

- ROCK FILTERS SHOULD ONLY BE USED FOR 20 DAYS.
- SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS.
- IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENTS FROM THE ROCK FILTER, REMOVE THE ROCK FILTER, AND STABILIZE DISTURBED AREA.

STONE CHECK DAM DETAIL
NOT TO SCALE

MAINTENANCE OF FACILITIES

- SILT FENCE SHOULD BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RETENING MUST BE PERFORMED IMMEDIATELY. IF E&S CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs OR MODIFICATIONS OF INSTALLED MEASURES WILL BE REQUIRED.
- CONTRACTOR SHALL MAINTAIN AND MAKE AVAILABLE TO THE BUCKS COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF THE ABOVE NOTED INSPECTION AND MAINTENANCE.
- SEEDING, MULCHING AND FERTILIZING SHALL BE IN ACCORDANCE WITH THE SEEDING AND MULCHING SCHEDULE.
- SHOULD THE TREE PROTECTION FENCING BE DISTURBED AT ANY POINT, IT SHALL BE REPLACED IMMEDIATELY.
- THE CONTRACTOR SHALL HAVE AVAILABLE WATER TRUCKS OR OTHER MEANS OF CONTROLLING EXCESSIVE DUST AND AIRBORNE DEBRIS.
- ALL AREAS OF CONCENTRATED SURFACE DRAINAGE SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH TEMPORARY TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #SC350 (OR EQUAL). IF AREAS ARE TO BE SOEDED, TURF REINFORCEMENT IS NOT REQUIRED.
- AFTER THE STORM CONVEYANCE SYSTEM IS CONSTRUCTED, MONTHLY INSPECTIONS FOR EACH DEVICE WILL BE MADE. AN INSPECTION OF ALL FACILITIES WILL BE MADE AFTER EVERY STORM TO DETERMINE THEIR RESISTANCE TO DRIVING RAINS AND ACCUMULATED RUNOFF.
- SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEDED. A BURLAP OR STRAW COVER WILL BE APPLIED TO RETAIN THE SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
- THE ABOVE PROCEDURE SHALL BE REPEATED AFTER EACH SIZEABLE STORM UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT MONTHLY INTERVALS THEREAFTER, INSPECTIONS AND NECESSARY CLEANING WILL BE DONE. TRASH THAT IS REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL AREA. SILT THAT HAS ACCUMULATED SHALL BE REMOVED AND ALLOWED TO DRY AND USED AS FILL WHEREVER REQUIRED ON THE SITE.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE MEASURES TO ADDRESS SAID CIRCUMSTANCES.

SEEDING AND MULCHING SCHEDULE

- SITE PREPARATION, STABILIZATION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH PENN STATE UNIVERSITY'S "THE AGRONOMY GUIDE" AND PENNDOT FORM 408 SPECIFICATIONS, MOST RECENT EDITION.
 TEMPORARY SEEDING SPECIFICATION FORMULA E -- ANNUAL RYE GRASS
 PERMANENT SEEDING SPECIFICATION FORMULA B --
 50% KENTUCKY BLUEGRASS MIXTURE
 30% PENNLAWM RED FESCUE
 20% PERENNIAL RYEGRASS MIXTURE
 STEEP SLOPE SEEDING SPECIFICATION FORMULA W --
 70% TALL FESCUE
 20% BRODSFOOT TREFLOIL MIXTURE
 10% REDTOP
 SEEDING RATE FOR THE ABOVE MIXTURES:
 10 LBS/1,000 SF FOR TEMPORARY SEEDING
 21 LBS/1,000 SF FOR PERMANENT SEEDING
 11 LBS/1,000 SF FOR STEEP SLOPE SEEDING (SEE NOTE 4)
 HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE.
- PULVERIZED AGRICULTURAL LIMESTONE AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE SEEDED EXCEPT FOR TEMPORARY SEED AREAS ARE THE FOLLOWING RATES:
 PULVERIZED AGRICULTURAL LIMESTONE -- 90 LBS/1,000 SF
 10-20-20 ANALYSIS COMMERCIAL FERTILIZER -- 20 LBS/1,000 SF
 NOTE: APPLICATION OF LIME AND FERTILIZER FOR TEMPORARY SEEDING IS UNNECESSARY AND ONLY SERVES TO CONTRIBUTE TO AN OVERABUNDANCE OF NUTRIENT POLLUTION IN THE WATERSHED.
- PERMANENT SEEDING SHALL TAKE PLACE FROM MARCH 15 TO JUNE 1 OR FROM AUGUST 1 TO OCTOBER 15. IF COMPLETED IN OTHER SEASONS, AREAS SHALL RECEIVE TEMPORARY SEEDING AND 3.0 TONS PER ACRE MULCH.
- STEEP SLOPE AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS. MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED FOR PARTICULAR METHOD AND SPECIFIC SITE CONDITIONS.
 FLEXIBLE GROWTH MEDIUM: SHALL BE HYDRAULICALLY APPLIED COMBINATION OF SEED, MULCH, AND EROSION PROTECTION MATERIAL SIMILAR TO "FLEX TERRA" BY ACF OR EQUAL BY OTHER MANUFACTURER.
 EROSION CONTROL MATTING: SHALL BE TEMPORARY MATTING SIMILAR TO SC350 BY NORTH AMERICAN GREEN OR EQUAL BY OTHER MANUFACTURER.

UTILITY LINE TRENCH EXCAVATION NOTES

- LIMITS ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
- ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.



EROSION & SEDIMENT CONTROL NOTES

- BEFORE EARTH DISTURBANCES BEGIN, THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH EROSION AND SEDIMENT CONTROL RULES AND REGULATIONS OF THE PA DEP.
- AT LEAST 3 WORKING DAYS BEFORE STARTING ANY EARTH DISTURBANCE, THE CONTRACTOR SHALL NOTIFY BUCKS COUNTY CONSERVATION DISTRICT. AT LEAST 3 DAYS BEFORE EARTH DISTURBANCE BEGINS, THE CONTRACTOR SHALL CONTACT THE PA ONE-CALL SYSTEM TO OBTAIN INFORMATION ON BURIED UTILITY LOCATIONS.
- COPIES OF THESE PLANS MUST BE AVAILABLE ON SITE THROUGHOUT CONSTRUCTION.
- ANY REVISIONS TO THIS PLAN, OR TO ANY OTHER PLANS THAT MAY AFFECT IT, MUST HAVE PRIOR APPROVAL OF THE BUCKS COUNTY CONSERVATION DISTRICT.
- THE CONTRACTOR SHALL ASSURE THAT AN APPROVED EROSION & SEDIMENT CONTROL PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE BORROW OR SPOIL SITES.
- THE CONTRACTOR SHALL ASSURE THAT THE APPROVED EROSION & SEDIMENT CONTROL PLAN IS PROPERLY IMPLEMENTED.
- UNTIL THE SITE IS STABILIZED, THE CONTRACTOR SHALL INSURE THAT ALL EROSION AND SEDIMENT CONTROL DEVICES ARE MAINTAINED PROPERLY. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RETENING MUST BE PERFORMED IMMEDIATELY.
- FOR PROJECTS THAT REQUIRE NPDES PERMIT, THE CONTRACTOR SHALL MAINTAIN AND MAKE AVAILABLE TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF THE ABOVE NOTED INSPECTION AND MAINTENANCE.
- SEEDING, MULCHING AND FERTILIZING SHALL BE IN ACCORDANCE WITH THE SEEDING AND MULCHING SCHEDULE.
- UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE MEASURES TO ADDRESS SAID CIRCUMSTANCES.
- ANY SEDIMENT OR MUD THAT IS TRACKED ONTO THE PUBLIC ROADWAY MUST BE CLEANED OFF IMMEDIATELY BY BROOMING AND/OR SHOVELING TO THE SATISFACTION OF THE TOWNSHIP AT THE EXPENSE OF THE CONTRACTOR. USE OF A BACKHOE BUCKET TO SCRAPE ROADWAY SURFACE IS PROHIBITED. WHERE SAND AND/OR SEDIMENT IS CAUSING SLICK OR HAZARDOUS CONDITIONS, ROADWAY SURFACE SHALL BE PRESSURE WASHED TO REMOVE THE CONDITION. ALL SEDIMENT LADEN WATER MUST BE FILTERED IN A MANNER SATISFACTORY TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT BEFORE ENTERING STORM SEWERS AND/OR DRAINAGE CHANNELS.
- NO SEDIMENT OR SEDIMENT LADEN WATER MAY BE ALLOWED TO LEAVE THE SITE/PROPERTY WITHOUT FIRST BEING FILTERED TO THE SATISFACTION OF BUCKS COUNTY CONSERVATION DISTRICT. ANY PUMPED WATER MUST BE DIRECTED TO A FILTER BAG DEVICE DISCHARGING OVER NON-DISTURBED AREAS.
- THE SEDIMENTATION AND EROSION CONTROL MEASURES SHOWN ON THIS PLAN HAVE BEEN PREPARED IN ACCORDANCE WITH REQUIREMENTS OF THE BUCKS COUNTY CONSERVATION DISTRICT. GILMORE AND ASSOCIATES DOES NOT TAKE ANY RESPONSIBILITY IN OBSERVING AND CERTIFYING THE CONSTRUCTION OF THESE FACILITIES UNLESS REQUESTED SPECIFICALLY BY THE TOWNSHIP AND/OR CONTRACTOR. THEREFORE, GILMORE AND ASSOCIATES DOES NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF IMPROPER CONSTRUCTION AND/OR MAINTENANCE OF FACILITIES DURING CONSTRUCTION.
- ACCUMULATED SEDIMENTS REMOVED FROM ANY AND ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES. REPLACED SOILS SHALL BE SEEDED AND MULCHED IMMEDIATELY.
- PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH PA DEP RULES AND REGULATIONS.
- LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES /FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NOV. 28, 1974 AS LAST AMENDED ON NOVEMBER 30, 2004, PENNSYLVANIA ACT 199. GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER XXXXXXXX FOR DESIGN PURPOSES ONLY.
- CONTRACTOR SHALL FOLLOW THE PROCEDURES OUTLINED BY THE APPROVED EROSION & SEDIMENT CONTROL PLAN AND THE SEQUENCE OF CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE BOROUGH ENGINEER AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT.

SEQUENCE OF CONSTRUCTION:

- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED, UNLESS NOTED OTHERWISE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH
- AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES, A PRECONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, TOWNSHIP ENGINEER, BUCKS COUNTY CONSERVATION DISTRICT, AND THE PLAN DESIGNER.
- NOTE: TRENCHING OPERATIONS SHALL BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE INSTALLED, BACKFILLED & STABILIZED IN ONE (1) DAY.
- INSTALL TEMPORARY EROSION & SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLAN.
 - REMOVE TREES OR OTHER EXISTING FEATURES TO BE REMOVED.
 - INSTALL ENDWALL AT OUTFALL LOCATION. STABILIZE SLOPES USING FLEXIBLE GROWTH MEDIUM "FLEX TERRA" BY ACF (OR EQUAL).
 - INSTALL ENERGY DISSIPATOR AT OUTFALL LOCATION.
 - EXCAVATE TRENCH AND INSTALL PROPOSED DRAINAGE PIPE. CONTRACTOR SHALL MAINTAIN EXISTING PIPE SYSTEM(S) UNTIL PROPOSED SYSTEM CAN BE UTILIZED. ANY PUMPING REQUIRED IS TO BE DONE IN ACCORDANCE WITH PA DEP E&S MANUAL, LATEST EDITION.
 - PLACE EXCAVATED MATERIAL ON THE UPSLOPE SIDE OF TRENCH. NO EXCAVATED MATERIAL CAN BE STORED ON THE ROADWAY. MATERIAL BEING EXCAVATED WITHIN THE ROADWAY SHALL BE DIRECTLY HAULED FROM THE SITE. LAWN AREAS ARE TO BE IMMEDIATELY STABILIZED WITH A MINIMUM 80% (8) INCHES OF TOP SOIL -- SEED AND MULCH.
 - UPON COMPLETION AND STABILIZATION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION & SEDIMENT CONTROL FACILITIES. STABILIZATION SHALL BE CONSIDERED STONE BASE FOR DRIVEWAY OR 70% VEGETATION UNIFORM COVERAGE.
 - ALL WORK ON OLD WELSH ROAD -- ROUTE 63 WILL BE COMPLETED PRIOR TO REOPENING. THIS WORK INCLUDES FINAL ROADWAY RESTORATION, CURBING, ETC.

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OWNER: HATBORO BOROUGH 414 YORK ROAD HATBORO, PA 19040 (215) 443-9100	REV.	DRAFT	
MUNICIPAL FILE NO.:	TAX MAP PARCEL NO.:	TOTAL AREA:	TOTAL LOTS:
	DATE:	SCALE:	AS NOTED
EROSION AND SEDIMENT CONTROL DETAILS WILLIAMS LANE IMPROVEMENTS HATBORO BOROUGH, MONTGOMERY COUNTY, PENNSYLVANIA			
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