



Application for URBAN DESIGN COMMITTEE Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219
(804) 646-6335

<http://www.richmondgov.com/CommitteeUrbanDesign>

Application Type

☐ Addition/Alteration to Existing Structure
☐ New Construction
☐ Streetscape
☐ Site Amenity

☐ Encroachment
☐ Master Plan
☐ Sign
☐ Other

Review Type

☐ Conceptual
☐ Final

Project Name: _____

Project Address: _____

Brief Project Description (this is not a replacement for the required detailed narrative) : _____

Applicant Information

(on all applications other than encroachments, a City agency representative must be the applicant)

Name: _____ Email: _____

City Agency: _____ Phone: _____

Address: _____

Main Contact (if different from Applicant): _____

Company: _____ Phone: _____

Email: _____

Submittal Deadlines

All applications and support materials must be filed no later than 21 days prior to the scheduled meeting of the Urban Design Committee (UDC). Please see the schedule on page 3 as actual deadlines are adjusted due to City holidays. **Late or incomplete submissions will be deferred to the next meeting.**

Filing

Applications can be mailed or delivered to the attention of "Urban Design Committee" at the address listed at the top of this page. **It is important that the applicant discuss the proposal with appropriate City agencies, Zoning Administration staff, and area civic associations and residents prior to filing the application with the UDC.**

UDC Background

The UDC is a ten member committee created by City Council in 1968 whose purpose is to advise the City Planning Commission on the design of projects on City property or right-of-way. The UDC provides advice of an aesthetic nature in connection with the performance of the duties of the Commission under Sections 17.05, 17.06 and 17.07 of the City Charter. The UDC also advises the Department of Public Works in regards to private encroachments in the public right-of-way.

IDLEWOOD AVENUE MODERN ROUNDABOUT PROJECT

Project Narrative

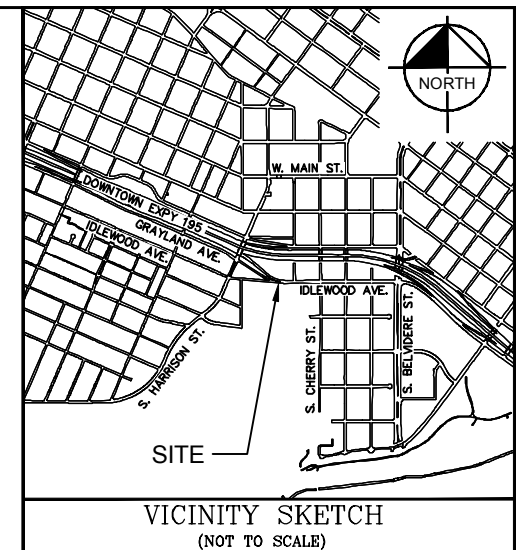
The intersection of Idlewood Avenue, Grayland Avenue, and the Downtown Expressway off-ramp (VA-195) is identified for reconstruction as a modern roundabout. Along with the proposed roundabout, Idlewood Avenue is to be converted from one-way to two-way travel between S. Harrison Street and S. Cherry Street. A byproduct of these improvements is a partial removal of Grayland Avenue between S. Harrison Street and the Downtown Expressway off-ramp. This project increases traffic efficiency within the Randolph and Oregon Hill areas by allowing two-way travel between S. Harrison Street and S. Cherry Street along Idlewood Avenue. Furthermore, roadway network connectivity is increased by the addition of a right-turn movement from the Downtown Expressway off-ramp to Idlewood Avenue west bound which provides a shorter travel distance to S. Harrison Street in comparison to existing conditions. This project will also improve safety and reduce travel speeds. The project is designed to enable pedestrians to safely walk along from S. Cherry Street to S. Harrison Street by connecting existing sidewalks and adding cross walks where feasible.

The current engineer's opinion of probable construction cost is \$600,000. The project is funded by multiple sources. Virginia Commonwealth University will provide \$250,000, FY2014 Revenue Sharing – a 50-50 split between the Commonwealth of Virginia and the City of Richmond – will provide \$200,000, and finally Traffic Calming CIP2014 will provide \$200,000.

In vicinity of the study area is Virginia Commonwealth University (VCU) – Monroe Park Campus, located to the north of the Downtown Expressway and accessible via S. Harrison Street and S. Cherry Street. In addition, the VCU Cary Street Sports Field and adjacent gymnasium and tennis courts and the Altria Theater attract residents and visitors to the area. Located to the south of Idlewood Avenue are historic Hollywood Cemetery, Clark Springs Elementary School, and Open High School.

CITY OF RICHMOND, VIRGINIA

DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING



VICINITY SKETCH
(NOT TO SCALE)

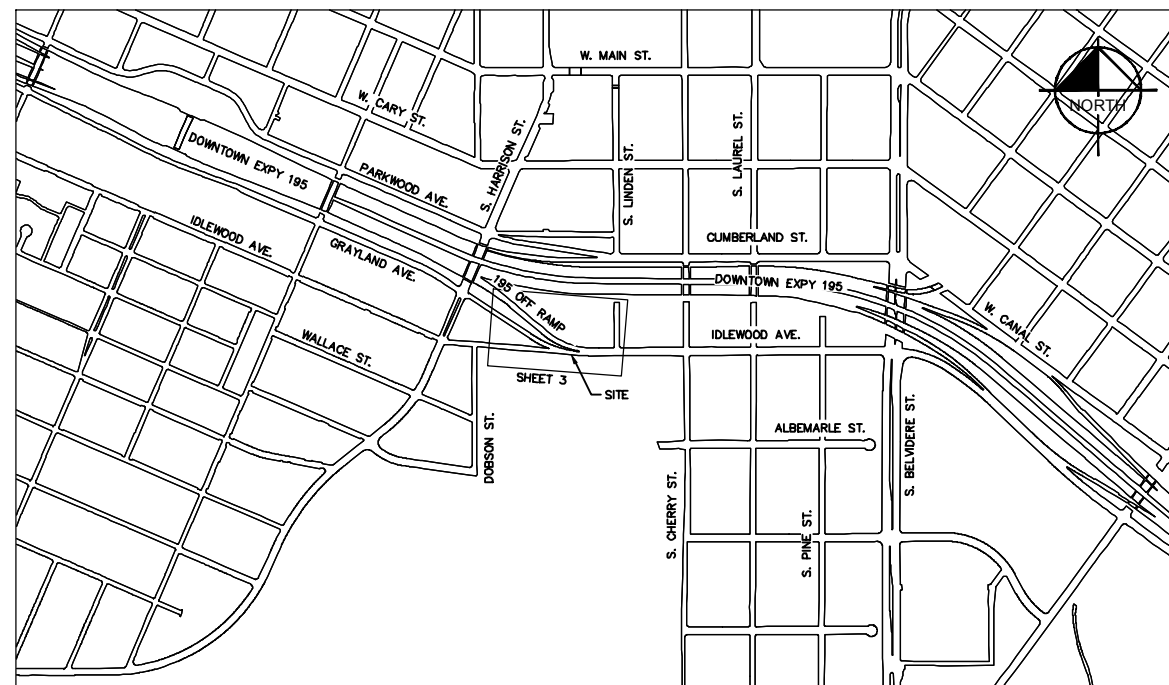
IDLEWOOD AVENUE ROUNDABOUT PROJECT

VDOT PROJECT NO. - U000-127-R50, PE-101, RW-201, C-501

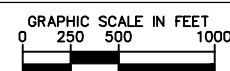
VDOT UPC - 104279

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
IDLEWOOD AVENUE	
URBAN MINOR COLLECTOR GS-7 - UNDIVIDED - ROLLING	
	Fr: INT WITH HARRISON AVENUE To: INT WITH CHERRY STREET
ADT (2014)	7,300 VPD
DHV	657 VPH
D (%) (design hour)	61%
T (%) (design hour)	1%
V (MPH)	30 MPH (POSTED SPEED LIMIT 25 MPH)

INDEX OF SHEETS	
Sheet Number	Sheet Title
1	TITLE SHEET
1A(1)	SURVEY DATA - ALIGNMENT DATA
1A(2)	SURVEY DATA - EXISTING SURVEY DATA
1B	CONSTRUCTION ALIGNMENT DATA SHEET
1C	RIGHT-OF-WAY DATA SHEET
1D	TRAFFIC MANAGEMENT PLAN
1E	VIRGINIA WORK AREA PROTECTION
2	GENERAL NOTES
2A(1)	TYPICAL SECTIONS
2A(2)	TYPICAL SECTIONS
2B	DRAINAGE DESCRIPTIONS
2C	TOP OF CURB ELEVATION DETAILS
3	PLAN SHEET - IDLEWOOD AVE. STA. 104+02.96 TO STA. 108+64.24
3A	IDLEWOOD, RAMP & DRIVEWAY PROFILE
4	LANDSCAPE PLAN
5	LANDSCAPE DETAILS
XS-1	CROSS SECTIONS - IDLEWOOD AVE
XS-2	CROSS SECTIONS - IDLEWOOD AVE
XS-3	CROSS SECTIONS - RAMP



VICINITY MAP



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

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CIT OF RICHMOND DESIGN AND CONSTRUCTION STANDARDS MANUAL, 2007 VDOT ROAD AND BRIDGE SPECIFICATIONS, 2008 VDOT ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL, AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE PAPER VERSION OF THE PLAN ASSEMBLY INCLUDING ALL REVISIONS.

THE ORIGINAL SIGNED/APPROVED TITLE SHEET, INCLUDING ORIGINAL SIGNATURES, IS FILED IN THE CITY OF RICHMOND DEPARTMENT OF PUBLIC WORKS OFFICE.

60% PLANS - 08/14/14

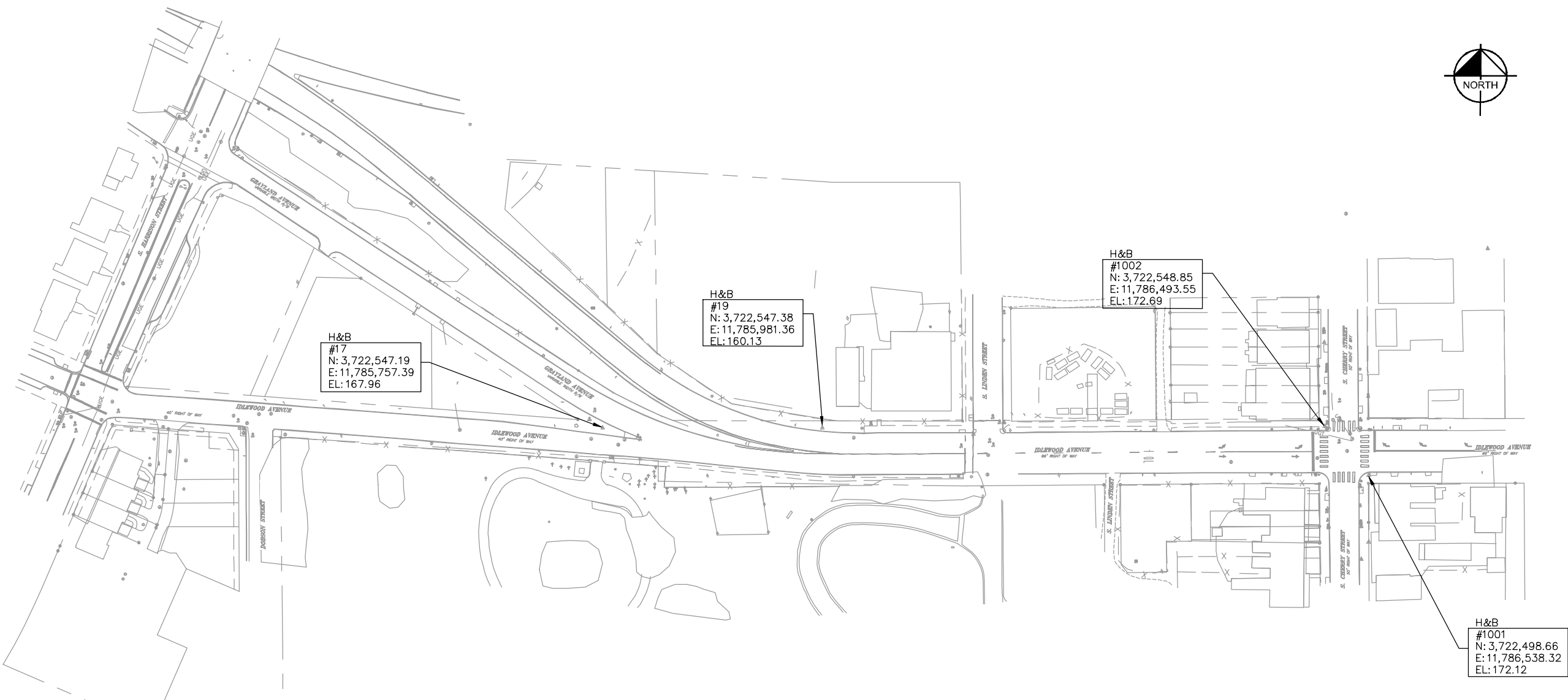
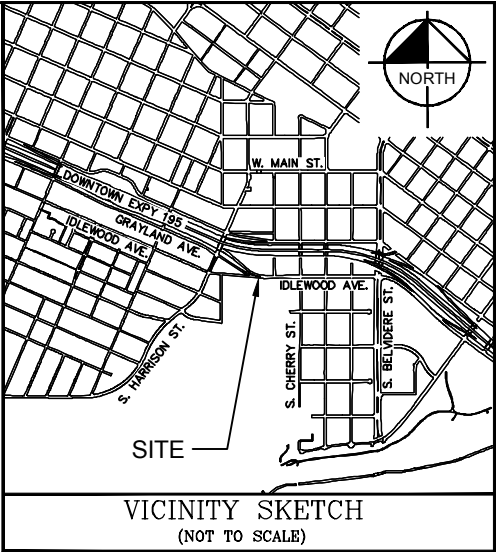
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

Kimley»Horn

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1700 WILLOW LAWN DRIVE, SUITE 200, RICHMOND, VA 23230
PHONE: (804) 673-3882 FAX: (804) 673-3980

NOTES		LEGEND			Technical		Administrative		IDLEWOOD AVENUE ROUNDABOUT PROJECT											
1. Lot dimensions in parentheses are from deed.		Existing Curb & Gutter			Proposed Conc. Sidewalk		Surveys Superintendent		Capital Project Administrator		TITLE SHEET									
2. Property owners correct as of _____, 20__		Existing Curb Cut Ramp			Castings: Water Valve		Project Engineer		Deputy Director for Transportation / Public Works		CIP: 040-000-000-0000									
3. Ordinance Number _____		Proposed Curb Cut Ramp			Decorative Light		City Traffic Engineer		DIRECTOR OF PUBLIC WORKS		DESIGN BY: MH									
4. Adopted _____		Proposed Curb & Gutter			Conduit		Department of Public Works		Richmond, Virginia		DRAWN BY: RSP									
5. Accepted _____		Proposed Sewer			Retaining Wall		City Traffic Engineer		Richmond, Virginia		CHECKED BY: BAM									
REFERENCES		REVISIONS			DEPARTMENT OF PUBLIC WORKS		DIRECTOR OF PUBLIC WORKS		REVIEWED BY		FIELD NOTES		SCALE		DATE		DRAWING NO.		SHEET NO.	
BL, XX, NK, NE, SW, SE					RICHMOND, VIRGINIA								AS NOTED		08-14-14		X-XXXX		1	

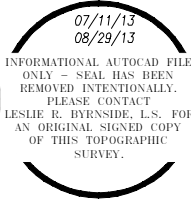
SURVEY ALIGNMENT DATA



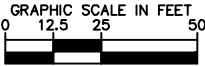
NOTES:

1. INLET INVERTS SHOWN HEREON ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO CONSTRUCTION OR DESIGN TIE IN.
2. EXISTING GROUND SURFACE LOCATION PERFORMED BY CONVENTIONAL INSTRUMENT SURVEY.
3. HORIZONTAL (NAD'83) AND VERTICAL (NAVD'88) DATUM ESTABLISHED THROUGH REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS ON JUNE 05, 2013. DIFFERENTIAL CORRECTIONS WERE DERIVED FROM NATIONAL GEODETIC SURVEY (NGS) CONTINUALLY OPERATING REFERENCE STATION (CORS) "1.0V3". COORDINATE VALUES, IF SHOWN HEREON, ARE BASED ON VIRGINIA STATE GRID, SOUTH ZONE.
4. UNDERGROUND UTILITIES WERE DESIGNATED (PAINTED) BY MISS UTILITY OF VIRGINIA. H & B SURVEYING AND MAPPING, LLC SURVEYED THE PAINTED LINE AS PAINTED AND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE PAINT DESIGNATION. UTILITY INFORMATION ON THIS DRAWING WILL NEED TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
5. PROPERTY LINES SHOWN HEREON TAKEN FROM COURT HOUSE RECORDS AND EVIDENCE OF MONUMENTATION AND OCCUPATION FOUND IN THE FIELD. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY AND WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT; NO EASEMENTS ARE SHOWN ON THIS SURVEY.

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, LESLIE R. BYRNSIDE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JUNE 05, 2013 THROUGH JUNE 25, 2013 AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.



REVISED 08/29/13:
LABEL EXISTING CONTROL



60% PLANS - 08/14/14

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IDLEWOOD AVENUE ROUNDABOUT PROJECT

SURVEY DATA - ALIGNMENT DATA

CIP: 040-000-000-0000

NOTES	
1. Lot dimensions in parentheses are from deed.	
2. Property owners correct as of _____, 20__	
3. Ordinance Number _____	
4. Adopted _____	
5. Accepted _____	
REFERENCES	REVISIONS
BL, XX, NK, NE, SW, SE	

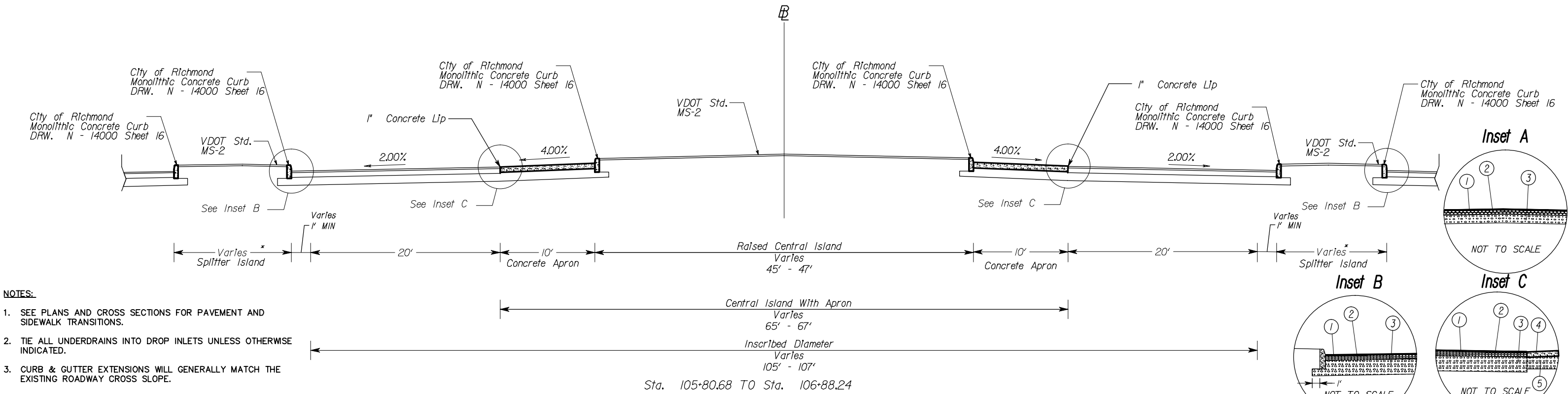
LEGEND	
Existing Curb & Gutter	Proposed Conc. Sidewalk
• Curb & Gutter	• Brick Sidewalk
• Sidewalk	Castings: Water Valve
• Basin	• Water Meter
• Storm Sewer	• Gas Drip
• Sewer Manhole	• Gas Valve
• Sanitary Sewer (sanitary)	• Telephone Manhole
• Sanitary Sewer (new line)	• Electric Manhole
• Gas Line	• Proposed Curb Cut Ramp
• Electric Line	• Decorative Light
• Telephone/Telegraph	• Conduit
• TV Cable	• Conduit (Conc. Encased)
• Water Line	• Retaining Wall
• Tree / Exist. Tree To Be Removed / Stump	
• Property Line	



Technical	Administrative
Surveys Superintendent	Capital Project Administrator
Project Engineer	Deputy Director for Transportation / Public Works
Maintenance Engineer	
City Traffic Engineer	Director of Public Works
DEPARTMENT OF PUBLIC WORKS RICHMOND, VIRGINIA	

DESIGN BY: M/H	REVIEWED BY	FIELD NOTES	SCALE	DATE	DRAWING NO.	SHEET NO.
DRAWN BY: RSP			AS NOTED	08-14-14	X-XXXXX	1A(1)
CHECKED BY: BAM						

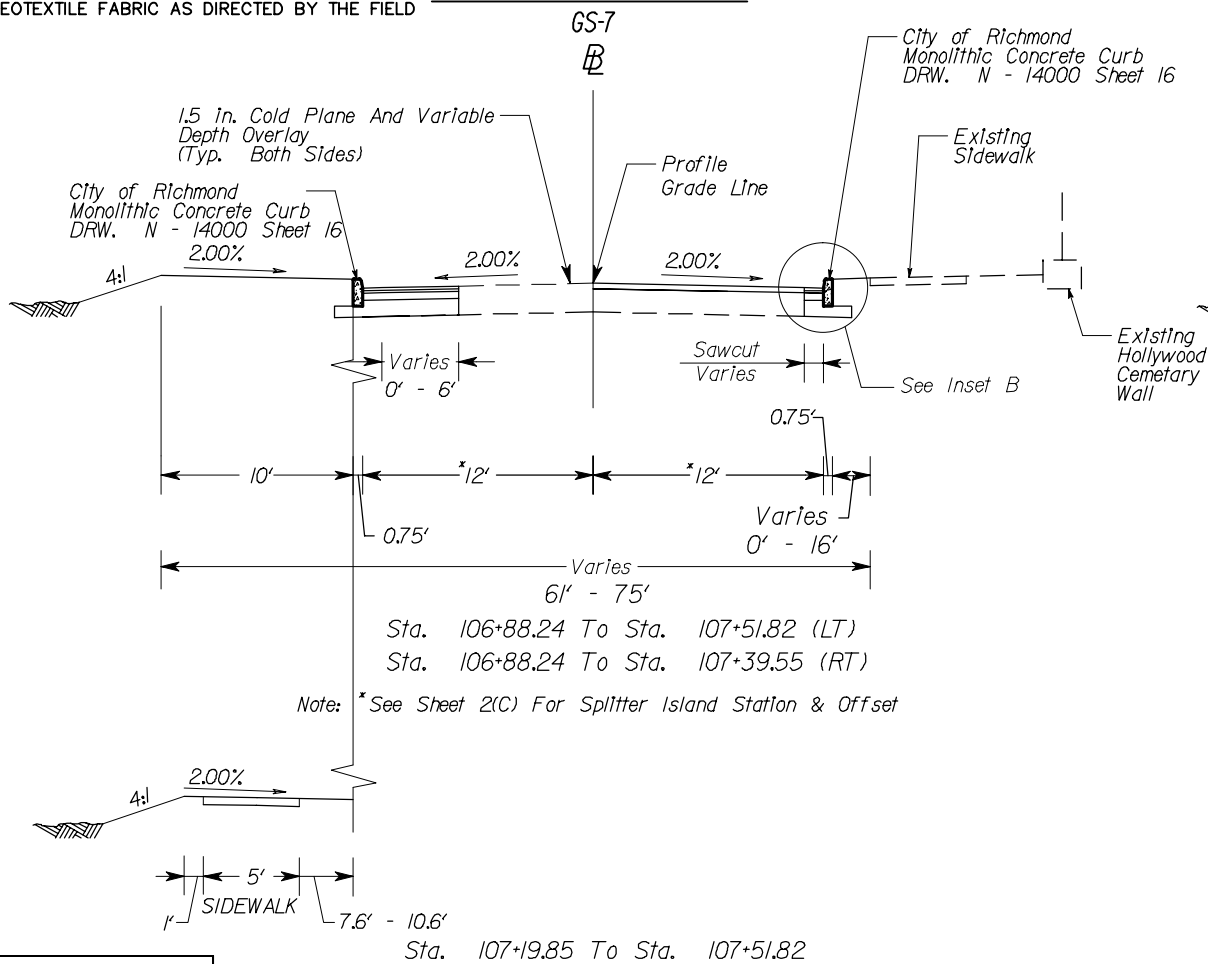
TYPICAL SECTIONS
NOT TO SCALE
IDLEWOOD AVENUE



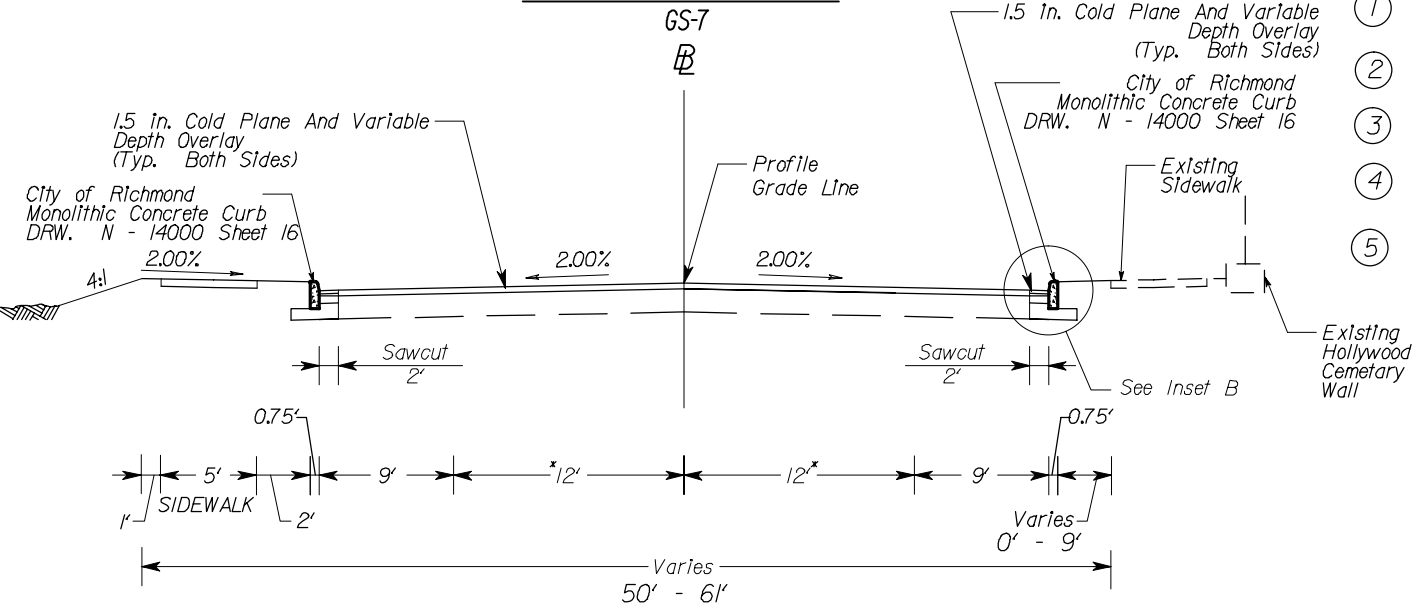
NOTES:

- SEE PLANS AND CROSS SECTIONS FOR PAVEMENT AND SIDEWALK TRANSITIONS.
- TIE ALL UNDERDRAINS INTO DROP INLETS UNLESS OTHERWISE INDICATED.
- CURB & GUTTER EXTENSIONS WILL GENERALLY MATCH THE EXISTING ROADWAY CROSS SLOPE.
- DURING CONSTRUCTION IF SOILS DEEMED TO BE "UNSUITABLE" ARE FOUND THE CONTRACTOR SHALL REMOVE THIS MATERIAL UP TO 1' BELOW SUBGRADE, PLACE SUITABLE BACKFILL, AND/OR GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

IDLEWOOD AVENUE



IDLEWOOD AVENUE



- 2" ASPHALT CONCRETE SURFACE COURSE TYPE SM-9.5A
- 3" ASPHALT CONCRETE BASE COURSE TYPE BM-25.0
- 8" AGGREGATE SUBBASE MATERIAL TYPE I, SIZE NO. 21A
- 4" CLASS A3 CONCRETE WITH 6x6 - W5.5 X W5.5 WWF (CENTERED IN SLAB)
- 6" AGGREGATE SUBBASE MATERIAL TYPE I, SIZE NO. 21A

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IDLEWOOD AVENUE ROUNDABOUT PROJECT

TYPICAL SECTIONS

DESIGN BY: MH	REVIEWED BY:	FIELD NOTES	SCALE: AS NOTED	DATE: 08-14-14	DRAWING NO. X-XXXX	SHEET NO. 2A(1)
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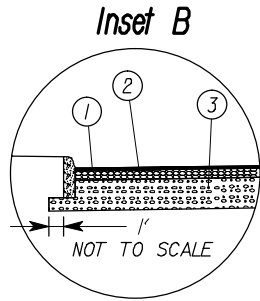
NOTES	REVISIONS
1. Lot dimensions in parentheses are from deed.	
2. Property owners correct as of 20	
3. Ordinance Number	
4. Adopted	
5. Accepted	


LEGEND	LEGEND	LEGEND
Existing Curb & Gutter	Existing Curb Cut Ramp	Proposed Conc. Sidewalk
• Curb & Gutter	• Coping	• Brick Sidewalk
• Basin	• Alley Crossing/Driveway	• Castings: Water Valve
• Storm Sewer	• Fire Hydrant	• Water Meter
• Sewer Manhole	• Edge of Pavement	• Gas Valve
• Sanitary Sewer (w/vent)	• Fence	• Gas Valve
• Sanitary Sewer (w/o vent)	• Cornerstone	• Telephone Manhole
• Gas Line	• Property Pin	• Electric Manhole
• Electric Line	• Utility Pole	• Electric Manhole
• Telephone/Telegraph	• Proposed Sewer	• Decorative Light
• TV Cable	• Manhole	• Conduit
• Water Line	• Basin	• Conduit (Conc. Encased)
• Tree / Exist. Tree To Be Removed / Stump	• Curb & Gutter	• Retaining Wall
• Property Line	• Asphalt	



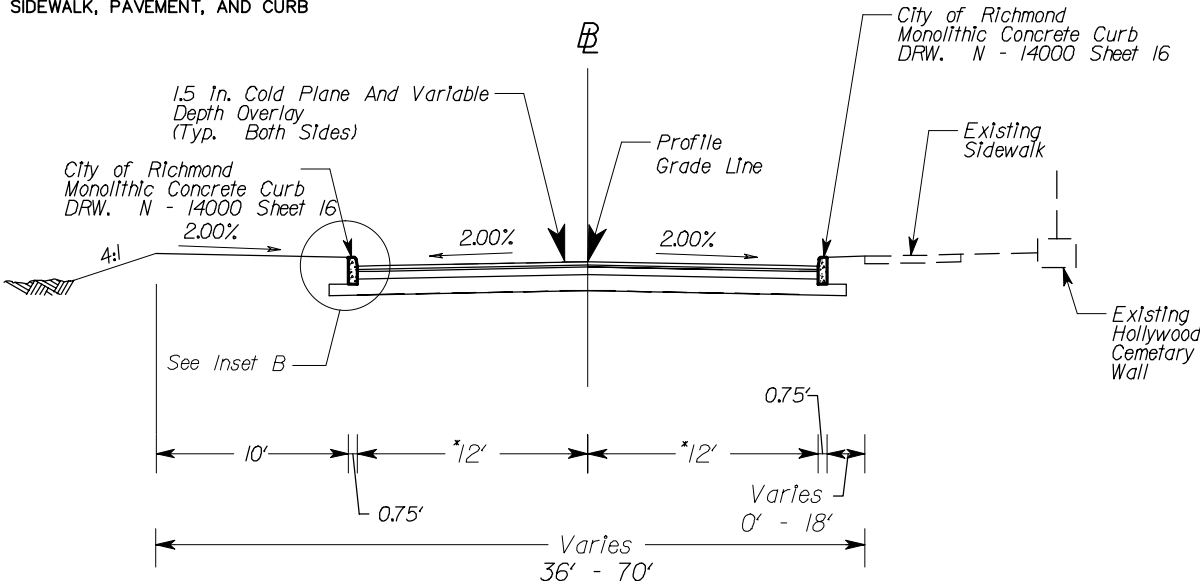
DEPARTMENT OF PUBLIC WORKS
RICHMOND, VIRGINIA

TYPICAL SECTIONS
NOT TO SCALE



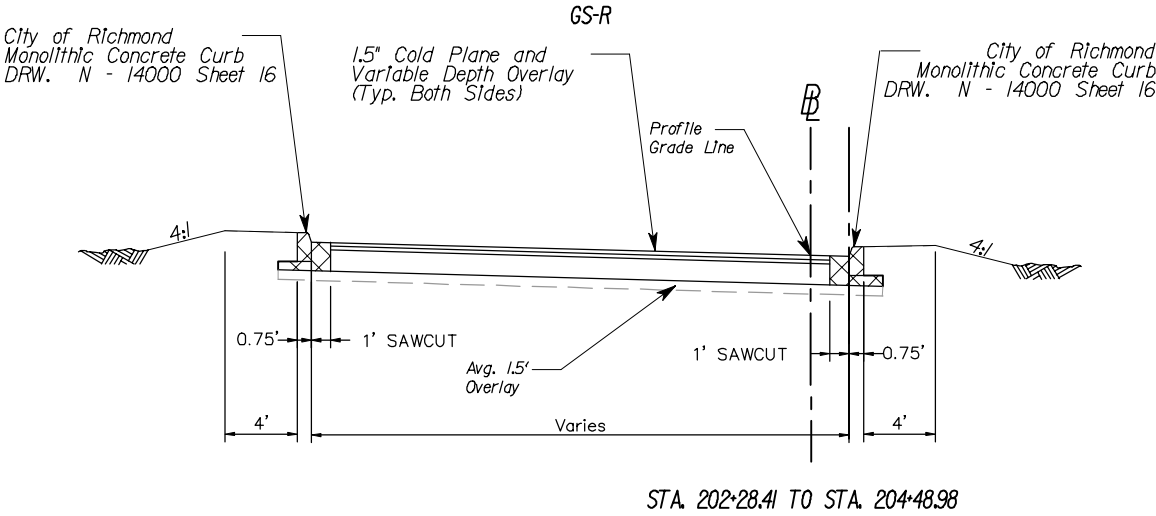
 DENOTES FULL DEPTH DEMOLITION AND REMOVAL OF EXISTING SIDEWALK, PAVEMENT, AND CURB

IDLEWOOD AVENUE



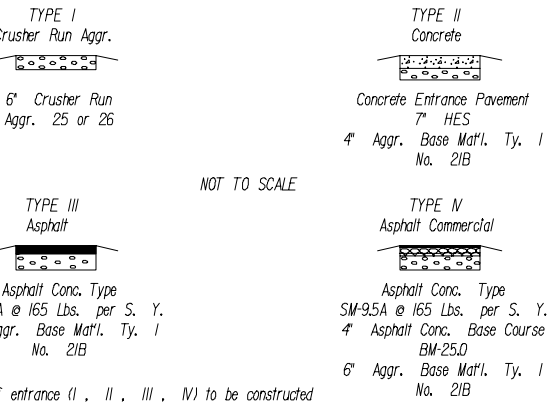
Sta. 104+02.96 To Sta. 105+80.68
Note: *See Sheet 2B(C) For Splitter Island Station & Offset

195 OFF RAMP



STA. 202+28.41 TO STA. 204+48.98

PRIVATE AND COMMERCIAL ENTRANCES



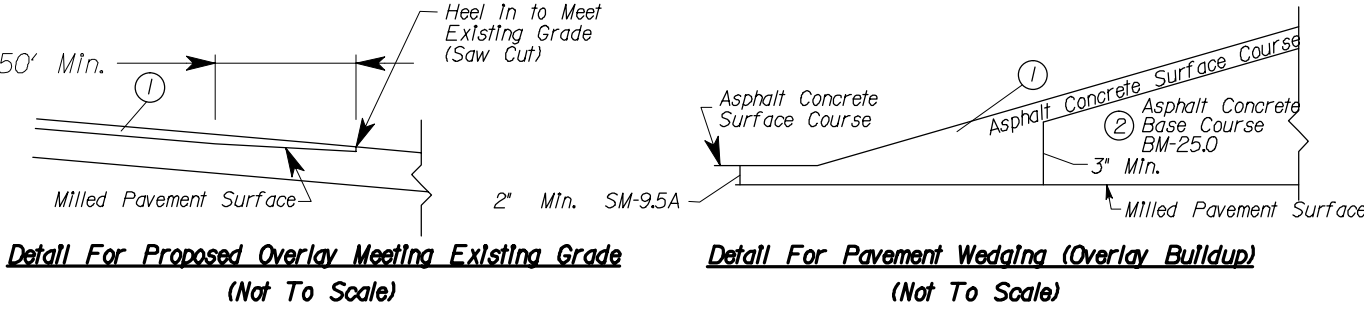
The type of entrance (I, II, III, IV) to be constructed will be determined by the existing condition at the time of construction.

NOTES:

- SEE PLANS AND CROSS SECTIONS FOR PAVEMENT AND SIDEWALK TRANSITIONS.
- TIE ALL UNDERDRAINS INTO DROP INLETS UNLESS OTHERWISE INDICATED.
- CURB & GUTTER EXTENSIONS WILL GENERALLY MATCH THE EXISTING ROADWAY CROSS SLOPE.
- DURING CONSTRUCTION IF SOILS DEEMED TO BE "UNSUITABLE" ARE FOUND THE CONTRACTOR SHALL REMOVE THIS MATERIAL UP TO 1' BELOW SUBGRADE, PLACE SUITABLE BACKFILL, AND/OR GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
- PAVEMENT CORE SAMPLES WERE DRILLED AND THE BROOKLAND PARK BLVD. MAINLINE WAS FOUND TO BE 9" OF CEMENT CONCRETE WITH 3" BITUMINOUS PAVEMENT OVERLAY AND THE EXISTING SIDE ROADS TO BE 9" BITUMINOUS PAVEMENT.

ROADWAY PAVEMENT WEDGING


Proposed Roadway Grade Shall Be As Designated On Profiles And Staking Details. Buildup Of Pavement To Desired Cross Slopes Shall Be In Accordance With Pavement Wedging Detail. (Cross Slopes Shall Be In Accordance With Profiles And Staking Detail Sheets.) Where Proposed Improvements Abut Existing Pavement, Condition Shall Be In Accordance With Subject Detail.



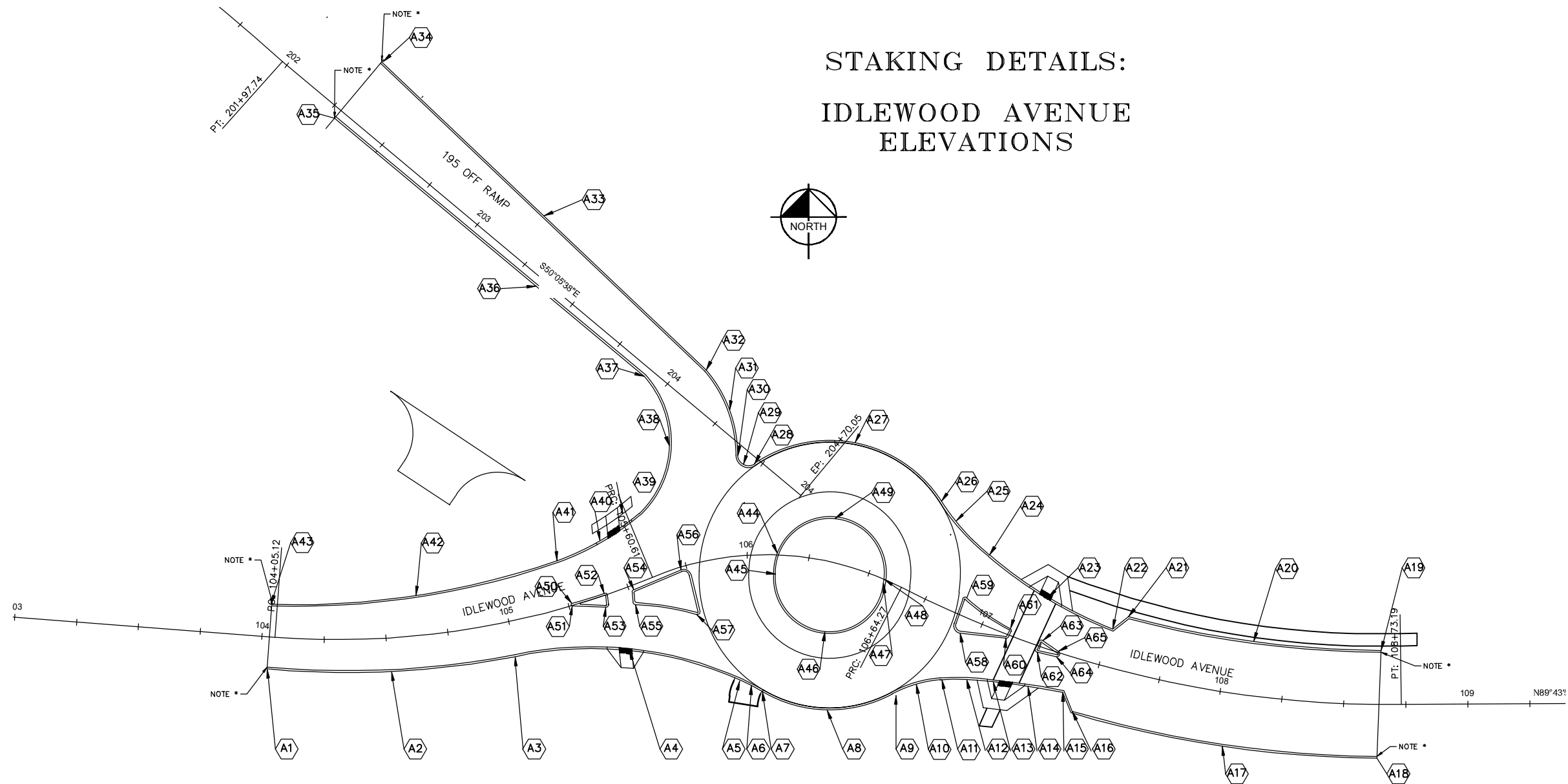
60% PLANS - 08/14/14
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NOTES		LEGEND			Technical		Administrative		IDLEWOOD AVENUE ROUNDABOUT PROJECT						
1. Lot dimensions in parentheses are from deed.	2. Property owners correct as of _____, 20____	Existing Curb & Gutter	Existing Curb Cut Ramp		Surveys Superintendent		Capital Project Administrator		TYPICAL SECTIONS						
3. Ordinance Number _____	4. Adopted _____	Proposed Conc. Sidewalk	Proposed Curb Cut Ramp	City Traffic Engineer	Department of Public Works		Director of Public Works	CIP: 040-000-000-0000	DESIGN BY: MH	REVIEWED BY	FIELD NOTES	SCALE	DATE	DRAWING NO.	SHEET NO.
5. Accepted _____	REFERENCES	BL, XX, NW, NE, SW, SE	REVISIONS	DRW. BY: RSP	RICHMOND, VIRGINIA		CHECKED BY: BAM		AS NOTED	08-14-14	X-XXXXX	2A(2)			

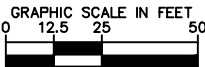
STAKING DETAILS:
IDLEWOOD AVENUE
ELEVATIONS



NOTES:

ALL ELEVATIONS ARE AT THE TOP OF PROPOSED CURB, UNLESS OTHERWISE NOTED

* TAPER CURB HEIGHT TO MEET EXISTING CURB HEIGHT.



A 50	105+26.40	IDLEWOOD	0.768	167.76
A 51	105+26.28	IDLEWOOD	0.061	167.768
A 52	105+40.11	IDLEWOOD	0.632	167.64
A 53	105+36.00	IDLEWOOD	4.77	167.565
A 54	105+51.79	IDLEWOOD	1.94	167.62
A 55	105+50.40	IDLEWOOD	7.79	167.51
A 56	105+72.51	IDLEWOOD	1.17	165.23
A 57	105+73.75	IDLEWOOD	20.1	158.46
A 58	106+93.25	IDLEWOOD	6.623	161.35
A 59	106+90.14	IDLEWOOD	7.46	160.1
A 60	107+11.03	IDLEWOOD	1.66	165.328
A 61	107+11.37	IDLEWOOD	2.55	165.29
A 62	107+24.79	IDLEWOOD	2.57	164.651
A 63	107+25.32	IDLEWOOD	2.54	164.63
A 64	107+32.73	IDLEWOOD	1.86	164.308
A 65	107+32.64	IDLEWOOD	0.412	164.348

POINT	STATION	BASELINE	OFFSET TO FACE OF CURB	TOP OF CURB ELEVATION
A 1	104+05.12	IDLEWOOD	13	170.54
A 2	104+51.37	IDLEWOOD	13.53	169.86
A 3	104+99.54	IDLEWOOD	14.3	168.42
A 4	105+42.17	IDLEWOOD	24.33	167.66
A 5	105+89.78	IDLEWOOD	47.74	166.98
A 6	105+97.27	IDLEWOOD	52.45	166.707
A 8	106+04.68	IDLEWOOD	55.09	166.59
A 9	106+79.24	IDLEWOOD	40.13	164.79
A 10	106+85.73	IDLEWOOD	32.63	165.41
A 11	106+93.84	IDLEWOOD	26.79	165.82
A 12	107+02.52	IDLEWOOD	22.84	165.74
A 13	107+12.32	IDLEWOOD	19.88	165.39
A 14	107+25.65	IDLEWOOD	16.76	164.81
A 15	107+39.23	IDLEWOOD	14.78	164.24
A 16	107+44.51	IDLEWOOD	21.75	163.88
A 17	108+04.03	IDLEWOOD	21.73	162.31
A 18	108+63.56	IDLEWOOD	21.696	160.22
A 19	108+64.98	IDLEWOOD	21.75	160
A 20	108+10.73	IDLEWOOD	21.76	161.76
A 21	107+56.46	IDLEWOOD	21.76	163.466
A 22	107+51.46	IDLEWOOD	15.36	163.73
A 23	107+21.55	IDLEWOOD	19.79	164.89
A 24	106+91.80	IDLEWOOD	26.95	166.16
A 25	106+72.30	IDLEWOOD	33.67	167.1
A 26	106+63.25	IDLEWOOD	38.23	167.69
A 27	106+33.29	IDLEWOOD	48.99	167.13
A 28	106+04.04	IDLEWOOD	36.64	166.58
A 29	106+00.67	IDLEWOOD	36.54	166.46
A 30	105+99.12	IDLEWOOD	40.27	166.41
A 31	204+25.93	RAMP	8.022	165.43
A 32	204+08.43	RAMP	14.3	165.7
A 33	203+25.00	RAMP	19.55	161.21
A 34	202+28.65	RAMP	25.62	156.1
A 35	202+28.41	RAMP	3.88	156.922
A 36	203+34.20	RAMP	3.74	160.667
A 37	203+90.77	RAMP	3.67	163.73
A 38	204+16.60	RAMP	18.65	166.1
A 39	105+64.58	IDLEWOOD	25.8	167.7
A 40	105+45.82	IDLEWOOD	21.23	167.73
A 41	105+25.58	IDLEWOOD	19.06	167.87
A 42	104+63.74	IDLEWOOD	16.15	169.29
A 43	104+05.12		13.25	170.49
A 44	106+12.70	IDLEWOOD	0	169.831
A 45	106+11.73	IDLEWOOD	7.79	169.77
A 46	106+38.86	IDLEWOOD	27.8	169.09
A 47	106+57.02	IDLEWOOD	1.768	170.12
A 48	106+56.55	IDLEWOOD	0	170.127
A 49	106+31.98	IDLEWOOD	17.34	169.965

60% PLANS - 08/14/14

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IDLEWOOD AVENUE ROUNDABOUT PROJECT

TOP OF CURB ELEVATION DETAILS

CIP: 040-000-000-0000	DESIGN BY: M/H DRAWN BY: RSP CHECKED BY: BAM	REVIEWED BY	FIELD NOTES	SCALE AS NOTED	DATE 08-14-14	DRAWING NO. X-XXXX	SHEET NO. 2C
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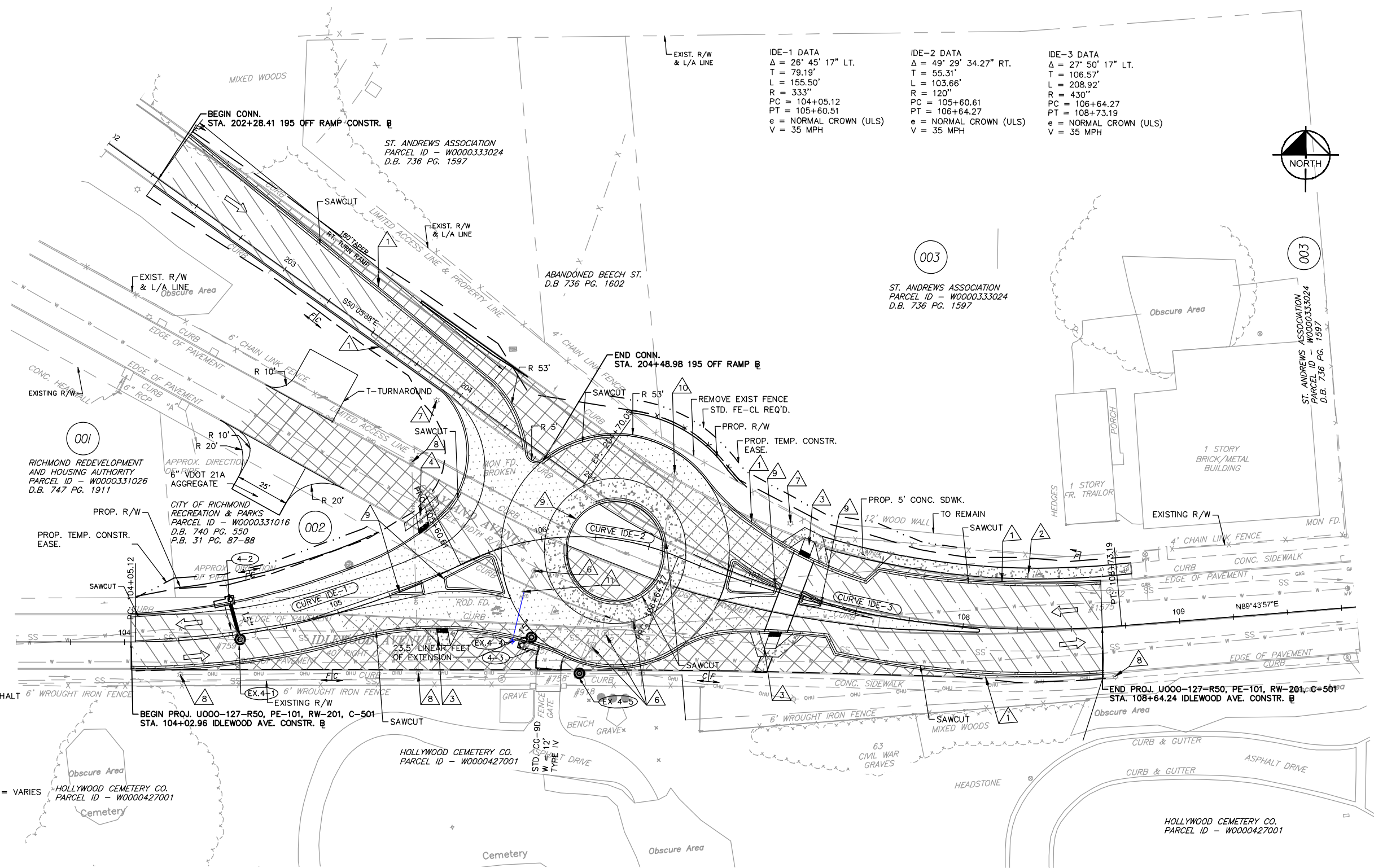
NOTES	
1. Lot dimensions in parentheses are from deed.	
2. Property owners correct as of _____, 20__	
3. Ordinance Number _____	
4. Adopted _____	
5. Accepted _____	
REFERENCES	REVISIONS
BL XX NW NE SW SE	

LEGEND	
Existing Curb & Gutter	Proposed Conc. Sidewalk
• Curb & Gutter	• Brick Sidewalk
• Sidewalk	Castings: Water Valve
• Basin	• Yaler Meter
• Storm Sewer	• Gas Drip
• Sewer Manhole	• Gas Valve
• Sanitary Sewer (sanitary)	• Telephone Manhole
• Sanitary Sewer (storm)	• Electric Manhole
• Gas Line	• Utility Pole
• Electric Line	Proposed Sewer
• Telephone/Telegraph	• Manhole
• TV Cable	• Basin
• Water Line	• Curb & Gutter
• Tree / Exist. Tree To Be Removed / Stump	• Asphalt
• Property Line	



Technical	Administrative
Surveys Superintendent	
Project Engineer	Capital Project Administrator
Maintenance Engineer	Deputy Director for Transportation / Public Works
City Traffic Engineer	Director of Public Works
DEPARTMENT OF PUBLIC WORKS RICHMOND, VIRGINIA	

DESIGNED BY:



LEGEND

- MILL & OVERLAY/BUILD-UP ASPHALT
- PROPOSED CONC. ITEMS
- PROPOSED ASPHALT
- OBSCURE PAVEMENT
- DEMOLISH PAVEMENT
- STD. CITY OF RICHMOND CURB
- STD. HYD. CONCR. SIDEWALK REQ'D., W = VARIES
- STD. CG-12A CURB CUT RAMP REQ'D.
- STD. CG-12B CURB CUT RAMP REQ'D.
- SAWCUT AND PAVEMENT REPAIR
- RAISE EXISTING UTILITY TO GRADE
- EXISTING LIGHT FIXTURE TO REMAIN
- EXISTING UTILITY POLE TO REMAIN
- STD. MS-2 W/ CITY OF RICHMOND CURB
- EXISTING LIGHT POLE TO BE RELOCATED
- RELOCATE HYDRANT AND REPLACE SERVICE LATERAL TO THE CORPORATION STOP. IF EXISTING CORPORATION STOP IS NOT USEABLE, NEW CORPORATION STOP AND SERVICE LATERAL WILL BE REQUIRED.

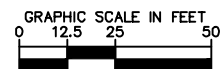
Denotes Construction Limits in Cuts

Denotes Construction Limits in Fills

Notes:
Dot-dashed lines denote Permanent Easements.

Dot-dot-dashed lines denote Temporary Easements.

RELOCATE HYDRANT AND REPLACE SERVICE LATERAL TO THE CORPORATION STOP. IF EXISTING CORPORATION STOP IS NOT USEABLE, NEW CORPORATION STOP AND SERVICE LATERAL WILL BE REQUIRED.



60% PLANS - 08/14/14

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION.

Kimley»Horn

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1700 WILLOW LAWN DRIVE, SUITE 200, RICHMOND, VA 23230
PHONE: (804) 673-3882 FAX: (804) 673-3980

NOTES

1. Lot dimensions in parentheses are from deed.
2. Property owners correct as of _____, 20__.
3. Ordinance Number _____
4. Adopted _____
5. Accepted _____

REFERENCES
BL: XX NW, NE, SW, SE

REVISIONS

Existing Curb & Gutter
• Sidewalk
• Basin
• Storm Sewer
• Sewer Manhole
• Sanitary Sewer (new) 12" DIA.
• Sanitary Sewer (new) 18" DIA.
• Gas Line
• Electric Line
• Telephone/Telegraph
• TV Cable
• Water Line
• Tree / Exst. Tree To Be Removed / Stump
• Property Line

Existing Curb Cut Ramp
• Coping
• Alley Crossing/Driveway
• Fire Hydrant
• Edge of Pavement
• Fence
• Cornerstone
• Property Pin
• Utility Pole
• Proposed Sewer Manhole
• Basin
• Curb & Gutter
• Asphalt

Proposed Conc. Sidewalk
• Brick Sidewalk
• Castings: Water Valve
• Water Meter
• Gas Drip
• Gas Valve
• Telephone Manhole
• Electric Manhole
• Proposed Curb Cut Ramp
• Decorative Light
• Conduit
• Conduit (Conc. Encased)
• Retaining Wall



Technical

Surveys Superintendent
Project Engineer
Maintenance Engineer
City Traffic Engineer

Administrative

Capital Project Administrator
Deputy Director for Transportation / Public Works
Director of Public Works

DEPARTMENT OF PUBLIC WORKS
RICHMOND, VIRGINIA

IDLEWOOD AVENUE ROUNDABOUT PROJECT

PLAN SHEET-IDLEWOOD AVE. STA. 104+00 TO STA. 108+95

CIP: 040-000-000-0000

DESIGN BY: M.H.
DRAWN BY: RSP
CHECKED BY: GAM

REVIEWED BY

FIELD NOTES

SCALE

AS NOTED

DATE

08-14-14

DRAWING NO.

X-XXXX

SHEET NO.

3

GENERAL PLANTING NOTES:

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, ETC. NECESSARY TO COMPLETE ALL PLANTING AS SHOWN ON THE PLANTING PLANS, AS SPECIFIED HEREIN OR IN SUPPLEMENTAL SPECIFICATIONS, AND/OR AS REQUIRED BY JOB CONDITIONS. THE WORK IN GENERAL INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

- (1) SOIL PREPARATION;
 - (2) PROVIDING TOPSOIL AND ALL SOIL AMENDMENTS;
 - (3) EXCAVATION OF PLANT PITS;
 - (4) PROVIDING ALL PLANT MATERIAL AND MULCH AS INDICATED ON PLANS;
 - (5) FERTILIZING;
 - (6) STAKING;
 - (7) CHEMICAL APPLICATION;
 - (8) MAINTENANCE AND GUARANTEE;
 - (9) ALL OTHER ITEMS NECESSARY TO MAKE WORK COMPLETE.
- THE PLANTING CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH THE OTHER CONTRACTORS. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITIES. PRIOR TO ANY CONSTRUCTION, EXCAVATION, OR ROTO-TILLING THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF VERIFYING THE LOCATIONS OF ALL UTILITIES, ABOVE AND/OR BELOW GROUND, PUBLIC AND/OR PRIVATE THAT MAY EXIST AND CROSS THROUGH THE AREAS OF CONSTRUCTION.

(1) SOIL PREPARATION

(1.1) BECAUSE OF SOIL COMPACTION DURING CONSTRUCTION, ALL PLANTING AREAS SHALL BE ROTOTILLED TO A DEPTH AS SHOWN IN DETAILS OR AS SPECIFIED IN WRITTEN SPECIFICATIONS. A PLANTING AREA IS ANY AREA IN WHICH NEW PLANTING OCCURS. EXCAVATE THE ENTIRE AREA BOUNDED BY WALKS, WALLS, FENCES, ETC. REMOVE SPOIL MATERIAL AS DIRECTED BY OWNER OR THE OWNER'S REPRESENTATIVE.

(1.2) EXCAVATED SOIL SHOULD BE USED AS BACKFILL MATERIAL IN ORDER TO ELIMINATE OR MINIMIZE THE OCCURRENCE OF HYDROLOGIC DISCONTINUITIES, AND/OR SOIL INTERFACE PROBLEMS COMMON TO PLANTING BEDS CONTAINING SOILS OF DIFFERENT TEXTURE. WHERE THE TEXTURE OF THE EXISTING SOIL IS UNDESIREABLE FOR THE PLANT SPECIES BEING PLANTED (i.e. HEAVY CLAY, PURE SAND) AND WHERE THE pH OF THE EXISTING SOIL IS SUITABLE FOR THE SPECIES BEING PLANTED, THE SOIL SHALL BE BLENDED 66% EXISTING SOIL WITH 33% AMENDED SOIL.

(1.3) WHERE IT IS DETERMINED THAT THE EXISTING SOIL EXCAVATED IS TOTALLY UNSUITABLE FOR USE AS BACKFILL MATERIAL BECAUSE OF IMPROPER pH OR THE PRESENCE OF DEBRIS OR OTHER DELETERIOUS MATTER, THE BACKFILL MATERIAL SHALL BE 100% AMENDED SOIL MIXTURE AS DESCRIBED BELOW WITH THE ADDITION OF 1/2 PART SAND. AMENDED SOIL: PLANTING SOIL FOR AMENDING BACKFILL SHALL BE 100 % TOPSOIL WITH AMENDMENTS ADDED ACCORDING TO THE RECOMMENDATIONS OF THE SOILS TEST REPORT TO BRING THE pH VALUE OF THE PLANTING BACKFILL MIXTURE WITHIN THE RANGES DESCRIBED BELOW. THE TOPSOIL AND AMENDMENTS SHALL BE MIXED AT AN ON-SITE LOCATION. PLANTING SOIL SHALL NOT BE MIXED AT INDIVIDUAL PLANT LOCATIONS.

(2) TOPSOIL AND ALL SOIL AMENDMENTS

(2.1) NECESSARY QUANTITIES OF TOPSOIL SHALL BE SUPPLIED BY THE CONTRACTOR AND APPROVED BY THE OWNER OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL APPLY TOPSOIL ONLY AFTER SECURING SOIL TEST (V.P.I.), APPLYING RECOMMENDED TREATMENT THEREOF, AND SUBMITTING FOR APPROVAL.

(2.2) ON-SITE TOPSOIL MEETING THE CONDITIONS FOR THESE NOTES MAY BE USED, OR IF INSUFFICIENT QUANTITIES ARE AVAILABLE, OUTSIDE TOPSOIL MEETING THE FOLLOWING CRITERIA SHALL BE PROVIDED.

(2.3) ON-SITE TOPSOIL SHALL BE STOCKPILED TOPSOIL THAT HAS BEEN SALVAGED IN ACCORDANCE WITH SECTION 303.04(A) OF THE V.D.O.T. SPECIFICATIONS. IT SHALL BE FREE FROM REFUSE, OR ANY MATERIAL TOXIC TO PLANT GROWTH, AND REASONABLY FREE FROM SUBSOIL, STUMPS, ROOTS, BRUSH, STONES, CLAY, LUMPS, OR SIMILAR OBJECTS LARGER THAN 3" IN THEIR GREATEST DIMENSION.

(2.4) OFF-SITE TOPSOIL, IF NEEDED, SHALL BE TOPSOIL FURNISHED FROM SOURCES OUTSIDE THE PROJECT LIMITS AND SHALL BE THE ORIGINAL TOP LAYER OF A SOIL PROFILE FORMED UNDER NATURAL CONDITIONS, TECHNICALLY DEFINED AS THE "A" HORIZON BY THE SOIL SOCIETY OF AMERICA. IT SHALL CONSIST OF NATURAL, FRIABLE, LOAMY SOIL WITHOUT ADMIXTURES OF SUBSOIL, OR OTHER FOREIGN MATERIALS, AND SHALL BE REASONABLY FREE FROM STUMPS, ROOTS, HARD LUMPS, STIFF CLAY, STONE, NOXIOUS WEEDS, BRUSH, OR OTHER LITTER. IT SHALL HAVE DEMONSTRATED BY EVIDENCE OF HEALTHY VEGETATION GROWING, OR HAVING GROWN ON IT PRIOR TO STRIPPING, THAT IT IS REASONABLY WELL DRAINED AND DOES NOT CONTAIN SUBSTANCES TOXIC TO PLANTS.

(2.4.1) "A" HORIZON: "A" HORIZONS SHALL BE MINERAL HORIZONS CONSISTING OF (1) HORIZONS OR ORGANIC MATTER ACCUMULATION FORMED OR FORMING AT OR ADJACENT TO THE SURFACE; (2) HORIZONS THAT HAVE LOST CLAY, IRON, OR ALUMINUM, WITH RESULTANT CONCENTRATIONS OF QUARTZ OR OTHER RESISTANT MINERALS OF SAND OR SILT SIZE; OR (3) HORIZONS DOMINATED BY 1 OR 2 ABOVE BUT TRANSITIONAL TO AN UNDERLYING B OR C.

(2.4.2) "A" HORIZON SUBDIVISIONS: A1 HORIZONS SHALL BE MINERAL HORIZONS, FORMED OR FORMING AT OR ADJACENT TO THE SURFACE, IN WHICH THE FEATURE EMPHASIZED IS AN ACCUMULATION OF HUMIDIFIED ORGANIC MATTER INTIMATELY ASSOCIATED WITH THE MINERAL FRACTION. THE SOIL IS A DARK OR DARKER THAN UNDERLYING HORIZONS BECAUSE OF THE PRESENCE OF ORGANIC MATTER. THE

ORGANIC MATERIAL IS ASSUMED TO BE DERIVED FROM PLANT AND ANIMAL REMAINS DEPOSITED ON THE SURFACE OF THE SOIL OR DEPOSITED WITHIN THE HORIZON WITHOUT APPRECIABLE TRANSLOCATION.

A2 HORIZONS SHALL BE MINERAL HORIZONS IN WHICH THE FEATURE EMPHASIZED IS LOSS OF CLAY, IRON OR ALUMINUM, WITH RESULTANT CONCENTRATION OF QUARTZ OR OTHER RESISTANT MINERALS IN SAND AND SILT SIZES.

(2.4.3) "A" HORIZON TOPSOIL CONTENT: "A" HORIZON TOPSOIL SHALL BE IN ACCORDANCE WITH THE FOLLOWING MATERIALS BY PERCENTAGE OF VOLUME:

- SILT 42-58%
- SAND 15-20%
- CLAY 15-20%
- ORGANIC MATERIAL 12-18%

(2.5) TOPSOIL SHALL HAVE A pH IN THE RANGE OF 6.0 TO 7.0 PRIOR TO MIXING WITH AMENDMENTS. IF THE pH IS NOT WITHIN THIS RANGE, THE pH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE OR A DIFFERENT SOURCE OF SUPPLY SHALL BE SELECTED. TOPSOIL SHALL BE SUBJECT TO INSPECTION BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE SOURCE OF SUPPLY AND IMMEDIATELY PRIOR TO USE IN THE PLANTING OPERATIONS.

(2.6) PLANTING SOIL AFTER AMENDING FOR DECIDUOUS PLANTS SHALL HAVE A pH VALUE BETWEEN 6.0 AND 7.0, AND FOR EVERGREEN OR SEMI-EVERGREEN PLANTS SHALL HAVE A pH VALUE BETWEEN 5.0 AND 6.0. A REPRESENTATIVE SAMPLE FROM THE EXCAVATED SOIL SHALL BE FIELD TESTED FOR pH UTILIZING A RELIABLE SOIL pH METER OR SOIL pH TEST KIT. THE pH VALUE OF THE NATURAL SOIL BACKFILL MIXTURE MAY BE AMENDED BY ADDING LIMESTONE OR ALUMINUM SULFATE AS NEEDED.

(3) EXCAVATION OF PLANT PITS

(3.1) PRIOR TO EXCAVATION OF TREE PITS, AN AREA EQUAL TO TWO TIMES THE DIAMETER OF THE ROOT BALL SHALL BE ROTO-TILLED TO A DEPTH EQUAL TO THE DEPTH OF THE ROOT BALL.

(3.2) IN CONTINUOUS SHRUB AND GROUND COVER BEDS, THE ROTO-TILLED PERIMETER SHOULD EXTEND TO A DISTANCE OF ONE FOOT BEYOND THE DIAMETER OF A SINGLE ROOTBALL. THE BED SHALL BE TILLED TO A DEPTH EQUAL TO THE ROOT BALL DEPTH PLUS 6".

(3.3) TREE PITS FOR WELL DRAINED SOILS SHALL BE DUG SO THAT THE BOTTOM OF THE ROOT BALL WILL REST ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL WILL BE FLUSH WITH FINISH GRADE. IN POORLY DRAINED SOILS THE TREE PIT SHALL BE DUG SO THAT THE ROOT BALL RESTS ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL IS 1" ABOVE FINISH GRADE. PLANT PIT WALLS SHALL BE SCARIFIED PRIOR TO PLANT INSTALLATION.

(3.4) SHRUB BEDS SHALL BE EXCAVATED TO 6" BELOW THE ROOT BALL OF THE SHRUB.

(3.5) ALL AIR POCKETS SHALL BE REMOVED FROM PLANT PIT UPON BACK FILLING WITH PLANTING SOIL BY FILLING APPROXIMATELY 1/2 TO 2/3 OF THE PIT WITH PLANTING BACKFILL MATERIAL, TAMPING BACKFILL MATERIAL AND THEN WATERING TO ENSURE SETTLEMENT OF THE MATERIAL. BACKFILL MATERIAL SHALL THEN BE PLACED WITHIN THE REMAINING CAVITIES OF THE PLANT PIT, TAMPING AND WATERED AGAIN TO ENSURE SETTLEMENT OF THE BACKFILL MATERIAL. UNDER NO CIRCUMSTANCES SHALL ANY SOIL OR BACKFILL MATERIAL BE APPLIED ABOVE THE ROOT BALL OF THE PLANTS.

(3.6) GROUND COVERS SHALL BE PLANTED IN BEDS HAVING A MINIMUM DEPTH OF 4" BELOW THE PROPOSED ROOT DEPTH. PLANTS SHALL BE EVENLY SPACED AND SET TO MAINTAIN THE ORIGINAL GROWING DEPTH WHILE ALLOWING FOR A 2" TOP DRESSING OF MULCH.

(4) PLANT MATERIAL AND MULCH

(4.1) THE NAMES OF PLANTS REQUIRED UNDER THIS CONTRACT CONFORM TO THOSE GIVEN IN L.H. BAILEY'S HORTUS THIRD, 1976 EDITION. NAMES OF VARIETIES NOT INCLUDED THEREIN CONFORM GENERALLY WITH NAMES ACCEPTED IN THE NURSERY TRADE. ALL PLANTS SHALL HAVE A HABIT OF GROWTH THAT IS NORMAL FOR THEIR SPECIES AND THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WITH WELL DEVELOPED ROOT SYSTEMS. ALL PLANT MATERIAL SHALL BE FREE FROM INSECT PESTS, PLANT DISEASES, AND INJURIES. ALL PLANTS SHALL EQUAL OR EXCEED THE MEASUREMENTS SPECIFIED IN THE PLANT LIST, WHICH ARE MINIMUM ACCEPTABLE SIZES. TREES SHALL HAVE SINGLE TRUNKS EXCEPT AS NOTED. ALL SHRUBS SHALL BE HEALTHY, VIGOROUS, AND OF GOOD COLOR. ONLY DAMAGED OR BROKEN BRANCHES OF PLANT MATERIAL MAY BE PRUNED AND ANY NECESSARY PRUNING SHALL BE DONE AT THE TIME OF PLANTING. HOWEVER, UNDER NO CIRCUMSTANCES SHALL THE CENTRAL LEADER OF A PLANT BE PRUNED.

(4.2) ALL TAGS, STRINGS OR ANY OTHER MATERIAL ATTACHED TO THE PLANTS SHALL BE REMOVED AT THE TIME OF THE PLANTING. BALLING AND BURLAPPING OF PLANTS SHALL FOLLOW THE CODE OF STANDARDS CURRENTLY RECOMMENDED BY THE AMERICAN STANDARD FOR NURSERY STOCK.

(4.3) SUBSTITUTIONS WILL BE PERMITTED ONLY UPON SUBMISSION OF PROOF THAT ANY PLANT IS NOT OBTAINABLE. ALL SUBSTITUTIONS MUST BE AUTHORIZED BY THE OWNER OR THE OWNER'S REPRESENTATIVE IN WRITING PROVIDING FOR USE OF THE NEAREST EQUIVALENT OBTAINABLE SIZE OR VARIETY OF PLANT HAVING THE SAME ESSENTIAL CHARACTERISTICS AS THE ORIGINAL VARIETY WITH AN EQUITABLE ADJUSTMENT OF CONTRACT PRICE.

(4.4) BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH OF SUFFICIENT DIAMETER AND DEPTH TO ENCOMPASS THE FIBROUS AND FEEDING ROOT SYSTEM NECESSARY FOR FULL RECOVERY OF THE PLANT. BALLS SHALL BE FIRMLY WRAPPED WITH BURLAP OR SIMILAR MATERIAL AND BOUND WITH TWINE OR CORD. BURLAP SHALL NOT BE PULLED OUT FROM UNDER BALLS DURING PLANTING OPERATIONS. B&B PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE COVERED WITH MOIST SOIL, MULCH, OR OTHER MATERIAL TO PROVIDE PROTECTION FROM DRYING WINDS AND SUN.

(4.5) PLANTS NOTED "CONTAINER" ON THE PLANT LIST MUST BE

CONTAINER GROWN WITH WELL ESTABLISHED ROOT SYSTEMS. LOOSE CONTAINERIZED PLANT MATERIAL WILL NOT BE ACCEPTED. ALL PLANTS INJURED AND PLANTS WITH ROOT BALLS BROKEN DURING TRANSPORT OR PLANTING OPERATIONS WILL BE REJECTED. BARE-ROOTED PLANTS (BR) SHALL BE PLANTED OR HEELED-IN IMMEDIATELY UPON DELIVERY. ALL PLANTS SHALL BE WATERED AS NECESSARY UNTIL PLANTED.

(4.6) NEW PLANTINGS SHALL BE LOCATED WHERE SHOWN ON THE PLAN EXCEPT WHERE OBSTRUCTIONS BELOW GROUND ARE ENCOUNTERED OR WHERE CHANGES HAVE BEEN MADE IN THE PROPOSED CONSTRUCTION. NECESSARY ADJUSTMENTS SHALL BE MADE ONLY AFTER APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE. REASONABLE CARE SHALL BE EXERCISED TO HAVE PLANTING PITS DUG AND SOIL PREPARED PRIOR TO MOVING PLANTS TO THEIR RESPECTIVE LOCATIONS TO ENSURE THAT THEY WILL NOT BE UNNECESSARILY EXPOSED TO DRYING OR PHYSICAL DAMAGE.

(4.7) A LIST OF PLANTS, INCLUDING SIZES, QUANTITIES AND OTHER REQUIREMENTS, IS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE QUANTITIES AS SHOWN ON THE DRAWINGS. IF DISCREPANCIES OCCUR IN THE QUANTITIES SHOWN, THE PLANTING PLANS SHALL GOVERN.

(4.10) AT THE TIME OF PLANTING, AND AS MANY TIMES LATER AS SEASONAL CONDITIONS REQUIRE, EACH PLANT AND THE SOIL AROUND IT SHALL BE THOROUGHLY WATERED. CARE SHOULD BE EXERCISED WHEN WATERING TO AVOID FLOODING OF PLANTS AND BEDS, DISPLACEMENT OF MULCH MATERIAL AND EROSION OF SOIL. AVOID USE OF HIGH PRESSURE HOSES. THE CONTRACTOR SHALL MAKE, AT HIS EXPENSE, WHATEVER ARRANGEMENTS MAY BE NECESSARY TO ENSURE AN ADEQUATE SUPPLY OF WATER TO MEET THE NEEDS OF THIS CONTRACT DURING INSTALLATION. THE CONTRACTOR SHALL ALSO FURNISH ALL NECESSARY HOSE, EQUIPMENT ATTACHMENTS AND ACCESSORIES FOR THE ADEQUATE WATERING OF PLANTED AREAS AS MAY BE REQUIRED UNTIL ACCEPTANCE BY THE OWNER OR THE OWNER'S REPRESENTATIVE.

(4.11) MULCH SHALL BE CLEAN, GROUND OR SHREDDED BARK OR HARDWOOD MULCH. IN PLANTING AREAS WHERE SLOPES EXCEED 3:1 AND AT DRAINAGE DISPERSION POINTS OR ALONG NATURAL WATER WAYS WHERE CONCENTRATIONS OF SURFACE WATER EMPTY FROM CULVERTS OR PAVED DITCHES, HEAVY JUTE MESH SHALL BE INSTALLED. SHREDDED HARDWOOD OR BARK MULCH SHALL HAVE BEEN COMPOSTED FOR AT LEAST TWO MONTHS PRIOR TO APPLICATION. FRESHLY GROUND MULCH WILL NOT BE ACCEPTED. FINELY GROUND MULCH WHICH INHIBITS DRAINAGE, ENCOURAGES WEED GROWTH OR BECOMES WATERLOGGED WILL NOT BE ACCEPTED. MULCH SHALL BE COMPOSED OF SIMILAR SIZED FRAGMENTS AND SHALL NOT CONTAIN STICKS, CONES, LEAVES, UNSHREDDED PIECES, OR OTHER DELETERIOUS MATTER. ALL AZALEA AND CAMELLIA PLANTING BEDS SHALL HAVE 1" OF PINE STRAW MULCH UNDER 2" OF BARK OR SHREDDED HARDWOOD MULCH.

(4.12) ALL PLANTS SHALL BE MULCHED IMMEDIATELY AFTER PLANTING. GROUND COVERS SHALL BE MULCHED WITH A 2" LAYER OF SHREDDED HARDWOOD OR BARK MULCH. ALL OTHER PLANTING BEDS, SHRUBS AND TREE PLANTINGS SHALL BE MULCHED WITH A 3" MINIMUM LAYER OF MULCH. THIS MULCH SHALL ENTIRELY COVER THE AREA OF THE PLANTING PIT, BED, OR EARTH BERM AROUND EACH PLANT WITH THE EXCEPTION OF THE AREA IMMEDIATELY ADJACENT TO THE PLANT TRUNK OR TRUNKS. THE AREA IMMEDIATELY ADJACENT TO THE PLANT TRUNK OR TRUNKS SHALL BE LEFT FREE OF ANY MULCH.

(5) FERTILIZING

(5.1) THE FERTILIZER SHOULD BE A DRY SLOW RELEASE FORM OF FERTILIZER. IT SHOULD CONTAIN AT LEAST 25-50% WATER INSOLUBLE NITROGEN. THE FERTILIZER SELECTED SHOULD ALSO HAVE A LOW ADJUSTED SALT INDEX TO PREVENT BURNING. THE N-P-K RATIO SHOULD NOT EXCEED 3-1-2 UNLESS THE SOIL TEST REVEALS THAT ADDITIONAL LEVELS OF P AND K ARE NECESSARY.

(5.2) FOR DECIDUOUS TREES, USE OSMOCOTE (18-6-12) AT THE RATE EQUIVALENT TO 4 LBS ACTUAL N/1000 SQ FT OF ROOT ZONE AREA/YEAR. FOR EVERGREEN TREES USE 2 LBS ACTUAL N/1000 SQ FT OF ROOT ZONE AREA/YEAR.

(5.3) MIX THE FERTILIZER INTO THE BACKFILL SOIL OF THE TREE PITS. FOR SHRUB BEDS, MIX THE FERTILIZER INTO THE AREA THAT HAS BEEN ROTO-TILLED FOR THE PLANTS.

(5.4) THE FERTILIZER RATE FOR CONTINUOUS GROUND COVER AND SHRUB BEDS SHOULD BE DERIVED BY CALCULATING THE ENTIRE ROOT ZONE AREA. THE ROOT ZONE AREA IS FOUND BY MEASURING THE AREA CONTAINING THE MULTIPLE PLANT ROOTS. USE OSMOCOTE (18-6-12) AT A RATE EQUIVALENT TO 2 LBS OF N/1000 SQ FT OF ROOT ZONE AREA. THE FERTILIZER SHOULD BE EVENLY DISTRIBUTED WITHIN THE SHRUB BED SOIL.

(5.5) ALWAYS BE SURE THAT ADEQUATE MOISTURE IS AVAILABLE WHEN FERTILIZING SO THAT THE FERTILIZER WILL BE DISSOLVED INTO THE SOIL SOLUTION FOR ROOT UPTAKE AND TO AVOID BURNING THE ROOTS.

(6) STAKING

(6.1) ALL TREES SHALL BE STAKED ACCORDING TO THE TYPICAL DETAILS PROVIDED.

(6.2) THREE STAKES SHALL BE REQUIRED PER TREE. THE STAKES SHALL BE DRIVEN IN A RADIAL PATTERN, VERTICALLY INTO THE GROUND OUTSIDE THE EDGE OF THE ROOTBALL TO A DEPTH OF 2 1/2' TO 3', ON OPPOSITE SIDES OF THE TREE IN SUCH A MANNER AS NOT TO INJURE THE ROOT BALL OR ROOTS. STAKES FOR SUPPORTING TREES SHALL BE 1.5" X 1.5" SQUARE OR ROUND, BY 8'. THE STAKES SHALL BE SOUND WOOD TREATED WITH A SUITABLE WOOD PRESERVATIVE. WIRE OR CABLE SIZES SHALL BE AS FOLLOWS:

TREES UP TO 65 MM (2.5 IN.) CALIPER - 14 GAUGE

TREES 65 MM (2.5 IN.) TO 75 MM (3 IN.) CALIPER - 12 GAUGE

TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 35MM (1.5 IN.) OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE. TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED. ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A

MINIMUM OF 12 MM (0.5 IN.).

(6.3) WOODEN STAKES AND WIRE TIES SHOULD BE REMOVED AFTER ONE YEAR.

(7) CHEMICAL APPLICATION

(7.1) ALL PESTICIDES SHALL BE PRODUCTS OF RECOGNIZED COMMERCIAL MANUFACTURERS, AND SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL PESTICIDE LAWS. PESTICIDES SHALL BE APPLIED WITH CALIBRATED EQUIPMENT ACCORDING TO EPA LABEL RESTRICTIONS AND REGULATIONS BY A CERTIFIED APPLICATOR. ANY DAMAGE INCURRED TO THE SITE, ADJACENT PROPERTIES, OR APPLICATOR DURING PESTICIDE APPLICATIONS WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

(7.2) PESTICIDES SHOULD BE USED ONLY WHEN NECESSARY TO TREAT AN OUTBREAK OF A HARMFUL PEST OR DISEASE PROBLEM. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED 24 HOURS PRIOR TO THE APPLICATION OF ANY PESTICIDE.

(8) MAINTENANCE AND GUARANTEE

(8.1) THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING HIS WORK FOR THE PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER OR THE OWNER'S REPRESENTATIVE. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, REMOVAL OF DEAD MATERIALS, RESETTING OF PLANTS TO PROPER GRADES OR UPRIGHT POSITIONS, RESTORATION OF EARTH BERMS, AND OTHER NECESSARY OPERATIONS. ADEQUATE PROTECTION FOR LAWN AREAS AGAINST TRESPASSING DURING PLANTING OPERATIONS AND AGAINST DAMAGE OF ANY KIND SHALL BE PROVIDED. NOTHING IN THESE NOTES IS INTENDED TO RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO REPAIR EXISTING LAWN AREAS DAMAGED BY WORKMEN ENGAGED IN THE COMPLETION OF THIS PROJECT.

(8.2) INSPECTION OF THE WORK TO DETERMINE COMPLETION OF THE CONTRACT EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTINGS, WILL BE MADE BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE CONCLUSION OF THE INSTALLATION PERIOD UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION. REQUEST SHALL BE SUBMITTED BY CONTRACTOR AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED DATE FOR INSPECTION. AFTER INSPECTION, THE CONTRACTOR WILL BE NOTIFIED IN WRITING BY THE OWNER OR THE OWNER'S REPRESENTATIVE OF ACCEPTANCE OF THE WORK, EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTS SUBJECT TO GUARANTEE; OR, IF THERE ARE ANY DEFICIENCIES, THE CONTRACTOR WILL BE NOTIFIED OF THE REQUIREMENTS NECESSARY FOR COMPLETION OF THE WORK. PLANTINGS SHALL NOT BE CONSIDERED ACCEPTED UNTIL ALL DEFICIENCIES HAVE BEEN CORRECTED AND APPROVED IN WRITING.

(8.3) NURSERY STOCK SHALL BE FULLY GUARANTEED FOR ONE FULL YEAR. ALL PLANTS THAT FAIL TO MAKE NEW GROWTH FROM A DORMANT CONDITION OR THAT DIE DURING THE FIRST YEAR AFTER PLANTING SHALL BE REPLACED. ALL REPLACEMENTS SHALL CONFORM WITH THE ORIGINAL SPECIFICATIONS AS TO SIZE AND TYPE. ALL COSTS OF REPLACEMENTS SHALL BE BORNE BY THE CONTRACTOR.

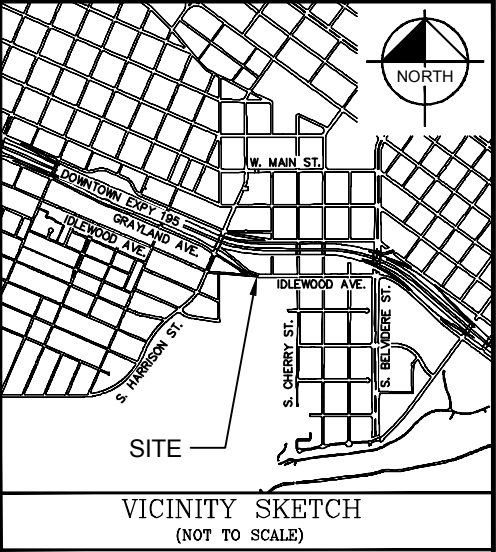
(9) ALL OTHER ITEMS NECESSARY TO MAKE WORK COMPLETE

(9.1) ANY PLANT MATERIAL NOT PLANTED SHALL BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNUSED RUBBISH AND DEBRIS FROM THE SITE UPON COMPLETION OF HIS WORK.

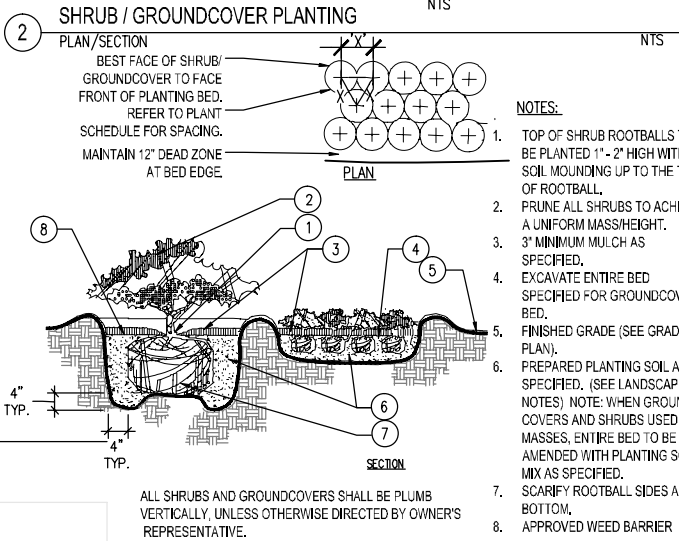
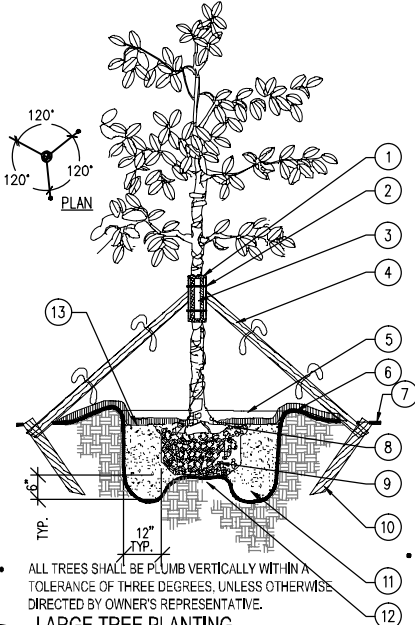
PLANT SCHEDULE

FINAL PLANT QUANTITIES AND SPECIES TO BE PROVIDED AT A LATER SUBMISSION.

KEY	QTY.	BOTANICAL / COMMON NAME	SIZE	ROOT	COMMENTS
CANOPY TREES					
TG	15	<i>Tilia cordata</i> 'Greenspire' Greenspire Littleleaf Linden	3" cal.	B&B	Strong Central Leader
ORNAMENTAL TREES					
LI	3	<i>Lagerstroemia indica</i> 'Natchez' Natchez Crape myrtle	6-8'	B&B	Multi-Stem, 3 Stem Min.
SHRUBS / ORNAMENTAL GRASSES					
RHA	23	<i>Rhaprolepis indica</i> 'Monto' Indian Princess Indian Hawthorne	24" ht.	Cont.	Upright, rounded form
PAH	41	<i>Pennisetum alopecuroides</i> 'Hamel' Dwarf Fountain Grass	3 Gal.	Cont.	Upright, rounded form
BAR	27	<i>Berberis thunbergii</i> 'Gentry' PP#9461 Royal Burgundy Barberry	24" ht.	Cont.	Upright, rounded form
PERENNIALS					
HEM	1545	<i>Hemerocallis x Rosy Returns</i> Rosy Returns Daylily	1 Gal.	Cont.	18" o.c. Full, dense
SED	551	<i>Sedum x Autumn Joy</i> Autumn Joy Stonecrop	1 Qt.	Cont.	18" o.c. Full, dense



- NOTES:
- A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
 - B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
 - C. "TREE SAVER" ANCHORING SYSTEM MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE.



60% PLANS - 08/14/14

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

Kimley»Horn

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IDLEWOOD AVENUE ROUNDABOUT PROJECT

LANDSCAPE DETAILS

NOTES

1. Lot dimensions in parentheses are from deed.

2. Property owners correct as of _____, 20__.

3. Ordinance Number _____

4. Adopted _____

5. Accepted _____

REFERENCES

BL, XX NW, NE, SW, SE

Existing Curb

- Curb & Gutter
- Sidewalk
- Basin
- Storm Sewer
- Sewer Manhole
- Sanitary Sewer (new)
- Sanitary Sewer (new) Man
- Gas Line
- Electric Line
- Telephone/Telegraph
- TV Cable
- Water Line
- Tree / Exist. Tree To Be Removed / Stump
- Property Line

Existing

- Curb Cut Ramp
- Coping
- Alley Crossing/Driveway
- Fire Hydrant
- Edge of Pavement
- Fence
- Cornerstone
- Property Pin
- Utility Pole

Proposed

- Manhole
- Basin
- Curb & Gutter
- Asphalt

Proposed Conc. Sidewalk

Castings

- Water Valve
- Water Meter
- Gas Valve
- Telephone Manhole
- Electric Manhole

Proposed Curb Cut Ramp

- Decorative Light
- Conduit
- Conduit (Conc. Encased)
- Retaining Wall



Technical

Administrative

Surveys Superintendent

Project Engineer

Maintenance Engineer

City Traffic Engineer

Capital Project Administrator

Deputy Director for Transportation / Public Works

Director of Public Works

DEPARTMENT OF PUBLIC WORKS

RICHMOND, VIRGINIA

CIP: 040-000-000-0000

DESIGN BY: JNJ

DRAWN BY: JNJ

CHECKED: JNJ

REVIEWED BY

FIELD NOTES

SCALE

AS NOTED

DATE

08-14-14

DRAWING NO.

X-XXXXX

SHEET NO.

5