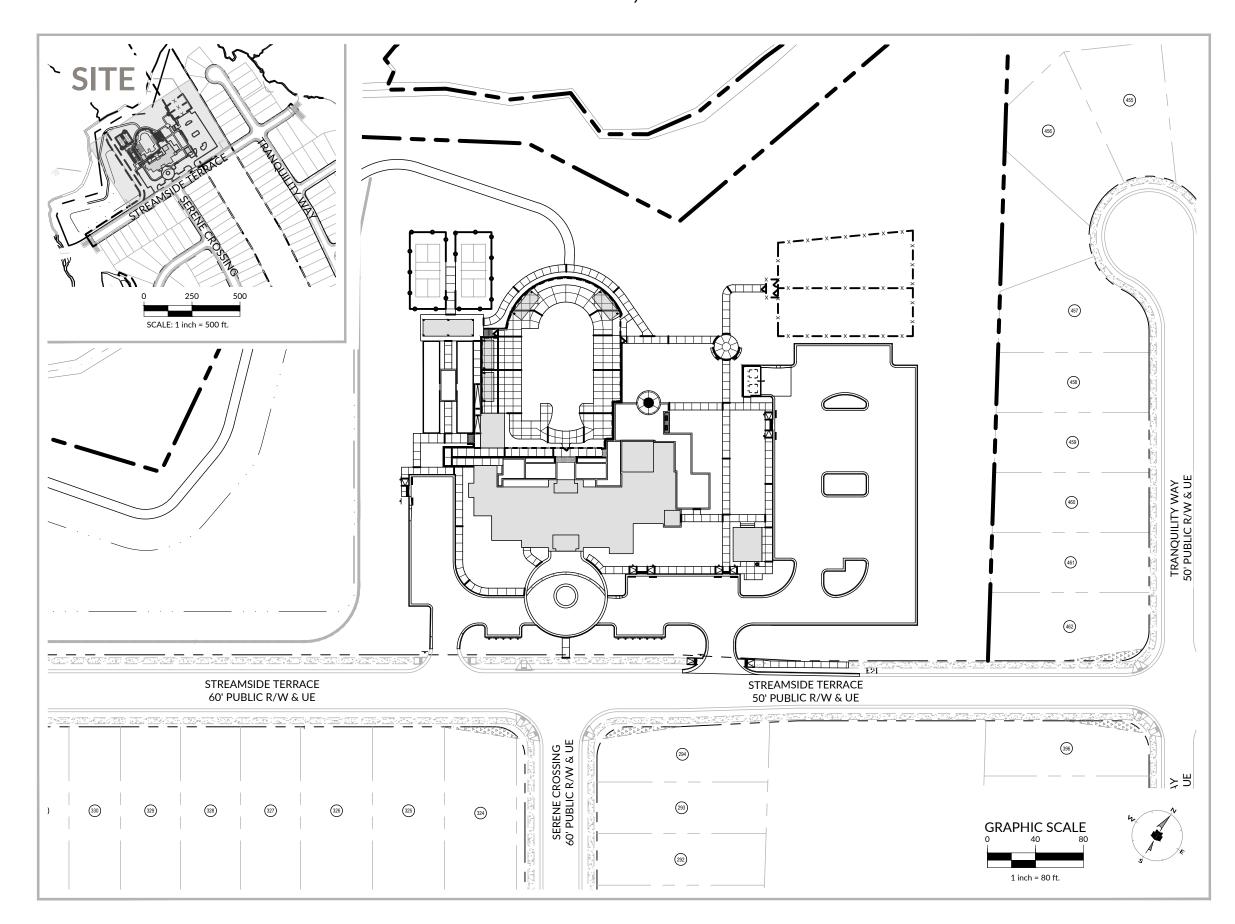
## **CONSTRUCTION PLANS**

# TRI POINTE HOMES SERENITY AMENITY

**HARNETT COUNTY PROJECT #SITE2412-0002** 

## STREAMSIDE TERRACE | HARNETT COUNTY, NORTH CAROLINA

MAY 23, 2025



SITE DATA TABLE

**SURVEY BENCHMARK** 

BENCHMARK IS LOCAL TO SITE. SEE SHEET CO.01 FOR BENCHMARK INFORMATION. VERTICAL DATUM BASED ON NAVD 88.

OWNER GREENFIELD SERENITY DEVO INC. 0645-84-9879.000 PARCEL PIN NO. LOT SIZE (ACRES) WATERSHED HECTOR CREEK **RESIDENTIAL - RA-30 EXISTING ZONING & LAND USE PROPOSED USE** RESIDENTIAL SETBACKS: FRONT SIDE REAR 1 PER 4 PERSON AT MAX CAPACITY(368)=92 SPACES, INCLUDING 4 ADA (1 VAN) PARKING REQUIRED (MAX ALLOWED=101 SPACES)

92 SPACES PARKING PROVIDED (INCLUDES 5 STANDARD ADA AND 3 VAN ADA SPACES) 92 SPACES = 4 TOTAL HC SPACES (1 VAN)

44,171 SF

**IMPERVIOUS AREA** 

HARNETT COUNTY REGIONAL WATER NOTES:

- 1. WATERLINE CONSTRUCTION AND TIE-IN NEED TO BE COORDINATED AND INSPECTED BY HRW CONSTRUCTION INSPECTOR CHAD EVERETT.
- 2. THE POOL DRAIN SYSTEM AND FILTER BACKWASH SHOULD BE DE-CHLORINATED AND DISCHARGED TO THE STORM DRAIN SYSTEM

## THIS PROJECT IS WITHIN PHASE 6 OF THE SRENITY SUBDIVISION AND IS SUBJECT TO THE FOLLOWING:

BOA APPROVAL: 07/09/2018 A. Garage: Each single-family house inside product families S2, S3 & S4 shall provide at least a standard two-car garage. All other single family houses shall provide at least a one-car garage. B. Landscaping: Each house shall provide one of the following: A) minimum of one tree for S1 & S2 product, B) minimum of one tree and four shrubs for S3 & S4, or C) minimum of eight Amenity: Amenity plan shall include a minimum of a cabana, a community pool with appropriate deck space, children's "tot" lot, lawn areas or ball fields, gazebos, appropriate parking, and pocket open space areas as outlined on the approved Concept Plan. Mail: Mail pick-up may be provided either by a centralized mail kiosk area, by kiosks placed in individual sections of the community, or a combination of both (as required by USPS). Setbacks: Lot setbacks should be as follows: a. S1 Product: minimum 20' front, 15' rear, 12' corner, and side yard options of 1) a zero-lot-line allowance with minimum 8' aggregate between units, or 2) 4' side setbacks. b. S2 Product: minimum 20' front, 5' side, 20' rear & 12' corner. c.S3 Product: minimum 20' front, 5' side, 20' rear & 12' corner. d. S4 Product: minimum 20' front, 5' side, 20' rear & 12' corner. Lot Ownership: All units will be sold as individual lots.

THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY AGRICULTURAL DISTRICT. HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR MAINTENANCE OF PARKING AREAS, DRIVE AISLES, MAIL KIOSK, EASEMENTS/STORMWATER DEVICES, AND ALL LANDSCAPE BUFFERING.

## SHEET LIST TABLE

Sheet Number	Sheet Title
C0.00	COVER
C0.01	GENERAL NOTES
C1.00	<b>EXISTING CONDITIONS AND DEMOLITION PLA</b>
C2.00	SITE PLAN
C3.00	UTILITY PLAN
C4.00	GRADING PLAN
C4.01	DRAINAGE PLAN
C4.02	RETAINING WALLS
C5.00	MATERIALS AND FURNISHING SCHEDULE
C5.01	SITE DETAILS
C5.02	SITE DETAILS
C5.03	SITE DETAILS
C5.04	SITE DETAILS
C5.05	SITE DETAILS
C5.06	SITE DETAILS
C5.07	WATER DETAILS
C5.08	SEWER DETAILS
C5.09	STORM DETAILS
C6.00	INITIAL PHASE EROSION CONTROL
C6.01	FINAL PHASE EROSION CONTROL
C6.02	<b>EROSION CONTROL NOTES &amp; DETAILS</b>
C6.03	<b>EROSION CONTROL NOTES &amp; DETAILS</b>
C6.04	<b>EROSION CONTROL NOTES &amp; DETAILS</b>
C6.05	NCG01 NOTES
L1.00	LANDSCAPE PLAN
L2.00	LANDSCAPE DETAILS
SL1.00	LIGHTING EXHIBIT

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

Kristi Dillard Date Owner Signature

Approved: SITE2412-0002

Jay Sikes, Mgr of Planning Services



## **CONTACT LIST:**

David Starkel, PE WithersRavenel 201 S. Tryon Street, Suite 800 Charlotte, NC 28202 704-919-1242 dstarkel@withersravenel.com

Landscape Architect Daniel Whatley PLA WithersRavenel 137 S Wilmington St, Suite 201 Raleigh, NC 27601 919-535-5200 dwhatley@withersravenel.com

Kristi Dillard Tri Point Homes 5440 Wade Park Blvd Suite 400 Raleigh, NC 27607









**DEVELOPER:** 

**CONSTRUCTION PLANS** Tri Pointe Homes Serenity Amenity WR PROJECT NO. 23-1177 HARNETT COUNTY PROJ. NO: SITE2412-0002

Tri Pointe Homes 5440 Wade Park Blvd Suite 400 Raleigh, NC 27607 PHONE #: 919-300-4914 ATTENTION: Kristi Dillard

INITIAL PLAN DATE: 05/23/2025

**SURVEY NOTES:** 

1. THE FOLLOWING INFORMATION WAS USED FOR THE EXISTING SURVEY:

b. PROJECT HORIZONTAL DATUM: NAD 83/2011

d. COORDINATE UNITS: US SURVEY FEET e. VERTICAL UNITS: US SURVEY FEET

c. VERTICAL DATUM: NAVD 88

a. COORDINATE SYSTEM: NORTH CAROLINA STATE PLANE FOOT

2. PROPERTY BOUNDARY SHOWN AS PROVIDED BY TIMMONS GROUP, DATED MARCH 8, 2019 & JUNE 6, 2019.

### AFTER NOTIFICATION TO ENGINEER AND OWNER, THE CONTRACTOR SHALL PERFORM THE AGREED UPON FIELD ADJUSTMENTS TO MATCH THE LOCATIONS OF THESE EXISTING FEATURES.

IF THERE ARE DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS RELATED TO WHERE THE PROPOSED STORM SEWER PIPING

TIES TO EXISTING STRUCTURES, PIPES, SWALES, ETC., THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER.

- 8. ALL STORM SEWER PIPE SHALL HAVE A MINIMUM COVER OF 2 FEET FROM FINISHED SUBGRADE TO THE PIPE CROWN IN TRAFFIC BEARING AREAS. UNLESS APPROVED BY AUTHORITIES HAVING JURISDICTION.
- 9. ALL STORM SEWER PIPE SHALL HAVE A MINIMUM COVER OF 1 FOOT TO THE PIPE CROWN IN NON-TRAFFIC BEARING AREAS.
- 3. TOPOGRAPHIC SURVEY SHOWN AS PROVIDED BY TIMMONS GROUP, DATED SEPTEMBER 10, 2018 4. WETLANDS, STREAMS, AND RIPARIAN BUFFERS SHOWN AS PROVIDED BY CAROLINA ECOSYSTEMS, INC., DATED FEBRUARY 2018, AND
- 5. PROPERTY DOES NOT FALL WITHIN FEMA FLOODPLAIN PER FEMA FIRM 3720064500J, EFFECTIVE DATE OCTOBER 3, 2006.
- 6. NO DETERMINATION HAS BEEN MADE BY THE SURVEYOR AS TO THE FOLLOWING: UNDERGROUND STORAGE FACILITIES, UNDERGROUND UTILITIES, GRAVES, CEMETERIES, BURIAL GROUNDS, HAZARDOUS WASTE DEPOSITS OR MATERIALS.
- 7. EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON THE DESIGN FILES FOR THE SUBDIVISION. THE CONTRACTOR IS TO VERIFY THE UTILITY LOCATIONS PRIOR TO STARTING CONSTRUCTION.
- 8. SURVEY CONTROL POINTS PROVIDED IN NC STATE PLANE COORDINATES. ALL PROPOSED COORDINATES ARE GROUND COORDINATES. THE CONTRACTOR'S SURVEYOR IS RESPONSIBLE FOR ANY CONVERSIONS NEEDED FOR THE STAKEOUT OF THE PROPOSED GROUND
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ADDITIONAL CONTROLS THAT MAY BE NEEDED THROUGHOUT THE PROJECT.

### GENERAL NOTES:

- 1. WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, HARNETT COUNTY STANDARDS AND SPECIFICATIONS, GEOTECHNICAL REPORTS, AND ANY OTHER APPLICABLE DESIGN STANDARDS AT THE TIME OF PLAN APPROVAL. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS OR PLANS, THE MOST STRINGENT SHALL GOVERN, UNLESS OTHERWISE NOTED IN THESE PLANS.
- 2. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HAVING VISITED THE SITE AND HAVING FAMILIARIZED THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- 3. ANY DISCREPANCIES, INCONSISTENCIES OR AMBIGUITIES FOUND BETWEEN THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER IN WRITING. WORK DONE BY THE CONTRACTOR AFTER THE DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES WITHOUT WRITTEN CLARIFICATION FROM THE ENGINEER AND APPROVAL BY OWNER SHALL BE DONE AT THE CONTRACTOR'S RISK AND EXPENSE.
- 4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL JOBSITE SAFETY DURING ALL PHASES OF CONSTRUCTION. ALL WORK SHALL COMPLY WITH MUNICIPAL, COUNTY AND STATE REGULATIONS, AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OSHA ACT.
- 5. THE CONTRACTOR SHALL CALL "811" FOR PROPER IDENTIFICATION OF EXISTING UTILITIES AT LEAST 72 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING, AND SUBSEQUENTLY PROTECTING, ALL PUBLIC AND PRIVATE UTILITIES (SHOWN OR NOT SHOWN) THAT LIE IN OR ADJACENT TO THE PROJECT SITE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE UNDERGROUND UTILITIES. ALL UTILITIES AND FACILITIES ARE NOT NECESSARILY SHOWN. HAND DIGGING TO PROTECT UTILITIES FROM DAMAGE MAY BE REQUIRED.
- 7. ANY UTILITIES AND EXISTING SITE ELEMENTS (I.E. SIGNS, ROADWAYS, PATHS, STRUCTURES, NATURAL VEGETATION, OTHER EXISTING PROPERTY ITEMS, ETC.) DAMAGED DURING THE PROJECT BY THE CONTRACTOR'S WORKERS OR EQUIPMENT SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER, UTILITY OWNER, REGULATORY AGENCY, AND
- 8. CONTRACTOR SHALL MAKE EVERY EFFORT TO PRESERVE PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES. A NORTH CAROLINA LICENSED LAND SURVEYOR SHALL REPLACE, AT THE CONTRACTOR'S EXPENSE, PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES DESTROYED BY THE CONTRACTOR.
- 9. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK IN ORDER TO CAUSE MINIMUM DISTURBANCE TO THE OWNER. ADJACENT PROPERTIES AND THE PUBLIC. CONTRACTOR SHALL COORDINATE WITH AND OBTAIN APPROVAL FROM STATE AND LOCAL REGULATORY AGENCIES ON TRAFFIC CONTROL PLANS.
- 10. ADJACENT STREETS AND SIDEWALKS SHALL BE MAINTAINED IN AN UNOBSTRUCTED, CLEAN CONDITION, MUD AND DUST-FREE.
- 11. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL PERMIT APPROVALS AND EXECUTED EASEMENTS ON THE JOB SITE AT ALL TIMES.
- 12. CONSTRUCTION STAKEOUT FOR THIS PROJECT MAY BE PERFORMED BY THE CONTRACTOR, USING A DIGITAL (CADD) FILE PROVIDED BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FOUND BETWEEN THE DIGITAL FILE AND THE CRITICAL STAKING DIMENSIONS SHOWN ON THIS PLAN (I.E. PAVEMENT WIDTHS, CURB RADII, BUILDING SETBACKS, BUILDING FOOTPRINTS, ETC.). ANY MODIFICATIONS MADE BY OTHERS TO THE DIGITAL FILE PROVIDED BY THE ENGINEER SHALL RENDER IT VOID.
- 13. WETLANDS SHOWN WILL HAVE DEED RESTRICTION AND SHALL NOT BE CLEARED, DRAINED, OR OTHERWISE DISTURBED UNLESS SPECIFICALLY PERMITTED BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) OR NC DIVISION OF COASTAL MANAGEMENT (DCM) OR NC DIVISION OF WATER RESOURCES (DWR), AS APPLICABLE.
- 14. ANY WETLANDS THAT ARE TEMPORARILY IMPACTED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RETURNED TO PRE-CONSTRUCTION GRADE AND SEEDED WITH A WETLAND SEED MIX IN ACCORDANCE WITH THE SEDIMENT & EROSION CONTROL PLAN.
- 15. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDINGS AS SHOWN ON THE PLANS. ALL PAVEMENT MARKING MATERIALS SHALL ADHERE TO NCDOT STANDARDS, UNLESS NOTED OTHERWISE.
- 16. ACCESSIBLE ROUTES AND PARKING AREAS MUST BE PROVIDED IN ACCORDANCE WITH THE CURRENT NORTH CAROLINA BUILDING CODE AND ADA STANDARDS FOR ACCESSIBLE DESIGN.
- 17. WHERE PROPOSED CURB AND GUTTER TIES TO EXISTING CURB OR CURB AND GUTTER, A TRANSITION OF 10' SHALL BE MADE TO CONFORM TO THE EXISTING HEIGHTS AND SHAPES, UNLESS OTHERWISE SHOWN ON THE PLANS.
- 18. ALL EXPANSION CURB JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1.5', UNLESS OTHERWISE SHOWN ON PLANS. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT.

## **DEMOLITION NOTES:**

- 1. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND UTILITY OWNER TO PROPERLY MAINTAIN, REMOVE OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING SURROUNDING NEIGHBORS ABOUT ANY POTENTIAL INTERRUPTION TO SERVICE OF ANY KIND.
- 3. EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING CONSTRUCTION ACTIVITIES.
- 4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY. STRUCTURES AND UTILITIES. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE REPLACED BY THE CONTRACTOR TO THE
- 5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
- 6. SAW CUTS OF EXISTING PAVEMENTS, CURBS, GUTTERS AND SIDEWALKS SHALL PRODUCE A NEAT VERTICAL EDGE.
- 7. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION.
- 8. ALL PERMITS REQUIRED FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PRIOR TO THE

## **STORM DRAINAGE NOTES:**

SPECIFICATIONS AND DETAILS.

SEWER DRAINAGE SYSTEM.

TOP OF GRATE AND JUNCTION BOX (JB) IS TOP OF RIM.

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT HARNETT COUNTY STANDARDS AND NCDOT STANDARD
- 2. ALL STORM DRAINAGE FRAMES, GRATES, AND HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH HARNETT COUNTY AND NCDOT STANDARDS.
- 3. RIM ELEVATION GIVEN FOR CATCH BASIN (CB) IS TOP OF CURB, YARD INLET (YI) IS OPENING INVERT FOR SLAB TOP, DROP INLET (DI) IS
- 4. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING, BUT NOT LIMITED TO THE HORIZONTAL AND VERTICAL LOCATION OF STRUCTURES AND UTILITIES CROSSING THE STORM SEWER PIPE.
- 5. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM
- 6. ALL STORM SEWER PIPE SHALL BE MINIMUM CLASS III REINFORCED CONCRETE PIPE (RCP), UNLESS OTHERWISE NOTED. IF HDPE PIPE IS SPECIFIED, PIPE SHALL BE TYPE S WATERTIGHT (WT) CONFORMING TO AASHTO M252/M294

- 10. THE STORM PIPE LENGTHS AS SHOWN ON THE DRAWINGS REPRESENTS THE DISTANCE FROM CENTER TO CENTER OF THE RESPECTIVE
- 11. STORM SEWER UTILITY STRUCTURE TABLES ARE AVAILABLE UPON REQUEST.

- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. IN ADDITION TO THE MEASURES SHOWN IN THESE PLANS, THE CONTRACTOR SHALL USE INTERIM DIVERSION DITCHES, BERMS, OR OTHER METHODS AS REQUIRED TO DIRECT DRAINAGE AS SHOWN ON THESE PLANS AND TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. ROADWAYS AND ENVIRONMENTALLY SENSITIVE AREAS SUCH AS BUFFERS AND WETLANDS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER IN WRITING OF ANY DISCREPANCIES OR CONCERNS.
- ALL SOILS USED FOR BACKFILL SHALL BE FREE OF UNSATISFACTORY MATERIALS INCLUDING ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATTER, ROCK OR GRAVEL LARGER THAN 2 INCHES IN ANY DIMENSION SHALL NOT BE PLACED IN THE IN THE FINAL LIFT (MINIMUM OF 6 INCHES). UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS AND REFUSE DEBRIS DERIVED FROM ANY SOURCE. REFER TO FINAL GEOTECHNICAL REPORT FOR ANY SPECIAL FILL MATERIAL REQUIRED FOR THIS PROJECT, IF ANY. THE CONTRACTOR SHALL CONSULT WITH THE SITE GEOTECHNICAL ENGINEER PRIOR TO BACKFILL PLACEMENT TO VERIFY BACKFILL MEETS PROJECT REQUIREMENTS.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SOIL TESTING IS PERFORMED AND THE RESULTS FORWARDED TO THE ENGINEER AND OWNER.
- MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKEILL AROUND DRAINAGE STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL MEET THE REQUIREMENTS OF THE PROJECT GEOTECHNICAL ENGINEER RECOMMENDATIONS.
- THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT TO THE OWNER AND PROJECT GEOTECHNICAL ENGINEER THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A NORTH CAROLINA CERTIFIED MATERIALS TESTING LABORATORY AND CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA REPRESENTING THE LABORATORY.
- ALL PAVEMENT SUBGRADES SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 100 PERCENT OF ASTM D1557 DENSITY AT OPTIMUM MOISTURE CONTENT UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS OR
- RETAINING SYSTEMS PROVIDING A CUMULATIVE VERTICAL RELIEF GREATER THAN FIVE FEET (5') IN HEIGHT WITHIN A HORIZONTAL SEPARATION DISTANCE OF 50 FEET OR LESS, INCLUDING RETAINING WALLS OR MECHANICALLY STABILIZED EARTH WALLS, SHALL BE DESIGNED UNDER THE RESPONSIBLE CHARGE OF A REGISTERED DESIGN PROFESSIONAL. RETAINING WALL SYSTEMS SHALL MEET THE REQUIREMENTS OF THE NC BUILDING CODE AND LOCAL JURISDICTION.
- 8. CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE. SPOT ELEVATIONS ARE TO BE USED IN CASE OF DISCREPANCY.
- CONTRACTOR SHALL OBTAIN ALL PERMITS AS REQUIRED FOR BLASTING ROCK IF BLASTING ROCK IS REQUIRED. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION RELATED TO BLASTING AND
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEWATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS. DEWATERING SHALL BE INCIDENTAL TO GRADING OPERATIONS.
- 11. THE FRAMES AND COVERS OF ALL EXISTING AND PROPOSED DRAINAGE, SANITARY SEWER, WATER MAIN, GAS AND ELECTRIC UTILITY STRUCTURES SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED ELEVATIONS AND SLOPES UNLESS OTHERWISE SHOWN ON THE
- 12. BEFORE ANY EARTHWORK COMMENCES, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SURVEYING FOR LINE AND GRADE CONTROL
- 13. THE PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL ENGINEER, UPON COMPLETION OF THE EARTHWORK ACTIVITIES THE OWNER AND JURISDICTION MUST BE PROVIDED WITH A FINAL GRADING REPORT THAT INCLUDES THE CORRESPONDING COMPACTION TEST RESULTS AND CERTIFIES THE TYPE OF FILL MATERIAL
- 14. REFERENCE STRUCTURAL DRAWINGS, SPECIFICATIONS, GEOTEHCNICAL REPORT, AND/OR DIRECTIVES PROVIDED BY THE PROJECT GEOTECHNICAL ENGINEER FOR BUILDING PAD AND PAVING SUBGRADE INFORMATION.

## GENERAL LANDSCAPE NOTES

DISCREPANCIES OR CONCERNS.

- THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS NOT TO DAMAGE EXISTING PLANTS, FACILITIES AND STRUCTURES THAT ARE TO REMAIN. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AND OWNER.
- 2. UTILITIES SHOWN ON THE LANDSCAPE DRAWINGS ARE FOR REFERENCE ONLY. SEE UTILITY DRAWINGS FOR EXISTING AND PROPOSED UTILITY LOCATIONS. SEE UTILITY NOTES FOR ADDITIONAL INFORMATION.
- NO CHANGES TO ANY ASPECT OF APPROVED PLAN, INCLUDING BUT NOT LIMITED TO LANDSCAPING, GRADING, BUILDING ELEVATIONS. LIGHTING, OR UTILITIES SHALL BE MADE WITHOUT THE APPROVAL OF THE GOVERNING MUNICIPALITY, ENGINEER, LANDSCAPE ARCHITECT AND OWNER.
- 4. ALL PLANTS PROVIDED BY THE CONTRACTOR SHALL MEET OR SURPASS THE SPECIFICATIONS GIVEN IN THE PLANT TABLE AND CONFORM TO THE AMERICAN STANDARD OF NURSERY STOCK, ANSI Z601-1973 IN REGARD TO SIZING, GROWING AND BALLED AND BURLAPPED (B&B) SPECIFICATIONS, PLANTS SHALL BE FULL AND HEAVY, AND IN HEALTHY CONDITION AT THE TIME OF PLANTING. LANDSCAPE ARCHITECT SHALL REJECT ANY PLANT NOT MEETING THESE GUIDELINES AND REQUIRE REPLACEMENT.
- ALL PLANTS ARE TO BE FULLY WARRANTED (INCLUDING LABOR AND MATERIALS) FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM
- 6. PLANTING SHALL BE INSTALLED DURING THE IDEAL SEASON BASED ON THE TYPE OF PLANT.
- ALL PLANTS THAT ARE UNABLE TO BE IMMEDIATELY PLANTED SHALL BE STORED IN A PROTECTED AREA OUT OF DIRECT SUN AND WIND. PLANTS SHALL BE EVENLY AND CONSISTENTLY WATERED. AS NEEDED. TO PREVENT DRYING OF ROOTS. ROOT BALLS OF B&B STOCK SHALL BE COVERED WITH AT LEAST 4 INCHES OF HARDWOOD MULCH TO MAINTAIN MOISTURE IN ROOTS.
- 8. THE CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES SHOWN ON PLANS AND CLARIFY ANY DISCREPANCIES WITH LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANTS. CONTRACTOR SHALL TAG ALL TREES (AS DESIGNATED IN THE MASTER PLANT LIST) AT THE NURSERY FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANTS.
- LANDSCAPE ARCHITECT SHALL BE NOTIFIED IN WRITING OF ANY PROPOSED PLANT SUBSTITUTIONS BY THE CONTRACTOR. NO SUBSTITUTIONS SHALL BE MADE UNDER ANY CIRCUMSTANCES WITHOUT PRIOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- 10. ALL PLANTS AND PLANTING BEDS ARE TO BE LOCATED BY SCALED DIMENSIONS FROM BUILDINGS, CURBS, PAVEMENTS, ETC. SPECIFIC ATTENTION SHALL BE GIVEN TO ENSURE THAT PLANTS INDIVIDUALLY SHOWN ON THE PLAN ARE ACCURATELY LOCATED. LOCATION OF ALL PLANTS SHALL BE REVIEWED IN THE FIELD BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE FOR REVIEW.
- 11. NO PLANTINGS SHALL BE REQUIRED WHEN A PRESERVED WETLAND OR REQUIRED RIPARIAN BUFFER EXISTS WITHIN A REQUIRED BUFFFR YARD.
- 12. EXISTING SIGNIFICANT VEGETATION THAT IS PRESERVED WITHIN ANY REQUIRED BUFFER YARD SHALL BE CREDITED TOWARD STANDARDS FOR THE TYPE OF BUFFER REQUIRED AT THE TIME OF MUNICIPAL APPROVALS. IF EXISTING VEGETATION DOES NOT FULLY MEET THE STANDARDS FOR THE TYPE OF BUFFER REQUIRED, SUPPLEMENTAL VEGETATION AND/OR SITE FEATURES (INCLUDING FENCES) SHALL BE PLANTED OR INSTALLED WITHIN THE REQUIRED BUFFER AREA TO MEET MINIMUM STANDARDS.
- RECOMMENDATIONS AND ALLOWED TO DISSIPATE PRIOR TO INSTALLATION OF ANY PLANT MATERIAL. 14. ALL LANDSCAPE AREAS ARE TO BE GRADED FOR POSITIVE DRAINAGE AND TO ENSURE NO STANDING WATER. SEE GRADING PLAN FOR SPECIFIC GRADING INFORMATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND/OR ENGINEER OF ANY GRADING

13. A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL NEW PLANTING BEDS IN ACCORDANCE WITH MANUFACTURER'S

- 15. ESTABLISH AND MAINTAIN TOP OF GRADE BELOW ADJACENT CURBS, WALKWAYS AND OTHER HARDSCAPE AREAS TO ALLOW FOR
- 16. ALL PLANTING BEDS ARE TO BE COVERED WITH MULCH TO A MINIMUM DEPTH OF 2-3 INCHES, UNLESS INDICATED OTHERWISE. MULCH SHALL BE AS SELECTED BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL SUBMIT A SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO PURCHASE AND DELIVERY TO PROJECT SITE.
- 17. FINISH OFF 2-4 FOOT CLEAR ZONE AROUND TREES WITH A 2-3-INCH LAYER OF MULCH, BUT DO NOT PLACE UP AGAINST OR MOUND AROUND THE ROOT FLARE.
- 18. MIXED GROUNDCOVER AND PLANTS SPECIFIED FOR MASS PLANTINGS SHALL BE PLANTED IN ODD GROUPINGS AND LOCATED AS REQUIRED TO PROVIDE A GENERAL MIXING OF SPECIES. DO NOT PLANT IN ROWS OR REPETITIVE PATTERNS UNLESS OTHERWISE DIRECTED

- 19. ALL TREES ADJACENT TO PEDESTRIAN WALKWAYS AND IN SIGHT TRIANGLES SHALL BE UNDER-TRIMMED SUFFICIENTLY TO ALLOW CLEAR SIGHT AND PEDESTRIAN ACCESS UP TO 6 FEET ABOVE SIDEWALK ELEVATION. ALL PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST AND ADHERE TO THE ANSI A300 PRUNING STANDARD. PRUNING CUTS ARE TO BE DELIBERATE AND TARGETED ONLY TO THE NECESSARY BRANCHES IN ORDER TO SATISFY SIGHT AND CLEARANCE REQUIREMENTS WHILE MAINTAINING THE
- 20. THE SITE SHALL BE STABILIZED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
- 21. CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO WATERING, MULCHING, SPRAYING, FERTILIZING, ETC.) OF THE PLANTING AREAS UNTIL FINAL ACCEPTANCE.
- 22. ANY PLANT WHICH DIES, TURNS BROWN OR DEFOLIATES PRIOR TO FINAL ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, IN ACCORDANCE WITH THE APPROPRIATE PLANTING SEASON; QUANTITY AND SIZE TO MEET PLAN SPECIFICATIONS.

### TREE PROTECTION NOTES:

OF ANY KIND.

CAUSE INJURY TO TREE TRUNKS, BRANCHES AND ROOTS.

- ALL TREES THAT ARE TO REMAIN, WITHIN OR DIRECTLY ADJACENT TO THE LIMITS OF WORK, MUST BE PROTECTED WITH TREE PROTECTION FENCE AS INDICATED ON THE PLANS TO THE EXTENT OF THE TREE BOX OR THE DRIP LINE IN A PLANTING STRIP. THE DRIP LINE IS DEFINED AS THE GROUND AREA UNDER THE CANOPY OF THE TREE. FENCING IS TO BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT, AND REMOVED ONLY AT THE END OF THE PROJECT.
- NONE OF THE FOLLOWING SHALL OCCUR WITHIN THE ROOT ZONE OF A TREE WITHOUT PERMISSION OF LANDSCAPE ARCHITECT OR PROJECT ARBORIST: ALTERATION OR DISTURBANCE TO EXISTING GRADE; STAGING OR STORAGE OF CONSTRUCTION MATERIALS,
- EQUIPMENT USE, SOIL OR DEBRIS REMOVAL OR STOCKPILING; TRENCHING; OR DISPOSAL OF ANY LIQUIDS. 3. APPROVED EXCAVATIONS WITHIN THE DRIP LINE SHALL PROCEED WITH CARE BY USE OF HAND TOOLS OR EQUIPMENT THAT WILL NOT
- NO ROOTS GREATER THAN 2 INCHES IN DIAMETER SHALL BE CUT WITHOUT PERMISSION OF LANDSCAPE ARCHITECT OR PROJECT ARBORIST. EXPOSED ROOTS 2 INCHES AND LARGER IN DIAMETER SHALL BE WRAPPED IN BURLAP OR OTHER APPROVED MATERIAL AND
- IF THERE ARE ANY TREE CONFLICTS ON THIS JOB SITE, PERMIT HOLDER MUST SUSPEND ALL WORK THAT CONTRIBUTES TO THE CONFLICT AND IMMEDIATELY CONTACT LANDSCAPE ARCHITECT OR PROJECT ARBORIST FOR DIRECTION AND CLEARANCE TO CONTINUE THE CONFLICTING WORK.
- TREES THAT ARE PROTECTED SHALL BE THOROUGHLY WATERED AS REQUIRED TO KEEP ROOT BALLS FROM DRYING OUT, ESPECIALLY BETWEEN APRIL THROUGH SEPTEMBER. **UTILITIES NOTES:**
- GENERALLY, FILL MATERIAL SHALL BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- 2. ALL NECESSARY INSPECTIONS, CERTIFICATIONS, AND TESTING REQUIRED BY CODES AND UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO MUNICIPAL APPROVAL FOR THE FINAL CONNECTION OF SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF TESTING SERVICES AND COORDINATION WITH UTILITY OWNER.
- 3. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE
- 4. THE CONTRACTOR SHALL REPORT, IN WRITING ANY UTILITY CONFLICTS TO THE ENGINEER IMMEDIATELY UPON DISCOVERING
- THE SANITARY SEWER PIPE LENGTHS AS SHOWN ON THE DRAWINGS REPRESENTS THE DISTANCE FROM CENTER TO CENTER OF THE RESPECTIVE STRUCTURES.
- PROVIDERS, LOCAL MUNICIPALITY, AND NCDOT. KNOWN UTILITY PROVIDER INFORMATION IS CONTAINED ON THIS PLAN SHEET. 7. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING SURROUNDING NEIGHBORS ABOUT ANY POTENTIAL INTERRUPTION TO SERVICE
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 3 FEET ON ALL PROPOSED WATER LINES. THREE FEET SHALL BE MEASURED

PRIOR TO UTILITY RELOCATION, REMOVAL OR ABANDONMENT, THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY

9. THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 3 FEET ON ALL PROPOSED SANITARY LINES. THREE FEET SHALL BE MEASURED TO THE BOTTOM OF THE PROPOSED SUBGRADE WITHIN PAVED AREAS.

TO THE BOTTOM OF THE PROPOSED SUBGRADE WITHIN PAVED AREAS.

- 10. THE CONTRACTOR SHALL MAINTAIN SEPARATION OF WATER MAIN FROM SANITARY SEWER PIPING IN ACCORDANCE WITH THOSE DISTANCES SPECIFIED BY STATE AND/OR LOCAL CODE OR A MINIMUM OF 10 FEET HORIZONTAL OR 18 INCHES VERTICAL DISTANCE.
- COMMUNICATION LINES AND ASSOCIATED APPURTENANCES. 12. THE CONTRACTOR MUST STUB THE FIRE LINE INTO THE RISER ROOM. THE CONTRACTOR WILL COORDINATE TESTING OF THE LINE

11. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR INSTALLATION OF ALL PROPOSED POWER AND

- FIRE LINE FROM THE FIRE INSPECTOR. THE COST OF TESTING AND CERTIFICATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. 13. THE CONTRACTOR WILL COORDINATE TESTING OF THE DOMESTIC WATER SERVICE LINE AND SANITARY SEWER LATERALS WITH THE
- LOCAL PLUMPING INSPECTOR, THE COST OF TESTING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR

14. THE CONTRACTOR MUST BRING THE PROPOSED UTILITIES TO WITHIN FIVE FEET OF BUILDINGS AND STUB UP FOR FUTURE

- CONNECTION BY OTHERS, UNI ESS SPECIFICALLY NOTED OTHERWISE. 15. THE CONTRACTOR MUST COORDINATE THE FINAL LOCATION OF THE PAD MOUNTED TRANSFORMER(S) WITH UTILITY COMPANY, ENGINEER AND OWNER PRIOR TO INSTALLATION. THE CONTRACTOR MUST INSTALL THE CONCRETE PAD AND THE UTILITY COMPANY
- WILL INSTALL THE TRANSFORMER. COORDINATION FOR THIS WORK ITEM WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. 16. THE CONDUIT LOCATIONS SHOWN ON THE PLAN ARE CONCEPTUAL ONLY. ACTUAL LOCATIONS MUST BE IDENTIFIED BY THE ELECTRICAL AND TELECOMMUNICATION CONTRACTORS. CONDUITS WITHIN PAVED AREAS ARE TO BE INSTALLED PRIOR TO THE FINAL PROOF ROLL AND INSTALLATION OF AGGREGATE BASE MATERIAL. CONDUITS MUST BE INSTALLED WITH PROPER MARKERS TO FACILITATE THE INSTALLATION OF UNDERGROUND ELECTRIC AND FIBER OPTIC LINES. CONDUITS MUST INCLUDE A PULL STRING. ACTUAL DIAMETER, LOCATION AND QUANTITY WILL BE DETERMINED BY THE ELECTRICAL AND TELECOMMUNICATION
- 17. THE GENERAL CONTRACTOR MUST PROVIDE CONDUITS AND CONDUCTORS FOR THE HEATERS AND/OR HEAT TAPE TO EACH
- BACKFLOW DEVICE HOT BOX. 18. ALL SANITARY SEWER SERVICE LATERALS 6" IN DIAMETER AND SMALLER SHALL BE PVC DWV SOLID CORE, SCHEDULE 40, IN
- ACCORDANCE WITH ASTM D2665 UNLESS OTHERWISE NOTED ON THE PLANS. 19. ALL PRIVATE DOMESTIC WATER LINES 1.5" DIAMETER AND SMALLER SHALL BE TYPE K SOFT COPPER TUBING PER ASTM B88 WITH BRASS

## FITTINGS CONFORMING TO AWWA C800.

DRAIN OFFSITE OR INTO WATERCOURSES.

- **EROSION & SEDIMENT CONTROL NOTES:** 1. CONTRACTOR SHALL INSTALL EROSION CONTROLS IN ORDER WITH THE SEQUENCE PROVIDED.
- . CONTRACTOR SHALL ENSURE GRADING OPERATIONS ARE CONDUCTED IN A MANNER THAT DOES NOT ALLOW ANY SEDIMENT TO
- 3. A GRAVEL CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE LOCATIONS SHOWN ON THE DRAWINGS AND AT EACH POINT OF CONSTRUCTION ACCESS.
- I. CONTRACTOR SHALL CONSTRUCT DIVERSION DITCHES AS NECESSARY TO ENSURE ALL SEDIMENT IS DIRECTED INTO EROSION CONTROL MEASURES.
- IF STORM CROSS DRAINAGE CANNOT BE INSTALLED PRIOR TO GRADING, TEMPORARY HDPE STORM DRAINAGE PIPE SHALL BE USED TO CROSS WET WEATHER CHANNELS, EXCLUDING ANY PROTECTED WETLANDS OR STREAMS.
- 6. ALL STORM DRAINAGE PIPE SHALL BE PROTECTED AS SHOWN ON THE PLANS DURING CONSTRUCTION.

SHALL BE REMOVED PRIOR TO FINAL SITE INSPECTION FOR THE CO.

ENSURE POSITIVE DRAINAGE. SEE PLANS FOR DIMENSIONS AND DETAILS.

7. CONTRACTOR SHALL PROVIDE RIPRAP LINED DISSIPATOR PADS AT THE STORM DRAINAGE PIPE DISCHARGE POINTS AS REQUIRED TO

B. PERMANENT GROUND COVER SHALL BE ESTABLISHED PER APPROVED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO THE CERTIFICATE OF OCCUPANCY (CO) IS SCHEDULED. THE FENCING

- TREE PROTECTION FENCING SHALL BE INSTALLED AND INSPECTED PRIOR TO ISSUANCE OF A GRADING PERMIT. FENCING SHALL NOT BE REQUIRED ADJACENT TO AREAS WITHOUT WOODED VEGETATION. FENCING SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE
- 10. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT AN EROSION CONTROL PERMIT AND ANY OTHER RELATED PERMITS ARE SECURED FOR ANY OFF-SITE WASTE OR BORROW AREAS. UNLESS OTHERWISE STATED IN THE PROJECT DOCUMENTS, THE CONTRACTOR IS RESPONSIBLE FOR SECURING ALL AGREEMENTS WITH LANDOWNERS FOR PLACEMENT OF WASTE SOIL OR REMOVAL OF BORROW. OFF-SITE PERMITS AND AGREEMENTS SHALL EXIST PRIOR TO CONSTRUCTION ACTIVITIES ON WASTE OR BORROW AREAS. COPIES OF PERMITS AND AGREEMENTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER.
- 11. SOILS CONTAMINATED WITH ANY CHEMICAL, METAL OR PETROLEUM CONTAMINATION SHALL NOT BE TRANSPORTED ONTO THE PROPERTY AS BORROW / FILL SOILS. CONTAMINATED SOILS, IF DISCOVERED ON THE PROPERTY SHALL NOT BE TRANSPORTED OFFSITE WITHOUT TESTING, PERMITTING AND/OR OTHER REGULATORY APPROVALS COMMENSURATE WITH THE TYPE OF CONTAMINATION
- 2. ALL ROADWAY DITCHES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER AND CONFORM TO NCDOT REQUIREMENTS OR AUTHORITIES HAVING JURISDICTION. ALL DITCHES SHALL BE LINED WITH EROSION CONTROL MATTING UNLESS OTHERWISE NOTED.

13. ALL EXCAVATED MATERIAL SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE DURING UTILITY INSTALLATION. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SEDIMENT AND EROSION CONTROL MEASURES TO CONTROL RUN-OFF. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF LEGALLY.

## FIRE & LIFE SAFETY NOTES:

- 1. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTION (FDC) OR FIRE HYDRANTS. A 3-FOOT (3') CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF ANY HYDRANT, FDC OR OTHER FIRE DEPARTMENT

- 4. A MINIMUM OF FIVE FEET (5') SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND
- CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION AS
- 8. ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 10. ROADWAYS AND BUILDINGS MUST BE CAPABLE OF SUPPORTING FIRE APPARATUS DURING CONSTRUCTION.
- 11. FIRE FLOW ANALYSIS MUST BE PROVEN AT TIME OF BUILDING PERMITS PER NORTH CAROLINA FIRE PROTECTION CODE (NCFPC), SECTION 507.3, LATEST EDITION. THIS IS THE AVAILABLE FIRE FLOW FROM THE HYDRANT AND THE MINIMUM REQUIRED FIRE FLOW

- 1. THE CONTRACTOR MUST ENGAGE A QUALIFIED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT FOR STRUCTURAL WALL
- 2. TFW REFERS TO TOP FACE OF WALL ELEVATION. BFW REFERS TO THE BOTTOM FACE OF WALL ELEVATION AT FINISHED GRADE, NOT
- 3. IF STAKED BY WITHERSRAVENEL, INC., BOTTOM OF WALL GRADE AT FINISHED GRADE WILL BE STAKED. ANY DIFFERENCES BETWEEN FOUNDATION OF WALL AS COMPARED TO FINISHED GRADE BOTTOM IS TO BE STATED SO ON RETAINING WALL PLANS BY OTHERS.
- 4. IF WALL CONTRACTOR REQUIRES ADDITIONAL STAKING BEYOND WALL AT FINISHED GRADE, THE ENGINEER MAY PROVIDE A CAD FILE NOTING LOCATION OF THE ITEMS TO BE STAKED. LOCATIONS WHERE WALL BREAKS OR CHANGES IN WALL ANGLES ARE TO BE NOTED
- 7. THE CONTRACTOR MUST INSTALL TEMPORARY FENCING/BARRICADES DURING CONSTRUCTION UNTIL PERMANENT FENCING IS

6. PRIOR TO WALL STAKING, A MEETING MUST BE HELD BY THE SURVEYOR AND WALL CONTRACTOR TO DETERMINE STAKING CRITERIA.

- 2. FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- 3. HYDRANTS MUST BE LOCATED WITHIN EIGHT FEET (8'), BUT NO CLOSER THAN THREE FEET (3') OF THE CURB.
- 5. NEW HYDRANTS SHALL BE OPERABLE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
- 6. HYDRANT MUST BE WITHIN 100' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE).
- SHOWN ON THE PLANS.
- 9. ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARD TO RUNNING WIRE FOR TAMPER SWITCH.
- CALCULATION FROM NCFPC APPENDIX B OR OTHER APPROVED METHOD.

- FOOTING GRADE.
- WALL DESIGN WIDTHS FOR USE ON DESIGN DRAWINGS MUST BE PROVIDED BY THE CONTRACTOR AND/OR QUALIFIED STRUCTURAL

DONE AT NO ADDITIONAL COST TO THE OWNER AND MUST BE DONE TO THE SATISFACTION OF THE ENGINEER AND OWNER.

8. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO PERMANENT FENCING DURING CONSTRUCTION. REPAIR OF DAMAGES WILL BE

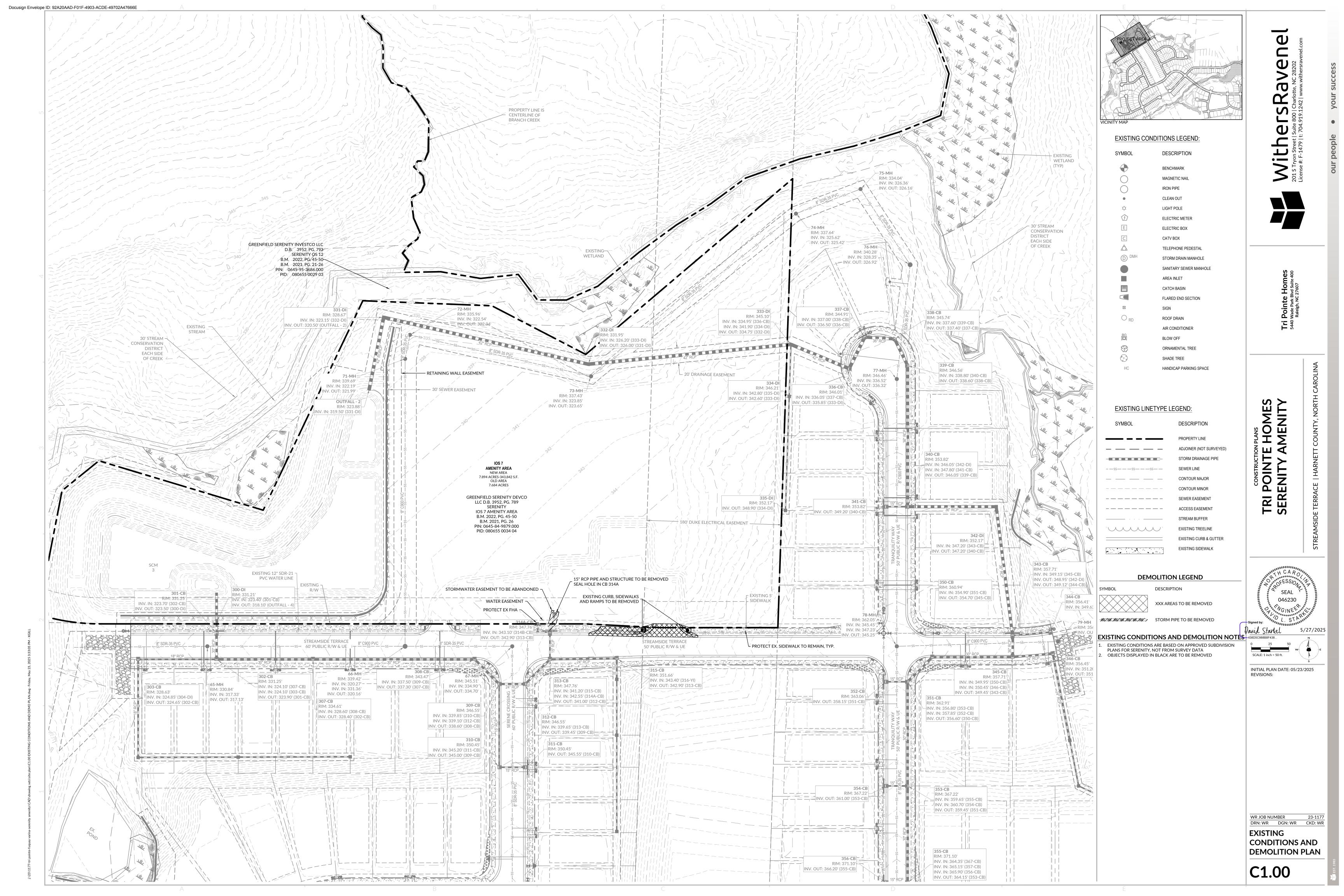
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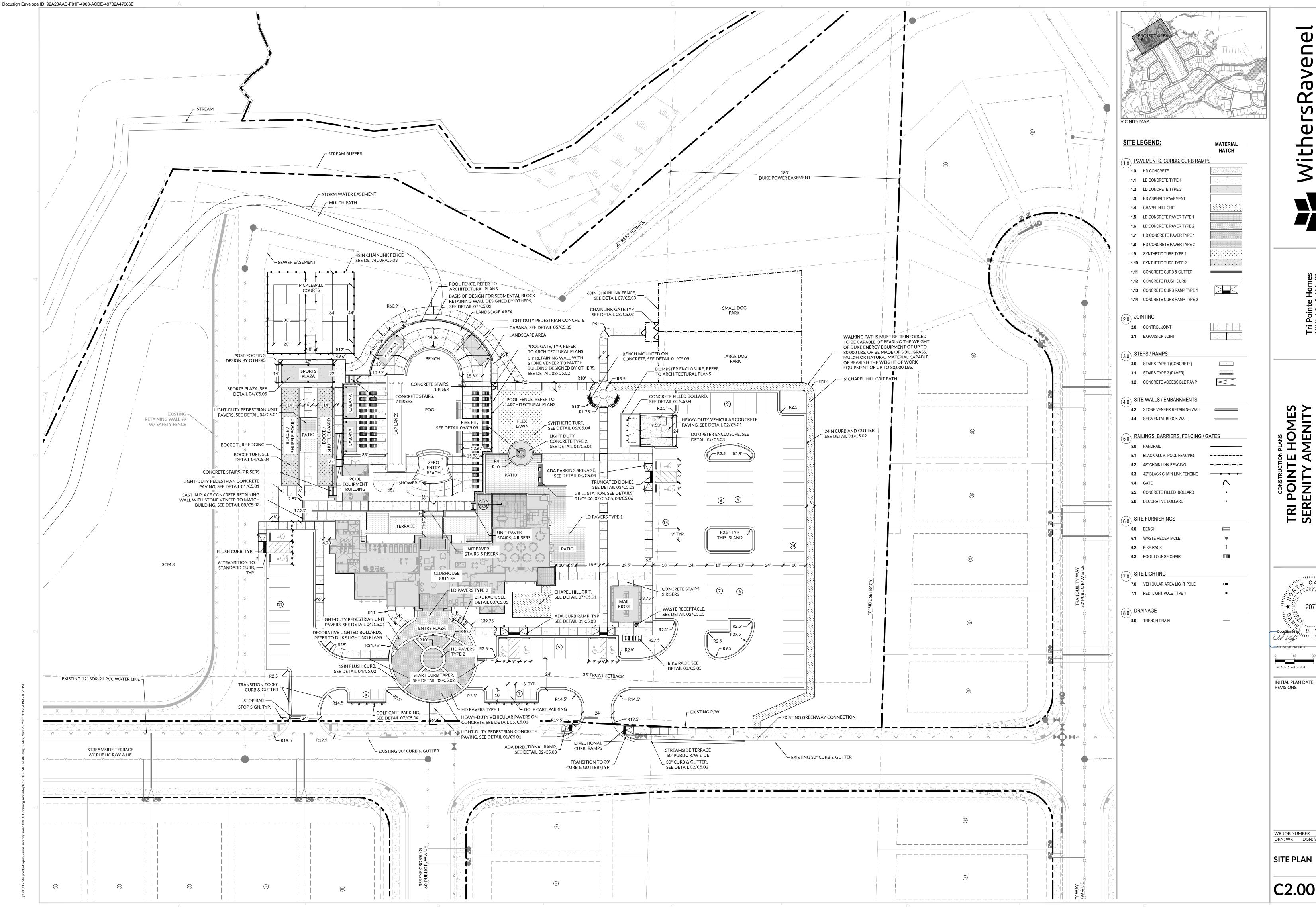
WR JOB NUMBER

**GENERAL NOTES** 

INITIAL PLAN DATE: 05/23/2025

DRN: WR DGN: WR CKD: WR

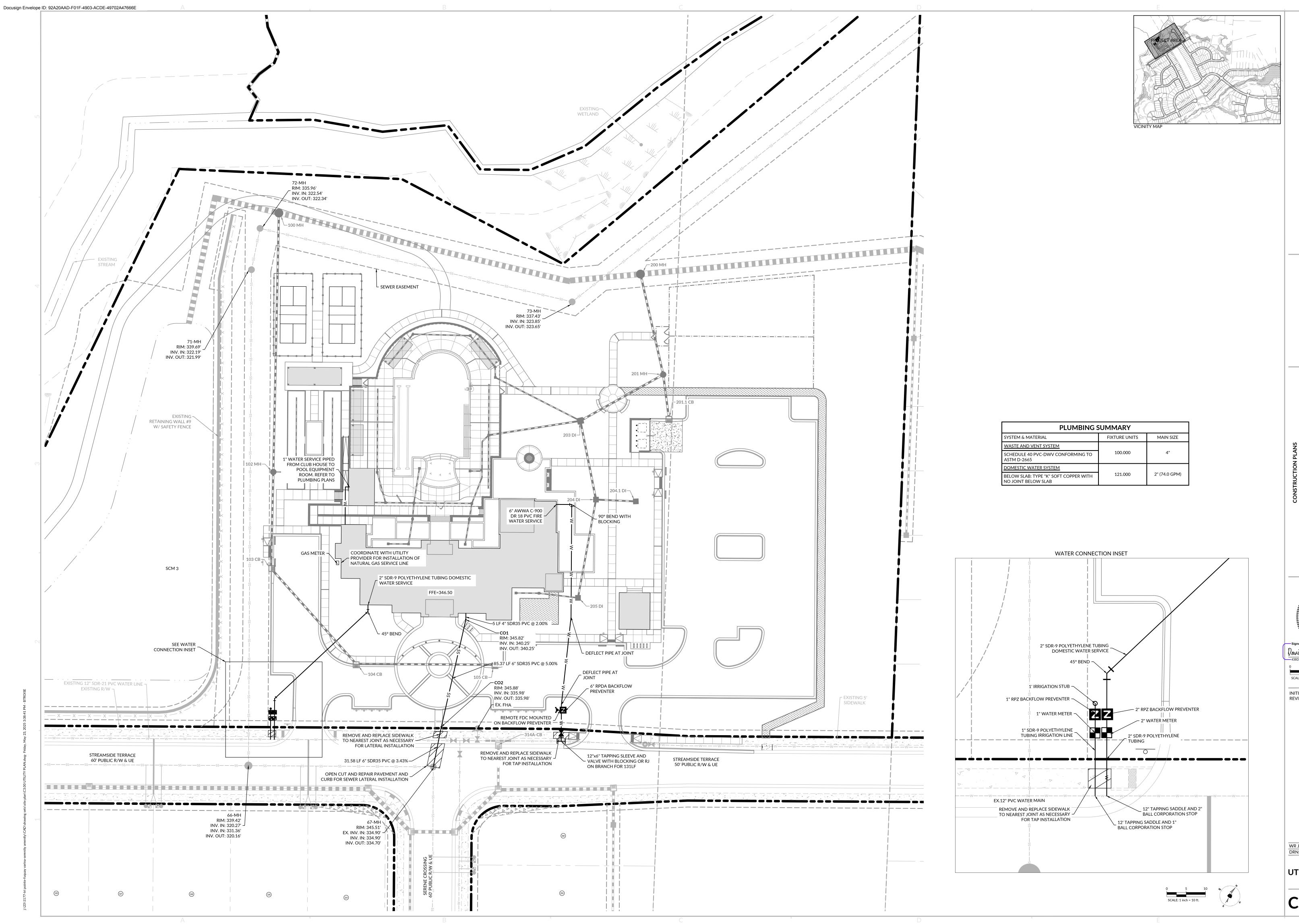




INITIAL PLAN DATE: 05/23/2025

DRN: WR DGN: WR CKD: WR

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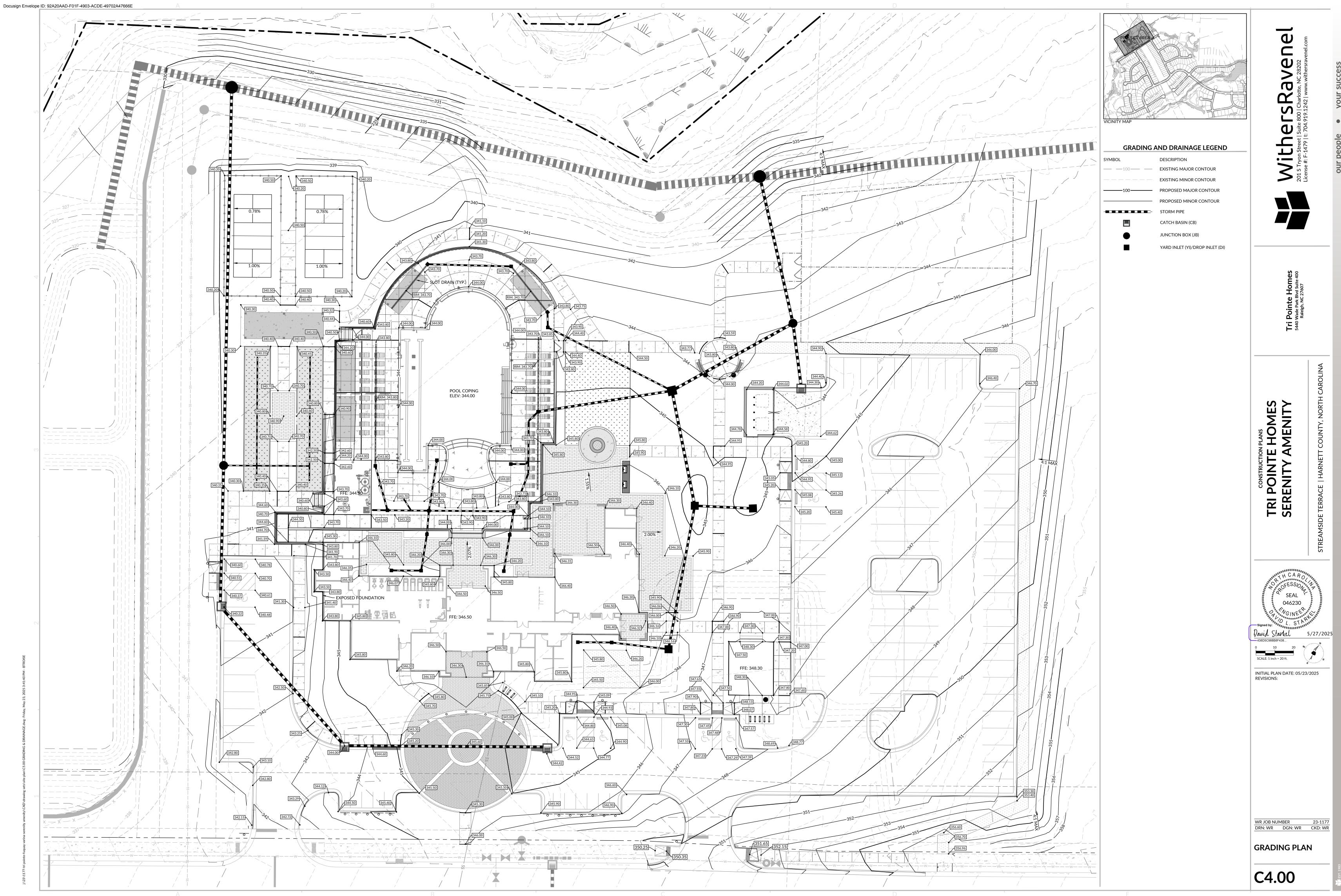
David Starkel 5/27/2025

INITIAL PLAN DATE: 05/23/2025

**REVISIONS:** 

WR JOB NUMBER DRN: WR DGN: WR CKD: WR

UTILITY PLAN

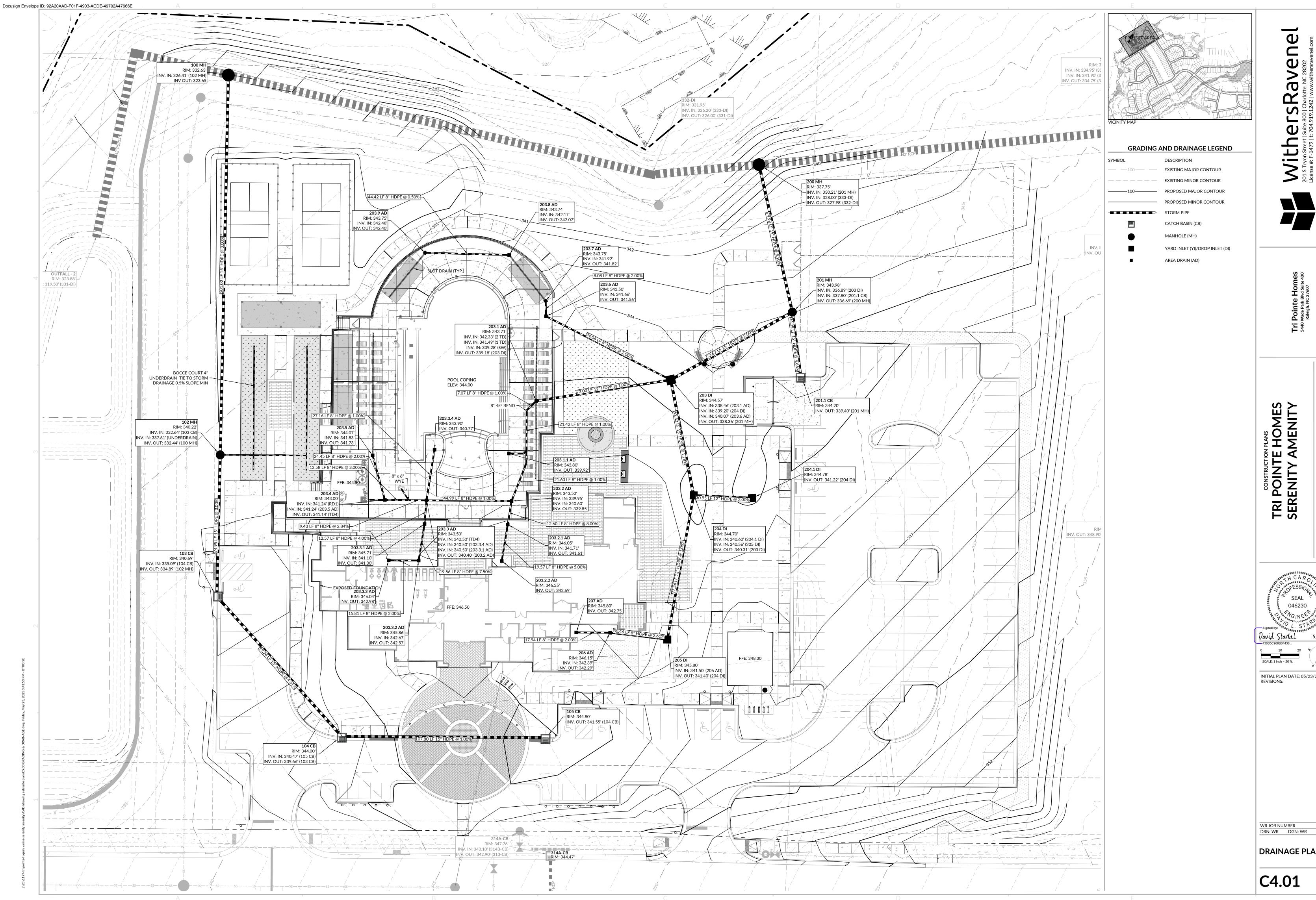


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WR JOB NUMBER 23-1177
DRN: WR DGN: WR CKD: WR

GRADING PLAN

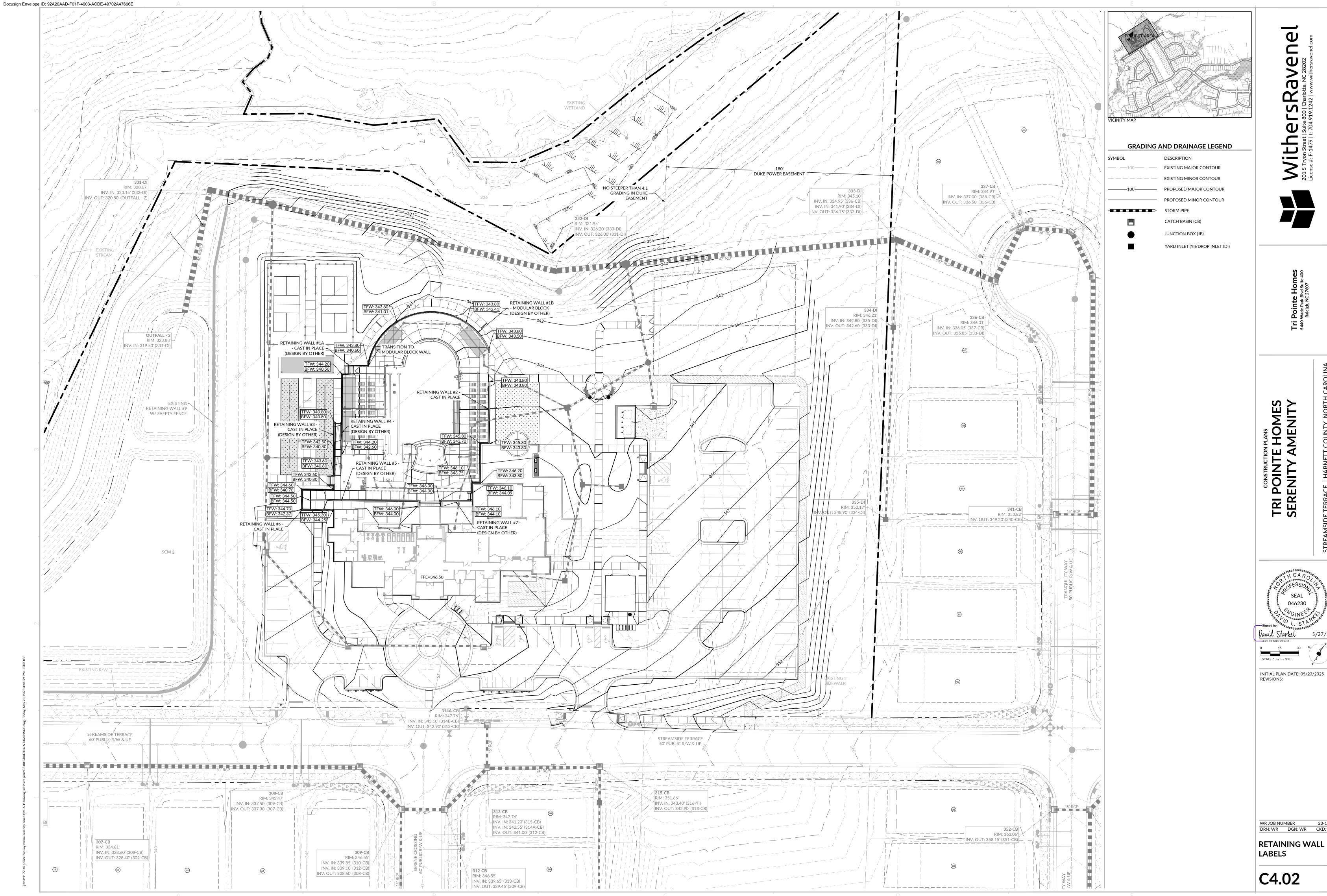


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INITIAL PLAN DATE: 05/23/2025

DRN: WR DGN: WR CKD: WR

DRAINAGE PLAN

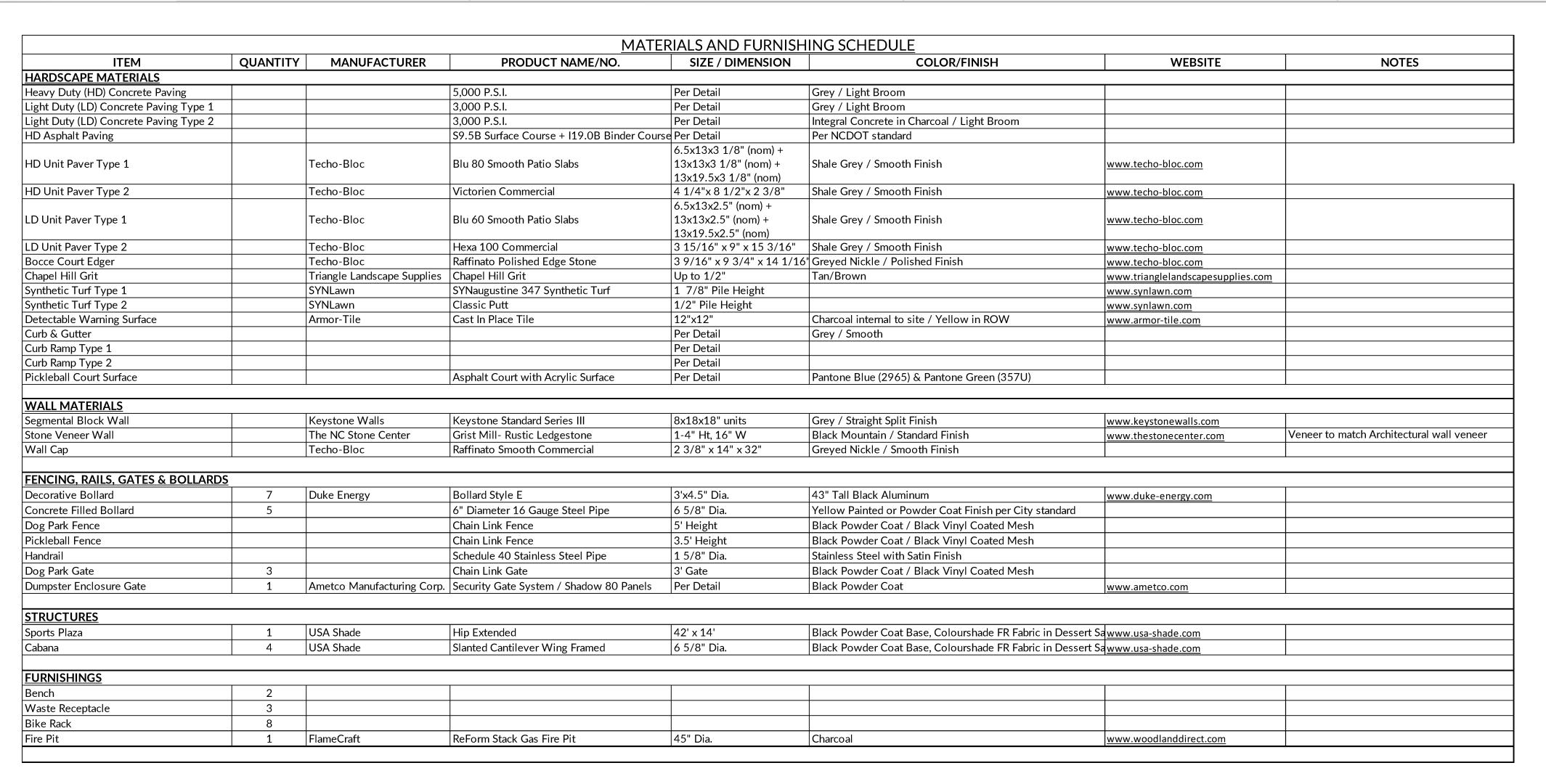


INITIAL PLAN DATE: 05/23/2025

DRN: WR DGN: WR CKD: WR

SCHEDULE

FURNISHING



- POLYMERIC SAND JOINTS

**EXPANSION** 

JOINT

MEET FLUSH WITH ADJACENT GRADE

ADJACENT HARDSCAPE

REFER TO SITE PLANS

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- 1. PROVIDE EXPANSION JOINT WHERE WALKS ARE POURED AGAINST VERTICAL SURFACES AND/OR DIFFERENT PAVING MATERIALS & AS SPECIFIED ON
- 2. PROVIDE CONTRACTION JOINT AT 5' INTERVALS UNLESS OTHERWISE SPECIFIED (SEE PLAN). 3. CONTRACTOR TO PROVIDE MOCK-UP OF CONCRETE FINISH, COLOR, AND SCORING FOR OWNERS APPROVAL MOCK-UP CAN BE USED AS PART OF

CONTROL

JOINT

TYPICAL PEDESTRIAN PAVEMENT

SECTION

2% MAX CROSS SLOPE; RE: GRADING PLANS FOR ADDITIONAL INFORMATION - TOOLED EDGE - SEALANT; MATCH CONCRETE COLOR TYP.  $\frac{1}{2}$ " PRE-MOLDED EXPANSION JOINT 4500 PSI CONCRETE PAVING, FILLER; FULL DEPTH OF POUR LIGHT BROOM FINISH 2" x  $\frac{1}{8}$ " SAW CUT JOINT 6X6-W4.0xW4.0 WWF SHEETS PLACED IN BOTTOM 1/3 OF SLAB  $-\frac{1}{2}$ " Expansion joint 95% COMPACTED AGGREGATE BASE COURSE COMPACTED OR UNDISTURBED **HEAVY DUTY EXPANSION** SUBGRADE PER GEOTECHNICAL -VEHICULAR JOINT **ENGINEER'S REPORT** PAVEMENT, TYP.

- 1. PROVIDE EXPANSION JOINT WHERE SLAB MEETS VERTICAL SURFACES AND/OR DIFFERENT PAVING MATERIALS & AS SPECIFIED ON PLANS. PROVIDE  $\frac{1}{2}$ " EXPANSION JOINTS AT 16' INTERVALS MIN., TYP.
- 3. SAW CUT (CONTROL JOINTS AT 4' INTERVALS OR AS SHOWN ON PLANS.

SECTION

- BITUMINOUS PAVING SURFACE COURSE (S9.5B)

95% COMPACTED AGGREGATE BASE COURSE

COMPACTED OR UNDISTURBED SUBGRADE PER GEOTECHNICAL ENGINEER'S REPORT

GEOTEXTILE FABRIC, AS REQUIRED BY GEOTECHNICAL ENGINEER

(TWO 1.5" LIFTS)

∠ BUILDING WALL

- INTERIOR PAVERS

CONCRETE BUILDING

SLAB BASE

FINISH GRADE TO BE LEVEL WITH FINISHED FLOOR ELEVATION

#4 REBAR DOWEL, 16" O.C. - $\frac{1}{2}$ " EXPANSION JOINT, TYP. HERRINGBONE PATTERN CONCRETE FLUSH CURB -─ POLYMERIC SAND JOINTS #4 REBAR 3" Ø WEEPHOLE FILLED WITH #78 STONE; 3' O.C. COVERED WITH FILTER FABRIC ½ " CHAMFER EDGE - VEHICULAR RATED UNIT PAVER ADJACENT PAVEMENT; ½" SAND SETTING BED REFER TO SITE PLANS CONCRETE SLAB, 3,000 PSI MIN.

2" CLEARANCE 母

1. PROVIDE CONTROL JOINT EVERY 4' MIN. 2. PROVIDE  $\frac{1}{2}$ " EXPANSION JOINT EVERY 16' MIN.

SECTION

SECTION

BASE COURSE GEOTEXTILE FABRIC COMPACTED OR UNDISTURBED SUBGRADE PER GEOTECHNICAL ENGINEER'S REPORT NOTES: 1. UNIT PAVER BASIS OF DESIGN IS LIGHT-DUTY COMMERCIAL-GRADE CONCRETE PAVERS (2 1/4" THICK). 2. UNIT PAVERS ARE TO BE LAID IN PATTERNS AS SHOWN ON PLANS AND MEET FLUSH WITH ADJACENT PAVING. 3. POLYMERIC JOINTING SAND IS TO MATCH PAVERS. COLOR IS TO BE SELECTED FROM MANUFACTURER'S FULL RANGE.

— POLYMERIC SAND JOINTS

95% COMPACTED AGGREGATE

UNIT PAVER

LIGHT-DUTY PEDESTRIAN UNIT PAVERS

CRUSHED STONE SURFACE TO

MEET FLUSH WITH ADJACENT

CONCRETE PAVING

1. UNIT PAVER BASIS OF DESIGN IS LIGHT-DUTY COMMERCIAL-GRADE CONCRETE PAVERS (2 1/4" THICK).

UNIT PAVERS ARE TO BE LAID IN PATTERNS AS SHOWN ON PLANS AND MEET FLUSH WITH ADJACENT PAVING. 3. POLYMERIC JOINTING SAND IS TO MATCH PAVERS. COLOR IS TO BE SELECTED FROM MANUFACTURER'S FULL RANGE.

2" CHAPEL HILL GRIT, SEE

12" OF 95% COMPACTED

SECTION

EDGE RESTRAINT

FINISH GRADE

BASE COURSE

95% COMPACTED AGGREGATE

SS SPIKE, 12" O.C. PLUS ALL CORNERS AND EDGING JOINTS

ENGINEER'S REPORT

COMPACTED OR UNDISTURBED

- SUBGRADE PER GEOTECHNICAL

**HEAVY-DUTY VEHICULAR PAVERS ON CONCRETI** SCALE: 3/4" = 1'-0"

SCALE: 1" = 1'-0"

TRI POIN SERENIT

INITIAL PLAN DATE: 05/23/2025 **REVISIONS:** 

5/27/2025

WR JOB NUMBER DRN: WR DGN: WR CKD: WR

SITE DETAILS

**SECTION** 

SCALE: 1 1/2" = 1'-0"

AGGREGATE BASE COURSE LAID
6" WIDER THAN THE GRIT ON EACH SIDE 6" ALUMINUM EDGING WITH 12" - STAKES @ 24" O.C. LOCKED INTO PREFORMED LOOPS GEOTEXTILE FABRIC COMPACTED OR UNDISTURBED SUBGRADE PER GEOTECHNICAL ENGINEER'S REPORT 1. PROVIDE MAX 2% CROSS-SLOPE FOR ADEQUATE DRAINAGE.

2. LAY CHAPEL HILL GRIT (CRUSHED GRANITE) IN 1" LIFTS, SOAK THOROUGHLY, SIT FOR 2-4 HOURS &

COMPACT WITH HEAVY ROLLER OR VIBRATING PLATE COMPACTOR UNTIL 2" DEPTH ACHIEVED.

NOTE: ADA PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION

CONCRETE PAVING

— ADA SIGN, REFER TO SITE PLAN

FLUSH CONDITION, REFER

-4" SOLID WHITE STRIPING — 4" SOLID WHITE STRIPE

TO SITE PLAN

WHEEL STOP, REFER TO SITE PLAN

- WELDED WIRE MESH

GEOTEXTILE FABRIC

95% COMPACTED AGGREGATE BASE COURSE

COMPACTED OR UNDISTURBED SUBGRADE

PER GEOTECHNICAL ENGINEER'S REPORT

PLAN

ACCESSIBLE PARKING STALL,

## NOTES:

- 1. PROVIDE 10' MAXIMUM BETWEEN CONTROL JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS. 2. ½" EXPANSION JOINT EVERY 50 FEET.
- 3,000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
- 4. LIQUID MEMBRANE CURBING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR
- 5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER & SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01. THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS & STRUCTURES. 6. REFER TO NCDOT DETAIL 845.01 FOR CURB & GUTTER SUPERELEVATION RATES.

**SECTION** 

SLOPE= ½" / FT.

SCALE: 1" = 1'-0"

2' MIN.

OVERALL

HEIGHT

2. ½" EXPANSION JOINT EVERY 50 FEET.

3,000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.

NOTES:

30" CURB & GUTTER

6. REFER TO NCDOT DETAIL 845.01 FOR CURB & GUTTER SUPERELEVATION RATES.

1. PROVIDE 10' MAXIMUM BETWEEN CONTROL JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.

PRECAST CONCRETE WALL CAP CENTERED ON WALL W/ 1/4" MIN.

OVERHANG ON BOTH FACES CONT. 8" DEEP BOND BEAM W/ REINFORCING PER STRUCTURAL

12" SPLIT FACED CMU W/ FINISH - FACING OUTSIDE (GRAY PARGE

REINFORCING PER STRUCTURAL

PROVIDED BY OTHERS (N.I.C.)

SOLID GROUT AT REINFORCED

CELLS AND CELLS BELOW GRADE

BELOW GRADE

RE: STRUCTURAL DRAWINGS

RETAINING WALL AND REINFORCING ARE TO MEET THE REQUIREMENTS SET FORTH IN THE STRUCTURAL DRAWINGS.

SPLIT FACE CMU IS TO HAVE INTEGRAL GRAY COLOR. OWNER TO SELECT COLOR FROM MFR'S FULL RANGE.

FRONT ELEVATION

PRECAST CONCRETE CAP,

VENEER ADDED TO REAR

FACE, 8" MIN. BELOW GRADE

MORTARED TO WALL

- FINISH GRADE

EXPANSION JOINT (TYP.)

THIS DETAIL SHOWN FOR REFERENCE ONLY; REFER TO STRUCTURAL DRAWINGS.

COAT ON INTERIOR)

WASTE CONTAINER

4. LIQUID MEMBRANE CURBING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR 5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER & SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01.

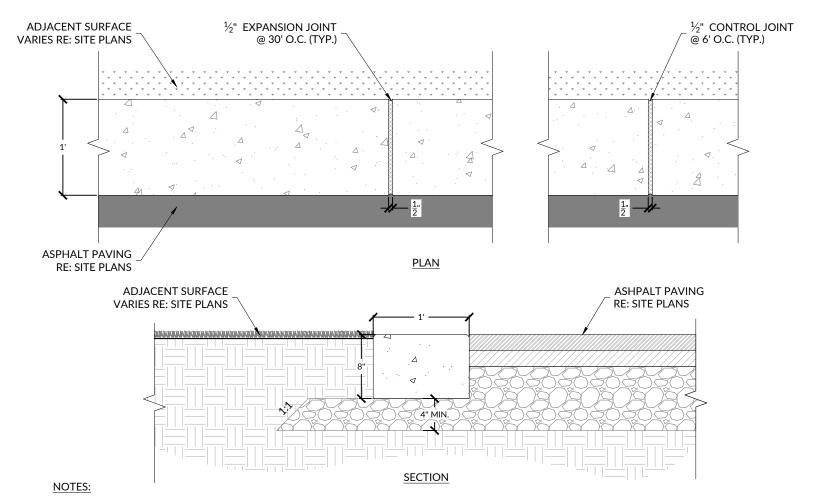
THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS & STRUCTURES.

30" SPILL CURB & GUTTER

SCALE: 1/4" = 1'-0"

6" TAPER OVER 6'-0"

**SECTION** 



PROVIDE 10' MAXIMUM BETWEEN CONTROL JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.

WALL BACKFILL PER GEOTECHNICAL REPORT

- $\frac{1}{2}$ " EXPANSION JOINT EVERY 50 FEET. 3. 3,000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
- 4. LIQUID MEMBRANE CURBING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS & STRUCTURES.
- 5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER & SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01.

SAFETY RAIL POST IN CONCRETE

- SEGMENTAL BLOCK WALL UNITS

FOOTING BEHIND WALL

THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS & STRUCTURES. 6. REFER TO NCDOT DETAIL 845.01 FOR CURB & GUTTER SUPERELEVATION RATES.

COMPACTED OR

UNDISTURBED SUBGRADE

SCALE: 1" = 1'-0"

SECTION

SCALE: 3/8" = 1'-0"

STONE VENEER ATTACHED

TO CONCRETE WALL WITH

SECTION

SCALE: 1/4" = 1'-0"

SECTION

REVISIONS:

INITIAL PLAN DATE: 05/23/2025

5/27/2025

TRI

WR JOB NUMBER DRN: WR DGN: WR CKD: WR

SITE DETAILS

BASIS OF DESIGN FOR SEGMENTAL BLOCK RETAINING WALL

CAST IN PLACE CONCRETE RETAINING WALL WITH STONE VENEER

**ELEVATION VIEW** REINFORCED CONCRETE FOOTER, REFER TO STRUCTURAL PLANS COMPACTED OR UNDISTURBED - SUBGRADE PER GEOTECHNICAL 1. RETAINING WALL AND REINFORCING ARE TO MEET THE REQUIREMENTS SET FORTH IN THE STRUCTURAL DRAWINGS. ENGINEER'S REPORT 2. STONE VENEER BASIS OF DESIGN: PRO-FIT ALPINE LEDGESTONE BY WESTLAKE ROYAL STONE, LLC (www.culturedstone.com) OR APPROVED EQUAL. OWNER TO SELECT COLOR FROM MANUFACTURER'S FULL RANGE. 3. WALL CAP BASIS OF DESIGN: WALL CAP BY HARTSTONE TILE (www.hartstonetile.com) OR APPROVED EQUAL. COLOR IS TO BE SELECTED BY OWNER WITH SMOOTH FINISH. CURVED WALLS SHALL HAVE CURVED WALL CAPS TO MATCH RADIUS OF WALL.

- PRECAST CONC. CAP - HEAVY DUTY GATE LATCH SPLIT FACED CMU WALL — IN RUNNING BOND - HEAVY DUTY BEARING HINGE PATTERN - 6" SQ. STEEL TUBE - "B" DECK STEEL LOUVERED FENCING PANEL - GATE FRAME: 2" SQ. STEEL TUBE HEAVY DUTY VEHICULAR CONCRETE BRACING AS REQUIRED (BACK SIDE OF DOORS) POST FOOTINGS FINISH GRADE;  $^{ extstyle \cap}$  PER STRUCTURAL - ADJACENT SURFACE MIN. 2 BLOCK COURSES MIN. 2 BLOCK COURSES BELOW GRADE CONCRETE FOOTING:

24" CURB & GUTTER -

1. GATE ENCLOSURE BASIS OF DESIGN: SECURITY GATE SYSTEM WITH SHADOW 100 INFILL PANELS BY AMETCO MANUFACTURING CORPORATION

(www.ametco.com). GATE TO BE 100% OPAQUE. 2. ALL GATE COMPONENTS ARE TO BE STEEL WITH BLACK POWDER COAT FINISH. 3. ALL GATE HARDWARE IS TO BE HEAVY DUTY GALVANIZED STEEL TO MEET MANUFACTURER'S REQUIREMENTS. 4. FINAL GATE ENCLOSURE DESIGN AND DETAILS ARE TO BE COORDINATED THROUGH SHOP DRAWINGS PROVIDED BY THE CONTRACTOR.

**CURB RAMP** 

CURB TAPER

6" TAPER OVER 6'-0" -

ADJACENT SURFACE VARIES, REFER TO SITE PLAN

PLAN VIEW

3" TAPER OVER 6'-0" -

PRECAST CONCRETE CAP,

MORTARED TO WALL - 🖁 MORTAR JOINT

SECTION

1. THE PURPOSED OF THIS DETAIL IS TO SHOW THE GENERAL CONFIGURATION OF A TYPICAL SEGMENTAL BLOCK WALL. ALL CONSTRUCTION DETAILS ARE TO BE INCLUDED WITH STRUCTURAL DESIGN. 2. THE CONTRACTOR MUST ENGAGE A QUALIFIED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT FOR STRUCTURAL WALL DESIGNS **SECTION** 

STONE VENEER ANCHORS STONE VENEER ATTACHED TO - GEOTEXTILE FABRIC CONCRETE WALL WITH VENEER TO MATCH BUILDING WALL HEIGHT ANCHORS TO MATCH BUILDING WALL HEIGHT VARIES CAST IN PLACE CONCRETE WALL, VARIES, REFER TO ½" CONCAVE MORTAR REFER TO GRADING PLANS REFER TO STRUCTURAL PLANS FOR **GRADING PLANS** 1/2" CONCAVE INTERNAL DETAILING JOINT, TYP. MORTAR JOINT, TYP. GEOGRID REINFORCING FINISH GRADE, REFER (DESIGN BY OTHERS) ADJACENT SURFACE TO GRADING PLANS REFER TO SITE PLANS FINISH GRADE - PIPE TO DAYLIGHT DEPTH-STRUCTURAL PLANS)

1'-6" CAP ----**/**── 1'-4" WALL —

JOINT FILLER

 $\frac{1}{8}$ " RADIUS TYP.

FRONT ELEVATION

TRANSVERSE EXPANSION JOINT

PLAN

SCALE: 3/4" = 1'-0"

SCALE: 1/2" = 1'-0"

PAVEMENT AND CURB SHALL ELEVATION OF CURBS VARY (SEE GRADING PLAN) MEET FLUSH AT TOP OF RAMP \_\_\_\_E.J. (TYP.) LANDSCAPE AREA 00000 00000 00000 00000 F.O.C. -CURB TYPE VARIES (SEE PLANS) = - TRUNCATED DOME (TYP.) GUTTER EDGE AT CONCRETE CURBS ONLY -

MORTAR SETTING BED CIP CONCRETE SLAB COMPACTED AGGREGATE BASE COURSE COMPACTED SUBGRADE SECTION 2.35" —/ / MONOLITHIC MATS. OF CURB RAMP. 11.75" 0 0 0 0

0 0 0 0 0 0 0 0 TRUNCATED DOME SECTION TRUNCATED DOME SPACING

——|1'-6" MIN. —— <del>|1| —— |</del>1' <del>—— |</del>

1. ALL DETECTABLE WARNINGS SHALL BE UNIT PAVERS OR TILES OR 2. WIDTH OF DETECTABLE WARNING STRIP SHALL BE EQUAL TO WIDTH

 $-\frac{1}{2}$ " WEEP HOLES IN CENTER OF PAVING (APPROX.  $\frac{1}{50}$  SF)

CONC. UNIT PAVERS

3. LENGTH OF DETECTABLE WARNING SHALL BE 2'. 4. DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.

DETECTABLE WARNINGS TO BE LOCATED 6"-8" FROM FACE OF CURB. 6. TRUNCATED DOME PAVERS/TILE TO MEET FLUSH WITH ADJACENT MATERIALS.

7. INSTALL FULL PAVERS UNLESS OTHERWISE NOTED.

SCALE: 1" = 1'-0"

1/2" X 12" DOWEL AT —

CENTER ON JOINT

CONSTRUCTION JOINT:

PLAN

SECTION

STONE VENEER TO MATCH

- EXPANSION JOINT

BUILDING MORTARED TO RISERS

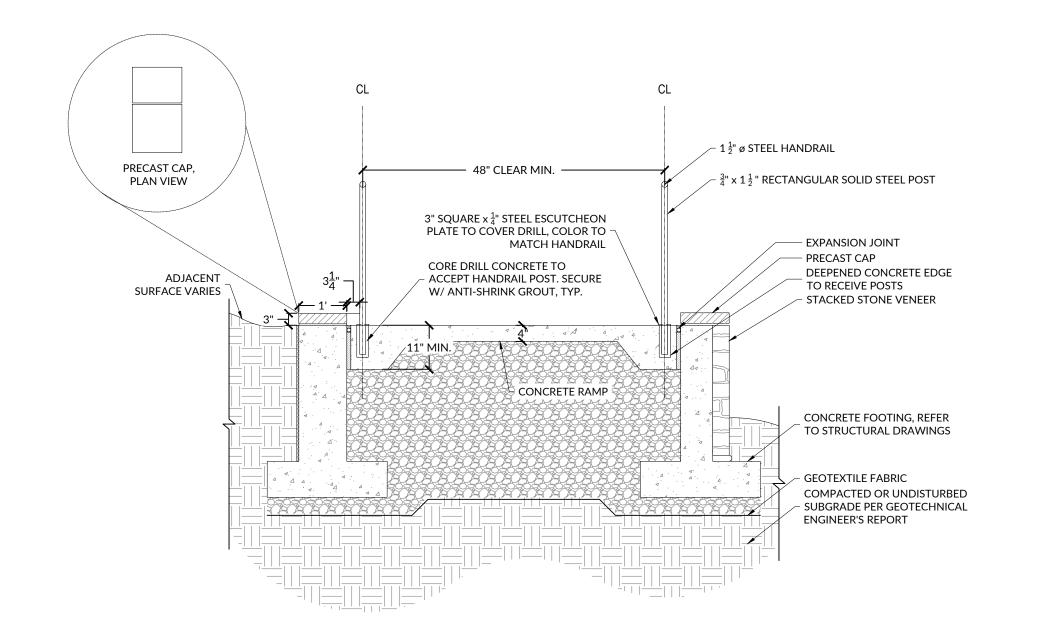
CORE DRILL HANDRAIL 6" INTO CONCRETE WITH EPOXY

ADJACENT VEHICULAR CONCRETE

SIDEWALK WITH THICKENED EDGE

HANDRAIL TOP RAIL: 2 1/4" WIDE CAP MOLDING ON 1 1/2" CHANNEL

PRECAST CONCRETE STEP MORTARED TO CONCRETE STEPS WITH 1/2" OVERHANG



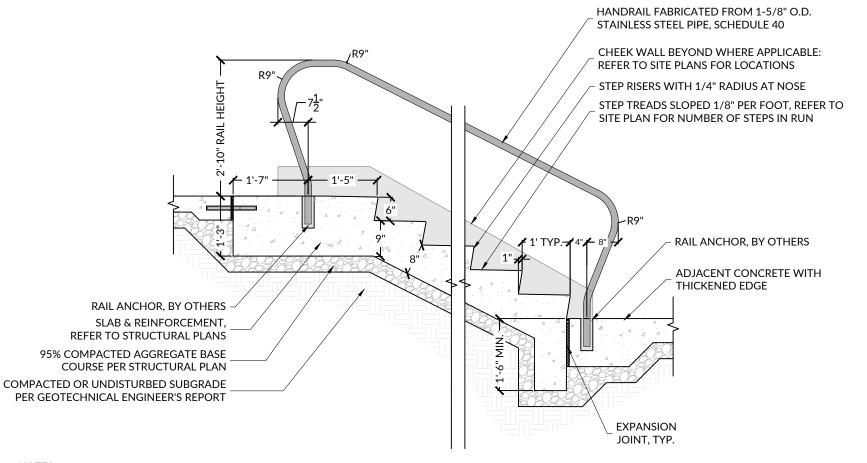
TAPERED CURB -

CONCRETE RAMP WITH CHEEK WALLS

SCALE: 1/2" = 1'-0"

SCALE: 3/4" = 1'-0"

FLUSH CURB -



1. THE PURPOSE OF THIS DETAIL IS TO SHOW THE GENERAL CONFIGURATION OF THE STAIRS AND HANDRAILS. ALL CONSTRUCTION DETAILS ARE SHOWN ON STRUCTURAL PLANS.

2. HANDRAIL COMPONENTS ARE TO SCHEDULE 40 STAINLESS STEEL. ALL CONNECTIONS ARE TO BE WELDED AND FINISHED SUCH THAT THERE ARE NO SHARP EDGES. 3. FOR STEP RUNS LONGER THAN 5 STEP RISERS, HANDRAILS SHALL INCLUDE A MID-POST, INSTALLED IN THE MIDDLE STEP OF THE RUN. IN LONGER STEP RUNS

WHERE MULTIPLE POSTS ARE REQUIRED, THE MID-POSTS SHALL BE EQUALLY SPACED IN THE STEP RUN. 4. REINFORCING AND FOUNDATIONS FOR STEPS ARE SHOWN FOR REFERENCE ONLY: REFER TO STRUCTURAL DRAWINGS.

ADJACENT PAVEMENT VARIES (SEE PLANS) -

5. THE CONTRACTOR MUST ENGAGE A QUALIFIED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT FOR STRUCTURAL DESIGN.

1. BRICK PAVERS ARE TO MATCH ADJACENT SIDEWALK BRICK PAVERS. 2. HANDRAIL COMPONENTS ARE TO BE WROUGHT IRON WITH BLACK POWDER COAT FINISH. ALL CONNECTIONS ARE TO BE WELDED AND FINISHED SUCH THAT THERE ARE NO SHARP EDGES.

SCALE: 3/4" = 1'-0"

CORE DRILL 6" INTO CONCRETE & KEEP 6" CLR.

95% COMPACTED AGGREGATE BASE COURSE

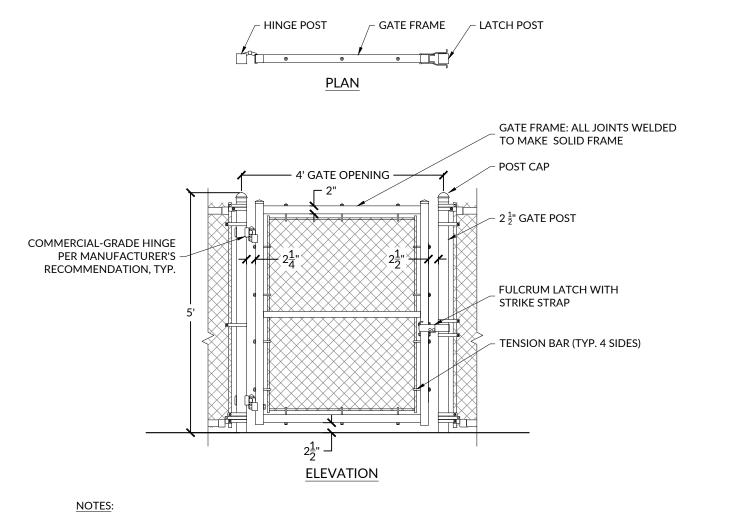
ENGINEER'S REPORT

COMPACTED OR UNDISTURBED

SUBGRADE PER GEOTECHNICAL

SECTION

**SECTION** 



1. ALL FENCE AND GATE MATERIALS TO BE VINYL-COATED STEEL.

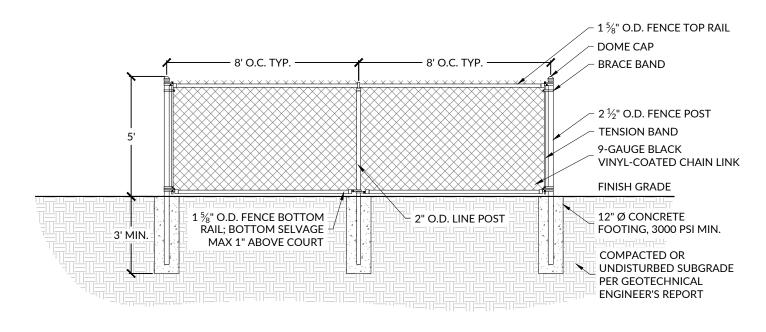
2. ALL FENCE AND GATE HARDWARE TO BE HEAVY DUTY AND GALVANIZED STEEL.

3. GATE FRAME, HINGES AND HARDWARE ARE TO MEET REQUIREMENTS OF FENCE MANUFACTURER.

 $\sim 1\,\%$ " O.D. FENCE TOP RAIL DOME CAP - BRACE BAND  $-2\frac{1}{2}$ " O.D. FENCE POST TENSION BAND 9-GAUGE BLACK VINYL-COATED CHAIN LINK FINISH GRADE 1 %" O.D. FENCE BOTTOM 12" Ø CONCRETE 2" O.D. LINE POST RAIL; BOTTOM SELVAGE FOOTING, 3000 PSI MIN. MAX 1" ABOVE COURT COMPACTED OR UNDISTURBED SUBGRADE PER GEOTECHNICAL ENGINEER'S REPORT

1. CONCRETE FOOTINGS TO BE SET BELOW THE FROST LINE. 2. ALL FENCE MATERIALS TO BE BLACK VINYL-COATED STEEL.

3. ALL HARDWARE TO BE GALVANIZED STEEL. 4. GATE FRAME, HINGES, AND HARDWARE ARE TO MEET REQUIREMENTS OF FENCE MANUFACTURER.



NOTES: 1. CONCRETE FOOTINGS TO BE SET BELOW THE FROST LINE.

ALL FENCE MATERIALS TO BE BLACK VINYL-COATED STEEL. ALL HARDWARE TO BE GALVANIZED STEEL. 4. GATE FRAME, HINGES, AND HARDWARE ARE TO MEET REQUIREMENTS OF FENCE MANUFACTURER.

SCALE: 1/2" = 1'-0"

SCALE: 1/4" = 1'-0"

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WR JOB NUMBER

DRN: WR DGN: WR CKD: WR

5/27/2025

INITIAL PLAN DATE: 05/23/2025

REVISIONS:

SITE DETAILS

POIN ENIT

TRI

SCALE: 1/4" = 1'-0"

**SECTION** 

SECTION

SECTION

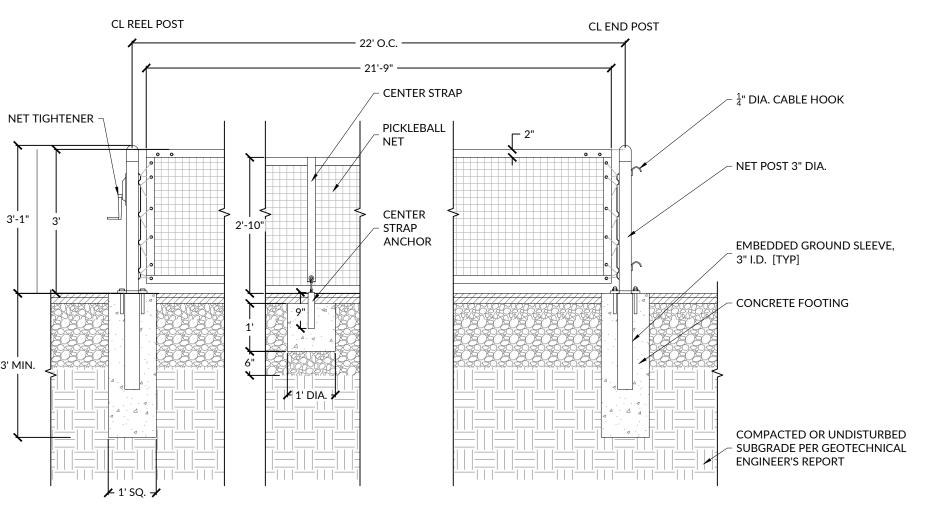
**SECTION** 

SECTION

5/27/2025

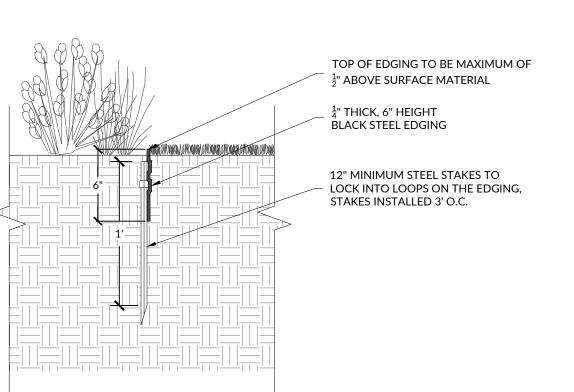
WR JOB NUMBER DRN: WR DGN: WR CKD: WR

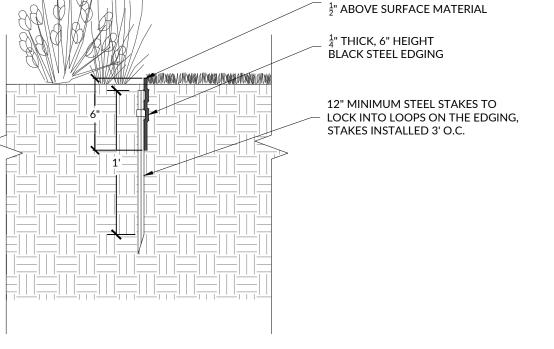
SITE DETAILS



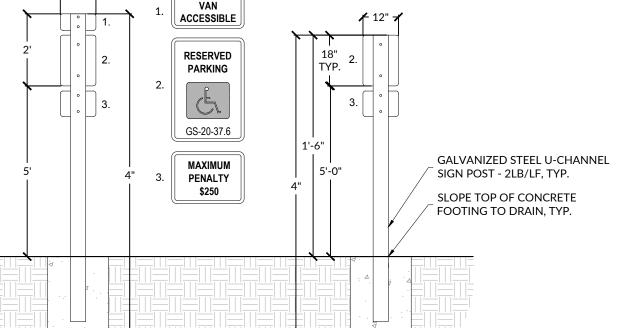
1. PICKLEBALL NET POSTS AND STRAP ANCHORS ARE TO BE INSTALLED PRIOR TO PAVING THE COURT TO MAINTAIN THE INTEGRITY OF THE NEW PAVEMENT. POSTS AND ANCHORS ARE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.

**SECTION** 













SECTION



SECTION

VAN ACCESSIBLE

1. PRIOR TO APPLICATION OF COURT SURFACE SYSTEM, ASPHALT SURFACE SHALL BE LEVELED SO THAT NO DEPRESSIONS GREATER THAN 1/16" ARE PRESENT. LEVELING AND PATCHING ARE TO MEET USTA & MANUFACTURER'S REQUIREMENTS (MAX 1/8" PER 10 FEET). ACRYLIC COURT SURFACE SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND MEET REQUIREMENTS FOR COVERAGE, SMOOTHNESS AND PLAYABILITY. MATERIALS SHALL BE PROVIDED BY ONE MANUFACTURER TO ENSURE COMPATIBILITY OF PRODUCTS. 3. COURT SURFACE COLOR IS TO BE PANTONE BLUE (2965) IN-BOUNDS AND PANTONE GREEN (357U) FOR OUTSIDE. COLOR COATS SHALL CONTAIN SAND 4. MASKING TAPE FOR PLAYING LINES SHALL BE PRIMED PRIOR TO PAINTING THE LINES TO PREVENT PAINT FROM BLEEDING UNDER THE TAPE. PLAYING LINES SHALL BE HAND BRUSHED OR ROLLED, NOT SPRAYED, PER USTA REQUIREMENTS. 5. THE USE OF RAP OR OTHER MATERIALS THAT COULD IMPACT PAVEMENT LONGEVITY OR STAIN THE COURT SURFACE ACRYLICS SHALL BE PROHIBITED. ASPHALT SHALL BE VIRGIN LIMESTONE OR GRANITE TYPE AGGREGATE ONLY. 6. WHERE PICKLEBALL COURT ABUTS RETAINING WALL, TOP OF WALL IS TO MEET FLUSH WITH COURT SURFACE WITH FENCE POSTS EMBEDDED INTO IT.

COURT DIMENSION

TO EDGE OF FENCE

PERFORATED SOLID PIPE SUB DRAIN

— ACRYLIC PICKLEBALL COURT SURFACE

COURT PATCH OR RESURFACER AS

3" ASPHALT SURFACE TYPE S9.5B,

REQUIRED TO LEVEL SURFACE

PLACED IN 2 EQUAL LIFTS

6" MIN. 95% COMPACTED

AGGREGATE BASE COURSE

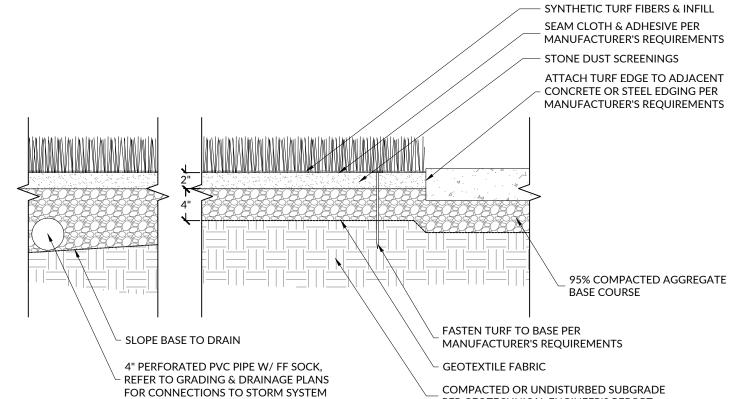
NONWOVEN GEOTEXTILE FABRIC (MIRAFI 160N OR APPROVED EQUAL)

COMPACTED OR UNDISTURBED - SUBGRADE PER GEOTECHNICAL

ENGINEER'S REPORT

PER GEOTECHNICAL ENGINEER'S REPORT

WHITE LINE PAINT WITH TEXTURED FINISH



1. SYNTHETIC TURF BASIS OF DESIGN PRODUCT: SYNAUGUSTINE X47 SYNTHETIC TURF BY SYNLAWN (www.synlawn.com), OR APPROVED EQUAL. SYNTHETIC TURF IS TO BE INSTALLED AND SEAMED PER MANUFACTURER'S REQUIREMENTS, WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION. SEAMS SHALL BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH; ADHESIVE TAPE SHALL NOT BE USED.
 INFILL MATERIAL IS TO MEET SPECIFICATIONS AND REQUIREMENTS OF MANUFACTURER, AND BE INSTALLED TO MEET MANUFACTURER'S REQUIREMENTS. 5. TURF IS TO BE INSTALLED TO SIT BETWEEN 1/4" AND 1/2" BELOW ADJACENT PAVEMENT GRADES.

PICKLEBALL FENCE POST —

PERIMETER OF COURT

**EXPANSION JOINT -**

12" WIDE x 6" THICK CONCRETE

ADJACENT SURFACE

REFER TO SITE PLANS

FENCE POST FOOTING

WITH TOP 6" BELOW -

FINISHED GRADE

CURB POURED FLUSH AROUND —

SCALE: 1" = 1'-0"

SECTION

THE RESERVED PARKING SIGN IS TO BE 5'-0" IF THE PEDESTRIAN PATH DOES NOT PASS UNDER OR AROUND SIGN.
 THE RESERVED PARKING SIGN IS TO BE 7'-0" IF THE PEDESTRIAN PATH GOES BY, UNDER, OR AROUND THE SIGN.

GALVANIZED STEEL U-CHANNEL

SIGN POST - 2LB/LF, TYP.

FOOTING TO DRAIN, TYP.

SLOPE TOP OF CONCRETE

6" DIAMETER STEEL PIPE, FILL

HEAVY DUTY CONCRETE INSIDE

SYNTHETIC TURF TYPE 2; REFER TO

- 4" PERFORATED PVC PIPE W/ FF SOCK

1" TO 2" LAYER OF UNWASHED STONE DUST OR FINES

4" TO 6" LAYER OF \(\frac{3}{4}\)" MINUS CRUSHED
\(-\tag{Aggregate}\) AGGREGATE, SLOPED TOWARDS PERFORATED

- COMPACTED SUBGRADE; REFER TO GEOTECH

CONSTRUCTION SCHEDULE

SUB DRAINS

SOLID WITH CONCRETE

DUMPSTER ENCLOSURE

CONCRETE FOOTING,

BOLLARD SLEEVE

3000 PSI MIN.

1. REFER TO PLANS FOR EXACT LOCATION & NUMBER OF BOLLARDS

4. THE SYNTHETIC GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION.

CONTRACTOR TO PROVIDE PRODUCT DATA AND SAMPLES FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

SYNTHETIC TURF INSTALLATION IS TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND BY AN AUTHORIZED INSTALLER.

5. ALL SEAMS ARE TO UTILIZE SUITABLE SEAMING GLUE AND SEAMING CLOTH. CONTRACTOR IS TO PROVIDE PRODUCT DATA FOR REVIEW AND APPROVAL

- PRECAST CONCRETE EDGER

- MORTAR FORTING

COMPOSITE 2"X4"

1. REFERENCE CONSTRUCTION SCHEDULE FOR ALL COLORS AND FINISHES

**GOLF CART** PARKING ONLY

BY LANDSCAPE ARCHITECT PRIOR TO USE.

SCALE: 1 1/2" = 1'-0"

NAILER BOARD

2. FOR BOLLARD PRODUCT INFORMATION SEE FINISHES AND FURNISHING SCHEDULE.

PAINT YELLOW

NOTES:

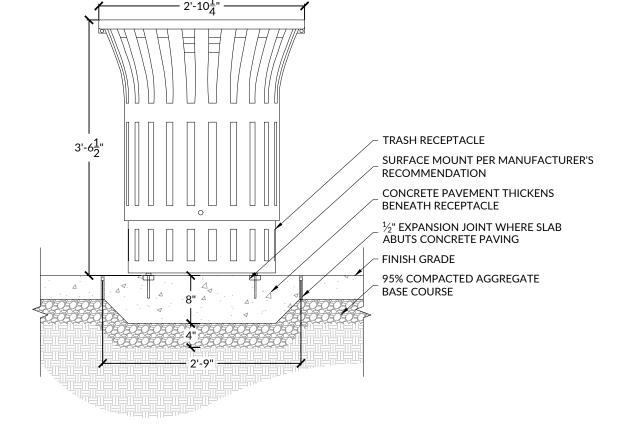
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1. ANCHORS FOR SURFACE MOUNTING BENCHES ARE TO BE STAINLESS STEEL & MEET REQUIREMENTS OF MANUFACTURER. 2. SEE APPROPRIATE DETAILS FOR ADJACENT PAVING CONDITIONS

3. SEE FINISHES & FURNISHINGS SCHEDULE \\FOR BENCH PRODUCT INFORMATION.

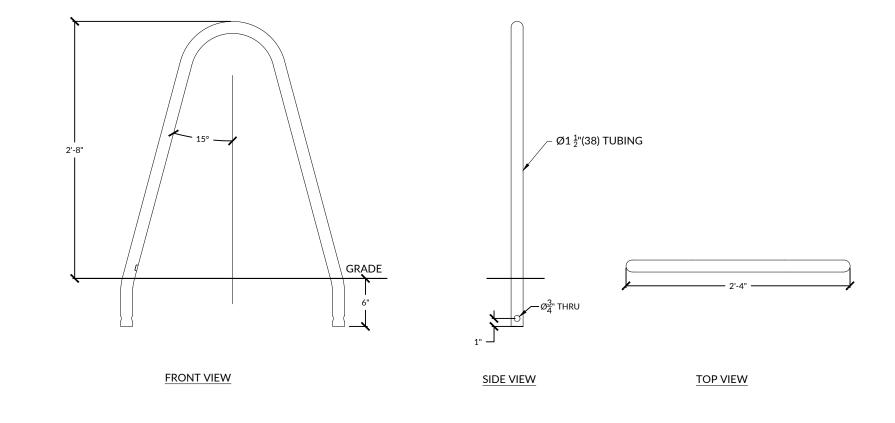
O1 BENCH MOUNTED ON CONCRETE SCALE: 1" = 1'-0"

SECTION



FOR WASTE RECEPTACLE PRODUCT INFORMATION SEE FINISHES & FURNISHINGS SCHEDULE.
 ANCHORS FOR SURFACE MOUNTING BENCHES ARE TO BE STAINLESS STEEL & MEET REQUIREMENTS OF MANUFACTURER.

SECTION SCALE: 3/4" = 1'-0"



 FRAME IS TO BE STAINLESS STEEL TUBING WITH BLACK POWDER COAT FINISH.
 BIKE RACK IS TO BE EMBEDDED MINIMUM 6 INCHES INTO CONCRETE PER MANUFACTURER'S REQUIREMENTS. 3. PRODUCT: BALA BIKE RACK BY LANDSCAPE FORMS (www.landscapeforms.com) OR APPROVED EQUAL.

4. BIKE RACKS ARE TO BE SPACED A MINIMUM OF 3 FEET FROM EDGE OF PAVING AND ADJACENT BIKE RACKS, UNLESS NOTED OTHERWISE.

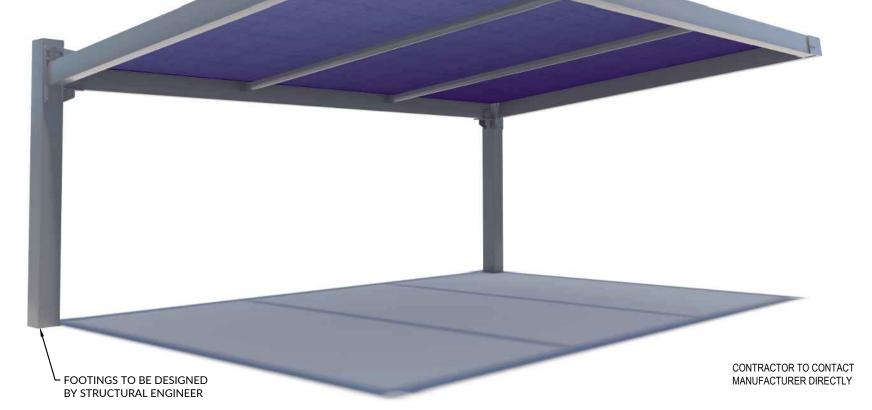
SCALE: 1" = 1'-0"

SECTION

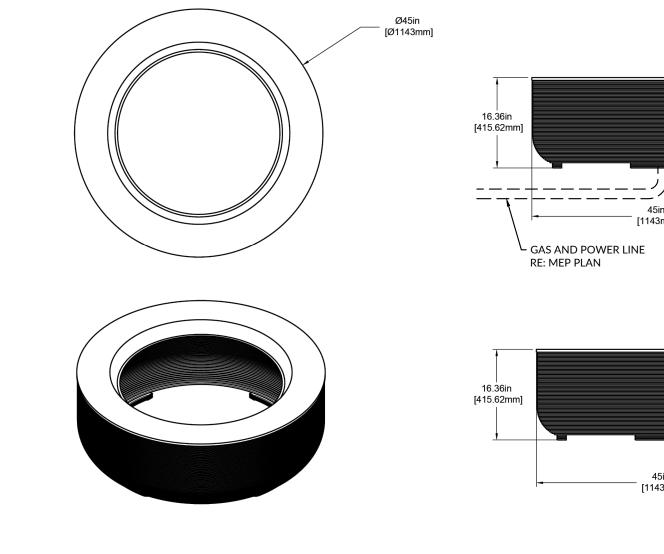
FOOTINGS TO BE DESIGNED BY STRUCTURAL ENGINEER

CONTRACTOR TO CONTACT MANUFACTURER DIRECTLY

PRODUCT



SCALE: NTS



SCALE: NTS

PRODUCT

PRODUCT

CONTRACTOR TO CONTACT MANUFACTURER DIRECTLY

5/27/2025

TRI POIN SERENIT

INITIAL PLAN DATE: 05/23/2025 REVISIONS:

WR JOB NUMBER 23-1177
DRN: WR DGN: WR CKD: WR

SITE DETAILS

GRILL STATION PLAN

SCALE: 1/2" = 1'-0"

GAS LINE; RE: MEP PLANS

TOP VIEW

┌ REGULATOR VALVE; RE: MEP PLANS

- 4" PVC PIPE, TIE INTO DRAINAGE SYSTEM

─ INTERNAL STORAGE CAVITY

PVC DRAIN W/ SS GRATE

MAINTAIN A MINIMUM 30" X 48" CLEAR SPACE, POSITIONED FOR PARALLEL APPROACH [TYP]

PLAN

OVERHANG OF COUNTER TOP

CONCRETE FOOTING [TYP]

- CMU BLOCK [TYP]

TRI POIN SERENIT

5/27/2025

INITIAL PLAN DATE: 05/23/2025 REVISIONS:

WR JOB NUMBER 23-1177
DRN: WR DGN: WR CKD: WR

SITE DETAILS

C5.06

FRONT ELEVATION

O1 GRILL STATION ELEVATION

SCALE: 1/2" = 1'-0"

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ELEVATION

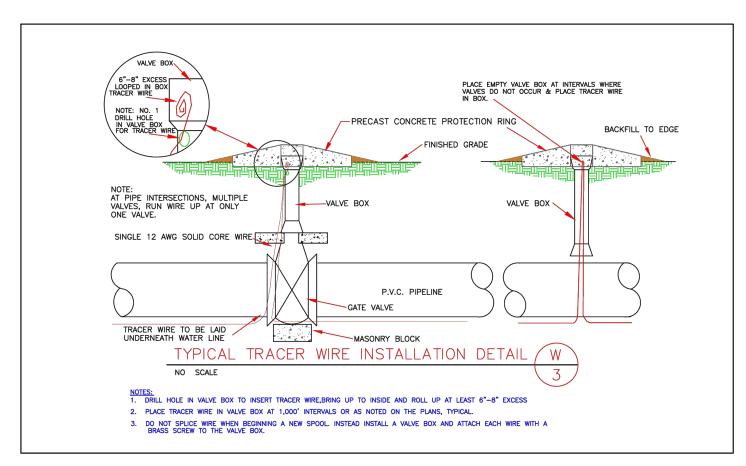
- IVORY PARGE COAT ON SIDES AND BACK - STAINLESS STEEL VENT (@ EACH GRILL) \_ DEKTON COUNTER TOP COLOR: BLANC CONCRETE - GRILL BY OWNER - VENEER AS SELECTED BY OWNER ON FRONT FACE GAS LINE AND REGULATOR VALVE - CMU BLOCK CORE — 4" PVC DRAIN WITH SS GRATE — FINISH GRADE, REFER TO SITE PLAN - REINFORCED CONCRETE FOOTING (SEE STRUTURAL) — COMPACTED SUBGRADE SIDE SECTION

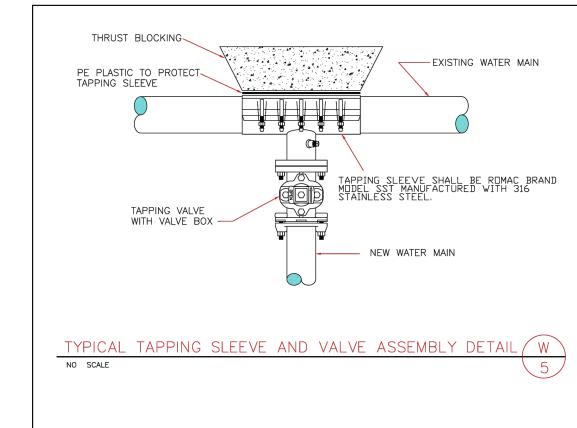
O3 GRILL STATION SECTION

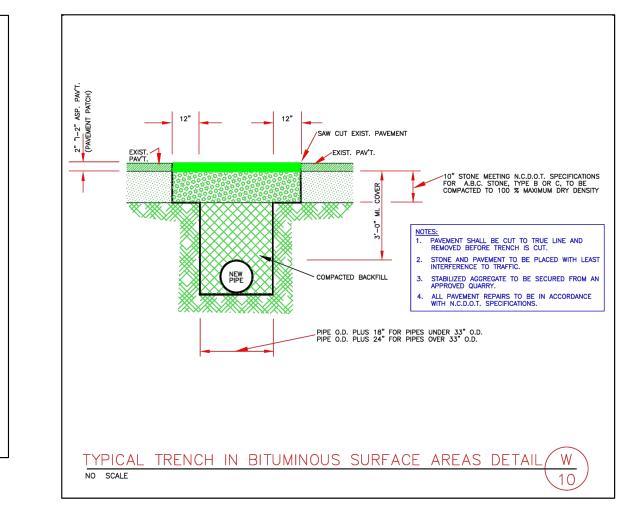
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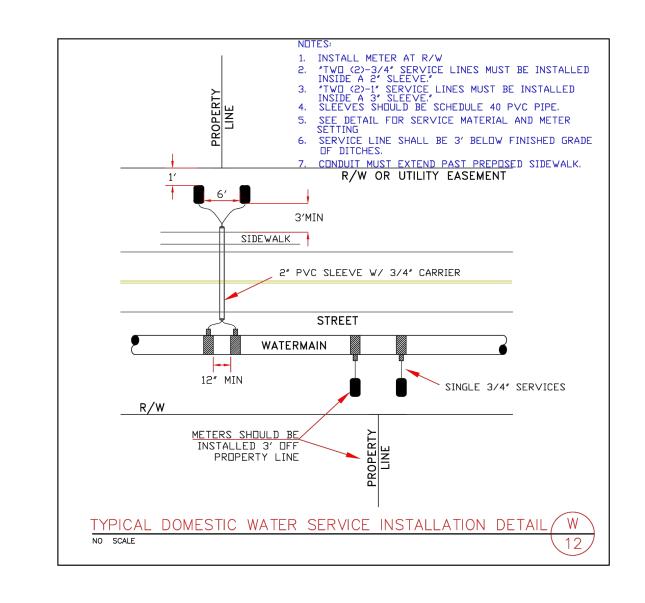
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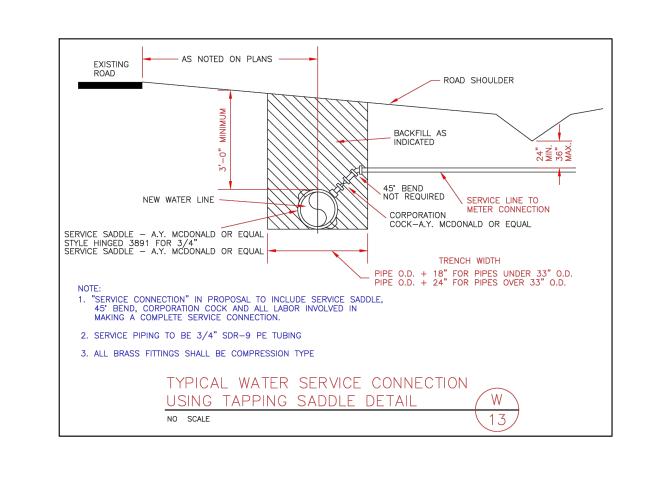
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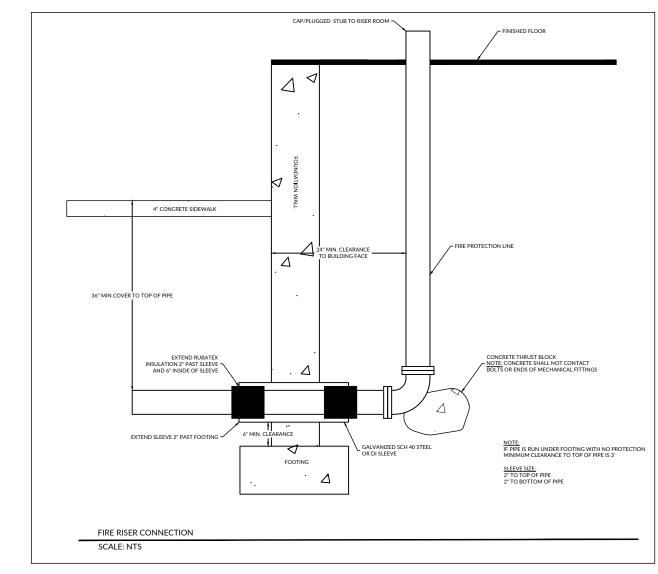


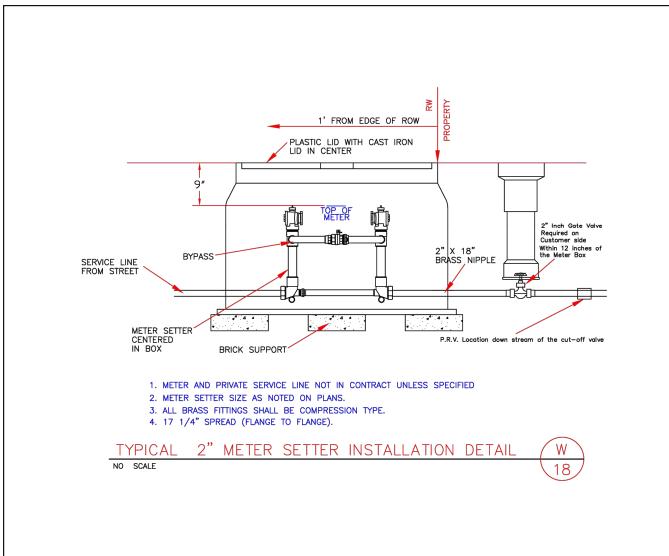




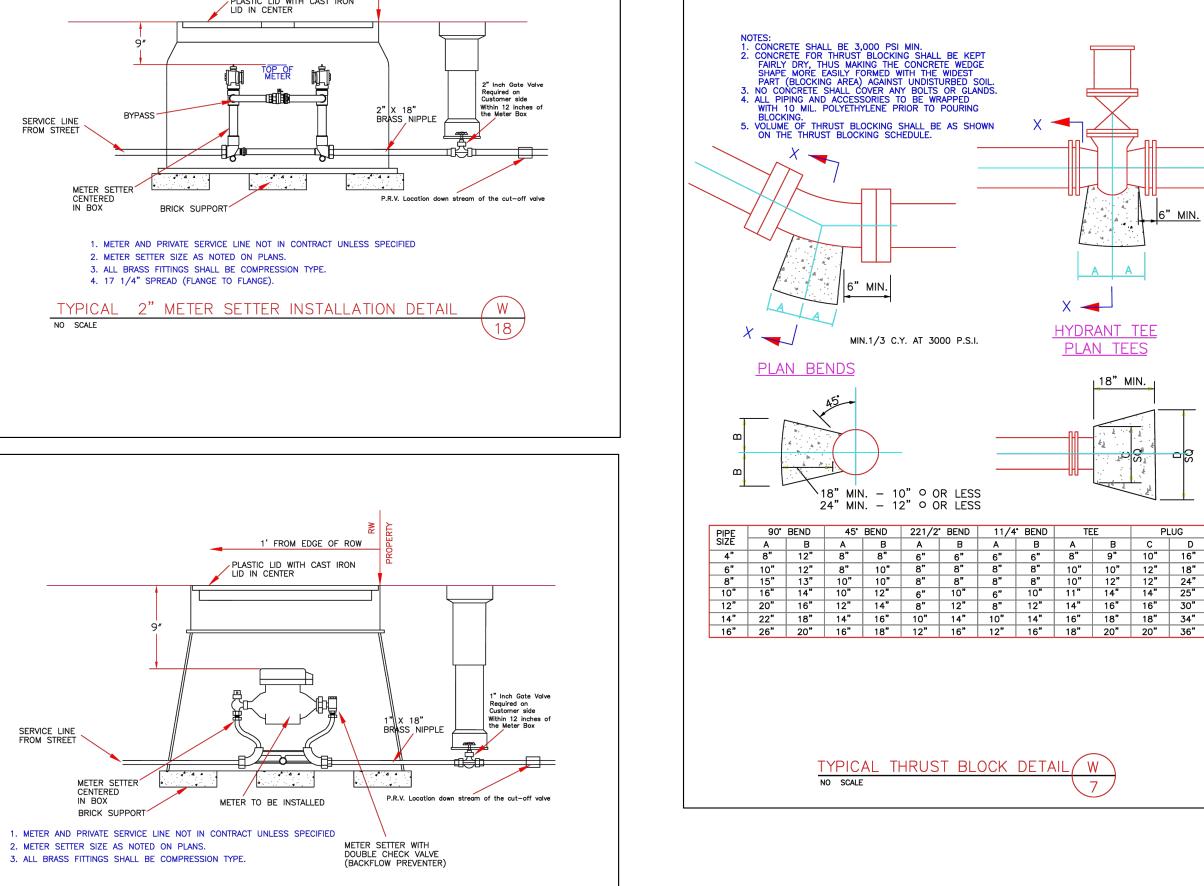


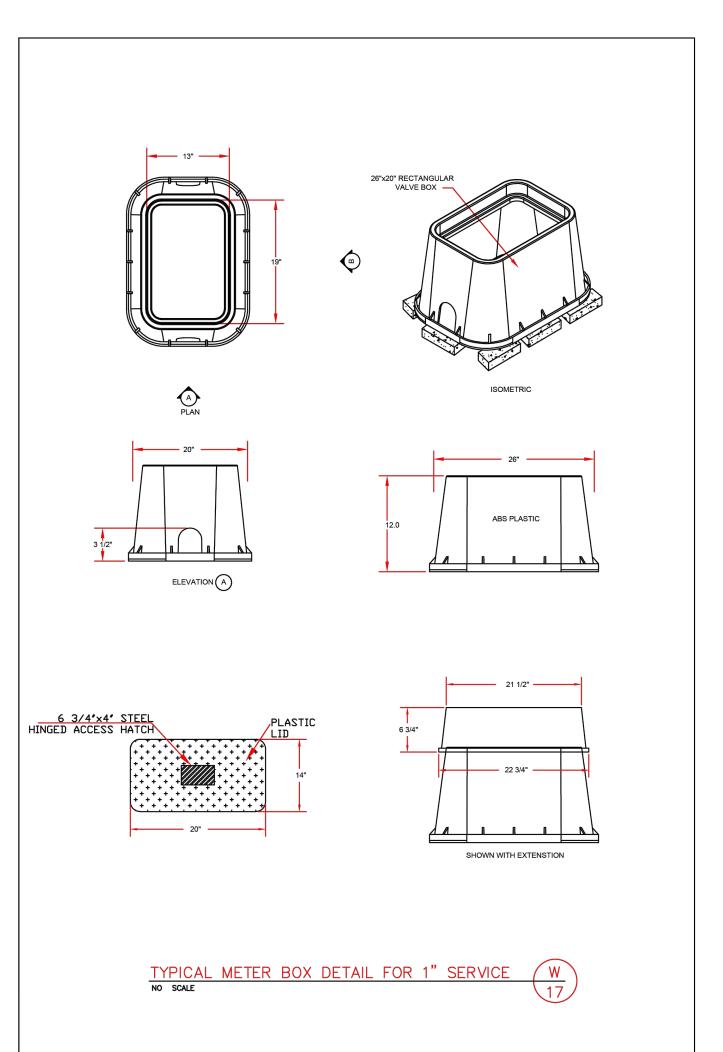


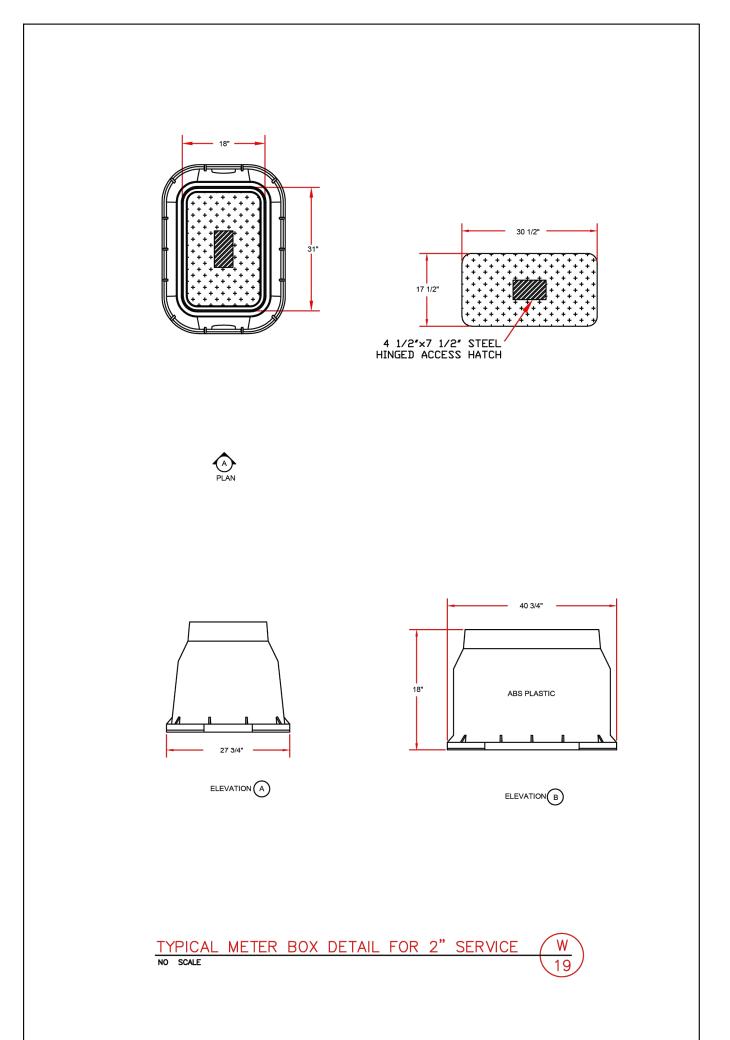




TYPICAL 1" METER SETTER INSTALLATION DETAIL ( W )









TRI POIN SERENIT

5/27/2025

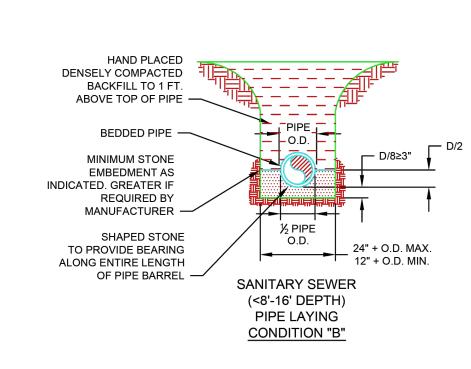
INITIAL PLAN DATE: 05/23/2025

**REVISIONS:** 

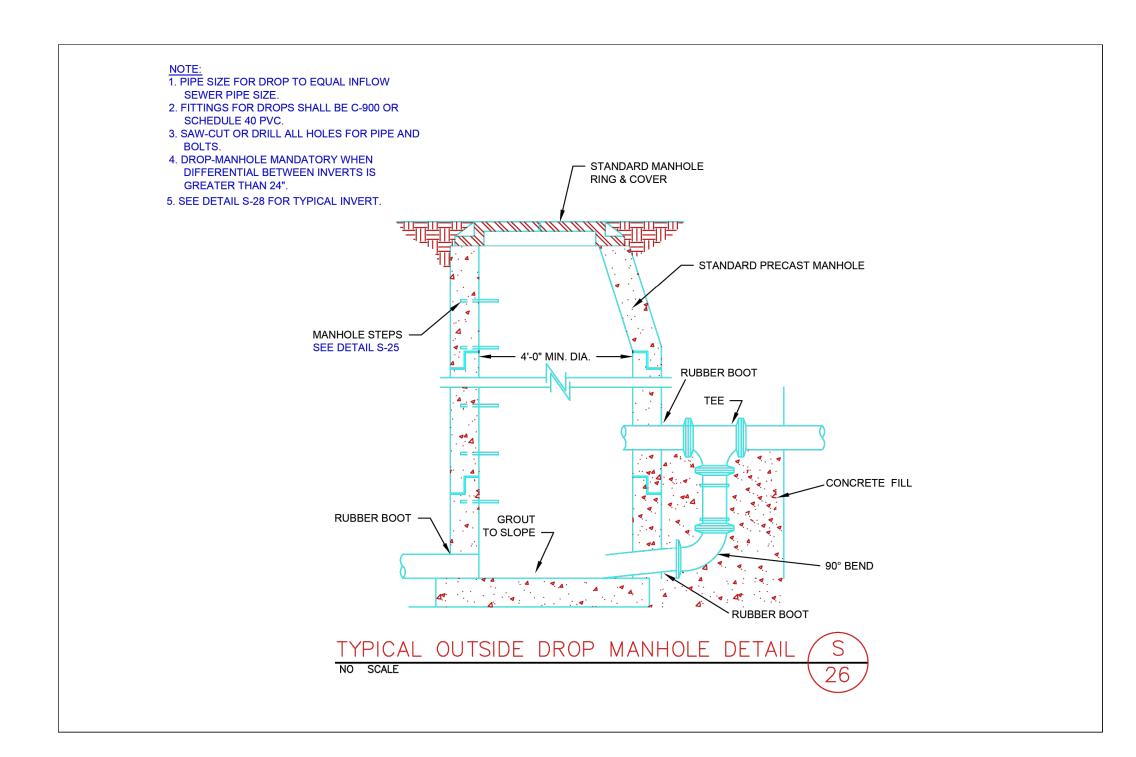
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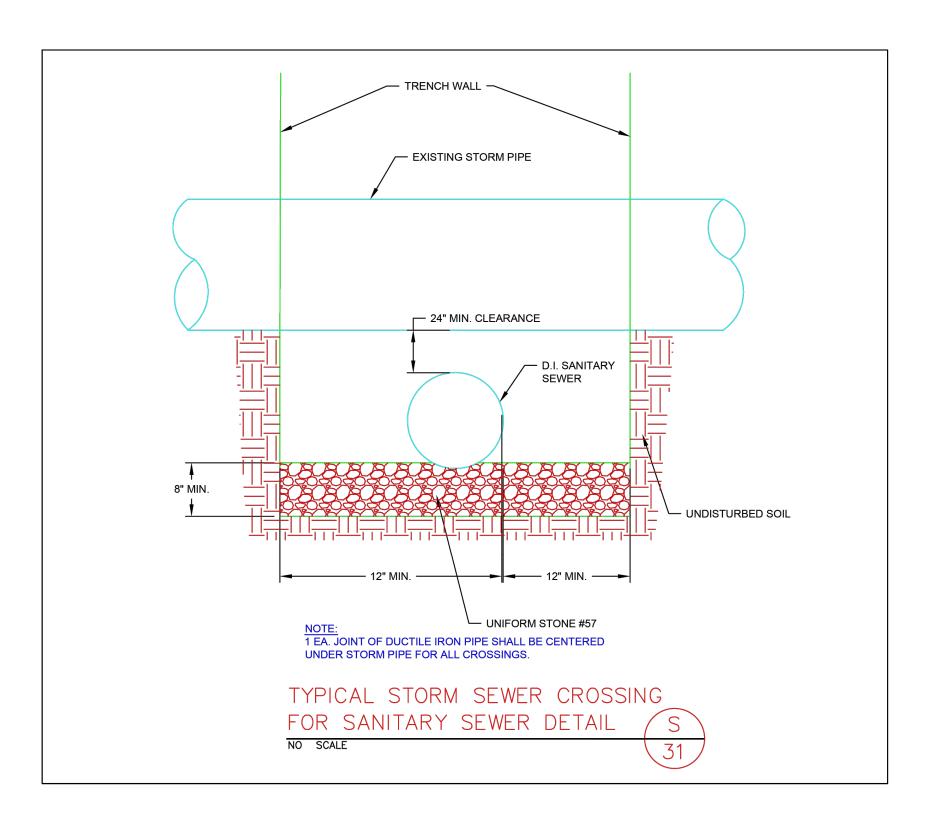
WATER DETAILS

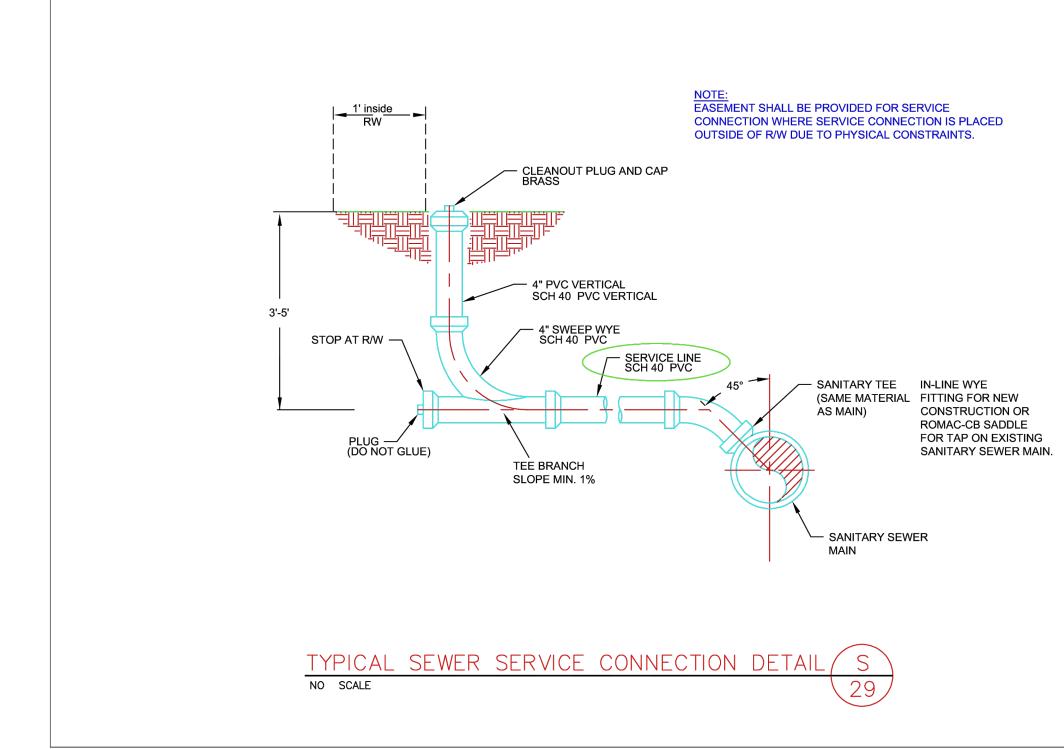
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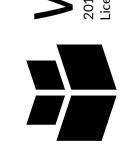
TYPICAL PIPE LAYING CONDITION DETAIL S





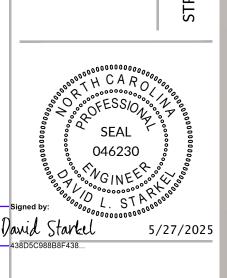


Thershore NC 28202 on Street | Suite 800 | Charlotte, NC 28202 F-1479 | t: 704.919.1242 | www.withersravenel.com



**ri Pointe Homes** 440 Wade Park Blvd Suite 400 Raleigh, NC 27607

TRI POINTE HOMES
SERENITY AMENITY



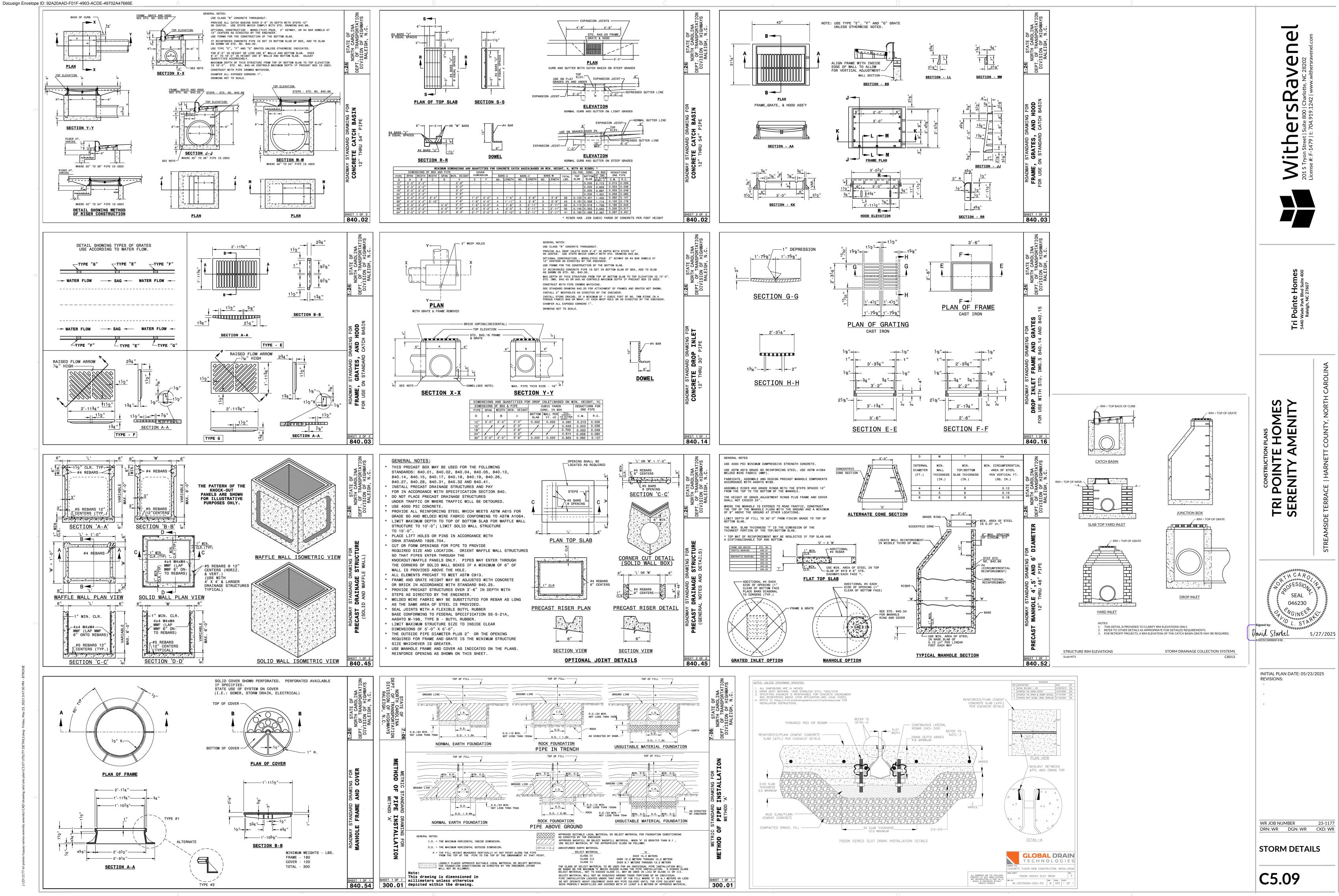
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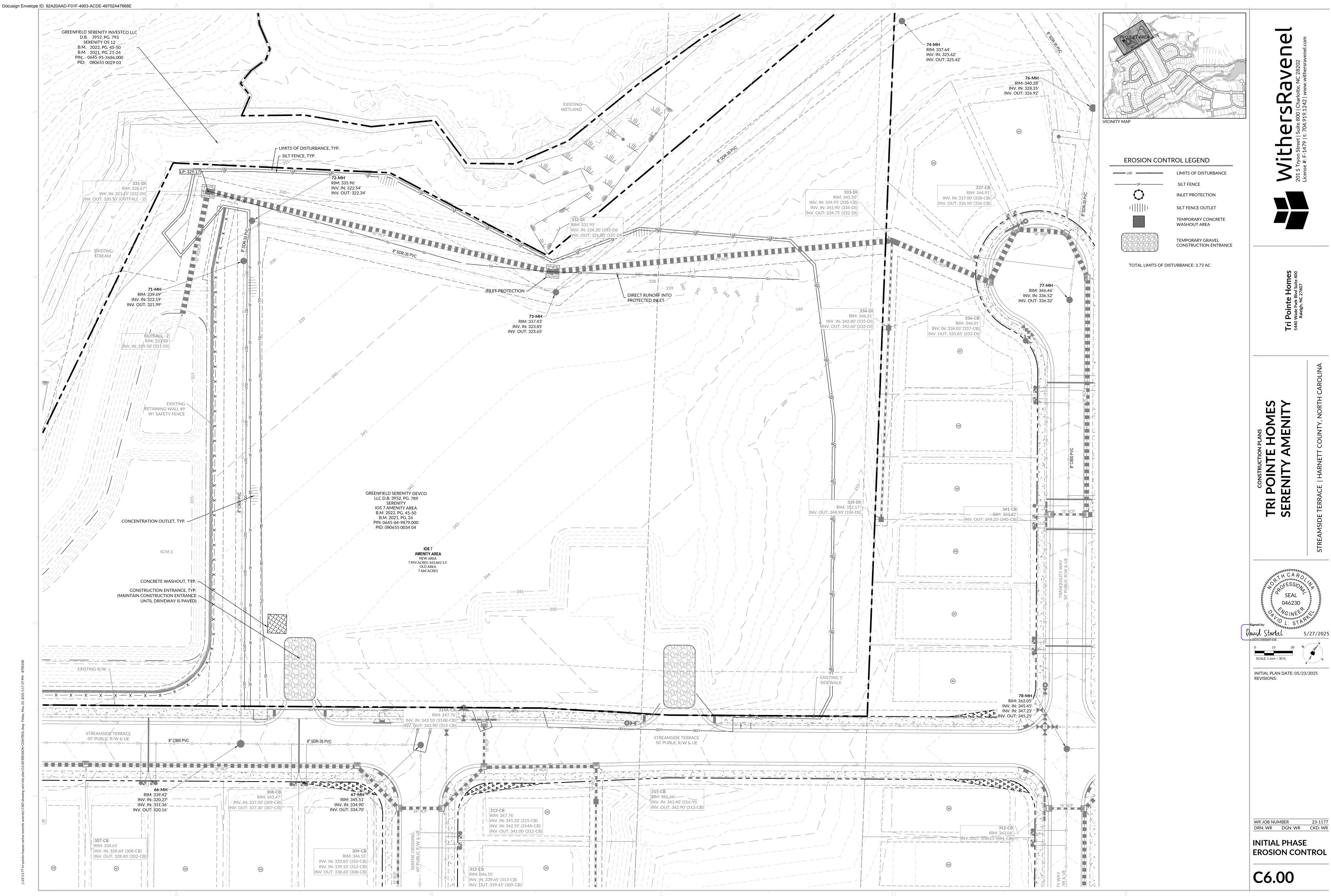
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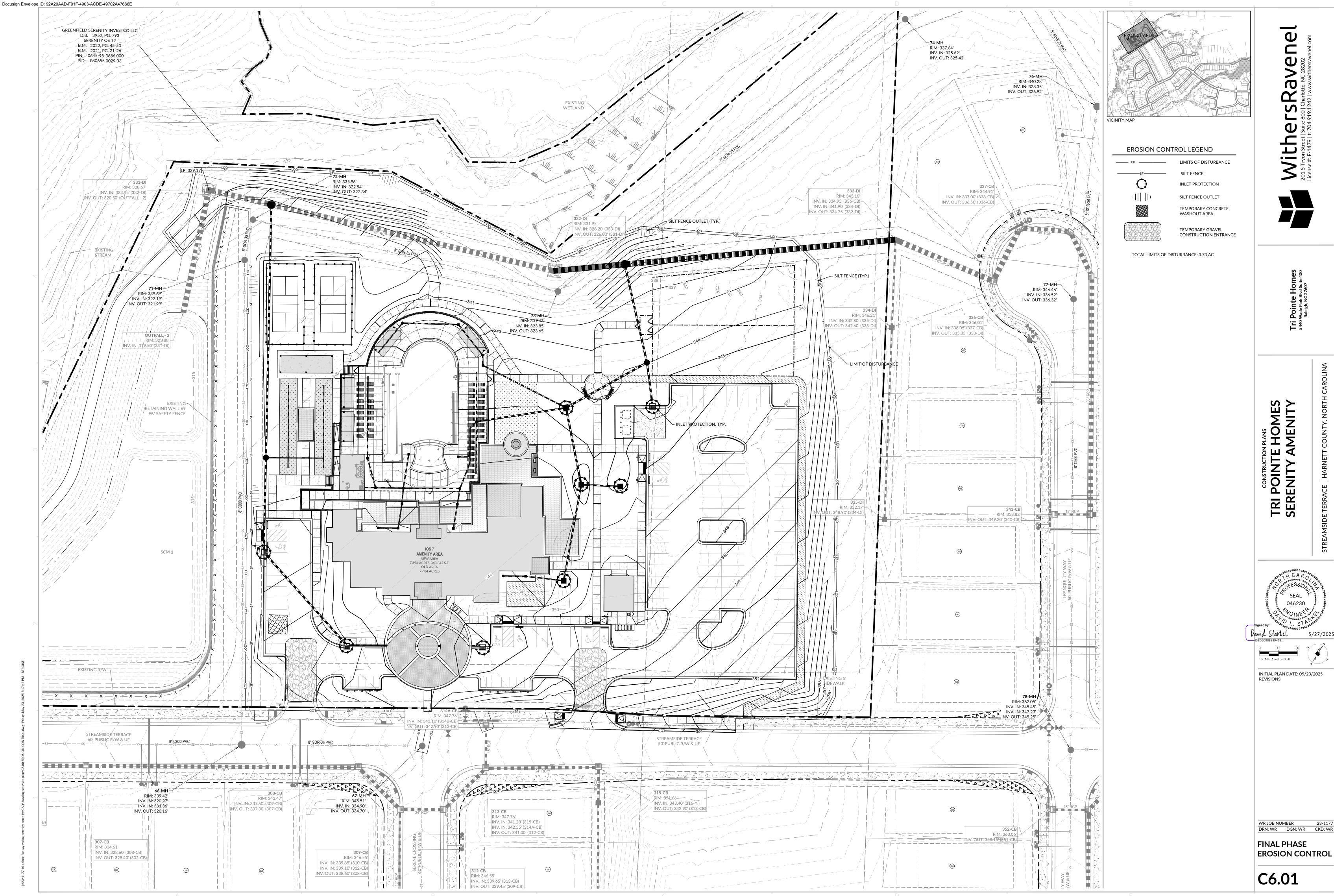
SEWER DETAILS

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INITIAL PLAN DATE: 05/23/2025

DRN: WR DGN: WR CKD: WR FINAL PHASE

**NOTES & DETAILS** 

**EROSION CONTROL** 

## COMPLETE GRADING BEFORE PREPARING SEEDBEDS AND INSTALL ALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS. MINIMIZE STEEP SLOPES BECAUSE THEY MAKE SEEDBED PREPARATION DIFFICULT AND INCREASE THE EROSION

## SEEDBED PREPARATION: GOOD SEEDBED PREPARATION IS ESSENTIAL TO SUCCESSFUL PLANT ESTABLISHMENT. A GOOD SEEDBED IS WELL-PULVERIZED, LOOSE, AND

UNIFORM. WHERE HYDROSEEDING METHODS ARE USED, THE SURFACE MAY BE LEFT WITH A MORE IRREGULAR SURFACE OF LARGE CLODS

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, WITH STOCKPILED TOPSOIL. CONTRACTOR SHALL RESERVE SUFFICIENT TOPSOIL FOR SEEDBED PREPARATION.

2. RIP THE ENTIRE AREA TO 6-INCH DEPTH. 3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.

4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPER-PHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW\*).

5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP. 6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING. 7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.

8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF THE STAND IS LESS THAN 60% ESTABLISHED. THE ENTIRE AREA SHALL BE RESEEDED ACCORDING TO SPECIFICATIONS USING THE ORIGINAL

LIME. FERTILIZER AND SEEDING RATES. 9. CONSULT A CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS

## LIME AND FERTILIZER:

TEMPORARY SEEDING:

BOTH LIME AND FERTILIZER SHOULD BE INCORPORATED INTO THE TOP 4-6 INCHES OF SOIL. IF A HYDRAULIC SEEDER IS USED, DO NOT MIX SEED AND FERTILIZER MORE THAN 30 MINUTES BEFORE APPLICATION.

## PLANT SELECTION:

SELECT AN APPROPRIATE SPECIES OR SPECIES MIXTURE FROM THE APPLICABLE SEEDING RECOMMENDATION TABLES DEPENDING ON THE PLANTING SEASON AND WHETHER OR NOT TEMPORARY OR PERMANENT SEEDING. IN THE MOUNTAINS, DECEMBER AND JANUARY SEEDINGS HAVE POOR CHANCES OF SUCCESS. WHEN IT IS NECESSARY TO PLANT AT THESE TIMES, USE RECOMMENDATIONS FOR FALL AND

EVENLY APPLY SEED USING A CYCLONE SEEDER (BROADCAST), DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. USE SEEDING RATES GIVEN IN TEMPORARY SEEDING RECOMMENDATIONS TABLES. BROADCAST SEEDING AND HYDROSEEDING ARE APPROPRIATE FOR STEEP SLOPES WHERE EQUIPMENT CANNOT BE DRIVEN. HAND BROADCASTING IS NOT RECOMMENDED BECAUSE OF THE DIFFICULTY IN ACHIEVING A UNIFORM DISTRIBUTION. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1 INCH DEEP, AND GRASSES AND LEGUMES NO MORE THAN 1/2 INCH. BROADCAST SEED MUST BE COVERED BY RAKING OR CHAIN DRAGGING, AND THEN LIGHTLY FIRMED WITH A ROLLER OR CULTIPACKER, HYDROSEEDED MIXTURES SHOULD INCLUDE A WOOD FIBER (CELLULOSE) MULCH.

THE USE OF AN APPROPRIATE MULCH WILL HELP ENSURE ESTABLISHMENT UNDER NORMAL CONDITIONS AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH SITE CONDITIONS (NCDEQ PRACTICE 6.14, MULCHING). HARSH SITE CONDITIONS INCLUDE:

- SEEDING IN FALL FOR WINTER COVER (WOOD FIBER MULCHES ARE NOT CONSIDERED ADEQUATE FOR THIS USE), SLOPES STEEPER THAN 3:1,
- EXCESSIVELY HOT OR DRY WEATHER,
- ADVERSE SOILS (SHALLOW, ROCKY, OR HIGH IN CLAY OR SAND), AND
- AREAS RECEIVING CONCENTRATED FLOW.
- IF THE AREA TO BE MULCHED IS SUBJECT TO CONCENTRATED WATERFLOW, AS IN CHANNELS, ANCHOR MULCH WITH NETTING (NCDEQ PRACTICE 6.14, MULCHING).

SEEDING	MIXTURE
SPECIES	RATE (LBS/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50
OMIT ANNUAL LESPEDEZA WHEN DURATION OF BEYOND JUNE.	TEMPORARY COVER IS NOT TO EXTEND
SEEDING	DATES
MOUNTAINS ABOVE 2,500 FEET BELOW 2,500 FEET	FEBRUARY 15 - MAY 15 FEBRUARY 1 - MAY 1
PIEDMONT	JANUARY 1 - MAY 1
COASTAL PLAIN	DECEMBER 1 - APRIL 15
SOIL AMENDMENTS: FOLLOW RECOMMENDATION GROUND AGRICULTURAL LIMESTONE AND 750 L	,
MULCH: APPLY 4,000 LBS/ACRE STRAW. ANCHOR OR A MULCH ANCHORING TOOL. A DISK WITH B A MULCH ANCHORING TOOL.	
MAINTENANCE: REFERTILIZE IF GROWTH IS NOT MULCH IMMEDIATELY	FULLY ADEQUATE. RESEED, REFERTILZE AND

TABLE 2 - TEMPORARY SEEDING	RECOMMENDATIONS FOR SUMMER	
SEEDING	G MIXTURE	
SPECIES	RATE (LBS/ACRE)	
GERMAN MILLET	40	
IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED	50	
SEEDING DATES		
MOUNTAINS	MAY 15 - AUGUST 15	
PIEDMONT	MAY 1 - AUGUST 15	
COASTAL PLAIN	APRIL 15 - AUGUST 15	
<b>SOIL AMENDMENTS:</b> FOLLOW RECOMMENDATIONS OF SOIL TEST OR APPLY 2,000 LBS/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.		
,	OR STRAW BY TACKING WITH ASPHALT, NETTING, BLADES SET NEARLY STRAIGHT CAN BE USED AS	
MAINTENANCE: REFERTILIZE IF GROWTH IS NO	T FULLY ADEQUATE. RESEED, REFERTILZE AND	

MULCH IMMEDIATELY

TABLE 3 - TEMPORARY SEEDING	RECOMMENDATIONS FOR FALL
SEEDING	MIXTURE
SPECIES	RATE (LBS/ACRE)
RYE (GRAIN)	120
SEEDING	G DATES
MOUNTAINS	AUGUST 15 - DECEMBER 15
PIEDMONT	AUGUST 15 - DECEMBER 30
COASTAL PLAIN	AUGUST 15 - DECEMBER 30
SOIL AMENDMENTS: FOLLOW RECOMMENDATION GROUND AGRICULTURAL LIMESTONE AND 750 L	,
MULCH: APPLY 4,000 LBS/ACRE STRAW. ANCHOR OR A MULCH ANCHORING TOOL. A DISK WITH B A MULCH ANCHORING TOOL.	·
MAINTENANCE: REPAIR AND REFERTILIZE DAMA LBS/ACRE OF NITROGEN IN MARCH. IF IT IS NECE BEYOND JUNE 15, OVERSEED WITH 50 LBS/ACRE	ESSARY TO EXTEND TEMPORARY COVER

KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

### PERMANENT SEEDING:

## **GENERAL REQUIREMENTS:**

- 1. PREPARATION FOR PRIMARY/PERMANENT STABILIZATION SHALL NOT BEGIN UNTIL ALL CONSTRUCTION AND UTILITY WORK WITHIN THE PREPARATION AREA IS COMPLETE. HOWEVER, IT MAY BE NECESSARY TO PREPARE FOR NURSE CROPS PRIOR TO THE COMPLETION OF CONSTRUCTION AND INSTALLATION OF UTILITIES.
- 2, A NORTH CAROLINA DEPARTMENT OF AGRICULTURE SOILS TEST (OR EQUAL) SHALL BE OBTAINED FOR ALL AREAS TO BE SEEDED. SPRIGGED, SODDED OR PLANTED. RECOMMENDED FERTILIZER AND PH ADJUSTING PRODUCTS SHALL BE INCORPORATED INTO THE PREPARED AREAS AND BACKFILL MATERIAL PER THE TEST.
- 3. ALL AREAS TO BE SEEDED OR PLANTED SHALL BE TILLED OR RIPPED TO A DEPTH OF SIX INCHES (6"). RIPPING CONSISTS OF CREATING FISSURES IN A CRISS-CROSS PATTERN OVER THE ENTIRE SURFACE AREA, UTILIZING AN IMPLEMENT THAT WILL NOT GLAZE THE SIDE WALLS OF THE FISSURES. SITE PREPARATION THAT DOES NOT COMPLY WITH THESE DOCUMENTS SHALL NOT BE ACCEPTABLE. THE DEPTH OF SOIL PREPARATION MAY BE ESTABLISHED AS A RANGE BASED ON THE APPROVAL OF THE REVIEWING STATE OR LOCAL AGENCY. ONCE TILLED OR RIPPED ACCORDING TO THE APPROVED PLAN, ALL AREAS ARE TO BE RETURNED TO THE APPROVED FINAL GRADE. PH MODIFIERS AND/OR OTHER SOIL AMENDMENTS SPECIFIED IN THE SOIL TESTS CAN BE ADDED DURING THE SOIL PREPARATION PROCEDURE OR AS DESCRIBED BELOW.

### AREAS TO BE SEEDED:

THE AUTHORITY HAVING JURISDICTION.

- 1. TILL OR DISC THE PREPARED AREAS TO BE SEEDED TO A MINIMUM DEPTH OF SIX (6) INCHES. REMOVE STONES LARGER THAN THREE (3) INCHES ON ANY SIDE, STICKS, ROOTS AND OTHER EXTRANEOUS MATERIALS THAT SURFACE. IF NOT INCORPORATED DURING THE SOIL PREPARATION PROCESS, ADD PH MODIFIER AND FERTILIZERS AT THE RATE SPECIFIED IN THE SOIL TEST REPORT.
- 2. RE-COMPACT THE AREA UTILIZING A CULTIPACKER ROLLER. THE FINISHED GRADE SHALL BE A SMOOTH EVEN SOIL SURFACE WITH A LOOSE, UNIFORMLY FINE TEXTURE. ALL RIDGES AND DEPRESSIONS SHALL BE REMOVED AND FILLED TO PROVIDE THE APPROVED SURFACE DRAINAGE. SEEDING OF GRADED AREAS IS TO BE DONE IMMEDIATELY AFTER FINISHED GRADES ARE OBTAINED AND SEEDBED PREPARATION IS COMPLETED.

### TABLE 4 - PERMANENT SEEDING RECOMMENDATIONS FOR SHOULDERS, SIDE DITCHES AND SLOPE (3:1 MAX)

	SEEDING MIXTURE	
SPECIES	RATE (LBS/ACRE)	DATE
TALL FESCUE	300	AUGUST 15 - NOVEMBER 1
TALL FESCUE & ABRUZZI RYE	300	NOVEMBER 1 - MARCH 2
TALL FESCUE	300	MARCH 1 - APRIL 15
HULLED COMMON BERMUDA GRASS	25	APRIL 15 - JUNE 30
TALL FESCUE AND  ***BROWN TOP MILLET OR  ***SORGHUM-SUDAN HYBRIDS	125 35 30	JULY 15 - AUGUST15

- \*\*\*TEMPORARY RESEED ACCORDING TO THE OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.
- A CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE SHALL BE CONSULTED FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER

## LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ANY VARIATION FROM THIS LIST SHALL BE PRE-APPROVED BY THE AUTHORITY HAVING JURISDICTION.

## TABLE 5 - PERMANENT SEEDING RECOMMENDATIONS FOR SLOPES 3:1 TO 2:1

	SEEDING MIXTURE	
SPECIES	RATE (LBS/ACRE)	DATE
SERICEA LESPEDEZA (SCARIFIED) AND	50	MARCH 1 - JUNE 1
ADD TALL FESUCE AND	120	MARCH 1 - APRIL 15
ADD WEEPING LOVE GRASS OR	10	MARCH 1 - JUNE 30
ADD COMMON BERMUDA GRASS	25	MARCH 1 - JUNE 30
TALL FESCUE AND  ***BROWN TOP MILLET OR  ***SORGHUM-SUDAN HYBRIDS	125 35 30	JUNE 1 - SEPTEMBER 1
SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE	70 120	SEPTEMBER 1 - MARCH 1
ADD ABRUZZI RYE	25	NOVEMBER 1 - MARCH 1

COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT. A CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE SHALL BE CONSULTED FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ANY VARIATION FROM THIS LIST SHALL BE PRE-APPROVED BY

## TABLE 6 - PERMANENT SEEDING SOIL AMENDMENTS

AGRICULTURAL LIMESTONE	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER	1,000 LBS/ACRE - 10-10-10
SUPER-PHOSPHATE	500 LBS/ACRE - 20% ANALYSIS
MULCH	2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR	ASPHALT EMULSION @ 300 GAL/ACRE

### **SEEDING NON-WETLAND AREAS:**

### 1. TEMPORARY NON-WETLAND SEEDING

a. SEEDING SCHEDULE - IN ACCORDANCE WITH TABLE 6 b. SOIL AMENDMENTS

WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

- i. FOLLOW RECOMMENDATIONS OF SOIL TEST OR APPLY 2,000 LBS/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LBS/ACRE
- c. MULCH i. APPLY 4,000 LBS/ACRE OF STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR MULCH ANCHORING TOOL. A DISK
- d. MAINTENANCE i. WINTER, EARLY SPRING, AND SUMMER
- 1. RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE, AND MULCH IMMEDIATELY EROSION OR OTHER DAMAGE.
- 1. REPAIR AND RE-FERTILIZE DAMAGED AREAS IMMEDIATELY. TOP DRESS WITH 50 LBS/ACRE OF NITROGEN IN MARCH. IF IT IS
- NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LBS/ACRE OF KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

e. TEMPORARY SEEDING MUST BE FOLLOWED WITH PERMANENT SEEDING AS SOON AS PRACTICAL.

## 2. PERMANENT NON-WETLAND SEEDING

- a. SEED ALL DISTURBED AREAS OF CONSTRUCTION.
- b. NO SEEDING SHOULD BE UNDERTAKEN IN WINDY OR UNFAVORABLE WEATHER, WHEN THE GROUND IS TOO WET TO RAKE EASILY, WHEN IT IS IN A FROZEN CONDITION, OR TOO DRY.
- c. The subgrade of all areas to be seeded shall be raked and all rubbish, sticks, roots, and stones larger than 2 INCHES SHALL BE REMOVED.
- d. THE SUBGRADE SHALL BE SCARIFIED OR OTHERWISE LOOSENED TO A MINIMUM DEPTH OF 4 INCHES.
- e. APPLY GROUND AGRICULTURAL LIMESTONE AT A RATE OF 3,000 4,000 LB/ACRE.
- f. APPLY 10-10-10 FERTILIZER AT A RATE OF 1,000 LB/ACRE. FERTILIZER SHALL BE UNIFORMLY SPREAD AND DISKED OR ROTOTILLED TO A DEPTH OF AT LEAST 4 INCHES.

### g. PERMANENT SEEDING

- i. IMMEDIATELY FOLLOWING THIS PREPARATION. PERMANENT SEED SHALL BE UNIFORMLY APPLIED AND LIGHTLY RAKED INTO THE SURFACE. LIGHTLY ROLL THE SURFACE AND WATER WITH FINE SPRAY. PERMANENT SEED SHALL BE APPLIED AT THE FOLLOWING
- ii. THE BEST SEEDING DATES ARE BETWEEN SEPTEMBER 1 THROUGH SEPTEMBER 30 AND FEBRUARY 15 THROUGH MARCH 20. iii. POSSIBLE SEEDING DATES ARE BETWEEN SEPTEMBER 1 THROUGH OCTOBER 31 AND FEBRUARY 15 THROUGH APRIL 30.
- iv. BETWEEN APRIL 15 AND AUGUST 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE OF SUDANGRASS.
- v. PRIOR TO MAY 1 OR AFTER AUGUST 15 ADD 25 LB/ACRE RYE (GRAIN). h. APPLY MULCH AT A RATE OF 4,000 LB/ACRE.
- i. APPLY TACKIFIER AT A RATE OF 10 GAL/1,000FT2.
- j. The contractor shall keep all seeded areas watered and in good condition. Reseeding shall be done if and WHEN NECESSARY UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA SEEDED.
- k. ON SLOPES, THE CONTRACTOR SHALL PROVIDE AGAINST WASHOUTS BY AN APPROVED METHOD. ANY WASHOUT THAT OCCURS
- SHALL BE REGRADED AND RESEEDED AT THE CONTRACTOR'S EXPENSE UNTIL GOOD SOD IS ESTABLISHED.

### TABLE 7 - PERMANENT SEEDING OF NON-WETLAND AREAS

	SEEDING MIXTURE	
SPECIES	RATE (LBS/ACRE)	DATE
BERMUDA GRASS	25	APRIL 1 - JUNE 30
KOBE LESPEDEZA	40	MAY 1 - SEPTEMBER 1
TALL FESCUE	120	SEPTEMBER 1 - APRIL 1
SERICEA LESPEDEZA	80	SEPTEMBER 1 - MAY 1

## **RIPARIAN SEED MIX:**

AREAS WITHIN FIFTY FEET (50') OF THE RIPARIAN BUFFER SHALL BE STABILIZED WITH NATIVE SEED MIX. ALL NATIVE SEED MIXTURES SHALL BE FROM MELLOW MARSH FARM (MMF) OR APPROVED EQUAL AND SHALL BE INSTALLED AS NOTED ON THESE PLANS. THE FOLLOWING INSTALLATION OF ALL NATIVE SEED MIXTURES SHALL FOLLOW MANUFACTURER'S BEST PRACTICES FOR NATIVE SEED ESTABLISHMENT. IF AN ALTERNATE SEED MIXTURE IS PROPOSED, THE CONTRACTOR SHALL PROVIDE THE BEST PRACTICES FOR ENGINEER REVIEW PRIOR TO

NATIVE SEED MIX SHALL BE INSTALLED AT THE FOLLOWING RATES (OR ALTERNATE AS PROVIDED BY MANUFACTURER AND APPROVED BY ENGINEER).

## TABLE 8 - RIPARIAN SEED MIX

SEEDING	MIXTURE
SPECIES	RATE (LBS/ACRE)
MMF NATIVE GRASS MIX	20-25
MMF POLLINATOR MIX	20-25
MMF RIPARIAN BUFFER MIX	20-25
MMF SHADE MIX	20-25
MMF STABILIZATION MIX	20-25
MMF STORMWATER POND MIX	20-25
MMF WETLAND MIX	20-25
MMF WETLAND SHADE MIX	20-25

**INITIAL PLAN DATE: 05/23/2025** 

**REVISIONS:** 

**EROSION CONTROL** NOTES & DETAILS

### REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND FROSION FROM HIGH FLOWS AROUND THE FDGES OF THE

REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE

CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD

4. ONCE ALL MEASURES ARE INSTALLED AND APPROVED, CONTRACTOR MAY BEGIN CLEARING AND GRUBBING OF SITE & ROUGH

8. ONCE THE STORM DRAINAGE & UTILITY INSTALLATION IS COMPLETE, THE STONE BASE COURSE SHALL BE INSTALLED. MAINTAIN INLET

7. INSTALL INLET PROTECTION TO ALL STORM STRUCTURES AND ENSURE ALL DRAINAGE IS REACHING INTENDED BASINS.

10. ONCE THE STORM DRAINAGE SYSTEM IS COMPLETE, COMPLETE GRADING AND ENSURE THE AREA IS FULLY STABILIZED.

SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL.

STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

1. INSTALL PERIMETER MEASURES INCLUDING SILT FENCE & SILT FENCE OUTLETS.

9. ONCE THE BASE COURSE IS INSTALLED, CONTRACTOR MAY INSTALL ALL BINDER ASPHALT.

INSTALL CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT.

5. STABILIZATION IS REQUIRED WITHIN 7 DAYS OF ANY ACTIVITY.

3. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.

6. COMPLETE UTILITY AND ROUGH GRADING.

11. REMOVE SILT FENCE ONCE SITE IS FULLY STABILIZED.

## DAMS. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN

GRADING.

## FOLLOW THE CONSTRUCTION SEQUENCE THROUGHOUT THE PROJECT DEVELOPMENT. WHEN CHANGES IN CONSTRUCTION ACTIVITIES MAINTAIN GRASS HEIGHT AT LEAST 2 INCHES WITH NO MORE THAN ONE-THIRD THE SHOOT HEIGHT (GRASS LEAF) REMOVED IN ANY

APPLY FERTILIZER AS NECESSARY TO MAINTAIN THE DESIRED GROWTH AND SOD DENSITY. ADD LIME AS NEEDED TO MAINTAIN THE PROPER PH.

TO PROVIDE SATISFACTORY INLET PROTECTION EFFICIENCY, REMOVE SEDIMENT FROM THE SEDIMENT POOL AREA WHEN THE VOLUME IS DECREASED BY HALF. THIS WILL HELP PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. STABILIZE EXCAVATED MATERIAL

TAKE CARE NOT TO DAMAGE OR UNDERCUT THE STRUCTURE DURING SEDIMENT REMOVAL. REMOVE DEBRIS FROM THE INLET AND

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED. REMOVE ALL MATERIALS AND DISPOSE OF SEDIMENT PROPERLY. BRING THE DISTURBED AREA TO THE GRADE OF THE DROP INLET. SMOOTH AND COMPACT AS NEEDED.

## APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET WITH GROUND COVER.

INSPECT ROCK PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.

CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND UNSTABLE

## SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER.

CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FEET BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE DESIGN GRADE. ANY RIPRAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.

INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.

CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.

SHOULD THE FABRIC OF THE SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE

CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

## CHECK SEDIMENT BASINS AFTER EACH RAINFALL. REMOVE SEDIMENT AND RESTORE ORIGINAL VOLUME WHEN SEDIMENT ACCUMULATES TO ABOUT ONE-HALF THE DESIGN VOLUME. SEDIMENT SHOULD BE PLACED ABOVE THE BASIN AND ADEQUATELY STABILIZED.

REMOVE THE STRUCTURE AND ANY UNSTABLE SEDIMENT IMMEDIATELY AFTER THE CONSTRUCTION SITE HAS BEEN PERMANENTLY STABILIZED. SMOOTH THE BASIN SITE TO BLEND WITH THE SURROUNDING AREA AND STABILIZE. ALL WATER AND SEDIMENT SHOULD BE REMOVED FROM THE BASIN PRIOR TO DAM REMOVAL. SEDIMENT SHOULD BE PLACED IN DESIGNATED DISPOSAL AREAS AND NOT

INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE

REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM. IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED. THE ORIFICE CAN BE REMOVED. AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER. CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH THE FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

POROUS BAFFLES:

INEFFECTIVE, REPLACE IT PROMPTLY.

REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT AND REPLACE IF DAMAGED DURING CLEANOUT OPERATIONS. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

## DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

## SEDIMENT AND ANY DEBRIS. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE. THE SOCK NEEDS TO BE REINSTALLED IF UNDERMINED

OR DISLODGED. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

EROSION CONTROL MAINTENANCE MEASURES (FROM CHAPTER 9)

CONSTRUCTION ROAD STABILIZATION:

MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION, SEDIMENT-PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY. A PROPERLY DESIGNED AND INSTALLED SUBSURFACE DRAIN REQUIRES LITTLE MAINTENANCE. HOWEVER, CHECK DRAINS PERIODICALLY

AND ESPECIALLY AFTER HEAVY RAINS TO SEE THAT THEY ARE OPERATING PROPERLY. KEEP THE OUTLETS FREE OF SEDIMENT AND OTHER DEBRIS, AND KEEP THE ANIMAL GUARD IN PLACE AND FUNCTIONAL. INVESTIGATE ANY WET AREAS ALONG THE LINE FOR POSSIBLE CAVE-IN DUE TO VEHICLE TRAFFIC, BLOCKAGE BY ROOTS, OR OTHER PROBLEMS. MAKE ALL NEEDED REPAIRS PROMPTLY.

EROSION. ESPECIALLY WHERE FLOW RE-ENTERS THE CHANNEL. REPAIR OR REPLACE FAILING STRUCTURES IMMEDIATELY.

INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN

SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD

## MAINTAIN DUST CONTROL MEASURES THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

MAINTAIN SAND FENCES, AND ERECT ADDITIONAL FENCES AS NEEDED UNTIL THE ERODING AREA HAS BEEN PERMANENTLY STABILIZED, OR IN THE CASE OF DUNE BUILDING, UNTIL THE DUNE HAS REACHED THE DESIRED HEIGHT AND IS PROPERLY VEGETATED.

### FLOC LOGS SHOULD BE CHECKED AT LEAST WEEKLY OR AFTER A RAINFALL EVENT OF ½ INCH OR GREATER TO MAKE SURE THE LOGS REMAIN IN PLACE, ARE MOIST, AND ARE NOT COVERED IN SEDIMENT.

DOSING SYSTEMS USING PUMPS SHOULD BE CHECKED DAILY.

ARE NEEDED, AMEND THE SEQUENCE SCHEDULE IN ADVANCE TO MAINTAIN MANAGEMENT CONTROL. ORDERLY MODIFICATION ASSURES COORDINATION OF CONSTRUCTION AND EROSION CONTROL PRACTICES TO MINIMIZE EROSION AND SEDIMENTATION PROBLEMS. WHEN MAJOR CHANGES ARE NECESSARY, SEND A COPY OF THE MODIFIED SCHEDULE TO THE LOCAL

## LAND GRADING:

PERIODICALLY, CHECK ALL GRADED AREAS AND THE SUPPORTING EROSION AND SEDIMENTATION CONTROL PRACTICES, ESPECIALLY AFTER HEAVY RAINFALLS. PROMPTLY REMOVE ALL SEDIMENT FROM DIVERSIONS AND OTHER WATER-DISPOSAL PRACTICES. IF WASHOUTS OR BREAKS OCCUR, REPAIR THEM IMMEDIATELY. PROMPT MAINTENANCE OF SMALL ERODED AREAS BEFORE THEY BECOME SIGNIFICANT GULLIES IS AN ESSENTIAL PART OF AN EFFECTIVE EROSION AND SEDIMENTATION CONTROL PLAN.

PERIODICALLY CHECK THE SEEDED SLOPES FOR RILLS AND WASHES. FILL THESE AREAS SLIGHTLY ABOVE THE ORIGINAL GRADE, THEN RESEED AND MULCH AS SOON AS POSSIBLE.

## NO MAINTENANCE MEASURES SPECIFIED IN NCDEQ MANUAL. IF NEEDED, COORDINATE W/ PM OR AUTHORITIES HAVING JURISDICTION.

### TAKE THESE STEPS AFTER ALL MATERIALS AND EQUIPMENT HAVE BEEN REMOVED FOR THE SITE: REMOVE TREE PROTECTION ZONE FENCES.

- PRUNE ANY DAMAGED TREES. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, REPAIR ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM IMMEDIATELY.
- o repair roots by cutting off the damaged areas and painting them with tree paint. Spread peat moss or moist
- O REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA AS SHOWN IN FIGURE 6.05D OF THE NCDEQ MANUAL TO
- AVOID PEELING BARK FROM HEALTHY AREAS OF THE TREE. CONTINUE MAINTENANCE CARE. PAY SPECIAL ATTENTION TO ANY STRESSED, DISEASED, OR INSECT-INFESTED TREES. REDUCE TREE STRESS CAUSED BY UNINTENDED CONSTRUCTION DAMAGE BY OPTIMIZING PLANT CARE WITH WATER, MULCH, AND FERTILIZER WHERE APPROPRIATE. CONSULT YOUR TREE EXPERT IF NEEDED.

## TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT:

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC

RESEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE.

## AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF THE

DO NOT REMOVE MORE THAN ONE-THIRD OF THE SHOOT IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3

AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD REQUIRES FERTILIZATION, AND MAY ALSO REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS WHEN POSSIBLE OR USE THE RATES IN TABLE 6.12B OF THE NCDEQ MANUAL.

INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION, DISLOCATION OR FAILURE. WHERE EROSION IS OBSERVED, APPLY ADDITIONAL MULCH. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. CONTINUE

## INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED. IN GENERAL, ONCE RIPRAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE. RIPRAP

SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN

ROLLED EROSION CONTROL PRODUCTS: INSPECT ROLLED EROSION CONTROL PRODUCTS (RECP) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL

GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE RECP. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.

### IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED, AND THE ERODED AREA PROTECTED. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

EVENT AND REPAIR IMMEDIATELY.

INSPECT COMPOST BLANKETS WEEKLY AND WITHIN 24 HOURS OF A RAINFALL EVENT OF ½ INCH OR GREATER. IF FAILURE OR DAMAGE TO THE BLANKET OCCURS OR IF VEGETATION DOES NOT ESTABLISH WITHIN THE EXPECTED GERMINATION TIME OF THE SELECTED SEED TYPE, REAPPLY COMPOST AND SEED TO THE AFFECTED AREA TO RETURN IT TO THE ORIGINAL CONDITION. TAKE ADDITIONAL MEASURES AS NECESSARY TO ESTABLISH PERMANENT GROUND COVER. COMPOST BLANKETS SHALL BE INSPECTED UNTIL PERMANENT VEGETATION IS ESTABLISHED. ROLLED EROSION CONTROL PRODUCTS (RECP) PLACED OVER THE COMPOST BLANKET SHOULD BE REPAIRED IF IT HAS BEEN MOVED OR DAMAGED BY WIND OR STORM RUNOFF AND/OR IF PART OF OR THE WHOLE BLANKET IS NOT IN CONTACT WITH THE SOIL

INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY

## PERMANENT DIVERSIONS:

INSPECT PERMANENT DIVERSIONS AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITIONS AT TALL TIMES.

## INSPECT DIVERSION DIKES ONCE A WEEK AND AFTER EVERY RAINFALL EVENT. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA

DIVERSION DIKE IS PERMANENTLY STABILIZED, REMOVE THE DIKE, AND FILL AND STABILIZE THE CHANNEL TO BLEND WITH THE NATURAL **RIGHT-OF-WAY DIVERSIONS:** PERIODICALLY INSPECT RIGHT-OF-WAY DIVERSIONS FOR WEAR AND AFTER EVERY HEAVY RAINFALL FOR EROSION DAMAGE. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIKE. CHECK OUTLET AREAS, AND MAKE TIMELY REPAIRS AS NEEDED. WHEN

PERMANENT ROAD DRAINAGE IS ESTABLISHED AND THE AREA ABOVE THE TEMPORARY RIGHT-OF-WAY DIVERSIONS IS PERMANENTLY

CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED TO AVOID GULLY FORMATION. WHEN THE AREA ABOVE THE TEMPORARY

### STABILIZED, REMOVE THE DIKE, AND FILL THE CHANNEL TO BLEND WITH THE NATURAL GROUND, AND APPROPRIATELY STABILIZED THE DISTURBED AREA.

**GRASS-LINED CHANNELS:** DURING THE ESTABLISHMENT PERIOD, CHECK GRASS-LINED CHANNELS AFTER EVERY RAINFALL. AFTER GRASS IS ESTABLISHED, PERIODICALLY CHECK THE CHANNEL; CHECK IT AFTER EVERY RAINFALL EVENT. IMMEDIATELY MAKE REPAIRS. IT IS PARTICULARLY IMPORTANT TO CHECK THE CHANNEL OUTLET AND ALL ROAD CROSSINGS FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLES. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATIONS TO MAINTAIN THE DESIGNED CARRYING CAPACITY. KEEP THE GRASS IN A HEALTHY, VIGOROUS CONDITION AT ALL TIMES, SINCE IT IS THE PRIMARY EROSION PROTECTION FOR THE CHANNEL.

INSPECT CHANNELS AT REGULAR INTERVALS AS WELL AS AFTER MAJOR RAINS, AND MAKE REPAIRS PROMPTLY. GIVE SPECIAL ATTENTION TO THE OUTLET AND INLET SECTIONS AND OTHER POINTS WHERE CONCENTRATED FLOW ENTERS. CAREFULLY CHECK STABILITY AT ROAD CROSSINGS, AND LOOK FOR INDICATION OF PIPING, SCOUR HOLES, OR BANK FAILURES. MAKE REPAIRS IMMEDIATELY. MAINTAIN ALL VEGETATION ADJACENT TO THE CHANNEL IN A HEALTHY, VIGOROUS CONDITION TO PROTECT THE AREA FROM EROSION AND SCOUR **DURING OUT-OF-BANK FLOW** 

### **TEMPORARY SLOPE DRAINS:** INSPECT THE SLOPE DRAIN AND SUPPORTING DIVERSION AFTER EVERY RAINFALL AND PROMPTLY MAKE NECESSARY REPAIRS. WHEN THE

PROTECTED AREA HAS BEEN PERMANENTLY STABILIZED, TEMPORARY MEASURES MAY BE REMOVED, MATERIALS DISPOSED OF PROPERLY, AND ALL DISTURBED AREAS STABILIZED APPROPRIATELY. INSPECT FLUMES AFTER EACH RAINFALL UNTIL ALL AREAS ADJOINING THE FLUME ARE PERMANENTLY STABILIZED. REPAIR ALL DAMAGE

NOTED IN INSPECTIONS IMMEDIATELY. AFTER THE SLOPES ARE STABILIZED, FLUMES NEED ONLY PERIODIC INSPECTION, AND INSPECTION AFTER MAJOR STORM EVENTS. INSPECT LEVEL SPREADERS AFTER EVERY RAINFALL UNTIL VEGETATION IS ESTABLISHED AND PROMPTLY MAKE NEEDED REPAIRS. AFTER THE

AREA HAS BEEN STABILIZED, MAKE PERIODIC INSPECTIONS, AND KEEP VEGETATION IN A HEALTHY, VIGOROUS CONDITION. INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO

### PREVENT FURTHER DAMAGE **EXCAVATED DROP INLET PROTECTION:**

STABILIZE IT APPROPRIATELY. HARDWARE CLOTH AND GRAVEL INLET PROTECTION: INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT, CLEAR THE MESH WIRE OF ANY

INSPECT, CLEAN AND PROPERLY MAINTAIN THE EXCAVATED BASIN AFTER EVERY STORM UNTIL THE CONTRIBUTING DRAINAGE AREA HAS

BEEN PERMANENTLY STABILIZED. TO PROVIDE SATISFACTORY BASIN EFFICIENCY, REMOVE SEDIMENT WHEN THE VOLUME OF THE BASIN

HAS BEEN REDUCED BY ONE-HALF. SPREAD ALL EXCAVATED MATERIAL EVENLY OVER THE SURROUNDING LAND AREA OR STOCKPILE AND

### DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED. **BLOCK AND GRAVEL INLET PROTECTION:**

INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

DURING THE FIRST FOUR WEEKS, WATER SOD AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 2 INCHES.

ROCK DOUGHNUT INLET PROTECTION: INSPECT ROCK DOUGHNUT INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT

REPLACE STONE AS NEEDED. IF THE INLET WAS COVERED WITH WIRE MESH. THE MESH SHOULD BE CLEANED OF DEBRIS.

ROCK PIPE INLET PROTECTION:

INSPECT TEMPORARY SEDIMENT TRAPS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE PART OF THE GRAVEL FACING THAT IS IMPAIRED BY SEDIMENT.

AFTER ALL SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.

## INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE

CHECK THE STRUCTURE FOR EROSION, PIPING, AND ROCK DISPLACEMENT WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINSTORM AND REPAIR IMMEDIATELY.

## ALLOWED TO FLOW INTO STREAMS OR DRAINAGE WAYS DURING STRUCTURE REMOVAL.

VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

## AND SETTLEMENT, MAKE ALL NECESSARY REPAIRS IMMEDIATELY, REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL

INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME

## REMOVE SEDIMENT DEPOSIT WHEN IT REACHES HALF FULL. TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO

AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED

INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP-DRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS.

ONCE A GRADE STABILIZATION STRUCTURE HAS BEEN PROPERLY INSTALLED AND THE AREA AROUND IT STABILIZED, MAINTENANCE SHOULD BE MINIMAL. INSPECT THE STRUCTURE PERIODICALLY AND AFTER MAJOR STORMS THROUGHOUT THE LIFE OF THE STRUCTURE. CHECK THE FILL AROUND THE STRUCTURE FOR PIPING, EROSION, AND SETTLEMENT AND TO ENSURE THAT GOOD PROTECTIVE VEGETATION IS MAINTAINED. CHECK THE CHANNEL AT THE STRUCTURE ENTRANCE AND OUTLET FOR SCOUR AND DEBRIS ACCUMULATION THAT MAY CAUSE BLOCKAGE OR TURBULENCE. CHECK THE STRUCTURE ITSELF FOR CRACKING OR SPALLING OF THE CONCRETE, UNEVEN OR EXCESSIVE SETTLEMENT, PIPING, AND PROPER DRAIN FUNCTIONING. CHECK EMERGENCY BYPASS AREAS AROUND THE STRUCTURE FOR

## STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

FLOCCULANTS:

## INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND

DRN: WR DGN: WR CKD: WR

MAINTENANCE NOTES:

1. INSPECT TEMPORARY DIVERSIONS ONCE A WEEK

2. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE.

3. CAREFULLY CHECK OUTLETS AND MAKE TIMELY

4. WHEN THE AREA PROTECTED IS PERMANENTLY

STABILIZED, REMOVE THE RIDGE AND THE

GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

**EROSION CONTROL** 

C4021

CHANNEL TO BLEND WITH THE NATURAL

1.PER NCG-01 INSPECT AT LEAST ONCE A WEEK AND AFTER EACH 1

2.MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR

SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY

3.IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED,

1. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH

NCDOT #5 OR #57

WASHED STONE

**EROSION CONTROL** 

C4002

REQUIRE PERIODIC TOPDRESSING WITH 2 INCH STONE.

WASHED OR TRACKED ONTO PUBLIC ROADWAYS.

INCH OR GREATER RAINFALL; MAKE ANY REQUIRED REPAIRS

IMMEDIATELY.

MAINTENANCE NOTES:

4. REPLACE STONE AS NEEDED.

AND AFTER EVERY RAINFALL.

REPAIRS AS NEEDED.

WASTE MATERIAL-COMPACT, -

SEED AND MULCH AFTER

CONSTRUCTION OF DITCH

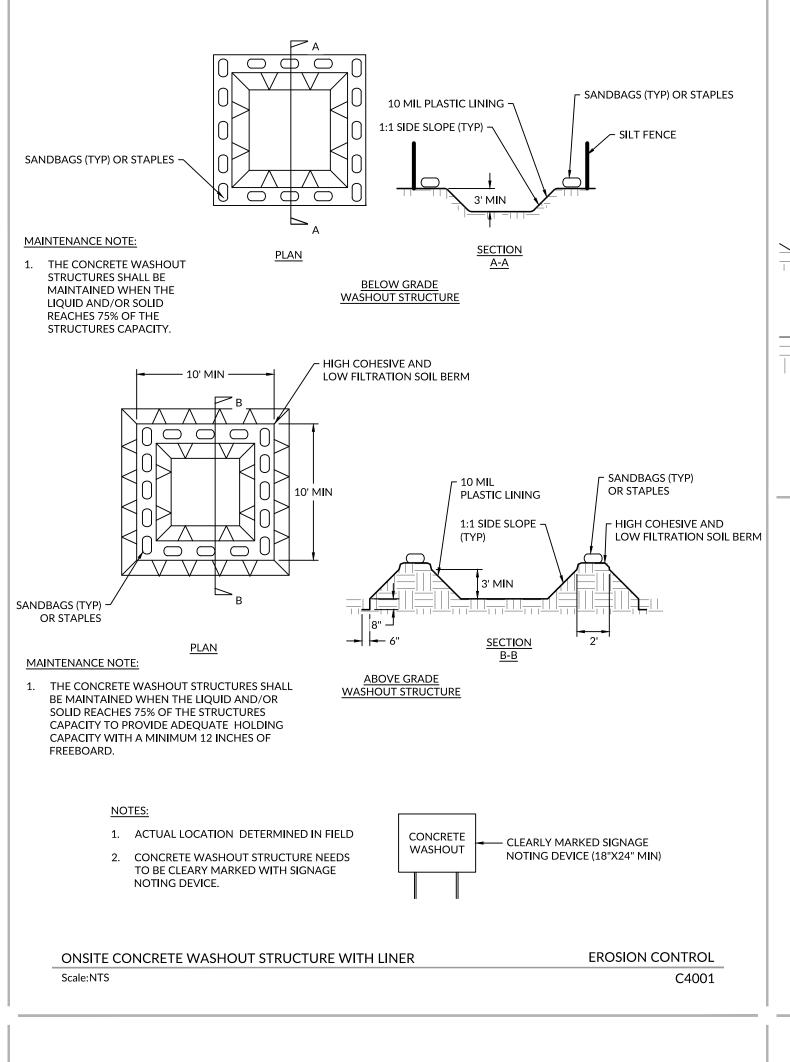
5/27/2025

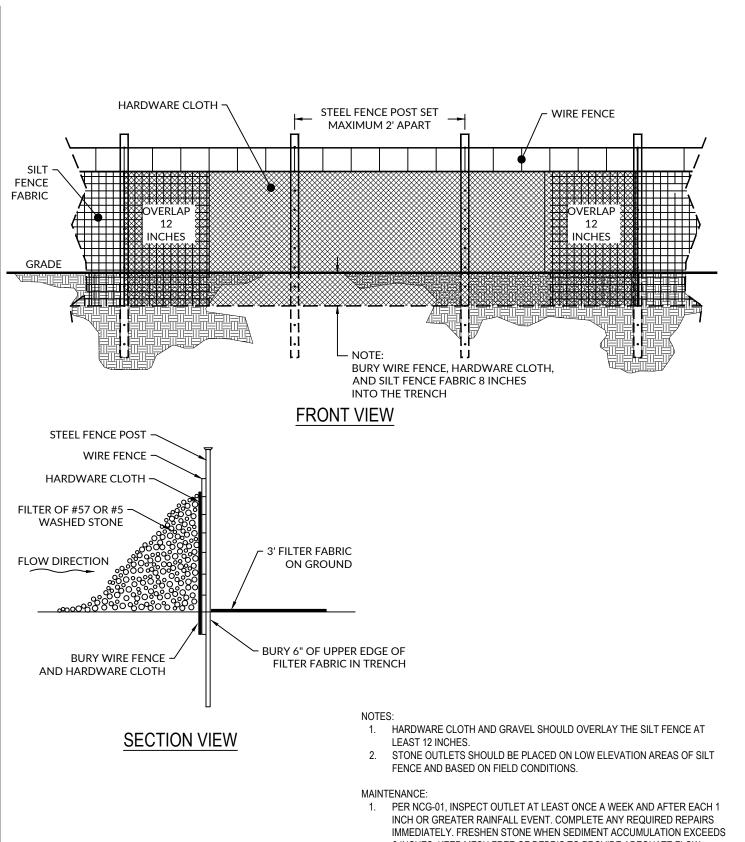
INITIAL PLAN DATE: 05/23/2025

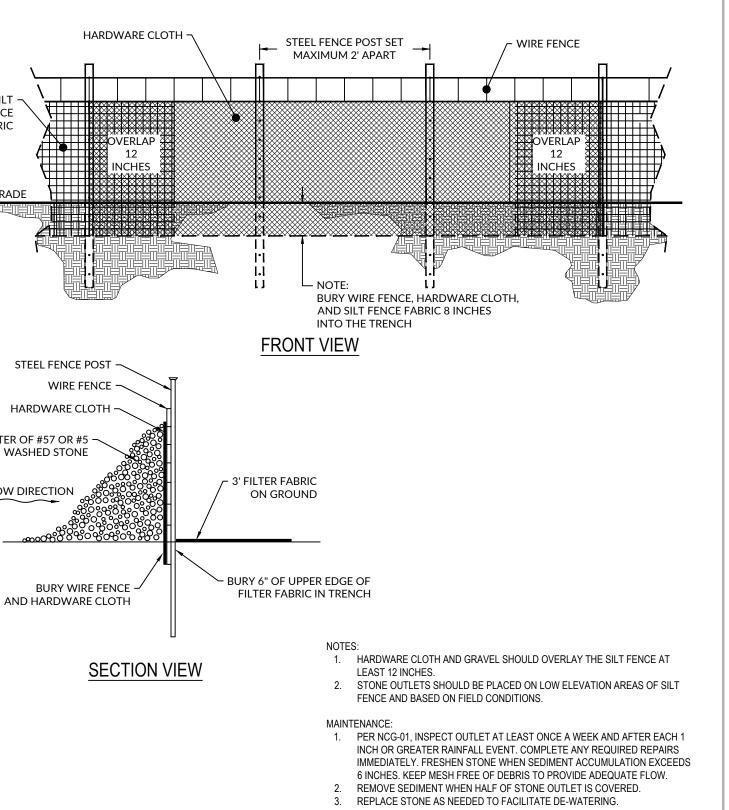
REVISIONS:

WR JOB NUMBER DRN: WR DGN: WR CKD: WR

**EROSION CONTROL NOTES & DETAILS** 







HARDWARE CLOTH AND GRAVEL INLET PROTECTION Scale:NTS

C4062

**EROSION CONTROL** 

MAINTENANCE: 1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH 1 INCH RAINFALL. MAKE ANY REQUIRED REPAIRS 9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC IMMEDIATELY. AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS 2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, CRITICAL TO SILT FENCE PERFORMANCE. DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. 10. DO NOT ATTACH FILTER FABRIC TO EXISTING TREES. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND REDUCE OF CONCENTRATED FLOW. PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. . REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. **EROSION CONTROL** SILT FENCE

WIRE FENCE ~

PLASTIC OR ~

WIRE TIES

STEEL POST -

Scale:NTS

✓ FILTER FABRIC

- BACKFILL TRENCH

AND COMPACT

THOROUGHLY

8' MAX. STANDARD STRENGTH FABRIC WITH WIRE FENCE 6' MAX. EXTRA STRENGTH FABRIC WITHOUT WIRE FENCE

CONSTRUCTION:

THE STRUCTURE.)

- FILTER FABRIC

CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR

ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT

EXCEED 24 INCHES ABOVE THE GROUND. (HIGHER FENCES MAY

CONSTRUCT THE FILTER FROM A CONTINUOUS ROLL CUT TO THE

LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE

NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A

SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH

SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.

FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND

THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN

THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF

IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF

EXTRA STRENGTH SYNTHETIC FILTER FABRICS.

APPROACHING THE INLET. SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. 2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE 2. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER GROUND SURROUNDING THE INLET. SPACE POSTS OBJECTS TO PROVIDE ADEQUATE FLOW FOR EVENLY AROUND THE PERIMETER OF THE INLET A SUBSEQUENT RAINS. MAXIMUM OF 4 FEET APART. 3. SURROUND THE POSTS WITH WIRE MESH 3. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE HARDWARE CLOTH. SECURE THE WIRE MESH TO WIRE MESH DURING SEDIMENT REMOVAL.

2-3" COURSE AGGREGATE -

THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACE A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING. 4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES

UNIFORMLY GRADE A SHALLOW DEPRESSION

NOTES:

1. TEMPORARY DIVERSION DITCH TO BE USED TO

CONTROL MEASURE OR BMP.

ONE-HALF FULL.

2. SILT SHALL BE REMOVED WHEN DITCH IS

3. DITCH SHALL BE RECONSTRUCTED WHEN DAMAGED BY EQUIPMENT OR COVERED BY FILL.

AND EROSION CONTROL MATTING.

INTERCEPT FLOW AND/OR DIVERT TO A SEDIMENT

4. STABILIZE TEMPORARY DIVERSION WITH SEEDING,

VARIES

SEE PLAN

1.CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS,

AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.

4.USE GEOTEXTILE FABRICS IN ORDER TO IMPROVE STABILITY OF THE

FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER

2.PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS

3.PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR

**CONSTRUCTION ENTRANCE / EXIT** 

SHOWN ON THE PLANS, AND SMOOTH IT.

OTHER SUITABLE OUTLET.

Scale:NTS

TEMPORARY DIVERSION

Scale:NTS

AROUND THE WIRE AND SMOOTH TO AN EVEN 5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS

BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT AND ESTABLISH FINAL GRADING ELEVATIONS.

6. COMPACT THE AREA PROPERLY AND STABILIZED

IT WITH GROUNDCOVER.

19-GAUGE HARDWARE CLOTH  $(\frac{1}{4} MESH OPENINGS)$ 

NCDOT #5 OR #57 WASHED STONE

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11. DO NOT PLACE ACROSS DITCHES, STREAMS, OR ANY OTHER AREAS

SILT FENCE OUTLET

Scale:NTS

C4067

THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE A MINIMUM 50 POUND TENSILE STRENGTH. 5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES. WIRE MESH SHALL BE A MINIMUM 14-GAUGE WITH 6-INCH MESH SPACING. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES **CROSS SECTION VIEW** SHOULD HAVE A MINIMUM OF 50 POUND TENSILE STRENGTH. 7. EXCAVATE THE TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF THE POSTS AND UPSLOPE FROM THE BARRIER. 8. PLACE 12 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE

- WIRE FENCE

∠ PLASTIC OR

WIRE TIES

TRENCH

4" FORWARD **ALONG THE** 

**EROSION CONTROL** C4051

authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes Site Area Description | this many calendar Timeframe variations days after ceasing (a) Perimeter dikes, None swales, ditches, ar perimeter slopes (b) High Quality Water (HQW) Zones f slopes are 10 feet or less in length and c) Slopes steeper are not steeper than 2:1, 14 days are -7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, d) Slopes 3:1 to 4:1 ditches, perimeter slopes and HQW -10 days for Falls Lake Watershed

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable

against accelerated erosion until permanent ground stabilization is achieved. **GROUND STABILIZATION SPECIFICATION** 

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the Permanent Stabilization

Temporary Stabilization Temporary grass seed covered with straw or other mulches and tackifiers.

Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch

Plastic sheeting

NORTH CAROLINA

NORTH CAROLINA

M Environmental Quality

Date:

Environmental Quality

Areas with slopes

flatter than 4:1

Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground co sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls

Rolled erosion control products with grass

-7 days for perimeter dikes, swales, ditches

-10 days for Falls Lake Watershed unless

rimeter slopes and HQW Zones

## POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction selecting from the NC DWR List of Approved PAMS/Flocculants. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- . Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- 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

- Maintain vehicles and equipment to prevent discharge of fluids. Provide drip pans under any stored equipment
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the Collect all spent fluids, store in separate containers and properly dispose as hazardous
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to

## a recycling or disposal center that handles these materials.

## LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 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.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if
- containers overflow. Dispose waste off-site at an approved disposal facility. On business days, clean up and dispose of waste in designated waste containers.

- PAINT AND OTHER LIQUID WASTE Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

- 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 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags
- Provide staking or anchoring of portable toilets during periods of high winds or in high
- foot traffic areas. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with

## EARTHEN STOCKPILE MANAGEMENT

properly operating unit.

- 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. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five
- feet from the toe of stockpile. Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with
- the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

## HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment. 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

### STRUCTURE WITH LINER NOTES: 1. ACTUAL LOCATION DETERMINED IN FIELD 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY. 3 CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEAR' MARKED WITH SIGNAGE NOTING SECTION A-A BELOW GRADE WASHOUT STRUCTURE NOTES: 1. ACTUAL LOCATION DETERMINED RUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID

REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE

HOLDING CAPACITY WITH A MINIMUN 12 INCHES OF FREEBOARD.

NEEDS TO BE CLEARY MARKED WITH

SIGNAGE NOTING DEVICE.

ONSITE CONCRETE WASHOUT

## ABOVE GRADE WASHOUT STRUCTURE

OR STAPLES

SECTION B-B

- CONCRETE WASHOUTS Do not discharge concrete or cement slurry from the site.
- state solid waste regulations and at an approved facility. 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 lot perimeter Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review

Dispose of, or recycle settled, hardened concrete residue in accordance with local and

- and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail. 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. 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 inlet(s) closest to the washout which could receive spills or
- 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. 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. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary
- products, follow manufacturer's instructions. 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.

## HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label 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 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. Do not stockpile these materials onsite.

## NCG-01 GROUND COVER & MATERIALS HANDLING

PART II, SECTION G, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE 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 E&SC 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 E&SC plan authority has approved these items,
- (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 sited, designed and maintained dewatering tanks, weir tanks, and filtration systems (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap 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 deposition of sediment into waters of the United States.

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 equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be

SELF-INSPECTION, RECORDKEEPING AND REPORTING

		ement of the next business day. Any time when inspections the Inspection Record.	
Inspect	Frequency (during normal business hours)	Inspection records must include:	
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts.  If no daily rain gauge observations are made during weekend on holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "Zero." The permittee may use another rain-monitoring device approved by the Division.	( c
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	<ol> <li>Identification of the measures inspected</li> <li>Date and Time of the inspection</li> <li>Name of the person performing the inspection</li> <li>Indication of whether the measures were operating properly</li> <li>Description of maintenance needs for the measure</li> <li>Description, Evidence, and date of corrective actions taken</li> </ol>	
(3) Stormwater discharge outfalls(SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	<ol> <li>Identification of the discharge outfalls inspected</li> <li>Date and Time of the inspection</li> <li>Name of the person performing the inspection</li> <li>Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration</li> <li>Indication of visible sediment leaving the site</li> <li>Description, Evidence, and date corrective actions taken</li> </ol>	(0
(4) Perimeter of Site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	If visible Sedimentation is found outside site limits, then record of the following shall be made:  1) Actions taken to clean up or stabilize sediment that has left the site limits  2) Description, Evidence and date of corrective actions taken  3) An explanation as to the actions taken to control future releases	2.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	If the stream or wetland has increased visible sedimentation or has visible increased turbidity from the construction activity, then a record of the following shall be made:  1) Description, Evidence and date of corrective actions taken  2)Records of required reports to the appropriate Division  Regional Office per Part III, Section C, Item(2)(a) of this permit	
(6) Ground Stabilization Measures	After each phase of grading.	The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).      Documentation that the required ground stabilization measures have been provided within the required timeframe or assurance that they will be provided as soon as possible.	3.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement

## SELF-INSPECTION, RECORDKEEPING AND REPORTING **SECTION B: RECORDKEEPING**

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

	I
Item to Document	Document Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.
Additional Documentation to be Kept on Sit In addition to the E&SC plan documents above site and available for inspectors at all times du	e, the following items shall be kept on the

## site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make

this requirement not practical:

- (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.

NCG-01 SELF INSPECTION

Documentation to be Retained for Three Years All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

SELF-INSPECTION, RECORDKEEPING AND REPORTING

Page:

I. Occurrences that Must be Reported Permittees shall report the following occurrences: (a) Visible sediment deposition in a stream or wetland.

**SECTION C: REPORTING** 

- (b) Oil spills if: They are 25 gallons or more, They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or They are within 100 feet of surface waters (regardless of volume). Releases of hazardous substances in excess of reportable quantities under Section 311
- of the Clean Water Act (Ref. 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- Anticipated bypasses and unanticipated bypasses. Noncompliance with the conditions of this permit that may endanger health or the

Reporting Timeframes and Other Requirements After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other equirements listed below. Occurrences outside normal business hours may also be reported

to the Departmer	nt's Environmental Emergency Center personnel at (800) 858-0368.
Occurrence	Reporting Timeframe (After Discovery) and Other Requirements
a) Visible	Within 24 hours, an oral or electronic notification.
ediment	Within 7 Calendar Days, a report that contains a description of the
leposition in a tream or wetland	sediment and actions taken to address the cause of the deposition.  Division staff may waive the requirement for a written report on a case-by-case basis.
	<ul> <li>If the stream is named on the NC 303(d) list as impaired for sediment- related caused, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
o) Oil spills and elease of	<ul> <li>Within 24 Hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location</li> </ul>
azardous	of the spill or release.
ubstances per em 1(b)-(c) above	·
c) Anticipated ypasses [40 CFR 22.41(m)(3)]	<ul> <li>A report at least ten days before the date of the bypass, if possible.         The report shall include an evaluation of the anticipated quality and effect of the bypass.     </li> </ul>
d) Unanticipated	Within 24 Hours, an oral or electronic notification
ypasses [40 CFR 22.41(m)(3)]	<ul> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
e) Noncompliance	Within 24 Hours, an oral or electronic notification

 Within 7 calendar days, a report that contains a description of the of this permit that may endanger health or the

environment [40]

CFR 122.41(I)(7)]

noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6). Division staff may waive the requirement for a written report on a caseby-case basis.

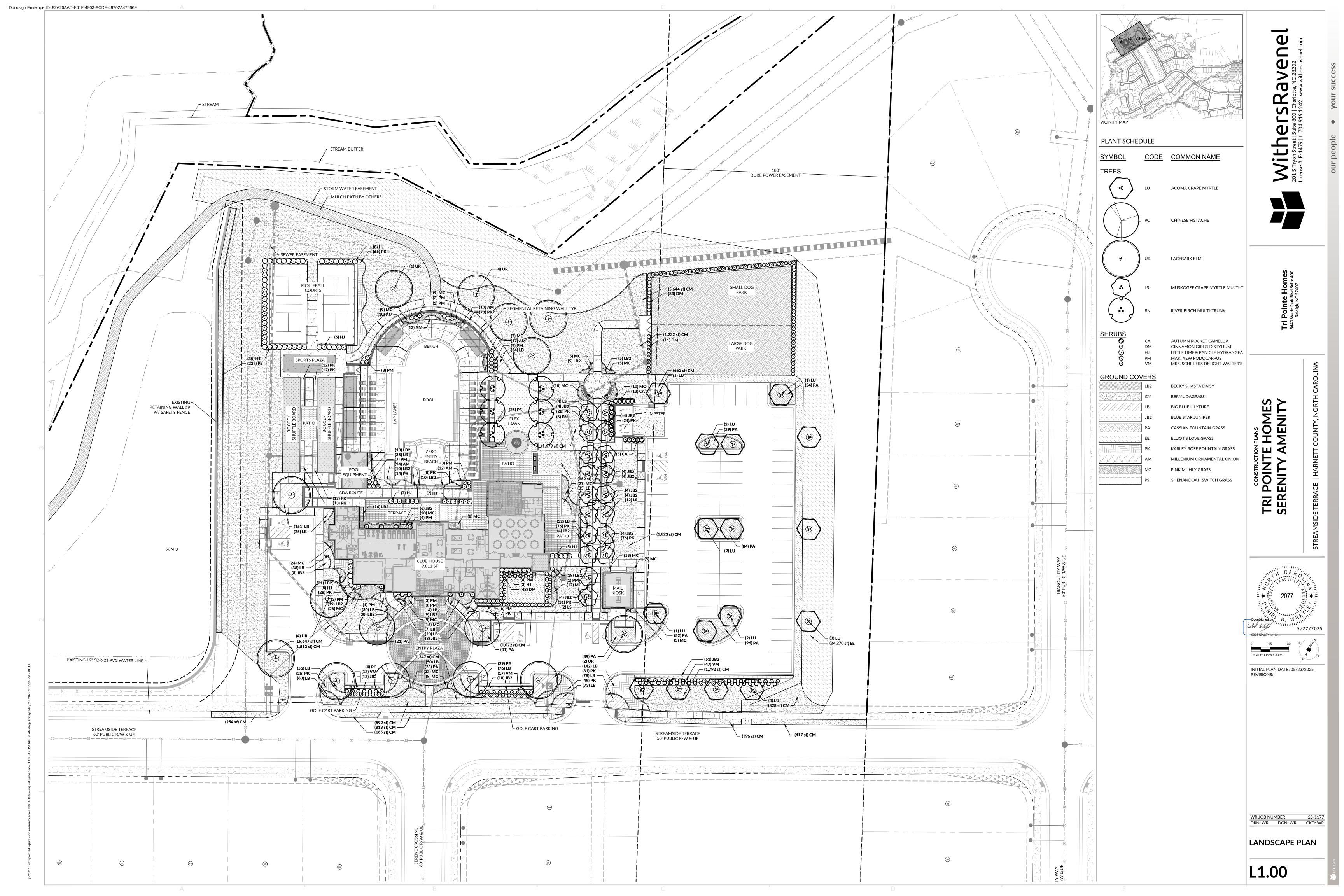
NCG01 NOTES

POIN

DRN: WR DGN: WR CKD: WR

INITIAL PLAN DATE: 05/23/2025

REVISIONS:



LOOSENED PLANTING SOIL BACKFILL SCARIFY BOTTOM & LOOSEN SIDES OF PLANTING PIT

Docusign Envelope ID: 92A20AAD-F01F-4903-ACDE-49702A47666E

1. FOR CONTAINER PLANTS, REMOVE CONTAINER & SCARIFY ROOT MASS PRIOR TO PLANTING. FOR B&B PLANTS, COMPLETELY REMOVE WIRE BASKET AND BURLAP MATERIAL; REMOVE ALL TWINE, ROPE, BURLAP, AND WIRE FROM ROOT BALL. SET ROOT BALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 2-3" ABOVE FINISHED GRADE. TAMP SOIL FIRMLY AROUND BOTTOM

OF ROOT BALL TO SET TREE PLUMB. 4. DIG & TURN PLANTING SOIL TO REDUCE COMPACTION. LIGHTLY TAMP SOIL AROUND ROOT BALL IN 6" LIFTS TO BRACE THE TREE. DO NOT OVER-COMPACT. MIX COMPOST INTO EACH LIFT OF BACKFILL AS RECOMMENDED IN SOIL REPORT. POUR WATER AROUND ROOT BALL TO SETTLE SOIL,

AND BACKFILL AS REQUIRED TO MEET REQUIRED FINISHED GRADE. 5. A 3" HIGH x 8" WIDE BERM SHALL BE MADE AROUND THE ROOT BALL EDGE.

PRUNE TREES ONLY AS NEEDED TO REMOVE DEAD OR BROKEN BRANCHES. TREES IN WINDY LOCATIONS OR ON STEEP SLOPES ARE TO BE ANCHORED PER DIRECTION FROM LANDSCAPE ARCHITECT.

MIN. 2x

— ROOT BALL —

WIDTH

SECTION

SUBGRADE (COMPACT SOIL UNDER ROOT

BALL TO 90 PERCENT PROCTOR)

BRANCHING HT. TO A.N.L.A. STDS. UNLESS

SET SHRUB PLUMB & 1" MIN. - ABOVE FINISH GRADE, DO NOT PLACE MULCH AGAINST TRUNK – MULCH, TYP. PLANTING MIX COMPACT PLANTING MIX 1.5X ROOT TO PREVENT SETTLING HEIGHT LOOSEN SUBGRADE, REMOVE

1. FOR CONTAINER PLANTS, SPLIT THE ROOT BALL WITH 4 EQUALLY SPACED VERTICAL CUTS & SCARIFY ROOT MASS PRIOR TO PLANTING.

2. FOR B&B PLANTS, REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM ROOT BALL. 3. A 3" HIGH x 8" WIDE BERM SHALL BE MADE AROUND THE ROOT BALL EDGE.

4. PLANTING AREAS WITH MULTIPLE SHRUBS ARE TO BE SIZED SO THAT THE OUTER EDGE OF PLANTING SOIL IS 8" MIN. FROM THE NEAREST SHRUB. 5. SHRUBS ARE TO BE LOCATED SUCH THAT MATURE CANOPY IS 5' MIN. FROM FIRE HYDRANTS AND 24" MIN. FROM CURB LINE.

2X ROOT BALL WIDTH

6. SHRUBS ARE TO BE LOCATED WITH TRIANGULAR SPACING (SEE DETAIL) UNLESS OTHERWISE SHOWN ON THE PLANS. 7. PRUNE SHRUBS ONLY AS NEEDED TO REMOVE DEAD OR BROKEN BRANCHES.

SCALE: 1/2" = 1'-0"

OTHERWISE SHOWN ON DRAWINGS.

- ANCHORS EQUALLY SPACED - PLANTING HOLE - ROOT BALL WOVEN STRAP, TYP - PLACE STRAPS AWAY FROM BRANCHES 3/4" FLAT WOVEN POLYESTER STRAP (ARBORTIE GREEN OR APPROVED EQUAL) ATTACH STRAP TO STAKE WITH KNOTS 2"x2"x24" WOODEN STAKE OR METAL ANCHOR DRIVEN INTO UNDISTURBED SOIL

SECTION

THREE (3) STAKES OR

TRI POIN SERENIT

INITIAL PLAN DATE: 05/23/2025 **REVISIONS:** 

LANDSCAPE

DETAILS

L2.00

SECTION SCALE: 3/8" = 1'-0"

1. SPLIT PLANT ROOTS WITH 2-3 EQUALLY-SPACED VERTICAL CUTS.

- 3" MULCH LAYER - 4" HIGH x 8" WIDE BERM CONSTRUCTED AROUND EDGE OF BED SCARIFY BOTTOM & SIDES OF PLANTING PIT - UNDISTURBED SOIL

- PLANTING SOIL: LIGHTLY TAMP SOIL AROUND ROOT BALL TO BRACE PLANT

GROUND COVER PLANT

SECTION

SCALE: 1/2" = 1'-0"

SECTION

- MULCH LAYER - 'V' SHAPED TRENCH

/- LAWN SURFACE COMPACTED OR UNDISTURBED SUBGRADE PER GEOTECHNICAL ENGINEER'S SPECIFICATIONS

SECTION

OTHERWISE SPECIFIED OR DISEASED WOOD WHILE RESERVING FORM APPROVED TREE WRAP ON THIN BARK SPECIES ONLY AS DIRECTED BY LANDSCAPE ARCHITECT SPECS MULCH AS SPECIFIED TO 2-3" MIN. DEPTH (DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK) REMOVE WIRE BASKET AND REMOVING EXCESS SOIL BURLAP FROM ROOT BALL NATIVE SOIL OR IMPORTED BACKFILL -REFER TO SPECS. FINISH GRADE SCARIFY NATIVE SOIL TO A 6" DEPTH-

AND CHARACTER OF TREE; DO NOT CUT LEADER; DO NOT PRUNE IN ORDER TO REDUCE - INSURE THAT BASAL ROOTS OR TRUNK TAPER IS VISIBLE-DO NOT COVER WITH SOIL OR MULCH

PRUNE ONLY TO REMOVE ANY BROKEN, DEAD,

SOIL LINE OF THE TOP OF ROOT BALL AFTER BUILT UP EARTH SAUCER AT EDGE OF

APPROXIMATELY EXISTING GRADE. SCARIFY SIDES OF TREE PIT WITH RAKES OR TINES

DIG WIDE, SHALLOW PLANTING HOLE WIDTH = 3X WIDTH OF ROOT 1. IF TREES SETTLE OR ARE BLOWN OUT OF PLUMB POSITION, THEY SHOULD BE STRAIGHTENED BY MAKING ADJUSTMENTS TO THE POSITION OF THE ROOTBALL -NOT BY PUSHING ON THE TRUNK AND/OR TIGHTENING THE GUY WIRE. TREES SHALL BE STRAIGHTENED DURING THE LIFE OF THE PROJECT AS THEY GET OUT OF

PLUMB, NOT JUST AT THE END OF THE PROJECT. 2. BALL DEPTHS ON SOME TREES IN A SINGLE GROUP MAY VARY. IF DEPTHS VARY, ALL TREES IN A GROUP SHOULD BE SET SO THAT THE BASE OF THE TRUNKS WILL APPEAR TO BE AT THE SAME RELATIVE ELEVATION ABOVE GRADE. 3. NO DECIDUOUS OR EVERGREEN TREES WILL BE ACCEPTED IF THERE IS MORE THAN ONE LEADER, UNLESS THE TREE IS SPECIFIED AS MULTI-TRUNK. 4. CONTRACTOR TO VERIFY THAT ADEQUATE DRAINAGE EXISTS PRIOR TO PLANTING.

5. STAKING OF TREES IS NOT RECOMMENDED, EXCEPT ON WINDY SITES OR IF TREES ARE 3" CALIPER AND LARGER. IF STAKING IS DONE, FLEXIBLE STRAPS - NOT HOSE AND WIRE - SHOULD BE USED AND MUST BE REMOVED AT APPROPRIATE TIME. PROPERTY OWNER IS RESPONSIBLE FOR REPLACEMENT OF DESTROYED OR 6. ALL TREES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE MOST RECENT EDITION (2004 OR LATER) OF AMERICAN STANDARD FOR NURSERY STOCK

PUBLISHED BY A.N.L.A. 7. A ROOT COLLAR EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE TOWN ARBORIST TO ENSURE THAT TREES WERE PLANTED/GROWN TOO DEEPLY

BY THE SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOTBALL. IF TOWN ARBORIST DETERMINES THAT THERE IS EXCESSIVE SOIL OVER ROOT CROWN, THESE TREES WILL BE REJECTED.

NOTES: 1. REFER TO PLANT SCHEDULE FOR SPACING REQUIREMENTS FOR EACH SPECIES.

2. PLANTS SHALL BE INSTALLED IN STRAIGHT AND PARALLEL ROWS FOLLOWING THIS PATTERN UNLESS

SPACING)

WR JOB NUMBER DRN: WR DGN: WR CKD: WR

