GENERAL CONSTRUCTION NOTES

- THE DESIGN OF THE DEVELOPMENT IS BASED ON EXISTING TOPOGRAPHIC FEATURES AND UTILITIES SHOWN ON A TOPOGRAPHIC SURVEY BY DRAPER ADEN ASSOCIATES DATED FEBRUARY 8, 2022. HORIZONTAL DATUM (NAD 83) AND VERTICAL DATUM (NAVD 88).
- THE CONTRACTOR SHALL HAVE AN APPROVED SET OF PLANS AND PERMITS ON SITE AT ALL TIMES DURING CONSTRUCTION. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY TOWN INSPECTORS.
- AS-BUILT DRAWINGS WILL BE PROVIDED TO THE TOWN BEFORE THE SITE IMPROVEMENT SECURITY IS RETURNED.
- ROADWAY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- AN EROSION AND SEDIMENT CONTROL PERMIT IS NOT REQUIRED SINCE THE LIMITS OF DISTURBANCE IS LESS THAN 5,000 SQUARE FEET. IF THE LIMITS OF DISTURBANCE EXPANDS BEYOND 5,000 SQUARE FEET AN EROSION & SEDIMENT CONTROL PERMIT AND A STORMWATER MANAGEMENT PERMIT WILL BE REQUIRED.
- THE TOWN SHALL MAINTAIN RESPONSIBILITY FOR OBTAINING ANY ADDITIONAL PERMITS REQUIRED BY ANY OTHER FEDERAL OR STATE AGENCY.
- ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS (TOWN OF BLACKSBURG STANDARDS, SPECIFICATIONS, AND REGULATORY/ZONING REQUIREMENTS AND VDOT STANDARDS AND SPECIFICATIONS). PRIOR TO COMMENCEMENT OF WORK, NOTIFICATION MS-5 TO THE TOWN OF BLACKSBURG IS REQUIRED AND THE CONTRACTOR SHALL OBTAIN ALL NECESSARY LICENSES AND PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS. SIGNAGE CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS OF THE TOWN.
- NOTHING ON THESE CONTRACT DRAWINGS SHALL BE CONSTRUED AS A GUARANTEE THAT UTILITIES INDICATED AS EXISTING ARE IN THE LOCATION INDICATED OR THAT THEY ACTUALLY EXIST, OR THAT OTHER EXISTING UTILITIES ARE NOT WITHIN THE AREA OF OPERATIONS. PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO DETERMINE THE EXISTENCE, LOCATIONS, AND ELEVATIONS OF EXISTING UTILITIES IN THE WORK AREA. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES WITHIN THE CONSTRUCTION ZONE. DAMAGE TO STRUCTURES, UTILITIES, AND EQUIPMENT TO REMAIN SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR AT HIS EXPENSE. IN ACCORDANCE WITH THE STATE AND LOCAL REQUIREMENTS. CONTRACTOR SHALL CONTACT MISS UTILITY AT 811, MINIMUM 3 WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.
- . A PRE-CONSTRUCTION MEETING WITH THE TOWN SHALL BE HELD PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION.
- OBTAIN ADVANCE APPROVAL FROM LOCAL AND STATE AUTHORITIES FOR ANY WORK PERFORMED IN ROADWAYS OR WALKWAYS ADJACENT TO SITE AND FOR ANY DETOURING OF TRAFFIC. PROVIDE ALL MS-8 SAFETY MEASURES AND DEVICES REQUIRED BY APPLICABLE REGULATORY AGENCIES.
- CONTACT ENGINEER IMMEDIATELY IF AN EXISTING UTILITY LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE DRAWINGS, IF THERE APPEARS TO BE A CONFLICT, AND/OR IF A UTILITY IS DISCOVERED THAT IS NOT SHOWN ON DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES THAT HAVE AFFECTED UNDERGROUND UTILITIES.
- 12. CONTRACTOR SHALL PROTECT EXISTING PROPERTY CORNERS. IF ANY PROPERTY CORNER IS DISTURBED BY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL RE-ESTABLISH THE PROPERTY CORNER BY A LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA AND ACCEPTABLE TO MS-11 THE ENGINEER.
- 3. PROTECT EXISTING STRUCTURES, UTILITIES, AND EQUIPMENT FROM DAMAGE. DAMAGE OR DISTURBANCE TO STRUCTURES, UTILITIES, AND EQUIPMENT TO REMAIN SHALL BE REPAIRED OF REPLACED BY THE CONTRACTOR TO PRECONSTRUCTION CONDITIONS AT NO COST TO THE OWNER, IN MS-12 WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ACCORDANCE WITH THE OWNER'S REPRESENTATIVE AND THE AUTHORITIES HAVING JURISDICTION.
- 14. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL ONSITE EXISTING OR NEW DITCHES, PIPES AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL OWNER ACCEPTS WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITIONS.
- 15. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING LIGHTS. OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.
- 16. PAVEMENT WORK WITHIN THE RIGHT-OF-WAY REQUIRES INSPECTION OF SUBGRADE PRIOR TO PLACEMENT OF BASE STONE AND BASE STONE PRIOR TO PLACEMENT OF PAVEMENT. PRIOR TO SUBGRADE APPROVAL BY THE TOWN, CBR RESULTS MUST BE PROVIDED WITH THE APPROPRIATE PAVEMENT DESIGN TO THE TOWN ENGINEER PER VDOT PAVEMENT DESIGN GUIDELINES.
- 17. ANY NEW UTILITIES TO BE MAINTAINED BY THE TOWN SHALL BE WITHIN DEDICATED RIGHTS-OF-WAY OR EASEMENTS.
- 18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MEET COMPLIANCE REQUIREMENTS WITH SECTION 59.1-406 ET SEQ. OF THE CODE OF VIRGINIA (OVERHEAD HIGH VOLTAGE LINES SAFETY ACT).
- 19. ALL DIMENSIONS AND COORDINATES THAT ARE REQUIRED FOR CONSTRUCTION STAKEOUT MAY NOT BE SHOWN. ELECTRONIC CIVIL 3D DRAWING FILE MAY BE MADE AVAILABLE FOR CONSTRUCTION STAKEOUT.
- 20. CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF BLACKSBURG STANDARDS AND SPECIFICATIONS AND VDOT ROAD AND BRDIGE STANDARDS, LATEST EDITION UNLESS SHOWN AND SPECIFIED OTHERWISE.
- 21. UTILITIES MUST BE VISUALLY INSPECTED BY THE TOWN INSPECTOR PRIOR TO BACKFILLING TRENCHES.
- 22. IT IS THE OWNER/DEVELOPER/DESIGN ENGINEER'S RESPONSIBILITY TO COORDINATE ANY RETAINING WALL DESIGN AND CONSTRUCTION WITH THE TOWN'S BUILDING DEPARTMENT FOR ENGINEERING SEALING AND BUILDING PERMIT REQUIREMENTS. BACKFILL OF PUBLIC WATER, SEWER AND OTHER PUBLIC UTILITY TRENCHES SHALL BE IN ACCORDANCE WITH THE TOWN OF BLACKSBURG UTILITY TRENCH REPAIR STANDARD.

TRAFFIC CONTROL NOTES

THE CONTRACTOR MUST OBTAIN A TEMPORARY ROAD CLOSURE PERMIT FROM THE TOWN OF BLACKSBURG FOR ALL WORK WITHIN OR IMPACTING THE RIGHT-OF-WAY. THE PERMIT REQUEST MUST BE SUBMITTED TO THE ENGINEERING DEPARTMENT AND APPROVED PRIOR TO THE START OF SAID WORK

STATE MINIMUM STANDARDS FOR EROSION CONTROL

A VESCP MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS

- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE, AND WILL INHIBIT EROSION.
- SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS. DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
 - TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.

SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE

A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF

DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAT THREE ACRES.

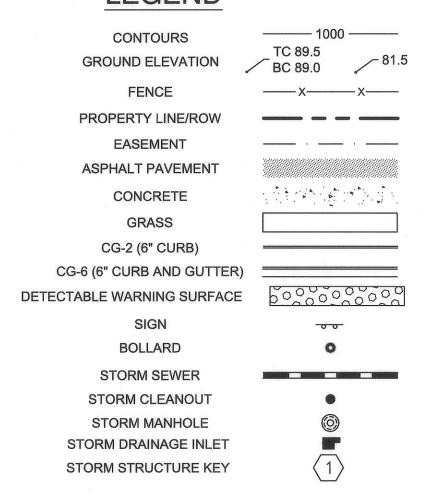
- B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF
- DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A TWENTY-FIVE YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- MS-10 ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- MS-13 WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- MS-14 ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- MS-15 THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- MS-16 UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES
 - NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY. D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO
 - MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REQULATIONS. F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- MS-17 WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
- MS-18 ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- MS-19 PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA:
 - A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
 - B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER: THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION: OR
 - (2)(A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.
 - (2)(B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE
 - EROSION OF CHANNEL BED OR BANKS; AND (2)(C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.

- C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
- IMPROVE THE CHANNEL TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL THE BED OR BANKS: OR
- IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR
- DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
- PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.
- D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
- E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.
- F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
- G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATERS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
- H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
- INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
- J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
- K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.

EROSION & SEDIMENT CONTROL PHASING NOTES:

- THE CONTRACTOR WILL DESIGNATE AN EMPLOYEE CERTIFIED AS THE "RESPONSIBLE LAND DISTURBER" (RLD), BY THE COMMONWEALTH OF VIRGINIA, DEPARTMENT OF ENVIRONMENTAL QUALITY (VADEQ), WHO IS IN CHARGE OF AND IS RESPONSIBLE FOR CARRYING OUT THE LAND-DISTURBING ACTIVITIES ON THIS PROJECT.
- INSPECTIONS SHALL BE CONDUCTED BY THE RLD AT A FREQUENCY OF AT LEAST ONCE EVERY FOUR BUSINESS DAYS OR AT LEAST ONCE EVERY FIVE BUSINESS DAYS AND NO LATER THAN 24 HOURS FOLLOWING A MEASURABLE STORM EVENT (0.25 INCHES). IN THE EVENT THAT A MEASURABLE STORM EVENT OCCURS WHEN THERE ARE MORE THAN 48 HOURS BETWEEN BUSINESS DAYS, THE INSPECTION SHALL BE CONDUCTED ON THE NEXT BUSINESS DAY.
- 3. AS FIRST STEP MEASURES, SILT FENCE, AND INLET PROTECTION SHALL BE INSTALLED AS INDICATED PRIOR TO UPSLOPE LAND DISTURBANCE. THE SITE SHALL BE INSPECTED BY TOWN OF BLACKSBURG PERSONNEL PRIOR TO LAND DISTURBANCE.
- 4. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DIVERSIONS IMMEDIATELY AFTER INSTALLATION, AS NEEDED.
- THROUGHOUT CONSTRUCTION ACTIVITIES, APPLY DUST CONTROL MEASURES ACCORDING TO VESCH STD. & SPEC. 3.39.
- 6. NO AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL BE DISTURBED.
- PERMANENT SEEDING AND MULCH WILL BE USED ON ALL DISTURBED AREAS THAT ARE NOT SCHEDULED TO RECEIVE CONCRETE SURFACING OR LANDSCAPING (HARDWOOD MULCH, ETC.) WITHIN SEVEN DAYS ONCE BROUGHT TO FINAL GRADE.
- 8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE TOWN. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

LEGEND



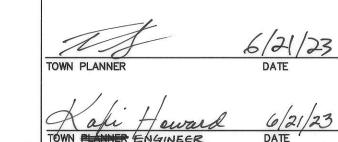
GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), LATEST EDITION.
- ES-2 TOWN OF BLACKSBURG SHALL BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 THE NARRATIVE PREPARED FOR THE PLAN IS PART OF THE PLANS AND SHALL BE USED IN CONJUNCTION WITH THE PLANS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND NARRATIVE AND THE RELEVANT VESCH SECTIONS, SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE AREAS OTHER THAN INDICATED ON THE THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO TOWN OF BLACKSBURG FOR REVIEW AND APPROVAL.
- INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE, AND AS DETERMINED BY TOWN OF BLACKSBURG INSPECTOR.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE
- ES-9 THE CONTRACTOR IS RESPONSIBLE FOR APPOINTING DESIGNATED "RESPONSIBLE LAND DISTURBER" (RLD). THE RESPONSIBLE LAND DISTURBER SHALL BE ADDED TO THE PLAN AT THE PRE-CONSTRUCTION CONFERENCE. THE RLD SHALL BE CERTIFIED IN VIRGINIA.
- ES-10 THE RESPONSIBLE LAND DISTURBER SHALL INSPECT EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES FOR PROPER INSTALLATION AND DEFICIENCIES IMMEDIATELY AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT, AT LEAST DAILY DURING PROLONGED RAINFALL, AND BI-WEEKLY WHEN NO RAINFALL EVENTS OCCUR. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MADE IMMEDIATELY.
- ES-11 STORE EXCAVATED TOPSOIL IN TOPSOIL STOCKPILES WITHIN THE LIMITS OF CONSTRUCTION WITH SILT FENCE ON THE DOWNSLOPE SIDE IN ACCORDANCE WITH THE VESCH, LATEST EDITION.
- ES-12 ALL DISTURBED AREAS NOT OTHERWISE HARDSCAPED AND STABILIZED ARE TO BE SEEDED IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS IN THE VESCH, LATEST EDITION AND DEQ ESC TECHNICAL BULLETIN #4.
- ES-13 SEED AND MULCH ALL SOIL STOCKPILES AND MATERIALS LEFT UNDISTURBED IN ACCORDANCE WITH THE VESCH, LATEST EDITION AND DEQ ESC TECHNICAL BULLETIN #4.
- ES-14 ALL CULVERT INLET PROTECTION AND STORM DRAIN INLET PROTECTION MUST REMAIN IN PLACE UNTIL FINAL UPSLOPE STABILIZATION IS ACHIEVED.

EROSION & SEDIMENT CONTROL NOTES:

- 1. MINIMUM MEASURES ARE INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THESE MINIMUM REQUIREMENTS AND ALL OTHER MEASURES NECESSARY TO CONTROL, FILTER, AND PREVENT SEDIMENT FROM LEAVING THE SITE. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO COMMENCEMENT OF UPSLOPE EARTHWORK ACTIVITIES. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL UPSLOPE DISTURBED AREAS ARE STABILIZED.
- 2. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF BLACKSBURG. THESE AGENCIES HAVE THE RIGHT TO ADD OR DELETE E&S CONTROLS IN THE FIELD. ANY CHANGES REQUIRED BY THE INSPECTOR OR NOTED DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR.
- 3. IF PERMANENT SEEDING IS NOT APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, THE ASSOCIATED AREA SHALL BE TEMPORARILY SEEDED. TEMPORARY SEEDING SHALL BE APPLIED WITHIN 7 DAYS ON DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS.
- 4. DUST CONTROL SHALL BE EMPLOYED TO REDUCE SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING ACTIVITIES. THE FOLLOWING METHODS ARE RECOMMENDED, AND ADDITIONAL MEASURES MAY BE USED IN ACCORDANCE WITH VESCH STANDARDS AND SPEC 3.39, OR AS DIRECTED BY THE VESCH AUTHORITY.
 - VEGETATIVE COVER PHASE CLEARING AND GRUBBING ACTIVITIES AND UTILIZE TEMPORARY SEEDING IN ACCORDANCE WITH MINIMUM STANDARD 1. IRRIGATION - SPRAY DISTURBED AREA UNTIL SURFACE IS WET.
 - STONE STABILIZED DISTURBED AREA WITH CRUSHED STONE OR COARSE GRAVEL. MULCH - COVER DISTURBED AREAS AND APPLY WITH TACKIFIERS WHEN USING LIGHTWEIGHT ORGANIC MULCHES.
- 6. ANY OFF-SITE LOCATION THAT IS USED AS A SOURCE OF BORROW SOIL MATERIALS OR RECEIVES WASTE SOIL MATERIALS FROM THE SITE MUST BE APPROVED BY THE EROSION & SEDIMENT CONTROL ADMINISTRATOR OF THE JURISDICTION IN WHICH THAT OFF-SITE AREA IS LOCATED.

TOWN APPROVAL



Andrew J. Hemmen Lic. No. 0402060905 10/04/2022 ONAL

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