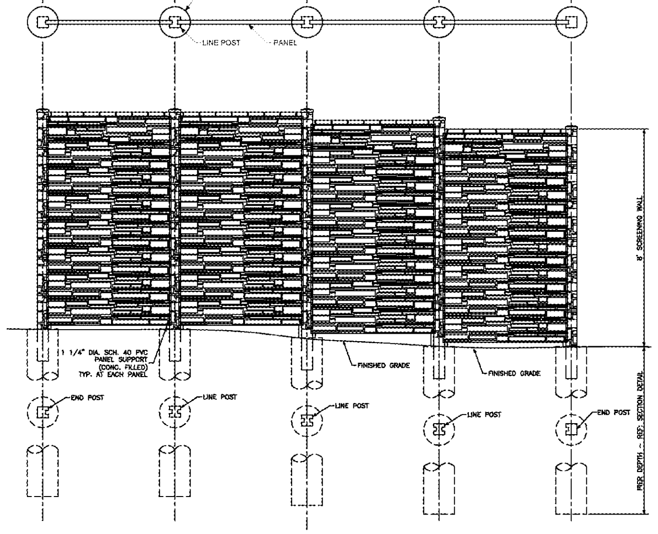


ELEVATION - 8' SCREENING WALL AND PIERS

Specifications and Notes

General:

1. This project has been designed in accordance with the International Building Code, 2010 Edition.

2. Applied loads:
   a. Wind Velocity (V) = 90 mph
   b. Exposure: C
   c. Importance Factor (I) = 1.0
   d. Velocity Pressure Exposure Coefficient (Kz) = 0.85
   e. Wind Directionality Factor (Kd) = 0.85
   f. Topographic Factor (Kzt) = 1.0
   g. Wind Pressure P = 0.00256(Kz)(Kzt)(Kd)(V^2)(I)
      P = 0.00256(0.85)(1.0)(0.85)(90)^2(1.0)
      P = 15.0 psf

   h. Working Design Stress: 33% Increase (1.33)
   i. Seismic Design: Site Class D

3. Screening wall is to be constructed entirely on the project property.

4. Color:
   a. Post, Panels and Panel caps shall be integrally colored.
   b. Color shall be brown as approved by the on-site owner.

Concrete

1. Concrete Materials:
   a. Concrete shall be normal weight concrete having sand and gravel or crushed stone aggregate. Mixed with ASTM-C150, type I or III portland cement to meet the minimum compressive strength as follows:
1. panels & post: 5000 psi @ 28 days
2. footings & piers: 3000 psi @ 28 days
3. sidewalk & non-structural: 3000 psi @ 28 days
   b. Water used for concrete shall be clean water and free from injurious amounts of oils, acids, alkalites, organic or other deleterious substances.
   c. All concrete permanently exposed to the weather shall contain an air-entraining admixture resulting in 3 to 6 percent entrained air or recommended by the manufacturer.

2. Concrete workmanship:
   a. Fresh poured concrete shall be tamped in to place using steel rammer, slicing tools, or mechanical vibrator, until concrete is thoroughly compact and without void.
   b. Excavation for footing shall be on undisturbed soil or to the depth noted on the drawings. Leave the bottom bearing surface clean and smooth. If footing excavations are made deeper than intended, only concrete shall be used for fill. Remove all loose material from excavations prior to concrete pour.

Reinforcements:

1. Reinforcing material:
   a. Deformed type bars shall conform to ASTM-A 615, Grade 60 placed as shown on the drawings.
   b. Steel reinforcing wire shall meet U.S. Steel Wire gauge, ASTM-A 82. fy = 70,000 psi min galvanized.
   c. All ties and stirrups shall conform to the requirements of ASTM-A/ 615, grade 40.
   d. All wire mesh shall be 9 gauge galvanized having 3 horizontal bars and 4 vertical on 16 inch centers.

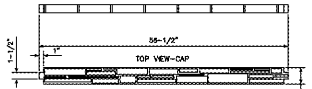
2. Reinforcing workmanship:
   a. Reinforcement steel shall be fabricated in accordance with the CRSI Standard Detail. Reinforcing bars shall be cold-bent only. Use of heat to bend reinforcement steel shall be cause for rejection.
   b. Reinforcement steel bars and wire fabric shall be thoroughly cleaned before placing and again before the concrete is placed. Shall be accurately positioned and secured in place. No brick of porous materials may be used to support the steel off the ground.
   c. Install all reinforcement with the following clearance between reinforcing steel and face of concrete:
      1. Footing, pier or beam bottom (3")
      2. Earth-formed pier or beam side (2")
      3. Formed footing, pier or beam sides, exposed (1")
      4. Precast exposed to weather: panels (3/4"), posts (1-1/4")
   d. Splices within continuous unscheduled reinforcing steel shall have a minimum lap of 30 bar diameters.

Soils

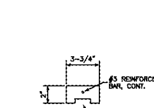
1. Footing size is based on the following minimum soil properties:
   a. Soil Compaction ******* 90% std. proctor
   b. Bearing Capacity ******* 1,500 psf
   c. Friction Resistance ****** 260 psf
   d. Lateral Bearing ******* 100 psf/ft of depth

Fill

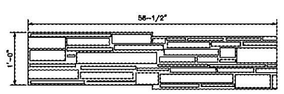
1. All design criteria based on construction on natural ground. Screenwall not to be constructed on berms or fill dirt.



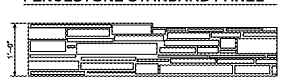
FENCESTONE PANEL CAP



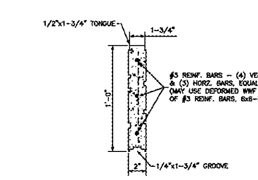
FENCESTONE CAP - SECTION



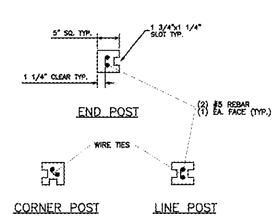
FENCESTONE STANDARD PANEL



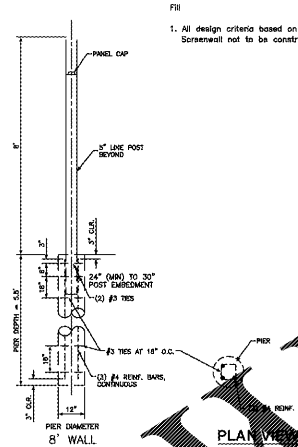
FENCESTONE TOP / BOTTOM PANEL



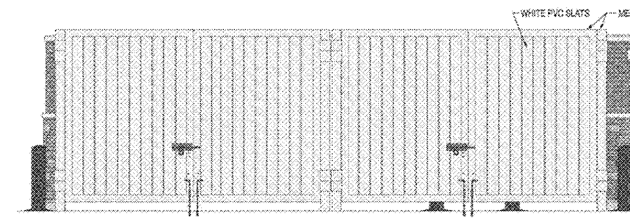
FENCESTONE PANEL - SECTION



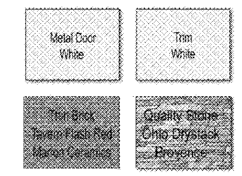
SECTION- 8' SCREENING WALL POST

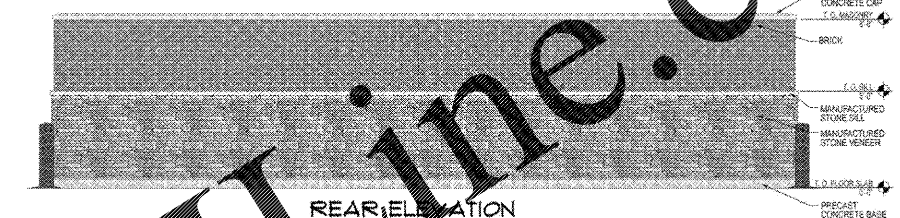


SECTION - 8' SCREENING WALL AND PIER

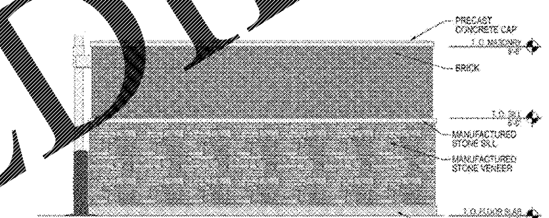


FRONT ELEVATION

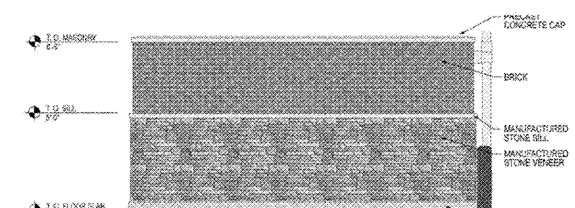




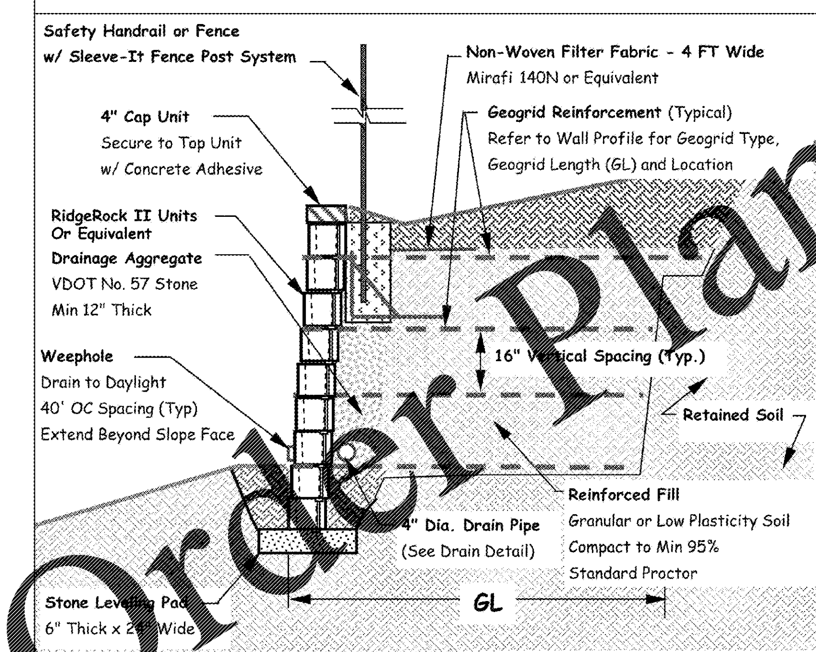
REAR ELEVATION



RIGHT ELEVATION

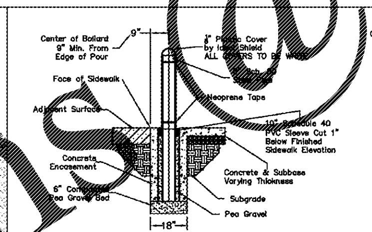


LEFT ELEVATION

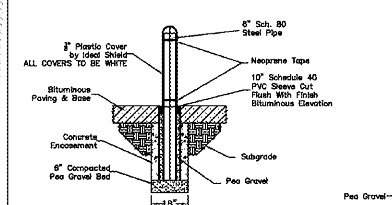


TYPICAL RETAINING WALL CROSS SECTION

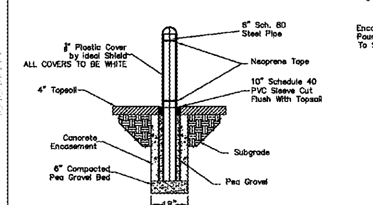
(Not to Scale)



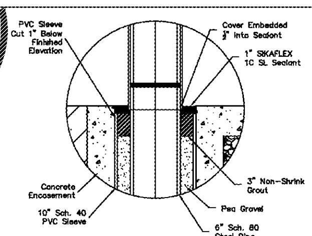
CONCRETE AREAS



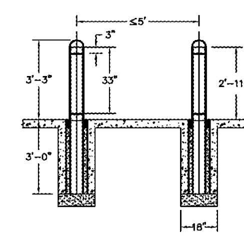
BITUMINOUS AREAS



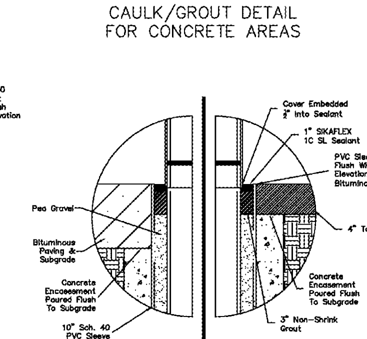
LANDSCAPED AREAS



GENERAL DETAILS AND CAULK/GROUT DETAIL FOR CONCRETE AREAS



GENERAL BOLLARD DIMENSIONS AND SPACING AROUND BUILDING

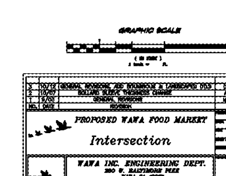


CAULK/GROUT DETAIL FOR LANDSCAPED & BITUMINOUS AREAS

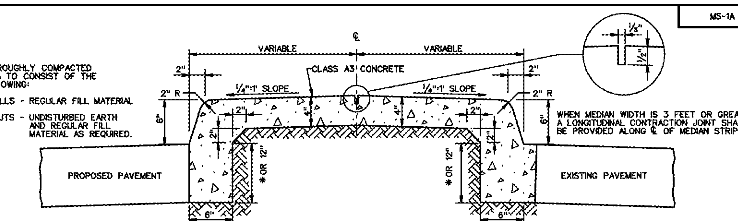
TYPICAL DETAIL

NEW CONSTRUCTION

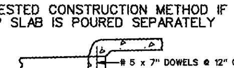
NO SCALE



NOTES:
(1) THOROUGHLY COMPACTED AREA TO CONSIST OF THE FOLLOWING:
IN FILLS - REGULAR FILL MATERIAL
IN CUTS - UNDISTURBED EARTH AND REGULAR FILL MATERIAL AS REQUIRED.

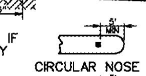


WHEN MEDIAN WIDTH IS 3 FEET OR GREATER, A LONGITUDINAL CONTRACTION JOINT SHALL BE PROVIDED ALONG ℄ OF MEDIAN STRIP.



SUGGESTED CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY

ALTERNATE CONSTRUCTION METHOD IF TOP SLAB IS POURED SEPARATELY



CIRCULAR NOSE

NON-SYMMETRICAL NOSE

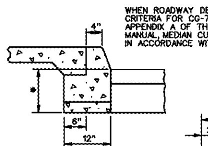
12" SQUARE HOLE FOR SIGN POST TO BE FORMED INTO INTRODUCED MEDIAN NOSES A MINIMUM OF 5' FROM THE NOSE.

W = 4' MIN

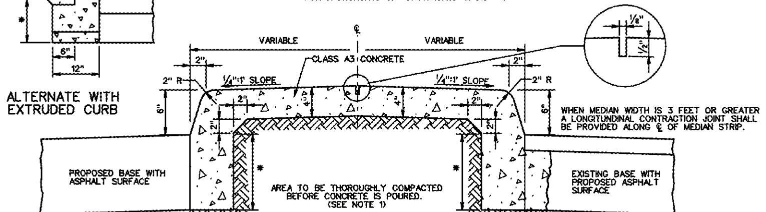
WHEN ROADWAY DESIGN MEETS THE CRITERIA FOR CG-7 AS SHOWN IN APPENDIX A OF THE ROAD DESIGN MANUAL, MEDIAN CURB IS TO BE IN ACCORDANCE WITH STANDARD CG-3.

*THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (9" DEPTH) OR INCREASED AS MUCH AS 3" (15" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT STRUCTURE. OTHERWISE, THE DEPTH IS TO BE 12" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.

ADDITIONAL HOLES OF ADEQUATE SIZE TO BE PROVIDED FOR SIGN POSTS, DELINEATOR POSTS, ETC. AS SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.



ALTERNATE WITH EXTRUDED CURB



WHEN MEDIAN WIDTH IS 3 FEET OR GREATER A LONGITUDINAL CONTRACTION JOINT SHALL BE PROVIDED ALONG ℄ OF MEDIAN STRIP.

SPECIFICATION REFERENCE	STANDARD SOLID CONCRETE RAISED MEDIAN STRIP	VDOT ROAD AND BRIDGE STANDARDS	
502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE	SHEET 1 OF 1 / 202.03

No.	REVISIONS	DATE	BY
1	OIL WATER SEPARATOR REVISIONS	11/07/18	RRP
2	OIL WATER SEPARATOR REVISIONS	01/02/19	RRP
3	UNDERGROUND PIPE CONNECTION REVISIONS	01/03/19	RRP
4	PHASE II E&S REVISIONS	01/14/19	RRP
5	BID SET REVISIONS	01/17/19	RRP

POD# 2018-00101 & 00196

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WWW.KIMLEY-HORN.COM

COMMONWEALTH OF VIRGINIA
RYAN R. PERKINS
Lic. No. 046565
11/09/2018
PROFESSIONAL ENGINEER

KHA PROJECT	113160005
DATE	11/09/2018
SCALE	AS SHOWN
DESIGNED BY	KRW
DRAWN BY	KRW
CHECKED BY	RRP

SITE DETAILS

WAWA AT PARHAM AND THREE CHOPT

PREPARED FOR
REBKEE CO.

HENRICO COUNTY VIRGINIA

SHEET NUMBER
CS-504

Plotted By: Westwood, Kelsey Sheet Set: Kha Layout: CS-504 SITE DETAILS January 17, 2019 04:16:49pm K:\RIC_CIV\113160 - Wawa - Rebkee\005 - Parham and Three Chopt - Henrico\CAD\PlanSheets\CS-501 HENRICO STANDARD DETAILS.dwg

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