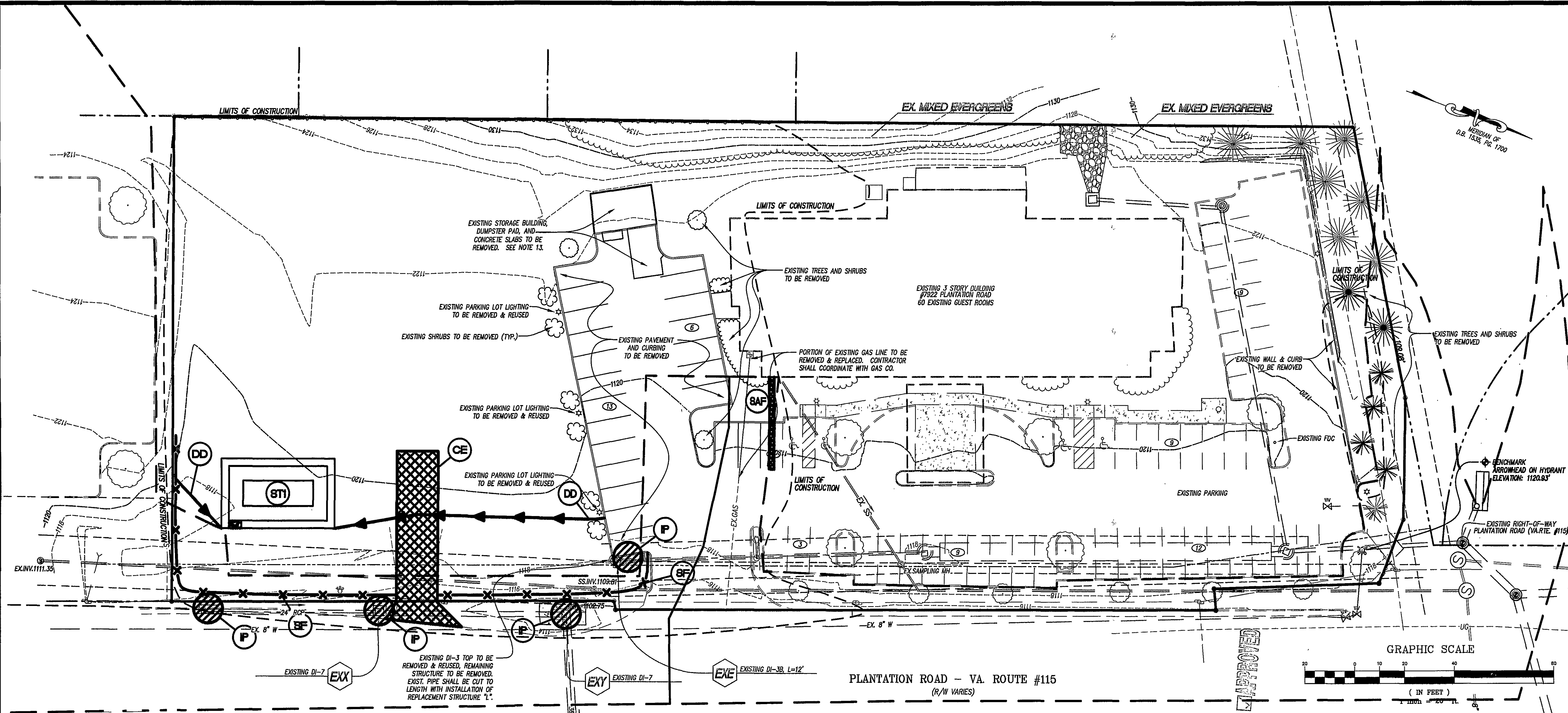


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EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A 7,400 SQUARE FOOT, THREE STORY, EXPANSION OF THE EXISTING HOTEL, ASSOCIATED PAVED PARKING AREAS AND REQUIRED UTILITY SYSTEM. APPROXIMATELY 1.19 ACRES WILL BE DISTURBED DURING CONSTRUCTION.

EXISTING SITE CONDITIONS

THE MAJORITY OF THE SITE INCLUDES TOPOGRAPHY OF BETWEEN TWO AND THREE PERCENT, WITH A NARROW AREA OF THIRTY PERCENT SLOPES LOCATED ALONG THE WESTERN BOUNDARY. THE SITE IS GRASSED, WITH AREAS OF BARE SOIL BECAUSE OF TEMPORARY PARKING, AND GENERALLY DRAINS IN EASTERLY DIRECTION.

ADJACENT AREAS

THE SITE IS BOUNDED ON THE NORTH BY GANDER WAY, TO THE EAST BY PLANTATION ROAD, TO THE SOUTH BY EL RODEO RESTAURANT AND RESIDENTIAL PROPERTY TO THE WEST.

OFF-SITE AREAS

THE LOCATION OF ALL OFFSITE FILL OR BORROW AREAS ASSOCIATED WITH THIS CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY COMMUNITY DEVELOPMENT. AN EROSION AND SEDIMENT CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THESE AREAS.

SOILS

THE SOILS INFORMATION IS BASED ON AN OBSERVATION OF SHEET 7 OF THE SOIL SURVEY OF ROANOKE COUNTY AND THE CITIES OF ROANOKE AND SALEM, VIRGINIA, ISSUED IN 1997, AND HAS NOT BEEN FIELD VERIFIED. THE ON-SITE SOILS, AS INDICATED ON SHEET 7, IS AS FOLLOWS.

GROSECLOSE SILT LOAM, 7 TO 15 PERCENT SLOPES.

SURFACE LAYER	0 TO 9 INCHES, DARK BROWN SILT LOAM
SUBSURFACE LAYER	9 TO 18 INCHES, BROWN SILT LOAM
SUBSOIL	18 TO 32 INCHES, BROWN SILTY CLAY LOAM
	32 TO 50 INCHES, YELLOWISH RED AND BROWN SILTY CLAY
	50 TO 62 INCHES, YELLOWISH RED AND BROWN SILTY CLAY LOAM
SUBSTRATUM	SLOW
PERMEABILITY	LOW
SURFACE RUNOFF	RAPID
EROSION POTENTIAL	HIGH
SHRINK SWELL POTENTIAL	LOW IN SURFACE LAYER, HIGH IN THE SUBSOIL

CRITICAL AREAS

PERIMETER CONTROLS ALONG PLANTATION ROAD MUST BE CAREFULLY INSTALLED AND MAINTAINED TO PREVENT SEDIMENT FROM ENTERING THE ROADWAY AND/OR THE EXISTING STORM DRAIN SYSTEM.

EROSION AND SEDIMENT CONTROL MEASURES

METHODS USED TO CONTROL EROSION AND SEDIMENTATION ON THE SITE WILL INCLUDE, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING MEASURES:

1. **TEMPORARY STONE CONSTRUCTION ENTRANCE (3.02)** - TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROAD BY EITHER MOTOR VEHICLES OR RUNOFF, A STABILIZED STONE PAD WITH A FILTER FABRIC UNDERLINED WILL BE INSTALLED AT THE POINT OF VEHICULAR INGRESS AND EGRESS TO THE SITE.
2. **CONSTRUCTION ROAD STABILIZATION (3.30)** - TO REDUCE THE EROSION AND SUBSEQUENT REGRADING OF PARKING AREAS BETWEEN THE TIME OF INITIAL GRADING AND FINAL STABILIZATION, THESE AREAS WILL BE TEMPORARILY STABILIZED WITH STONE IMMEDIATELY AFTER GRADING.
3. **SILT FENCE (3.05)** - TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS AND TO PREVENT SEDIMENT FORM LEAVING THE SITE, SILT FENCING WILL BE INSTALLED BELOW DISTURBED AREAS WHERE EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION.
4. **STORM DRAIN INLET PROTECTION (3.02)** - TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM PRIOR TO PERMANENT STABILIZATION, STORM DRAIN INLET PROTECTION, EITHER IN THE FORM OF A SEDIMENT FILTER OR AN EXCAVATED IMPOUNDING AREA, WILL BE INSTALLED AROUND A STORM DRAIN DROP INLET OR CURB INLET.
5. **TEMPORARY RIGHT-OF-WAY DIVERSION (3.11)** - TO DIVERT SEDIMENT-LADEN RUNOFF FROM A DISTURBED AREA TO A SEDIMENT-TRAPPING FACILITY, A TEMPORARY RIDGE OF LOOSE GRAVEL WILL BE CONSTRUCTED TO ALLOW CONSTRUCTION TRAFFIC TO PASS WHILE DIVERTING RUNOFF TO A SEDIMENT TRAP.
6. **TEMPORARY SEDIMENT TRAP (3.13)** - TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH TO ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT, TEMPORARY PONDING AREAS, OR SEDIMENT TRAPS, WILL BE CREATED BY CONSTRUCTING AN EARTHEN EMBANKMENT WITH A STONE OUTLET.
7. **TEMPORARY SEEDING (3.31)** - TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS AND TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM OFF-SITE AREAS, TEMPORARY VEGETATIVE COVER WILL BE ESTABLISHED ON DISTURBED AREA BY SEEDING WITH APPROPRIATE RAPIDLY GROWN ANNUAL PLANTS.
8. **PERMANENT SEEDING (3.32)** - TO PERMANENTLY STABILIZED DISTURBED AREAS IN A MANNER THAT IS ECONOMICALLY ADAPTABLE TO SITE CONDITIONS AND ALLOWS SELECTION OF THE MOST APPROPRIATE PLANT MATERIAL, AND TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS, PERENNIAL VEGETATIVE COVER WILL BE ESTABLISHED ON DISTURBED AREAS BY PLANTING SEED.
9. **MULCHING (3.35)** - TO FOSTER GROWTH OF VEGETATION BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATING AGAINST EXTREME HEAT AND COLD, AND TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND REDUCING THE VELOCITY OF OVERLAND FLOW, PLANT RESIDUES OR OTHER SUITABLE MATERIALS WILL BE APPLIED TO THE SOIL SURFACE.

PERMANENT STABILIZATION

ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN FOR THIS PROJECT.

MANAGEMENT STRATEGIES

THE RESPONSIBLE LAND DISTURBER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES. THESE MEASURES NOT ONLY INCLUDE THOSE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN, BUT ALSO THOSE THAT MAY BE REQUIRED BY THOSE GOVERNMENTAL ENTITIES HAVING JURISDICTIONAL AUTHORITY OVER LAND DISTURBING ACTIVITIES. THE FOLLOWING IS A LISTING OF GENERAL MANAGEMENT CONSIDERATIONS TO BE IMPLEMENTED BY THE RESPONSIBLE LAND DISTURBER.

1. CONSTRUCTION SHALL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS FIRST STEP IN GRADING AND WILL BE SEEDING AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION. SEDIMENT TRAPS WILL REQUIRE RELOCATION WHERE THEY ARE SHOWN ADJACENT TO OR ABOVE STORM DRAINAGE AND UNDERGROUND DETENTION FACILITY.
3. TEMPORARY AND/OR PERMANENT SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
4. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED.
5. THE RESPONSIBLE LAND DISTURBER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
6. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED AND THE AFFECTED AREAS PERMANENTLY SEED.

MAINTENANCE

ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. A LOG OF DATES AND INSPECTIONS SHALL BE KEPT. INSPECTIONS SHALL BE COMPLETED AND REPORTED TO ROANOKE COUNTY ACCORDING TO THEIR STANDARDS. ANY DEFICIENCIES THAT ARE FOUND SHALL BE CORRECTED IMMEDIATELY. IN PARTICULAR:

1. THE CONSTRUCTION ENTRANCE AND RIGHT-OF-WAY DIVERSION WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP. IF STONE IS CLOGGED BY SEDIMENT, IT WILL BE REMOVED AND CLEANED, OR REPLACED.
2. THE SILT FENCE WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT BUILDUP REACHES THE MIDWAY POINT OF THE SILT FENCE.
3. DIVERSIONS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP, BREACHES, AND DIKE INTEGRITY. IF DEFICIENCIES IN THE DIVERSIONS ARE FOUND, THEY SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.
4. THE SEDIMENT TRAPS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP. CLEAN OUT AS NECESSARY TO MAINTAIN DESIGN VOLUMES.
5. INLET PROTECTION WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. IF STONE IS CLOGGED BY SEDIMENT, IT WILL BE REMOVED AND CLEANED OR REPLACED.
6. ALL SEEDING AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND OF GRASS IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDING AS REQUIRED TO ACHIEVE A GOOD STAND OF GRASS.

STORMWATER RUNOFF CONSIDERATIONS

THE PROPOSED DEVELOPMENT WILL INCREASE PEAK RUNOFF RATES. AN EXISTING STORMWATER MANAGEMENT FACILITY WAS DESIGNED AND CONSTRUCTED WITH THE ORIGINAL SITE DEVELOPMENT, BUT IT IS NOT ADEQUATE FOR THE INCREASE IN RUNOFF. THEREFORE, A NEW STORMWATER MANAGEMENT SYSTEM IS INCLUDED IN THESE PLANS TO MANAGE THE ADDITIONAL RUNOFF VOLUME.

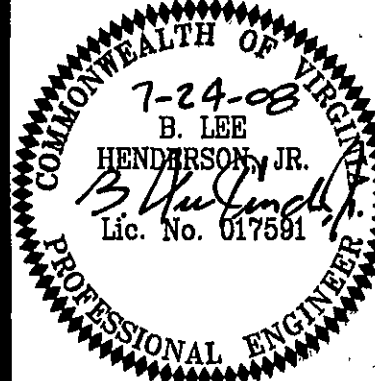
CALCULATIONS

DETAILED CALCULATIONS FOR THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES, WHEN APPLICABLE, ARE INCLUDED IN THE DRAINAGE CALCULATIONS FOR THIS PROJECT AND HAVE BEEN SUBMITTED UNDER SEPARATE COVER.

PHASE I CONSTRUCTION SEQUENCE

1. THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER (RLD) SHALL BE NAMED AND A COPY OF HIS RLD CERTIFICATE SHALL BE PROVIDED TO THE ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT AT LEAST TWO (2) DAYS PRIOR TO THE PRECONSTRUCTION MEETING. RLD SHALL ALSO ATTEND THE PRECONSTRUCTION MEETING.
2. CONTRACTOR SHALL APPLY FOR DCR LAND DISTURBANCE PERMIT AT LEAST TWO (2) DAYS PRIOR TO LAND DISTURBANCE AND PROVIDE ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT A COPY OF SAID PERMIT WITHIN FIVE (5) DAYS OF ISSUANCE.
3. THE LOCATION OF ALL OFFSITE FILL OR BORROW AREAS ASSOCIATED WITH THIS CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY COMMUNITY DEVELOPMENT. AN EROSION AND SEDIMENT CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THESE AREAS.
4. INSTALL THE PHASE I CONSTRUCTION ENTRANCE AND SILT FENCE ALONG PLANTATION ROAD AS THE FIRST STEP IN THE CONSTRUCTION PROCESS.
5. INSTALL SAFETY FENCE AS SHOWN ON PLAN.
6. INSTALL INLET PROTECTION ON CURB AND DROP INLETS AS SHOWN ON PLAN. INLET PROTECTION FOR EXISTING STRUCTURE "EXE" SHALL REMAIN IN PLACE UNTIL THE STRUCTURE IS REMOVED.
7. INSTALL THE SEDIMENT TRAP AND THE RESPECTIVE DIVERSION DIKES AS SOON AS GRADING OPERATIONS BEGIN IN THE AFFECTED AREAS. THE CONSTRUCTION PROCESS SHOULD BE SEQUENCED AS MUCH AS POSSIBLE SO THAT EACH AREA IS SEEDING AND STABILIZED PRIOR TO BEGINNING GRADING OPERATIONS IN ANOTHER AREA.
8. SEDIMENT TRAP AND DIVERSION DIKES MAY REQUIRE ADJUSTMENT DURING INSTALLATION OF STORM DRAIN, UNDERGROUND DETENTION AND WATER QUALITY BMP. ANY NECESSARY ADJUSTMENTS MUST BE COMPLETE AND FULLY FUNCTIONING PRIOR TO EXCAVATION FOR INSTALLATION OF DRAINAGE COMPONENTS.

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



PHASE I
EROSION AND
SEDIMENT
CONTROL PLAN

EXPANSION AT
HAMPTON INN -
PLANTATION ROAD
PREPARED FOR
PD LODGING ASSOCIATES, LLC
HOLLINS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		
	3		
	4		
	5		

DATE: July 24, 2008

SCALE: 1" = 20'

COMMISSION NO: 2007-335

SHEET 9 OF 12

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