

## STANDARD CONSTRUCTION NOTES

### CONSTRUCTION METHODS

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, AND LOCAL JURISDICTIONAL STANDARDS AND SPECIFICATIONS, WHERE APPLICABLE.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION WORK AND NOTIFY ENGINEER IMMEDIATELY IF LOCATIONS DIFFER FROM PLANS.
- THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-552-7001 OR 811 PRIOR TO ANY CONSTRUCTION WORK IN THIS AREA.
- NO CONSTRUCTION/FIELD CHANGES WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER, OWNER, AND THE PLAN APPROVING AUTHORITY.
- ANY PAVEMENT DISTURBED OR DESTROYED DURING THE CONSTRUCTION PROCESS SHALL BE REPAIRED/REPLACED AS NECESSARY TO PRE-CONSTRUCTION CONDITIONS AT NO COST TO THE OWNER.
- ASPHALT SURFACES SHALL HAVE A MINIMUM SLOPE OF 2% AND CONCRETE SURFACES SHALL HAVE A MINIMUM SLOPE OF 1% UNLESS SPECIFIED OTHERWISE.
- SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION WHERE APPLICABLE UNLESS SPECIFIED OTHERWISE.

### HANDICAPPED ACCESSIBILITY/ADA COMPLIANCE

- THE MAXIMUM ALLOWABLE CROSS SLOPE ACROSS ACCESSIBLE PARKING SPACES AND ACCESSIBLE AISLES IS 2%. NO SLOPES IN ANY DIRECTION SHALL EXCEED 2% WITH ADA PARKING SPACES OR AISLES.
- THE MAXIMUM ALLOWABLE LONGITUDINAL SLOPE ALONG ACCESSIBLE AISLES IS 5%.
- THE CONTRACTOR SHALL VERIFY SLOPES AND GRADES FOR ALL ACCESSIBLE PARKING SPACES AND ACCESS AISLES AFTER STAKING IS COMPLETE AND BOTH BEFORE AND AFTER INSTALLATION.
- ANY SLOPE DISCREPANCIES DETECTED BY THE SURVEYOR AND/OR CONTRACTOR SHALL BE REPORTED TO THE ENGINEER PRIOR TO INSTALLATION.
- UNLESS SPECIFICALLY NOTED ON THE SITE PLAN, DETECTABLE WARNING STRIPS ARE REQUIRED AT ALL CURB RAMPS AND FLUSH CURB TRANSITIONS TO PARKINGLOTS.
- HAND RAILS ARE REQUIRED FOR ANY ACCESSIBLE SITE PEDESTRIAN RAMPS WITH LONGITUDINAL SLOPES THAT EXCEED 5% AND / OR 6-INCHES IN RISE.
- SITE HAND RAILS SHALL BE PER VDOT / ADA / ANSI STANDARDS AND SPECIFICATIONS, UNLESS NOTED OTHERWISE.
- SITE HAND RAILS SHALL BE INSTALLED ON BOTH SIDES OF THE SITE SIDEWALKS WHERE HAND RAILS ARE REQUIRED.
- PER VDOT STANDARDS, THE MAXIMUM PERMISSIBLE CURB RAMP SLOPE IS 12:1.
- WHEEL STOPS FOR ACCESSIBLE PARKING SPACES SHALL BE INSTALLED 3'-0" OFF THE FACE OF CURB.
- GUTTER PAN INSTALLED IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% SLOPE.
- NO VERTICAL TRANSITIONS IN ADA ACCESSIBLE ROUTES SHALL EXCEED 1/4".
- ANY AND ALL STANDARDS SHALL COMPLY WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE DEPARTMENT OF JUSTICE SEPTEMBER 15, 2010.

### CURB AND GUTTER

- THE CONTRACTOR SHALL USE A MINIMUM OF THREE (3) RUNNING CONSTRUCTION STAKES TO AVOID HARD BREAK LINES IN THE CURB – UNLESS SPECIFICALLY CALLED FOR ON THE PLANS.
- THE MINIMUM LONGITUDINAL SLOPE FOR GUTTER PAN IS 0.5%, UNLESS OTHERWISE NOTED ON PLANS.
- A MINIMUM 20-FOOT TRANSITION FROM CG-6 TO CG-7 IS REQUIRED, UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL CURB AND GUTTER SHOWN ON THE PLANS SHALL BE VDOT CG-6, CG-2, OR CG-7, UNLESS SPECIFICALLY NOTED OTHERWISE.

### UNDERGROUND UTILITIES

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LINE AND GRADE FOR ALL DRY UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING DRY UTILITY LINES AND GRADES AGAINST ALL PROPOSED UTILITIES SHOWN ON THE PLANS. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER AS SOON AS POSSIBLE.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING TELEPHONE, CABLE, FIBER OPTIC, AND ELECTRICAL SERVICES TO THE PROJECT. CONTACT UTILITY PROVIDERS AS SOON AS POSSIBLE TO BEGIN COORDINATION.
- THE CONTRACTOR SHALL REVIEW SITE AND BUILDING DRAWINGS TO VERIFY COORDINATION OF UTILITY INVERTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.

### VDOT RIGHT OF WAY

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR WORKING IN VDOT RIGHT OF WAY.
- CONTRACTOR IS RESPONSIBLE FOR HAVING A VDOT CERTIFIED RESPONSIBLE LAND DISTURBER ON SITE IN ACCORDANCE WITH VDOT REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS AND PROVIDING VDOT WITH RECORDS OF REQUIRED INSPECTIONS.
- CONTRACTOR IS RESPONSIBLE FOR REVIEWING GUARDRAIL REQUIREMENTS WITH THE VDOT INSPECTOR PRIOR TO THE START OF CONSTRUCTION. GUARDRAIL LOCATIONS SHOWN ON THE PLANS ARE PER VDOT STANDARDS, BUT THE VDOT INSPECTOR SHALL HAVE THE ABILITY TO ALTER REQUIREMENTS.
- CG-12'S MUST BE INSTALLED AT CURB RETURNS WHERE THERE IS AN EXISTING OR POTENTIAL FUTURE SIDEWALK IN THE RIGHT OF WAY ALONG THE PROPERTY FRONTRAGE. IF SIDEWALK IS NOT EXISTING OR PROPOSED, CURB MUST BE DEPRESSED TO ACCOMMODATE FUTURE SIDEWALK EXTENSIONS.

### SIDEWALKS AND SITE STAIRS

- ALL SITE STAIRS SHALL BE FURNISHED WITH VDOT HR-1 ON BOTH SIDES OF THE STAIRS.
- ALL SITE STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VDOT / ADA / ANSI STANDARDS AND SPECIFICATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.
- SIDEWALKS SHALL BE INSTALLED WITH A MAXIMUM 2% CROSS-SLOPE.
- SIDEWALKS SHALL BE BROOM FINISHED, UNLESS NOTED OTHERWISE ON THE PLANS.
- SIDEWALKS SHALL BE 5-FOOT IN WIDTH, UNLESS NOTED OTHERWISE ON THE PLANS.

### ROOF DRAINS AND DOWN SPOUTS

- ALL DOWNSPOUTS NOT CONNECTED TO STORM SEWER SHALL BE FURNISHED WITH SPLASH BLOCKS.
- ALL DOWN SPOUTS SHALL BE FURNISHED WITH A DOWNSPOUT/ROOFDRAIN TRANSITION BOOT, STUBBING OF DOWNSPOUT INTO ROOF DRAIN LATERAL WITHOUT A SUITABLE BOOT TRANSITION IS NOT PERMITTED.
- ALL ROOF DRAIN LATERALS SHALL BE INSTALLED IN ACCORDANCE WITH THE PREVAILING LOCAL JURISDICTIONAL PLUMBING CODE OR THE INTERNATIONAL PLUMBING CODE, WHICHEVER IS MORE STRINGENT.
- MINIMUM ALLOWABLE SLOPE FOR 4-INCH ROOF DRAIN LATERAL IS 2.08%.
- MINIMUM ALLOWABLE SLOPE FOR 6-INCH ROOF DRAIN LATERAL IS 0.04%.
- ROOF DRAIN LATERALS SHALL BE 6-INCH DIAMETER (SMOOTH-WALLED), UNLESS NOTED OTHERWISE ON THE PLANS.

### TELEPHONE, FIBER OPTIC, CABLE, AND GAS LINE SERVICES

- CONTRACTOR SHALL HAVE 'MISS UTILITY' MARK EXISTING UTILITY LINES PRIOR TO START OF CONSTRUCTION AND AS NECESSARY THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL REVIEW PLANS TO VERIFY EXISTING LOCATIONS MARKED IN THE FIELD MATCH THOSE SHOWN ON THE PLANS.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ANY POTENTIAL DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL POT-HOLE EXISTING UTILITIES AT CRITICAL CROSSING LOCATIONS PRIOR TO THE START OF CONSTRUCTION AND PROVIDE ENGINEER WITH LINE AND GRADE INFORMATION.

### BUILDING DOORS AND GRADES

- FINISHED GRADE SHALL BE 8-INCHES BELOW FINISHED FLOOR ELEVATION ALONG ALL BUILDING WALLS. IN AREAS WHERE PERVIOUS SURFACES ARE PROVIDED, UNLESS OTHERWISE NOTED, FINISHED GRADE FOR AREAS TO BE MULCHED SHALL BE AT TOP OF MULCH. FINISHED GRADE FOR AREAS TO RECEIVE SOD SHALL BE TO TOP OF SOD.
- ALL PERVIOUS SURFACES SHALL BE INSTALLED WITH A MINIMUM OF 5% SLOPE AWAY FROM THE BUILDING (FOR A MINIMUM OF 10-FEET), TO PROVIDE FOR POSITIVE DRAINAGE.
- CONTRACTOR SHALL COORDINATE LOCATION OF WEEP HOLES ALONG ALL BUILDING WALLS AND VERIFY REQUIRED SEPARATION BETWEEN WEEP HOLES AND FINISHED GRADES.
- CONTRACTOR SHALL REVIEW GRADING ALONG BUILDINGS WITH STOREFRONTS TO VERIFY REQUIRED SEPARATION IS PROVIDED.

### FENCES

- FENCES TALLER THAN 6-FOOT IN HEIGHT WILL REQUIRE A BUILDING PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE BUILDING PERMIT AT CONTRACTOR'S EXPENSE.
- CONSTRUCTION BARRIERS – ALL CONSTRUCTION BARRIERS SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH IBC CHAPTER 33.
- THE CONTRACTOR SHALL SUBMIT FOR BUILDING PERMIT FOR CONSTRUCTION BARRIERS AS REQUIRED BY LOCAL CODES.

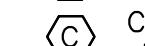
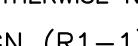
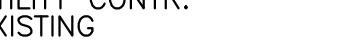
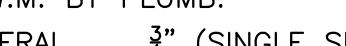
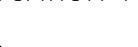
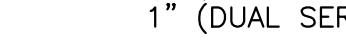
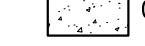
### RETAINING WALLS

- RETAINING WALL LAYOUT AND GRADING DESIGN IS PRELIMINARY. CONTRACTOR/OWNER IS RESPONSIBLE FOR SHOP DRAWINGS AND ACQUIRING ANY REQUIRED BUILDING PERMIT AS WELL AS ANY OTHER JURISDICTIONAL REQUIREMENTS.
- BUILDING PERMIT IS REQUIRED FOR RETAINING WALLS GREATER THAN 2-FT IN HEIGHT.
- TW-FINISHED GRADE AT TOP OF WALL (WALL SHALL PROJECT A MINIMUM OF 6-INCHES ABOVE FINISHED GRADE, UNLESS NOTED OTHERWISE).
- 4BW-FINISHED GRADE AT BOTTOM FACE OF WALL.
- WHEN SEGMENTED BLOCK ('STACKED-BLOCK') RETAINING WALLS ARE CALLED FOR ON THE PLANS, ENGINEER SIGNED AND SEALED SHOP DRAWINGS MUST ENSURE THAT GEO-FABRIC IS PROPERLY ANCHORED TO THE WALL IN AREAS WITH VERTICAL PENETRATIONS. UNAPPROVED PENETRATIONS WILL REQUIRE GEOGRID REPLACEMENT AT CONTRACTOR'S EXPENSE.
- WHEN SEGMENTED BLOCK ('STACKED-BLOCK') RETAINING WALLS ARE CALLED FOR ON THE PLANS, CONTRACTOR SHALL VERIFY THAT ALL REQUIRED VERTICAL PENETRATIONS THROUGH THE GEO-GRID ARE SPECIFIED ON THE PLANS PRIOR TO START OF CONSTRUCTION.
- ENGINEER SHALL REVIEW AND APPROVE RETAINING WALL SHOP DRAWINGS PRIOR TO INSTALLATION.

## SITE PLAN NOTES

- PAVEMENT FLOW LINE RADIUS OF 5' IS TYPICAL.
- G.C. SHALL COORDINATE THE EXACT SANITARY SEWER AND DOMESTIC WATER LATERAL BUILDING TIE IN LOCATIONS WITH THE ARCHITECTURAL PLANS.
- THE G.C. IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL CONDUIT ASSOCIATED WITH REQUIRED UTILITIES FOR THE PROPOSED BUILDING AND ANY NECESSARY UTILITIES ON-SITE SUCH AS LIGHTING, ELECTRICAL, ETC.
- THE G.C. SHALL COORDINATE TEMPORARY POWER FOR THE PROPOSED BUILDINGS.
- PROPOSED BUILDINGS WILL NOT HAVE SPRINKLER SERVICE. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DETAILS.
- SANITARY WASTE LINES FROM BUILDING SHALL BE A MINIMUM 4" PVC (MIN. SLOPE 2.08%) OR 6" PVC (MIN. SLOPE 1.04%). SEE ARCHITECTURAL.

## LEGEND

 CONCRETE WHEEL STOP	 CG-12 CURB RAMP	 WATER METER
 CONCRETE SIDEWALK	 CLEANOUT	 TOWN OF CHRISTIANSBURG
 3' WIDE UNLESS OTHERWISE NOTED	 RETAINING WALL (BY OTHERS)	 EXISTING
 VDOT STOP SIGN (R1-1)	 SEWER LATERAL 6"	 BEYOND W.M. BY PLUMB.
 WALL PACK (LOCATION APPROX.)	 ASPHALT PAVING	 WATER LATERAL 3" (SINGLE SERVICE)
 CONCRETE	 X	 WATER LATERAL 1" (DUAL SERVICE)
 ACCESIBLE ROUTE		

