Incidental concrete must be Class A3 in accordance specifications.

- A permit must be secured from the Henrico County Department of Public Works before any work is performed within an existing County right-of-way or easement.
- The Department of Public Works must be notified at least 24 hours prior to beginning any construction work.
- The contractor shall notify the Henrico County Department of Public Utilities prior to doing any utility work.
- 6.
- 10
- 12.
- When driveways are located within roll face curb and gutter, transitions to a drop inlet, curb cuts and aprons are required.

 Prior to the issuance of any building permits, all signs and barricades for dead end stub roads must be in place.
- All curb and gutter shall be Henrico County standard curb and gutter, except as noted. All curb and gutter and storm sewer/inlets located within the existing County right-of-way shall be staked by the County upon written request being made to the County Engineer or by calling 501-4619.
- This plan establishes curb and gutter elevations along the right-of-way. The County reserves the right to modify the pro-
- All curb and gutter in the County right-of-way must be wet curb and gutter. The use of dry curb and gutter is prohibited in the County right-of-way.
- The transition from standard six (6) inch curb to roll-faced curb shall be at intersections at the point of curvature (PC) of curb retums.
- Where sidewalks are present or proposed, all driveways must be concrete from the back of curb to at least the rear of the sidewalk.
- Class 57 stone must be placed under all curb and gutter and must extend one foot beyond the back of the curb.
- CG-12's must be installed at curb returns where there is existing or proposed sidewalks. In locations where there is no sidewalk being proposed, the curb must be depressed for the future location of a CG-12.

Guardrail is typically required on sections of roadway when any of the following conditions exist within the clear zone:

- A roadside parallel embankment (fill slope) of 3:1 or depth of four feet or more.
- A water hazard with a depth of two feet or more.
- pipe, headwall, retaining wall,
- Other hazards as determined by the Traffic Engineer.

All guardrail must be approved by the Department of Public Works and shown on the plans, including any necessary details, type, and lengths of rail.

- 2. necessary pavement widening between the existing pavement the proposed improvements is the responsibility of the
- ω. All medians for turn lanes must be VDOT Std. MS-1. For turn lanes being constructed on existing roads, the old median must be removed entirely and the solid raised median poured on the asphalt base course in accordance with the standards for MS-1 Median. Standard MS-1A or variations of the same will not be permitted.
- Pavement the existing for through lanes and turn lanes must be the g pavement section. These turn lanes must have
- 6. If utility connections are located outside of the pavement and right-of-way, no pavement disturbance is required and all utility crossings must be bored.
- Soil tests and CBR information, with an appropriate pavement design, must be performed and made available to the Construction Engineer prior to subgrade approval

DRAINAGE

- All storm sewer within the County right-of-way and easements must be ASTM C-76, Class III or better, reinforced concrete pipe with sealed joints in accordance with VDOT specifications.
- Precast drop inlets are not permitted at locations where the grade of the adjacent curb and gutter is less than 1.5%. Precast drop inlets with flat inverts are not permitted in sag locations when the total length of the required throat opening exceeds six (6) feet.

- The location of existing utilities, as shown, is approximate. contractor shall verify the location of existing utilities prior to construction work.
- A permit must be obtained from the Virginia Department of Transportation for any work performed within the State right-of-way.
 The contractor shall notify "Miss Utility" at 1-800-552-7001 prior to any construction work in this area.
 When it appears that the proposed work may have some impact to adjacent private or commercial properties, the applicant must inform the property owners of the proposed work and keep them apprised of time schedules, delays, impacts, changes in pedestrian and vehicle access or traffic patterns, and final restoration plans.
- When a temporary cul-de-sac is no longer required due to a road extension, the developer of the road being extended is responsible for removing the temporary cul-de-sac and extending the road and property components (curb and gutter, gravel driveways, paved driveways, sidewalks, mailboxes, etc.) to the new road section and regrading areas to finished contours acceptable to the adjacent property owners and to Henrico County.
- No driveway access points shall be allowed within the radius of a public road intersection.

CURB AND GUTTER

- 2.
- 6.

CONDITIONS FOR GUARDRAIL

- A ditch section with a depth of three feet or more (as measured from the near edge of pavement.
- A fixed object (such as a culvert, bridge pier, or abutment).
- Additional right-of-way or permanent easements may be required to accommodate the guardrail in its entirety.

PAVEMENT

- The pavement section is subject to change based on soil conditions at the time of construction, as determined by the Construction Engineer for Henrico County.

NOTES

AND DETAIL

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CURRENT

VERSION OF

THE HENRICO COUNTY

DESIGN MANUAL

- 5. roads unless sp Henrico County. are allowed on existing County maintained approved by the Construction Engineer for

Standard Construction Notes and Details — 19feb13

- All storm sewer within a County easement or right-of-way must have a minimum of four (4) inches of aggregate bedding material and must be backfilled in accordance with the detail on this sheet.
- All drop inlets must have Type B noses.
- Drop inlets on grade must be poured with the throat on the same grade as the adjoining curb and gutter.
- #4 x 8" dowels must be placed at approxii mately 12" c-c in all areas ttlement
- When using non-concrete pipe for private areas, the connection to the structure in the County easement or right-of-way must be concrete. Non-concrete pipe must terminate in a concrete structure and continue concrete to the point where it ties into the County easement or right-of-way. All manholes and inlets must be concrete. 4 underdrains are required along the entire length of all proposed ds and/or road widening within the public right-of-way unless ved by the Director of Public Works.
- Irrigation is not permitted in the shoulder right-of-way unless specifically approved by t r area within the County the County Engineer.
- 10. CD-1 underdrains are required on all vertical sags.
 UD-2 underdrains are required in all raised grass medians and islands within the public right-of-way.
- The outlet end of all underdrains must terminate in drainage structures or daylight out of fill slopes with a standard EW-12 endwall placed at the outlet end of the underdrain.

GRADING

The subgrade area shall be scarified to a depth of eight inches for a minimum of two feet beyond the proposed edges of the pavement on both sides (or from the curb and gutter) and compacted to a density of not less than 95 percent.

*TAPER AND LANE LENGTHS ARE TO BE APPROVED BY THE TRAFFIC ENG

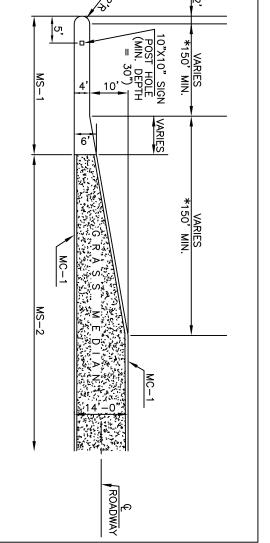
- When materials which are unsuitable for foundation, subgrade, or other roadway purposes occur within the roadway limits, such materials must be excavated below the grade shown on the plans as directed by the geotechnical engineer or as approved by the Henrico County Construction Engineer and the areas must be backfilled with suitable material.
- All solid rock or boulders found in the roadway shall be excavated to the full roadway width to a depth of one foot below subgrade and then backfilled to the proper grade with suitable materials.

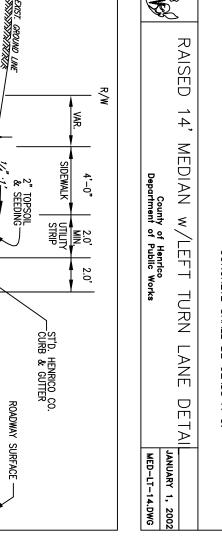
 A six (6) feet wide pedestrian shelf is required behind all curb and gutter in the County right-of-way. The shelf must be cleared/constructed at the time of road construction, including the relocation of all power poles and other above ground obstacles.

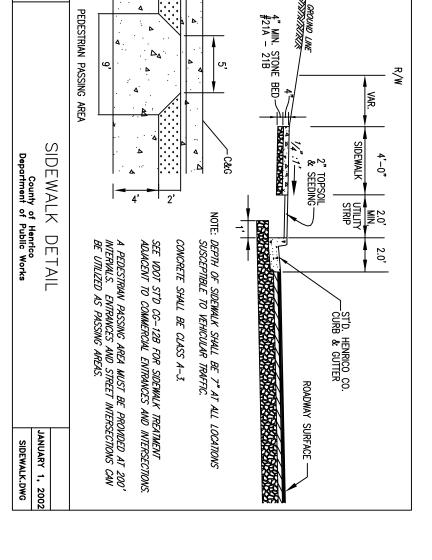
 All graded islands must be graded to ¼":1' rise to minimize sight distance problems.
- All graded islands must be graded distance problems.
- All grading shown on lots issuance. All areas to be filled within the buildable area (ponds, sediment basins, sediment traps, wetlands, etc.) must be backfilled with structural fill and compacted to 95% compaction. must be prior to building permit
- The design and construction of basins must in compliance with the general requirements for dams in the <u>Virginia Stormwater Management Program Manual</u>. A geotechnical engineer must certify that the construction compaction requirements have been achieved. BMPs for subdivisions will not be accepted for County maintenance until the geotechnical certification is provided and accepted by the Department of Public Works.

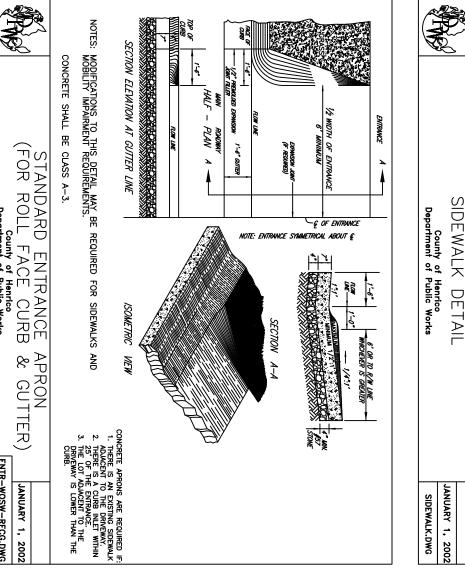
- All roadways must be cleared in the area prior to requesting staking from the Count of proposed construction
 y.
- All utility poles, fire hydrants, and other above ground obstacles located within the public right-of-way and in conflict with the proposed sidewalk shelf, curb and gutter, and/or the pavement widening shall be relocated at the developer's expense prior to Henrico County staking the curb and gutter.
- This plan approval establishes the curb and gutter and storm sewer/inlet elevations along the public right-of-way. These elevations (located within the existing County right-of-way) shall be staked by Henrico County upon written request being made to the County Engineer or by calling 501-4619. The County reserves the right to modify the proposed grades, if necessary.
- Prior to requesting County stakeout, all appropriate information necessary for stakeout must be provided to the Henrico County Survey Department.
- Right-of-way and baseline information must be established in the field and clearly tied to monuments/benchmarks prior to requesting stakeout by the County.

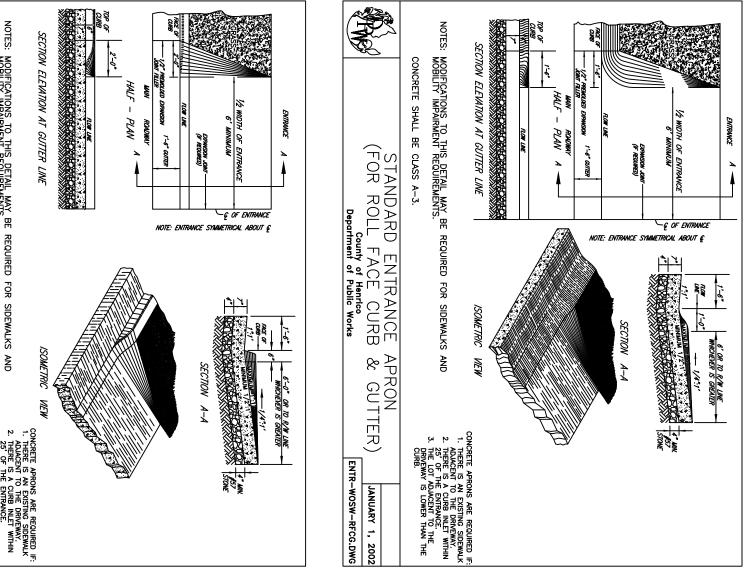
1. THIS DETAIL IS TO BE USED IN ALL LOCATIONS WHERE PROPOSED STORM SEWER OR UTILITY CROSSES EXISTING PAPEMENT. 2. OVERLAYS IN SHOULDER SECTIONS MUST BE WEDGED DO TO EXISTING SHOULDERS AT A 1*:1* GRADE WITH MATERIAL MATCHING EXISTING CONDITIONS. SAWCUT JOINTS FULL DEPTH OF ASPHALT COURSE SKETCH SHOWING PAVEMENT PATCH FOR SINGLE ISOLATED CUTS PAVEMENT REPLACEMENT FOR PIPE TRENCH LANI County of Henrico Department of Public Works BACKFILL WITH NO 21B STONE OR OTHER APPROVED CRUSHED STONE IN COMPACTED LIFTS. 3. IN CURB AND GUTTER SECTIONS, MILLING IS REQUIRED PRIOR TO PLACEMENT OF THE OVERLAY. 4. TEMPORARY OR PERMANENT ASPHALT MUST BE PLACED IN ROADWAY TRENCHES BY THE CLOSE OF EACH WORKDA SKETCH SHOWING FOR LONGITUDINAL OVERLAY ENTIRE WIDTH OF EXISTING PAVE WITH 2" MIN. ASPHALT SURFACE COURSE.

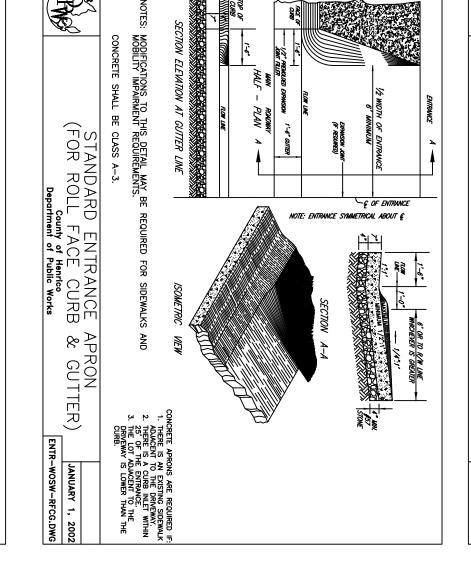


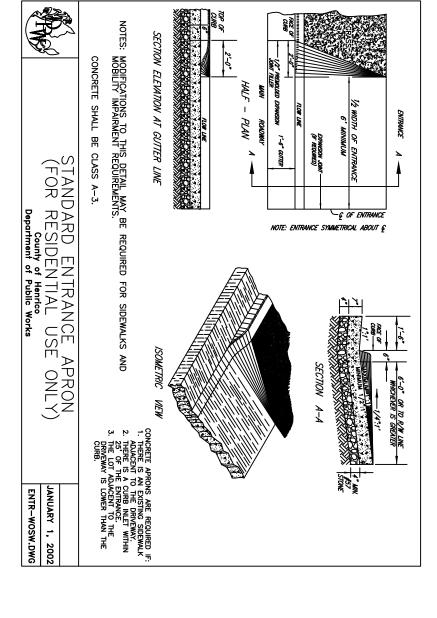












4" #57 STONE (MIN) DEPTH TO MATCH — SUBGRADE

1/2" R

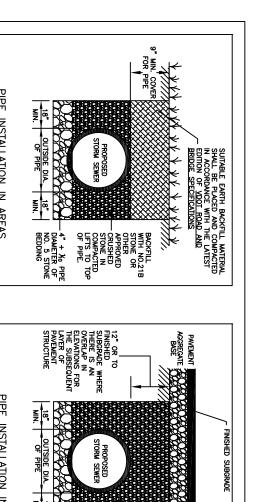
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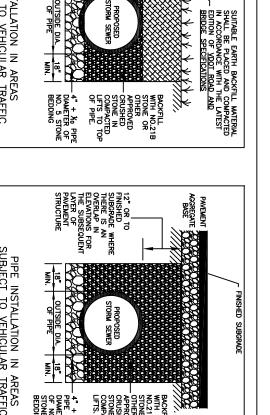
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STANDARD CONSTRUCTION NOTES AND DETAILS

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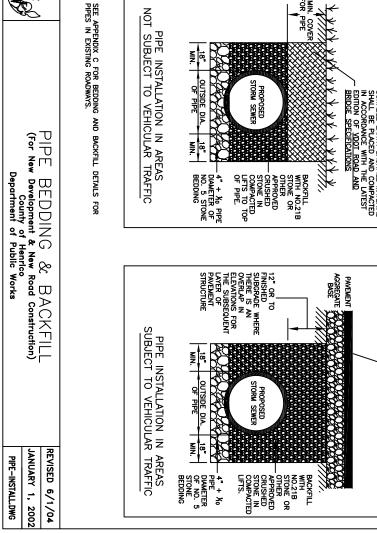
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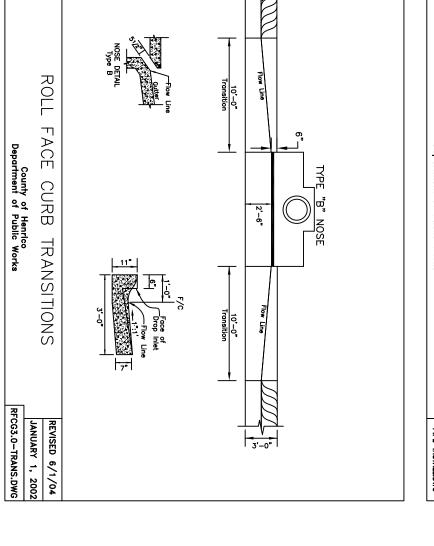
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Henrico

Department of Public Works

REFER TO HENRICO COUNTY
DESIGN MANUAL FOR ADDITIONAL DETAILS





*THIS DISTANCE MAY BE DECREASED TO A MINIMUM OF 4'-6" ON SUBDIVISION ROADS WITHOUT SIDEWALKS ON ROAD CLASSIFICATIONS 1 THROUGH IV.

FOR END TREATMENT AND OTHER DETAILS NOT SHOWN HERE, REFER TO VDOT STANDARDS FOR GUARDRAIL.

THIS DETAIL IS TO BE USED WITH CUSIDEWALK AND/OR SIDEWALK SHELF.

GUTTER,

GUARDRAIL DETAIL WITH CURB

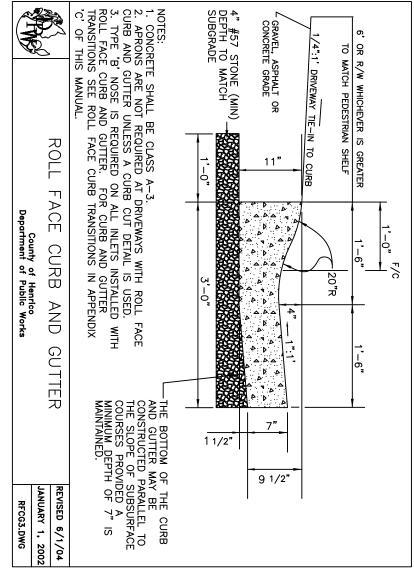
County of Henrico
Department of Public Works

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GUTTER

JANUARY 1, 2002 GR-2-CG.DWG

. RIGHT-OF-WAY OR PERMANENT EASEMENT MAY TO ACCOMMODATE TERMINAL TREATMENTS.



GUARDRAIL

DETAIL

TAIL WITHOUT CL

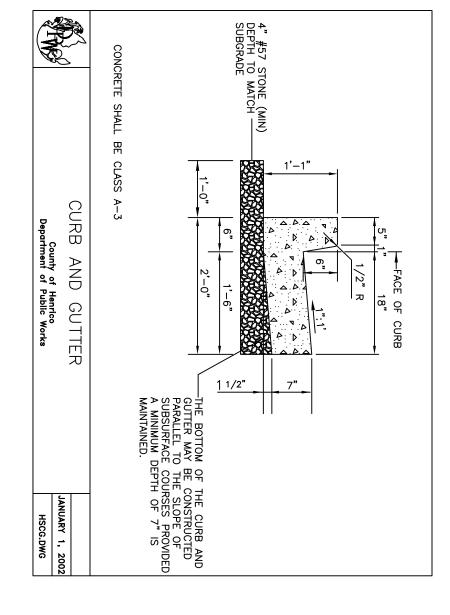
CURB

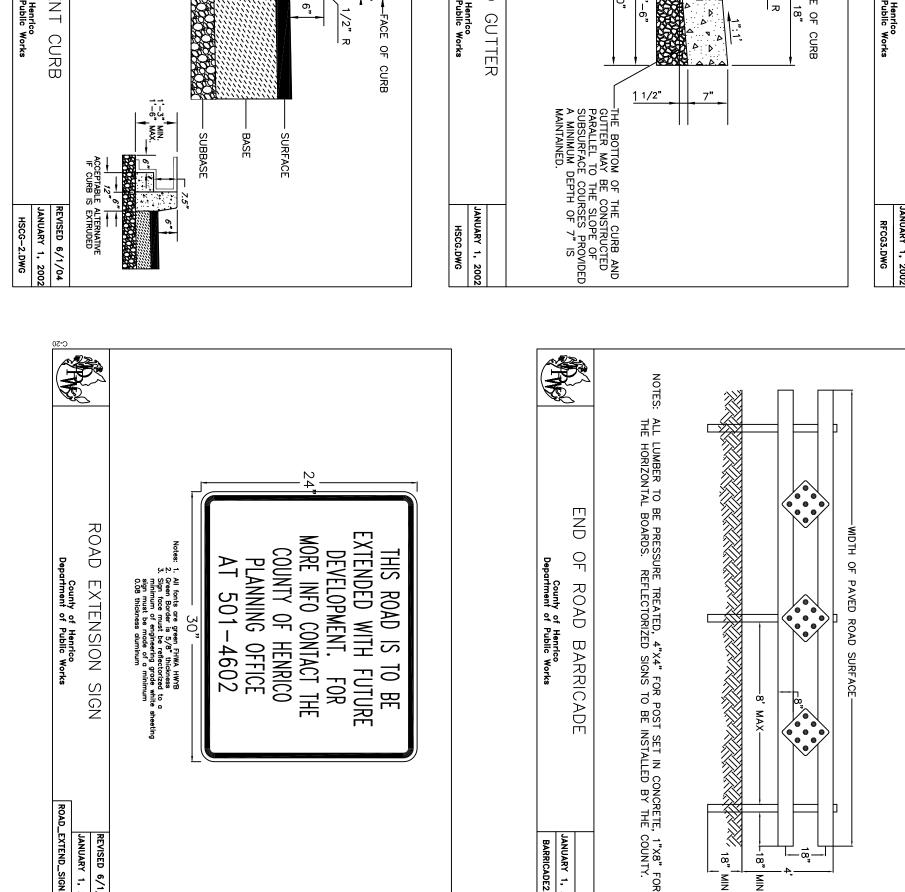
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GUTTER

ADDITIONAL RIGHT OF WAY OR PERMANENT EASEMENT MAY REQUIRED TO ACCOMMODATE TERMINAL TREATMENTS.

1'-0"





JANUARY 1, 2002 BARRICADE2.DWG

