JEFFERSON DAVIS HIGHWAY ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE BRT IMPROVEMENTS DESIGN/BUILD

DRAFT - 30% Design Documents

PROJECT DESCRIPTION

THE PROJECT INCLUDES THE IMPLEMENTATION OF BUS RAPID TRANSIT (BRT) LANES WITHIN THE MEDIAN OF JEFFERSON DAVIS HIGHWAY (ROUTE 1) FROM EAST GLEBE ROAD TO POTOMAC AVENUE AND ASSOCIATED IMPROVEMENTS. THE PROJECT WILL INCLUDE DESIGN AND CONSTRUCTION OF ALL REQUIRED ROADWAY AND DRAINAGE IMPROVEMENTS, SIGNING AND PAVEMENT MARKINGS, ROADWAY LIGHTING, SIGNALIZATION/COMMUNICATION SYSTEMS, LANDSCAPE, IRRIGATION AND UTILITY RELOCATION/RECONSTRUCTION.

ENVIRONMENTAL SITE ASSESSMENT

THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OF BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON SITE. THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS OR AREAS OF SOIL OR GROUNDWATER CONTAMINATED ON THE SITE.

SPECIAL USE PERMITS/ZONING MODIFICATIONS/WAVERS

NOT APPLICABLE.

VICINITY MAP

N.T.S.

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09	PAVEMENT MARKINGS & SIGNING PLAN
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10	TRAFFIC SIGNAL MODIFICATION PLAN - ROUTE 1 AND EAST GLEBE ROAD
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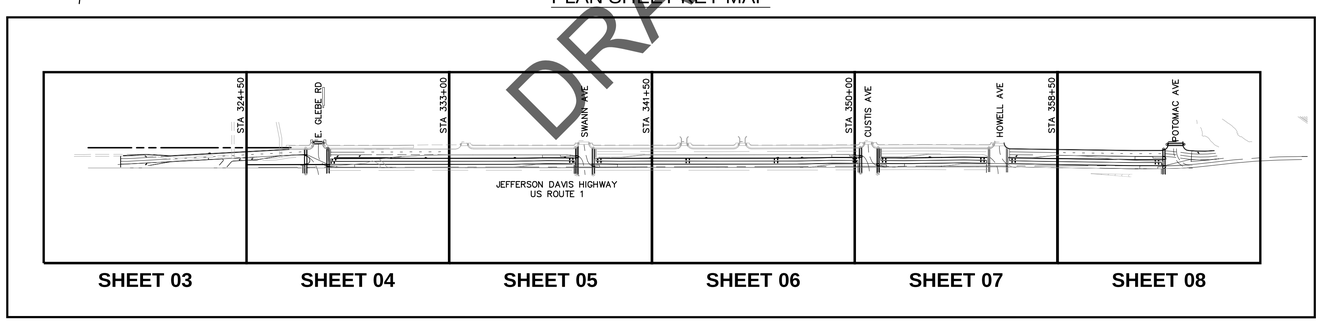
11	SEQUENCE OF CONST. & TRAFFIC CONTROL PLAN - PHASE 1
11A	SEQUENCE OF CONST. & TRAFFIC CONTROL PLAN - PHASE 2

NORTH

GRAPHIC SCALE IN FEET
0 150 300 600

PLAN SHEET KEY MAP



CITY OF ALEXANDRIA
301 KING STREET, SUITE 3200
ALEXANDRIA, VIRGINIA 22314

RECOMMENDED FOR APPROVAL DATE:
DIRECTOR OF –ENVIRONMENTAL QUALITY DIVISION

RECOMMENDED FOR APPROVAL DATE:
CHIEF–ENGINEERING & DESIGN DIVISION

RECOMMENDED FOR APPROVAL DATE:
CHIEF–CONSTRUCTION & INSPECTION DIVISION

RECOMMENDED FOR APPROVAL DATE:
DEPUTY DIRECTOR OF TRANSPORTATION

RECOMMENDED FOR APPROVAL DATE:
DEPUTY DIRECTOR OF ENGINEERING

RECOMMENDED FOR APPROVAL DATE:
DEPUTY DIRECTOR OF OPERATIONS

APPROVED DATE:
DIRECTOR

No.	REVISIONS	DATE	BY

Kimley-Horn and Associates, Inc.
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KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

TITLE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
01

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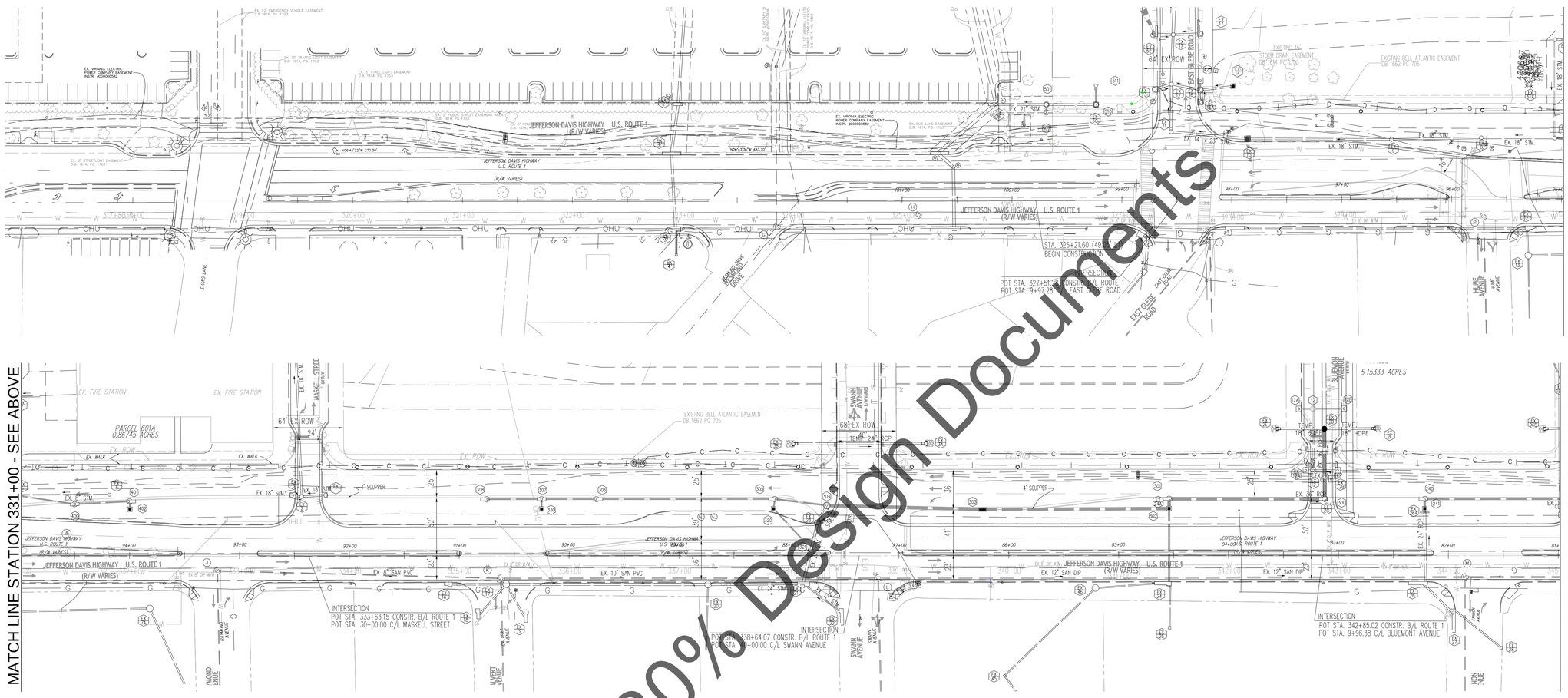

ABBREVIATIONS

ASPH.	ASPHALT
CDI	CURB DROP INLET
GI	GRATE INLET
SDMH	STORM DRAIN MANHOLE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
UNK	UNKNOWN
DIP	DUCTILE IRON PIPE
CONC.	CONCRETE
C&G	CURB AND GUTTER
TELE.	TELEPHONE
ELEC.	ELECTRIC
W/	WITH
TRAFF.	TRAFFIC
H.H.	HAND HOLE
D.B.	DEED BOOK
PG.	PAGE
INSTR.	INSTRUMENT
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
FES	FLARED END SECTION

SYMBOL LEGEND

	STORM DRAIN MANHOLE	-T-	TELEPHONE
	SANITARY MANHOLE	-C-	COMUNICATION
	WATER VALVE	-W-	WATER
	SIGN	-G-	GAS
	TRAFFIC LIGHT POLE	-FO-	FIBER OPTICS
	FIRE HYDRANT		
	TELEPHONE PEDESTAL		
	TRAFFIC		
	LIGHT POLE		
	UTILITY POLE		
	ELECTRIC BOX		
	ELECTRIC MANHOLE		
	GAS VALVE		
	TELEPHONE MANHOLE		
	GUY		
	UNKNOWN MANHOLE		
	INLET		
	STORM PIPE		
	SEWER PIPE		

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DRAWN BY C.P.M.
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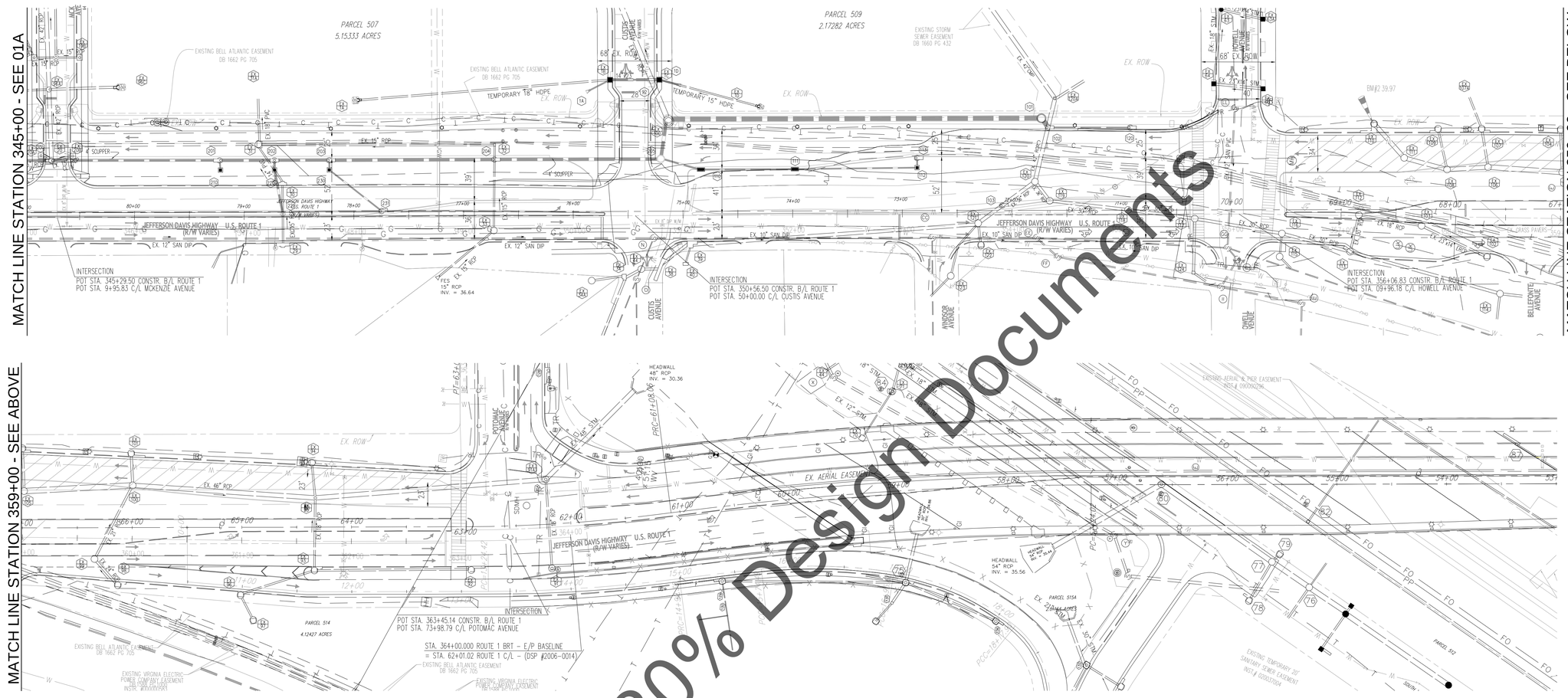

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DRAWN BY C.P.M.
CHECKED BY R.F.B.

SURVEY DATA

JEFFERSON DAVIS HIGHWAY
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DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
01B

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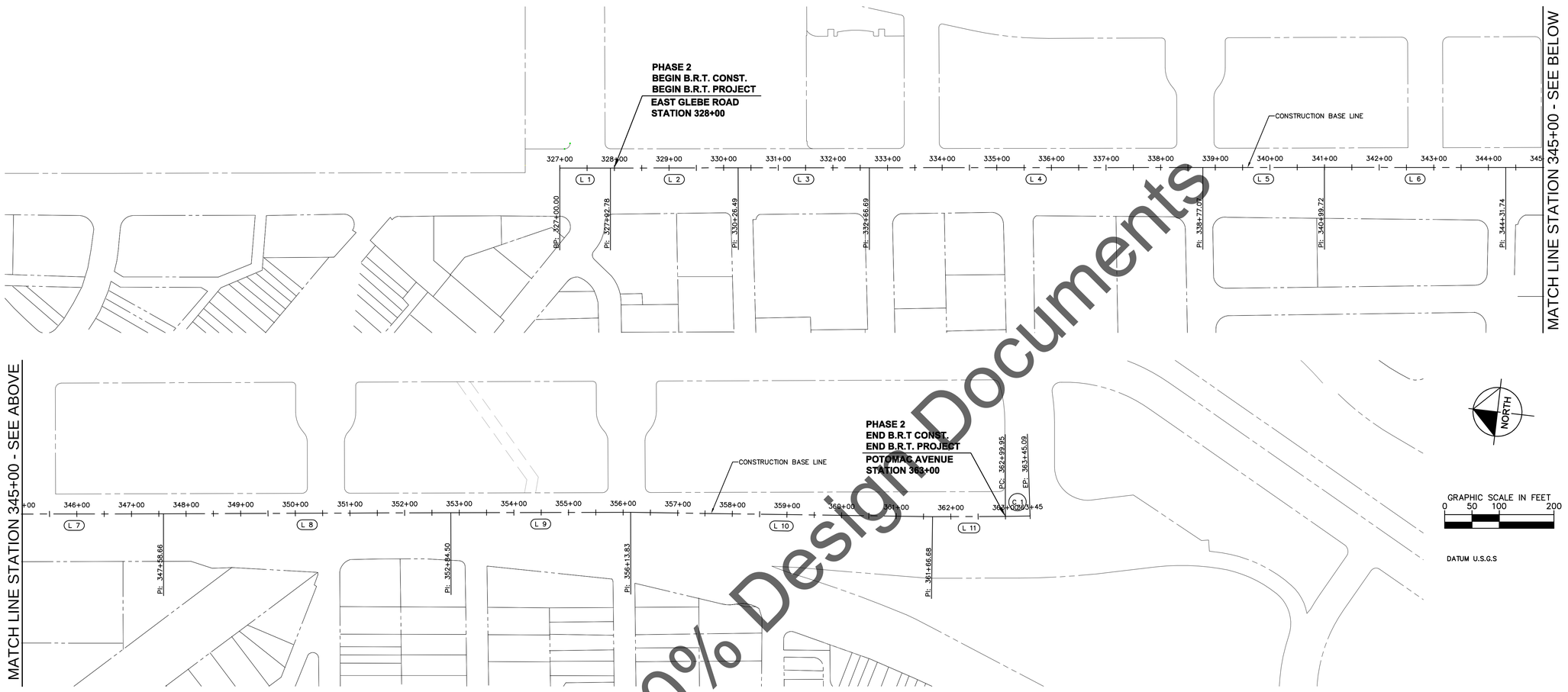

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ALIGNMENT DATA
CONSTRUCTION BASE LINE

SEGMENT NUMBER	BEGINNING STATION	ENDING STATION	PI STATION	DELTA	DEGREE	RADIUS (FT)	TANGENT (FT)	LENGTH (FT)	BEGINNING COORDINATES NORTHING	BEGINNING COORDINATES EASTING	ENDING COORDINATES NORTHING	ENDING COORDINATES EASTING	AZIMUTH
L 1	327+00.00	327+92.78						92.78	427779.79	412645.40	427687.64	412656.15	173°20'48"
L 2	327+92.78	330+26.49						233.72	427687.64	412656.15	427455.57	412683.84	173°11'39"
L 3	330+26.49	332+66.69						240.19	427455.57	412683.84	427217.00	412711.70	173°20'24"
L 4	332+66.69	338+77.07						610.39	427217.00	412711.70	426610.77	412782.82	173°18'33"
L 5	338+77.07	340+99.72						222.65	426610.77	412782.82	426389.65	412808.82	173°17'38"
L 6	340+99.72	344+31.74						332.03	426389.65	412808.82	426059.84	412847.13	173°22'29"
L 7	344+31.74	347+58.66						326.92	426059.84	412847.13	425735.17	412885.45	173°16'07"
L 8	347+58.66	352+84.50						525.84	425735.17	412885.45	425213.13	412948.54	173°06'33"
L 9	352+84.50	356+13.83						329.33	425213.13	412948.54	424886.08	412987.21	173°15'21"
L 10	356+13.83	361+66.68						552.85	424886.08	412987.21	424336.11	413043.49	174°09'25"
L 11	361+66.68	362+99.95						133.27	424336.11	413043.49	424203.77	413059.26	173°12'20"
C 1	362+99.95	363+45.09	363+22.52	1°46'15"	3°55'22.89"	1460.50	22.57	45.14	424203.77	413059.26	424159.04	413065.29	173°12'20" 171°26'05"

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GENERAL NOTES

GENERAL

1. ALL CONSTRUCTION METHODS AND MATERIAL SHALL CONFORM WITH THESE DRAWINGS, PROJECT SPECIFICATIONS, AND WITH ALL CURRENT APPLICABLE CODES AND THE LATEST REVISIONS OF THE FOLLOWING REFERENCE DOCUMENTS:

   (A) VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS
   (B) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
   (C) VIRGINIA WORK AREA PROTECTION MANUAL
   (D) VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH)
   (E) VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) DRAINAGE MANUAL
   (F) VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE STANDARDS
   (G) CITY OF ALEXANDRIA DESIGN AND CONSTRUCTION STANDARDS

2. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AND LICENSES AND KEEP COPIES OF THE SAME ON SITE DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL REVIEW THE SITE FOR THIS PROJECT PRIOR TO WORK.

4. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS. ANY DISCREPANCIES FOUND SHALL BE CALLED TO THE ATTENTION OF THE CITY OF ALEXANDRIA AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.

5. ALL INFORMATION SHOWN ON THESE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL REPORT IMMEDIATELY TO CITY OF ALEXANDRIA ANY CONDITIONS CONFLICTING WITH THE DRAWINGS. FIELD MODIFICATIONS TO THE DRAWINGS SHALL NOT BE MADE WITHOUT THE CONSENT OF CITY OF ALEXANDRIA.

6. THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE, FREE FROM TRASH AND DEBRIS.

7. THE CONTRACTOR SHALL KEEP AND MAINTAIN A SET OF APPROVED PROJECT PLANS AND SPECIFICATIONS ON THE SITE AT ALL TIMES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, SIGNS, ETC. THAT MUST BE CUT OR REMOVED, OR THAT ARE DAMAGED DURING CONSTRUCTION.

UTILITIES

1. PRIOR TO CONSTRUCTION OR EXCAVATION, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY AND ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST OR CROSS THROUGH THE AREA OF CONSTRUCTION WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. BEFORE DIGGING, TO AVOID THE UTILITIES, THE CONTRACTOR SHALL CALL "MISS UTILITY OF VIRGINIA" AT 1-800-552-7001. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS SOLE EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

2. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NONEXISTENCE, SIZE, TYPE, LOCATION, ALIGNMENT, OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES. WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM TEST EXCAVATION OR OTHER REINVESTIGATION AS NECESSARY TO VERIFY LOCATION AND CLEARANCES.

3. UNLESS OTHERWISE NOTED, UTILITIES ARE TO BE ADJUSTED BY THE RESPECTIVE OWNER.

4. STATE LAW MANDATES THE NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF EXCAVATION. FOR LOCATION OF UTILITIES CALL:

UTILITY OWNERS	TELEPHONE
DOMINION VIRGINIA POWER	888-667-3000
VERIZON COMMUNICATIONS	888-826-2355
COMCAST	888-683-1000
WASHINGTON GAS	703-750-1000
PEPCO	202-833-7500
VIRGINIA AMERICAN WATER	703-491-2136
SANITARY SEWER – CITY OF ALEXANDRIA	703-746-4488

5. CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 2003) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.

CLEARING AND GRUBBING

1. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND AS DIRECTED BY CITY OF ALEXANDRIA.

2. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO BEGINNING DEMOLITION WORK.

3. THE CONTRACTOR SHALL REMOVE AND/OR PLUG AND ABANDON EXISTING UTILITIES SUCH AS SANITARY SEWER, WATER, GAS, ELECTRIC, AND TELEPHONE AS DIRECTED BY THE CITY OF ALEXANDRIA. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING EACH UTILITY COMPANY AND CITY OF ALEXANDRIA TO COORDINATE ABANDONMENT OR REMOVAL OF ALL UTILITIES AND FOR DETERMINING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO COMMENCING WORK.

4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.

5. ALL MATERIALS REMOVED UNDER CLEARING WORK, NOT TO BE RELOCATED OR TO BE TURNED OVER TO THE OWNER, SHALL BE REMOVED AS DIRECTED BY CITY OF ALEXANDRIA.

6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING ROAD SURFACES.

7. ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.

8. THE CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEBRIS FROM THE SITE TO A LOCATION APPROVED BY CITY OF ALEXANDRIA.

CONSTRUCTION NOTES

1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREIN ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.

2. THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED FOLLOWING NOTIFICATION AND MARKING OF ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES TEST HOLES TO BE PERFORMED AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE OWNER AND ENGINEER. REDESIGN AND APPROVAL BY REVIEWING AGENCY SHALL BE OBTAINED IF REQUIRED.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.

4. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.

5. ALL AREAS, ON OR OFF-SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. THE MINIMUM ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS, SEED MIXTURE TO BE AS RECOMMENDED BY THE CITY AGENT. ALL SLOPES 3:1 AND GREATER SHALL BE SODDED AND PEGGED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY OF ALEXANDRIA.

6. THE CONTRACTOR SHALL VERIFY INVERT SIZE AND LOCATION OF BUILDING UTILITY CONNECTIONS PRIOR TO PLACEMENT OF UNDERGROUND UTILITIES.

7. EXISTING FENCES, AND OTHER EXISTING PHYSICAL FEATURES ARE TO BE REMOVED AS REQUIRED BY THE CONTRACTOR.

8. THE CONSTRUCTION, FIELD PRACTICES AND METHODS SHALL CONFORM TO THE REQUIREMENTS SET FORTH BY THE CITY OF ALEXANDRIA AND ITS CURRENT ZONING ORDINANCE AND CONSTRUCTION STANDARDS MANUAL. FAILURE TO COMPLY WITH THE CODE, APPLICABLE MANUALS, AND PROVISIONS OF THE CONSTRUCTION AND ESCROW AGREEMENTS OR THE PERMITS SHALL BE DEEMED A VIOLATION.

9. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER/DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITIES WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE CITY OF ALEXANDRIA.

10. CONSTRUCTION STAKEOUT SHALL BE UNDER THE DIRECT SUPERVISION OF A LICENSED LAND SURVEYOR IN THE COMMONWEALTH OF VIRGINIA.

11. THE CALIFORNIA BEARING RATIO (CBR) VALUES ON IN-SITU MATERIALS SHALL BE DETERMINED BY FIELD AND/OR LABORATORY TESTS FOR ACTUAL DETERMINATION OF REQUIRED THICKNESS OF SURFACE, BASE, SUB-BASE, AND SUB GRADE MATERIALS. THE PAVEMENT SECTION SHALL BE DESIGNED BY A GEOTECHNICAL/LICENSED PROFESSIONAL ENGINEER TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT(EVE) TO SUPPORT H-20 LOADING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION.

12. ALL EARTHWORK OPERATIONS ARE TO BE PERFORMED UNDER THE FULL TIME, ON-SITE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER WITH GEOTECHNICAL TESTING IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND SOILS REPORT REQUIREMENTS.

13. THE CONTRACTORS SHALL NOT CAUSE OR PERMIT VEHICLES TO IDLE FOR MORE THAN 10 MINUTES WHEN PARKED.

14. DAMAGE TO ANY EXISTING ENTRANCES, CURB AND GUTTER, PAVEMENT OR OTHER EXISTING STRUCTURES NOT PROPOSED TO BE DISTURBED WITH THIS DEVELOPMENT, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE REPAIRED TO THE SATISFACTION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION AND ANY ADJOINING OWNERS THAT MAY BE AFFECTED.

15. ALL CONSTRUCTION ACTIVITES SHALL CONFORM WITH LATEST EDITION OF OSHA REGULATIONS AND GUIDELINES.

16. THE APPLICANT SHALL BE RESPONSIBLE FOR REPAIRS TO THE ADJACENT CURB, GUTTER, AND RIGHT-OF-WAY, IF DAMAGED DURING CONSTRUCTION ACTIVITY AS DETERMINED BY THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES).

17. IN THE EVENT THE PROPOSED DRAINAGE SYSTEM ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON THE PUBLIC OR PRIVATE PROPERTIES THEN THE APPLICANT SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO THE FIELD DRAINAGE SYSTEM AND/OR SUMP PUMP DISCHARGE TO THE SATISFACTION OF THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES).

18. ALL GEOTECHNICAL AND CONCRETE TESTING AND INPECTIONS SHALL BE PROVIDED BY A CITY APPROVED, THIRD PARTY CONSULTANT. FEES FOR ALL THIRD PARTY CONSULTANT TESTING AND INSPECTIONS SHALL BE PAID BY THE CONTRACTOR AND INCLUDED IN THE CONTRACTOR'S BASE BID.

19. ALL COORDINATION WITH APPLICABLE PUBLIC UTILITIES INCLUDING BUT NOT LIMITED TO TIMING OF SERVICE DROPS, RECONNECTIONS, LOAD LETTERS, PRESSURE TESTS AND PERMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SUCH WORK SHALL BE SCHEDULED AND PERFORMED IN A MANNER TIMELY TO COMPLETION OF THE PROJECT.

COORDINATION

1. CONSTRUCTION WILL TAKE PLACE ADJACENT TO ONGOING TRAFFIC OPERATIONS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH CITY OF ALEXANDRIA.

2. THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR CONSTRUCTION TO THE CITY OF ALEXANDRIA IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE A MEETING WITH CITY OF ALEXANDRIA TO DISCUSS COORDINATION OF CONSTRUCTION ACTIVITIES AND RELATED PROJECTS. THE CONTRACTOR SHALL PARTICIPATE IN PERIODIC PROGRESS MEETINGS AND SHALL SUBMIT SCHEDULE UPDATES AT THESE MEETINGS.

DRAINAGE

1. THE LOCATIONS OF ALL DRAINAGE STRUCTURES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, WITH THE EXCEPTION OF STRUCTURES SHOWING SPECIFIC STATIONS, SPECIAL DESIGN BRIDGES, AND STORM SEWERS. THE HEIGHT ("H") DIMENSIONS SHOWN ON THE PLANS FOR DROP INLETS AND JUNCTION BOXES AND THE LINEAR FOOT (LF) DIMENSIONS SHOWN FOR MANHOLES ARE APPROXIMATE.

2. TEMPORARY DRAINAGE DURING CONSTRUCTION WILL BE PROVIDED BY THE CONTRACTOR TO RELIEVE AREAS THAT MAY CAUSE DAMAGE TO ROADWAYS, AS DIRECTED BY CITY OF ALEXANDRIA.

3. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE, STORMWATER MANAGEMENT, BEST MANAGEMENT PRACTICES FACILITIES AND SYSTEMS, AND EROSION AND SEDIMENT CONTROLS TO ENSURE THAT THEY FUNCTION PROPERLY DURING CONSTRUCTION.

CONSTRUCTION NOTES (CONT'D)

1. ALL CLEARING, GRUBBING, GRADING, AND PAVING SHALL BE PERFORMED IN ACCORDANCE WITH VDOT SPECIFICATIONS AND STANDARDS.

2. EXISTING VEGETATION SURROUNDING THE CONSTRUCTION AREA SHALL REMAIN IN A NATURAL STATE. TREES NEAR THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH DETAILS AND NOTES AS SHOWN THE EROSION AND CONTROL PLAN.

3. THE CONTRACTOR SHALL STRIP TOPSOIL AND ANY ORGANIC LADEN SOIL AND STORE FOR USE IN BACKFILLING AND LANDSCAPING FOR SITE RESTORATION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY EXCESS SOIL AFTER RESTORATION OF THE SITE.

4. WHEN MATERIALS WHICH ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR ROADWAY PURPOSES OCCUR WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE SUCH MATERIAL BELOW THE GRADE SHOWN ON THE PLANS. THE AREAS SO EXCAVATED SHALL BE BACKFILLED WITH APPROVED SUITABLE SELECT FILL MATERIAL.

5. ALL UNPAVED SURFACES SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM PAVED AREAS AND TOWARD DRAINAGE STRUCTURES.

6. ALL DISTURBED AREAS SHALL BE PREPARED, SEEDED, AND MULCHED.

7. DISTURBED AREAS WITHIN THE PROJECT LIMITS THAT WILL REMAIN INACTIVE FOR A PERIOD OF 14 CALENDAR DAYS OR LONGER SHALL BE TEMPORARILY STABILIZED WITH SEED AND STRAW, MULCH, OR OTHER ACCEPTABLE GROUNDCOVER.

8. THE CONTRACTOR IS REQUIRED TO NOTIFY CITY OF ALEXANDRIA THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION AND SPECIFICALLY REQUEST INSPECTION BEFORE BEGINNING

   A. INSTALLATION OF SILTATION AND EROSION CONTROL MEASURES
   B. CLEARING AND GRUBBING
   C. EARTHWORK
   D. BACKFILL OF ANY STORM DRAINAGE PIPE, CULVERTS, INLET, AND OTHER UTILITIES
   E. INSTALLATION OF ANY UNDERGROUND UTILITY, INCLUDING STORM PIPES, CULVERT, & INLETS
   F. BEFORE PLACING SUBBASE, BASE OR PAVING SURFACE
   G. INSTALLATION OF ANY FORMS.
   H. PLACING OF ANY CONCRETE.
   I. BACKFILL OF ANY FOUNDATIONS OR WALLS.

9. SERVICE ROADS ARE TO BE CONSTRUCTED AND PRIVATE ENTRANCES CONNECTED THERETO PRIOR TO THE PERMANENT SEVERING OF PRIVATE ENTRANCES BY OTHER PHASES OF THE PROPOSED CONSTRUCTION.

10. WHERE STANDARD SLOPE ROUNDOFFS WOULD DAMAGE TREES, BUSHES, OR OTHER DESIRABLE VEGETATION THEY SHALL BE OMITTED WHEN SO ORDERED BY CITY OF ALEXANDRIA.

12. THE CONTRACTOR SHALL SUBMIT A DETAILED MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF ALEXANDRIA TO ADDRESS WORK THAT IMPACTS JEFFERSON DAVIS HIGHWAY.

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No.	REVISIONS	DATE	BY

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KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

GENERAL NOTES

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
02

K:\NVA_TPTO\110104 - Alexandria On-Call\006_US_1-D-B-Bridging_Documents\CAD\SHEET\110104-NOTES-02.dwg, Layout:Layout1 Jul 11, 2011 marshall.gibson
XREFS: x104006_BORDER kh-address-nov
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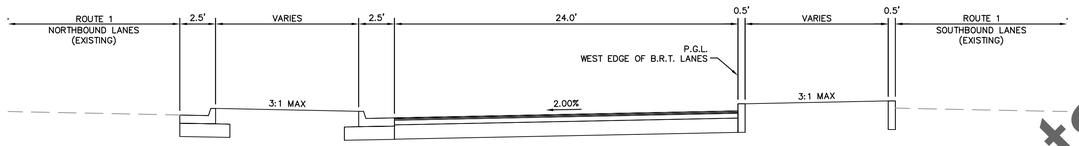
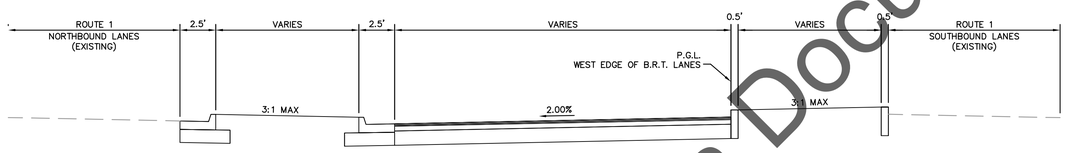


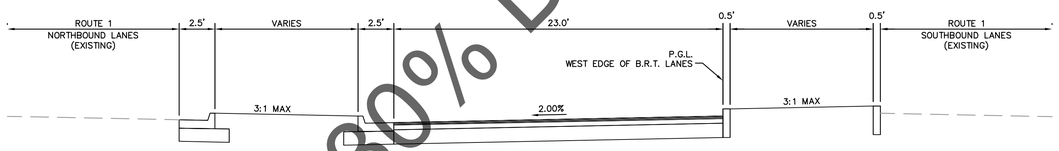
TYPICAL SECTION - 24' WIDE
STATION 328+00.00 – 335+64.02
STATION 341+63.96 – 347+56.47
STATION 359+06.38 – 362+90.20

NOT TO SCALE



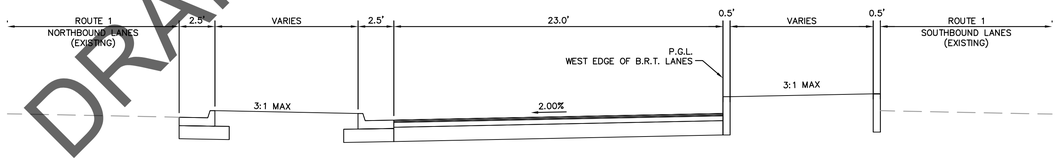
TYPICAL SECTION - VARIES
STATION 335+64.02 – 337+14.10
STATION 340+14.10 – 341+63.96
STATION 347+56.47 – 349+06.41
STATION 357+56.34 – 359+06.38

NOT TO SCALE



TYPICAL SECTION - 23' WIDE
STATION 337+14.10 – 340+14.10
STATION 349+06.41 – 357+56.34

NOT TO SCALE



TYPICAL SECTION - STATION STOPS
STATION 337+14.10 – 340+14.10
STATION 349+06.41 – 357+56.34

NOT TO SCALE

NOTES

1. TYPICAL SECTIONS ARE SHOWN FACING SOUTH.
2. PROPOSED PAVEMENT SECTION DEPTH(S) SHALL BE BASED ON A CBR VALUE OF 10 FOR ROUTE 1. LABORATORY TESTS OF SUBGRADE SOIL SHALL BE PERFORMED FOR ACTUAL DETERMINATION OF REQUIRED SUBGRADE THICKNESS PRIOR TO PAVING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION.
3. CONTRACTOR TO CONDUCT GEOTECHNICAL INVESTIGATION TO DETERMINE PAVEMENT THICKNESS FOR BRT LANES

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

TYPICAL SECTIONS

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
02A

K:\NVA_TPTO\110104 - Alexandria On-Call\006_US_1-D-B-Bridging_Documents\CAD\SHEET\110104-TYP-02.dwg, Layout:Layout1 Jul 07, 2011 marshall.gibson
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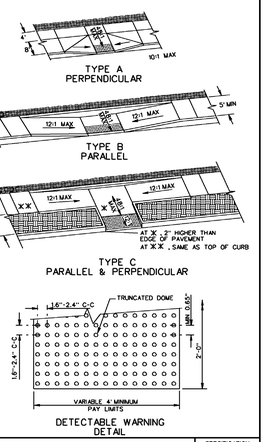
CG-12

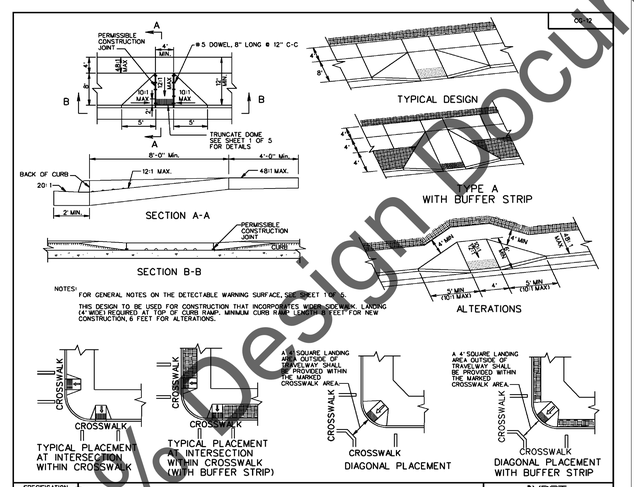
GENERAL NOTES:

1. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.
2. DETECTABLE WARNING TO BE CLASS A-3 CONCRETE (CLASS A-4 IF PRECAST) WITH SLIP RESISTANT INTEGRAL SURFACE COVERING THE FULL WIDTH OF THE RAMP FLOOR BY 2 FOOT IN LENGTH IN THE DIRECTION OF PEDESTRIAN TRAVEL. OTHER TYPES OF MATERIAL WITH THE TRUNCATED DOMES DETECTABLE WARNING MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
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. 3 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 ARE ALSO LOCATED WITHIN PEDESTRIAN CROSSWALKS ON NONSTREET FACILITIES. THEY ARE DIRECTED TO BE LOCATED AND 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.



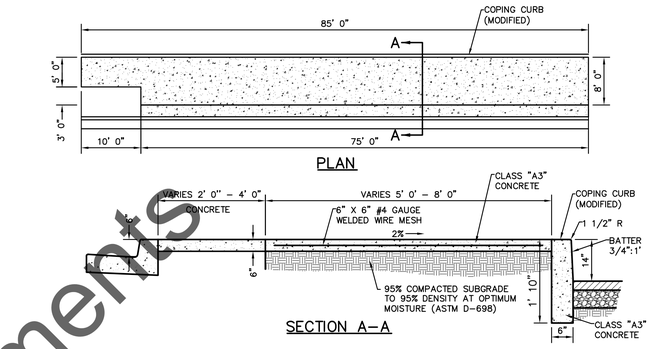
VDOT ROAD AND BRIDGE STANDARDS		CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES) VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 5	REVISION DATE		105
203.05	10/09		502

CG-12



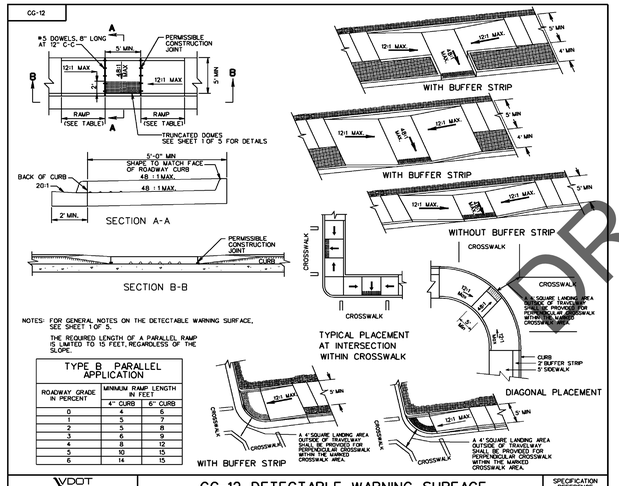
NOTES:
FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
THIS DESIGN TO BE USED FOR CONSTRUCTION THAT INCORPORATES WIDER SIDEWALK, LANDING (4' WIDE) REQUIRED AT TOP OF CURB RAMP. MINIMUM CURB RAMP LENGTH 6 FEET FOR NEW CONSTRUCTION, 6 FEET FOR ALTERATIONS.

SPECIFICATION REFERENCE	VDOT ROAD AND BRIDGE STANDARDS	CG-12 DETECTABLE WARNING SURFACE TYPE A (PERPENDICULAR) APPLICATION VIRGINIA DEPARTMENT OF TRANSPORTATION	
105	REVISION DATE		SHEET 2 OF 5
502	10/09		203.06



B.R.T. STATION PLATFORM

CG-12



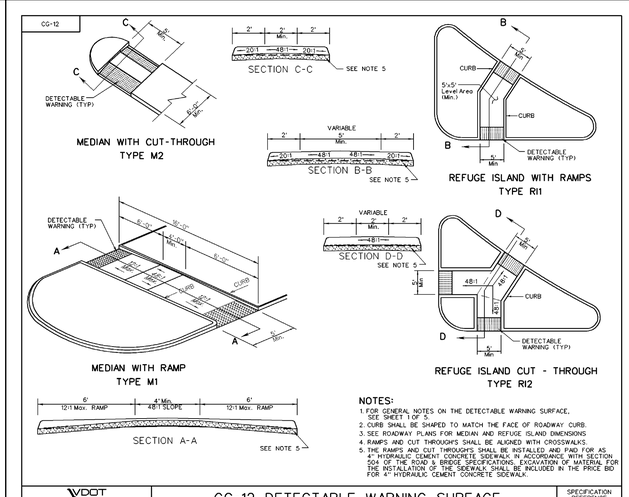
NOTES: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

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		CG-12 DETECTABLE WARNING SURFACE TYPE B (PARALLEL) APPLICATION VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 3 OF 5	REVISION DATE		105
203.07	10/09		502

CG-12



NOTES:
1. FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
2. CURB SHALL BE SHAPED TO MATCH THE FACE OF ROADWAY CURB.
3. SEE ROADWAY PLANS FOR MEDIAN AND REFUGE ISLAND DIMENSIONS
4. RAMPS AND CUT THROUGHS SHALL BE ALIGNED WITH CROSSWALKS.
5. THE RAMPS AND CUT THROUGHS SHALL BE INSTALLED AND PAID FOR AS 4" HYDRAULIC CEMENT CONCRETE SIDEWALK IN ACCORDANCE WITH SECTION 504 OF THE ROAD & BRIDGE SPECIFICATIONS. EXCAVATION OF MATERIAL FOR THE INSTALLATION OF THE SIDEWALK SHALL BE INCLUDED IN THE PRICE BID FOR 4" HYDRAULIC CEMENT CONCRETE SIDEWALK.

VDOT ROAD AND BRIDGE STANDARDS		CG-12 DETECTABLE WARNING SURFACE MEDIAN AND REFUGE ISLAND APPLICATIONS VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 5 OF 5	REVISION DATE		105
203.08A	08/10		502

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CITY OF ALEXANDRIA VIRGINIA

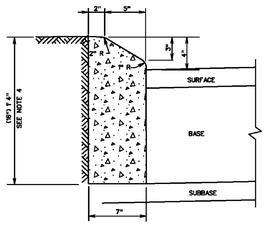
KHA PROJECT 110104006
DATE 05/10/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

DETAILS

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
02B

CG-3



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" (13" DEPTH) OR INCREASED AS MUCH AS 3" (19" DEPTH) IN ORDER THAT THE BOTTOM OF THE CURB WILL CONTACT WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. WITHIN THE LIMITS OF THE DEPTH CHANGE, NO FURTHER ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. CG-3 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-7 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL IN THE SECTION ON CS URBAN STANDARDS.
6. WHEN THIS STANDARD IS TO BE TIED INTO EXISTING BARRIER CURB, THE TRANSITION IS TO BE MADE WITHIN 10' OF THE CHANGE IN STANDARDS CAN BE MADE AT REGULAR OPENINGS.

VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | REVISION DATE 201.02

STANDARD 4" CURB

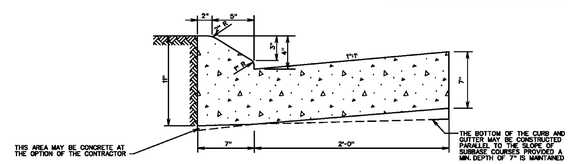
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE: 105, 502

CG-7

NOTES:

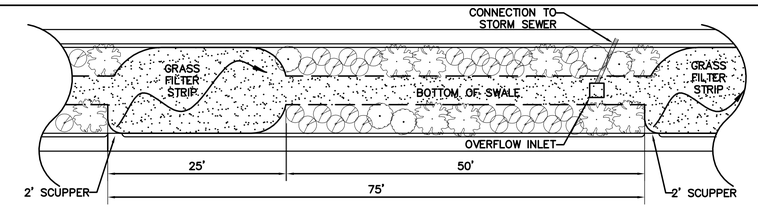
1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB AND 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-7 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL IN THE SECTION ON URBAN CS STANDARDS.
6. WHEN THIS STANDARD IS TO BE TIED INTO EXISTING BARRIER CURB, THE TRANSITION IS TO BE MADE WITHIN 10' OF THE CHANGE IN STANDARDS CAN BE MADE AT REGULAR OPENINGS.
7. WHEN COMBINATION MOUNTABLE CURB AND GUTTER IS USED, THE STANDARD ENTRANCE GUTTERS OR STANDARD CONNECTION FOR STREET INTERSECTIONS ARE TO HAVE THE MOUNTABLE CURB CONFIGURATION INCORPORATED.



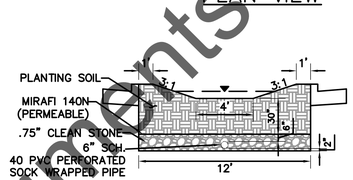
VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | 201.04

COMBINATION 4" CURB AND GUTTER

SPECIFICATION REFERENCE



PLAN VIEW



CROSS-SECTION VIEW

PLANTING LEGEND

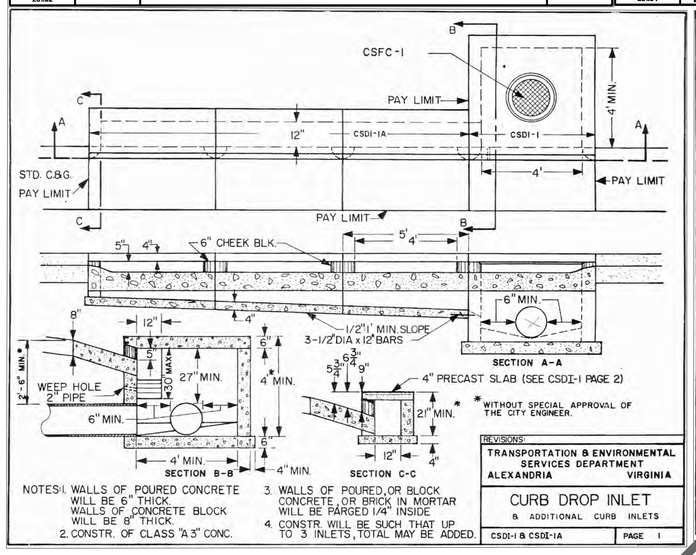
- SHRUB
- GRASS TYPE 1
- GRASS TYPE 2

BIORETENTION DETAIL

N.T.S.

NOTES:

- TYPICAL PLANTING SHALL BE APPROXIMATELY 85% HERBACEOUS SPECIES AND 15% SHRUB SPECIES.
- SHRUB SPECIES SHALL BE FROM TABLE 3.11-7B, RECOMMENDED PLANT SPECIES FOR USE IN BIORETENTION FROM THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK, WITH A HIGH TOLERANCE TO SALT AND A SPECIES FOUND IN THE COASTAL PLAINS.
- HERBACEOUS SPECIES SHALL BE FROM TABLE 3.11-7C, RECOMMENDED PLANT SPECIES FOR USE IN BIORETENTION FROM THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK, WITH A HIGH TOLERANCE TO SALT.



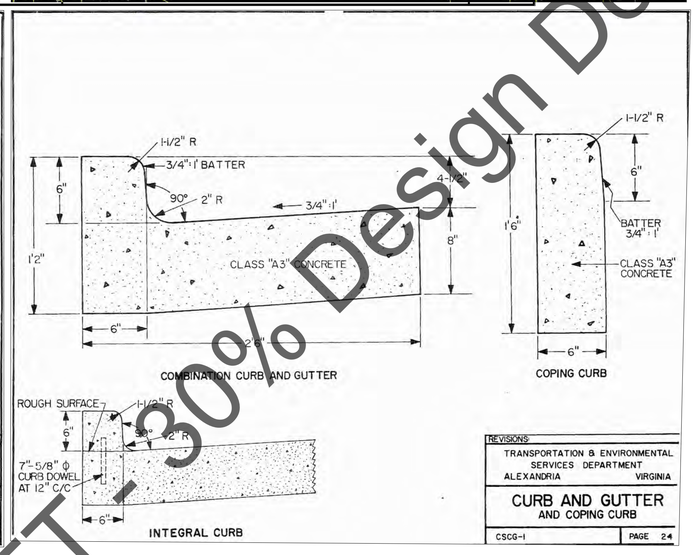
NOTES: 1. WALLS OF POURED CONCRETE WILL BE 6" THICK. WALLS OF CONCRETE BLOCK WILL BE 8" THICK.
2. CONSTR. OF CLASS "A3" CONC.
3. WALLS OF POURED, OR BLOCK CONCRETE, OR BRICK IN MORTAR WILL BE PARGED 1/4" INSIDE
4. CONSTR. WILL BE SUCH THAT UP TO 3 INLETS, TOTAL MAY BE ADDED.

REVISIONS:

TRANSPORTATION & ENVIRONMENTAL SERVICES DEPARTMENT
ALEXANDRIA VIRGINIA

CURB DROP INLET
& ADDITIONAL CURB INLETS

CSDI-1 & CSDI-1A | PAGE 1



REVISIONS:

TRANSPORTATION & ENVIRONMENTAL SERVICES DEPARTMENT
ALEXANDRIA VIRGINIA

CURB AND GUTTER
AND COPING CURB

CSCG-1 | PAGE 24

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No.	REVISIONS	DATE	BY

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11400 COMMERCE PARK DRIVE, SUITE 400, RESTON, VA 20191
PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 05/10/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

DETAILS

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
02C

K:\NVA_PTO\110104 - Alexandria On-Call\006_US_1-D-B-Bridging_Documents\CAD\SHEET\110104-DTLS-02C.dwg, Layout:Layout1 Jul 11, 2011 marshdi.gibson
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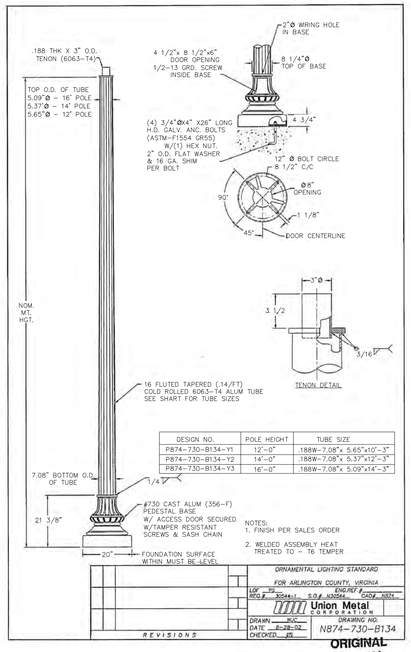
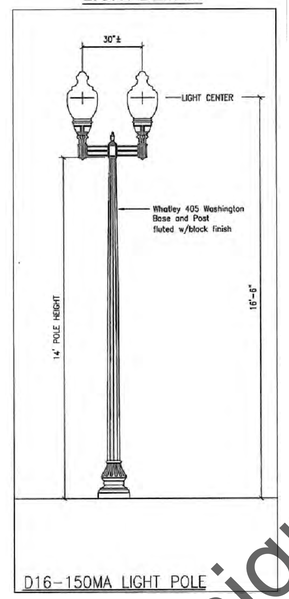


DESIGN NO.	POLE HEIGHT	TUBE SIZE
P874-730-B134-Y1	12'-0"	.188W-7.08"x 5.65"x10'-3"
P874-730-B134-Y2	14'-0"	.188W-7.08"x 5.37"x12'-3"
P874-730-B134-Y3	16'-0"	.188W-7.08"x 5.09"x14'-3"

LIGHT DETAIL



D16-150MA LIGHT POLE

NOTES:
1. LIGHT SHALL BE DOUBLE ACORN. LED.
2. CONTRACTOR TO COORDINATE EXISTING AND PROPOSED ILLUMINATION TO DETERMINE PROPOSED SPACING

LTL LUMINAIRE TESTING LABORATORY, INC.
905 Harrison Street · Allentown, PA 18103 · 610-770-1044 · Fax 610-770-8912 · www.LuminaireTesting.com

L/TL NUMBER: 17612 DATE: 02-15-2010
PREPARED FOR: RELUME TECHNOLOGIES
CATALOG NUMBER: UNIVERSAL ACORN
LUMINAIRE: POMPED AND EXTRUDED ALUMINUM HOUSING, NO ENCLOSURE.
LAMP: 48 WHITE LEDS
LED POWER SUPPLY: ONE ADVANCE LED-INTA-700C-140-F30
ELECTRICAL VALUES: 120.0VAC, 0.4833A, 57.59W, PF=0.993
LUMINAIRE EFFICACY: 81.2 LUMENS/WATT
NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.*

IES CLASSIFICATION: **AREA LIGHT**
CUTOFF CLASSIFICATION: **NON-CUTOFF****

**CUTOFF DESIGNATION IS NOT DEFINED FOR ABSOLUTE PHOTOMETRIC TESTS. THE CUTOFF RATIO IS DEFINED AS THE MAXIMUM CANDELA READING PER LUMINAIRE RATED AT 1000 LUMENS.

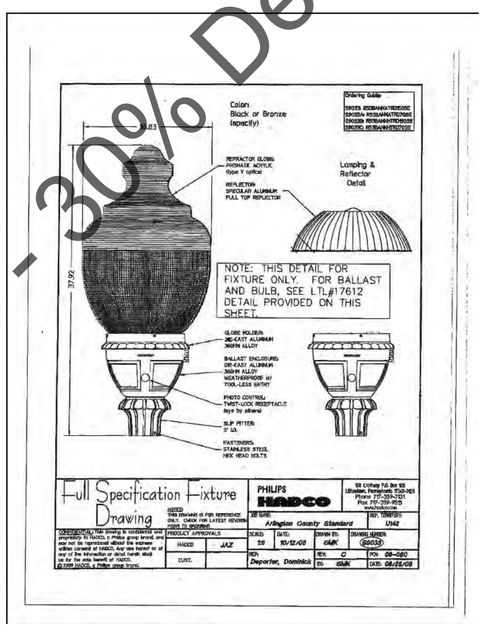
FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	1971.[illegible]	36[illegible]	[illegible].68
STREET SIDE	19[illegible]	365.80	2337.68
TOTALS	3943.77	731.60	4675.37

Approved By: YG

*DATA WAS ACQUIRED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY. A UDT MODEL #211 PHOTODETECTOR AND UDT MODEL #S370 OPTOMETER COMBINATION WERE USED AS A STANDARD. A SPECTRAL MISMATCH CORRECTION FACTOR WAS EMPLOYED BASED ON THE SPECTRAL RESPONSIVITY OF THE PHOTODETECTOR AND THE SPECTRAL POWER DISTRIBUTION OF THIS TEST SUBJECT.

TESTING WAS PERFORMED IN ACCORDANCE WITH IES LM-79-08.
TEST ANGULAR INCREMENTS AND REPORT FORMATTING WAS BASED ON IES LM-31-95.



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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

LIGHTING DETAILS

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
02D

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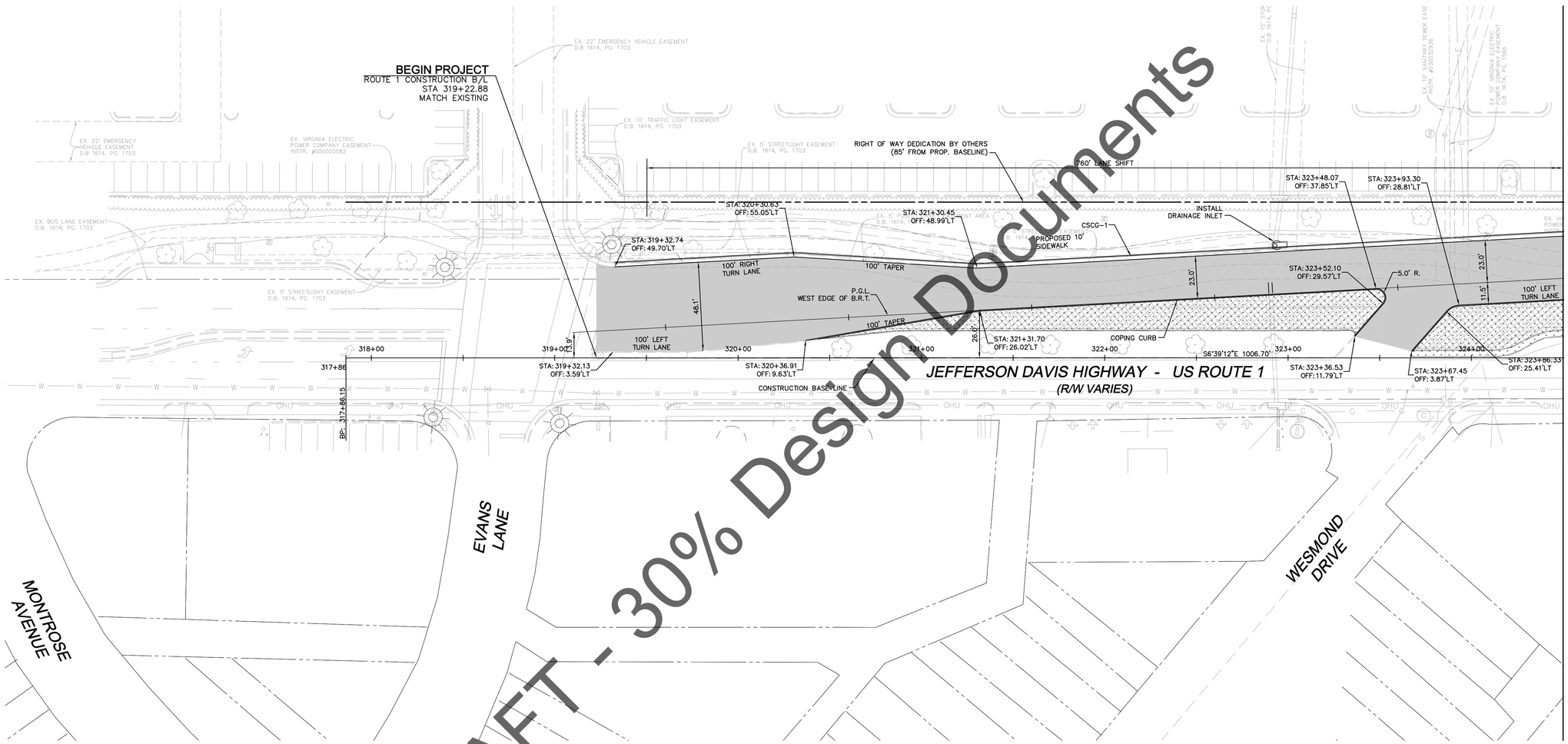
JEFFERSON DAVIS HIGHWAY - ROUTE 1
EXISTING RIGHT-OF-WAY VARIES
EXISTING POSTED SPEED = 35 MPH
DESIGN SPEED = 40 MPH



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GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

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DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PLAN SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
03

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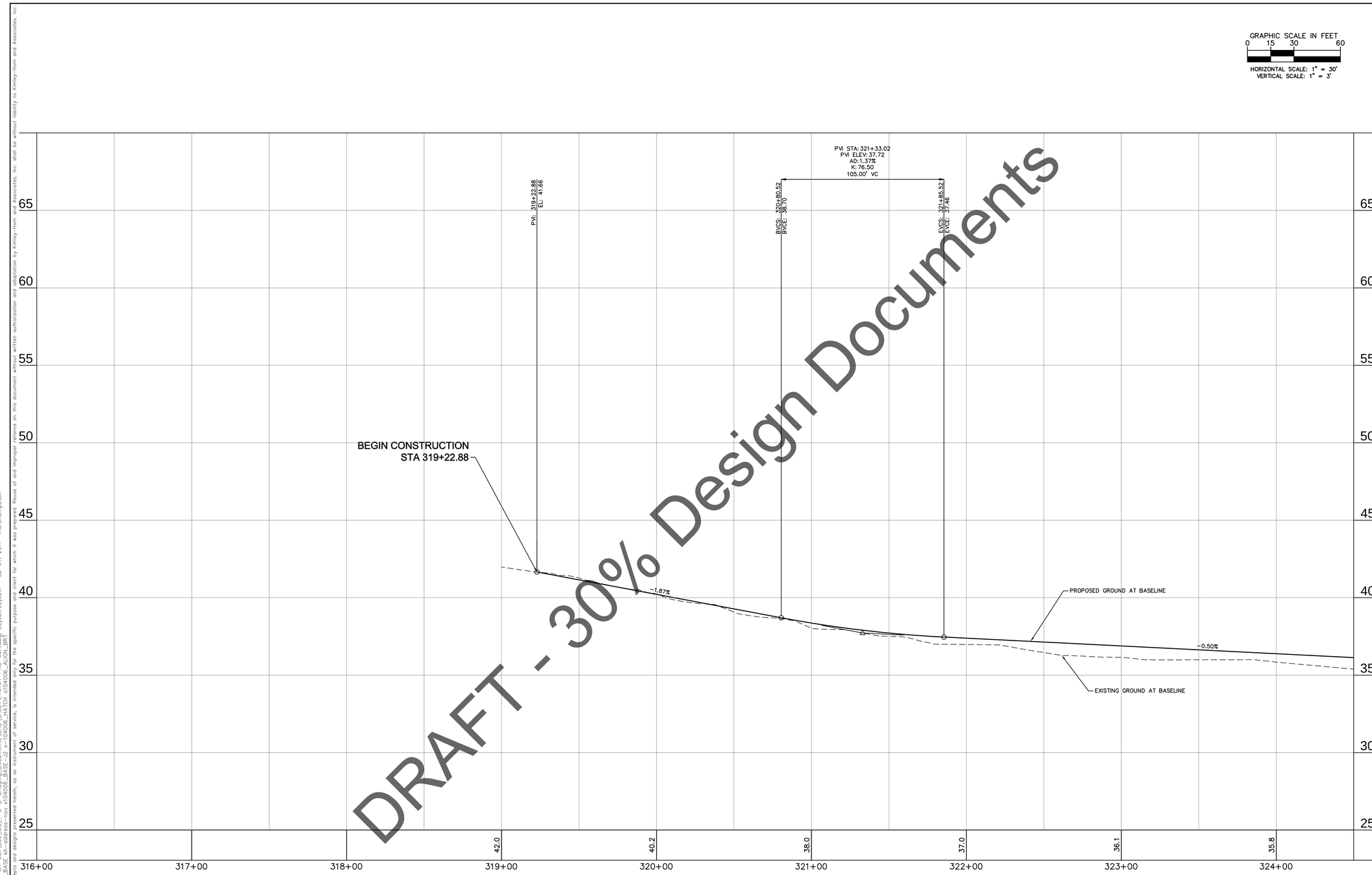

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PROFILE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
03A

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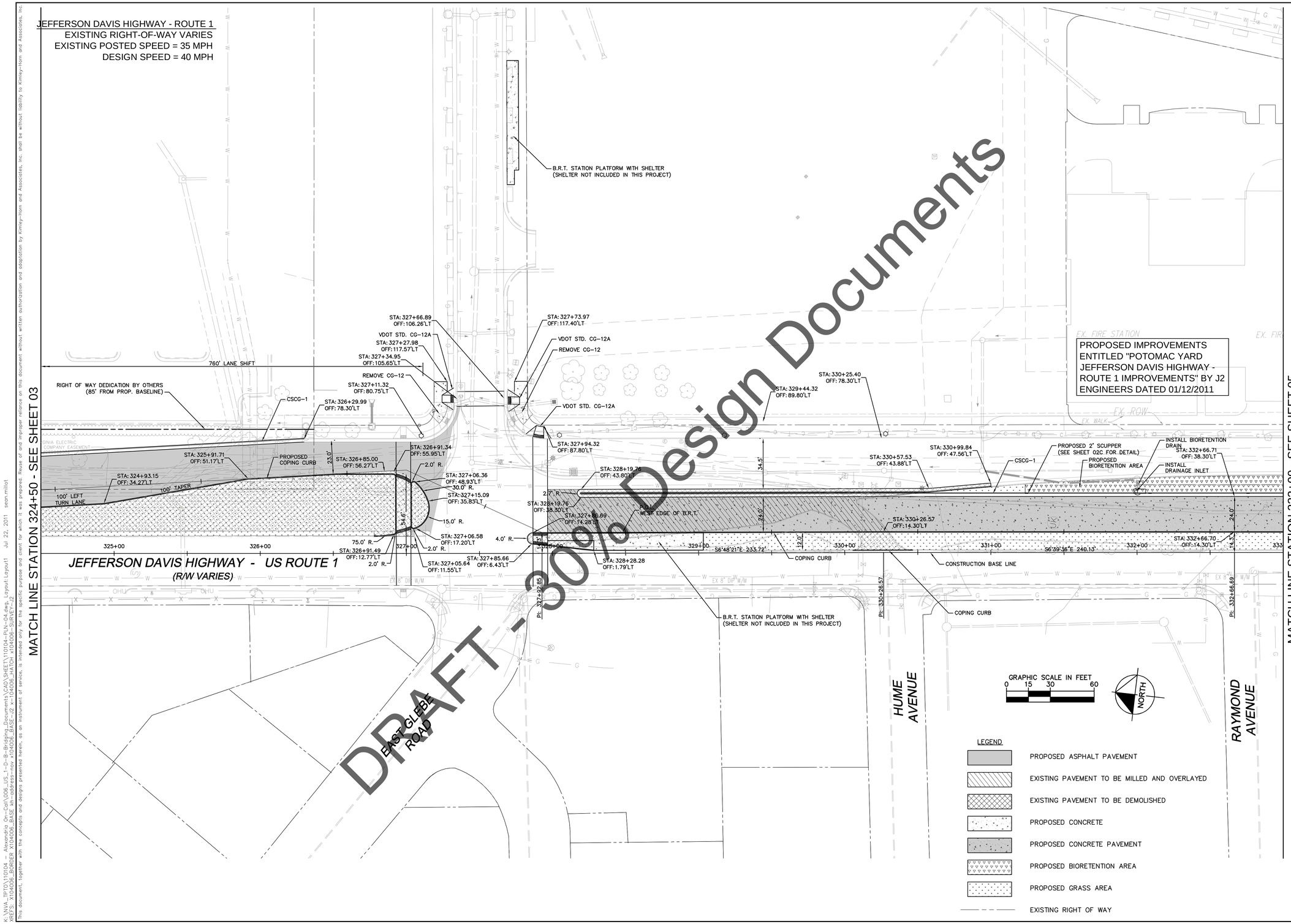

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PLAN SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
04

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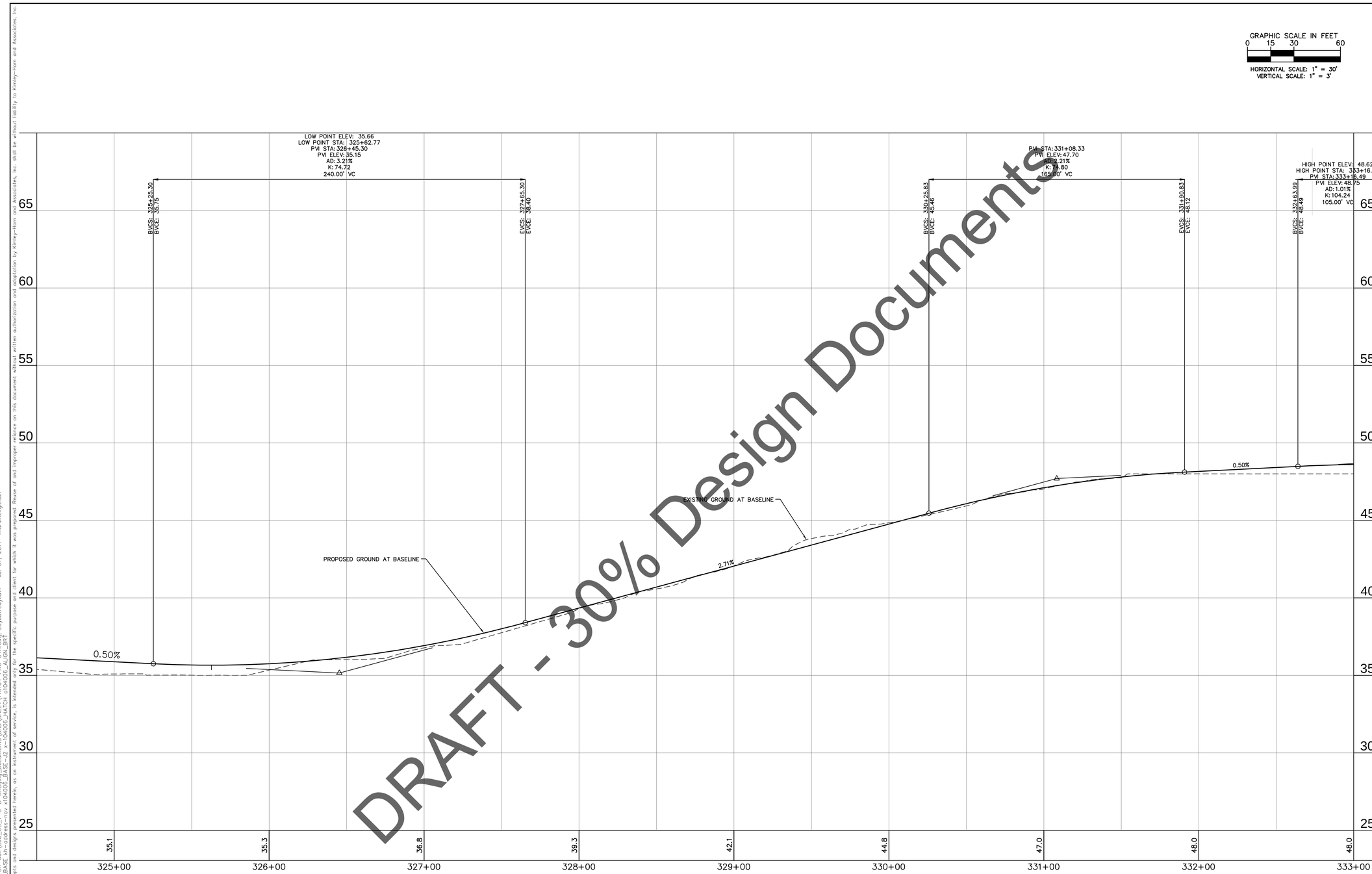

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT

DATE	07/08/2011
SCALE	AS SHOWN
DESIGNED BY	P.M.H.
DRAWN BY	C.P.M.
CHECKED BY	R.F.B.

PROFILE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
04A

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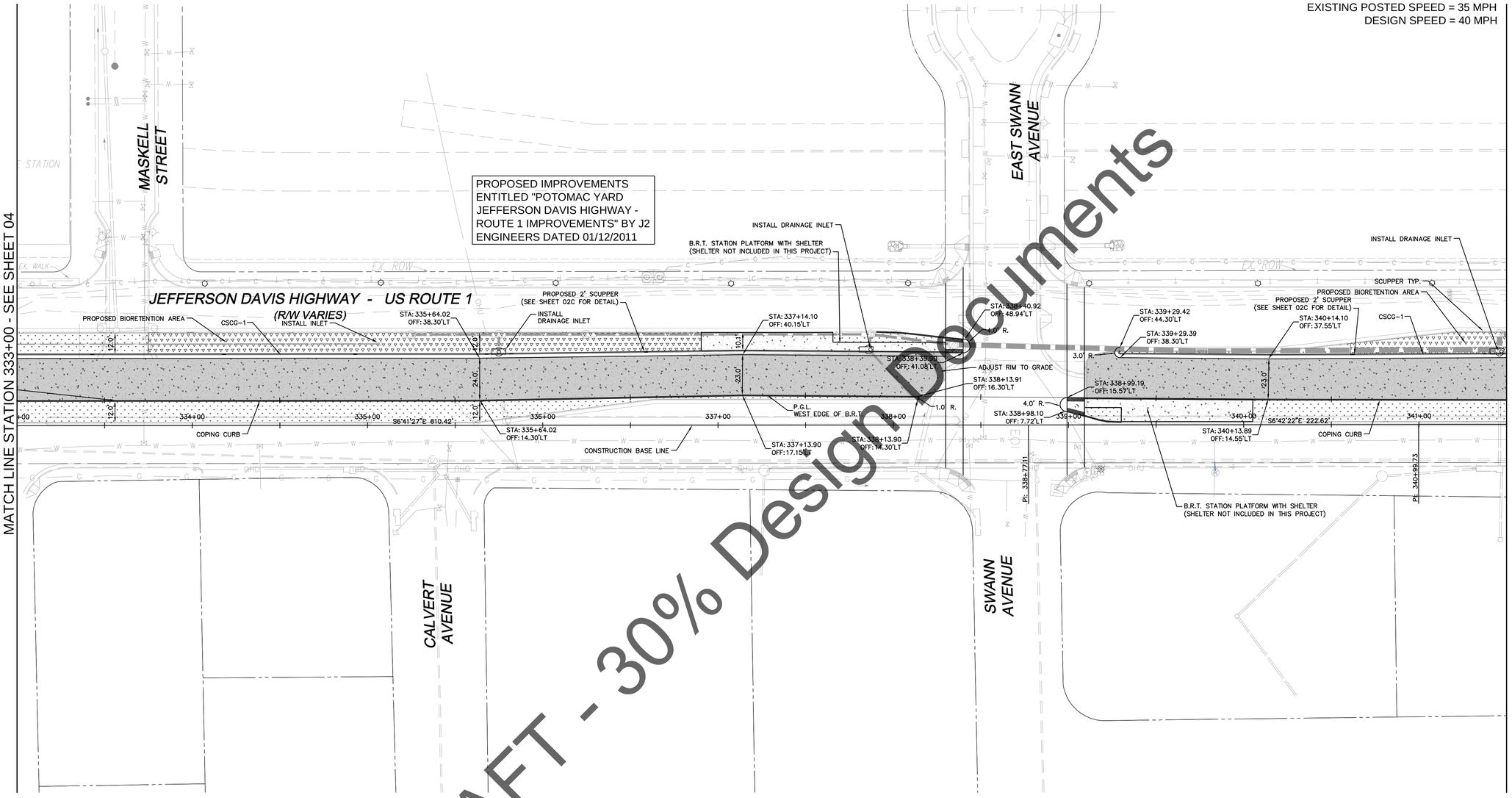
JEFFERSON DAVIS HIGHWAY - ROUTE 1
EXISTING RIGHT-OF-WAY VARIES
EXISTING POSTED SPEED = 35 MPH
DESIGN SPEED = 40 MPH



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GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PLAN SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
05

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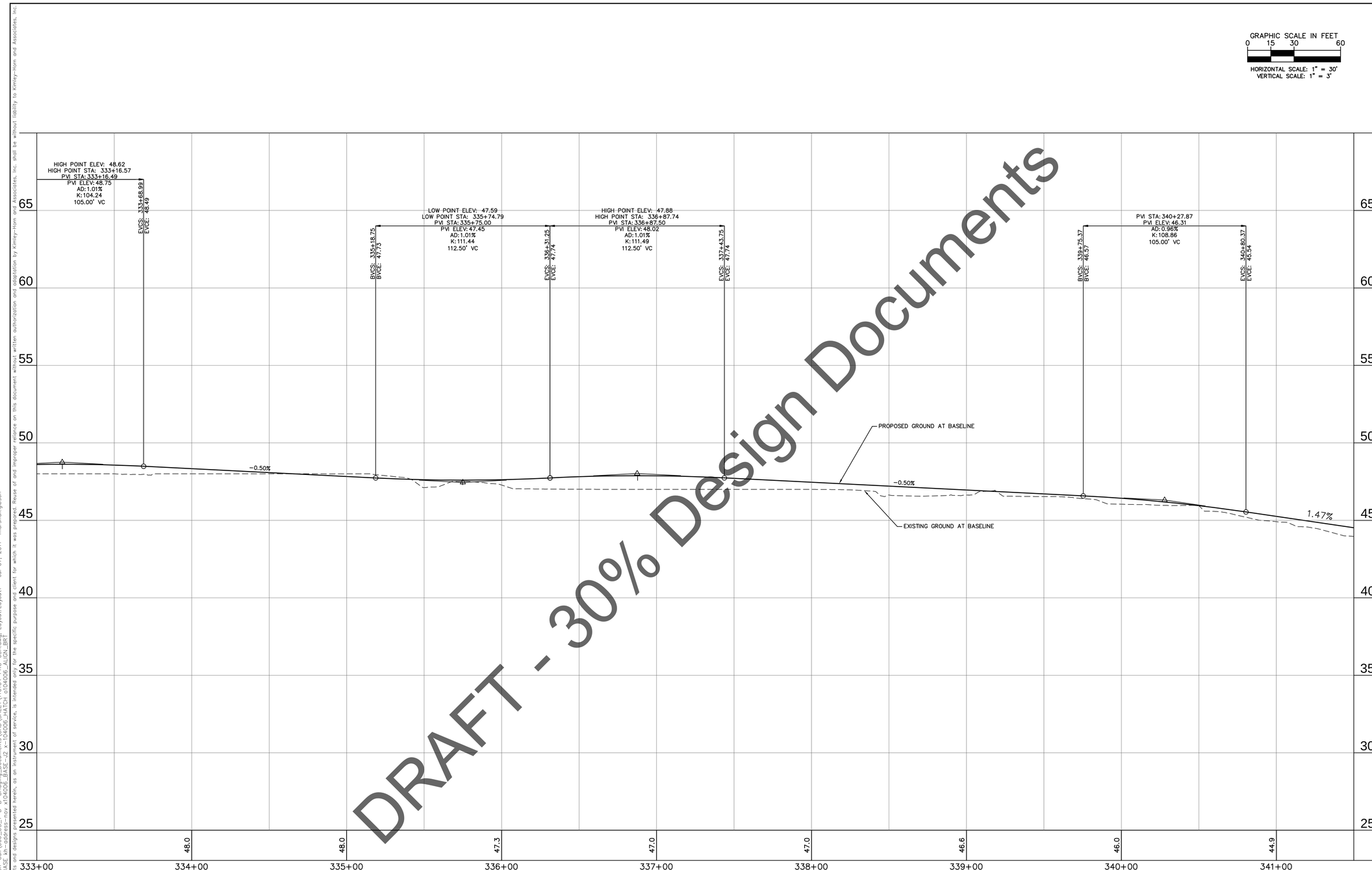

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CITY OF ALEXANDRIA VIRGINIA

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DESIGNED BY P.M.H.
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PROFILE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
05A

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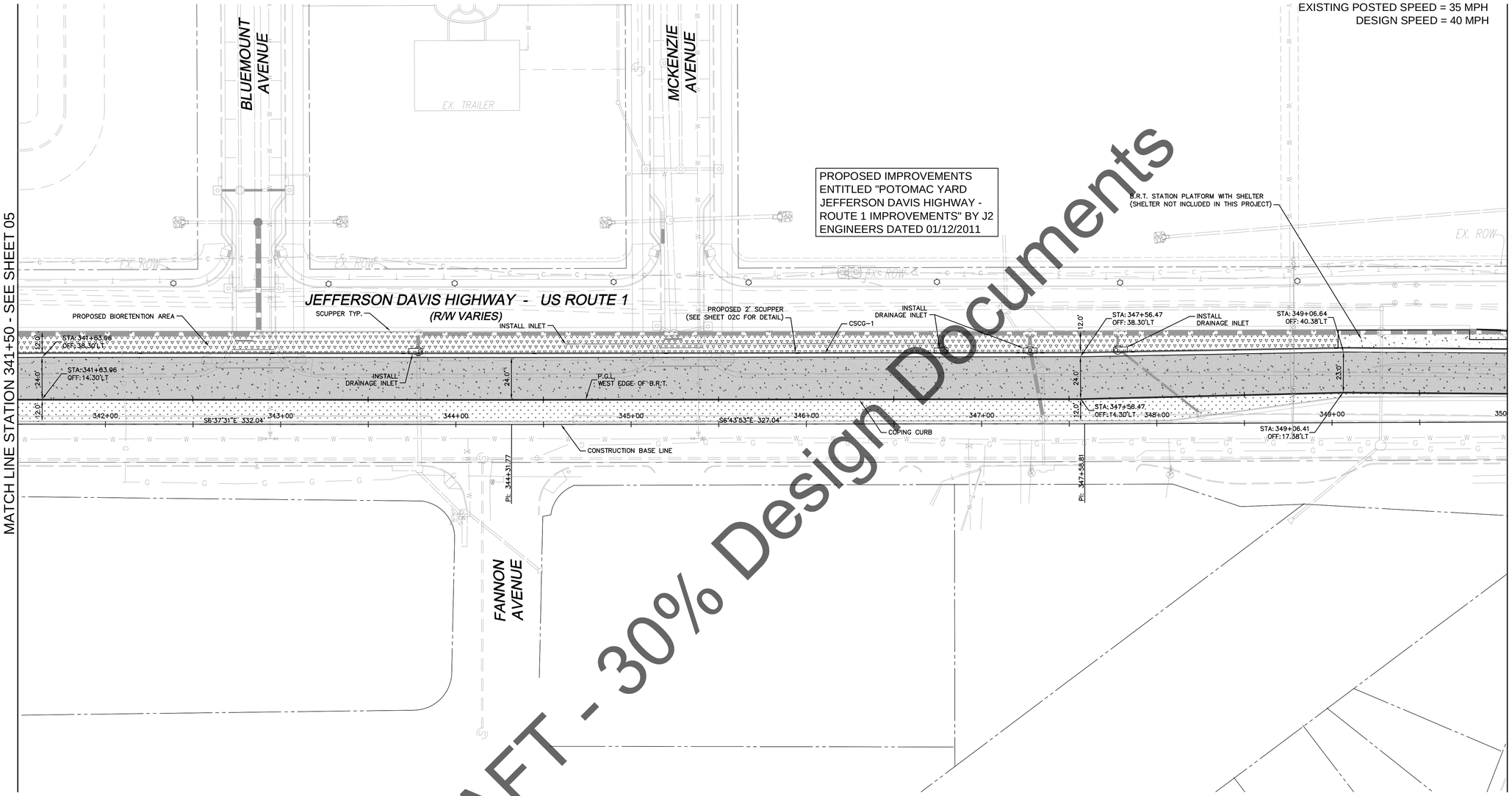
JEFFERSON DAVIS HIGHWAY - ROUTE 1
EXISTING RIGHT-OF-WAY VARIES
EXISTING POSTED SPEED = 35 MPH
DESIGN SPEED = 40 MPH

PROPOSED IMPROVEMENTS ENTITLED "POTOMAC YARD JEFFERSON DAVIS HIGHWAY - ROUTE 1 IMPROVEMENTS" BY J2 ENGINEERS DATED 01/12/2011



DRAFT - 30% Design Documents

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

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KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PLAN SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
06

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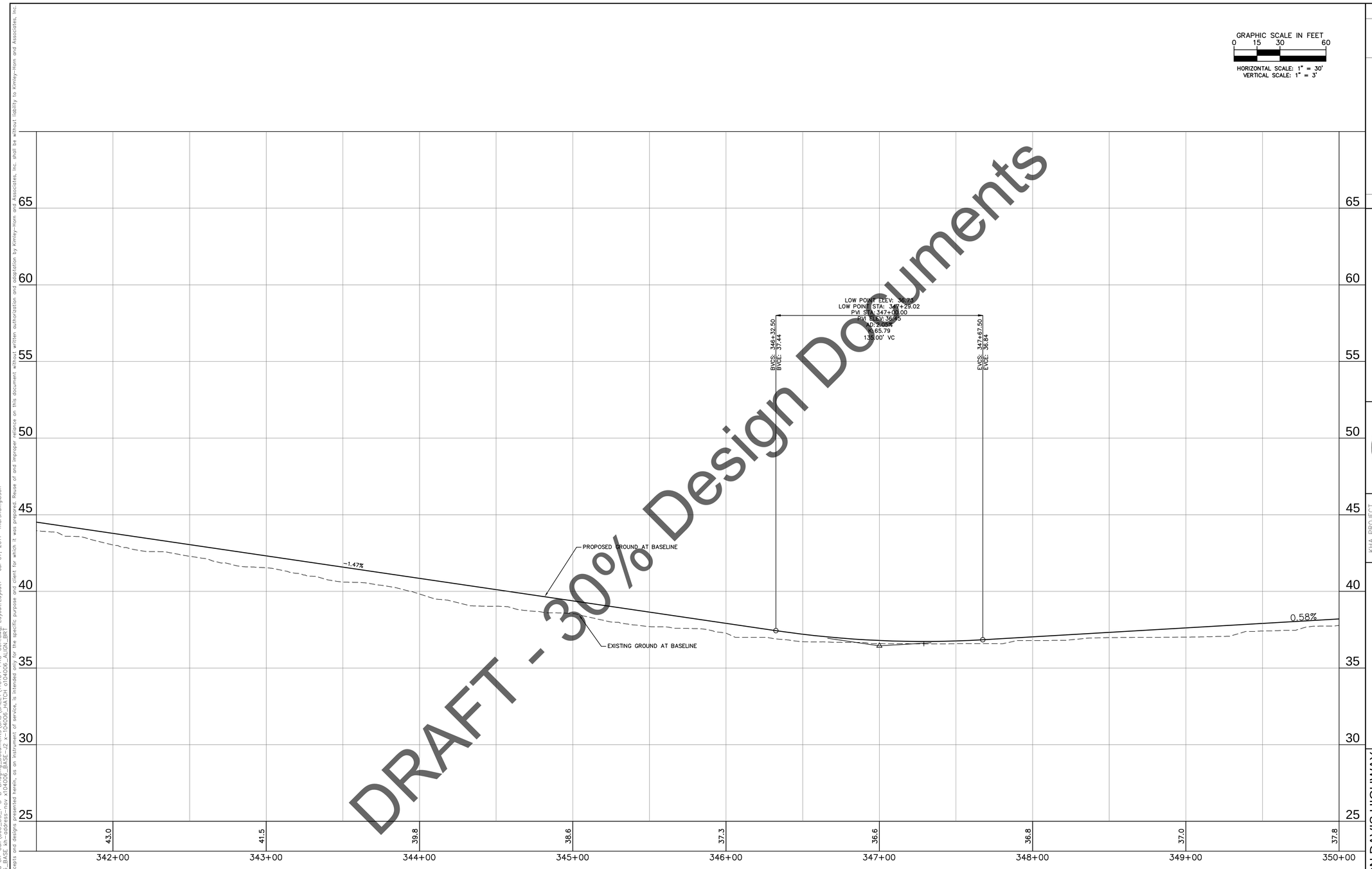

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PROFILE SHEET

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DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
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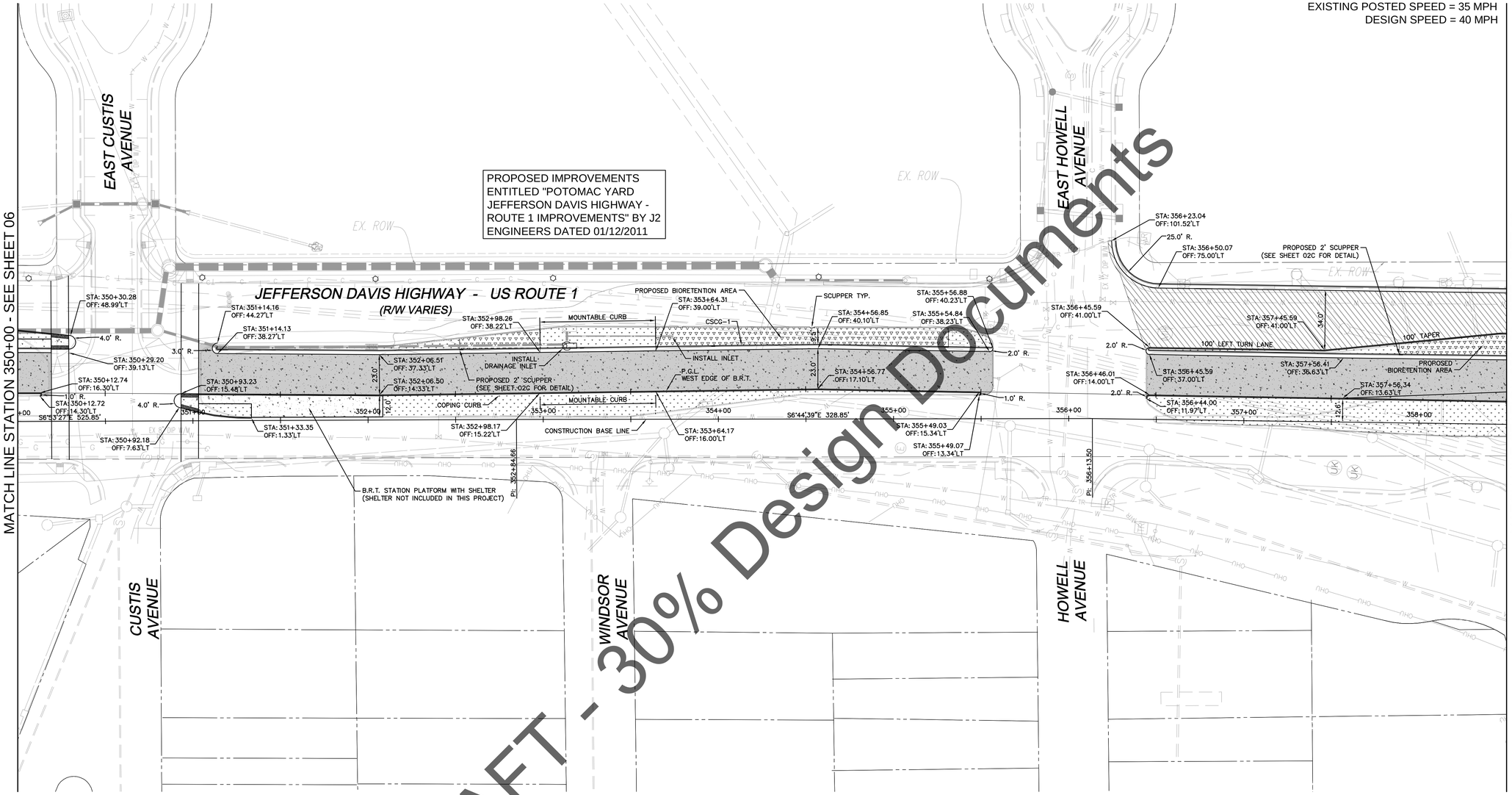
DESIGN SPEED = 40 MPH



GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
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PLAN SHEET

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DESIGN/BUILD
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SHEET NUMBER
07

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XREFS: X104006_BORDER X104006_BASE sh_underlay-mov X104006_BASE-underlay-2 X104006_HATCH X104006-SURVEY-2
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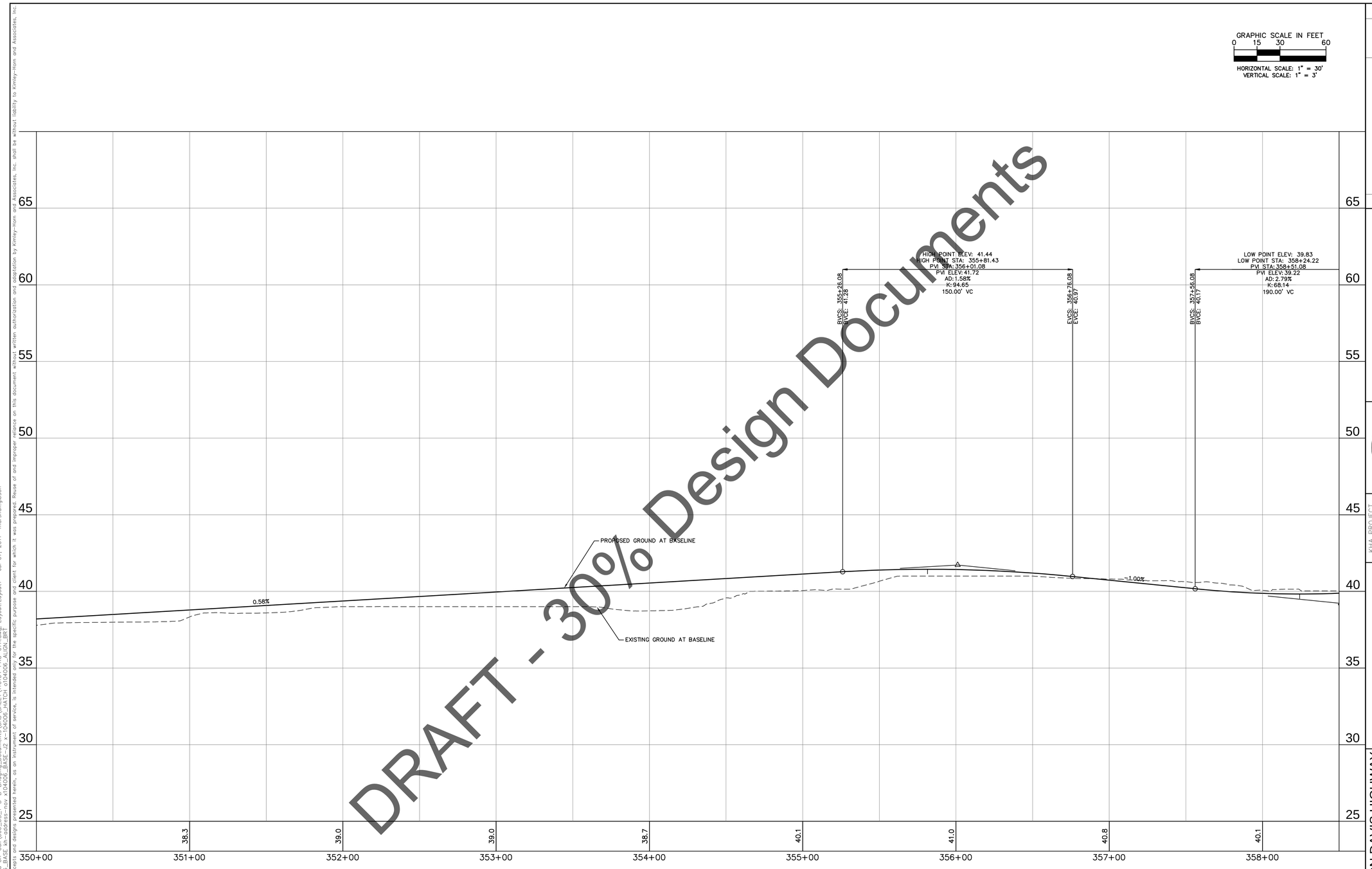

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PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PROFILE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
07A

K:\NVA_TPTO\110104 - Alexandria On-Call\006 US-1-D-B-Bridge Documents\CAD\SHEET\110104-PRO-07A.dwg, Layout:Layout Jul 07, 2011 marshall.gibson
XREFS: X104006 BRIDGE X104006 BASE wh_updates-mp X104006 BASE-Cut X104006 HATCH X104006 ALIGN BASE
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JEFFERSON DAVIS HIGHWAY - ROUTE 1
EXISTING RIGHT-OF-WAY VARIES
EXISTING POSTED SPEED = 35 MPH
DESIGN SPEED = 40 MPH

PROPOSED IMPROVEMENTS ENTITLED "POTOMAC YARD JEFFERSON DAVIS HIGHWAY - ROUTE 1 IMPROVEMENTS" BY J2 ENGINEERS DATED 01/12/2011

MATCH LINE STATION 358+50 - SEE SHEET 07

BELLEFONTE AVENUE

POTOMAC AVENUE

JEFFERSON DAVIS HIGHWAY - US ROUTE 1
(R/W VARIES)

PROPOSED 2' SCUPPER (SEE SHEET 02C FOR DETAIL)
PROPOSED BIORETENTION AREA
RELOCATE EXISTING LIGHT POLE
CSCG-1
SCUPPER TYP. INSTALL INLET
COPING CURB
EX. GRASS PAVERS
EX. ROW
EX. AERIAL EASEMENT
B.R.T. STATION PLATFORM WITH SHELTER (SHELTER NOT INCLUDED IN THIS PROJECT)
REMOVE CSCG-1 FROM STA: 356+23.04 TO STA: 363+16.52
P.G.L. WEST EDGE OF B.R.T.
VDOT CG-12A
REMOVE CSCG-1 FROM STA: 364+15.08 TO STA: 365+15.30
CONSTRUCTION BASE LINE
PI: 361+66.37
PRC: 363+16.05
PRC: 364+93.76

STA: 359+06.38 OFF: 37.00'LT
STA: 359+06.38 OFF: 13.00'LT
S5°50'35"E 552.87'
548.8'
STA: 360+26.90 OFF: 0.00'
STA: 361+55.94 OFF: 52.00'LT
STA: 361+66.37 OFF: 0.00'
STA: 361+66.68 OFF: 37.00'LT
STA: 361+66.48 OFF: 13.00'LT
STA: 361+66.99 OFF: 75.00'LT
STA: 362+88.42 OFF: 75.00'LT
STA: 362+91.04 OFF: 52.00'LT
STA: 362+91.13 OFF: 37.00'LT
STA: 362+91.29 OFF: 13.00'LT
STA: 362+91.37 OFF: 0.00'
STA: 362+95.04 OFF: 52.00'LT
STA: 362+95.59 OFF: 0.00'LT
STA: 363+16.52 OFF: 101.76'LT
STA: 363+04.12 OFF: 38.99'LT
STA: 363+03.31 OFF: 13.00'LT
S6°47'40"E 133.70'
Δ=7°20'05" R=513.00' L=193.68' CB=S10°27'42"E C=193.55'
STA: 364+06.24 OFF: 29.51'LT
STA: 364+06.24 OFF: 17.81'LT
STA: 364+12.13 OFF: 34.44'LT
STA: 364+03.25 OFF: 71.93'LT
STA: 364+35.69 OFF: 66.41'LT
STA: 363+80.16 OFF: 111.39'LT
STA: 363+79.50 OFF: 99.55'LT
STA: 365+15.30 OFF: 59.37'LT
STA: 365+29.48 OFF: 24.23'LT
STA: 365+29.48 OFF: 0.00'
Δ=7°20'05" R=2987.00' L=382.38' CB=S10°27'42"E C=382.12'

END PROJECT
ROUTE 1 CONSTRUCTION B/L
STA 365+29.48
MATCH EXISTING

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GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

No.	REVISIONS	DATE	BY

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PLAN SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
08

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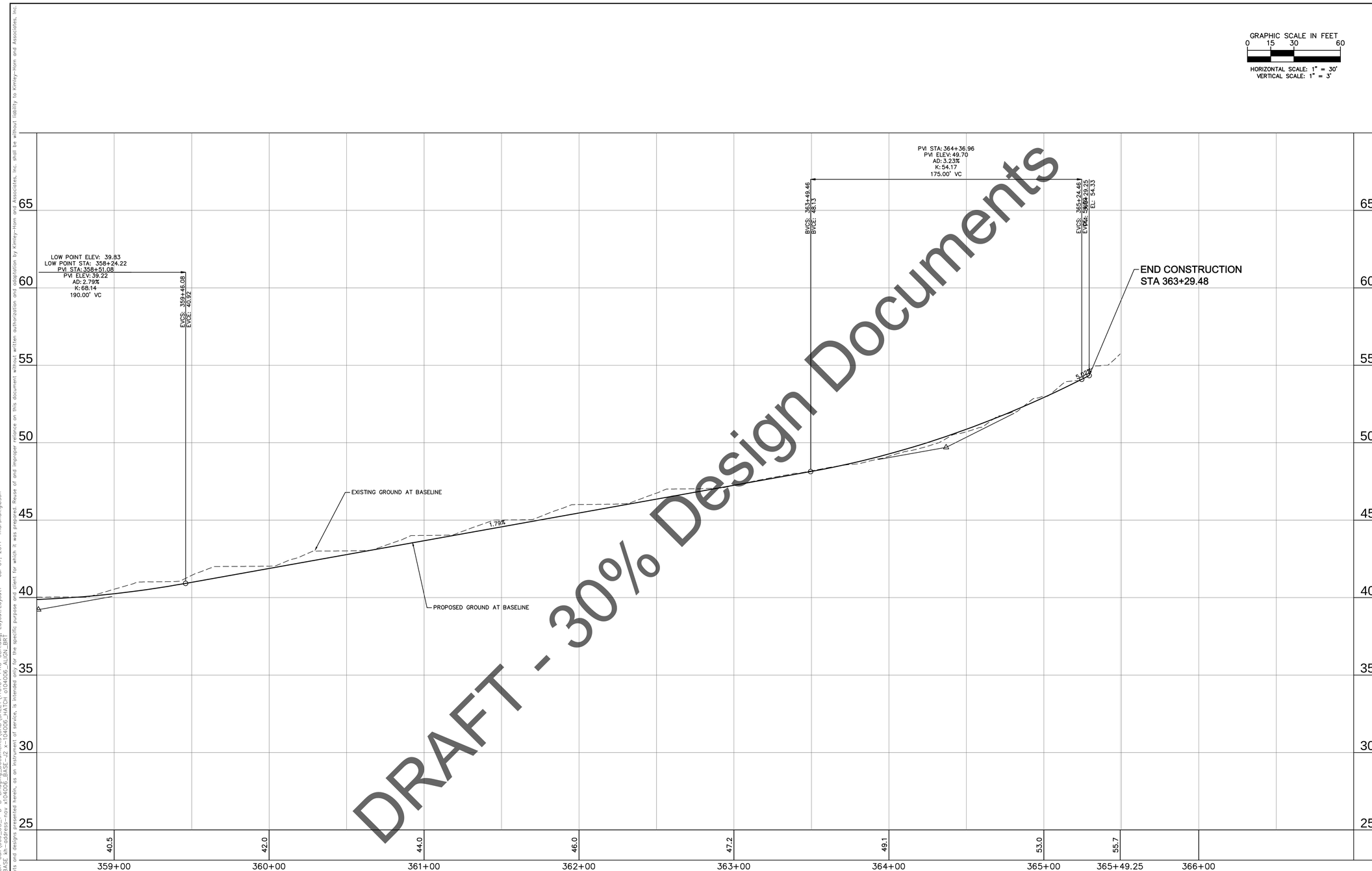

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CITY OF ALEXANDRIA VIRGINIA

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DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PROFILE SHEET

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
08A

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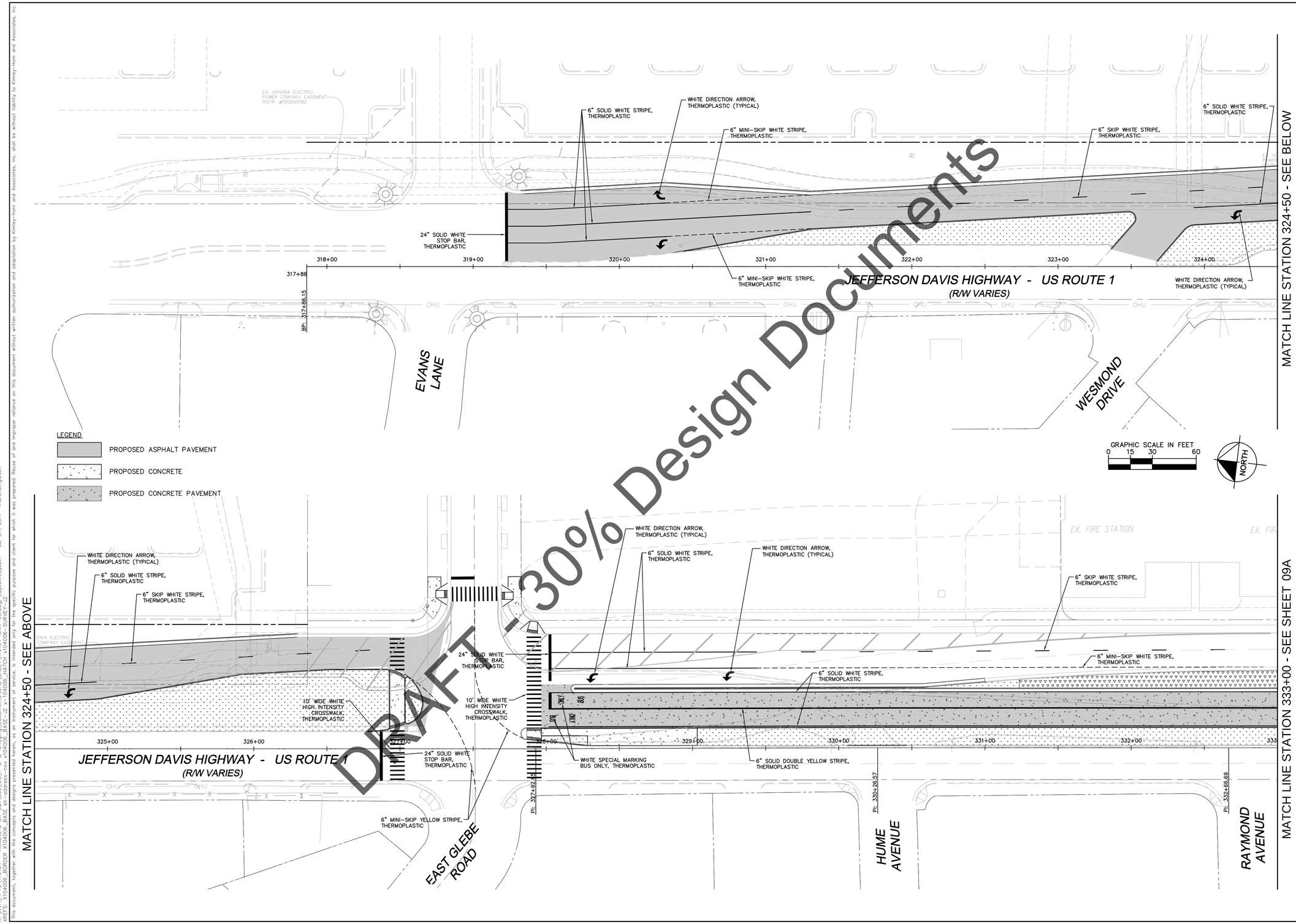

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT	110104006
DATE	07/08/2011
SCALE	AS SHOWN
DESIGNED BY	P.M.H.
DRAWN BY	C.P.M.
CHECKED BY	R.F.B.

PAVEMENT MARKINGS & SIGNING PLAN

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
09

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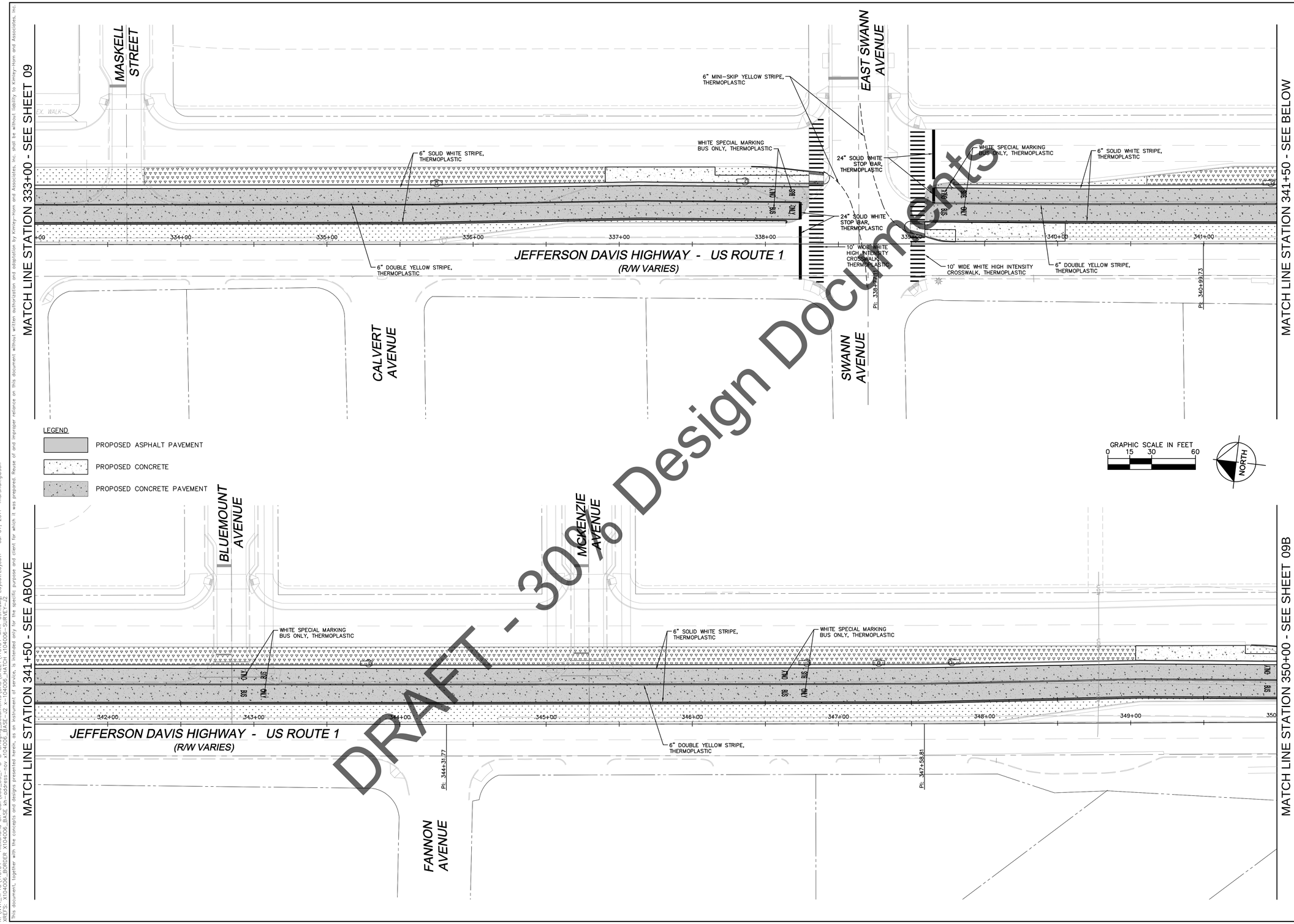

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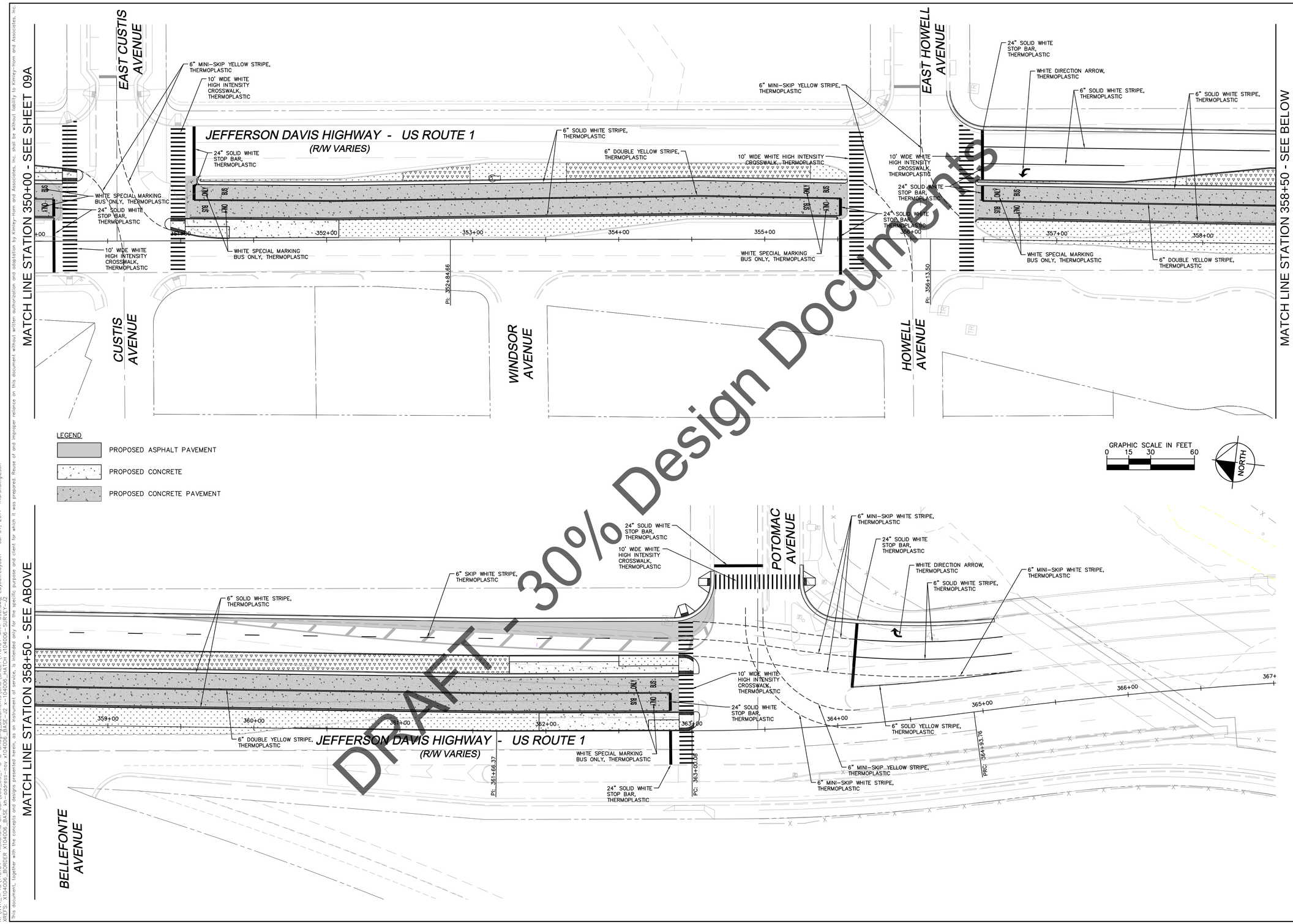
CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 05/10/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PAVEMENT MARKINGS & SIGNING PLAN

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
09A



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CITY OF ALEXANDRIA VIRGINIA

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DATE 05/10/2011
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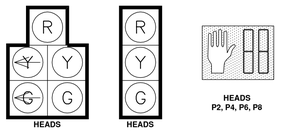
DRAWN BY C.P.M.
CHECKED BY R.F.B.

PAVEMENT MARKINGS & SIGNING PLAN

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
09B

EXISTING SIGNALS



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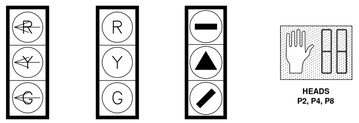
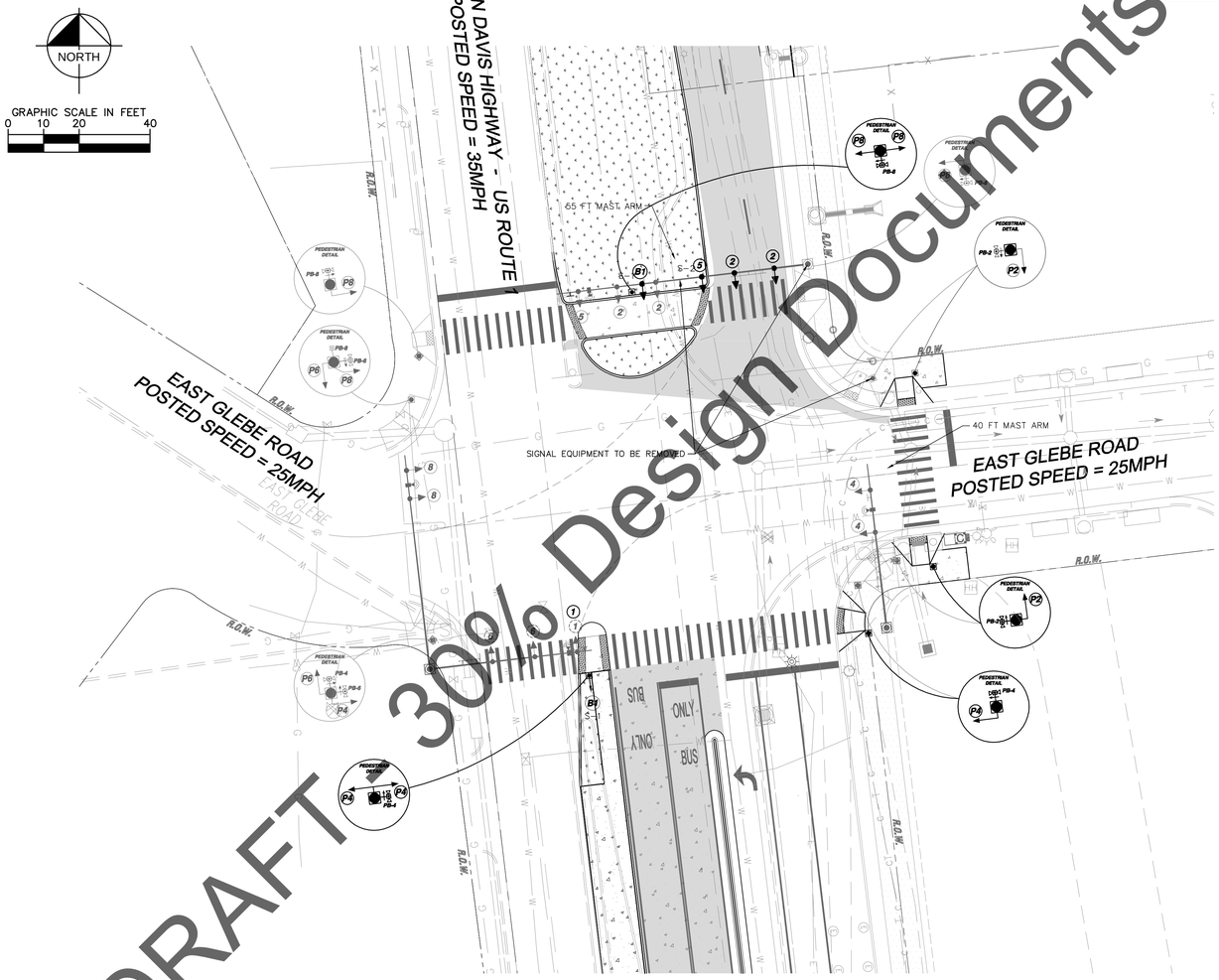
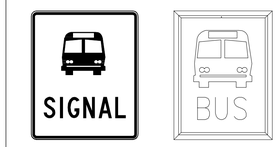




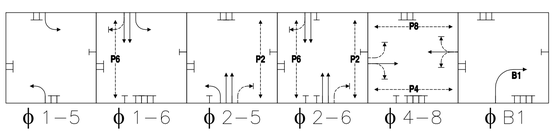
PROPOSED SIGNS



S-1
CUSTOM
36" X 30"

S-2
BRT LED BUS
WARNING SIGN

PROPOSED PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED	
C		CONTROLLER CABINET WITH SWITCH AND METER ASSEMBLY
		TRAFFIC SIGNAL POLE
		10 "PEDESTAL POLE
		TRAFFIC SIGNAL HEAD

No.	REVISIONS	DATE	BY

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DRAWN BY C.P.M.
CHECKED BY R.F.B.

TRAFFIC SIGNAL MODIFICATION PLAN
ROUTE 1 AND EAST GLEBE RD

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
10

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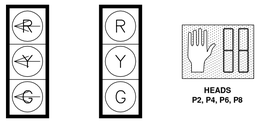

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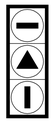

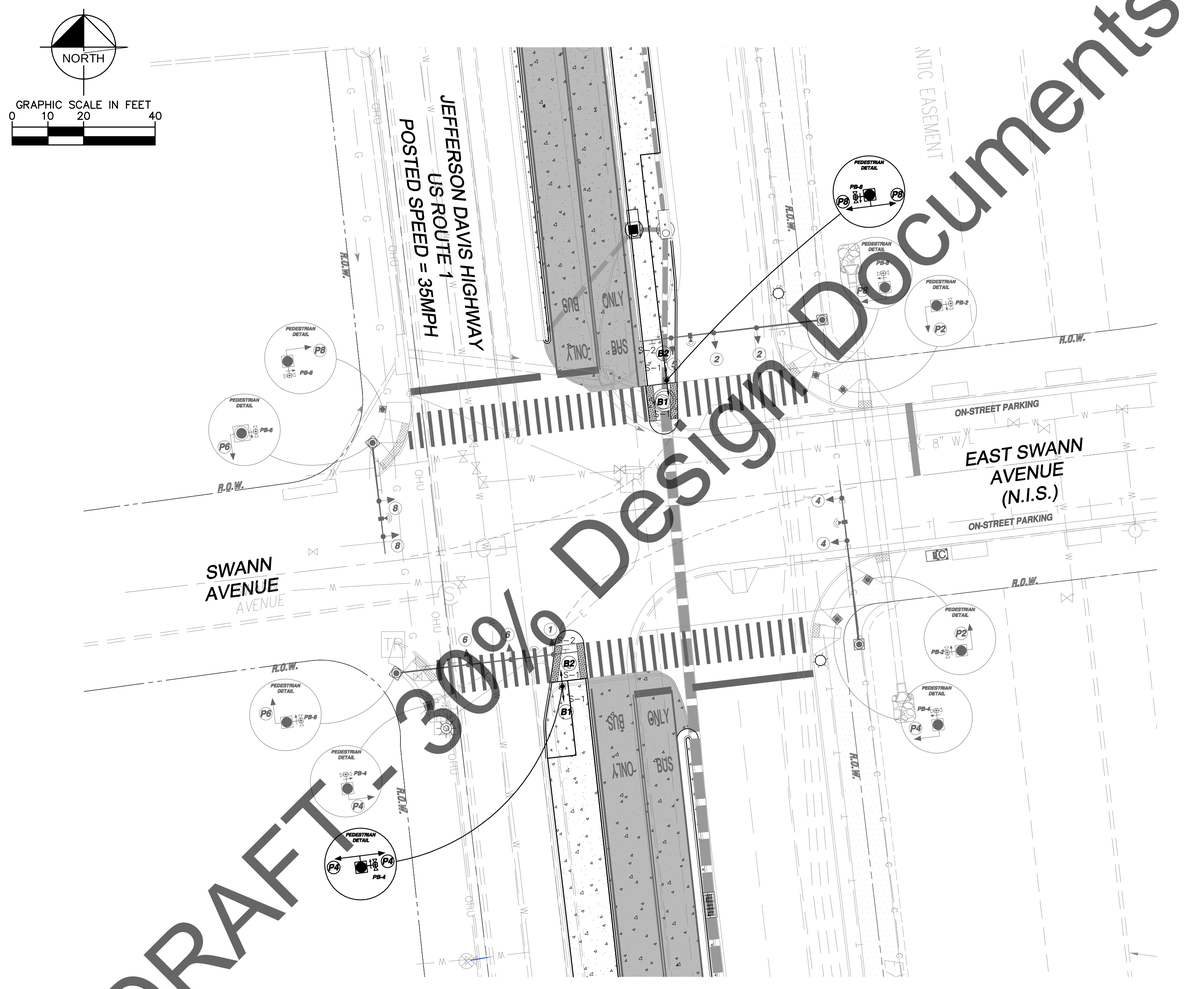

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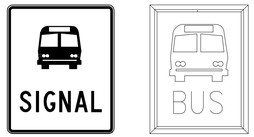
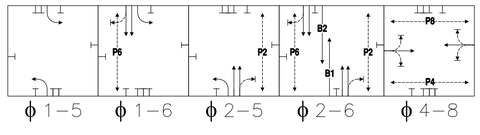


S-1
CUSTOM
36" X 30"

S-2
BRT LED BUS
WARNING SIGN

PROPOSED PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED	
C	C	CONTROLLER CABINET WITH SWITCH AND METER ASSEMBLY
		TRAFFIC SIGNAL POLE
		10 "PEDESTAL POLE
		TRAFFIC SIGNAL HEAD

No.	REVISIONS	DATE	BY

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DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

TRAFFIC SIGNAL MODIFICATION PLAN
ROUTE 1 AND SWANN AVENUE

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
10A

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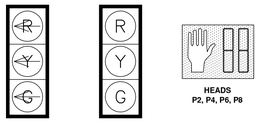

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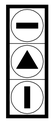

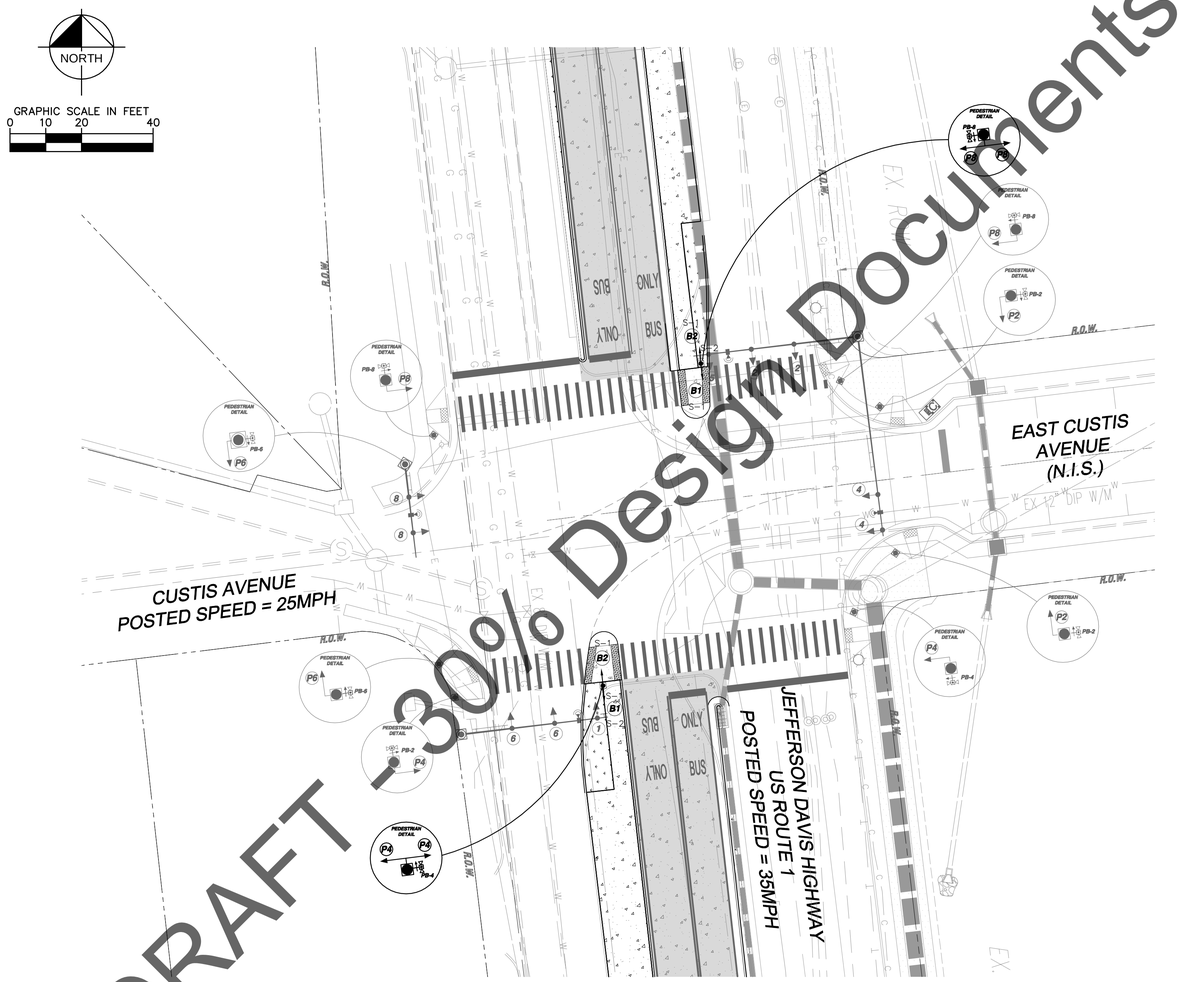

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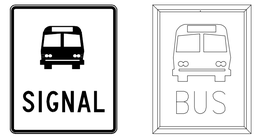
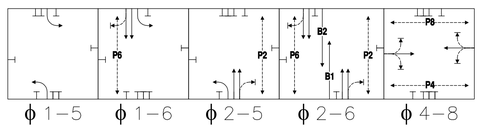
PROPOSED SIGNS



S-1
CUSTOM
36" X 30"

S-2
BRT LED BUS
WARNING SIGN

PROPOSED PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED	
C		CONTROLLER CABINET WITH SWITCH AND METER ASSEMBLY
		TRAFFIC SIGNAL POLE
		10 "PEDESTAL POLE
		TRAFFIC SIGNAL HEAD

No.	REVISIONS	DATE	BY

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DRAWN BY C.P.M.
CHECKED BY R.F.B.

TRAFFIC SIGNAL MODIFICATION PLAN
ROUTE 1 AND CUSTIS ROAD

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
10B

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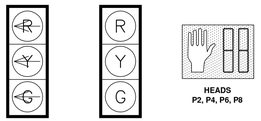
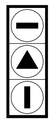
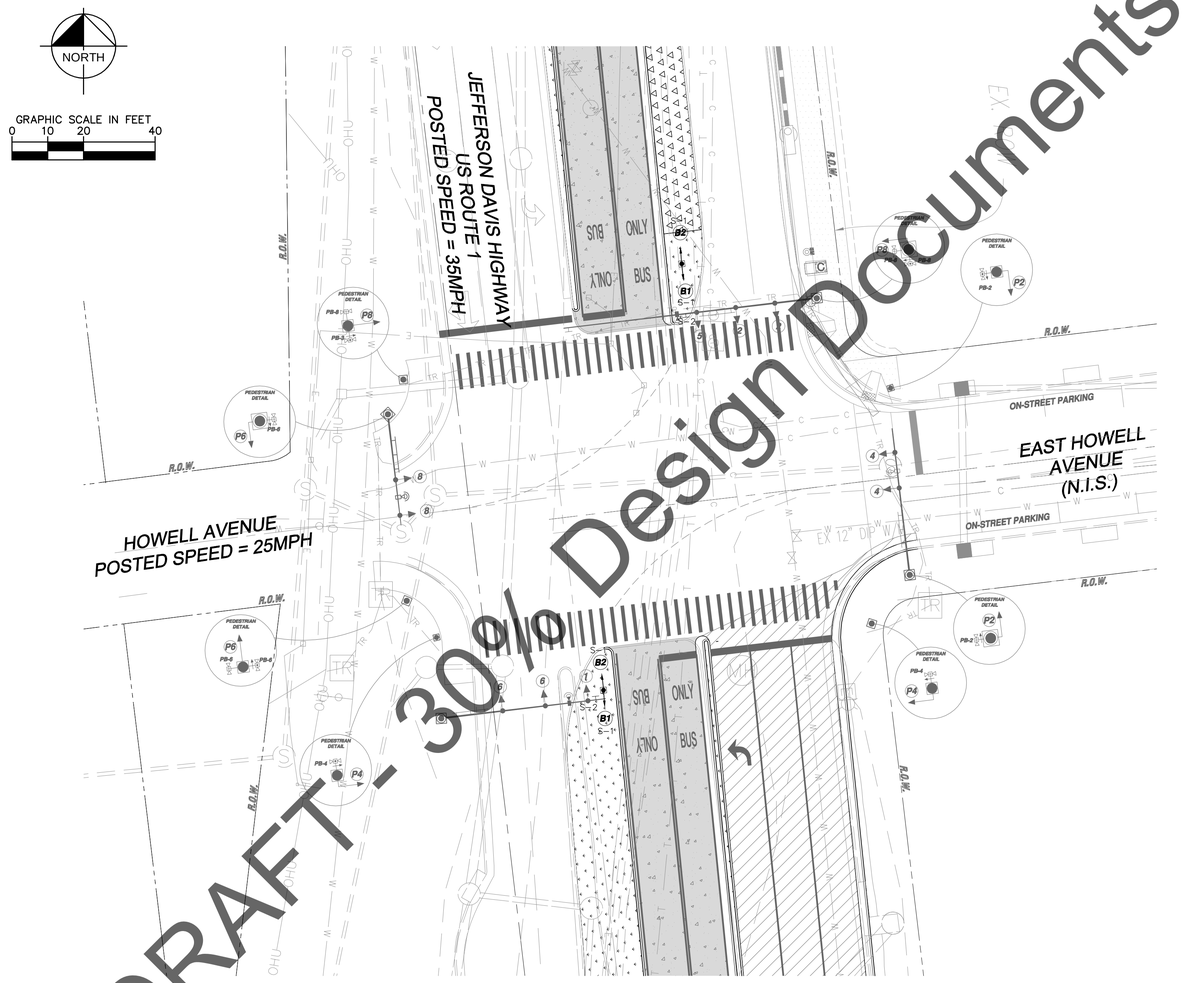
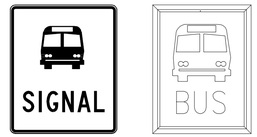


PROPOSED SIGNALS





PROPOSED SIGNS

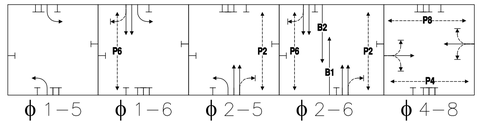


S-1
CUSTOM
36" X 30"

S-2
BRT LED BUS
WARNING SIGN

DRAFT - 30% Design Documents

PROPOSED PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED	
C		CONTROLLER CABINET WITH SWITCH AND METER ASSEMBLY
		TRAFFIC SIGNAL POLE
		10 'PEDESTAL POLE
		TRAFFIC SIGNAL HEAD

No.	REVISIONS	DATE	BY

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11400 COMMERCE PARK DRIVE, SUITE 400, RESTON, VA 20191
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WWW.KIMLEY-HORN.COM

CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

TRAFFIC SIGNAL MODIFICATION PLAN
ROUTE 1 AND HOWELL AVE

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
10C

K:\NVA_TPTO\110104 - Alexandria On-Call\006-US-1-D-B-Bridge\Documents\CAD\SHEET\110104-SIG-10C.dwg, Layout:Layout1 - Jul 07, 2011 marshall.gibson
XREFS: X104006_BORDER X104006_BASE X104006-ROW X104006-Grid X104006_GS-Signal X104006_HATCH X104006_SHEET-2
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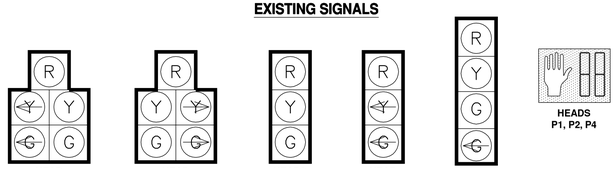
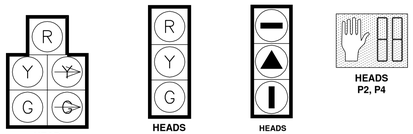
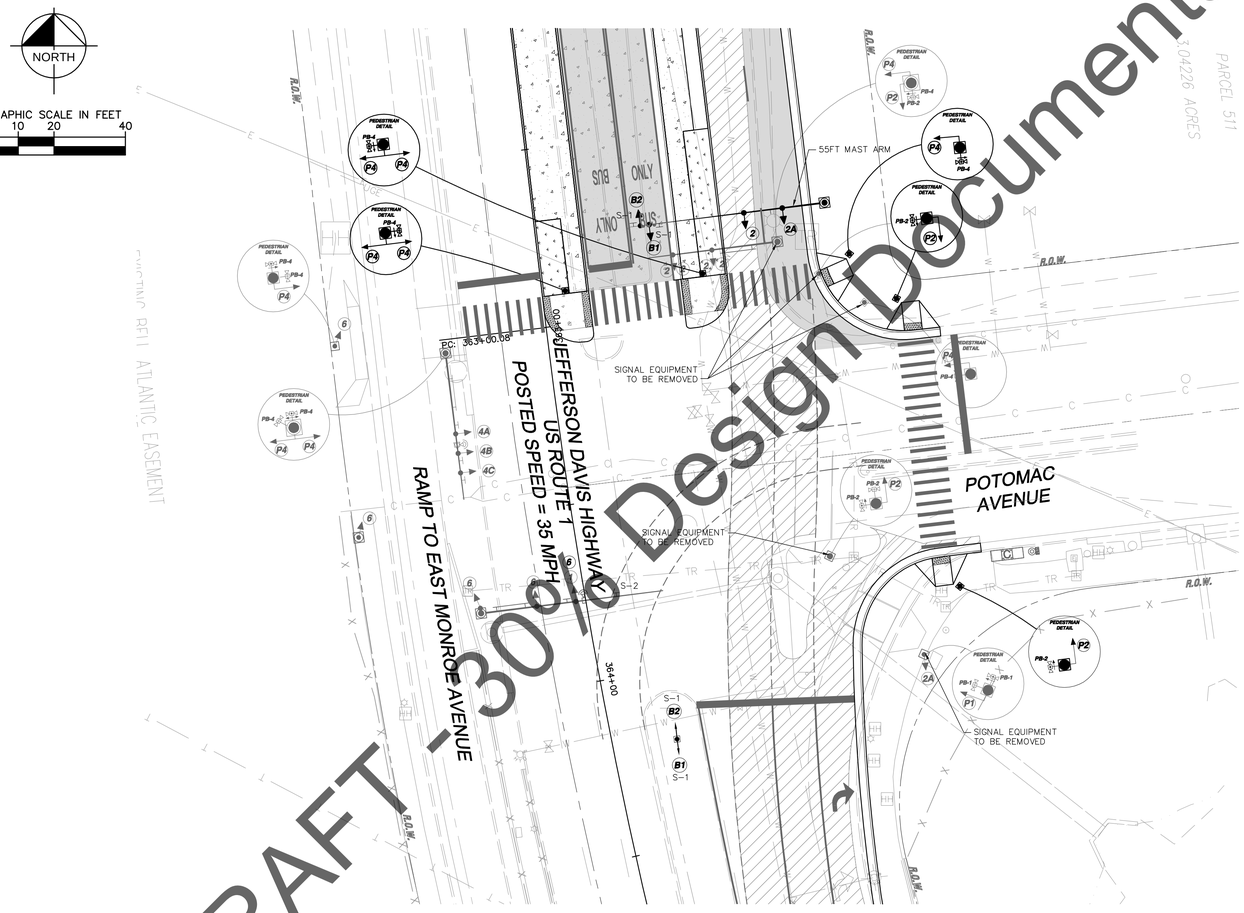
EXISTING SIGNALS



PROPOSED SIGNALS



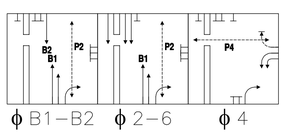


PROPOSED SIGNS

S-1 CUSTOM 36" X 30"

S-2 R3-2 36" X 36"

PROPOSED PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED	
C		CONTROLLER CABINET WITH SWITCH AND METER ASSEMBLY
		TRAFFIC SIGNAL POLE
		10 "PEDESTAL POLE
		TRAFFIC SIGNAL HEAD

No.	REVISIONS	DATE	BY

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CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE 07/08/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

TRAFFIC SIGNAL MODIFICATION PLAN
ROUTE 1 AND POTOMAC AVE

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
10D

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XREFS: X10400B_BORDER alexandria_xref X10400B_BASE-PROPERTY alexandria_xref X10400B-SITE-SIGNAL alexandria_xref X10400B_BASE
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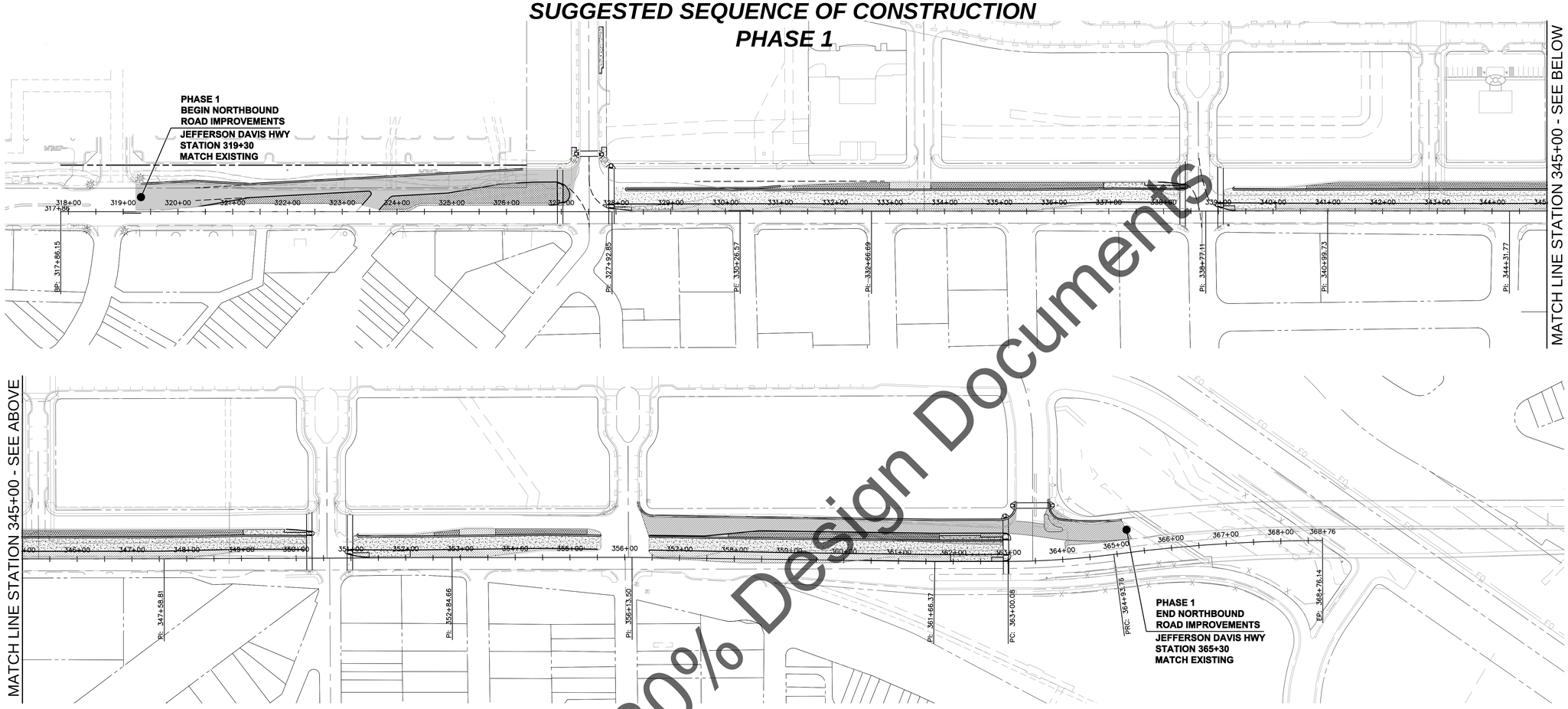
SUGGESTED SEQUENCE OF CONSTRUCTION
PHASE 1



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GENERAL NOTES FOR ALL PHASES OF CONSTRUCTION

1. UNLESS OTHERWISE APPROVED OR DIRECTED BY CITY OF ALEXANDRIA, THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THE FOLLOWING SEQUENCE AND MAINTENANCE OF TRAFFIC PLAN. IT IS NOT THE INTENT OF THIS SEQUENCE OF CONSTRUCTION PLAN TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH PHASE, BUT ONLY THE GENERAL HANDLING OF TRAFFIC.

2. CONTRACTOR SHALL OBTAIN AN CITY OF ALEXANDRIA RIGHT-OF-WAY PERMIT PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY. WORK SOUTH OF 10TH STREET MAY REQUIRE A VDOT RIGHT-OF-WAY PERMIT PRIOR TO COMMENCEMENT.

3. ALL WORK AREAS (AND THE LIMITS THEREOF) AND LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, DATED MAY 2005 (INCLUDING ALL CURRENT REVISIONS), AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION AND SHALL BE DIRECTED OR APPROVED BY CITY OF ALEXANDRIA.

4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SATISFACTORY DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

5. RESTRICTIONS ON TRAFFIC SHALL BE REMOVED BY 12:00 NOON THE DAY BEFORE A HOLIDAY(S) AND TRAFFIC SHALL NOT BE RESTRICTED AGAIN UNTIL 12:00 NOON THE DAY AFTER THE HOLIDAY(S). WHEN A HOLIDAY FALLS ON MONDAY, RESTRICTION ON TRAFFIC SHALL BE REMOVED BY 12:00 NOON THE PROCEEDING FRIDAY. WHEN A HOLIDAY FALLS ON FRIDAY, RESTRICTIONS ON TRAFFIC SHALL NOT BE PLACED UNTIL 12:00 NOON THE FOLLOWING MONDAY. HOLIDAYS ARE NEW YEARS DAY, EASTER DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.

6. RESTRICTIONS ON TRAFFIC SHALL BE APPROVED BY CITY OF ALEXANDRIA. TRAFFIC SHALL NOT BE STOPPED ON US ROUTE 1 AND ADJACENT STREETS FOR LONGER THAN FIVE MINUTES AT ANY TIME, UNLESS OTHERWISE DIRECTED BY CITY OF ALEXANDRIA.

7. TRAFFIC CONTROL DEVICES SHALL BE KEPT CLEAN, LEGIBLE, AND IN PROPER WORKING ORDER AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE A PERSON WHOSE RESPONSIBILITY SHALL BE TO INSPECT AND MAINTAIN SIGNS, BARRICADES, OTHER CHANNELIZING DEVICES, AND LIGHTS DURING THE TIME THAT TRAFFIC IS RESTRICTED DUE TO CONSTRUCTION OPERATIONS.

8. IF THE CONTRACTOR ELECTS TO WORK AT NIGHT, IT MUST BE APPROVED BY CITY OF ALEXANDRIA. SUFFICIENT LIGHTING OF THE WORK SITE(S) TO ENABLE THE SATISFACTORY COMPLETION OF THE WORK SHALL BE PROVIDED IN ACCORDANCE WITH CITY OF ALEXANDRIA REGULATION. LIGHTING SHALL BE ARRANGED SO AS NOT TO INTERFERE WITH OR IMPEDE TRAFFIC APPROACHING THE WORK SITE(S) FROM EITHER DIRECTION. LIGHTING ARRANGEMENTS AT THE WORK SITE(S) SHALL PROVIDE A MINIMUM OF 50-FOOT CANDLES OF LIGHT FOR AN AREA APPROXIMATELY 15 FEET BY 15 FEET WITH A MINIMUM OF 5-FOOT CANDLES IN THE CORNERS OF THE AREA. LIGHTING SHALL BE FROM A MINIMUM OF TWO FIXTURES WITH BACKUP FIXTURES AND POWER SOURCE READILY AVAILABLE.

9. ANY CONTRACT ITEMS NOT SPECIFICALLY NOTED IN THE SEQUENCE OF CONSTRUCTION MAY BE CONSTRUCTED AT THE CONVENIENCE OF THE CONTRACTOR OR AS DIRECTED BY THE ENGINEER. UNDER NO CIRCUMSTANCES WILL CONCURRENT CONSTRUCTION OF A LEFT TURN LANE AND RIGHT TURN LANE ON THE SAME APPROACH TO AN INTERSECTION BE PERMITTED.

10. ALL CONSTRUCTION AND CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED WITHIN THE CONSTRUCTION WORK ZONE.

11. ALL CONSTRUCTION SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH MUTCD STANDARDS.

12. THE CONTRACTOR SHALL MAINTAIN 11' MINIMUM LANES.

13. ALL AREAS EXCAVATED BELOW EXISTING PAVEMENT SURFACES AND WITHIN THE CLEAR ZONE, IF NOT PROTECTED BY CHANNELIZATION DEVICES, SHALL BE BACKFILLED TO FORM AN APPROXIMATE 6:1 WEDGE AGAINST EXISTING PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC. PLACING, MAINTAINING AND REMOVING 6:1 WEDGE SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS IN THE CONTRACT AND NO ADDITIONAL COMPENSATIONS WILL BE ALLOWED.

14. CONCRETE TRAFFIC BARRIER SERVICE, IF USED, SHALL BE INSTALLED AND REMOVED SO AS TO NOT PRESENT ANY FIXED OBJECT HAZARD TO THE MOTORING PUBLIC.

15. THE CONTRACTOR SHALL CONSTRUCT THE FINAL PAVEMENT OVERLAY AT THE END OF THE PROJECT.

PHASE 1

CONSTRUCT IMPROVEMENTS TO THE NORTHBOUND LANES ALONG ROUTE 1.

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

No.	REVISIONS	DATE	BY

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WWW.KIMLEY-HORN.COM

CITY OF ALEXANDRIA VIRGINIA

KHA PROJECT 110104006
DATE (5/10/2011)
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

SEQUENCE OF CONST. & TRAFFIC CONTROL PLAN - PHASE 1

JEFFERSON DAVIS HIGHWAY
ROUTE 1 FROM EAST GLEBE
ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
11

K:\NVA_TPTO\110104 - Alexandria On-Call\006_US_1_D-B_Bridging Documents\CAD\SHEET\110104-SQC-11.dwg, Layout:Layout1 Jul 07, 2011 marshall.gibson
XREFS: x104006_BORDER x104006-TB x104006-BASE-2 x104006-BASE x104006-SURVEY-2
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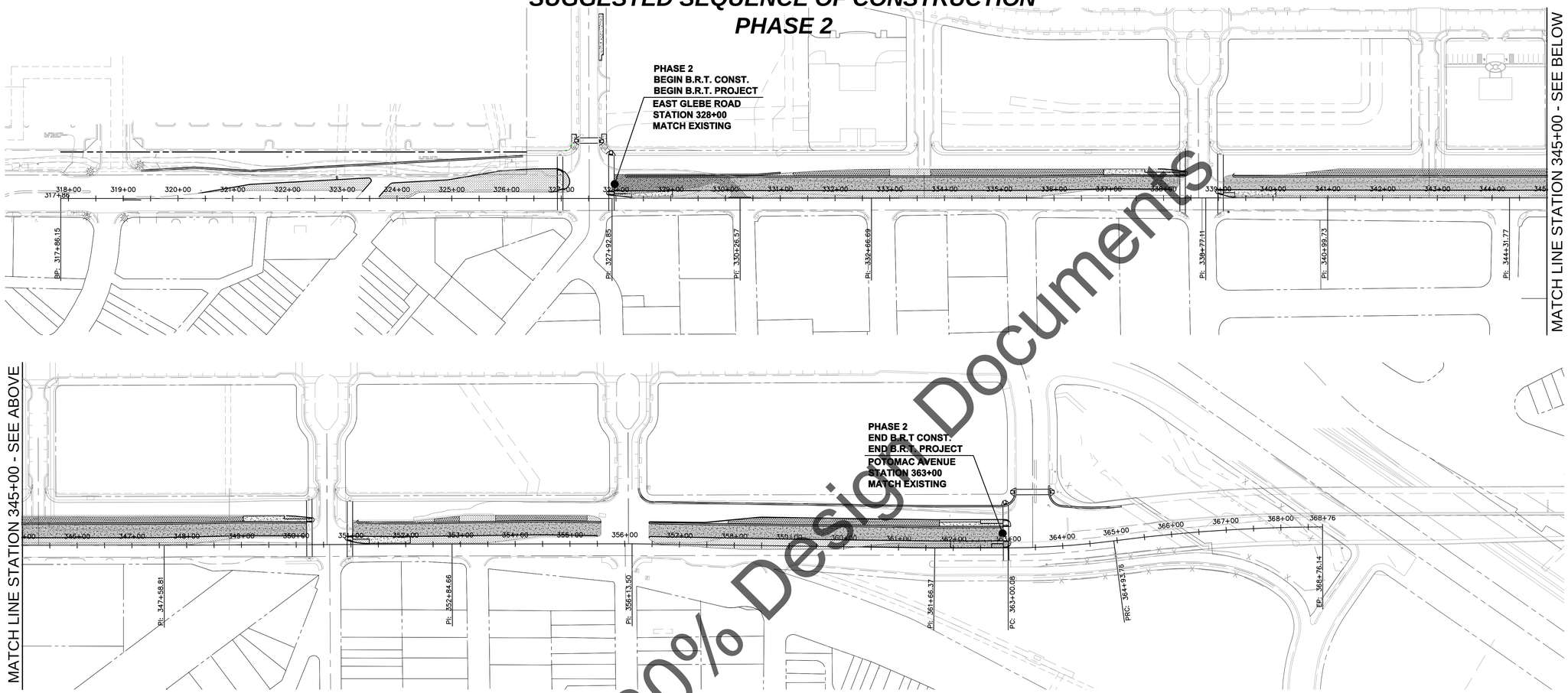
SUGGESTED SEQUENCE OF CONSTRUCTION
PHASE 2



DRAFT - 30% Design Documents

GENERAL NOTES FOR ALL PHASES OF CONSTRUCTION

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PHASE 2

CONSTRUCT THE TRANSIT LANES IN THE MEDIAN OF ROUTE 1.

LEGEND

- PROPOSED ASPHALT PAVEMENT
- EXISTING PAVEMENT TO BE MILLED AND OVERLAYED
- EXISTING PAVEMENT TO BE DEMOLISHED
- PROPOSED CONCRETE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BIORETENTION AREA
- PROPOSED GRASS AREA
- EXISTING RIGHT OF WAY

No.	REVISIONS	DATE	BY

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KHA PROJECT 110104006
DATE (5/10)/2011
SCALE AS SHOWN
DESIGNED BY P.M.H.
DRAWN BY C.P.M.
CHECKED BY R.F.B.

SEQUENCE OF CONST. & TRAFFIC CONTROL PLAN - PHASE 2

JEFFERSON DAVIS HIGHWAY ROUTE 1 FROM EAST GLEBE ROAD TO POTOMAC AVENUE
BRT IMPROVEMENTS
DESIGN/BUILD
CITY OF ALEXANDRIA VIRGINIA

SHEET NUMBER
11A

K:\NVA_TPTO\110104 - Alexandria On-Call\006_US_1_D-B_Bridging_Documents\CADD\SHEET\110104-SQC-114.dwg, Layout:Layout1 Jul 07, 2011 marshall-gibson
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