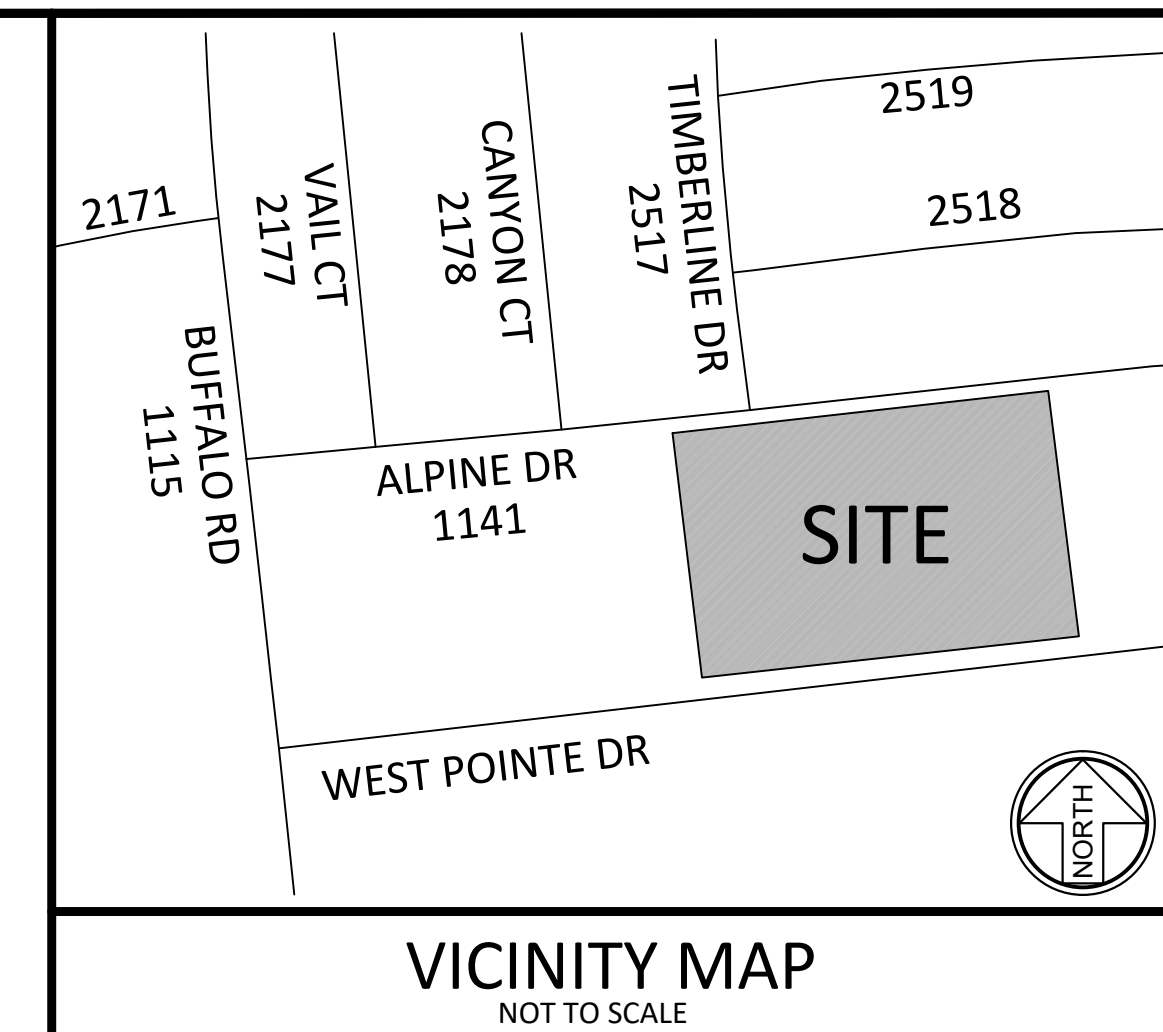
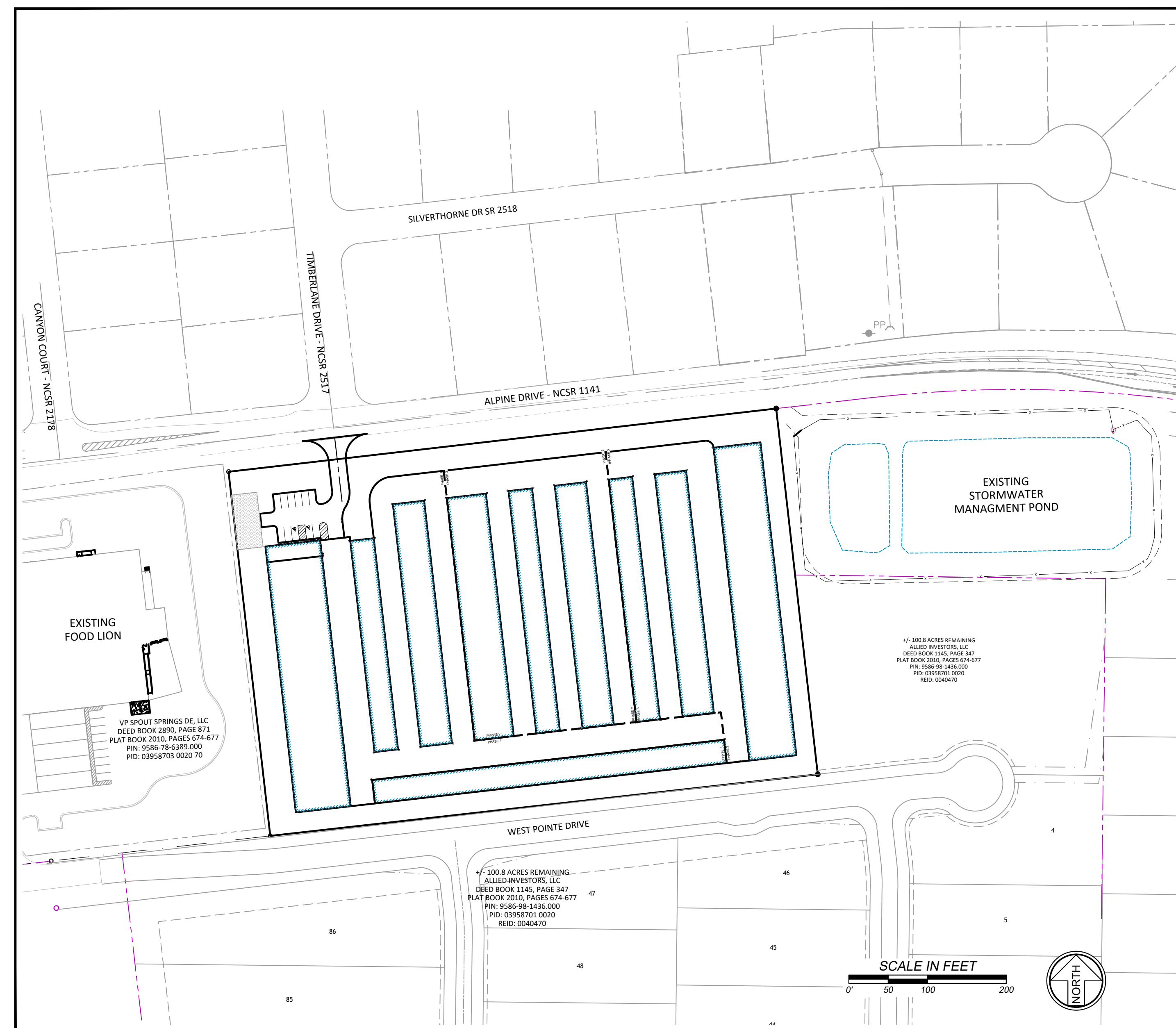


HARNETT SELF STORAGE

SPOUT SPRINGS, NORTH CAROLINA



VICINITY MAP
NOT TO SCALE



OVERALL PLAN

GENERAL NOTES:

- ALL WORK SHALL COMPLY WITH HARNETT COUNTY AND NCDOT STANDARDS AND SPECIFICATIONS.
- THIS PROJECT IS SERVED BY PUBLIC WATER OWNED, MAINTAINED AND OPERATED BY HARNETT COUNTY DEPARTMENT OF PUBLIC UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES AND REPAIRING ANY DAMAGE TO SAME. UTILITY LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION.
- PROVISIONS SHALL BE MADE TO ENSURE POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. NATURAL DRAINAGE FEATURES DISTURBED BY CONSTRUCTION MUST BE RE-ESTABLISHED. NO PONDING DUE TO SPOILS STOCKPILING OR OTHER ACTIVITIES SHALL BE PERMITTED.
- WORK IN PUBLIC RIGHT-OF-WAYS OR PRIVATE EASEMENTS SHALL BE ACCOMPLISHED BY THE CONTRACTOR ACCORDING TO THE REQUIREMENTS OR CONDITIONS OF THE ENCROACHMENT PERMIT OR OTHER LEGAL DOCUMENTS AS THOUGH DOCUMENTS WERE ISSUED IN THE CONTRACTOR NAME. THE CONTRACTOR SHALL MAINTAIN COPIES OF THESE DOCUMENTS ON THE SITES AT ALL TIMES.
- WHEN THE CONTRACTOR IS UNABLE TO COMPLETE HIS WORK AS SHOWN ON THE PLANS BECAUSE OF AN EXISTING UTILITY, CONTRACTOR SHALL STAKE THE LOCATION OF THE UTILITY PRIOR TO PROCEEDING AND CONTACT THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AGENCIES, THE OWNER, THE ENGINEER AND ALL OTHER CONCERNED PARTIES WHEN CONSTRUCTION IS TO COMMENCE. PRIOR TO ANY CONSTRUCTION A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE MUNICIPALITY / AUTHORITY, THE CONTRACTOR, THE ENGINEER AND ANY OTHER INTERESTED PARTY.
- DATA REQUIRED FOR PREPARATION OF RECORD DRAWINGS SHALL BE OBTAINED BY THE CONTRACTOR AT THE TIME FOR INSTALLATION. DATA SHALL BE ACCUMULATED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD AND PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT
- INSPECTIONS SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE HARNETT COUNTY, NCDNER AND NCDOT STANDARDS.
- ALL EXCAVATED EXCESS OR WASTE SOILS AND MATERIAL SHALL BE REMOVED FROM THE SITE BY CONTRACTOR EXCEPT AS SPECIFICALLY APPROVED IN WRITING BY BOTH THE ENGINEER AND OWNER.
- WHEN CONCRETE SIDEWALKS, CURB AND GUTTER SECTIONS OR ASPHALT PAVEMENT ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES, THEY SHALL BE REPLACED IN A TIMELY MANNER BY THE CONTRACTOR TO ASSURE THE CONTINUED USE OF THESE FACILITIES BY ALL CONCERNED.
- CONTRACTOR IS TO COMPLY WITH ALL PROVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES WHEN WORKING ADJACENT TO AN EXISTING PUBLIC HIGHWAY RIGHT OF WAY.
- THE CONTRACTOR WILL MAINTAIN ALL EXISTING ROADS IN A NEAT AND CLEAN CONDITION THROUGHOUT THE COURSE OF THE PROJECT CONSTRUCTION.

SHEET SCHEDULE

SHEET TITLE	SHEET NO.	ORIGINAL DATE	LATEST REVISION DATE
COVER SHEET	01	MAY 18, 2022	-
EXISTING CONDITION	C 1.0	MAY 18, 2022	
SITE PLAN	C 2.0	MAY 18, 2022	
EROSION CONTROL PLAN - INITIAL PHASE	C 3.0	MAY 18, 2022	
EROSION CONTROL PLAN - CONSTRUCTION PHASE	C 3.1	MAY 18, 2022	
EROSION CONTROL PLAN - FINAL PHASE	C 3.2	MAY 18, 2022	
EROSION CONTROL GROUND STABILIZATION AND SELF INSPECTION NOTE	C 3.4	MAY 18, 2022	
EROSION CONTROL NOTE	C 3.5	MAY 18, 2022	
EROSION CONTROL DETAIL	C 3.6	MAY 18, 2022	
EROSION CONTROL DETAIL	C 3.7	MAY 18, 2022	
EROSION CONTROL DETAIL	C 3.8	MAY 18, 2022	
GRADING AND DRAINAGE PLAN	C 4.0	MAY 18, 2022	
STORM DRAINAGE PROFILES	C 4.1	MAY 18, 2022	
STORM DRAINAGE PROFILES	C 4.2	MAY 18, 2022	
UTILITY PLAN AND DETAILS	C 5.0	MAY 18, 2022	
SITE DETAIL	C 6.0	MAY 18, 2022	
MODIFIED PERMIT DRAINAGE AREA MAP	D 1.0	MAY 18, 2022	
LANDSCAPE PLAN AND DETAIL	L 1.0	MAY 18, 2022	

REVISION OCCURRENCE LIST

REVISION NO.	DATE	REVISION DESCRIPTION	BY

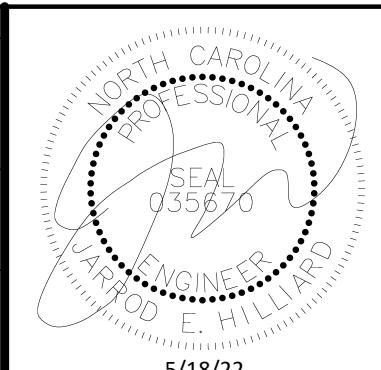
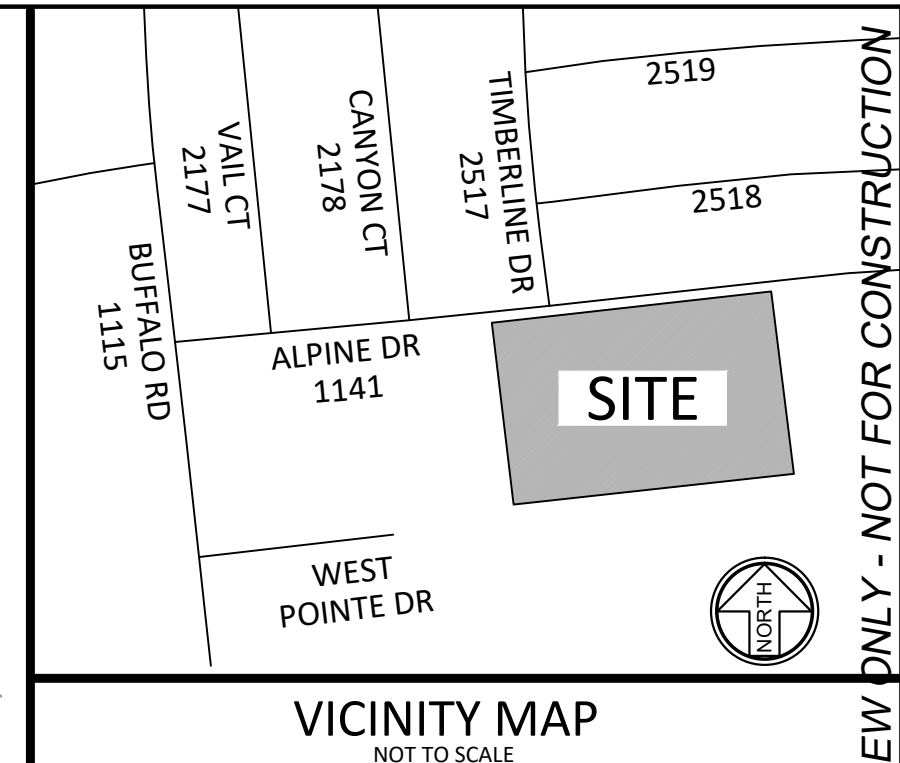
THIS SET IS CURRENT THROUGH SHEET DATED: MAY 18, 2022

OWNER
 ALLIED INVESTORS, INC.
 F.K.A.: ALLIED DEVELOPMENT, INC.
 350 WAGONER DRIVE
 FAYETTEVILLE, NC 28303

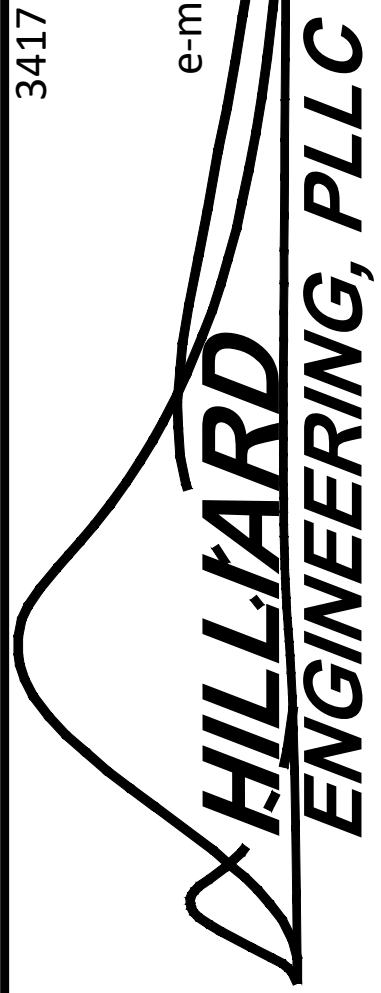
FINAL
 - FOR REVIEW ONLY -
 NOT FOR CONSTRUCTION



3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836



PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836



CONTROL CORNER
 EXISTING 5/8" SOLID IRON
 NC GRID COORDINATES
 NORTH: 568,650.99'
 EAST: 1,387,948.35'
 NAD 83-2011

VP SPOUT SPRINGS DE, LLC
 DEED BOOK 1145, PAGE 347
 PLAT BOOK 2010, PAGES 674-677
 PIN: 9586-98-1436.000
 PID: 03958701 0020
 REID: 0040470

E 280.35'
 IE

EXISTING 5/8" SOLID IRON

WEST POINTE DRIVE
 60' PUBLIC R/W & PUBLIC UTILITY - 31' B-B

S 83°34'52" W 699.81'

EXISTING PRIVATE STORM WATER EASEMENT
 PLAT BOOK 2010, PAGES 674-677

LOT 1
 7.500 ACRES
 CALCULATED BY
 COORDINATE METHOD

+/- 100.8 ACRES REMAINING
 ALLIED INVESTORS, LLC
 DEED BOOK 1145, PAGE 347
 PLAT BOOK 2010, PAGES 674-677
 PIN: 9586-98-1436.000
 PID: 03958701 0020
 REID: 0040470

+/- 100.8 ACRES REMAINING
 ALLIED INVESTORS, LLC
 DEED BOOK 1145, PAGE 347
 PLAT BOOK 2010, PAGES 674-677
 PIN: 9586-98-1436.000
 PID: 03958701 0020
 REID: 0040470

EXISTING PRIVATE STORM WATER EASEMENT
 PLAT BOOK 2010, PAGES 674-677

**ATLAS SURVEYING
 AND MAPPING**
 1503 OLD CARBONTON ROAD
 SANFORD, NC 27330
 919 478-3945
 FIRM: 1458
 ATLASURVEYINGANDMAPPING@GMAIL.COM

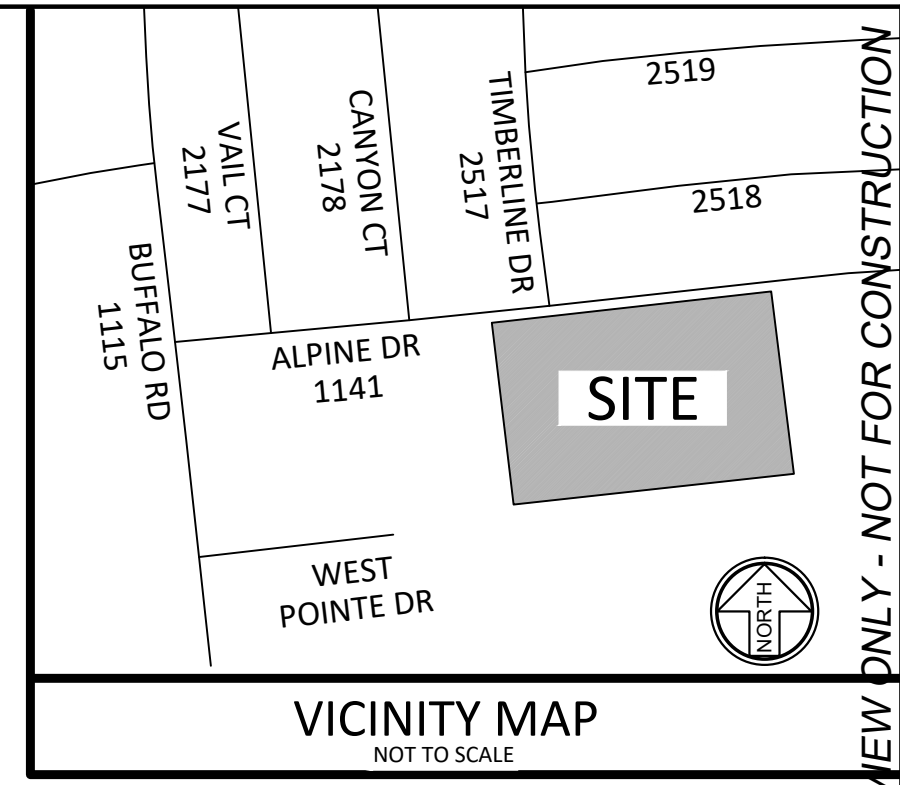
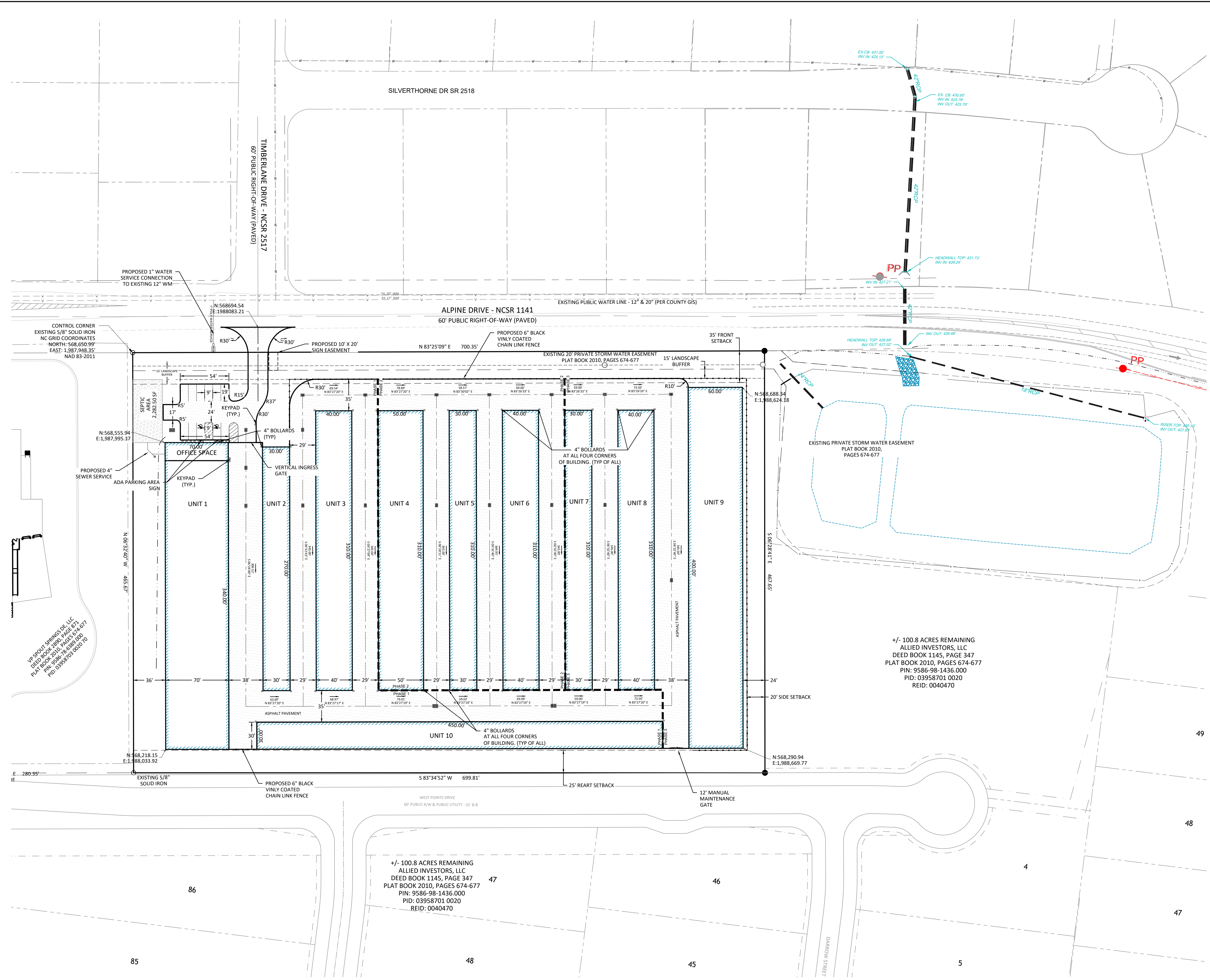
BOOK 1452, PAGE 155; BOOK 1521, PAGE 500; PLAT
 CABINET 2008, SLIDE 153; PLAT CABINET 2011, SLIDE
 69
 FLOOD HAZARD: ZONE X
 MAP: 3710958600J ~ PANEL: 9586
 EFFECTIVE: 3 OCT. 2006



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

EXISTING CONDITIONS
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	C1.0
	CIVIL



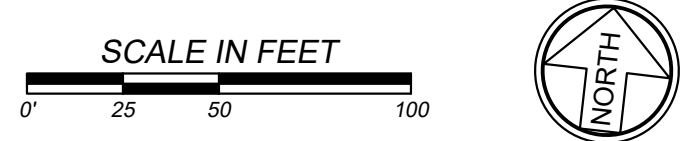
SITE DATA:

PROJECT:	HARNETT SELF STORAGE
ZONED:	COMMERCIAL
OWNER:	ALLIED INVESTORS INC 350 WAGONER DRIVE FAYETTEVILLE, NC 28303 PHONE: 919-606-4696 cbd1971@gmail.com
PROPERTY LOCATION:	ALPINE DRIVE SANFORD, NC 27332
PIN #:	9586-88-3426.00
NEIGHBORHOOD:	00300F
PROPOSED USED:	SELF STORAGE
TOTAL SITE AREA:	7.50 AC
DEED REFERENCE:	BOOK 1145, PAGE 0347
THE SUBJECT PROPERTY LIES IN A ZONE X ACCORDING TO FIRM #3710958001 EFFECTIVE DATE 10/03/2006	

SITE LEGEND

	STANDARD DUTY ASPHALT PAVEMENT (SEE DETAIL)
--	---

- NOTES:**
- RADI AND PARKING DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 - DEVELOPMENT SHALL COMPLY WITH HARNETT COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS, LATEST EDITIONS.

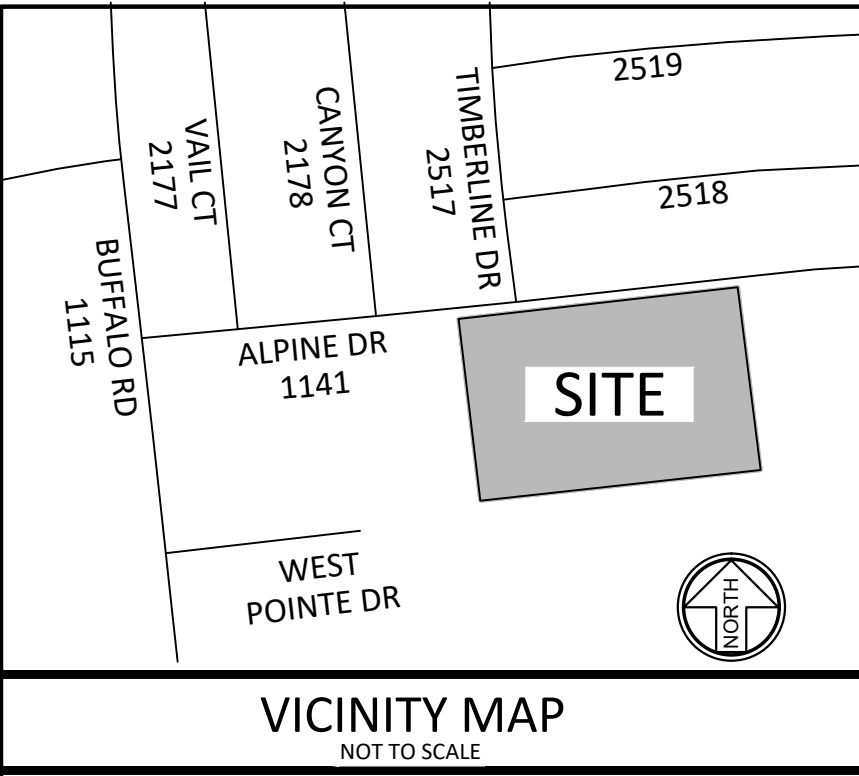


NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

SITE PLAN
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA
 PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

HILLIARD ENGINEERING, PLLC

DESIGNED BY: JEH
 DRAWN BY: -
 APPROVED BY: JEH
SHEET: C2.0
 CIVIL



EROSION CONTROL MEASURE - INITIAL PHASE:

1. ENSURE ALL APPROVALS HAVE BEEN OBTAINED PRIOR TO ANY LAND DISTURBANCE.
2. CONDUCT ON-SITE PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER, ENGINEER AND CONSTRUCTION MANAGER TO REVIEW THE PROJECT AND EROSION CONTROL SEQUENCES.
3. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT AREA.
4. INSTALL CONSTRUCTION ENTRANCE AT LOCATION SHOWN ON THE PLAN - OFF OF EDGE OF EXISTING PAVEMENT ON ALPINE DRIVE.
5. FLAG LIMITS OF ALL DISTURBED AREA AS SHOWN ON THE PLANS FOR INSTALLATION OF PERIMETER EROSION CONTROL DEVICES - SILT FENCE AND SILT FENCE OUTLET AND SEDIMENT BASIN WHERE SHOWN ON THE PLANS.
6. INSTALL ALL SILT FENCE AND SEDIMENT BASINS AS SHOWN ON THE PLANS.
7. CONSTRUCT TEMPORARY DIVERSION DITCHES AS SHOWN ON THE PLANS.
8. "EROSION AND SEDIMENT CONTROL (E&S) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR. A COPY OF THE E&S PERMIT, THE COC, AND A HARD COPY OF THE PLAN MUST BE KEPT ON SITE, PREFERABLY IN A PERMITS BOX, AND ACCESSIBLE DURING INSPECTION." THE COC CAN BE OBTAINED BY FILLING OUT THE ELECTRONIC NOTICE OF INTENT (E-NOI) FORM AT DEQ.NC.GOV/NG01. PLEASE NOTE, THE E-NOI FORM MAY ONLY BE FILLED OUT ONCE THE PLANS HAVE BEEN APPROVED.
9. WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, GROUND COVER SHALL BE PROVIDED ON EXPOSED SLOPES AND PERMANENT GROUND COVER SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
10. THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES AND COMPLETE THE FOLLOWING COMBINED SELF-INSPECTION FORM FOUND ON THE DEMLR WEBSITE:
<https://files.nc.gov/ncdeq/energy%20Mineral%20and%20Land%20Resources/Stormwater/NPDES%20General%20Permits/DEMLR-CSW-Monitoring-Form-Rev-August-8-2019.pdf>
 TWELVE MONTHS OF COMPLETE INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS RECOMMENDED A COPY BE KEPT IN A PERMITS BOX. (GS 113A-54.1 (E), 15ANCAC 04B.0131, NCG01 PART III SECTIONS A AND B).
11. CLEAR AND GRUB SITE (WHERE REQUIRED) AND LEGALLY DISPOSE OF ALL DEBRIS OFF SITE.
12. "SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING.
13. TOTAL SITE DISTURBED AREA = 7.52 AC.

GENERAL NOTES:

PURSUANT TO G.S. 133-A57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 OR 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PERMANENT GROUND COVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION.

PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 15 CALENDAR DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

ANY BORROW MATERIAL BROUGHT ONTO THIS SITE MUST BE FROM A LEGALLY PERMITTED MINE SITE OR OTHER APPROVED SOURCE. A SINGLE-USE BORROW OR WASTE AREA SITE IS ONLY PERMISSIBLE IF IT IS OPERATED UNDER CONTROL OF THE FINANCIALLY RESPONSIBLE PERSON OR FIRM THAT IS DEVELOPING THIS SITE. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN IS REQUIRED FOR ALL SINGLE USE BORROW AND WASTE SITES.

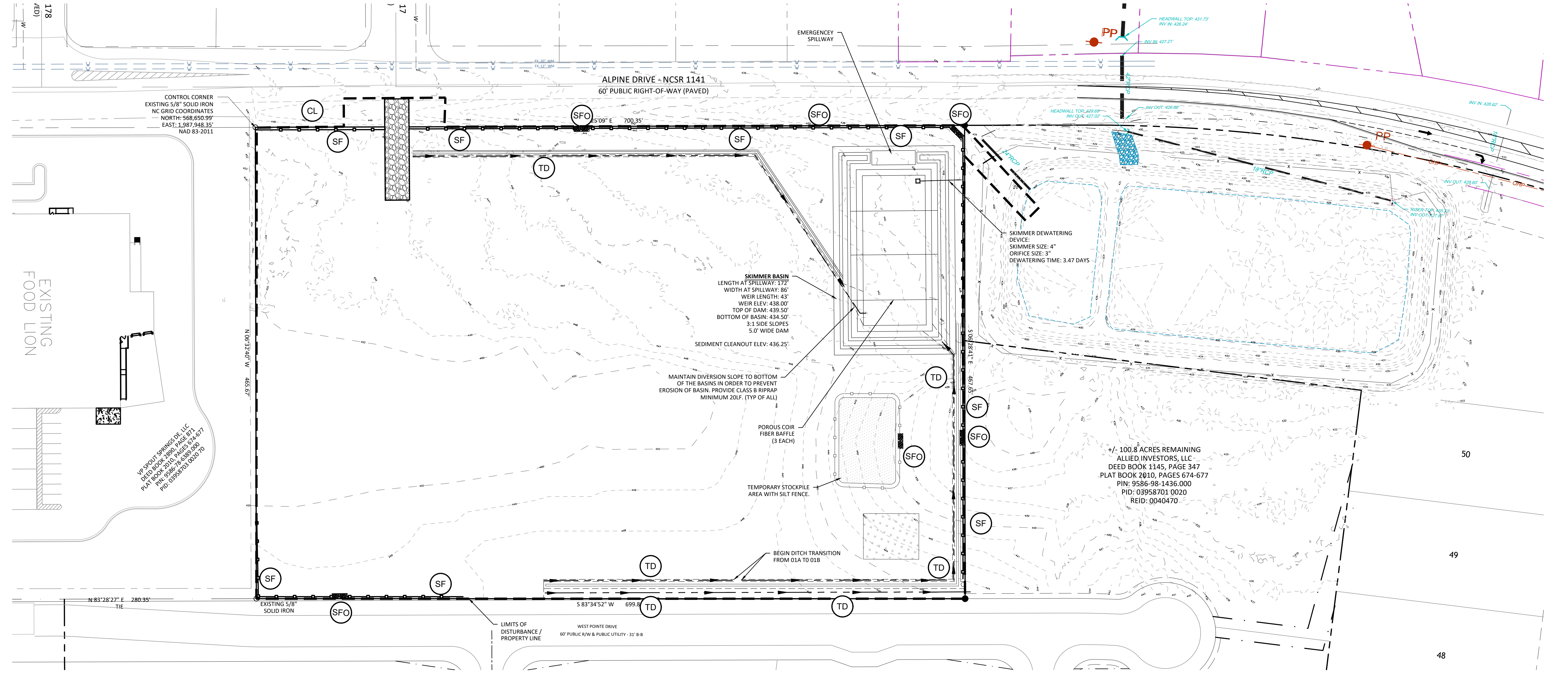
EROSION CONTROL DESIGN, DETAILS AND MAINTENANCE SPECIFICATIONS SHALL COMPLY WITH CURRENT NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SELF INSPECTION NOTE:

THE LANDOWNER, THE FINANCIALLY RESPONSIBLE PARTY, OR THE LANDOWNER'S OR THE FINANCIALLY RESPONSIBLE PARTY'S AGENT SHALL PERFORM AN INSPECTION OF THE AREA COVERED BY THE PLAN AFTER EACH PHASE OF THE PLAN HAS BEEN COMPLETED AND AFTER ESTABLISHMENT OF TEMPORARY GROUND COVER IN ACCORDANCE WITH G.S. 113A-57(2). THE PERSON WHO PERFORMS THE INSPECTION SHALL MAINTAIN AND MAKE AVAILABLE A RECORD OF THE INSPECTION AT THE SITE OF THE LAND-DISTURBING ACTIVITY. THE RECORD SHALL SET OUT ANY SIGNIFICANT DEVIATION FROM THE APPROVED EROSION CONTROL PLAN, IDENTIFY ANY MEASURES THAT MAY BE REQUIRED TO CORRECT THE DEVIATION, AND DOCUMENT THE COMPLETION OF THOSE MEASURES. THE RECORD SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER HAS BEEN ESTABLISHED AS REQUIRED BY THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE INSPECTIONS REQUIRED BY THIS SUBSECTION SHALL BE IN ADDITION TO INSPECTIONS REQUIRE BY G.S. 113A-61.1. SEE NCG01 INSPECTION, RECORDKEEPING AND REPORTING PLAN SHEET.

SYMBOL	PRACTICE	DESCRIPTION
CE	CONSTRUCTION ENTRANCE	A STONE STABILIZED PAD LOCATED AT ANY POINT THAT TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING PLOT WHICH WILL REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE CONSTRUCTION SITE.
SF	SILT FENCE	A TEMPORARY STRUCTURE USED TO SLOW THE VELOCITY OF RUN-OFF, CAUSE SEDIMENT DEPOSITION AT THE STRUCTURE, AND FILTER SEDIMENT FROM RUN-OFF.
SFO	SILT FENCE OUTLET PROTECTION	A TEMPORARY STRUCTURE AS A REINFORCED OUTLET AT LOW POINTS OF THE SILT FENCE. INSTALL #57 WASHED STONE AT UPSTREAM FLOW WITH HARDWARE CLOTH. (SEE DETAIL.)
TD	TEMPORARY DIVERSION	A TEMPORARY RIDGE OR EXCAVATED CHANNEL OR COMBINATION RIDGE AND CHANNEL CONSTRUCTED ACROSS SLOPING LAND ON A PREDETERMINED GRADE.
CL	CONSTRUCTION LIMITS	A DEFINED AREA THAT ALL LAND DISTURBANCE WILL OCCUR DURING CONSTRUCTION.
SK	SKIMMER SEDIMENT BASIN	AN EARTHEN EMBANKMENT SUITABLY LOCATED TO CAPTURE RUNOFF, WITH A TRAPEZOIDAL SPILLWAY LINED WITH AN IMPERMEABLE GEOTEXTILE OR LAMINATED PLASTIC MEMBRANE, AND EQUIPPED WITH A FLOATING SKIMMER FOR DEWATERING.
BF	POROUS BAFFLE	POROUS BARRIERS INSTALLED INSIDE A TEMPORARY SEDIMENT TRAP, SKIMMER BASIN, OR SEDIMENT BASIN TO REDUCE THE VELOCITY AND TURBULENCE OF THE WATER FLOWING THROUGH THE MEASURE, AND TO FACILITATE THE SETTLING OF SEDIMENT FROM THE WATER BEFORE DISCHARGE.

TEMPORARY DIVERSION DITCHES						
DITCH NAME	LENGTH	AVE. SLOPE (%)	TOTAL DEPTH (FT)	BERM HEIGHT (FT)	BOTTOM BERM WIDTH (FT)	TOP BERM WIDTH (FT)
01-OFFSITE	420	1.0	1.5	1.3	6.0	2.0
01A	178	1.0	1.5	1.0	6.0	2.0
01B	455	1.0	1.5	0.8	6.0	2.0
2	500	1.0	1.5	0.6	6.0	2.0



CONTROL CORNER
 EXISTING 5/8" SOLID IRON
 NC GRID COORDINATES
 NORTH: 568.650.99'
 EAST: 1,987.948.35'
 NAD 83-2011

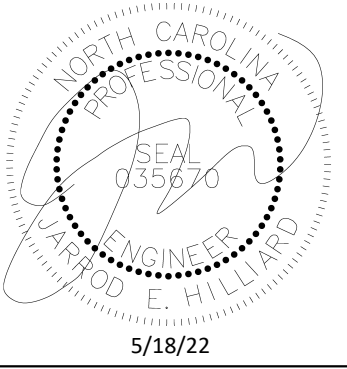
VP-SP017 SPRINGS OF LLC
 DEED BOOK 280, PAGE 374-377
 PLAT BOOK 2010, PAGES 674-677
 PIN: 9586-98-1436.000
 PID: 03958701 0020

+/- 100.8 ACRES REMAINING
 ALLIED INVESTORS, LLC
 DEED BOOK 1145, PAGE 347
 PLAT BOOK 2010, PAGES 674-677
 PIN: 9586-98-1436.000
 PID: 03958701 0020
 REID: 0040470



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330



PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836



EROSION CONTROL PLAN -
 INITIAL PHASE

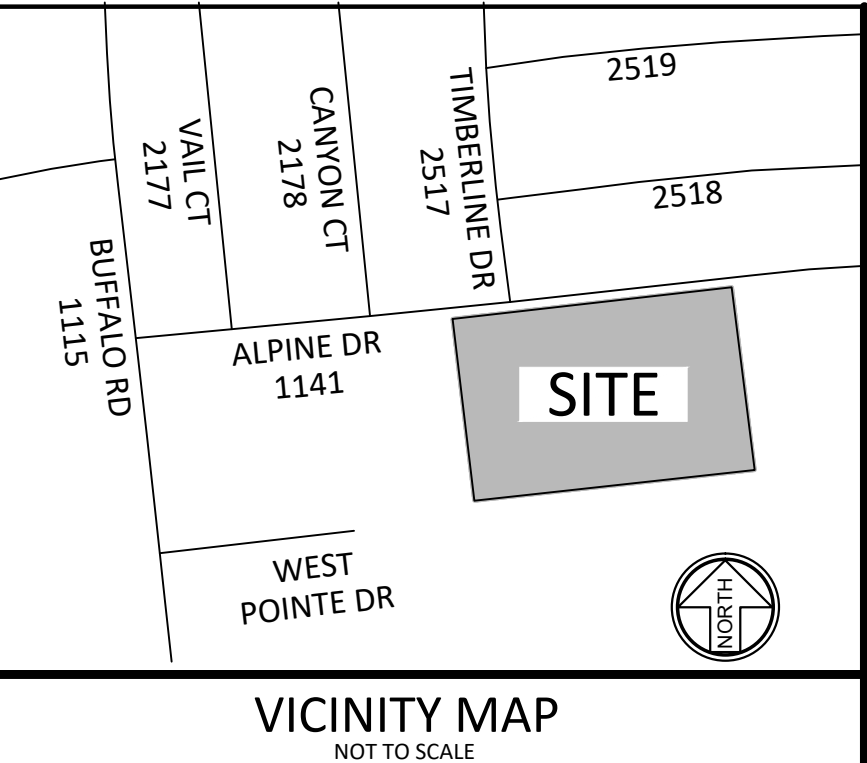
HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH

DRAWN BY: -

APPROVED BY: JEH

SHEET:
C3.0
 CIVIL



- ### CONSTRUCTION SEQUENCE & EROSION CONTROL MEASURES - CONSTRUCTION PHASE:
- CHECK ALL SILT FENCE AND TEMPORARY DIVERSION DITCHES, REPAIR AS NECESSARY. ASSURE ANY ERODED AREA ARE STABILIZED WITH TEMPORARY SEEDING AND MULCH.
 - INSTALL THE SEWER AND WATER SYSTEMS AS SHOWN ON THE PLANS.
 - INSTALL STORM DRAINAGE SYSTEMS. (SEE STORM TRUNK CONSTRUCTION NOTE THIS SHEET.)
 - INSTALL INLET / OUTLET BMP'S WHERE REQUIRED.
 - GRADE AND PREPARE SUBGRADE FOR PAVEMENT AREA.
 - PLACE COMPACTED G.A.B.C FOR ASPHALT CONSTRUCTION.
 - FINISH FINE GRADING THE ROAD RIGHT OF WAY AND OPEN SPACES.
 - PLACE ASPHALT, PAVEMENT MARKINGS AND SIGNAGE WHERE APPLICABLE.
 - FOR PHASE 3 CONSTRUCTION: REMOVE TEMPORARY SEDIMENT BASIN AND FILL IN AND GRADE SITE TO PROPOSE GRADE. SEE BASIN REMOVAL SEQUENCE.
 - EXTEND SILT FENCE TO PROPERTY CORNER.
 - REPEAT CONSTRUCTION SEQUENCES OF PHASE 1 AND 2 TO PHASE 3.
 - PLACE ASPHALT, PAVEMENT MARKINGS, AND SIGNAGE WHERE APPLICABLE.

- ### BASIN REMOVAL SEQUENCE:
- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE IF THE BASIN CAN BE REMOVED. INSTALL SILT FENCING AND EXTEND TO PROPERTY CORNER.
 - REMOVE BASIN AND ASSOCIATED TEMPORARY DIVERSION DITCHES. FINE GRADE AREAS IN PREPARATION FOR SEEDING.
 - PERFORM SEEDBED PREPARATION, SEED, MULCH AND ASPHALT TACH AND RESULTING BARE AREA IMMEDIATELY.
 - WHEN SITE IS FULLY STABILIZED, CALL NCDEQ FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

- ### CONSTRUCTION SEQUENCE & EROSION CONTROL MEASURES - FINAL PHASE:
- UPON COMPLETING ALL SITE IMPROVEMENTS AND FINAL GRADING, STABILIZE ALL DISTURBED AREAS PER LANDSCAPE PLAN. WATER AND MAINTAIN ALL LANDSCAPED AREAS TO ENSURE PROPER GROUND COVERAGE PRIOR TO FINAL APPROVAL.
 - RE-GRADE AND CONVERT SEDIMENT BASIN TO TEMPORARY OUTFALL BASIN FOR STORM DRAINAGE DISCHARGE. FILL IN EASTERN HALF OF THE SEDIMENT BASIN AND REMOVE DAM. LEVEL BOTTOM BASIN TO EXISTING GRADE AS SHOWN ON THE PLANS. STABILIZED BASIN BANK AND BOTTOM BASIN WITH PERMANENT VEGETATION AND EROSION CONTROL MATTING.
 - CONSTRUCT PIPE DISCHARGE DITCH AS SHOWN ON THE PLAN. DITCH SHALL GRADE TO RE-GRADED SEDIMENT BASIN AS SHOWN ON THE PLANS.
 - INSTALL CLASS B RIPRAP LINING AS SHOWN ON THE PLAN.
 - PERIMETER MEASURES, SILT FENCE AND TEMPORARY DIVERSION MUST BE LEFT INPLACE UNTIL ALL UPLAND AREAS ARE STABILIZED WITH PERMANENT VEGETATION.
 - SEE SEEDING SCHEDULE PROVIDED IN EROSION CONTROL DETAIL.
 - AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE. SEDIMENT BASINS MAY NOT BE REMOVED OR CONVERTED TO PERMANENT BMP'S UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. (GS 113A-57(3). 15A NCAC 04B. 0113)
 - WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE E&SC PLAN. AFTER DEMLR INFORMS THE PERMITTEE OF THE PROJECT CLOSE OUT, VIA INSPECTION REPORT, THE PERMITTEE SHALL VISIT DEQ.NC.GOV/NCG01 TO SUBMIT AN ELECTRONIC NOTICE OF TERMINATION (e-NOT). A \$100 ANNUAL GENERAL PERMIT FEE WILL BE CHARGED UNTIL THE e-NOT HAS BEEN FILLED OUT.

GROUND STABILIZATION REQUIREMENTS

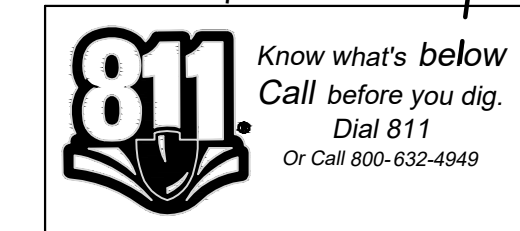
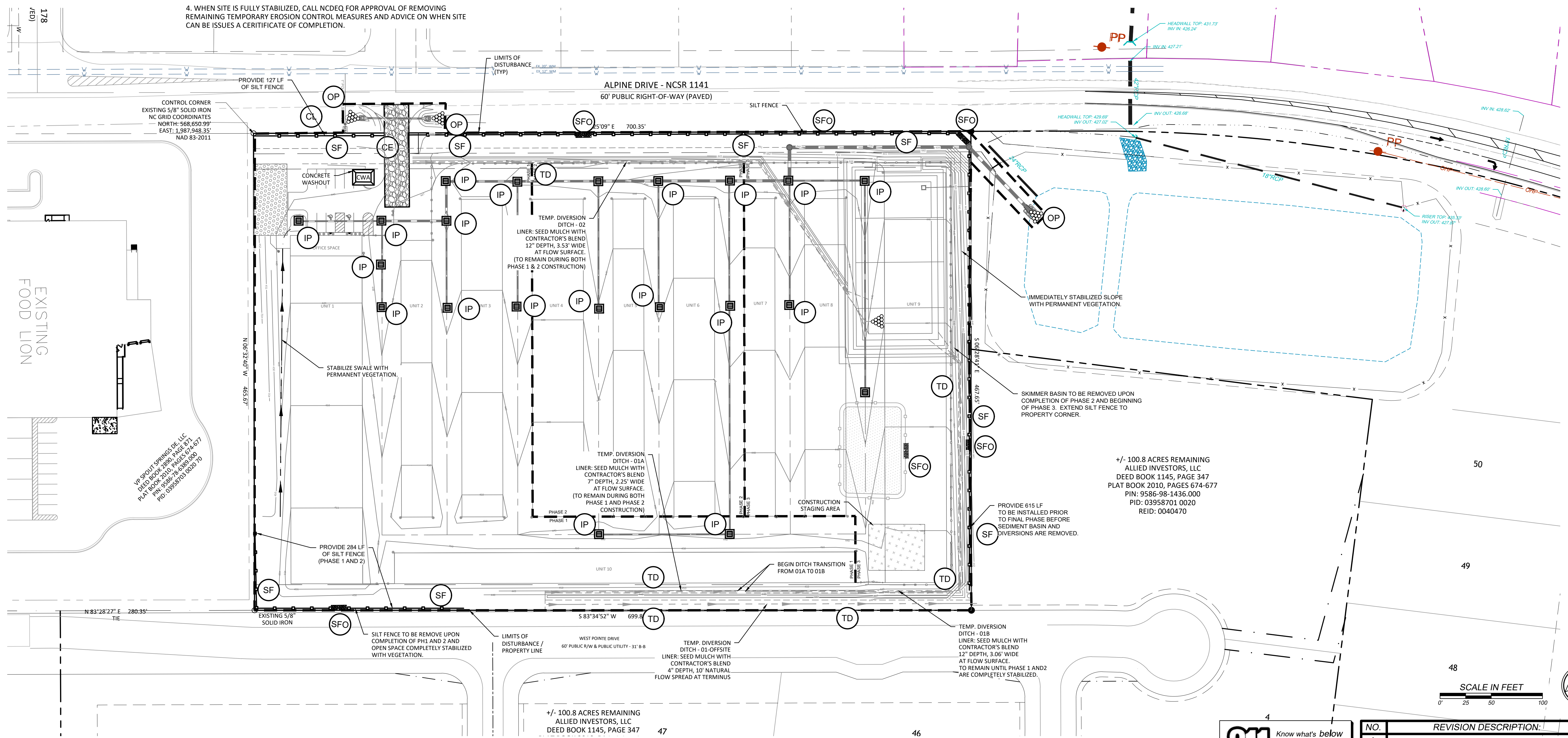
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	APPLICABLE THIS PROJECT
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	YES
HIGH QUALITY WATER (HOW) ZONES FLATTER THAN 4:1	7 DAYS	NONE	NO
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1 14 DAYS ARE ALLOWED	NO
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH	YES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETER AND HOW ZONES)	YES

TYPICAL GROUND COVER STABILIZATION TYPES - GRASS AND OR SOD, WHEAT STRAW, MULCH, BIODEGRADABLE STRAW MATTING, SYNTHETIC MATTING, ETC.

STORM TRUNK CONSTRUCTION:

THE STORM TRUNK LINE OF FES-1 THROUGH CB-12 AND THE BRANCH STORM LINE OF CB-5 THROUGH CB-17B SHALL ALL BE CONSTRUCTED AS PART OF PHASE 1. ALL OTHER BRANCH STORM LINES SHALL BE CONSTRUCTED AS PART OF THEIR RESPECTIVE PHASE.

SYMBOL	PRACTICE	DESCRIPTION
IP	INLET PROTECTION	A TEMPORARY SEDIMENT BARRIER LAID AROUND A STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
CWA	CONCRETE WASHOUT AREA	TEMPORARY FACILITY PROVIDED ONSITE FOR CONCRETE TRUCKS TO WASHOUT PRIOR TO LEAVING CONSTRUCTION SITE. CONTRACTOR MAY RELOCATE ONSITE AS DEEMED NECESSARY THROUGHOUT CONSTRUCTION



NO.	REVISION DESCRIPTION	DATE
1		
2		
3		
4		

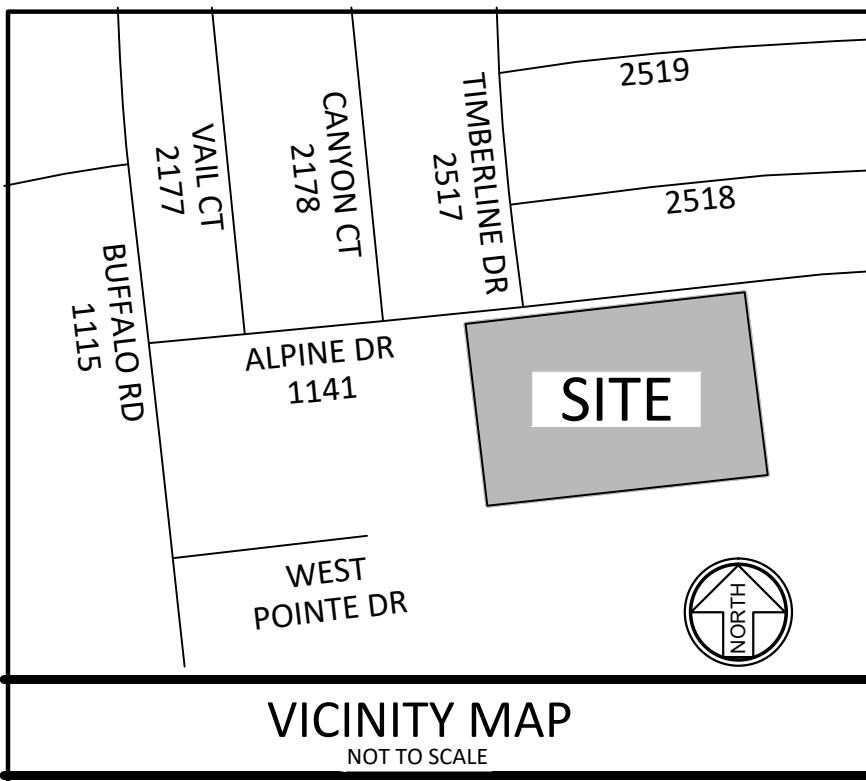
PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

EROSION CONTROL PLAN -
 CONSTRUCTION PHASE

HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH
 DRAWN BY: -
 APPROVED BY: JEH

SHEET:
C3.1
 CIVIL



CONSTRUCTION SEQUENCE & EROSION CONTROL MEASURES - FINAL PHASE:

- UPON COMPLETING ALL SITE IMPROVEMENTS AND FINAL GRADING, STABILIZE ALL DISTURBED AREAS PER LANDSCAPE PLAN. WATER AND MAINTAIN ALL LANDSCAPED AREAS TO ENSURE PROPER GROUND COVERAGE PRIOR TO FINAL APPROVAL.
- PERIMETER MEASURES, SILT FENCE AND TEMPORARY DIVERSION MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE STABILIZED WITH PERMANENT VEGETATION.
- SEE SEEDING SCHEDULE PROVIDED IN EROSION CONTROL DETAIL.
- AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE. SEDIMENT BASINS MAY NOT BE REMOVED OR CONVERTED TO PERMANENT BMPs UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. (GS 113A-57(3), 15A NCAC 04B. 0113)
- WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE E&SC PLAN. AFTER DEMLR INFORMS THE PERMITTEE OF THE PROJECT CLOSE OUT, VIA INSPECTION REPORT, THE PERMITTEE SHALL VISIT DEQ.NC.GOV/NCGOJ TO SUBMIT AN ELECTRONIC NOTICE OF TERMINATION (e-NOT). A \$100 ANNUAL GENERAL PERMIT FEE WILL BE CHARGED UNTIL THE e-NOT HAS BEEN FILLED OUT.

GROUND STABILIZATION REQUIREMENTS

CONTRACTOR SHALL BE REQUIRED TO ESTABLISH GROUND STABILIZATION AS PER FOLLOWING CHART.

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	APPLICABLE THIS PROJECT
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	YES
HIGH QUALITY WATER (HOW) ZONES FLATTER THAN 4:1	7 DAYS	NONE	NO
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	NO
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH	YES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETER AND HOW ZONES)	YES

TYPICAL GROUND COVER STABILIZATION TYPES - GRASS AND OR SOD, WHEAT STRAW, MULCH, BIODEGRADABLE STRAW MATTING, SYNTHETIC MATTING, ETC.

SYMBOL	PRACTICE	DESCRIPTION
CL	CONSTRUCTION LIMITS	A DEFINED AREA THAT ALL LAND DISTURBANCE WILL OCCUR DURING CONSTRUCTION.
SEEDING SCHEDULE FOR PERMANENT VEGETATION		NOTES:
SCHEDULE NO.	COMMON NAME OF SEED	RATE PER ACRE (LBS.)
1	COMMON BERMUDA (HULLED)	210
	TALL FESCUE	140
2	COMMON BERMUDA (UNHULLED)	175
PLANTING DATES		THE CONTRACTOR SHALL OBTAIN A SATISFACTORY STAND OF PERENNIAL VEGETATION WHOSE ROOT SYSTEM SHALL BE DEVELOPED SUFFICIENTLY TO SURVIVE DRY PERIODS AND WINTER WEATHER, AND BE CAPABLE OF RE-ESTABLISHMENT IN THE SPRING. THE PERENNIAL VEGETATIVE COVER SHALL HAVE A MINIMUM COVERAGE DENSITY OF 70% FOR THE SEEDING AREAS. CONTRACTOR SHALL DETERMINE ALL RATES OF APPLICATION NECESSARY TO PRODUCE THE REQUIRED STAND OF GRASS, AND SHALL FOLLOW THE APPLICATION PROCEDURES AS SPECIFIED HEREIN.
D _{s3}		GIANT BERMUDA SEED, INCLUDING NK-37, SHALL NOT BE USED.
		SEPT. 1 TO MARCH 15

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION

3417 Winterview Circle, Sanford, NC 27330

PO Box 249, Sanford, NC 27331

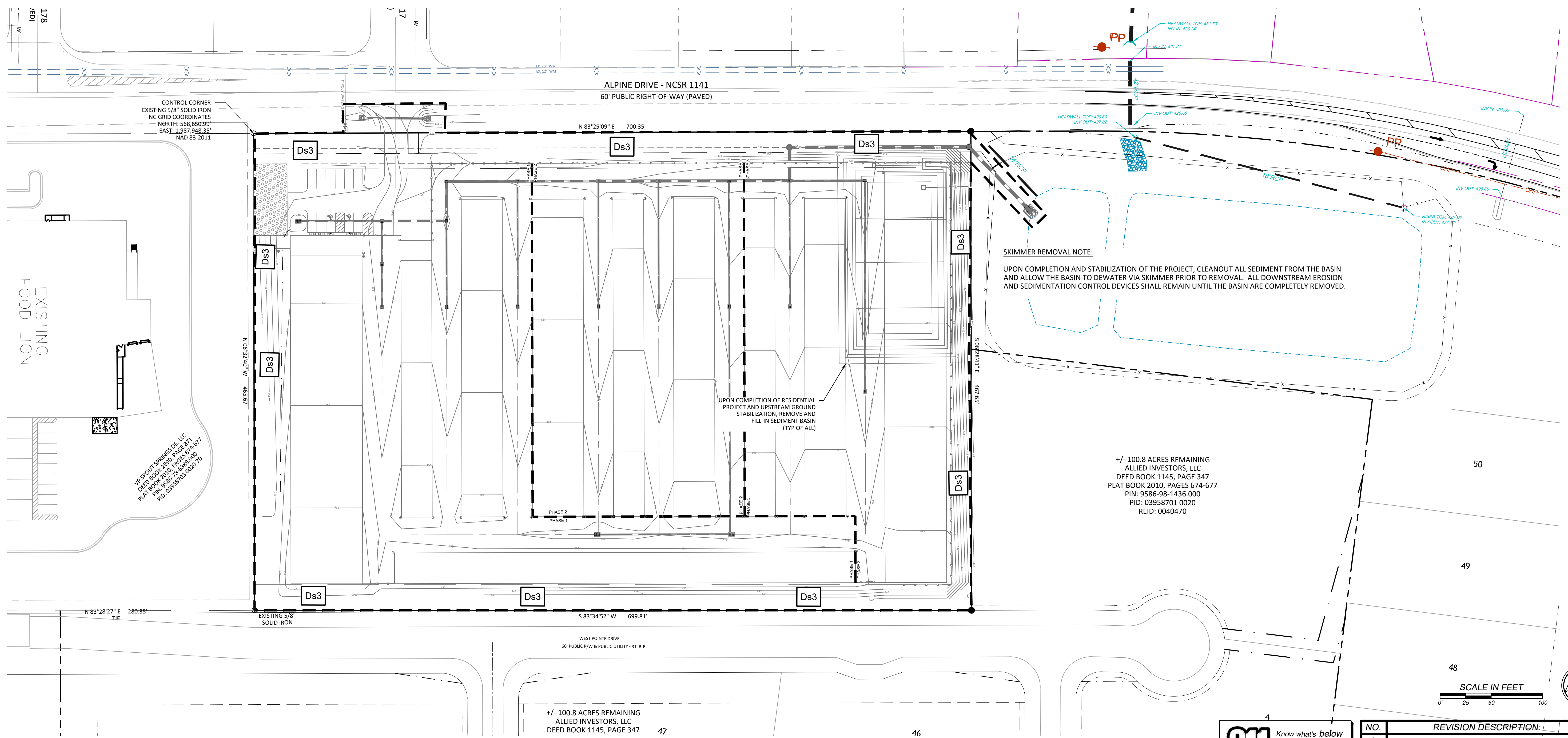
Phone: (919) 352-2834

e-mail: jhilliard@hilliardengineering.com

NC License #: P-0836

5/18/22

HILLIARD ENGINEERING, PLLC



EROSION CONTROL PLAN - FINAL PHASE

HARNETT SELF STORAGE
SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH

DRAWN BY: -

APPROVED BY: JEH

SHEET: C3.2

CIVIL

811 Know what's below
Call before you dig.
Dial 811
Or Call 800-632-4949

NO.	REVISION DESCRIPTION	DATE
1		
2		
3		
4		

NATURE AND PURPOSE OF CONSTRUCTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE ROAD ACCESS FOR STORAGE UNITS DEVELOPMENT SITE. THE PROJECT WILL INVOLVE CONSTRUCTION OF STORM DRAINAGE SYSTEM TO EXISTING POND AND CONVEYANCE SWALE. SEWER SERVICE TO A SEPTIC SYSTEM AND WATER SERVICE CONNECTED TO AN EXISTING WATER MAIN.

PERMANENT VEGETATION SHALL BE ESTABLISHED QUICKLY UPON COMPLETION OF THE PERIMETER AREA OF THE SITE GRADING AND INFRASTRUCTURES IN ORDER TO REDUCE THE AMOUNT OF SEDIMENT RUNOFF FROM THE SITE.

SITE IS NOT IN FLOOD PLAIN.

NOTE:

PURSUANT TO G.S. 133-A57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 OR 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PERMANENT GROUND COVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION.

PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 15 CALENDAR DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

NOTE:

EFFECTIVE OCTOBER 1, 2010, PERSONS CONDUCTING LAND-DISTURBING ACTIVITIES LARGER THAN ONE ACRE MUST INSPECT THEIR PROJECT AFTER EACH PHASE OF THE PROJECT AND DOCUMENT THE INSPECTION IN WRITING. KEEP WRITTEN INSPECTION REPORTS ON CONSTRUCTION SITE IN WHICH IT SHOULD BE READILY AVAILABLE FOR EROSION CONTROL INSPECTOR'S REVIEW WHEN VISITING SITE.

SELF-INSPECTION REPORT FORMS ARE AVAILABLE AS AN EXCEL SPREADSHEET FROM LAND QUALITY WEB SITE: www.dlr.enr.state.nc.us/pages/sedimentation_new.html

SEEDING SCHEDULE

NOTE

TEMPORARY SEED MIX SHALL BE USED FOR ALL AREAS EXPOSED GREATER THAN 21 CALENDAR DAYS AND SUBJECT TO FURTHER DISTURBANCE. PERMANENT SEED MIX SHALL BE CHECKED FOR ADEQUACY ON JULY 15. AN ADEQUATE COVER SHALL HAVE 50 SPRIGS OF BERMUDA OR SERICEA LESPEDEZA PER ONE SQUARE FOOT.

TEMPORARY SUMMER SEED MIX	(TO BE FOLLOWED BY PERMANENT FALL SEED MIX)
SPECIES	RATE (LB./ACRE)
MARCH 1 - SEPT. 1	GERMAN MILLET 120
TEMPORARY WINTER SEED MIX	(TO BE FOLLOWED BY PERMANENT SPRING SEED MIX)
SPECIES	RATE (LB./ACRE)
SEPT. 1 - MARCH 1	WINTER RYE (GRAIN) 200 KOBE LESPEDEZA 120
PERMANENT SPRING SEED MIX	
SPECIES	RATE (LB./ACRE)
MARCH 1 - JULY 1	PENSICOLA BAHIA GRASS 60 COMMON BERMUDA 25 SERICEA LESPEDEZA 30
PERMANENT FALL SEED MIX	
SPECIES	RATE (LB./ACRE)
SEPT. 1 - NOV. 1	COMMON BERMUDA 30 SERICEA LESPEDEZA (UNSCARIFIED) 30 KOBE LESPEDEZA 10

SOIL AMENDMENTS

TO BE INCORPORATED INTO THE TOP 3 INCHES OF SOIL IN AREAS WITH SLOPES 2:1 OR FLATTER
 APPLY FERTILIZER (10-10-10) AT A RATE OF 1000 LB/ACRE
 APPLY LIME (GROUND AGRICULTURAL LIMESTONE) AT A RATE OF 4000 LB/ACRE
 APPLY SUPERPHOSPHATE (0-49-0) AT A RATE OF 200 LB/ACRE

* REQUIRED FOR PERMANENT SEED MIX ONLY

MULCH

APPLY 4,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER.
 ANCHOR MULCH WITH ROVING, NETTING OR BY TACKLING WITH ASPHALT EMULSION AT A RATE OF 400 GAL./ACRE

MAINTENANCE

MINIMUM OF 1" OF RAINFALL A WEEK (IF NOT SUPPLIED NATURALLY, CONTRACTOR SHALL SUPPLY THE REMAINING AMOUNT UNTIL GROUND COVER HAS BEEN ESTABLISHED).

WATER

REFERTILIZE IN THE SECOND YEAR UNLESS THE GROWTH IS FULLY ADEQUATE.
 MOW WHEN THE AVERAGE PLANT HEIGHT EXCEEDS 6 INCHES.
 RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

EROSION CONTROL MAINTENANCE SCHEDULE

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 WASHOUT 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.

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 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.

OUTLET STABILIZATION STRUCTURE: INSPECT RIP RAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

DROP INLET PROTECTION (TEMPORARY): INSPECT THE FABRIC BARRIER AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT FROM THE POOL AREA AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE FABRIC DURING SEDIMENT REMOVAL. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SEDIMENT AND DISPOSE OF THEM PROPERLY. BRING THE DISTURBED AREA TO THE GRADE OF THE DROP INLET AND SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

SEDIMENT FENCE (SILT FENCE): INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY 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.

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

TREE PRESERVATION AND PROTECTION: REPAIR ANY DAMAGE TO PROTECTED TREE AS FOLLOW SHOULD DAMAGE TO CROWN, TRUNK, OR ROOT SYSTEM OCCUR.

(REFERENCE NCDENR MANUAL, PAGE 6.05.3 AND 6.05.4)

REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS AND PAINTING THEM WITH TREE PAINT. SPREAD PEAT MOSS OR MOIST TOPSOIL OVER EXPOSED ROOTS.

REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREAS AS SHOWN IN FIGURE 6.05b, TAPER THE CUT TO PROVIDE DRAINAGE, AND PAINT WITH TREE PAINT.

CUT OFF ALL DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THREE SEPARATED CUTS AS SHOWN IN FIGURE 6.05c TO AVOID PEELING BARK FROM HEALTHY AREAS OF THE TREE.

GROUND STABILIZATION REQUIREMENTS

CONTRACTOR SHALL BE REQUIRED TO ESTABLISH GROUND STABILIZATION AS PER FOLLOWING CHART.			
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	APPLICABLE THIS PROJECT
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	YES
HIGH QUALITY WATER (HQW) ZONES FLATTER THAN 4:1	7 DAYS	NONE	NO
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	NO
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH	YES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETER AND HQW ZONES)	YES
TYPICAL GROUND COVER STABILIZATION TYPES - GRASS AND OR SOD, WHEAT STRAW, MULCH, BIODEGRADABLE STRAW MATTING, SYNTHETIC MATTING, ETC.			

SEED BED PREPARATION

- RIP THE ENTIRE AREA TO 6" DEPTH.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE IN ACCORDANCE WITH "SEEDING SCHEDULE" AND MIX WITH SOIL.
- CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
- SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING. SEED ACCORDING TO "SEEDING SCHEDULE."
- MULCH IN ACCORDANCE WITH "SEEDING SCHEDULE" IMMEDIATELY AFTER SEEDING.
- INSPECT ALL SEEDING FOR COMPLIANCE WITH THE REQUIREMENTS OF THE "SEEDING SCHEDULE". MAKE NECESSARY REPAIRS AND RESEED WITHIN THE PLANTING SEASON, IF POSSIBLE, OR THE DAMAGED AREA SHALL BE REESTABLISHED FOLLOWING THE ORIGINAL LIME, FERTILIZER, AND SEEDING REQUIREMENTS.

EROSION CONTROL MEASURE - INITIAL PHASE:

- ENSURE ALL APPROVALS HAVE BEEN OBTAINED PRIOR TO ANY LAND DISTURBANCE.
- CONDUCT ON-SITE PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, OWNER, ENGINEER AND CONSTRUCTION MANAGER TO REVIEW THE PROJECT AND EROSION CONTROL SEQUENCES.
- CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT AREA.
- INSTALL CONSTRUCTION ENTRANCE AT LOCATION SHOWN ON THE PLAN - OFF OF EDGE OF EXISTING PAVEMENT ON ALPINE DRIVE.
- FLAG LIMITS OF ALL DISTURBED AREA AS SHOWN ON THE PLANS FOR INSTALLATION OF PERIMETER EROSION CONTROL DEVICES - SILT FENCE AND SILT FENCE OUTLET AND SEDIMENT BASIN WHERE SHOWN ON THE PLANS.
- INSTALL ALL SILT FENCE AND SEDIMENT BASINS AS SHOWN ON THE PLANS.
- CONSTRUCT TEMPORARY DIVERSION DITCHES AS SHOWN ON THE PLANS.
- "EROSION AND SEDIMENT CONTROL(E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR. A COPY OF THE E&SC PERMIT, THE COC, AND A HARD COPY OF THE PLAN MUST BE KEPT ON SITE, PREFERABLY IN A PERMITS BOX, AND ACCESSIBLE DURING INSPECTION." THE COC CAN BE OBTAINED BY FILLING OUT THE ELECTRONIC NOTICE OF INTENT (E-NOI) FORM AT DEQ.NC.GOV/NCG01. PLEASE NOTE, THE E-NOI FORM MAY ONLY BE FILLED OUT ONCE THE PLANS HAVE BEEN APPROVED.
- WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, GROUND COVER SHALL BE PROVIDED ON EXPOSED SLOPES AND PERMANENT GROUND COVER SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS OR 60 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
- THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES AND COMPLETE THE FOLLOWING COMBINED SELF-INSPECTION FORM FOUND ON THE DEMLR WEBSITE : <https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/NPDES%20General%20Permits/DEMLR-CSW-Monitoring-Form-Rev-August-8-2019.pdf> TWELVE MONTHS OF COMPLETE INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS RECOMMENDED A COPY BE KEPT IN A PERMITS BOX. (GS 113A-54.1 (E), 15ANCAC 04B.0131, NCG01 PART III SECTIONS A AND B).
- CLEAR AND GRUB SITE (WHERE REQUIRED) AND LEGALLY DISPOSE OF ALL DEBRIS OFF SITE.
- "SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING.
- TOTAL SITE DISTURBED AREA = 7.52 AC.

CONSTRUCTION SEQUENCE & EROSION CONTROL MEASURES - CONSTRUCTION PHASE:

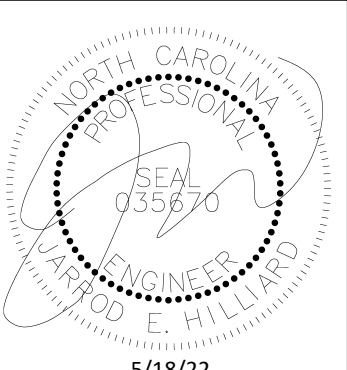
- CHECK ALL SILT FENCE AND TEMPORARY DIVERSION DITCHES, REPAIR AS NECESSARY. ASSURE ANY ERODED AREA ARE STABILIZED WITH TEMPORARY SEEDING AND MULCH.
- INSTALL THE SEWER AND WATER SYSTEMS AS SHOWN ON THE PLANS.
- INSTALL STORM DRAINAGE SYSTEMS. (SEE STORM TRUNK CONSTRUCTION NOTE THIS SHEET.)
- INSTALL INLET / OUTLET BMP'S WHERE REQUIRED.
- GRADE AND PREPARE SUBGRADE FOR PAVEMENT AREA.
- PLACE COMPACTED G.A.B.C FOR ASPHALT CONSTRUCTION.
- FINISH FINE GRADING THE ROAD RIGHT OF WAY AND OPEN SPACES.
- PLACE ASPHALT, PAVEMENT MARKINGS AND SIGNAGE WHERE APPLICABLE.
- FOR PHASE 3 CONSTRUCTION: REMOVE TEMPORARY SEDIMENT BASIN AND FILL IN AND GRADE SITE TO PROPOSE GRADE. SEE BASIN REMOVAL SEQUENCE.
- EXTEND SILT FENCE TO PROPERTY CORNER.
- REPEAT CONSTRUCTION SEQUENCES OF PHASE 1 AND 2 TO PHASE 3.
- PLACE ASPHALT, PAVEMENT MARKINGS, AND SIGNAGE WHERE APPLICABLE.

CONSTRUCTION SEQUENCE & EROSION CONTROL MEASURES - FINAL PHASE:

- UPON COMPLETING ALL SITE IMPROVEMENTS AND FINAL GRADING, STABILIZE ALL DISTURBED AREAS PER LANDSCAPE PLAN. WATER AND MAINTAIN ALL LANDSCAPED AREAS TO ENSURE PROPER GROUND COVERAGE PRIOR TO FINAL APPROVAL.
- RE-GRADE AND CONVERT SEDIMENT BASIN TO TEMPORARY OUTFALL BASIN FOR STORM DRAINAGE DISCHARGE. FILL IN EASTERN HALF OF THE SEDIMENT BASIN AND REMOVE DAM. LEVEL BOTTOM BASIN TO EXISTING GRADE AS SHOWN ON THE PLANS. STABILIZED BASIN BANK AND BOTTOM BASIN WITH PERMANENT VEGETATION AND EROSION CONTROL MATTING.
- CONSTRUCT PIPE DISCHARGE DITCH AS SHOWN ON THE PLAN. DITCH SHALL GRADE TO RE-GRADED SEDIMENT BASIN AS SHOWN ON THE PLANS.
- INSTALL CLASS B RIPRAP LINING AS SHOWN ON THE PLAN.
- PERIMETER MEASURES, SILT FENCE AND TEMPORARY DIVERSION MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE STABILIZED WITH PERMANENT VEGETATION.
- SEE SEEDING SCHEDULE PROVIDED IN EROSION CONTROL DETAIL.
- AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE. SEDIMENT BASINS MAY NOT BE REMOVED OR CONVERTED TO PERMANENT BMP'S UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. (GS 113A-57(3), 15A NCAC 04B. 0113)
- WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE E&SC PLAN. AFTER DEMLR INFORMS THE PERMITTEE OF THE PROJECT CLOSE OUT, VIA INSPECTION REPORT, THE PERMITTEE SHALL VISIT DEQ.NC.GOV/NCG01 TO SUBMIT AN ELECTRONIC NOTICE OF TERMINATION (e-NOT). A \$100 ANNUAL GENERAL PERMIT FEE WILL BE CHARGED UNTIL THE e-NOT HAS BEEN FILLED OUT.



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

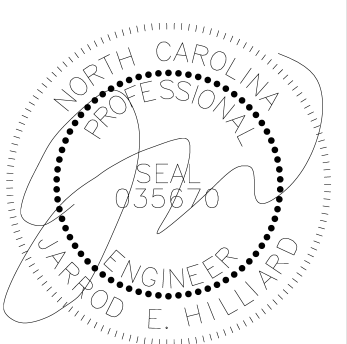


PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: hilliard@hilliardengineering.com
 NC License #: P-0836
 5/18/22



EROSION CONTROL NARRATIVE
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	
C3.3	
CIVIL	



5/18/22

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836



EROSION CONTROL GROUND STABILIZATION AND SELF INSPECTION NOTES
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH

DRAWN BY: -

APPROVED BY: JEH

SHEET:
C3.4
 CIVIL

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

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

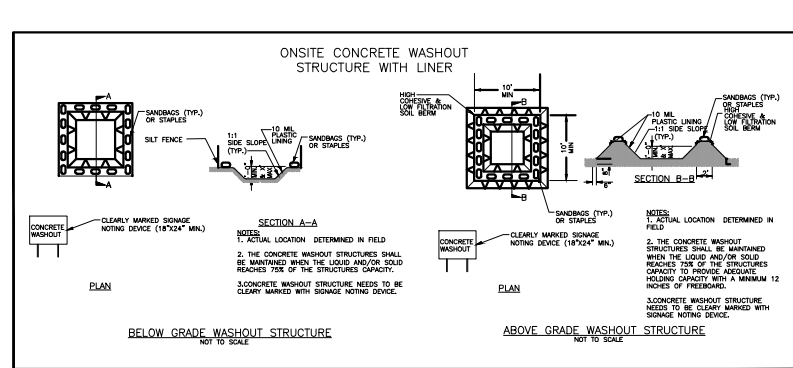
SECTION F: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed. 7 days for slopes greater than 50' in length and with slopes steeper than 4:1.
(d) Slopes 3:1 to 4:1	14	7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones 10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones 10 days for Falls Lake Watershed unless there is zero slope

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.

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



- CONCRETE WASHOUTS**
- Do not discharge concrete or cement slurry from the site.
 - Dispose of, or recycle/retail, hardened concrete residue in accordance with local and 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 silt fence.
 - 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 and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this sheet.
 - 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 inlets (s) closest to the washout which could receive spills or overflow.
 - 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 restrictions.
 - Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
 - 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.

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

GROUND STABILIZATION SPECIFICATION

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

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Reeled erosion control products with or without temporary grass seed Approximate applied straw or other mulch Plastic covering 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Stippler or other permanent planting covered with mulch Uniformly evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Reeled erosion control products with grass seed

- POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**
- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWL 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 DWL List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
 - Provide ponding area for containment of treated Stormwater before discharging offsite.
 - Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge	10:00 hrs	Only verify amounts.
(2) E&S Measures	As soon as possible, but not later than 24 hours after each event.	1. Identification of the inspector(s) involved. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of any non-compliance issues for the inspection. 6. Direction, evidence, and date of corrective action taken.
(3) Stormwater discharge outlets (S/Os)	7 a.m. to 5 p.m. on days with rain events.	1. Identification of the discharge outlet(s) inspected. 2. Date and time of the inspection. 3. Evidence of indicators of stormwater pollution such as oil, silt, trash, floating or suspended solids or obstructions. 4. Indication of visible sediment leaving the site. 5. Specific observations, evidence, and date of corrective action taken.
(4) Perimeter of site	As soon as possible, but not later than 24 hours after each rain event.	1. Evidence of sedimentation found outside site limits, then a record of the findings that will be made. 2. Actions taken to clean up or stabilize the sediment that has left the site limits. 3. Direction, evidence, and date of corrective action taken, and 4. An entry made as to the actions taken to correct future violations.
(5) Streams or waterways on site	As soon as possible, but not later than 24 hours after each rain event.	1. Evidence of increased silt or sedimentation or erosion has visible increased turbidity from the construction site. In the event of a violation, the date, location, and description of the required actions to be taken by the Division. (Note: Other per North Carolina Section 150B-215.3(b)(2)). 2. The name of and a notification of approved E&S measures, including a description of the measures, the name of the responsible party, and the date of implementation, permanent ground cover. 3. Documentation that the required ground stabilization measures have been provided with the required materials or in a way where they will be provided as soon as possible.

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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&S Plan Documentation

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

Item to Document	Documentation Requirements
(a) Each E&S measure has been installed and does not significantly deviate from the location, dimensions and relative elevations shown on the approved E&S plan.	Initial and date each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures and if the E&S measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S 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&S plan.	Initial and date a copy of the approved E&S 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&S measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken for E&S measures.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&S plan documents above, 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:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the 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)

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more.
 - They are less than 25 gallons but cannot be cleaned up within 24 hours.
 - They are 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 environment.

2. 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 requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposit. Division staff may waive the requirement for a written report on a case-by-case basis. If the stream is named on the NC 303(d) list as impaired for sediment-related causes, 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 impairment reduction conditions.
(b) Oil spills and release of hazardous substances per item 310 (c) above	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release. A report of 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.
(c) Unanticipated bypasses (40 CFR 122.41(a)(1)(ii))	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(d) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(a)(6), (8), (9) and (10))	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the 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 recurrence of the noncompliance. (40 CFR 122.41(a)(6), (8), (9), and (10)) Division staff may waive the requirement for a written report on a case-by-case basis.

PART III, SECTION G, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

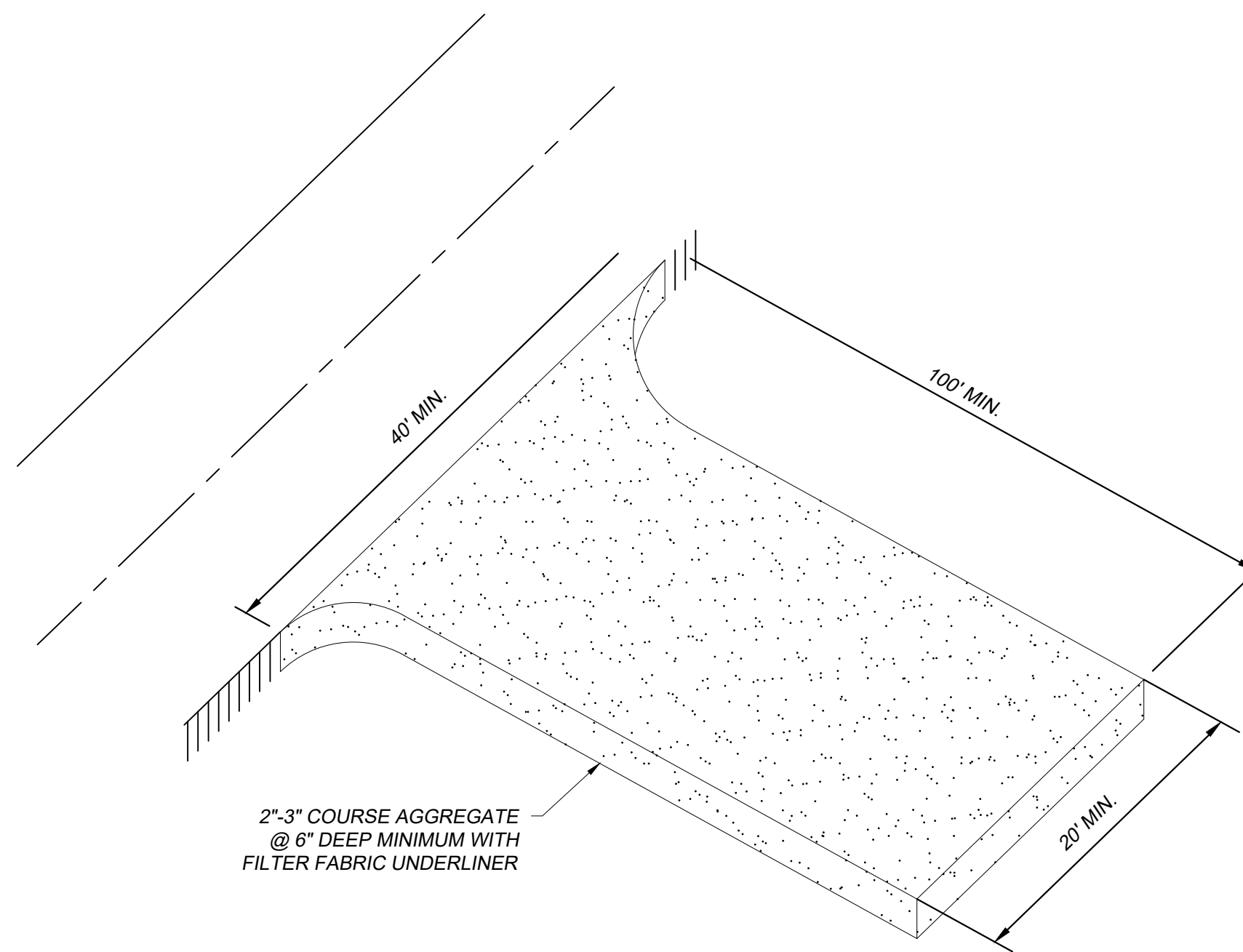
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw 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 the following criteria have been met:

- The E&S 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&S plan authority has approved these items.
- 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.
- 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.
- 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.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- 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.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		



CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE:

1. 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-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.

CONSTRUCTION SPECIFICATIONS

1. PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS.
3. EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4. PROTECT THE CHANNEL AFTER THE DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
5. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.
6. MAKE SURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE DAM, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.
7. SEE SILT FENCE DETAIL FOR CONSTRUCTION SPECIFICATIONS.

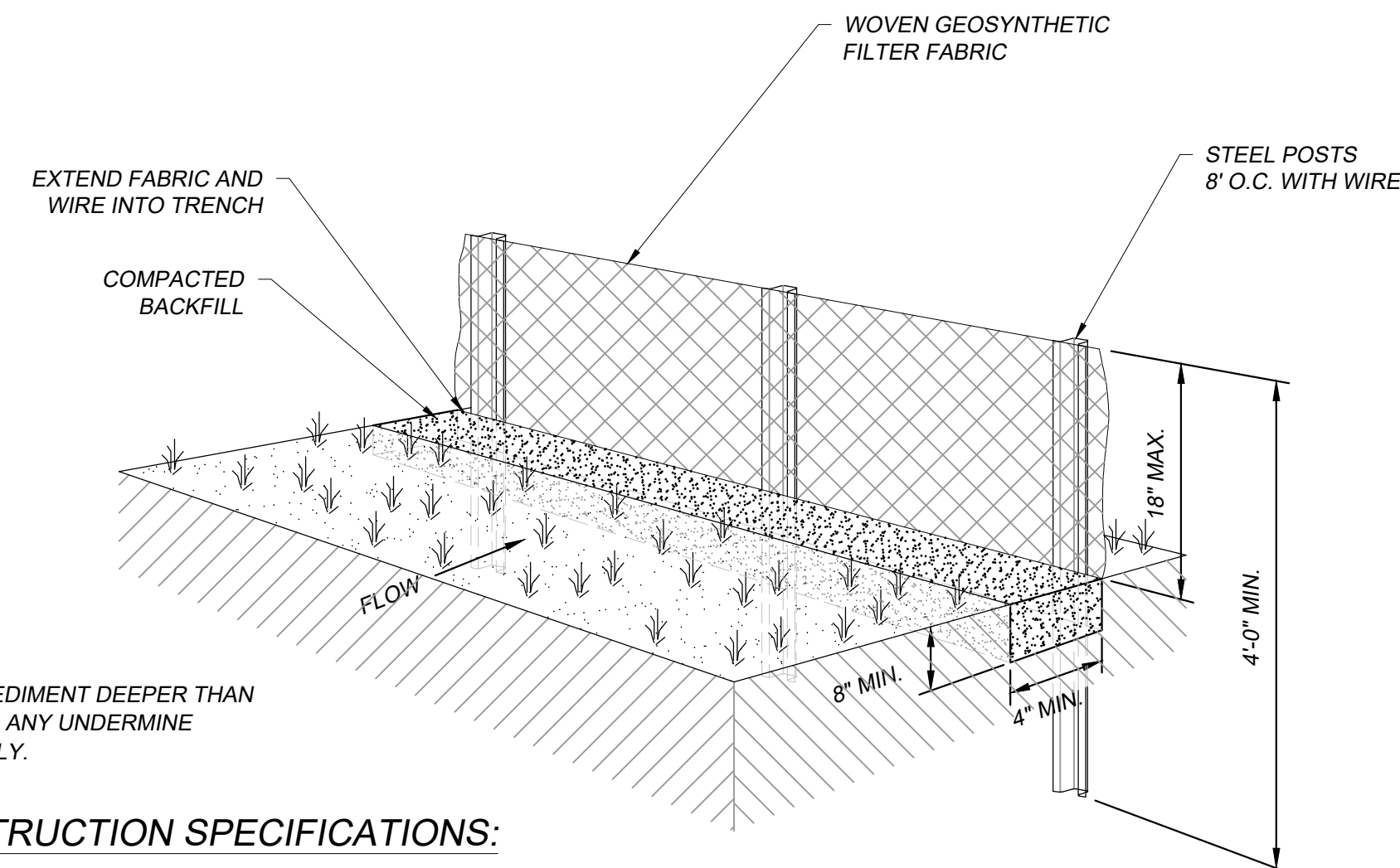
MAINTENANCE

INSPECT DAM 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 DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS AROUND DAM, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL (PRACTICE 6.31, RIPRAP-LINE AND PAVED CHANNELS).

REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ALLOW THE CHANNEL TO DRAIN THROUGH THE DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM.

ADD STONES TO DAM AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.



NOTE:

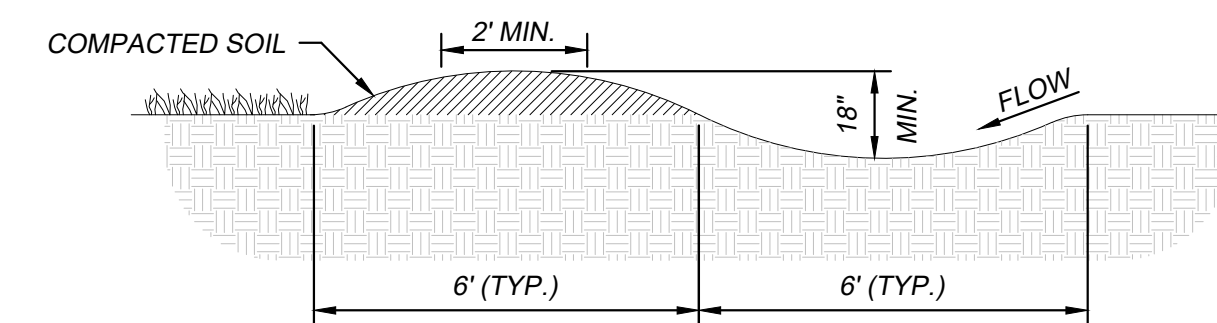
REMOVE SEDIMENT DEEPER THAN 12". REPAIR ANY UNDERMINE IMMEDIATELY.

CONSTRUCTION SPECIFICATIONS:

CONSTRUCTION:

1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE GROUND SURFACE.
3. CONSTRUCT THE FILTER FABRIC 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 POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH 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 THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO THE POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
8. PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
10. DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

SF SILT FENCE DETAIL
NOT TO SCALE



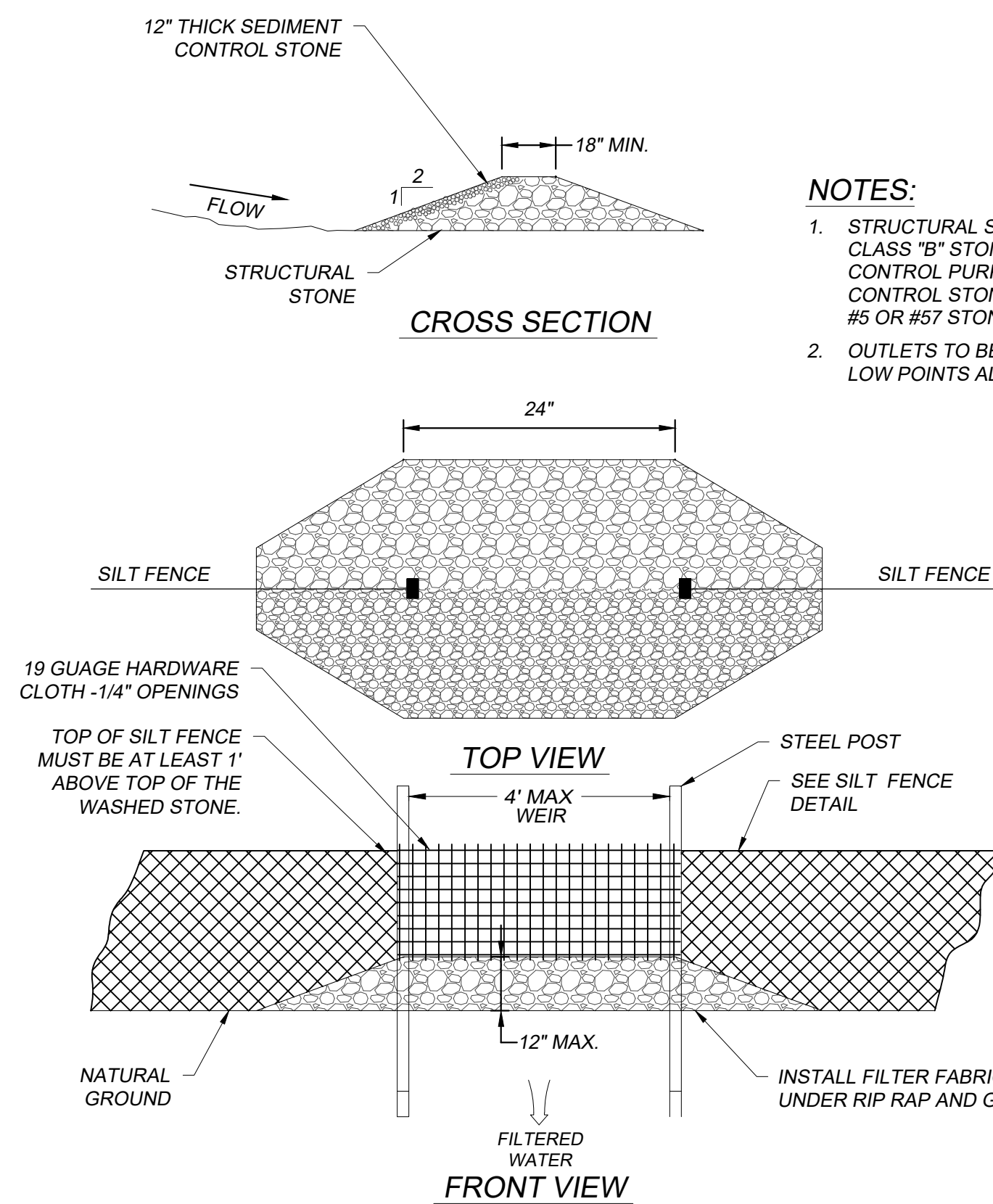
CONSTRUCTION SPECIFICATIONS

1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
4. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
5. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

MAINTENANCE

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.

TD TEMPORARY DIVERSIONS
SCALE: N.T.S.



SFO SILT FENCE OUTLET DETAIL
NOT TO SCALE

MATERIAL:

1. USE SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFIN OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461.
2. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 4 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
3. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

MAINTENANCE:

1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUTS.
4. 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.

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION

3417 Winterwind Circle, Sanford, NC 27330
Phone: (919) 352-2834
e-mail: jhilliard@hilliardengineering.com
NC License #: P-0836

HILLIARD
ENGINEERING, PLLC

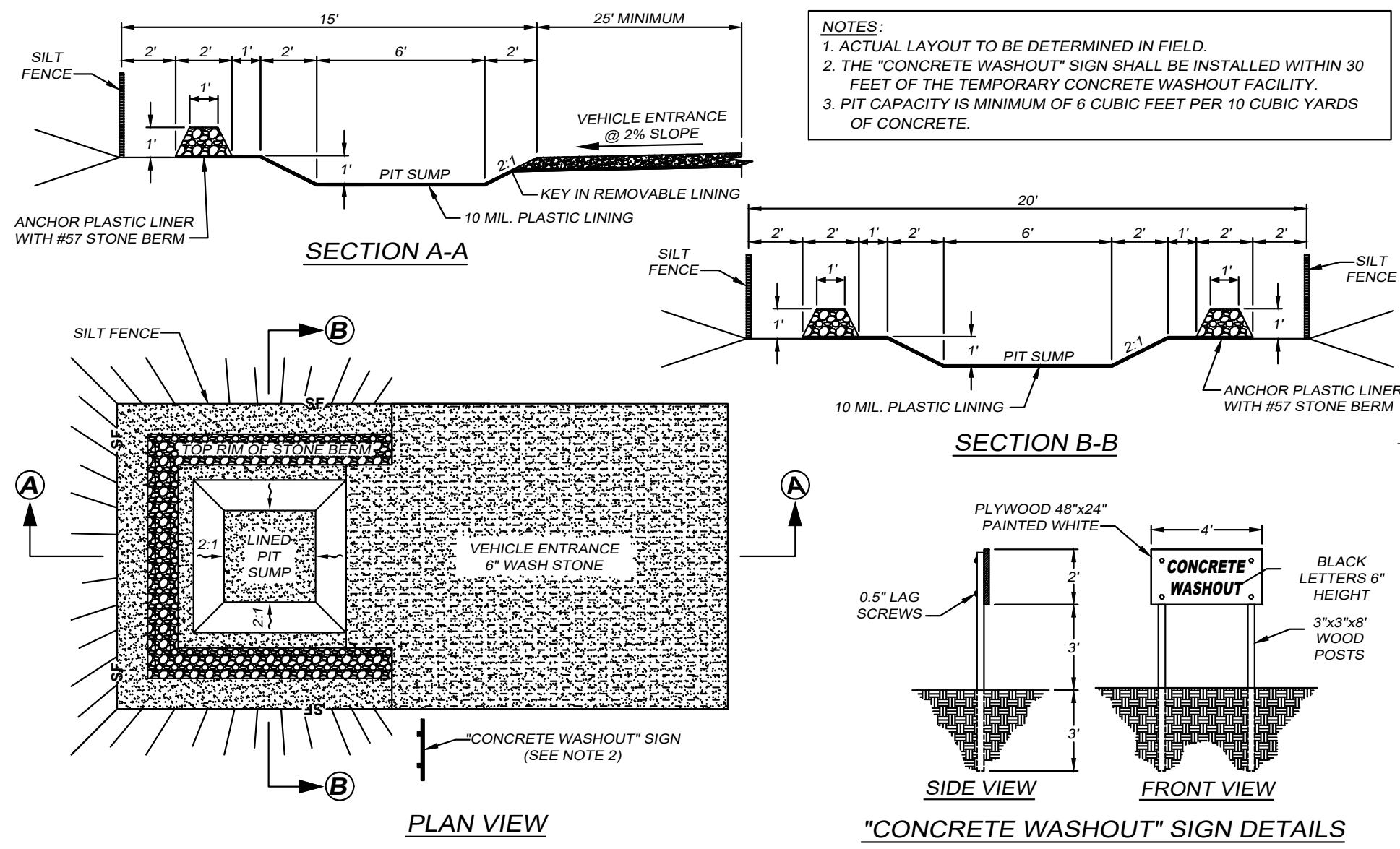
EROSION CONTROL DETAIL

HARNETT SELF STORAGE
SPOUT SPRINGS, NORTH CAROLINA

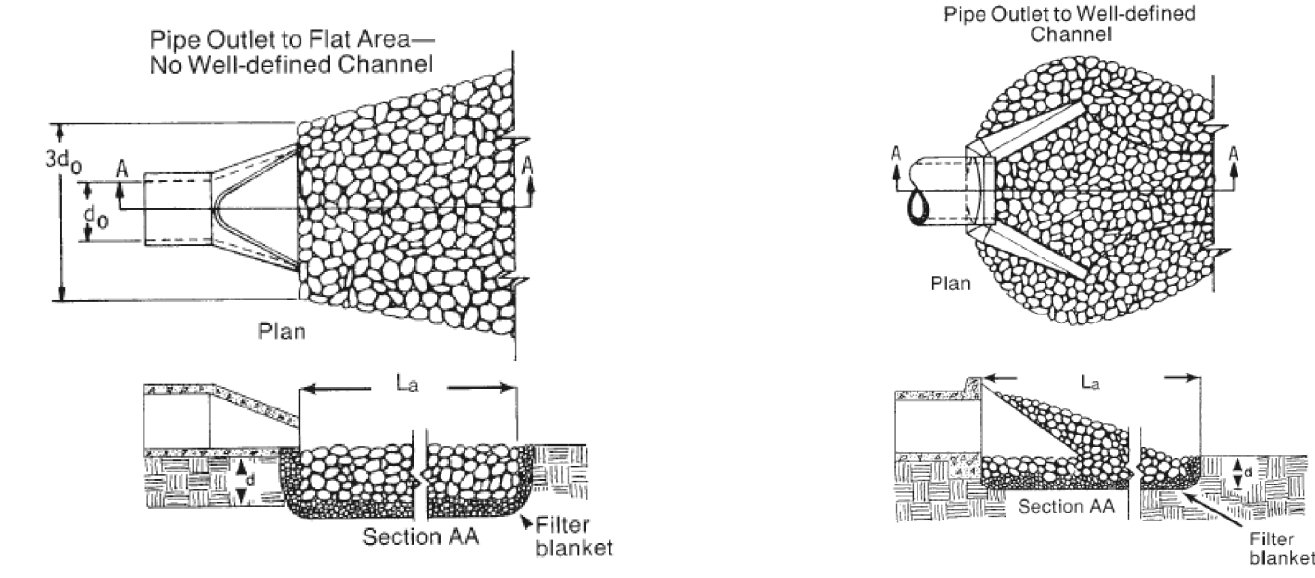
811 Know what's below
Call before you dig.
Dial 811
Or Call 800-632-4949

NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	C3.5
	CIVIL



CWP CONCRETE WASHOUT PIT
NOT TO SCALE



- Notes
1. L_a is the length of the riprap apron.
 2. $d = 1.5$ times the maximum stone diameter but not less than 6".
 3. In a well-defined channel extend the apron up the channel banks to an elevation of 6" above the maximum tailwater 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.

OP RIP RAP OUTLET PROTECTION
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

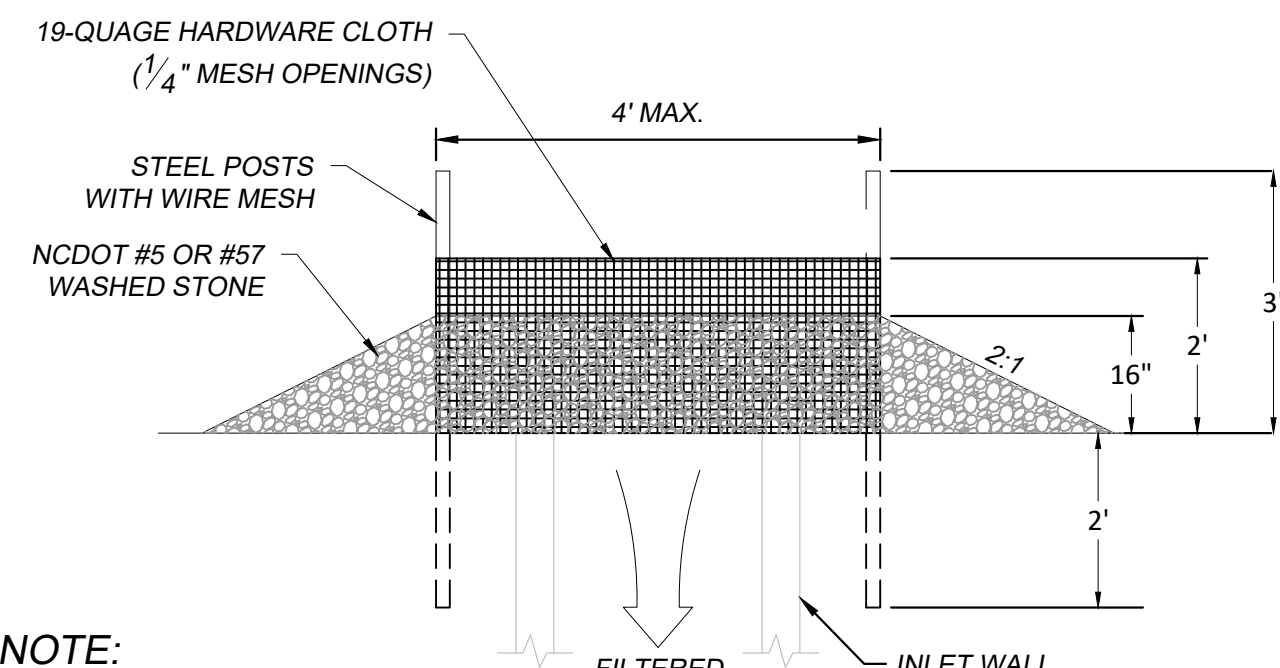
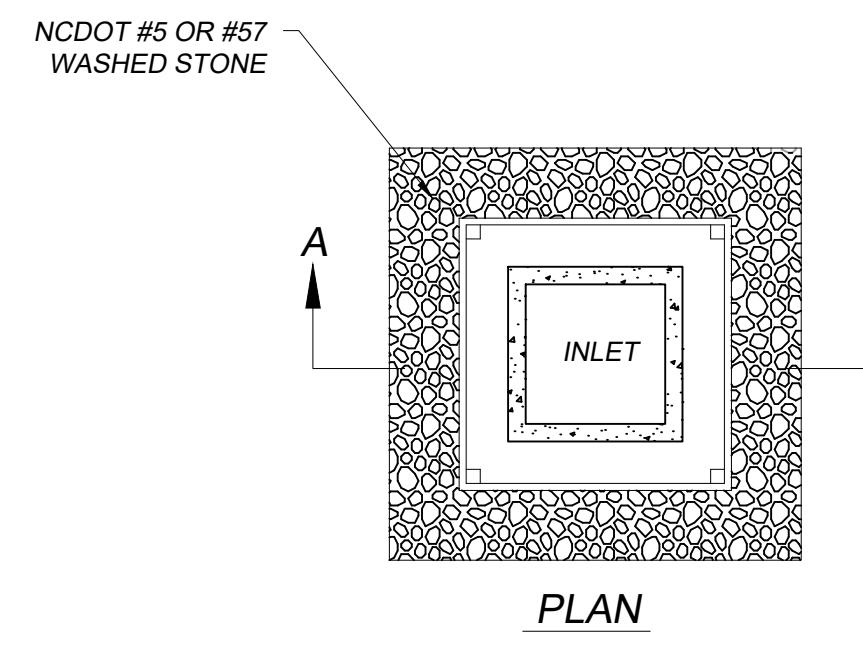
1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
3. FILTER CLOTH, WHEN USED, MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER CLOTH OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP SO THE TOP LAYER IS ABOVE THE DOWNSTREAM LAYER A MINIMUM OF 1 FOOT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER CLOTH.
4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER.
5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
6. RIPRAP MAY BE FIELD STONE OR ROUGH QUARRY STONE. IT SHOULD BE HARD, ANGULAR, HIGHLY WEATHER-RESISTANT AND WELL GRADED.
7. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFILL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
8. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
9. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION (PRACTICES 6.10, TEMPORARY SEEDING, AND 6.11, PERMANENT SEEDING).

MAINTENANCE

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.

MAINTENANCE:

1. MAINTAINING TEMPORARY CONCRETE WASHOUT SHALL INCLUDE REMAINING AND DISPOSING OF HARDENED CONCRETE AND / OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS



NOTE:
INLET TOPS TO REMAIN OFF INLET STRUCTURES WHILE INLET PROTECTION IS IN PLACE.

IP HARDWARE CLOTH & GRAVEL INLET PROTECTION DETAIL
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5" STEEL POST 2' INTO THE GROUND SURROUNDING THE INLET SPACE POSTS EVENLY AROUND THE PERIMETER ON THE INLET, MAX. 4' APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE AND BOTTOM. PLACING A 2" FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16" AROUND THE WIRE, AND SMOOTH TO AN EVEN LEVEL.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUND COVER.

MAINTENANCE:

INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT.
CLEAR THE MESH WIRE OF ANY 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.



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

DESIGNED BY: JEH

DRAWN BY: -

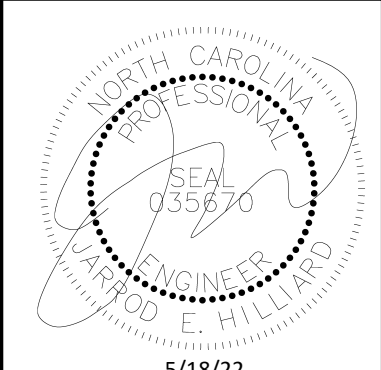
APPROVED BY: JEH

SHEET:
C3.6
CIVIL

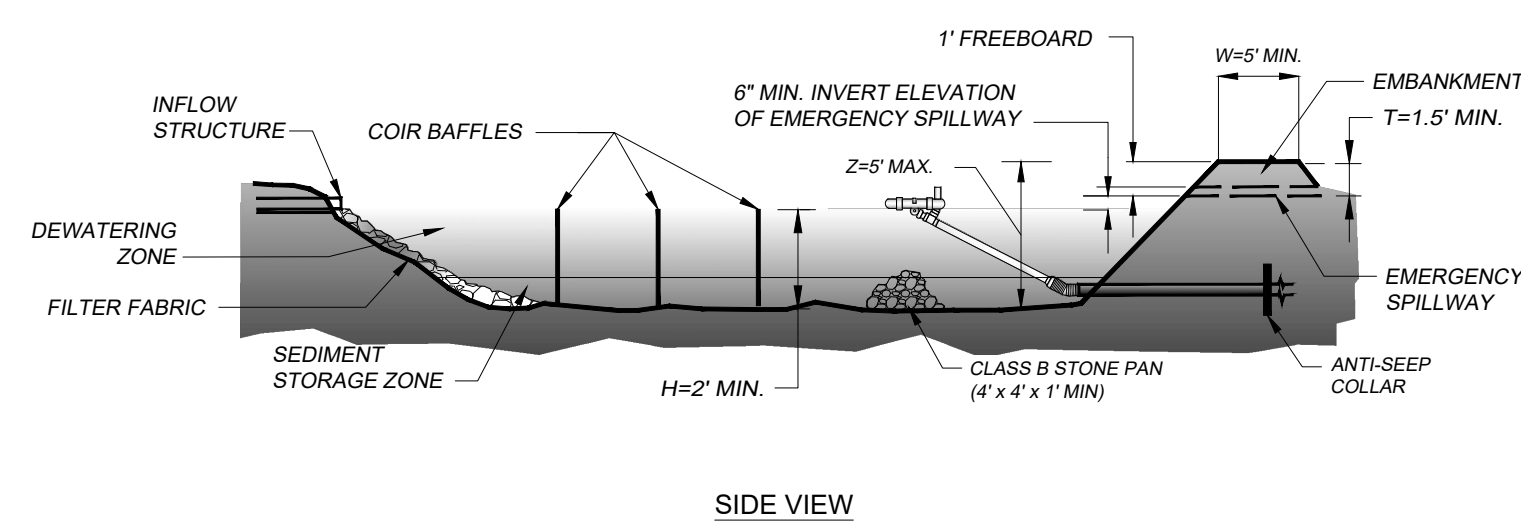
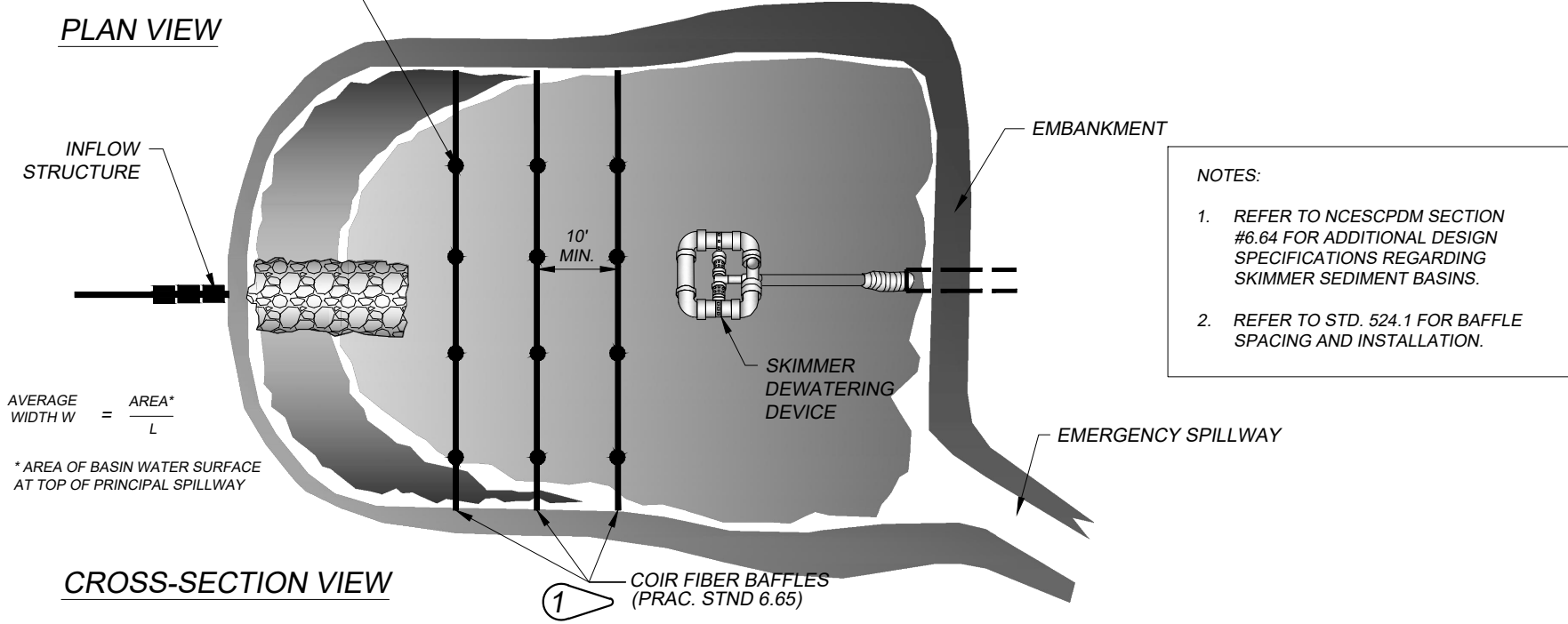
PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
3417 Winterwind Circle, Sanford, NC 27330
PO Box 249, Sanford, NC 27331
Phone: (919) 352-2834
e-mail: jhilliard@hilliardengineering.com
NC License #: P-0836

EROSION CONTROL DETAIL

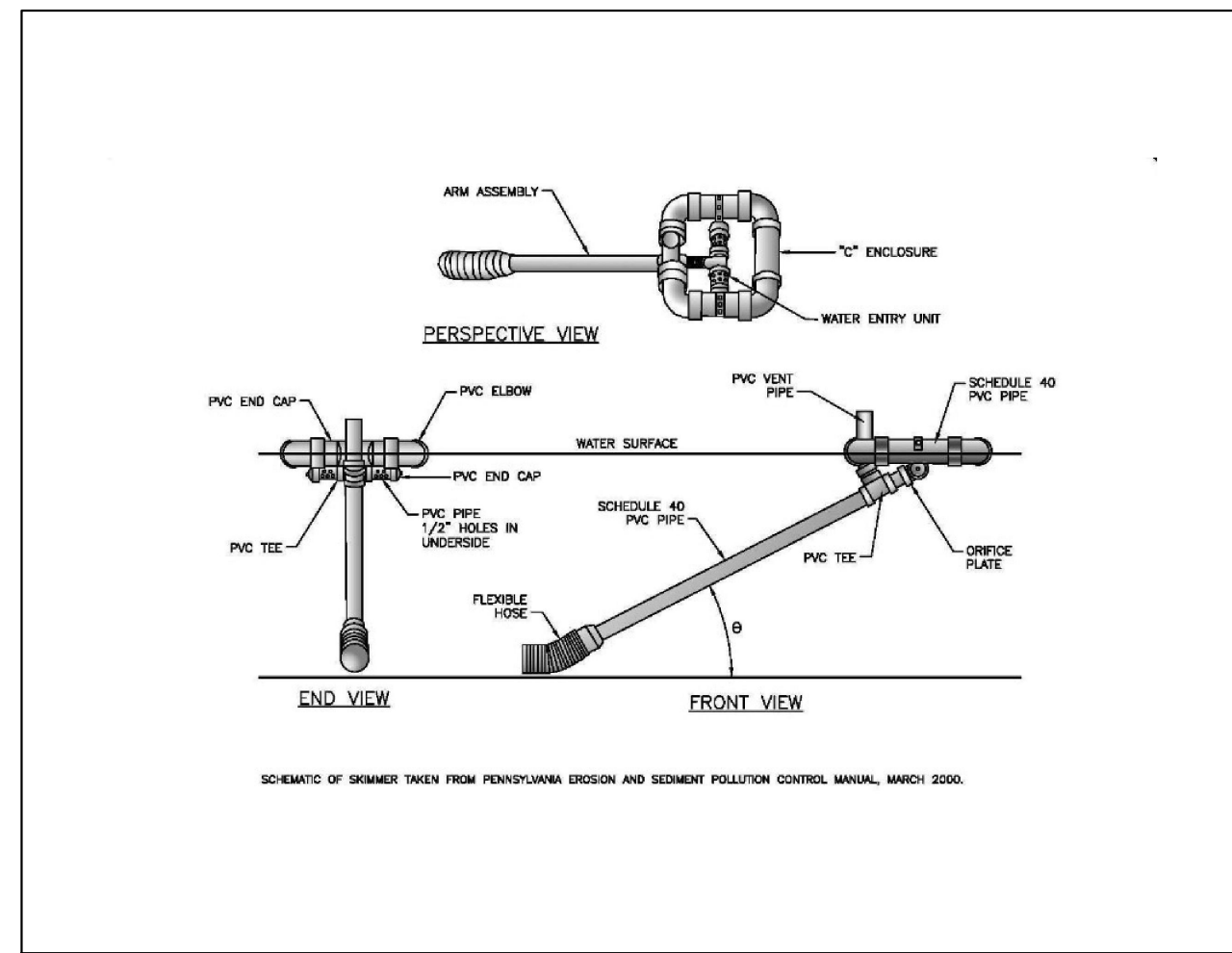
HARNETT SELF STORAGE
SPOUT SPRINGS, NORTH CAROLINA



SKIMMER SEDIMENT BASIN DESIGN CRITERIA	
DRAINAGE AREA (ACRES)	< 10 AC.
MIN. LENGTH TO WIDTH RATIO	2:1
MAX. LENGTH TO WIDTH RATIO	6:1
MIN. VOLUME REQUIRED	1800 (CU. FT. PER AC. DISTURBED)
SURFACE AREA REQUIRED	328 (SQ. FT. PER CFS @ 10)



SK SEDIMENT SKIMMER BASIN
SCALE: N.T.S.



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.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

SKIMMER DEWATERING DEVICE

NOT TO SCALE

CONSTRUCTION SPECIFICATION

1. CLEAR, GRUB, AND STRIP 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.
2. 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.
3. SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OR PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.
4. PLACE THE BARREL (TYPICALLY 4-INCH SCHEDULE 40 PVC PIPE) ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PREVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS A BACK FILL 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 CONTRACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES.
5. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURES INSTRUCTIONS, OR AS DESIGNED.
6. 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.
7. 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 SHOULD BE LINED WITH THE LAMINATED PLASTIC OR IMPERMEABLE GEO TEXTILE 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 SHOULD 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. (ADAPTED FROM " A MANUAL FOR DESIGNING, INSTALLING AND MAINTAINING SKIMMER SEDIMENT BASINS." FEBRUARY 1999 J.W. FAIR CLOTH & SON.)
8. INLETS - DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE

- TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).
9. 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 (REFERENCES: SURFACE STABILIZATION).
 10. INSTALL POROUS BAFFLES AS SPECIFIED IN PRACTICE 6.65
 11. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND AIL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY (REFERENCES: SURFACE STABILIZATION).

MAINTENANCE

INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT 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 BATTLE. 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.

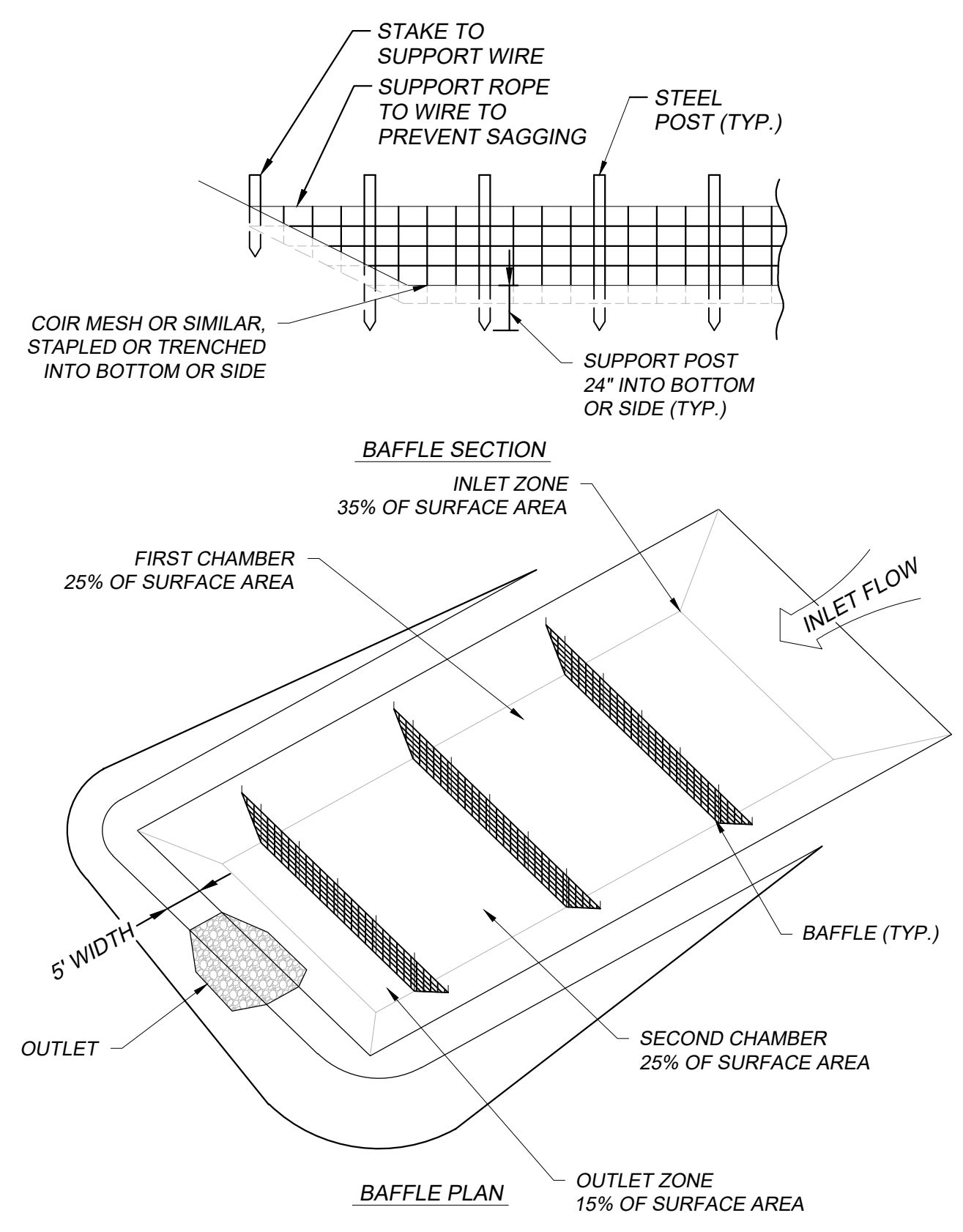
REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

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 AND REMOVE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER FOR DEBRIS.

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 AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

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.



CONSTRUCTION SPECIFICATIONS:

GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.

INSTALL POSTS OR SAW HORSES ACROSS THE WIDTH OF THE SEDIMENT TRAP.

STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24", SPACED A MAXIMUM OF 4' APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6" HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2" LOWER THAN THE TOP OF THE BERMS.

INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN THE TOP OF THE BERMS.

WHEN USING POSTS, ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.

WRAP POROUS MATERIAL, LIKE JUTE BACKED BY COIR MATERIAL, OVER A SAWHORSE OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS FOR ANCHORING. THE FABRIC SHOULD HAVE FIVE TO TEN PERCENT OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE OR STAPLES.

THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8" EROSION CONTROL MATTING STAPLES.

DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN

MAINTENANCE:

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 INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS WHEN IT REACHED HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PROESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

AFTER CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL HAFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS. BRING THE AREA TO GRADE, AND STABILIZE IT.

BF BAFFLES FOR TEMPORARY SEDIMENT TRAPS
NOT TO SCALE

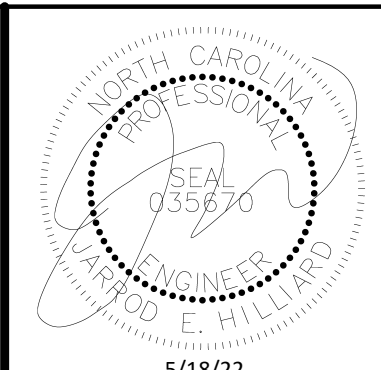


NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

HILLIARD ENGINEERING, PLLC
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	
C3.7	
CIVIL	

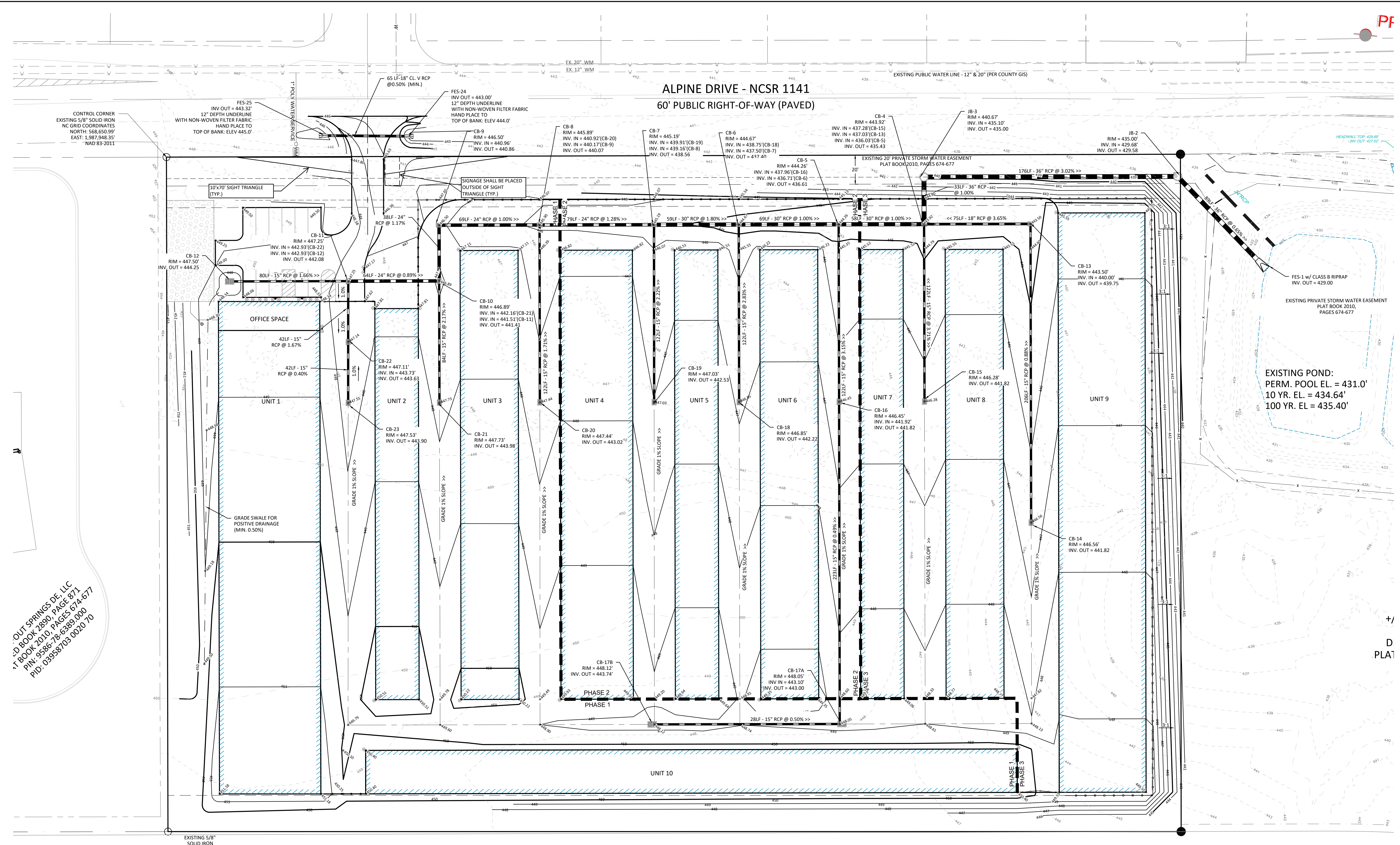


PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

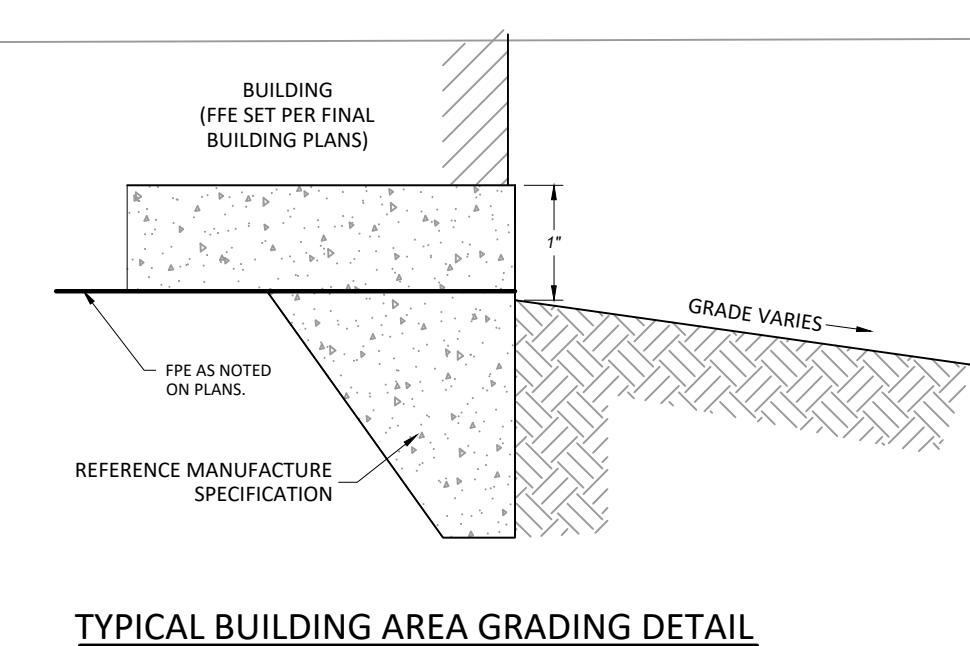


GRADING AND DRAINAGE PLAN
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH
 DRAWN BY: -
 APPROVED BY: JEH
SHEET: C4.0
 CIVIL



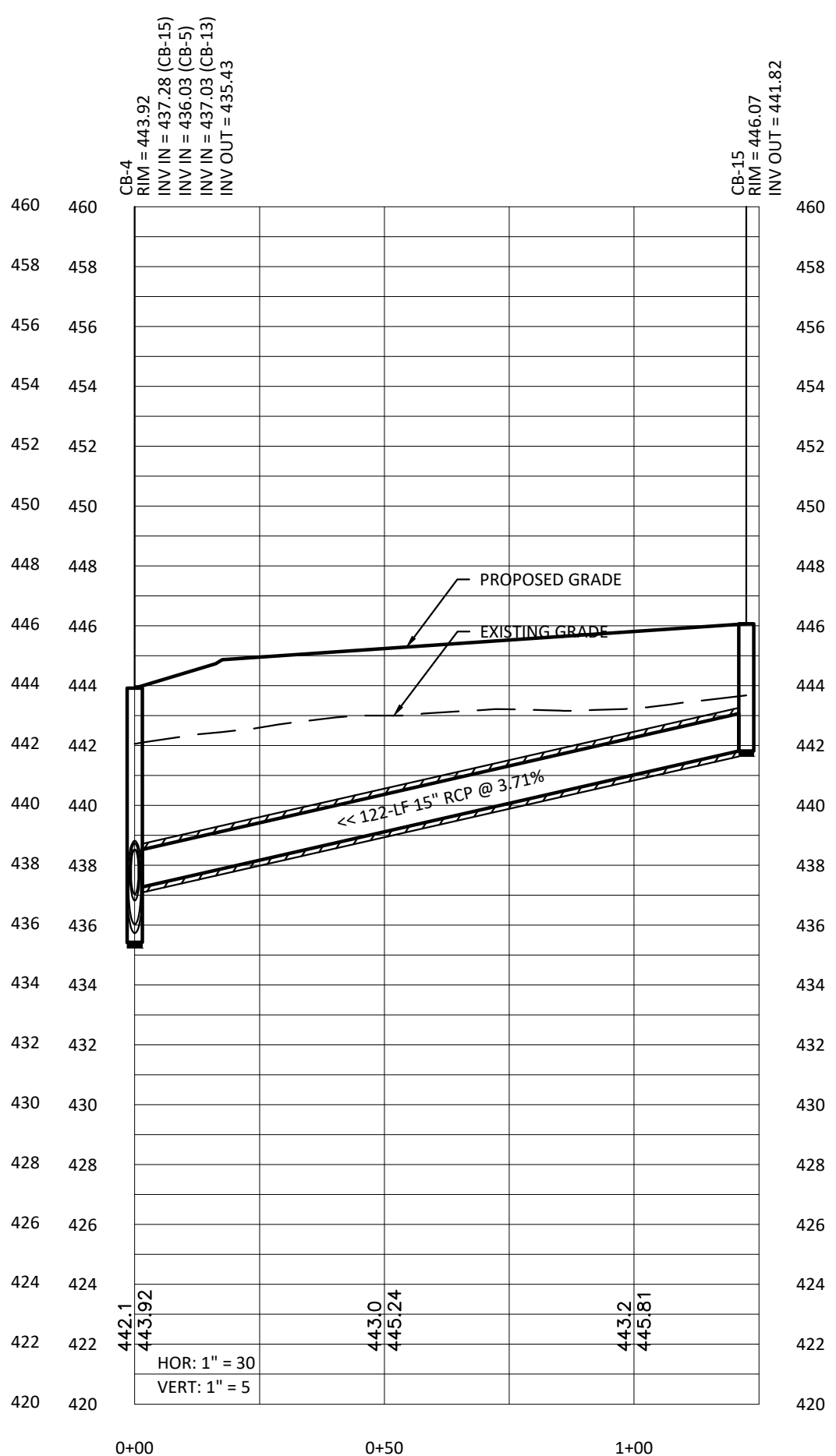
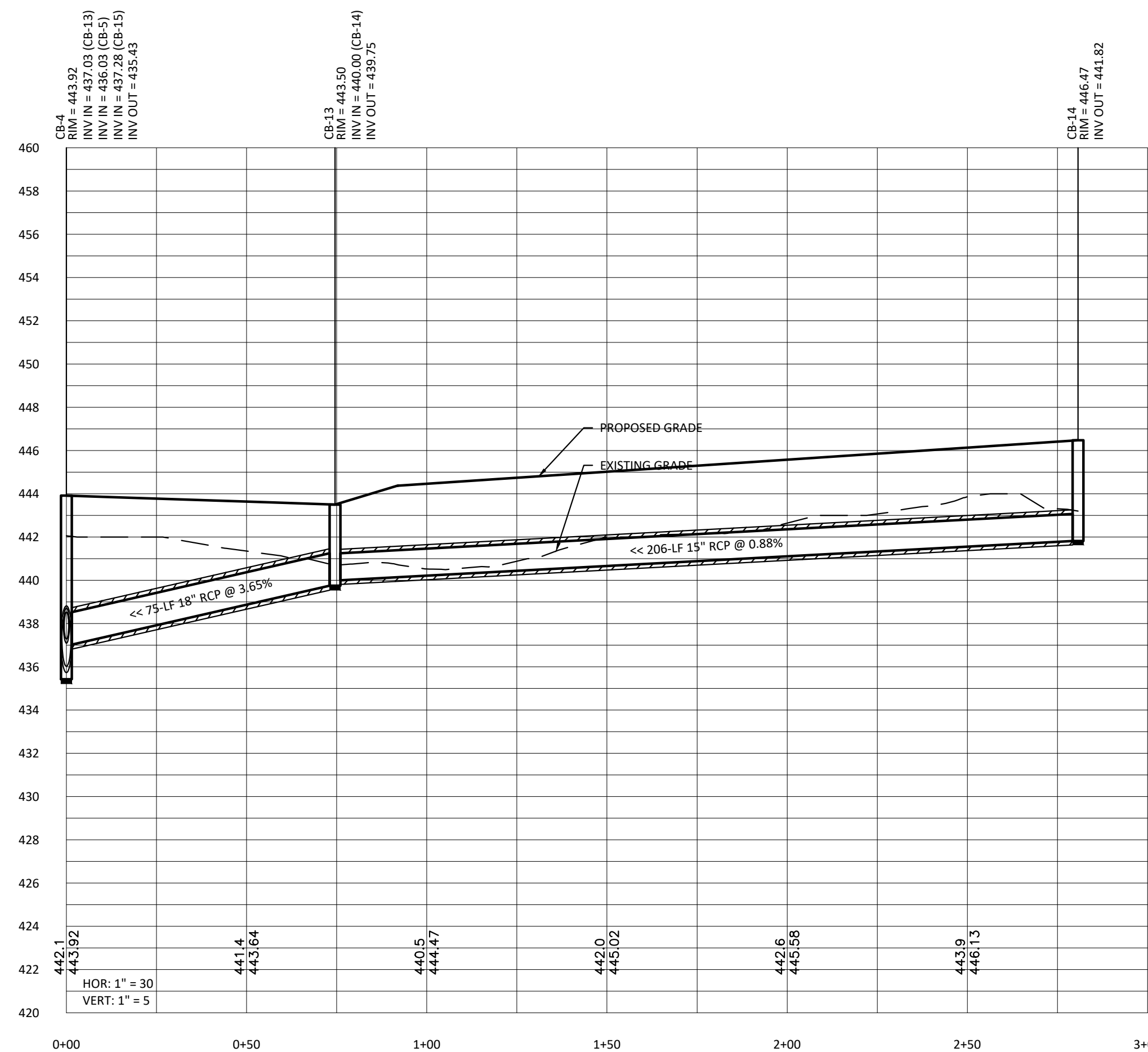
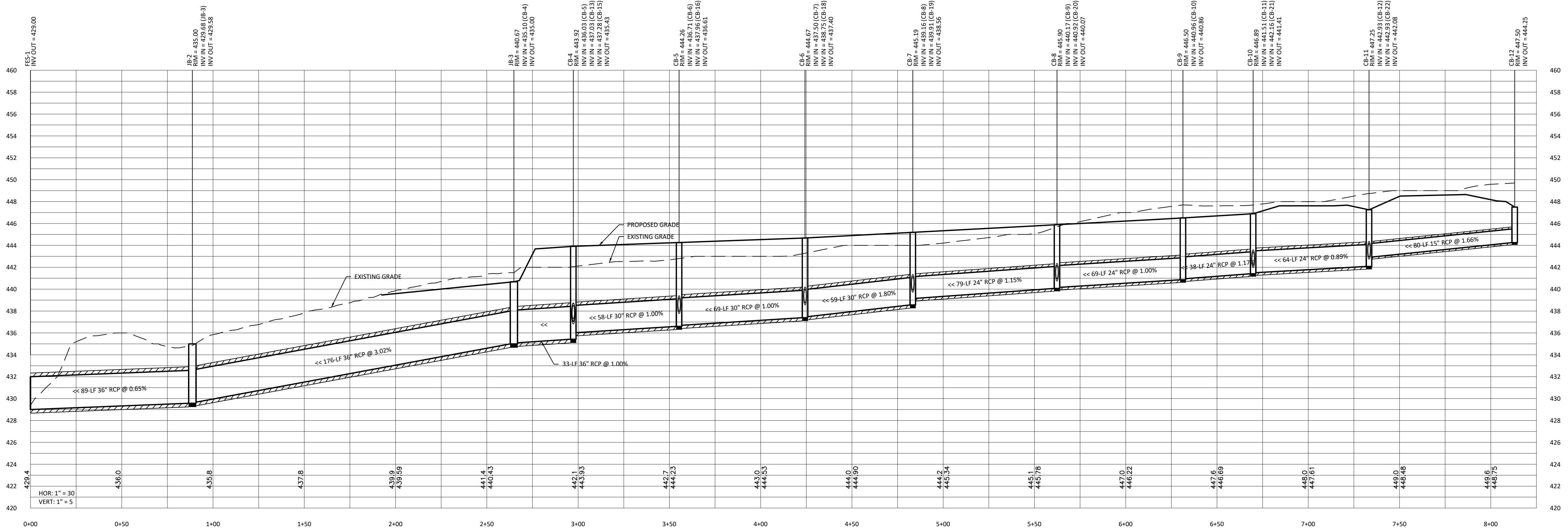
OUT SPRINGS DE, LLC
 IT BOOK 2890 PAGE 871
 PIN: 9536 78-6389 000
 PID: 03958703 0020 70



NOTE:
 1) SPOT GRADES ARE EDGE OF PAVEMENT. CONTRACTOR SHALL ADD 1" FOR TOP OF SLAB GRADE.
 2) REFERENCE SHEET C4.1 & 4.2 FOR STORM DRAINAGE PROFILES.



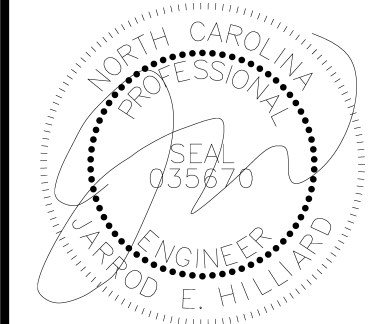
NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		



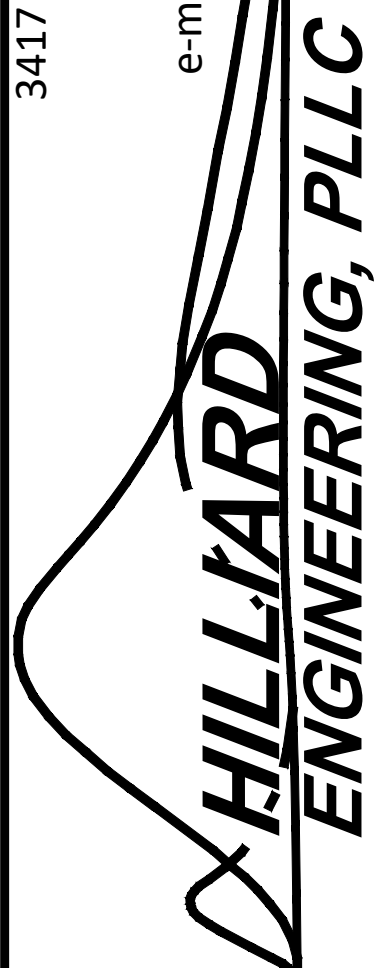
1) ALL RCP STORM DRAINAGE PIPES ARE CLASS III.
2) PROVIDE MINIMUM OF 2 FEET OF COVER.



NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

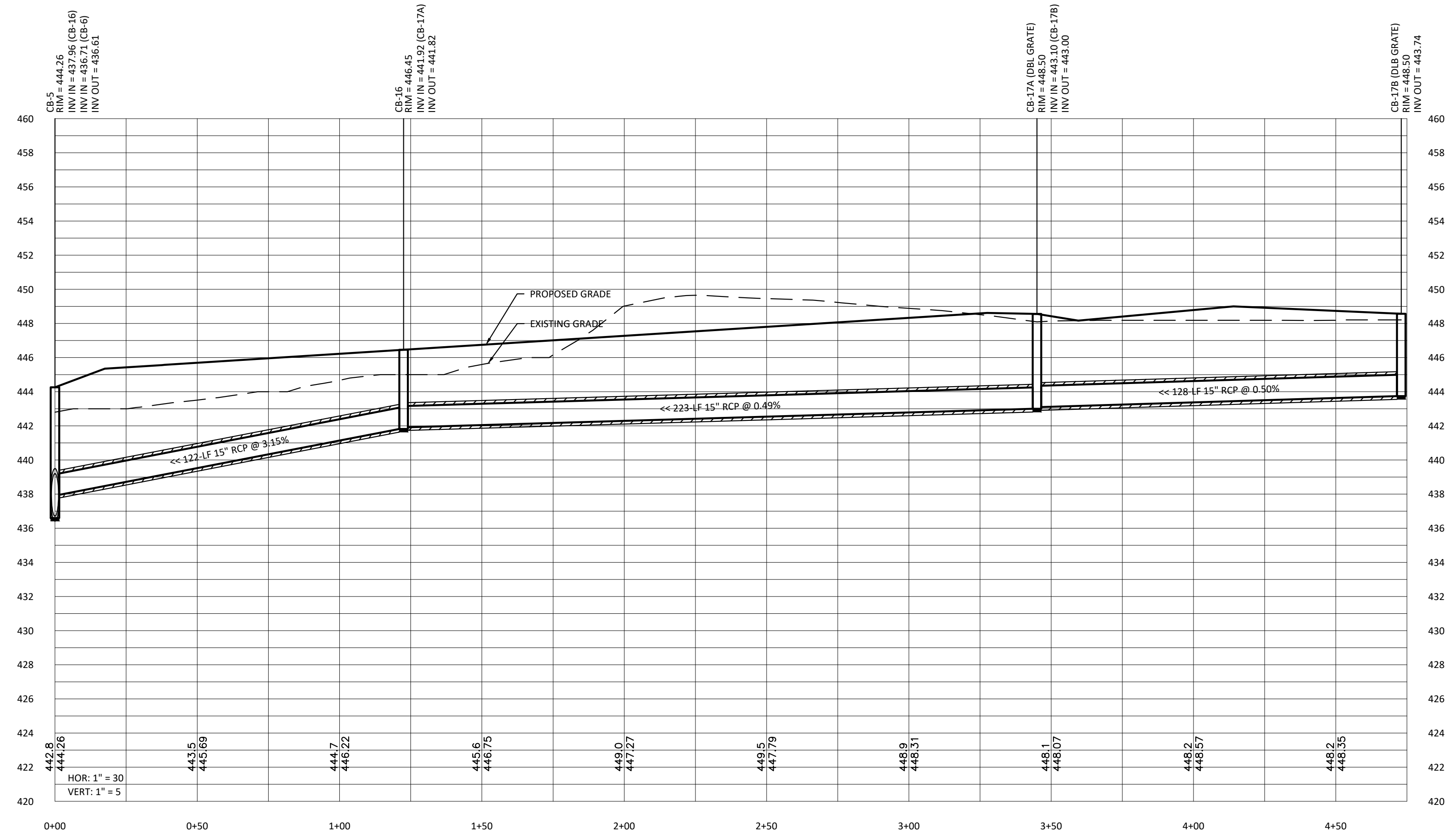
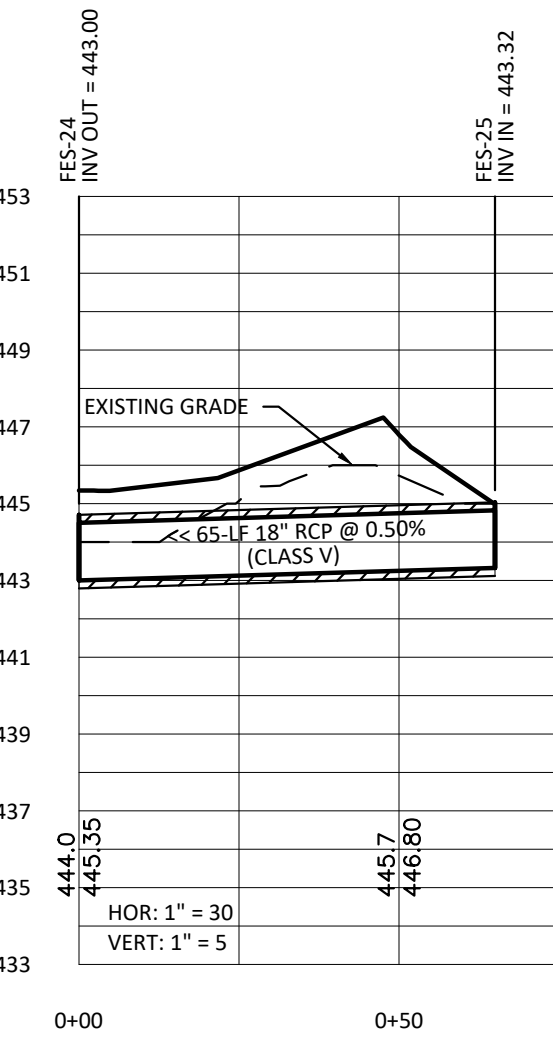
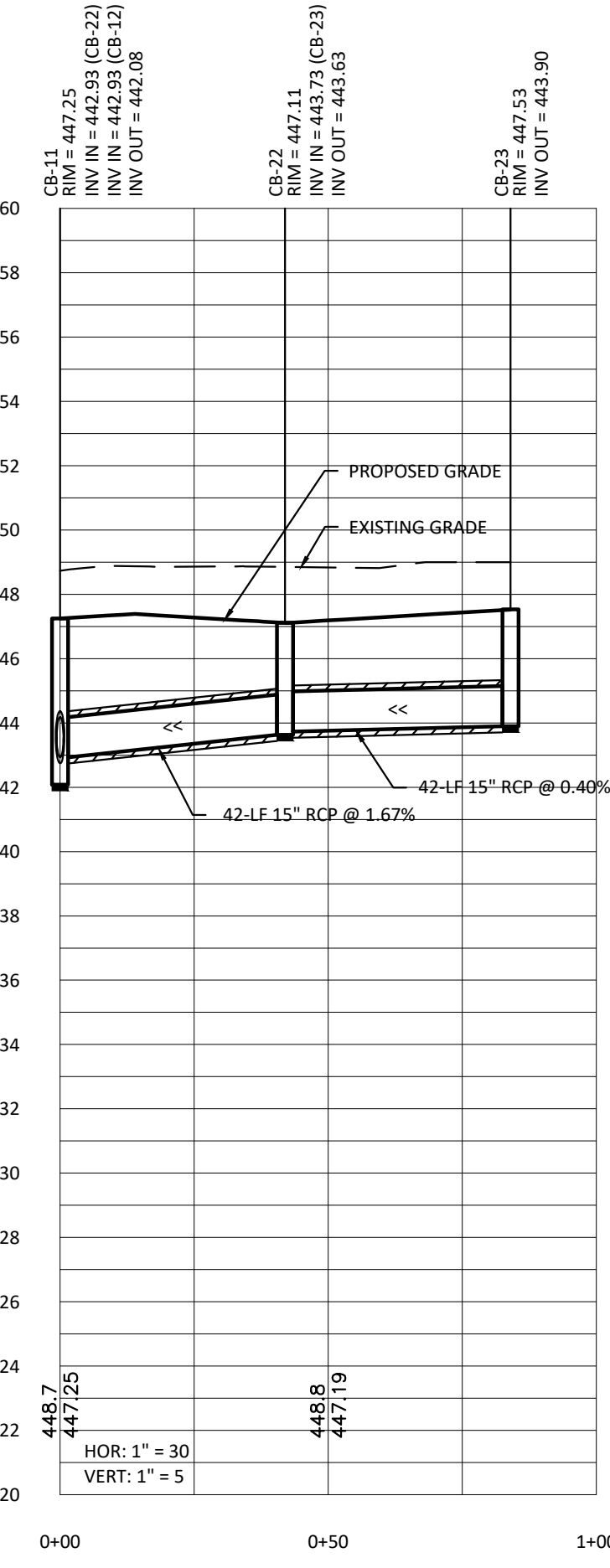
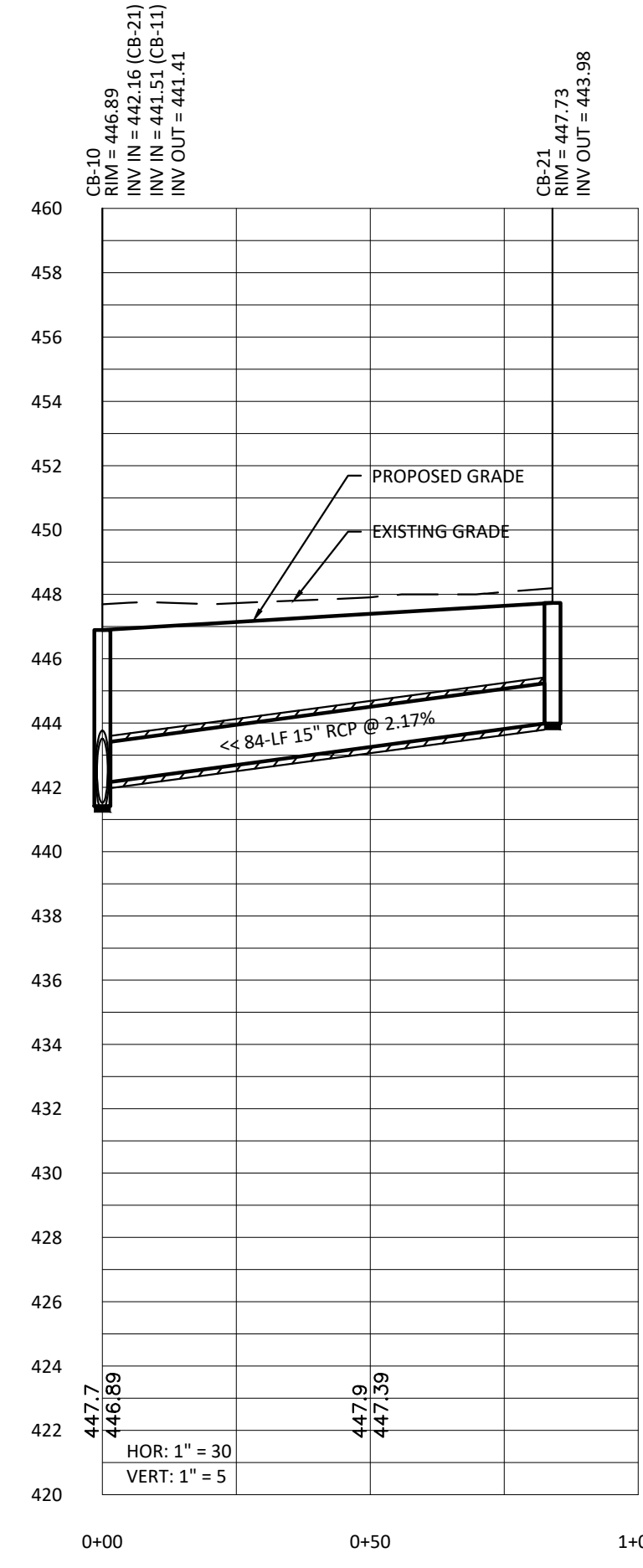
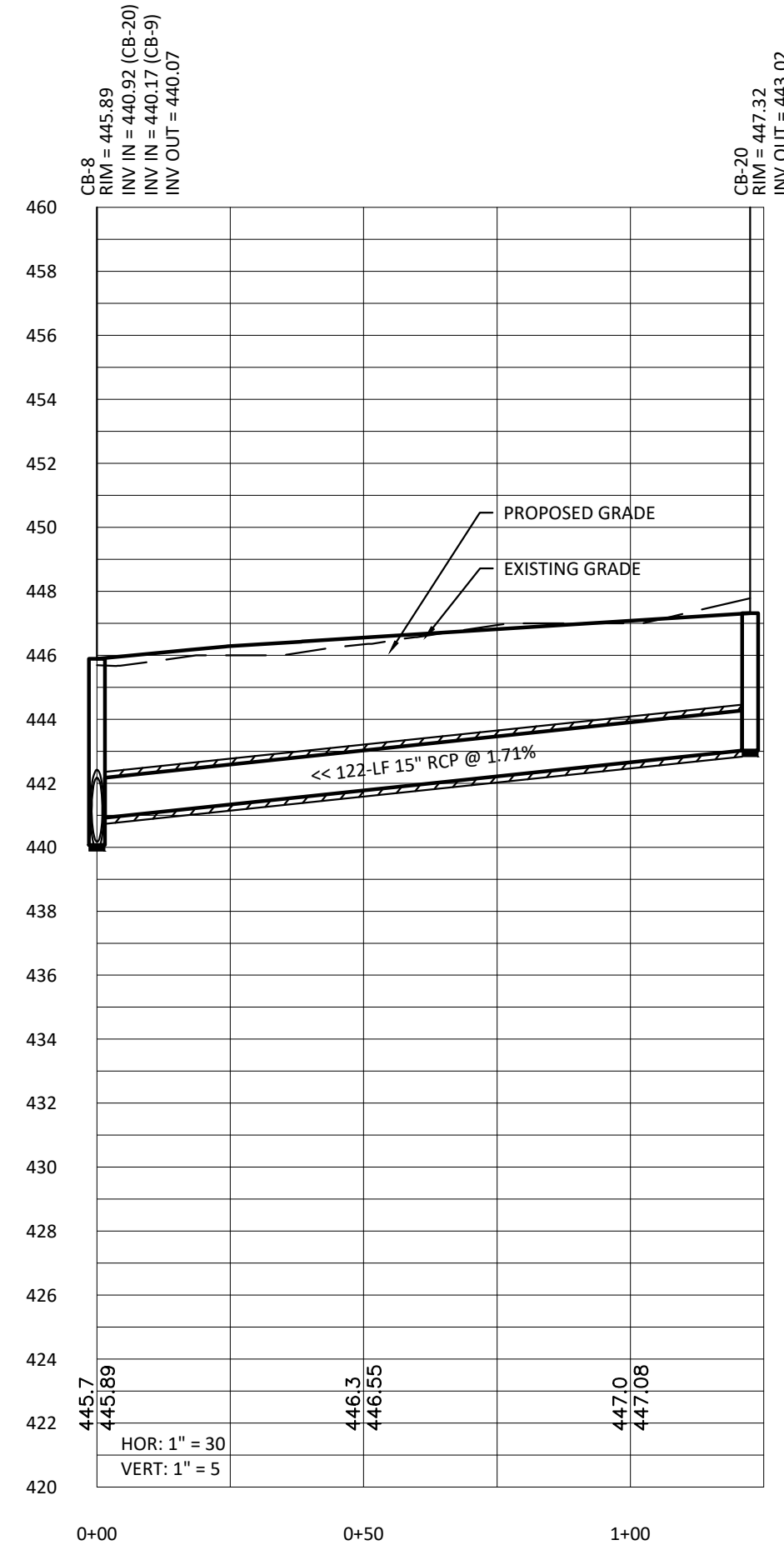
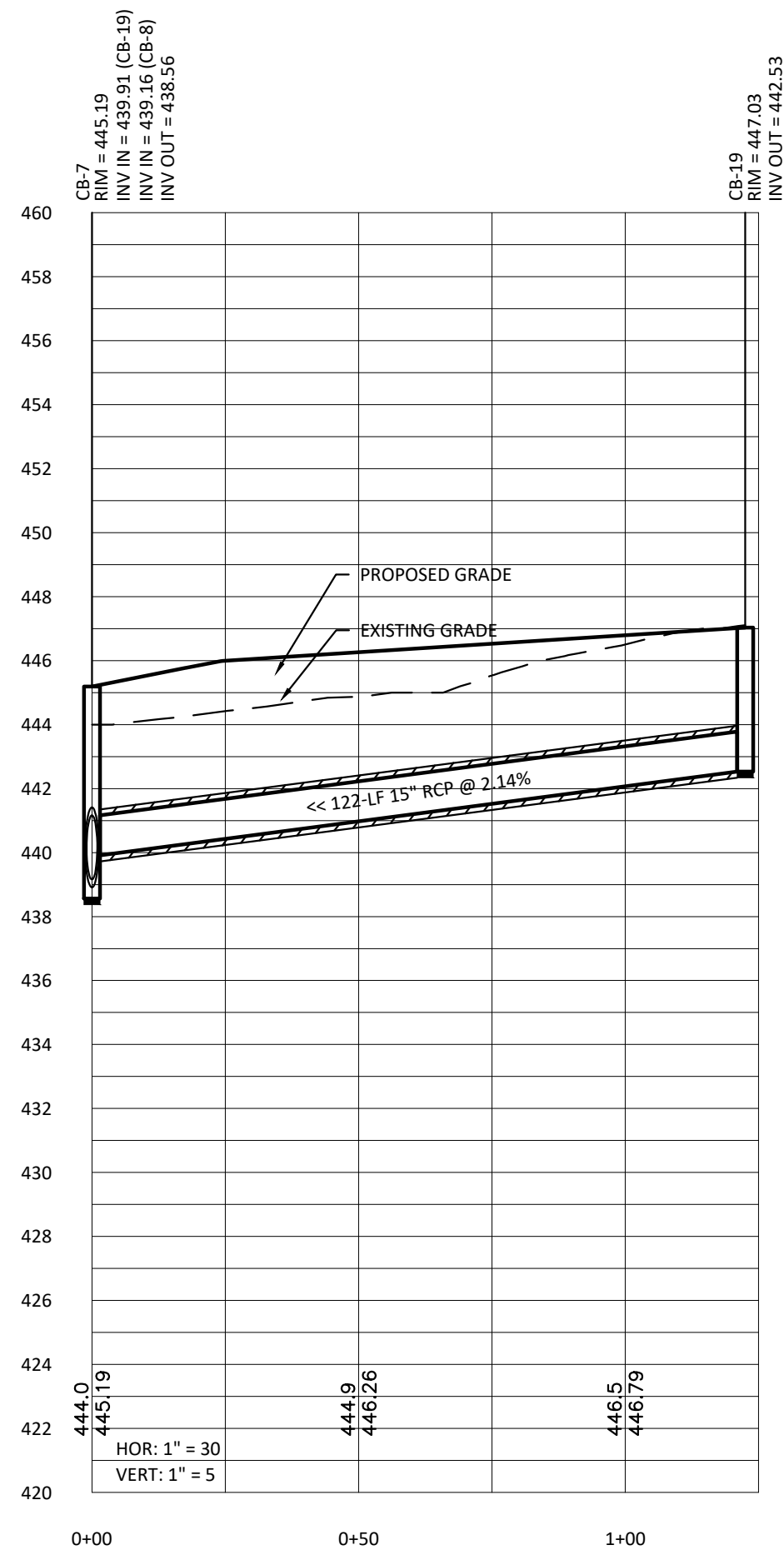


PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
3417 Winterwind Circle, Sanford, NC 27330
PO Box 249, Sanford, NC 27331
Phone: (919) 352-2834
e-mail: jhilliard@hilliardengineering.com
NC License #: P-0836



STORM DRAINAGE PROFILES
HARNETT SELF STORAGE
SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	C4.1
CIVIL	



STORM DRAINAGE PROFILES

HARNETT SELF STORAGE
SPOUT SPRINGS, NORTH CAROLINA

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION

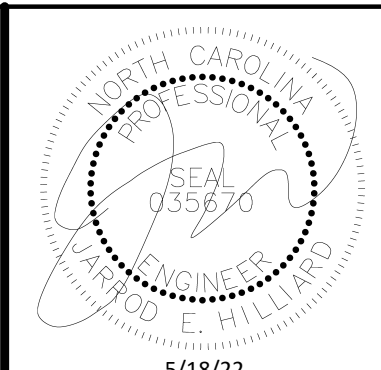
3417 Winterwind Circle, Sanford, NC 27330

PO Box 249, Sanford, NC 27331

Phone: (919) 352-2834

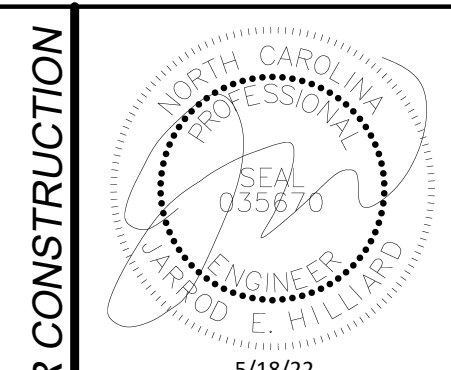
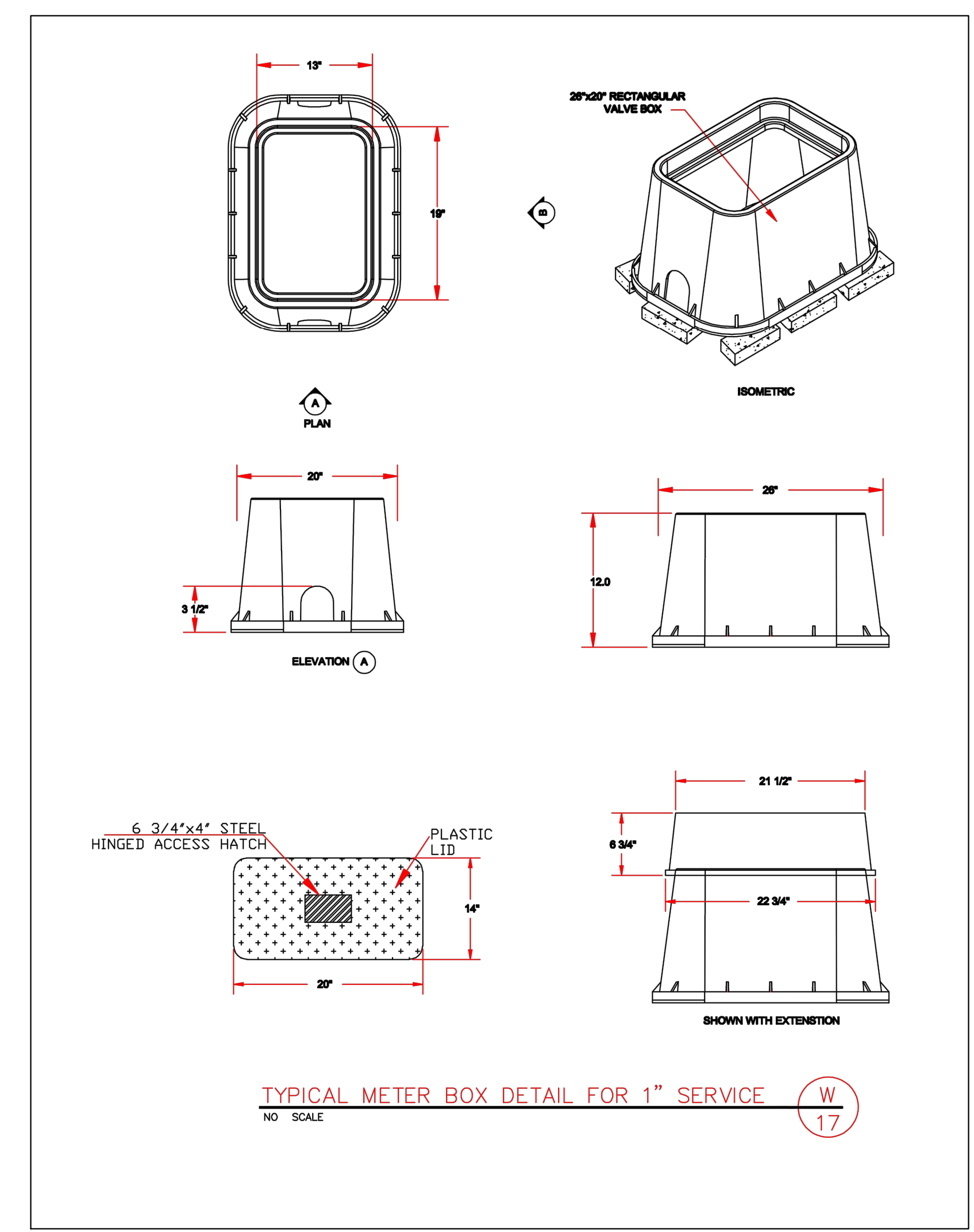
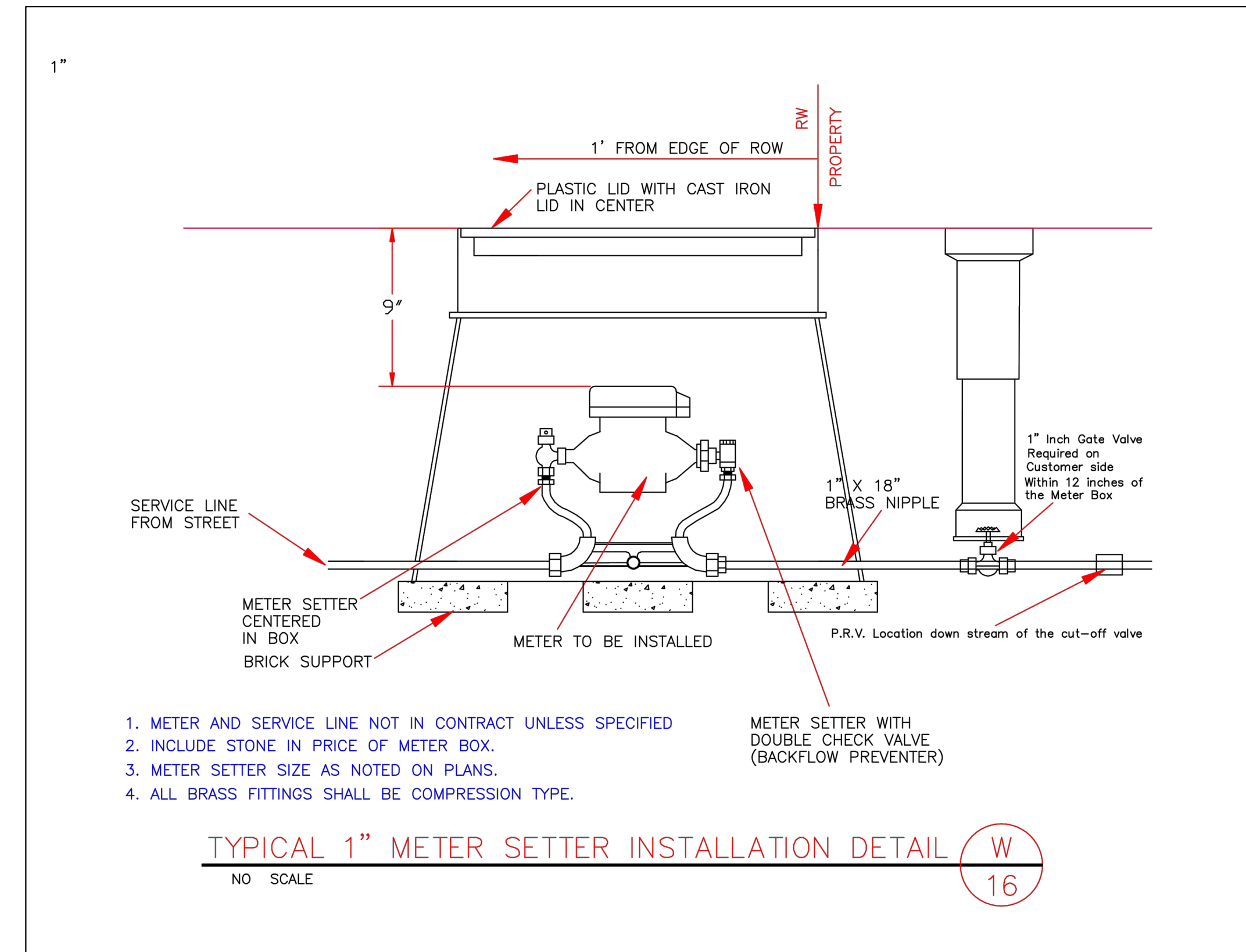
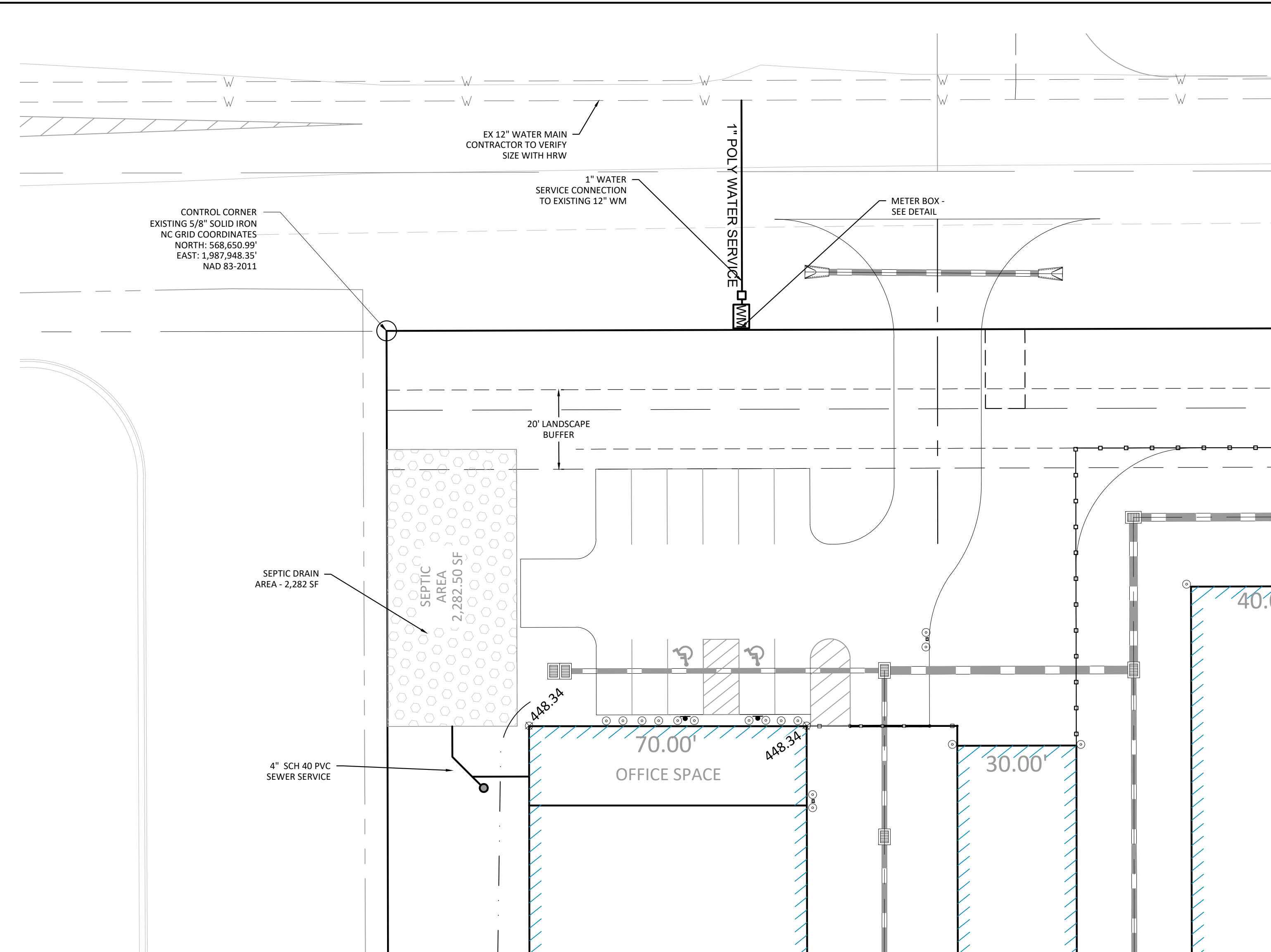
e-mail: jhilliard@hilliardengineering.com

NC License #: P-0836

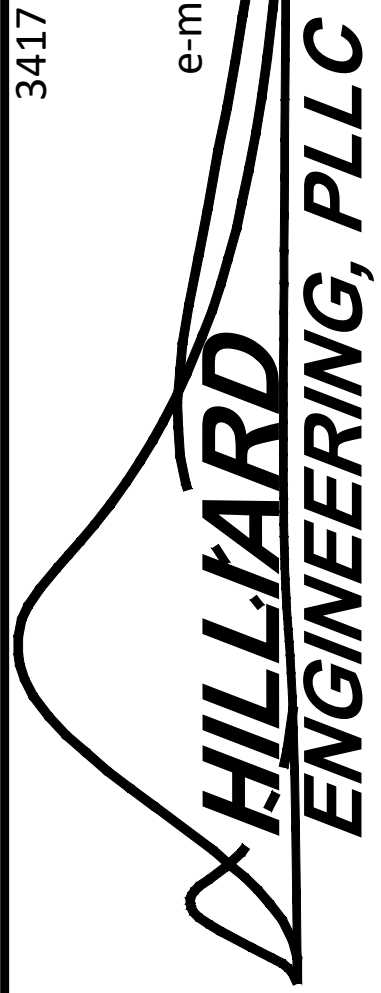


NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	C4.2
CIVIL	



PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836



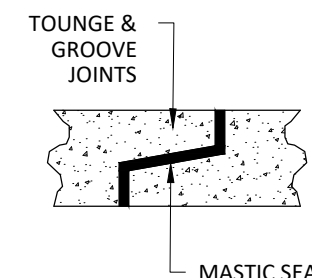
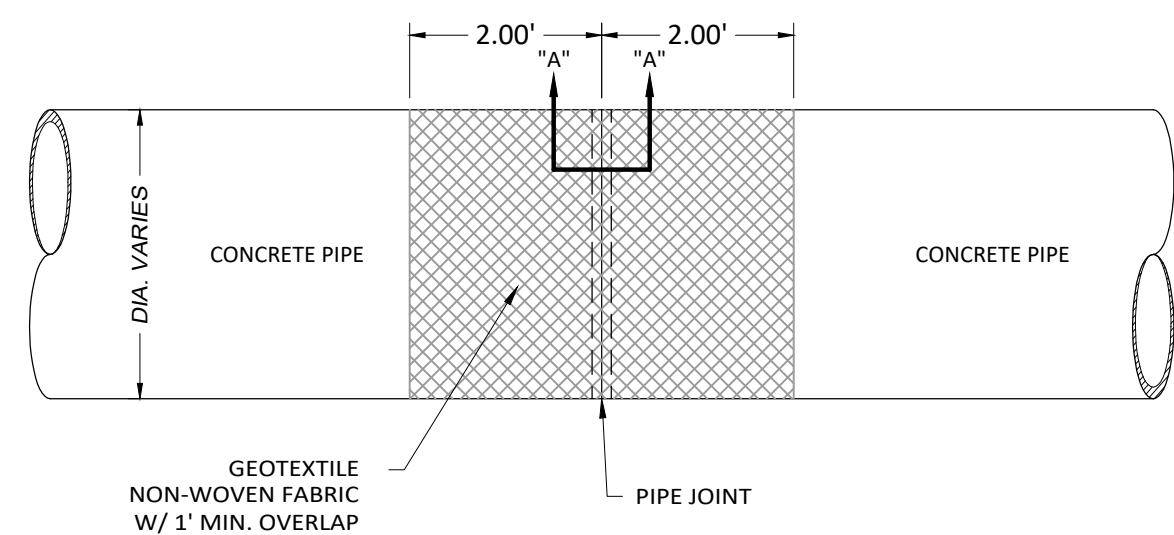
UTILITY PLAN AND DETAIL

HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	-
APPROVED BY:	JEH
SHEET:	C5.0
	CIVIL

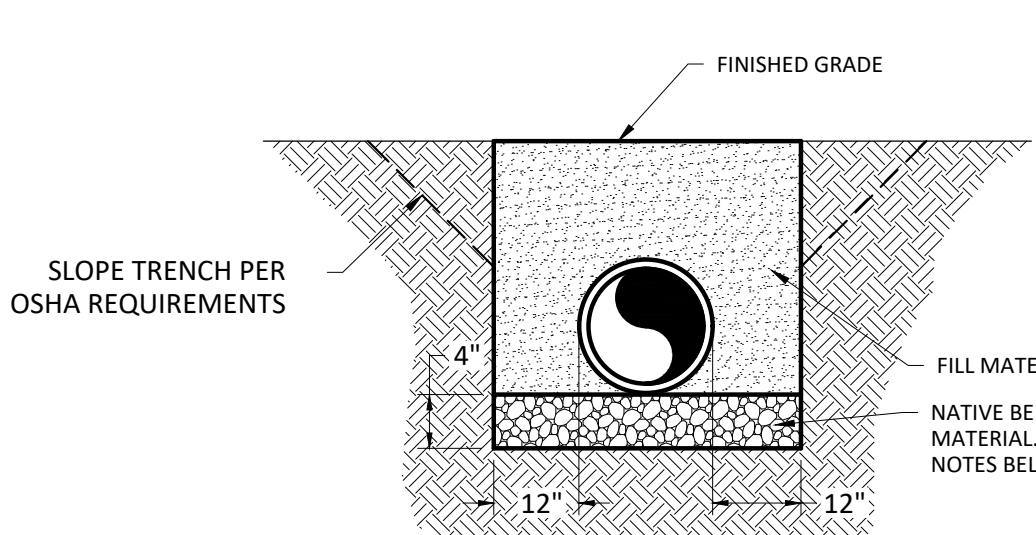


NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		



SECTION "A"- "A"

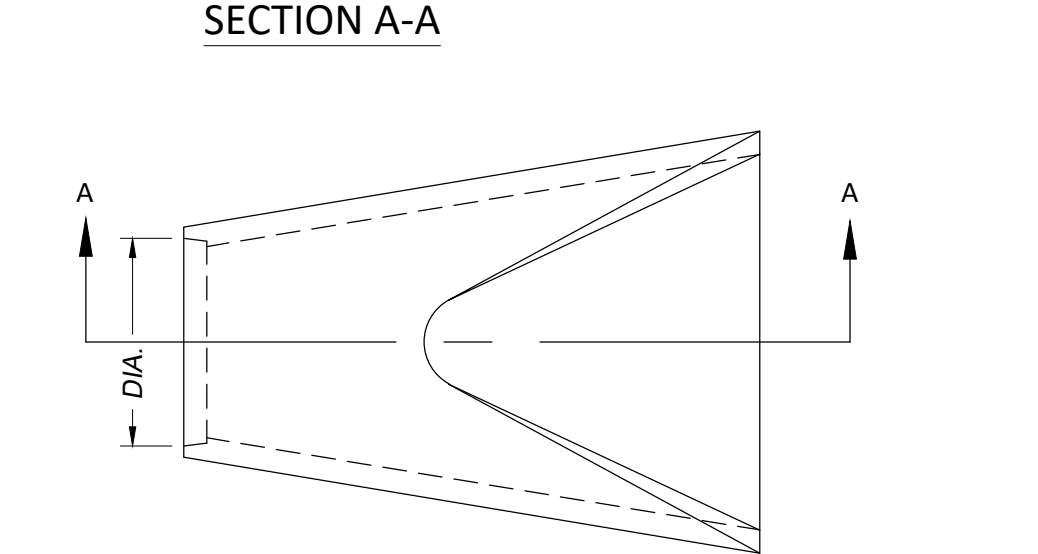
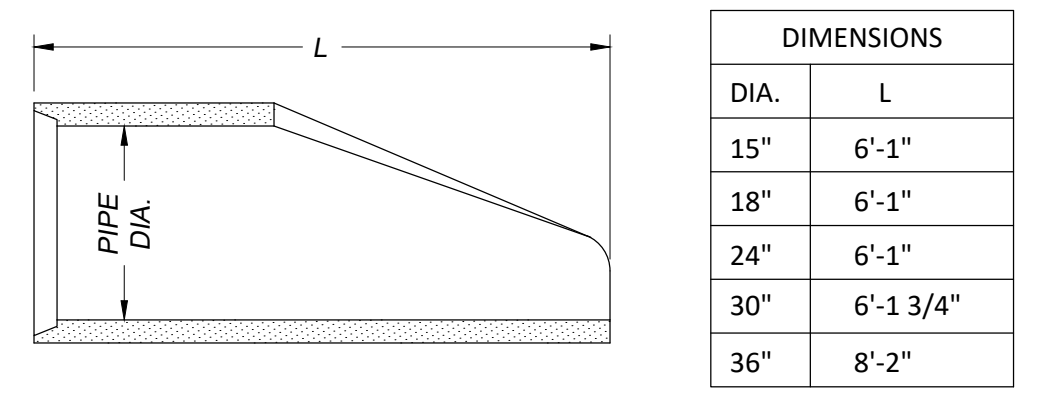
PIPE JOINT
SCALE: N.T.S.



SLOPE TRENCH PER OSHA REQUIREMENTS

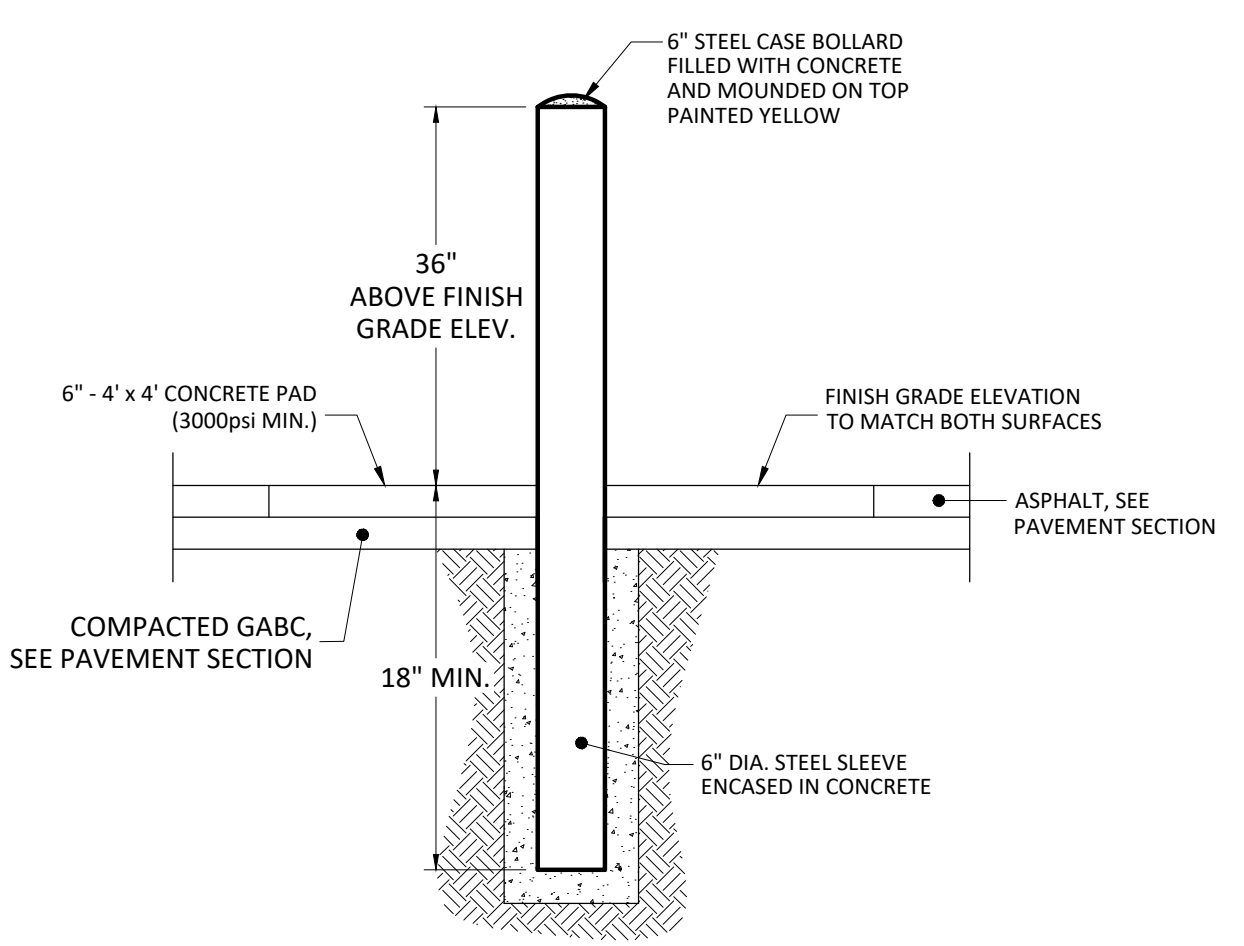
- NOTES:
1. MIN. 6" #57 STONE BEDDING SHALL BE REQUIRED IF TRENCH BOTTOM IS BELOW THE GROUND WATER TABLE.
 2. FILL SHALL BE NATIVE MATERIAL FREE OF LARGE ROCKS, DEBRIS OR ORGANICS PLACED IN 6" LIFTS AND COMPACTED TO 95% OF THE SOIL'S MODIFIED PROCTOR.

REINFORCED CONCRETE PIPE BEDDING
SCALE: N.T.S.

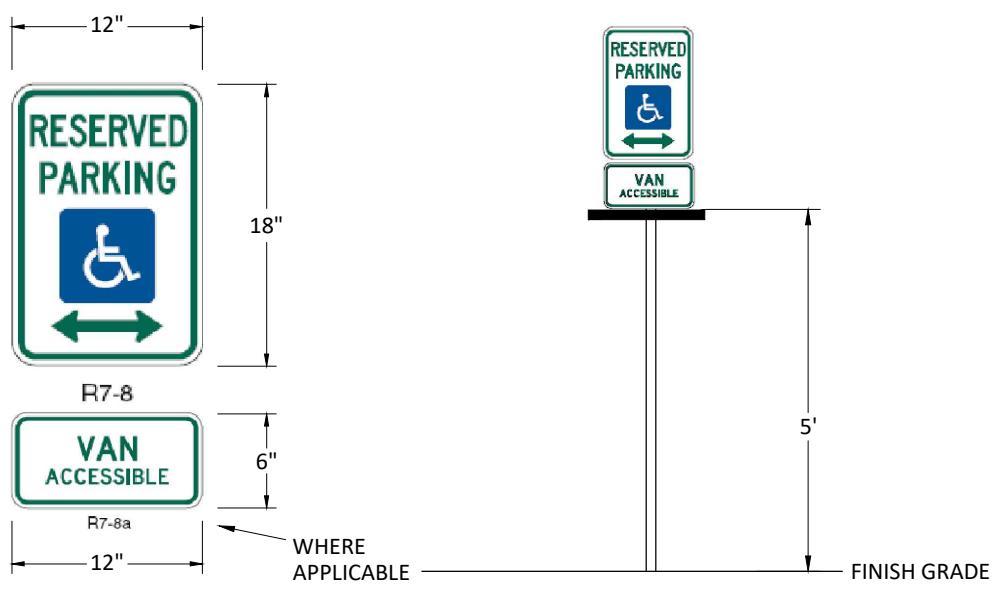


TOP VIEW

FLARED END SECTION
SCALE: N.T.S.

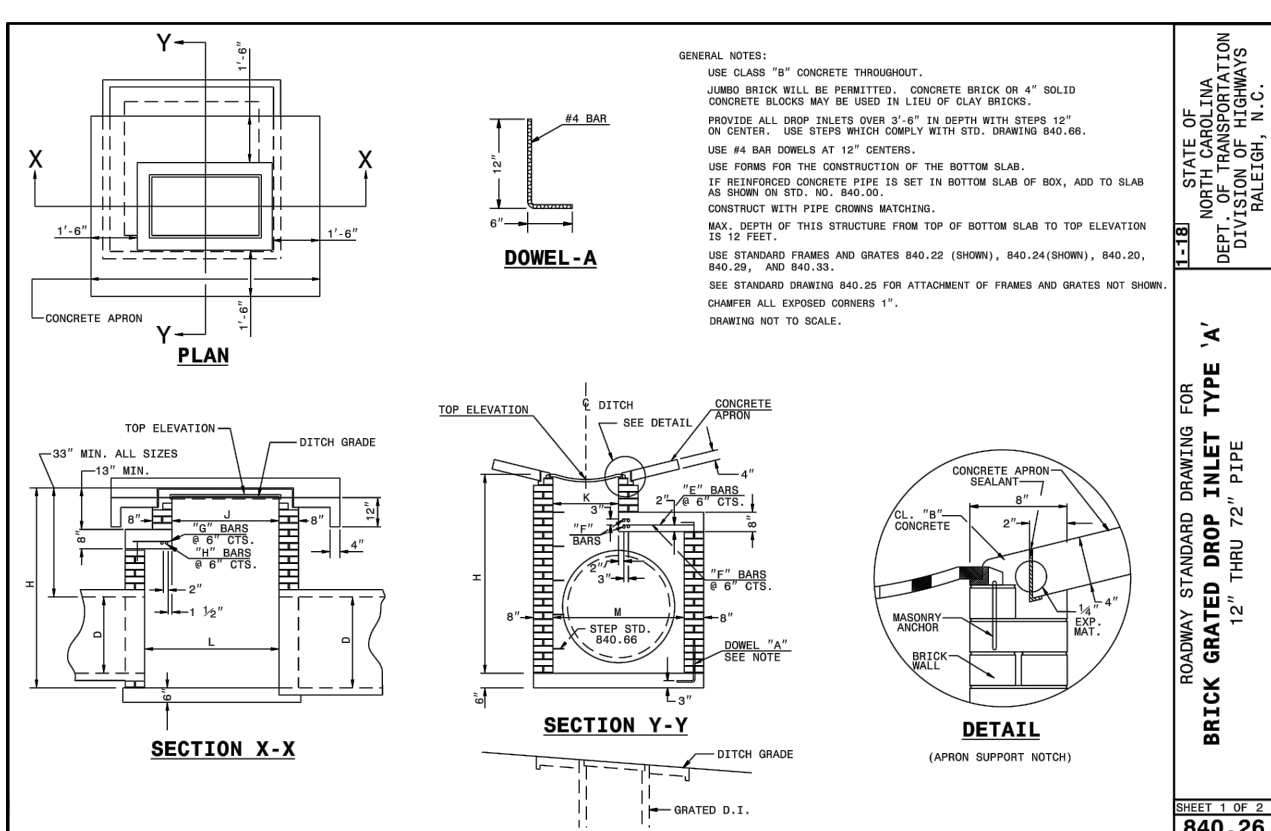


CONCRETE BOLLARD
SCALE: N.T.S.

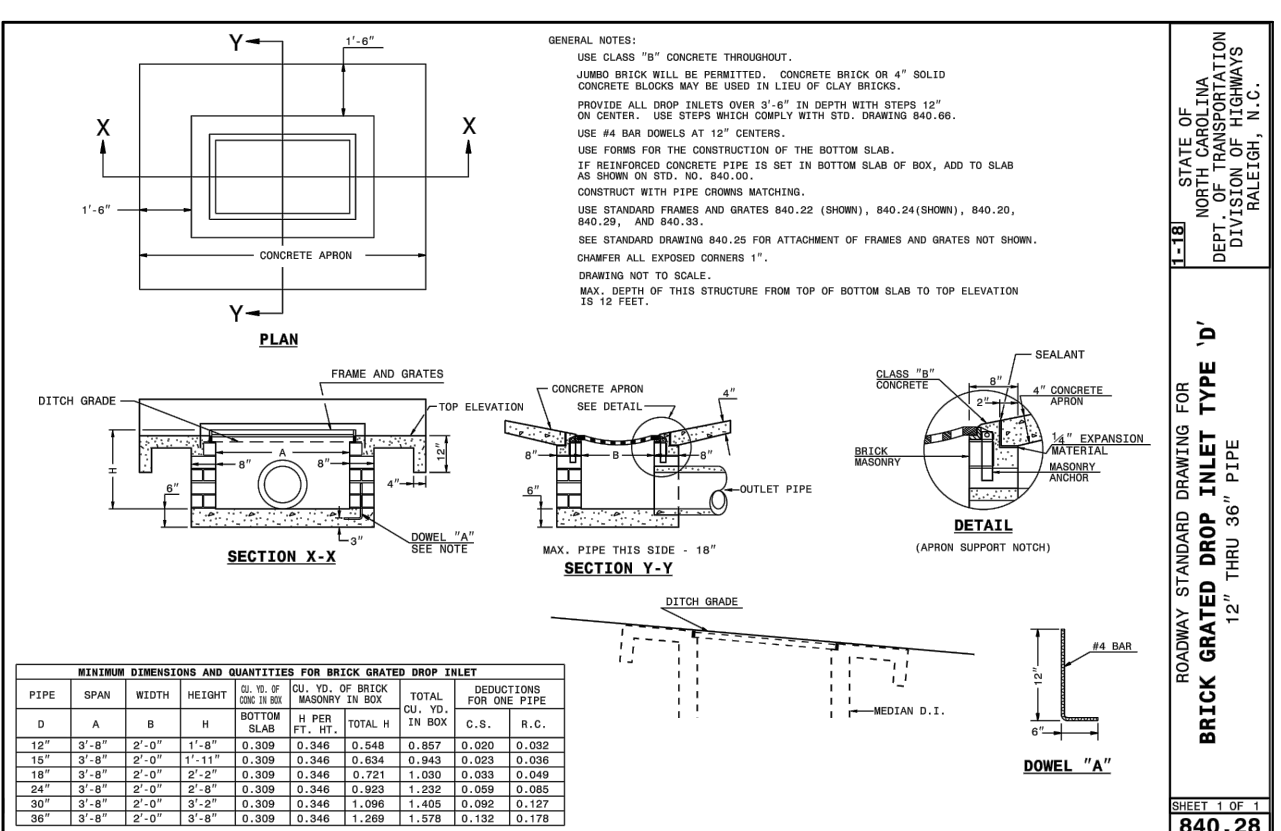


NOTE: HANDICAP SIGN TO CONFORM WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" LATEST EDITION
LOCATION: HANDICAPPED PARKING SIGNS SHALL BE LOCATED 4 FT MIN. OFF OF BACK OF CURB ON CENTER WITH THE WHEEL STOP.

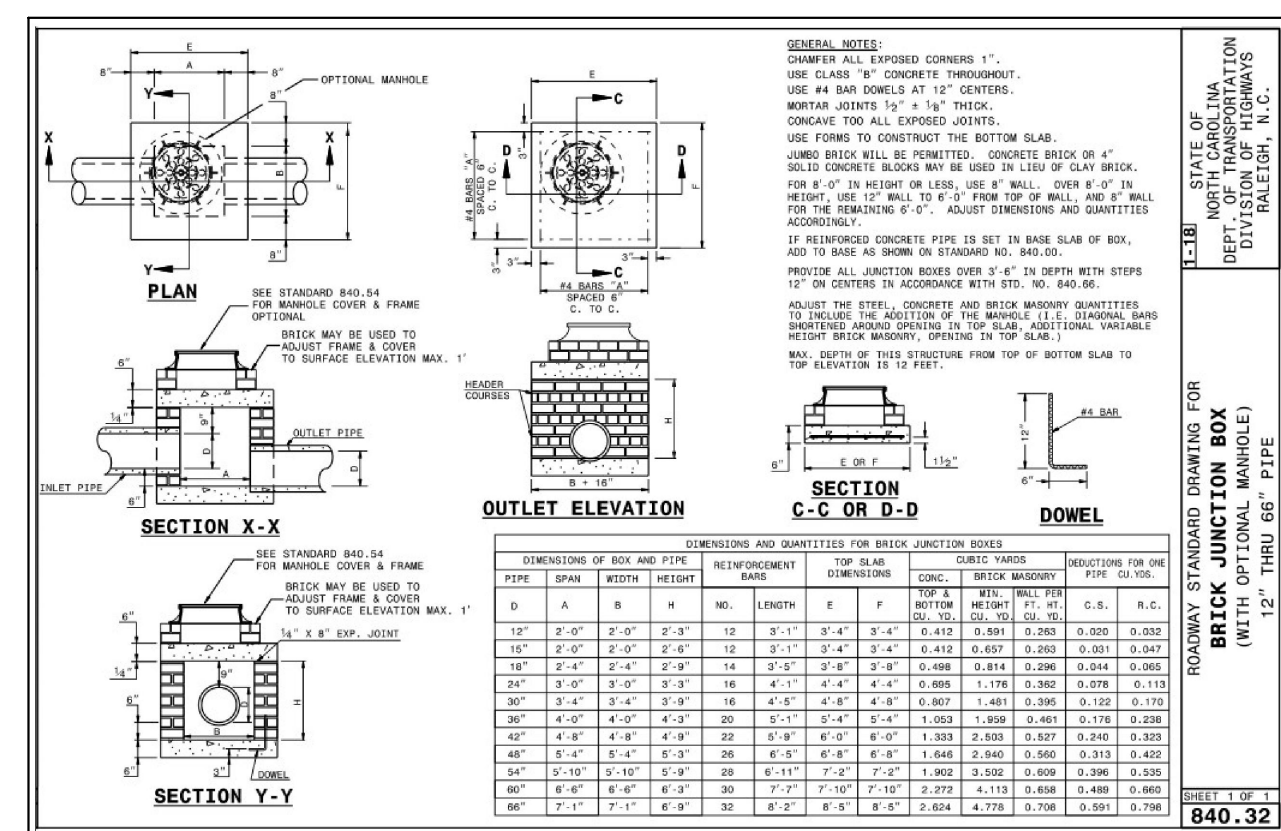
HANDICAP PARKING SIGN (R7-8 8a)
SCALE: N.T.S.



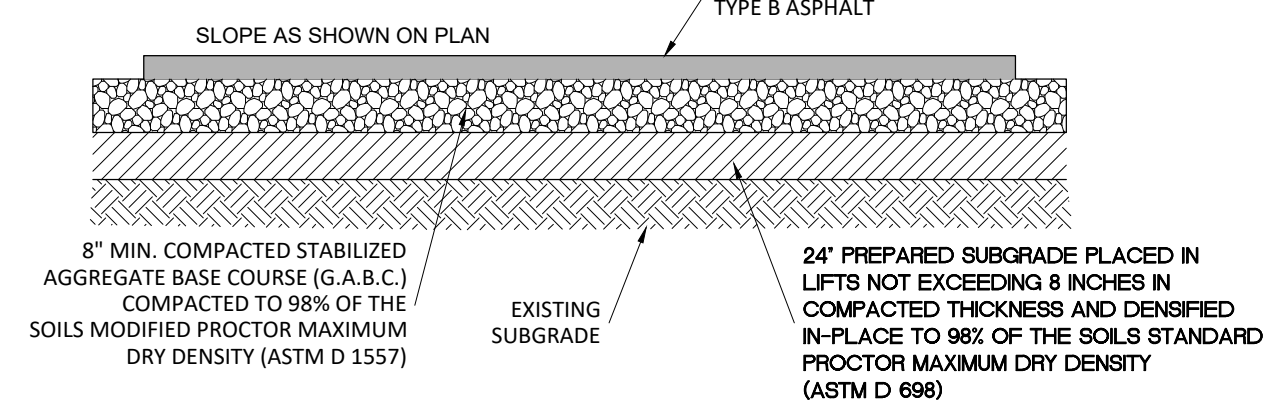
BRICK GRATED DROP INLET TYPE 'A'
SCALE: N.T.S.



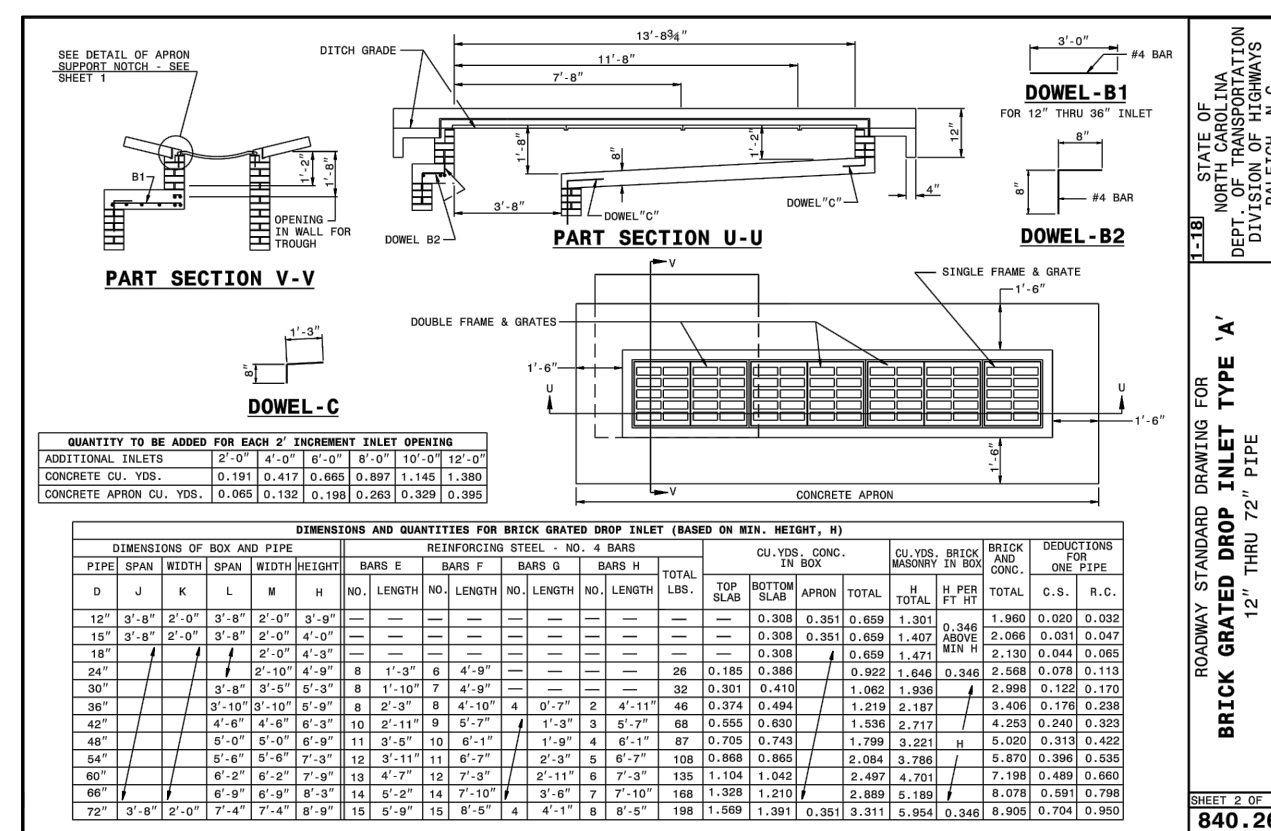
BRICK GRATED DROP INLET TYPE 'D'
SCALE: N.T.S.



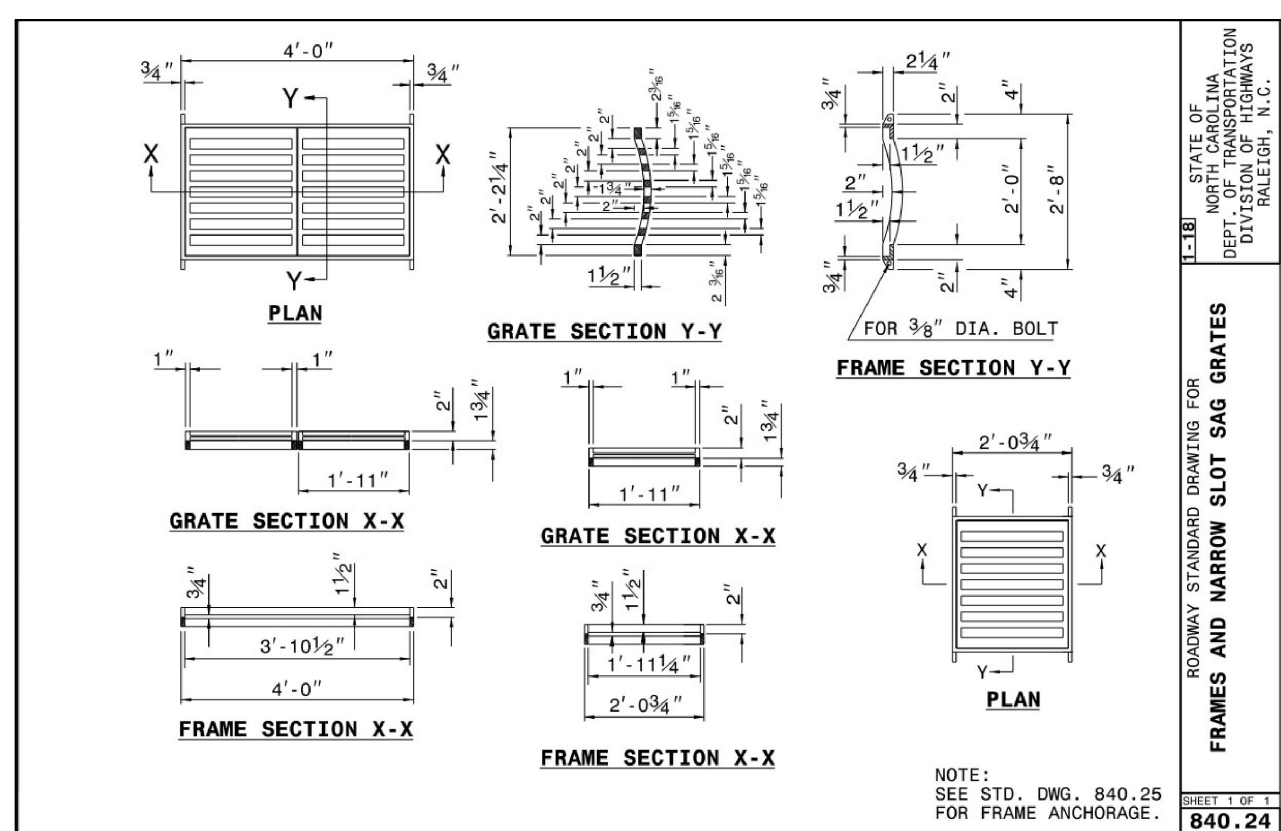
NCDOT JUNCTION BOX DETAIL
SCALE: N.T.S.



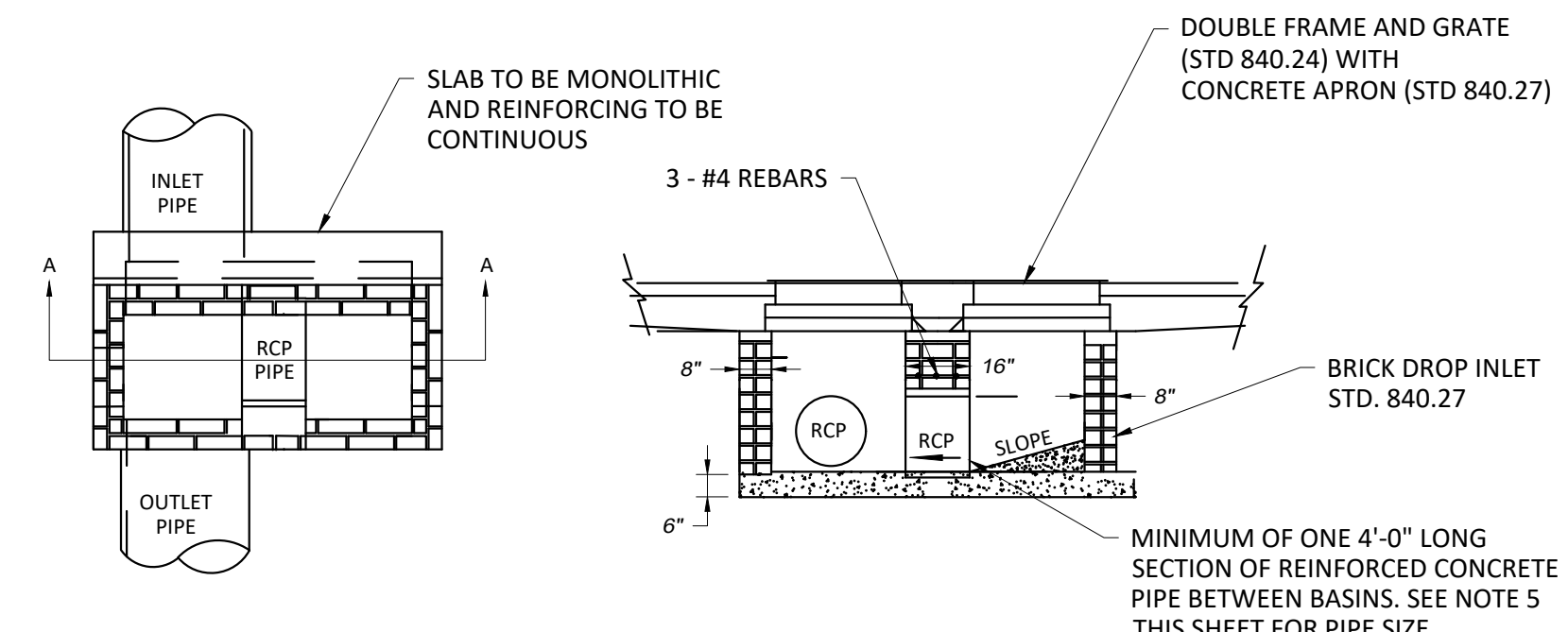
TYPICAL PAVEMENT SECTION
SCALE: N.T.S.



BRICK GRATED DROP INLET TYPE 'A'
SCALE: N.T.S.



NCDOT FRAME AND GRATE DETAIL
SCALE: N.T.S.



PLAN VIEW SECTION A-A VIEW

- GENERAL NOTES:
1. INSTALLATION REQUIRES A MINIMUM OF ONE 4'-0" LONG SECTION OF REINFORCED CONCRETE PIPE BETWEEN CATCH BASINS.
 2. CONSTRUCT TWO SINGLE BASINS PER NCDOT STANDARD WITH DOUBLE INTERIOR WALL.
 3. ALL CONCRETE TO BE 3000 P.S.I COMPRESSIVE STRENGTH.
 4. BASE SLAB SHALL BE MONOLITHIC.
 5. PIPE SECTION D2 CONNECTING CATCH BASINS SHALL HAVE A MINIMUM DIAMETER SAME AS OF OUTLET PIPE D3.
 6. ALL REINFORCING STEEL SHOWN ON NCDOT STANDARDS IS TO BE PROVIDED AS CONTINUOUS MEMBERS. (NO LAPS, USED AS A SINGLE CONTINUOUS BAR IN THE SLAB)

NCDOT - DROP INLET - TYPE 'A'
NOT TO SCALE

NCDOT FRAME AND GRATE DETAIL
NOT TO SCALE

PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

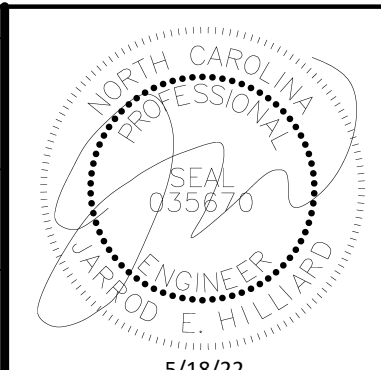
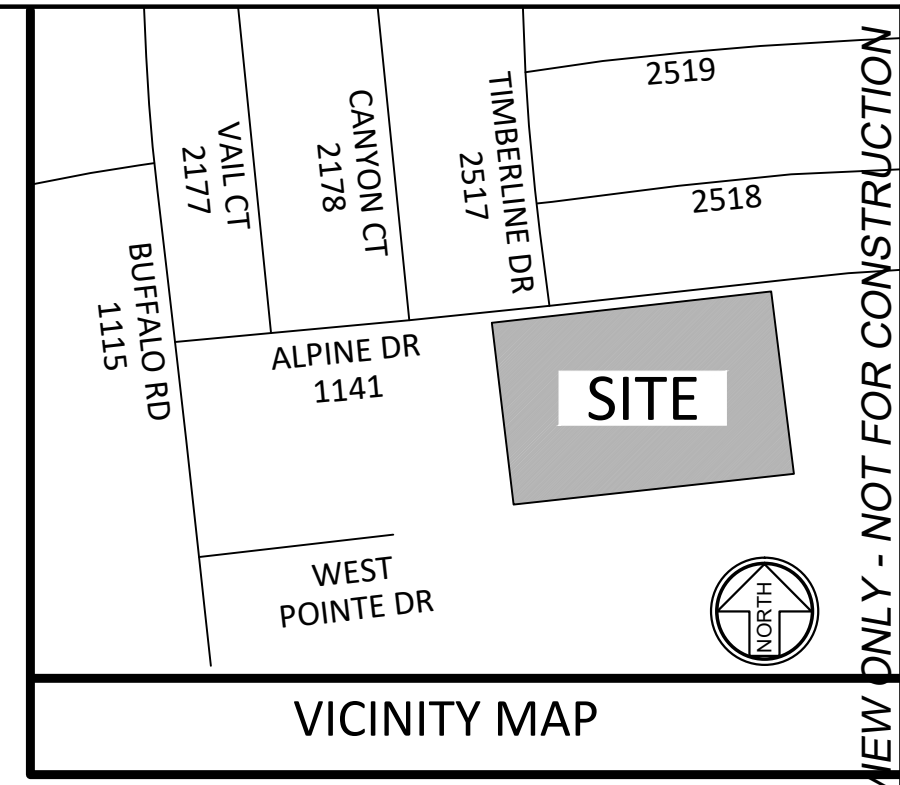
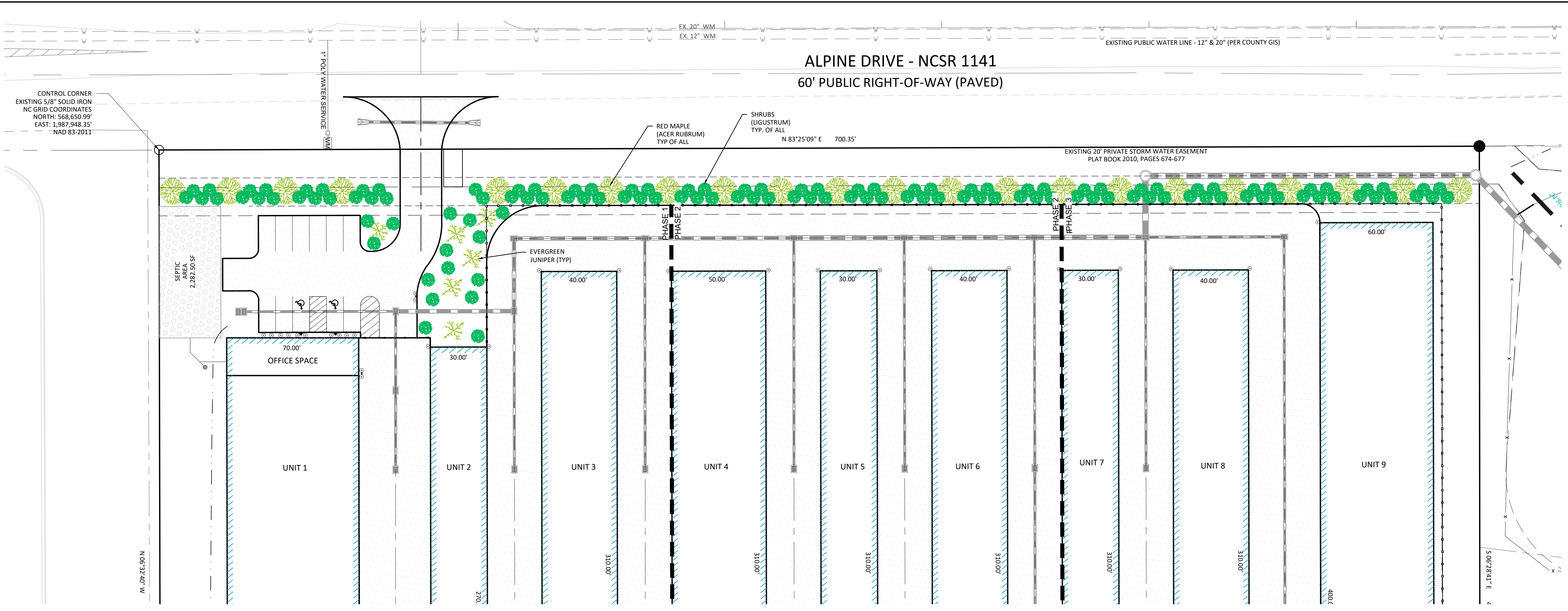
HILLIARD ENGINEERING, PLLC
 HARNETT SELF STORAGE
 SPOUT SPRINGS, NORTH CAROLINA

DESIGNED BY: JEH
 DRAWN BY: -
 APPROVED BY: JEH

SHEET: C6.0
 CIVIL

Know what's below
 Call before you dig.
 Dial 811
 Or Call 800-632-4949

NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		



PRELIMINARY - FOR REVIEW ONLY - NOT FOR CONSTRUCTION
 3417 Winterview Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-0836

HILLIARD
 ENGINEERING, PLLC

TREE/SHRUB PLAN LIST:	BOTANICAL NAME	SIZE	COUNT	SYMBOL
COMMON NAME				
LARGE TREES:			22	
RED MAPLE	ACER RUBRUM	2" CAL., 6' HT		
SHRUBS:				
PRIVET	LIQUSTRUM		122	
EVERGREEN JUNIPER			6	

NOTE:

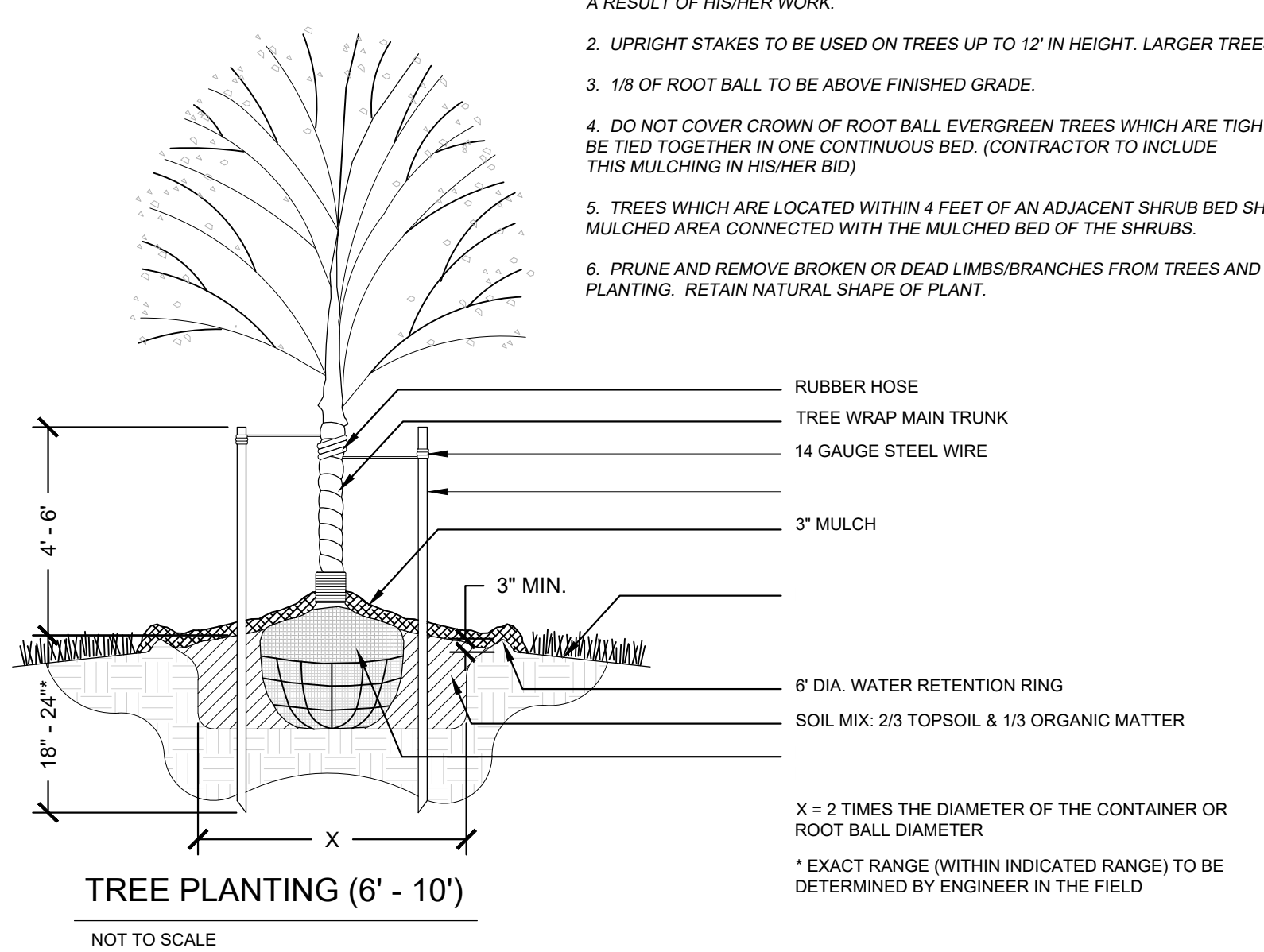
- CONTRACTOR TO REGRADE, SOD OR HYDROSEED, AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF HIS/HER WORK.
- UPRIGHT STAKES TO BE USED ON TREES UP TO 12' IN HEIGHT. LARGER TREES MUST BE GUYED.
- 1/8 OF ROOT BALL TO BE ABOVE FINISHED GRADE.
- DO NOT COVER CROWN OF ROOT BALL EVERGREEN TREES WHICH ARE TIGHTLY SPACED SHALL BE TIED TOGETHER IN ONE CONTINUOUS BED. (CONTRACTOR TO INCLUDE THIS MULCHING IN HIS/HER BID)
- TREES WHICH ARE LOCATED WITHIN 4 FEET OF AN ADJACENT SHRUB BED SHALL HAVE THEIR MULCHED AREA CONNECTED WITH THE MULCHED BED OF THE SHRUBS.
- PRUNE AND REMOVE BROKEN OR DEAD LIMBS/BRANCHES FROM TREES AND SHRUBS AFTER PLANTING. RETAIN NATURAL SHAPE OF PLANT.

NOTE:

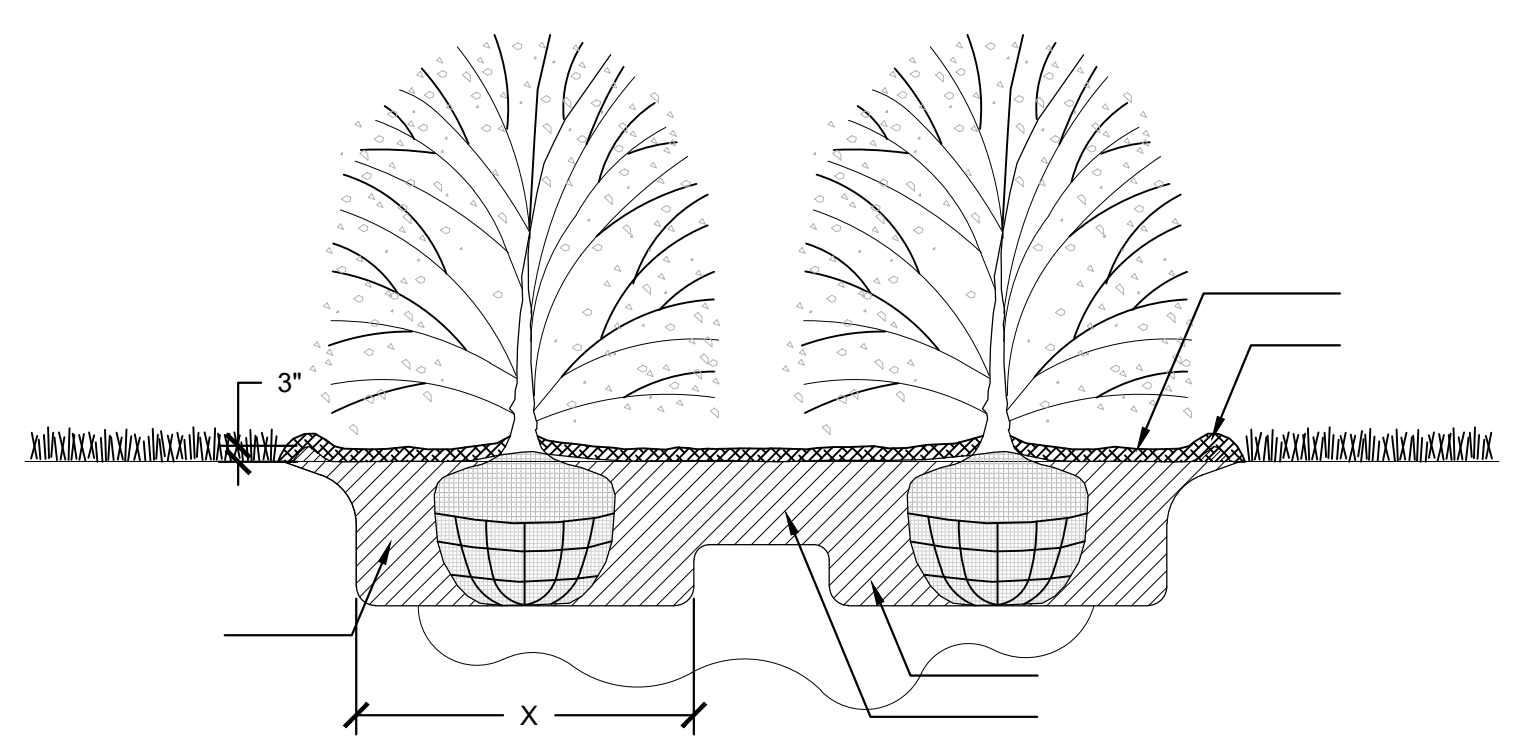
- BEDS TO HAVE SMOOTHLY CONTOURED AND CLEANLY DEFINED EDGES. BEDS SHALL CURVILINEAR EXCEPT AS NOTED ON PLAN.
- PROPOSED BEDS MUST BE LAID OUT ON SITE AND APPROVED BY OWNER, IF REQUESTED BY OWNER.
- REMOVE TOP 1/3 OF ALL BURLAP FABRIC AROUND ROOT BALL.
- COMPLETELY REMOVE ALL STRINGS, RIBBONS, AND TABS FROM THE PLANT.
- SCARIFY ROOTS ON POT BOUND PLANTS.
- PLANT SPACING VARIES - (SEE PLAN)
- ALL SHRUBS TO BE PLANTED IN MULCHED BEDS.
- PRUNE ALL BROKEN, DISEASED, AND WEAK BRANCHES.
- ALL SHRUB BEDS TO BE COMPLETELY EXCAVATED OF ALL EXISTING SOIL TO REQUIRED DEPTH AND BACKFILLED WITH REQUIRED SOIL MIX.
- SOIL MIX: 2/3 TOPSOIL & 1/3 ORGANIC MATTER.
- TOP DRESS BED WITH 10-6-4 FERTILIZER AT THE RATE OF 5 LBS. PER 100 S.F. OF BED AREA.

GENERAL NOTES:

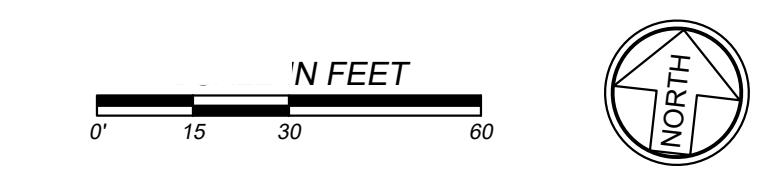
- THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY. LANDSCAPE PLAN PROVIDED IS FOR MINIMUM COMPLIANCE WITH HARNETT COUNTY UDO AND SHOULD NOT BE CONSIDERED AN ENHANCED LANDSCAPE PLAN. CONSULT WITH A REGISTERED LANDSCAPE ARCHITECT FOR SPECIFIC PLANTING RECOMMENDATIONS.
- UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, LANDSCAPE ARCHITECT, OR THEIR REPRESENTATIVES. PLEASE CALL BEFORE YOU DIG.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.
- THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DISCREPANCIES. NOTIFICATION SHALL BE MADE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
- ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND REQUIREMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL WORK IN A MANNER THAT PROTECTS COMPLETED WORK BY OTHERS, SUCH AS CURBS, UTILITIES, STORM DRAINAGE, FENCES, DRIVEWAY APRONS, DRIVES, VEGETATION, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF SATISFACTORY REPAIR OF ALL DAMAGES IN KIND RESULTING FROM HIS/HER FAILURE TO COMPLY.
- THE CONTRACTOR IS TO VERIFY ALL QUANTITIES SHOWN ON THE PLAN AND IN THE PLANT SCHEDULE. IF DISCREPANCIES OCCUR, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY. QUANTITIES OF PLANTS SHOWN BY LANDSCAPE SYMBOLS SHALL GOVERN OVER THE QUANTITIES SHOWN IN THE PLANT SCHEDULE.
- ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE TAGS FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY OR CULTIVAR PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN). PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- NO SUBSTITUTIONS OF PRODUCTS, PLANT TYPES OR SIZES SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER, LANDSCAPE ARCHITECT, AND MUNICIPAL REVIEW AGENCY. REQUESTS FOR SUBSTITUTION SHALL BE IN WRITING, AND SHALL STATE THE REASONS FOR THE SUBSTITUTION REQUEST. THE SUGGESTED ALTERNATIVE, AND THE CHANGES IN COST. REQUESTS FOR SUBSTITUTION IN PLANT MATERIAL SHALL STATE THE NAMES OF NURSERIES WHO HAVE BEEN UNABLE TO SUPPLY THE ORIGINALLY SPECIFIED MATERIAL.
- PLANTING SHALL ONLY OCCUR DURING SPECIFIED PLANTING SEASONS. SPRING SEASON SHALL BE FROM MARCH 1 TO JUNE 15. FALL PLANTING SEASON SHALL BE FROM SEPTEMBER 15 TO NOVEMBER 15.
- THE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE DURING THE GUARANTEE PERIOD.
- INSTALLED UNIT PRICES FOR ALL PLANT MATERIAL SHALL BE SUPPLIED TO THE OWNER AND LANDSCAPE ARCHITECT AT THE TIME OF BIDDING.
- THE LANDSCAPE CONTRACTOR IS TO PERFORM A THOROUGH CLEANUP AND QUALITY CONTROL INSPECTION WITHIN 12 HOURS PRIOR TO THE OPENING OF THE POOL.
- THE LANDSCAPE CONTRACTOR IS SUBJECT TO RANDOM INSPECTIONS BY THE OWNER AND/OR THE OWNER'S REPRESENTATIVE AT ANY TIME DURING THE INSTALLATION PROCESS.



TREE PLANTING (6' - 10')
 NOT TO SCALE



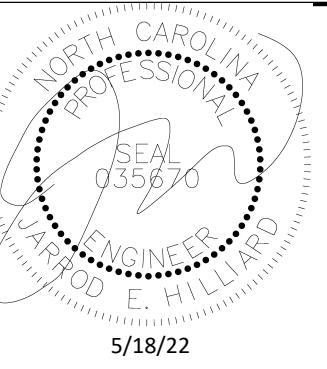
SHRUB PLANTING BED
 NOT TO SCALE



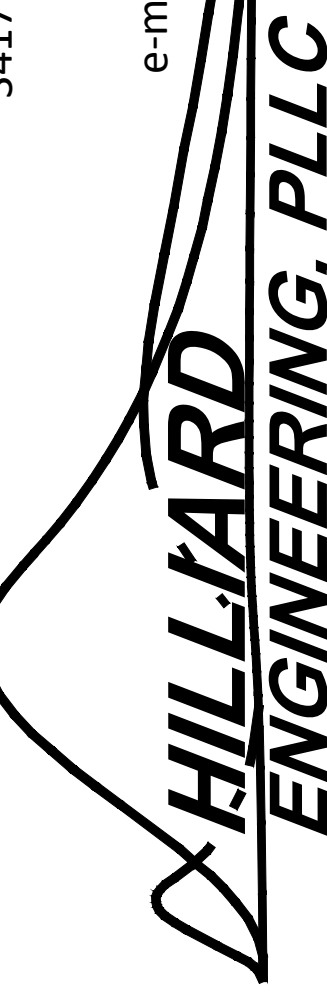
NO.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		

LANDSCAPE PLAN AND DETAIL

DESIGNED BY: JEH
 DRAWN BY: -
 APPROVED BY: JEH
SHEET:
L 1.0
 CIVIL



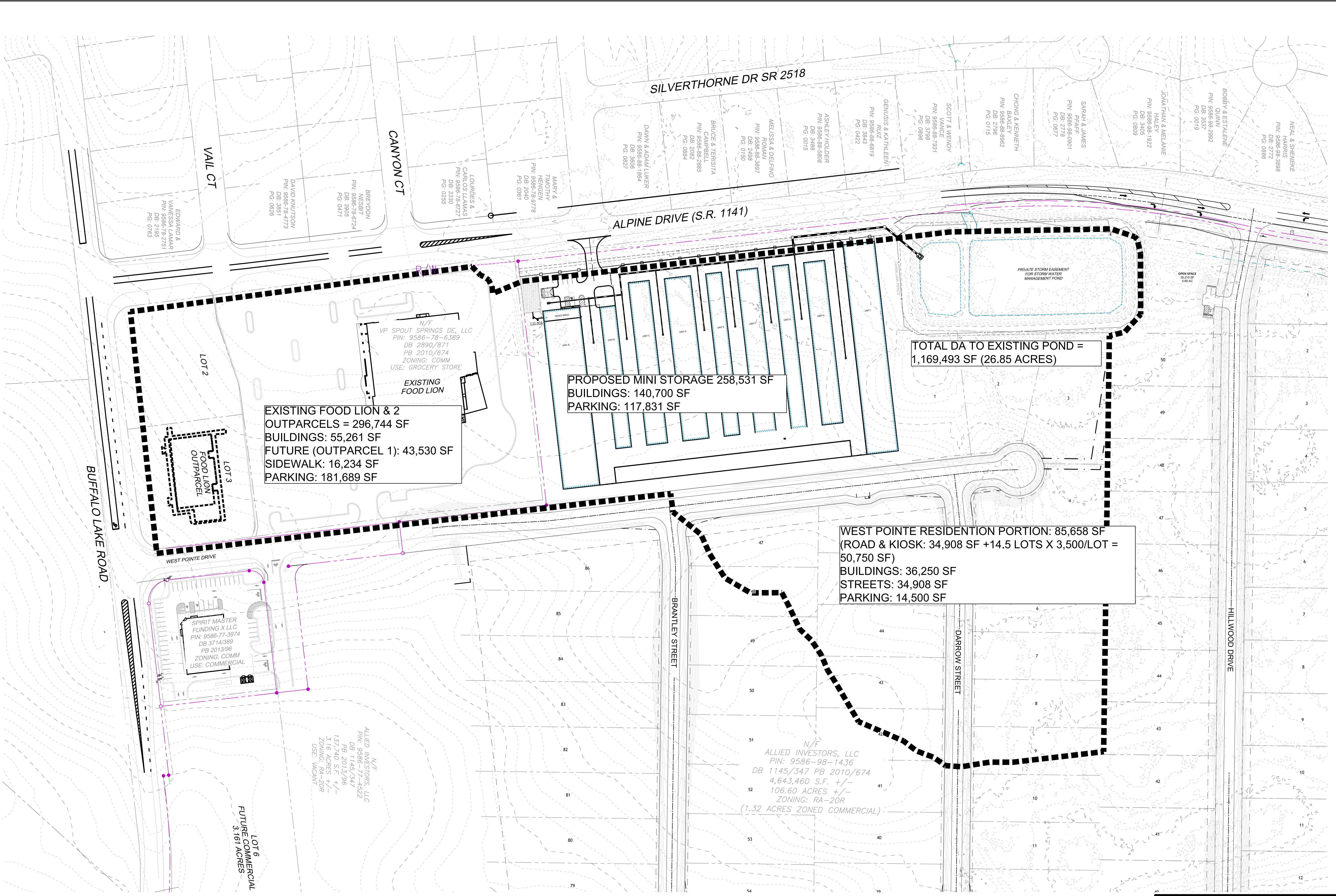
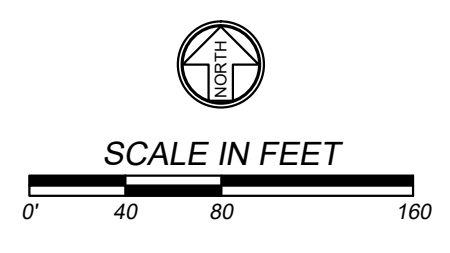
3417 Winterwind Circle, Sanford, NC 27330
 PO Box 249, Sanford, NC 27331
 Phone: (919) 352-2834
 e-mail: jhilliard@hilliardengineering.com
 NC License #: P-08396



MODIFIED PERMIT DRAINAGE AREA MAP
SHOPPES AT SUMMIT
 HOKE COUNTY, NORTH CAROLINA

DESIGNED BY:	JEH
DRAWN BY:	JEH
APPROVED BY:	JEH
SHEET:	D-1
	CIVIL

SYM.	REVISION DESCRIPTION:	DATE:
1		
2		
3		
4		
5		
6		



TOTAL DA TO EXISTING POND =
 1,169,493 SF (26.85 ACRES)

PROPOSED MINI STORAGE 258,531 SF
 BUILDINGS: 140,700 SF
 PARKING: 117,831 SF

EXISTING FOOD LION & 2
 OUTPARCELS = 296,744 SF
 BUILDINGS: 55,261 SF
 FUTURE (OUTPARCEL 1): 43,530 SF
 SIDEWALK: 16,234 SF
 PARKING: 181,689 SF

WEST POINT RESIDENTION PORTION: 85,658 SF
 (ROAD & KIOSK: 34,908 SF +14.5 LOTS X 3,500/LOT =
 50,750 SF)
 BUILDINGS: 36,250 SF
 STREETS: 34,908 SF
 PARKING: 14,500 SF

N/F
 ALLIED INVESTORS, LLC
 PIN: 9586-98-1436
 DB 1145/347 PB 2010/674
 4,643,460 S.F. +/-
 106.60 ACRES +/-
 ZONING: RA-20R
 (1.32 ACRES ZONED COMMERCIAL)

N/F
 ALLIED INVESTORS, LLC
 PIN: 9586-77-4522
 DB 1145/347
 PB 2013/96
 1,371,740 S.F. +/-
 3.16 ACRES +/-
 ZONING: RA-20R
 USE: VACANT

LOT 6
 FUTURE COMMERCIAL
 3.161 ACRES

SPIRIT MASTER
 FUNDING X LLC
 PIN: 9586-77-3974
 DB 3714/389
 PB 2013/96
 ZONING: COMM
 USE: COMMERCIAL

N/F
 VP SPOUT SPRINGS DE, LLC
 PIN: 9586-78-6389
 DB 2890/871
 PB 2010/674
 ZONING: COMM
 USE: GROCERY STORE

LOT 3
 FOOD LION
 OUTPARCEL

LOT 2

VAIL CT

CANYON CT

ALPINE DRIVE (S.R. 1141)

SILVERTHORNE DR SR 2518

BUFFALO LAKE ROAD

BRANTLEY STREET

DARROW STREET

HILLWOOD DRIVE

WEST POINTE DRIVE

EXISTING FOOD LION

PRIVATE STORM EASEMENT
 FOR STORM WATER
 MANAGEMENT POND

OPEN SPACE
 30,215 SF
 0.69 AC

EDWARD &
 VANISSA
 PIN: 9586-78-2195
 DB: 2195
 PG: 0783

BREYDON
 NESBIT
 PIN: 9586-78-6234
 DB: 6235
 PG: 0441

LOURDES &
 CARLOS LLANAS
 PIN: 9586-78-9727
 DB: 0255
 PG: 0255

MARY &
 TIMOTHY
 HENGEN
 PIN: 9586-78-9778
 DB: 3040
 PG: 0381

DANN &
 ADAM LUKER
 PIN: 9586-88-1864
 DB: 3606
 PG: 0827

BRUCE &
 TERESITA
 PIN: 9586-88-2885
 DB: 2082
 PG: 0884

MELISSA &
 DELFINO
 ROMAN
 PIN: 9586-88-3897
 DB: 2498
 PG: 0150

ASHLEY HOLDER
 PIN: 9586-88-5808
 DB: 3488
 PG: 0015

GENUIS &
 KATHLEEN
 RUIZ
 PIN: 9586-88-8819
 DB: 3843
 PG: 0422

SCOTT &
 WENDY
 VANCE
 PIN: 9586-88-7931
 DB: 3798
 PG: 0896

CHONG &
 KENNETH
 BAKER
 PIN: 9586-88-8982
 DB: 2786
 PG: 0115

SARAH &
 JAMES
 PFAFF
 PIN: 9586-98-0901
 DB: 2778
 PG: 0677

JONATHAN &
 MELANIE
 HALEY
 PIN: 9586-98-1922
 DB: 3405
 PG: 0809

BOBBY &
 ESTALENE
 PIN: 9586-98-2992
 DB: 3537
 PG: 0019

NEAL &
 SHERENE
 HARRIS
 PIN: 9586-98-3898
 DB: 2772
 PG: 0886