PROPERTY OWNER:

CITY OF FRANKLIN, VIRGINIA 207 WEST SECOND AVE FRANKLIN, VIRGINIA 23851

APPLICANT/CONTRACT PURCHASER:

PINNACLE AGRICULTURE HOLDINGS, LLC P.O.BOX 1169, N. SHARPE AVE CLEVELAND, MS 38732 CONTACT: BRUCE WEST TEL: (662) 846-8677 BRUCE.WEST@SANDERS.COM

CIVIL ENGINEER:

NEEL-SCHAFFER, INC. 1022 HIGHLAND COLONY PARKWAY, STE 202 RIDGELAND, MS 39157 CONTACT: BRANDON RUT TEL: (601) 898-3358 FAX: (601) 898-8485

CONSTRUCTION MANAGER:

CENTURY CONSTRUCTION & REALTY, INC. 1062 HIGHLAND COLONY PARKWAY RIDGELAND, MS 39157 CONTACT: TALTY SHANNON TEL: (769) 300-2266 TSHANNON@CENTURYCR.COM

PROGRAM MANAGER:

JED JOHNSON
AREA MANAGER
PROVIDENCE AGRICULTURE
TEL: (785) 985-2550
JED.JOHNSON@PROVIDENCEAG.COM

PROPERTY INFO:

PROPERTY ADDRESS: BUSINESS DRIVE

(# TO BE DETERMINED ONCE PLAT IS RECORDED)

FRANKLIN, VA 23851

TYPE OF DEVELOPMENT: NEW CONSTRUCTION

PROPOSED USE: STORAGE AND DISTRIBUTION WAREHOUSE

TAX PARCEL: 155-(186)-1

PARCEL ZONING: M-2 HEAVY INDUSTRIAL

TOTAL SITE AREA: 10.00 ACRES

TOTAL DISTURBED AREA: 6.00 ACRES

PHASE 1 LAND DISTURBANCE AREA: 6.00 ACRES

TOTAL POST IMPERVIOUS AREA: 1.50 ACRES (APPROX.)

TOTAL EXISTING IMPERVIOUS AREA: 1.50 ACRES

TOTAL ADDED IMPERVIOUS AREA: 1.50 ACRES (APPROX.)

ADJACENT PARCEL ZONING:

NORTH: M-2 - HEAVY INDUSTRIAL
SOUTH: M-2 - HEAVY INDUSTRIAL
EAST: R-0 - SINGLE FAMILY RESIDENCE
WEST: M-2 - HEAVY INDUSTRIAL

MINIMUM SETBACKS:

NORTH: EQUAL TO BUILDING HEIGHT; BUT NOT LESS THAN 25' SOUTH: EQUAL TO BUILDING HEIGHT; BUT NOT LESS THAN 25' EAST: 30' WEST: 25'

BUILDING HEIGHT: OFFICE≈18.7'; WAREHOUSE≈22.2'; BULK WAREHOUSE≈44.3'

BUILDING SQUARE FOOTAGE: OFFICE=2,400; WAREHOUSE=24,000; BULK WAREHOUSE=8,568

NUMBER OF EMPLOYEES: 15

MINIMUM PARKING SPACES REQUIRED: 8 (1 PER 2 EMPLOYEES)

REGULAR PARKING SPACES PROVIDED: 21

HANDICAP PARKING SPACES PROVIDED: 2

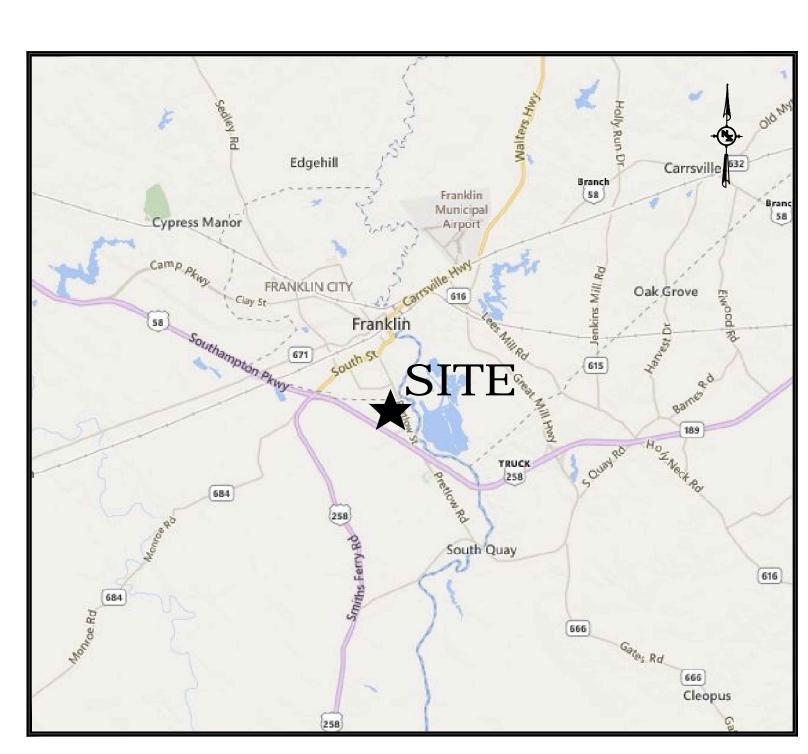
WATER & SEWER: TO BE SUPPLIED BY CITY.

FLOOD ZONE: PROPERTY DOES NOT LIE IN A FLOOD PRONE AREA PER F.I.R.M. MAP 5100600004 D DATED 09-04-02.

PHASE 1 CONSTRUCTION PLANS

FRANKLIN, VA

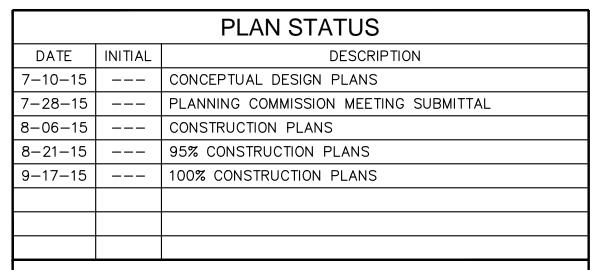
AGRICULTURAL PRODUCT SALES CENTER FRANKLIN, VA



LOCATION MAP SCALE: N.T.S.



VICINITY MAP SCALE: 1"=600'



RELEASED FOR STAKEOUT

T DATE FULLY APPROVED

| RELEASED ONLY FOR FOLLOWING IMPROVEMENTS

NEEL-SCHAFFER, INC.

DRAWING INDEX:

T-1 TITLE SHEET
C-1 SITE PLAN (PHASE 1)
C-2 SITE COORDINATE PLAN & DETAILS
C-3 GRADING PLAN
C-4 GRADING STANDARD DETAILS
C-5 UTILITIES PLAN
C-6 UTILITIES STANDARD DETAILS
C-7 EROSION & SEDIMENT CONTROL PLAN
C-8 EROSION & SEDIMENT CONTROL NOTES



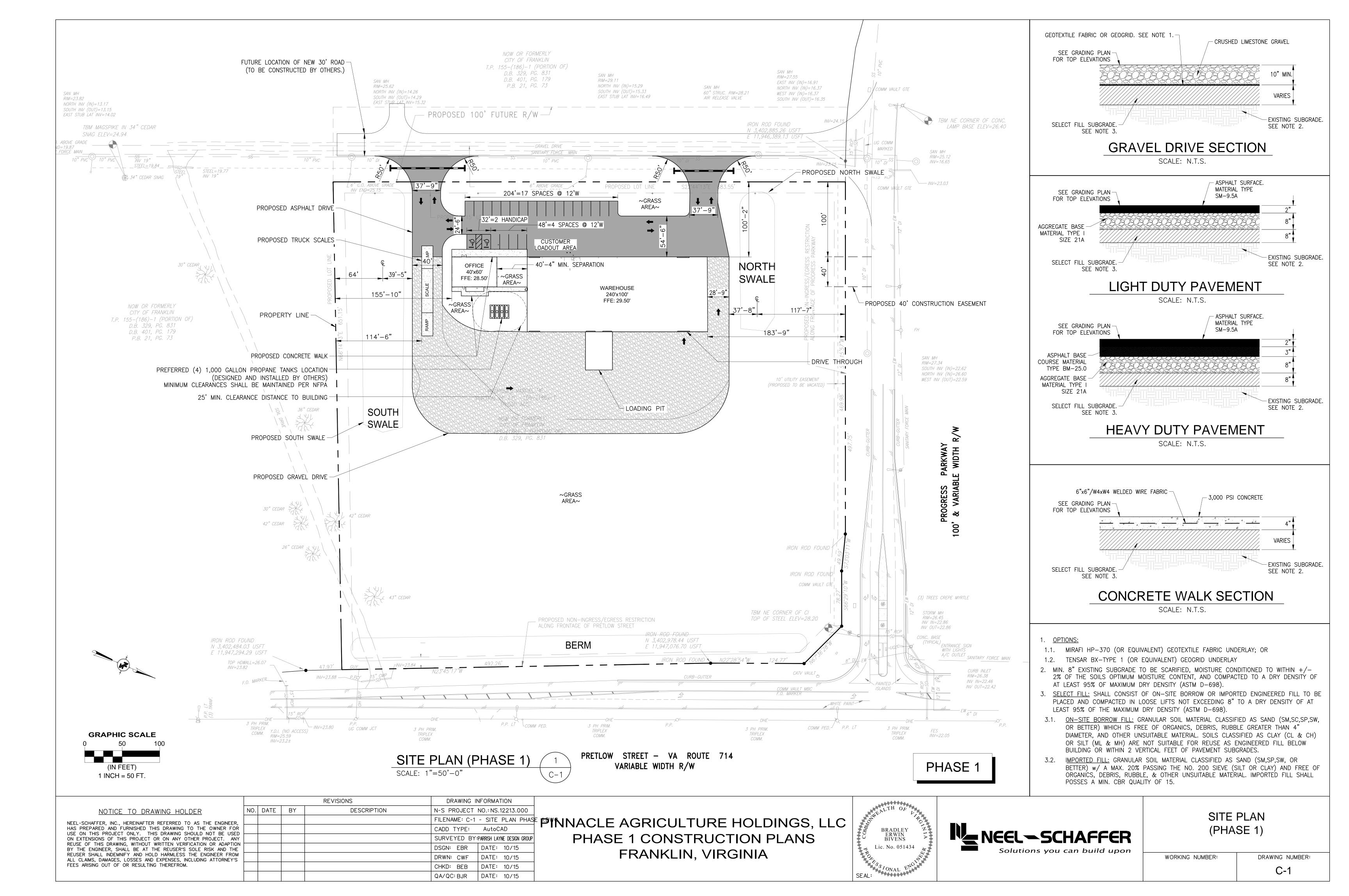


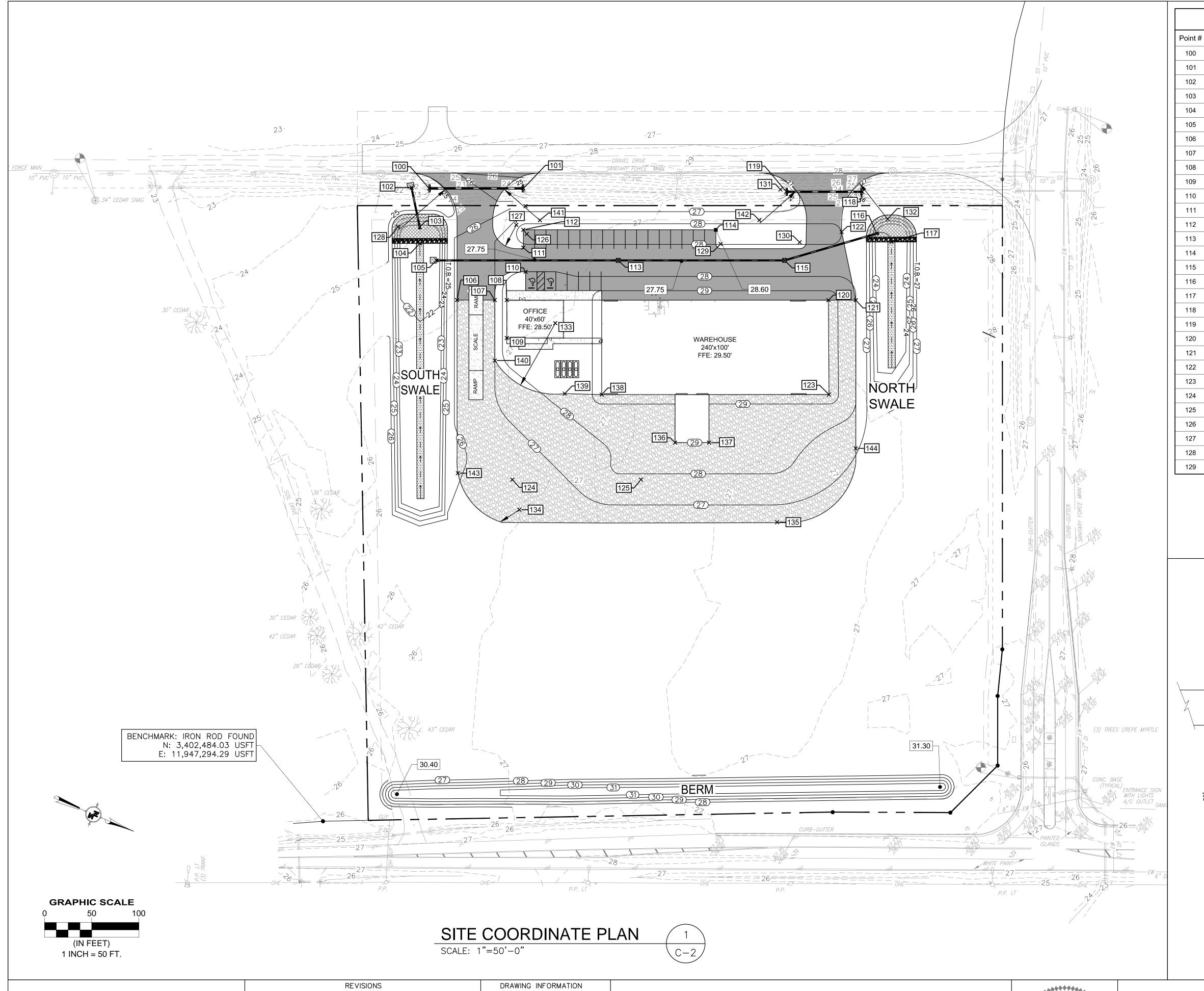
PREPARED BY:

NEEL-SCHAFFER
Solutions you can build upon

1022 HIGHLAND COLONY PARKWAY, SUITE 202 RIDGELAND, MS 39157 PH: (601) 898-3358 FAX: (601) 898-8485

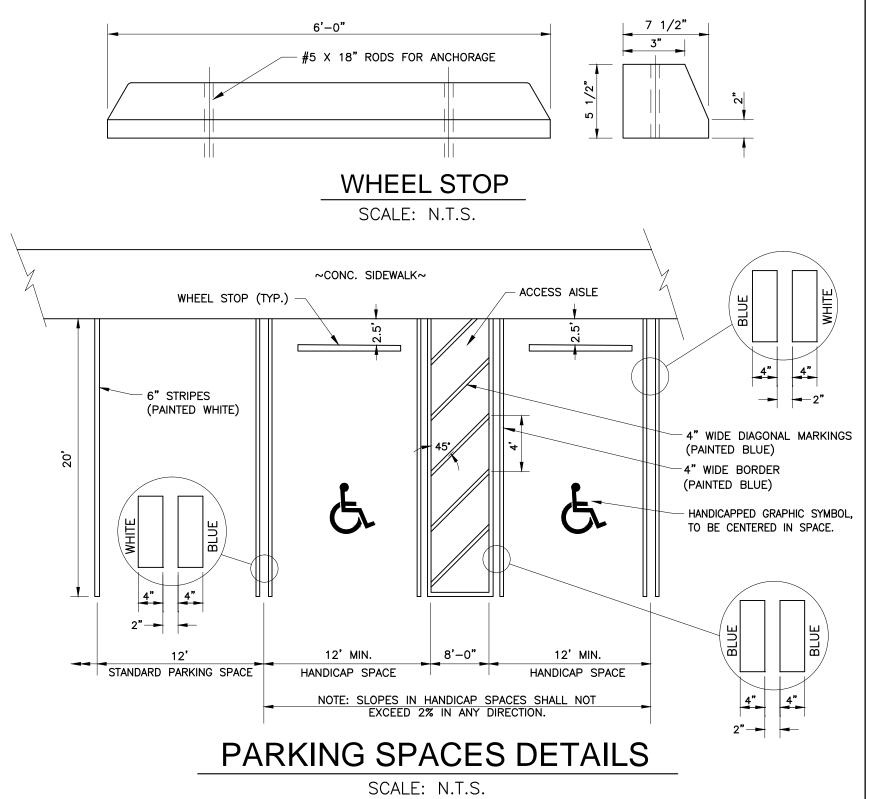






Point Table						
Point #	Northing	Easting				
100	3402328.64	11946632.68				
101	3402420.87	11946594.03				
102	3402311.16	11946639.07				
103	3402335.37	11946674.25				
104	3402342.13	11946690.13				
105	3402365.21	11946700.04				
106	3402401.73	11946730.27				
107	3402438.62	11946714.81				
108	3402450.28	11946709.92				
109	3402465.84	11946747.05				
110	3402457.13	11946674.53				
111	3402445.01	11946651.86				
112	3402437.75	11946634.53				
113	3402542.98	11946625.54				
114	3402625.90	11946555.68				
115	3402705.53	11946557.42				
116	3402784.61	11946493.42				
117	3402802.37	11946495.55				
118	3402753.44	11946458.53				
119	3402679.20	11946489.64				
120	3402764.67	11946578.32				
121	3402791.49	11946567.11				
122	3402749.70	11946506.22				
123	3402803.89	11946670.29				
124	3402529.20	11946883.10				
125	3402654.97	11946830.39				
126	3402442.87	11946637.25				
127	3402428.82	11946632.58				
128	3402314.14	11946682.85				
129	3402636.31	11946567.59				

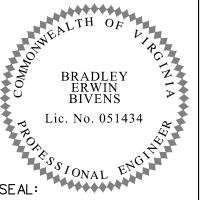
	Point Table							
Point #	Northing	Easting						
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131	3402672.43	11946489.9						
132	3402789.32	11946474.7						
133	3402507.18	11946712.6						
134	3402548.48	11946909.5						
135	3402805.47	11946816.2						
136	3402673.11	11946780.2						
137	3402706.32	11946766.3						
138	3402581.78	11946763.4						
139	3402545.31	11946777.5						
140	3402463.38	11946773.8						
141	3402449.98	11946618.3						
142	3402664.45	11946528.4						
143	3402473.38	11946899.0						
144	3402851.95	11946711.8						



NOTICE TO DRAWING HOLDER	NO. DATE	BY		
NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER.				
HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR				
USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY				
REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE				
REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS. DAMAGES. LOSSES AND EXPENSES. INCLUDING ATTORNEY'S				
FEES ARISING OUT OF OR RESULTING THEREFROM.				_
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				REVISIONS	DRAWING I	NFORMATION	l
	NO.	DATE	BY	DESCRIPTION	N-S PROJECT	NO.: NS.12213.000	
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R ED					CADD TYPE:	AutoCAD	'
٧Y					SURVEYED BY	:PARRISH LAYNE DESIGN GROUP	
ON IE					DSGN: EBR	DATE: 10/15	
M S					DRWN: CWF	DATE: 10/15	
					CHKD: BEB	DATE: 10/15	
					QA/QC: BJR	DATE: 10/15	

MINNACLE AGRICULTURE HOLDINGS, LLC PHASE 1 CONSTRUCTION PLANS FRANKLIN, VIRGINIA

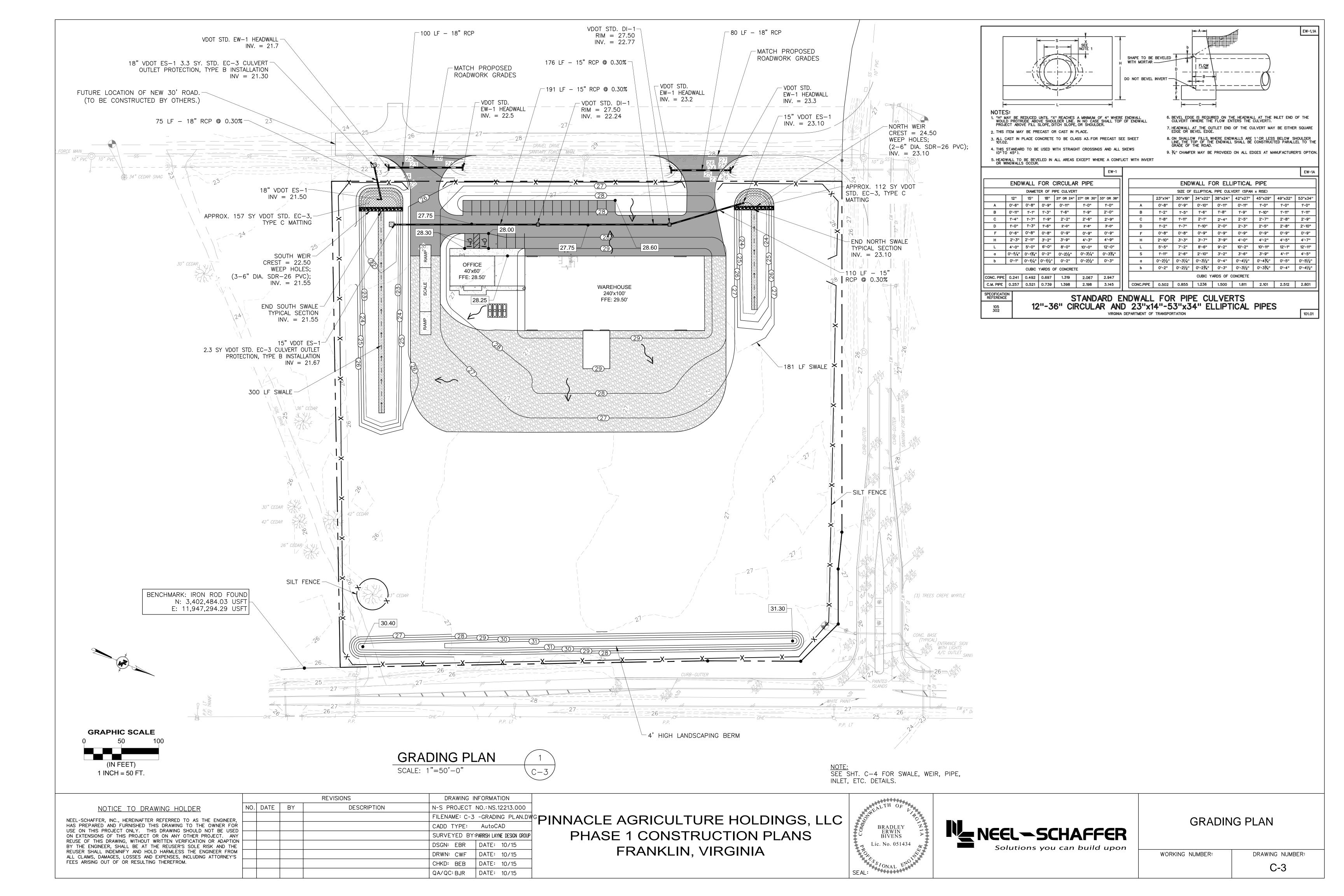


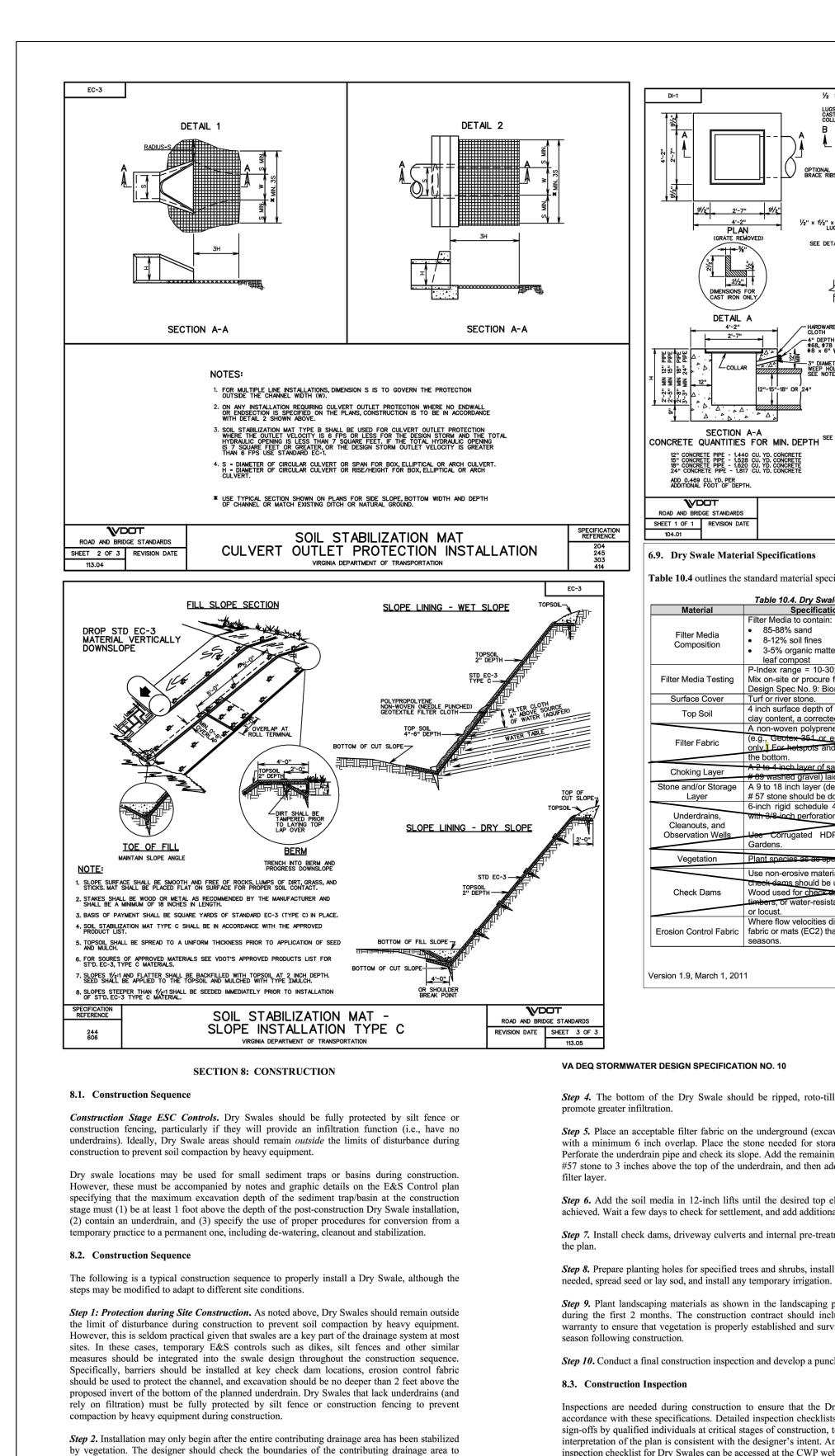


SITE COORDINATE PLAN & **DETAILS**

WORKING NUMBER:

DRAWING NUMBER: C-2





ensure it conforms to original design. Additional E&S controls may be needed during swale

construction, particularly to divert stormwater from the Dry Swale until the filter bed and side

slopes are fully stabilized. Pre-treatment cells should be excavated first to trap sediments before

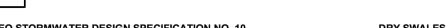
Step 3. Excavators or backhoes should work from the sides to excavate the Dry Swale area to the

appropriate design depth and dimensions. Excavating equipment should have scoops with

adequate reach so they do not have to sit inside the footprint of the Dry Swale area.

they reach the planned filter beds.

Version 1.9, March 1, 2011



Step 4. The bottom of the Dry Swale should be ripped, roto-tilled or otherwise scarified to

with a minimum 6 inch overlap. Place the stone needed for storage layer over the filter bed. #57 stone to 3 inches above the top of the underdrain, and then add 3 inches of pea gravel as a

achieved. Wait a few days to check for settlement, and add additional media as needed.

Step 9. Plant landscaping materials as shown in the landscaping plan, and water them weekly during the first 2 months. The construction contract should include a care and replacement warranty to ensure that vegetation is properly established and survives during the first growing

Step 10. Conduct a final construction inspection and develop a punchlist for facility acceptance.

Inspections are needed during construction to ensure that the Dry Swale practice is built in accordance with these specifications. Detailed inspection checklists should be used that include sign-offs by qualified individuals at critical stages of construction, to ensure that the contractor's interpretation of the plan is consistent with the designer's intent. An example construction phase

http://www.cwp.org/Resource Library/Controlling Runoff and Discharges/sm.htm (scroll to Tool6: Plan Review, BMP Construction, and Maintenance Checklists)

Some common pitfalls can be avoided by careful construction supervision that focuses on the following key aspects of dry swale installation.

- Check the filter media to confirm that it meets specifications and is installed to the correct
- · Check elevations such as the invert of the underdrain, inverts for the inflow and outflow points, and the ponding depth provided between the surface of the filter bed and the overflow
- Ensure that caps are placed on the upstream (but not the downstream) ends of the
- Page 19 of 21

QA/QC:BJR DATE: 10/15

Step 5. Place an acceptable filter fabric on the underground (excavated) sides of the dry swale Perforate the underdrain pipe and check its slope. Add the remaining stone jacket, and then pack

Step 6. Add the soil media in 12-inch lifts until the desired top elevation of the Dry Swale is

Step 7. Install check dams, driveway culverts and internal pre-treatment features, as specified in

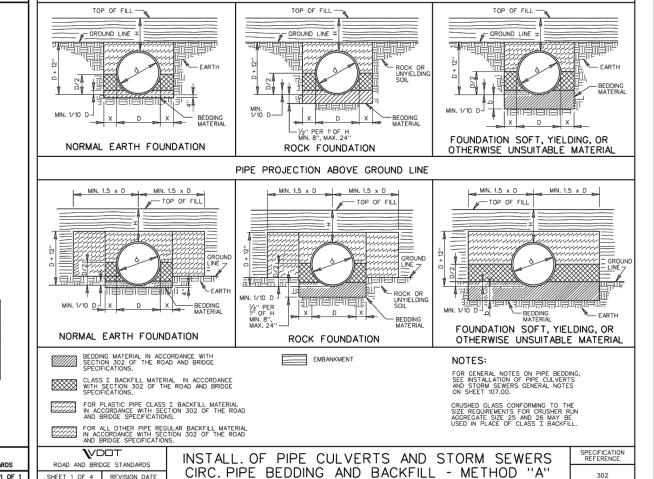
Step 8. Prepare planting holes for specified trees and shrubs, install erosion control fabric where

inspection checklist for Dry Swales can be accessed at the CWP website at:

- underdrains.

Version 1.9, March 1, 2011

NO PROJECTION OF PIPE ABOVE GROUND LINE NORMAL FARTH FOUNDATION SECTIONAL ELEVATION BEDDING THICKNESS TABLE . BEDDING MATERIAL IS TO BE AGGREGATE SIZE 25 OR 26. IF FOUNDATION HAS STANDIN OR RUNNING WATER PRESENT, THEN AGGREGATE NO. 57 SHALL BE USED FOR THE DEPI SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, CAPPED WITH 4 INCHES OF AGGREGATE NO. 25 OR 26. BEDDING THICKNESS WIDTH OF BEDDING MATERIAL SHALL EXTEND A MINIMUM OF 6" BEYOND THE BASE OF THE STRUCTURE ON ALL SIDES. NORMAL EARTH NORMAL EARTH FOUNDATION 1" PER FOOT OF H, MAX. 8" . HEIGHT OF STRUCTURE (H) IS MEASURED FROM THE INVERT OF THE STRUCTURE TO THE TOP OF THE FRAME AND COVER OR CONCRETE DEPENDING ON STRUCTURE TYPE. SEE APPLICABLE DRAINAGE STRUCTURE STANDARD FOR DETAIL. BEDDING MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS AS SPECIFIED ON THE PLANS SOFT & YIELDING OR AS DIRECTED BY THE ENGINEER CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS FOR PLASTIC PIPE CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND RIDGE SPECIFICATIONS FOR ALL OTHER PIPE REGULAR BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND RPINCE SPECIFICATIONS ROAD AND BRIDGE STANDARDS DRAINAGE STRUCTURE BEDDING FOR DROP INLET. ROAD AND BRIDGE STANDARDS MANHOLE, AND JUNCTION BOX



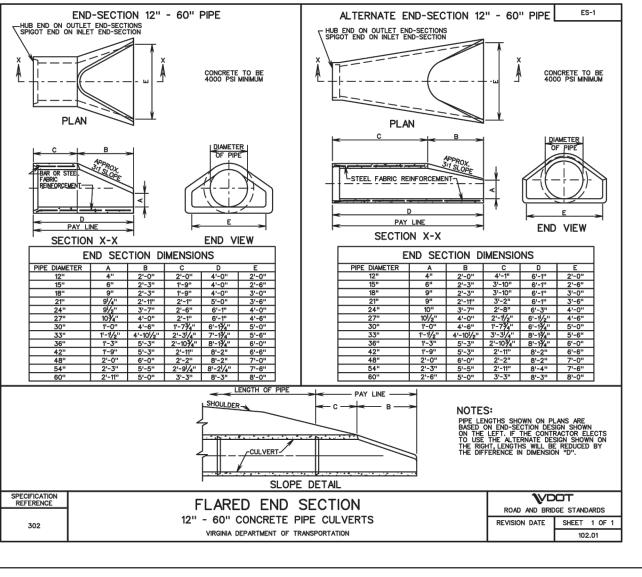


Table 10.4 outlines the standard material specifications for constructing Dry Swales.

3 LBS 43.6 LBS

COLLAR DETAIL

DETAIL B

SAVANGELYA OF ENAMS - STRAW ON SAUCE

SEE DETAIL B

SECTION C-C SECTION D-D

GRATE DETAIL

STANDARD DROP INLET

12" - 24" PIPE: MAXIMUM DEPTH (H) - 10'

VIRGINIA DEPARTMENT OF TRANSPORTATION

Material	Specification	Notes					
Filter Media Composition	Filter Media to contain: 85-88% sand 8-12% soil fines 3-5% organic matter in form of leaf compost	The volume of filter media is based on 110% of the product of the surface area and the media depth, to account for settling.					
Filter Media Testing	P-Index range = 10-30; Cation Excha Mix on-site or procure from an approv Design Spec No. 9: Bioretention, for ac	red media vendor (refer to Stormwater					
Surface Cover	Turf or river stone.						
Top Soil	4 inch surface depth of loamy sand or clay content, a corrected pH of 6 to 7,	and at least 2% organic matter.					
Filter Fabric	A non-woven polyprene geotextile with a flow rate of > 110 gal./min./sq. ft. (e.g., Geotex 351 or equivalent); Apply immediately above the underdrain only. For hetspots and certain karst sites only, use an appropriate liner on the bottom.						
		A 2 to 4 inch layer of sand over a 2 inch layer of choker stone (typically #8 or					
Choking Layer	#89 washed gravel) laid above the underdrain stone.						
Stone and/or Storage Layer		e desired depth of the storage layer) of					
Underdrains, Cleanouts, and Observation Wells	With 3/8-inch perforations. Use Corrugated HDPE for Rain Gardens.	length of the Dry Swale cell. Use non-perforated pipe, as needed, to connect with the storm drain system.					
Vegetation	Plant species as as specified on the la	ndscaping plan					
Check Dams	Use non-erosive material such as woo check dams should be underlain with f Wood used for check dams should cor timbers, or water-resistant tree species	ilter fabric, and include weep holes. sist of pressure-treated logs or					
	or locust.						
Erosion Control Fabric	Where flow velocities dictate, use wow fabric or mats (EC2) that are durable e seasons.						

DRY SWALES VA DEQ STORMWATER DESIGN SPECIFICATION NO. 10

• Make sure the desired coverage of turf or erosion control fabric has been achieved following construction, both on the filter beds and their contributing side-slopes. • Inspect check dams and pre-treatment structures to make sure they are properly installed and working effectively. Check that outfall protection/energy dissipation measures at concentrated inflow and outflow points are stable.

The real test of a Dry Swale occurs after its first big storm. The post-storm inspection should focus on whether the desired sheetflow, shallow concentrated flows or fully concentrated flows assumed in the plan actually occur in the field. Also, inspectors should check that the Dry Swale drains completely within minimum 6 hour drawdown period. Minor adjustments are normally Page 16 of 21 needed as a result of this post-storm inspection (e.g., spot reseeding, gully repair, added armoring

SECTION 9: MAINTENANCE

9.1. Maintenance Agreements

NOTES DEPTH OF INLET (H) TO BE SHOWN ON PLANS, FOR DEPTH GREATER THAN 10'USE STANDARD DI-1A

STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.

THIS ITEM MAY BE PRECAST OR CAST-

SPECIFICATION REFERENCE

233 302

Section 4 VAC 50-60-124 of the regulations specifies the circumstances under which a maintenance agreement must be executed between the owner and the local program. This section sets forth inspection requirements, compliance procedures if maintenance is neglected, notification of the local program upon transfer of ownership, and right-of-entry for local program

If a Dry Swale is located on a residential lot, the existence and purpose of the Dry Swale must be noted on the deed of record. Homeowners will need to be provided a simple document that explains their purpose and routine maintenance needs. A deed restriction, drainage easement or other mechanism enforceable by the qualifying local program must be in place to help ensure that dry swales are maintained. The mechanism should, if possible, grant authority for local agencies to access the property for inspection or corrective action. In addition, the GPS coordinates should be logged for all Dry Swales, upon facility acceptance, and submitted for

9.2. Maintenance Inspections

treatment cells

entry into the local BMP maintenance tracking database.

Annual inspections are used to trigger maintenance operations such as sediment removal, spot revegetation and inlet stabilization. The following is a list of several key maintenance inspection

- Add reinforcement planting to maintain 95% turf cover or vegetation density. Reseed any · Remove any accumulated sand or sediment deposits on the filter bed surface or in pre-
- Inspect upstream and downstream of check dams for evidence of undercutting or erosion, and remove trash or blockages at weepholes.
- Examine filter beds for evidence of braiding, erosion, excessive ponding or dead grass.

VA DEQ STORMWATER DESIGN SPECIFICATION NO. 10 Page 20 of 21

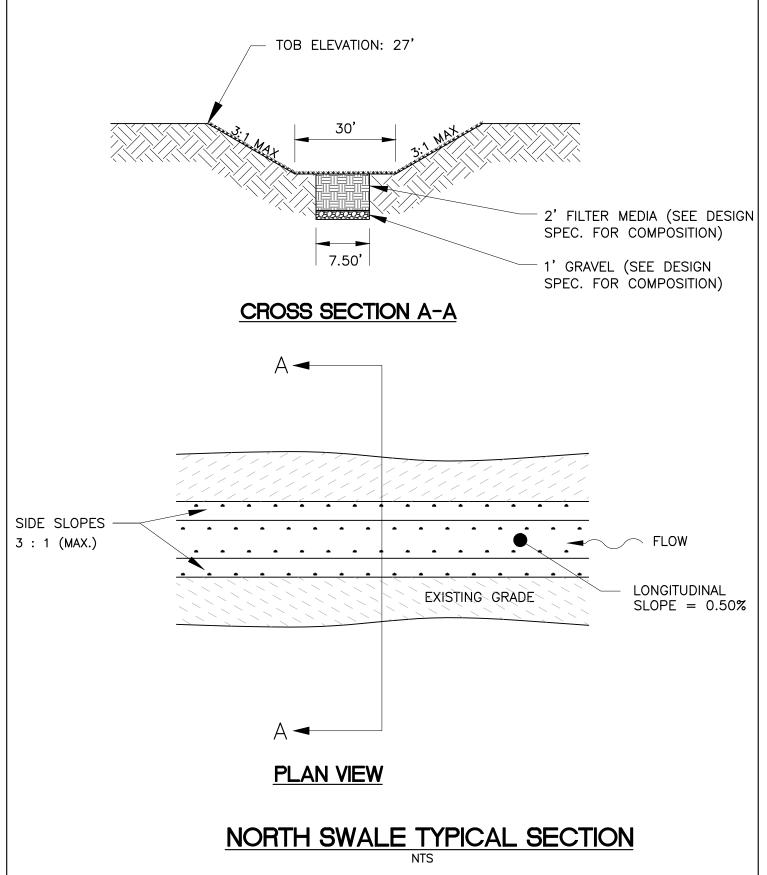
- Version 1.9, March 1, 2011
- Check inflow points for clogging, and remove any sediment. • Inspect side slopes and grass filter strips for evidence of any rill or gully erosion, and repair
- Look for any bare soil or sediment sources in the contributing drainage area, and stabilize

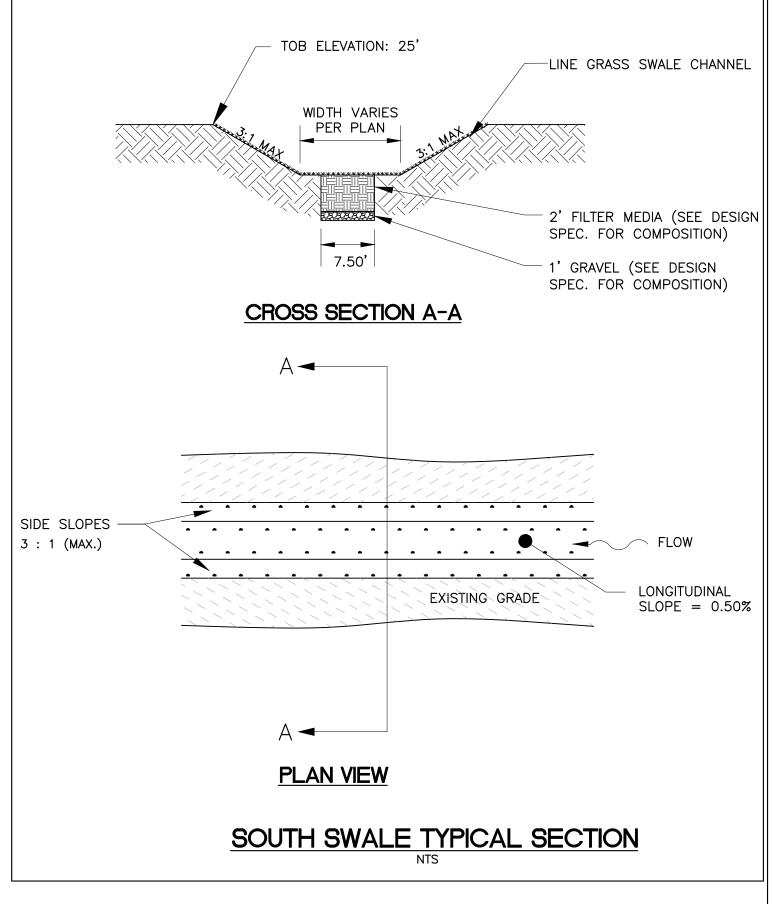
Ideally, inspections should be conducted in the spring of each year. Example maintenance inspection checklists for Dry Swales can be accessed in Appendix C of Chapter 9 of the Virginia

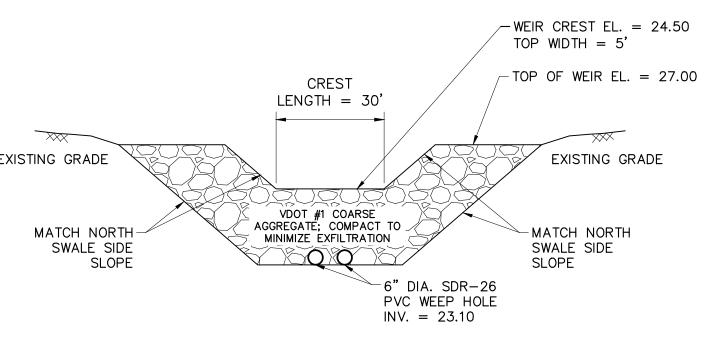
Stormwater Management Handbook (2010) or at CWP website at: http://www.cwp.org/Resource Library/Controlling Runoff and Discharges/sm.htm (scroll to Tool6: Plan Review, BMP Construction, and Maintenance Checklists)

9.3 Routine Maintenance and Operation

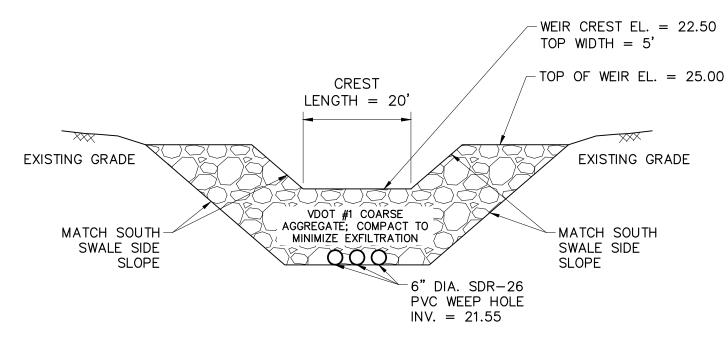
Once established, Dry Swales have minimal maintenance needs outside of the spring clean up, regular mowing, and pruning and management of trees and shrubs. The surface of the filter bed can become clogged with fine sediment over time, but this can be alleviated through core aeration or deep tilling of the filter bed. Additional effort may be needed to repair check dams, stabilize inlet points, and remove deposited sediment from pre-treatment cells.









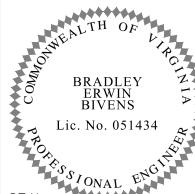


SOUTH SWALE WEIR ELEVATION

		REVISIONS				INFORMATION
NOTICE TO DRAWING HOLDER	NO.	DATE	BY	DESCRIPTION	N-S PROJEC	Γ NO.: NS.12213.000
NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER, HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY					FILENAME: C-	·4 - GRADING STANDA
					CADD TYPE:	AutoCAD
					SURVEYED E	Y:PARRISH LAYNE DESIGN GROUP
REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE					DSGN: EBR	DATE: 10/15
REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S					DRWN: CWF	DATE: 10/15
FEES ARISING OUT OF OR RESULTING THEREFROM.					CHKD: BEB	DATE: 10/15

Page 18 of 21

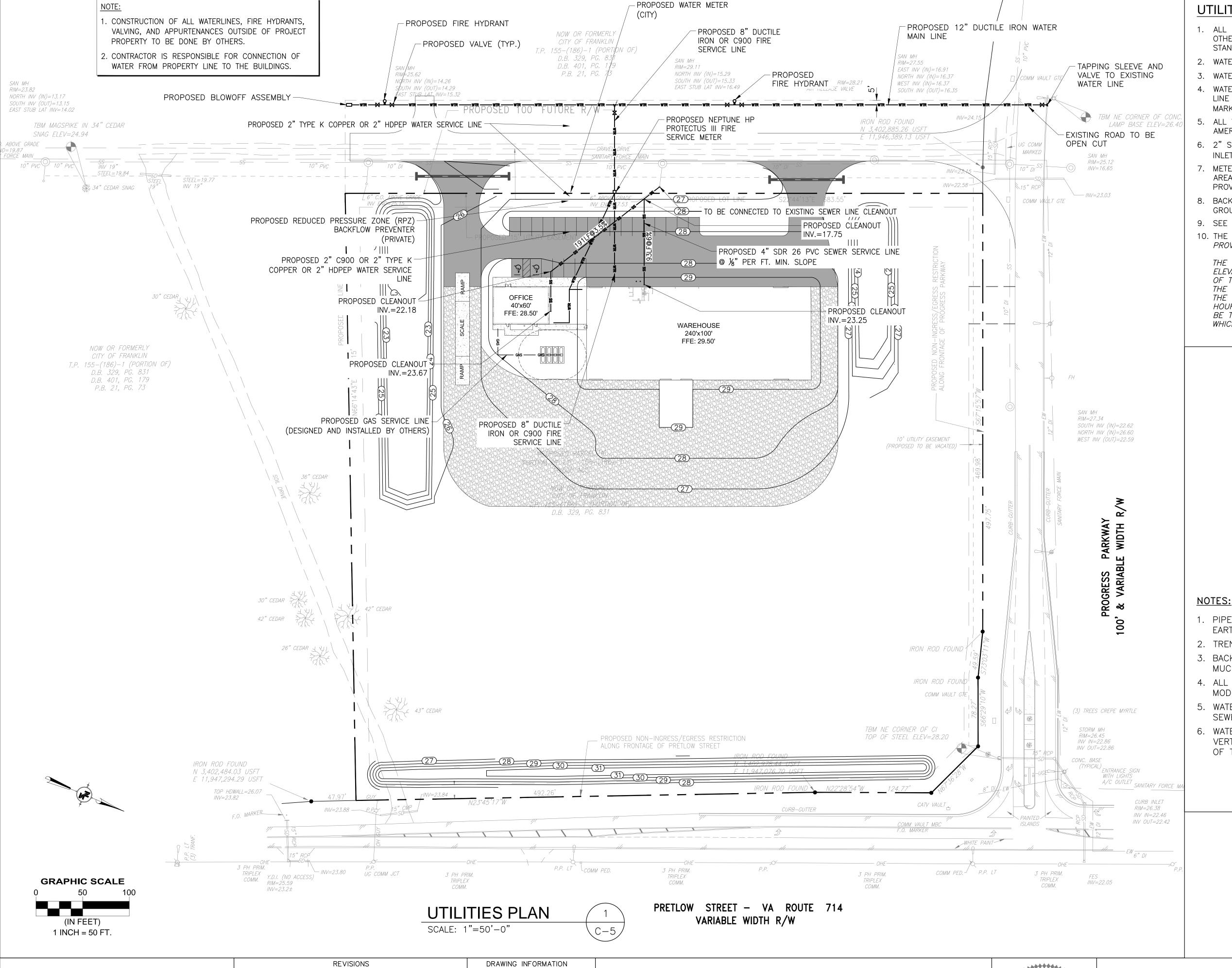
MPINNACLE AGRICULTURE HOLDINGS, LLC PHASE 1 CONSTRUCTION PLANS FRANKLIN, VIRGINIA





GRADING STANDARD DETAILS

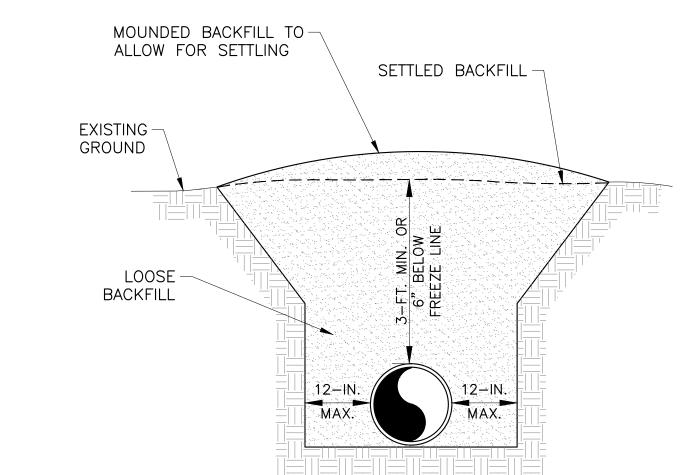
WORKING NUMBER:	DRAWING NUMBER:
	C-4



UTILITY NOTES

- 1. ALL UTILITIES SHALL CONFORM TO CITY OF FRANKLIN CONSTRUCTION STANDARDS UNLESS OTHERWISE APPROVED. REFERENCE SHEET C-6 & CITY OF FRANKLIN CONSTRUCTION STANDARDS FOR DETAILS.
- 2. WATER METER SHALL BE 2" NEPTUNE FLANGED WITH R900; PIT MIU REGISTER.
- 3. WATER METER SETTER SHALL BE A FORD # VBHH77-12B-11-77 OR EQUIVALENT.
- 4. WATER MAINS 4 INCHES OR LARGER SHALL BE DUCTILE IRON OR C900 PIPE. WATER LINE WILL HAVE TRACER WIRE ATTACHED TO TOP OF WATER LINE AND WATER LINE MARKER TAPE 12-18" ABOVE WATER MAIN.
- 5. ALL VALVES AND HYDRANTS IN THE RIGHT OF WAY SHALL BE MANUFACTURED BY AMERICAN AVK PER THE CITY OF FRANKLIN CONSTRUCTION STANDARD.
- 6. 2" SERVICE LINE SHALL BE TYPE K COPPER OR HDPEP FROM THE WATER MAIN TO THE INLET WITH A 2" AVK VALVE PRIOR TO METER SETTER.
- 7. METER BOX SHALL BE MADE BY BROOKS, CARSON OR EQUIVALENT IN NONE TRAFFIC AREA, ARMOR CAST SHALL BE USED IN TRAFFIC AREA. A TWO INCH HOLE WILL BE PROVIDED IN METER LID FOR THE EXTERNAL ANTENNA.
- 8. BACKFLOW PREVENTER SHALL BE REDUCED PRESSURE ZONE (RPZ) INSTALLED ABOVE GROUND IN A HOT BOX.
- 9. SEE MECHANICAL PLANS FOR UTILITY CONNECTION DETAILS AT BUILDING.
- 10. THE SITE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH THE MOST CURRENT DATA PROVIDED BY THE OWNER.

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

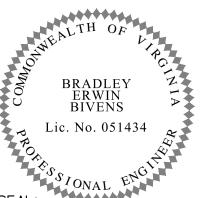


- 1. PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH BY UNDISTURBED EARTH. DIG OUT HOLLOW AT PIPE BELL.
- 2. TRENCH SHALL BE DRY DURING PLACEMENT.
- 3. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, STICKS, ROOTS & OTHER DEBRIS.
- 4. ALL BACKFILL SHALL BE COMPACTED TO 95% DENSITY OF AASHTO T-180 MODIFIED PROCTOR.
- 5. WATER LINES SHALL BE LAID AT LEAST TEN FEET, HORIZONTALLY FROM ANY SEWER OR SEWER MANHOLE WHEREVER POSSIBLE.
- 6. WATER PIPES CROSSING SEWERS SHALL BE CONSTRUCTED TO PROVIDE A VERTICAL SEPARATION OF AT LEAST 18 INCHES BETWEEN THE INVERT ELEVATION OF THE ABOVE PIPE AND THE TOP OF THE LOWER WHEREVER POSSIBLE.

TYPE I TRENCH DETAIL SCALE: N.T.S.

NO. DATE BY DESCRIPTION N-S PROJECT NO.: NS.12213.000 NOTICE TO DRAWING HOLDER FILENAME: C-5 - UTILITIES.DWG NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER, HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR CADD TYPE: AutoCAD USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED SURVEYED BY:PARRISH LAYNE DESIGN GROUP ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTION DATE: 10/15 DSGN: EBR BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM DRWN: CWF DATE: 10/15 ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM. DATE: 10/15 CHKD: BEB DATE: 10/15 QA/QC: BJR

PINNACLE AGRICULTURE HOLDINGS, LLC PHASE 1 CONSTRUCTION PLANS FRANKLIN, VIRGINIA



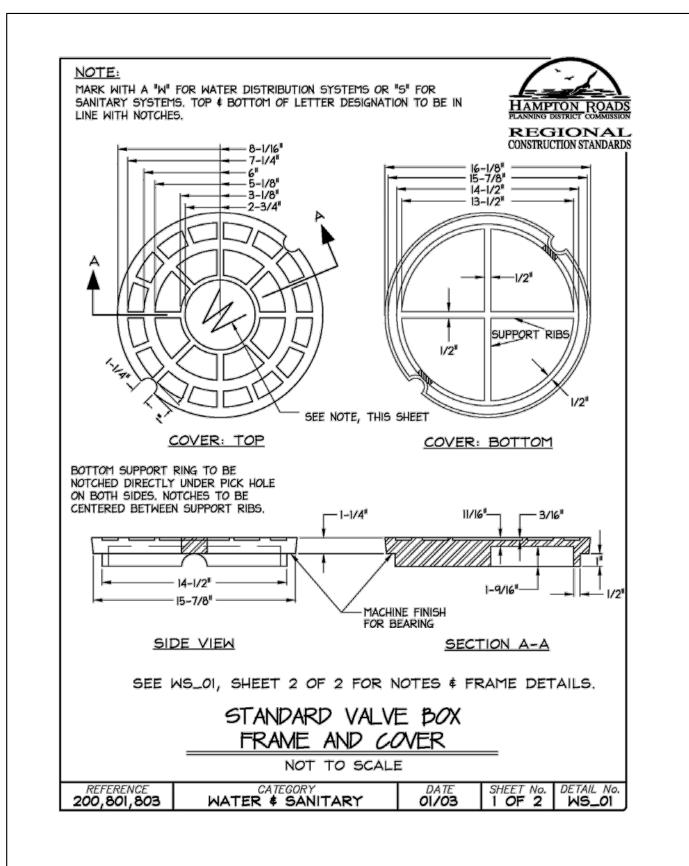


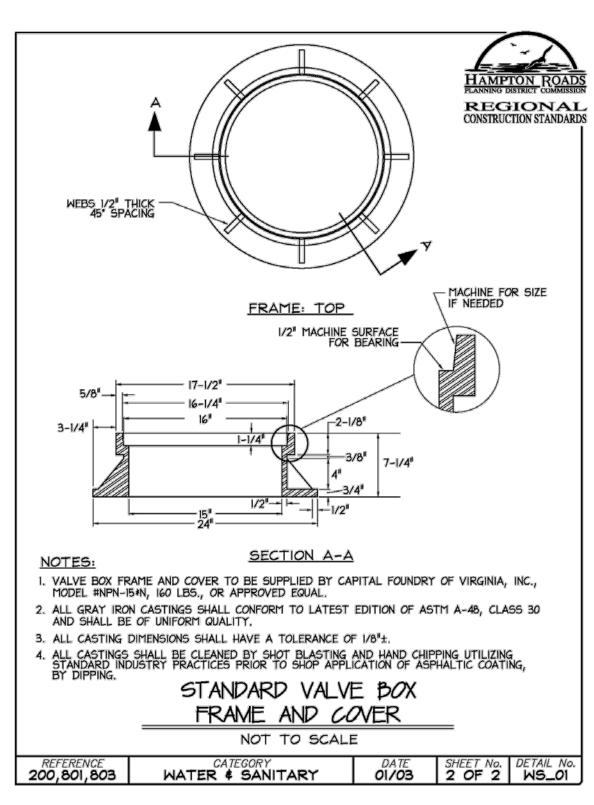
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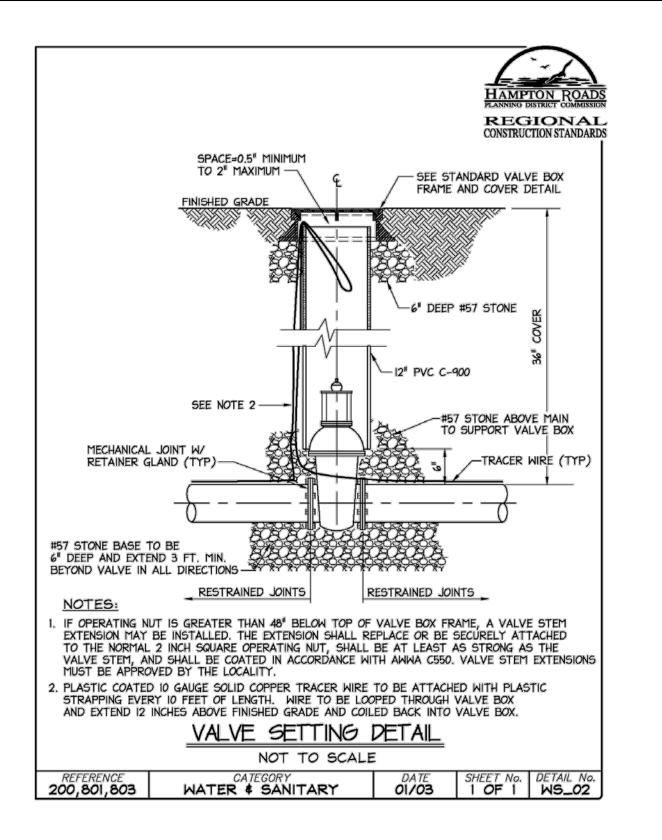
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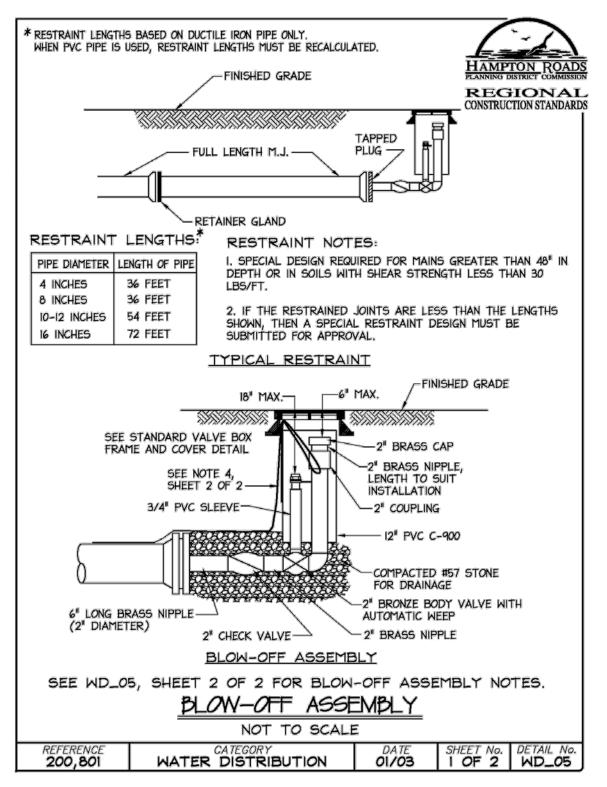
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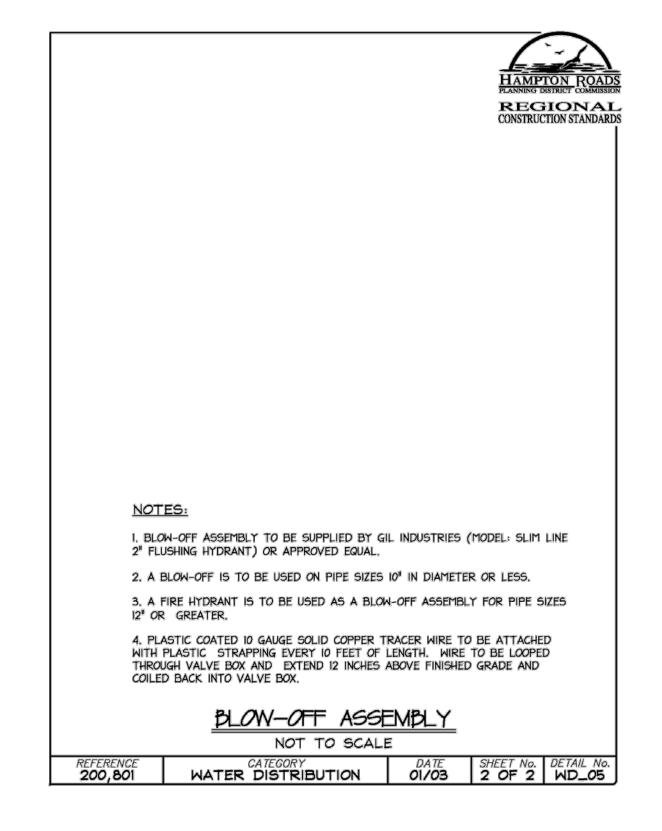
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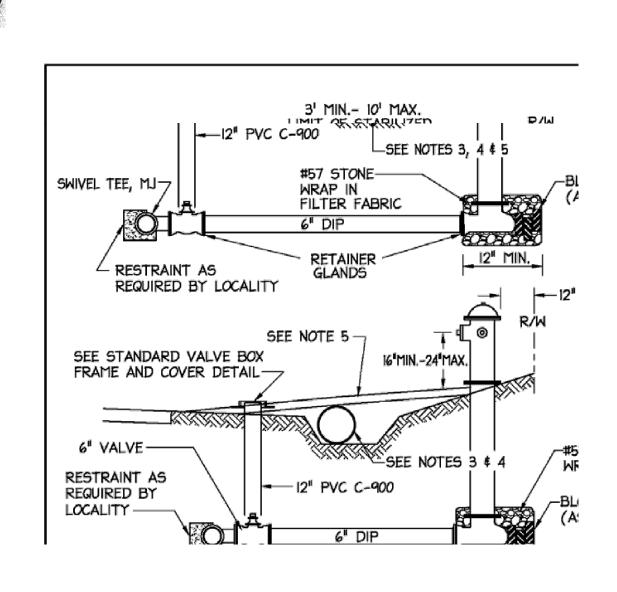


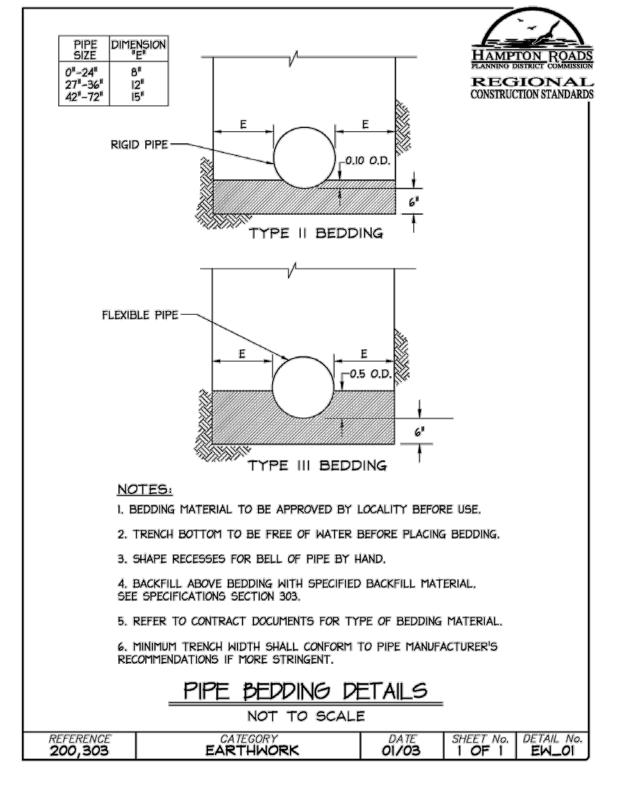


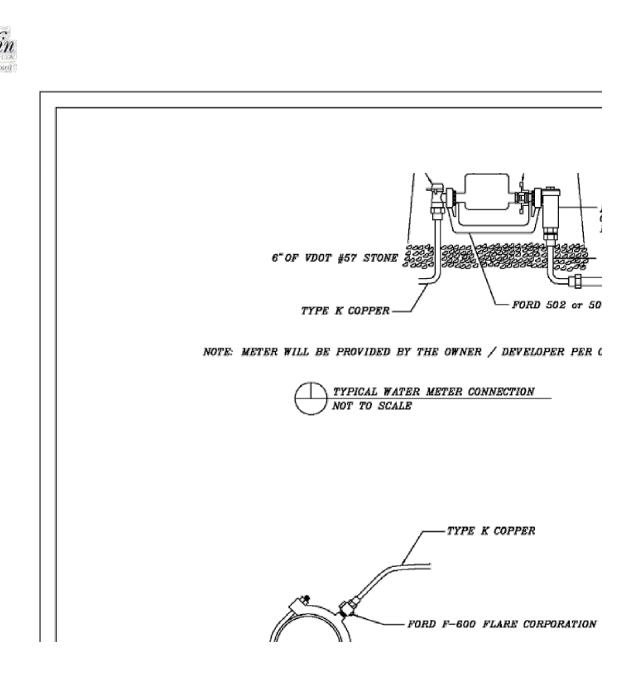


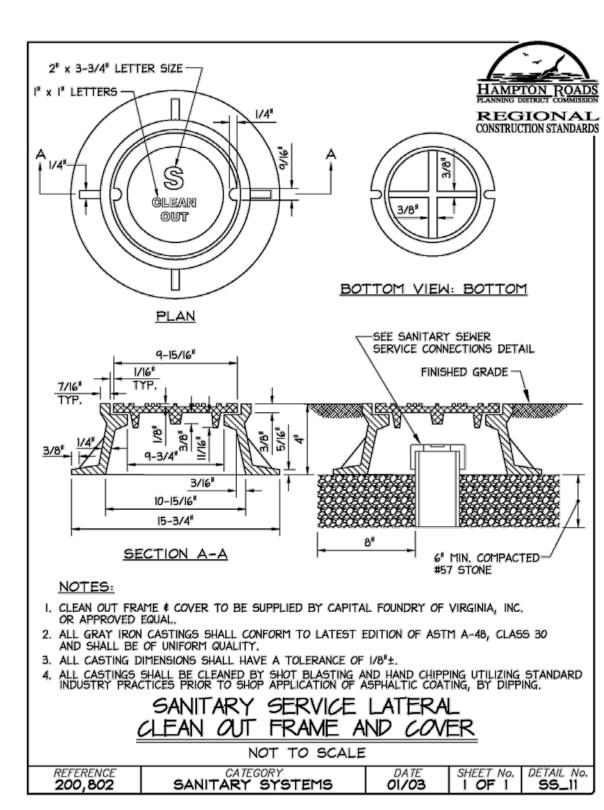


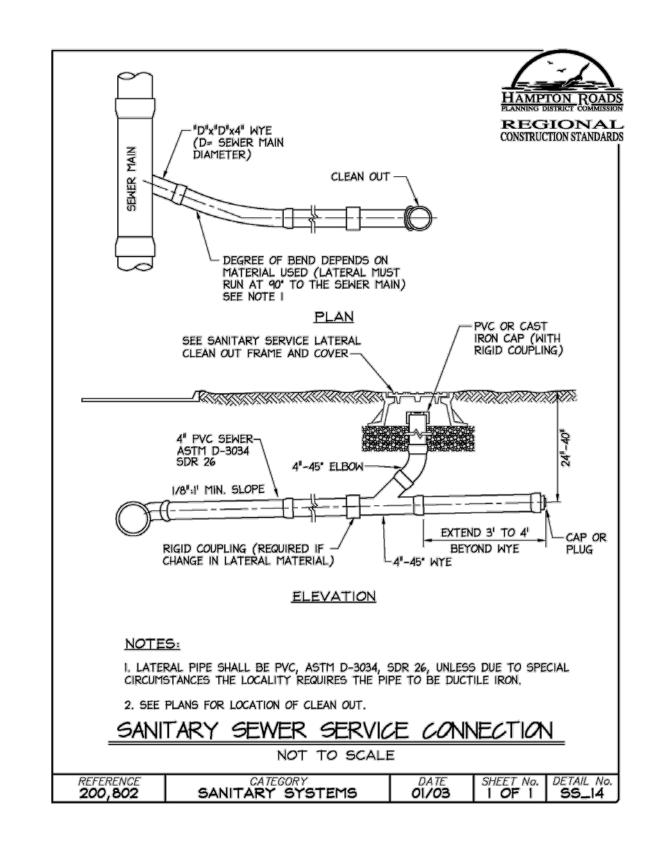






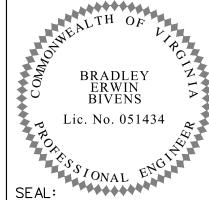






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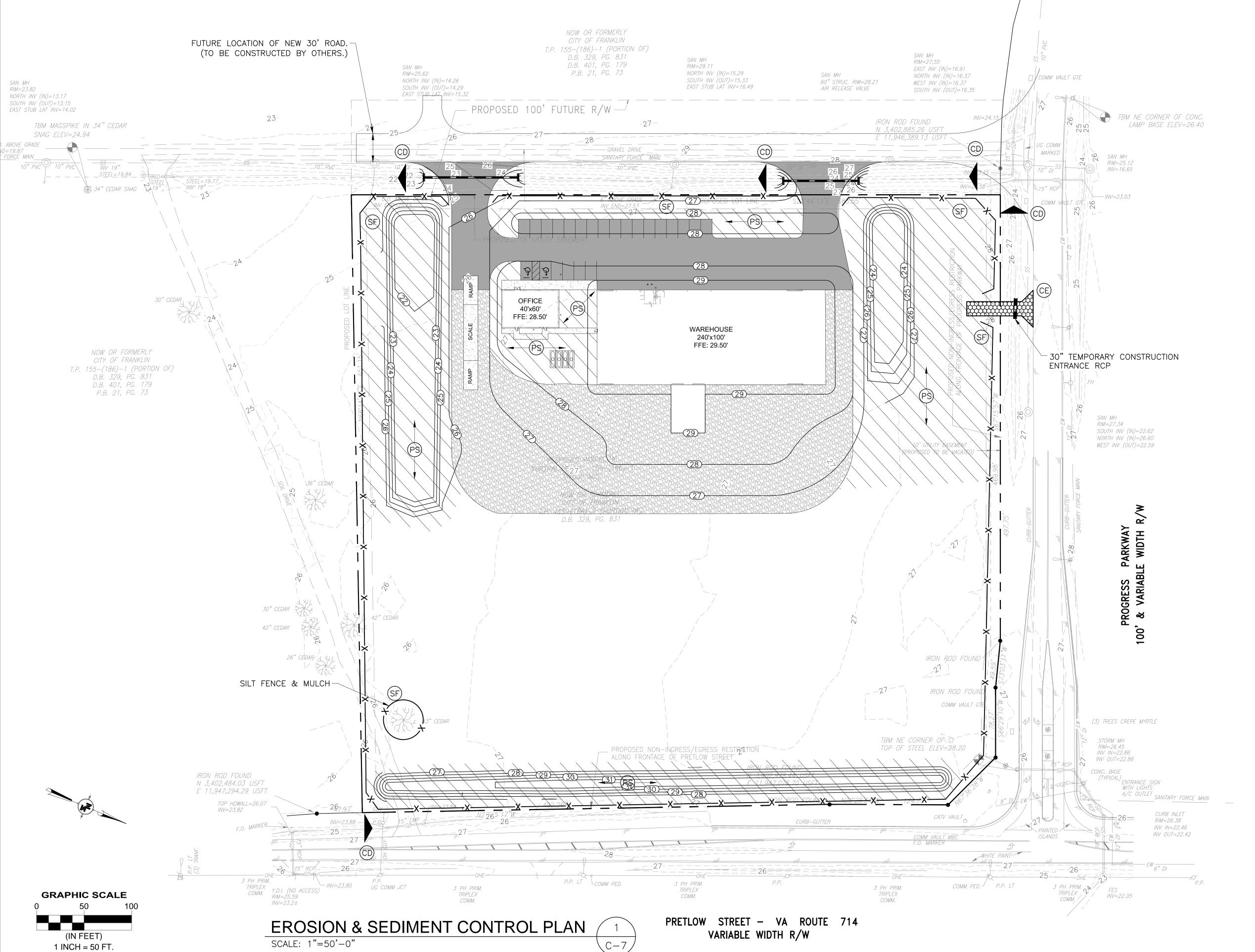
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FRANKLIN, VIRGINIA





UTILITY STANDARD DETAILS

WORKING NUMBER: DRAWING NUMBER: C-6



GENERAL EROSION AND SEDIMENT CONTROL NOTES

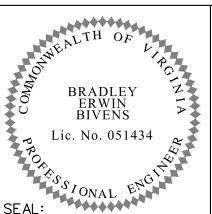
- ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

E & S LEGEND

TITLE	SYMBOL	KEY	NO.						
TEMPORARY STONE CONSTRUCTION ENTRANCE w/ WASHRACK		(CE)	3.02						
SILT FENCE	_xx	SF	3.05						
ROCK CHECK DAMS		(C)	3.20						
PERMANENT SEEDING		PS •	3.32						

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NOTICE TO DRAWING HOLDER	NO.	DATE	BY	DESCRIPTION	N-S PROJECT	NO.: NS.12213.00
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					DSGN: EBR	DATE: 10/15
					DRWN: CWF	DATE: 10/15
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					QA/QC: BJR	DATE: 10/15

PINNACLE AGRICULTURE HOLDINGS, LLC PHASE 1 CONSTRUCTION PLANS FRANKLIN, VIRGINIA





EROSION & SEDIMENT CONTROL PLAN

WORKING NUMBER: DRAWING NUMBER:

C-7

- MS-1: PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE
- LEFT DORMANT FOR MORE THAN ONE YEAR.

 MS-2: DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS
- WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

 MS-3: A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT
- MS-4: SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

 MS-5: STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

 MS-6: SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE
 - A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
 - B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- MS-7: CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROPIEM IS CORRECTED.
- THE PROBLEM IS CORRECTED.

 MS-8: CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT
- CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.

 MS-9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- MS-9. WHENEVER WATER SELFS FROM A SECRETACE, ADEQUATE DIVAINAGE OR OTHER PROTECTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT
- ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

 MS-11: BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- MS-12: WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- MS-13: WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY
- VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.

 MS-14: ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- MS-15: THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

 MS-16: UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

 A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

 C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF—SITE PROPERTY.
 - D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

 E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
- F. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.

 MS-17: WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS
- REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND—DISTURBING ACTIVITIES.

 MS—18: ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER
- EROSION AND SEDIMENTATION.

 MS-19: PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS:
 - A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
 - B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:

 (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
 - 2)
 (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO—YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP
 - CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.

 (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT
 - CAUSE EROSION OF CHANNEL BED OR BANKS; AND

 (C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN—YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
 - C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
 - (1) IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR
 - (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;

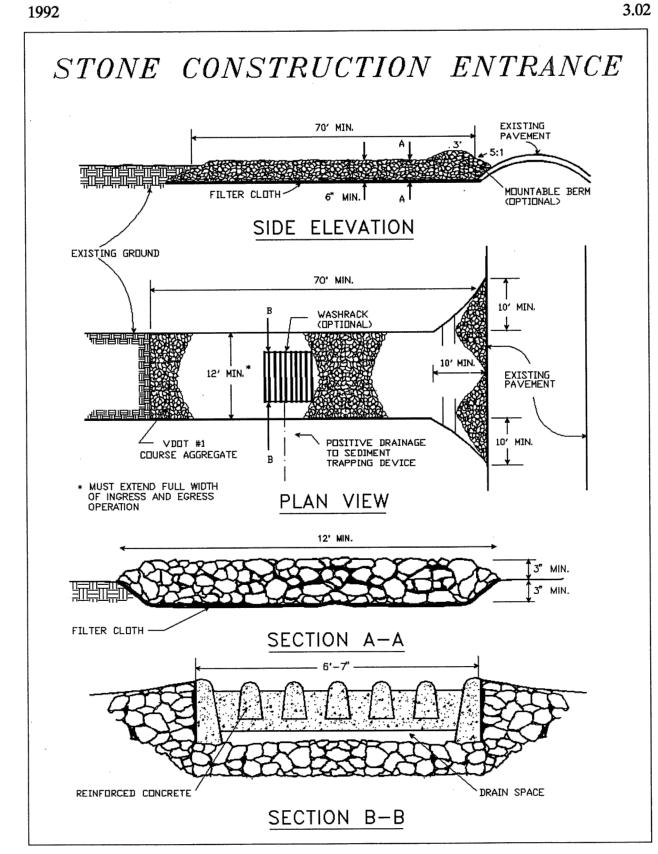
 (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
 - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.

 D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
 - E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF
- THE SUBJECT PROJECT.

 F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
- G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
- H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.

 I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
- J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
- K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
- L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED
- PURSUANT TO § 62.1-44.15:54 OR 62.1-44.15:65 OF THE ACT.

 M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15:52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62.1-44.15:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATIONS.
- N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF SUBDIVISION 19 OF THIS SUBSECTION.



CONSTRUCTION OF A SILT FENCE

SHEET FLOW INSTALLATION

POINTS A SHOULD BE HIGHER THAN POINT B.

(FRONT ELEVATION)

Source: Adapted from Installation of Straw and Fabric Filter

QA/QC:BJR DATE: 10/15

Barriers for Sediment Control, Sherwood and Wyant

DRAINAGEWAY INSTALLATION

(PERSPECTIVE VIEW)

(WITHOUT WIRE SUPPORT)

Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

1. SET THE STAKES.

3. STAPLE FILTER MATERIAL

IT INTO THE TRENCH.

TO STAKES AND EXTEND

Plate 3.02-1

2. EXCAVATE A 4"X 4" TRENCH

4. BACKFILL AND COMPACT

THE EXCAVATED SOIL.

STAKES.

UPSLOPE ALONG THE LINE OF

CONSTRUCTION SEQUENCE

Minimum Care Lawn

<u>High-Maintenance Lawn</u>

General Slope (3:1 or less)

- Kentucky 31 Fescue

- Seasonal Nurse Crop *

Low Maintenance Slope (Steeper than 3:1)

- Common Bermudagrass **

- Kentucky 31 Tall Fescue

- Seasonal Nurse Crop *

- Sericea Lespedeza **

- Red Top Grass

- Red Top Grass

- Commercial or Residential

- Kentucky 31 or Turf-Type Tall Fescue

- Kentucky 31 or Turf-Type Tall Fescue

- Hybrid Bermudagrass (by other vegetative

establishment method, see Std. & Spec. 3.34)

- Hybrid Bermudagrass (seed) **

- Common Bermudagrass **

The following construction sequence is planned to minimize the amount of sediment movement through the storm drain system. Installation and maintenance of these measures are considered critical for controlling sediment movement at this project site.

* Use seasonal nurse crop in accordance with seeding dates as stated below:

** May through October, use hulled seed. All other seeding periods, use

unhulled seed. Weeping Lovegrass may be added to any slope or low-

maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

February, March through April Annual Rye

May 1st through August Foxtail Millet

September, October through November 15th Annual Rye

November 16th through January Winter Rye

TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

Construction Access

Access to the construction site shall be from Progress Parkway. At the egress point, it is required that stabilized gravel construction drives (about 50 feet) be established. This will provide an opportunity for trucks to clean mud from their wheels prior to entering adjacent streets.

Sediment Control Measures

This project will be constructed in one phase utilizing associated sediment control measures. Silt fences will be utilized and shall be installed in the following sequence to minimize soil movement and loss:

- 1. Silt Fence: Silt fence is to be installed according to manufacturer's recommendations.
- a. Install a single line of silt fence as shown on the drawings as soon as clearing and
- grubbing of this fence area is completed.
- b. Remove silt fence when area is ready for final compaction, grading and placement of surface topping.

SITE PLAN NOTES

- 1. All unsurfaced areas are to receive four inches of seeding with topsoil or sod and watered until a healthy stand of grass is obtained as indicated on the landscape plan.
- 2. Contractor is responsible for protecting existing benchmark.
- 3. Contractor shall be responsible for all relocations, including but not limited to all utilities, storm drainage, signs, traffic signals & poles, etc. as required for the construction of this project. All work shall be in accordance with governing authorities specifications and shall be approved by such.
- 4. All necessary permits and approvals from agencies governing the construction of this work shall be secured prior to beginning construction by the Contractor.
- 5. The Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, sidewalks, driveways, etc. Repairs shall be equal to better than existing conditions.
- 6. Contractor shall match existing pavement in grade and alignment, at connections to city streets.
- 7. Construction shall comply with all governing codes and be constructed to the same.

STREET CLEANING PLAN

3.32

Total Lbs.

Per Acre

175-200 lbs.

200-250 lbs.

128 lbs.

2 lbs.

20 lbs.

150 lbs.

93-108 lbs.

0-15 lbs.

2 lbs.

20 lbs.

20 lbs.

150 lbs.

40 lbs. (unhulled)

30 lbs. (hulled)

75 lbs.

The following is planned to minimize the amount of dirt and sediment tracked onto roadways by construction vehicles. Inspection and maintenance of these measures are considered critical for controlling mud tracking at this project site.

Construction Access to the construction site shall be from Progress Parkway. All vehicles must be mud free before exiting the site. Vehicles shall use the wash rack area to remove all dirt from tires. This will provide an opportunity for trucks to clean mud from their wheels prior to entering

The street shall be cleaned before each midday peak hour and at the end of construction activities each day. If the street requires cleaning between these times, Unless there is an event that requires the street to be cleaned, it shall be cleaned to restore it to pre construction.

INSPECTION & MAINTENANCE PLAN

The administrator or any duly authorized agent of the administrator shall inspect the land—disturbing activity during construction for:

- Compliance with the approved erosion and sediment control plan;
- (2)
- Compliance with the approved stormwater management plan;

(3)
Development, updating, and implementation of a stormwater pollution prevention plan; and

Development and implementation of any additional control measures necessary to address a TMDL.

(b)

In accordance with a performance bond with surety, cash escrow, letter of credit, any combination thereof, or such other legal arrangement or instrument, the administrator may also enter any establishment or upon any property, public or private, for the purpose of initiating or maintaining appropriate actions which are required by the permit conditions associated with a land—disturbing activity when a permittee, after proper notice, has failed to take acceptable action within the time specified.

Pursuant to § 62.1—44.15:40 of the Code of Virginia, the administrator may require every VSMP authority permit applicant or permittee, or any such person subject to VSMP authority permit requirements under this chapter, to furnish when requested such application materials, plans, specifications, and other pertinent information as may be necessary to determine the effect of his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of this chapter.

ost-construction inspections of stormwater man

Post—construction inspections of stormwater management facilities required by the provisions of this chapter shall be conducted by the administrator or any duly authorized agent of the administrator pursuant to the locality's adopted and state board approved inspection program, and shall occur, at minimum, at least once every five (5) years except as may otherwise be provided for in this article.

Both the short—term (during construction) and long term (after construction) maintenance needs must be addressed.

Short Term

All erosion and sediment control practices will be checked for stability and operation following every runoff producing rainfall but in no case, less than every week. Any needed repairs will be made immediately to maintain the practice performance as designed.

The access road exit area shall be maintained in a smooth, well compacted condition. Excess soil and debris shall be removed as needed to maintain a gravel exposed surface.

Sediment will be removed from the upstream face of the silt fence when it increases to about a 6—inch depth at the fence. The silt fence will be replaced as necessary to maintain a barrier.

All vegetated areas will be fertilized, and re-vegetated as needed to maintain a vigorous and dense vegetative cover.

Long Term

All vegetated areas will be maintained in adequate condition to provide proper ground cover and reduce any areas of potential erosion. Where vegetation is lost, the area will be fertilized and seeded or other acceptable methods used to restore proper cover.

As needed, new employees responsible for working the area will be informed about the requirements of the Maintenance Plan.

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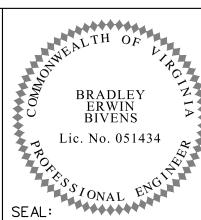
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PINNACLE AGRICULTURE HOLDINGS, LLC

PHASE 1 CONSTRUCTION PLANS
FRANKLIN, VIRGINIA

Plate 3.05-2





EROSION & SEDIMENT CONTROL NOTES

WORKING NUMBER: DRAWING NUMBER:

