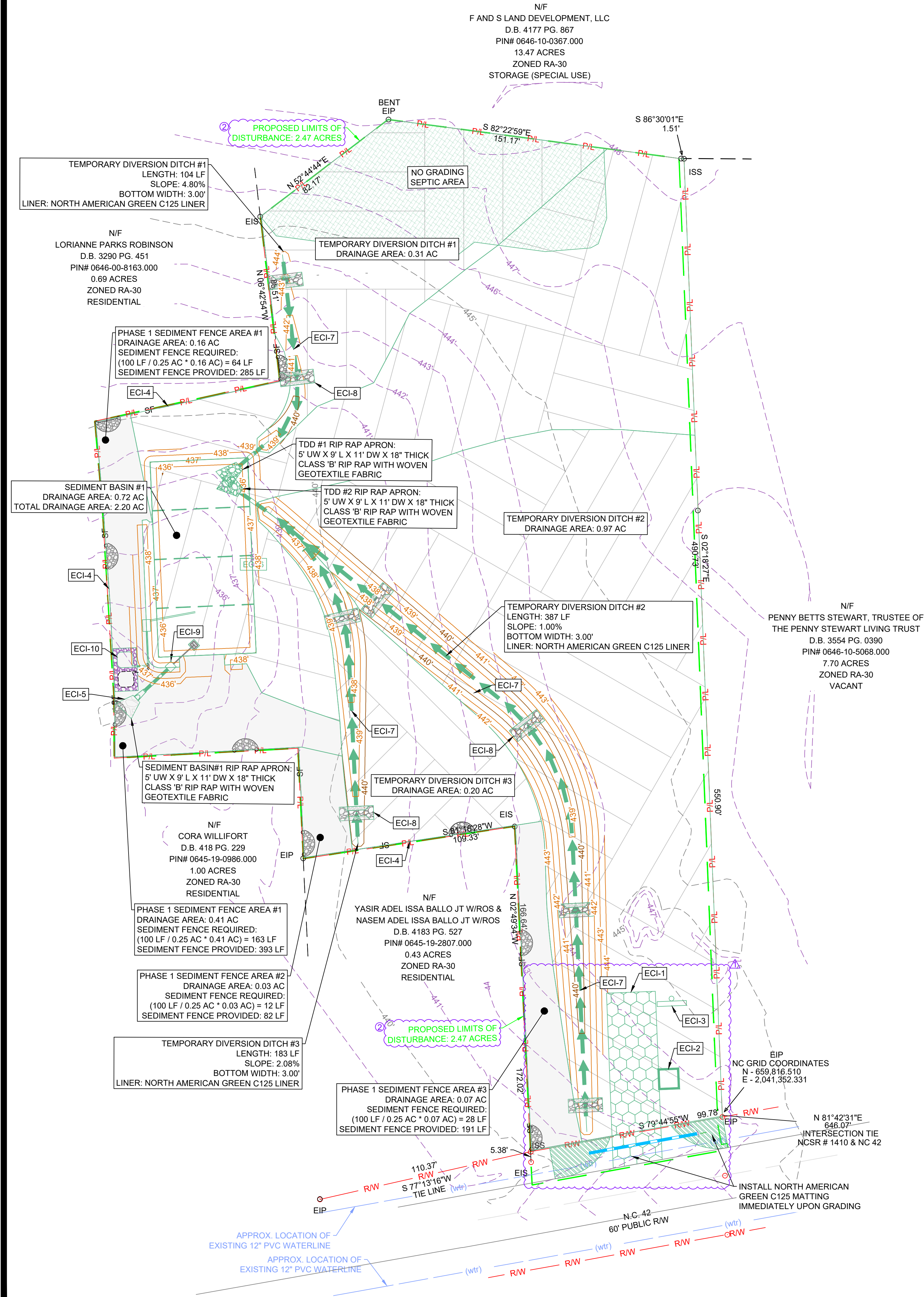
PROPERTY MAINTENANCE NOTE: SITE, PARKING, AND  
LANDSCAPE BUFFER SHALL BE MAINTAINED THROUGH  
CONTRACTORS HIRED BY F&S LAND DEVELOPMENT.

NOTE: NC 50 IS ON THE HARNETT COUNTY COMPREHENSIVE  
TRANSPORTATION PLAN.

NOTE: THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY  
AGRICULTURAL DISTRICT.

NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK  
COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING  
CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C,  
HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ  
AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

NOTE: CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY  
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CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN  
RISK.



EROSION CONTROL CONSTRUCTION SEQUENCE

- PHASE 1
1. OBTAIN ALL NECESSARY PERMITS FROM HARNETT COUNTY, NCDOT AND NCDEQ.
  2. SCHEDULE PRE-CONSTRUCTION MEETING WITH NCDOT, OWNER, AND ENGINEER.
  3. PERFORM CONSTRUCTION STAKEOUT. CLEAR/GRUB/ROUGH GRADE ONLY ENOUGH AREA TO INSTALL INITIAL SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO, TEMPORARY CONSTRUCTION ENTRANCE, COMBINATION TREE PROTECTION AND SEDIMENT FENCE WITH OUTLETS. SEED TEMPORARY DIVERSION DITCHES IMMEDIATELY AFTER CONSTRUCTION.
  5. EXCAVATE TOPOGRAPHY NECESSARY FOR SEDIMENT BASIN INSTALLATION. INSTALL RISER, FAIRCLOTH SKIMMER, AND SEDIMENT BASIN BAFFLES. SEED SEDIMENT BASINS IMMEDIATELY AFTER CONSTRUCTION.
  6. SCHEDULE INSPECTION FOR INITIAL ONSITE EROSION CONTROL MEASURES WITH NCDEQ ENGINEERING INSPECTOR TO OBTAIN CERTIFICATE OF COMPLIANCE (C.O.C.).
  7. UPON ISSUANCE OF C.O.C. COMMENCE GRUBBING, AND ROUGH GRADING.
  8. VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO GRADING.
- NOTE: THIS EROSION CONTROL SEQUENCE IS FOR ENFORCEMENT OF EROSION CONTROL MEASURES ONLY. THIS DOES NOT IN ANY WAY OBLIGATE OR DIRECT THE CONTRACTOR ON MEANS AND METHODS OF HOW TO CONSTRUCT THE PROJECT.

- MAINTENANCE NOTE
1. SEED AND MULCH ALL EROSION CONTROL MEASURES IMMEDIATELY AFTER CONSTRUCTION. SLOPES SHALL BE MATTED IN ACCORDANCE WITH THE APPROVED PLAN.
  2. STABILIZE SITE IN ACCORDANCE WITH THE NPDES STABILIZATION TIME FRAMES AND TEMPORARY SEEDING SCHEDULE. MAINTAIN SELF-INSPECTION RECORDS WEEKLY OR AFTER A RAINFALL EVENT IN EXCESS OF ONE INCH IN ACCORDANCE WITH NPDES.
  3. CONTRACTOR SHALL INSPECT & MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAIN EVENT AND/OR A MIN. OF ONCE PER WEEK.

| EROSION CONTROL PHASE I KEYNOTES |                                                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ECI-1                            | INSTALL 25'X70'X12" TEMPORARY CONSTRUCTION ENTRANCE.                                                                                                                                      |
| ECI-2                            | INSTALL CONCRETE WASHOUT PIT AT AT ENTRANCE.                                                                                                                                              |
| ECI-3                            | APPROXIMATE LOCATION OF RAIN GAUGE AND PERMITS/RECORD BOX ON-SITE.                                                                                                                        |
| ECI-4                            | INSTALL APPROX. 839 LF SEDIMENT FENCING WITH SEDIMENT FENCE OUTLETS EVERY 100 LF MAX AS SHOWN.                                                                                            |
| ECI-5                            | INSTALL RIP RAP APRON AT THE END OF FLARED END SECTION AS SHOWN.                                                                                                                          |
| ECI-6                            | INSTALL TEMPORARY PROPOSED 100'X50'X2' DEEP SEDIMENT BASIN WITH BAFFLES AND SKIMMER AS SHOWN.                                                                                             |
| ECI-7                            | INSTALL TEMPORARY DIVERSION DITCHES WITH TEMPORARY EROSION CONTROL LINER AS SHOWN. DIVERSION DITCH TO END WITH 18" PVC (SCH40) TEMPORARY SLOPE DRAIN TO SEDIMENT BASIN.                   |
| ECI-8                            | INSTALL TEMPORARY ROCK CHECK DAMS EVERY 100 FT MAX IN TEMPORARY DIVERSION DITCHES.                                                                                                        |
| ECI-9                            | INSTALL SCM RISER AND 12" RCP OUTLET PIPE. CONNECT 2" FAIRCLOTH SKIMMER WITH 1.8" Ø ORIFICE TO RISER UNDERDRAIN LOCATION. AFTER CONVERSION, REMOVE SKIMMER AND INSTALL 6" PVC UNDERDRAIN. |
| ECI-10                           | INSTALL DEWATERING PUMP WITH (2) 8"x8" DEWATERING SILT BAGS                                                                                                                               |

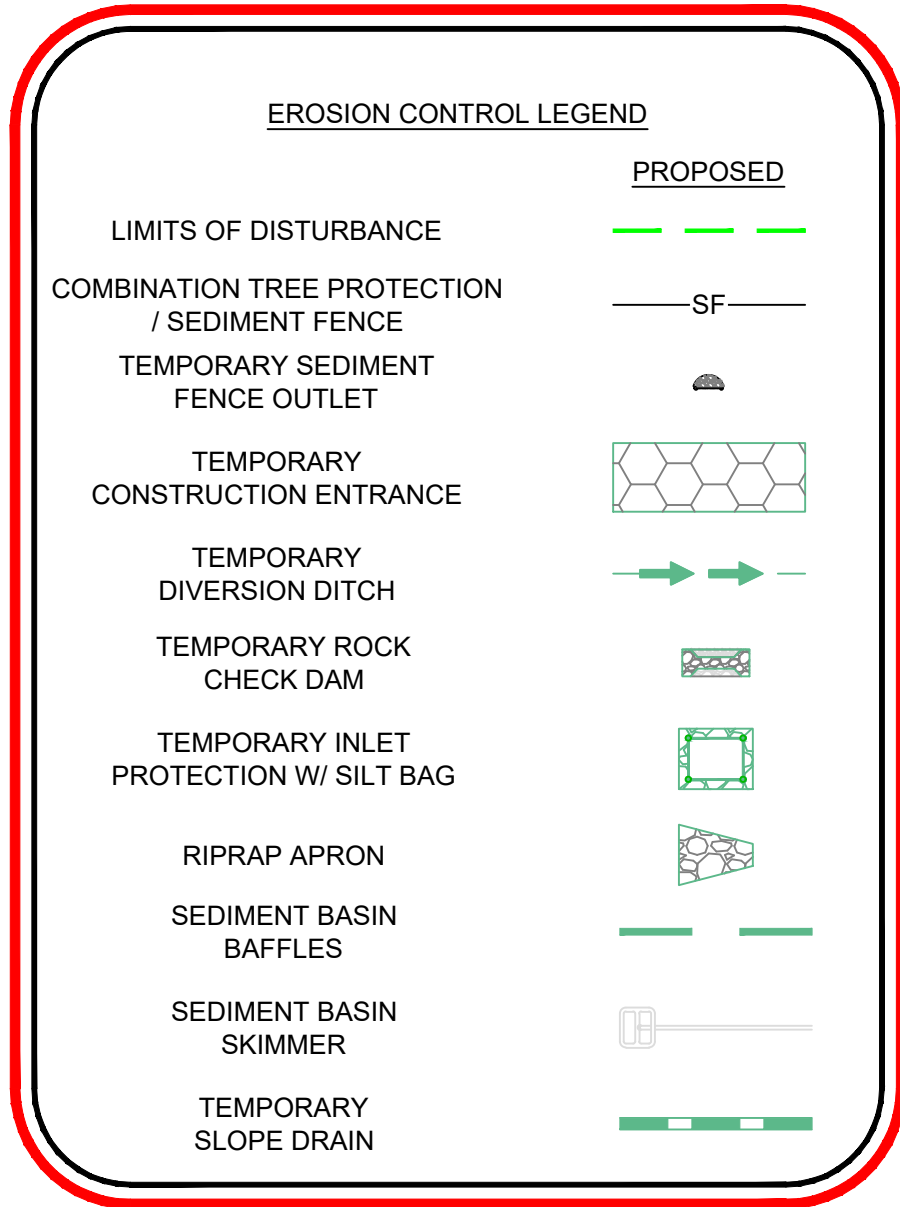
EROSION CONTROL SUMMARY:

- (1) 1 CONSTRUCTION ENTRANCES
- (2) 840 LF COMBINATION TREE PROTECTION / SEDIMENT FENCE
- (3) 9 SEDIMENT FENCE OUTLETS
- (4) 674 LF TEMPORARY DIVERSION DITCHES
- (5) 8 TEMPORARY ROCK CHECK DAMS
- (6) 6 INLET PROTECTION
- (7) 4 RIP RAP APRONS

| NPDES STABILIZATION TIME FRAMES              |               |                                                                                        |
|----------------------------------------------|---------------|----------------------------------------------------------------------------------------|
| SITE AREA DESCRIPTION                        | STABILIZATION | TIMEFRAME EXCEPTIONS                                                                   |
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES  | 7 DAYS        | NONE                                                                                   |
| HIGH QUALITY WATER (HQW) ZONES               | 7 DAYS        | NONE                                                                                   |
| SLOPES STEEPER THAN 3:1                      | 7 DAYS        | IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 - 14 DAYS ARE ALLOWED |
| SLOPES 3:1 OR FLATTER                        | 14 DAYS       | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH AND WITH SLOPES STEEPER THAN 4:1          |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS       | 7 DAYS FOR PERIMETERS AND HQW ZONES                                                    |

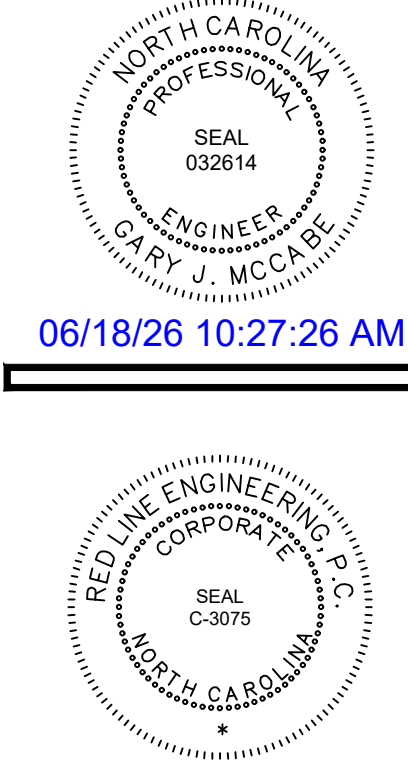
SITE GRADING & EROSION CONTROL NOTES:

- (1) SEE GENERAL NOTES, SHEET C1.0.
- (2) DISTURBED/DENUDED AREA: 2.47 ACRES
- (3) TOTAL TRACT AREA: 2.46 ACRES
- (4) ALL DISTURBED AREAS SHALL BE SEEDED, MULCHED OR OTHERWISE STABILIZED WITHIN IN ACCORDANCE WITH THE NPDES TIME FRAMES LOCATED ON THIS SHEET AND WITH THE TEMPORARY SEEDING SCHEDULE ON SHEET C8.0.
- (5) ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
- (6) CONTRACTOR TO SWEEP AND KEEP CLEAN OF SEDIMENT THE ROADWAY ADJACENT TO THE PROJECT SITE AT ALL TIMES OR WASH STATION WILL BE REQUIRED.
- (7) ALL DISTURBED AREAS SHALL BE SEEDED WITH NON-CLUMPING NATIVE GRASSES (i.e. BERMUDA, FESCUE, CENTIPEDE, ETC.)



NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C, HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

NOTE: CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY CONFLICTS, INCONSISTENCIES OR AMBIGUITIES EXIST BETWEEN CIVIL DRAWINGS & SPECIFICATIONS. IF HIDDEN SITE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION/DEMOLITION, CONTRACTOR SHALL OBTAIN WRITTEN RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK.



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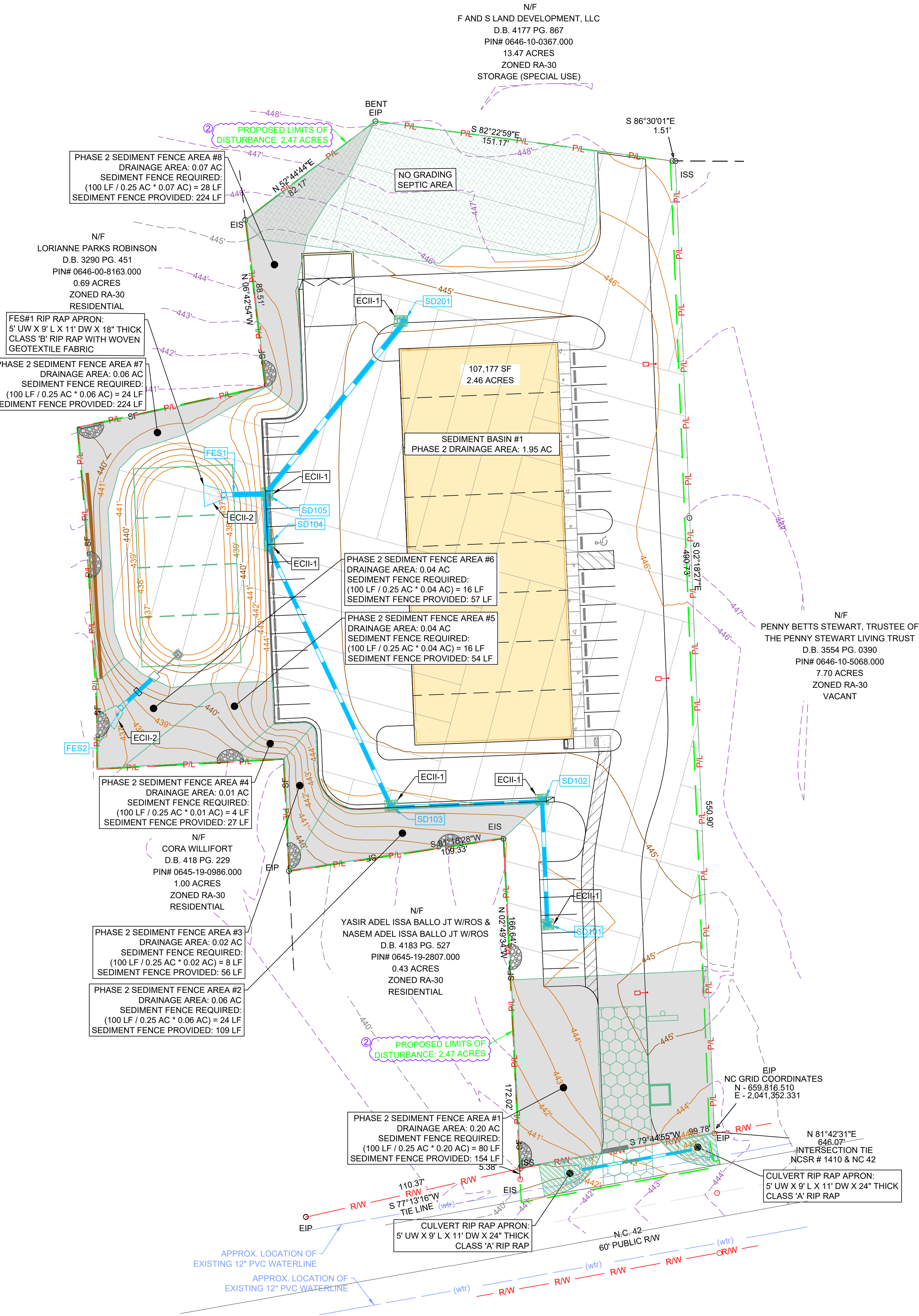
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F&S LAND DEVELOPMENT LLC  
12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
EROSION CONTROL PLAN - PHASE I

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |
| ISSUED FOR:     | DATE:    |
| REVIEW/PERMIT   | 07/22/25 |
| NCDOT & HRW     | 01/14/26 |
| PROJECT NO.:    |          |
| DRAWN BY:       |          |
| REVIEWED BY:    |          |

SHEET NUMBER:  
C4.0  
OF 19 SHEETS



EROSION CONTROL CONSTRUCTION SEQUENCE

PHASE 2

1. INSTALL DEVICES FOR STORM WATER COLLECTION SYSTEM AS THE SITE IS BEING GRADED AND PROTECT INLETS WITH SILT BAG INLET PROTECTION OR OTHER APPROVED MEASURES.
2. SHIFT AND REPAIR DIVERSION DITCH AS NEEDED TO INSTALL UTILITIES.
3. FINISH GRADE THE SITE. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, DITCH LININGS, ETC. SCARIFY, SEED, FERTILIZE, & MULCH ALL DENUDED AREAS IN ACCORDANCE WITH PERMANENT SEEDING SCHEDULE AND GROUND STABILIZATION TIME FRAMES.
4. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, SCHEDULE INSPECTIONS WITH NCDEQ.
5. UPON APPROVAL BY THE INSPECTOR, THE CONTRACTOR SHALL RETURN TO THE SITE AND REMOVE TEMPORARY DIVERSIONS, SILT FENCE, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS.
6. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY NCDEQ. OBTAIN A CERTIFICATE OF COMPLETION.
7. NCDEQ INSPECTOR AND ENGINEER MUST GRANT PERMISSION TO REMOVE SEDIMENT BASIN #1.
8. UPON ISSUANCE OF CERTIFICATE OF COMPLETION, OWNER MUST SUBMIT A NOTICE OF TERMINATION TO NCDEQ FOR TERMINATION OF COVERAGE FOR NCG01 PERMIT.

NOTE: THIS EROSION CONTROL SEQUENCE IS FOR ENFORCEMENT OF EROSION CONTROL MEASURES ONLY. THIS DOES NOT IN ANY WAY OBLIGATE OR DIRECT THE CONTRACTOR ON MEANS AND METHODS OF HOW TO CONSTRUCT THE PROJECT.

MAINTENANCE NOTE

1. SEED AND MULCH ALL EROSION CONTROL MEASURES IMMEDIATELY AFTER CONSTRUCTION. SLOPES SHALL BE MATTED IN ACCORDANCE WITH THE APPROVED PLAN.
2. STABILIZE SITE IN ACCORDANCE WITH THE NPDES STABILIZATION TIME FRAMES AND TEMPORARY SEEDING SCHEDULE. MAINTAIN SELF-INSPECTION RECORDS WEEKLY OR AFTER A RAINFALL EVENT IN EXCESS OF ONE INCH IN ACCORDANCE WITH NPDES.
3. CONTRACTOR SHALL INSPECT & MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAIN EVENT AND/OR A MIN. OF ONCE PER WEEK.

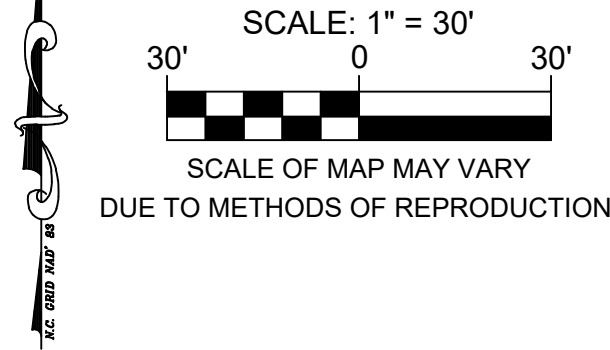
EROSION CONTROL PHASE II KEYNOTES

|        |                                                                                                                                     |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|
| ECII-1 | INSTALL TEMPORARY SILT SACK INLET PROTECTION (ACF SILT SACK - TYPE B OR EQUAL) AND GRAVEL YARD INLET PROTECTION IN ALL YARD INLETS. |
| ECII-2 | INSTALL RIP RAP APRON AT FLARED END SECTION.                                                                                        |

EROSION CONTROL SUMMARY:

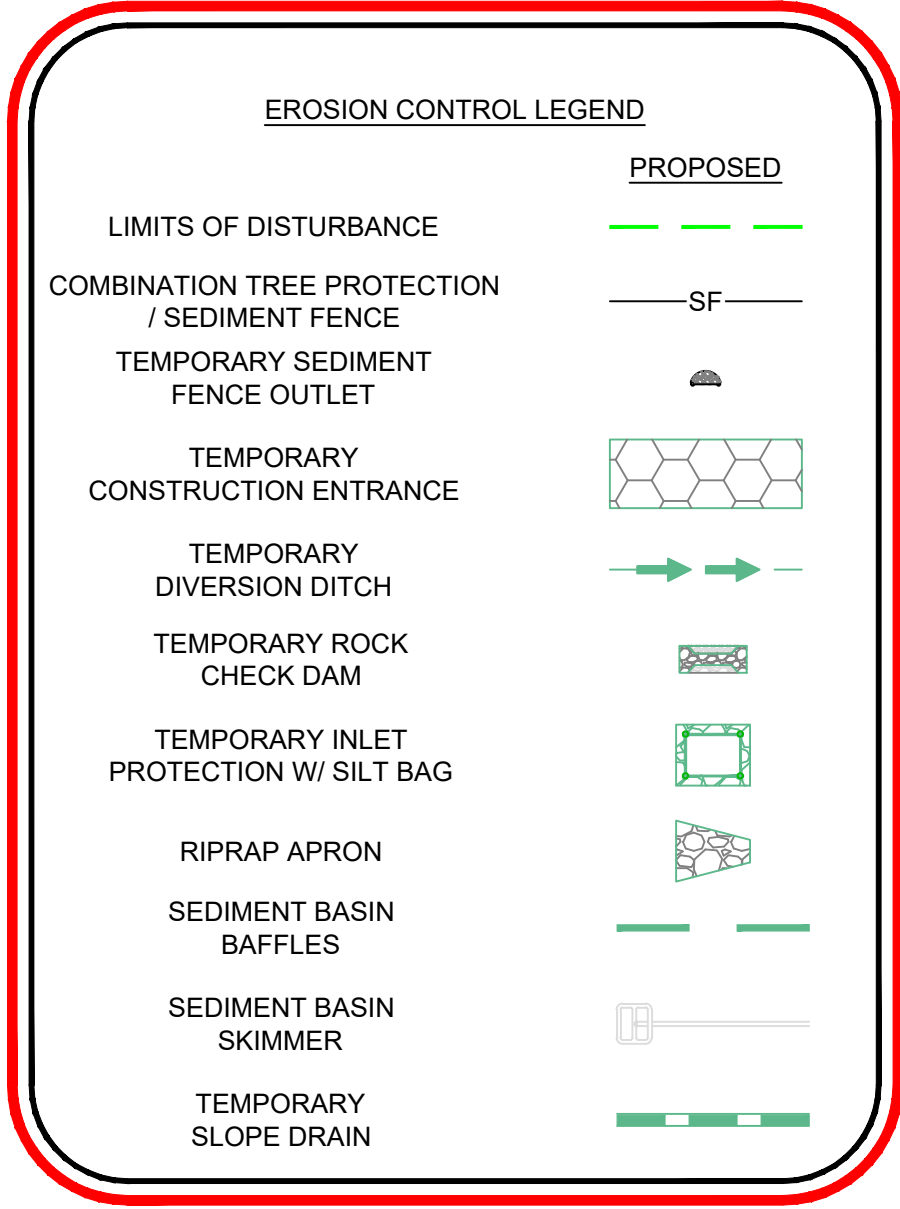
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- (3) 9 SEDIMENT FENCE OUTLETS
- (4) 674 LF TEMPORARY DIVERSION DITCHES
- (5) 8 TEMPORARY ROCK CHECK DAMS
- (6) 6 INLET PROTECTION
- (7) 4 RIP RAP APRONS

| NPDES STABILIZATION TIME FRAMES              |               |                                                                                        |
|----------------------------------------------|---------------|----------------------------------------------------------------------------------------|
| SITE AREA DESCRIPTION                        | STABILIZATION | TIMEFRAME EXCEPTIONS                                                                   |
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES  | 7 DAYS        | NONE                                                                                   |
| HIGH QUALITY WATER (HQW) ZONES               | 7 DAYS        | NONE                                                                                   |
| SLOPES STEEPER THAN 3:1                      | 7 DAYS        | IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 - 14 DAYS ARE ALLOWED |
| SLOPES 3:1 OR FLATTER                        | 14 DAYS       | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH AND WITH SLOPES STEEPER THAN 4:1          |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS       | 7 DAYS FOR PERIMETERS AND HQW ZONES                                                    |



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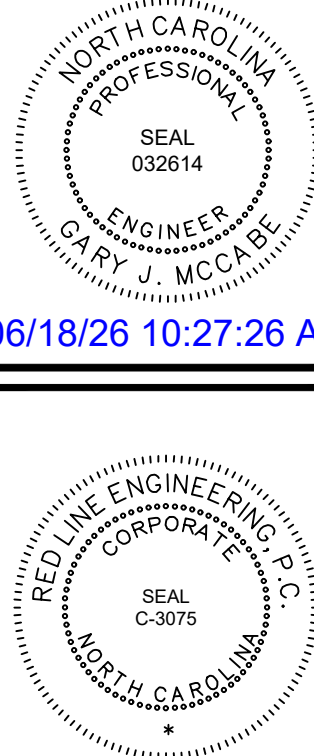


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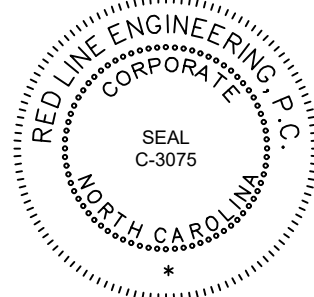
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HOLLY SPRINGS, NORTH CAROLINA 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
EROSION CONTROL PLAN - PHASE II

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

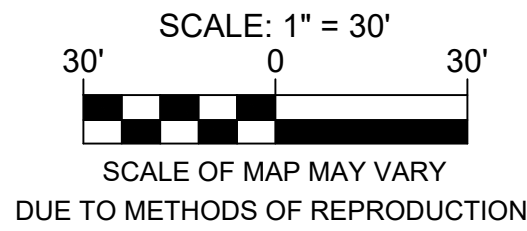
| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

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| PROJECT NO.: |  |
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| REVIEWED BY: |  |

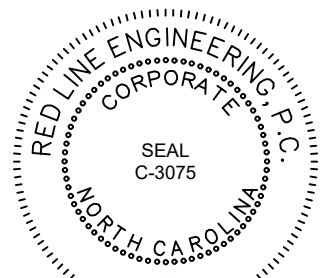
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OF 19 SHEETS



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12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
NPDES STABILIZATION PLAN

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| NPDES STABILIZATION TIME FRAMES              |               |                                                                                        |
|----------------------------------------------|---------------|----------------------------------------------------------------------------------------|
| SITE AREA DESCRIPTION                        | STABILIZATION | TIMEFRAME EXCEPTIONS                                                                   |
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES  | 7 DAYS        | NONE                                                                                   |
| HIGH QUALITY WATER (HQW) ZONES               | 7 DAYS        | NONE                                                                                   |
| SLOPES STEEPER THAN 3:1                      | 7 DAYS        | IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 - 14 DAYS ARE ALLOWED |
| SLOPES 3:1 OR FLATTER                        | 14 DAYS       | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH AND WITH SLOPES STEEPER THAN 4:1          |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS       | 7 DAYS FOR PERIMETERS AND HQW ZONES                                                    |

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION A: SELF-INSPECTION**

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the inspection record.

| Inspection                | Frequency                                                               | Inspection record and reporting                                                                                                                                                                                                                                                                                |
|---------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Non-point runoff      | As soon as possible, but no later than 7 calendar days after the event. | Only rainfall amounts. If no data, no data observations are made during or after the event. If data is available, record the rainfall amount for the event. If the rainfall amount is greater than 1.0 inch, record the rainfall amount for the event.                                                         |
| (2) EESC Measures         | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (3) Stormwater discharge  | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (4) Stormwater storage    | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (5) Stormwater treatment  | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (6) Stormwater disposal   | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (7) Stormwater reuse      | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (8) Stormwater recycling  | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (9) Stormwater treatment  | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (10) Stormwater disposal  | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (11) Stormwater reuse     | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |
| (12) Stormwater recycling | As soon as possible, but no later than 7 calendar days after the event. | 1. Date and time of the inspection.<br>2. Name of the person performing the inspection.<br>3. Location of the inspection.<br>4. Description of the inspection.<br>5. Description of the inspection results.<br>6. Description of the inspection findings.<br>7. Description of the inspection recommendations. |

**SECTION B: RECORDKEEPING**

1. EESC Plan Documentation

The approved EESC plan as well as any approved deviation shall be kept on the site. The approved EESC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the EESC plan shall be kept on site and available for inspection at all times during normal business hours.

(a) A plan of grading has been completed.

(b) Ground cover is located and installed in accordance with the approved EESC plan.

(c) The maintenance and repair requirements for all EESC measures have been performed.

(d) Corrective actions have been taken to EESC measures.

2. Additional Documentation to be Kept on Site

In addition to the EESC plan documents above, the following items shall be kept on the site and available for inspection at all times during normal business hours, unless the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the EESC plan and inspection records shall be maintained for a period of three years after project completion and made available upon request. (40 CFR 122.43)

**PART III, SECTION B, ITEM (H)**

**DRAW DOWN OF PERIMETER BASINS FOR INSPECTION OR CLOSE OUT**

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The EESC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the EESC plan authority has approved these terms.

(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, item (2)(c) and (d) of this permit.

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, wet tanks, and filtration systems.

(d) Vegetated, upland areas of the site or a properly designed area pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.

(e) Velocity dispersion devices such as check dams, sediment traps, and traps are provided at the discharge points of all dewatering devices, and

(f) Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause disposal of sediment into waters of the United States.

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**EFFECTIVE: 04/01/19**

**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections 4 and 5, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

| Site Area Description                                      | Required Ground Stabilization Timeframes | Timeframe variations                                                                   |
|------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------|
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7                                        | None                                                                                   |
| (b) High Quality Water (HQW) Zones                         | 7                                        | None                                                                                   |
| (c) Slopes steeper than 3:1                                | 7                                        | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed. |
| (d) Slopes 3:1 to 4:1                                      | 14                                       | 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones            |
| (e) Areas with slopes flatter than 4:1                     | 14                                       | 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones            |

**GROUND STABILIZATION SPECIFICATION**

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

| Temporary Stabilization                                                  | Permanent Stabilization                                                     |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| • Temporary grass seed covered with straw or other mulches and seedlings | • Permanent grass seed covered with straw or other mulches and seedlings    |
| • Hydroseeding                                                           | • Geotextile fabric such as permeable soil reinforcement matting            |
| • Rolled erosion control products with or without temporary grass seed   | • Hydroseeding                                                              |
| • Appropriately applied straw or other mulch                             | • Strips or other permanent slatting covered with mulch                     |
| • Plastic sheeting                                                       | • Strips and evenly distributed ground cover sufficient to restrain erosion |
|                                                                          | • Structural methods such as concrete, asphalt or retaining walls           |
|                                                                          | • Rolled erosion control products with grass seed                           |

**POLYCARBONATES (PAMS) AND FLOCCULANTS**

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.

2. Apply flocculants at or before the time of erosion and sediment control measures.

3. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.

4. Provide ponding area for containment of treated stormwater before discharging offsite.

5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

1. Maintain vehicles and equipment to prevent discharge of fluids.

2. Provide drip pans under any stored equipment.

3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.

4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).

5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.

6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**UTILE, BUILDING MATERIAL AND LAND CLEARING WASTE**

1. Never bury or burn waste. Place litter and debris in approved waste containers.

2. Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.

3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.

4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.

5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.

6. Anchor all lightweight items in waste containers during times of high winds.

7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.

8. Dispose waste off-site at an approved disposal facility.

9. On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

1. Store paint and other liquid waste in storm drains, ditches or wetlands.

2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.

3. Contain liquid wastes in a controlled area.

4. Containment must be labeled, sized and placed appropriately for the needs of site.

5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 feet offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.

2. Provide stacking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.

3. Monitor portable toilets for leaking and properly dispose of any leaked material.

4. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.

2. Protect stockpile with silt fence installed along top of slope with a minimum offset of five feet from the toe of stockpile.

3. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the manufacturer's instructions.

4. Provide physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

**HAZARDOUS AND TOXIC WASTE**

1. Create designated hazardous waste collection area on-site.

2. Place hazardous waste containers under cover or secondary containment.

3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

1. Store and apply herbicides, pesticides and rodenticides in accordance with label instructions.

2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.

3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.

4. Do not stockpile these materials on-site.

**CONCRETE WASHOUTS**

1. Do not discharge concrete or cement slurry from the site.

2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.

3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within six feet of silt fence.

4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your regional authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.

5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.

6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlets closest to the washout which could receive spills or overflow.

7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.

8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.

9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, and bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.

10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

**HAZARDOUS AND TOXIC WASTE**

1. Create designated hazardous waste collection area on-site.

2. Place hazardous waste containers under cover or secondary containment.

3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

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**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING**

**EFFECTIVE: 04/01/19**

| REVISIONS:       | DATE:    |
|------------------|----------|
| 1. PER NCDOT/HRW | 03/23/26 |
| 2. PER HRW       | 05/14/26 |
| 3. PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

| PROJECT NO.: | 24-013 |
|--------------|--------|
| DRAWN BY:    | GJM    |
| REVIEWED BY: | GJM    |

SHEET NUMBER:

C4.2

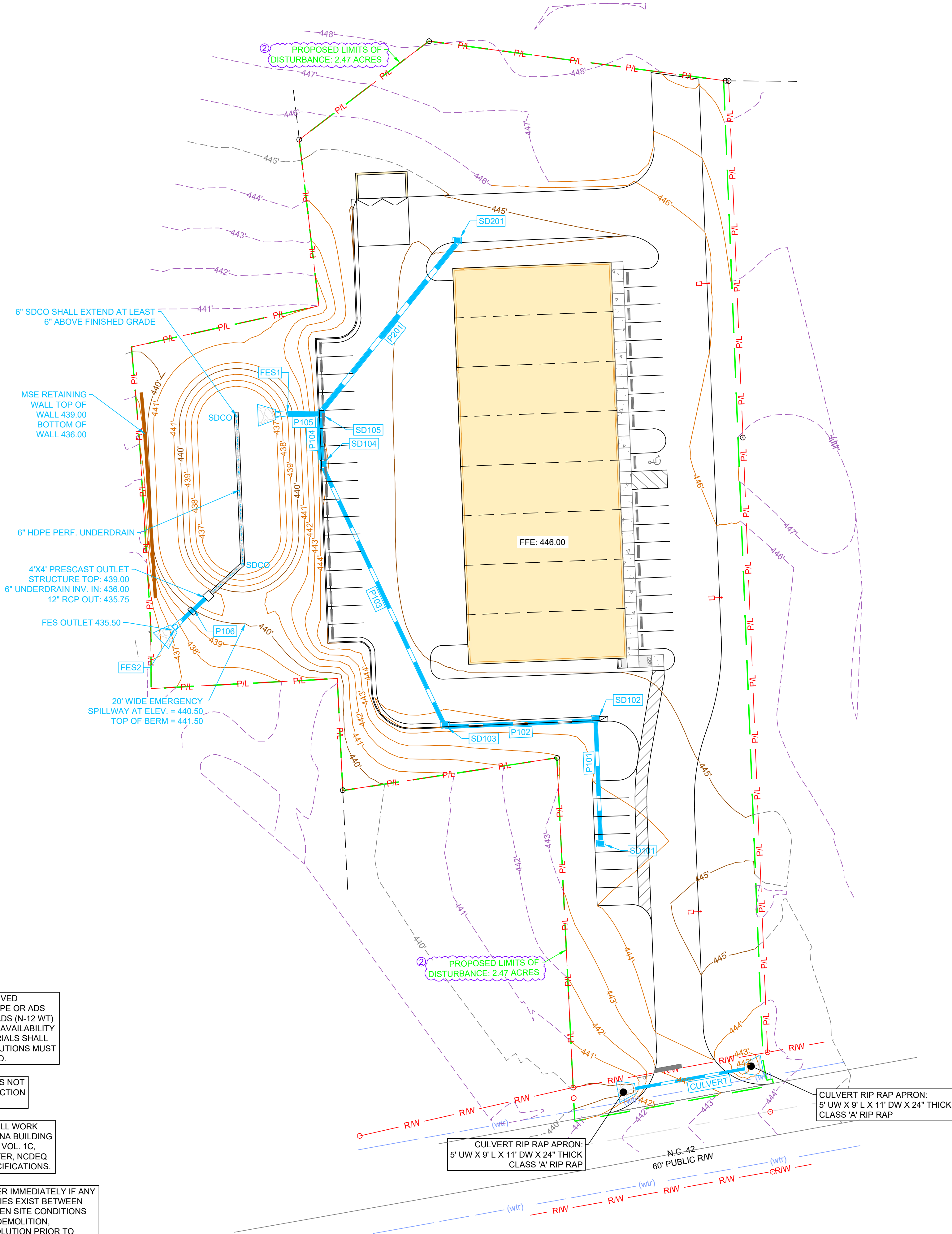
OF 19 SHEETS

STORM PIPE MATERIAL NOTE: NCDOT APPROVED MATERIALS SUCH AS RCP (CLASS III OR IV) PIPE OR ADS HP STORM PIPE MAY BE SUBSTITUTED FOR ADS (N-12 WT) PIPE BY THE OWNER/DEVELOPER BASED ON AVAILABILITY OF MATERIALS. TRANSITIONS IN PIPE MATERIALS SHALL OCCUR IN STRUCTURES ONLY. ALL SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER OF RECORD.

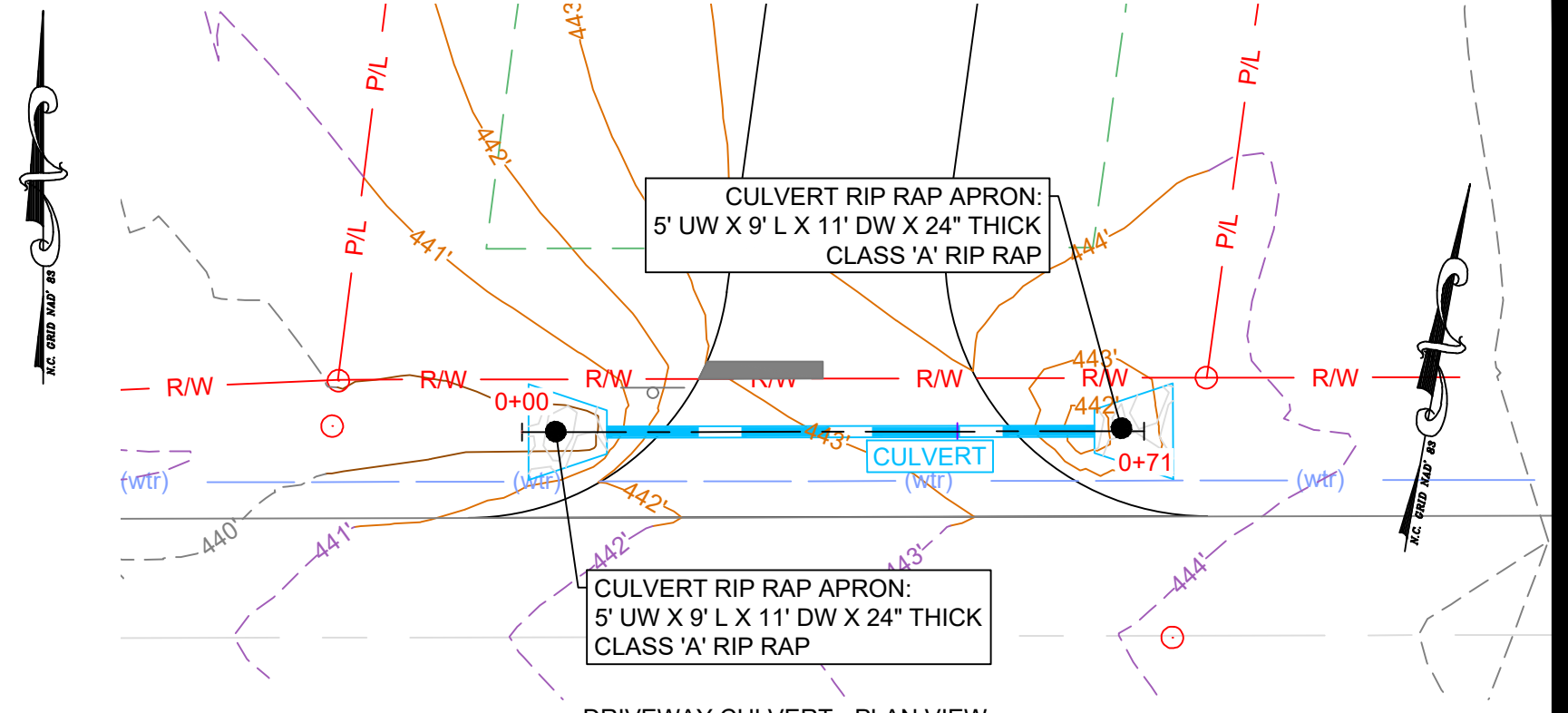
STORMWATER EXEMPTION NOTE: PROJECT IS NOT LOCATED WITHIN A PHASE 2 POST-CONSTRUCTION STORMWATER REGULATED AREA.

NOTE: CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH APPLICABLE NORTH CAROLINA BUILDING CODES, HANDICAPPED ACCESSIBILITY CODE VOL. 1C, HARNETT COUNTY, HARNETT REGIONAL WATER, NCDEQ AND NCDOT STANDARDS, DETAILS AND SPECIFICATIONS.

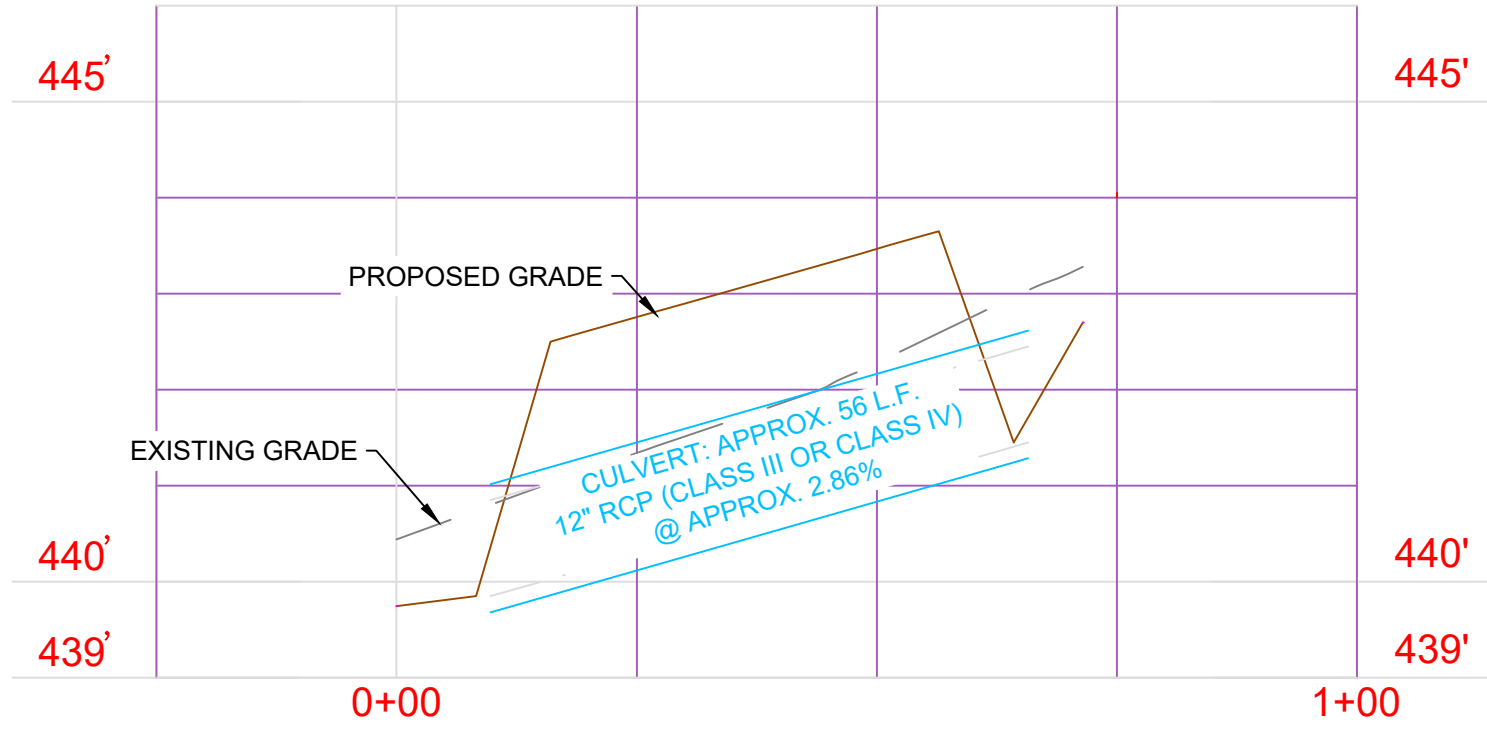
NOTE: CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY CONFLICTS, INCONSISTENCIES OR AMBIGUITIES EXIST BETWEEN CIVIL DRAWINGS & SPECIFICATIONS. IF HIDDEN SITE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION/DEMOLITION, CONTRACTOR SHALL OBTAIN WRITTEN RESOLUTION PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK.



SCALE: 1" = 30'  
30' 0 30'  
SCALE OF MAP MAY VARY  
DUE TO METHODS OF REPRODUCTION.



DRIVEWAY CULVERT - PLAN VIEW  
SCALE: 1" = 20'



DRIVEWAY CULVERT - PROFILE VIEW  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 2'

| STORM PIPE TABLE |                |                           |        |       |
|------------------|----------------|---------------------------|--------|-------|
| PIPE NAME        | DIAMETER (IN.) | MATERIAL                  | LENGTH | SLOPE |
| CULVERT          | 12             | 12 RCP (CLASS III OR IV)  | 56     | 2.86% |
| P101             | 18             | 18" HDPE (ADS N-12WT)     | 62     | 0.65% |
| P102             | 18             | 18" HDPE (ADS N-12WT)     | 76     | 0.53% |
| P103             | 18             | 18" HDPE (ADS N-12WT)     | 147    | 0.85% |
| P104             | 24             | 24" HDPE (ADS N-12WT)     | 26     | 0.82% |
| P105             | 24             | 24" RCP (CLASS III OR IV) | 16     | 0.88% |
| P106             | 18             | 12" RCP (CLASS III OR IV) | 16     | 1.01% |
| P201             | 24             | 24" HDPE (ADS N-12WT)     | 111    | 2.12% |

| STORM STRUCTURE TABLE |                        |                |                              |              |
|-----------------------|------------------------|----------------|------------------------------|--------------|
| STRUCTURE NAME        | STRUCTURE TYPE         | RIM (FLOWLINE) | INV. IN                      | INV. OUT     |
| FES1                  | 18" FLARED END SECTION | 439.29         |                              |              |
| FES2                  | 18" FLARED END SECTION | 439.29         |                              |              |
| SD101                 | 2'X3' DROP INLET       | 443.00         |                              | 440.30 (18") |
| SD102                 | 2'X3' CURB INLET       | 444.20         | 439.90 (18")                 | 439.80 (18") |
| SD103                 | 2'X3' CURB INLET       | 443.82         | 439.40 (18")                 | 439.30 (18") |
| SD104                 | 2'X3' CURB INLET       | 443.90         | 438.05 (18")                 | 437.95 (24") |
| SD105                 | 2'X3' CURB INLET       | 444.03         | 437.74 (24")<br>437.65 (24") | 437.64 (24") |
| SD201                 | 2'X3' DROP INLET       | 444.51         |                              | 440.00 (24") |

| PRE VS POST PEAK RUNOFF SUMMARY |           |            |           |
|---------------------------------|-----------|------------|-----------|
|                                 | PRE (CFS) | POST (CFS) | SCM (CFS) |
| 1 YR / 24 HR                    | 2.39      | 5.34       | 0.34      |
| 2 YR / 24 HR                    | 3.88      | 7.30       | 0.70      |
| 10 YR / 24 HR                   | 8.72      | 13.02      | 7.65      |
| 25 YR / 24 HR                   | 12.01     | 16.65      | 8.72      |
| 100 YR / 24 HR                  | 17.87     | 22.70      | 10.38     |

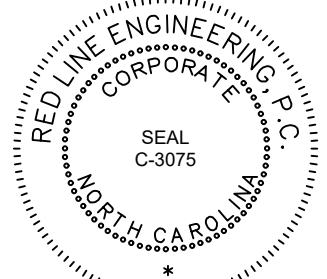
A PRIMARY SCM (INFILTRATION BASIN) IS PROPOSED FOR THIS SITE. THE PROPOSED SCM CONTROLS THE PEAK RUNOFF RATES TO BELOW THE PRE-DEVELOPED CONDITIONS FOR THE 1, 2, 10, 25 & 100 YEAR 24 HOUR STORM EVENTS. AS SUCH, NO FURTHER DOWNSTREAM ANALYSIS IS REQUIRED.



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F&S LAND DEVELOPMENT LLC  
12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
OVERALL GRADING & STORMWATER MANAGEMENT PLAN

| REVISIONS:      | DATE:    |
|-----------------|----------|
| ① PER NCDOT/HRW | 03/23/26 |
| ② PER HRW       | 05/14/26 |
| ③ PER HRW       | 06/18/26 |

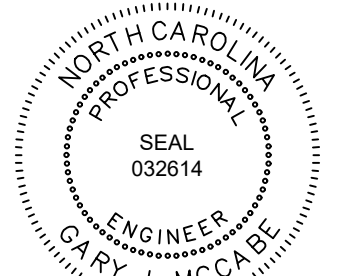
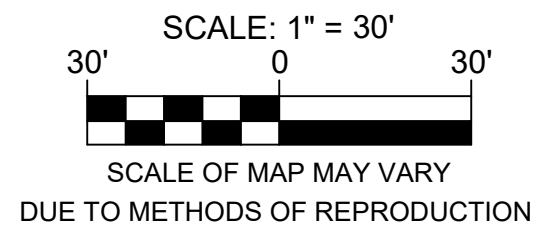
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|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

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| PROJECT NO.: | 24-013 |
| DRAWN BY:    | GJM    |
| REVIEWED BY: | GJM    |

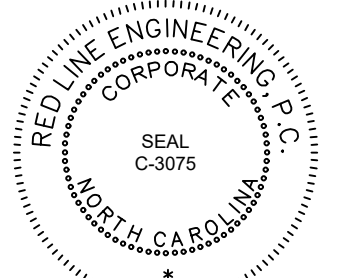
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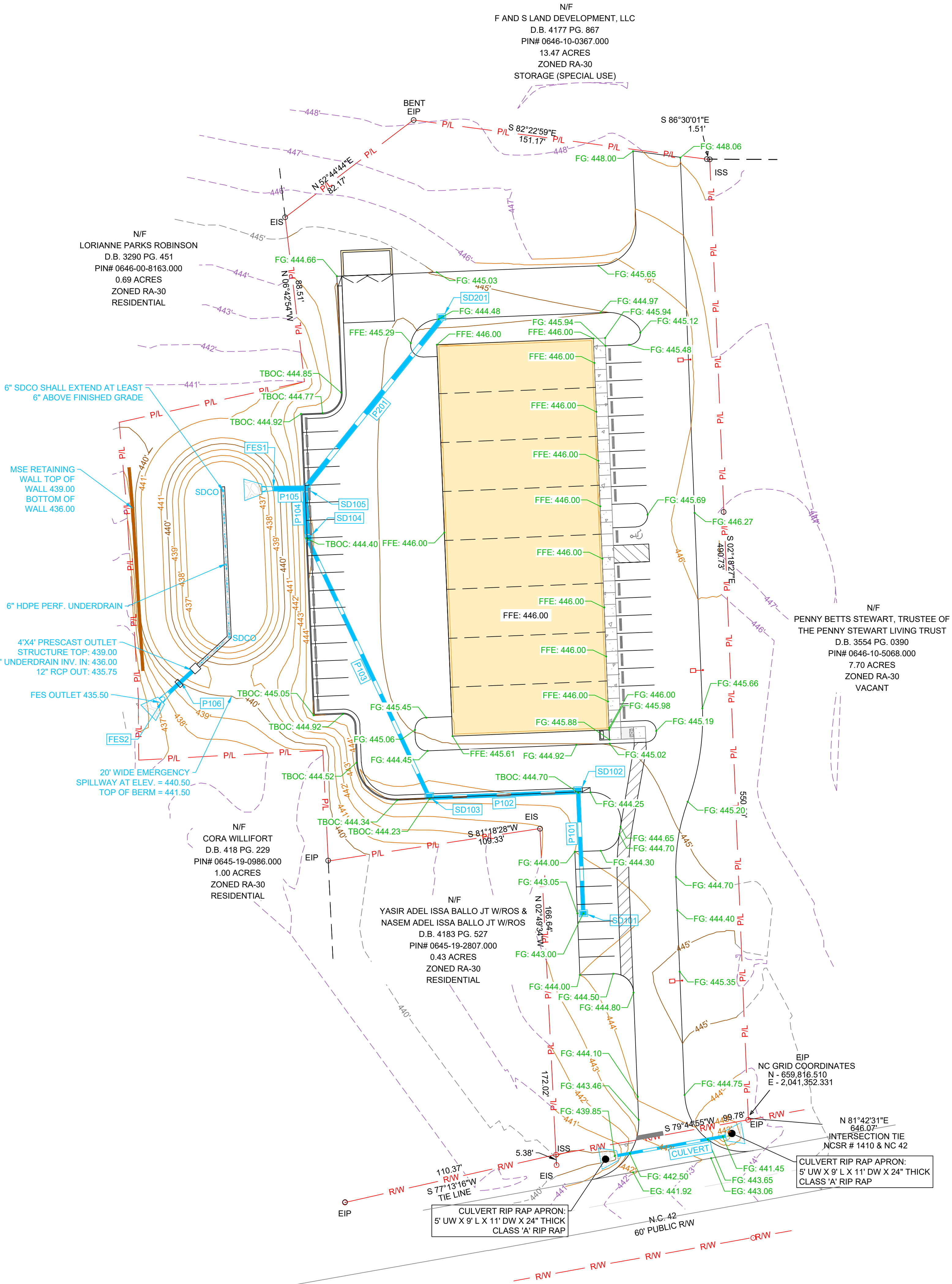


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12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
ENLARGED FINE GRADING PLAN



FINE GRADING NOTE: SPOT ELEVATIONS SHOWN ARE PROVIDED AS A COURTESY ONLY. CONTRACTOR SHALL HAVE LICENSED PROFESSIONAL LAND SURVEYOR GENERATE A SEPARATE STAKING PLAN PRIOR TO CONSTRUCTING PROPOSED IMPROVEMENTS. CONTRACTOR SHALL DOUBLE CHECK ALL GRADES, STAKES, FORMS, ETC. PRIOR TO CONSTRUCTING IMPROVEMENTS. ENGINEER, ARCHITECT, AND OWNER SHALL NOT BE LIABLE FOR ANY DISCREPANCIES IN SPOT ELEVATIONS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ANY CONFLICTS, INCONSISTENCIES OR AMBIGUITIES EXIST ON CIVIL DRAWINGS, GRADING, AND SPOT ELEVATIONS. BEFORE INSTALLATION, ALL ELEVATION DISCREPANCIES OR ISSUES SHALL REQUIRE WRITTEN RESOLUTION FROM ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION. OTHERWISE, CONTRACTOR PROCEEDS AT THEIR OWN RISK AND EXPENSE.

VEGETATION NOTE: EXISTING VEGETATION INCLUDES, BUT NOT LIMITED TO, MATURE SOFTWOOD TREES, NATIVE GRASSES, AND A MIX OF EVERGREEN TREES. THOSE TREES LOCATED WITHIN THE PROPOSED 20' NATURAL WOODED BARRIER BUFFER WILL NOT BE TOUCHED. A MINIMUM AMOUNT OF ALL OTHER VEGETATION WILL BE REMOVED AS NECESSARY WITHIN LIMITS OF DISTURBANCE.

STORMWATER EXEMPTION NOTE: PROJECT IS NOT LOCATED WITHIN A PHASE 2 POST-CONSTRUCTION STORMWATER REGULATED AREA.

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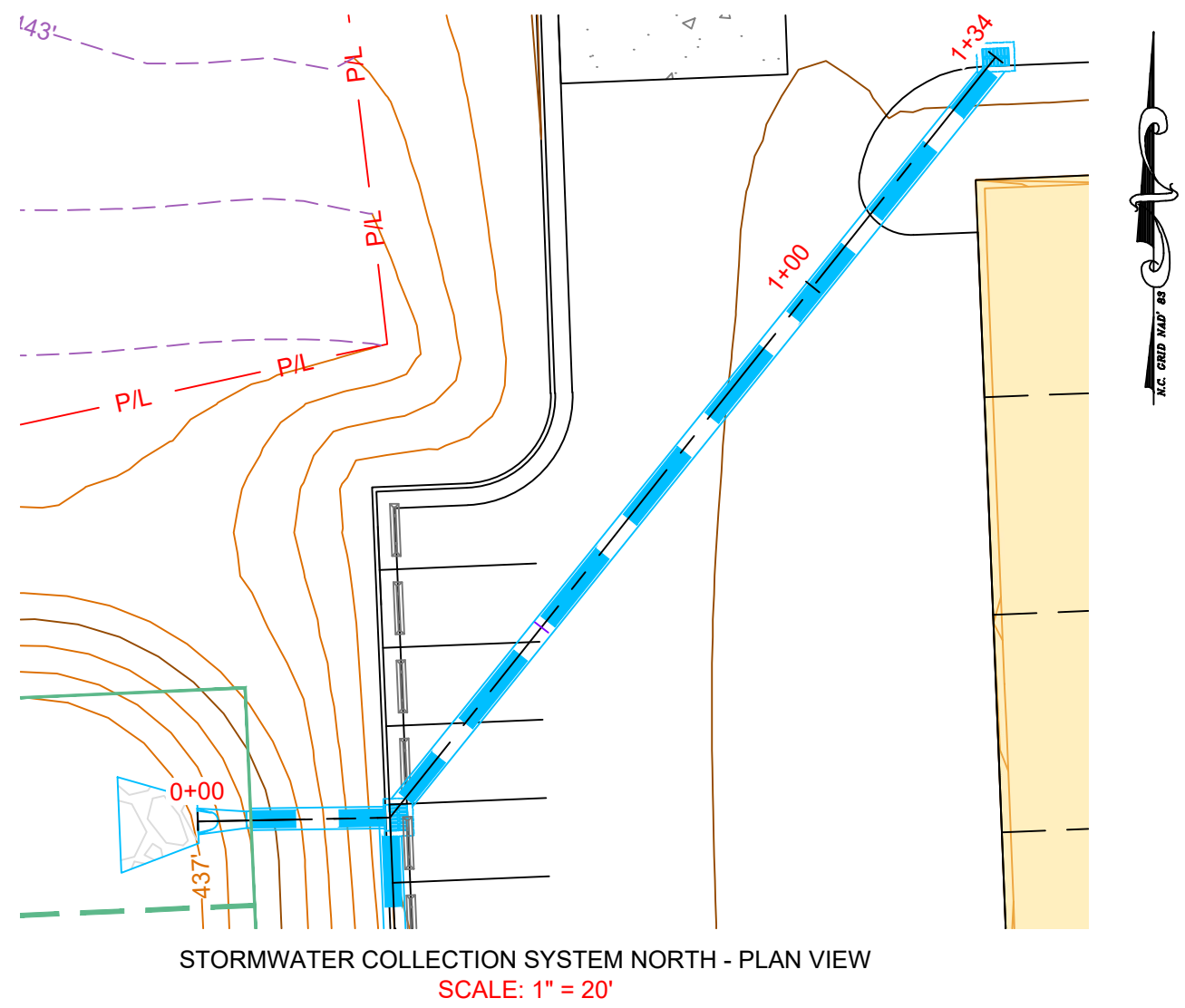
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| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
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| NCDOT & HRW   | 01/14/26 |

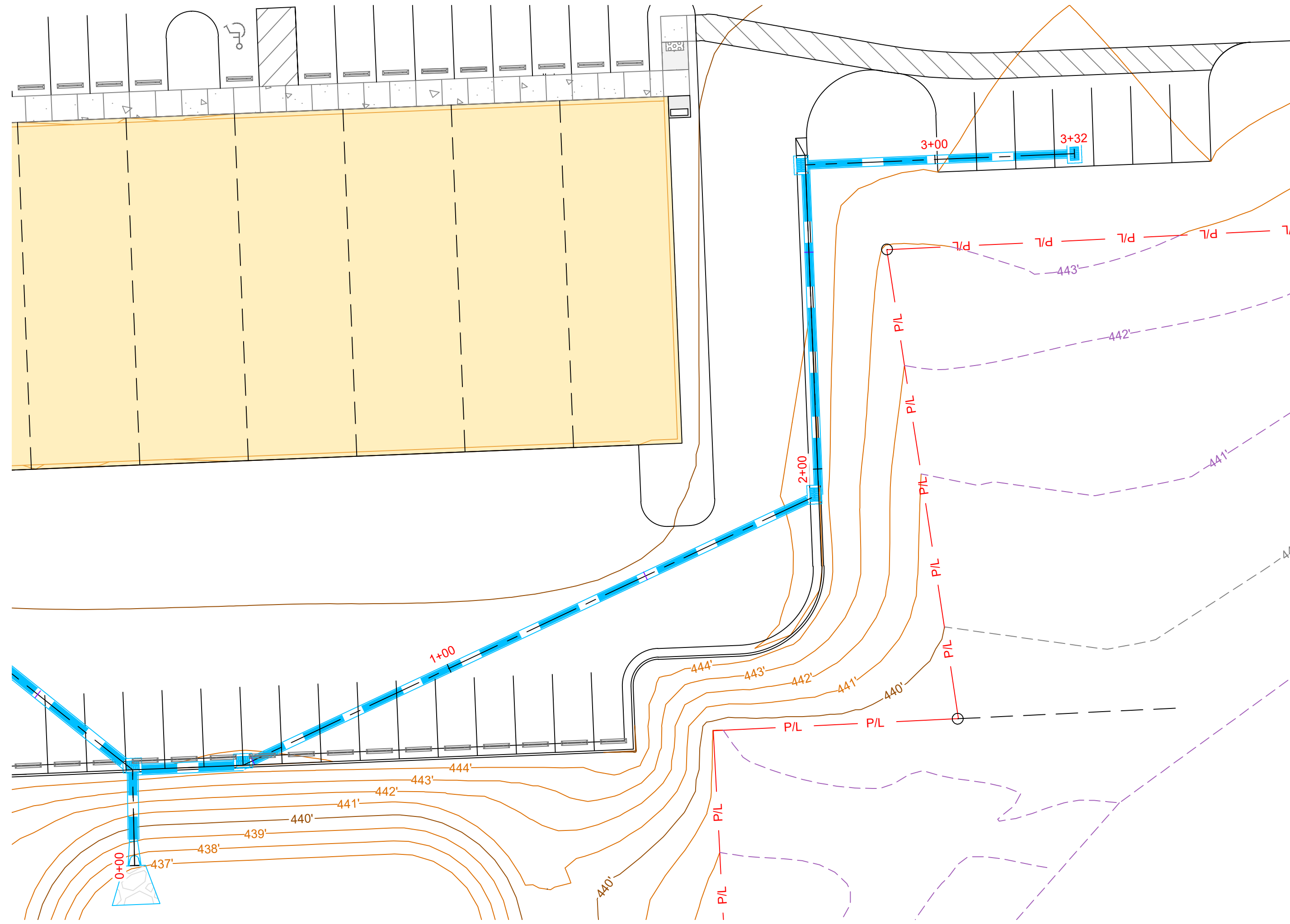
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| REVIEWED BY: | GJM    |

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STORMWATER COLLECTION SYSTEM NORTH - PLAN VIEW  
SCALE: 1" = 20'



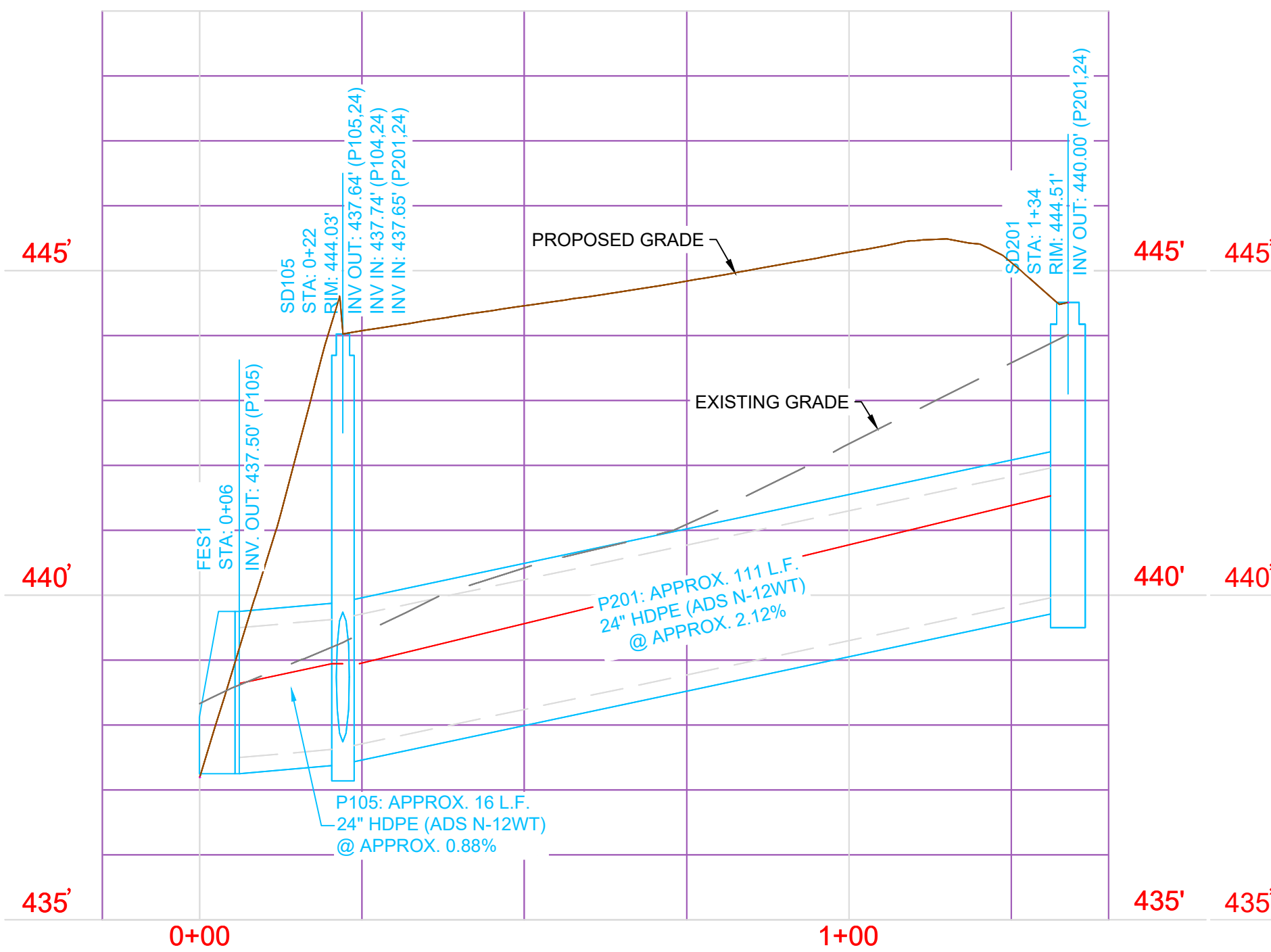
STORMWATER COLLECTION SYSTEM SOUTH - PLAN VIEW  
SCALE: 1" = 20'

CCTV & CLEANOUT NOTE: PRIOR TO THE FINAL PUNCH LIST AND OWNER ACCEPTANCE, THE CONTRACTOR SHALL CLEAN AND CAMERA ALL INSTALLED SANITARY SEWER AND STORMWATER PIPES AND STRUCTURES TO DETERMINE THEIR CONDITION AND IDENTIFY ANY DEFECTS OR REPAIRS NECESSARY. CCTV SHALL CONFIRM THAT ALL PIPES AND STRUCTURES ARE IN COMPLIANCE WITH DESIGN STANDARDS, LOCAL, STATE AND FEDERAL CODES AND ARE FREE OF SEDIMENT, STONE OR ANY DEBRIS PRIOR TO ACCEPTANCE BY THE OWNER. A DIGITAL COPY OF ALL CAMERA WORK AND A WRITTEN REPORT OF ANY DEFICIENCIES FOUND SHALL BE PROVIDED TO THE OWNER, ENGINEER AND ARCHITECT PRIOR TO ACCEPTANCE BY THE OWNER AND FINAL PAY APPLICATION APPROVAL.

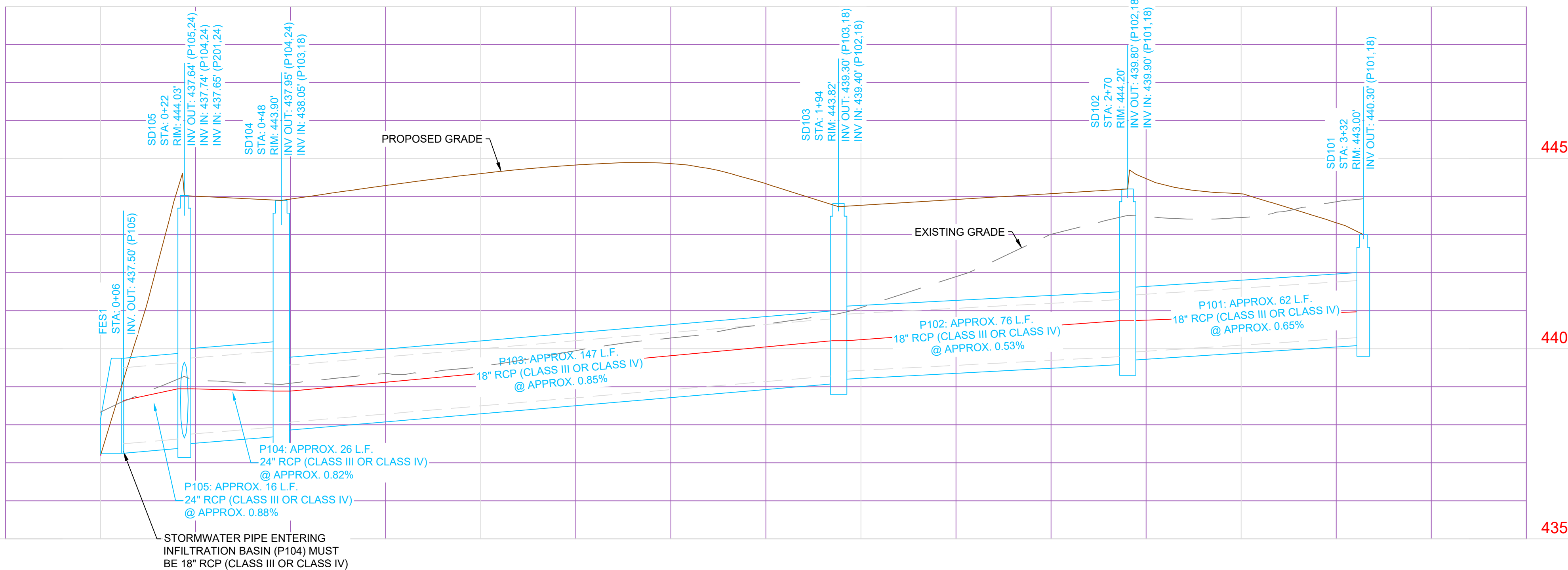
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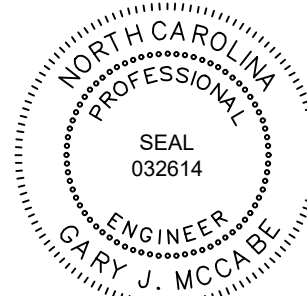
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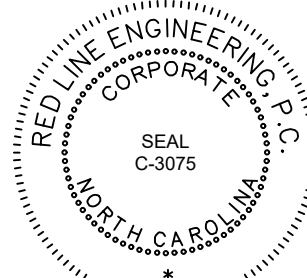
STORMWATER COLLECTION SYSTEM NORTH - PROFILE VIEW  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 2'



STORMWATER COLLECTION SYSTEM SOUTH - PROFILE VIEW  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 2'



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F&S LAND DEVELOPMENT LLC

12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526

42 BUSINESS PARK INDUSTRIAL FLEX BASE  
PROPOSED STORMWATER PLAN & PROFILE

| REVISIONS:      | DATE:    |
|-----------------|----------|
| 1 PER NCDOT/HRW | 03/23/26 |
| 2 PER HRW       | 05/14/26 |
| 3 PER HRW       | 06/18/26 |

| ISSUED FOR:   | DATE:    |
|---------------|----------|
| REVIEW/PERMIT | 07/22/25 |
| NCDOT & HRW   | 01/14/26 |

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| PROJECT NO.: | 24-013 |
| DRAWN BY:    | GJM    |
| REVIEWED BY: | GJM    |

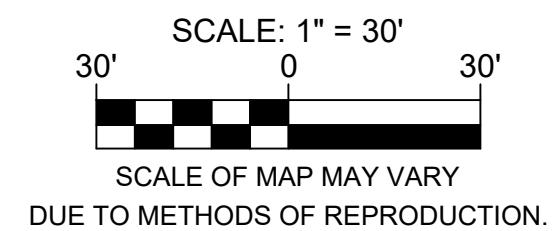
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**SEPTIC SYSTEM SIZING CALCULATIONS**

**PROJECTED WASTEWATER DAILY DISCHARGE FOR OFFICE BUILDING**  
25 EMPLOYEES X 25 GPD = 625 GPD

**REQUIRED LF OF TRENCH =  $\frac{(625 \text{ GPD})}{(0.4 \text{ GPD/SF})}$**   
**3 SF/LF**

**REQUIRED LF OF TRENCH = 521 LF OF SEPTIC TRENCH**

**EZ FLOW REDUCTION (25%) = 521 LF X 0.75 = 391 LF**

**AREA FOR CONVENTIONAL SEPTIC SYSTEM = 391 FT X 9 FT = 3,519 SF**

**LF OF SEPTIC TRENCH PROVIDED = 100 FT X 4 LINES = 400 LF**

**AREA OF SEPTIC SYSTEM PROVIDED = 3,600 SF**

**LF OF REPAIR TRENCH = 400 LF**

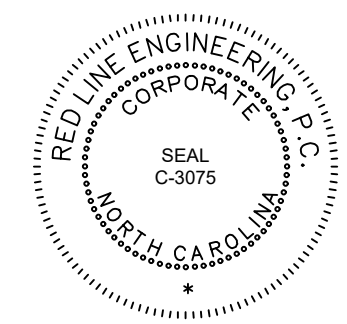
**AREA OF SEPTIC REPAIR = 100' X 36' = 3,600 SF**



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| 3 PER HRW       | 06/18/26 |

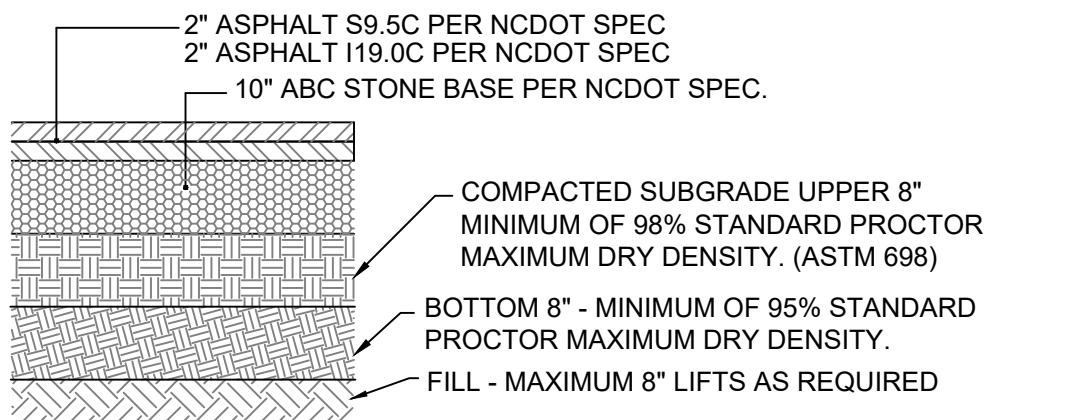
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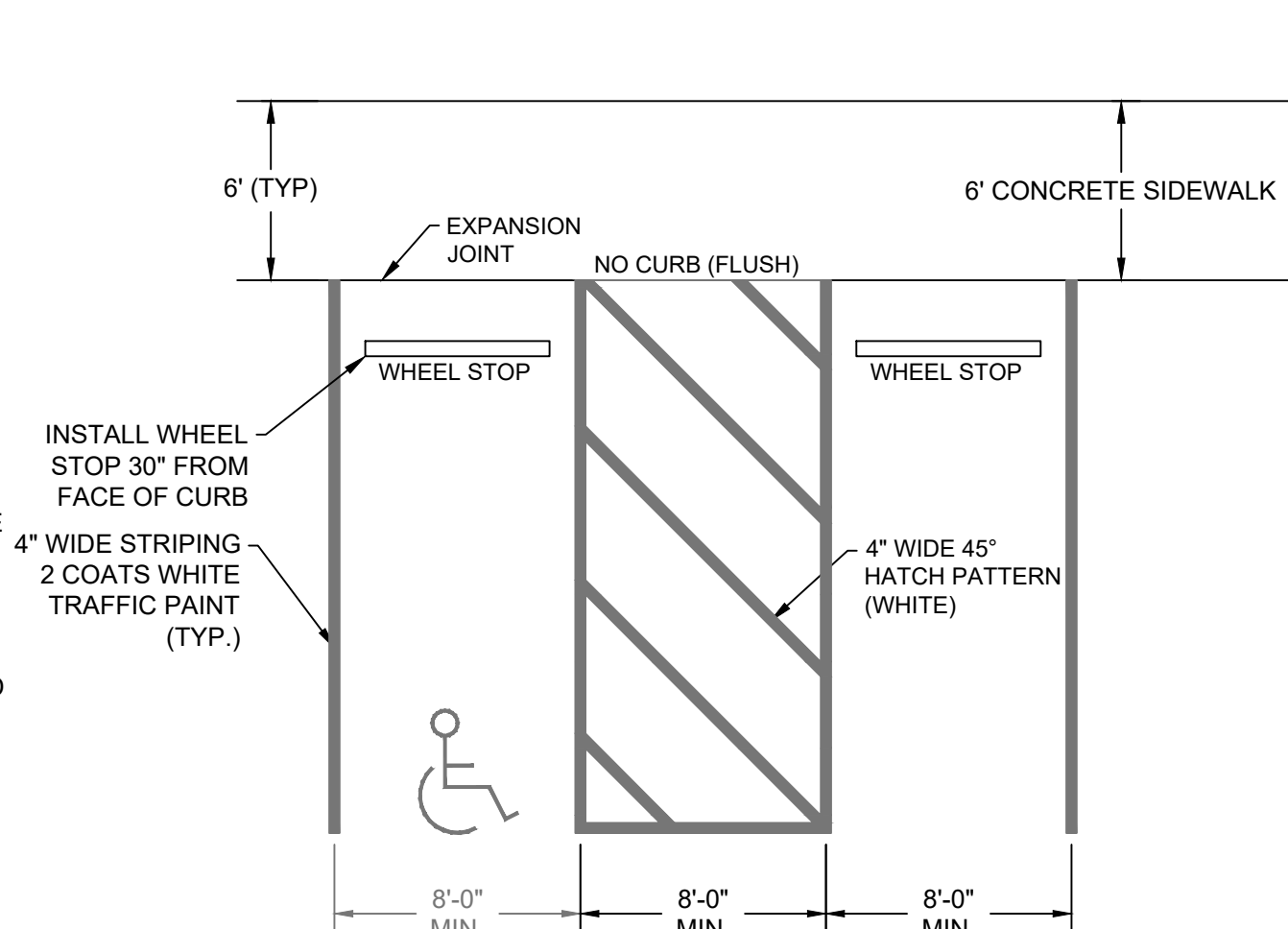


NOTE: HEAVY DUTY ASPHALT SHALL BE INSTALLED IN ALL COMMERCIAL VEHICLE PARKING SPACES, ROADWAYS AND DRIVE AISLES. OWNER MAY INSTALL A DIFFERENT HD ASPHALT SECTION UPON SITE SPECIFIC APPROVAL OF THE GEOTECHNICAL ENGINEER, BASED ON TESTING OF SOILS PRESENT ONSITE. GEOTECHNICAL ENGINEER SHALL APPROVE FINAL SECTION.

MATERIALS SHALL MEET THE REQUIRED SECTIONS OF THE N.C.D.O.T. STANDARD SPECIFICATION FOR ROADS AND STRUCTURES.

### HEAVY DUTY ASPHALT PAVEMENT DETAIL

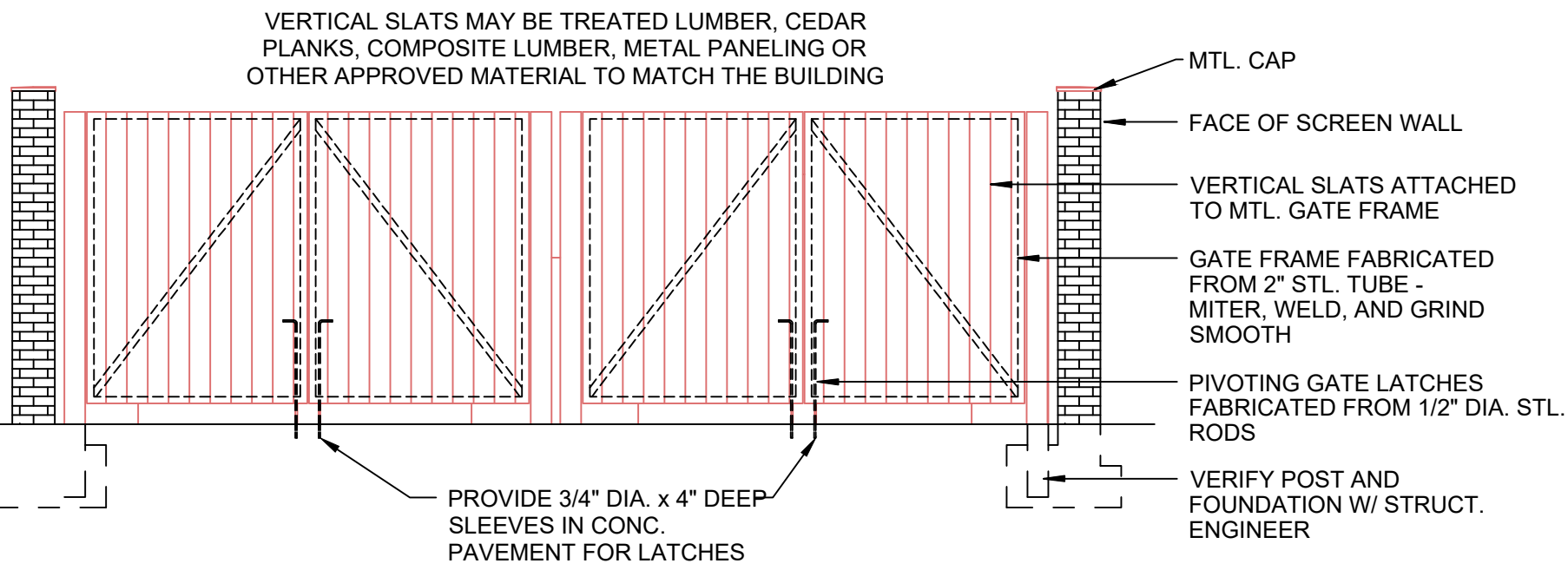
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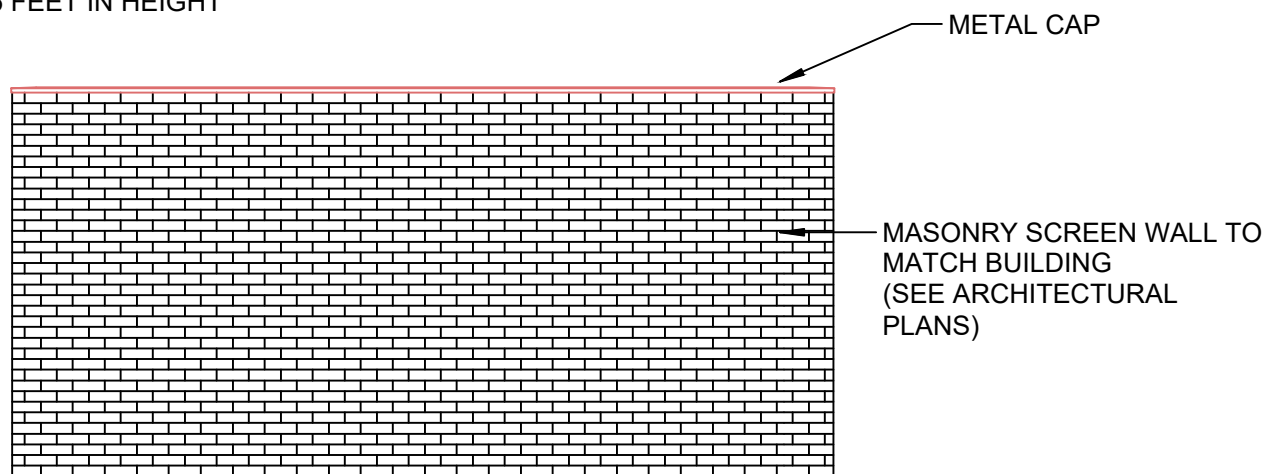
- NOTES:
- SEE OVERALL SITE PLAN FOR ACTUAL DIMENSIONS AND LAYOUT. TYPICAL DIMENSIONS SHOWN ABOVE ARE FOR REFERENCE ONLY.
  - WHEEL STOPS SHALL BE MADE OF REINFORCED CONCRETE AND ANCHORED WITH STEEL RODS.
  - WHEEL STOPS SHALL BE PLACED SUCH THAT THERE IS 30" FROM THE FRONT OF SIDEWALK TO THE TIRE SIDE OF THE WHEEL STOP.
  - WHEEL STOPS ARE OPTIONAL WHEN 6 FT SIDEWALK WITH CURB AND GUTTER IS PROVIDED FOR A TOTAL WIDTH OF 6.5 FT FROM FACE OF CURB TO BACK OF SIDEWALK.

### TYPICAL HC PARKING LAYOUT & STRIPING DETAIL

SCALE: NOT TO SCALE

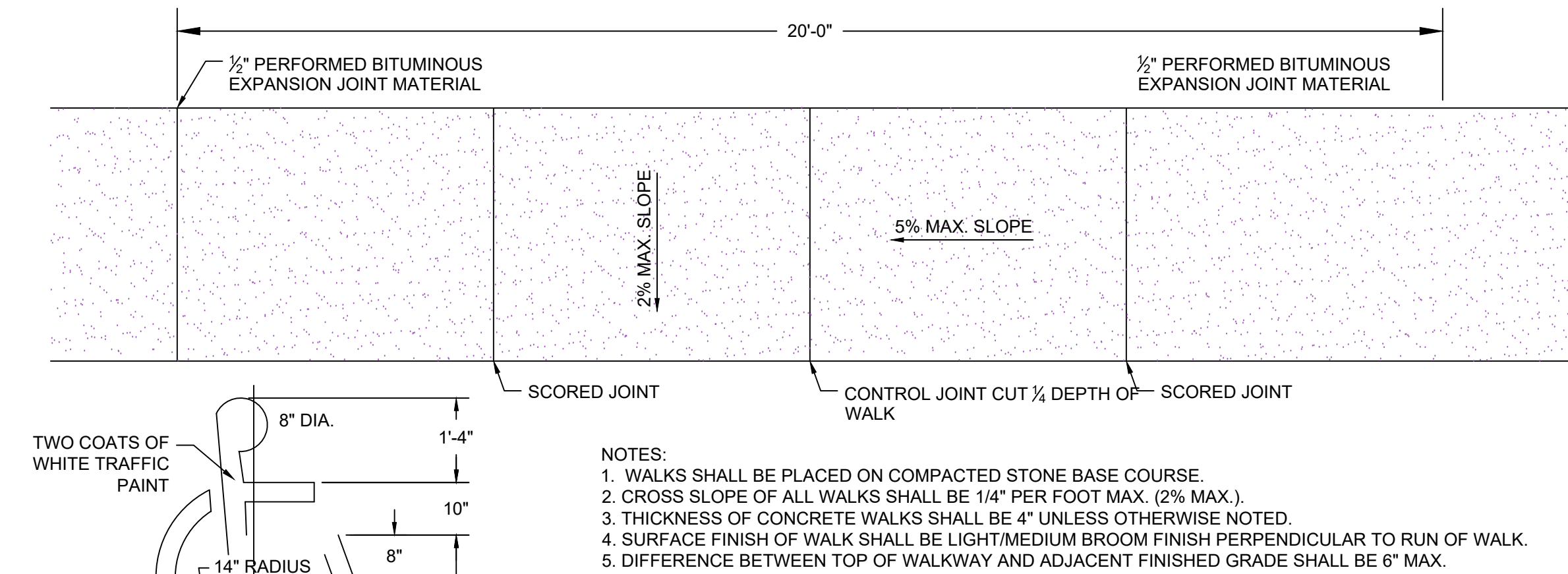
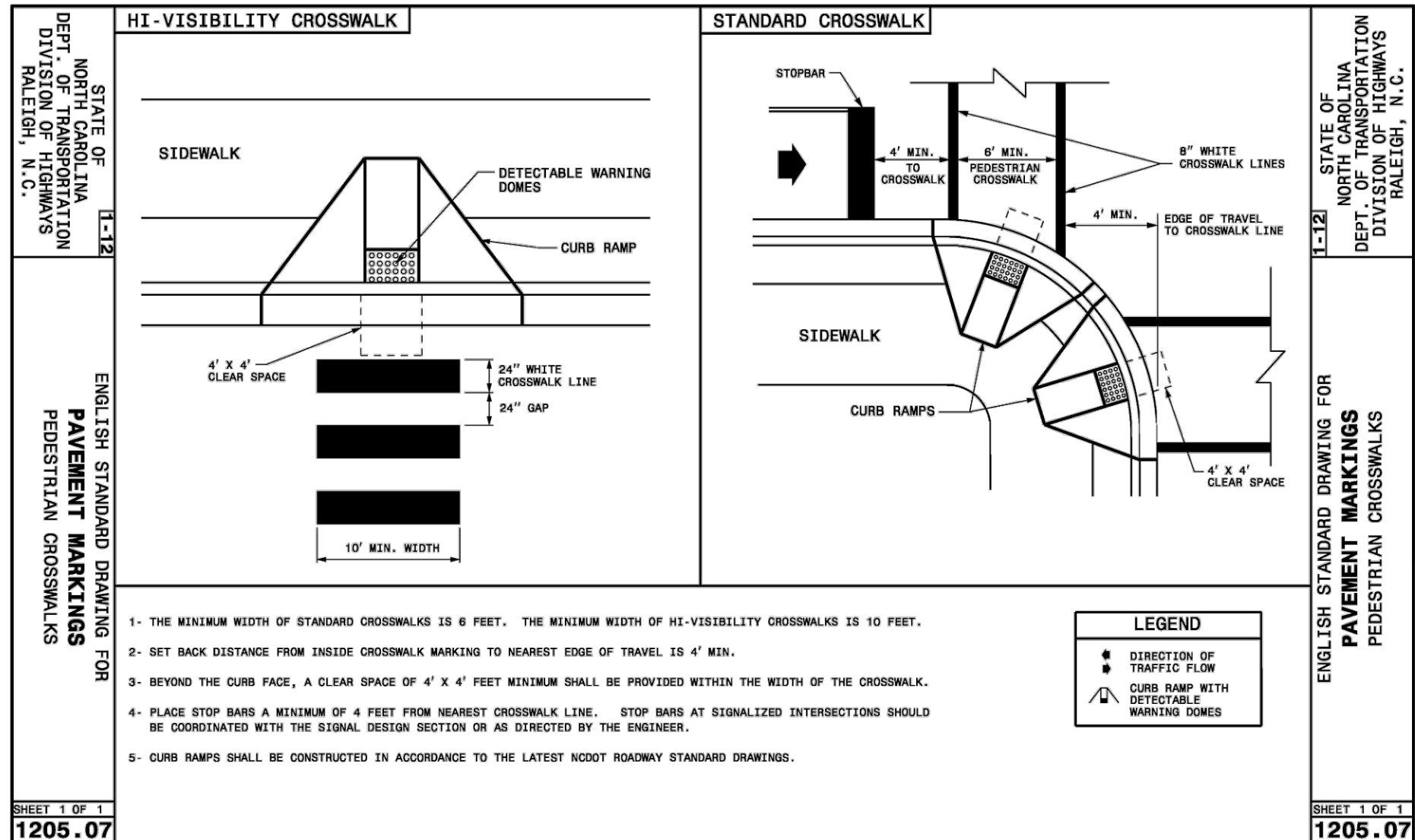


NOTE:  
THE DUMPSTER ENCLOSURE SHALL  
BE AT LEAST 6 FEET IN HEIGHT

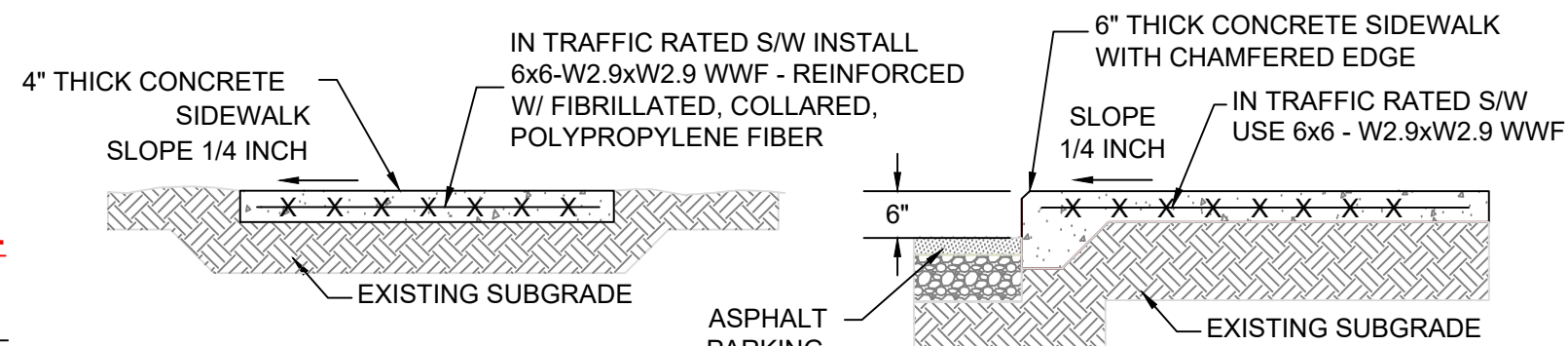


### DUMPSTER ENCLOSURE DETAIL

SCALE: NOT TO SCALE



- NOTES:
- WALKS SHALL BE PLACED ON COMPACTED STONE BASE COURSE.
  - CROSS SLOPE OF ALL WALKS SHALL BE 1/4" PER FOOT MAX. (2% MAX.).
  - THICKNESS OF CONCRETE WALKS SHALL BE 4" UNLESS OTHERWISE NOTED.
  - SURFACE FINISH OF WALK SHALL BE LIGHT/MEDIUM BROOM FINISH PERPENDICULAR TO RUN OF WALK.
  - DIFFERENCE BETWEEN TOP OF WALKWAY AND ADJACENT FINISHED GRADE SHALL BE 6" MAX.



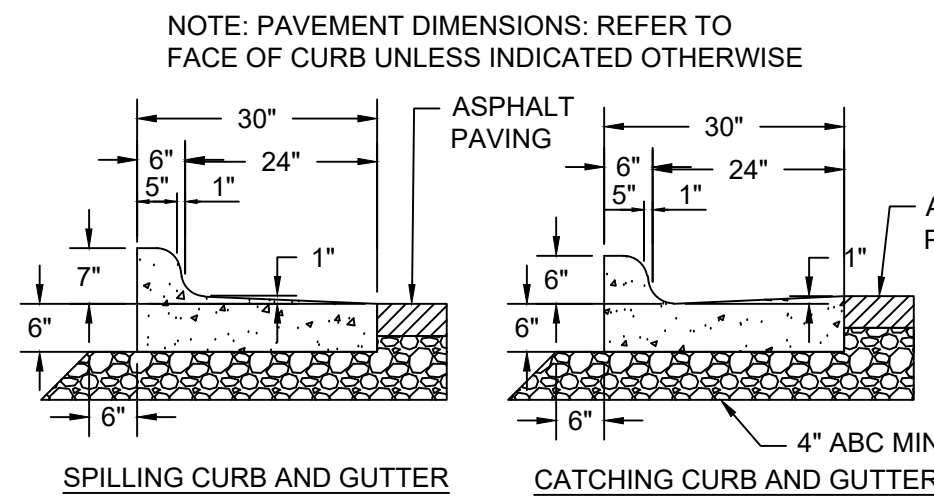
### HANDICAP PAVEMENT SYMBOL DETAIL

SCALE: NOT TO SCALE

- NOTES:
- A GROOVE JOINT 1" DEEP WITH A 1/8" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 20' INTERVALS. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
  - CONCRETE COMPRESSIVE STRENGTH SHALL BE 3,000 PSI IN 28 DAYS. (4,000 PSI FOR TRAFFIC RATED SIDEWALKS)

### CONCRETE WALKWAYS DETAIL

SCALE: NOT TO SCALE



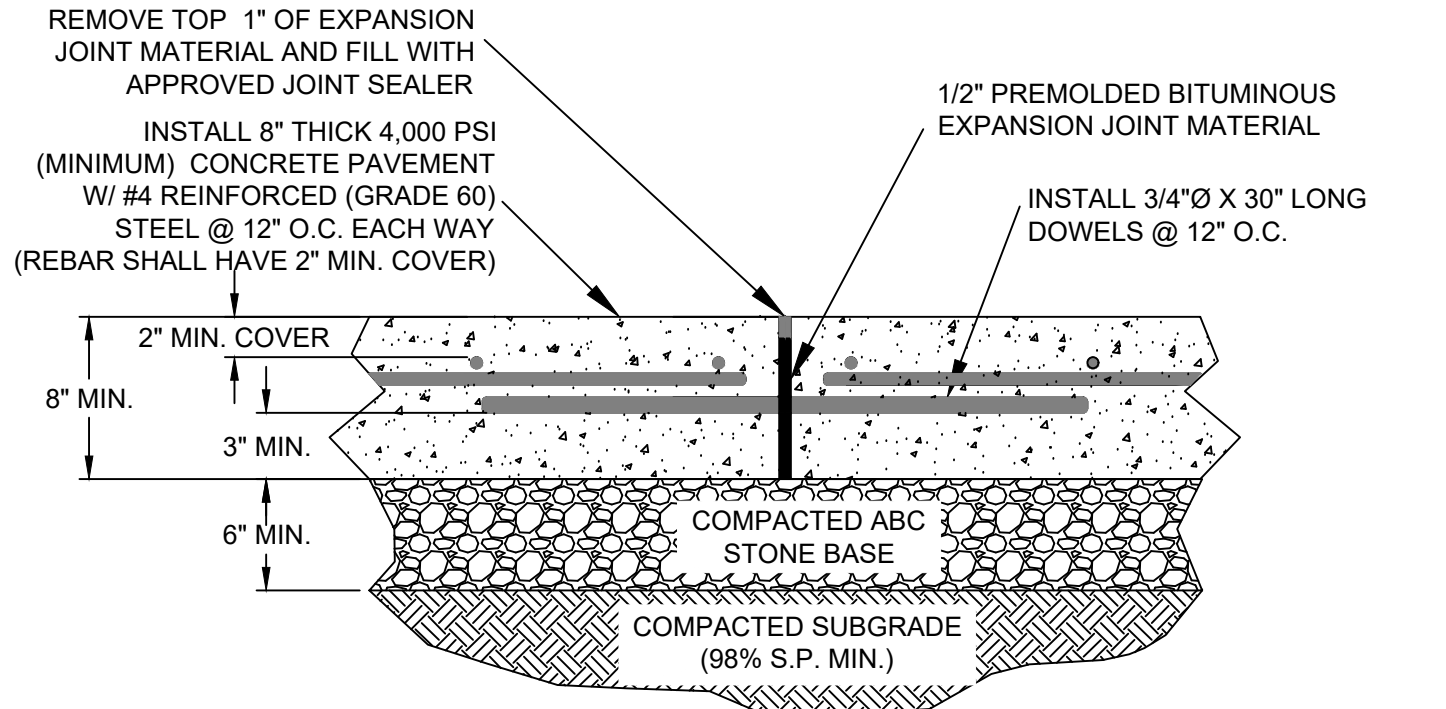
CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. AT 28 DAYS.

CONSTRUCTION STAKING FOR CURBING INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE FACE OF CURB AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF THE PAVEMENT TO MAKE BOTTOM OF GUTTER PARALLEL WITH PAVING OF BASE COURSE.

CONTRACTION JOINTS AT 10'-0" O.C. TOOLED 1/4" (± 1/16") WIDE. 1" OR MAX. D14 DEEP WHEREVER IS GREATER. EXPANSION JOINTS AT 40' MAX. AND ALL P.C.'s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.

### 30" CURB AND GUTTER SECTION DETAIL

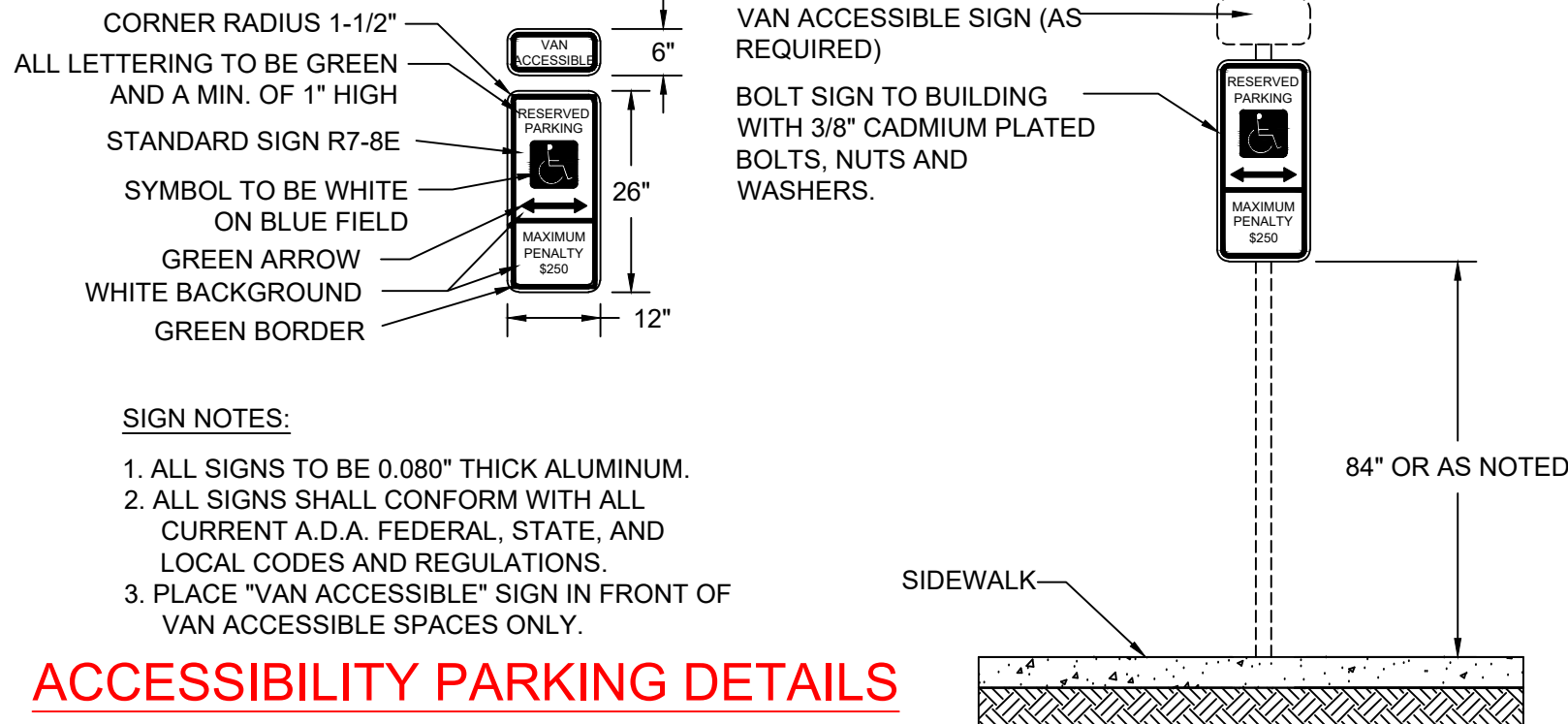
SCALE: NOT TO SCALE



- NOTES:
- ALL CONCRETE SHALL ACHIEVE A MINIMUM 28 DAY YIELD STRENGTH OF 4,000 PSI.
  - ALL CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 3 INCHES AND 2-4% AIR ENTRAINMENT.
  - CONTRACTOR SHALL INSTALL EXPANSION JOINTS WITH PREFORMED FILLER STRIPS.
    - EVERY 50 LF EACH WAY FOR FLATWORK AND CURB & GUTTER
    - AT TERMINATION OF ALL PROPOSED PAVEMENT
    - WHERE PROPOSED PAVEMENT ABUTTS ANY STRUCTURE, BUILDING, AND CURB AND GUTTER
    - BETWEEN PROPOSED AND EXISTING PAVEMENT
  - INSTALL CONTROL JOINTS EVERY 10 LF EACH WAY.
  - WELDED WIRE MAY BE SUBSTITUTED FOR REBAR, WITH THE USE OF 4,000 PSI CONCRETE. (CONTRACTOR MUST HAVE ENGINEER'S APPROVAL PRIOR TO SUBSTITUTION)

### TYPICAL CONCRETE PAVEMENT SECTION THROUGH EXPANSION/ISOLATION JOINT DETAIL

SCALE: NOT TO SCALE



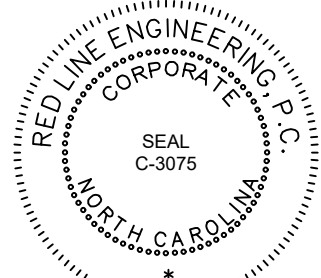
- SIGN NOTES:
- ALL SIGNS TO BE 0.080" THICK ALUMINUM.
  - ALL SIGNS SHALL CONFORM WITH ALL CURRENT A.D.A. FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
  - PLACE "VAN ACCESSIBLE" SIGN IN FRONT OF VAN ACCESSIBLE SPACES ONLY.

### ACCESSIBILITY PARKING DETAILS DETAIL

SCALE: NOT TO SCALE



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42 BUSINESS PARK INDUSTRIAL FLEX BASE  
SITE DETAILS

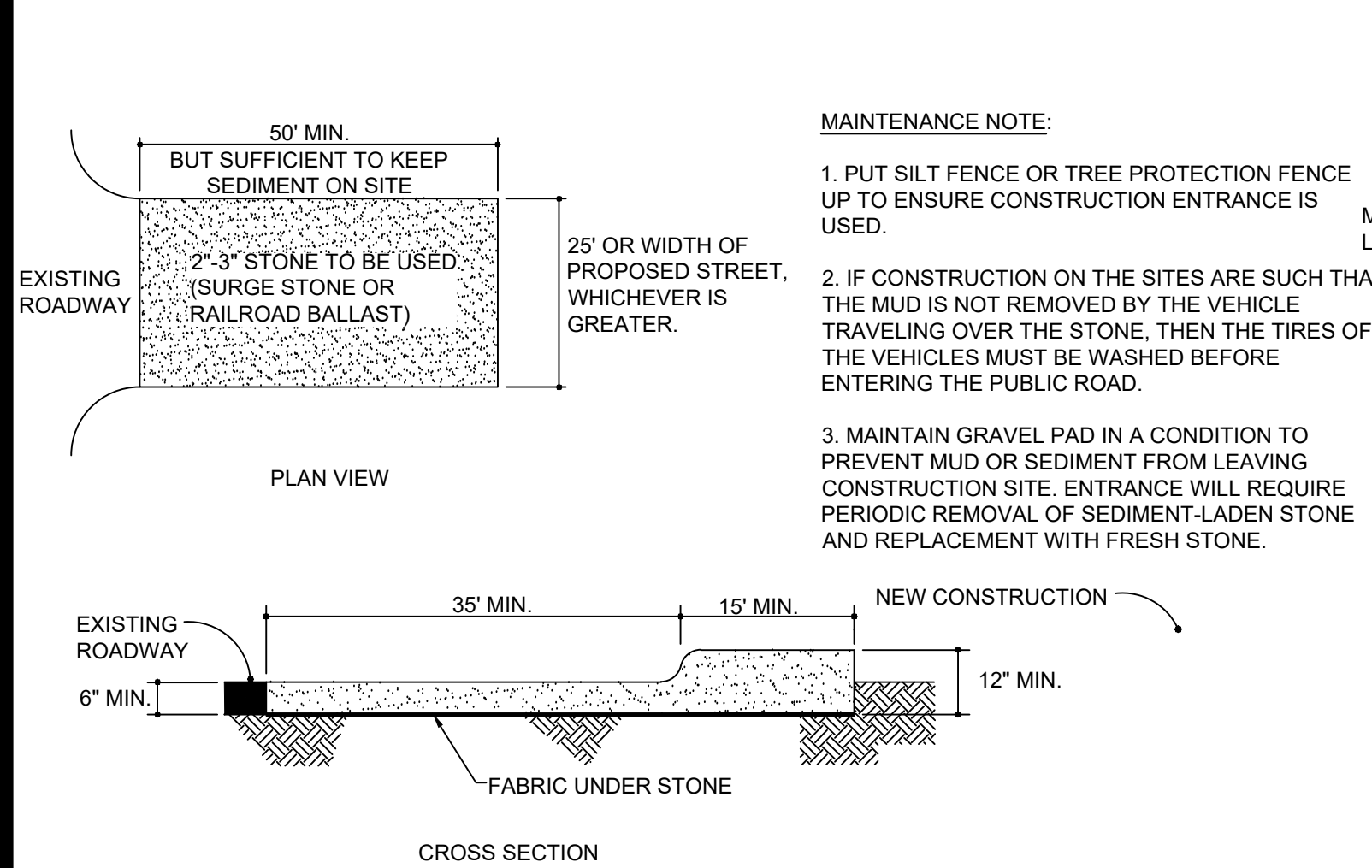
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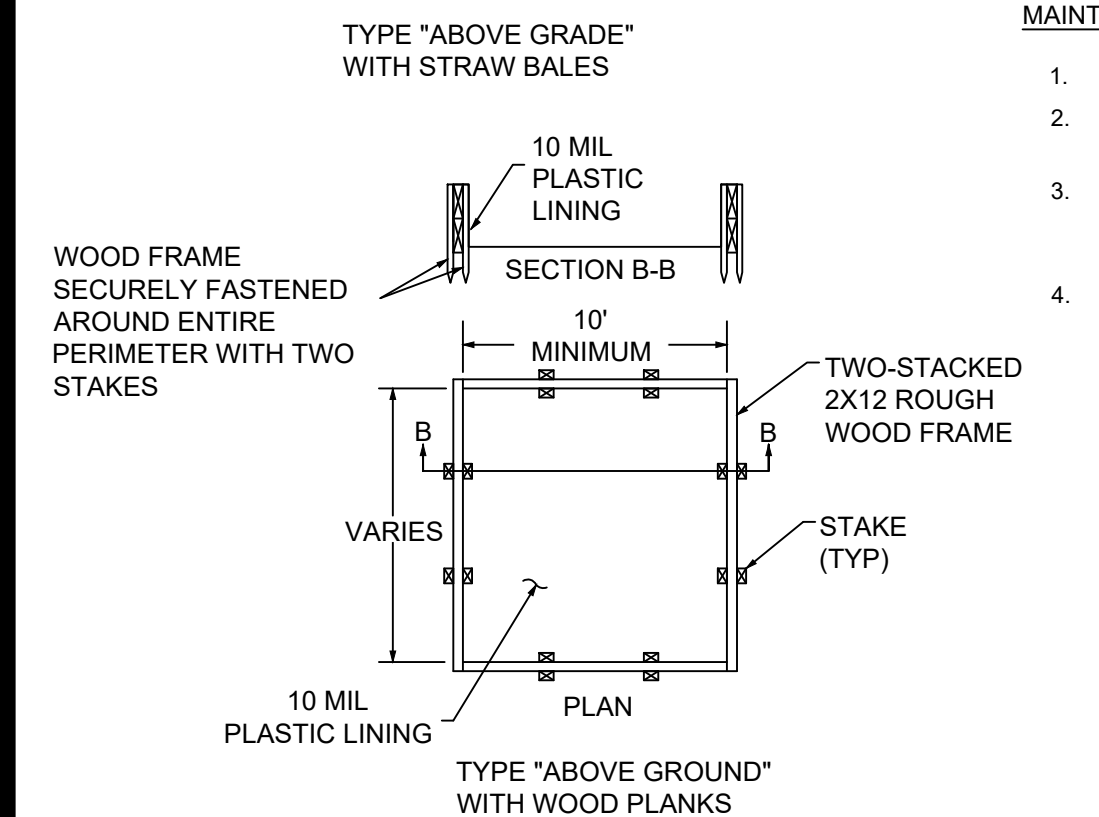
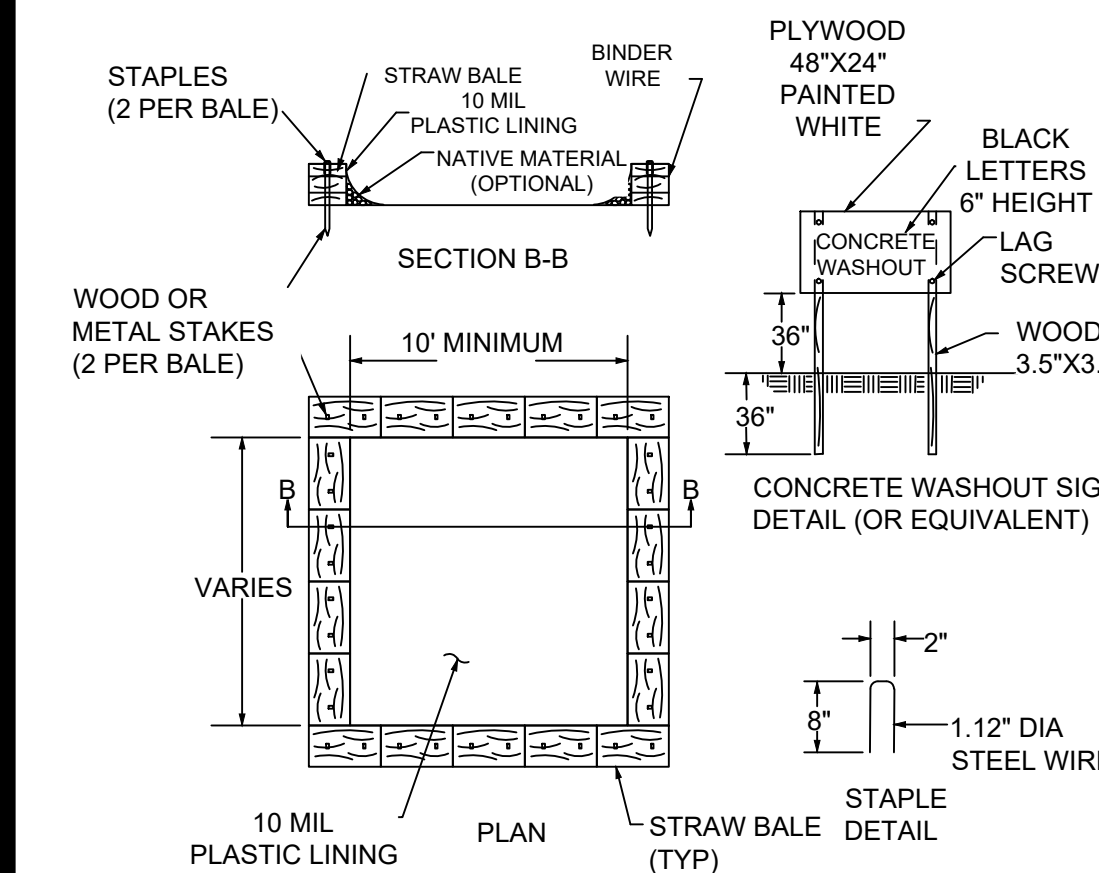
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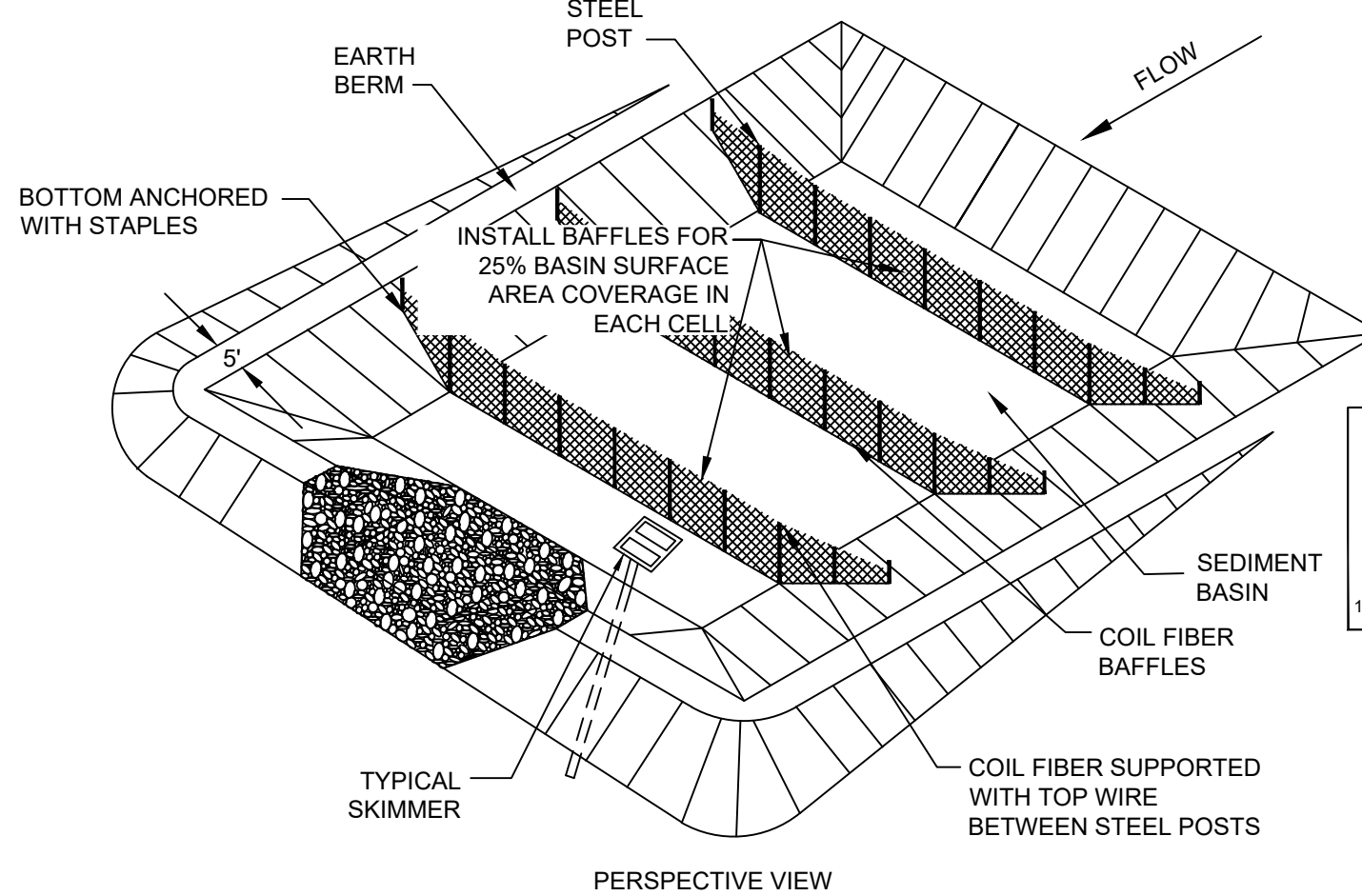


**STANDARD CONSTRUCTION ENTRANCE DETAIL**  
SCALE: NOT TO SCALE

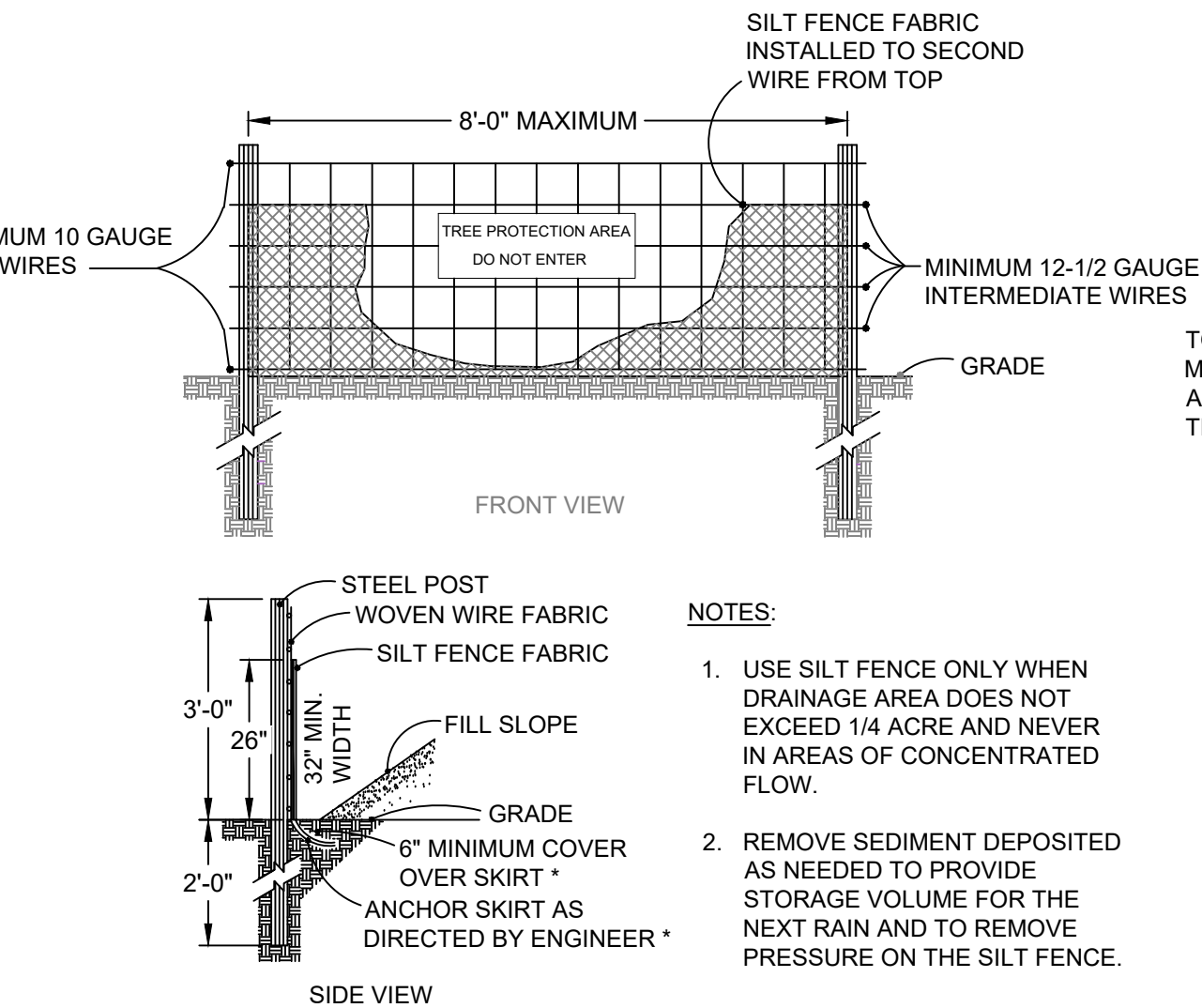


**CONCRETE WASH OUT DETAIL**  
SCALE: NOT TO SCALE

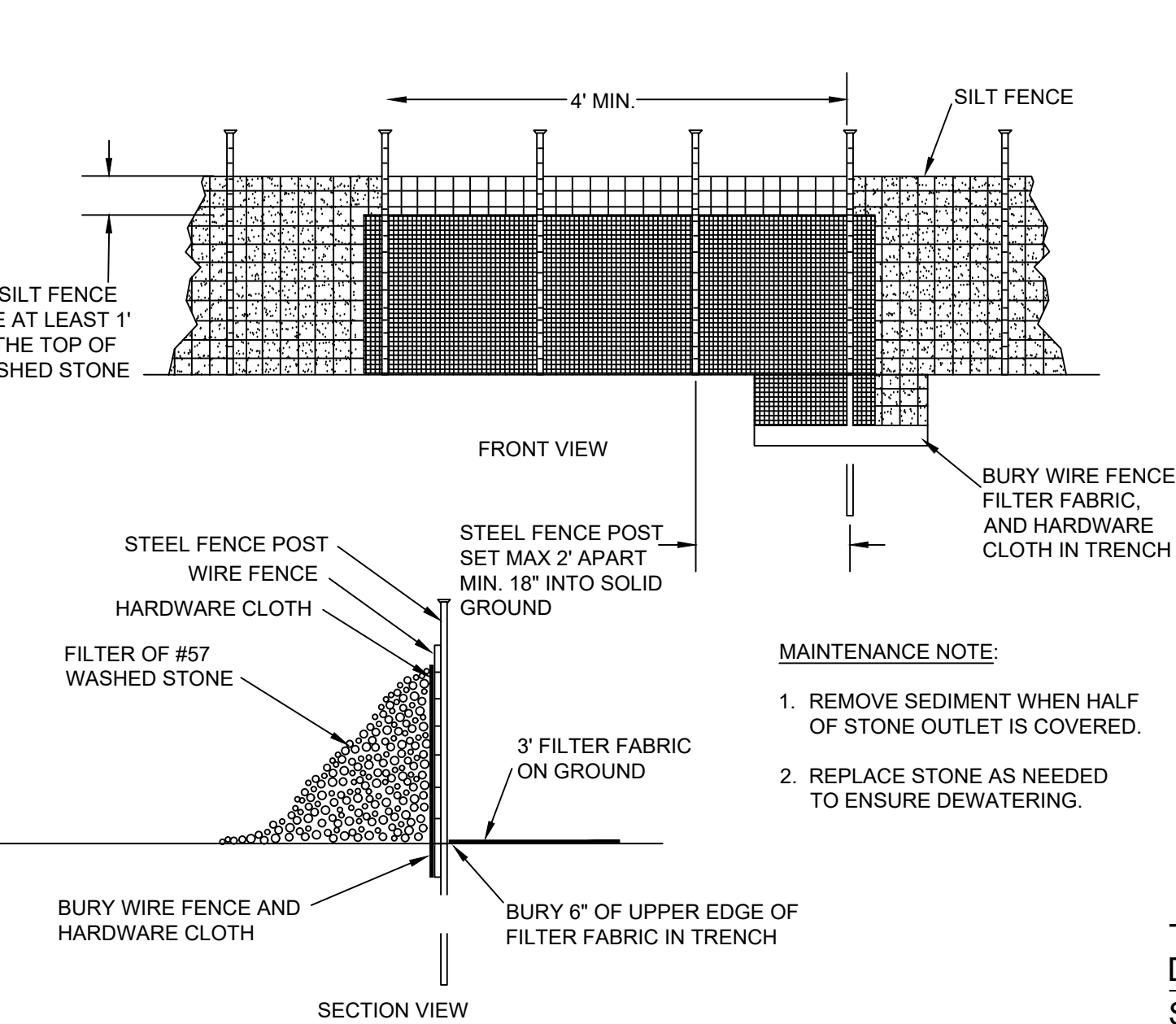
- NOTES:**
1. DRIVE STEEL FENCE POST AT LEAST 18" INTO SOLID GROUND.
  2. WOOD POST ARE NOT ACCEPTABLE.



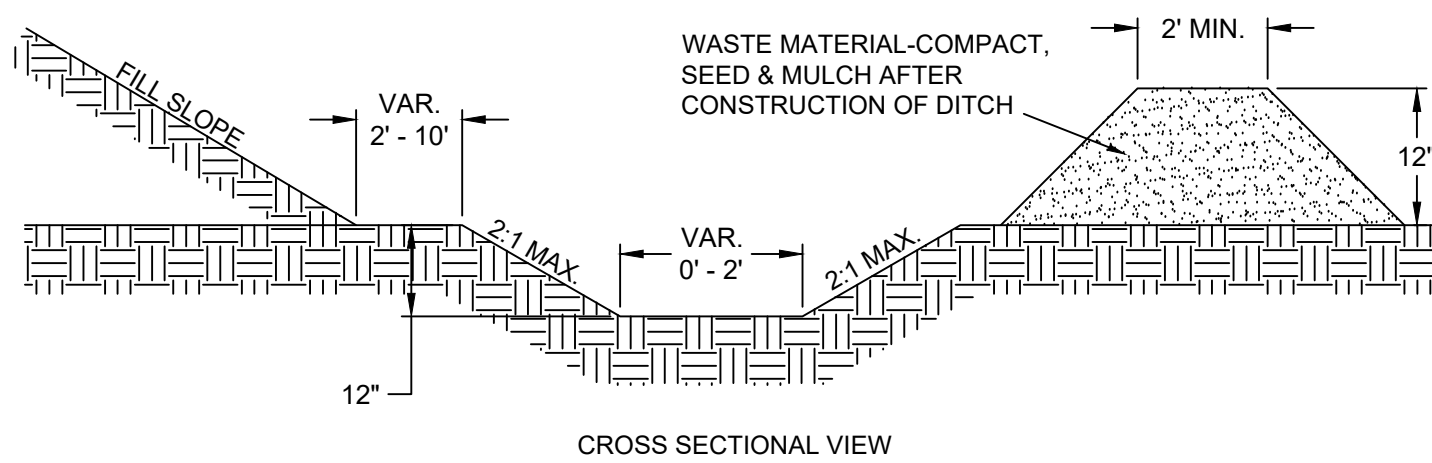
**SEDIMENT BASIN DETAIL**  
SCALE: NOT TO SCALE



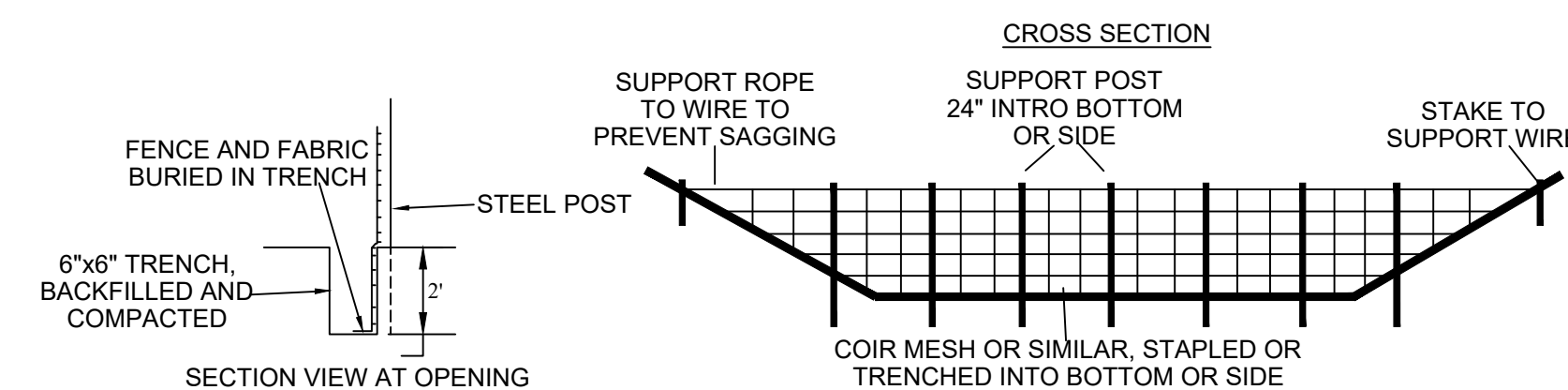
**STANDARD TEMPORARY SILT FENCE / TREE PROTECTION FENCE DETAIL**  
SCALE: NOT TO SCALE



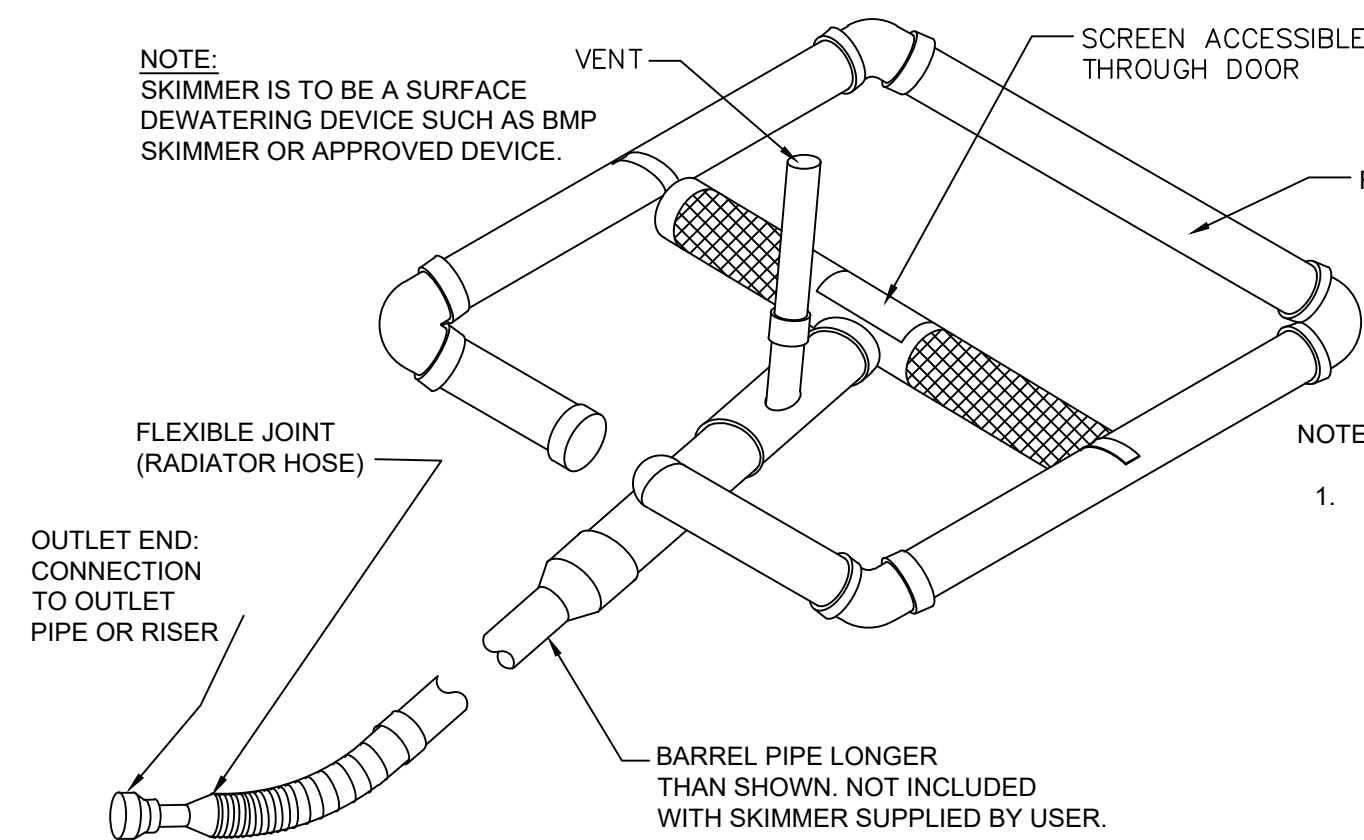
**STANDARD SILT FENCE OUTLET DETAIL**  
SCALE: NOT TO SCALE



**STANDARD TEMPORARY DIVERSION DITCH DETAIL**  
SCALE: NOT TO SCALE



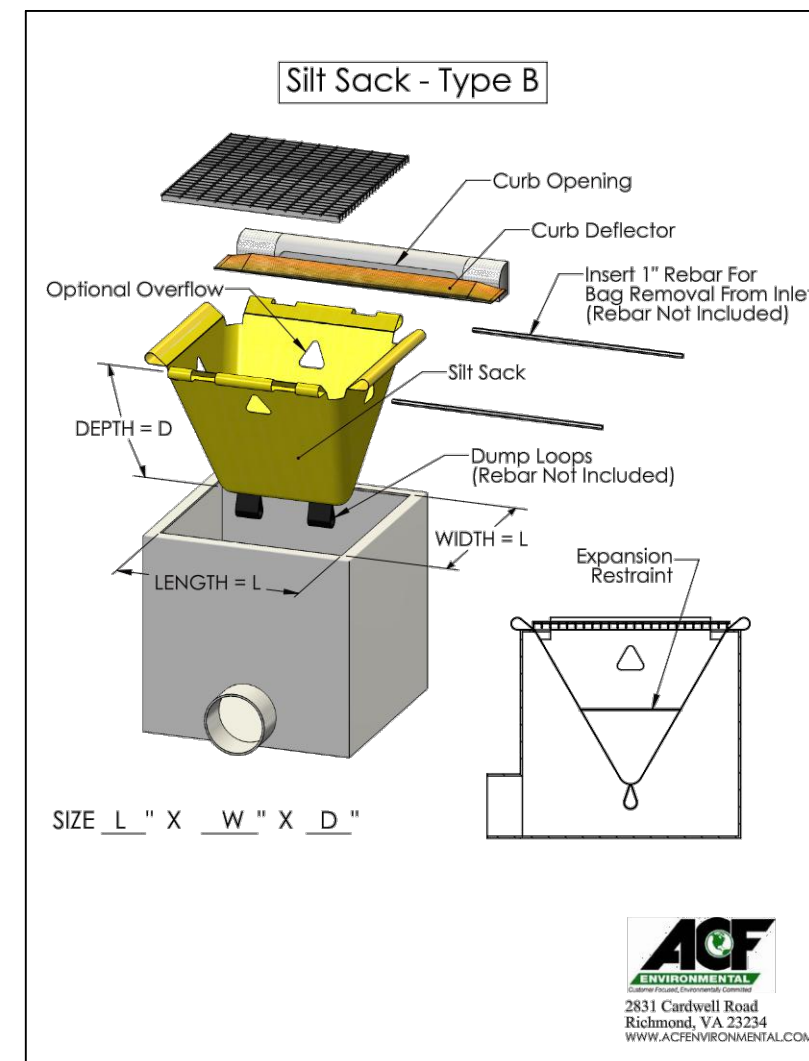
- NOTES:**
1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCING AS FOR SILT FENCE.
  2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE 1ST BAY, WHICH SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
  3. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
  4. INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH RAINFALL.



**STANDARD SKIMMER DETAIL**  
SCALE: NOT TO SCALE

| TEMPORARY SEEDING                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| SPECIES                                                                                                                                                                                                                                                                                                                                                                                                                                        | RATE (LBS/AC) | DATES             |
| RYE (GRAIN)                                                                                                                                                                                                                                                                                                                                                                                                                                    | 120           | DEC 1-APR. 15     |
| KOBE LESPEDEZA                                                                                                                                                                                                                                                                                                                                                                                                                                 | 50            | DEC. 1 - APR. 15  |
| GERMAN MILLET                                                                                                                                                                                                                                                                                                                                                                                                                                  | 40            | APR. 15 - AUG. 15 |
| RYE (GRAIN)                                                                                                                                                                                                                                                                                                                                                                                                                                    | 120           | AUG. 15 - DEC. 30 |
| SOIL AMENDMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                   |
| FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LBS/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LBS/ACRE 10-10-10 FERTILIZER                                                                                                                                                                                                                                                                                                                |               |                   |
| MULCH                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                   |
| APPLY 4,000 LBS/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                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                   |
| IF GROWTH IS LESS THAN FULLY ADEQUATE, REFERTILIZE IN THE SECOND YEAR ACCORDING TO SOIL TESTS OR TOPDRESS WITH 500 LBS/ACRE 10-10-10 FERTILIZER. RESEED, REFERTILIZE, AND MULCH AREA IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF SEEDING IN FALL, TOPDRESS WITH 50 LBS/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LBS/ACRE KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH. |               |                   |

**TEMPORARY SEEDING SCHEDULE DETAIL**  
SCALE: NOT TO SCALE



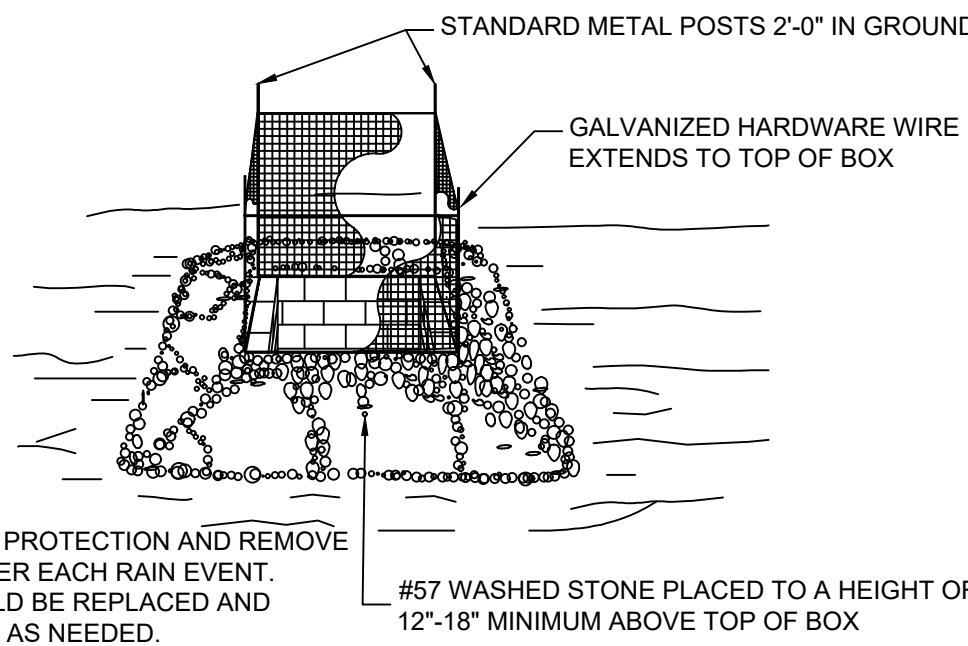
| SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1) |                                                          |               |
|-------------------------------------------|----------------------------------------------------------|---------------|
| DATE                                      | TYPE                                                     | PLANTING RATE |
| AUG 15 - NOV 1                            | TALL FESCUE                                              | 300 LBS/ACRE  |
| NOV 1 - MAR 1                             | TALL FESCUE & ABRUZZI RYE                                | 300 LBS/ACRE  |
| MAR 1 - APR 15                            | TALL FESCUE                                              | 25 LBS/ACRE   |
| APR 15 - JUN 30                           | HULLED COMMON BERMUDA GRASS                              | 300 LBS/ACRE  |
| JUL 1 - AUG 15                            | TALL FESCUE AND **BROWNTOP MILLET                        | 120 LBS/ACRE  |
|                                           | **OR SORGHUM-SUDAN HYBRID                                | 35 LBS/ACRE   |
|                                           |                                                          | 30 LBS/ACRE   |
| SLOPES (3:1 TO 2:1)                       |                                                          |               |
| MAR 1 - JUN 1                             | SERICEA LESPEDEZA (SCARIFIED) & ADD TALL FESCUE          | 50 LBS/ACRE   |
| (MAR 1 - APR 15)                          | OR ADD HULLED COMMON BERMUDA GRASS                       | 120 LBS/ACRE  |
| (MAR 1 - JUN 30)                          | **TALL FESCUE AND **BROWNTOP MILLET                      | 35 LBS/ACRE   |
| JUN 1 - SEP 1                             | **OR SORGHUM-SUDAN HYBRIDS                               | 30 LBS/ACRE   |
| SEP 1 - MAR 1                             | SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE | 70 LBS/ACRE   |
| (NOV 1 - MAR 1)                           | ADD ABRUZZI RYE                                          | 120 LBS/ACRE  |
|                                           |                                                          | 25 LBS/ACRE   |

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUED AREAS.

THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

\*\*\*TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

**PERMANENT SEEDING SCHEDULE DETAIL**  
SCALE: NOT TO SCALE



**STANDARD GRAVEL YARD INLET PROTECTION DETAIL**  
SCALE: NOT TO SCALE



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301 Carroll Road  
Richmond, VA 23234  
PHONE: (819) 778-8851  
WWW.RELENC.COM

**F&S LAND DEVELOPMENT LLC**  
12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA 27526  
42 BUSINESS PARK INDUSTRIAL FLEX BASE  
EROSION CONTROL DETAILS

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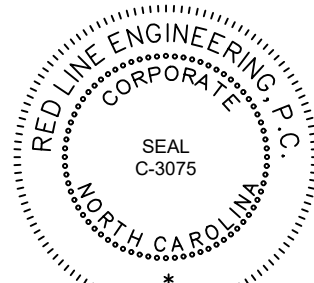
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12719 NC HIGHWAY 42  
HOLLY SPRINGS, NORTH CAROLINA, 27526

**442 BUSINESS PARK INDUSTRIAL FLEX BASE  
UTILITY DETAILS**

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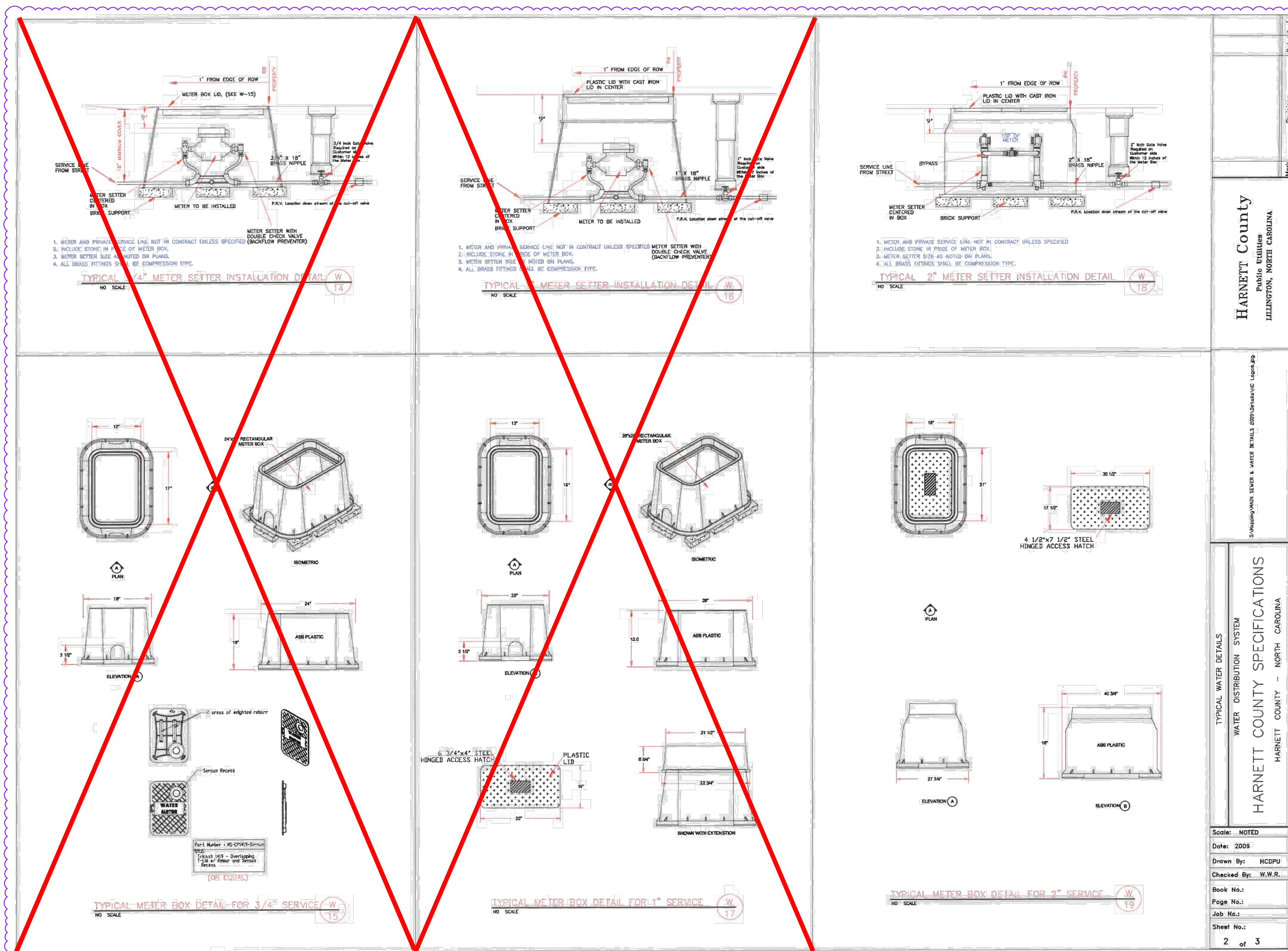
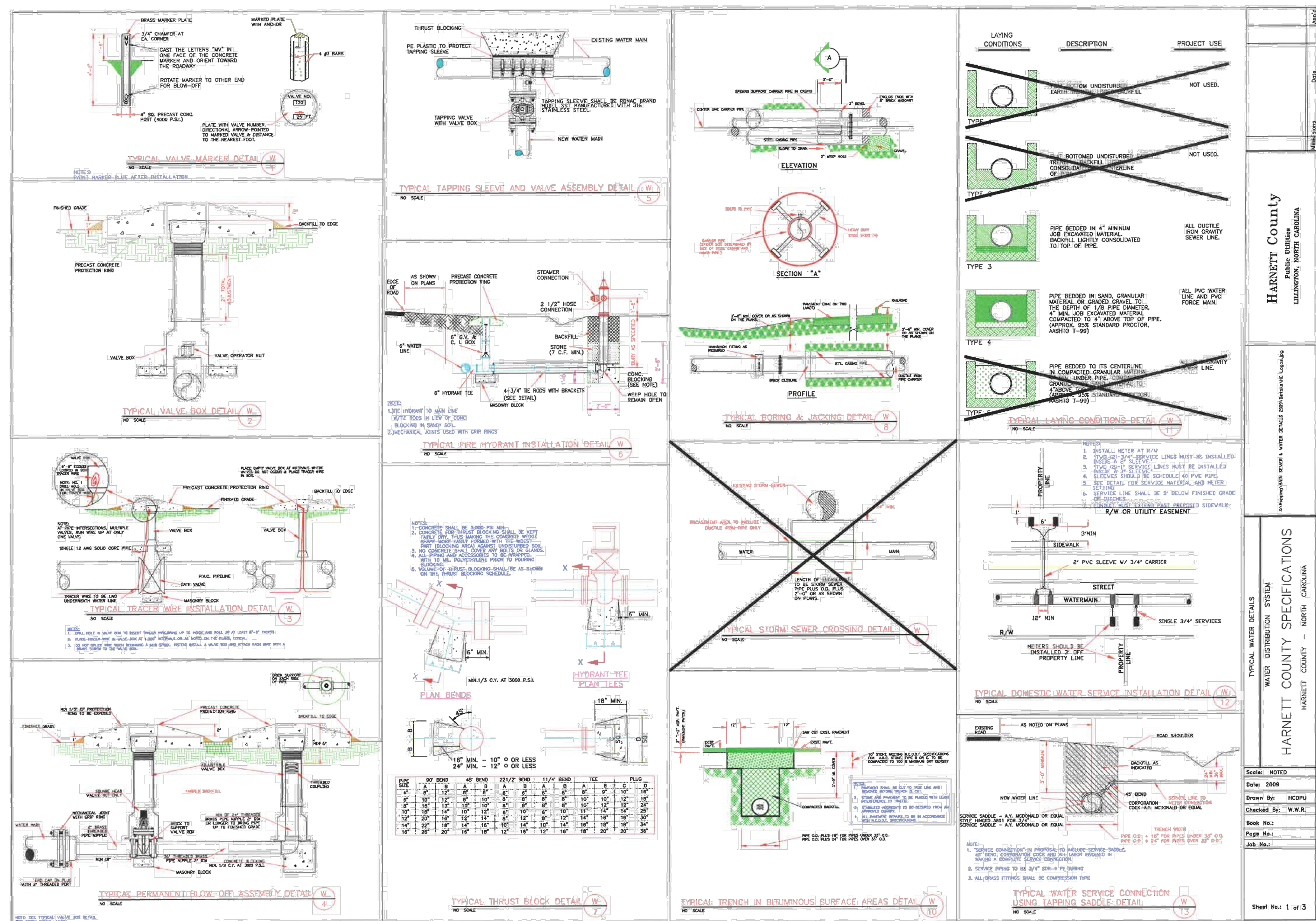
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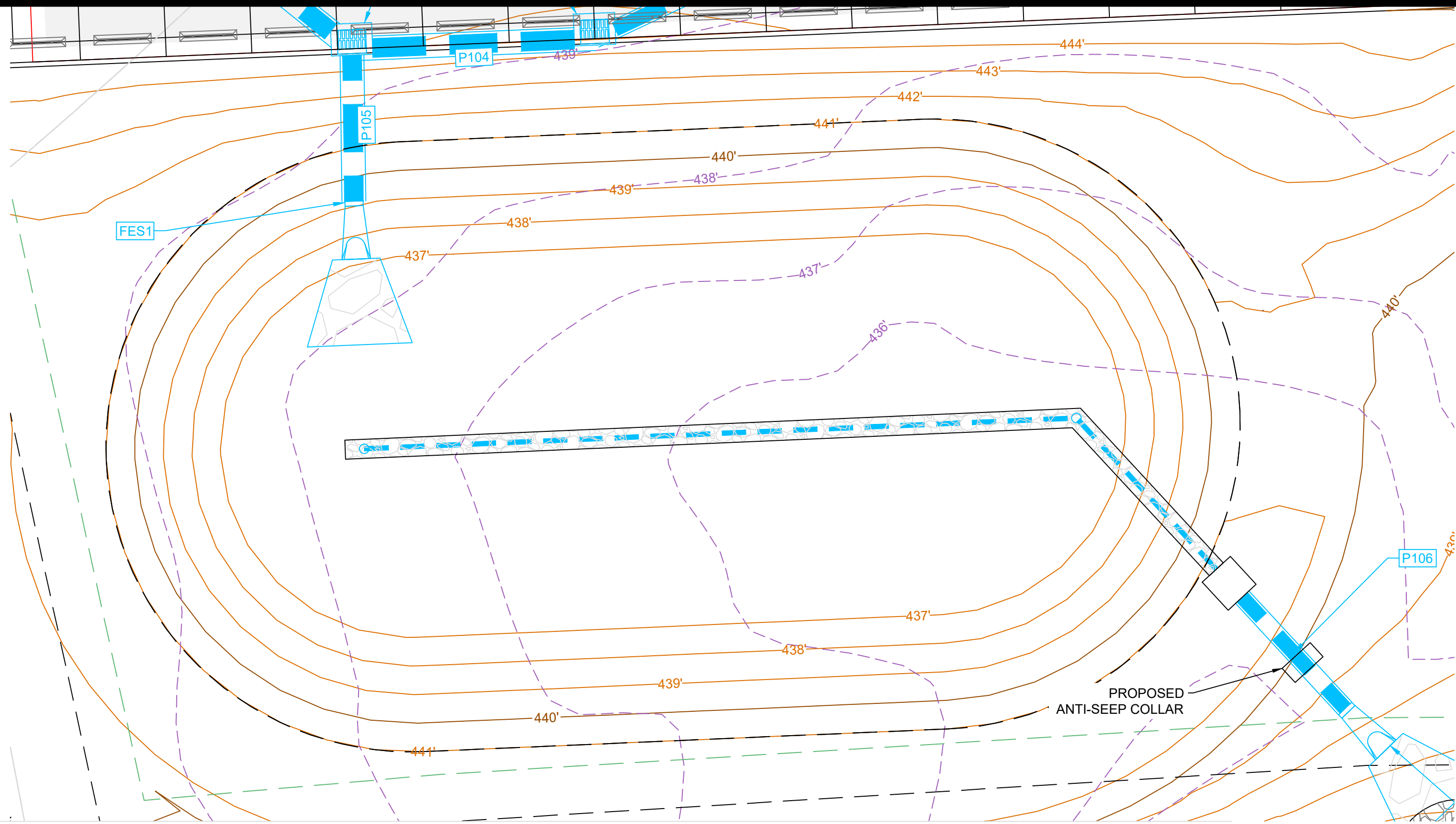
## C9.0

OF 19 SHEETS



Know what's **below**.  
**Call** before you dig.





PLAN VIEW  
INFILTRATION BASIN

- SCM CONVERSION NOTES:
- INFILTRATION BASIN MAY BE SODDED WITH NATIVE GRASSES (I.E. FESCUE, BERMUDA, ZOYSIA, CENTIPEDE), LINED WITH EXCELSIOR MATTING AND SEED, HYDRO-SEEDED OR CONVENTIONALLY SEEDED WITH SEED, STRAW AND TACK (AT THE OWNER'S DISCRETION).
  - IF SOD IS USED, SOD MUST BE GROWN IN SANDY SOIL, NOT CLAY SOIL. OWNER SHALL VERIFY WITH PROVIDER AND ENGINEER PRIOR TO PLACEMENT.
  - BLEND COARSE SAND INTO THE BOTTOM 12" OF THE SCM TO PROMOTE INFILTRATION.
  - LANDSCAPER SHALL NOT COMPACT THE BOTTOM OF THE POND OR PLACE HEAVY EQUIPMENT IN THE BOTTOM OF THE POND. LANDSCAPER MAY NEED TO IMPORT 4-6" OF SANDY TOPSOIL TO HELP THE VEGETATION ROOT AND ESTABLISH.

SCALE: 1" = 10'  
10' 0 10'  
SCALE OF MAP MAY VARY  
DUE TO METHODS OF REPRODUCTION.

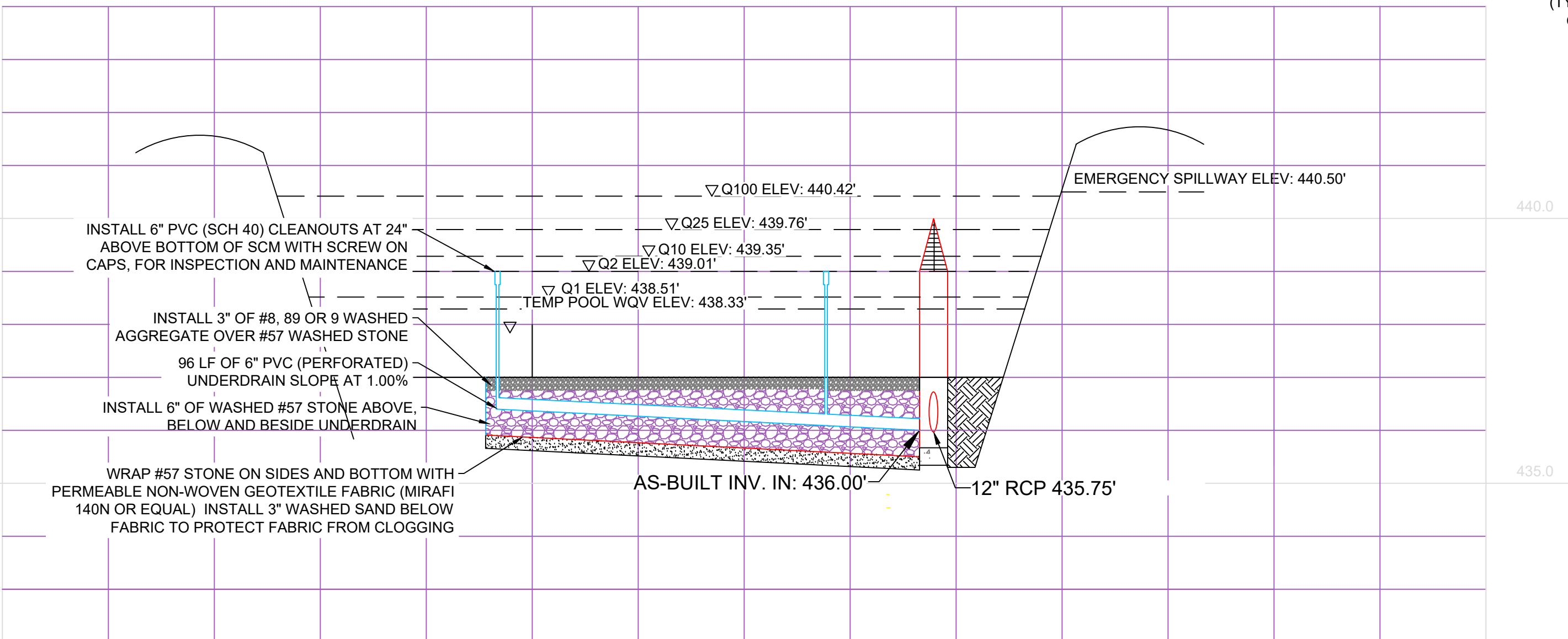
Q100 ELEV. = 440.42'  
Q25 ELEV. = 439.76'  
Q10 ELEV. = 439.35'  
TOP OF PRECAST RISER EL. = 439.00'  
Q2 ELEV. = 439.01'  
Q1 ELEV. = 438.51'  
WQV (4,450 CF) ELEV. = 438.33'

6" PVC (SCH-40 PERFORATED)  
UNDERDRAIN AT 1.00% SLOPE  
(AS-BUILT INV. = 436.00')  
(SEE UNDERDRAIN DETAIL)

- NOTES:
- RISER TO BE 4' x 4' PRE-CAST REINFORCED CONCRETE AND BARREL TO BE 18" RCP
  - ALL CONCRETE SHALL BE A MIN. 3,000 PSI CONCRETE (28 DAY STRENGTH)

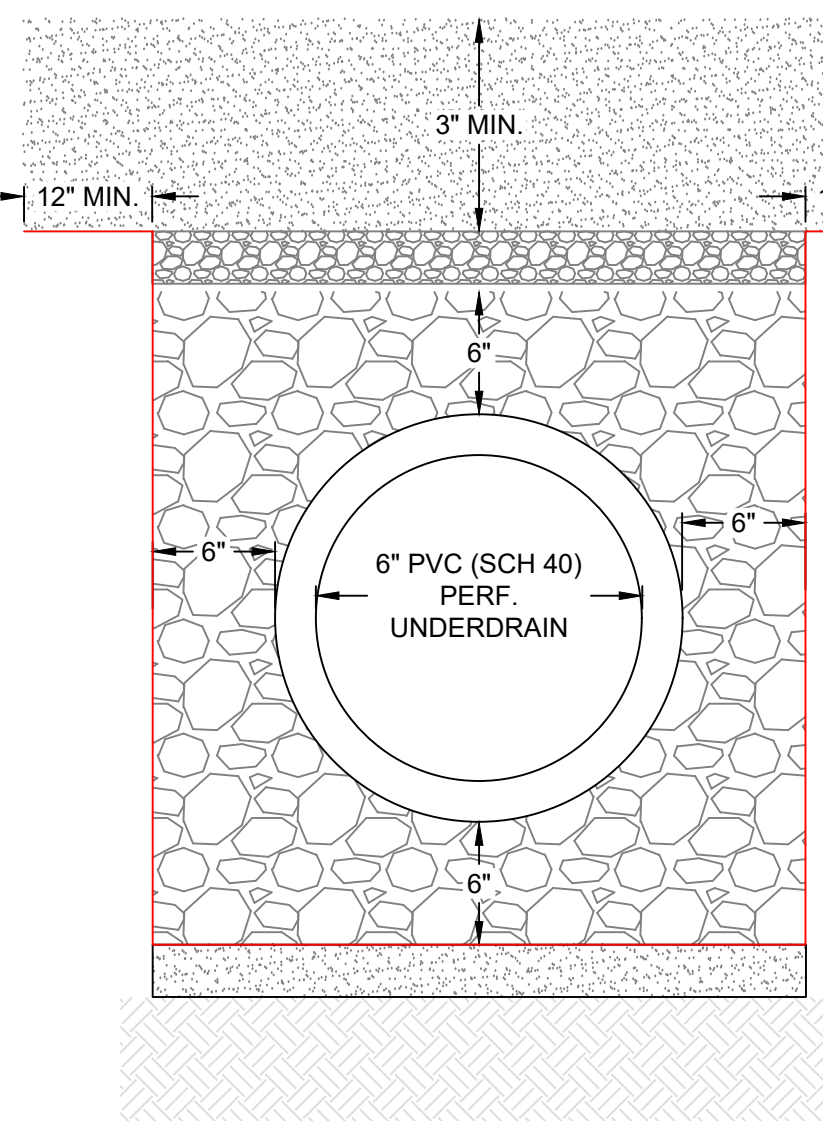
### INFILTRATION BASIN OUTLET/BYPASS STRUCTURE DETAIL

SCALE: NOT TO SCALE



INFILTRATION BASIN  
PROFILE VIEW A-A

HORIZONTAL: 1" = 20'  
VERTICAL: 1" = 2'



### UNDERDRAIN SECTION DETAIL DETAIL

SCALE: NOT TO SCALE

BACKFILL WITH COARSE, SANDY MATERIAL TO FINISHED GRADE AND VEGETATE. DO NOT COMPACT OR INSTALL WITH HEAVY EQUIPMENT

KEY GEOTEXTILE FABRIC 12" MIN. ON EACH SIDE AND STAPLE AT TOP. INSTALL 3" #8, #9, OR 9 WASHED STONE ABOVE #57 WASHED STONE

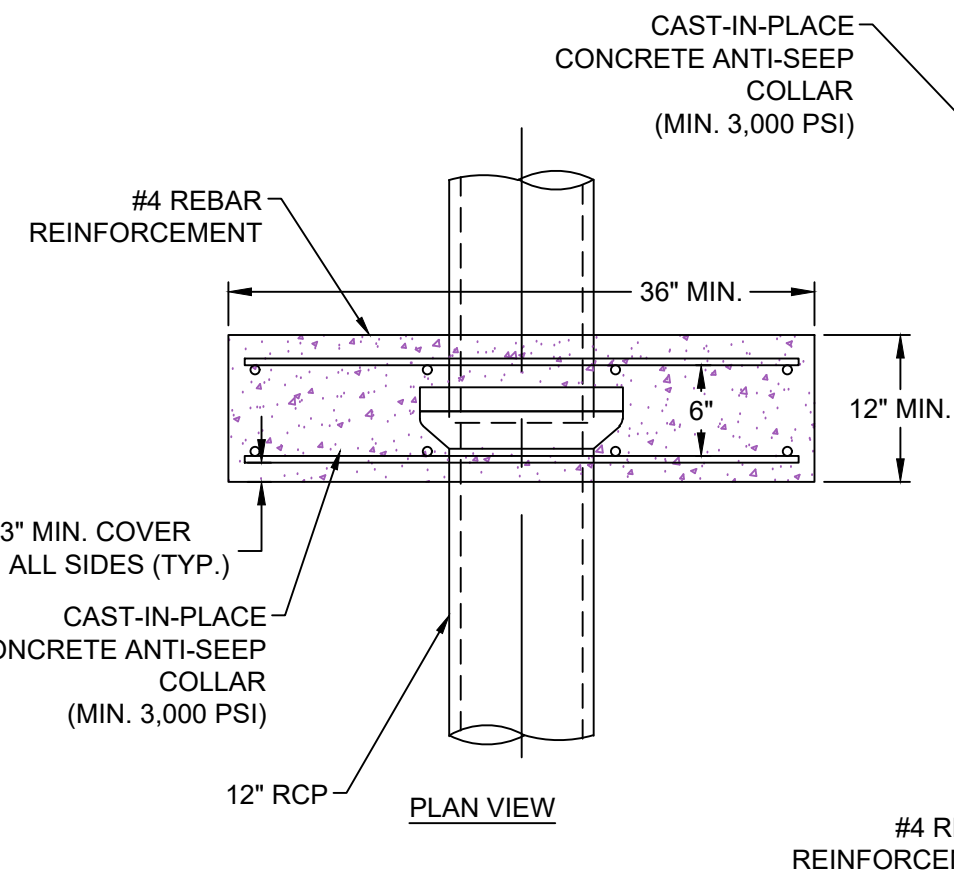
INSTALL 80 LF OF 6" PVC (SCH 40-PERFORATED) UNDERDRAIN IN CENTER OF SCM BOTTOM. SLOPE AT 0.50% TOWARD OUTLET

INSTALL WASHED #57 STONE AROUND UNDERDRAIN PIPE

WRAP TRENCH WITH GEOTEXTILE FABRIC, OVERLAP 6" MIN. AT TOP OF TRENCH AND STAPLE (MIRAFI 140 N OR APPROVED EQUAL)

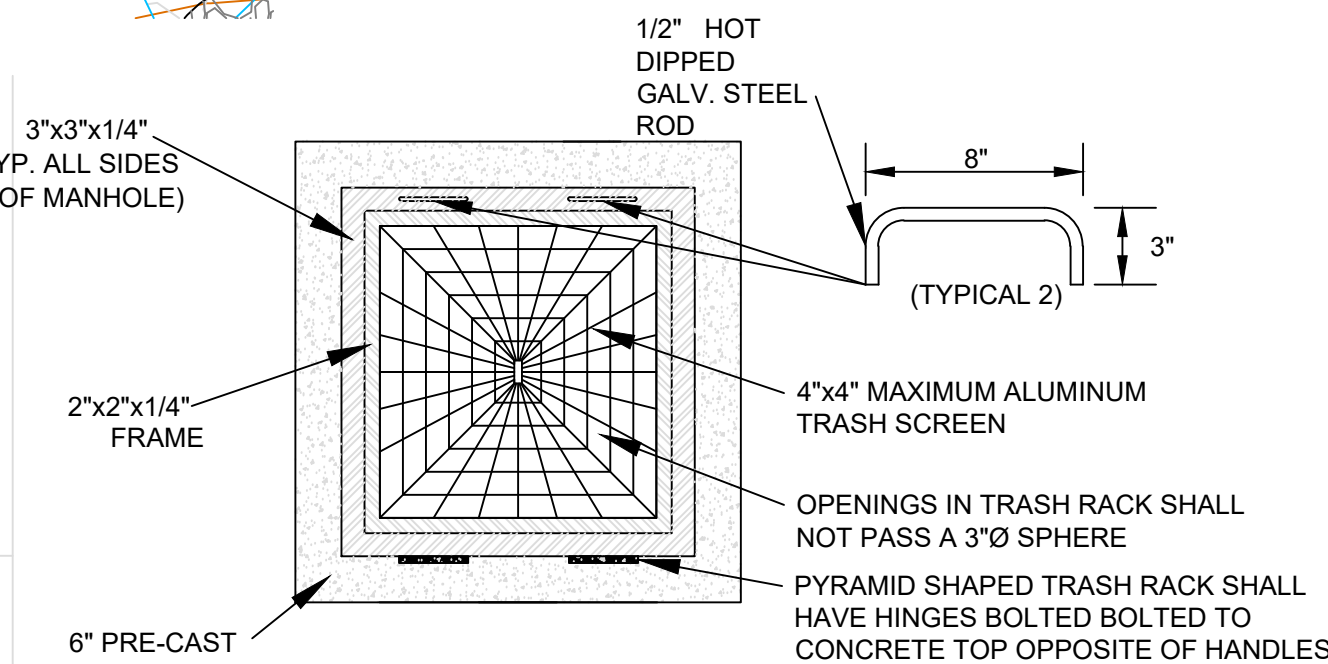
INSTALL 3" WASHED SAND BELOW TRENCH

SCARIFY EXISTING SUBGRADE TO PROMOTE INFILTRATION



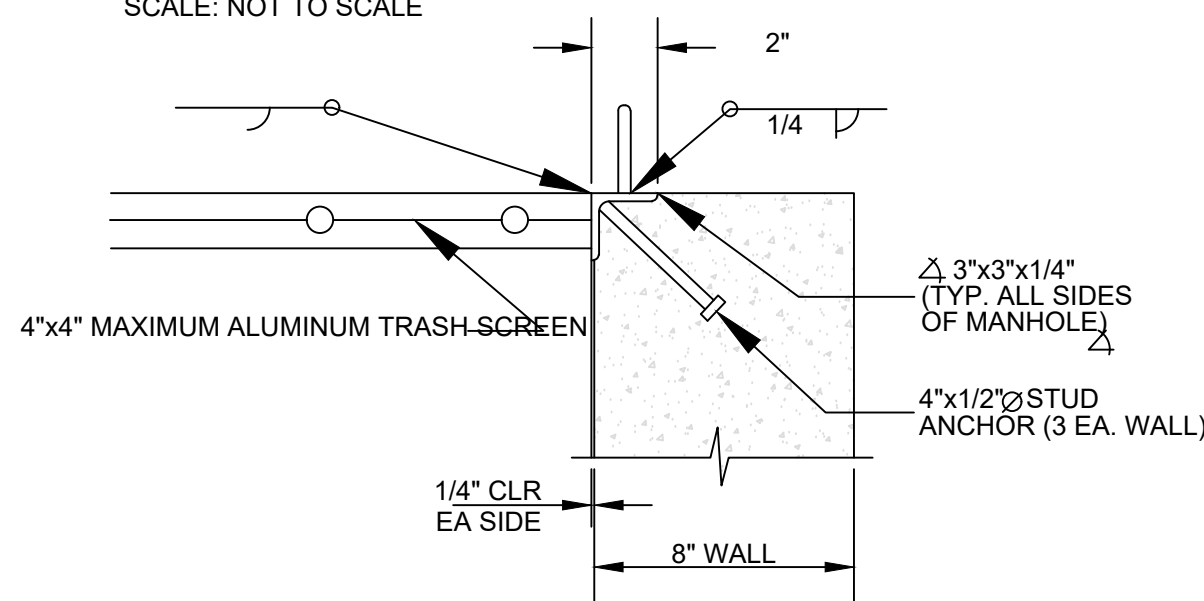
### ANTI-SEEP COLLAR (TYP.) DETAIL

SCALE: NOT TO SCALE



### OUTLET STRUCTURE TRASH SCREEN DETAIL

SCALE: NOT TO SCALE



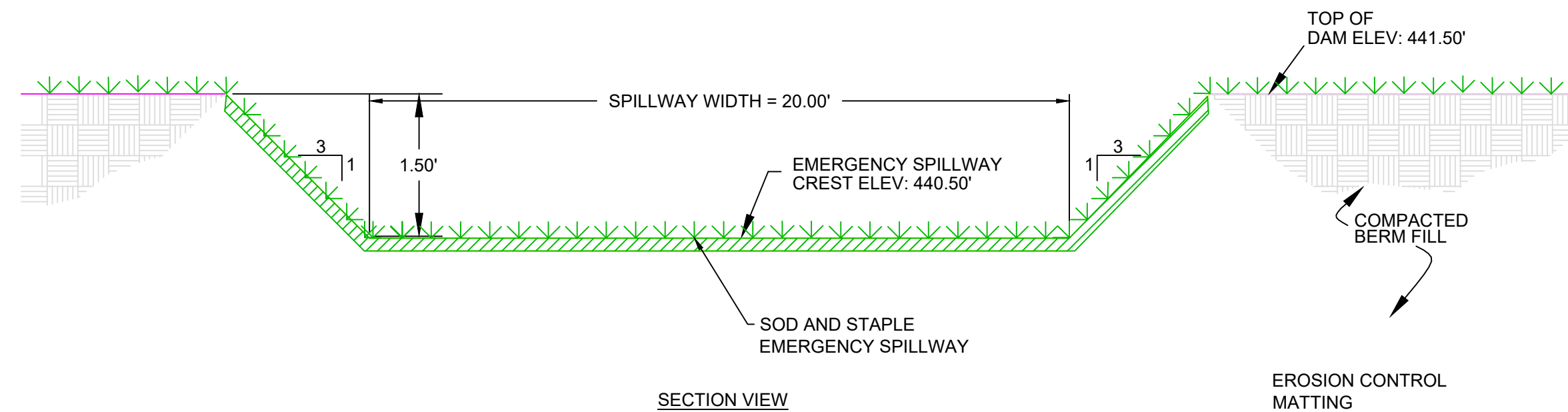
### CORNER DETAIL DETAIL

SCALE: NOT TO SCALE

- NOTES:
- THE EROSION CONTROL MATTING SHALL BE INSTALLED AFTER GRASS SEED AND SOIL AMENDMENTS HAVE BEEN APPLIED.
  - WHEN INSTALLING THE EROSION CONTROL MATTING THE MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED FOR LAP DISTANCES, ANCHOR SPACING & NUMBER, AND TRENCHING.
  - FERTILIZER, LIME, AND SEED SHALL BE APPLIED BEFORE MATTING IS INSTALLED. SEEDING AND SOIL AMENDMENTS SHALL BE APPLIED AT TWICE SCHEDULED RATES IN THE SPILLWAY SECTION.

### EMERGENCY SPILLWAY (SOD) DETAIL

SCALE: NOT TO SCALE



SECTION VIEW



| PRE VS POST PEAK RUNOFF SUMMARY |           |            |           |
|---------------------------------|-----------|------------|-----------|
|                                 | PRE (CFS) | POST (CFS) | SCM (CFS) |
| 1 YR / 24 HR                    | 2.39      | 5.34       | 0.34      |
| 2 YR / 24 HR                    | 3.88      | 7.30       | 0.70      |
| 10 YR / 24 HR                   | 8.72      | 13.02      | 7.65      |
| 25 YR / 24 HR                   | 12.01     | 16.65      | 8.72      |
| 100 YR / 24 HR                  | 17.87     | 22.70      | 10.38     |

A PRIMARY SCM (INFILTRATION BASIN) IS PROPOSED FOR THIS SITE. THE PROPOSED SCM CONTROLS THE PEAK RUNOFF RATES TO BELOW THE PRE-DEVELOPED CONDITIONS FOR THE 1, 2, 10, 25 & 100 YEAR 24 HOUR STORM EVENTS. AS SUCH, NO FURTHER DOWNSTREAM ANALYSIS IS REQUIRED.

INFILTRATION NOTE: PER ONSITE INFILTRATION TESTING AND CONDUCTED ON SEPTEMBER 20TH, 2023, BY NVS ENGINEERS & CONSULTANTS, INC., THE INFILTRATION RATES OF THE INSITU SOILS IN THE BOTTOM OF THE POND RANGED FROM 3.75 TO 0.5 IN/HR. WITH AN AVERAGE INFILTRATION RATE OF 1.5 IN/HR. THE EXISTING POND IS THUS BEING CONVERTED FROM A WET DETENTION POND TO AN INFILTRATION BASIN.

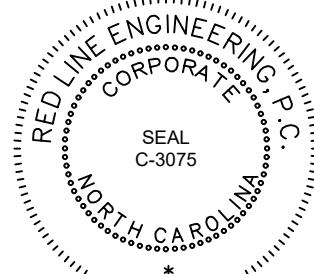
SHWT SEPARATION NOTE: PER ONSITE TESTING AND FIELD OBSERVATION ON NOVEMBER 30TH, 2023, BY NVS ENGINEERS & CONSULTANTS, INC., THE SEASONAL HIGH WATER TABLE (SHWT) WAS NOT PRESENT WITHIN SIX (6) FEET OF THE BOTTOM OF THE EXISTING POND. 24 INCHES OF SEPARATION IS REQUIRED. THE PROPOSED DESIGN EXCEEDS THIS REQUIREMENT.

POND LINER NOTE: CLAY LINER IS REQUIRED WITH A MAXIMUM INFILTRATION RATE OF 0.01 IN/HR. NO GEOTECHNICAL TESTING OF ONSITE SOILS HAS BEEN PROVIDED AT THIS TIME. A GEOTECHNICAL ENGINEER SHALL CERTIFY THAT PROPER PLACEMENT, COMPACTION AND INFILTRATION RATE FOR THE POND LINER HAVE BEEN ACHIEVED PRIOR TO PLACING SCM INTO SERVICE. IF ONSITE MATERIAL CANNOT MEET 0.01 IN/HR MAX INFILTRATION RATE, IMPORTED MATERIAL WILL BE REQUIRED.

BASIN BERM NOTE: TOP OF BERM ON BASIN SHALL BE DOMED 6" TO MIDDLE TO PROVIDE POSITIVE DRAINAGE. TOP OF BERM IN CENTER = 382.50



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42 BUSINESS PARK INDUSTRIAL FLEX BASE  
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| 2 PER HRW       | 05/14/26 |
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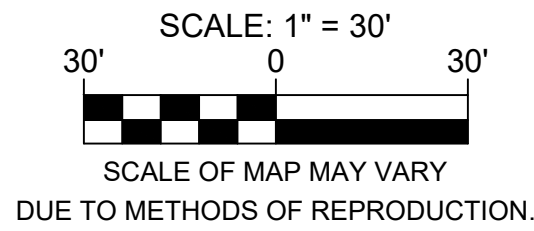
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REQUIRED LANDSCAPE IMPROVEMENTS

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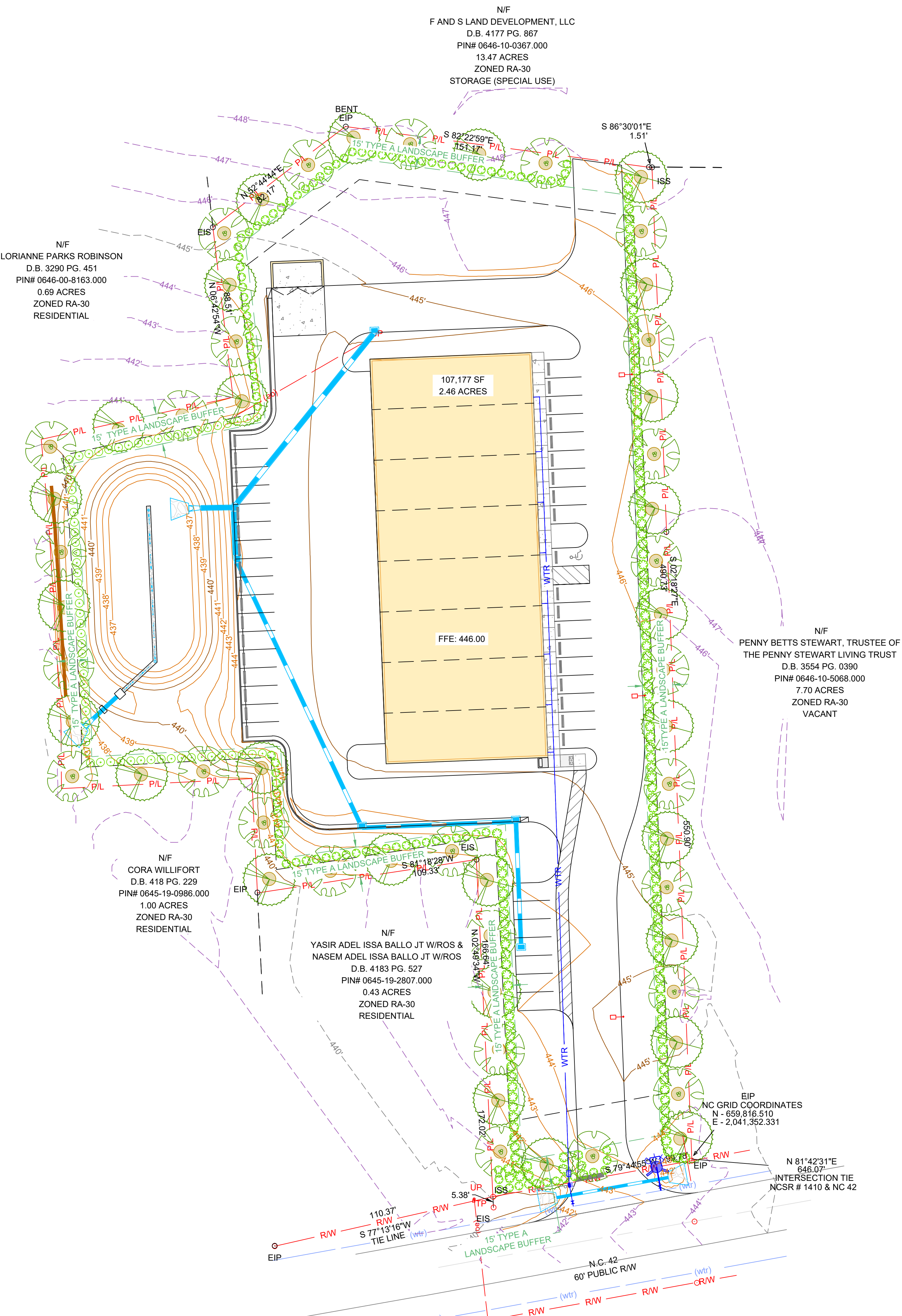
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## PLANTING SCHEDULE

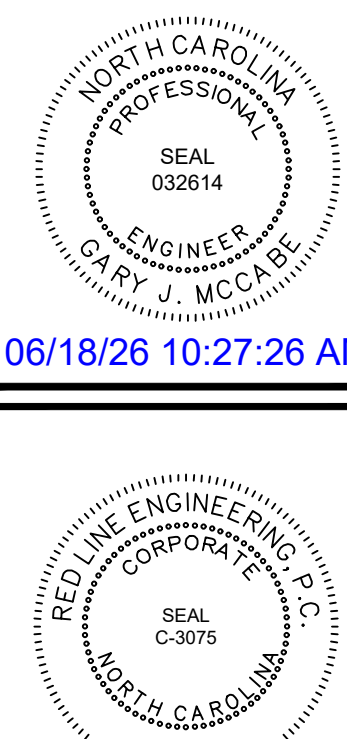
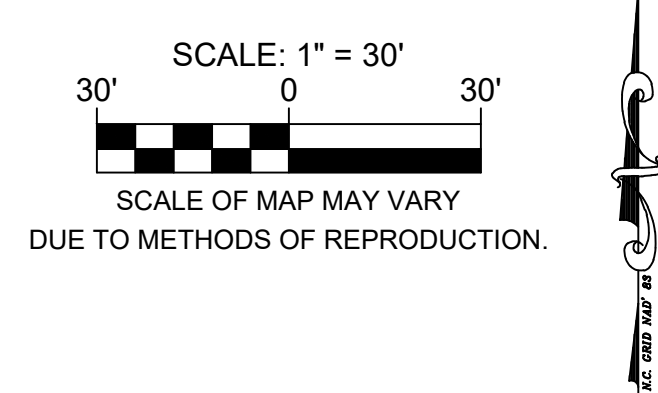
|              | SYMBOL | CODE NAME | QUANTITY | COMMON NAME                     | SCIENTIFIC NAME                        | PLANTING SIZE                                                               |
|--------------|--------|-----------|----------|---------------------------------|----------------------------------------|-----------------------------------------------------------------------------|
| SHRUBS       |        | DEH       | 142      | DISTYLIUM 'EMERALD HEIGHTS' (e) | DISTYLIUM PIDIST-L,<br>MED HT          | 3 GAL. / 18" HT. MIN. AT PLANTING 36" HT. X 30" SPREAD WITHIN 3 YRS         |
|              |        | DJC       | 103      | DWARF JAPANESE CEDAR (e)        | CRYPTOMERIA JAPONICA<br>'GLOBOSA NANA' | 3 GAL. / 18" HT. MIN. AT PLANTING 36" HT. X 30" SPREAD WITHIN 3 YRS         |
|              |        | IlcoD     | 67       | DWARF BURFORD HOLLY (e)         | ILEX CORNUTA<br>'DWARF BURFORD'        | 3 GAL. / 18" HT. MIN. AT PLANTING 36" HT. X 30" SPREAD WITHIN 3 YRS         |
| CANOPY TREES |        | Quph      | 27       | WILLOW OAK                      | QUERCUS PHELLOS                        | 2 1/2" CAL. / 8" HT. MIN. AT PLANTING 40' MIN. HT. / 30' SPREAD AT MATURITY |
|              |        |           | 27       |                                 |                                        | 2 1/2" CAL. / 8" HT. MIN. AT PLANTING 40' MIN. HT. / 30' SPREAD AT MATURITY |

## LANDSCAPE SUMMARY

| LANDSCAPE BUFFER DATA:       |                            |           |
|------------------------------|----------------------------|-----------|
| West PL                      | Type A Buffer - 15' width  | 805.36 lf |
| 1 canopy trees req./30ft     | 27 canopy trees req./prov. |           |
| 1 shrubs req./6ft            | 135 shrubs req.            |           |
|                              | 149 shrubs prov.           |           |
| North PL                     | Type A Buffer - 15' width  | 208.98 lf |
| 1 canopy trees req./30ft     | 7 canopy trees req./prov.  |           |
| 1 shrubs req./6ft            | 39 shrubs req.             |           |
|                              | 40 shrubs prov.            |           |
| East PL                      | Type A Buffer - 15' width  | 490.73 lf |
| 1 canopy trees req./30ft     | 17 canopy trees req./prov. |           |
| 1 shrubs req./6ft            | 82 shrubs req.             |           |
|                              | 93 shrubs prov.            |           |
| South PL (ROW)               | Type A Buffer - 15' width  | 71.64 lf  |
| 1 canopy trees req./30ft     | 3 canopy trees req./prov.  |           |
| 10 shrubs req./1 canopy tree | 30 shrubs req.             |           |
|                              | 30 shrubs prov.            |           |



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