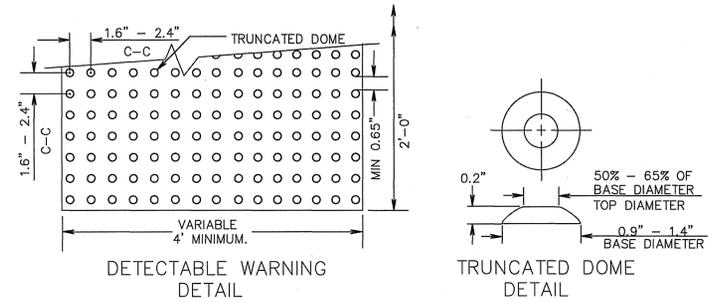
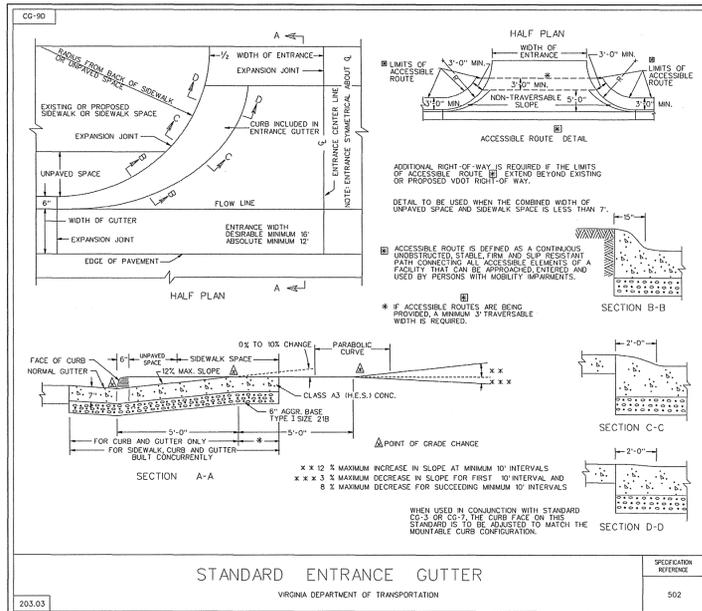


Notice: All Landowners, Developers and Contractors FAILURE TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, TIME DELAYS OR THE ISSUANCE OF A STOP WORK ORDER.
Construction Procedure Requirements

- Right-of-Way Excavation Permit** - Prior to the commencement of any digging, alteration or construction within the public right-of-way (streets, alleys, public easements), a right-of-way excavation permit shall be applied for and obtained by the contractor from the City of Roanoke.
- Land Disturbance Permit** - An approved erosion and sediment control plan for any borrow/fill sites associated with the project must be submitted prior to the issuance of a land disturbance permit.
- Plans and Permits** - A copy of the plans as approved by the City (signed by the proper City officials) and all permits issued by the City shall be available at the construction site at all times of ongoing construction.
- Location of Utilities** - The contractor shall verify the location of all existing utilities prior to the commencement of any construction.
- Construction Entrance** - The contractor shall install an adequate construction entrance for all construction related egress from the site. Size and composition of construction entrance shall be as shown on the plans.
- Streets to Remain Clean** - It shall be the responsibility of the contractor to insure that the public street adjacent to the construction entrance remains free of mud, dirt, dust, and/or any type of construction materials or litter at all times.
- Barricades/Ditches** - The contractor shall maintain the integrity of all excavated ditches and shall furnish and ensure that all barricades proper and necessary for the safety of the public are in place.
- Sewer and Pavement Replacement** - Construction of sanitary sewers and the replacement of pavement shall be in accordance with approved standards and specifications of the City of Roanoke and the Western Virginia Water Authority.
- Approved Plans/Construction Changes** - Any change or variation from construction design as shown on the officially approved plans shall be approved by the erosion and sediment control agent prior to said changes or variation in construction being made.
- Final Acceptance/City** - The owner or developer shall furnish the City of Roanoke's Planning Building and Development Department with a field surveyed final correct set of as-built plans of the newly constructed storm drain and/or stormwater management facilities prior to final acceptance and issuance of a certificate of occupancy by the City. As-built plans shall be provided in the State Plane Virginia South Coordinate System, NAD 1983, FIPS 4502 Feet, US Survey Feet, Datum NA 83, in the form of 1 paper copy and 1 digital AUTOCAD file.

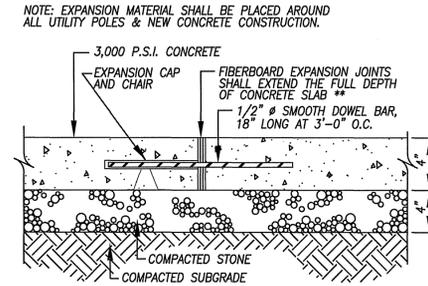
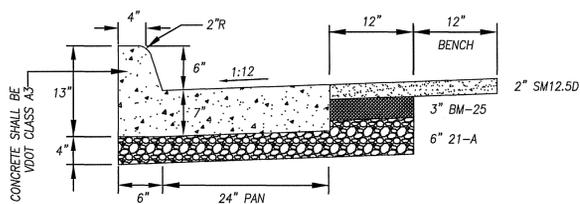


TYPE B PARALLEL APPLICATION

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

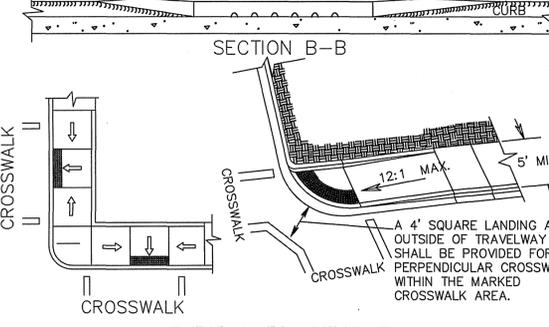
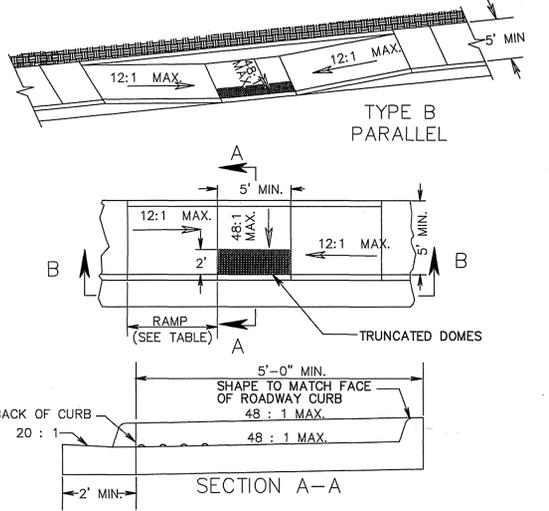
NOTE: THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

- NOTES:
- THE DETECTABLE WARNING SHALL BE PROVIDED BY CAST IRON TRUNCATED DOMES PLATE, POWDER-COATED RED.
 - SLOPING SIDES OF CURB RAMP SHALL BE POURED MONOLITHICALLY WITH RAMP FLOOR.
 - CURB RAMP ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES. EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.
 - RAMP 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.
 - MINIMUM RAMP THICKNESS IS 7".
 - WHEN CURB RAMP ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.

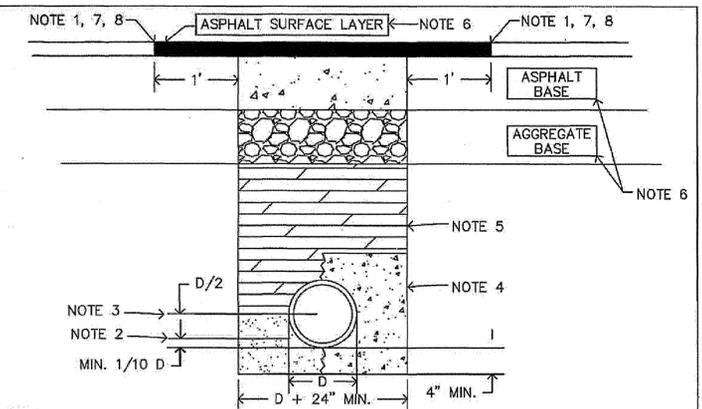


NOTE: EXPANSION MATERIAL SHALL BE PLACED AROUND ALL UTILITY POLES & NEW CONCRETE CONSTRUCTION.

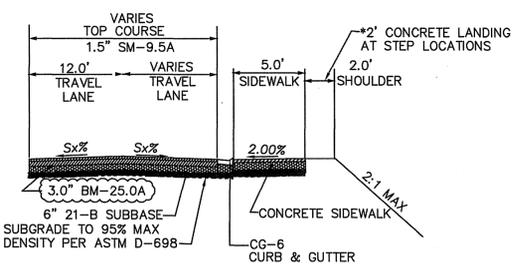
NTS
** FIBERBOARD SHALL BE TRIMMED TO ALLOW FOR SEALANT. SEE PROJECT MANUAL SPECIFICATIONS FOR THE REQUIRED USE OF SEALANT.



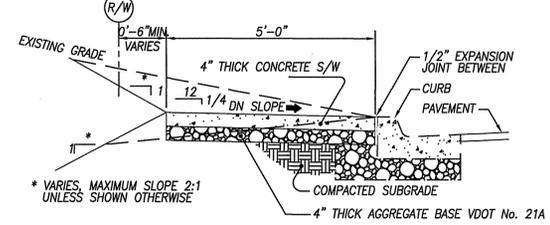
TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK



- NOTES:
- ALL PAVEMENTS SHALL BE SAW CUT WITH NEAT, UNIFORM LINES PRIOR TO EXCAVATION.
 - PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT NO. 25 OR 26) OR OPEN GRADED AGGREGATE (VDOT NO. 57, 68, 7, OR 8). ALTERNATE MATERIAL MUST BE APPROVED BY THE TRANSPORTATION DIVISION INSPECTOR.
 - MAXIMUM DEPTH OF PIPE BEDDING MATERIAL IF USING OPEN GRADED AGGREGATE FOR BEDDING.
 - OPTIONAL CONCRETE ENCASEMENT FOR POWER OR COMMUNICATION CONDUIT. PROVIDE A MINIMUM OF 4" CONCRETE COVER FROM ALL SIDES OF CONDUIT.
 - BACKFILL MATERIAL SHALL BE VDOT NO. 21A AGGREGATE OR FLOWABLE FILL.
A. AGGREGATE SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 6", AND COMPACTED TO AT LEAST 95% MAXIMUM DRY DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE (V_M-1) WITH THE USE OF MECHANICAL TAMPERS OR VIBRATORY ROLLERS. WATER COMPACTION IS NOT PERMITTED. LOCAL MATERIAL CLASSIFIED AS TYPE 1 SELECT MATERIAL MAY BE USED AS BACKFILL UPON PRIOR APPROVAL BY THE TRANSPORTATION DIVISION. SEE STANDARDS FOR ADDITIONAL INFORMATION ON DENSITY AND TESTING REQUIREMENTS.
B. FLOWABLE FILL, IF USED, SHALL MEET THE REQUIREMENTS OF VDOT'S SPECIAL PROVISION FOR FLOWABLE BACKFILL. THE MATERIAL SHALL BE PLANT-CERTIFIED TO PROVIDE A 28-DAY COMPRESSIVE STRENGTH BETWEEN 30 AND 200 PSI. SEE STANDARDS FOR ADDITIONAL INFORMATION ON DENSITY AND TESTING REQUIREMENTS.
 - RESTORATION OF ASPHALT PAVEMENT SHALL CONFORM TO SECTION 5.1 OF THE STANDARDS.
 - THE REPAIR SHALL BE RECTANGULAR AND SAW CUT IN STRAIGHT, UNIFORM LINES THAT ARE ALIGNED WITH THE STREET CENTERLINE. WHEN EDGES OF PAVEMENT HAVE BEEN UNDERMINED, PAVEMENT SHALL BE REMOVED TO A NEAT LINE 12" BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER THAN 40 SQUARE FEET MAY BE NON-RECTANGULAR. HOWEVER, THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES. ANY OTHER DEVIATION ON PATCH SHAPE MUST BE APPROVED BY THE INSPECTOR PRIOR TO THE REPAIR BEING MADE. THE FINISHED PATCH SURFACE SHALL BE WITHIN 1/4 INCH AT ANY POINT ACROSS THE PATCH AS IT RELATES TO THE SURROUNDING STREET SURFACE.
 - A FULL COVERAGE TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER.



* CONCRETE LANDING SHALL BE LOCATED AT ALL EXISTING STEP LOCATIONS WITHIN PROJECT, OTHERWISE 2' GRASS LANDING SHALL BE MAINTAINED



* VARIES, MAXIMUM SLOPE 2:1 UNLESS SHOWN OTHERWISE

No.	Revision	By	Appd.	Date	Drawn
1	PHASE 18 COLONIAL AVE	CJM	RHW	11/22/13	Designed
2	PHASE 18 COLONIAL AVE	CJM	RHW	12/17/13	Checked
					Approved
					Approved

PHASE 18 CURB, GUTTER, & SIDEWALK MISC DETAIL

COLONIAL AVENUE SW APPROVED JUL 11 2014
ROANOKE CITY, VIRGINIA

SCALE: AS SHOWN
NOV. 22, 2013
PROJECT: 13030
2 OF 5

DATE: July 1, 2013 UTILITY TRENCH REPAIR