SHEET INDEX

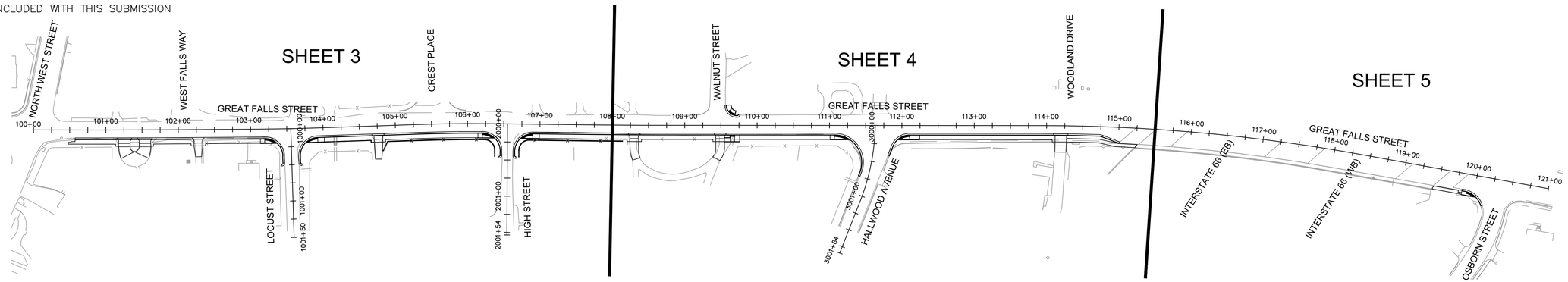
* SHEET NOT INCLUDED WITH THIS SUBMISSION

FUNCTIONAL CLASSIFICATION	
GREAT FALLS STREET (ROUTE 694)	
	FROM: OSBORNE STREET TO: FALLS CHURCH CITY LIMITS
STREET CLASS	URBAN MINOR ARTERIAL
AADT (2015)	9,100
AADT (2035)	N/A
DHV	1,144
D (%)	51.8%/48.2%
T (%)	2%
DESIGN V (mph)	35 MPH
POSTED V (mph)	35 MPH

PROGRAMMATIC WAIVER TO THE STANDARD REPORT FOR SIDEWALK BUFFER STRIP WIDTH APPROVED ON XX/XX/2017. THE WAIVER RELATES TO THE CURB ABUTTED SIDEWALK

THE STORMWATER DETENTION EXCEPTION WAS APPROVED ON XX/XX/2017. THE EXCEPTION RELATES TO THE STORMWATER DETENTION REQUIREMENT UNDER THE STORMWATER MANAGEMENT ORDINANCE (SWMO).

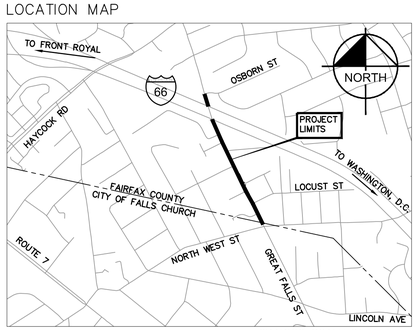
FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS
AND ENVIRONMENTAL SERVICES
PROJECT NO. 5G25–060–042
FUND NO. 300–C30050



GRAPHIC SCALE IN FEET
0 37.5 75 150

PROJECT NAME:
GREAT FALLS STREET SIDEWALK IMPROVEMENTS
PRE–FINAL PLANS

LOCATION MAP



DISTRICT NAME: DRANESVILLE
TAX MAP GRID: 40–4

GRAPHIC SCALE IN FEET
0 500 1000 2000

PRE–FINAL PLANS
JULY 2017

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER
KIMLEY–HORN AND ASSOCIATES, INC.

FINAL PLANS AUTHORIZED FOR CONSTRUCTION
PER DPWES/DOT DELEGATION MATRIX

SECTION CHIEF, STORMWATER & TRANSPORTATION CONSTRUCTION BRANCH

CHIEF, TRANSPORTATION DESIGN DIVISION

DESIGN FEATURES RELATING TO CONSTRUCTION OR REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S:

- ROAD AND BRIDGE SPECIFICATIONS, DATED 2016
- ROAD AND BRIDGE STANDARDS, DATED 2016
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2009
- VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, DATED 2011
- VIRGINIA WORK AREA PROTECTION MANUAL, DATED 2011, REVISED 2015

AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC–5.11U EXCEPT WHERE OTHERWISE NOTED.

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY–HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

Plotted By: Doughty, Derik Sheet Set: Great Falls St Layout: 1 TITLE SHEET July 11, 2017 09:35:54am K:\NVA_RDWY\110213037–Great Falls Street\CAD\Plansheets\1 TITLE SHEET.dwg

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

RIGHT OF WAY DATA

NORTH WEST STREET

APPROXIMATE LOCATION OF COUNTY AND CITY LINE

CITY OF FALLS CHURCH
FAIRFAX COUNTY

WEST FALLS WAY

EX. INGRESS&EGRESS ESMT.
D.B. 5590 PG. 1761
EX. UTILITY ESMT.
D.B. 5624 PG. 420

EX. PUBLIC STREET ESMT.
D.B. 5590 PG. 1761

EX. SLOPE ESMT.
D.B. 4179 PG. 719

EX. 5' PUBLIC STREET ESMT.
D.B. 408 PG. 43

CREST PLACE

EX. 5' PUBLIC STREET ESMT.
D.B. 408 PG. 43

EX. 15' VERIZON ESMT.
D.B 1682 PG. 63

EX. VEPCO ESMT.
ALONG R/W, NO WIDTH
D.B 4122 PG. 30

EX. ROW

GREAT FALLS STREET

101+00 102+00 103+00 104+00 105+00 106+00 107+00

EX. DRAINAGE ESMT.
D.B. 4184 PG. 269

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

PROPOSED PERMANENT DRAINAGE EASEMENT

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

LOCUST STREET

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

HIGH STREET

PROPOSED PERMANENT PUBLIC STREET EASEMENT

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

MATCHLINE- STA 108+00 SEE THIS SHEET

MATCHLINE- STA 108+00 SEE THIS SHEET

WALNUT STREET

EX. 10' PUBLIC STREET ESMT.
D.B. 1934 PG. 424

WOODLAND DRIVE

GREAT FALLS STREET

109+00 110+00 111+00 112+00 113+00 114+00 115+00

PROPOSED PERMANENT DRAINAGE EASEMENT

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

HALLWOOD AVENUE

PROPOSED GRADING AGREEMENT AND TEMPORARY CONSTRUCTION EASEMENT

MATCHLINE- STA 115+50 SEE SHEET 1C(2)

TAX MAP 40-4

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
RIGHT OF WAY DATA

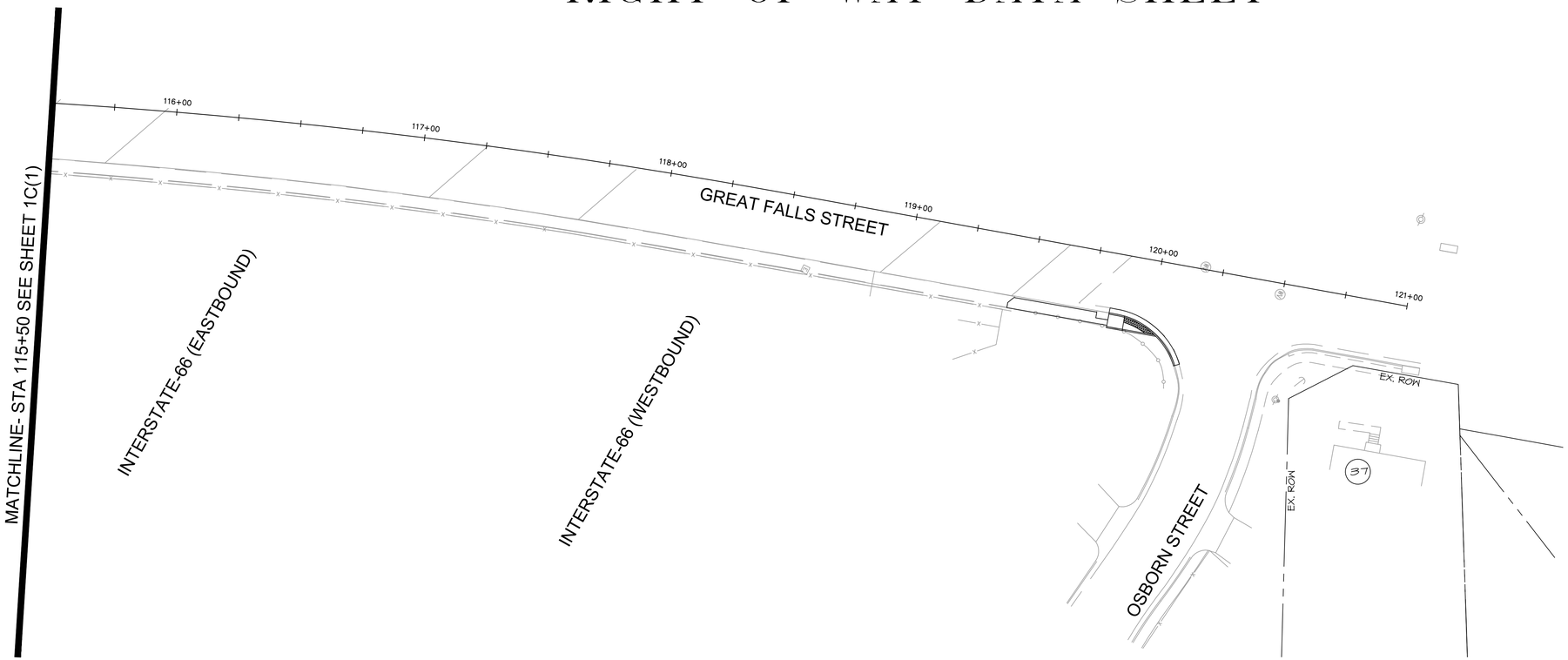
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	1C(1)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

RIGHT OF WAY DATA SHEET



LANDOWNER	AREA						
	TOTAL	FEE TAKING	FEE REMAINDER	EASEMENTS			PROFFERS
				PERMANENT	UTILITY	TEMPORARY	
	SQUARE FEET	SQUARE FEET	SQUARE FEET	SQUARE FEET	SQUARE FEET	SQUARE FEET	YES / NO
EUGENE F. GALVIN & MARY GALVIN (6)	8,751		8,751	18		605	NO
S. GEORGE ABURDEINEH & SAMIA S. ABURDEINEH (21)	9,150		9,150	18		132	NO
BARBARA B. COLLINS & BARRY D. BILLET (22)	14,338		14,338	0		517	NO
SAMUAL R. PEALE & ANNE M. MORRISON (23)	14,000		14,000	0		165	NO
KLARA K. SEVER (24)	17,243		17,243	0		69	NO
6712 HIGH STREET ASSOCIATES LLC. (31)	12,000		12,000	35		445	NO
DUANE L. KISSICK & MARTHA M. KISSICK (32)	33,387		33,387	111		1,586	NO
JUAN ESPINOZA (36)	11,310		11,310	0		114	NO
TOTAL	120179		120,179	182		3,633	

NOTE:
1. CONTRACTOR SHALL PROTECT PROPERTY CORNERS FROM HARM. CONTRACTOR SHALL REPLACE, IF NECESSARY, ANY DISTURBED PROPERTY MONUMENTS UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR.

TAX MAP 40-4

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
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EMERGENCY POLICE - FIRE - RESCUE 911
FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
RIGHT OF WAY DATA

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE: SEE GRAPHIC SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET: 1C(2)

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

RIGHT OF WAY DATA SHEET

(1)
DEPUTRON SUBDIVISION
PART OF LOT 2 &
PART OF LOT 3
D.B. W-6 PG. 402
TM# 51-1-21-054
N/F
JASON C. ROBERTSON
& JACLYN L. ROBERTSON
INST. #20150100008238

(2)
DEPUTRON SUBDIVISION
PART OF LOT 3
D.B. W-6 PG. 402
TM# 51-1-21-013
N/F
ROHIT S. SATOSKAR &
REBECCA T. SATOSKAR
D.B. 4300 PG. 1913

(3)
SHERWOOD SUBDIVISION
BLOCK "N"
LOT 20
D.B. 1396 PG. 26
TM# 51-1-21-024
N/F
FREDERICK H. DEGNAN
& JUDITH B. DEGNAN
D.B. 6759 PG.1526

(4)
MAYNARD M. ERWIN
PROPERTY SUBDIVISION
LOT 2
D.B. 3695 PG. 269
TM# 51-2-04-008
N/F
SCOTT A. GAMES &
BONNIE W. GAMES
D.B. 4197 PG. 1410

(5)
MAYNARD M. ERWIN
PROPERTY SUBDIVISION
LOT 1
D.B. 3695 PG. 269
TM# 0404-01-0030
N/F
MICHAEL A. SHAW &
PATRICIA J. SHAW
D.B. 14662 PG. 110

(6)
SPEER SUBDIVISION
LOTS 3, 4 &
PART OF LOT 5
D.B. F-9 PG. 53
TM# 0404-13-0003
N/F
EUGENE F. GALVIN
& MARY GALVIN
D.B. 6724 PG. 1673

(7)
SPEER SUBDIVISION
LOT 1 &
LOT 2
D.B. F-9 PG. 53
TM# 0404-13-0002
N/F
DEBORAH L. GILPIN
& KERRY S. GILPIN
D.B. 18666 PG. 828

(8)
SPEER SUBDIVISION
LOT 12, 13
& LOT 14
D.B. F-9 PG. 53
TM# 0404-13-0012
N/F
SCOTT FREDERICK LISMAN
& DENISE BLANCHER LISMAN
D.B. 21639 PG. 1001

(9)
SPEER SUBDIVISION
RESUBDIVISION OF
LOTS 15, 16 & 17
D.B. 6227 PG. 1484
TM# 0404-13-0017A
N/F
PAUL ALAN ZUCKER
& JANICE ZUCKER
D.B. 7796 PG. 492

(10)
SPEER SUBDIVISION
RESUBDIVISION OF
LOTS 15, 16 & 17
D.B. 6227 PG. 1484
TM# 0404-13-0017B
N/F
JOHN JOSEPH DILLON
& MIRIAM DILLON
D.B. 11427 PG.1896

(11)
MERIDIAN PARK
LOT 35
D.B. 659 PG. 380
TM# 0404-12-0035
N/F
THU PHAM TRAN &
TONY THUAN VAN TRAN
D.B. 9672 PG. 821

(12)
MERIDIAN PARK
LOT 36
D.B. 659 PG. 380
TM# 0404-12-0036
N/F
MICHAEL P. THOMAS
& JENNIFER T. THOMAS
D.B. 13217 PG.400

(13)
SHERWOOD SUBDIVISION
BLOCK "N"
LOT 21A
D.B. 1396 PG. 26
TM# 51-1-21-023
N/F
JERRY A. WOLFORD
& CRYSTAL WOLFORD
D.B. 4052 PG. 154

(14)
WEST FALLS CROSSING
LOT 2A
D.B. 5624 PG. 420
TM# 0404-35-0002A
N/F
DANIEL L. LARCAMP
& SUSAN F. LARCAMP
D.B. 6462 PG. 263

(15)
WEST FALLS CROSSING
LOT 3A-1
D.B. 5652 PG. 923
TM# 0404-35-0003A1
N/F
RICHARD KLEIN &
JOYCE N. MIGDALL
D.B. 11623 PG. 1671

(16)
WEST FALLS CROSSING
LOT 1A
D.B. 5624 PG. 420
TM# 0404-35-0001A
N/F
ROBERT AUGUSTINE

D.B. 6479 PG.230

(17)
WEST FALLS CROSSING
PART LOT 6A
D.B. 7700 PG. 245
TM# 0404-35-0006A
N/F
ROBERT AUGUSTINE

D.B. 7708 PG. 245

(18)
WEST FALLS CROSSING
PART LOT 6
D.B. 5624 PG. 420
TM# 0404-35-0006
N/F
JESSICA C. STEWART &
DAVID JOSEPH GAINER
D.B.24267 PG. 21

(19)
WEST FALLS CROSSING
LOT 5
D.B. 5624 PG. 420
TM# 0404-35-0005
N/F
JEANNE L. WHYTE, TRUSTEE
UNDER THE TRUST AGREEMENT
OF JEANNE L. WHYTE
D.B.23792 PG. 293

(20)
WEST FALLS CROSSING
LOT 4
D.B. 5624 PG. 420
TM# 0404-35-0004
N/F
ADRIENNE A. WHYTE

D.B. 5669 PG. 579

(21)
SPEER SUBDIVISION
LOTS 6, 7 &
PART OF LOT 5
D.B. F-9 PG. 53
TM# 0404-13-0006
N/F
S. GEORGE ABURDEINEH
& SAMIA S. ABURDEINEH
D.B. 22213 PG. 585

(22)
SPEER SUBDIVISION
LOTS 8, 9,
10 & 11
D.B. F-9 PG. 53
TM# 0404-13-0008
N/F
N EDGEWOOD,
LLC
D.B. 24518 PG. 1951

(23)
SPEER SUBDIVISION
LOTS 25, 26,
27 & 28
D.B. F-10 PG. 451
TM# 0404-13-0025
N/F
SAMUEL R. PEALE, TRUSTEE OF THE
SAMUEL R. PEALE REVOCABLE TRUST
DATED APRIL 9, 2001 &
ANNE M. MORRISON, TRUSTEE OF THE
ANNE M. MORRISON REVOCABLE TRUST
DATED APRIL 9, 2001
D.B. 11844 PG. 519

(24)
SPEER SUBDIVISION
LOTS 29, 30,
31 & 32
D.B. F-10 PG. 451
TM# 0404-13-0029
N/F
KLARA K. SEVER, TRUSTEE OF THE
KLARA K. SEVER REVOCABLE
TRUST DATED SEPTEMBER 12, 2011
D.B. 21860 PG. 1703

(25)
WOODCREST
LOT 1
D.B. 908 PG. 93
TM# 0404-21-0001
N/F
RYAN J. CONNELLY &
SAMANTHA K. CONNELLY
D.B.22824 PG.1120

(26)
WOODCREST
LOT 8
D.B. 908 PG. 93
TM# 0404-21-0008
N/F
CHRISTINA CHEUNG

D.B. 9548 PG. 283

(27)
N/F
MICHAEL LEE SMITH AND
BRIGITTE N. PETIT, CO-TRUSTEES
OF THE MICHAEL LEE SMITH LIVING
TRUST, U/A DATED DECEMBER 12,
2014 AND BRIGITTE N. PETIT
AND MICHAEL LEE SMITH
CO-TRUSTEES OF THE
BRIGITTE N. PETIT LIVING
TRUST, U/A DATED DECEMBER 12,
2014
D.B. 23959 PG. 662
TM# 0404-01-0027

(28)
N/F
ANN ELIZABETH BARKLEY

W.B. 394 PG. 854
D.B. W-13 PG. 314
TM# 0404-01-0026

(29)
N/F
LIN QI &
WEIWEN GU
D.B. 19793 PG. 814
TM# 0404-01-0026

(30)
N/F
BRIAN M. KROPP AND
ELAINE K. TURVILLE,
TRUSTEES UNDER THE
KROPP FAMILY TRUST
DATED JUNE 30, 2014
D.B. 23742 PG. 1913
TM# 0404-01-0025

(31)
SPEER SUBDIVISION
PART LOTS 69, 70,
71, 72, 73, 74 & 75
D.B. F-9 PG. 53
TM# 0404-13-0070
N/F
6712 HIGH STREET
ASSOCIATES, LLC
D.B. 19032 PG. 130

(32)
SPEER SUBDIVISION
PART LOTS 69, 70, 71, 72
73, 74 & 75 LOT 76 & 77
D.B. F-9 PG. 53
TM# 0404-13-0076
N/F
DUANE L. KISSICK
& MARTHA M. KISSICK
D.B. 6829 PG.1639

(33)
DAHK'S ADDITION TO
MOUNT DANIEL - LOT 4
D.B. 1934 PG. 424
TM# 0404-27-0004
N/F
EDWARD D. JOHNSON,
TRUSTEES, THE EDWARD D.
JOHNSON TRUST, DATED
AUGUST 6, 1999
D.B. 20338 PG. 58

(34)
BRILYN PARK
LOT 2
D.B. 511 PG. 242
TM# 0404-05-0002
N/F
CLYDE ALLEN VANDERHOOF
& MARTHA F. VANDERHOOF
D.B. 2628 PG. 390

(35)
BRILYN PARK
LOT 109 & 110
D.B. 511 PG. 242
TM# 0404-05-0109
N/F
ROBERT WILLIAM MORIARTY &
MARY FRANCES O. C. MORIARTY
D.B. 2046 PG. 89

(36)
BRILYN PARK
LOT 1
D.B. 511 PG. 242
N/F
JUAN ESPINOZA
D.B. 16361 PG. 172
TM# 0404-05-0001

(37)
Z. B. GROVES SUBDIVISION
LOT 29
D.B. C-13 PG. 174
TM# 0404-04-0029
N/F
LEONEL MAXIMILIANO JEREZ
D.B. 24327 PG. 751

(38)
DEPUTRON SUBDIVISION
LOT 1 & PART OF LOT 2
D.B. W-6 PG. 402
TM# 51-1-21-008
N/F
BRADLEY S. PARKER
& DEENA J. PARKER
INST. #20150100015420

(39)
DAHNK'S ADDITION TO
MOUNT DANIEL - LOT 5
D.B. 1934 PG. 424
TM# 0404-27-0005
N/F
WILLIAM C. HORRIGAN
& MARY CATHERINE L.
HORRIGAN
D.B. 10434 PG. 1555

(40)
WOODLAWN GLEN
SECTION 1, LOT 1
D.B. 5772 PG. 880
TM# 0404-34-0001
N/F
MORGAN B. VETH
AND
ANDREW H. VETH
D.B. 24049 PG. 994

(41)
N/F
JOHN D. LAWRENCE &
MARY ANN RALLS
D.B. 3029 PG. 1088
TM# 51-1-21-006

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
RIGHT OF WAY DATA

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

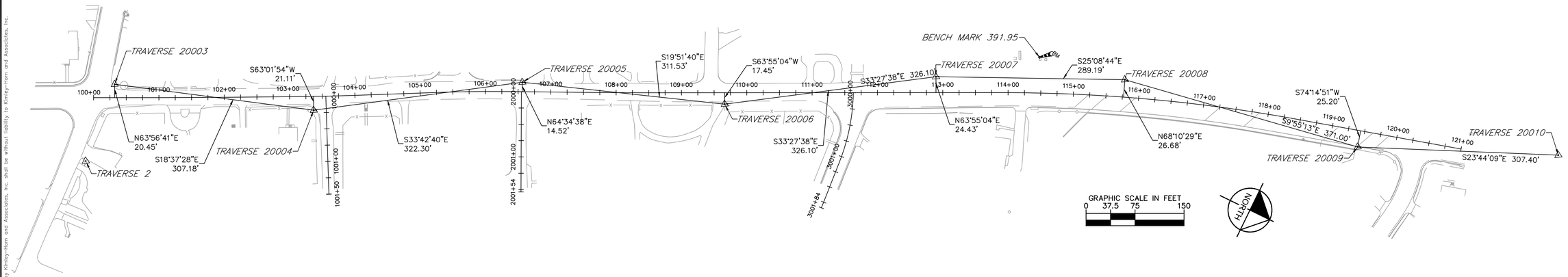
SCALE: NOT TO SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET 1C(3)

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

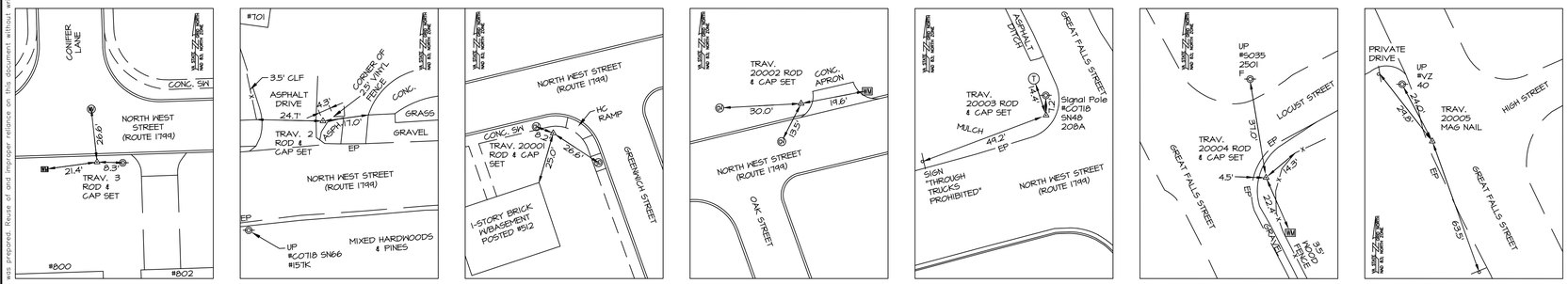
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

SURVEY CONTROL DATA

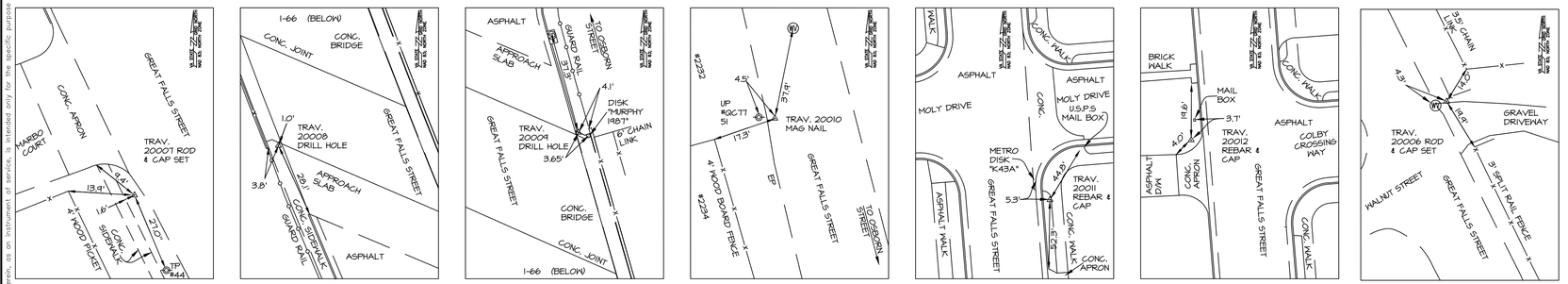


GRAPHIC SCALE IN FEET
0 37.5 75 150

NORTH



GRAPHIC SCALE IN FEET
0 12.5 25 50



TRAVERSE POINT LOCATION TABLE

THE COORDINATES SHOWN HEREON ARE FROM A GROUND RUN SURVEY TRANSLATED AND ROTATED TO STATE PLANE COORDINATES BASED ON GPS DATA COLLECTED AT TRAVERSE POINTS 20001, 20002, 20011 AND 20012.

THIS DRAWING IS ORIENTED TO VCS 83 NORTH, ZONE 4501.
CONTROL POINTS WERE ESTABLISHED USING GPS DATA COLLECTED ON NOVERMBER 9 & 11, 2012
VERTICAL DATUM WAS ESTABLISHED USING GPS DATA COLLECTED
AT 20001 THEN CONVERTED TO NGVD 29.

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
20059	7012524.966	11859145.845	391.95	BMRK 391.95
20012	7013928.811	11858735.176	394.52	OHV/ 20012
20011	7013600.940	11858890.953	401.89	OHV/ 20011
20010	7013304.170	11858931.705	406.35	TRV/ 20010
20009	7013022.776	11859055.438	406.19	TRV/ 20009
20008	7012657.321	11859119.354	401.44	TRV/ 20008
20007	7012395.536	11859242.236	387.39	TRV/ 20007
20006	7012123.479	11859422.038	382.61	TRV/ 20006
20005	7011830.484	11859527.876	372.49	TRV/ 20005
20004	7011562.382	11859706.753	365.11	TRV/ 20004
20003	7011271.290	11859804.854	358.48	TRV/ 20003
20002	7011062.853	11859041.179	354.07	OHV/ 20002
20001	7011116.115	11859414.392	350.63	OHV/ 20001
3	7011269.757	11860395.496	349.44	TRV 3
2	7011283.123	11859929.900	360.80	TRV 2

TAX MAP 40-4

EMERGENCY POLICE – FIRE – RESCUE 911

FAIRFAX COUNTY, VIRGINIA
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CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
SURVEY CONTROL DATA

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	1D
	CHECKED BY: BB	

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CONSTRUCTION ALIGNMENT DATA

GREAT FALLS STREET

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
C1	84.00'	103+15.64	103+99.64	Δ=1° 31' 09"	N27° 20' 57.65"W	42.002	83.999	3168.205	7011534.1166	11859697.3737	11859658.7844	11859658.7844	
C2	107.28'	105+27.55	106+34.84	Δ=2° 41' 10"	N26° 45' 57.06"W	53.652	107.285	2288.436	7011721.5481	11859598.5196	11859550.2089	11859550.2089	
C3	61.72'	107+80.94	108+42.66	Δ=0° 39' 34"	N25° 45' 08.98"W	30.859	61.717	5362.787	7011949.2851	11859487.4871	11859460.6720	11859460.6720	
C4	450.72'	113+91.17	118+41.89	Δ=10° 19' 47"	N20° 55' 02.38"W	225.972	450.719	2500.000	7012497.5287	11859219.5120	11859058.8139	11859058.8139	
C5	100.00'	100+97.79	101+97.79	Δ=0° 32' 04"	N26° 19' 21.05"W	50.000	100.000	10717.988	7011339.0969	11859794.4672	11859750.1251	11859750.1251	
L1	127.91'						127.910		7011608.7243	11859658.7844	7011721.5481	11859598.5196	N28° 06' 32.02"W
L2	146.10'						146.104		7011817.3288	11859550.2089	7011949.2851	11859487.4871	N25° 25' 22.09"W
L3	548.51'						548.515		7012004.8724	11859460.6720	7012497.5287	11859219.5120	N26° 04' 55.88"W
L4	258.11'						258.106		7012917.9740	11859058.8139	7013166.3869	11858988.7426	N15° 45' 08.87"W
L5	97.79'						97.790		7011251.2451	11859837.4203	7011339.0969	11859794.4672	N26° 03' 18.81"W
L6	117.85'						117.854		7011428.7278	11859750.1251	7011534.1166	11859697.3737	N26° 35' 23.28"W

ENTRANCE STA. 10+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L9	29.43'						29.435		7011363.9529	11859782.2747	7011376.9500	11859808.6846	N63° 47' 48.39"E

ENTRANCE STA. 20+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L10	29.54'						29.542		7011389.7900	11859769.4644	7011402.8141	11859795.9808	N63° 50' 27.49"E

ENTRANCE STA. 30+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L11	46.41'						46.411		7011455.6840	11859736.6324	7011476.1671	11859778.2790	N63° 48' 38.55"E

LOCUST STREET

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L12	150.33'						150.327		7011569.6997	11859679.2817	7011639.9561	11859812.1816	N62° 08' 13.87"E

ENTRANCE STA. 40+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L13	45.98'						45.979		7011675.8765	11859622.9151	7011697.3984	11859663.5465	N62° 05' 25.61"E

HIGH STREET

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L14	160.15'						160.146		7011835.5133	11859541.5654	7011905.3547	11859685.6793	N64° 08' 38.12"E

ENTRANCE STA. 50+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
C7	3.10'	50+28.95	50+32.05	Δ=17° 45' 37"	N55° 32' 50.33"E	1.562	3.100	10.000	7012005.3403	11859492.6511	11859495.1969	11859495.1969	
L15	28.95'						28.946		7011992.8456	11859466.5406	7012005.3403	11859492.6511	N64° 25' 38.59"E
L16	17.06'						17.058		7012007.0869	11859495.1969	7012018.7926	11859507.6045	N46° 40' 02.08"E

ENTRANCE STA. 60+00

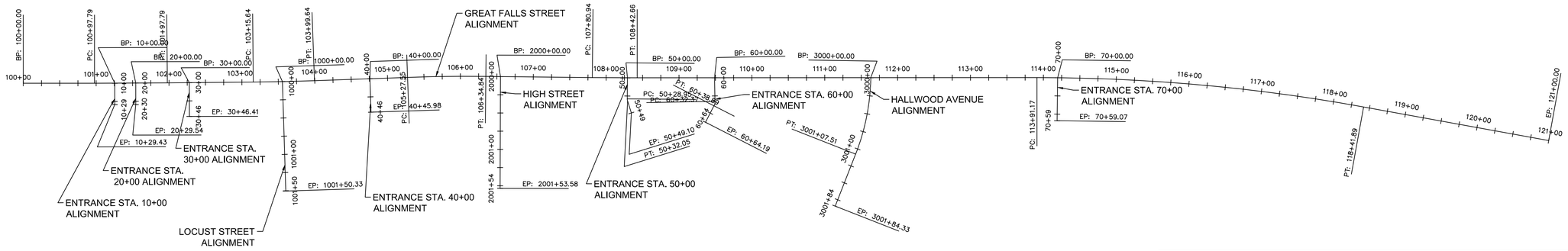
NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
C8	6.52'	60+32.37	60+38.89	Δ=28° 11' 25"	N76° 58' 40.63"E	3.329	6.523	13.259	7012114.8996	11859442.8105	11859449.1023	11859449.1023	
L17	32.37'						32.370		7012100.1448	11859413.9984	7012114.8996	11859442.8105	N62° 52' 58.12"E
L18	25.29'						25.294		7012116.3547	11859449.1023	7012115.8810	11859474.3916	S88° 55' 36.86"E

HALLWOOD

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
C9	107.51'	0+00.00	1+07.51	Δ=20° 31' 56"	N75° 07' 26.60"E	54.336	107.507	300.000	7012292.6953	11859319.7799	11859423.1283	11859423.1283	
L19	76.83'						76.826		7012320.1477	11859423.1283	7012326.3222	11859499.7062	N85° 23' 24.67"E

ENTRANCE STA. 70+00

NO.	LENGTH	PC	PT	DELTA	CHORD DIRECTION	TANGENT	LENGTH	RADIUS	START N	START E	END N	END E	DIRECTION
L20	59.07'						59.072		7012523.1486	11859207.1510	7012548.3925	11859260.5579	N64° 42' 04.49"E



TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 37.5 75 150

NORTH

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SCALE: SEE GRAPHIC SCALE
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SHEET 1E

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

TRANSPORTATION MANAGEMENT PLAN AND SEQUENCE OF CONSTRUCTION (TMP/SOC)

Temporary Traffic Control Plan Notes

TEMPORARY TRAFFIC CONTROL PLAN

GENERAL NOTES

1. TMP/SOC TYPE A PROJECT INFORMATION:

   A. IDENTIFY THE PROJECT'S TMP TYPE:
   THIS PROJECT'S TMP/SOC PLAN HAS BEEN DESIGNED IN CONFORMANCE WITH A TYPE A TMP/SOC PLAN,

   B. IDENTIFY THE WORK ZONE LOCATION, LENGTH, AND WIDTHS:
   THE PROJECT LOCATION IS AS SHOWN ON SHEET 1
   THE WORK ZONE AREAS HAVE BEEN DELINEATED AS SHOWN ON THE TMP/SOC PLAN SHEET 1G(2)–1G(5).
   THE WORK ZONE LENGTHS AND WIDTHS VARY BY LOCATION AS SHOWN ON THE TMP/SOC PLAN SHEET 1G(2)–1G(5).

   C. NOTE THE HOURS THE CONSTRUCTION AREA WILL BE ACTIVE:
   CONSTRUCTION AREA SHALL BE CONSIDERED ACTIVE WHEN ANY IMPACT TO TRAFFIC OCCURS (1ST CONE IN ROAD)
   CONSTRUCTION AREA HOURS HAVE THE FOLLOWING LIMITATIONS:

	LANE CLOSURES (NON MAJOR ARTERIAL)			
	MONDAY TO THURSDAY	FRIDAY	SATURDAY	SUNDAY
DAY TIME	9:30AM to 3:30PM	9:30AM to 2:00PM	*NOT ALLOWED	*NOT ALLOWED
NIGHT TIME	*NOT ALLOWED	*NOT ALLOWED	*NOT ALLOWED	*NOT ALLOWED

   * NIGHT TIME AND WEEKEND WORK SHALL NOT BE ALLOWED UNLESS APPROVED BY VDOT.

   NO LANE CLOSURES WILL BE ALLOWED FROM NOON ON THE DAY BEFORE A HOLIDAY UNTIL NOON ON THE WORKDAY FOLLOWING THE HOLIDAY. HOLIDAYS INCLUDE ALL STATE AND FEDERAL HOLIDAYS.

   DESIGNATION OF PEAK HOUR TIMES:
   PEAK HOURS ARE 6:00AM THROUGH 9:00AM AND 3:30PM THROUGH 6:30PM.

   D. THE TMP/SOC PLAN, DURING CONSTRUCTION, SHALL BE IN ACCORDANCE WT1H SECTIONS 512, 701, 703 & 704 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, DATED 2007; THE VIRGINIA WORK AREA PROTECTION MANUAL (VWAPM) DATED AUGUST 2011 AND UPDATED APRIL 2015; THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2009; THE VIRGINIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, DATED 2011; AND IIM-LD-241.5 OF THE INSTRUCTIONAL AND INFORMATIONAL MEMORANDA.

   E. NOTE ANY EXISTING ENTRANCES, EXISTING INTERSECTIONS, OR EXISTING PEDESTRIAN ACCESS POINTS THAT WILL BE AFFECTED BY THE CONSTRUCTION AREA OR BY THE TRAFFIC CONTROL DEVICES:

   EXISTING ENTRANCES:
   THERE ARE SEVEN PRIVATE ENTRANCES WITHIN THE PROJECT LIMITS. THE FIRST AND SECOND ARE A DOUBLE ENTRANCE IN THE FORM OF A CIRCULAR CONCRETE DRIVEWAY AT APPROXIMATE STATIONS 102+25 AND 102+50. THE THIRD IS AN ASPHALT DRIVEWAY AT APPROXIMATE STATION 103+25. THE FOURTH IS AN ASPHALT ENTRANCE AT APPROXIMATE STATION 105+75. THE FIFTH AND SIXTH ARE GRAVEL ENTRANCES THAT SERVE THE SAME PROPERTY IN A CIRCULAR ENTRANCE AT APPROXIMATE STATIONS 109+25 AND 110+50. THE SEVENTH ENTRANCE IS AN ASPHALT DRIVEWAY AT APPROXIMATE STATION 115+25. EXCEPT FOR DRIVEWAY RECONSTRUCTION, ALL ENTRANCES ARE TO REMAIN OPEN AND FUNCTIONAL DURING CONSTRUCTION. DURING DRIVEWAY RECONSTRUCTION, CONTRACTOR TO WORK WITH THE PROPERTY OWNER TO ESTABLISH A MUTUALLY AGREEABLE SCHEDULE TO CLOSE THE ENTRANCE.

   EXISTING INTERSECTIONS:
   THE GREAT FALLS STREET AND NORTH WEST STREET INTERSECTION IS AT APPROXIMATE STATION 101+00, THE GREAT FALLS STREET AND LOCUST STREET INTERSECTION IS AT APPROXIMATE STATION 104+50, THE GREAT FALLS STREET AND CREST PLACE INTERSECTION IS AT APPROXIMATE STATION 106+50, THE GREAT FALLS STREET AND HIGH STREET INTERSECTION IS AT APPROXIMATE STATION 107+50, THE GREAT FALLS STREET AND WALNUT STREET IS AT APPROXIMATE STATION 110+50, THE GREAT FALLS STREET AND HALLWOOD AVENUE INTERSECTION IS AT APPROXIMATE STATION 112+75, THE GREAT FALLS STREET AND MARBO COURT INTERSECTION IS AT APPROXIMATE STATION 114+00, THE GREAT FALLS STREET AND WOODLAND DRIVE INTERSECTION IS AT APPROXIMATE STATION 115+25, AND THE GREAT FALLS STREET AND OSBORN STREET INTERSECTION IS AT APPROXIMATE STATION 121+25. ALL INTERSECTIONS ARE TO REMAIN IN OPERATION DURING THE DURATION OF CONSTRUCTION EXCEPT DURING THE PHASES NOTED IN THE NARRATIVE.

   EXISTING PEDESTRIAN ACCESS POINTS:
   THERE ARE NO PEDESTRIAN ACCESS POINTS WITHIN THE PROJECT LIMITS. THERE IS AN EXISTING CONCRETE WALKWAY TO THE EAST OF THE PROJECT LIMITS BETWEEN HALLWOOD AVENUE AND THE NORTHERN LIMITS OF THE BRIDGE OVER I-66. THE BRIDGE ALSO HAS A SIDEWALK ON THE WEST SIDE OF THE PROJECT. ALL PEDESTRIANS ARE TO BE DIVERTED AWAY FROM THE WORK ZONE DURING CONSTRUCTION.

   EXISTING BUS STOPS:
   THERE ARE NO BUS STOPS WITHIN THE PROJECT LIMITS.

   F. IDENTIFY THE MAJOR TYPES OF TRAVELERS:
   THE TRAFFIC ON THE ROADWAY CONSISTS PRIMARILY OF PASSENGER VEHICLES WITH SOME PEDESTRIANS ON THE ROAD. THE SURROUNDING AREA IS RESIDENTIAL.

   G. THE CONTRACTOR SHALL:

   DESIGNATE A PERSON ASSIGNED TO THE PROJECT WHO WILL HAVE THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TMP/SOC AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PERMIT WORK. THIS PERSON SHALL COORDINATE WITH THE FAIRFAX COUNTY CONSTRUCTION INSPECTOR FOR THE DURATION OF CONSTRUCTION.

   ENSURE THAT PERSONNEL ASSIGNED TO THE PROJECT ARE TRAINED IN TRAFFIC CONTROL TO A LEVEL COMMENSURATE WITH THEIR RESPONSIBILITIES IN ACCORDANCE WITH VDOT'S WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.

   INFORM THE ENGINEER OF ANY WORK REQUIRING LANE SHIFTS, LANE CLOSURES, AND/OR PHASE CHANGES A MINIMUM OF TWO WORKING DAYS PRIOR TO IMPLEMENTING THIS ACTIVITY.

   PERFORM REVIEWS OF THE CONSTRUCTION AREA TO ENSURE COMPLIANCE WITH CONTRACT DOCUMENTS AT REGULARLY SCHEDULED INTERVALS AT THE DIRECTION OF THE ENGINEER. CONTRACTOR SHALL MAINTAIN AN APPROVED COPY OF THE TEMPORARY TRAFFIC CONTROL PLAN AT THE WORK SITE AT ALL TIMES.

   COORDINATE WITH FAIRFAX COUNTY POLICE DEPARTMENT AND FAIRFAX COUNTY FIRE/RESCUE DEPORTMENT FOR ANY LANE CLOSURES AND ANY DETOURS OF ANY NATURE.

   SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH A MANNER THAT WATER, SANITARY SEWER, CABLE, FIBER CABLE/OPTIC CABLE, ANY OVERHANGING UTILITIES, AND ANY UNDERGROUND UTILITIES SERVICES WILL NOT BE INTERRUPTED.

2. THIS TMP/SOC PLAN IS INTENDED AS A GUIDE. IT IS NOT TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH PHASE, BUT ONLY TO SHOW THE GENERAL HANDLING OF EXISTING TRAFFIC. IF THE CONTRACTOR IS TO DEVIATE FROM THE APPROVED TMP, A NEW OR REVISED TMP MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

3. CONTRACTOR IS TO MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION ON NORTH WEST STREET, GREAT FALLS STREET, HALLWOOD AVENUE, AND OSBORN STREET DURING CONSTRUCTION OF THIS PROJECT WITH A MINIMUM CLEAR ROADWAY WIDTH NO LESS THAN EXISTING CONDITIONS UNLESS OTHERWISE APPROVED BY THE ENGINEER. FOR STREET INTERSECTIONS, A MINIMUM WIDTH NO LESS THAN EXISTING WIDTH SHALL BE MAINTAINED AT ALL TIMES, UNLESS APPROVED BY THE ENGINEER.

4. ALL AREAS EXCAVATED BELOW THE EXISTING PAVEMENT SURFACE AND WITHIN THE CLEAR ZONE AT THE CONCLUSION OF EACH WORKDAY, SHALL BE BACKFILLED TO FORM AN APPROXIMATE 6:1 WEDGE AGAINST THE EXISTING PAVEMENT OR NEWLY CONSTRUCTED PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC.

5. EACH PHASE OF CONSTRUCTION SHALL BE COMPLETED TO THE INSTALLATION OF INTERMEDIATE COURSE ASPHALT PRIOR TO THE START OF THE NEXT PHASE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

6. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADD ANY ADDITIONAL TEMPORARY MEASURES NECESSARY TO FACILITATE PROPER, POSITIVE DRAINAGE FOR THE DURATION OF CONSTRUCTION.

7. UNLESS SPECIFIED ON THE PLANS, ALL EXISTING TURN LANES SHALL BE MAINTAINED AT ALL TIMES FOR THE DURATION OF CONSTRUCTION.

8. WHERE GROUP 2 CHANNELIZING DEVICES ARE USED TO SEPARATE THE CONSTRUCTION AREA AND TRAFFIC, A MINIMUM CLEAR ZONE AREA AS DEFINED IN THE VWAPM IS TO BE MAINTAINED.

9. THE CONTRACTOR IS TO COORDINATE WITH FAIRFAX COUNTY FOR LOCATION(S) OF THE CONSTRUCTION STAGING AREA. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS NECESSARY.

10. IMPLEMENTING THE TRANSPORTATION MANAGEMENT PLAN
DURING THE FIRST DAY OF THE NEW WORK ZONE TRAFFIC PATTERN, THE PROJECT'S MANAGER AND PROJECT'S CONSTRUCTION INSPECTOR SHALL INSPECT THE WORK ZONE TO ENSURE COMPLIANCE WITH THE TMP. ON THE THIRD TO FIFTH DAY OF IMPLEMENTATION OF THE TMP'S NEW WORK ZONE TRAFFIC PATTERN, THE CONSTRUCTION INSPECTOR SHALL CONDUCT AN ON-SITE REVIEW OF THE WORK ZONE'S PERFORMANCE IN COORDINATION WITH VDOT AND RECOMMEND TO THE CONTRACTOR ANY REQUIRED CHANGES TO THE TMP TO ENHANCE THE WORK ZONE'S SAFETY AND MOBILITY. ALL SUCH CHANGES SHALL BE DOCUMENTED. AN ON-SITE REVIEW OF THE PROJECT'S WORK ZONE TRAFFIC CONTROL BY THE COUNTY'S CONSTRUCTION INSPECTOR AND THE CONTRACTOR SHALL BE CONDUCTED (WITH COORDINATION FROM VDOT) WITHIN 48 HOURS OF ANY FATAL ACCIDENT/CRASH WITHIN THE WORK ZONE.

11. EVALUATION OF THE TRANSPORTATION MANAGEMENT PLAN
A PERFORMANCE ASSESSMENT OF THE TMP INCLUDING AREA-WIDE IMPACTS ON ADJACENT ROADWAYS SHALL BE PERFORMED BY FAIRFAX COUNTY WITH COORDINATION FROM THE ENGINEER DURING CONSTRUCTION. AS CIRCUMSTANCES DICTATE, A REVIEW OF THE OVERALL EFFECTIVENESS OF THE PROJECT'S TMP SHALL BE COMPLETED DURING THE POST CONSTRUCTION MEETING AND INCLUDED WITH THE POST CONSTRUCTION REPORT. A COPY OF THE SPECIFIC INFORMATION ON THE EFFECTIVENESS OF THE TMP WILL BE FORWARDED TO FAIRFAX COUNTY FOR REVIEW. A COPY OF THE TMP INTERIM/POST CONSTRUCTION REPORT FORM CAN BE OBTAINED FROM FAIRFAX COUNTY.

12. PUBLIC COMMUNICATIONS PLAN
THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

   A. NOTIFYING THE PROJECT MANAGER AND CONSTRUCTION INSPECTOR TWO WEEKS IN ADVANCE OF ANY SCHEDULE WORK PLANS AND TRAFFIC DELAYS.

   B. NOTIFYING THE PROJECT MANAGER, CONSTRUCTION INSPECTOR, AND CORRESPONDING ENGINEER OF ANY UNSCHEDULED TRAFFIC DELAYS

14. TRANSPORTATION OPERATIONS
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:

   A. NOTIFY THE REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) ONE WEEK IN ADVANCE (USUALLY THE WEDNESDAY PRIOR TO THE REQUESTED OPERATION), IN ORDER TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC.

   B. POST A LIST OF LOCAL EMERGENCY RESPONSE AGENCIES INSIDE THE PROJECT'S CONSTRUCTION OFFICE/TRAILER.

   C. IMMEDIATELY REPORT ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE.

   D. NOTIFY THE PROJECT'S CONSTRUCTION INSPECTOR AND CORRESPONDING ENGINEER OF ANY NEW INCIDENTS AND EXPECTED TRAFFIC DELAYS.

   E. WITHIN 24 HOURS OF ANY INCIDENTS WITHIN THE CONSTRUCTION WORK ZONE, A REVIEW OF THE TRAFFIC CONTROLS SHALL BE COMPLETED AND NECESSARY ADJUSTMENTS MADE TO REDUCE THE FREQUENCY AND SEVERITY OF ANY FUTURE INCIDENTS.

CONTACT NUMBERS:

COUNTY PROJECT MANAGER	JIM BEALL (703) 877-5600
COUNTY CONSTRUCTION MANAGER	TBD
COUNTY CONSTRUCTION INSPECTOR	TBD
EMERGENCY CALL	911
NON-EMERCENCY NUMBERS:	
FAIRFAX COUNTY POLICE	(703) 246-2253
FAIRFAX COUNTY FIRE & RESCUE	(703) 246-2126

GENERAL CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL-APRIL 2015.
2. CONTRACTOR SHALL INSTALL PROJECT LIMIT SIGNS ON GREAT FALLS STREET AND ALL SIDE STREETS IN ACCORDANCE WITH VWAPM TTC-53.0. THESE SIGNS ARE TO REMAIN IN PLACE FOR THE DURATION OF ALL PHASES OF CONSTRUCTION UNLESS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS DURING BOTH WORK AND NON-WORK HOURS TO ENSURE THE PROTECTION AND SAFETY OF THE ADJACENT PROPERTY OWNERS, PEDESTRIANS, VEHICULAR TRAFFIC AND THE GENERAL PUBLIC FROM ANY CONSTRUCTION RELATED ACTIVITY, CONSTRUCTION EQUIPMENT AND THE CONSTRUCTION SITE ITSELF.
4. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE.
5. UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THE FOLLOWING:

PHASE 1:

1. CONTRACTOR IS TO IMPLEMENT VWAPM TTC-23.1 AND TTC-28.1 DURING ALLOWABLE HOURS TO CONSTRUCT THE PROPOSED CURB AND GUTTER, STORM SEWER, AND SIDEWALK ALONG GREAT FALLS STREET AS WELL AS ALL OTHER RELATED ACTIVITIES FOR THE AREA AS SHOWN AS CONSTRUCTION WORK ZONE PHASE 1 ON SHEET 1G(2)
2. CONTRACTOR SHALL ENSURE 10' MINIMUM LANES AT ALL TIMES DURING CONSTRUCTION.
3. FOR THE CONSTRUCTION OF PIPE UNDER HIGH STREET AND LOCUST STREET, CONTRACTOR SHALL IMPLEMENT VWAPM TTC-34.1 TO CLOSE EITHER HIGH STREET OR LOCUST STREET, BUT NOT BOTH AT THE SAME TIME, DURING CONSTRUCTION. CONTRACTOR SHALL DETOUR TRAFFIC VIA WALNUT STREET AND EITHER HIGH STREET OR LOCUST STREET. CONTRACTOR SHALL NOT BLOCK ANY ENTRANCES AND SHALL PROVIDE RESIDENTS WITH ADEQUATE WARNING OF THE UPCOMING TEMPORARY DETOUR.
4. CONTRACTOR SHALL BUILD UP PROPOSED FULL DEPTH PAVEMENT UP TO AND INCLUDING THE INTERMEDIATE LAYER. FINAL ROADWAY SURFACING IS TO BE CONDUCTED IN PHASE 6.

PHASE 2:

1. CONTRACTOR IS TO IMPLEMENT VWAPM TTC-23.1 AND TTC-28.1 DURING ALLOWABLE HOURS TO CONSTRUCT THE PROPOSED CURB AND GUTTER, STORM SEWER, AND SIDEWALK ALONG GREAT FALLS STREET AS WELL AS ALL OTHER RELATED ACTIVITIES FOR THE AREA AS SHOWN AS CONSTRUCTION WORK ZONE PHASE 2 ON SHEET 1G(2)
2. CONTRACTOR SHALL ENSURE 10' MINIMUM LANES AT ALL TIMES DURING CONSTRUCTION.
3. FOR THE CONSTRUCTION OF PIPE UNDER HIGH STREET AND LOCUST STREET, CONTRACTOR SHALL IMPLEMENT VWAPM TTC-34.1 TO CLOSE EITHER HIGH STREET OR LOCUST STREET, BUT NOT BOTH AT THE SAME TIME, DURING CONSTRUCTION. CONTRACTOR SHALL DETOUR TRAFFIC VIA WALNUT STREET AND EITHER HIGH STREET OR LOCUST STREET. CONTRACTOR SHALL NOT BLOCK ANY ENTRANCES AND SHALL PROVIDE RESIDENTS WITH ADEQUATE WARNING OF THE UPCOMING TEMPORARY DETOUR.
4. CONTRACTOR SHALL BUILD UP PROPOSED FULL DEPTH PAVEMENT UP TO AND INCLUDING THE INTERMEDIATE LAYER. FINAL ROADWAY SURFACING IS TO BE CONDUCTED IN PHASE 6.

PHASE 3:

1. CONTRACTOR IS TO IMPLEMENT VWAPM TTC-23.1 AND TTC-28.1 DURING ALLOWABLE HOURS TO CONSTRUCT THE PROPOSED CURB AND GUTTER AND SIDEWALK ALONG GREAT FALLS STREET AS WELL AS ALL OTHER RELATED ACTIVITIES FOR THE AREA AS SHOWN AS CONSTRUCTION WORK ZONE PHASE 3 ON SHEET 1G(2)
2. CONTRACTOR SHALL ENSURE 10' MINIMUM LANES AT ALL TIMES DURING CONSTRUCTION.
3. CONTRACTOR SHALL BUILD UP PROPOSED FULL DEPTH PAVEMENT UP TO AND INCLUDING THE INTERMEDIATE LAYER. FINAL ROADWAY SURFACING IS TO BE CONDUCTED IN PHASE 6.

PHASE 4:

1. CONTRACTOR IS TO IMPLEMENT VWAPM TTC-23.1 AND TTC-28.1 DURING ALLOWABLE HOURS TO CONSTRUCT THE PROPOSED CURB AND GUTTER AND SIDEWALK ALONG GREAT FALLS STREET AS WELL AS ALL OTHER RELATED ACTIVITIES FOR THE AREA AS SHOWN AS CONSTRUCTION WORK ZONE PHASE 4 ON SHEET 1G(3)
2. CONTRACTOR SHALL ENSURE 10' MINIMUM LANES AT ALL TIMES DURING CONSTRUCTION.
3. 3. CONTRACTOR SHALL BUILD UP PROPOSED FULL DEPTH PAVEMENT UP TO AND INCLUDING THE INTERMEDIATE LAYER. FINAL ROADWAY SURFACING IS TO BE CONDUCTED IN PHASE 6.

PHASE 5:

1. CONTRACTOR IS TO IMPLEMENT VWAPM TTC-16.1 DURING ALLOWABLE HOURS TO CONSTRUCT THE PROPOSED CURB AND GUTTER AND SIDEWALK ALONG GREAT FALLS STREET AS WELL AS ALL OTHER RELATED ACTIVITIES FOR THE AREA AS SHOWN AS CONSTRUCTION WORK ZONE PHASE 5 ON SHEETS 1G(3)
2. CONTRACTOR SHALL ENSURE 10' MINIMUM LANES AT ALL TIMES DURING CONSTRUCTION.
3. CONTRACTOR SHALL BUILD UP PROPOSED FULL DEPTH PAVEMENT UP TO AND INCLUDING THE INTERMEDIATE LAYER. FINAL ROADWAY SURFACING IS TO BE CONDUCTED IN PHASE 6.

PHASE 6:

1. CONTRACTOR SHALL IMPLEMENT VWAPM TTC-59.1 AND ANY NECESSARY LANE CLOSURES WITHIN THE STANDARDS AND PRACTICES OF THE VWAPM TO MILL PAVEMENT AND APPLY THE FINAL ASPHALT SURFACE LAYER AS DELINEATED ON SHEETS 3-5.
2. CONTRACTOR IS TO INSTALL PROPOSED PAVEMENT MARKINGS AS OUTLINED IN THE PAVEMENT MARKING PLAN ON SHEETS 6(1)-6(2).
3. CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES UPON COMPLETION OF THE PROJECT.

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements

TRANSPORTATION MANAGEMENT PLAN NOTES

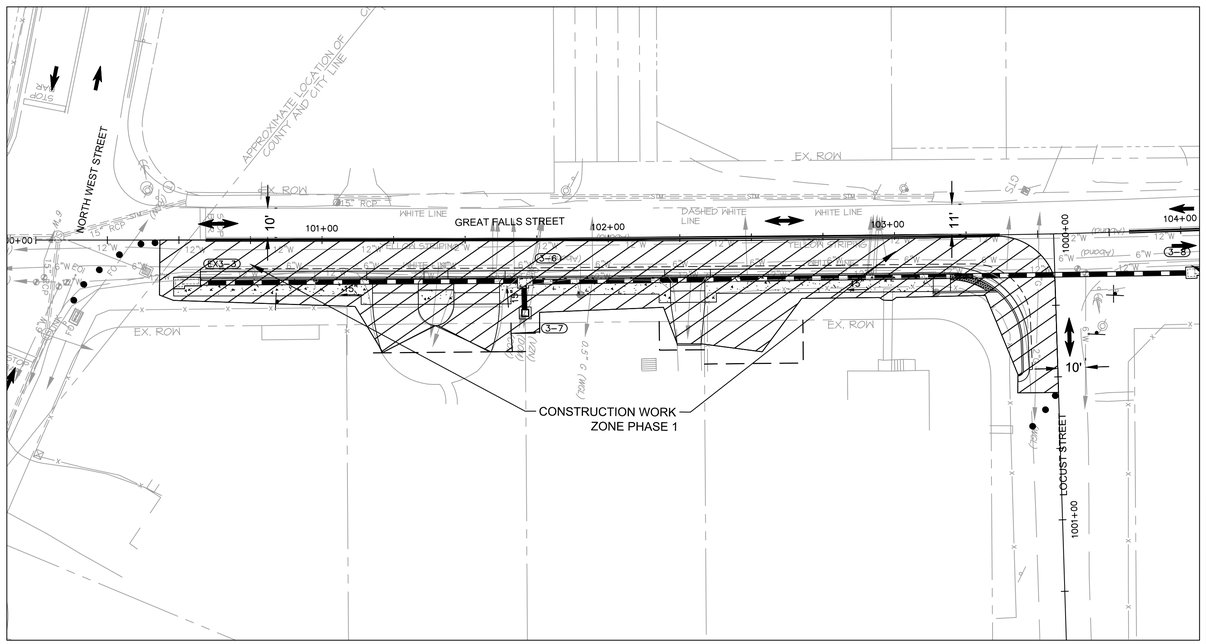
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	1G(1)
	CHECKED BY: BB	

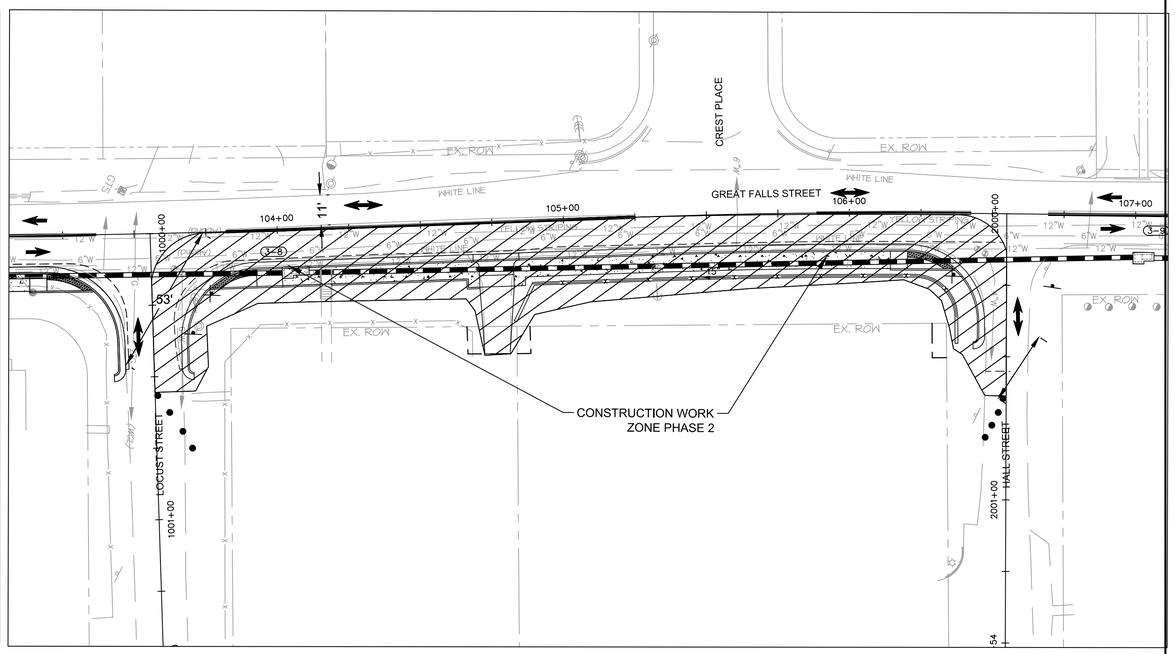
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

TEMPORARY TRAFFIC CONTROL

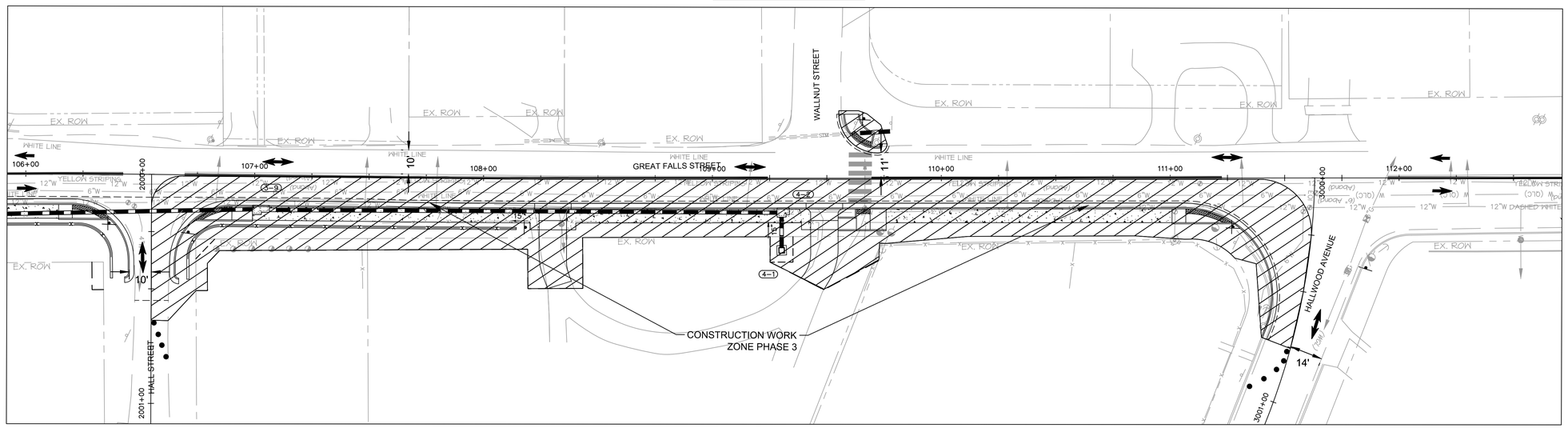
TMP PHASE 1



TMP PHASE 2



TMP PHASE 3



TAX MAP 40-4

LEGEND

- CONSTRUCTION WORK ZONE
- GROUP 1 CHANNELING DEVICE

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

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EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS	△#	DESCRIPTION	BY	APPROVED	DATE

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TEMPORARY TRAFFIC CONTROL

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

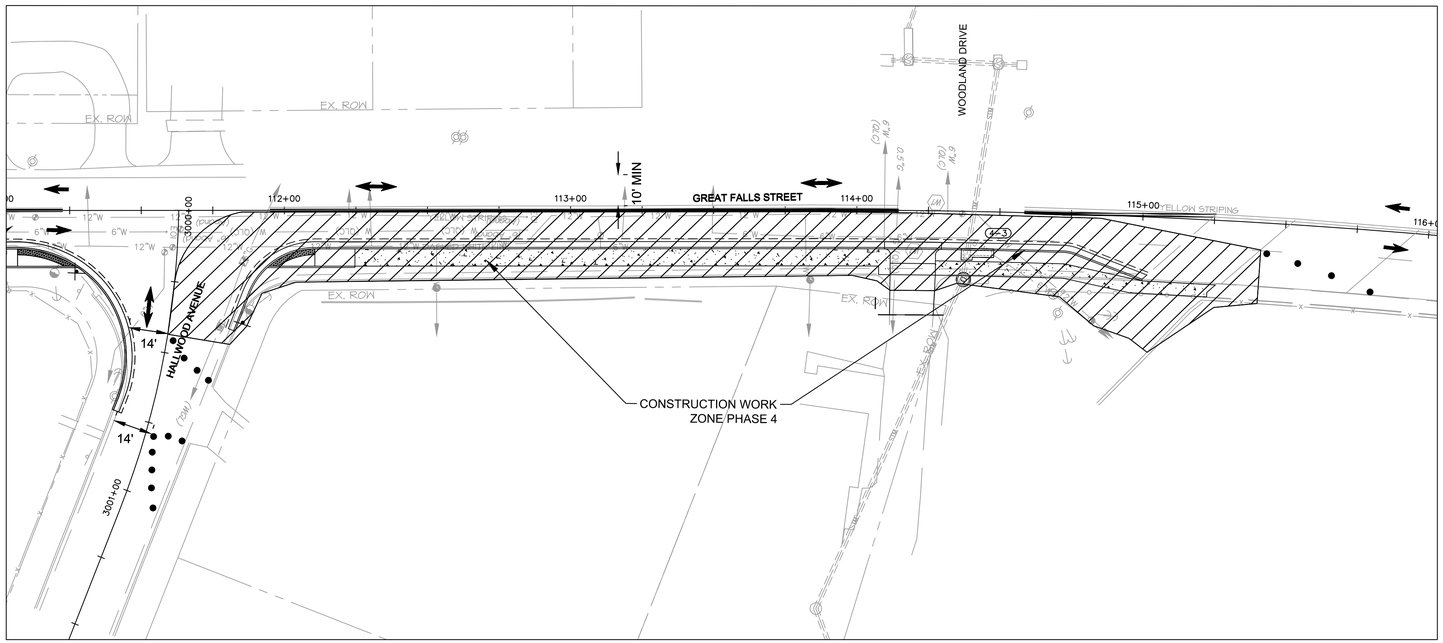
SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	1G(2)
	CHECKED BY: BB	

Plotted By:Doughty, Derik Sheet Set:Great Falls St Layout:1G(2) TEMPORARY TRAFFIC CONTROL July 11, 2017 09:38:27am K:\NVA_RDWY\110213037-Great Falls Street\CAD\Plansheets\1G TRANSPORTATION MANAGMENT PLAN.dwg

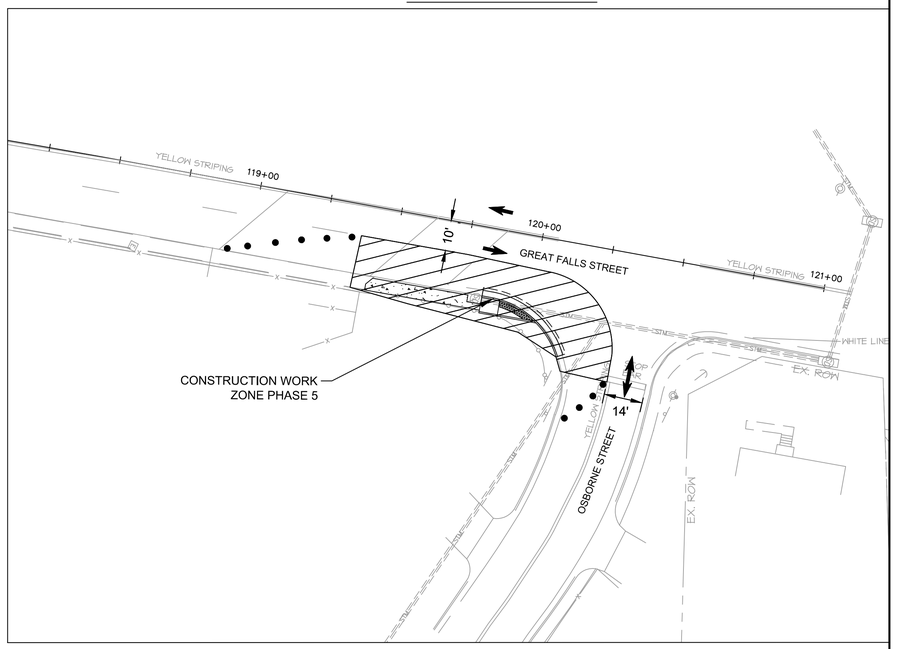
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

TEMPORARY TRAFFIC CONTROL

TMP PHASE 4



TMP PHASE 5



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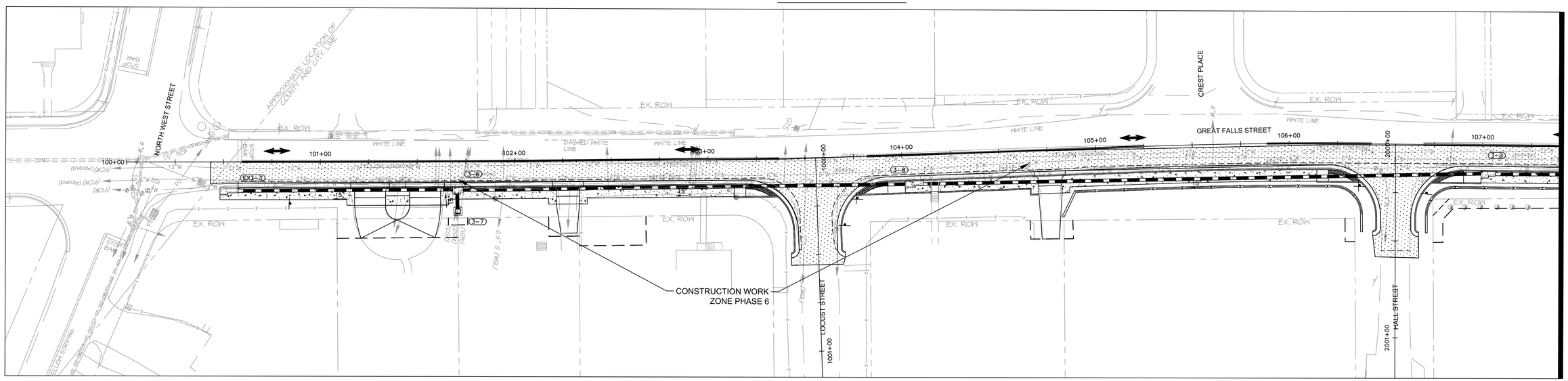

TAX MAP 40-4

LEGEND

- CONSTRUCTION WORK ZONE
- CONSTRUCTION WORK ZONE MILL AND OVERLAY AND NEW PAVEMENT
- GROUP 1 CHANNELING DEVICE

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

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EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS	△#	DESCRIPTION	BY	APPROVED	DATE

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TEMPORARY TRAFFIC CONTROL

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

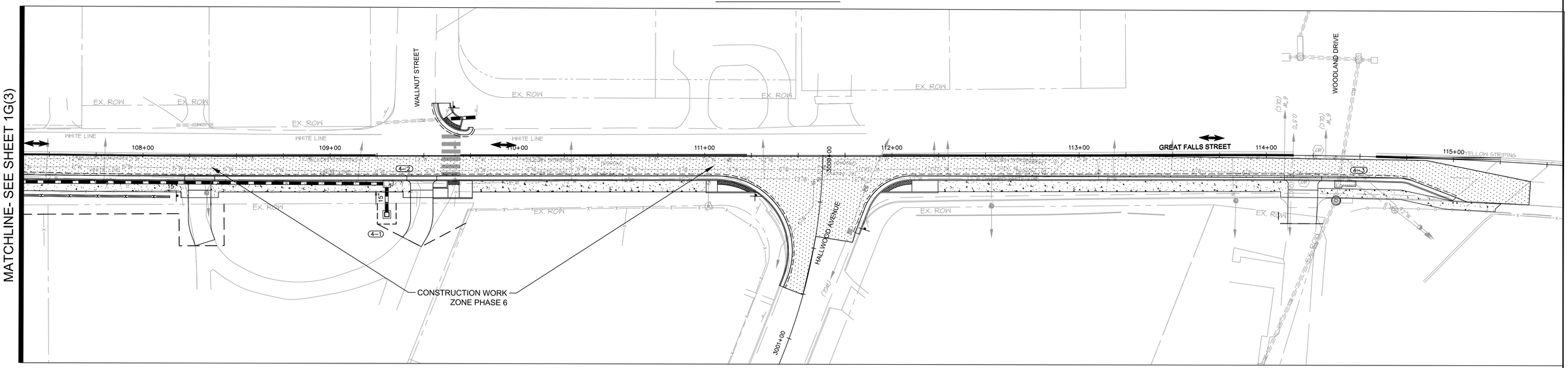
SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	1G(3)
	CHECKED BY: BB	

Plotted By:Doughty, Derik Sheet Set:Great Falls St Layout:1G(3) TEMPORARY TRAFFIC CONTROL July 11, 2017 09:38:33am K:\NVA_RDWY\110213037-Great Falls Street\CAD\Plansheets\1G TRANSPORTATION MANAGMENT PLAN.dwg

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

TEMPORARY TRAFFIC CONTROL

TMP PHASE 6



LEGEND

- CONSTRUCTION WORK ZONE
- CONSTRUCTION WORK ZONE MILL AND OVERLAY AND NEW PAVEMENT

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TEMPORARY TRAFFIC CONTROL

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

SCALE: SEE GRAPHIC SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET: 1G(4)

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

Typical Traffic Control
Stationary Operation on a Shoulder
(Figure TTC-4.1)
NOTES

Standard

1. **For long-term stationary work (more than 3 days) on divided highways having a median wider than 8', sign assemblies on both sides of the roadway shall be required as shown (ROAD WORK AHEAD (W20-1), RIGHT SHOULDER CLOSED AHEAD (W21-5bR), RIGHT SHOULDER CLOSED (W21-5aR)[1]), even though only one shoulder is being closed. For operations less than 3 days in duration, sign assemblies will only be required on the side where the shoulder is being closed and a RIGHT SHOULDER CLOSED (W21-5aR)[1] sign shall be added to that side.**

Guidance

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*

Option:

3. The SHOULDER WORK (W21-5) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
4. For short duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity amber rotating, flashing, or[1] oscillating lights is used.

Standard:

5. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or[1] oscillating, lights.**
6. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length (L)				
Speed Limit (mph)	Lane Width (Feet)			
	9	10	11	12
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access highways shall be 1000 feet.				
Shoulder Taper = ⅓ L Minimum				

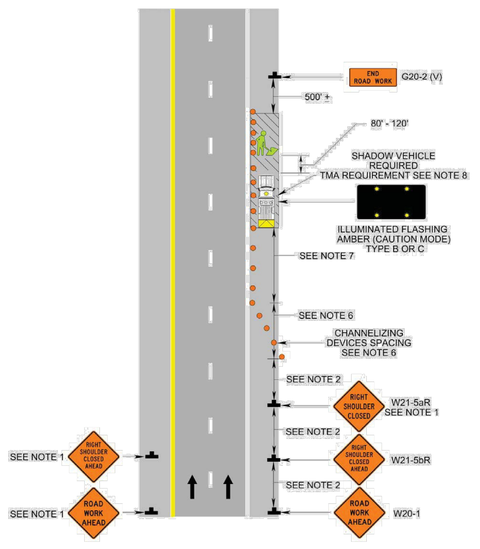
Channelizing Device Spacing		
Location	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'
* Spacing may be increased to this distance, but shall not exceed one access per ¼ mile.		

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

7. **The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
8. **A truck-mounted attenuator (TMA) shall be used on the shadow vehicle on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph for operations with a duration greater than 60 minutes.**
9. **When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.**

1: Revision 1 – 4/1/2015

Stationary Operation on a Shoulder
(Figure TTC-4.1)



Typical Traffic Control
Shoulder Operation with Minor Encroachment
(Figure TTC-5.1)
NOTES

Standard

1. **For required sign assemblies for multi-lane roadways see Note 1, TTC-4.**

Guidance

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
3. *When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.*

Option:

4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.

Standard:

5. **A shadow vehicle with either an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or[1] oscillating light shall be parked 80' - 120' in advance of the first work crew.**
6. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or[1] oscillating, lights.**
7. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length (L)				
Speed Limit (mph)	Lane Width (Feet)			
	9	10	11	12
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access highways shall be 1000 feet.				
Shoulder Taper = ⅓ L Minimum				

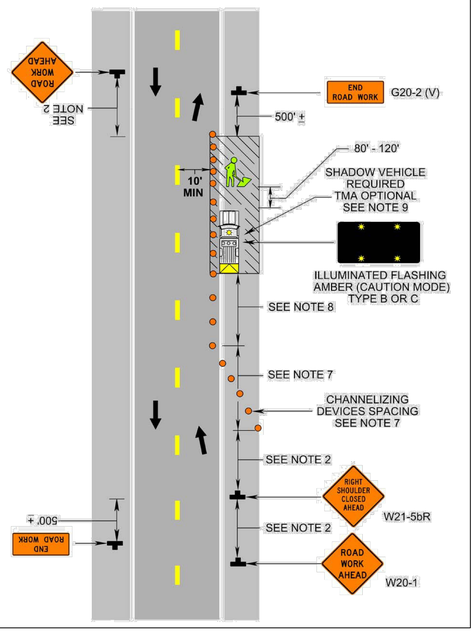
Channelizing Device Spacing		
Location	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'
* Spacing may be increased to this distance, but shall not exceed one access per ¼ mile.		

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

8. **The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
9. **A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.**
10. **When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.**

1: Revision 1 – 4/1/2015

Shoulder Operation with Minor Encroachment
(Figure TTC-5.1)



Typical Traffic Control
Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.1)
NOTES

Guidance:

1. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.*
2. *Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the flagger station and transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagger symbol sign to the flagger.*

Option:

3. Where Right-of-Way or geometric conditions prevent the use of 48" x 48" signs, 36" x 36" signs may be used.

Standard:

4. **Flagging stations shall be located far enough in advance of the work space to permit approaching traffic to reduce speed and/or stop before passing the work space and allow sufficient distance for departing traffic in the left lane to return to the right lane before reaching opposing traffic (see Table 6H-3 on Page 6H-5).**
5. **All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6E.01, Qualifications for Flaggers).**
6. **Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.**
7. **A shadow vehicle with at least one high intensity amber rotating, flashing, or[1] oscillating light shall be parked 80'-120' in advance of the first work crew.**

Option:

8. A supplemental flagger may be required in this area to give advance warning of the operation ahead by slowing approaching traffic prior to reaching the flagger station or queued traffic.

Guidance:

9. *If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the portable temporary rumble strips (PTRS)[1], should be readjusted at greater distances.*
10. *When a highway-rail crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the highway-rail grade crossing, the temporary traffic control zone should be extended so that the transition area precedes the highway-rail crossing (see Figure TTC-56 for additional information on highway-rail crossings).*

Standard:

11. **At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).**

Option:

12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less.
13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).

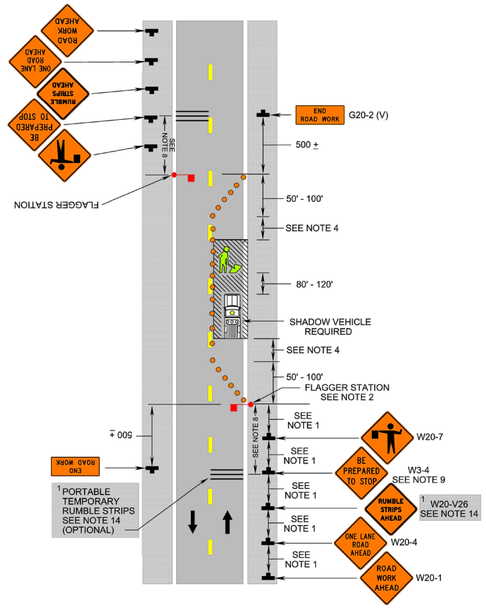
Standard:

14. **When approved for use, three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V26) sign shall also be utilized.**

Posted Speed	0 – 35 mph	36 – 55 mph
PTRS Spacing (Center to Center)	5 Feet	8 Feet

1: Revision 1 – 4/1/2015

Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.1)



1: Revision 1 – 4/1/2015

Typical Traffic Control
Outside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-16.1)
NOTES

Standard:

1. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**

Guidance:

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
3. *Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.*
4. *All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.*

Standard:

5. **Taper Length (L) and Channelizing Device Spacing shall be:**

Taper Length (L)				
Speed Limit (mph)	Lane Width (Feet)			
	9	10	11	12
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access highways shall be 1000 feet.				
Shoulder Taper = ½ L Minimum				

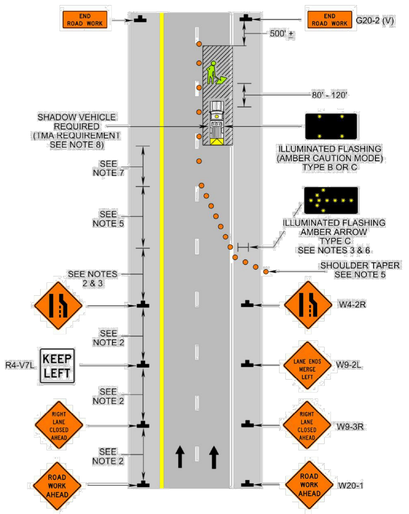
Channelizing Device Spacing		
Location	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'
* Spacing may be increased to this distance, but shall not exceed one access per ¼ mile.		

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

6. **An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).**
7. **The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
8. **A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or[1] oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.**
9. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights but can be used to supplement the amber rotating, flashing, or[1] oscillating lights.**
10. **When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.**

1: Revision 1 – 4/1/2015

Outside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-16.1)



TAX MAP 40-4

EMERGENCY POLICE – FIRE – RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TRANSPORTATION MANAGEMENT PLAN DETAILS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE: SEE GRAPHIC SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET 1G(5)

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

Typical Traffic Control
Lane Closure Operation in an Intersection
(Figure TTC-28.1)
NOTES

Guidance:

1. *The control of traffic through the intersection in order of preference should be:*
   a. *Obtain the services of law enforcement personnel.*
   b. *Detour the effective routes to other roads and streets as approved and directed by the Regional Traffic Engineer.*
   c. *Place a state certified flagger on each leg of the intersection controlling a single lane of traffic.*

   Appropriate signing as shown should be used for law enforcement and flagging operations. For detour signs see Figure TTC-34.
2. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.*

Standard:

3. Channelizing device spacing shall be on 20' centers or less.

Guidance:

4. *If room permits, a shadow vehicle with at least one rotating amber light or high intensity amber flashing or oscillating[1] light should be parked 80'-120' in advance of the first work crew.*

Standard:

5. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating[1] lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.

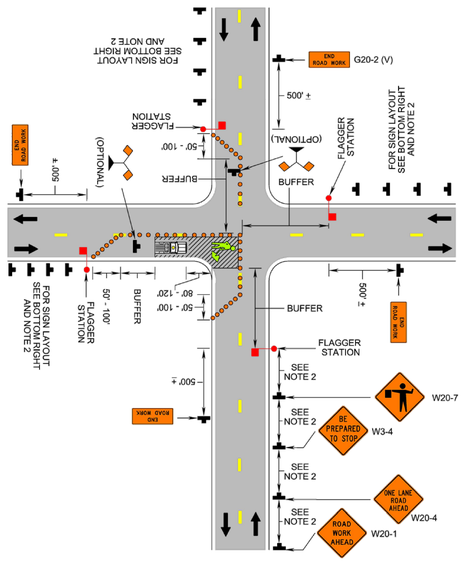
Guidance:

6. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.*

Support:

7. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

Lane Closure Operation in an Intersection
(Figure TTC-28.1)



Typical Traffic Control
Street Closure Operation with Detour
(Figure TTC-34.1)
NOTES

Guidance:

1. *This plan should be used for streets without posted route numbers.*
2. *On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn.*
3. *Sign spacing distance should be 225'-275' where the posted speed limit is 30 to 35 mph, and 100'-200' where the posted speed is 25 mph or less.*
4. *If the road is opened for a significant distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, the ROAD CLOSED (R11-2) and Detour Arrow (M4-10) signs on Type 3 Barricades should be located at the corners of intersecting closed roadway or the traveled way.*

Option:

5. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
6. Flashing warning lights may be used on Type 3 Barricades.
7. Detour signs may be located on the far side of intersections. A Detour sign with an advance arrow may be used in advance of a turn.
8. A Street Name (M4-VP1a) plaque may be mounted with the Detour sign. The Street Name plaque may be either white on green or black on orange.

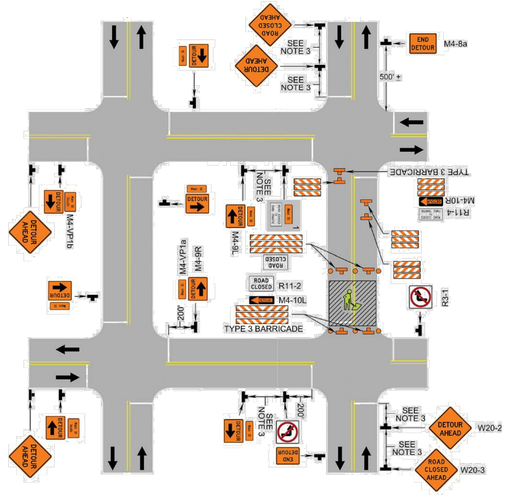
Standard:

9. When used, the Street Name plaque shall be placed above the Detour sign.

Support:

10. See Chapter 6I for additional information on incident management traffic control.

Street Closure Operation with Detour
(Figure TTC-34.1)



Typical Traffic Control
End of Day Signing for Paving Operations on a Two-Lane Roadway
(Figure TTC-59.1)
NOTES

Standard:

1. **Open travel lane(s) shall not be exposed to more than 2 to 3 mile sections of milled or uneven surface.**
2. **The maximum pavement edge drop-off shall be 2 inches or less.**
3. **NO CENTER LINE (W8-12) sign shall be installed whenever the centerline has been obliterated or until permanent pavement markings have been installed. The sign shall be installed in both directions when the centerline is not present. In addition, NO CENTER LINE signs shall be installed every mile if the unmarked area is less than 3 miles, or every 2 miles if the unmarked area is longer than 4 miles.**
4. **A DO NOT PASS (R4-1) sign shall be used when the centerline has been obliterated or until pavement markings have been installed. The DO NOT PASS sign shall be installed after the NO CENTER LINE sign and their sign stand shall be supported with a sand bag weighing approximately 25-pounds on each leg or two (2) drum collar weights positioned on the center of the sign stand[1]. Thereafter the DO NOT PASS sign shall be installed every mile if the unmarked area is less than 3 miles or every 2 miles if the unmarked area is longer than 4 miles.**
5. **In the vicinity of a turning lane a BUMP (W8-1) sign shall be installed.**
6. **The UNEVEN LANES (W8-11) sign and BUMP sign shall be adjusted daily with the work operation and their sign stand shall be supported with a sand bag weighing approximately 25-pounds on each leg or two (2) drum collar weights positioned on the center of the sign stand[1]. Additional UNEVEN LANES signs shall be installed every mile.**
7. **Signs shall be post-mounted at locations after 72 consecutive hours of non-work activities.**

Guidance:[1]

8. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.*

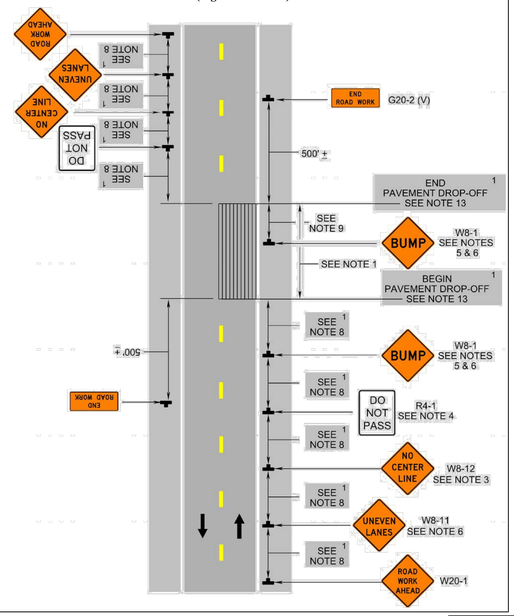
Option:[1]

9. Only traffic control signing for pavement resurfacing is shown. Other devices may be used for the control of traffic through the work area.
10. The LOW SHOULDER (W8-9) sign may be used to warn of a shoulder condition where there is an elevation difference of less than 2 inches between the shoulder and the travel lane.

Standard:

11. **The LOW SHOULDER sign shall be repeated at 1 mile intervals where there is an elevation difference of less than 2 inches between the shoulder and the travel lane extends over a distance in excess of 1 mile.**
12. **If pavement marking cannot be installed in accordance with Section 704.03 of the Road and Bridge Specifications, then yellow temporary pavement markers spaced at 10 foot centers for two-way traffic shall be placed along the centerline for lane division. No edge markers will be required.**
13. **A temporary pavement wedge shall be constructed of surface mix asphalt a minimum of three (3) feet in length for every inch of depth of pavement milling on the approach and departure end of the milled travel lane(s). Refer to Standard ACOT-1 of the Road and Bridge Standards for details.**

End of Day Signing for Paving Operations on a Two-Lane Roadway
(Figure TTC-59.1)



Typical Traffic Control
Signing for Project Limits
(Figure TTC-53.0)
NOTES

Support:

1. This layout depicts signing requirements for notifying motorist when they are entering and exiting a potential construction/maintenance area with a duration equal to or greater than 60 days.

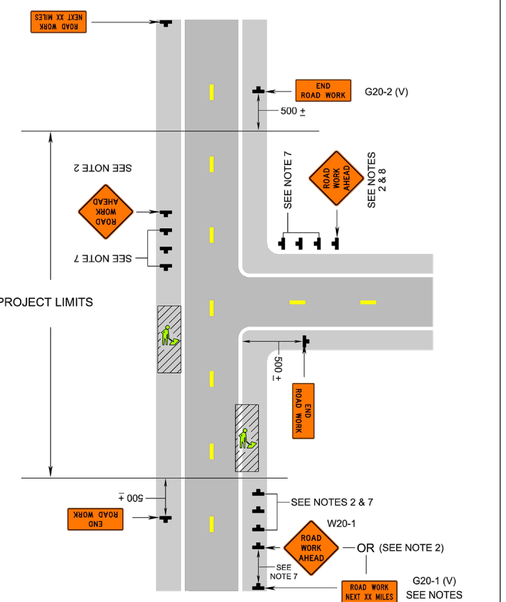
Standard:

2. **The ROAD WORK AHEAD (W20-1) sign or the ROAD WORK NEXT XX MILES (G20-1 (V)) sign shall be placed far enough in advance of the project limits so that other warning signs in a series may be adequately placed prior to the condition they are warning about.**
3. **The ROAD WORK NEXT XX MILES sign shall be used for projects with activity areas greater than 2 miles in length, or when multiple work activities (such as pavement patching, guardrail installations, shoulder restoration, etc.) occur along a highway.**
4. **The distance displayed on the ROAD WORK NEXT XX MILES sign shall be stated to the nearest whole mile from the point of installation to the END ROAD WORK (G20-2 (V)) sign.**
5. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**

Guidance:

6. *For projects with activity areas 2 miles or less in length, the ROAD WORK AHEAD sign should be the first sign motorist encounter.*
7. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
8. *All connections within the project limits should be identified with signs indicating to motorist they are entering or exiting a potential construction/maintenance area.*

Signing for Project Limits
(Figure TTC-53.0)



TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS				
△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TRANSPORTATION MANAGEMENT PLAN DETAILS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

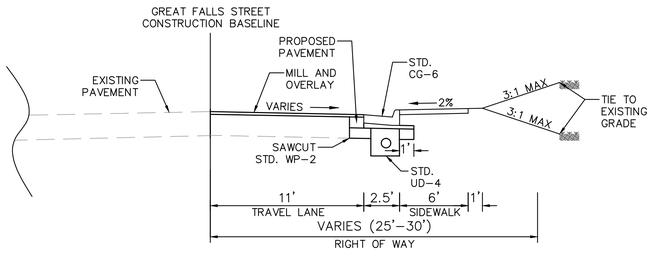
SCALE: SEE GRAPHIC SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET: 1G(6)

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

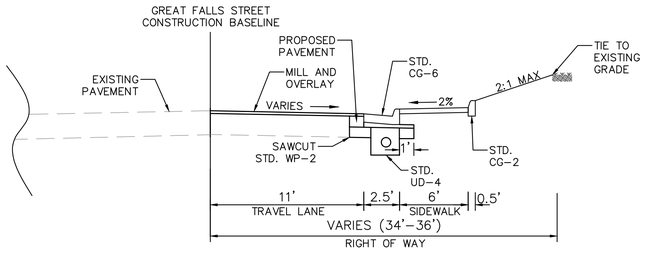
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

TYPICAL SECTIONS

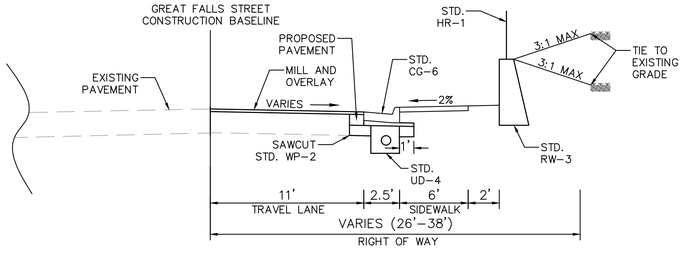
GREAT FALLS STREET
STA. 100+48 TO STA. 103+75
STA. 108+25 TO STA. 114+25



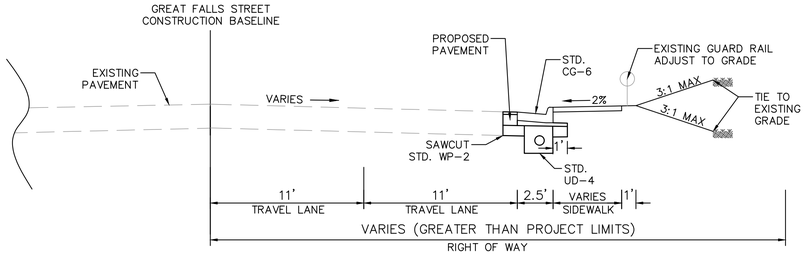
GREAT FALLS STREET
STA. 103+75 TO STA. 104+75



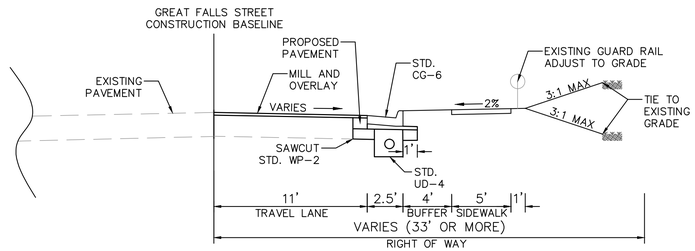
GREAT FALLS STREET
STA. 104+75 TO STA. 108+25



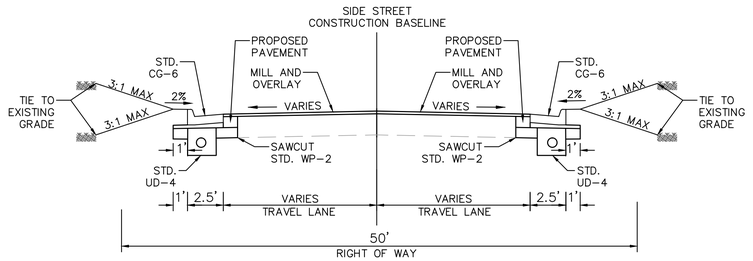
GREAT FALLS STREET
STA. 119+25 TO STA. 120+00



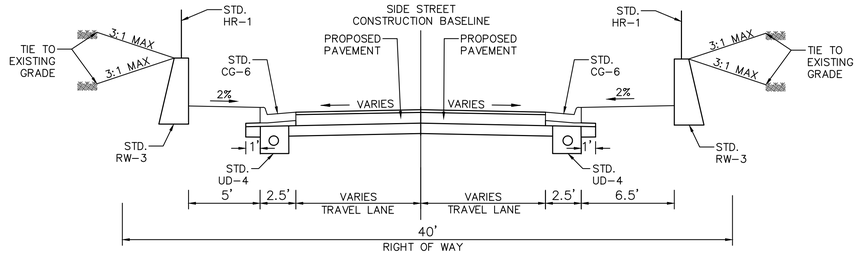
GREAT FALLS STREET
STA. 114+25 TO STA. 115+25



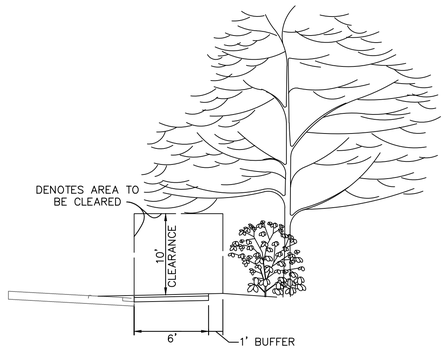
LOCUST STREET
AND
HALLWOOD AVENUE



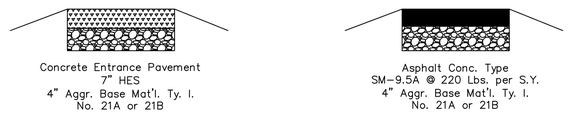
HIGH STREET



CLEARING DETAIL FOR WALWAYS



DRIVEWAY PAVEMENT DETAIL



TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
TYPICAL SECTIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE	DESIGNED BY: DD	SHEET
NOT TO SCALE	DRAFTED BY: TC	2
	CHECKED BY: BB	

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

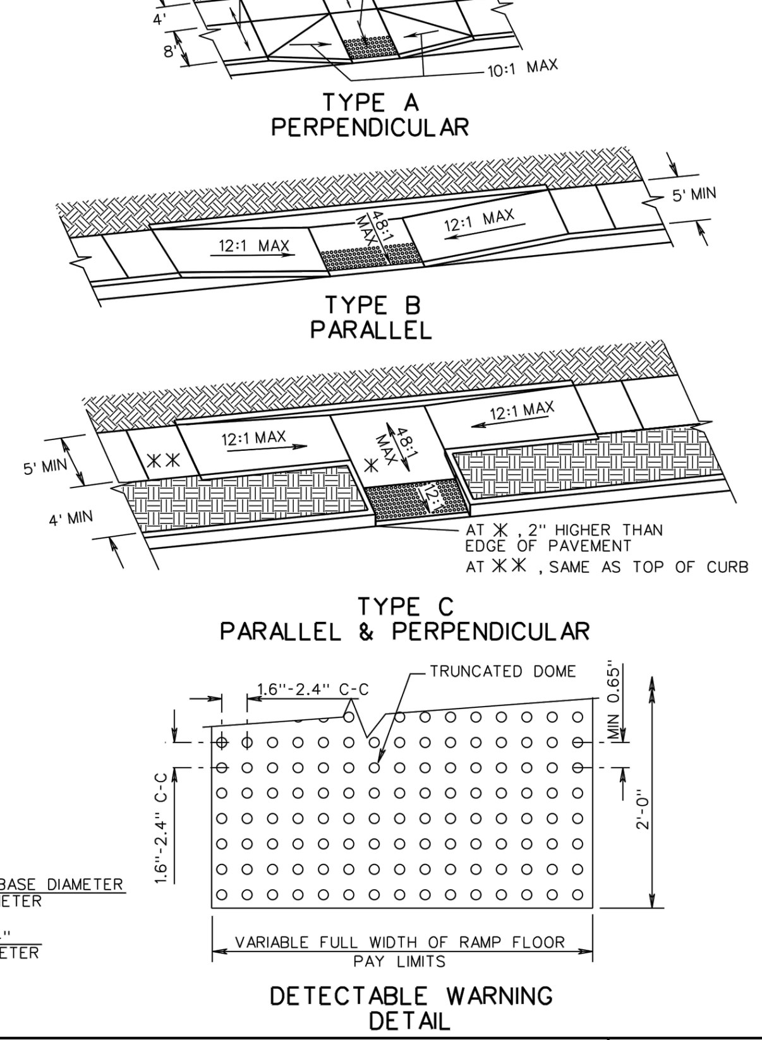
STANDARD DETAILS

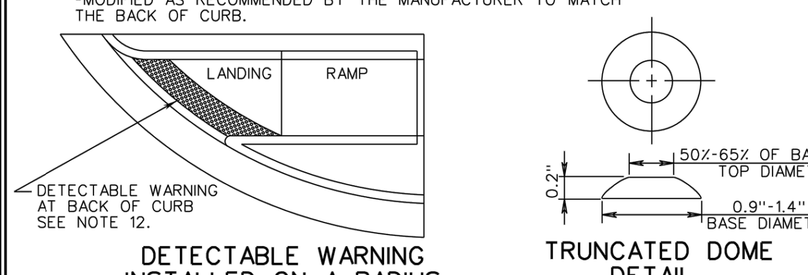
CG-12

GENERAL NOTES:

1. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.
2. DETECTABLE WARNING SHALL BE FROM THE MATERIALS APPROVED LIST FOR DETECTABLE WARNING SUFACES. PRODUCTS NOT LISTED SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION FOR CG-12 DETECTABLE WARNING SURFACE AND SHALL BE SUBMITTED TO THE STANDARDS AND SPECIAL DESIGN SECTION FOR APPROVAL.
3. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
4. IF RAMP FLOOR IS PRECAST, HOLES MUST BE PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4.
5. REQUIRED BARS ARE TO BE NO. 5 X 8" PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1½".
6. CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER.
7. CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES, EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.
8. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
9. TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN THE ENTRANCE RADII CANNOT ACCOMMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, REFER TO STANDARD CG-13, COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC) FOR CONCRETE DEPTH.
10. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.
11. WHEN ONLY ONE CURB RAMP IS PROVIDED FOR TWO CROSSINGS (DIAGONAL), A 4' x 4' LANDING AREA SHALL BE PROVIDED TO MANEUVER A WHEELCHAIR INTO THE CROSSWALK WITHOUT GOING INTO THE TRAVELWAY. THIS 4' x 4' LANDING AREA MAY INCLUDE THE GUTTER PAN.
12. ALL CASES WHERE CURB RAMPS INTERSECT A RADIAL SECTION OF CURB AT ENTRANCES OR STREET CONNECTIONS THE DETECTABLE WARNING SURFACE SHALL HAVE A FACTORY RADIUS OR BE FIELD -MODIFIED AS RECOMMENDED BY THE MANUFACTURER TO MATCH THE BACK OF CURB.

NOTE: COMPONENTS OF CURB RAMPS CONSIST OF THE FOLLOWING:
HYDRAULIC CEMENT SIDEWALK (DEPTH IN INCHES, AREA IN SQUARE YARDS)
CURB WHEN REQUIRED (CG-2 OR CG-3 IN LINEAR FEET)
DETECTABLE WARNING SURFACE (AREA IN SQUARE YARDS)
EACH OF THE ABOVE ITEMS IS A SEPARATE PAY ITEM AND SHOULD BE SUMMARIZED FOR EACH CURB CUT RAMP.

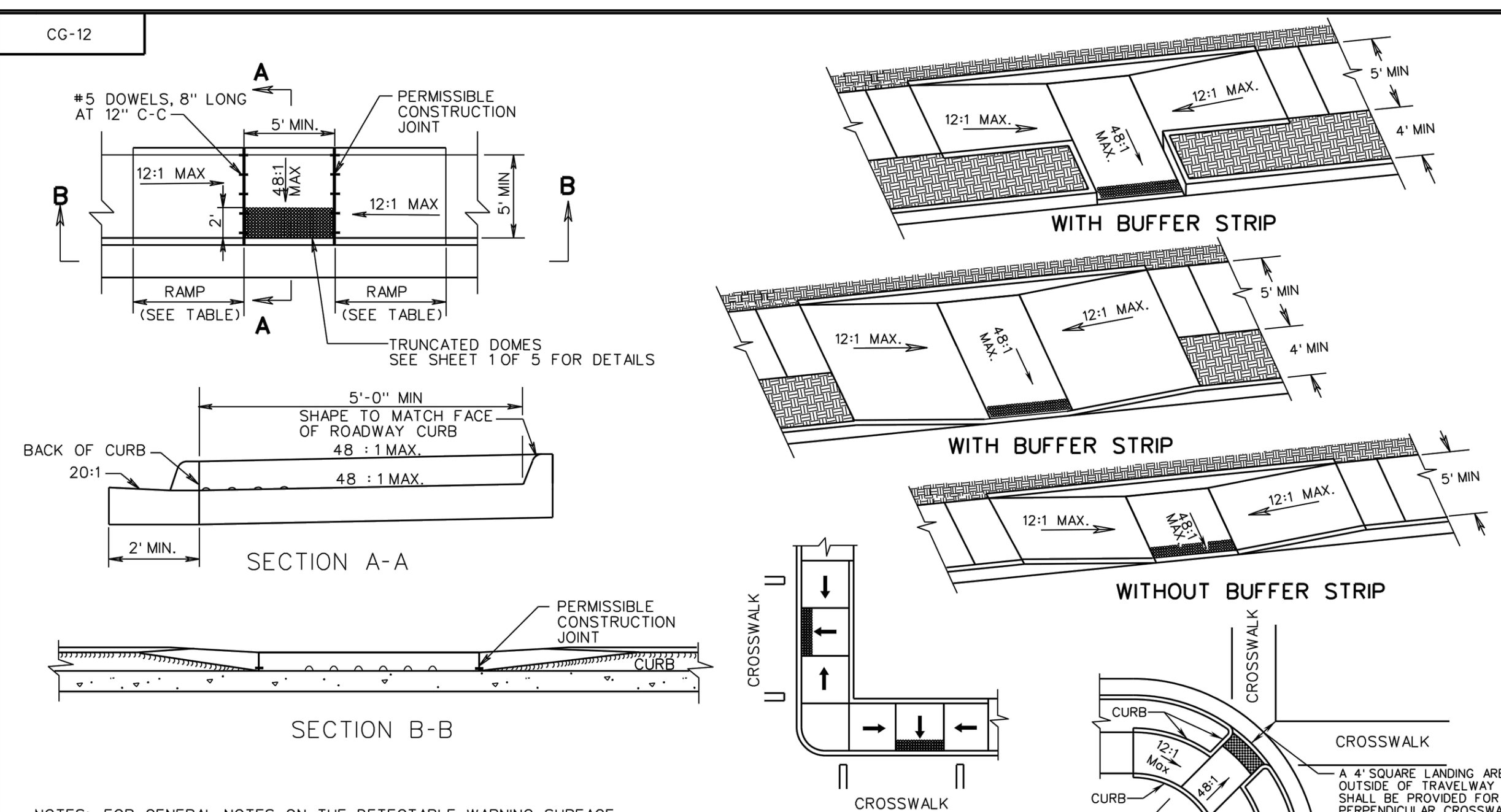




VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 5 | 203.05 | REVISION DATE 07/15

CG-12 DETECTABLE WARNING SURFACE
(GENERAL NOTES)
VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATION REFERENCE 105 502

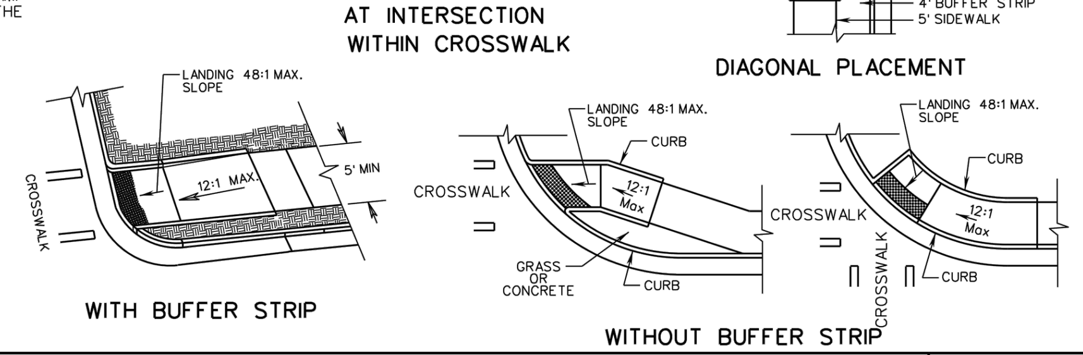
CG-12



NOTES: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.

THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

TYPE B PARALLEL APPLICATION		
ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

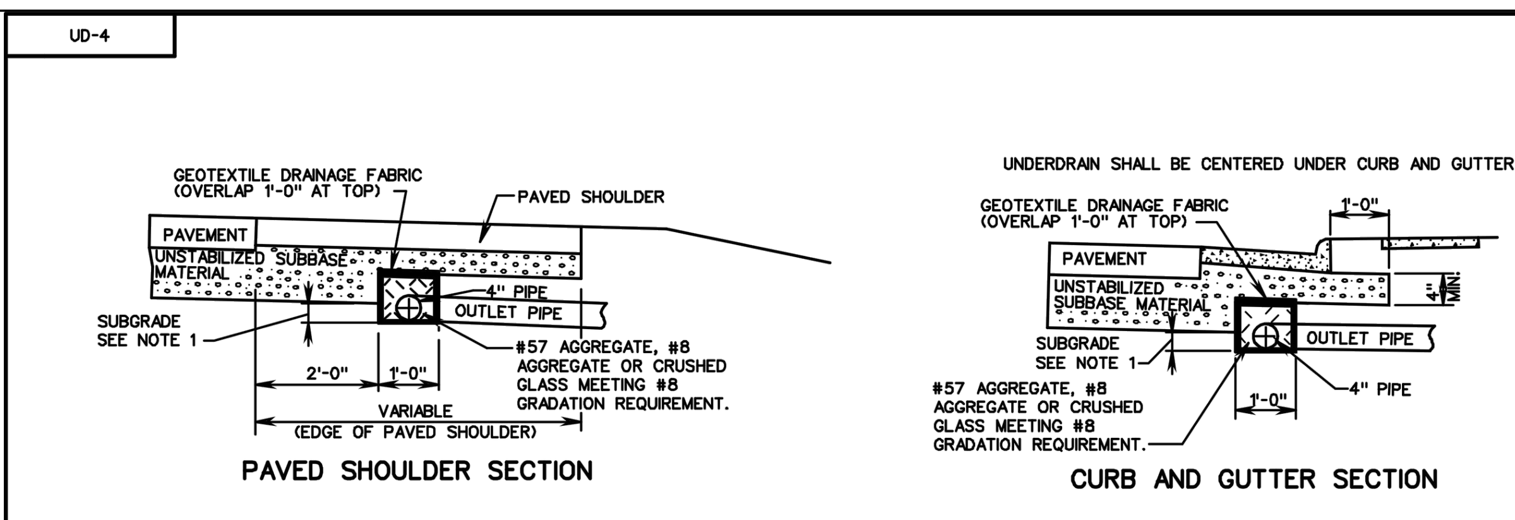


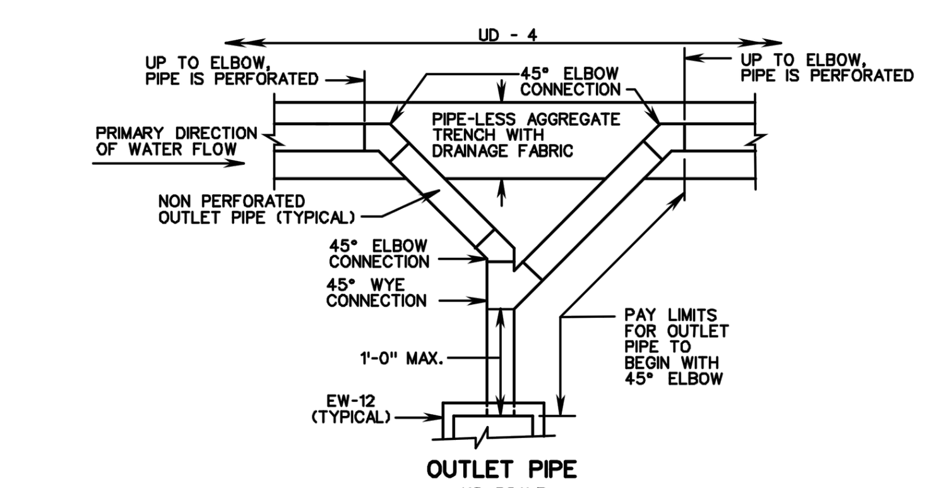
VDOT ROAD AND BRIDGE STANDARDS | SHEET 3 OF 5 | 203.07 | REVISION DATE 07/16

CG-12 DETECTABLE WARNING SURFACE
TYPE B (PARALLEL) APPLICATION
VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATION REFERENCE 105 502

UD-4

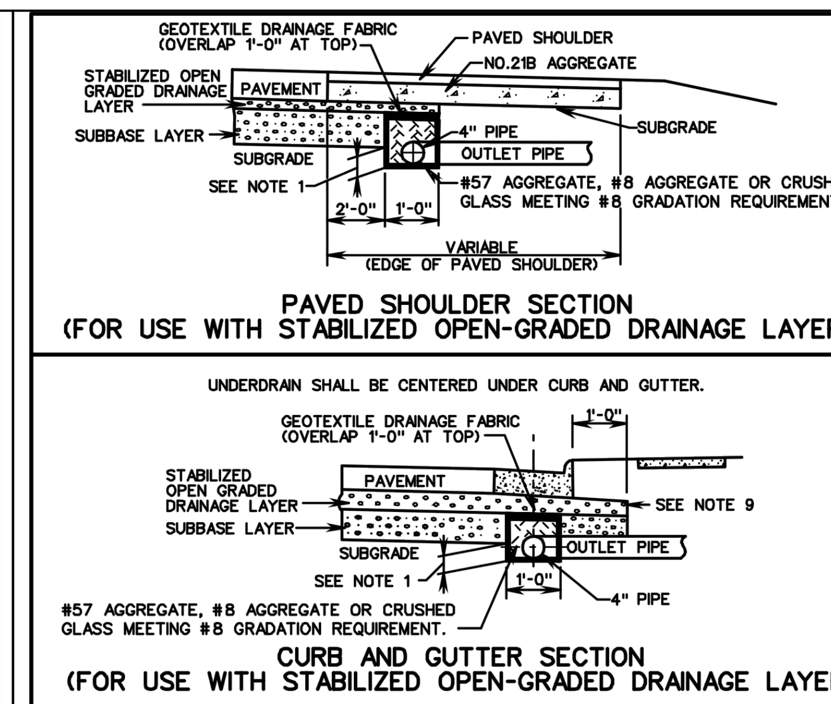
UNDERDRAIN SHALL BE CENTERED UNDER CURB AND GUTTER





VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 2 | 108.06 | REVISION DATE

STANDARD PAVEMENT EDGEDRAIN
VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATION REFERENCE 240 258 501 701



NOTES:

1. 4" MINIMUM, PROVIDED ATTAINING MINIMUM 4" OF AGGREGATE ON TOP OF PIPE
2. WHEN THE LONGITUDINAL PIPE CONNECTS DIRECTLY INTO A DRAINAGE STRUCTURE (DROP INLET, MANHOLE, ECT.), NON-PERFORATED OUTLET PIPES ARE NOT REQUIRED.
3. INVERT ELEVATION AT OUTLET END OF OUTLET PIPE TO BE A MINIMUM OF 1'-0" ABOVE INVERT ELEVATION OF RECEIVING DRAINAGE DITCH OR STRUCTURE.
4. ALL CONNECTIONS (ELBOWS, WYES, ETC.) WITHIN PAY LIMITS FOR OUTLET PIPE ARE TO BE OF THE SAME CRUSHING STRENGTH AS THE OUTLET PIPE.
5. OUTLET PIPES ARE TO BE INSTALLED ON 2% MIN. (3% DESIRABLE) GRADE AND LOCATED EVERY 350' MAXIMUM OR AS NOTED ON PLANS.
6. OUTLET PIPE TO BE SECURELY CONNECTED TO EW-12 OR OTHER DRAINAGE STRUCTURE.
7. WITHIN THE LIMITS OF A COMMERCIAL ENTRANCE, NON-PERFORATED PIPE SHALL BE UTILIZED IN LIEU OF PERFORATED PIPE.
8. THE LENGTH OF PIPE BETWEEN THE WYE CONNECTION AND THE EW-12 SHALL BE LIMITED TO NO MORE THAN 1'-0" TO PERMIT CAMERA INSPECTION OF THE MAIN LINE IN EITHER DIRECTION.
9. IN SITUATIONS WHEN FULL DEPTH OF STABILIZED OPEN-GRADED MATERIAL CANNOT BE MAINTAINED UNDER CURB AND GUTTER, NO. 21B AGGREGATE SHALL BE USED UNDER CURB AND GUTTER.
NO. 21 B AGGREGATE MAY ALSO BE USED FROM TOP OF STABILIZED OPEN-GRADED MATERIAL LAYER AND CURB AND GUTTER.

UD-4

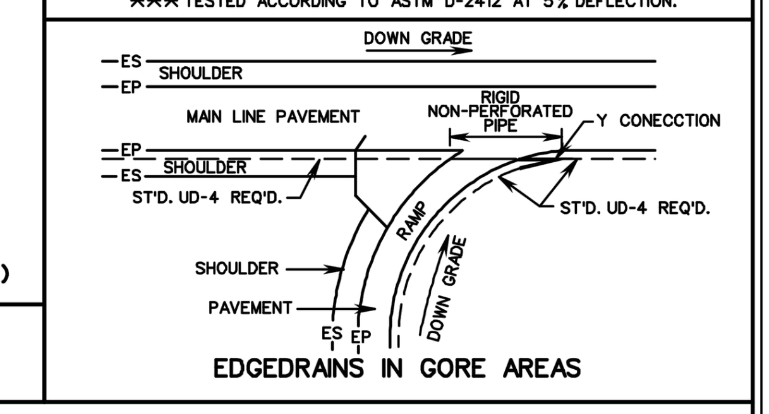
LONGITUDINAL PERFORATED PIPE

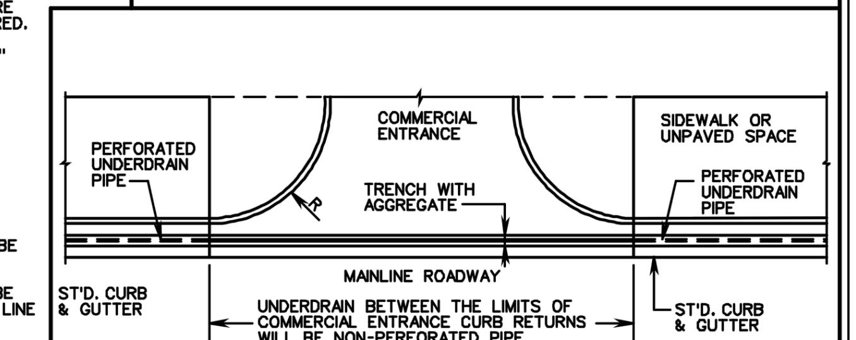
TYPE OF PIPE	CRUSHING STRENGTH	
	* W.T.	4" NOM. DIAMETER
SMOOTH WALL PVC	.103	
CORRUGATED PE		AASHTO M-252

NON-PERFORATED OUTLET PIPE FOR USE UNDER COMMERCIAL ENTRANCES AND FOR OUTLETS

TYPE OF PIPE	CRUSHING STRENGTH	
	* W.T.	4" NOM. DIAMETER
SMOOTH WALL PVC	.103	
SMOOTH WALL PE		70 PSI ***

* WALL THICKNESS (MIN) - INCHES
*** TESTED ACCORDING TO ASTM D-2412 AT 5% DEFLECTION.

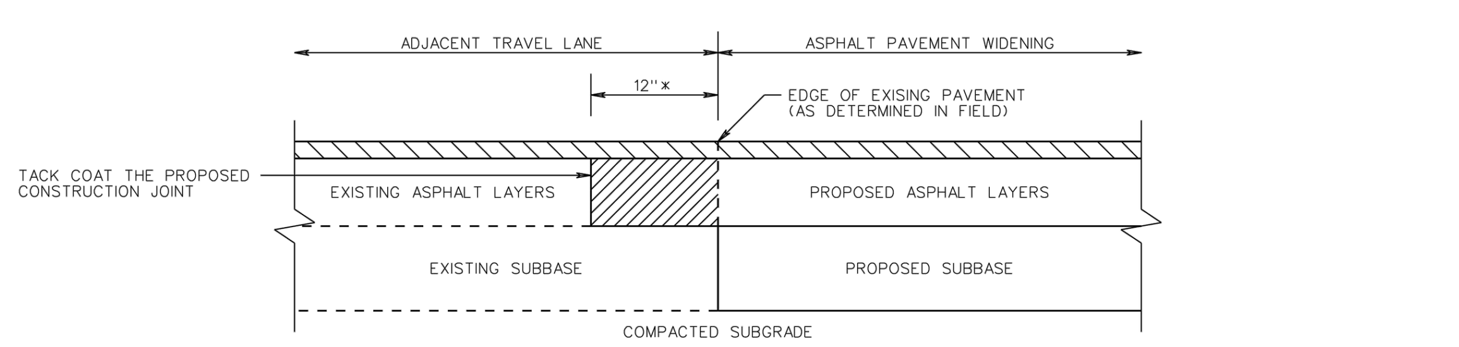




SPECIFICATION REFERENCE 240 258 501 701

STANDARD PAVEMENT EDGEDRAIN
VIRGINIA DEPARTMENT OF TRANSPORTATION
VDOT ROAD AND BRIDGE STANDARDS | REVISION DATE | SHEET 2 OF 2 | 108.07

WP-2



CONSTRUCTION JOINT DETAIL

(hatched) REMOVE EXISTING ASPHALT LAYERS TO EXISTING SUBBASE AND REPLACE WITH PROPOSED ASPHALT WIDENING LAYERS
(hatched) PROPOSED MINIMUM 1½ INCH THICK ASPHALT SURFACE COURSE (SEE NOTE 5)
* MINIMUM 12 INCHES, OR GREATER AS NECESSARY TO ABUT THE FULL THICKNESS OF EXISTING ASPHALT LAYERS AS DETERMINED BY CORES (SEE NOTE 3)

NOTES:

1. ASPHALT PAVEMENT WIDENING SHALL HAVE A PAVEMENT DESIGN IN ACCORDANCE WITH CURRENT VDOT PROCEDURES AND BE APPROVED BY THE ENGINEER.
2. THE PAVEMENT DESIGN FOR ASPHALT PAVEMENT WIDENING SHALL MEET OR EXCEED THE DEPTHS AND TYPES OF THE LAYERS OF EXISTING PAVEMENT. SUBSURFACE DRAINAGE OF THE EXISTING AND PROPOSED PAVEMENT SHALL BE ADDRESSED IN THE PAVEMENT DESIGN.
3. A MINIMUM OF THREE CORES SHALL BE TAKEN ALONG THE CENTER OF THE ADJACENT TRAVEL LANE TO DETERMINE THE TYPE AND THICKNESS OF EXISTING PAVEMENT LAYERS. THESE CORES SHALL BE SPACED NO MORE THAN 500 FEET APART.
4. THE ADJACENT TRAVEL LANE SHALL BE MILLED A MINIMUM DEPTH OF 1½ INCHES AND REPLACED WITH AN ASPHALT SURFACE COURSE TO MATCH THE PROPOSED PAVEMENT WIDENING SURFACE COURSE, UNLESS WAIVED BY THE ENGINEER.
5. THE ENGINEER MAY REQUIRE THE MILLING DEPTH OF THE EXISTING PAVEMENT TO BE ADJUSTED TO ACHIEVE AN ACCEPTABLE PAVEMENT CROSS-SLOPE AND EFFECTIVE SURFACE DRAINAGE.
6. EXISTING PAVEMENT MARKINGS AND MARKERS WITHIN THE PROJECT LIMITS SHALL BE RESTORED SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. FINAL TRANSVERSE PAVEMENT TIE-IN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 315 OF THE SPECIFICATIONS EXCEPT THAT ALL JOINTS AT TIE-IN LOCATIONS SHALL BE TESTED USING A 10 FOOT STRAIGHTEDGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 315 OF THE SPECIFICATIONS.

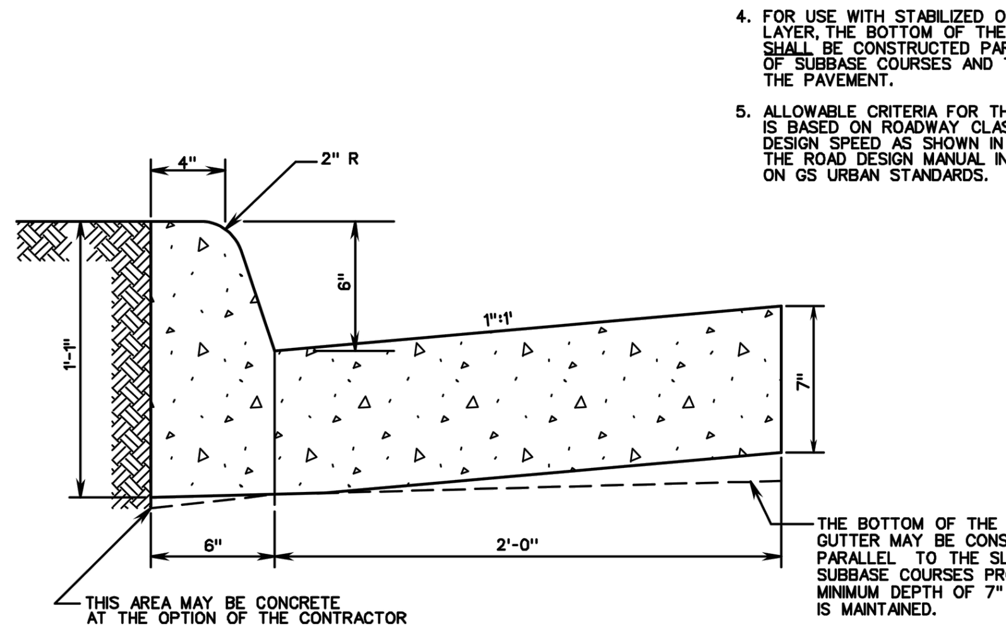
VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | 303.02 | REVISION DATE

ASPHALT PAVEMENT WIDENING
FOR WIDENING SUBJECT TO TRAFFIC
VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATION REFERENCE 315

CG-6

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB & GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE ROAD DESIGN MANUAL IN THE SECTION ON GS URBAN STANDARDS.



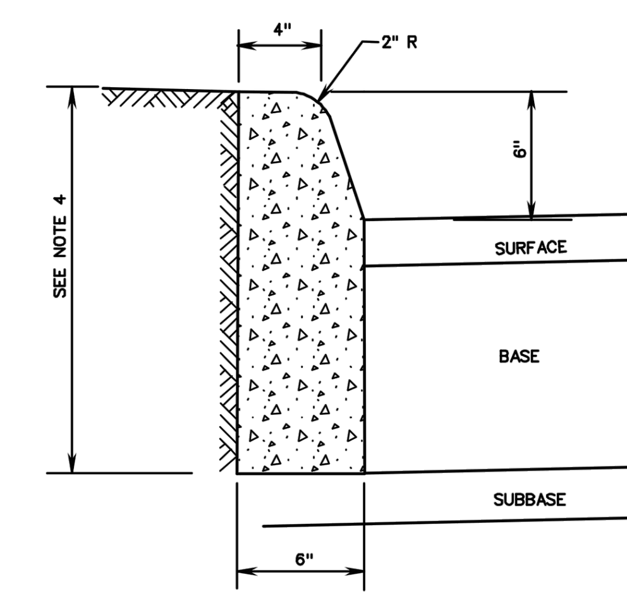
SPECIFICATION REFERENCE 105 502

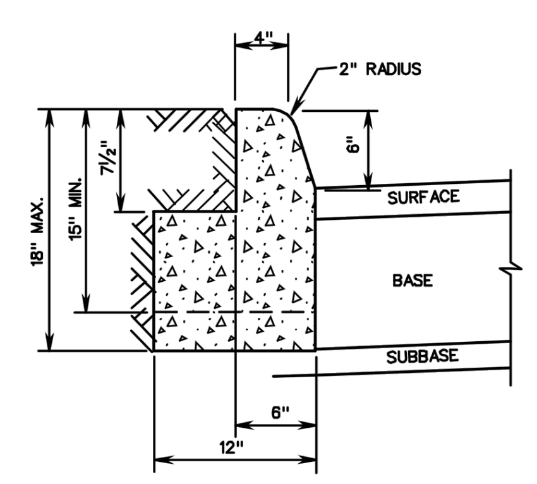
COMBINATION 6" CURB AND GUTTER
VIRGINIA DEPARTMENT OF TRANSPORTATION
VDOT ROAD AND BRIDGE STANDARDS | REVISION DATE | SHEET 1 OF 1 | 201.03

CG-2

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE, THE DEPTH IS TO BE 18" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. CG-2 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL, IN THE SECTION ON GS URBAN STANDARDS.



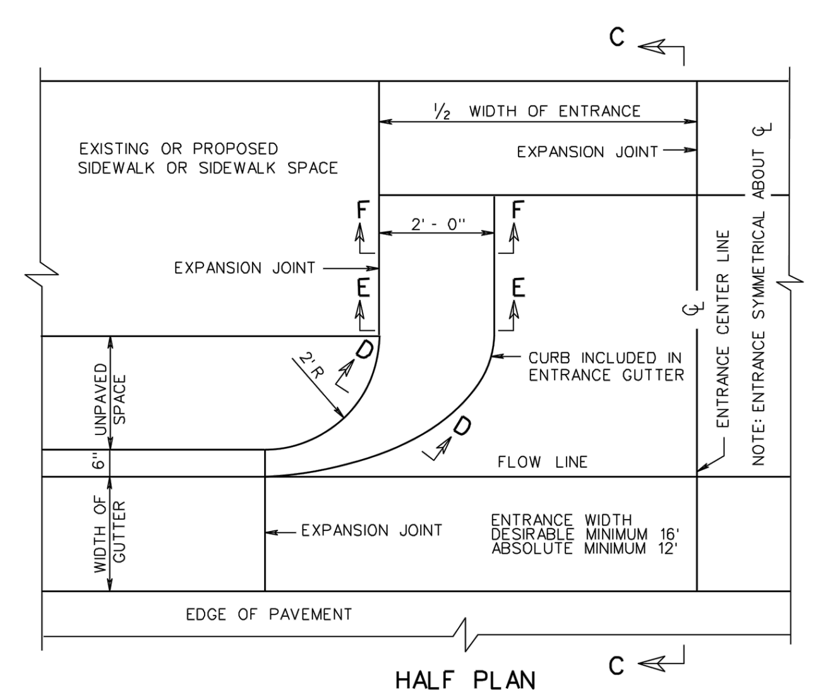


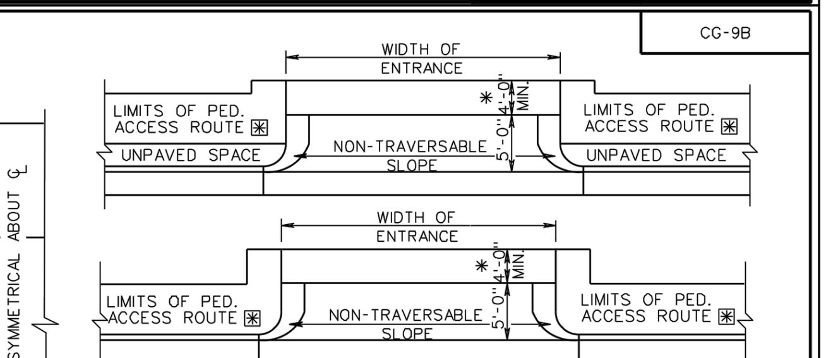
ACCEPTABLE ALTERNATIVE IF CURB IS EXTRUDED

SPECIFICATION REFERENCE 105 502

STANDARD 6" CURB
VIRGINIA DEPARTMENT OF TRANSPORTATION
VDOT ROAD AND BRIDGE STANDARDS | REVISION DATE | SHEET 1 OF 1 | 201.01

CG-9B





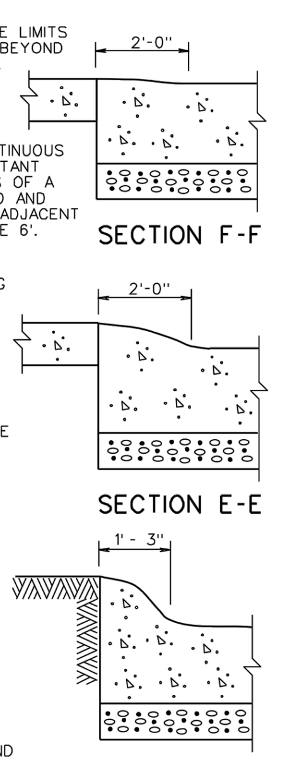
PEDESTRIAN ACCESS ROUTE DETAIL WITH & WITHOUT UNPAVED SPACE

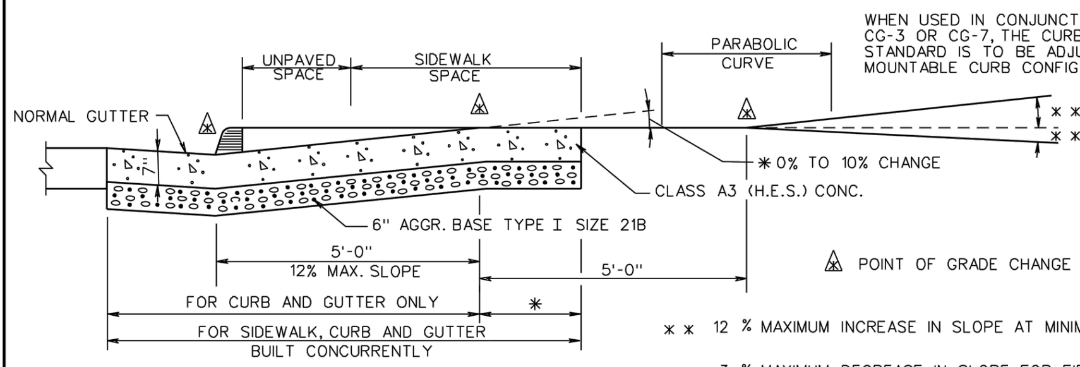
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE ⊠ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF WAY.

⊠ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS. IF ACCESS ROUTE IS ADJACENT TO BACK OF CURB, MINIMUM WIDTH SHOULD BE 6'.

* IF PEDESTRIAN ACCESS ROUTES ⊠ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH A MAX. 2% CROSS SLOPE.

WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.





△ POINT OF GRADE CHANGE

** 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS

*** 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND 8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

SPECIFICATION REFERENCE 502

STANDARD ENTRANCE GUTTER
VIRGINIA DEPARTMENT OF TRANSPORTATION
VDOT ROAD AND BRIDGE STANDARDS | REVISION DATE 07/15 | SHEET 1 OF 1 | 203.02

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
STANDARD DETAILS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE		SHEET
NOT TO SCALE	DESIGNED BY: DD DRAFTED BY: TC CHECKED BY: BB	2A

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

Erosion and Sediment Control Narrative

Project Description: This project is a pedestrian facility improvement project in Fairfax County. The project proposes the construction of approximately 1,525 LF of 5'-6' concrete sidewalk on Northbound Great Falls Street (Route 694), except at bridge approaches that will require a reduced width of 4.5'-5.5', that will tie into the proposed sidewalk improvements at North West Street.

Existing Site Conditions: The existing vegetation along the proposed sidewalk consists of lawn grasses and trees. These provide a buffer between the road and houses along Great Falls Street. Some of these trees are located in areas where sidewalk is proposed. The existing longitudinal slope of Great Falls Street varies from relatively flat to approximately 6% in some areas along the project site. There is a high point at approximate Station 119+50 near the mid point of the bridge over I-66. There is an existing asphalt shoulder along Great Falls Street along the project limits.

There are four outfall location in this project. Three of the outfalls are the existing storm drain systems and one sheet flows to an existing concrete ditch. See Outfall Analysis Map on Sheets 2G for the outfall locations. Runoff from the project site reaches the outfalls via proposed storm sewer, curb and gutter, an existing ditch and existing overland flow.

Adjacent Areas: The site is bound by Osborn Street to the north, residential development to the east and west, and North West Street to the south. A portion of the road includes a bridge passing over I-66 to the north.

Offsite Areas: This project proposes offsite work. All necessary easements will be acquired prior to land disturbance.

Critical Areas: The critical area for this project is the existing trees along the project corridor. Extreme care shall be taken to ensure all trees that can be saved in this project, will be protected.

Erosion and Sediment Control Measures: *Unless otherwise directed, all vegetative and structural Erosion and Sediment Control practices shall be constructed and maintained in accordance with the most current minimum standards and specifications of the Virginia Sediment and Erosion Control Handbook. All necessary E&S measures shall be in place prior to beginning construction.*

Structural Practices:
1. Silt Fence Barrier (3.05) – Silt Fence sediment barriers will be installed down slope of areas with minimal grades to filter sediment-laden runoff from
   sheet flow as indicated on E&S Plan.
2. Storm Drain Inlet Protection (3.07) – All storm sewer inlets shall be protected during construction. Sediment-laden water shall be filtered before entering
   the storm sewer inlets.
3. Tree Protection (3.38) – A fence barrier is to be placed around the trees and vegetated areas which will not be disturbed as shown on the E&S plan.

Permanent Stabilization:
Permanent stabilization shall be done in accordance with the Virginia Erosion and Sediment Control Handbook (See Sheet 2B(1) for seed mixtures). In all seeding operations, seed, fertilizer and lime will be applied prior to mulching. All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Erosion and Sediment Control measures shall remain in place until the grass is established.

Stormwater Management: The project proposes an addition of 0.13 acres of impervious area total and a total of 0.67 acres of land disturbance. Details on the Stormwater Management Plan can be found on Sheet 2F.

Maintenance: In General, all Erosion and Sediment Control measures shall be checked daily and after each significant rainfall.
1. Sediment trapping measures will be installed as a first step in grading and will be seeded and mulched immediately following installation.
2. Temporary seeding or other stabilization will follow immediately after grading.
3. The job superintendent shall be responsible for the installation, daily inspection, and maintenance of all erosion and sediment control practices.

NOTES:

1. An Erosion & Sediment Control Contractor Certification (ESCCC) is required for all land disturbing activities occurring within the state's Right of Way.
2. The County is responsible for complying with applicable local, state and federal environmental laws and regulations, including acquiring clearances/authorizations from appropriate regulatory agencies.
3. All E&S controls shall be removed within 30 days after project is stabilized.

SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

MINIMUM CARE LAWN	*TOTAL LBS PER ACRE*
COMMERCIAL OR RESIDENTIAL	*175-200 LBS*
-KENTUCKY 31 OR TURF-TYPE TALL FESCUE	*95-100%*
-IMPROVED PERENNIAL RYEGRASS	*0-5%*
-KENTUCKY BLUEGRASS	*0-5%*
GENERAL SLOPE (3:1 OR LESS)	
-KENTUCKY 31 FESCUE	*128 LBS*
-RED TOP GRASS	*2 LBS*
*-SEASONAL NURSE CROP **	*20 LBS*
	150 LBS
LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1)	
-KENTUCKY 31 FESCUE	*108 LBS*
-RED TOP GRASS	*2 LBS*
*-SEASONAL NURSE CROP **	*20 LBS*
*-CROWNVETCH ***	*20 LBS*
	150 LBS

** USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW*

FEBRUARY 16TH THROUGH APRIL	*ANNUAL RYE*
MAY 1ST THROUGH AUGUST 15TH	*FOXTAIL MILLET*
AUGUST 16TH THROUGH OCTOBER	*ANNUAL RYE*
NOVEMBER THROUGH FEBRUARY 15TH	*WINTER RYE*

*** SUBSTITUTE SERICEA LESPEDEZA FOR CROWNVETCH EAST OF FARMVILLE, VA. (MAY THROUGH SEPTEMBER USE HULLED SERICEA, ALL OTHER PERIODS, USE UNHULLED SERICEA). IF FLATPEA IS USED IN LIEU OF CROWNVETCH, INCREASE RATE TO 30LBS/ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARMER SEEDING PERIODS; ADD 10-20 LBS/ACRE IN MIXES*

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements

EROSION AND SEDIMENT CONTROL PLAN NARRATIVE

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE NOT TO SCALE | DESIGNED BY: DD | DRAFTED BY: TC | CHECKED BY: BB | SHEET 2B(1)

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

4VAC50-30-40 MINIMUM STANDARDS. (MS-19)

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

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 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES 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 SOILS STOCKPILES ONSITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

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 EROSION.

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.

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

6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.

a. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE 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 TWENTY-FIVE 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.

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 PROBLEM IS CORRECTED.

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.

9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

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.

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. NON-ERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NON-ERODIBLE COVER MATERIALS.

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 NON-ERODIBLE MATERIAL SHALL BE PROVIDED.

14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

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 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 THESE REGULATIONS.

f. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

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.

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 LOCAL PROGRAM AUTHORITY. TRAPPED MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASE 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:

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 AND BANKS; AND

(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 TS 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 CHANNEL 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 BED OR BANKS; OR

(2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR

(3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR 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 PLAN-APPROVING 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 EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.

f. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE LOCALITY 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.

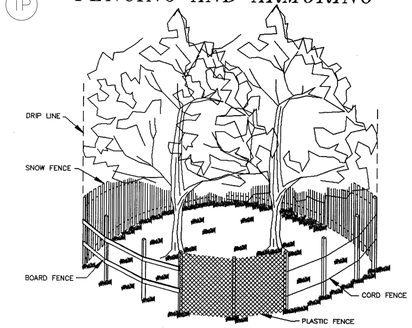
j. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC 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.

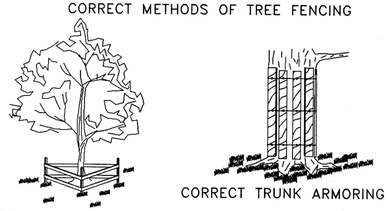
1992 3.38

TP

FENCING AND ARMORING



CORRECT METHODS OF TREE FENCING



CORRECT TRUNK ARMORING

TRIANGULAR BOARD FENCE

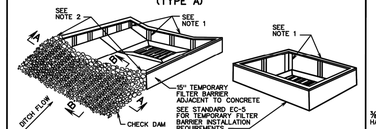
Source: Va. DSWC

Plate 3.38-2

III - 401

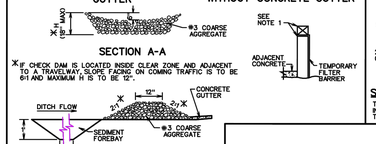
2016 ROAD & BRIDGE STANDARDS

INLET PROTECTION (TYPE A)



TYPICAL TREATMENT FOR DROP INLET WITH CONCRETE GUTTER

TYPICAL TREATMENT FOR DROP INLET WITHOUT CONCRETE GUTTER



SECTION A-A

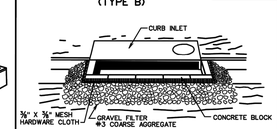
* IF CHECK DAM IS LOCATED INSIDE CLEAR ZONE AND ADJACENT TO A TRAVELWAY, SLOPE FACING ON COMING TRAFFIC IS TO BE 6:1 AND MAXIMUM H IS TO BE 12".

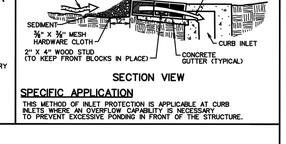
SECTION B-B

NOTES

1. POSTS AND TOP RAIL SHALL BE A NOMINAL 2½" X 2½" OR 4 3" DIA. NO. 2 SOUTHERN PINE, A NOMINAL 2" X 2" OAK, OR STEEL HAVING A MIN. WEIGHT OF 1.25 LBS. PER LINEAR FOOT AND A MIN. LENGTH OF 5' FOR TEMPORARY SILT FENCES.
2. END OF FILTER BARRIER TO BE EMBEDDED INTO AGGREGATE.
3. IF A DROP INLET IS LOCATED IN A SAG IN THE DITCH GRADE, A CHECK DAM IS REQUIRED FOR EACH SIDE OF THE INLET THAT RECEIVES DITCH FLOW.
4. WHERE DRAINAGE AREAS EXCEED ONE ACRE OR DITCH GRADE EXCEEDS 3%, A TEMPORARY SEDIMENT FOREBAY SHALL BE INSTALLED WITH MINIMUM DIMENSIONS OF 12" DEPTH, 2' WIDTH AND 6' LENGTH.

INLET PROTECTION (TYPE B) EC-6





SECTION VIEW

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE AN OVERFLOW CAPABILITY IS NECESSARY TO PREVENT EXCESSIVE PONDING IN FRONT OF THE STRUCTURE.

NOTE:
GEOTEXTILE PRODUCTS DESIGNED TO BE INSERTED INTO GRATED DROP INLETS OR DESIGNED TO COVER THE SLOTS OF SLOT DROP INLETS, THAT HAVE BEEN APPROVED FOR USE ON VDOT PROJECTS AND ARE FOUND ON VDOT'S SPEL LIST, MAY BE SUBSTITUTED FOR THE DROP INLET PROTECTION DEVICES DETAILED HEREON.

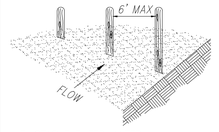
SPECIFICATION REFERENCE	IP	INLET PROTECTION (TYPE A AND B)	VDOT ROAD AND BRIDGE STANDARDS
107 242 303		VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE: SHEET 1 OF 2 113.09

2016 ROAD & BRIDGE STANDARDS

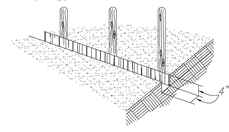
SF

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

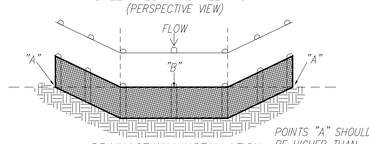
1. SET THE STAKES



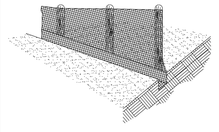
2. EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF STAKES



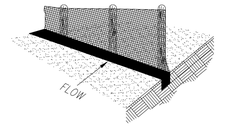
SHEET FLOW INSTALLATION (PERSPECTIVE VIEW)



3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH



4 BACKFILL AND COMPACT THE EXCAVATED SOIL



DRAINAGEWAY INSTALLATION (FRONT ELEVATION)

POINTS "A" SHOULD BE HIGHER THAN POINT "B"

GENERAL NOTES - SILT FENCE

1) THE HEIGHT OF A SILT FENCE WILL BE A MINIMUM OF 16 INCHES AND A MAXIMUM OF 34 INCHES ABOVE GROUND ELEVATION.
2) FILTER FABRIC SHALL BE A CONTINUOS ROLL. WHEN JOINTS ARE UNAVOIDABLE, A SPLICE MAY BE MADE AT A SUPPORT POST WITH A 6" OVERLAP.
3) THE EXCAVATED TRENCH SHALL BE 4 INCHES WIDE AND 4 INCHES DEEP ON THE UPSLOPE SIDE OF THE PROPOSED LOCATION.
4) SUPPORT POSTS SHALL BE A MAXIMUM OF 6 FEET APART.
5) THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
6) SILT FENCES SHALL BE REMOVED WHEN THE UPSLOPE AREA HAS BEEN PERMANENTLY STABLIZED.

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements

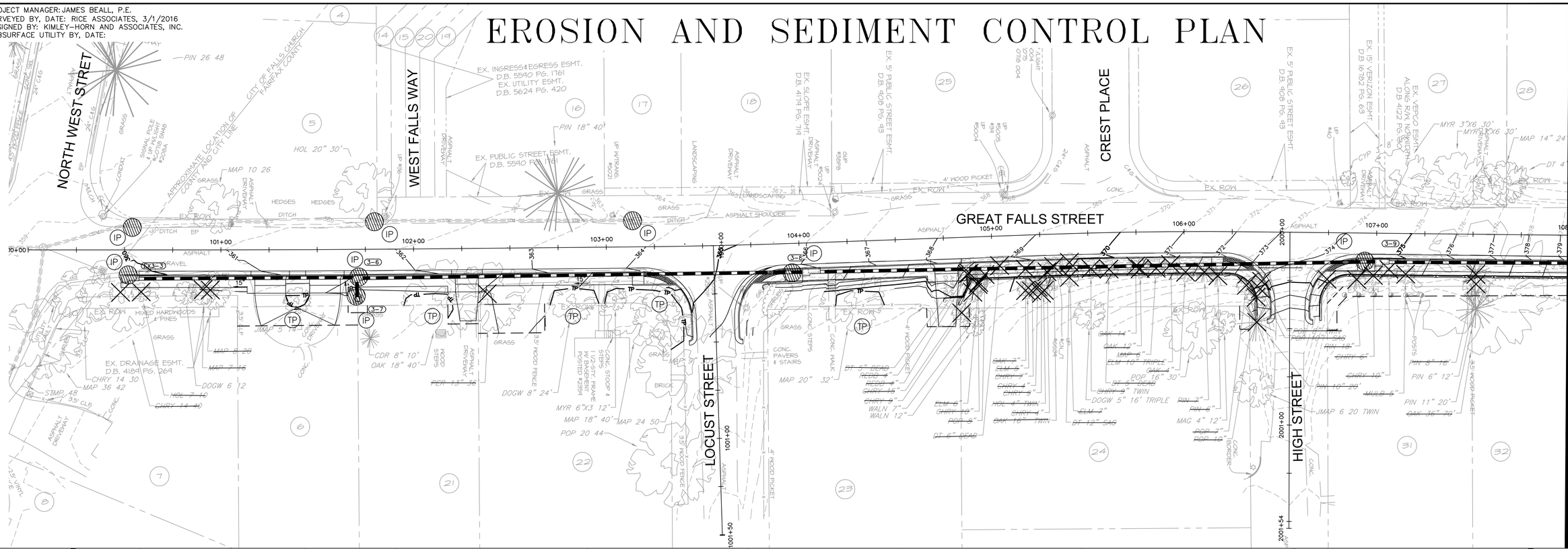
EROSION AND SEDIMENT CONTROL PLAN
NOTES AND DETAILS

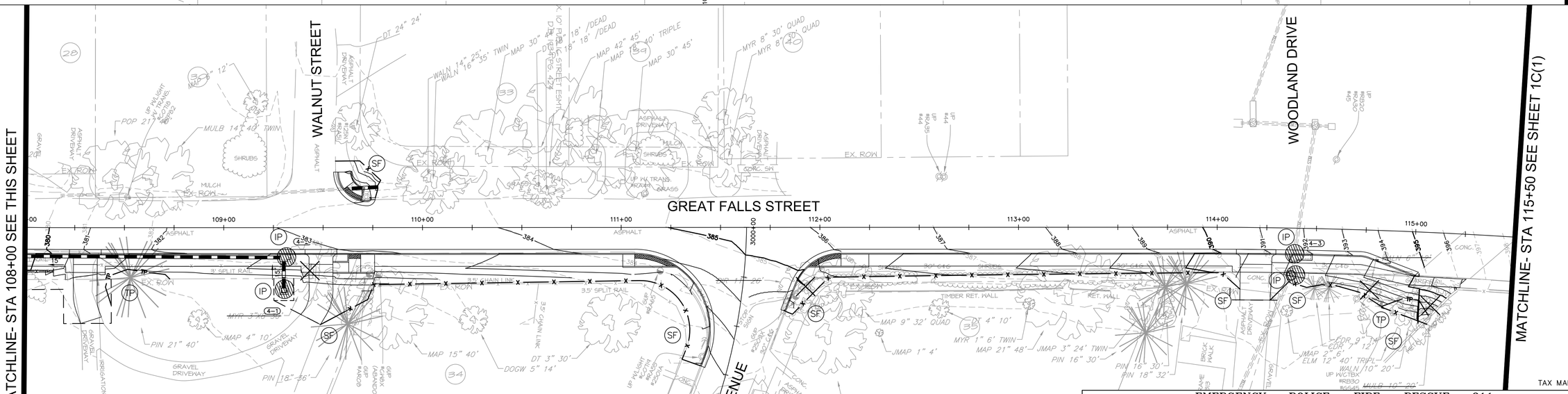
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
NOT TO SCALE	DRAFTED BY: TC	2B(2)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

EROSION AND SEDIMENT CONTROL PLAN





EROSION & SEDIMENT CONTROL LEGEND

KEY	SYMBOL	DESCRIPTION	No.
SF	x—x—x—x	TEMPORARY SILT FENCE	3.05
IP		TEMPORARY INLET PROTECTION	3.07
TP	—TP—TP—	TEMPORARY TREE PROTECTION FENCE	3.38

FOR DETAILS SEE CURRENT EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. AND THE VDOT ROAD AND BRIDGE STANDARDS SECTION 100.

TREE LEGEND

TREE TO BE REMOVED
WALN 6" 15'
HEIGHT
DIAMETER
TREE SPECIES

GRAPHIC SCALE IN FEET
0 12.5 25 50

COMMONWEALTH OF VIRGINIA
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Great Falls Street
Sidewalk Improvements
EROSION AND SEDIMENT CONTROL PLAN

PRE-FINAL PLANS NOT FOR CONSTRUCTION

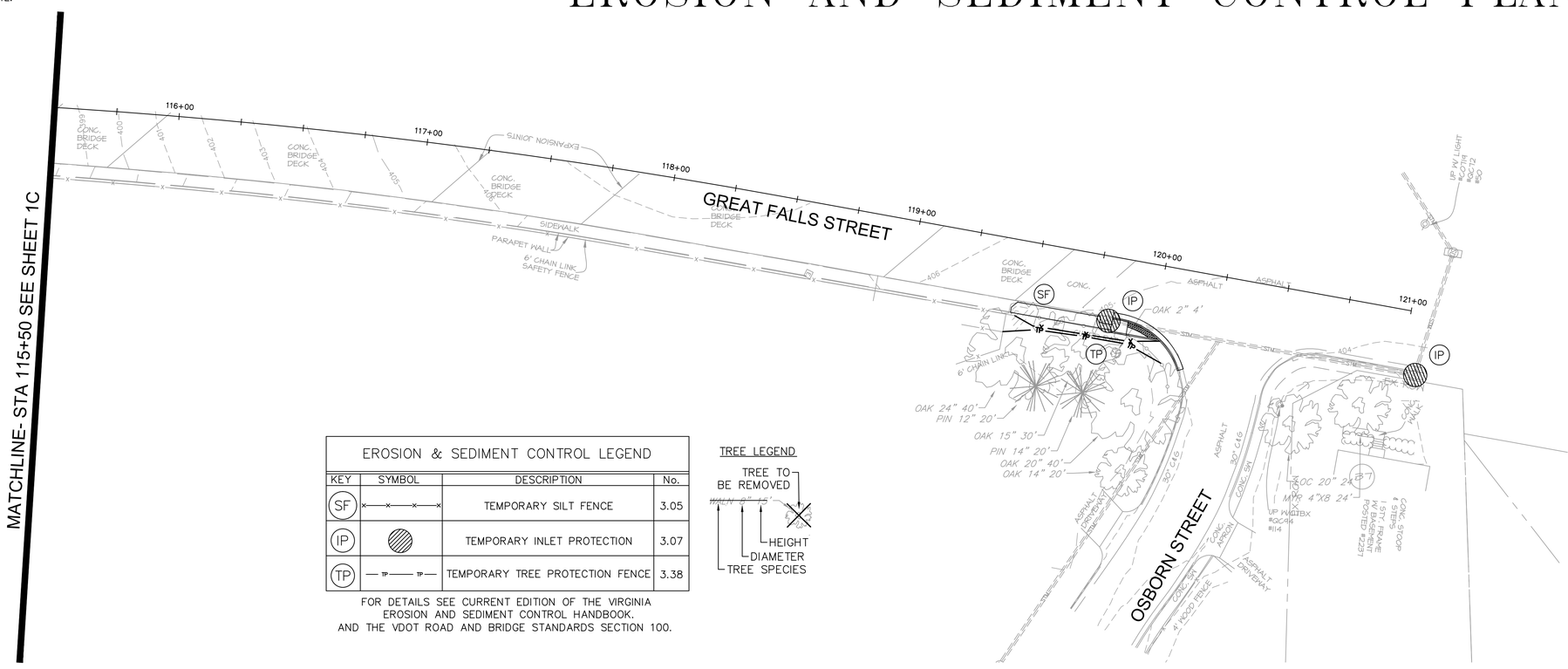
REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2B(3)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

EROSION AND SEDIMENT CONTROL PLAN



EROSION & SEDIMENT CONTROL LEGEND			
KEY	SYMBOL	DESCRIPTION	No.
SF		TEMPORARY SILT FENCE	3.05
IP		TEMPORARY INLET PROTECTION	3.07
TP	TP TP	TEMPORARY TREE PROTECTION FENCE	3.38

FOR DETAILS SEE CURRENT EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. AND THE VDOT ROAD AND BRIDGE STANDARDS SECTION 100.

TREE LEGEND

TAX MAP 40-4

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

COMMONWEALTH OF VIRGINIA
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07/11/2017
PROFESSIONAL ENGINEER

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CAPITAL FACILITIES
703-324-5800

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS
NOT FOR CONSTRUCTION

Great Falls Street
Sidewalk Improvements

EROSION AND SEDIMENT CONTROL PLAN

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2B(4)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

OUTFALL #1
A3400 A=2.10 C=0.50
TIME OF CONCN. 10 MIN
GREAT FALLS STREET
EX4
EX5 A=1.46 C=0.50
TIME OF CONCN. 10 MIN
NORTH WEST STREET
EX3-5 A=0.05 C=0.90
EX3-4 A=0.01 C=0.90
EX3-2 A=0.16 C=.57
EX3-3 A=0.52 C=0.55
EX3-1 A=0.37 C=.50
WEST FALLS WAY
GREST PLACE
EX2 A=5.90 C=0.40
TIME OF CONCN. 25 MIN
WALNUT STREET
MARBO COURT
TIME OF CONCN. 10 MIN
WOODLAND DRIVE
EX335 A=3.24 C=0.40
A3700 A=3.51 C=0.45
TIME OF CONCN. 15 MIN
OAK HAVEN DRIVE
A3800 A=7.20 C=0.45
A1200
LANGSTON LANE
A400 A=6.2 C=0.4
TIME OF CONCN. 15 MIN
TIME OF CONCN. 25 MIN
BRILYN PLACE
CONIFER LANE
TIME OF CONCN. 20 MIN
A0200 A=14.20 C=0.45
DUNBAR LANE
MERIDIAN STREET
LOCUST STREET
HIGH STREET
TIME OF CONCN. 13 MIN
OUTFALL #2
HALLWOOD AVENUE
EX333
EX332 A=0.15 C=0.40
EX334 A=0.22 C=0.90
OUTFALL #3
INTERSTATE 66
GREAT FALLS STREET
OUTFALL #4
EX352 A=0.41 C=0.75
EX348 A=0.12 C=0.90
EX351A A=0.17 C=0.70
EX351B A=0.19 C=0.70
EX351C A=0.41 C=0.55
FISHER AVENUE
OSBORN STREET

TAX MAP 40-4

LEGEND
- DRAINAGE DIVIDE BOUNDARY
- FLOW PATH
- CONTOUR (2FT INTERVAL)
- PROJECT AREA
- IMPERVIOUS AREA

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

Kimley»Horn

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Great Falls Street
Sidewalk Improvements
PRE-DEVELOPMENT DRAINAGE DIVIDES

PRE-FINAL PLANS NOT FOR CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2C(1)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

OUTFALL #1
A3400 A=2.10 C=0.50
TIME OF CONCN. 10 MIN
GREAT FALLS STREET
EX4
EX5 A=1.46 C=0.50
TIME OF CONCN. 10 MIN
NORTH WEST STREET
EX3-5 A=0.05 C=0.90
EX3-4 A=0.01 C=0.90
WEST FALLS WAY
EX3-2 A=0.16 C=.57
EX3-3 A=0.23 C=0.55
EX3-1 A=0.37 C=.50
3-7 A=0.23 C=0.55
3-6 A=0.12 C=0.70
3-8 A=0.29 C=0.60
LOCUST STREET
GREST PLACE
EX2 A=5.36 C=0.40
TIME OF CONCN. 25 MIN
HIGH STREET
3-9 A=0.27 C=0.55
4-1 A=0.18 C=0.45
4-2 A=0.08 C=0.90
WALNUT STREET
HALLWOOD AVENUE
TIME OF CONCN. 13 MIN
OUTFALL #2
INTERSTATE 66
MABRO COURT
TIME OF CONCN. 10 MIN
WOODLAND DRIVE
EX335 A=3.24 C=0.40
GREAT FALLS STREET
EX333
EX334
EX332 A=0.15 C=0.40
4-3 A=0.22 C=0.90
OUTFALL #3
OUTFALL #4
EX352 A=0.41 C=0.75
EX348 A=0.12 C=0.90
EX351A A=0.17 C=0.70
EX351B A=0.19 C=0.70
EX351C A=0.41 C=0.55
FISHER AVENUE
OSBORN STREET
A3700 A=3.51 C=0.45
TIME OF CONCN. 15 MIN
OAK HAVEN DRIVE
A3800 A=7.20 C=0.45
A1200
EXA37 A=0.61 C=0.54
LANGSTON LANE
BRILYN PLACE
TIME OF CONCN. 15 MIN
TIME OF CONCN. 25 MIN
CONIFER LANE
A0200 A=14.20 C=0.45
A0400 A=6.22 C=0.40
TIME OF CONCN. 20 MIN
DUNBAR LANE
MERIDIAN STREET

TAX MAP 40-4

LEGEND
- DRAINAGE DIVIDE BOUNDARY
- FLOW PATH
- CONTOUR (2FT INTERVAL)
- PROJECT AREA
- IMPERVIOUS AREA

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

Kimley»Horn

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PRE-FINAL PLANS NOT FOR CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

Great Falls Street
Sidewalk Improvements
POST-DEVELOPMENT DRAINAGE DIVIDES

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2C(2)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

STORMWATER INLET CALCULATIONS

LD-204 Stormwater Inlet Computations

LD-204
Rev. 6-85

PPMS# _____

PROJ Great Falls Street Sidewalk Improvements

DATE June 21, 2017

SHEET 1 OF 1

INLET																										Sag Inlets Only			
NUMBER	TYPE	LENGTH (FT)	STATION	DRAINAGE AREA (AC)	C	CA	sum CA	I (IN/HR)	Q INCR (CFS)	Q_b, CARRYOVER (CFS)	Q_T, GUTTER FLOW (CFS)	S, GUTTER SLOPE (FT/FT)	S_X, CROSS SLOPE (FT/FT)	T, SPREAD (FT)	W (FT)	W/T	S_W, (FT/FT)	S_W/S_X	E_0	a = 12W(S_W - S_X)+Local Depression	S'_W = a/(12w)	S_e = S_X + $S'_W(E_0)$, (FT/FT)	COMPUTED LENGTH, L_T, (FT)	L, SPECIFIED LENGTH (FT)	L/L_T	E	Q_i, INTERCEPTED (CFS)	Qb, CARRYOVER (CFS)	d (FT)	h (FT)	d/h	T, SPREAD @ SAG (FT)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
PRE-DEVELOPMENT INLETS - ON GRADE																																
EX334	EXIST	10	114+37	0.22	0.90	0.198	0.198	4.0	0.792	0.000	0.792	0.0472	0.0475	1.98	2	1.01	0.0833	1.75	1.00	2.86	0.119	0.167	8	10	1.25	1.00	0.79	0.000				
EX348	EXIST	4	119+81	0.12	0.90	0.108	0.108	4.0	0.432	0.000	0.432	0.0112	0.0235	2.20	2	0.91	0.0833	3.55	1.00	3.44	0.143	0.167	4	4	1.00	1.00	0.43	0.000				
EX3-3	DI-3B	8	100+50	0.52	0.55	0.286	0.286	4.0	1.144	0.000	1.144	0.0272	0.0326	3.25	2	0.62	0.0833	2.56	0.97	3.22	0.134	0.162	8	8	1.00	1.00	1.14	0.000				
POST-DEVELOPMENT INLETS - ON GRADE																																
EX3-3	DI-3B	8	100+50	0.23	0.55	0.127	0.127	4.0	0.506	0.000	0.506	0.0272	0.0326	1.85	2	1.08	0.0833	2.56	1.00	3.22	0.134	0.167	6	8	1.33	1.00	0.51	0.000				
3-6	DI-3B	4	101+70	0.12	0.70	0.084	0.084	4.0	0.336	0.000	0.336	0.0081	0.0108	1.99	2	1.00	0.0833	7.72	1.00	3.74	0.156	0.167	4	4	1.00	1.00	0.34	0.000				
3-8	DI-3B	8	104+03	0.29	0.60	0.174	0.174	4.0	0.696	0.000	0.696	0.0252	0.0026	5.32	2	0.38	0.0833	32.05	0.99	3.94	0.164	0.165	7	8	1.14	1.00	0.70	0.000				
3-9	DI-3B	6	107+01	0.27	0.55	0.149	0.149	4.0	0.594	0.000	0.594	0.0257	0.0001	1.99	2	1.01	0.0833	833.33	1.00	4.00	0.167	0.167	6	6	1.00	1.00	0.59	0.000				
4-2	DI-3B	4	109+30	0.08	0.90	0.072	0.072	4.0	0.288	0.000	0.288	0.0115	0.0304	1.76	2	1.13	0.0833	2.74	1.00	3.27	0.136	0.167	4	4	1.00	1.00	0.29	0.000				
4-3	DI-3B	10	114+39	0.22	0.90	0.198	0.198	4.0	0.792	0.000	0.792	0.0472	0.0475	1.98	2	1.01	0.0833	1.75	1.00	2.86	0.119	0.167	8	10	1.25	1.00	0.79	0.000				
EX348	EXIST	4	119+81	0.12	0.90	0.108	0.108	4.0	0.432	0.000	0.432	0.0112	0.0235	2.20	2	0.91	0.0833	3.55	1.00	3.44	0.143	0.167	4	4	1.00	1.00	0.43	0.000				
PRE-DEVLOPMENT INLETS - IN SAG																																
EX351	EXIST	6	121+00	0.17	0.72	0.122	0.122	4.0	0.490	0.000	0.490	0.0010	0.0540	4.34	2	0.46	0.0833	1.54	0.87	2.70	0.113	0.152	2.80	6	2.14	1.00	0.49	0.000	0.132	0.420	0.314	2.446
EX351	EXIST	6	121+00	0.19	0.75	0.143	0.143	4.0	0.570	0.000	0.570	0.0010	0.0540	4.34	2	0.46	0.0833	1.54	0.85	2.70	0.113	0.149	2.97	6	2.02	1.00	0.57	0.000				
POST-DEVLOPMENT INLETS - IN SAG																																
EX351	EXIST	6	121+00	0.17	0.73	0.124	0.124	4.0	0.496	0.000	0.496	0.0010	0.0540	4.34	2	0.46	0.0833	1.54	0.87	2.70	0.113	0.152	2.82	6	2.13	1.00	0.50	0.000	0.133	0.420	0.316	2.456
EX351	EXIST	6	121+00	0.19	0.75	0.143	0.143	4.0	0.570	0.000	0.570	0.0010	0.0540	4.34	2	0.46	0.0833	1.54	0.85	2.70	0.113	0.149	2.97	6	2.02	1.00	0.57	0.000				

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
STORM DRAINAGE COMPUTATIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE: NOT TO SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET 2D(1)

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

STORMWATER PIPE CALCULATIONS

LD-229
40330

STORM SEWER DESIGN COMPUTATIONS

ROUTE: 694 **PROJ:** Great Falls Street Sidewalk Improvements
COUNTY: Fairfax County **DISTRICT:** Northern Virginia
DESCRIPTION: Stormwater Calculations
SHEET 1 OF 1

Inlet	From Point	To Point	Inlet Area (acres)	Run-off Coeff.	CA Increment	CA External	CA System	Inlet Time (min)	System Intensity (in/hr)	System Flow (cfs)	Invert Elevations Upstream End	Invert Elevations Downstream End	Length (ft)	Slope (ft/ft)	Pipe Size	Capacity (cfs)	Velocity (ft/s)	Flow Time (min)
System #1 - PRE-DEVELOPMENT																		
EX3-3	EX3-3	EX3-5	0.52	0.55	0.29	0.00	0.29	5.00	6.77	1.95	354.33	354.06	27.10	0.01	18	10.49	4.54	0.10
EX3-4	EX3-4	EX3-5	5.91	0.00	0.00	2.37	2.37	25.00	3.60	8.59	355.33	354.06	127.10	0.01	15	6.46	7.00	0.30
EX3-5	EX3-5	EX4	0.05	0.90	0.05	2.66	2.70	25.30	3.57	9.73	353.96	353.50	46.10	0.01	18	10.49	6.74	0.11
EX4	EX4	EX5	0.00	0.00	0.00	2.98	2.98	25.42	3.57	10.70	353.50	341.81	380.10	0.03	18	18.42	10.81	0.59
EX5	EX5	A3400	1.46	0.50	0.73	2.98	3.71	26.00	3.52	13.16	341.76	328.20	502.00	0.03	18	17.26	10.75	0.78
A3400	A3400	A3700	2.10	0.50	1.05	3.71	4.76	26.78	3.47	16.62	328.20	325.50	91.20	0.03	24	38.93	11.90	0.13
A3700	A3700	A3800	3.51	0.45	1.58	4.76	6.34	26.91	3.46	22.08	325.50	325.20	106.60	0.00	24	12.00	7.03	0.25
A3800	A3800	Outfall 1	7.20	0.45	3.24	15.21	18.45	27.16	3.44	64.00	325.20	324.20	230.70	0.00	38"x60"	91.15	8.08	0.48
System #2 - PRE-DEVELOPMENT																		
No Storm Sewer Pipes in System #2																		
System #3 - PRE-DEVELOPMENT																		
EX335	EX335	EX334	3.24	0.40	1.30	0.00	1.30	10.00	5.46	7.13	386.62	385.51	76.80	0.01	15	7.77	7.18	0.18
EX334	EX334	EX333	0.22	0.90	0.20	1.30	1.49	10.18	5.42	8.16	385.51	375.68	126.00	0.08	18	29.34	14.21	0.15
EX333	EX333	Outfall 3	0.15	0.40	0.06	1.49	1.55	10.33	5.39	8.44	375.68	372.04	46.70	0.08	18	29.33	14.34	0.05
System #4 - PRE-DEVELOPMENT																		
EX348	EX348	EX351	0.12	0.90	0.11	0.00	0.11	5.00	6.77	0.74	401.65	399.41	124.60	0.02	15	8.66	4.30	0.48
EX351	EX351	EX352	0.77	0.00	0.00	0.59	0.59	5.48	6.61	3.90	397.63	397.34	51.40	0.01	15	4.85	4.40	0.20
EX352	EX352	Outfall 4	0.41	0.75	0.31	0.59	0.89	5.68	6.55	5.90	397.28	396.90	37.70	0.01	15	6.49	5.99	0.11
System #1 - POST-DEVELOPMENT																		
4-1	4-1	4-2	0.18	0.45	0.08	0.00	0.08	5.00	6.77	0.55	377.38	377.29	18.00	0.01	15	4.57	2.52	0.12
4-2	4-2	3-9	0.08	0.90	0.07	0.08	0.15	5.12	6.73	1.04	377.19	370.70	229.30	0.03	15	10.87	5.59	0.68
3-9	3-9	3-8	0.27	0.55	0.15	0.15	0.30	5.80	6.51	1.98	370.60	361.70	297.20	0.03	15	11.18	6.88	0.72
3-8	3-8	3-6	0.29	0.60	0.17	0.30	0.48	6.52	6.30	3.02	361.60	356.93	233.70	0.02	15	9.13	6.68	0.58
3-7	3-7	3-6	0.23	0.55	0.13	0.00	0.13	5.00	6.77	0.86	357.05	356.93	12.20	0.01	15	6.45	3.66	0.06
3-6	3-6	EX3-3	0.12	0.70	0.08	0.60	0.69	7.11	6.13	4.24	356.83	354.43	120.20	0.02	15	9.13	7.30	0.27
EX3-3	EX3-3	EX3-5	0.23	0.55	0.13	0.69	0.81	7.38	6.06	4.96	354.33	354.06	27.10	0.01	18	10.49	2.81	0.16
EX3-4	EX3-4	EX3-5	5.37	0.00	0.00	2.15	2.15	25.00	3.60	7.81	355.33	354.06	127.10	0.01	15	6.46	6.36	0.33
EX3-5	EX3-5	EX4	0.05	0.90	0.05	2.97	3.01	25.33	3.57	10.84	353.96	353.50	46.10	0.01	18	10.49	6.13	0.13
EX4	EX4	EX5	0.00	0.00	0.00	3.29	3.29	25.46	3.56	11.80	353.50	341.81	380.10	0.03	18	18.42	11.06	0.57
EX5	EX5	A3400	1.46	0.50	0.73	3.29	4.02	26.03	3.52	14.25	341.76	328.20	502.00	0.03	18	17.26	10.91	0.77
A3400	A3400	A3700	2.10	0.50	1.05	4.02	5.07	26.80	3.47	17.70	328.20	325.50	91.20	0.03	24	38.93	12.10	0.13
A3700	A3700	A3800	3.51	0.45	1.58	5.07	6.65	26.92	3.46	23.16	325.50	325.20	106.60	0.00	24	12.00	7.37	0.24
A3800	A3800	Outfall 1	7.20	0.45	3.24	15.52	18.76	27.16	3.44	65.07	325.20	324.20	230.70	0.00	38"x60"	91.15	8.12	0.47
System #2 - POST-DEVELOPMENT																		
No Storm Sewer Pipes in System #2																		
System #3 - POST-DEVELOPMENT																		
EX335	EX335	4-3	3.24	0.40	1.30	0.00	1.30	10.00	5.46	7.13	386.62	385.76	66.00	0.01	18	11.99	7.08	0.16
4-3	4-3	EX334	0.22	0.90	0.20	1.30	1.49	10.16	5.42	8.17	385.76	385.62	10.80	0.01	18	11.97	7.29	0.03
EX334	EX334	EX333	0.00	0.00	0.00	1.49	1.49	10.18	5.42	8.16	385.51	375.68	126.00	0.08	18	29.34	14.21	0.15
EX333	EX333	EX332	0.15	0.40	0.06	1.49	1.55	10.33	5.39	8.44	375.68	372.04	46.70	0.08	18	29.33	14.34	0.05
System #4 - POST-DEVELOPMENT																		
EX348	EX348	EX351	0.12	0.90	0.11	0.00	0.11	5.00	6.77	0.74	401.65	399.41	124.60	0.02	15	8.66	4.30	0.48
EX351	EX351	EX352	0.77	0.00	0.00	0.59	0.59	5.48	6.61	3.90	397.63	397.34	51.40	0.01	15	4.85	4.40	0.20
EX352	EX352	Outfall 4	0.41	0.75	0.31	0.59	0.89	5.68	6.55	5.90	397.28	396.90	37.70	0.01	15	6.49	5.99	0.11

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
STORM DRAINAGE COMPUTATIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE NOT TO SCALE | DESIGNED BY: DD | DRAFTED BY: TC | CHECKED BY: BB | SHEET 2D(2)

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

STORMWATER HGL CALCULATIONS

LD-347 Hydraulic Grade Line Computations

LD-347 Rev. 7/00
HYDRAULIC GRADE LINE

PROJECT: Great Falls Street Sidewalk Improvements
SHEET: 1 OF 1

Inlet Number	Outlet Water Surface Elev.	D_o	Q_o	L_o	S_{fo}	H_f	JUNCTION LOSS												Final H	Inlet Water Surface Elev.	Rim Elev.
							V_o	H_o	Q_i	V_i	Q_iV_i	$\frac{V_L^2}{2g}$	H_i	Angle	H_Δ	H_t	Plunging H_t	Shaping H_t			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
System #1 - PRE-DEVELOPMENT																					
EX3-3	355.47	18	1.95	27	0.000	0.00	1.35	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	355.48	360.23
EX3-4	355.47	15	8.59	127	0.018	2.25	7.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.25	0.12	2.37	357.84	361.75
EX3-5	354.97	18	9.73	46	0.008	0.22	6.27	0.15	8.59	7.00	60.13	0.76	0.27	15.36	0.15	0.57	0.57	0.29	0.51	355.48	360.00
EX4	343.40	18	10.70	380	0.030	11.35	6.77	0.18	9.73	5.53	53.81	0.47	0.17	15.09	0.09	0.43	0.43	0.22	11.57	354.97	359.40
EX5	330.32	18	13.16	502	0.026	12.80	7.83	0.24	10.70	6.05	64.74	0.57	0.20	0.01	0.00	0.44	0.57	0.29	13.09	343.41	347.94
A3400	329.12	24	16.62	91	0.009	0.55	6.72	0.18	13.16	7.45	98.04	0.86	0.30	68.03	0.52	1.00	1.30	0.65	1.20	330.32	332.40
A3700	327.87	24	22.08	107	0.010	1.02	7.03	0.19	16.62	5.29	87.92	0.43	0.15	4.28	0.02	0.37	0.48	0.24	1.26	329.13	330.20
A3800	326.76	38"x60"	64.00	231	0.004	0.48	7.55	0.22	22.08	7.03	155.22	0.77	0.27	69.75	0.47	0.96	1.25	0.62	1.10	327.86	330.35
System #2 - PRE-DEVELOPMENT																					
No Storm Sewer Pipes in System #2																					
System #3 - PRE-DEVELOPMENT																					
EX335	386.89	15	7.13	77	0.012	0.80	6.38	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.21	0.10	0.90	387.79	391.95
EX334	377.03	18	8.16	126	0.077	9.59	5.84	0.13	7.13	5.81	41.43	0.52	0.18	14.74	0.10	0.41	0.53	0.27	9.86	386.89	391.95
EX333	373.24	18	8.44	47	0.078	3.57	5.94	0.14	8.16	4.88	39.82	0.37	0.13	44.78	0.17	0.44	0.44	0.22	3.79	377.03	382.96
System #4 - PRE-DEVELOPMENT																					
EX348	399.66	15	0.74	125	0.017	2.33	2.78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.02	2.35	402.01	405.27
EX351	398.44	15	3.90	51	0.004	0.13	3.91	0.06	0.74	0.60	0.44	0.01	0.00	82.33	0.00	0.00	0.00	0.00	0.13	398.57	403.97
EX352	397.90	15	5.90	38	0.010	0.36	5.70	0.13	3.90	3.40	13.26	0.18	0.06	49.85	0.09	0.28	0.36	0.18	0.54	398.44	403.92
System #1 - POST-DEVELOPMENT																					
4-1	377.65	15	0.55	18	0.004	0.02	2.52	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.03	377.68	381.41
4-2	371.21	15	1.04	229	0.028	6.38	3.06	0.04	0.55	1.88	1.03	0.05	0.02	89.72	0.04	0.09	0.12	0.06	6.44	377.65	383.04
3-9	362.38	15	1.98	297	0.030	8.78	3.71	0.05	1.04	2.19	2.28	0.07	0.03	1.26	0.00	0.08	0.10	0.05	8.83	371.21	375.08
3-8	357.77	15	3.02	234	0.020	4.53	4.28	0.07	1.98	2.93	5.80	0.13	0.05	0.15	0.00	0.12	0.16	0.08	4.61	362.38	366.39
3-7	357.77	15	0.86	12	0.000	0.00	1.18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	357.78	361.04
3-6	356.01	15	4.24	120	0.015	1.65	4.87	0.09	3.02	3.43	10.36	0.18	0.06	86.02	0.01	0.17	0.22	0.11	1.76	357.77	362.01
EX3-3	355.80	18	4.96	27	0.002	0.06	2.81	0.03	4.24	3.46	14.67	0.19	0.06	94.55	0.13	0.23	0.30	0.15	0.21	356.01	360.23
EX3-4	355.80	15	7.81	127	0.015	1.86	6.36	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.21	0.10	1.96	357.76	361.75
EX3-5	355.07	18	10.84	46	0.011	0.49	6.13	0.15	7.81	6.36	49.67	0.63	0.22	15.36	0.12	0.49	0.49	0.25	0.74	355.81	360.00
EX4	343.48	18	11.80	380	0.030	11.32	7.23	0.20	10.84	6.13	66.45	0.58	0.20	15.09	0.11	0.52	0.52	0.26	11.58	355.06	359.40
EX5	330.46	18	14.25	502	0.025	12.68	8.35	0.27	11.80	6.68	78.82	0.69	0.24	0.01	0.00	0.51	0.66	0.33	13.01	343.47	347.94
A3400	329.32	24	17.70	91	0.007	0.40	6.93	0.19	14.25	8.07	115.00	1.01	0.35	68.03	0.61	1.15	1.50	0.75	1.15	330.47	332.40
A3700	327.93	24	23.16	107	0.010	1.12	7.37	0.21	17.70	5.63	99.65	0.49	0.17	4.28	0.03	0.41	0.53	0.27	1.39	329.32	330.20
A3800	326.76	38"x60"	65.07	231	0.004	0.50	7.60	0.22	23.16	7.37	170.69	0.84	0.30	69.75	0.52	1.04	1.35	0.68	1.18	327.94	330.35
System #2 - POST-DEVELOPMENT																					
No Storm Sewer Pipes in System #2																					
System #3 - POST-DEVELOPMENT																					
EX335	387.03	18	7.13	66	0.012	0.63	5.49	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.16	0.08	0.71	387.74	391.95
4-3	386.81	18	8.17	11	0.012	0.06	5.84	0.13	7.13	4.48	31.94	0.31	0.11	0.00	0.00	0.24	0.31	0.16	0.22	387.03	392.04
EX334	377.03	18	8.16	126	0.077	9.59	5.84	0.13	8.17	5.45	44.53	0.46	0.16	14.74	0.09	0.38	0.38	0.19	9.78	386.81	391.95
EX333	373.24	18	8.44	47	0.078	3.57	5.94	0.14	8.16	4.88	39.82	0.37	0.13	44.78	0.17	0.44	0.44	0.22	3.79	377.03	382.96
System #4 - POST-DEVELOPMENT																					
EX348	399.66	15	0.74	125	0.017	2.33	2.78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.02	2.35	402.01	405.27
EX351	398.44	15	3.90	51	0.004	0.13	3.91	0.06	0.74	0.60	0.44	0.01	0.00	82.33	0.00	0.00	0.00	0.00	0.13	398.57	403.97
EX352	397.90	15	5.90	38	0.010	0.36	5.70	0.13	3.90	3.40	13.26	0.18	0.06	49.85	0.09	0.28	0.36	0.18	0.54	398.44	403.92

1 of 1

VDOT Drainage Manual

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911
FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

CAPITAL FACILITIES
703-324-5800

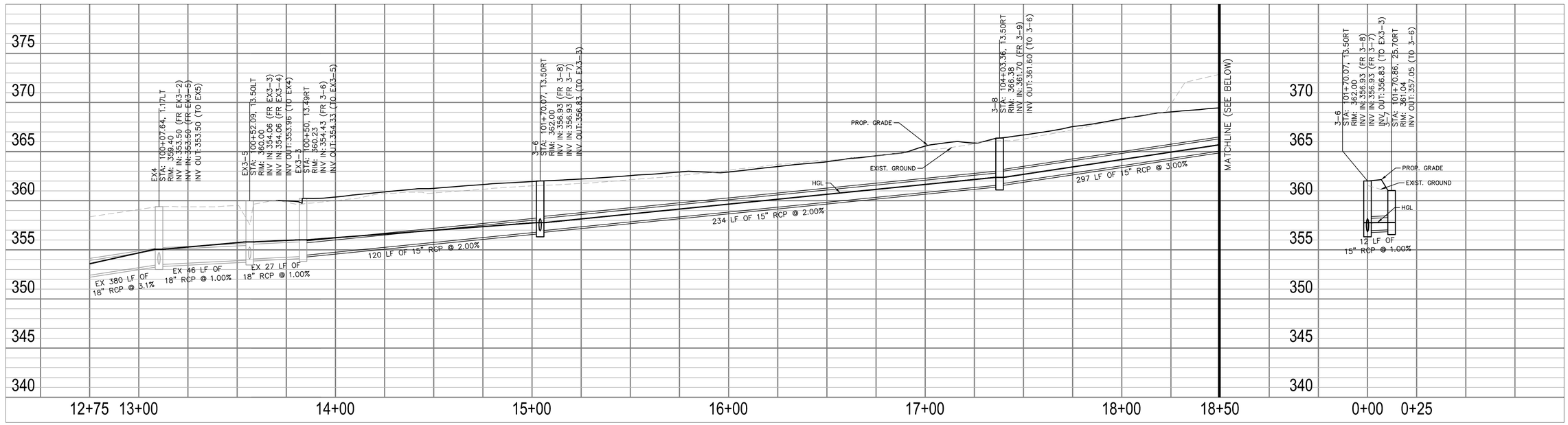
Great Falls Street
Sidewalk Improvements
STORM DRAINAGE COMPUTATIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE NOT TO SCALE | DESIGNED BY: DD | DRAFTED BY: TC | CHECKED BY: BB | SHEET 2D(3)

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

STORM DRAINAGE PROFILES



(4-1) 1 Std. DI-1 Req.
H=4.0' Inv=377.4'
Std. IS-1 Req.

(4-1)TO(4-2) 18'-15" Conc. Pipe Class III Req. (2' Cover)
Silt Tight Joint Type
Inv(In)=377.4' Inv(Out)=377.3'

(4-2) 1 Std. DI-3B Req.
L=6', H=5.9' Inv=377.2
Std. IS-1 Req.
Connect UD-4 to Structure

(4-2)TO(3-9) 229'-15" Conc. Pipe Class III Req. (5' Cover)
Silt Tight Joint Type
Inv(In)=377.2' Inv(Out)=370.7'

(3-9) 1 Std. DI-3B Req.
L=6', H=4.1' Inv=370.6'
Std. IS-1 Req.
Connect UD-4 to Structure

(3-9)TO(3-8) 297'-15" Conc. Pipe Class III Req. (3' Cover)
Silt Tight Joint Type
Inv(In)=370.6' Inv(Out)=361.7'

(3-8) 1 Std. DI-3B Req.
L=8', H=4.8' Inv=361.6'
Std. IS-1 Req.
Connect UD-4 to Structure

(3-8)TO(3-6) 234'-15" Conc. Pipe Class III Req. (3' Cover)
Silt Tight Joint Type
Inv(In)=361.6' Inv(Out)=356.93'

(3-7) 1 Std. DI-1 Req.
H=4.0' Inv=357.1'
Std. IS-1 Req.

(3-7)TO(3-6) 12'-15" Conc. Pipe Class III Req. (2' Cover)
Silt Tight Joint Type
Inv(In)=357.1' Inv(Out)=356.93'

(3-6) 1 Std. DI-3B Req.
L=4', H=5.2' Inv=356.8'
Std. IS-1 Req.
Connect UD-4 to Structure
Connect To Existing 15" Conc. Pipe

(3-6)TO(EX3-5) 120'-15" Conc. Pipe Class III Req. (4' Cover)
Silt Tight Joint Type
Inv(In)=356.8' Inv(Out)=354.4'

(EX3-5) Modify Existing Drop Inlet
Modify To Accept 15" Conc. Pipe
Connect UD-4 To Structure

(EX348) Modify Existing Drop Inlet
Connect UD-4 To Structure

(4-3) 1 Std. DI-3B Req.
L=10', H=6.3' Inv=385.8'
Std. IS-1 Req.
Connect UD-4 to Structure
Connect To Existing 15" Conc. Pipe

(EX334) Modify Existing Drop Inlet
Adjust To Grade, Raise 0.3'
1 Std. MH-1 Frame & Cover Req.
Proposed Top Elev=392.0
Convert Existing DI to Manhole

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DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

PROFILE VIEW
GRAPHIC SCALE
1"=25' (H)
1"=5' (V)
0 25 50
0 2.5 5

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NOTE: A POST INSTALLATION VISUAL/VIDEO CAMERA INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR ON ALL STORM SEWER PIPE AND A SELECTED NUMBER OF PIPE CULVERTS IN ACCORDANCE WITH SECTION 302.03(D) OF THE VDOT 2016 ROAD AND BRIDGE SPECIFICATIONS AND VTM 123.

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911
FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
STORM DRAINAGE PROFILES

PRE-FINAL PLANS NOT FOR CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2E
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

PROJECT DATA SHEET

PROJECT INFORMATION						
PROJECT INFORMATION						
PROJECT NAME	GREAT FALLS STREET SIDEWALK IMPROVEMENTS					
COUNTY PROJECT NUMBER	5G25-060-042					
VDOT UPC NUMBER (IF APPLICABLE)	N/A		N/A		N/A	
PROJECT LIMITS / LENGTH	1,500 LF OF SIDEWALK					
FUNDING SOURCE	300-C30050					
DATE OF FUNDING OBLIGATION						
LATITUDE/ LONGITUDE	LAT	38.896102	LONG	-77.176971		
6TH ORDER HUC	020700100301 AND 020700100103					
TYPE OF DEVELOPMENT: (SELECT ALL THAT APPLY)						
☐ NEW DEVELOPMENT						
☒ REDEVELOPMENT						
☒ LINEAR DEVELOPMENT						
☐ NON-LINEAR DEVELOPMENT						
STORMWATER MANAGEMENT TECHNICAL CRITERIA USED:						
☒ VSMP TECHNICAL CRITERIA IIB / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 4						
☐ VSMP TECHNICAL CRITERIA IIC / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 5						
SWM WAIVER/EXCEPTION(S) REQUIRED: YES ☒ NO ☐ APPROVAL DATE: _____						
TYPE(S): WATER QUANTITY CONTROL EXCEPTION LDS NUMBER: _____						
CONSTRUCTION SITE ESTIMATES						
TOTAL SITE AREA	0.67	(AC)	29,185	(SF)		
TOTAL DISTURBED AREA	0.67	(AC)	29,185	(SF)		
TOTAL SITE IMPERVIOUS AREA	PRE 0.25	(AC)	POST 0.38	(AC)		
VPDES PERMIT REQUIREMENTS (CHECK ONE):						
☒ DISTURBED AREA < 1 (AC) ; VPDES PERMIT NOT REQUIRED.						
☐ DISTURBED AREA ≥ 1 (AC) ; VPDES PERMIT IS REQUIRED.						
RECEIVING WATERS						
RECEIVING STREAM	MANMADE STORWATER PIPE SYSTEM					
WATERSHED	FOUR MILE RUN AND PIMMIT RUN					
IS PROJECT LOCATED WITHIN THE WATER SUPPLY PROTECTION OVERLAY DISTRICT (WSPOD) IF YES SEE NOTE 3	YES ☐ NO ☒					
IS THERE A LOCAL TMDL RESTRICTION WITHIN THE PROJECT WATERSHED AREA	YES ☐ NO ☒					
IF YES PROVIDE DESCRIPTION OF IMPAIRED WATERS						

NOTE:

(1.) FOR ADDITIONAL DETAILS SEE THE LATEST REVISION OF THE DRAINAGE/SWM REPORT AND EROSION AND SEDIMENT CONTROL PLAN SHEET.
(2.) THIS IS A COUNTY ADMINISTERED PROJECT AND THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP) IS PREPARED BY FAIRFAX COUNTY. WHEN APPLICABLE, IT WILL BE INCLUDED WITH VPDES AND CONSTRUCTION PACKAGE.
(3.) PURCHASE OF NUTRIENT CREDITS MAY NOT BE USED TO SATISFY DEQ'S WATER QUALITY REQUIREMENTS ON PROJECTS LOCATED WITHIN THE WATER SUPPLY PROTECTION OVERLAY DISTRICT (WSPOD).

STORMWATER INFORMATION TABLE

STORMWATER INFORMATION

HIGH DENSITY POLYETHYLENE (HDPE) USED ON THIS PROJECT YES ☐ NO ☒
THE PLAN MEETS: TIME LIMITS ON APPLICABILITY OF APPROVED DESIGN CRITERIA ☒
SWM FACILITIES (PROPOSED ONLY) THE PLAN MEETS THE GRANDFATHERING CRITERIA ☐

FACILITY ID NO.	FACILITY TYPE	PURPOSE	AREA TREATED (ACRES)	ATTITUDE (DECIMAL DEGREE)	LONGITUDE (DECIMAL DEGREE)	WATERSHED	RECEIVING WATERS	MAINTENANCE AGREEMENT Y/N	VAHUS CODE	LENGTH/ AREA OF FACILITY	UNIT (FT/ SF)	NO. OF BLDG. SERVED (FOR ROOFTOP DISCONNECT)

VPDES REQUIRED YES ☐ NO ☒
VPDES PERMIT NO. (IF TIME LIMITS):
COUNTY STORMWATER PERMIT REQUIRED YES ☒ NO ☐
SWM FACILITIES DESIGNED USING: TECHNICAL CRITERIA 4 (NEW) ☒
TECHNICAL CRITERIA 5 (OLD) ☐

DISTURBED AREA (DA) WITHIN WATERSHED(S):
WATERSHED 1 FOUR MILE RUN DA= 0.66 (ACRES)
WATERSHED 2 PIMMIT RUN DA= 0.01 (ACRES)
TOTAL DISTURBED AREA= 0.67 (ACRES)

SDID 7/22/14

TABLE 1.
WATER QUALITY ANALYSIS PER VSMP TECHNICAL CRITERIA IIB / FFX CO STORMWATER MANAGEMENT ORDINANCE ARTICLE 4

RECEIVING WATERS	OUTFALL		TOTAL DISTURBED AREA		PRE DEVELOPMENT LAND USE			POST DEVELOPMENT LAND USE			PHOSPHORUS REMOVAL REQUIRED *	ON-SITE PHOSPHORUS REMOVAL PROVIDED *	IS PROJECT LOCATED WITHIN WSPOD	
	ID	LOCATION	(AC)	(SF)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	(LB/YR)	(LB/YR)	YES (3)	NO (4)
FOUR MILE RUN	#1	OFFSITE	0.48	20,909	0.00	0.35	0.13	0.00	0.20	0.28	0.34	0.00		NO
FOUR MILE RUN	#2	OFFSITE	0.14	6,098	0.00	0.04	0.10	0.00	0.07	0.07	0.00	0.00		NO
FOUR MILE RUN	#3	OFFSITE	0.04	1,742	0.00	0.02	0.02	0.00	0.02	0.02	0.01	0.00		NO
PIMMIT RUN	#4	OFFSITE	0.01	436	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.00		NO
										TOTAL	0.37	0.00		

NOTE:

(4.) PHOSPHORUS REMOVAL MAY BE PROVIDED BY THE PURCHASE OF OFFSITE NUTRIENT CREDITS. PLEASE SEE TABLE 2 BELOW FOR MORE INFORMATION.

TABLE 2.
OFFSITE COMPLIANCE FOR WATER QUALITY (NUTRIENT CREDITS)

NUTRIENT CREDIT BANK NAME (5)	4TH ORDER HUC	NUTRIENT CREDIT TO BE ACQUIRED (LB/YR)	PURCHASE LETTER (MM/DD/YY) (5)
NAME TO BE PROVIDED UPON PURCHASE			/ /

NOTE:

(5.) EVIDENCE OF NUTRIENT CREDIT PURCHASE WILL BE PROVIDED ON SHEET 2F(1) AFTER SWM APPROVAL BY COUNTY LDS AND VDOT. PLEASE SEE LEDGER BELOW FOR EVIDENCE OF NUTRIENT CREDIT AVAILABILITY/RESERVATION.

EVIDENCE OF NUTRIENT CREDIT AVAILABILITY

Purchase #1: Ledger- Elk Run (DEQ Certification No. Potomac-003) Bulk Purchase of Nutrient Credits by Fairfax County DOT

Draw Down Quantity for Individual Projects

Proj. #	Project Name	UPC # (if any)	Funding Source	Fund Number	Project Location 8 Digit HUC	Watershed Name	Phosphorous Removal Required (lbs/yr)	Cost/Project	TP Transferred (LB)	TP Balance Remaining (LB)	TN Retired (LB)	TN Balance Remaining (LB)	DEQ Permit #	Purchase Agreement Date	Date Requested	Date of Credit Transfer	Comments
5G25-060-042	Great Falls Street Walkway	N/A	2014 Transportation Bond	300-C30050	02070010	Middle Potomac-Anacostia-Occoquan Watershed (Four Mile Run & Pimmit Run)	0.37	$8,325.00	0.37	0.28	4.98	3.78	N/A	5/11/2015	7/6/2017	Pending	Reserved

SITE DEVELOPMENT AND INSPECTION DIVISION APPROVAL STAMP

OWNER/REPRESENTATIVE CONTACT INFORMATION

NAME:

PHONE NUMBER:
EMAIL ADDRESS:

ADDRESS: UTILITIES DESIGN AND CONSTRUCTION DIVISION
12000 GOVERNMENT CENTER PKWY
SUITE 463
FAIRFAX, VA 22035

TAX MAP 40-4

CONSULTANT CERTIFIED E & S PLAN REVIEWER

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
07/11/2017
PROFESSIONAL ENGINEER

Kimley-Horn
Reston, VA
E&S ENGINEER

CONSULTANT STORMWATER MANAGEMENT PLAN REVIEWER

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley-Horn
Reston, VA
DRAINAGE ENGINEER

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FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

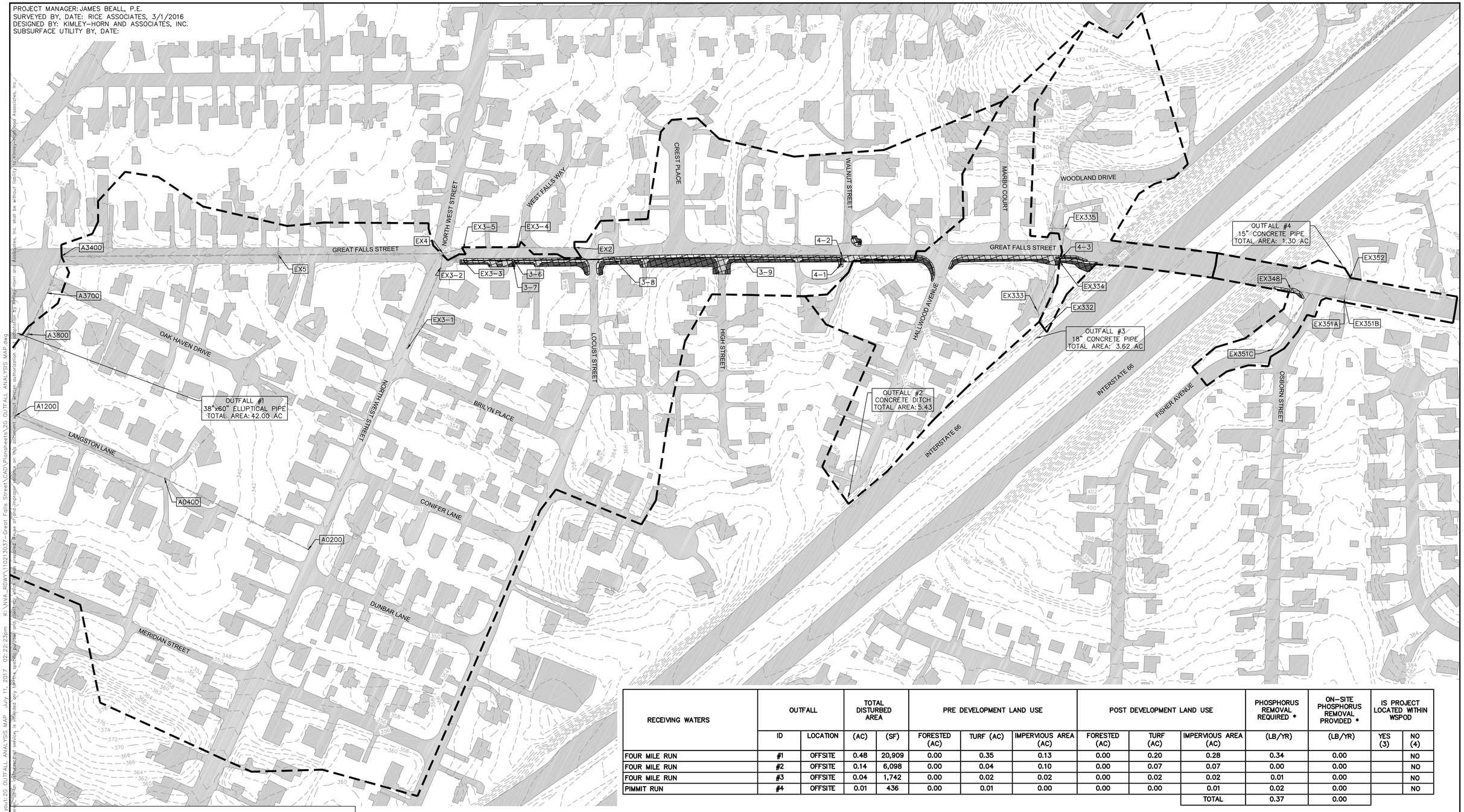
CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
PROJECT DATA SHEET

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE NOT TO SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET 2F

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:



RECEIVING WATERS	OUTFALL		TOTAL DISTURBED AREA		PRE DEVELOPMENT LAND USE			POST DEVELOPMENT LAND USE			PHOSPHORUS REMOVAL REQUIRED *	ON-SITE PHOSPHORUS REMOVAL PROVIDED *	IS PROJECT LOCATED WITHIN WSPOD	
	ID	LOCATION	(AC)	(SF)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	FORESTED (AC)	TURF (AC)	IMPERVIOUS AREA (AC)	(LB/YR)	(LB/YR)	YES (3)	NO (4)
FOUR MILE RUN	#1	OFFSITE	0.48	20,909	0.00	0.35	0.13	0.00	0.20	0.28	0.34	0.00		NO
FOUR MILE RUN	#2	OFFSITE	0.14	6,098	0.00	0.04	0.10	0.00	0.07	0.07	0.00	0.00		NO
FOUR MILE RUN	#3	OFFSITE	0.04	1,742	0.00	0.02	0.02	0.00	0.02	0.02	0.01	0.00		NO
PIMMIT RUN	#4	OFFSITE	0.01	436	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.00		NO
										TOTAL	0.37	0.00		

LEGEND

- OUTFALL BOUNDARY
- CONTOUR (2FT INTERVAL)
- PROJECT CONTRIBUTING DRAINAGE AREA
- EXISTING IMPERVIOUS AREA
- PROPOSED OPEN SPACE (WITHIN PROJECT AREA)

TAX MAP 40-4

GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

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FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

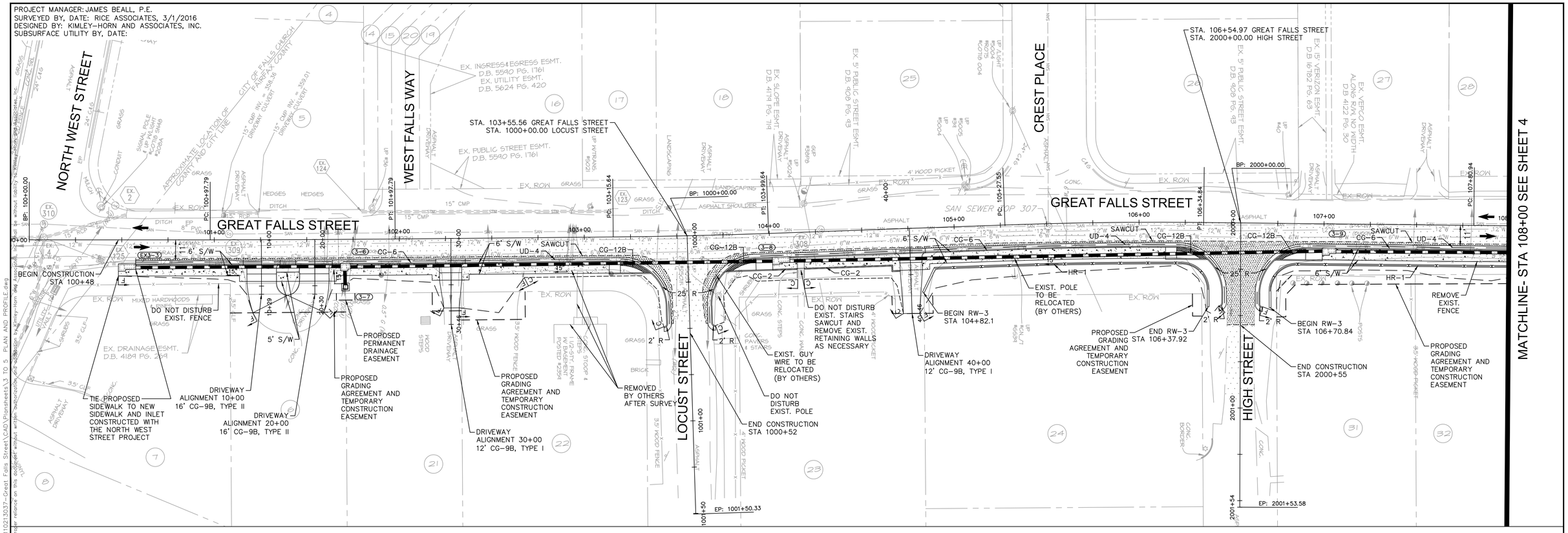
REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

Great Falls Street
Sidewalk Improvements
OUTFALL ANALYSIS MAP

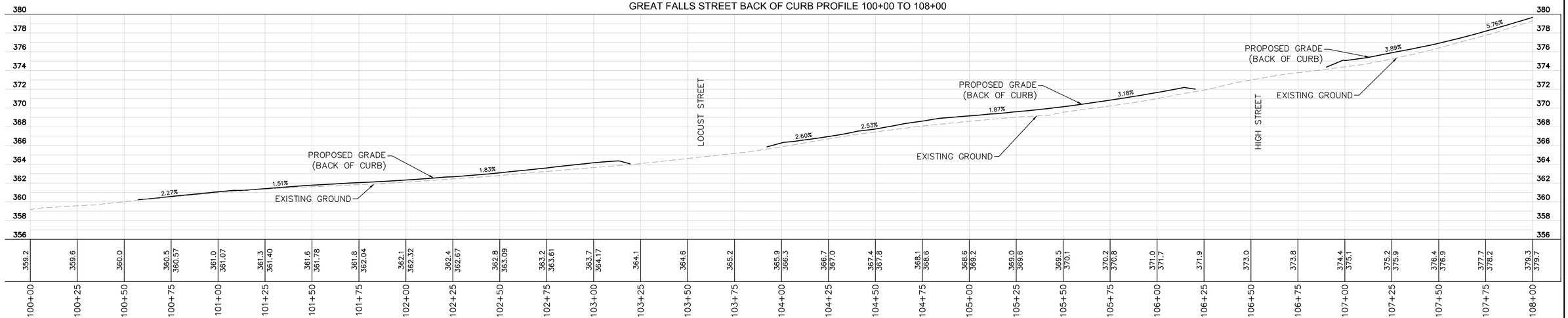
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	2G
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:



GREAT FALLS STREET BACK OF CURB PROFILE 100+00 TO 108+00



TAX MAP 40-4

NOTE:
1. SEE SHEET 2E STORM DRAINAGE PROFILES FOR DRAINAGE DESCRIPTIONS.

LEGEND
- PROPOSED PAVEMENT
- MILL AND OVERLAY
- SIDEWALK PAVEMENT
- DEMOLITION OF PAVEMENT
- F ____ LIMITS OF CONSTRUCTION IN FILL
- C _____ LIMITS OF CONSTRUCTION IN CUT

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

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12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

CAPITAL FACILITIES
703-324-5800

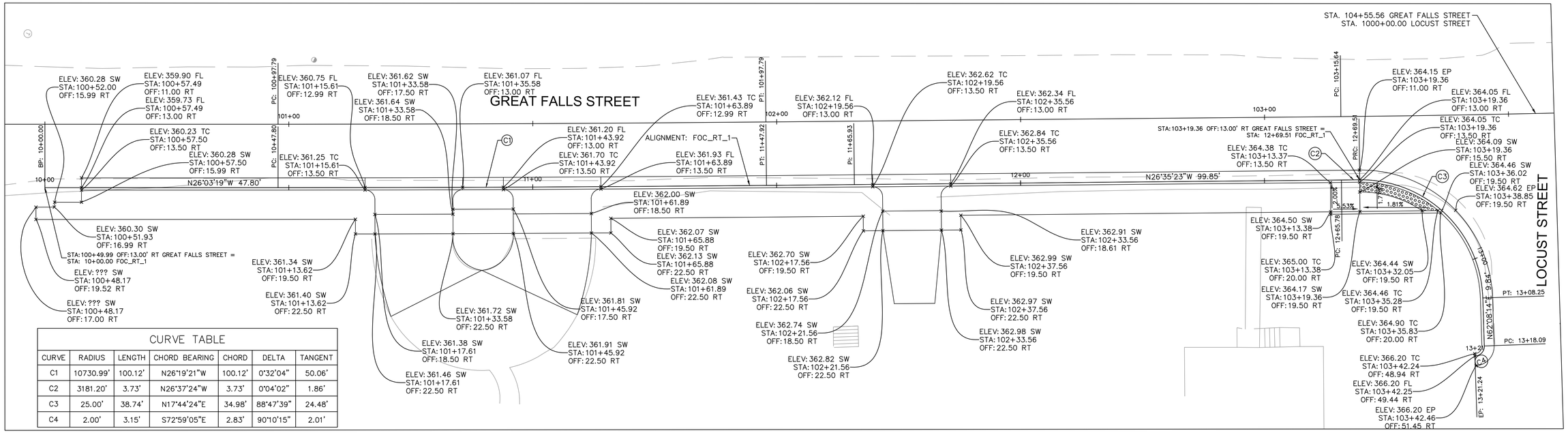
Great Falls Street
Sidewalk Improvements
PLAN AND PROFILE STA 100+00 TO STA 108+00

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	3
	CHECKED BY: BB	

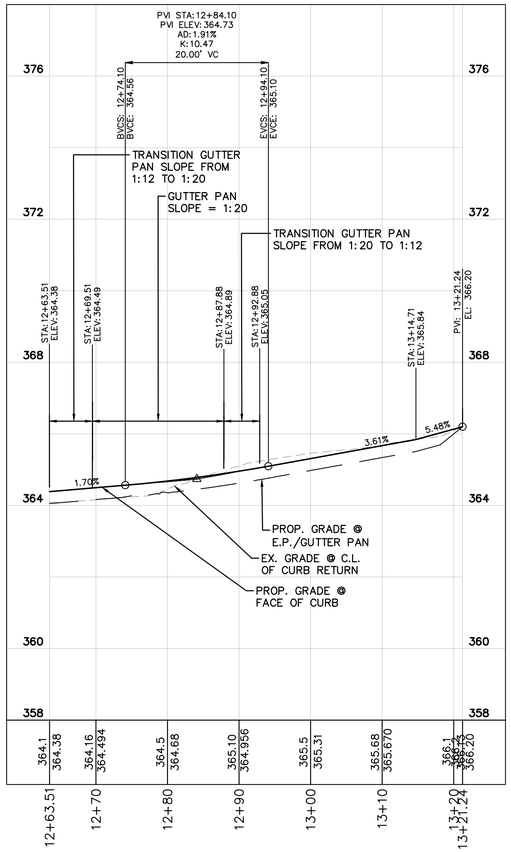
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

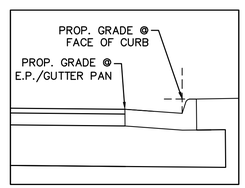
CURB RETURN PROFILES AND GRADING



CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	10730.99'	100.12'	N26°19'21"W	100.12'	0°32'04"	50.06'
C2	3181.20'	3.73'	N26°37'24"W	3.73'	0°04'02"	1.86'
C3	25.00'	38.74'	N17°44'24"E	34.98'	88°47'39"	24.48'
C4	2.00'	3.15'	S72°59'05"E	2.83'	90°10'15"	2.01'

SOUTH CORNER LOCUST STREET CURB RETURN PROFILE





NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)
0 10 20
2 1 0

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07/11/2017
PROFESSIONAL ENGINEER

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

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DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
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Great Falls Street
Sidewalk Improvements
CURB RETURN PROFILES AND GRADING

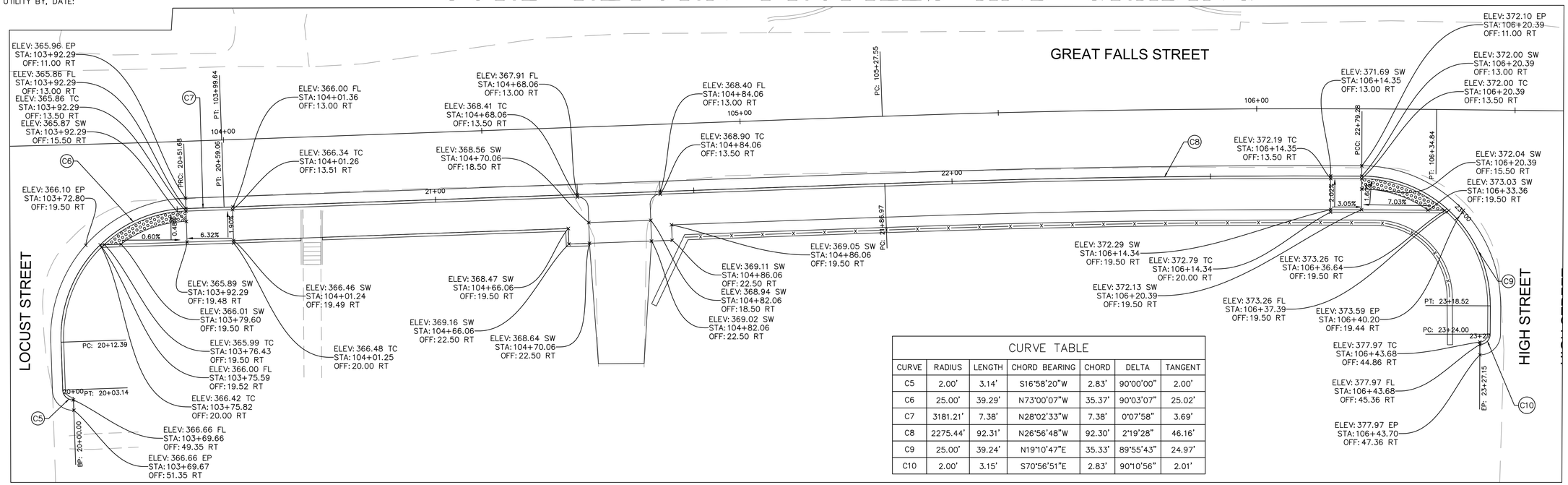
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE: SEE GRAPHIC SCALE
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB
SHEET: 3A(1)

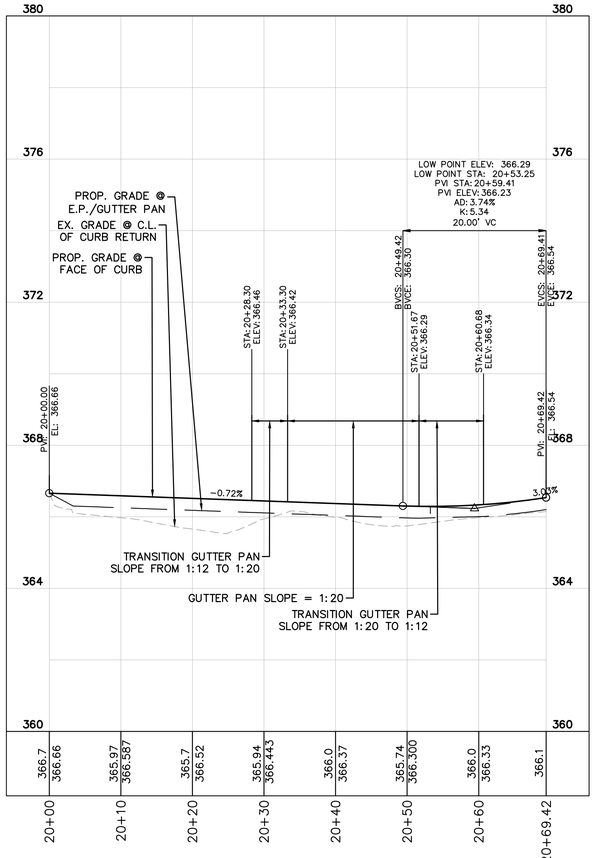
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CURB RETURN PROFILES AND GRADING

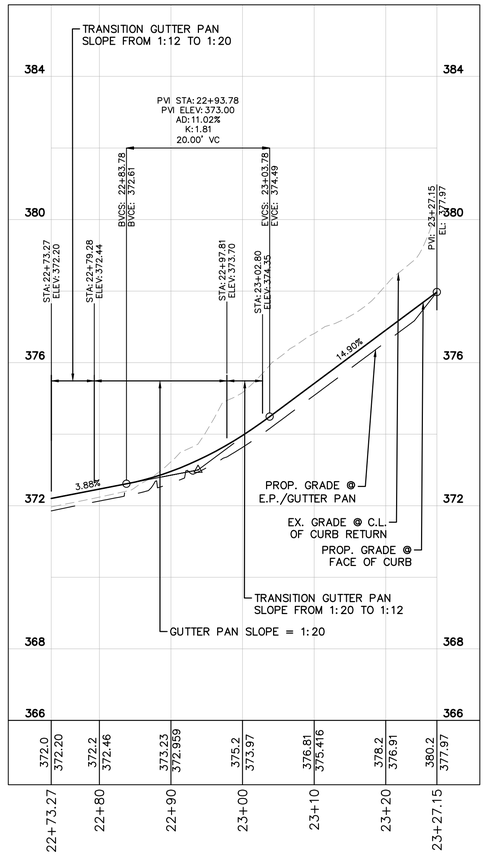


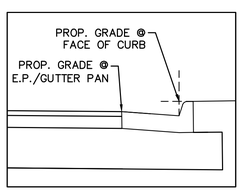
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C5	2.00'	3.14'	S16°58'20"W	2.83'	90°00'00"	2.00'
C6	25.00'	39.29'	N73°00'07"W	35.37'	90°03'07"	25.02'
C7	3181.21'	7.38'	N28°02'33"W	7.38'	0°07'58"	3.69'
C8	2275.44'	92.31'	N26°56'48"W	92.30'	2°19'28"	46.16'
C9	25.00'	39.24'	N19°10'47"E	35.33'	89°55'43"	24.97'
C10	2.00'	3.15'	S70°56'51"E	2.83'	90°10'56"	2.01'

NORTH CORNER LOCUST STREET CURB RETURN PROFILE



SOUTH CORNER HIGH STREET CURB RETURN PROFILE





GRAPHIC SCALE IN FEET
0 5 10 20

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)
0 1 2
0 10 20

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Phone: 703-674-1300

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
CURB RETURN PROFILES AND GRADING

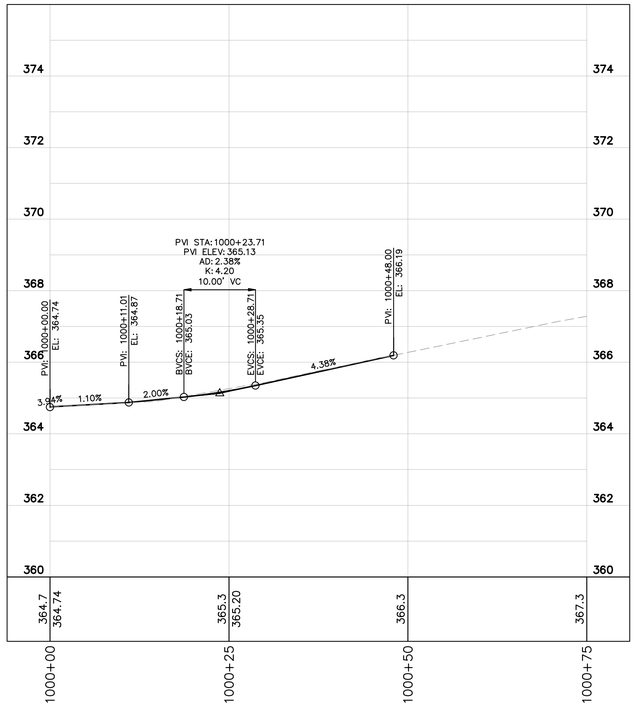
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	3A(2)
	CHECKED BY: BB	

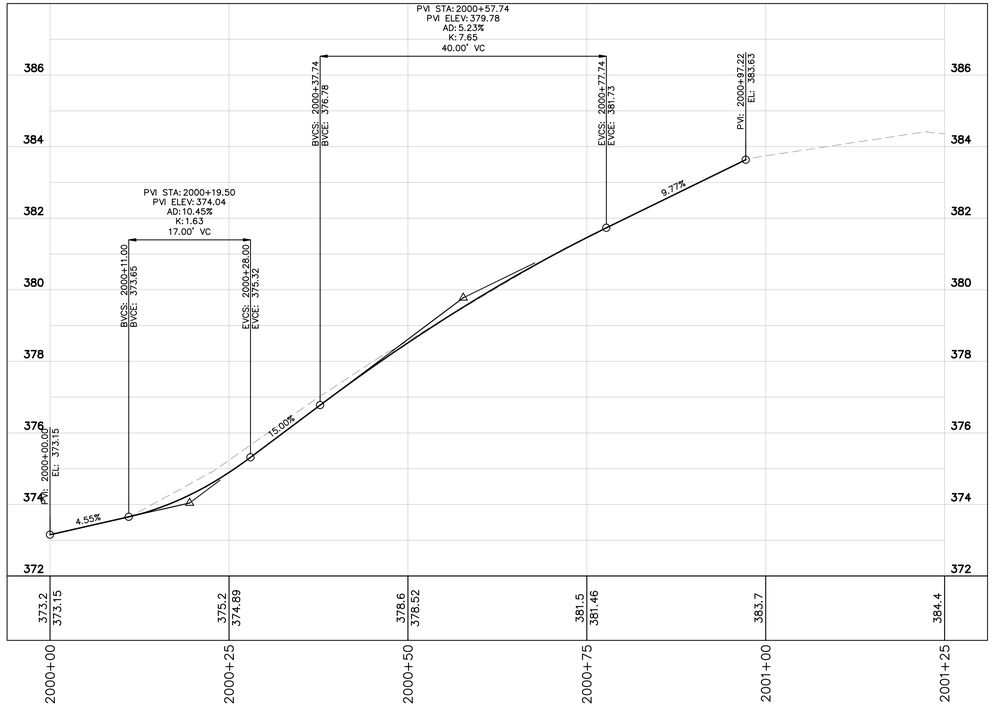
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

SIDE STREET AND ENTRANCE PROFILES

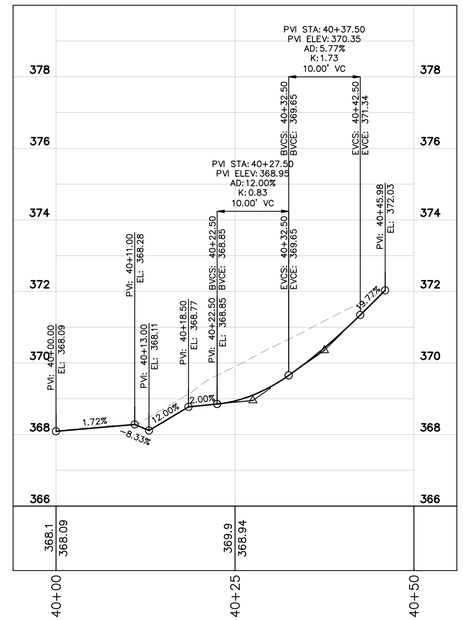
LOCUST STREET CENTERLINE PROFILE



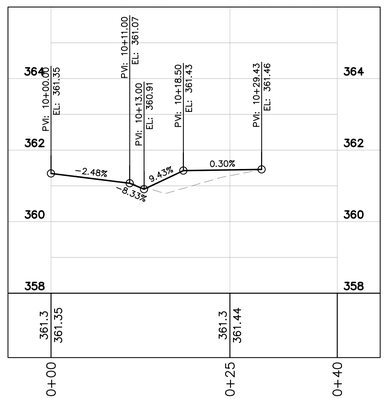
HIGH STREET CENTERLINE PROFILE



DRIVEWAY PROFILE - 40+00



DRIVEWAY PROFILE - 10+00



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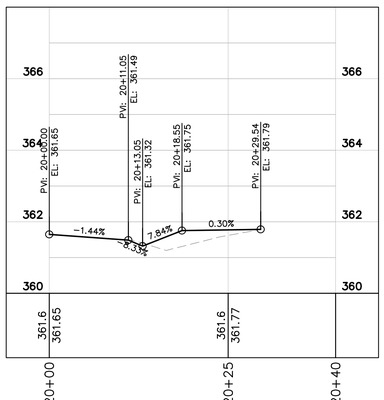

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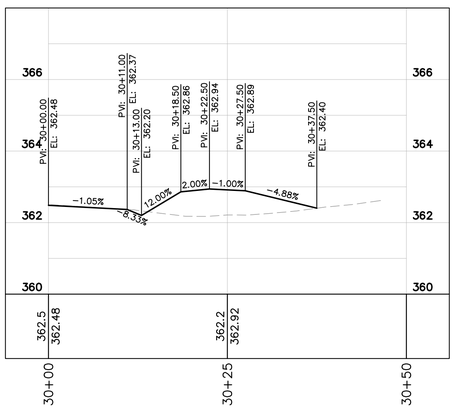
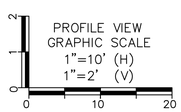


TAX MAP 40-4



COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

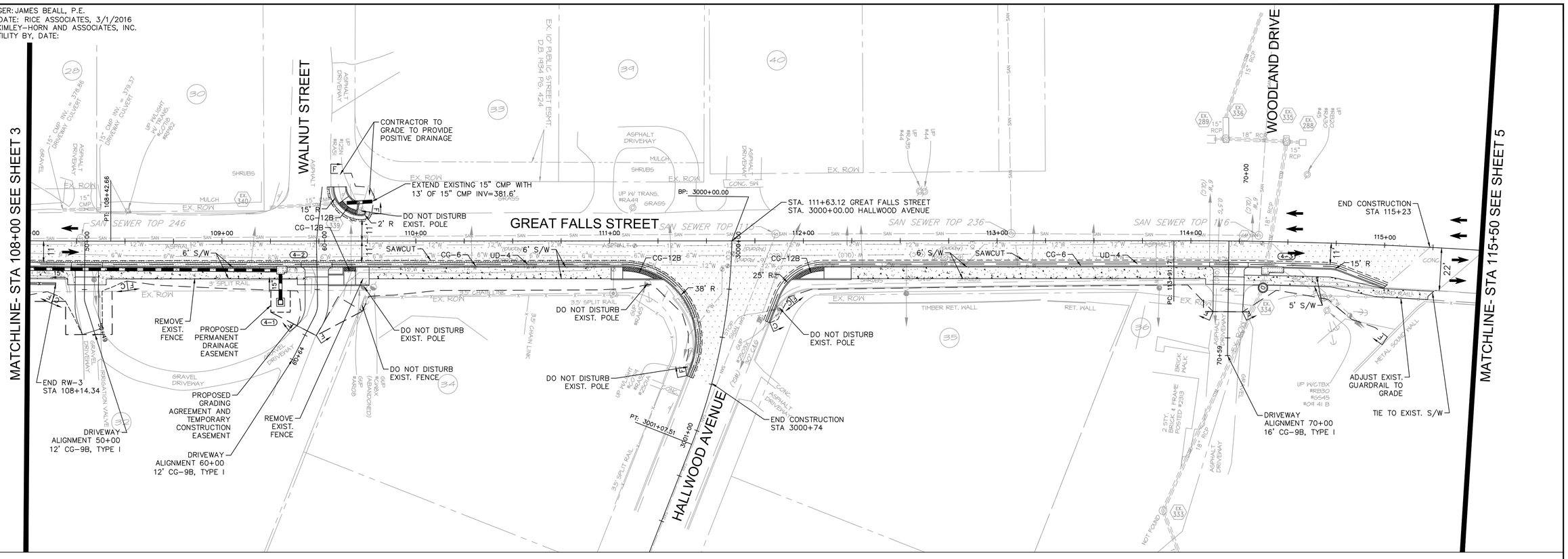
CAPITAL FACILITIES
703-324-5800

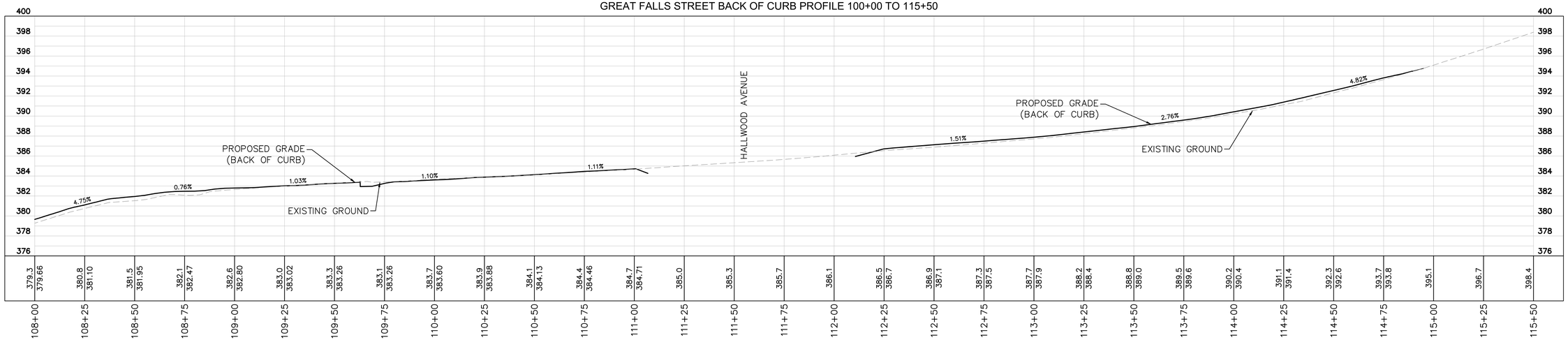
Great Falls Street
Sidewalk Improvements
SIDE STREET AND ENTRANCE PROFILES

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	3B
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:





TAX MAP 40-4

NOTE:

1. SEE SHEET 2E STORM DRAINAGE PROFILES FOR DRAINAGE DESCRIPTIONS.

LEGEND

- PROPOSED PAVEMENT
- MILL AND OVERLAY
- SIDEWALK PAVEMENT
- DEMOLITION OF PAVEMENT
- F ____ LIMITS OF CONSTRUCTION IN FILL
- C _____ LIMITS OF CONSTRUCTION IN CUT

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

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EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS NOT FOR CONSTRUCTION

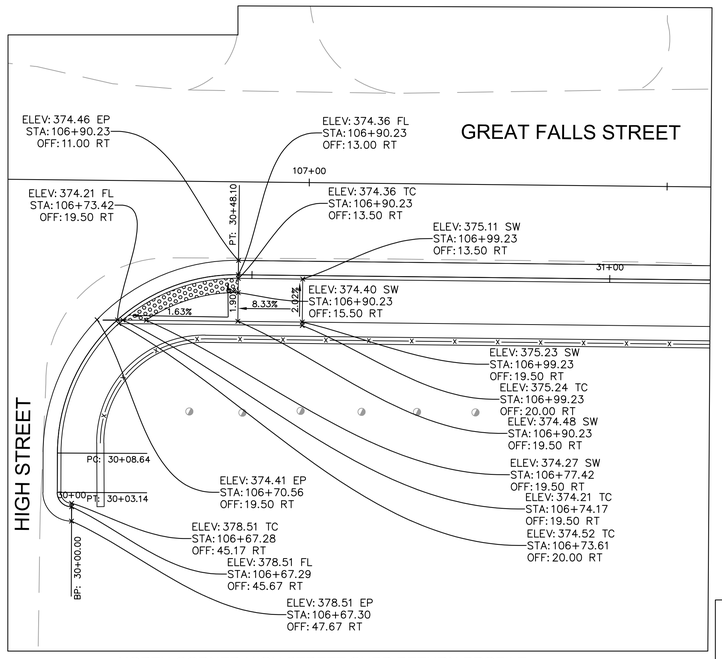
Great Falls Street
Sidewalk Improvements
PLAN AND PROFILE STA 108+00 TO STA 115+50

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

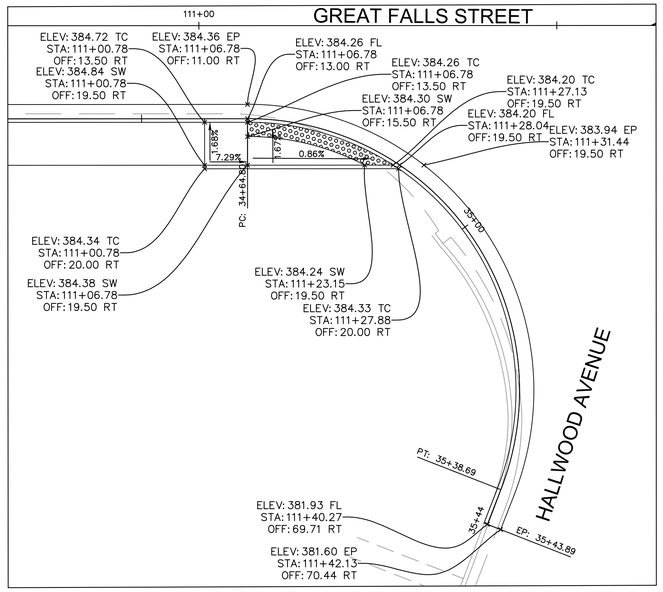
SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	4
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

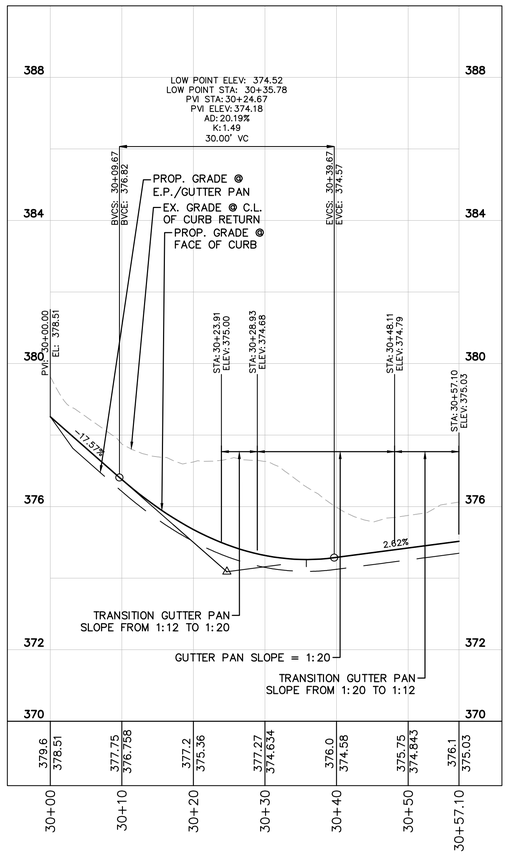
CURB RETURN PROFILES AND GRADING

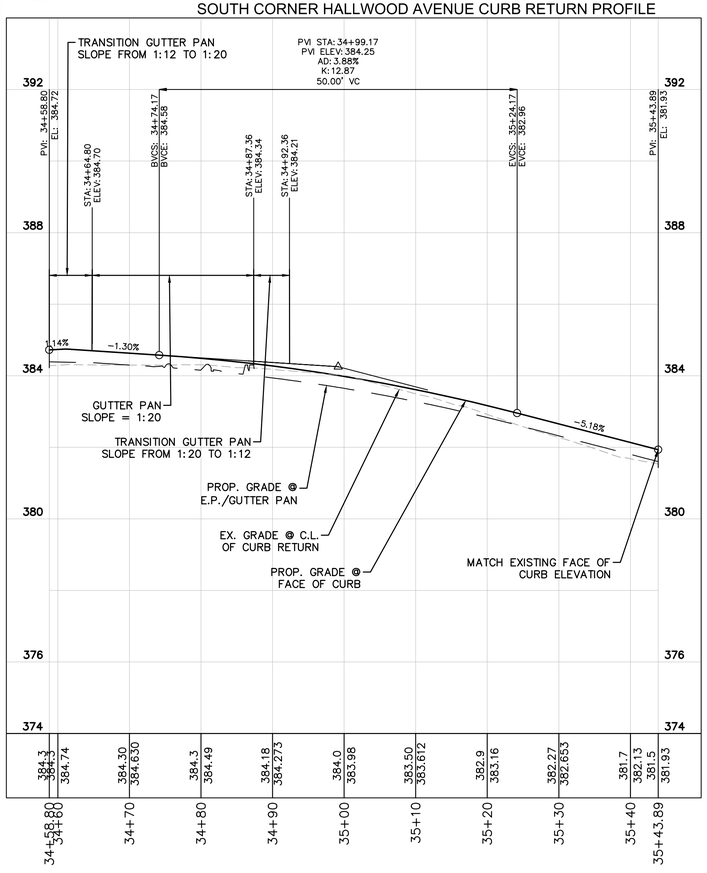


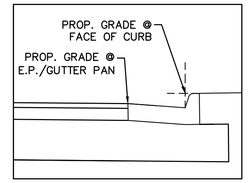
NORTH CORNER HIGH STREET CURB RETURN PROFILE



SOUTH CORNER HALLWOOD AVENUE CURB RETURN PROFILE







GRAPHIC SCALE IN FEET
0 5 10 20

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)
0 10 20
2 1 0

TAX MAP 40-4

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
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07/11/2017
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PRE-FINAL PLANS NOT FOR CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

Great Falls Street
Sidewalk Improvements
CURB RETURN PROFILES AND GRADING

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	4A(1)
	CHECKED BY: BB	

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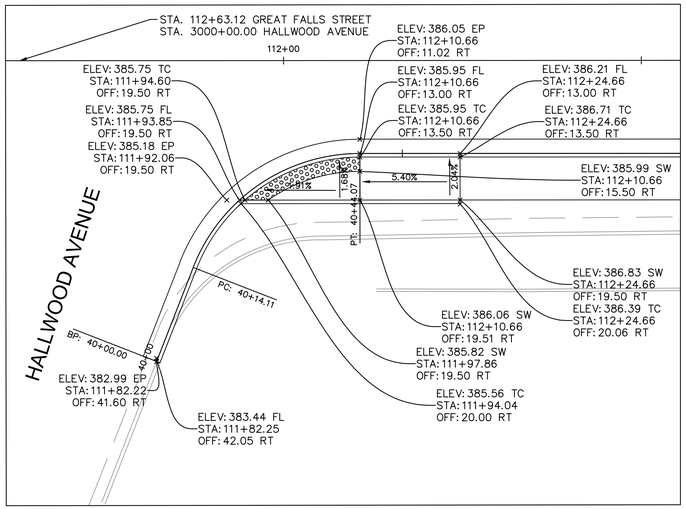
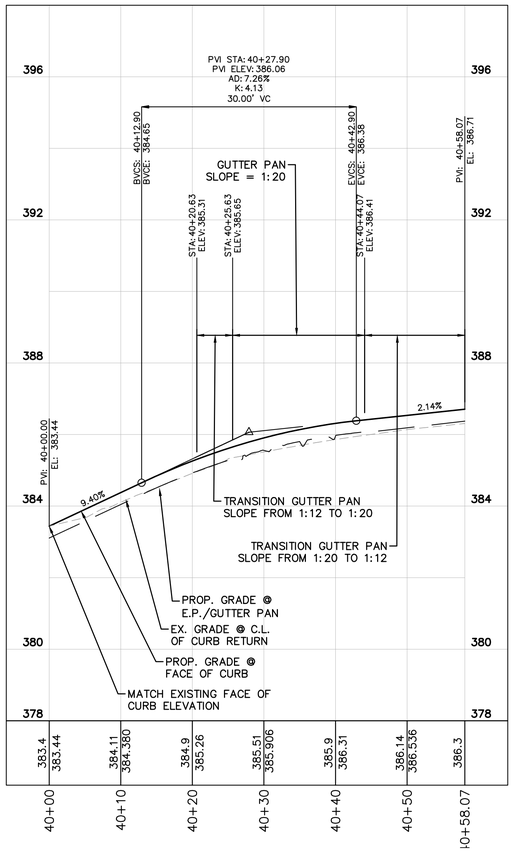
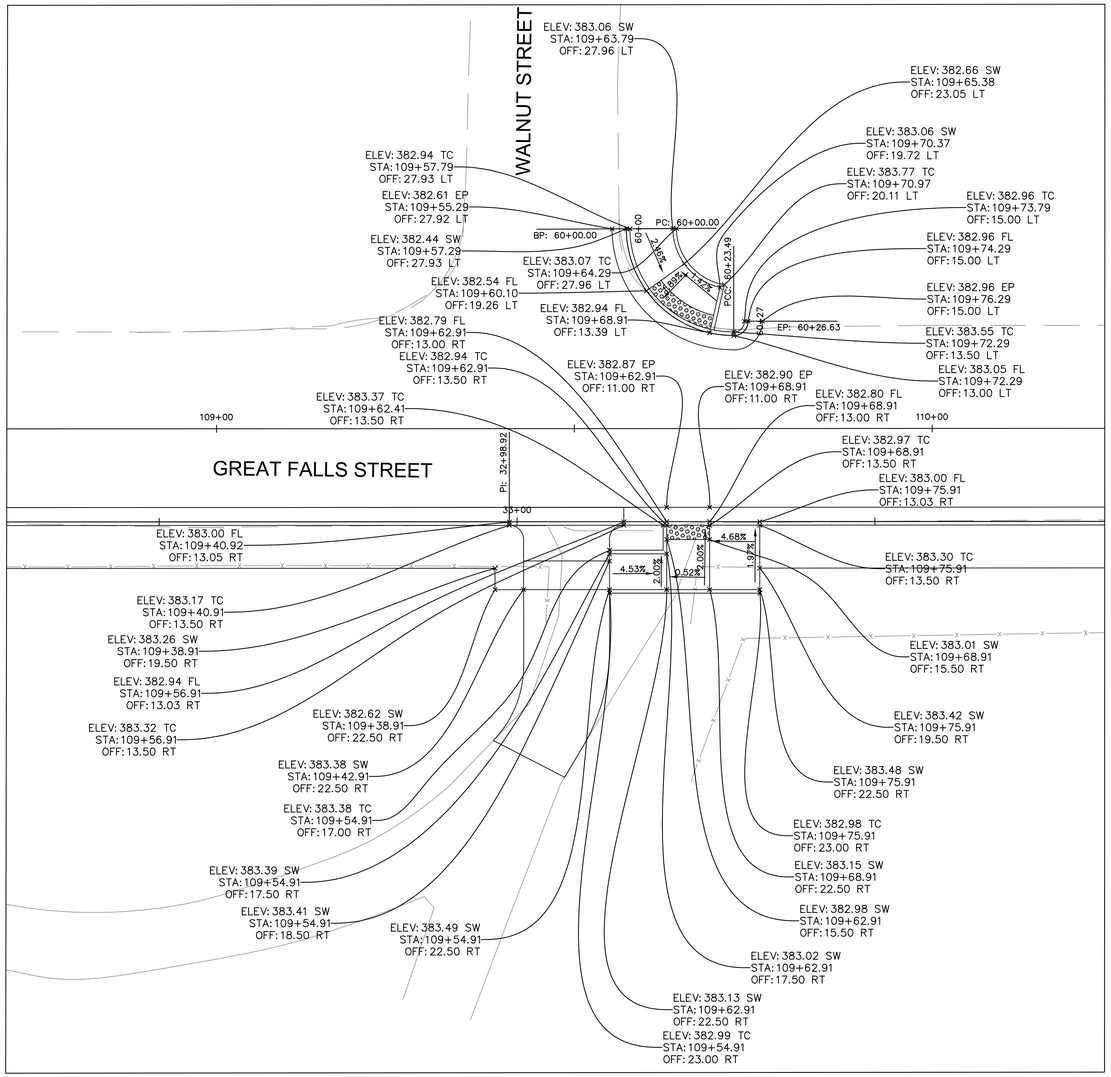
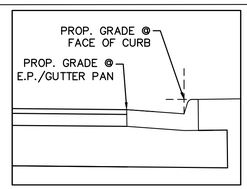
CURB RETURN PROFILES AND GRADING



NORTH CORNER HALLWOOD AVENUE CURB RETURN PROFILE







NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)
0 1 2
0 10 20

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

TAX MAP 40-4

EMERGENCY POLICE – FIRE – RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
CURB RETURN PROFILES AND GRADING

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	4A(2)
	CHECKED BY: BB	

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

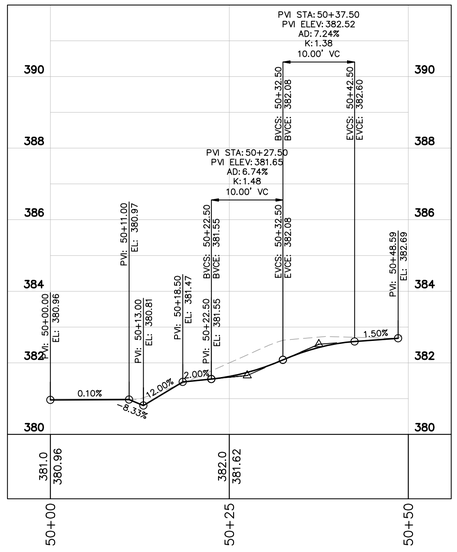
Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

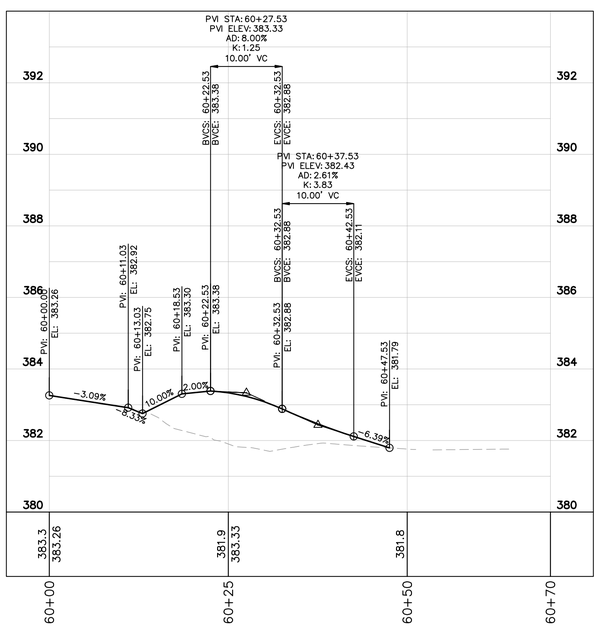
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

SIDE STREET AND ENTRANCE PROFILES

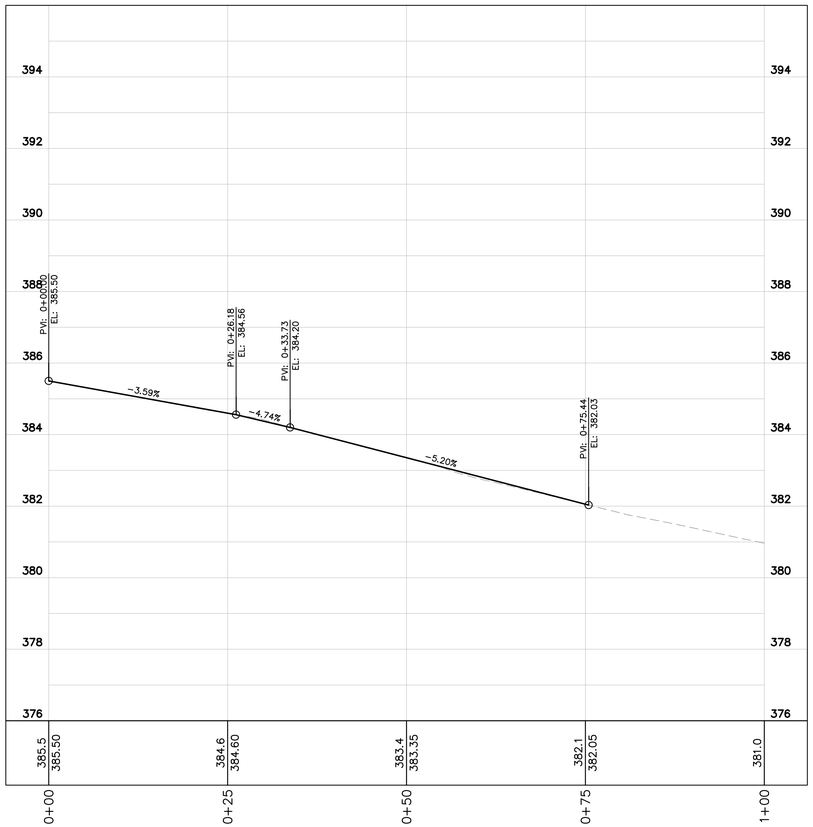
DRIVEWAY PROFILE - 50+00



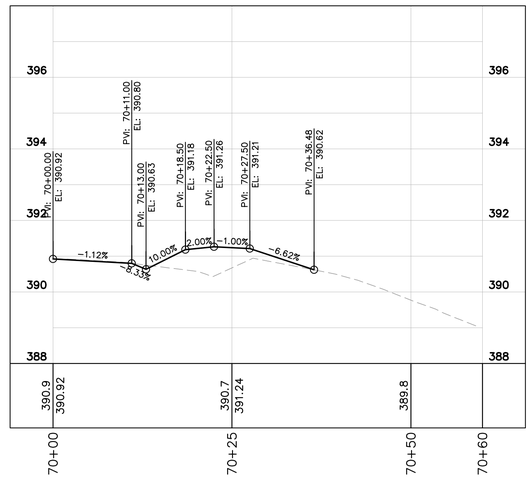
DRIVEWAY PROFILE - 60+00



HALLWOOD STREET CENTERLINE PROFILE

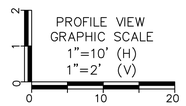


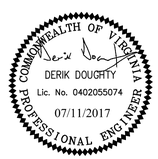
DRIVEWAY PROFILE - 70+00



TAX MAP 40-4

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)





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EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
SIDE STREET AND ENTRANCE PROFILES

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	4B
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
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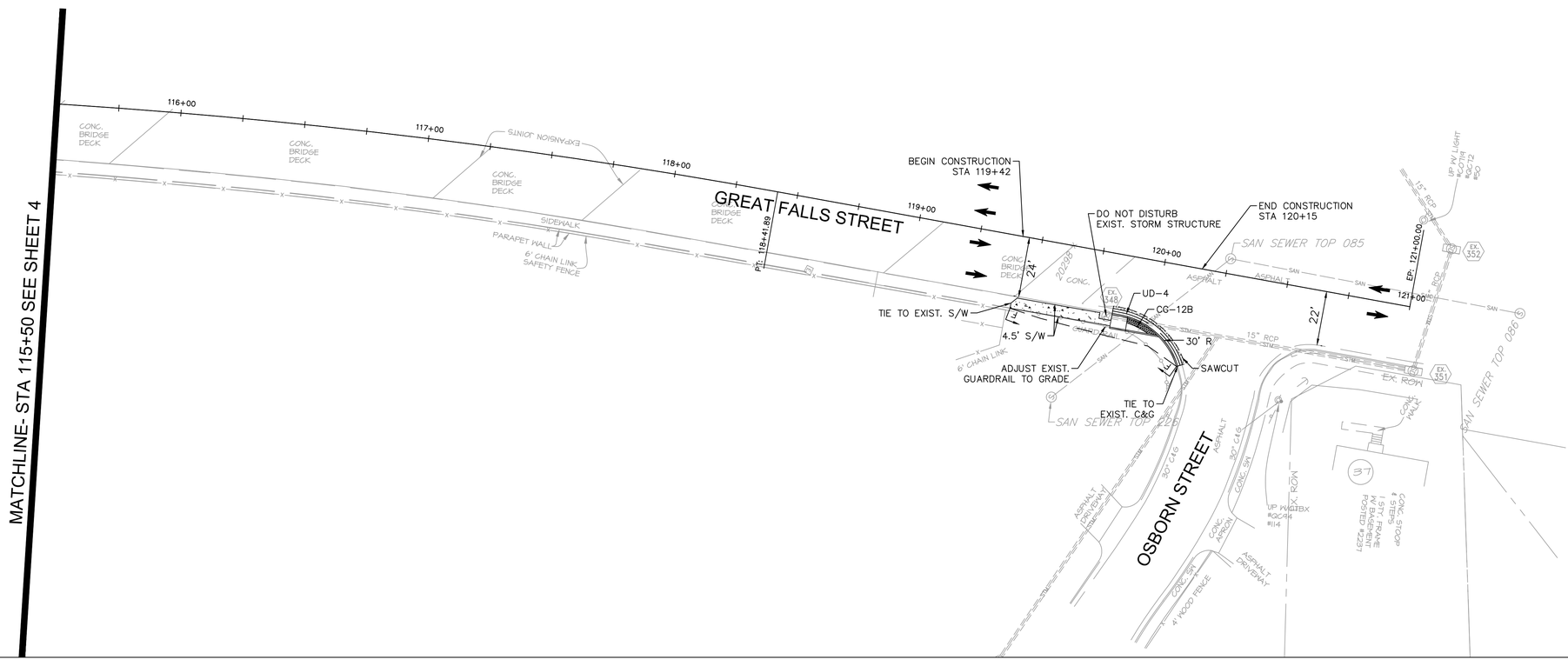


LEGEND

- PROPOSED PAVEMENT
- MILL AND OVERLAY
- SIDEWALK PAVEMENT
- DEMOLITION OF PAVEMENT
- F — — — LIMITS OF CONSTRUCTION IN FILL
- C ——— LIMITS OF CONSTRUCTION IN CUT

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

PRE-FINAL PLANS
NOT FOR CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

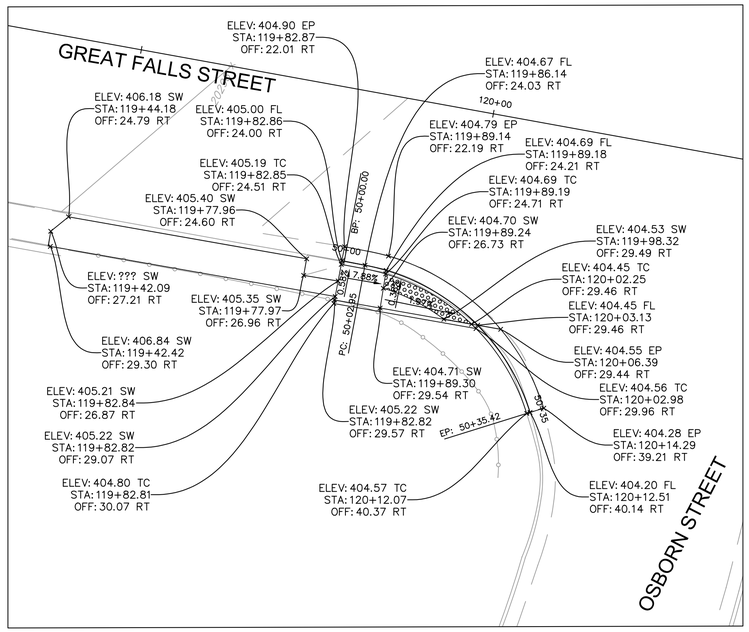
Great Falls Street
Sidewalk Improvements
PLAN AND PROFILE STA 115+50 TO STA 121+00

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

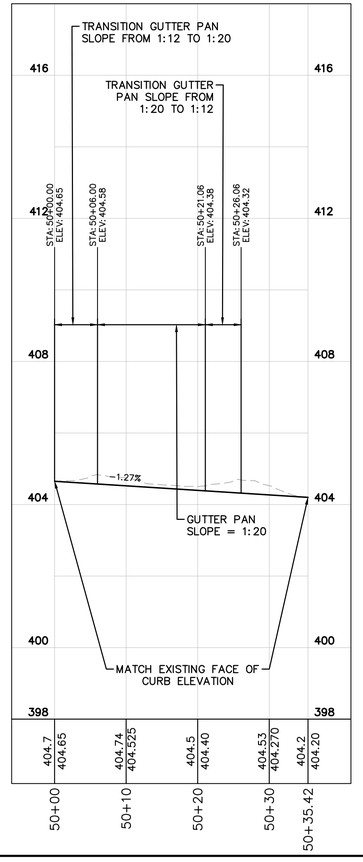
SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	5
	CHECKED BY: BB	

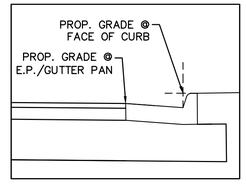
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CURB RETURN PROFILES AND GRADING



SOUTH CORNER OSBORNE AVENUE CURB RETURN PROFILE





NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

PROFILE VIEW
GRAPHIC SCALE
1"=10' (H)
1"=2' (V)
0 10 20
2
1
0

Kimley»Horn

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COMMONWEALTH OF VIRGINIA
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07/11/2017
PROFESSIONAL ENGINEER

TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
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703-324-5800

REVISIONS

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PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

Great Falls Street
Sidewalk Improvements
CURB RETURN PROFILES AND GRADING

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	5A
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

SIGNING AND STRIPING PLAN

NORTH WEST STREET (25 MPH)
WEST FALLS WAY (15 MPH)
CREST PLACE (25 MPH)
GREAT FALLS STREET (35 MPH)
LOCUST STREET (25 MPH)
HIGH STREET (25 MPH)
WALNUT STREET (25 MPH)
WOODLAND DRIVE (25 MPH)
HALLWOOD AVENUE

RELOCATE EXISTING SIGN
SPEED LIMIT 35
RELOCATE EXISTING SIGNS
GREAT FALLS ST
LOCUST ST
HIGH ST
694
STOP
PROPOSED D3-1
DO NOT DISTURB EXISTING R2-1 (25 MPH)
RELOCATE EXISTING SIGN
ADOPT A HIGHWAY
WALNUT ST
HALLWOOD AVE

MATCHLINE- STA 108+00 SEE THIS SHEET
MATCHLINE- STA 108+00 SEE THIS SHEET
MATCHLINE- STA 115+50 SEE SHEET 1C(1)

TAX MAP 40-4

SIGN LEGEND
- PROPOSED SIGN
- EXISTING SIGN
- SIGN PROPOSED SIGN PANEL
- SIGN EXISTING SIGN PANEL

PAVEMENT MARKING LEGEND
- (A) TYPE B, CLASS I, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING , 24" WIDTH, 24" SPACING (10' LINE)

GRAPHIC SCALE IN FEET
0 12.5 25 50

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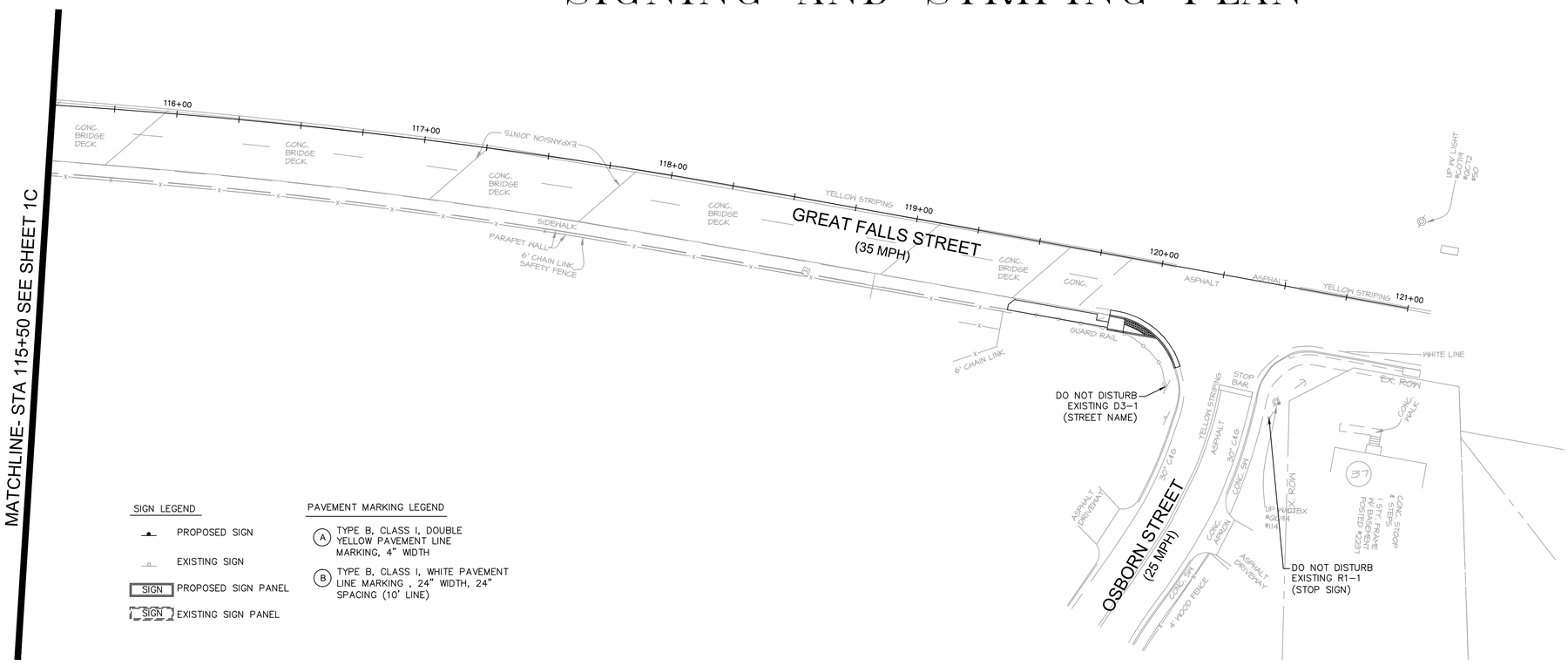
Sidewalk Improvements
SIGNING AND STRIPING PLAN

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	6(1)
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

SIGNING AND STRIPING PLAN



SIGN LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- SIGN PROPOSED SIGN PANEL
- SIGN EXISTING SIGN PANEL

PAVEMENT MARKING LEGEND

- (A) TYPE B, CLASS I, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING , 24" WIDTH, 24" SPACING (10' LINE)

SIGNAGE GENERAL NOTES:

1. All signs shall be in accordance with the most current edition of each of the following manuals or the most recent revision thereof:

A. Manual on Uniform Traffic Control Devices (MUTCD)
B. The Virginia Supplement to the Manual on Uniform Traffic Control Devices
C. The Virginia Department of Transportation Road and Bridge Specifications
D. The Virginia Department of Transportation Road and Bridge Standards

2. All signs as necessary or directed by Fairfax County shall be installed in accordance with St'd STP-1 with breakaway metal post. All signs, as necessary or directed by Fairfax County, designated to be relocated, shall be reinstalled in such a manner that the relocated sign complies with St'd STP-1

3. The Contractor shall stake all the proposed sign locations and relocations for review and approval by Fairfax County prior to any installation or relocation.

4. Proposed sign locations are approximate and shall be modified in the field to avoid conflicts with underground utilities or other obstructions and to comply with standards referenced in Signage General Note 1. Contractor is responsible for any disruptions in utility service due to digging for signage structure. If proposed signage will impact utility service, it shall be relocated with the approval of Fairfax County at no additional cost.

5. Contractor must provide shop drawings for all nonstandard signs to be approved by Fairfax County. Contractor shall design signs in accordance with the current VDOT Road and Bridge Standards and any subsequent revisions.

6. Unless otherwise indicated on plans, all breakaway sign structures shall be located within 25 feet of the sign's current field location or as directed by Fairfax County.

7. The Contractor is to coordinate with Fairfax County for the handling of all salvaged materials (sign panels, framing members and miscellaneous hardware).

PAVEMENT MARKING GENERAL NOTES;:

1. All pavement markings shall be in accordance with the most current edition of each of the following manuals or the most recent revision thereof:

A. Manual on Uniform Traffic Control Devices (MUTCD)
B. The Virginia Supplement to the Manual on Uniform Traffic Control Devices
C. The Virginia Department of Transportation Road and Bridge Specifications
D. The Virginia Department of Transportation Road and Bridge Standards

2. All pavement markings shall be Type B, Class I, unless otherwise noted in the Pavement Marking legend and in accordance with VDOT Road and Bridge Standards and VDOT Road and Bridge Specifications.

3. Any existing pavement markings that conflict with the proposed pavement markings shall be completely eradicated in accordance with VDOT Road and Bridge Standards and VDOT Road and Bridge Specifications.

4. Limits of proposed pavement markings and raised markers are approximate and shall be modified in the field to ensure that proposed pavement markings and raised markers continue until existing pavement markings can be matched.

5. Elongated arrows shall be in accordance with MUTCD and VDOT Road and Bridge Specifications.

6. Any changes to the pavement marking plan as shown shall be approved by Fairfax County.

TAX MAP 40-4

GRAPHIC SCALE IN FEET
0 12.5 25 50

NORTH

COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

CAPITAL FACILITIES
703-324-5800

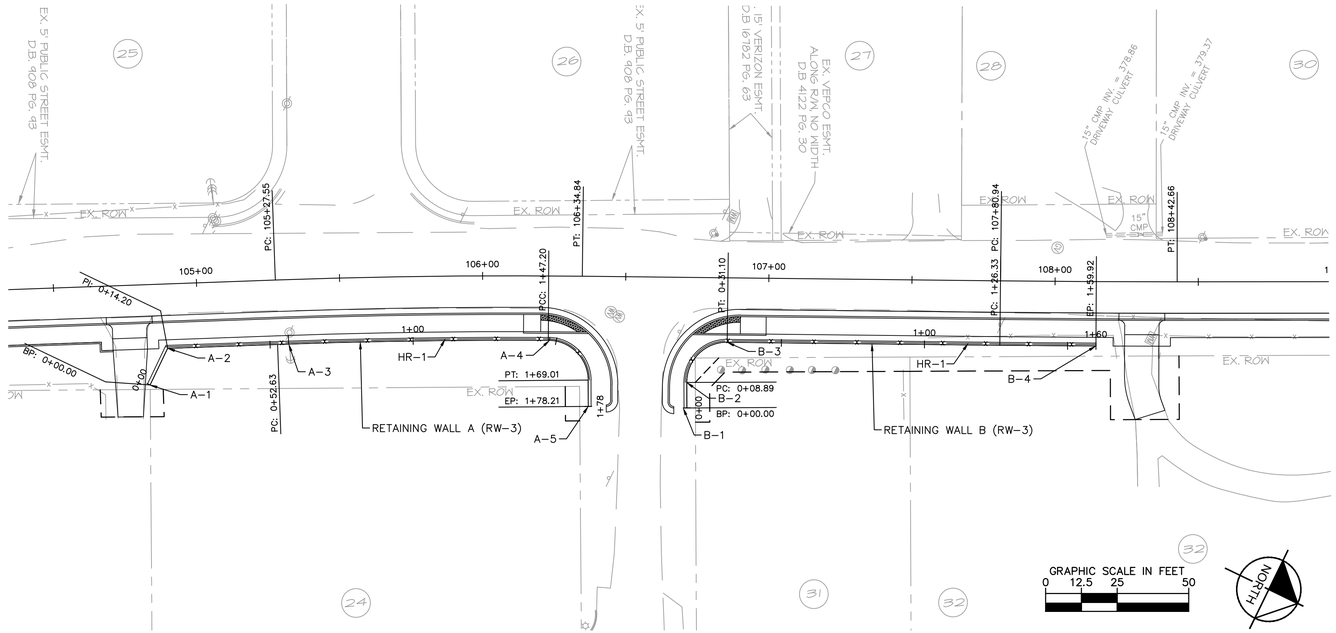
Great Falls Street
Sidewalk Improvements
SIGNING AND STRIPING PLAN

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	6(2)
	CHECKED BY: BB	

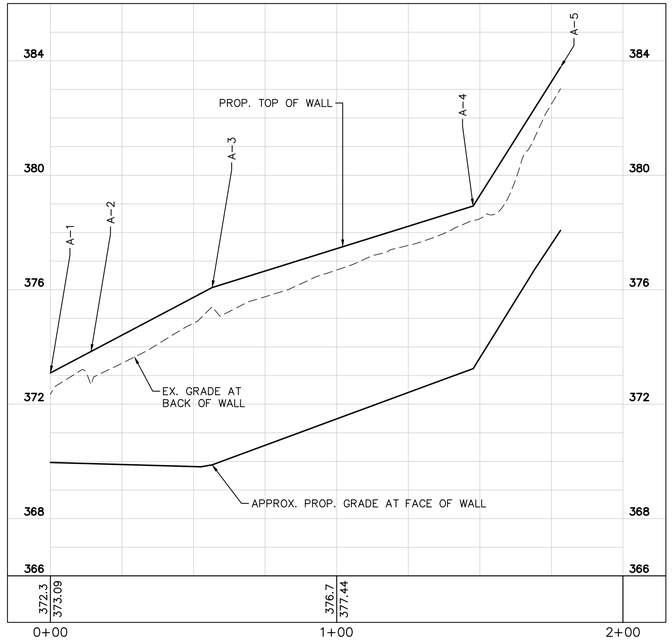
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

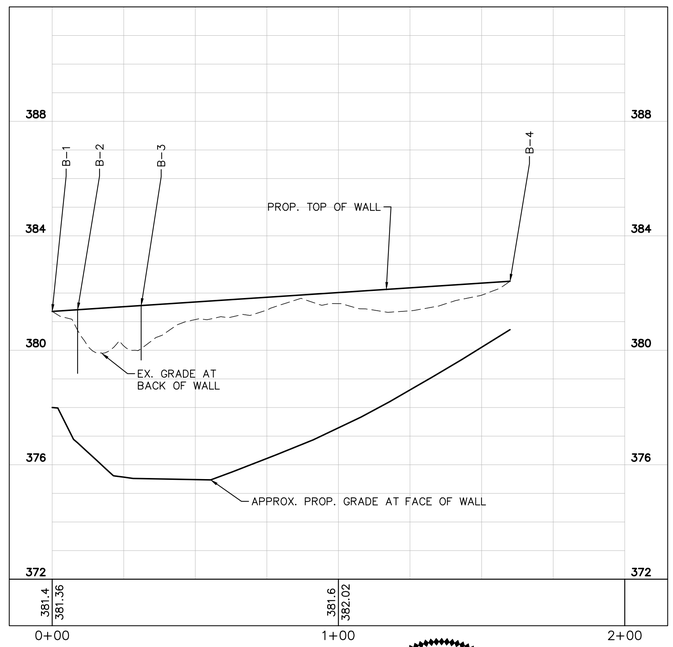
RETAINING WALL PROFILES AND DETAILS

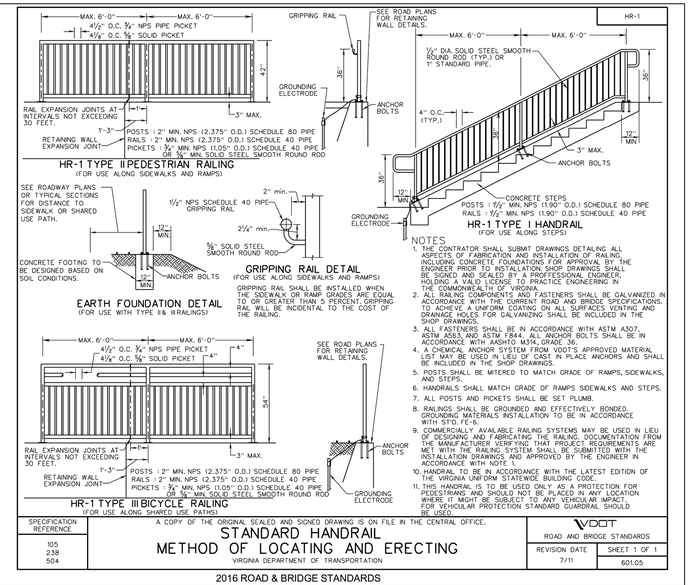


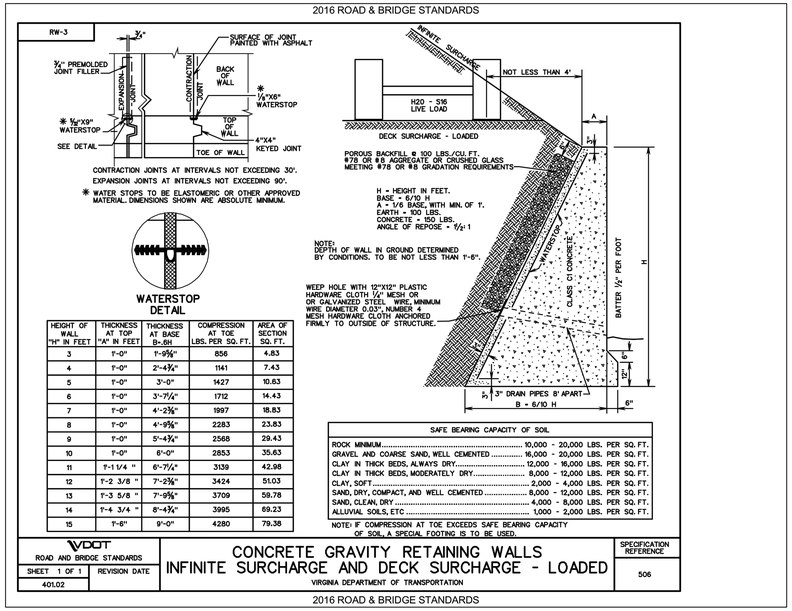
RET. WALL A					
PROFILE POINT	ALIGNMENT	STATION	OFFSET	T.W. ELEV.	E.G. ELEV.
A-1	GREAT FALLS STREET	104+82.54	35.07' RT	373.09'	372.34
A-2	GREAT FALLS STREET	104+89.12	22.48' RT	373.84'	372.68
A-3	GREAT FALLS STREET	105+31.45	22.48' RT	376.08'	375.40
A-4	GREAT FALLS STREET	106+23.55	22.49' RT	378.93'	378.43
A-5	GREAT FALLS STREET	106+37.42	45.46' RT	383.78'	383.03

RET. WALL B					
PROFILE POINT	ALIGNMENT	STATION	OFFSET	T.W. ELEV.	E.G. ELEV.
B-1	GREAT FALLS STREET	106+71.84	45.58' RT	381.36	380.36
B-2	GREAT FALLS STREET	106+71.71	36.69' RT	381.41	380.70
B-3	GREAT FALLS STREET	106+85.70	22.48' RT	381.56	380.05
B-4	GREAT FALLS STREET	108+14.39	22.48' RT	382.41	382.41









HEIGHT OF WALL "H" IN FEET	THICKNESS AT TOP "A" IN FEET	THICKNESS AT BASE B=.6H	COMPRESSION AT TOE LBS. PER SQ. FT.	AREA OF SECTION SQ. FT.
3	1'-0"	1'-9⅝"	856	4.83
4	1'-0"	2'-4⅞"	1141	7.43
5	1'-0"	3'-0"	1427	10.83
6	1'-0"	3'-7¼"	1712	14.43
7	1'-0"	4'-2⅝"	1997	18.83
8	1'-0"	4'-9⅝"	2283	23.83
9	1'-0"	5'-4¾"	2568	29.43
10	1'-0"	6'-0"	2853	35.63
11	1'-1 1/4 "	6'-7¼"	3139	42.98
12	1'-2 3/8 "	7'-2⅜"	3424	51.03
13	1'-3 5/8 "	7'-9⅝"	3709	59.78
14	1'-4 3/4 "	8'-4¾"	3995	69.23
15	1'-6"	9'-0"	4280	79.38

SAFE BEARING CAPACITY OF SOIL	
ROCK MINIMUM	10,000 - 20,000 LBS. PER SQ. FT.
GRAVEL AND COARSE SAND, WELL CEMENTED	16,000 - 20,000 LBS. PER SQ. FT.
CLAY IN THICK BEDS, ALWAYS DRY	12,000 - 16,000 LBS. PER SQ. FT.
CLAY IN THICK BEDS, MODERATELY DRY	8,000 - 12,000 LBS. PER SQ. FT.
CLAY, SOFT	2,000 - 4,000 LBS. PER SQ. FT.
SAND, DRY, COMPACT, AND WELL CEMENTED	8,000 - 12,000 LBS. PER SQ. FT.
SAND, CLEAN, DRY	4,000 - 8,000 LBS. PER SQ. FT.
ALLUVIAL SOILS, ETC	1,000 - 2,000 LBS. PER SQ. FT.

NOTE: IF COMPRESSION AT TOE EXCEEDS SAFE BEARING CAPACITY OF SOIL, A SPECIAL FOOTING IS TO BE USED.

VDOT ROAD AND BRIDGE STANDARDS
SHEET 1 OF 1
401.02
REVISION DATE
CONCRETE GRAVITY RETAINING WALLS
INFINITE SURCHARGE AND DECK SURCHARGE - LOADED
VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIFICATION REFERENCE
506
2016 ROAD & BRIDGE STANDARDS

TAX MAP 40-4

EMERGENCY POLICE – FIRE – RESCUE 911
FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
RETAINING WALL PROFILES AND DETAILS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	7
	CHECKED BY: BB	

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

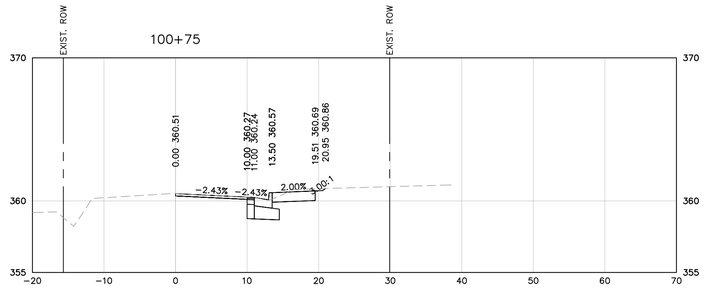
COMMONWEALTH OF VIRGINIA
DERIK DOUGHTY
Lic. No. 0402055074
07/11/2017
PROFESSIONAL ENGINEER

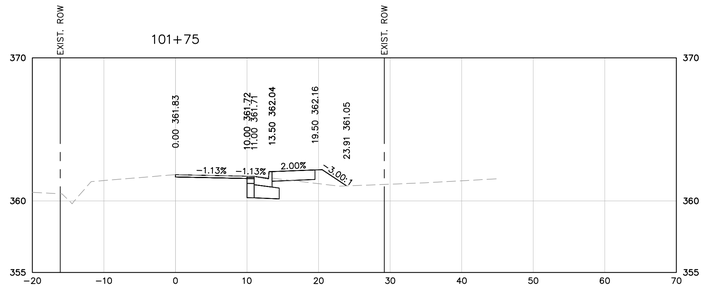
Kimley»Horn

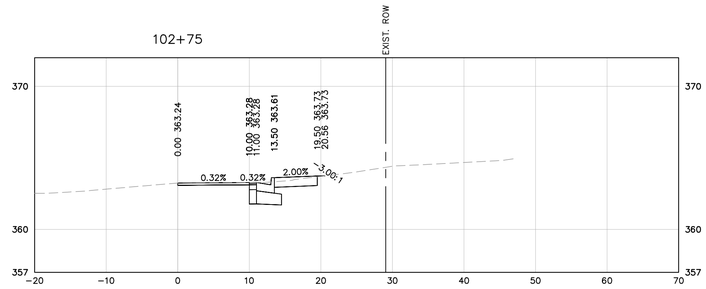
2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

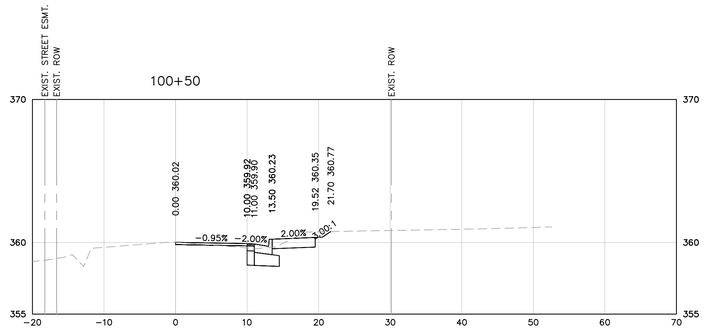
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

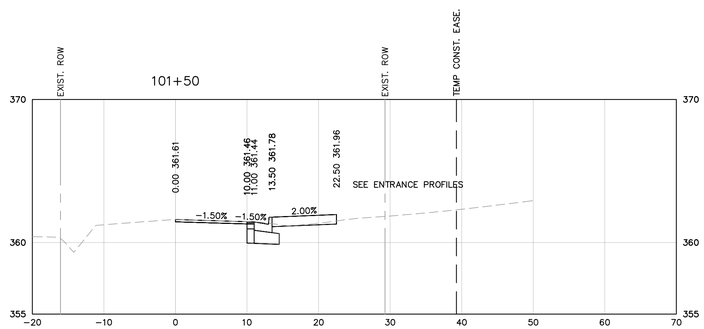
CROSS SECTIONS

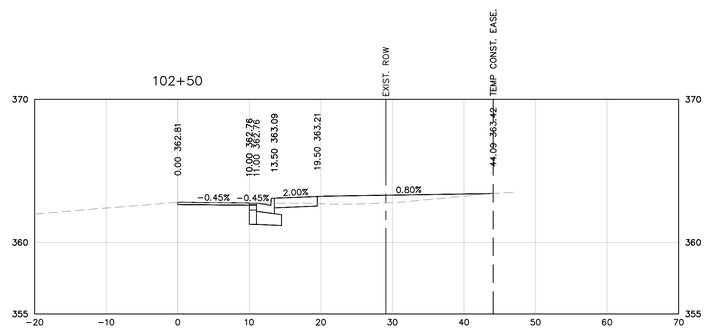


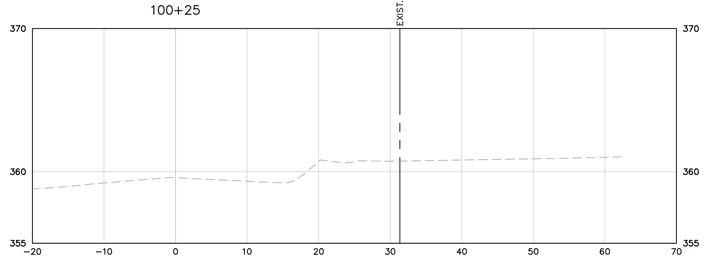


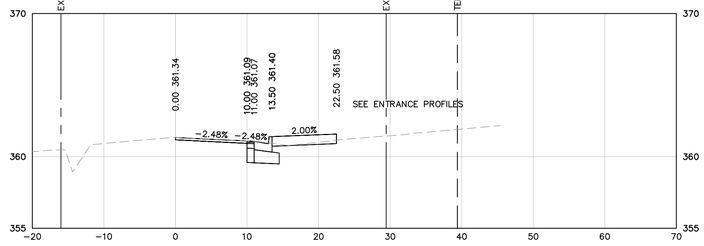


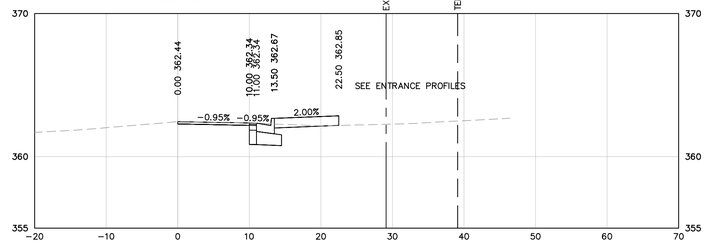


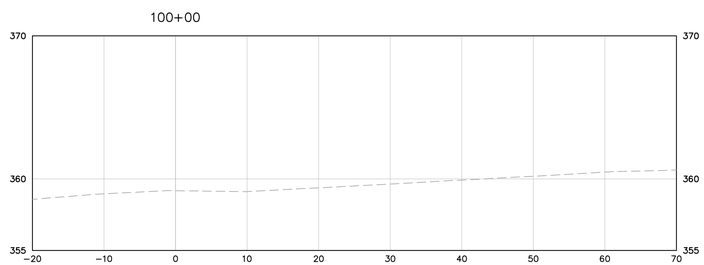


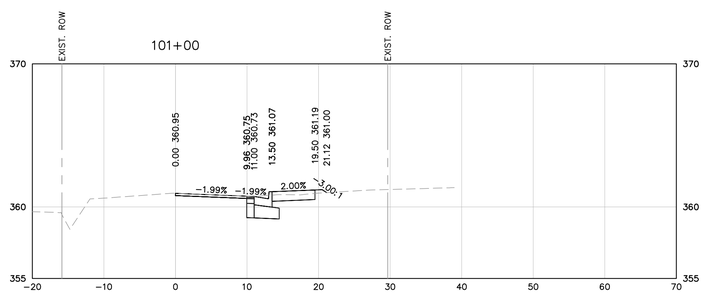


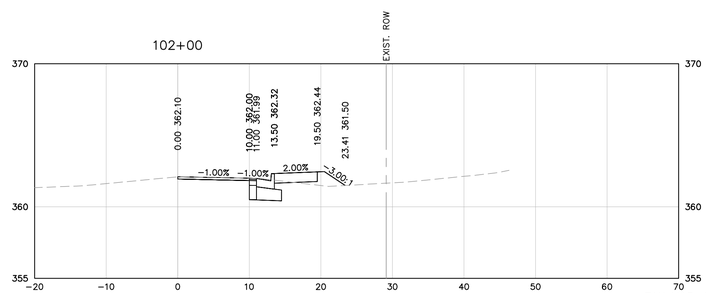












TAX MAP 40-4

CROSS SECTIONS
GRAPHIC SCALE
1"=10' (H)
1"=5' (V)

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
ROADWAY CROSS SECTIONS

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

REVISIONS

△#	DESCRIPTION	BY	APPROVED	DATE

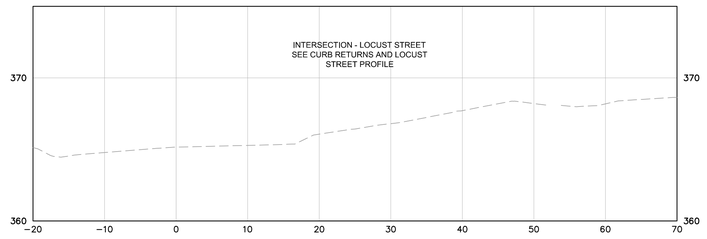
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
SEE GRAPHIC SCALE	DRAFTED BY: TC	X1
	CHECKED BY: BB	

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CROSS SECTIONS

103+75



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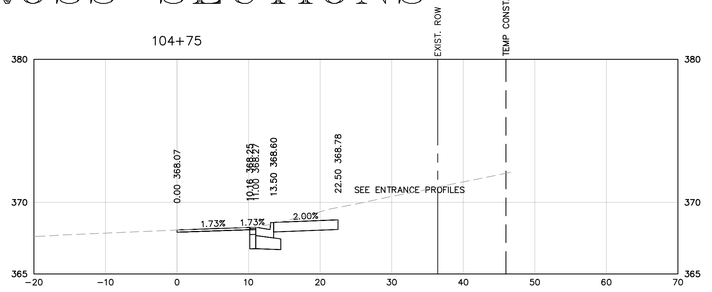

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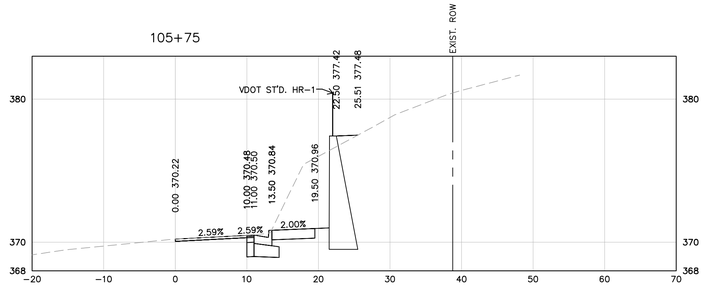

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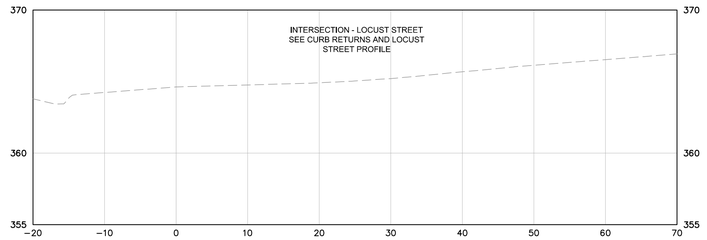

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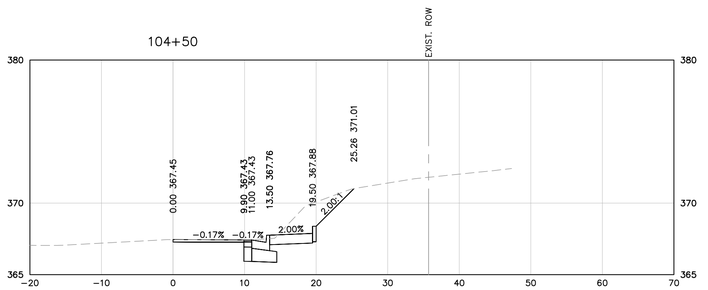

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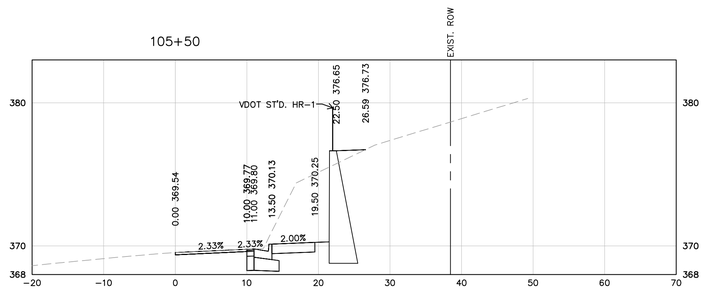

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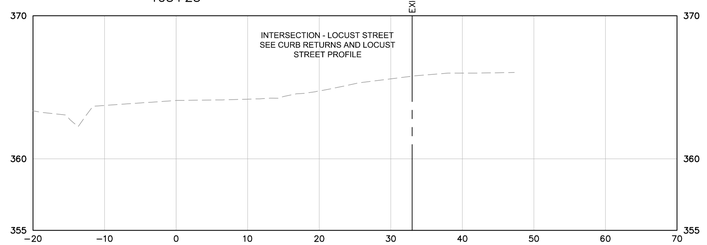

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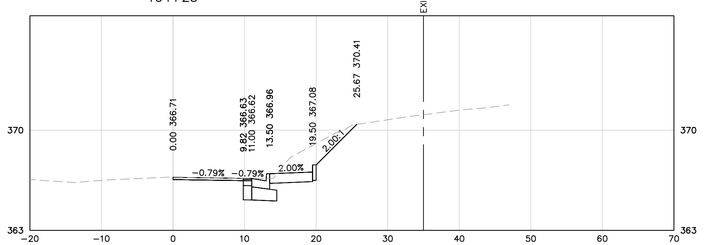

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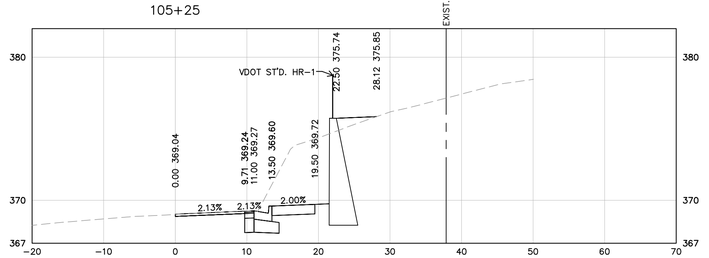

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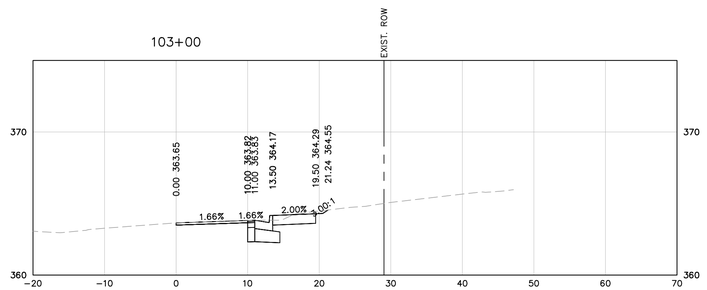

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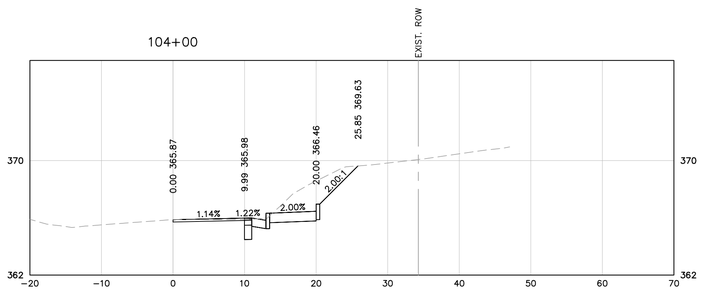

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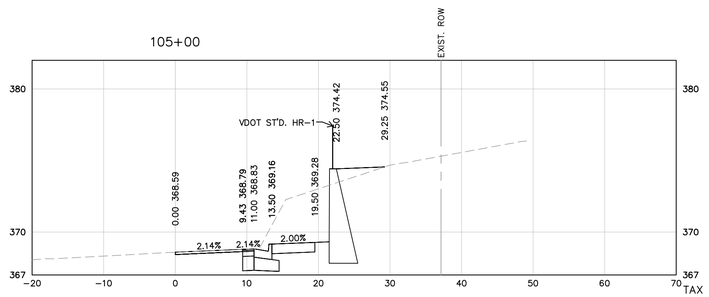


TAX MAP 40-4

CROSS SECTIONS
GRAPHIC SCALE
1"=10' (H)
1"=5' (V)

Kimley»Horn

2017 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400, Reston, VA 20191
Phone: 703-674-1300

EMERGENCY POLICE - FIRE - RESCUE 911

FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
ROADWAY CROSS SECTIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

SCALE
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=5'

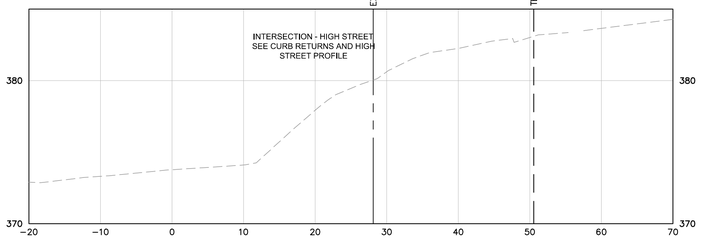
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB

SHEET
X2

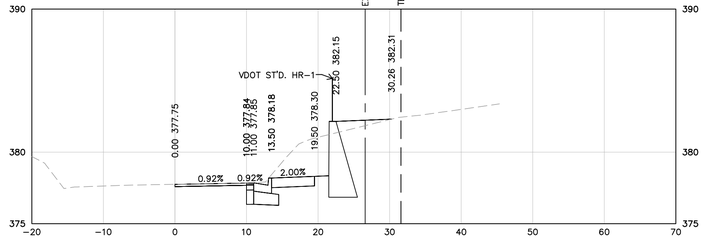
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CROSS SECTIONS

106+75



107+75



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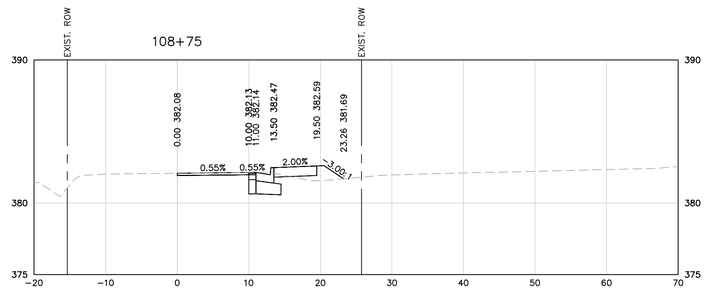
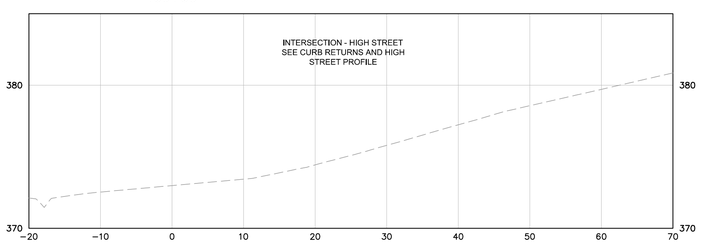


106+50



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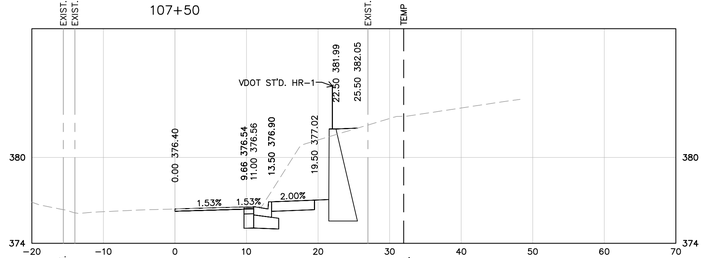

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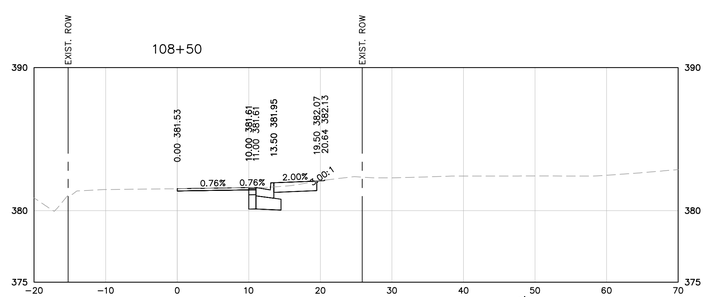

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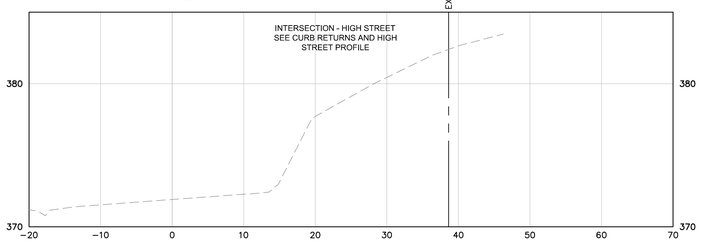

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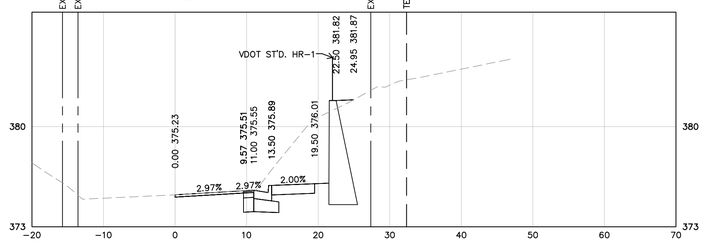

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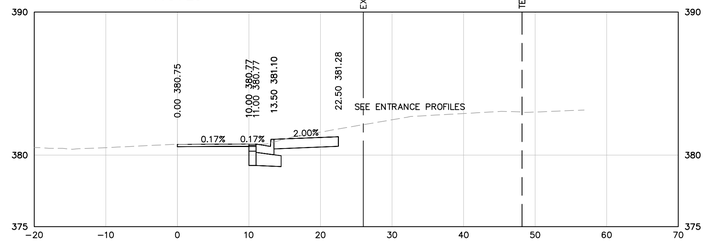

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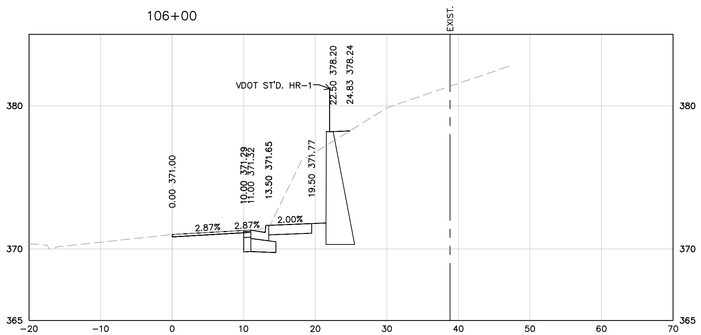

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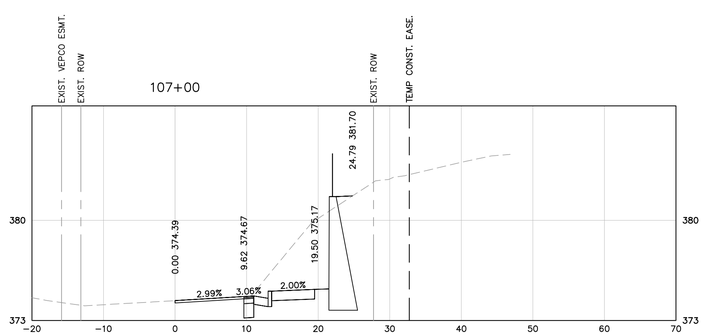

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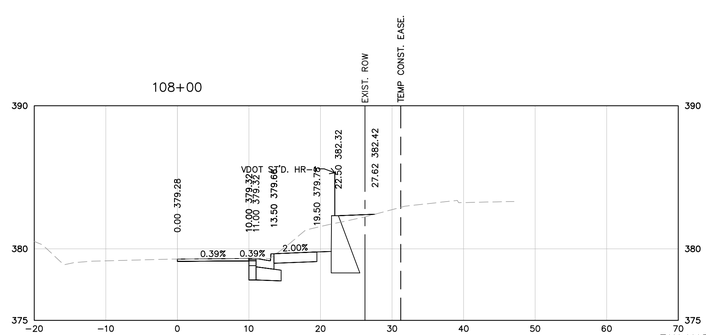
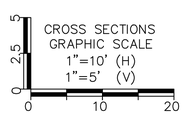


TAX MAP 40-4



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Phone: 703-674-1300

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FAIRFAX COUNTY, VIRGINIA
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
ROADWAY CROSS SECTIONS

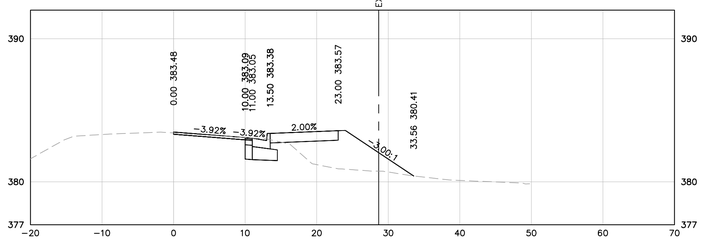
PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
HORIZ. GRAPHIC 1"=10'	DRAFTED BY: TC	X3
VERT. SCALE 1"=5'	CHECKED BY: BB	

CROSS SECTIONS

PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

109+75



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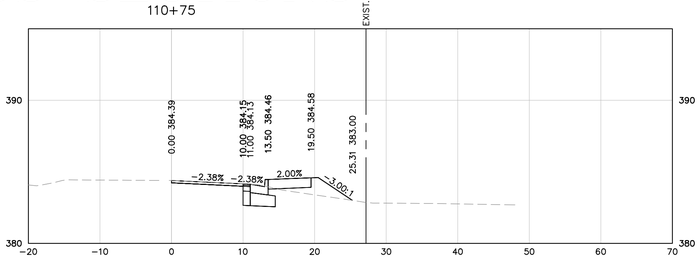

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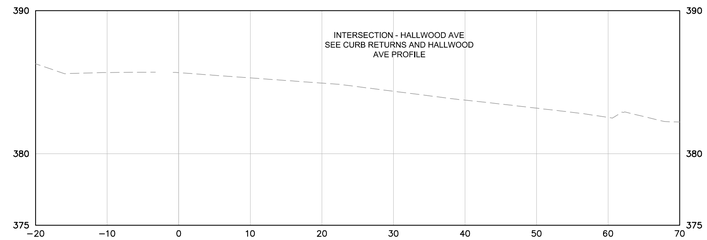

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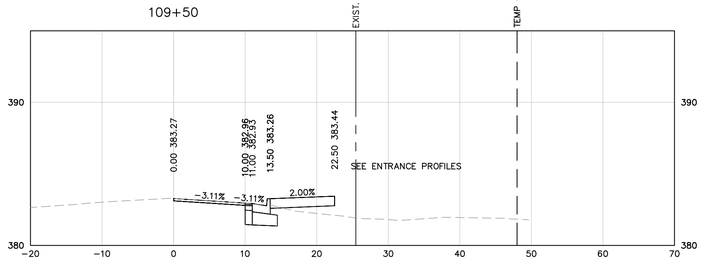

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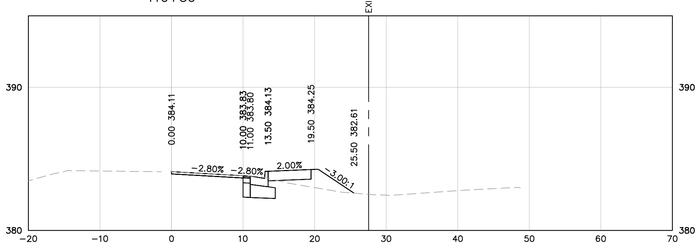

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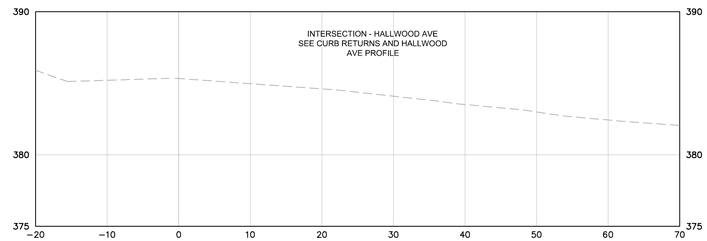

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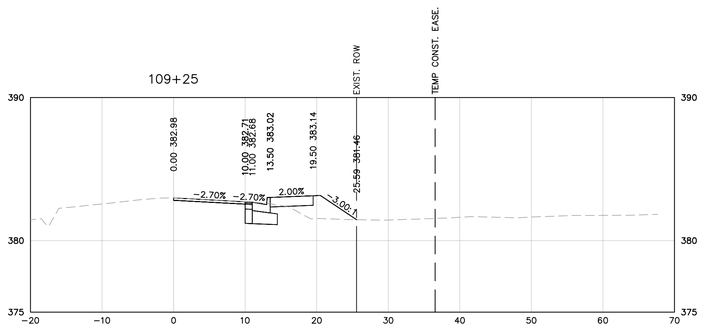

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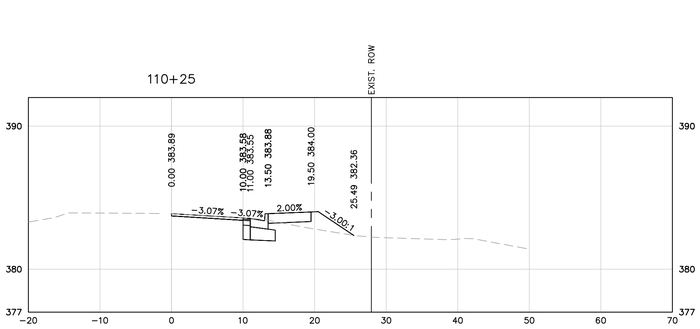

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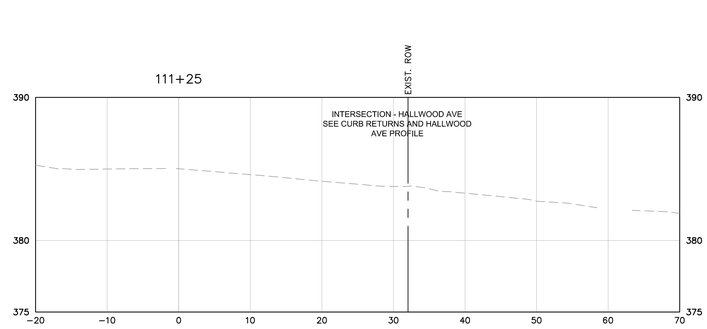

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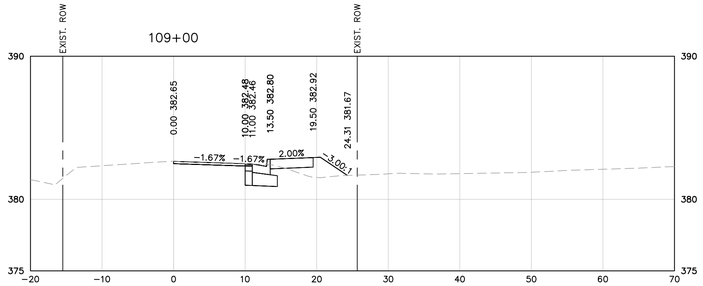

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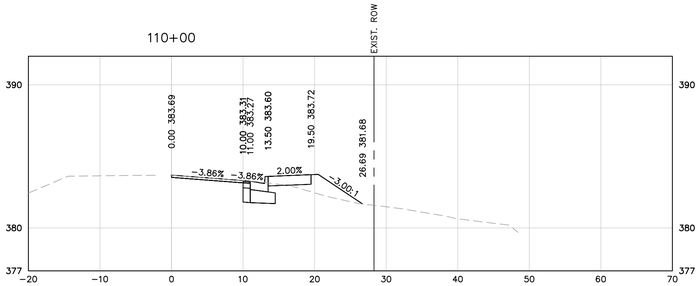

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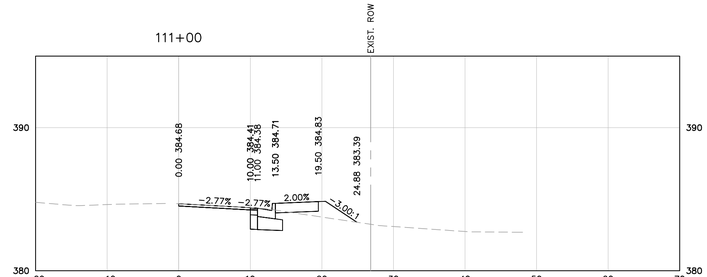

TAX MAP 40-4

CROSS SECTIONS
GRAPHIC SCALE
1"=10' (H)
1"=5' (V)

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DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
12000 GOVERNMENT CENTER PARKWAY, SUITE 449 FAIRFAX, VA., 22035-0052

CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
ROADWAY CROSS SECTIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

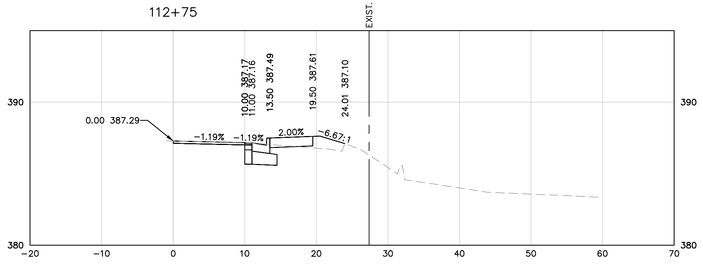
SCALE
HORIZ. SCALE=10'
VERT. SCALE=5'

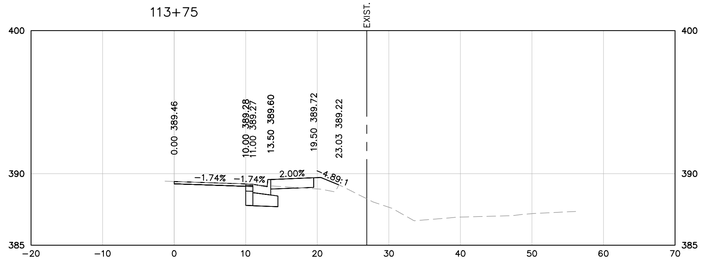
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB

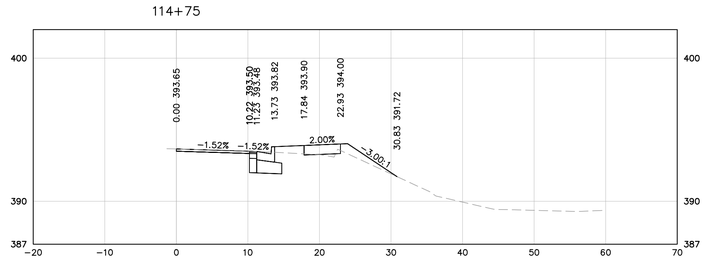
SHEET
X4

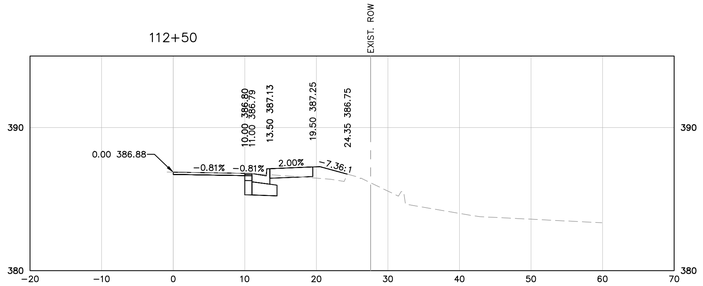
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

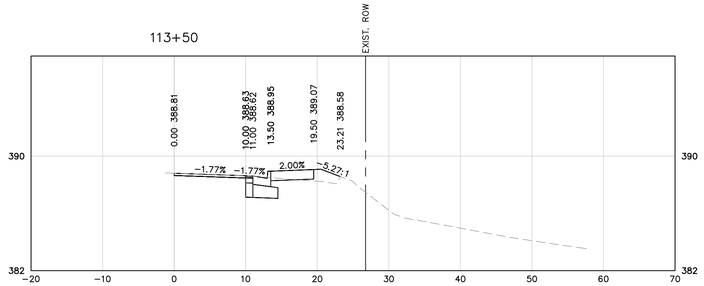
CROSS SECTIONS

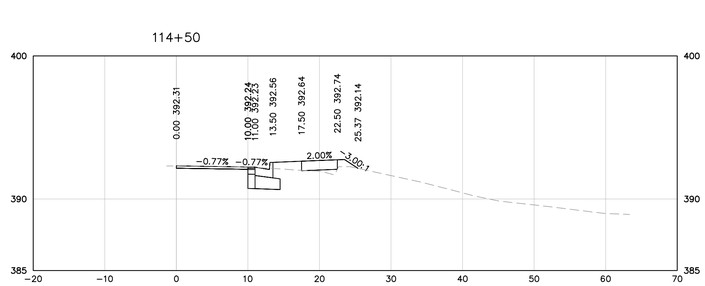


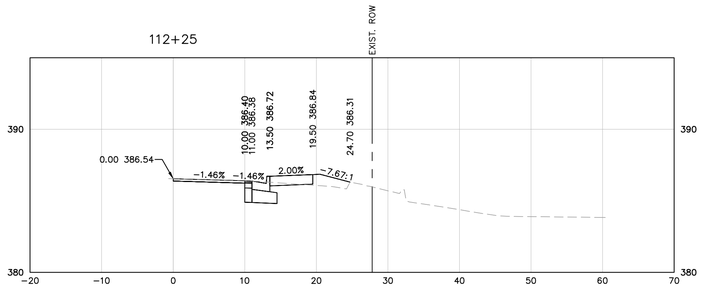


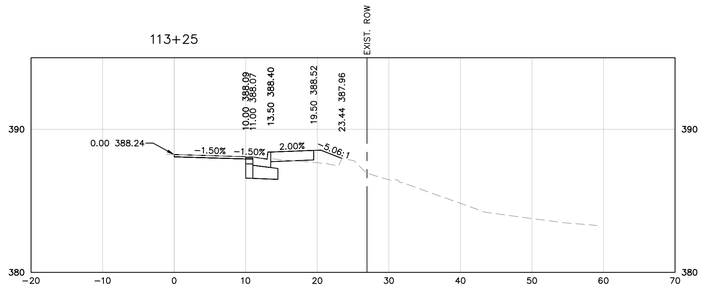


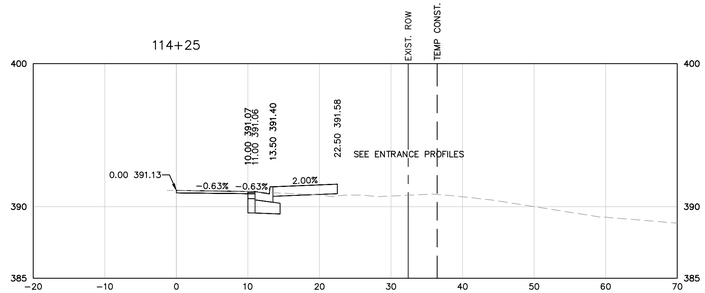


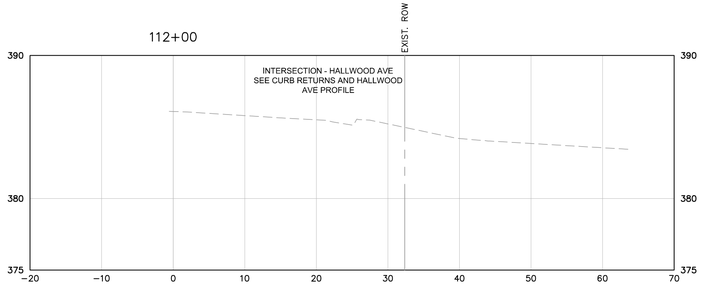


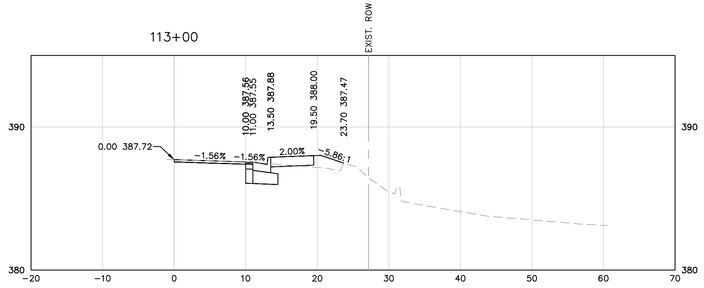


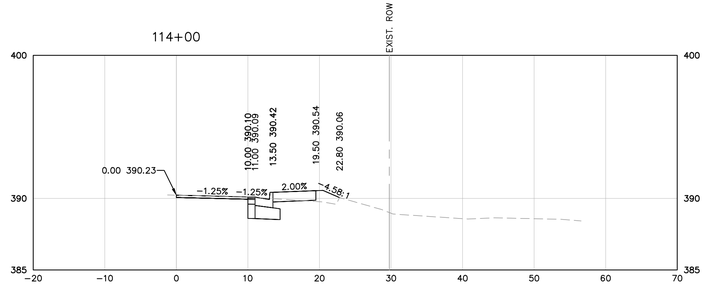












TAX MAP 40-4

CROSS SECTIONS
GRAPHIC SCALE
1"=10' (H)
1"=5' (V)

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CAPITAL FACILITIES
703-324-5800

Great Falls Street
Sidewalk Improvements
ROADWAY CROSS SECTIONS

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE
	PRE-FINAL PLANS NOT FOR CONSTRUCTION			

SCALE
HORIZ. SCALE: 1"=10'
VERT. SCALE: 1"=5'

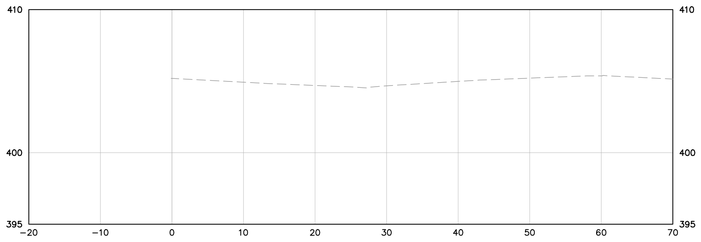
DESIGNED BY: DD
DRAFTED BY: TC
CHECKED BY: BB

SHEET
X5

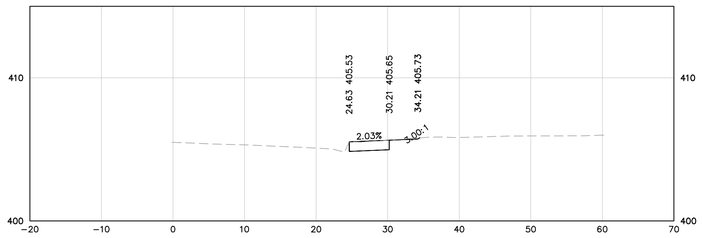
PROJECT MANAGER: JAMES BEALL, P.E.
SURVEYED BY, DATE: RICE ASSOCIATES, 3/1/2016
DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC.
SUBSURFACE UTILITY BY, DATE:

CROSS SECTIONS

120+00



119+75



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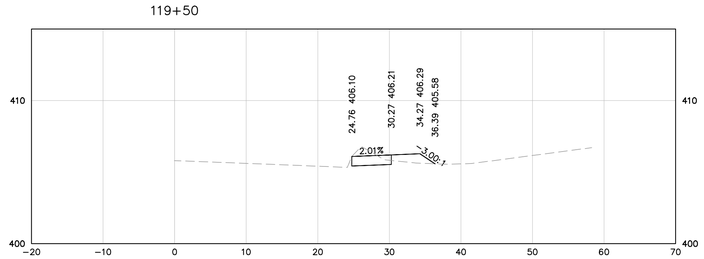

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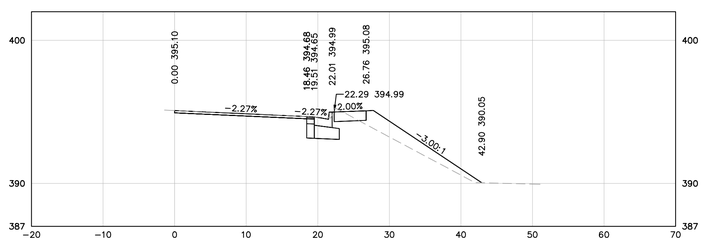
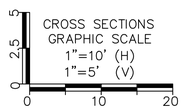


CROSS SECTIONS
GRAPHIC SCALE
1"=10' (H)
1"=5' (V)



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TAX MAP 40-4

EMERGENCY POLICE - FIRE - RESCUE 911

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Great Falls Street
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ROADWAY CROSS SECTIONS

PRE-FINAL PLANS
NOT FOR
CONSTRUCTION

REVISIONS △#	DESCRIPTION	BY	APPROVED	DATE

PROJECT NO. 5G25-060-042 FUND NO. 300-C30050

SCALE	DESIGNED BY: DD	SHEET
HORIZONTAL=10'	DRAFTED BY: TC	X6
VERTICAL=5'	CHECKED BY: BB	