



Cleveland County NORTH CAROLINA

REQUEST FOR PROPOSAL

RFP No. FY22-001
Pistol Range Additions— Foothills Public Shooting Complex
283 Fielding Rd, Cherryville, NC 28021

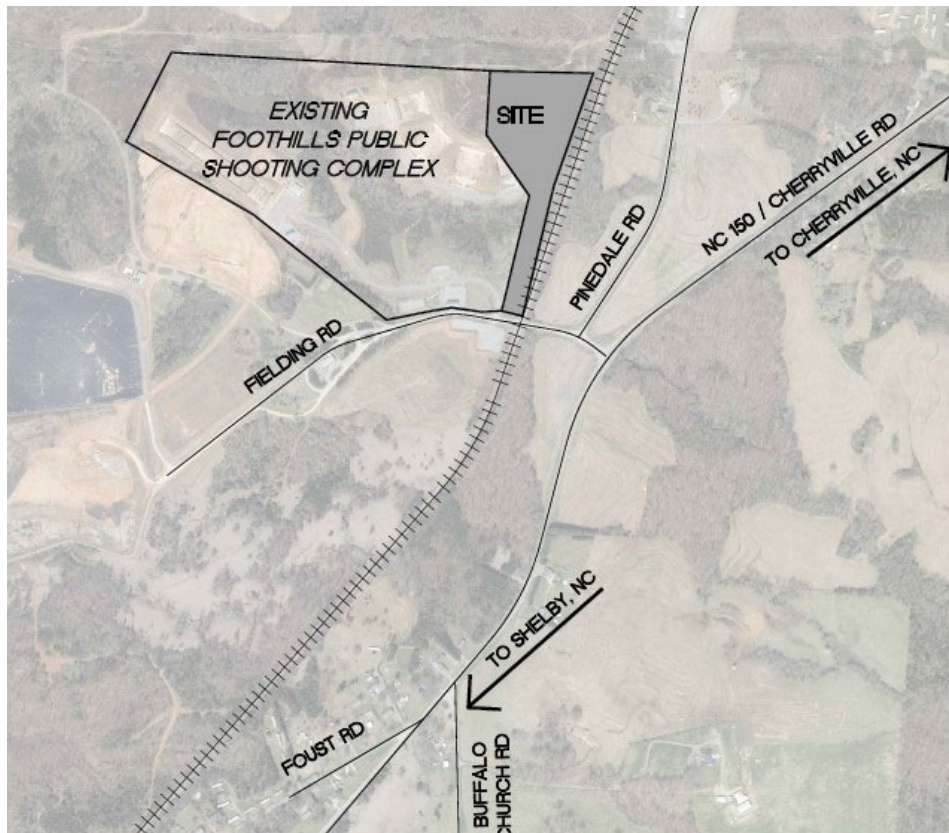
July 1, 2022

The Foothills Public Shooting Complex at 283 Fielding Road, Cherryville, NC. is hosting a very large pistol shooting competition in November 2022. In order to execute the competition efficiently during a weekend the Foothills Public Shooting Complex needs 6 additional pistol ranges.

Cleveland County will receive bids for the site preparation and forming of six additional pistol shooting ranges.

Site preparation and forming shall include: erosion control, grading, drainage, access road and parking construction, forming of the six pistol ranges with berms, and seeding.

Figure 1 —Vicinity Map



TGS Engineers has developed the erosion control plans and submitted the plans to NCDEQ for an expedited permitting application (CLEVE-2022-036). The *Certificate of Plan Approval* is expected to be received by May 20, 2022. To make the pistol ranges

INVITATION TO BID

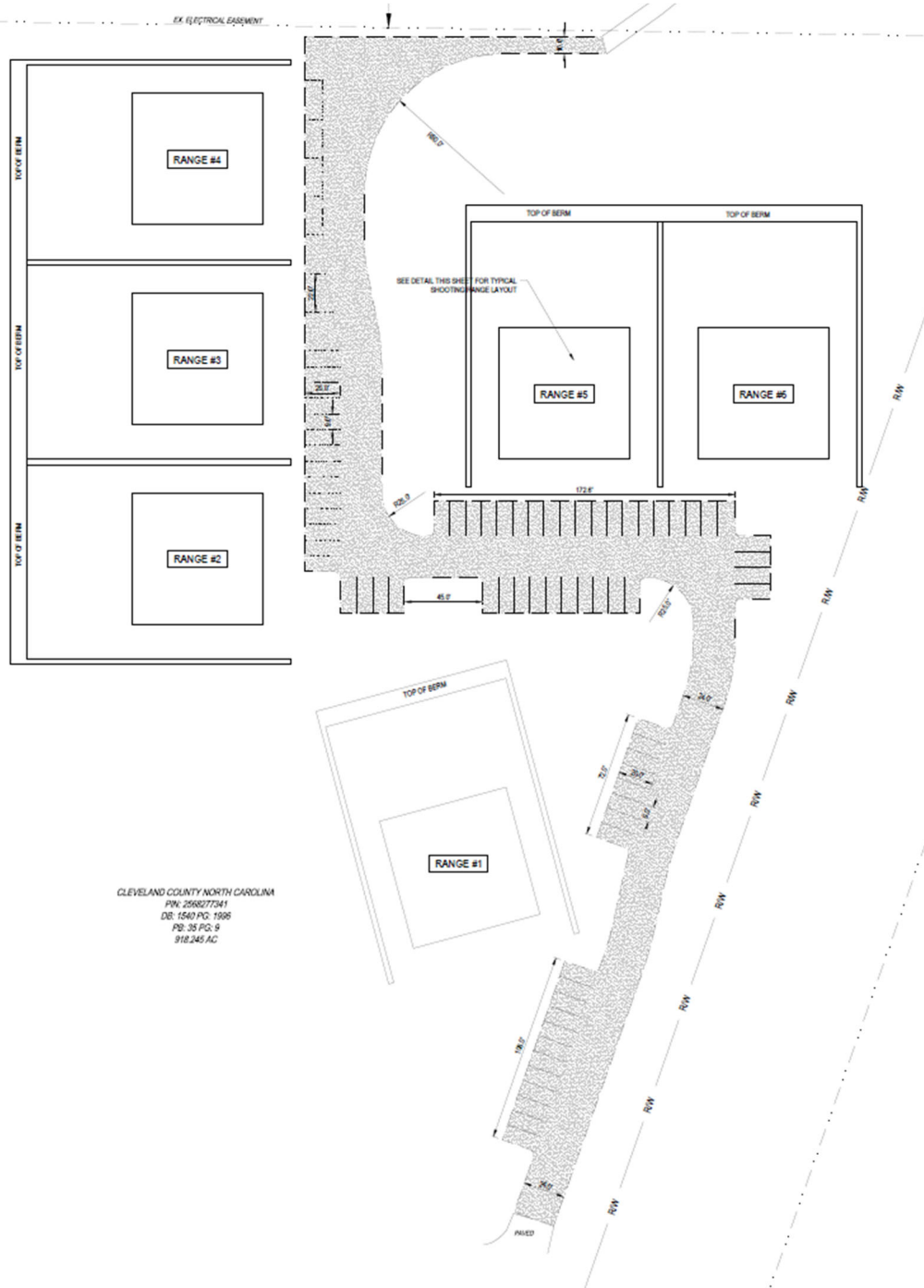
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283 Fielding Rd, Cherryville, NC 28021

usable by November 2022 deadline, construction work must start immediately after the erosion control plans have been approved.

Below is the layout of the 6 pistol ranges. The typical shooting range dimensions can be found on this drawing C-3.0 OVERALL SITE PLAN.

Snippet from TGS Engineers Drawing C-3.0 OVERALL SITE PLAN



INVITATION TO BID

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The TGS Engineers drawings are at the end of this RFP and listed below:

SHEET	NAME	PG
C-1.0	COVER SHEET	1
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C-5.0	GRADING & DRAINAGE PLAN	9

The Contractor shall supply the labor, equipment, and material to grade the site, install the erosion control measures and construct the ranges, berms, access road, and parking areas as per the drawings above.

The Contractor shall complete construction 75 days after receipt of *Notice to Proceed*.

The Contractor shall keep on file with the County a current *Certificate of Liability Insurance* and *Proof of Workmen's Compensation* before work begins and keep in force throughout remainder of project.

The Contractor will not be required to furnish a *Performance or Payment Bond*.

The Contractor shall submit biweekly invoices using the AIA document G702 Application and Certificate for Payment included with Minority Business Enterprises Document for Contract Payments, and the State of North Carolina County Sales and Use Tax Report Summary totals and Certification with Detail.

The Contractor shall visit and inspect the site prior to submitting a bid.

The Foothills Public Shooting Complex hours of operation are:

Mon. Closed
Tues., Wed., Fri., Sat. 9:30 – 7:30 PM
Thurs. 9:30 — 2:30 PM
Sun. 1:30 — 4:30 PM

Arrangements can be made to access the range Mondays while nobody is there using the front gate code.

INVITATION TO BID

RFP No. FY22-001
Pistol Range Additions— Foothills Public Shooting Complex
283 Fielding Rd, Cherryville, NC 28021

ALL BIDS ARE DUE ON OR BEFORE July 1st, 2022—BY 3:00 PM.

Bids shall be submitted on the form provided in a sealed envelope.

The sealed envelope shall be labeled with the project name and the bidder's name.

Bids can be submitted by any one of the following methods:

Mail: Finance & Purchasing Department
Attn: Tonya Brittain
Assistant Finance Director
PO Box 1210,
Shelby, NC 28151

Email: Tonya.Brittain@clevelandcountync.gov

Hand delivered: Cleveland County Administrative Building
Finance & Purchasing Department
Attn: Tonya Brittain
311 E. Marion St
Shelby, NC

Cleveland County reserves the right to reject any or all bids if it is in the best interests of the County.

If you have any project scope questions or want to schedule a site visit, please contact:

Josh Davis
[Director—Cleveland County Solid Waste](#)
D: (704) 447-8212
C: (704) 476-5110
E: Josh.Davis@clevelandcountync.gov

BID FORM
INVITATION TO BID

RFP No. FY22-001
Pistol Range Additions— Foothills Public Shooting Complex
283 Fielding Rd, Cherryville, NC 28021

ALL BIDS ARE DUE ON OR BEFORE May 27th, 2022—BY 3:00 PM.

To: Cleveland County Finance & Purchasing Department
PO Box 1210
ATTN: Thadd Hodge
311 E. Marion Street
Shelby, NC 28151

From: _____

Date: _____

As the undersigned contractor, I have inspected the above referenced site and understand the extent and character of the work to be completed as described in the *Invitation to Bid*.

I propose to furnish all labor and equipment necessary to accomplish all work as described in the *Request for Proposal*.

- Material and Equipment Costs: \$ _____
- Labor Costs: \$ _____
- Total Project Costs: \$ _____

I agree to the attached Terms & Conditions and will complete all work within 45 days of receipt of the *Notice to Proceed*.

Signature

Company Address Line 1

Print Name

Company Address Line 2

Contractor's License Number

Work Phone

Expiration Date

Cell Phone

Company Name

Email

SERVICE CONTRACT AND INDEMNITY AGREEMENT

County of Cleveland, North Carolina (hereinafter "County") agrees to secure the services of the company or individual (hereinafter "Contractor") indicated in the signature section below to provide labor for a particular job or services of a limited special nature. The Contractor has been offered contract work by the County and the work will be performed at site(s) owned or operated by the County. Prior to signing contract and prior to commencing services, County and Contractor have provided a jointly completed "Worker Status Determination Report" and "Vendor Registration Form" for inspection by qualified staff in the County Finance & Purchasing Department. In consideration of the foregoing premises, the mutual promises contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

TERMS AND CONDITIONS

- 1. Services:** The services to be performed by the Contractor shall be as described in documents attached hereto and incorporated herein by this reference. The work shall include all labor and materials which will be paid by the Contractor and necessary for completion of the work. Label attached documents sequentially beginning with Attachment 1. If more than two documents are attached, provide as Attachment 1 a list that identifies all documents attached and remaining documents shall be sequentially numbered.
- 2. Payment:** The Contractor will be paid as outlined in attached documents.
- 3. Warranty:** The Contractor shall and hereby does warranty all workmanship and materials for up to at least one year after completion of the project. Any materials, equipment, or workmanship discovered to be inferior or which fails to perform as reasonably expected shall be repaired or replaced by the Contractor, at the Contractor's expense, within a reasonable time period of the Contractor being notified of such discovery.
- 4. Independent Contractor:** The Contractor agrees that he/she is an "independent contractor" not under the control or supervision of the County and, therefore, not eligible for County employee benefits (such as health insurance and workers' compensation insurance). The County's health insurance policy and workers' compensation insurance will not cover the Contractor in the event of sickness, illness, injury, or accident. The personnel policies of the County do not apply to the Contractor. The Contractor does not make this agreement under any duress.
- 5. Taxes/Withholdings:** The Contractor is responsible for all federal and state employment taxes or other required withholdings. The County will not pay on the Contractor's behalf any federal or state income tax, social security tax, or any other withholding tax or benefit.
- 6. IRS Form 1099:** The Contractor will not be required to fill out an application for employment. The Contractor will not be provided a W-2 form, but the Contractor's pay will be reported to the IRS. The County will provide an IRS Form 1099 at the end of the calendar year to each Contractor per IRS rules and regulations.
- 7. Limited Need for Services:** As an "independent contractor", the Contractor's services may be needed for a limited time and the need may end at any time for any reason.
- 8. Compliance with Applicable Laws:** The parties to this Contract agree that the laws of the State of North Carolina shall govern the validity, construction, interpretation, and effect of this contract. The Contractor shall perform the work as provided for by the contract in compliance with all applicable federal, state and local regulations and laws including, but not limited to, the OSHA standards set and enforced by the Department of Labor, minimum hour and wage regulations, equal opportunity employment laws, confidentiality, state incorporation laws, state rules concerning the collection and reporting of sales and use taxes, restriction against officers and employees of the County deriving personal benefit(s) from the Contractor, disclosure of lobbying activities, etc. This Contract and the work to be done as described herein is also subject to the provisions of all pertinent local government ordinances which are hereby made a part hereof with the same force and effect as if specifically set out herein.

9. Insurance and Bonding: Prior to commencing services and throughout the term of this agreement, the Contractor and all subcontractors shall maintain in force adequate applicable insurance coverage for property and general liability, malpractice, workers compensation, and vehicle liability. When the minimum required insurance is determined to be insufficient, the Contractor will maintain in force insurance reasonably appropriate to the work to be undertaken by the Contractor. When exempt from workers compensation or other insurance coverage, the Contractor shall provide documented proof of exemption. Further, the Contractor agrees to provide a Certificate of Liability to the County for all applicable insurance coverage.

10. Indemnity: To the fullest extent permitted by law, the Contractor agrees to and hereby does indemnify, defend, and hold harmless the County and County's officers, agents, and employees from and against any and all losses, costs, damages, obligations, and expenses incurred by the County (including, without limitation, attorney's fees) that arise in connection in any way, directly or indirectly, associated with the work to be performed by the Contractor or any of its agents, subcontractors, and employees (including, without limitation, any claim for personal injury, death, sickness, or disease, or payment arising from an employee of Contractor, any sub-Contractor or any other party), whether in any event such claim arises prior to completion of and payment for the contracted work or thereafter.

11. Damage to County Property: The Vendor shall be responsible for any damage to or loss of the County's equipment or facilities arising out of an act or omission of the Vendor or its authorized user and deemed reasonable by either (1) both County and Contractor, (2) mediator, or (3) court/judge.

12. Additional Terms: The Contractor hereby also formally agrees to the entire set of general terms and conditions at <http://www.ccncgov.com/FinanceD/vendors.html>, which aids the County in its efforts to comply with federal rules and regulations.

13. Amendment of the Contract: No modification or amendment of the terms hereof shall be effective unless written and signed by the authorized representatives of all parties entitled to receive a right or obligated to perform a duty under this Contract. On behalf of the County, both the Authorized County Department Representative and the County Finance Director must sign and a board chairperson may also be required to sign. A signed original is to be fastened to the original Contract with signed copies retained by all parties.

14. Complete Agreement: This Contract and all attachments constitute the complete agreement and understanding between the parties. All prior and coexisting agreements and understandings, whether oral or written, are to be without effect in the construction of any provision or term of this contract if they alter, vary, or contradict this Contract.

SIGNATURE SECTION

1. Subject to Contractor Approval: On behalf of the Contractor, please indicate consent to these terms and conditions by signing and completing the lines below.

Printed Name of Company or Individual

Authorized Representative: Signature / Printed Name / Date

2. Subject to Board Approval: On behalf of the Cleveland County Board of Commissioners, the Order to demolish this dwelling was approved on: _____

Clerk to the Board of Commissioners: Signature / Seal

FOOTHILLS PUBLIC SHOOTING COMPLEX

283 FIELDING ROAD
CHERRYVILLE, NORTH CAROLINA 28021
MASS GRADING PLANS
APRIL 12, 2022

DEVELOPMENT TEAM

OWNER/DEVELOPER
CLEVELAND COUNTY
FOOTHILLS PUBLIC SHOOTING COMPLEX

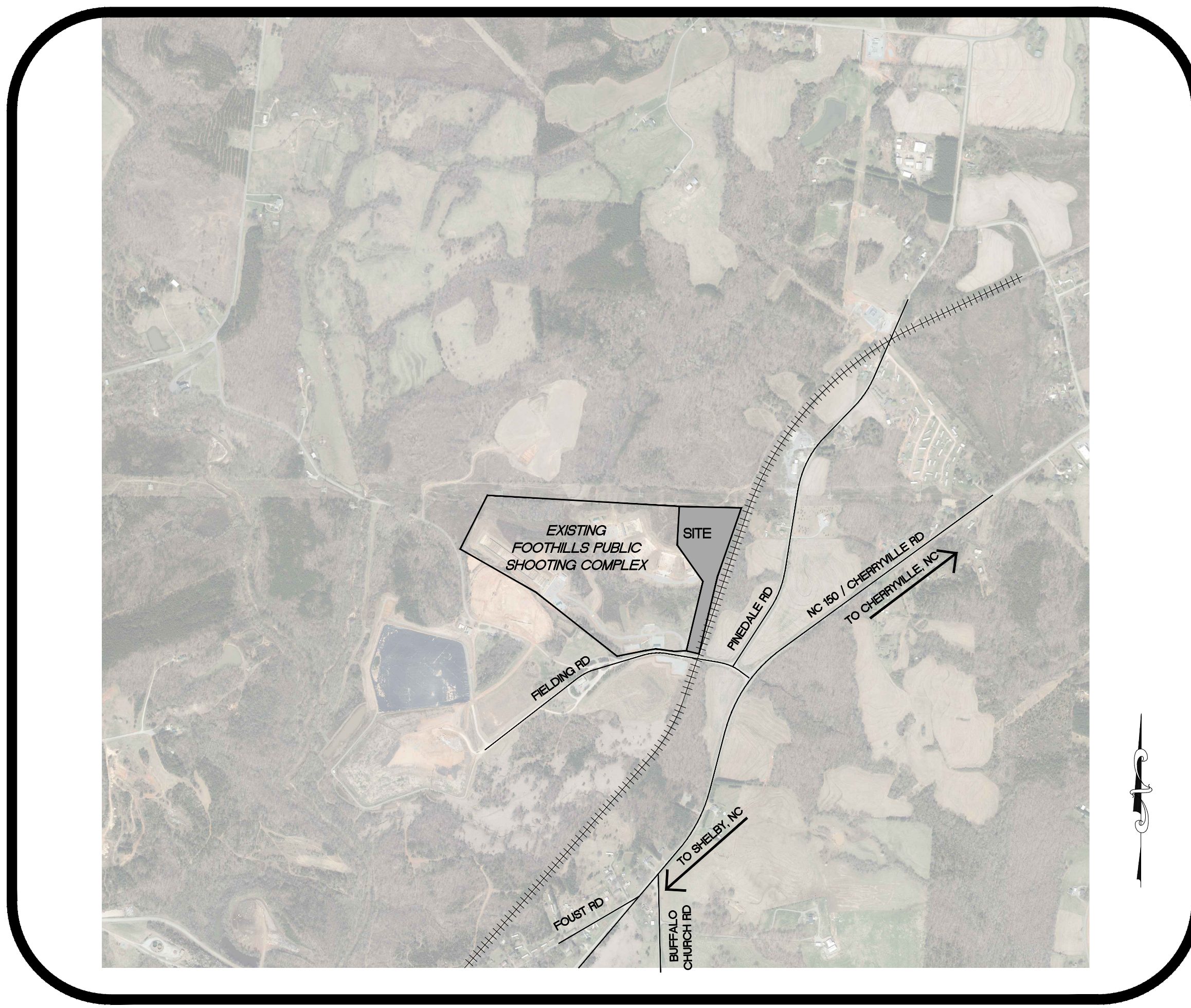
SURVEYOR / ENGINEER
TGS ENGINEERS, INC.
201 WEST MARION STREET, SUITE 200
SHELBY, NC 28150
PH: (704) 476-0003
CONTACT: TOMMY REGISTER
EMAIL: TREGISTER@TGSENGINEERS.COM

SITE DATA

**FOOTHILLS PUBLIC SHOOTING COMPLEX
OVERALL SITE DATA TABLE**
SITE ADDRESS 283 FIELDING ROAD, CHERRYVILLE, NC 28021

CURRENT SITE OWNERS (AREA / PIN / PARCEL ID)
CLEVELAND COUNTY NORTH CAROLINA (918 245AC / 2568277341 / 16732)

DEVELOPER FOOTHILLS PUBLIC SHOOTING COMPLEX
WATERSHED BROAD RIVER BASIN
FEMAMAP NO. 3710256800J
FEMA PANEL EFFECTIVE DATE February 20, 2008
PROJECT DISTURBED ACREAGE 6.920 AC
AUTHORITY HAVING JURISDICTION CLEVELAND COUNTY
CURRENT ZONING HI (HEAVY INDUSTRIAL)
PROPOSED ZONING HI (HEAVY INDUSTRIAL)
SETBACKS
FRONT 30'
SIDE 10' (OR 20' ON CORNER LOT)
REAR 30'



VICINITY MAP
1" = 1000'

SHEET INDEX

C-1.0	COVER SHEET
C-2.0	EXISTING CONDITIONS & DEMOLITION PLAN
C-4.1	EROSION CONTROL PLAN (PHASE 1)
C-4.2	EROSION CONTROL PLAN (PHASE 2)
C-4.3	NPDES STABILIZATION PLAN
C-4.4	EROSION CONTROL DETAILS
C-4.5	EROSION CONTROL DETAILS
C-5.0	GRADING & DRAINAGE PLAN

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL BE STAKED BY A LICENSED NC LAND SURVEYOR.
- CONTRACTOR SHALL COORDINATE ARCHITECTURAL, PLUMBING, MECHANICAL, AND CONSTRUCTION PLANS PRIOR TO CONSTRUCTION. NOTIFY CIVIL ENGINEER OF ANY DISCREPANCIES IN ORDER TO PROVIDE A SOLUTION PRIOR TO BEGINNING CONSTRUCTION.
- BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY ENTITLED "BOUNDARY & RECOMBINATION SURVEY" PREPARED FOR: E5 HOLDINGS, LLC & ROADSIDE TRUCK PLAZA, INC. SITUATED IN CLEVELAND COUNTY, NORTH CAROLINA. PREPARED BY TGS ENGINEERS, INC., DATED DECEMBER 1, 2014.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTABLE CLOSURE AND REPAIR OF ALL AREAS DISTURBED DURING CONSTRUCTION. REPAIR WORK SHALL UTILIZE LIKE MATERIALS WHERE POSSIBLE, OR MATERIALS COMPATIBLE TO EXISTING AND SHALL RESTORE DISTURBED SURFACE TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED EXPOSED PIPING, DUCT WORK, CONDUIT, AND HANGER ASSEMBLIES SHALL BE PAINTED TO MATCH EXISTING FEATURES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEANING AND MAINTENANCE OF ALL INVOLVED AREAS FROM CONSTRUCTION DEBRIS AND DUST. SWEEP HARD FLOORS WITH A TREATED DUST MOP. VACUUM AND REMOVE SPOTS FROM CARPETING UNOCCUPIED CONSTRUCTION AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING NEAT AND CLEAN CONDITIONS AT ALL TIMES. UPON OVERALL COMPLETION OF THE PROJECT, CONTRACTOR IS RESPONSIBLE FOR FINAL CLEANING/TREATMENT (INCLUDING WINDOW WASH) AS FOLLOWS: DUST INVOLVED SURFACES WITH A TREATED BAG OR CLOTH, USE METHODS AND CHEMICALS AS RECOMMENDED FOR A SPECIFIC SURFACE BY THE RELATED MANUFACTURERS OF THE SURFACE MATERIAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND MATERIAL SUPPLY FOR CONSTRUCTION AND INSTALLATION, VERIFICATION OF DIMENSIONS AT THE SITE, AND THE VERIFICATION OF QUANTITIES.

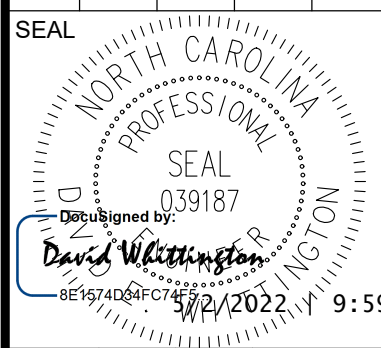
TGS ENGINEERS
706 HILLSBOROUGH ST.
SUITE 200
RALEIGH, NC 27603
C-0275
PHONE: 919-773-8887
FAX: 919-773-8839

Plans Prepared By:

FOOTHILLS PUBLIC SHOOTING COMPLEX

Plans Prepared For:

NO.	DATE	DESCRIPTION
1	05/02/2022	REVISIONS



SCALE	00000
TGS JOB NO.	00000
DEW	LF
PREPARED BY	LF
APPROVED BY	LF
CTR	CTR
CHECKED BY	CTR
DATE	04/12/2022

FOOTHILLS PUBLIC SHOOTING COMPLEX
283 FIELDING ROAD, CHERRYVILLE, NC 28021
COVER SHEET

SHEET **C-1.0**
1 OF 9

**ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ
MINIMUM STANDARDS & SPECIFICATIONS**



LEGEND

— R/W	PROPERTY LINE (PL)
—	RIGHT-OF-WAY LINE
—	SETBACK LINE
—	UTILITY EASEMENT
— 140	EXISTING MAJOR CONTOUR
— 139	EXISTING MINOR CONTOUR
—	EXISTING GRAVITY SEWER
—	EXISTING WATER LINE
—	EXISTING STORM DRAINAGE PIPE
—	EXISTING GAS LINE
—	EXISTING OVERHEAD ELECTRIC LINE
—	EXISTING UNDERGROUND ELECTRIC LINE
—	EXISTING FIBER OPTIC LINE
—	EXISTING GUARDRAIL
—	EXISTING FENCE
—	EXISTING TREE LINE
—	SURVEY BENCHMARK
—	PROPERTY CORNER/MONUMENT
—	EX IRON PIN
—	EX IRON REBAR
—	STORM CATCH BASIN
—	CATV BOX
—	ELECTRIC SWITCH
—	ELECTRIC TRANSFORMER
—	ELECTRIC STRUCTURE
—	TRAFFIC SIGNAL HAND HOLE
—	FIRE HYDRANT
—	GUY WIRE
—	LIGHT POLE
—	SANITARY STRUCTURE
—	STREET SIGN
—	ELECTRIC STRUCTURE
—	UTILITY POLE
—	EVERGREEN TREE
—	WATER VALVE
—	REINFORCED CONCRETE PIPE
—	POLYVINYL CHLORIDE
—	BACK OF CURB
—	EDGE OF PAVEMENT
—	SIDEWALK
—	ASBESTOS CEMENT PIPE

GENERAL NOTES

- BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY ENTITLED "BOUNDARY & RECOMBINATION SURVEY" PREPARED FOR: ES HOLDINGS, LLC & ROADSIDE TRUCK PLAZA, INC. SITUATED IN THE, CLEVELAND COUNTY, N.C. PREPARED BY TGS ENGINEERS, INC., DATED JULY 28, 2021.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN (IF ANY) IS APPROXIMATE ONLY; UTILITIES MAY EXIST WHICH ARE NOT SHOWN. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE WITHIN THE LIMITS OF ANY GRADING OR EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- ANY ON-SITE UTILITIES DESIGNATED TO BE RELOCATED, AS REQUIRED FOR CONSTRUCTION, WILL BE DONE AT OWNER'S EXPENSE. CONTRACTOR TO CONTACT CITY OF KINGS MOUNTAIN AND ANY APPLICABLE UTILITY COMPANIES PRIOR TO RELOCATION.
- DAMAGE DONE TO ANY ITEMS NOT SHOWN IN THESE PLANS TO BE REMOVED, ADDED, OR REPLACED SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE.

DEMOLITION NOTES

- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES. SEE SHEETS C-4.1-4.2.
- WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST EDITIONS OF THE CITY OF KINGS MOUNTAIN STANDARDS AND SPECIFICATIONS, THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) ROAD AND BRIDGE SPECIFICATIONS, THE NCDOT ROAD AND BRIDGE STANDARDS, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS. THE MOST STRINGENT SHALL GOVERN.
- ANY DISCREPANCIES FOUND BETWEEN THESE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS, OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS, SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S REPRESENTATIVE AND ENGINEER, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE AFTER DISCOVERY, WITHOUT ATTEMPTING TO CONTACT THE OWNER'S REPRESENTATIVE AND DESIGN ENGINEER, WILL BE DONE AT THE CONTRACTOR'S RISK.
- MAINTENANCE OF TRAFFIC AND TRAFFIC CONTROL IS THE SOLE RESPONSIBILITY OF THE SITE CONTRACTOR. THESE PLANS ARE TO SERVE ONLY AS A GENERAL GUIDE AND IN NO WAY LIMITS THE SITE CONTRACTOR FROM MAINTAINING TRAFFIC CONTROL IN ACCORDANCE WITH NCDOT STANDARDS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE CITY OF KINGS MOUNTAIN.
- BEFORE STARTING ANY CONSTRUCTION OF IMPROVEMENTS WITHIN ANY NCDOT STREET OR HIGHWAY RIGHT-OF-WAY, OBTAIN ALL PERMITS AND ENCROACHMENTS. CROSS CHECK SPECIAL PROVISIONS WITH PLANS. MAINTAIN A COPY OF ALL PERMITS ON SITE. CONTACT LOCAL DISTRICT ENGINEER 24 HOURS BEFORE ANY WORK WITHIN NCDOT RIGHT-OF-WAY.
- CONTRACTOR TO ACQUIRE A DEMOLITION PERMIT PRIOR TO REMOVAL OF EXISTING STRUCTURES.
- SITE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL AND TO INITIATE CLEAN-UP OF LITTER AND REFUSE GENERATED BY HIMSELF AND SUBCONTRACTORS. THE CLEAN-UP OF LITTER AND REFUSE SHALL BE DONE ON A REGULAR BASIS, AND SHALL INCLUDE INITIATING ACTION AND ASSUMING ANY COST IN REMEDYING THE SITUATION. THE SITE CONTRACTOR, AT NO COST TO THE OWNER, SHALL SUPPLY, PLACE AND MAINTAIN SUITABLE REFUSE CONTAINERS THROUGHOUT THE PROJECT AREA DURING THE ENTIRE CONSTRUCTION PHASE.

CLEVELAND COUNTY NORTH CAROLINA
 PIN: 2668277341
 DB: 1540 PG: 1996
 PG: 35 PG: 9
 918.245 AC

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS

Plans Prepared By:

TGS ENGINEERS

706 HILLSBOROUGH ST.
 SUITE 200
 RALEIGH, NC 27603
 C-0275
 PHONE: 919-773-8887
 FAX: 919-773-8839

Plans Prepared For:

FOOTHILLS PUBLIC SHOOTING COMPLEX

NO.	DATE	DESCRIPTION	REVISIONS
1	05/02/2022		

SCALE: 1"=40'

TGS JOB NO. 00000

DEW

PREPARED BY LP

APPROVED BY

CTR

CHECKED BY

DATE: 04/22/2022

SHEET

C-2.0

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

EXISTING CONDITIONS & DEMOLITION PLAN

2 OF 9

9:59 AM EDT



CLEVELAND COUNTY NORTH CAROLINA
 PIN: 2568277341
 DB: 1540 PG: 1996
 PB: 35 PG: 9
 918.245 AC

**FOOTHILLS PUBLIC SHOOTING COMPLEX
 OVERALL SITE DATA TABLE**

SITE ADDRESS 283 FIELDING ROAD, CHERRYVILLE, NC 28021

CURRENT SITE OWNERS (AREA / PIN / PARCEL ID)
 CLEVELAND COUNTY NORTH CAROLINA (918.245AC / 2568277341 / 16732)

DEVELOPER FOOTHILLS PUBLIC SHOOTING COMPLEX

WATERSHED BROAD RIVER BASIN

FEMA MAP NO. 3710256800J

FEMA PANEL EFFECTIVE DATE February 20, 2008

PROJECT DISTURBED ACREAGE 6.920 AC

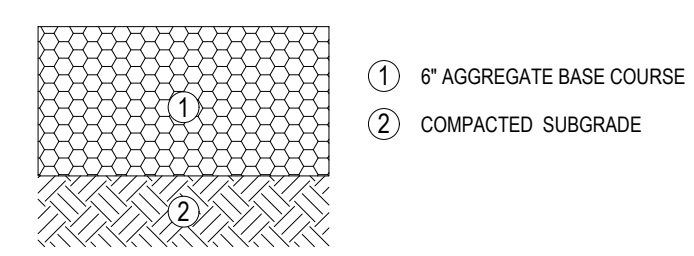
AUTHORITY HAVING JURISDICTION CLEVELAND COUNTY

CURRENT ZONING HI (HEAVY INDUSTRIAL)

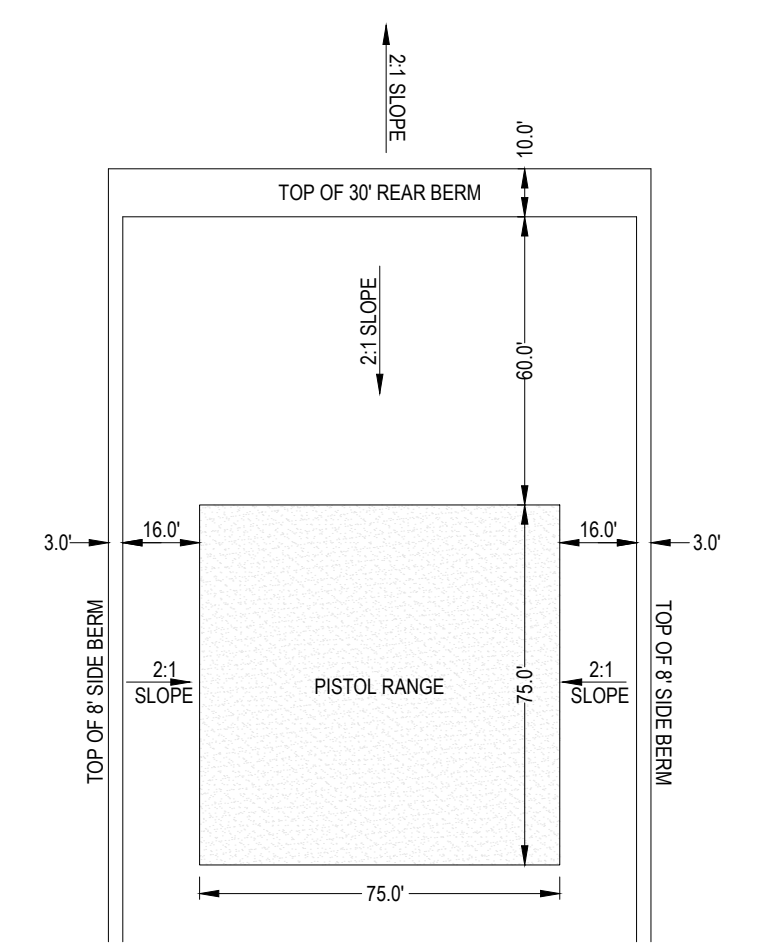
PROPOSED ZONING HI (HEAVY INDUSTRIAL)

SETBACKS

FRONT	30'
SIDE	10' (OR 20' ON CORNER LOT)
REAR	30'



TYPICAL GRAVEL ROAD & PARKING SECTION



TYPICAL SHOOTING RANGE DIMENSIONS

SITE NOTES

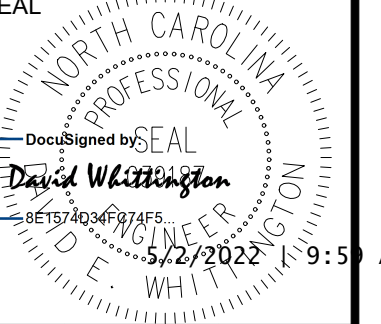
- BEFORE YOU DIG, STOP, CALL THE NC ONE-CALL CENTER AT 1-800-632-4949. IT'S THE LAW. EXISTING UTILITIES ARE SHOWN FROM THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE AND OTHER UTILITIES BEFORE STARTING CONSTRUCTION. NOTIFY UTILITY LOCATING COMPANY (ONE CALL @ 1-800-632-4949) OR INDIVIDUAL UTILITY OWNERS FOR UNDERGROUND LOCATIONS AT LEAST 48 HOURS IN ADVANCE.
- CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, RIGHT-OF-WAYS AND UTILITIES, PUBLIC OR PRIVATE, BEFORE WORKING IN THESE AREAS.
- CONTRACTOR SHALL PUT INTO PLACE SUCH TEMPORARY EROSION CONTROL MEASURES AS INDICATED ON THE PLANS. THESE MEASURES SHALL BE INSPECTED AND EVALUATED DURING CONSTRUCTION OPERATION FOR THEIR EFFECTIVENESS IN PREVENTING EROSION MATERIAL AND SEDIMENT FROM DISCHARGING FROM THE WORK AREA. IF REQUIRED, AND AS DIRECTED BY THE CITY INSPECTOR, ADDITIONAL TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTITUTED AND INSTALLED.
- UNLESS EXPLICITLY SPECIFIED IN THESE PLANS, ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF KINGS MOUNTAIN UNIFIED DEVELOPMENT ORDINANCE, NCDEQ, NCDOT, AND ALL OTHER APPLICABLE REGULATIONS AND GUIDELINES. IN THE EVENT OF A DISCREPANCY BETWEEN THIS APPROVED PLAN AND THE APPLICABLE REGULATIONS OR GUIDELINES, THE MORE STRINGENT SHALL APPLY.
- PROTECT ALL PROPERTY MONUMENTS AND PINS. MONUMENTS AND PINS THAT WILL BE DISTURBED DURING CONSTRUCTION SHALL BE REFERENCED AND REPLACED BY A LICENSED LAND SURVEYOR AT A COST TO THE CONTRACTOR.
- CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SUCH THAT WORKMEN AND THE PUBLIC WILL BE PROTECTED FROM INJURY AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION. DEBRIS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MANNER. CONTRACTOR IS RESPONSIBLE FOR ANY FEES.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL DUE TO CONSTRUCTION OPERATIONS. ALL STREET SURFACES, UTILITY POLES, CULVERTS, DITCHES, CURB AND GUTTER OR OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS.
- ~~ALL PARKING LOT STRIPING AND DIRECTIONAL ARROWS (IF REQUIRED) TO BE PAINTED REFLECTIVE WHITE, TWO COATS.~~
- IF DEPARTURES FROM THE DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED IN WRITING TO THE OWNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS WILL BE ALLOWED WITHOUT APPROVAL BY THE OWNER.
- CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING AND PIPE INVERT ELEVATIONS PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT.
- ANY AND ALL QUANTITIES SHOWN OR IMPLIED ON THE PLANS ARE FOR ESTIMATION PURPOSES ONLY.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION IN WRITING MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- NO SIGHT OBSTRUCTING, OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERM, SIGN, PARKED VEHICLE, OR OTHER OBJECT BETWEEN THE HEIGHTS OF TWO (2) FEET AND EIGHT (8) FEET ABOVE THE CURB LINE ELEVATION (OR THE EDGE OF PAVEMENT IF NO CURB EXISTS) SHALL BE PLACED WITHIN A SIGHT TRIANGLE.
- ALL RADI DIMENSIONS ARE TO FACE OF CURB AND HAVE A RADIUS OF 3.5' UNLESS OTHERWISE NOTED.

**ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ
 MINIMUM STANDARDS & SPECIFICATIONS**

TGS ENGINEERS
 706 HILLSBOROUGH ST.
 SUITE 200
 RALEIGH, NC 27603
 C-0275
 PHONE: 919-773-8887
 FAX: 919-773-8839

Plans Prepared By:
FOOTHILLS PUBLIC SHOOTING COMPLEX

NO.	DATE	DESCRIPTION
1	05/02/2022	REVISIONS

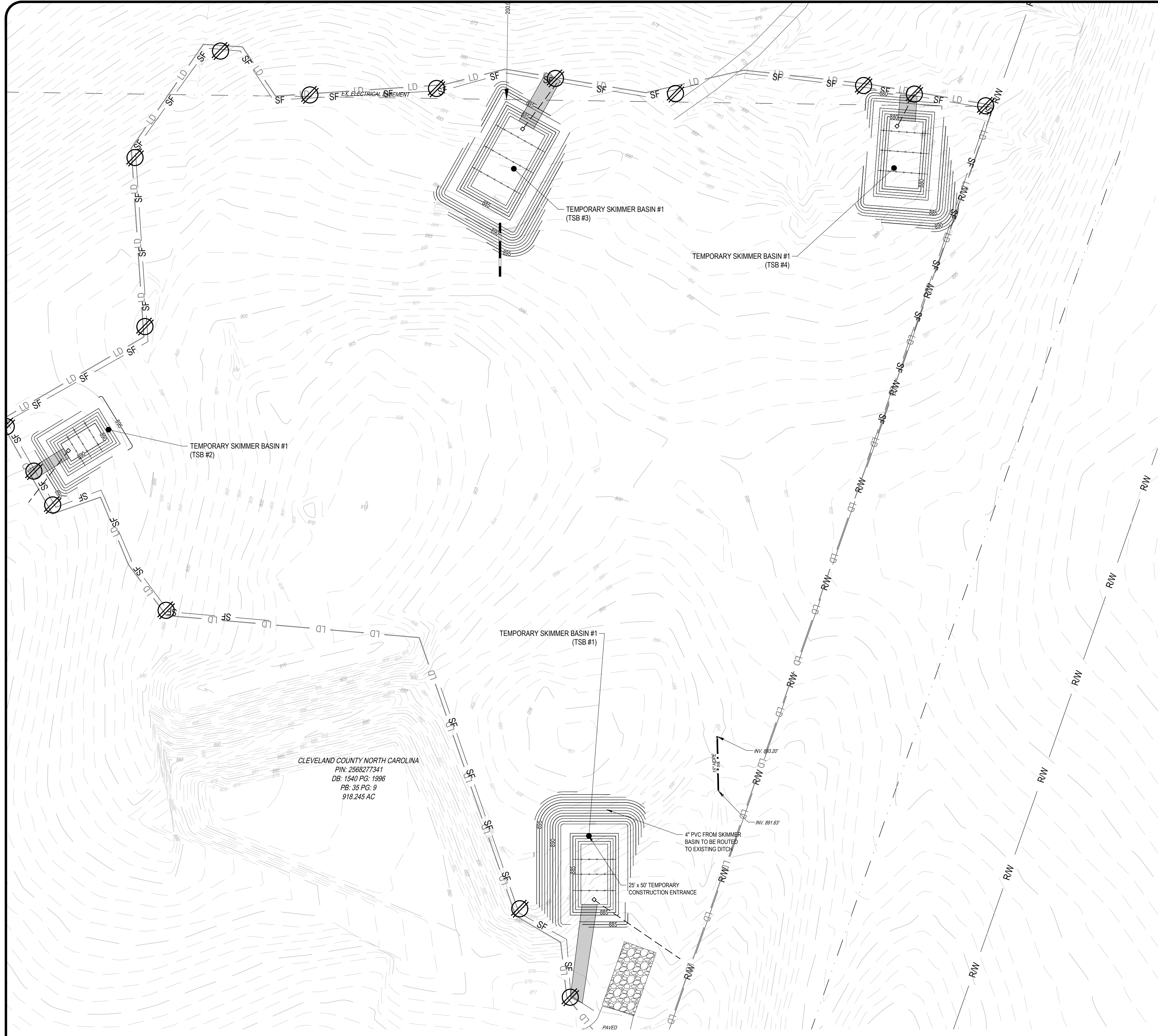


SCALE	1"=40'
TGS JOB NO.	00000
DEW	LF
PREPARED BY	LF
CHECKED BY	LF
DATE	04/22/2022

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

OVERALL SITE PLAN

SHEET **C-3.0** OF **9**



LEGEND

	PROPERTY LINE (PL)		CURB INLET SILT SOCK
	RIGHT-OF-WAY LINE		INLET PROTECTION
	SETBACK LINE		COIR BAFFLES
	UTILITY EASEMENT		CONSTRUCTION ENTRANCE
	EXISTING MAJOR CONTOUR		IMPERMEABLE MEMBRANE
	EXISTING MINOR CONTOUR		SKIMMER DEVICE
	PROPOSED MAJOR CONTOUR		SILT FENCE OPENING
	PROPOSED MINOR CONTOUR		
	PROPOSED SILT FENCE		
	PROPOSED TREE PROTECTION FENCE		
	PROPOSED LIMITS OF DISTURBANCE		
	PROPOSED SEDIMENT TRAP BAFFLE		
	PROPOSED TEMPORARY DIVERSION DITCH		
	PROPOSED TEMPORARY SLOPE DRAIN		

EROSION CONTROL NOTES

- STABILIZE ALL DISTURBED AREAS WITHIN THE NUMBER OF CALENDAR DAYS AS SHOWN ON THE APPROVED GRADING PERMIT, OR PERMANENTLY SUSPENDING LAND DISTURBING ACTIVITY. PERMANENT GROUND COVER SHALL BE PLACED FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT, WITHIN THE NUMBER OF CALENDAR DAYS DICTATED IN THE APPROVED GRADING PERMIT.
- CONTRACTOR SHALL PROVIDE RAIN GAUGE ON SITE AND PROTECT & MAINTAIN FOR DURATION OF CONSTRUCTION.
- CONTRACTOR SHALL LOCATE AND VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- EXISTING UTILITIES ARE SHOWN FROM THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE AND OTHER UTILITIES BEFORE STARTING CONSTRUCTION. NOTIFY UTILITY LOCATING COMPANY (ONE CALL @ 1-800-632-4949) OR INDIVIDUAL UTILITY OWNERS FOR UNDERGROUND LOCATIONS AT LEAST 48 HOURS IN ADVANCE.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED SO THAT RUNOFF THAT CONTAINS SEDIMENT FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.
- PROPERTIES AND RIGHT-OF-WAY ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCE.
- EXCAVATED MATERIAL FROM TRENCHES SHALL BE PLACED ON THE UPGRADE SIDE OF THE TRENCH TO ALLOW MATERIAL TO ERODE INTO THE TRENCH. CONSTRUCTION MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF GRADING CONTRACTOR UNLESS OTHERWISE NOTED.
- THE EROSION CONTROL MEASURES SHOWN ON THIS DRAWING ARE RECOMMENDED AT A MINIMUM. ACTUAL MEASURES NECESSARY FOR CONTAINMENT OF RUN-OFF SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE FIELD VERIFIED.
- ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION AND IS SUBJECT TO A FINE. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS ALSO A VIOLATION THAT IS SUBJECT TO A FINE.
- ALL SLOPES 4:1 OR STEEPER MUST BE SEEDED, MULCHED, AND STABILIZED WITHIN 14 WORKING DAYS. SLOPES STEEPER THAN 3:1 MUST BE SEEDED, MULCHED, AND STABILIZED WITHIN 7 WORKING DAYS. REFER TO JURISDICTIONAL EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
- ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY ENGINEERING DEPARTMENT.
- SLOPES SHALL BE GRADED NO STEEPER THAN 2.5:1.
- ON-SITE BURIAL PITS ARE NOT ALLOWED, UNLESS WRITTEN APPROVAL IS RECEIVED FROM THE OWNER AND AN ON-SITE DEMOLITION LANDFILL PERMIT IS RECEIVED FROM THE ZONING ADMINISTRATOR.
- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS.
- DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION, AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.
- SITE STABILIZATION IS REQUIRED PRIOR TO FINAL APPROVAL AND ISSUANCE OF CERTIFICATE OF OCCUPANCY. SITE MUST HAVE VEGETATIVE GROWTH AND % DENSITY OF COVER ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS IN ORDER TO PASS FINAL INSPECTION.

PHASE 1 EROSION CONTROL CONSTRUCTION SEQUENCE

- CONTACT THE NCDEQ MOORESVILLE REGIONAL OFFICE (704-663-1699) TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE, PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND PERIMETER PROTECTION (SILT SOCKS, INLET PROTECTION, SILT FENCE, DIVERSION DITCHES ETC.) PER THE APPROVED PLANS.
- INSTALL TEMPORARY SKIMMER BASINS.
- ONCE APPROVED, BEGIN DEMOLITION, CLEARING, GRADING, AND CONSTRUCTION OF SITE ITEMS. STRIP THE SITE OF TOPSOIL AND STOCKPILE FOR LATER USE. PLACE SELECT FILL FOR BUILDING BERMS. CONTRACTOR TO INSTALL SILT FENCE AND SILT FENCE OUTLETS ON DOWNSTREAM SIDES OF ANY STOCKPILE MATERIAL. DISPOSAL OF ANY EXCESS MATERIAL(S) TO BE TAKEN OFF SITE. SHALL BE DONE SO IN A MANNER THAT MEETS THE CONDITIONS OF LOCAL, STATE AND FEDERAL REGULATIONS.
- INSPECT SEDIMENT AND EROSION CONTROL DEVICES AT LEAST ONCE A WEEK, AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN A HALF-INCH (DURING A 24-HOUR PERIOD), TO INSURE THEY ARE OPERATING PROPERLY AND IF MAINTENANCE IS NEEDED, TAKE IMMEDIATE CORRECTIVE ACTION FOR ANY DEVICE FAILURE.
- MAINTAIN AND ADJUST EROSION & SEDIMENTATION CONTROL MEASURES AS NEEDED DURING DEMOLITION, CLEARING AND GRUBBING, AND THROUGHOUT THE LIFE OF THE PROJECT AND UNTIL PERMANENT VEGETATION ON THE PROJECT IS ESTABLISHED.
- PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN THE TIME FRAME AS SHOWN ON THE APPROVED GRADING PERMIT. EROSION AND SEDIMENTATION CONTROL MEASURES MUST REMAIN IN PLACE UNTIL GROUND COVER IS SUFFICIENT TO RESTRAIN EROSION.
- CONTACT THE NCDEQ MOORESVILLE REGIONAL OFFICE (704-663-1699) TO SCHEDULE AN INSPECTION BEFORE MOVING TO PHASE 2.

CLEVELAND COUNTY NORTH CAROLINA
 PIN: 2563277341
 DB: 1540 PG: 1996
 PB: 35 PG: 9
 918.245 AC

TEMPORARY SKIMMER BASINS																			
Basin ID	Drainage	Disturbed	Storage Volume (CF)		Surface Area (SF)		Bottom Dimensions (ft.)			Top Dimensions (ft.)			Emergency Spillway		Skimmer Sizing		Baffle Locations		
			Required	Provided	Required	Provided	Length	Width	Bottom	Length	Width	Elevation	Length	Elevation	Head	Orifice Dia.	Distance from Invert of Weir, ft.)	Distance from Invert of Weir, ft.)	
TSB #1	1.25	1.25	2,256	2,360	1,210	1,480	45	20	882.00	59	34	885.50	8	884.00	1.50	1.00	13.25	26.5	39.75
TSB #2	0.61	0.61	1,093	1,300	580	870	30	15	890.00	44	29	893.50	8	892.00	1.50	0.80	5.75	11.5	17.25
TSB #3	2.31	2.31	4,161	4,360	2,220	2,580	60	30	882.00	74	44	885.50	8	884.00	1.50	1.40	17	34	51
TSB #4	1.54	1.54	2,764	3,140	1,480	1,910	50	25	879.00	64	39	882.50	8	881.00	1.50	1.20	8.25	16.5	24.75

LIMITS OF DISTURBANCE
 301,500 S.F. = 6.92 AC.

NOTE: SEE SHEETS C-4.4 & C-4.5 FOR EROSION CONTROL DETAILS

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS

Plans Prepared By:
TGS ENGINEERS
 706 HILLSBOROUGH ST.
 SUITE 200
 RALEIGH, NC 27603
 C-0275
 PHONE: 919-773-8887
 FAX: 919-773-8839

Plans Prepared For:
FOOTHILLS PUBLIC SHOOTING COMPLEX

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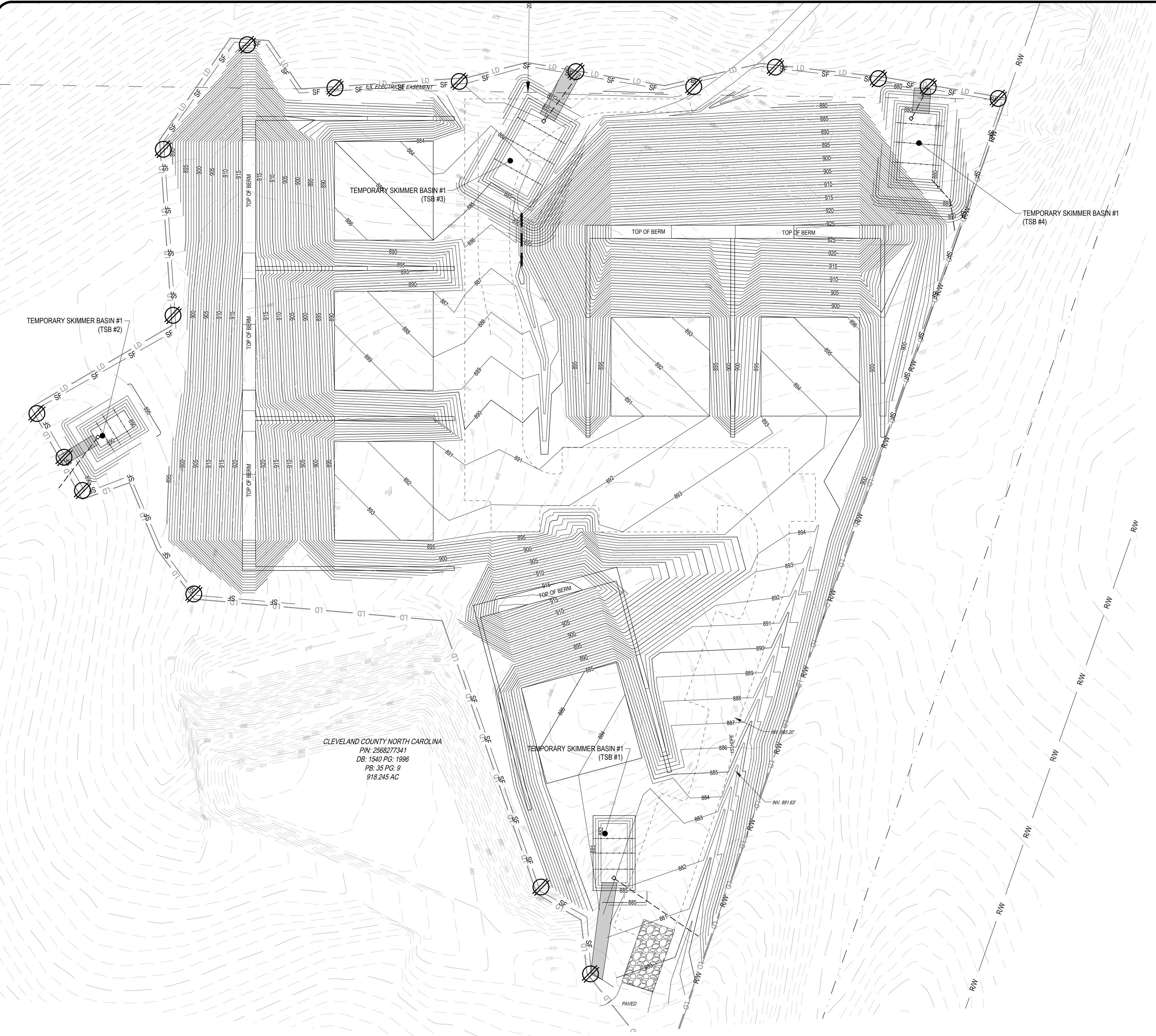
SEAL
 NORTH CAROLINA
 PROFESSIONAL ENGINEER
 David Whitton
 5/17/2022

SCALE: 1"=40'
 TGS JOB NO. 00000
 PREPARED BY: LF
 CHECKED BY: CTR
 DATE: 04/22/2022

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

EROSION CONTROL PLAN - PHASE 1

SHEET **C-4.1** OF **9**



LEGEND

- PROPERTY LINE (PL)
- RIGHT-OF-WAY LINE
- SETBACK LINE
- UTILITY EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SILT FENCE
- PROPOSED TREE PROTECTION FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SEDIMENT TRAP BAFFLE
- PROPOSED TEMPORARY DIVERSION DITCH
- PROPOSED TEMPORARY SLOPE DRAIN
- CURB INLET SILT SOCK
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- IMPERMEABLE MEMBRANE
- SKIMMER DEVICE
- SILT FENCE OPENING

EROSION CONTROL NOTES

- STABILIZE ALL DISTURBED AREAS WITHIN THE NUMBER OF CALENDAR DAYS AS SHOWN ON THE APPROVED GRADING PERMIT, OR PERMANENTLY SUSPENDING LAND DISTURBING ACTIVITY. PERMANENT GROUND COVER SHALL BE PLACED FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT, WITHIN THE NUMBER OF CALENDAR DAYS DICTATED IN THE APPROVED GRADING PERMIT.
- CONTRACTOR SHALL PROVIDE RAIN GAUGE ON SITE AND PROTECT & MAINTAIN FOR DURATION OF CONSTRUCTION.
- CONTRACTOR SHALL LOCATE AND VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- EXISTING UTILITIES ARE SHOWN FROM THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE AND OTHER UTILITIES BEFORE STARTING CONSTRUCTION. NOTIFY UTILITY LOCATING COMPANY (ONE CALL @ 1-800-452-4549) OR INDIVIDUAL UTILITY OWNERS FOR UNDERGROUND LOCATIONS AT LEAST 48 HOURS IN ADVANCE.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED SO THAT RUNOFF THAT CONTAINS SEDIMENT FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.
- PROPERTIES AND RIGHT-OF-WAY ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCE.
- EXCAVATED MATERIAL FROM TRENCHES SHALL BE PLACED ON THE UPGRADE SIDE OF THE TRENCH TO ALLOW MATERIAL TO ERODE INTO THE TRENCH. CONSTRUCTION MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF GRADING CONTRACTOR UNLESS OTHERWISE NOTED.
- THE EROSION CONTROL MEASURES SHOWN ON THIS DRAWING ARE RECOMMENDED AT A MINIMUM. ACTUAL MEASURES NECESSARY FOR CONTAINMENT OF RUN-OFF SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE FIELD VERIFIED.
- ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION AND IS SUBJECT TO A FINE. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS ALSO A VIOLATION THAT IS SUBJECT TO A FINE.
- ALL SLOPES 4:1 OR STEEPER MUST BE SEEDED, MULCHED, AND STABILIZED WITHIN 14 WORKING DAYS. SLOPES STEEPER THAN 3:1 MUST BE SEEDED, MULCHED, AND STABILIZED WITHIN 7 WORKING DAYS. REFER TO JURISDICTIONAL EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
- ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY ENGINEERING DEPARTMENT.
- SLOPES SHALL BE GRADED NO STEEPER THAN 2.5:1.
- ON-SITE BURIAL PITS ARE NOT ALLOWED, UNLESS WRITTEN APPROVAL IS RECEIVED FROM THE OWNER AND AN ON-SITE DEMOLITION LANDFILL PERMIT IS RECEIVED FROM THE ZONING ADMINISTRATOR.
- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS.
- DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION, AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- EARTHEN MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.
- SITE STABILIZATION IS REQUIRED PRIOR TO FINAL APPROVAL AND ISSUANCE OF CERTIFICATE OF OCCUPANCY. SITE MUST HAVE VEGETATIVE GROWTH AND % DENSITY OF COVER ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS IN ORDER TO PASS FINAL INSPECTION.
- ROLLED EROSION CONTROL PRODUCTS SPECIFIED ARE FROM NORTH AMERICAN GREEN; SUBMIT PRODUCT TECHNICAL SPECIFICATIONS FOR ANY SUBSTITUTIONS.

PHASE 2 EROSION CONTROL CONSTRUCTION SEQUENCE

- ONCE PHASE 1 ACTIVITIES ARE COMPLETE AND APPROVED BY NCDEQ MOORESVILLE REGIONAL OFFICE, PROCEED TO PHASE 2.
- INSPECT SEDIMENT AND EROSION CONTROL DEVICES AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN A HALF-INCH (DURING A 24-HOUR PERIOD), TO INSURE THEY ARE OPERATING PROPERLY AND IF MAINTENANCE IS NEEDED, TAKE IMMEDIATE CORRECTIVE ACTION FOR ANY DEVICE FAILURE.
- INSTALL ADDITIONAL, MAINTAIN AND ADJUST ERS CONTROL MEASURES AS NEEDED DURING DEMOLITION, CLEARING AND GRUBBING, AND THROUGHOUT THE LIFE OF THE PROJECT AND UNTIL PERMANENT VEGETATION ON THE PROJECT IS ESTABLISHED.
- BEGIN INSTALLING FILL MATERIAL AND ADJUST TEMPORARY SKIMMER BASINS ACCORDINGLY.
- PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN THE TIME FRAME AS SHOWN ON THE APPROVED PLANS. EROSION AND SEDIMENTATION CONTROL MEASURES MUST REMAIN IN PLACE UNTIL GROUND COVER IS SUFFICIENT TO RESTRAIN EROSION.
- ONCE EARTH DISTURBING ACTIVITIES ARE COMPLETED AND GROUND COVER IS ESTABLISHED, CONTACT NCDEQ PRIOR TO REMOVING TEMPORARY SKIMMER BASINS, DEWATER BASINS AS NECESSARY BY PUMPING THROUGH FILTER BAG, DO NOT DISCHARGE SEDIMENT LADEN RUNOFF INTO STORM SYSTEM. REMOVE MUCK AND ACCUMULATED SEDIMENT FROM BASIN AND BACK FILL WITH SUITABLE CONSTRUCTION MATERIAL TO GRADE. PAVE THE PARKING LOT, SEED, SOE AND INSTALL LANDSCAPING, ALONG WITH ANY OTHER GROUND COVER.
- CONTACT THE NCDEQ MOORESVILLE REGIONAL OFFICE TO SCHEDULE A FINAL INSPECTION FOR APPROVAL.

CLEVELAND COUNTY NORTH CAROLINA
 PIN: 2568277341
 DB: 1540 PG: 1996
 PB: 35 PG: 9
 918.245 AC

TEMPORARY SKIMMER BASINS

Basin ID	Drainage	Disturbed	Storage Volume (CF)		Surface Area (SF)		Bottom Dimensions (ft.)			Top Dimensions (ft.)			Emergency Spillway		Skimmer Sizing		Baffle Locations		
			Required	Provided	Required	Provided	Length	Width	Bottom	Length	Width	Elevation	Length	Elevation	Head	Orifice Dia.	Distance from Invert of Weir, ft.	Distance from Invert of Weir, ft.	Distance from Invert of Weir, ft.
TSB #1	1.25	1.25	2,256	2,360	1,210	1,480	45	20	882.00	59	34	885.50	8	884.00	1.50	1.00	13.25	26.5	39.75
TSB #2	0.61	0.61	1,093	1,300	580	870	30	15	890.00	44	29	893.50	8	892.00	1.50	0.80	5.75	11.5	17.25
TSB #3	2.31	2.31	4,161	4,360	2,220	2,580	60	30	882.00	74	44	885.50	8	884.00	1.50	1.40	17	34	51
TSB #4	1.54	1.54	2,764	3,140	1,480	1,910	50	25	879.00	64	39	882.50	8	881.00	1.50	1.20	8.25	16.5	24.75

LIMITS OF DISTURBANCE
 301,500 S.F. = 6.92 AC.

NOTE: SEE SHEETS C-4.4 & C-4.5 FOR EROSION CONTROL DETAILS

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS

Plans Prepared By:
TGS ENGINEERS
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Plans Prepared For:
FOOTHILLS PUBLIC SHOOTING COMPLEX

NO.	DESCRIPTION	DATE	REVISIONS
1		05/02/2022	

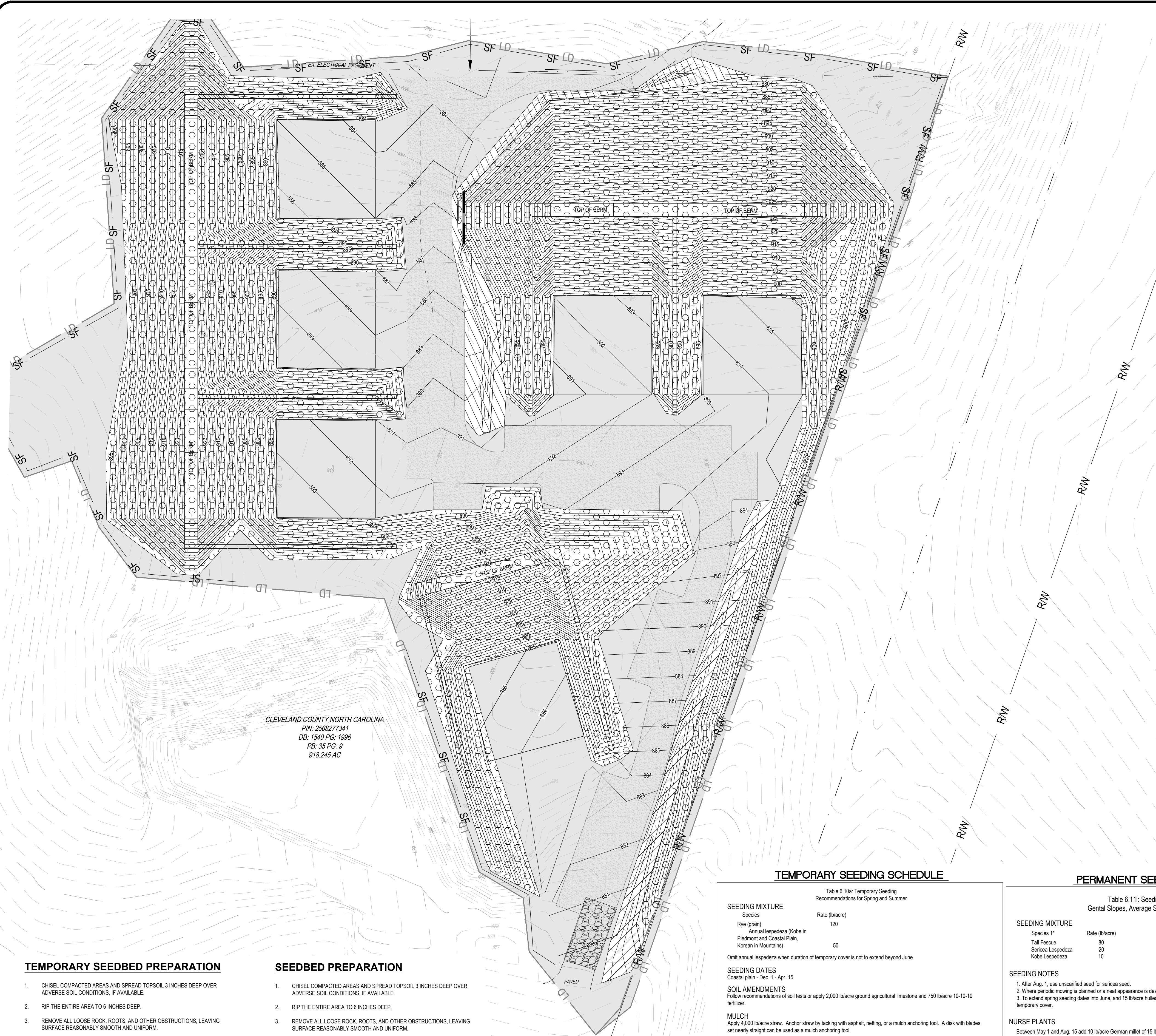
SEAL
 NORTH CAROLINA
 PROFESSIONAL ENGINEER
 David Wellington
 04/22/2022

SCALE: 1"=40'
 TGS JOB NO. 00000
 PREPARED BY: DEW
 CHECKED BY: CTR
 DATE: 04/22/2022
 APPROVED BY: LF

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

EROSION CONTROL PLAN - PHASE 2

SHEET C-4.2 OF 9



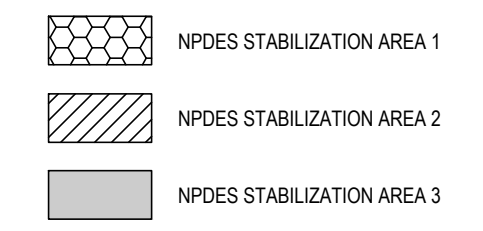
CLEVELAND COUNTY NORTH CAROLINA
PIN: 2588277341
DB: 1540 PG: 1996
PB: 35 PG: 9
918.245 AC

AREA	SITE AREA DESCRIPTION	STABILIZATION TIME FRAM	STABILIZATION TIME FRAME EXCEPTION
1	SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
2	SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
3	ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT AS SHOWN IN CHART)

NPDES DOCUMENTATION NOTE

- 1. THIS PAGE IS SUBMITTED TO COMPLY WITH THE NPDES GENERAL STORMWATER PERMIT NCG010000.
- 2. THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
- 3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
- 4. THE CITY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR PURPOSES OF ENFORCEMENT ACTION UNDER THE CITY CODE.

NPDES STABILIZATION LEGEND



ADMIXTURES

- AGRICULTURAL LIMESTONE: 2 TONS / ACRE (3 TONS / ACRE IN CLAY SOILS)
- FERTILIZER: 1,000 LBS / ACRE - 10-10-10
- SUPERPHOSPHATE: 500 LBS / ACRE - 20% ANALYSIS
- MULCH: 4,000 LBS / ACRE - SMALL GRAIN STRAW
- ANCHOR: ASPHALT EMULSION AT 400 GALS / ACRE

1) GROUND STABILIZATION *

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

EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE. (SECTION II.B(2)(b))

2) BUILDING WASTES HANDLING

- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS
- DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION, AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS

3) DISCHARGES TO FEDERALLY-LISTED WATERS

- REQUIREMENTS ARE THE SAME AS IN PREVIOUS PERMIT.
- THE PERMIT ALLOWS REDUCTION FROM THE 20 ACRE MINIMUM IF THE DIRECTOR OF DWQ DETERMINES THAT OTHER BMP'S PROVIDE EQUIVALENT PROTECTION.

4) INSPECTIONS

- SAME WEEKLY INSPECTION REQUIREMENTS
- SAME RAIN GAUGE & INSPECTIONS AFTER 0.5" RAIN EVENT
- INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS"
- INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
- RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE ON REQUEST.
- ELECTRONICALLY-AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.

5) IMPLEMENTATION OF NEW PERMIT CONDITIONS

- PROJECTS PERMITTED UNDER THE PREVIOUS PERMIT CAN CONTINUE TO FOLLOW THE PREVIOUSLY-PERMITTED CONDITIONS.
- COMPLETE APPLICATIONS RECEIVED PRIOR TO AUGUST 3, 2011 CAN FOLLOW CONDITIONS OF APPROVED APPLICATION.
- APPLICATIONS RECEIVED AFTER AUGUST 2, 2011 MUST COMPLY WITH NEW PERMIT CONDITIONS.

6) CONDITIONS IN EROSION & SEDIMENTATION CONTROL PLANS *

DESIGNATION ON THE PLANS WHERE THE 7 AND 14-DAY GROUND STABILIZATION REQUIREMENTS OF THE NPDES PERMIT APPLY

DESIGNATION ON THE PLANS WHERE BASINS THAT COMPLY WITH THE SURFACE-WITHDRAWAL REQUIREMENTS OF THE NPDES PERMIT ARE LOCATED.

TEMPORARY SEEDBED PREPARATION

- 1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
- 2. RIP THE ENTIRE AREA TO 6 INCHES DEEP.
- 3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- 4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL. (SEE ADMIXTURE 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 STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER, AND SEEDING RATES.
- 9. CONSULT SAEC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

SEEDBED PREPARATION

- 1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
- 2. RIP THE ENTIRE AREA TO 6 INCHES DEEP.
- 3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- 4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL. (SEE ADMIXTURE 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 STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER, AND SEEDING RATES.
- 9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 50% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER, AND SEEDING RATES AND LANDSCAPING PLANS.
- 10. SEE SEEDING SCHEDULES ON THIS SHEET FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDED PER THE LANDSCAPING PLANS.

TEMPORARY SEEDING SCHEDULE

Table 6.10a: Temporary Seeding Recommendations for Spring and Summer

SEEDING MIXTURE	Rate (lb/acre)
Species	
Rye (gram)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

SEEDING DATES
Coastal plain - Dec. 1 - Apr. 15

SOIL AMENDMENTS
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

MULCH
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

MAINTENANCE
Referentize if growth is not fully adequate. Reseed, referentize and mulch immediately following erosion or other damage.

PERMANENT SEEDING SCHEDULE

Table 6.11: Seeding No. 2P for: Gentle Slopes, Average Soil, Low Maintenance

SEEDING MIXTURE	Rate (lb/acre)
Species	
Tall Fescue	60
Sericea Lespedeza	20
Kobe Lespedeza	10

SEEDING NOTES

- 1. After Aug. 1, use unscarified seed for sericea seed.
- 2. Where periodic mowing is planned or a neat appearance is desired, omit sericea and increase Kobe lespedeza to 40 lb/acre.
- 3. To extend spring seeding dates into June, and 15 lb/acre hulled Bermudagrass. However, after mid-Apr. it is preferable to seed temporary cover.

NURSE PLANTS
Between May 1 and Aug. 15 add 10 lb/acre German millet of 15 lb/acre Sudangrass. Prior to May 1 or After Aug. 15, add 40 lb/acre rye (gram).

SEEDING DATES

Fall:	BEST	Possible
Late Winter	Aug. 25-Sept. 15	Aug. 20-Oct. 25
	Feb. 15-Mar. 21	Feb. 1-Apr. 15

Fall is best for tall fescue and late winter for lespedezas. Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.

SOIL AMENDMENTS
Apply lime and fertilizer according to soil tests or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

MULCH
Apply 4,000-5,000 lb/acre grain straw or equivalent cover of another suitable mulching. Anchor mulch by tacking with asphalt, netting or riving or by crimping with a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

MAINTENANCE
Referentize in the second year unless growth is fully adequate. May be mowed once or twice a year, but mowing is not necessary. Reseed, fertilize, and mulch damaged areas immediately.

*1 Refer to Appendix 8.02 for botanical names.

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Prepared For: **FOOTHILLS PUBLIC SHOOTING COMPLEX**

NO. 1
DATE 05/02/2022
DESCRIPTION REVISIONS

SCALE 1"=40'
CTR. CHECKED BY 04/22/2022
DATE

00000 TGS JOB NO.
DEW PREPARED BY
LF APPROVED BY

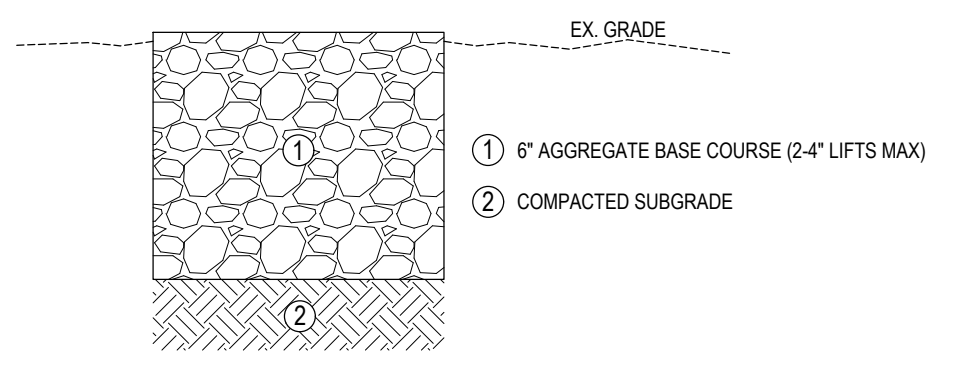
NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
DANIEL W. WATSON
15187
5/2/2022 10:59 AM EDT

SHEET C-4.3 OF 9
FOOTHILLS PUBLIC SHOOTING COMPLEX
283 FIELDING ROAD, CHERRYVILLE, NC 28021

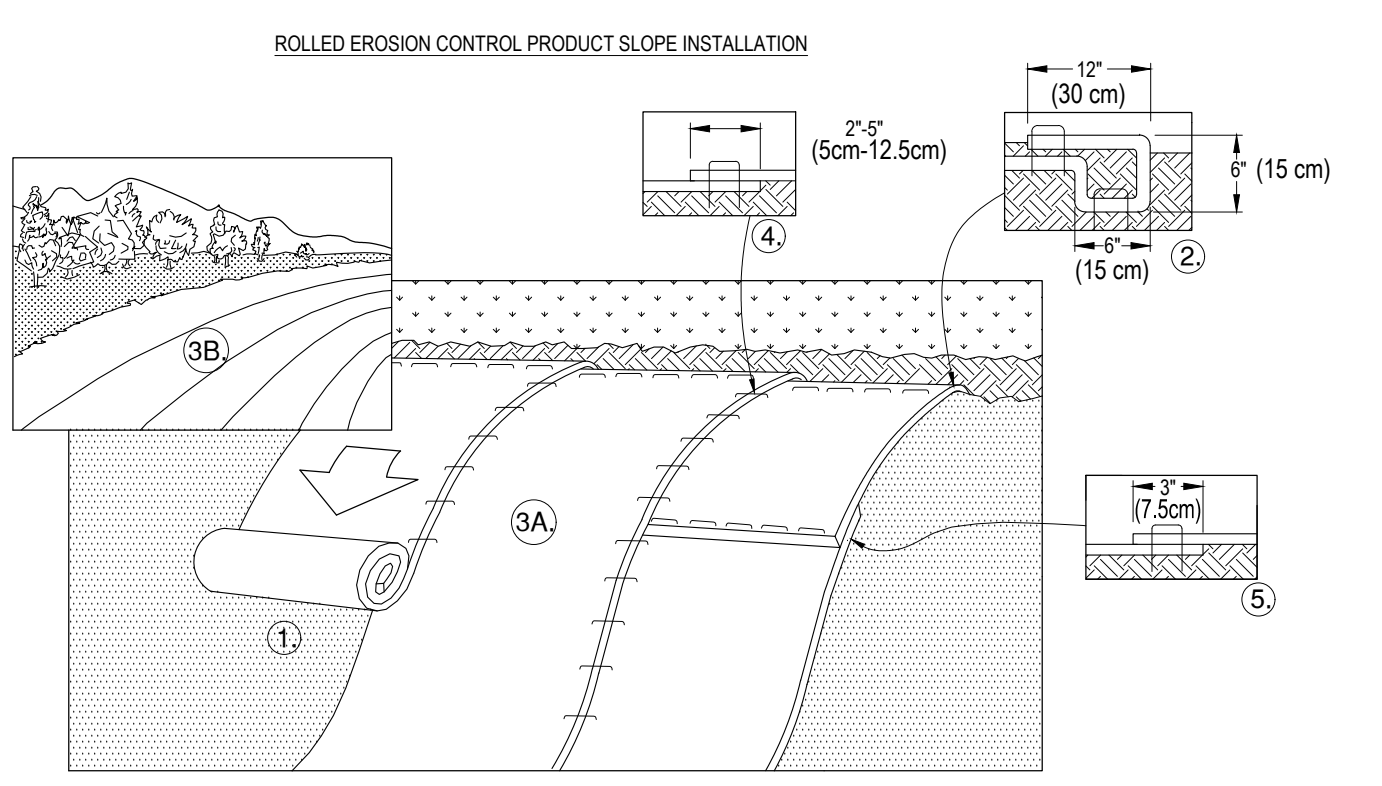
NPDES STABILIZATION PLAN

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS



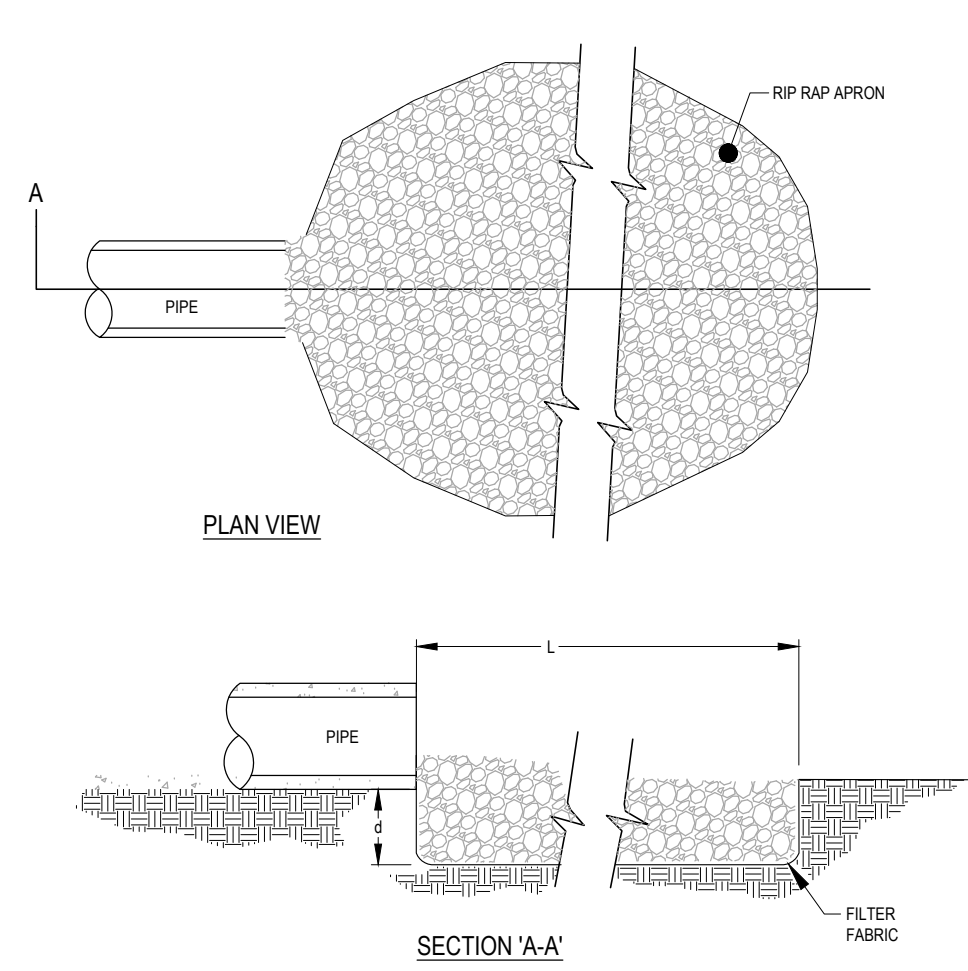
- NOTE:**
1. CLEAR TOP SOIL AND CUT IN ACCESS ROAD, ENSURE POSITIVE DRAINAGE FROM ROAD SURFACE
 2. COORDINATE WITH GEOTECHNICAL ENGINEER FOR ANY SITE SPECIFIC RECOMMENDATIONS.
 3. CONSULT GEOTECHNICAL ENGINEER FOR SUBGRADE AND COMPACTION RECOMMENDATIONS.

TYPICAL GRAVEL ACCESS ROAD SECTION
NOT TO SCALE



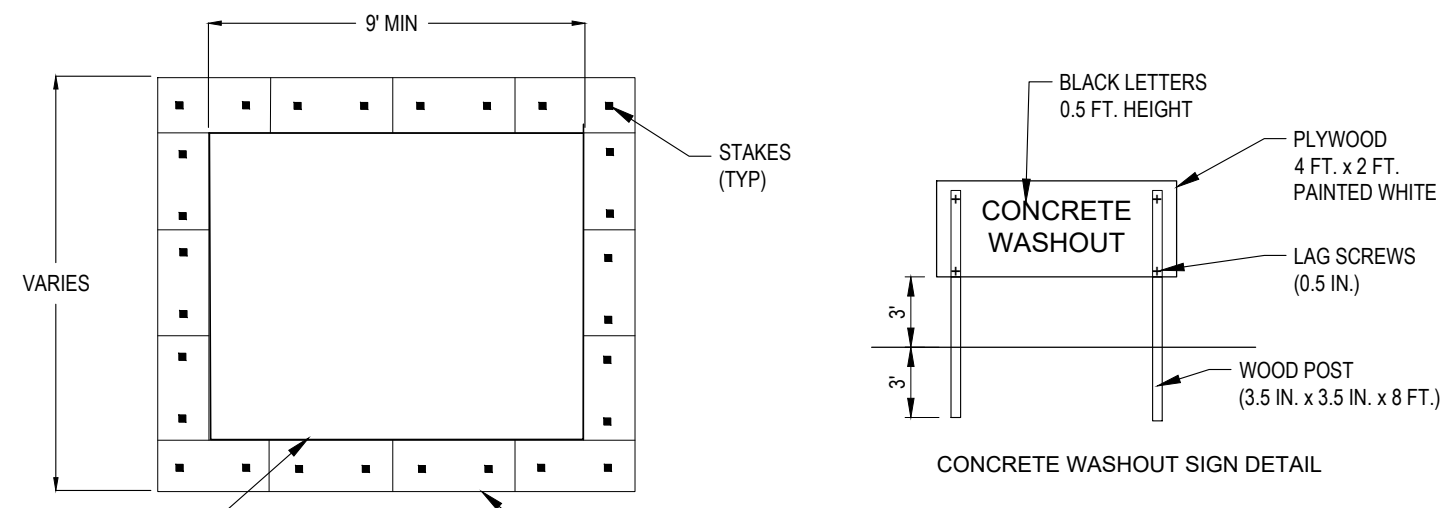
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPs IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECPs EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPs WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECPs BACK OVER SEED AND COMPACTED SOIL. SECURE RECPs OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECPs.
3. ROLL THE RECPs (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPs WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPs MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECPs MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECPs TYPE.
5. CONSECUTIVE RECPs SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECPs WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECPs.

ROLLED EROSION CONTROL PRODUCT DETAIL
NOT TO SCALE

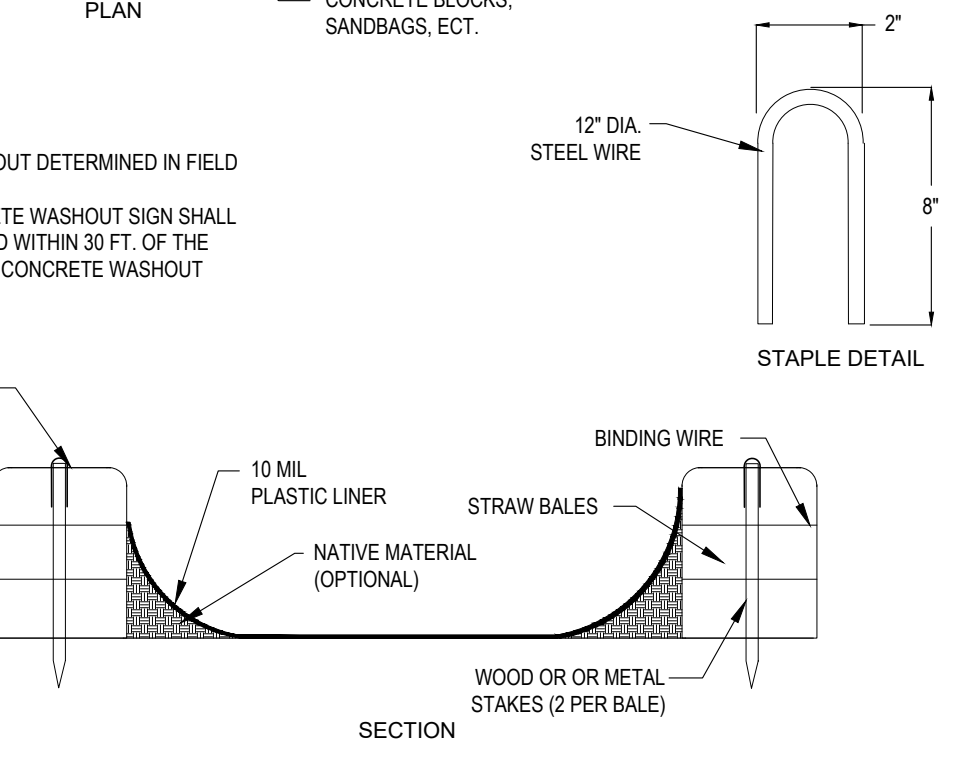


- NOTES:**
1. L = LENGTH OF THE RIPRAP APRON.
 2. $d \ge 1.5$ TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (inches).
 3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" (inches) ABOVE THE MAXIMUM TALK-TO-DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
 4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

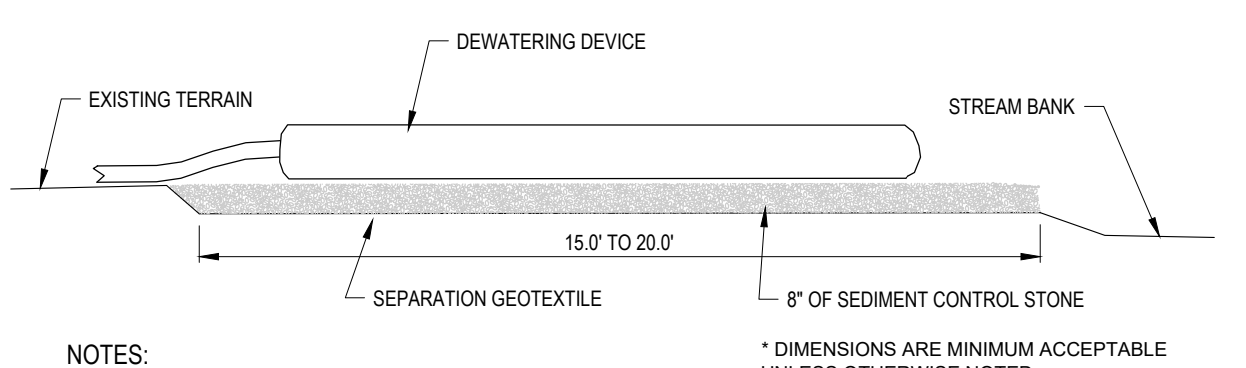
RIPRAP OUTLET DISSIPATOR
NOT TO SCALE



- NOTES:**
1. ACTUAL LAYOUT DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY



CONCRETE WASHOUT-ABOVE GRADE
NOT TO SCALE



- NOTES:**
1. USE NO. 67 STONE FOR SEDIMENT CONTROL STONE.
 2. PROVIDE STABILIZED OUTLET TO STREAMBANK.
 3. WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE DEWATERING DEVICE ABOVE NATURAL GROUND.
- * DIMENSIONS ARE MINIMUM ACCEPTABLE UNLESS OTHERWISE NOTED.

DEWATERING DEVICE / FILTER BAG
NOT TO SCALE

MAINTENANCE NOTES:

- NPDES PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW.
1. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING TOWNSTATE ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
 2. MAINTAIN THE GRAVEL PAD (CONSTRUCTION ENTRANCE/EXIT) IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP-DRESSING 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 ROADWAYS.
 3. INSPECT SEDIMENT FENCES (SILT FENCE) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS ONCE ACCUMULATION HAS REACHED HALF OF THE HEIGHT OF THE SILT FENCE TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE 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.
 4. INSPECT SILT FENCE OUTLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE WIRE FENCE AND HARDWARE CLOTH OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH OR HARDWARE CLOTH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.
 5. 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 STABILIZE IT.
 6. TEMPORARY SEEDING - RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE, AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
 7. SKIMMER BASINS
 - A. 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 VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.
 - B. REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.
 - C. 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 THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED, IF SO REMOVE THE DEBRIS.
 - D. 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.
 - E. CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. 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 DEBRIS FROM THE SKIMMER AND POOL AREAS.
 - F. 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. IF ICE IS PRESENT IN THE SKIMMER BASIN, REMOVE IMMEDIATELY.
 8. CHECK DAMS & WATTLE/SILT SOCKS
 - A. INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.
 - B. 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 (PRACTICE 6.31 RIPRAP-LINED AND PAVED CHANNELS OF NCDENR EROSION & SEDIMENTATION CONTROL MANUAL).
 - C. 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 STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

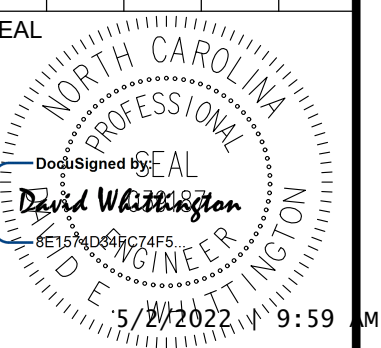
9. PERMANENT SEEDING.
 - A. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.
 - B. RESEEDING - IF A STAND HAS INADEQUATE COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. RE-ESTABLISH THE STAND AFTER SEEDBED PREPARATION OR OVER-SEED THE STAND. CONSIDER SEEDING TEMPORARY, ANNUAL SPECIES IF THE TIME OF YEAR IS NOT APPROPRIATE FOR PERMANENT SEEDING.
 - C. IF VEGETATION FAILS TO GROW, SOIL MUST BE TESTED TO DETERMINE IF ACIDITY OR NUTRIENT IMBALANCE IS RESPONSIBLE.
 - D. FERTILIZATION - ON THE TYPICAL DISTURBED SITE, FULL ESTABLISHMENT USUALLY REQUIRES REFERTILIZATION IN THE SECOND GROWING SEASON. FINE TURF REQUIRES ANNUAL MAINTENANCE FERTILIZATION (TABLE 6.12B). USE SOIL TESTS IF POSSIBLE OR FOLLOW THE GUIDELINES GIVEN FOR THE SPECIFIC SEEDING MIXTURE.
10. ROCK PIPE INLET PROTECTION
 - A. 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 FACINGS.
 - B. CHECK THE STRUCTURE FOR DAMAGE AND RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY.
 - C. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER (SURFACE STABILIZATION).
11. DEWATERING DEVICE
 - A. INSPECT DEWATERING DEVICE AND STABILIZED OUTLET AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE ANY ACCUMULATED SEDIMENT WITHIN STONE PAD AND STABILIZED OUTLET.
 - B. ANY DEWATERING FROM SEDIMENT CONTROL DEVICE MUST BE DONE WITHIN LIMITS OF DISTURBANCE AND THROUGH A FILTER BAG.
12. SEDIMENT PIT (FOR SILT FENCE OUTLET)
 - A. INSPECT SEDIMENT PIT 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 PIT. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE WATTLE AND STONE FOR SILT FENCE OUTLET IF NECESSARY.
 - B. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER (SURFACE STABILIZATION).
13. RIPRAP OUTLET STRUCTURE
 - A. INSPECT WEEKLY AND AFTER SIGNIFICANT (1/2 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.
14. RIPRAP CHANNEL
 - A. 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 TRENDS. CAREFULLY CHECK STABILITY AT ROAD CROSSINGS, AND LOOK FOR INDICATIONS 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.
15. ROLLED EROSION CONTROL PRODUCTS
 - A. INSPECT WEEKLY AND AFTER SIGNIFICANT (1/2 OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE ROLLED EROSION CONTROL PRODUCT (RECP) HAS TAKEN PLACE. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
 - B. 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.
 - C. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.
 - D. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS

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Plans Prepared By:
FOOTHILLS PUBLIC SHOOTING COMPLEX

NO.	DATE	DESCRIPTION
1	05/02/2022	REVISIONS

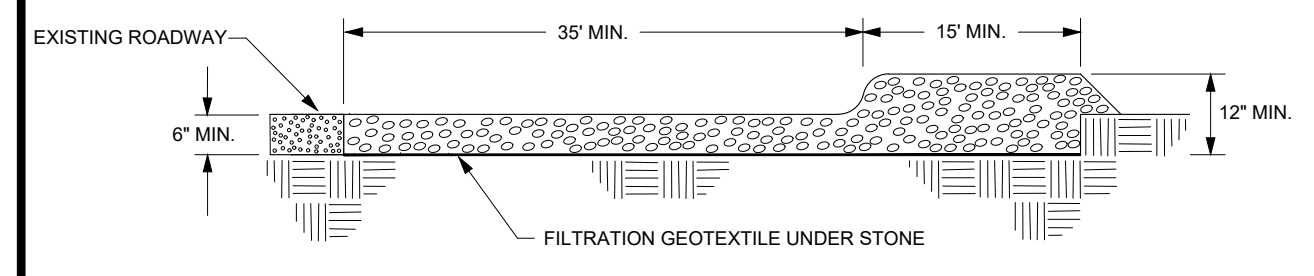
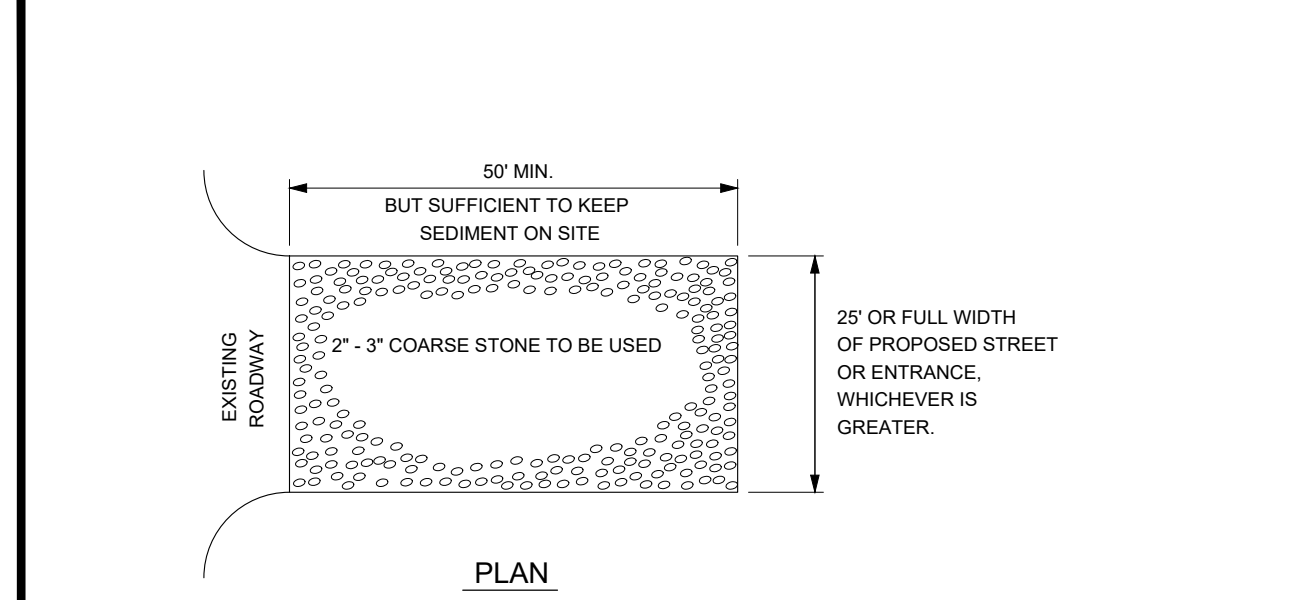


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CHECKED BY	DATE	APPROVED BY	DATE
04/12/2022			

FOOTHILLS PUBLIC SHOOTING COMPLEX
283 FELDING ROAD, CHERRYVILLE, NC 28021

EROSION CONTROL DETAILS

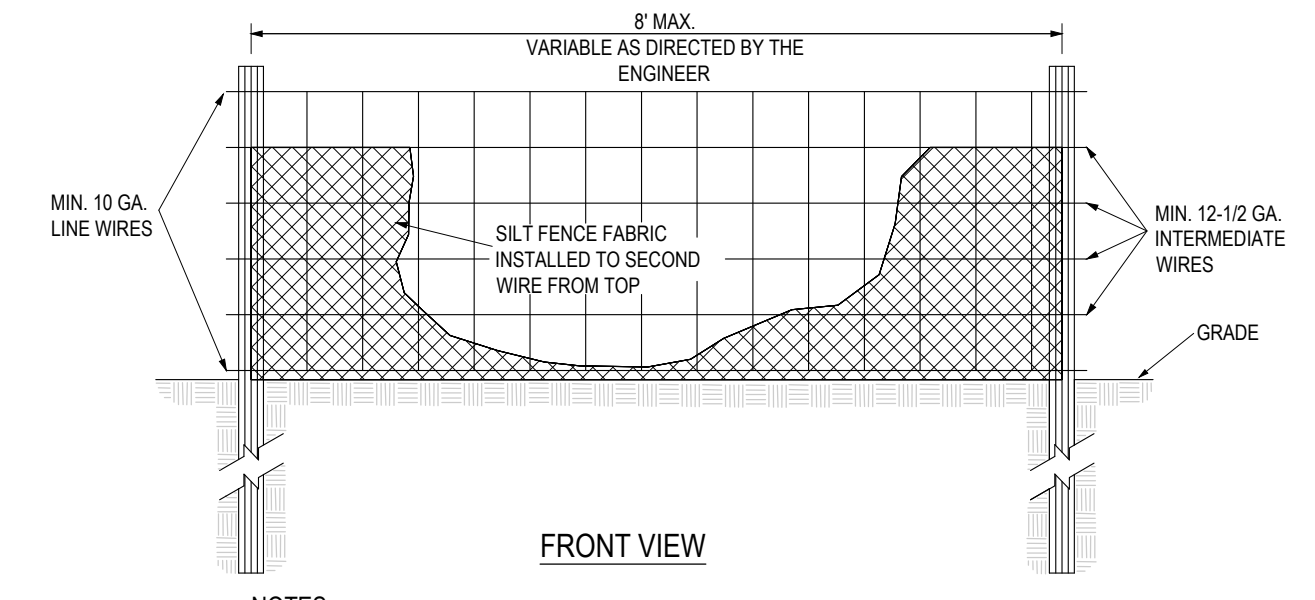
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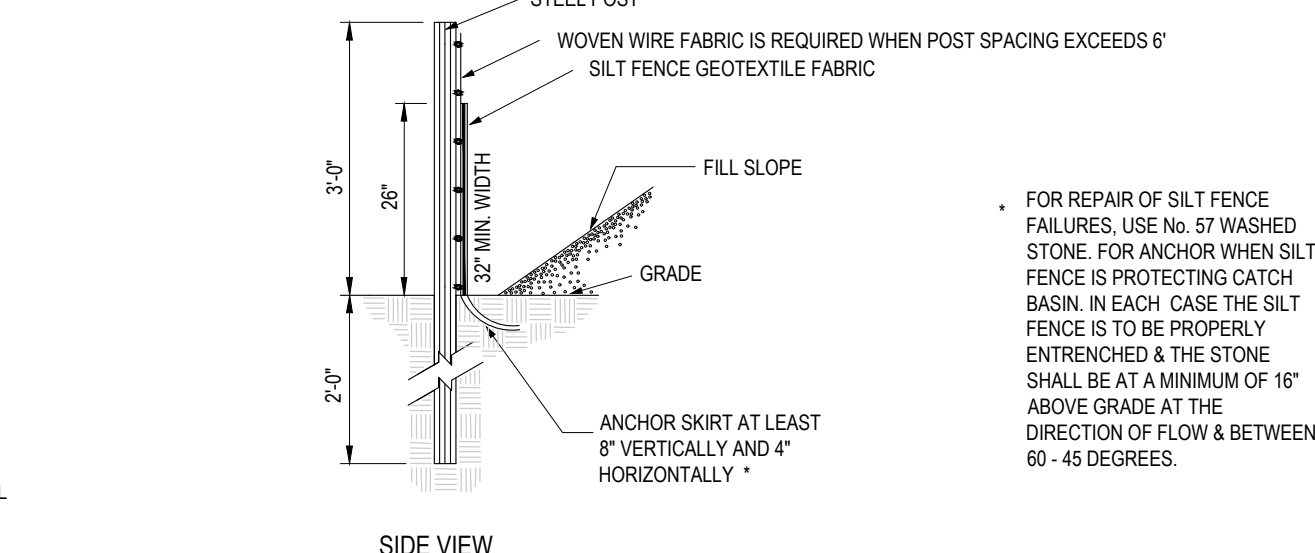
MAINTENANCE NOTES:
 MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-3 INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED WASHED OR TRACKED ONTO PUBLIC HIGHWAYS.

NOTES:
 1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
 2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLE MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
 3. IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.

CONSTRUCTION ENTRANCE
 NOT TO SCALE



NOTES:
 - END OF SILT FENCE SHOULD BE TURNED UP HILL.
 - SEE N.C. STATE DENR PRACTICE STANDARDS & SPECIFICATIONS SEDIMENT FENCE SET FOR CONDITIONS WHERE PRACTICE APPLIES. PLANNING CONSIDERATIONS & DESIGN CRITERIA (HOWEVER FLOW SHALL NOT RUN PARALLEL WITH THE TOE OF THE FENCE).



STANDARD TEMPORARY SILT FENCE W/ SEDIMENT STORAGE PIT
 NOT TO SCALE



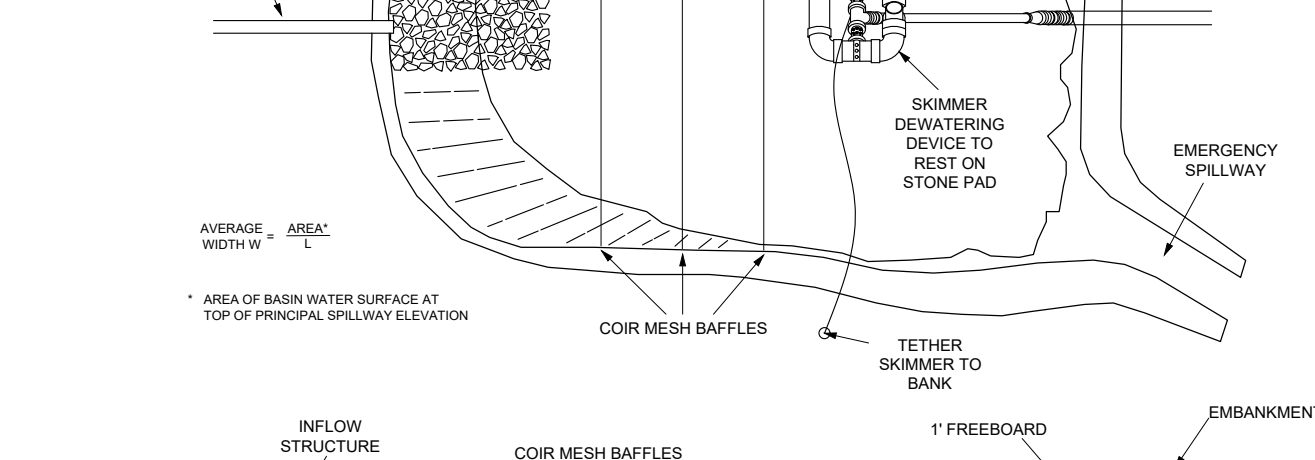
NOTE:
 GRAVEL & RIP-RAP FILTER BERM BASIN DETAIL IS DESIGNED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 1/4 ACRES OR LESS. IF EXCAVATED STORAGE AREA IS USED AS SEDIMENT TRAP, THE DESIGN CRITERIA FOR SEDIMENT TRAP MUST BE SATISFIED.

HORSESHOE INLET PROTECTION
 NOT TO SCALE



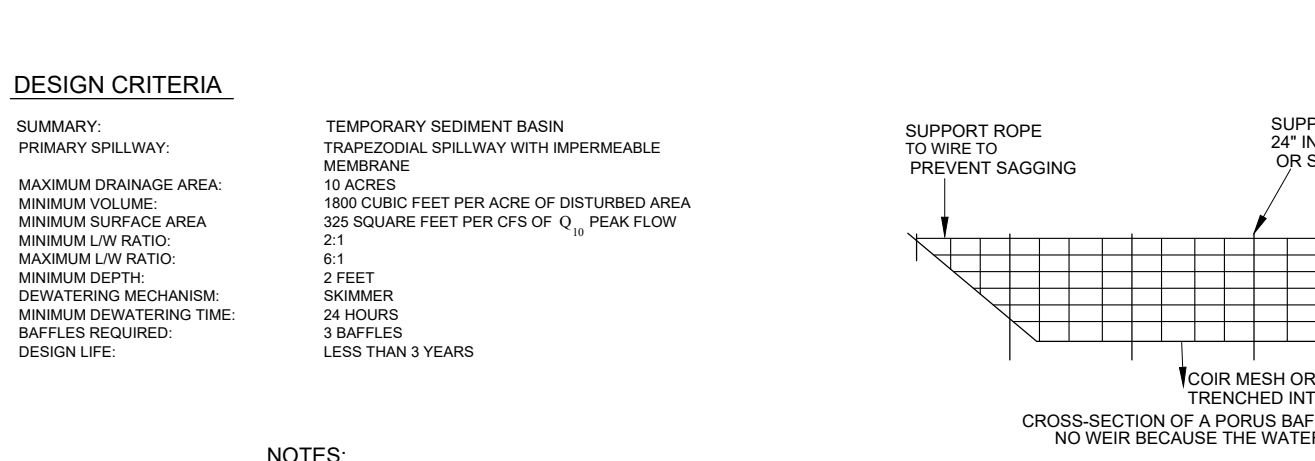
DESIGN CRITERIA
 SUMMARY:
 PRIMARY SPILLWAY: TRAPEZOIDAL SPILLWAY WITH IMPERMEABLE MEMBRANE
 MAXIMUM DRAINAGE AREA: 10 ACRES
 MINIMUM VOLUME: 1500 CUBIC FEET PER ACRE OF DISTURBED AREA
 MINIMUM SURFACE AREA: 325 SQUARE FEET PER CFS OF Q₁₀ PEAK FLOW
 MINIMUM L/W RATIO: 2:1
 MINIMUM DEPTH: 2 FEET
 DEWATERING MECHANISM: SKIMMER
 MINIMUM DEWATERING TIME: 24 HOURS
 BAFFLES REQUIRED: 3 BAFFLES
 DESIGN LIFE: LESS THAN 3 YEARS

TEMPORARY SKIMMER BASIN
 NOT TO SCALE



NOTES:
 1. CONTRACTOR MAY INSTALL SKIMMER BASIN AS SHOWN ON THIS DETAIL WITH IMPERMEABLE MEMBRANE OR WITH PERMANENT RIPRAP AS SHOWN ON THE STORMWATER PLAN IN THE EMERGENCY SPILLWAY DETAIL.
 2. IF CONTRACTOR WISHES TO INSTALL PERMANENT RIPRAP, THE RIPRAP SHOULD REMAIN CLEAN AND CLEAR OF DEBRIS AT ALL TIMES.

TEMPORARY SKIMMER BASIN
 NOT TO SCALE

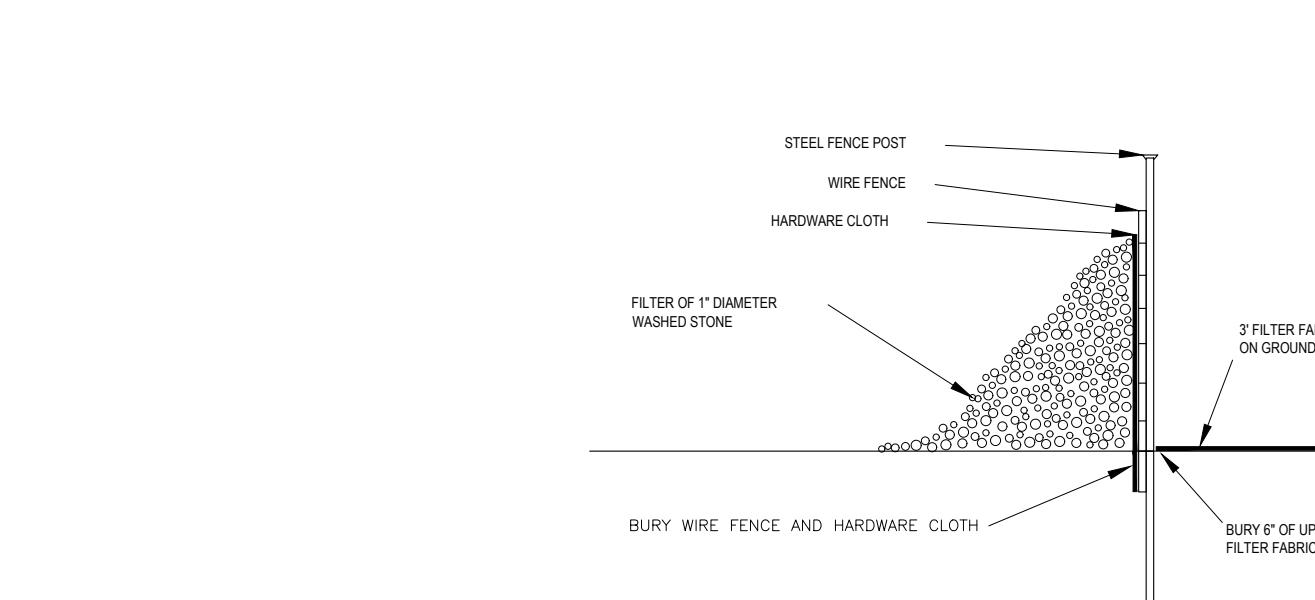


GENERAL NOTES:
 1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
 2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
 3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
 4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
 5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
 6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

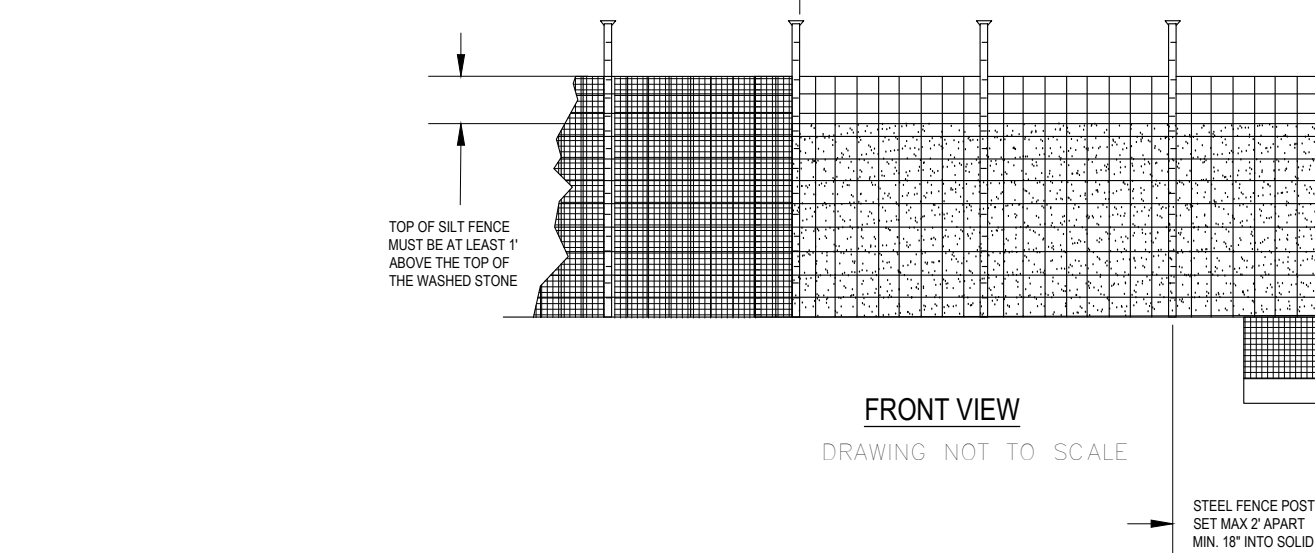
SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



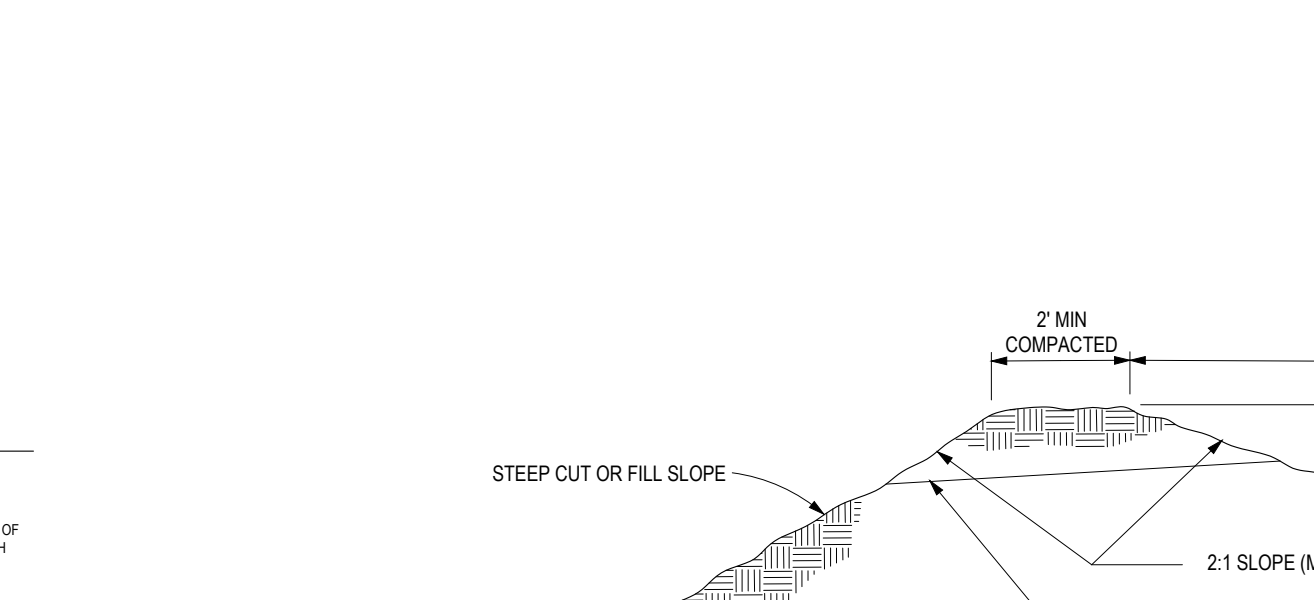
SILT FENCE OUTLET
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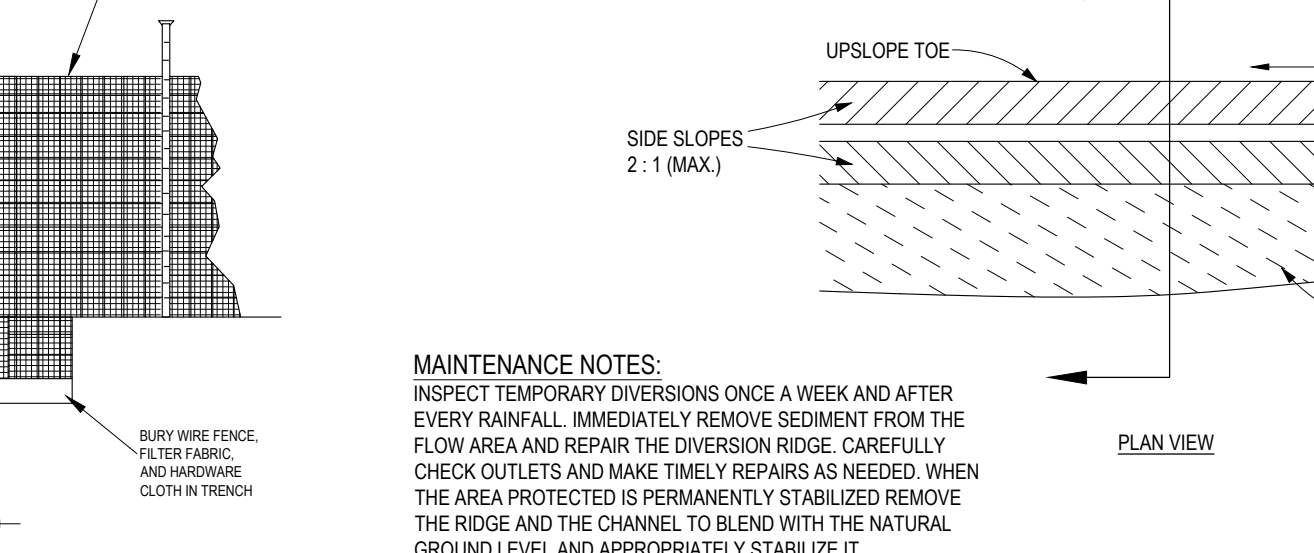
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SILT FENCE OUTLET
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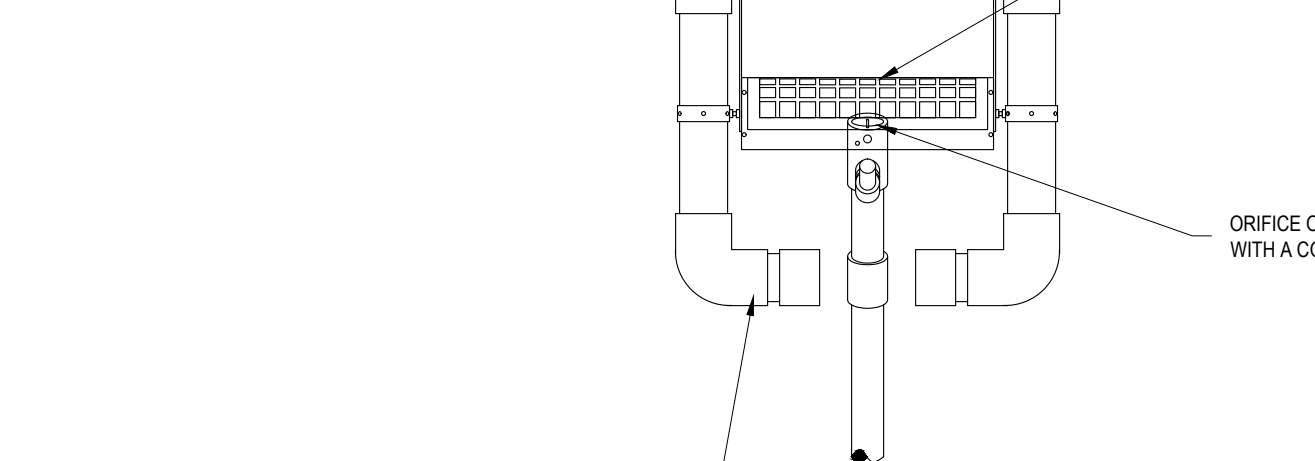
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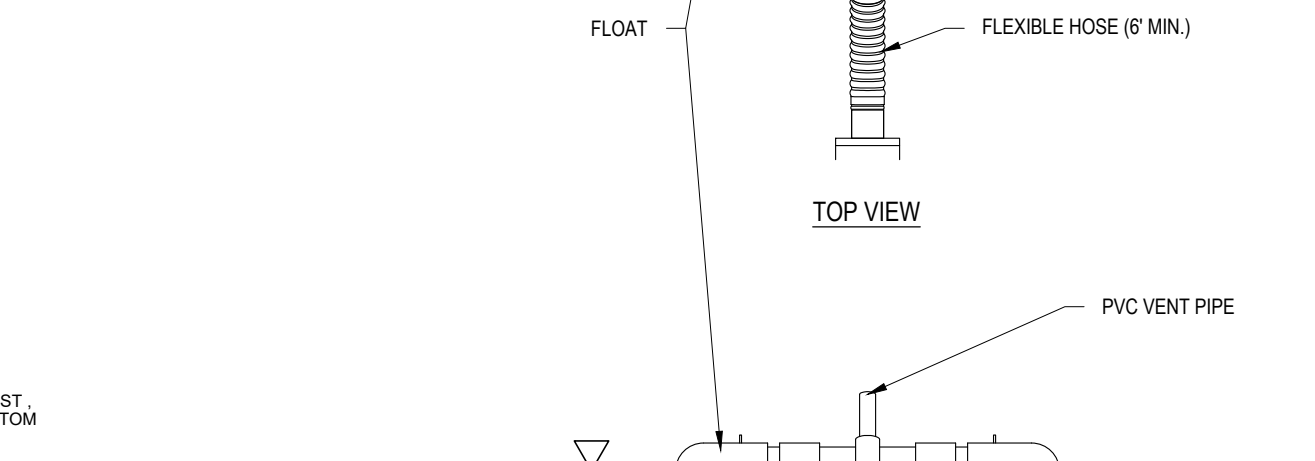
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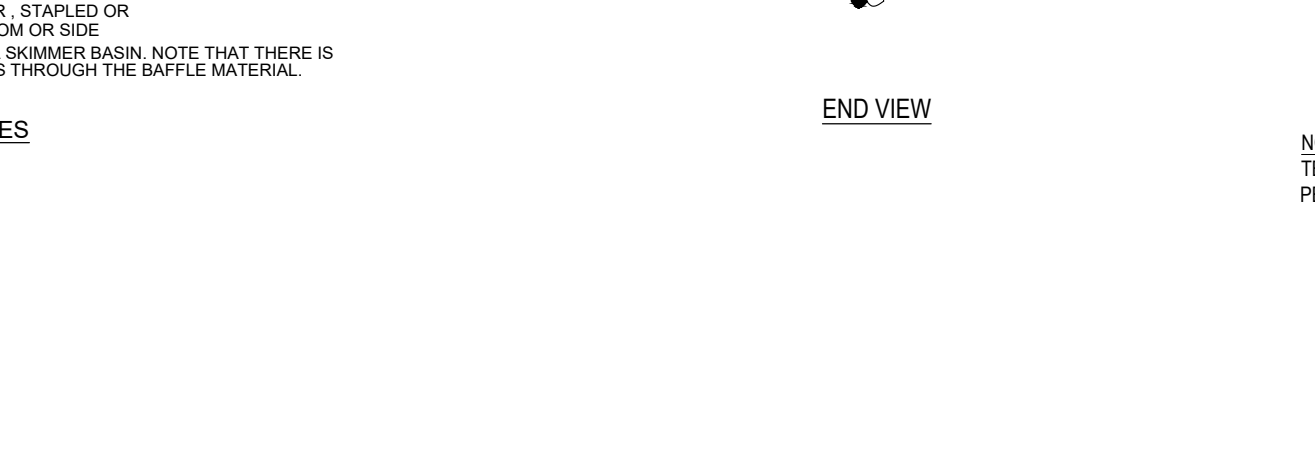
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SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



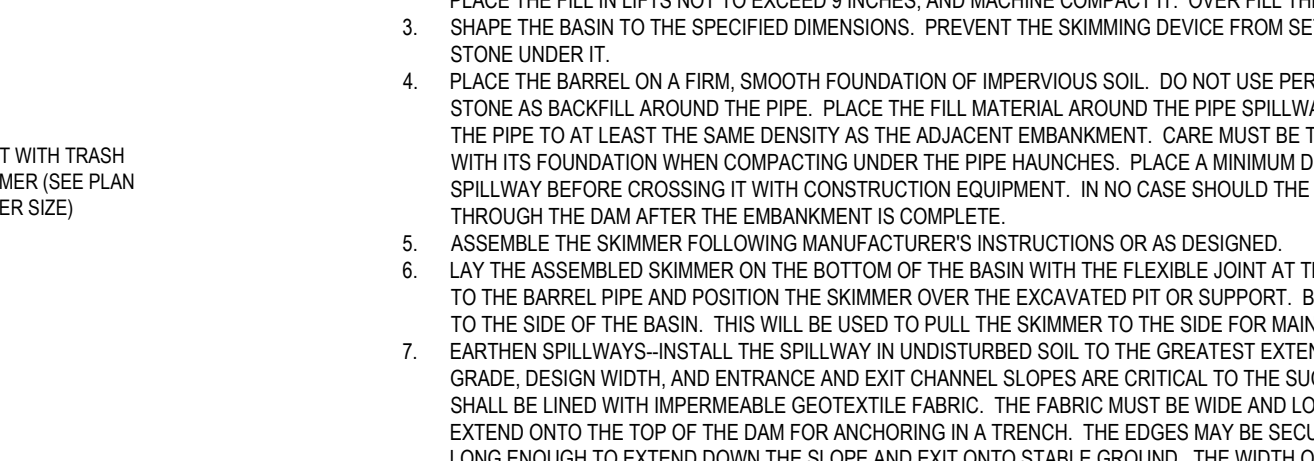
SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



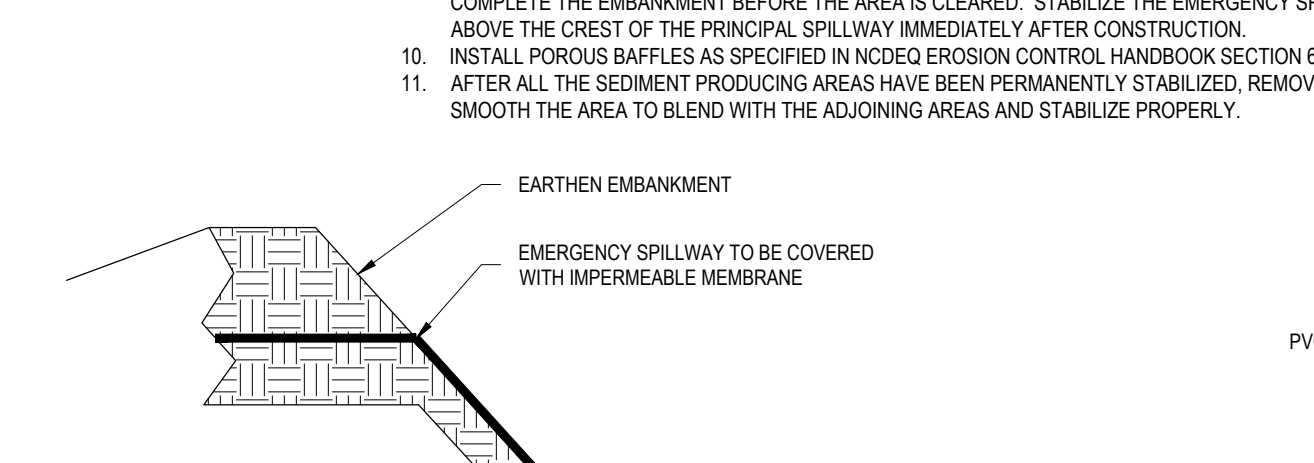
SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



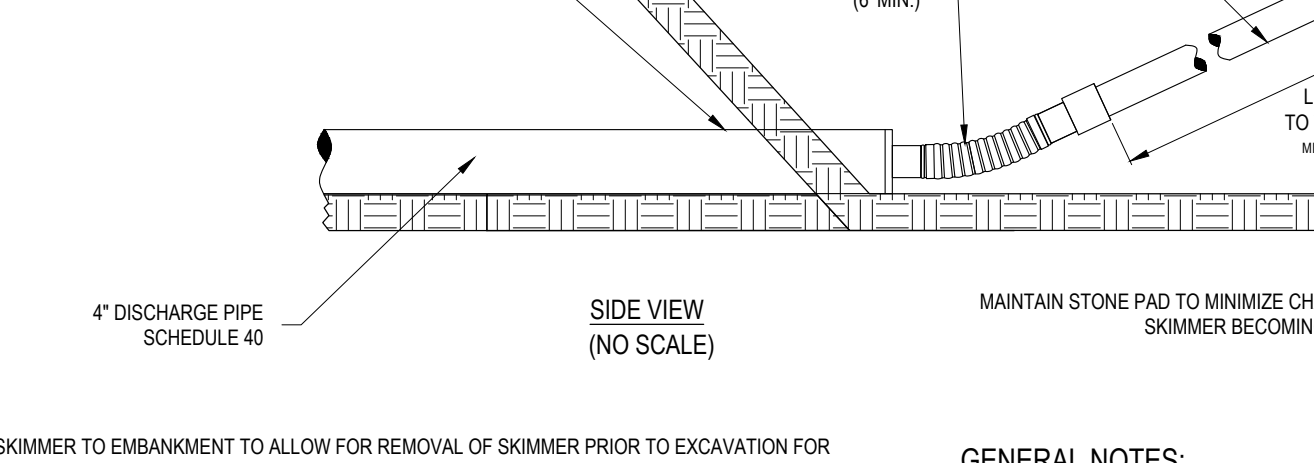
DIVERSION DITCH
 NOT TO SCALE



DIVERSION DITCH
 NOT TO SCALE



SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE



SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT
 NOT TO SCALE

- TEMPORARY SKIMMER BASIN CONSTRUCTION SPECIFICATIONS:**
- CLEAR, GRUB AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
 - ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
 - SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY PROVIDING LOW SUPPORT OF STONE UNDER IT.
 - PLACE THE BARREL ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM THE FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
 - ASSEMBLE THE SKIMMER FOLLOWING MANUFACTURER'S INSTRUCTIONS OR AS DESIGNED.
 - LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE. ATTACH THE FLEXIBLE JOINT TO THE BARREL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACH A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.
 - EARTHEN SPILLWAYS--INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY. THE SPILLWAY SHALL BE LINED WITH IMPERMEABLE GEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTOM AND SIDES AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8-INCH STAPLES OR PINS. THE FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPLICED; OTHERWISE WATER CAN GET UNDER THE FABRIC. IF THE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE SPILLWAY, MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTIONS SHALL OVERLAP THE LOWER SECTIONS SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
 - INLETS--DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE DIVERSIONS WITH RIPRAP PROTECTION TO IMPROVE BASIN TRAP EFFICIENCY.
 - EROSION CONTROL--CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.
 - INSTALL POROUS BAFFLES AS SPECIFIED IN NCDCEQ EROSION CONTROL HANDBOOK SECTION 6.85 POROUS BAFFLES.
 - AFTER ALL THE SEDIMENT PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.

TGS ENGINEERS
 706 HILLSBOROUGH ST.
 SUITE 200
 RALEIGH, NC 27603
 C-0275
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 FAX: 919-773-8839

TGS ENGINEERS

Plans Prepared For:
FOOTHILLS PUBLIC SHOOTING COMPLEX

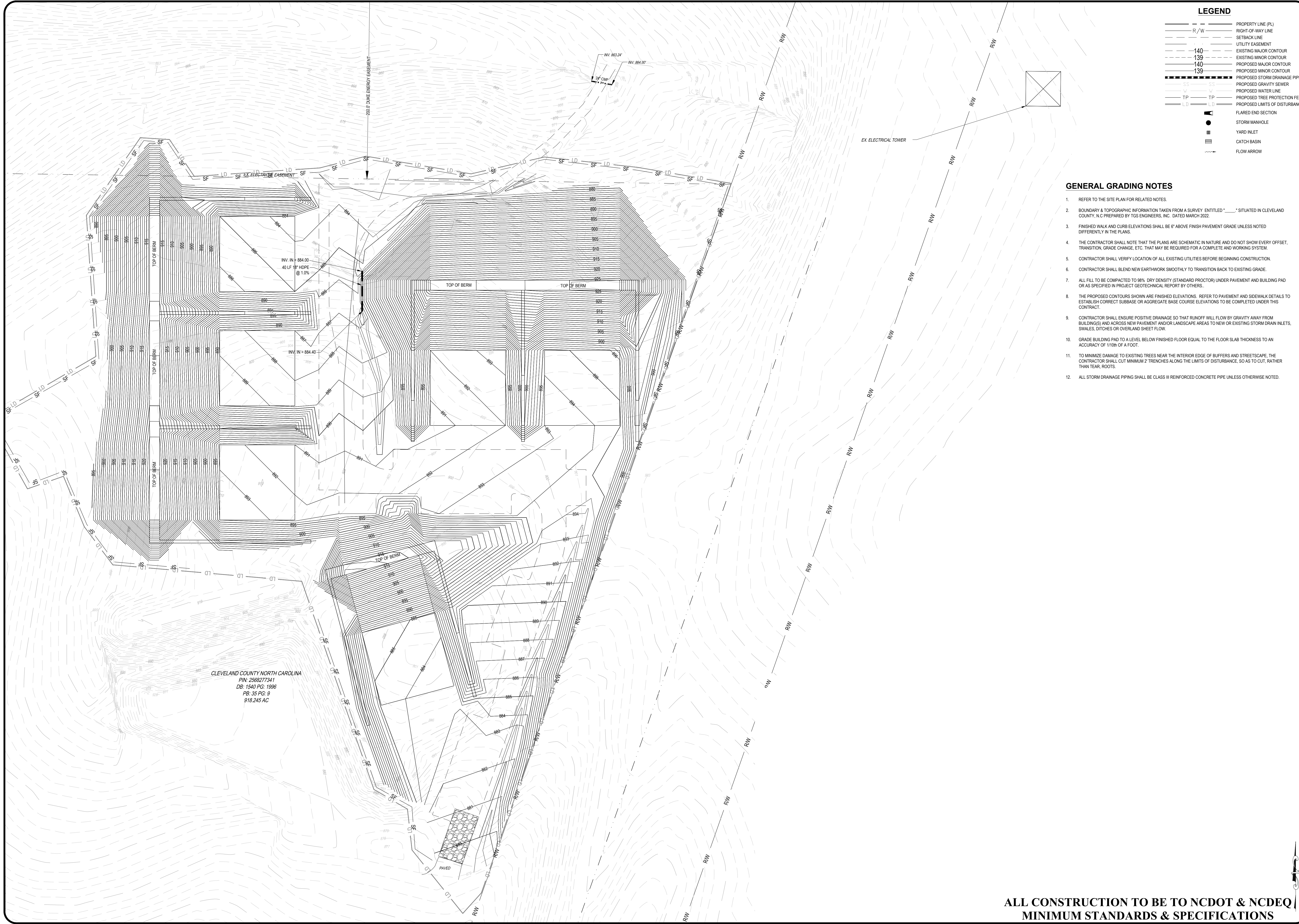
NO	DATE	DESCRIPTION	REVISIONS
1	05/02/2022		

SCALE: 00000
 TGS JOB NO. 00000
 PREPARED BY: LF
 CHECKED BY: CTR
 DATE: 04/12/2022

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

EROSION CONTROL DETAILS
 SHEET C-4.5 OF 9

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS



LEGEND

---	PROPERTY LINE (PL)
- - - -	RIGHT-OF-WAY LINE
---	SETBACK LINE
---	UTILITY EASEMENT
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	PROPOSED MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED STORM DRAINAGE PIPE
---	PROPOSED GRAVITY SEWER
---	PROPOSED WATER LINE
---	PROPOSED TREE PROTECTION FENCE
---	PROPOSED LIMITS OF DISTURBANCE
---	FLARED END SECTION
○	STORM MANHOLE
○	YARD INLET
□	CATCH BASIN
→	FLOW ARROW

GENERAL GRADING NOTES

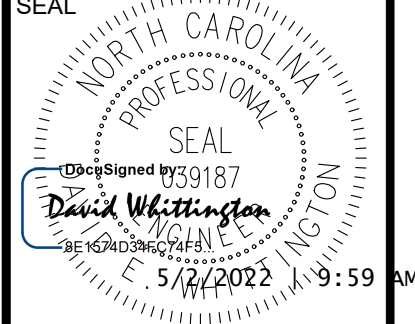
- REFER TO THE SITE PLAN FOR RELATED NOTES.
- BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY ENTITLED "..." SITUATED IN CLEVELAND COUNTY, N.C. PREPARED BY TGS ENGINEERS, INC. DATED MARCH 2022.
- FINISHED WALK AND CURB ELEVATIONS SHALL BE 6" ABOVE FINISH PAVEMENT GRADE UNLESS NOTED DIFFERENTLY IN THE PLANS.
- THE CONTRACTOR SHALL NOTE THAT THE PLANS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EVERY OFFSET, TRANSITION, GRADE CHANGE, ETC. THAT MAY BE REQUIRED FOR A COMPLETE AND WORKING SYSTEM.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- ALL FILL TO BE COMPACTED TO 98% DRY DENSITY (STANDARD PROCTOR) UNDER PAVEMENT AND BUILDING PAD OR AS SPECIFIED IN PROJECT GEOTECHNICAL REPORT BY OTHERS.
- THE PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS. REFER TO PAVEMENT AND SIDEWALK DETAILS TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL FLOW BY GRAVITY AWAY FROM BUILDING(S) AND ACROSS NEW PAVEMENT AND/OR LANDSCAPE AREAS TO NEW OR EXISTING STORM DRAIN INLETS, SWALES, DITCHES OR OVERLAND SHEET FLOW.
- GRADE BUILDING PAD TO A LEVEL BELOW FINISHED FLOOR EQUAL TO THE FLOOR SLAB THICKNESS TO AN ACCURACY OF 1/10th OF A FOOT.
- TO MINIMIZE DAMAGE TO EXISTING TREES NEAR THE INTERIOR EDGE OF BUFFERS AND STREETSCAPE, THE CONTRACTOR SHALL CUT MINIMUM 2' TRENCHES ALONG THE LIMITS OF DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR, ROOTS.
- ALL STORM DRAINAGE PIPING SHALL BE CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED.

CLEVELAND COUNTY NORTH CAROLINA
 PIN: 2586277341
 DB: 1540 PG: 1996
 PB: 35 PG: 9
 918.245 AC

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Plans Prepared By: **TGS ENGINEERS**
 Prepared For: **FOOTHILLS PUBLIC SHOOTING COMPLEX**

NO.	DESCRIPTION	DATE	REVISIONS
1		05/02/2022	



SCALE: 1"=40'	SCALE: 1"=40'
TGS JOB NO. 00000	DATE: 04/22/2022
PREPARED BY: LF	CHECKED BY: CTR
APPROVED BY: LF	DATE: 04/22/2022

FOOTHILLS PUBLIC SHOOTING COMPLEX
 283 FIELDING ROAD, CHERRYVILLE, NC 28021

GRADING & DRAINAGE PLAN

SHEET **C-5.0** OF **9**

ALL CONSTRUCTION TO BE TO NCDOT & NCDEQ MINIMUM STANDARDS & SPECIFICATIONS