

STANDARD CITY GENERAL NOTES

ALL NOTES MAY NOT APPLY

1. WORK IN THIS PROJECT SHALL CONFORM TO THE LATEST EDITIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, THE VDOT ROAD AND BRIDGE STANDARDS, THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND THE CITY OF HARRISONBURG DESIGN AND CONSTRUCTION STANDARDS MANUAL. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS OR PLANS, THE MOST STRINGENT SHALL GOVERN. ALL UTILITIES TO BE DEDICATED TO THE CITY OF HARRISONBURG MUNICIPAL WATER AND/OR SANITARY SEWER SYSTEM SHALL BE CONSTRUCTED TO THE CITY OF HARRISONBURG DESIGN AND CONSTRUCTION STANDARDS MANUAL. ALL UTILITIES TO BE MAINTAINED BY THE CITY OF HARRISONBURG AND/OR SEWERAGE REGULATIONS AND THE CITY OF HARRISONBURG DESIGN AND CONSTRUCTION STANDARDS MANUAL.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RESEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.
3. ALL DRAIN LISTS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.
4. WHEN THE GRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF ORIGINAL APPLICATION.
5. THE LOCATION OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS AT HIS EXPENSE. ALL UTILITIES TO BE MAINTAINED BY THE CITY OF HARRISONBURG SHALL BE LOCATED FROM TYPICAL EXCAVATION DATA FROM EXCAVATION CALL MASS UTILITY 1 (800) 552-3001.
6. ALL UNDERGROUND FACILITIES LOCATED WITHIN THE CITY'S RIGHTS-OF-WAY SHALL BE INSTALLED PRIOR TO THE PLACEMENT OF ANY PART OF THE PAVEMENT STRUCTURE.
7. INSTALLATION OF STORM PIPE SHALL COMPLY WITH VDOT STANDARD DRAWING PB-1.
8. ALL MATERIALS USED FOR FILL OR BACK-FILL SHALL BE FREE OF WOOD, ROOTS, ROCKS, BOULDERS OR ANY OTHER NON-COMPACTIBLE SOIL. THE MATERIAL, UNSATSFACTORY MATERIALS ALSO INCLUDE MANMADE FILLS AND REUSE DEBRIS DERIVED FROM ANY SOURCE.
9. SATISFACTORY MATERIAL FOR USE AS FILL FOR PUBLIC STREETS INCLUDE MATERIAL CLASSIFIED IN ASTM D-2487 AS GW, GP, GM, GC, SW, SP, SM, SC, ML AND CL GROUPS. THE MOISTURE CONTENT SHALL BE CONTROLLED WITHIN PLUS OR MINUS 2 PERCENTAGE POINTS OF OPTIMUM TO FACILITATE COMPACTION. GENERALLY, UNSATSFACTORY MATERIALS INCLUDE MATERIALS CLASSIFIED IN ASTM D-2487 AS FT, CH, MH, OL, OH, AND ANY SOIL TOO WET TO FACILITATE COMPACTION. CH AND MH SOILS MAY BE USED SUBJECT TO APPROVAL OF THE PUBLIC WORKS PROJECT MANAGER. SOILS SHALL HAVE A MINIMUM DRY DENSITY OF 92 LB./CU. FT. PER ASTM D-999 AND SHALL HAVE A PLASTICITY INDEX LESS THAN 17.
10. COMPACTION OF FILL MATERIAL UNDER BUILDING SLABS SHALL BE BASED UPON RECOMMENDATIONS OF SOILS ENGINEER AFTER COMPLETION OF STANDARD PROCTOR TEST AND SHALL MEET BEARING REQUIREMENTS OF ARCHITECT OF BUILDINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING.
11. MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACK-FILL AROUND DRAINAGE STRUCTURES OR IN UTILITY TRENCHES OR ANY OTHER DEPRESSION REQUIRING FILL OR BACK-FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AS SET OUT IN ASTM STANDARD D-998. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING RECORDS OF ALL FIELD TESTS AND RECORDS OF ALL FIELD TESTS WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A CERTIFIED MATERIALS TESTING LABORATORY AND THE CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING THE LABORATORY.
12. CERTIFICATIONS FOR MATERIALS INCLUDING, BUT NOT LIMITED TO STONE, CONCRETE, PRECAST UNITS, HANDRAILS, STABILIZATION MATS, TRAFFIC SIGNAL ITEMS, MUST BE PROVIDED TO THE CITY'S ON-SITE INSPECTOR AND APPROVED BY THE INSPECTOR PRIOR TO INSTALLATION. SEE INSPECTOR FOR MATERIALS CERTIFICATION CHECKLIST.
13. EMBANKMENT FILL AND TRENCH BACK-FILL SHALL BE PLACED IN LISTS AT A MAXIMUM UNCOMPACTED DEPTH OF BANCHES AND GINCHES, RESPECTIVELY. DENSITY TESTS SHALL BE CONDUCTED AT THE FOLLOWING MINIMUM FREQUENCIES:
 - (A) EMBANKMENTS FOR ROADS, STREET DAMS, ETC.: ONE TEST PER LIFT PER 10,000 SQUARE FEET OF LIFT.
 - (B) BACK-FILL AROUND STRUCTURES AND IN TRENCHES: ONE TEST PER LIFT PER 900 LINEAL FEET OF TRENCH.
14. COMPACTION TESTS FOR STREET PAVEMENT STRUCTURE SHALL BE MADE IN CUT AND FILL AREAS AT THE FOLLOWING MINIMUM FREQUENCIES:
 - (A) SUB-GRADE: ONE TEST PER LANE PER 500 LINEAL FEET
 - (B) STONE BASE: ONE TEST PER LANE PER 6' COMPACTED LIFT PER 500 LINEAL FEET
 - (C) HOT ASPHALTIC CONCRETE: ONE TEST PER LANE PER LIFT PER 500 LINEAR FEET
15. ALL EXCAVATIONS, INCLUDING TRENCHES, SHALL BE KEPT DRY TO PROTECT THEIR INTEGRITY.
16. TEST RESULTS SHALL BE SUBMITTED TO THE PUBLIC WORKS PROJECT MANAGER. FAILURE TO CONDUCT TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE OF THE FACILITY. TESTS SHALL BE CONDUCTED AT THE SOLE COST OF THE DEVELOPER OR HIS AGENT.
17. COMBINATION UNDERDRAINS TYPE CD-1 SHALL BE INSTALLED AT THE LOWER END OF CUT SECTIONS. UNDERDRAINS TYPE CD-2 SHALL BE INSTALLED AT THE LOW POINT OF ALL VERTICAL CURVES.
18. STANDARD UD-1 AND UD-3 UNDERDRAINS SHALL BE INSTALLED WHERE INDICATED ON PLANS AND FURTHER WHERE DETERMINED NECESSARY IN THE FIELD BY CITY INSPECTORS.
19. CITY INSPECTORS HAVE FULL AUTHORITY TO REJECT FILL OR BACKFILL MATERIALS. REQUIRE UNDERDRAINING OR SUBGRADE STABILIZATION. REQUIRE PROVISIONS FOR SUB DRAINAGE. OR REQUIRE OTHER MEASURES WHICH AFFECT THE INTEGRITY OF ROAD AND UTILITY CONSTRUCTION. FAILURE TO

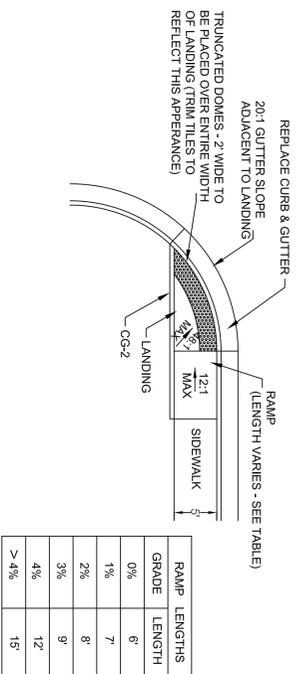
COMPLY WITH INSPECTORS DIRECTIVES SHALL BE CAUSE FOR NON-ACCEPTANCE TO THE FACILITY.

20. TRAFFIC CONTROL ON PUBLIC STREETS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND AS FURTHER DIRECTED BY CITY INSPECTORS. CITY INSPECTORS MUST BE NOTIFIED 24 HOURS IN ADVANCE OF ANY PLANNED WORK OR ACTIVITY IN CITY RIGHT-OF-WAY THAT REQUIRES FLAGGING, LANE CLOSURE OR 5 FEET CLOSURE. ALL SIGNAGE AND OTHER CONTROL DEVICES SHALL BE IN PLACE BEFORE SUCH ACTIVITIES CAN COMMENCE.
21. ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
22. A PRE CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF THE CONSTRUCTION. THE CONTRACTOR SHALL APPEAR AT THE MEETING WITH THE PROJECT MANAGER AT THIS TIME. THE CONTRACTOR SHALL PROVIDE A SCHEDULE AND TRAFFIC CONTROL PLAN FOR WORK WITHIN THE CITY RIGHT-OF-WAY.
23. INSTALL CITY STANDARD STREET CENTERLINE MONUMENTS WHERE REQUIRED FOR NEW STREETS.
24. IF TRAFFIC SIGNAL PLANS HAVE BEEN REVISED OR CHANGED SINCE APPROVAL, THE DEVELOPER MUST PROVIDE TO THE DIRECTOR OF PUBLIC WORKS AS-BUILT DRAWINGS REFLECTING CHANGES. PROVISIONS OF AS-BUILT DRAWINGS IS A CONDITION OF BOND RELEASE.

REV/	DATE	DESCRIPTION	BY	SCALE:	AS SHOWN		
				DRAWN BY	DATE	BURGESS ROAD/ HARRISONBURG CROSSING SIGNAL MODIFICATION PUBLIC WORKS DEPARTMENT CITY OF HARRISONBURG 320 EAST MOSBY ROAD HARRISONBURG, VIRGINIA	GENERAL NOTES
				AMRGR	7/18/16		
				DESIGNED BY	DATE		
				AMRGR/TAH	7/18/16		
				CHECKED BY	DATE		
				TAH	7/18/16		
				TAX	MAP		

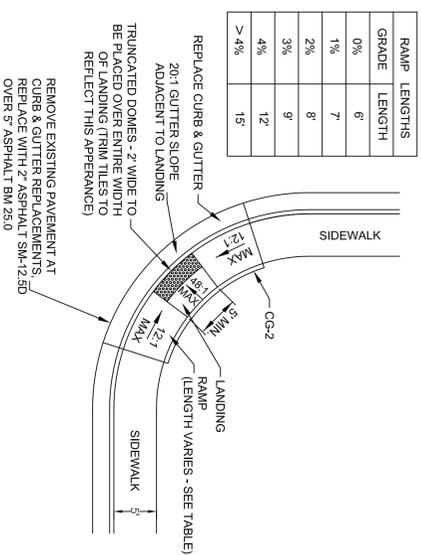
SHEET

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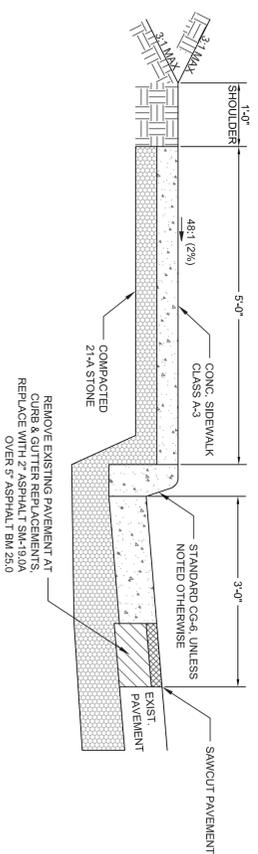
RAMP GRADE	LENGTH
0%	6'
1%	7'
2%	8'
3%	9'
4%	12'
> 4%	15'

CG-12B ONE-WAY CURB RAMP W/O GREEN SPACE
 7" CLASS A-3 CONCRETE
 4" 21-A-COMPACTED STONE BASE
 SCALE: 1" = 10'



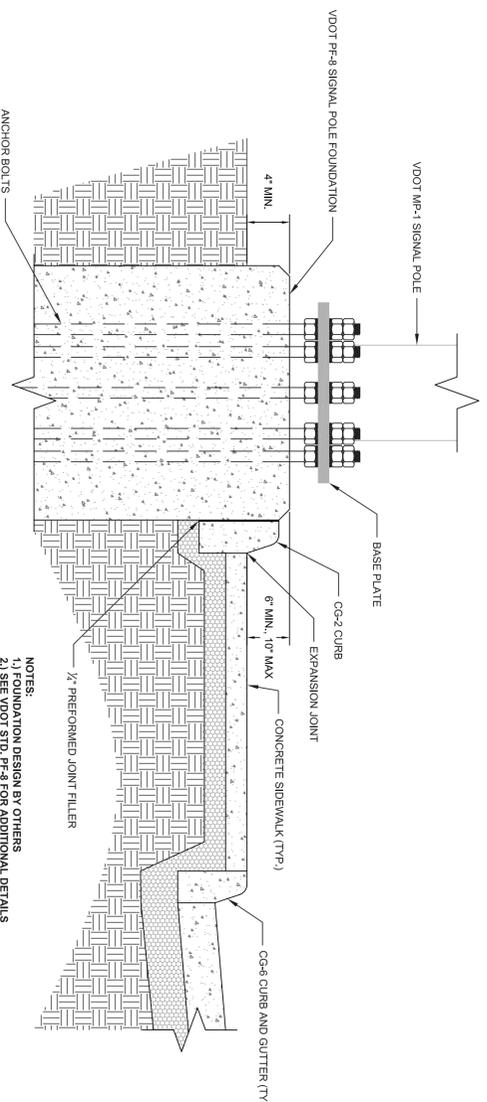
RAMP GRADE	LENGTH
0%	6'
1%	7'
2%	8'
3%	9'
4%	12'
> 4%	15'

CG-12B TWO-WAY CURB RAMP W/O GREEN SPACE
 7" CLASS A-3 CONCRETE
 4" 21-A-STONE BASE
 SCALE: 1" = 10'



- NOTES:
 1.) CONCRETE THICKNESS: 4" NORMAL, 7" AT ENTRANCES
 2.) STONE THICKNESS: 4" NORMAL, 6" AT ENTRANCES

TYPICAL SIDEWALK SECTION W/ GREEN SPACE
 SCALE: (NTS)



- NOTES:
 1.) FOUNDATION DESIGN BY OTHERS
 2.) SEE VDOT STD. PF-8 FOR ADDITIONAL DETAILS

SIGNAL POLE FOUNDATION DETAILS
 SCALE: (NTS)

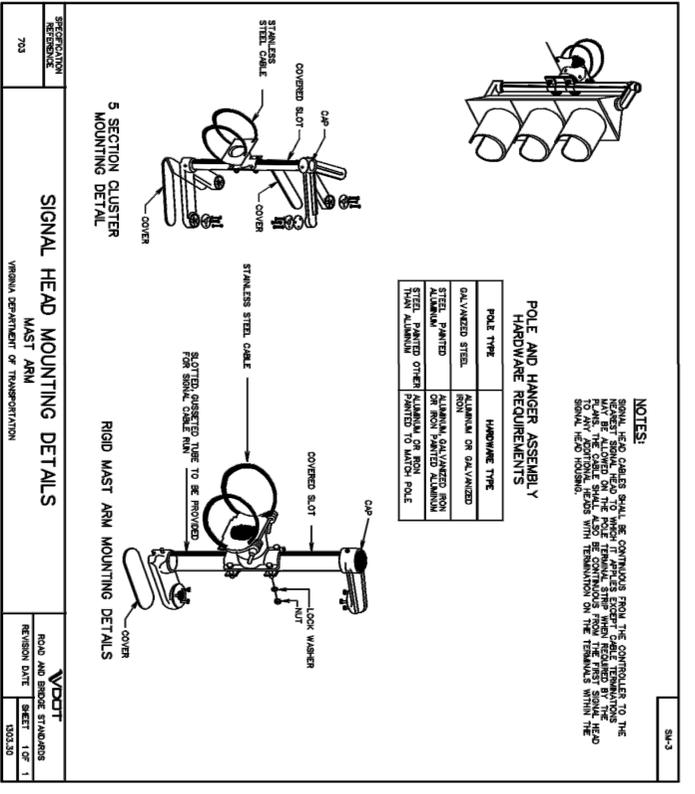
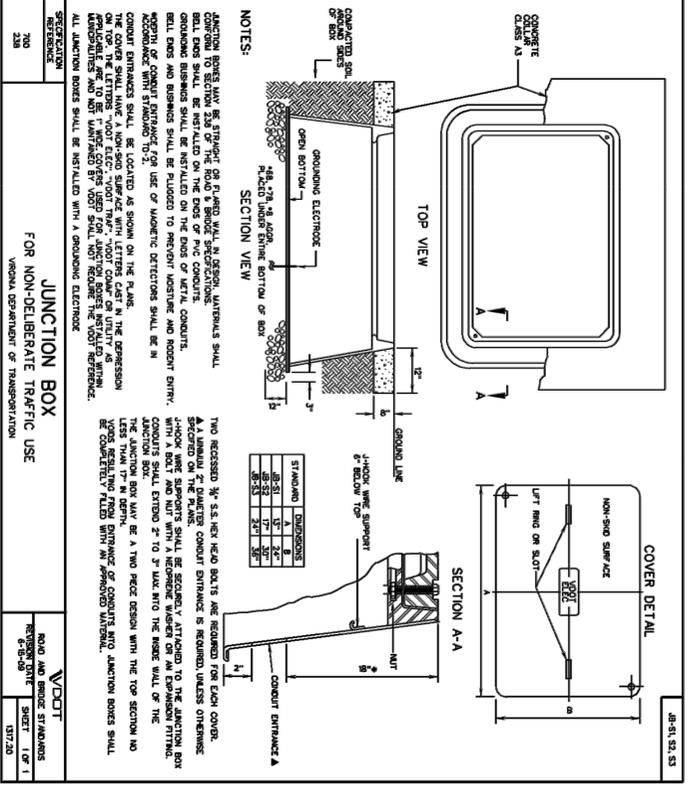
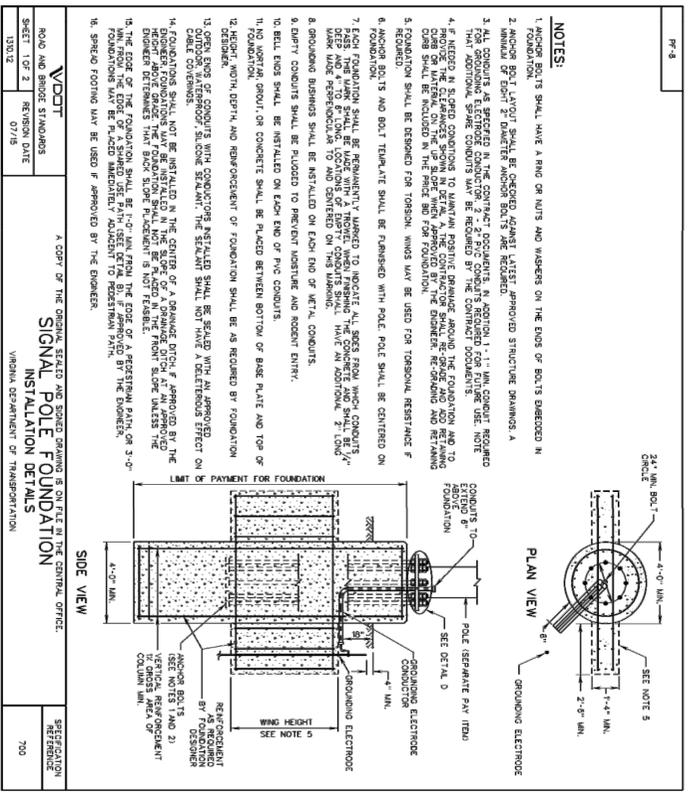
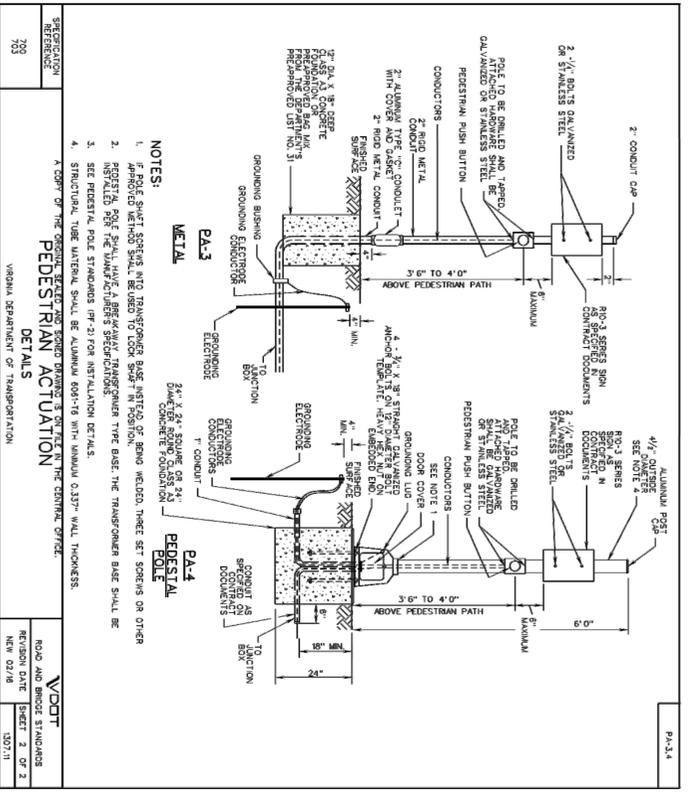
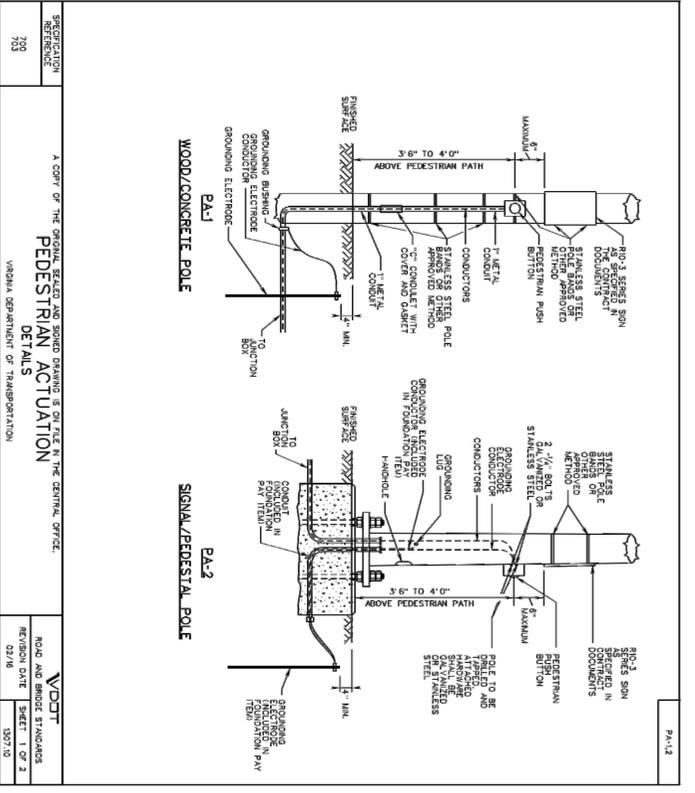
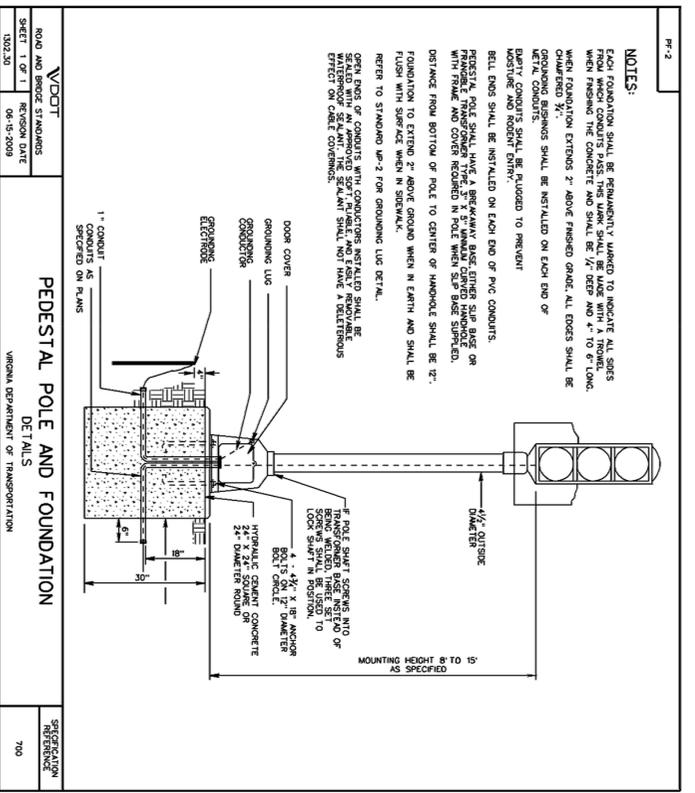
REV	DATE	DESCRIPTION	BY	SCALE	AS SHOWN
			AMR		
			AMR		
			AMR		
			TAH		

BURGESS ROAD/
 HARRISONBURG CROSSING
 SIGNAL MODIFICATION
 PUBLIC WORKS DEPARTMENT
 CITY OF HARRISONBURG
 300 EAST MOSBY ROAD
 HARRISONBURG, VIRGINIA

TYPICAL SECTION AND DETAIL

SHEET

2A



VDOT
 ROAD AND BRIDGE STANDARDS
 SHEET 1 OF 2
 REVISION DATE: 07/15

A COPY OF THE ORIGINAL SEALS AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.
SIGNAL POLE FOUNDATION
 VIRGINIA DEPARTMENT OF TRANSPORTATION

REGISTRATION REFERENCE: 703

REV. DATE DESCRIPTION BY SCALE:

1	4/20/15	MAST ARM LENGTHEN 22" TO 30"	AMR	1" = 5/8"
			AMR/RBR	DATE: 7/18/16
			AMR/RBR/TAH	DATE: 7/18/16
			TAH	DATE: 7/18/16
			TAX	MAP

**BURGESS ROAD/
 HARRISONBURG CROSSING
 SIGNAL MODIFICATION
 PUBLIC WORKS DEPARTMENT
 CITY OF HARRISONBURG
 300 EAST MOSBY ROAD
 HARRISONBURG, VIRGINIA**

DETAILS

SHEET: **2B**

TRAFFIC SIGNAL GENERAL NOTES

- Multiple conduits between proposed conduits and existing utilities may exist. The Contractor is cautioned that the location of all existing underground utilities should be considered approximately 18" from the centerline of the proposed conduit. The Contractor shall be responsible for the definite location of each utility involved within the area of this excavation for work under this contract. The Contractor shall call MISS UTILITY (1-200-552-2001) 48 hours before beginning work. Where conflicts occur, the Contractor shall contact the Engineer prior to beginning work.
- All sign and traffic signal components included in this project must be compliant with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) and the Virginia Supplement to the MUTCD unless otherwise indicated.
- All signal heads shall be mounted in accordance with VDOT SMA-3 and all signal heads shall include lowered aluminum backplates of flat black color. All traffic signal heads shall be 12" polycarbonate and include yellow cut away lenses. Signal heads shall be wired/installed as per Special Provisions.
- All damages to existing structures, facilities, pavement, grassed areas, etc., shall be restored to existing condition by the Contractor at his expense.
- All street signs shall be LED lighted street signs capable of nighttime illumination to be controlled by individual photocell on/off switch in traffic cabinet. All street name sign text is to be composed of 8' Clearview 2-W font. City of Harrisonburg Traffic Engineering (540-434-5929) needs to approve sign proofs prior to ordering. Refer to Special Provisions for specifications.
- Signal pole and pedestrian pedestal pole locations shall be installed within 6" of the print as shown on the plan. Contractor shall stake and add verify with MISS UTILITY OF VIRGINIA the pole location before ordering poles and arms. THE CITY PROJECT MANAGER OR HIS/HER DESIGNEE SHALL APPROVE STAKED POLE LOCATIONS. Signal pole foundation to be designed to meet VDOT PF-8 standard. Pedestrian pedestal pole foundations to be designed to meet VDOT PF-2 standard.
- The Contractor shall furnish to the City shop drawings and calculations for all poles and foundations. Detailed quantities shown on this plan are for informational purposes only. Final quantities shall be determined by the shop drawings and calculations.
- Provide an Uninterrupted Power Supply (UPS) power backup system as specified in the Special Provisions. Install with batteries. UPS system shall be installed in a separate bolt-on enclosure attached to the signal cabinet. Refer to Special Provisions for additional details.
- Contractor shall ensure integrity of cabling for signal heads throughout the duration of construction.
- The Contractor shall verify the elevation of all underground utilities to be crossed prior to trenching, jacking, or boring conduits. The Contractor shall hand dig when crossing water lines, gas lines, sewer force mains, fiber optic lines, cable lines, etc..
- All U-bolts, nuts, and washers shall be stainless steel. All plate materials shall be galvanized.
- Conduite entering junction boxes shall not extend over 3' maximum or under 2" minimum and shall be filled with ball ends or bushings.
- The proposed pole foundations shall be permanently marked to indicate the locations of all conduits cast in the foundation, and the foundations specifications.
- All conduit shall be PVC Conductor (EGC) is required and the cost of EGC shall be included in the cost of the conduit. Conduit quantities are based on the proposed signal head and pedestal quantities shown on the requirements. Additional pavement will not be provided for open trenching if/where required for road crossings.
- Conduit and junction boxes shown in the plan may be placed in location to accommodate field conditions. All equipment shall be placed within the right-of-way.
- Controller and cabinet to be supplied by the City. Contact City Traffic Engineering to coordinate installation (540-434-5929) at least two weeks in advance of the planned installation date.
- The City of Harrisonburg will provide the signal linings for the controller. The Contractor shall contact Traffic Engineering (540-434-5929) at least two weeks in advance of requiring those linings.
- Pedestrian push buttons shall be per VDOT specifications and shall be fully ADA and MUTCD compliant in size and location. Push buttons shall be included with an accessible Pedestrian Signal and shall be Polara brand. Pedestrian push buttons shall be supplied by the City of Harrisonburg. Each cabinet will be supplied with one LED indicator. Push buttons shall be programmed to use audible tones. Test to ensure that volume automatically adjusts to ambient noise conditions. City Traffic Engineering (540-434-5929) needs to approve order forms and custom audible

message programming prior to ordering.

- Top of pedestrian pole foundations shall be flush with the adjacent sidewalk. Pedestrian push buttons shall be fully accessible from the adjacent sidewalk.
- All pole foundations shall be designed for maximum mast arm length and load. Pole foundations shall be designed for a maximum arm length of 70 feet. The maximum load capacity shall be figured to include the weight of internally-illuminated LED street signs.
- Detection camera locations shall be adjusted in the field. Use extender arms as necessary to allow the camera to be structurally located at the proper elevation as per the manufacturer's recommendations and to provide the operators shown at the project intersection.
- Provide Opticom Emergency preemption devices for all approaches as shown on the plans. Confirmation lights to be included with this bid item. This item includes the testing and adjusting of the system as necessary to ensure that the emergency preemption detectors adequately detect and preempt the signal timings. The Opticom system shall be setup and wired with City Opticom channel configurations. See Special Provisions for additional details.
- Conduit schedule includes conduit specified in VDOT PF-8 standard, CF-1 standard, PF-2 standard, and SC-3 Type B standard.
- #8 bonded ground cable shall connect to all signal and pedestrian poles.
- Junction boxes shall have 8" concrete collar, not the 12" specified by VDOT. See Special Provisions for additional details. All junction box collars shall be marked to show the number and detectors of conduits, similar to the PF-8 foundation markings.
- Provide new electrical service. Electrical service shall be 110VAC. Electrical service shall be VDOT STD, SE-3, Type B120 Volt single phase with 100 AMP meter base and circuit breaker box, containing 1 single pole 60 AMP breaker and 2 single pole 20 AMP breaker mounted on the signal pole. Contractor shall install meter supplied by Harrisonburg Electric Commission. Contractor shall pick up meter at Harrisonburg Electric Commission (540-434-5361). Contractor shall obtain an "Electric Permit" from City of Harrisonburg Community Development Department prior to performing any electrical work. The electrical power shall be supplied based on existing equipment shown on City of Harrisonburg Traffic Engineering and Harrisonburg Electric Commission.
- Pedestrian signal heads shall be mounted according to the VDOT SMB-1 standard for poles with one head and according to the SMB-2 standard for poles with two heads. Mounting hardware shall be Federal yellow color. Pedestrian signal heads shall meet City Special Provisions, which includes wiring detail.
- Installation of the signal devices shall be incidental to the installation of the controller cabinet.
- Transverse spacing of signal heads and video detectors shall be verified and adjusted as necessary in the field.
- All vehicular signal heads shall be powered by 144C except for FLASHING YELLOW ARROW signal head which shall be powered by 147C. All pedestrian signal heads and pedestrian push buttons shall be powered by 144C cable. Signal heads shall not be wired in sequence. Each vehicular signal shall have a separate cable.
- All LED lighted street name signs shall be powered by 144C cable. All emergency vehicle preemptions shall be wired with emergency vehicle preemption detector cable and 142C shielded cable (for the confirmation beacon).
- Three printed copies and one (1) digital copy of as-built plans shall be supplied to the Public Works Department and include specifications for mast arm poles and pole foundations. CD sheets shall be supplied for all proposal items that differ from what is specified in the plans.

TRAFFIC SIGNAL SPECIAL PROVISIONS

- Control Cabinet**
The control cabinet shall be an Econole model Plug & Go P44 T52 Type 1 enclosure as per City of Harrisonburg specifications. The control cabinet will be supplied by the City of Harrisonburg.
 - Components**
Traffic controller shall be an Econole model ASC3-2100, with Ethernet and Data Key capability as per the City of Harrisonburg contract with the manufacturer. The controller will be supplied by the City of Harrisonburg.
 - Multi-Action Management Unit (MAMU) shall be a Reno A&E model MAMU-2000, with Ethernet capability. (MAMU) shall be supplied by the City of Harrisonburg.
 - UPS battery backup shall be a Tesco Controls model 22000, 1000-watt, 6-battery system. UPS, battery backup, and supply cabinet shall be supplied and installed by City of Harrisonburg.
 - 100-Amp A/C power service shall be permitted and inspected by the Contractor through the Community Development Department (540) 432-7700. Contractor is responsible for installing power service, which shall be brought through a 100-amp service disconnect.
 - Traficon video detection system using model WPD2 cards shall be used for vehicle detection. This system shall include VIP cards (1 for every 4 phases in use at the intersection), cameras (1 for every intersection approach), wires, and a Traficon ViewCom E Max card for remote management.
 - Contractor to re-install Opticom equipment from existing signal cabinet to NEW signal cabinet. Contractor to install wiring for Opticom to NEW signal. City of Harrisonburg will provide and install Opticom equipment on NEW signal.
- Mast Arms**
- Mast arm poles and arms shall meet Virginia Department of Transportation standard PF-8 and have VDOT regional contract galvanneal eight (8) bolt design.
 - Mast arm (or strain poles, if applicable) shall be designed in accordance with the 1994 ASHTO Standard Specifications for Structure Supports for Highway Signs, Luminaires, and Traffic Signals.
 - Mast arms shall be designed to a minimum 90 mph wind load capacity. In addition, mast arms shall be designed to meet the following conditions: a) mast arm shall be designed for a 70' maximum leading scenario, and the 70' mast arm shall be designed for a 70' maximum leading scenario.
- Signal Heads**
- Signal heads shall be manufactured by Peak Traffic, Inc., McCain, In., or equivalent.
 - All signal heads shall have 12 inch Red, Amber and Green VDOT approved LED lenses.
 - Signal indicators shall be Leotek Electronics Corp., Model LLF-P3, 12" Incandescent look LED modules.
 - Signal heads shall be wired according to the following schemas:
Red Wire - Red output
Orange Wire - Yellow output
Green Wire - Green output
White Wire - Neutral
Black/White Wire - Flashing Yellow Arrow
 - Pedestrian signal housing shall be 16" aluminum and be Federal yellow color.
 - Pedestrian signal heads shall be wired according to the following schema:
Blue Wire - Walk output
Orange Wire - Don't Walk output
White Wire - Neutral

- Pedestrian signals shall meet VDOT standard SPA, be 16" wide, and be Leotek Electronics Corp., Model No. TSL-PED-16-CL-P1 or exact equivalent.
- Conduits & Junction Boxes**
All conduits shall be schedule 80 PVC pipe.
- All Junction Boxes shall be constructed of Amercast Products Company 20K rated polymer concrete cover with polymer concrete ring or APPROVED equivalent.
- Amercast Products Company model WFRP 34H #4B-3C shall be used at all locations and model #J5-3C shall be used at all other locations or APPROVED equivalent.
- Covers shall have the text "TRAFFIC" stamped on top.
- All conduits shall run under and turned up into the junction box. Conduits shall not be drilled into the side of the junction box.
- All junction box collars shall be marked to show the number and directions of conduits, similar to the PF-8 foundation markings.

Maintenance of Traffic (MOT)

- Contractor shall submit MOT plan to City of Harrisonburg Public Works Department prior to start of construction for City to review and approve.

REV/	DATE	DESCRIPTION	BY	SCALE	AS SHOWN
			DRAWN BY	DATE	
			AMR/BR	7/18/16	
			DESIGNED BY	DATE	
			AMR/RRT/AH	7/18/16	
			CHECKED BY	DATE	
			TAH	7/18/16	
			TAX	MAP	

BURGESS ROAD/
HARRISONBURG CROSSING
SIGNAL MODIFICATION

PUBLIC WORKS DEPARTMENT
CITY OF HARRISONBURG
300 EAST MOSBY ROAD
HARRISONBURG, VIRGINIA

TRAFFIC SIGNAL NOTES

SHEET

4

