2.4 Sequence and Estimated Dates of Construction Activities

Phase I

MOBILIZATION AND SWPPP IMPLEMENTATION 1. Mobilize to site and establish construction office 2. SWPPP implementation and daily documentation starts 3. Install/Construct temporary erosion and sedimentation control measures 4. Install temporary site security fencing 5. Construct temporary wheel wash area(s) 6. Construct temporary staging area(s) 7. Install temporary sanitary facilities 8. Install temporary dumpster(s)	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase II

DEMOLITION 1. Demolish existing structures 2. Demolish existing gravel drive and entrance 3. Begin site clearing and grubbing operations 4. Rework existing site drainage and retention 5. Rework existing site utilities for logistical conflicts	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase III

SITE PREPARATION 1. Begin overall site grading and topsoil stripping 2. Import structural fill and materials 3. Establish temporary stockpiles with erosion and sedimentation control measures 4. Install new site entrance	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase IV

FOUNDATION 1. Construct temporary concrete washout area(s) 2. Foundation preparation 3. Place FRP foundations 4. Foundation drainage and waterproofing 5. Backfill, compact and cure	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase V

BUILDING CONSTRUCTION 1. Install structural beams components 2. Construct exterior walls and roof 3. Install mechanical systems and utilities 4. Interior and exterior finishes	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase VI

EARTHWORK AND SITE UTILITIES 1. Install site drainage infrastructure 2. Install utilities, sanitary sewer and water services 3. Perform site grading and finalize pavement sub-grade preparation 4. Install lighting and signage precast foundations 5. Construct permanent stormwater management areas 6. Install slope retention measures	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

Phase VII

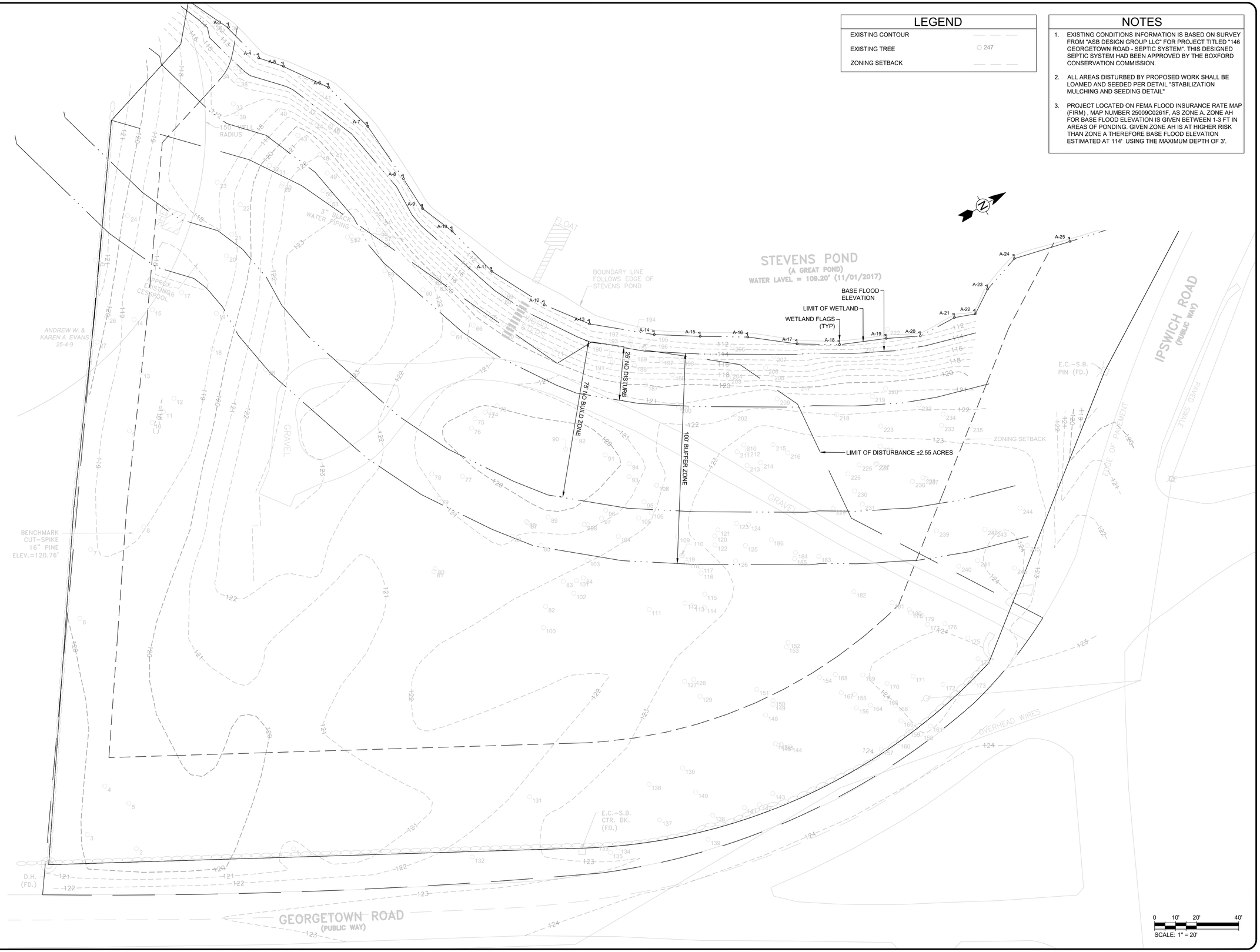
FINAL STABILIZATION 1. Finalize pavement activities 2. Perform final grading, seeding, planting and stabilization activities 3. Remove all temporary erosion control measures and stabilize any areas disturbed by their removal with appropriate erosion controls 4. Monitor stabilized areas until final stabilization is reached	
Estimated Start Date of Construction Activities for this Phase	
Estimated End Date of Construction Activities for this Phase	
Estimated Date(s) of Application of Stabilization Measures for Areas of the Site Required to be Stabilized	
Estimated Date(s) when Stormwater Controls will be Removed	

LEGEND

EXISTING CONTOUR	
EXISTING TREE	○ 247
ZONING SETBACK	

NOTES

1. EXISTING CONDITIONS INFORMATION IS BASED ON SURVEY FROM "ASB DESIGN GROUP LLC" FOR PROJECT TITLED "146 GEORGETOWN ROAD - SEPTIC SYSTEM". THIS DESIGNED SEPTIC SYSTEM HAD BEEN APPROVED BY THE BOXFORD CONSERVATION COMMISSION.
2. ALL AREAS DISTURBED BY PROPOSED WORK SHALL BE LOAMED AND SEEDED PER DETAIL "STABILIZATION MULCHING AND SEEDING DETAIL"
3. PROJECT LOCATED ON FEMA FLOOD INSURANCE RATE MAP (FIRM) , MAP NUMBER 25009C0261F. AS ZONE A. ZONE AH FOR BASE FLOOD ELEVATION IS GIVEN BETWEEN 1-3 FT IN AREAS OF PONDING. GIVEN ZONE AH IS AT HIGHER RISK THAN ZONE A THEREFORE BASE FLOOD ELEVATION ESTIMATED AT 114' USING THE MAXIMUM DEPTH OF 3'.



No.	Date	Description

Revisions

Prepared for:
CLAUDIO SENA
146 GEORGETOWN ROAD
BOXFORD, MA, 01921

Property of:
142 FISHER STREET LLC
142 FISHER STREET
WESTBOROUGH, MA 01581

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Project Title

SENA RESIDENCE

Sheet Title

EXISTING CONDITIONS SITE MAP

SCALE	1"=20'
DRAWN	MAD
CHECKED	CEF
FILE NAME	146 GEORGETOWN
PROJECT	146 GEORGETOWN RD
ISSUE DATE	
JOB NO.	146-0521

EROSION AND SEDIMENTATION CONTROL NOTES

1. THE EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES PROVIDED REPRESENT THE MINIMUM MEASURES TO BE EMPLOYED DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY TO MEET FIELD CONDITIONS AT THE TIME OF AND DURING ALL PHASES OF CONSTRUCTION.
2. WHERE LINEAR SEDIMENTATION CONTROL MEASURES ARE INDICATED ON THE PLAN THEY SHALL CONSIST OF A SINGLE ROW ALONG WITH APPROVED SEDIMENT FENCE ON THE WETLAND SIDE OF THE COMPOST FILTER SOCKS AND ORANGE CONSTRUCTION FENCE OF THE UPLAND SIDE OF THE COMPOST FILTER SOCKS.
3. CONSTRUCTION LAYDOWN AREA SHALL INCLUDE MATERIAL STOCKPILING, VEHICLE/EQUIPMENT STORAGE, PRODUCT STORAGE, WASTE STORAGE, PORTABLE SANITARY UNIT AND FUELING AND MAINTENANCE OF EQUIPMENTS AND VEHICLES. CONCRETE WASHOUT AREA TO INCLUDE WASHING OF APPLICATORS, CONTAINERS, VEHICLES AND EQUIPMENT.
4. REFER TO SECTION 4 OF THE STORMWATER POU.UTION PREVENTION PLAN (SWPPP) FOR A LIBRARY OF EROSION AND SEDIMENT CONTROLS THAT ARE TO BE IMPLEMENTED AT THE PROJECT SITE DURING CONSTRUCTION, AS NEEDED. INCLUDED IN THIS SECTION ARE DESCRIPTIONS, MAINTENANCE EQUIPMENTS AND DESIGN SPECIFICATIONS FOR THE EROSION AND SEDIMENT CONTROLS.
5. REFER TO SECTION 5 OF THE SWPPP FOR POLLUTION PREVENTION STANDARDS THAT ARE TO BE IMPLEMENTED AT THE PROJECT SITE DURING CONSTRUCTION, AS NEEDED. INCLUDED IN THIS SECTION ARE DESCRIPTIONS, MAINTENANCE REQUIREMENTS AND DESIGN SPECIFICATIONS FOR THE POLLUTION PREVENTION PRACTICES.
6. REFER TO SECTION 6 OF THE SWPPP FOR INSPECTION AND CORRECTIVE ACTION PROCEDURES THAT ARE TO BE IMPLEMENTED AT THE PROJECT SITE DURING CONSTRUCTION.

LEGEND

- EXISTING CONTOUR
- EXISTING TREE 247
- ZONING SETBACK
- TEMPORARY SEDIMENTATION BASIN
- TEMPORARY CONVEYANCE CHANNEL

NOTES

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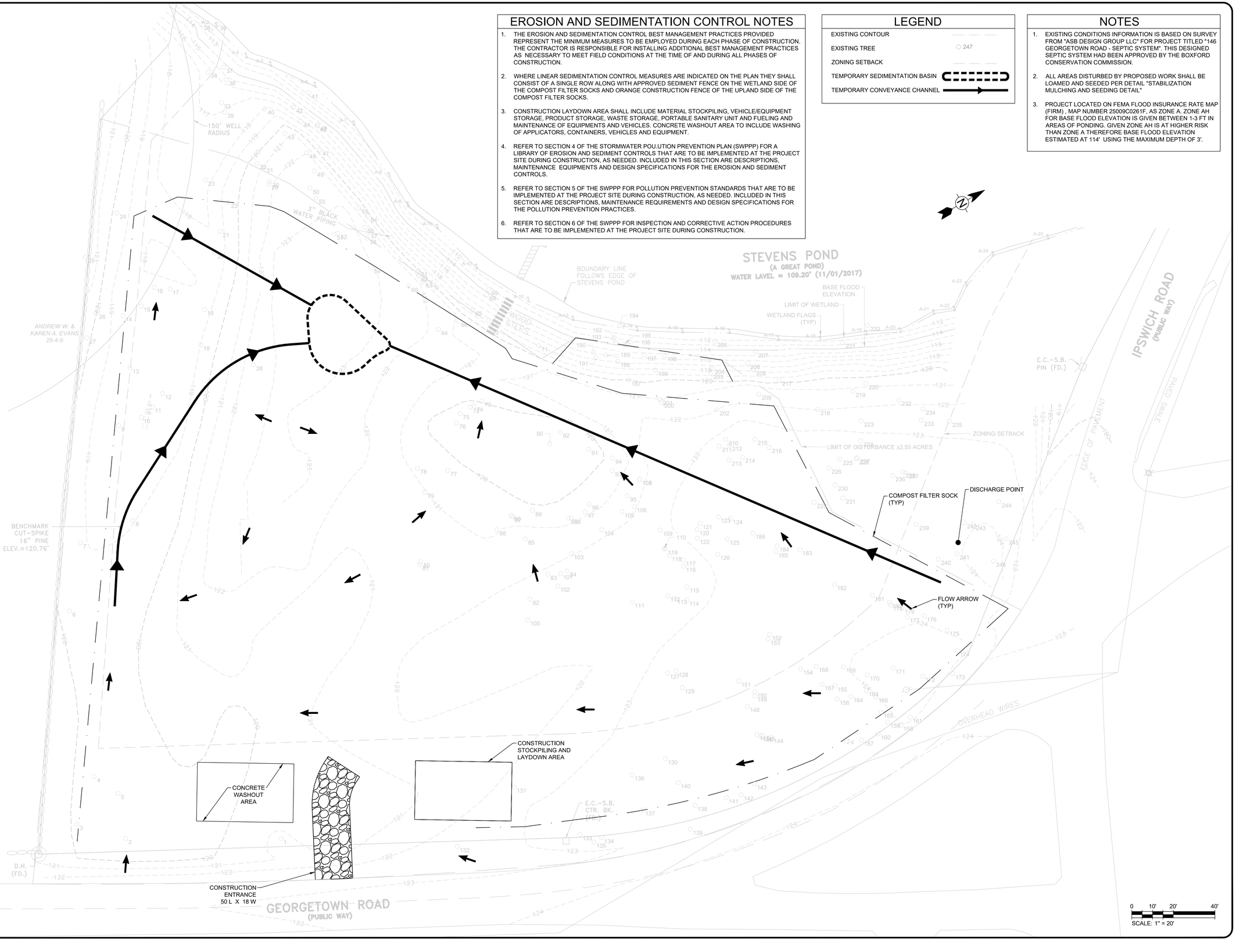

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146 GEORGETOWN ROAD
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SENA RESIDENCE

Sheet Title
EROSION AND SEDIMENT CONTROL SITE MAP

SCALE	1"=20'
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CHECKED	CEF
FILE NAME	146 GEORGETOWN
PROJECT	146 GEORGETOWN RD
ISSUE DATE	
JOB NO.	146-0521

LEGEND

- EXISTING CONTOUR
- EXISTING TREE
- ZONING SETBACK
- BUILDING
- MINOR CONTOUR
- MAJOR CONTOUR
- SPOT GRADE

NOTES

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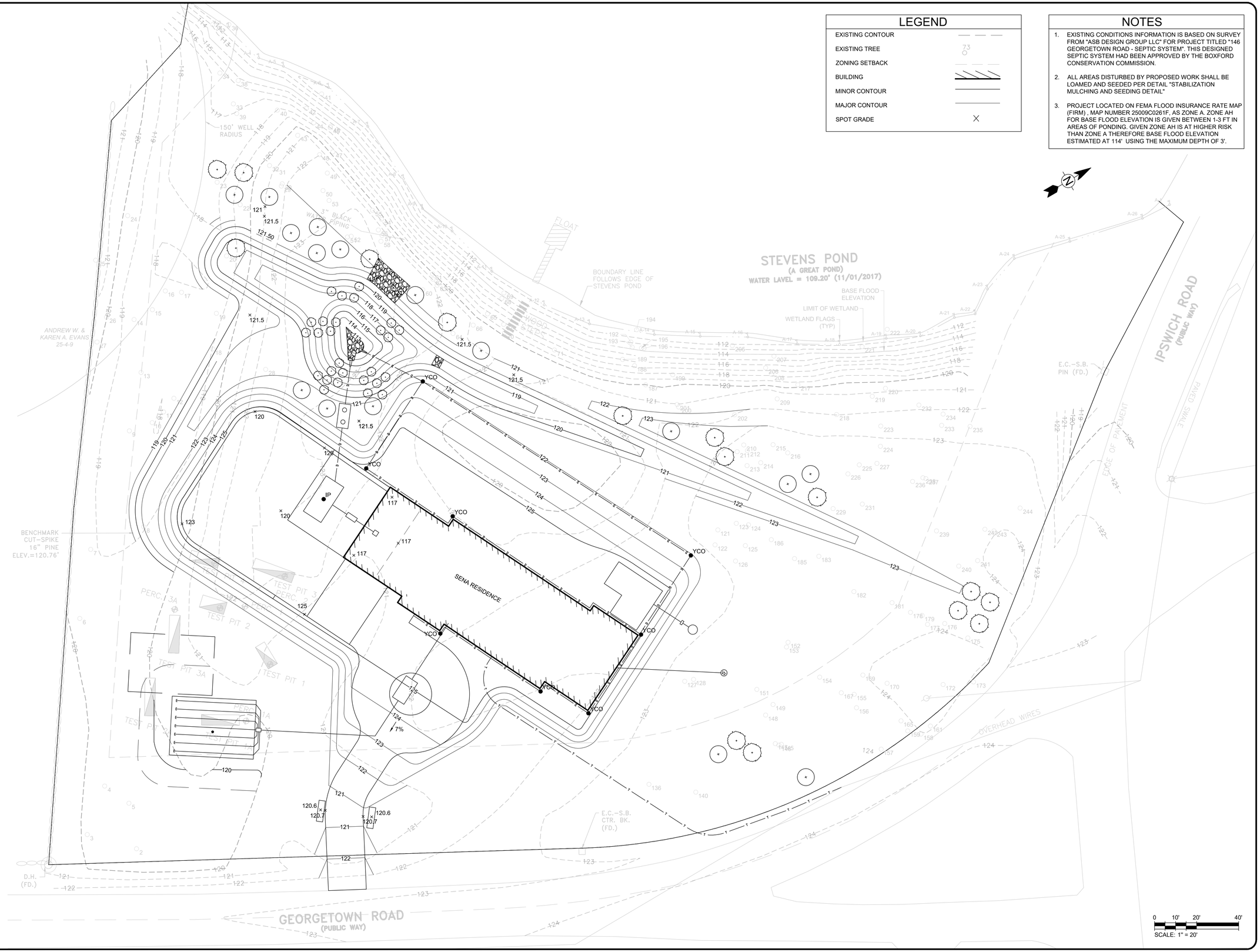

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Project Title

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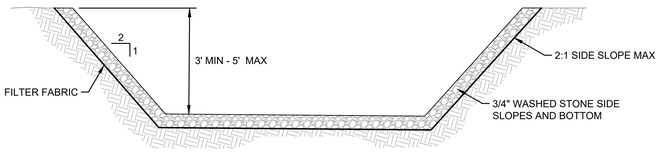
Sheet Title

PROPOSED CONDITIONS SITE MAP

SCALE	1"=20'
DRAWN	CEF
CHECKED	CEF
FILE NAME	146 GEORGETOWN
PROJECT	146 GEORGETOWN RD
ISSUE DATE	
JOB NO.	146-0521



NOTES:

CONTRACTOR TO DEWATER THE SEDIMENT TRAP WITHIN 72 HOURS. PUMP INTAKE SHALL BE LOCATED AS CLOSE TO THE TOP OF THE WATER COLUMN AS POSSIBLE AND WATER SHALL NOT BE DRAWN FROM THE BOTTOM OF THE BASIN. DEWATERING FLUIDS MUST BE VISIBLY CLEAR OF SEDIMENT, OTHERWISE CONTRACTOR MUST TREAT DISCHARGES WITH A SEDIMENT CONTROL MEASURE PRIOR TO DISCHARGE.

PRACTICE: SEDIMENT TRAPS. TEMPORARY SEDIMENT TRAPS ARE A SEDIMENT CONTROL PRACTICE AND STORMWATER MANAGEMENT PRACTICE THAT CONSIST OF AN EXCAVATED OR NATURAL DEPRESSION THAT DETAINS/RETAINS STORM WATER RUNOFF ALLOWING SEDIMENTS TO SETTLE OUT OF SUSPENSION PRIOR TO DISCHARGE VIA SUITABLY STABILIZED OUTLET.

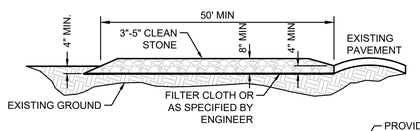
EFFECTIVE IMPLEMENTATION OF EROSION CONTROL PRACTICES ON EXPOSED SOILS LOCATED UPSLOPE WITHIN THE CONTRIBUTING DRAINAGE AREA WILL SIGNIFICANTLY REDUCE MAINTENANCE REQUIREMENTS. PROPERLY CONSTRUCTED AND MAINTAINED TEMPORARY SEDIMENT TRAPS ARE VERY EFFECTIVE AT TREATING SEDIMENT-LADEN STORM WATER RUNOFF. THE SIZE OF THE TEMPORARY TRAP MUST BE DETERMINED BY THE CONTRACTOR, 3,600 CUBIC FEET PER ACRE DRAINED.

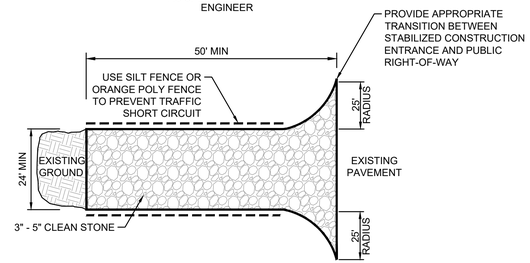
INSTALLATION REQUIREMENTS: CONSTRUCTION OF THE TRAPS MUST OCCUR BEFORE EARTH DISTURBANCE ACTIVITIES COMMENCE. THE SIDE SLOPES AND BOTTOMS OF THE TEMPORARY TRAP MUST BE APPROPRIATELY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

MAINTENANCE REQUIREMENTS: REMOVE ACCUMULATED SEDIMENT BEFORE IT REACHES ½ OF THE CAPACITY OF THE SEDIMENT TRAP IN ORDER TO MAXIMIZE SEDIMENT SETTLING POTENTIAL AND MINIMIZE THE POSSIBILITY OF SEDIMENT WASHOUT DURING HIGH INTENSITYLONG DURATION STORM EVENTS. INSPECT TRAPS AFTER EACH STORM EVENT TO ENSURE PROPER DRAINAGE AND DETERMINE THE NEED FOR REPAIRS. REPLACE ERODED MATERIAL AND REMOVE DISLODGED STONES FROM EARTHEN EMBANKMENTS.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE





NOTES:

1. STONE - USE COARSE AGGREGATE (3"-5" STONE).
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT PAVED ROAD SURFACES MUST BE REMOVED IMMEDIATELY.

PRACTICE: STABILIZED CONSTRUCTION EXIT POINTS. IN ORDER TO MINIMIZE TRACK OUT FROM VEHICLES, STABILIZED CONSTRUCTION EXIT(S) MUST BE INSTALLED AT THE LOCATIONS WHERE VEHICLES WILL EXIT THE SITE. THE CONTRACTOR MUST RESTRICT VEHICLE USE TO THE PROPOSED DESIGN EXIT LOCATIONS. ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM TIRES MAY BE REQUIRED IF TRACKING OCCURS; SUCH METHODS MAY INCLUDE WHEEL WASH STATIONS, RUMBLE STRIPS OR RUMBLE PLATES. NO VISIBLE SIGNS OF SOIL TRACKING FROM VEHICLES SHOULD BE PRESENT ON PUBLIC ROADWAYS EXITING THE SITE.

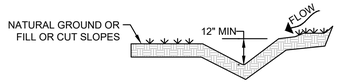
INSTALLATION. THE STABILIZED CONSTRUCTION EXIT(S) WILL CONSIST OF AN 8 INCH LAYER OF THREE TO FIVE INCH (3"-5") STONE, PLACED OVER A LAYER OF GEOTEXTILE FABRIC (IN ORDER TO PROVIDE SEPARATION FROM THE UNDERLYING SOIL AND PREVENT THE STONE FROM BEING GROUND DOWN INTO THE SOIL). THE STABILIZED CONSTRUCTION EXIT MUST BE WIDE ENOUGH TO COVER THE ENTIRE WIDTH OF THE EXIT AND IT SHOULD BE FLARED WHERE IT MEETS THE ROADWAY TO ACCOMMODATE LONGER CONSTRUCTION VEHICLES. THE STABILIZED CONSTRUCTION EXIT MUST BE LONG ENOUGH TO ALLOW MUD AND SEDIMENT TO BECOME DISLODGED FROM VEHICLE TIRES, AND/OR A MINIMUM OF FIFTY FEET (50') IN LENGTH.

MAINTENANCE. DURING THE COURSE OF CONSTRUCTION THE STABILIZED CONSTRUCTION EXIT WILL BECOME FILLED WITH ACCUMULATED SEDIMENT AND/OR THE STONE WILL BECOME COMPACTED. THE CONTRACTOR MUST REPAIR THE EXIT AS NECESSARY BY REMOVING ACCUMULATED SEDIMENT, REPLACING THE STONE OR BACK-BLADING THE STONE TO REFRESH IT. IF TRACKING OF SEDIMENT OCCURS, THE CONTRACTOR MUST REMOVE DEPOSITED SEDIMENT BY COMPLYING WITH THE FOLLOWING REQUIREMENTS:

- WHERE TRACK-OUT OF SEDIMENT OCCURS FROM THE SITE ONTO OFF-SITE STREETS, SIDEWALKS, AND OTHER PAVED AREAS, DEPOSITS MUST BE SWEPT, SHOVELED, OR VACUUMED TO REMOVE TRACK-OUT MATERIAL OR OTHER SEDIMENT DEPOSITS BY THE END OF THE SAME WORK DAY IN WHICH THE TRACK OUT IS DISCOVERED.
- HOSING OR SWEEPING TRACKED-OUT SEDIMENT INTO ANY STORMWATER CONVEYANCE, (UNLESS IT IS CONNECTED TO A SEDIMENT BASIN, SEDIMENT TRAP, OR SIMILARLY EFFECTIVE CONTROL), STORM DRAIN INLET, OR SURFACE WATER IS PROHIBITED.

STABILIZED CONSTRUCTION EXIT

NOT TO SCALE



PRACTICE: CONSTRUCTED STORMWATER CONVEYANCE CHANNELS: STORMWATER CONVEYANCE CHANNELS, OR DIVERSION DITCHES, ARE A RUNOFF CONTROL MEASURE CONSISTING OF A CHANNEL OR EXCAVATION INSTALLED AS A MEANS OF DIVERTING CONCENTRATED FLOWS TO STABILIZED AREAS. VEGETATIVE LINED CHANNELS SLOW DOWN CONCENTRATED RUNOFF. THE TEMPORARY CONVEYANCE CHANNELS WILL CONTAIN VELOCITY DISSIPATION DEVICES INCLUDING STONE CHECK DAMS TO ENHANCE RUNOFF STORAGE, IMPROVE POLLUTANT REMOVAL AND DECREASE FLOW RATES.

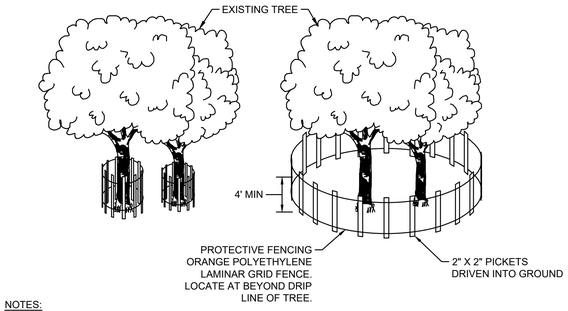
OUTLET FLOW FROM THE CHANNEL WILL BE STABILIZED WITH A NON-EROSIVE FLOW VELOCITY DISSIPATOR WHICH INCLUDES A RIP RAP APRON. VEGETATIVE AND NON-VEGETATIVE STABILIZATION TECHNIQUES INCLUDE CHANNEL LINERS, ROLLED EROSION CONTROL PRODUCTS (E.G., EROSION CONTROL BLANKETS FOR CHANNEL INSTALLATION AND TURF REINFORCEMENT MATS), RIPRAP, GEOTEXTILES, OR OTHER ARMORING MATERIALS THAT ARE SUITABLE FOR USE IN AREAS WITH CONCENTRATED OR CHANNELIZED FLOW. THE STORM WATER RUNOFF FROM THE CHANNEL MUST BE CONVEYED TO THE TEMPORARY SEDIMENT BASINSTRAPS OR OTHER SEDIMENT CONTROL PRACTICE. TEMPORARY CHANNELS MAY BE CONSTRUCTED AS NEEDED AT LOCATIONS OTHER THAN THOSE INDICATED ON THE EROSION AND SEDIMENTATION CONTROL PLANS TO ACCOUNT FOR CHANGING ON-SITE FIELD CONDITIONS.

INSTALLATION REQUIREMENTS: THE CONVEYANCE CHANNEL SIDE-SLOPES AND BOTTOM MUST BE APPROPRIATELY STABILIZED PRIOR TO CONVEYING RUNOFF TO IT.

MAINTENANCE REQUIREMENTS: CLOGGING WITH SEDIMENT AND DEBRIS REDUCES THE EFFECTIVENESS OF GRASS-LINED CHANNELS FOR STORMWATER CONVEYANCE. THE CHANNELS MUST BE INSPECTED AND LITTER AND SEDIMENT ACCUMULATIONS REMOVED. EVIDENCE OF EROSION AT THE INLET AND OUTLET MUST BE REPAIRED.

TEMPORARY CONVEYANCE CHANNEL

NOT TO SCALE

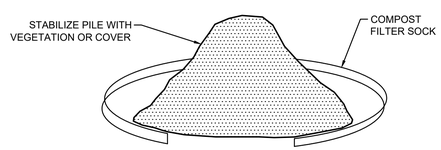


NOTES:

1. TREE PROTECTION BARRIERS MUST BE PLACED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR.
2. TREE PROTECTION BARRIER MUST REMAIN IN PLACE UNTIL GRADING AND CONSTRUCTION ACTIVITY IS COMPLETE OR UNTIL COMMENCEMENT OF FINISH GRADING AND SODDING.
3. BARRIERS SHALL BE PLACED AROUND TREES AT THE DRIPLINE EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE DRIPLINE.
4. THE DRIPLINE OF A TREE IS THE IMAGINARY VERTICAL LINE THAT EXTENDS DOWNWARD FROM THE OUTERMOST TIPS OF THE TREE'S BRANCHES TO THE GROUND.
5. AREAS SURROUNDED BY THE TREE PROTECTION BARRIERS SHALL BE PROTECTED FROM VEGETATION REMOVAL, PLACEMENT OF SOIL, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND.
6. ALL TREE ROOTS WITHIN AREA TO BE GRADED AND ORIGINATING FROM A PROTECTED TREE SHALL BE SEVERED CLEANLY AT THE LIMITS OF THE PROTECTED AREA.
7. ALL TREE PRUNING AND TRIMMING ON ANY TREE TO BE RETAINED SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE AMERICAN SOCIETY OF ARBORICULTURE (ASA).
8. 2'x2' TREE PROTECTION SIGNS SPACED A MINIMUM OF ONE SIGN EVERY 300' SHALL CONTAIN THE WORDING "TREE PROTECTION ZONE - KEEP OUT".

TREE PROTECTION BARRIER / ORANGE CONSTRUCTION FENCE

NOT TO SCALE



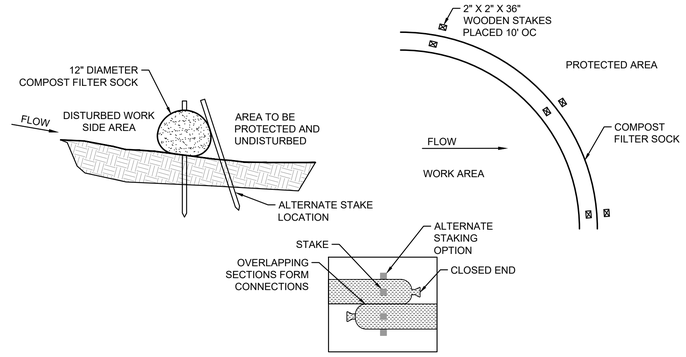
NOTE:
STOCKPILES MUST BE PHYSICALLY SEPARATED FROM OTHER STORMWATER CONTROLS.

NOTE:

1. FOR ANY STOCKPILED OR LAND CLEARING DEBRIS COMPOSED, IN WHOLE OR IN PART, OF SEDIMENT OR SOIL, THE FOLLOWING MEASURES MUST BE FOLLOWED:
   - LOCATE THE PILES 50' OUTSIDE OF ANY RESOURCE AREAS AND PHYSICALLY SEPARATED FROM OTHER STORMWATER CONTROLS;
   - PROTECT FROM CONTACT WITH STORMWATER (INCLUDING RUN-ON) USING A TEMPORARY PERIMETER SEDIMENT BARRIER;
   - PROVIDE COVER OR APPROPRIATE TEMPORARY STABILIZATION TO AVOID DIRECT CONTACT WITH PRECIPITATION OR TO MINIMIZE SEDIMENT DISCHARGE;
   - DO NOT HOSE DOWN OR SWEEP SOIL OR SEDIMENT ACCUMULATED ON PAVEMENT OR OTHER IMPERVIOUS SURFACES INTO ANY STORMWATER CONVEYANCE (UNLESS CONNECTED TO A SEDIMENT BASIN, SEDIMENT TRAP, OR SIMILARLY EFFECTIVE CONTROL), STORM DRAIN INLET, OR SURFACE WATER; AND
   - UNLESS INFEASIBLE, CONTAIN AND SECURELY PROTECT FROM WIND.

SOIL STOCKPILE CONTROL

NOT TO SCALE



NOTES:

1. PREFABRICATED COMPOST FILTER SOCK SHALL BE FILTREXX SOXX OR APPROVED EQUAL.
2. MATERIAL FOR SOCKS SHALL CONSIST OF SANITIZED MATURE COMPOST, FREE OF VIABLE WEED SEEDS AND FOREIGN DEBRIS SUCH AS GLASS AND PLASTIC. COMPOST SHALL BE IN SHREDDED OR GRANULAR FORM AND FREE FROM HARD LUMPS. IN ADDITION, NO KILN-DRIED WOOD OR CONSTRUCTION DEBRIS SHALL BE ALLOWED. CONTRACTOR SHALL REFER TO MASSDOT SPECIFICATIONS M1.06.0 FOR MATERIAL SPECIFICATIONS.
3. SOCK SHALL CONSIST OF JUTE MESH OR OTHER APPROVED BIODEGRADABLE MATERIAL.

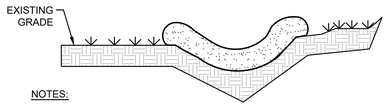
PRACTICE: COMPOST FILTER SOCK. A COMPOST FILTER SOCK IS A TYPE OF CONTAINED COMPOST FILTER BERM CONSISTING OF A MESH TUBE FILLED WITH COMPOSTED MATERIAL THAT IS PLACED PERPENDICULAR TO SHEET-FLOW RUNOFF TO RETAIN SEDIMENT FROM DISTURBED AREAS. THE COMPOST FILTER SOCK ACTS AS A FILTER TO RETAIN SEDIMENT AND OTHER POLLUTANTS (E.G., SUSPENDED SOLIDS, NUTRIENTS) WHILE ALLOWING THE WATER TO FLOW THROUGH IT. COMPOST QUALITY MUST MEET AASHTO 2010 SPECIFICATIONS.

INSTALLATION: ONCE THE FILTER SOCK IS FILLED AND PUT IN PLACE, IT SHOULD BE ANCHORED TO THE SLOPE BY STAKES THROUGH THE CENTER OR OUTER EDGE OF THE SOCK AT REGULAR INTERVALS; ALTERNATIVELY, STAKES CAN BE PLACED ON THE DOWNSTREAM SIDE OF THE SOCK. THE ENDS OF THE FILTER SOCK SHOULD BE DIRECTED UPSLOPE, TO PREVENT STORMWATER FROM RUNNING AROUND THE END OF THE TUBE. THERE SHOULD BE NO GAPS BETWEEN SEGMENTS AND THE SOCK ENDS MUST OVERLAP A MINIMUM OF 6 INCHES.

MAINTENANCE: SOCKS MUST BE INSPECTED FOR SEDIMENT ACCUMULATION. IF THERE IS EXCESSIVE PONDING BEHIND THE FILTER SOCK OR ACCUMULATED SEDIMENT REACHES THE TOP OF THE SOCK, AN ADDITIONAL SOCK SHOULD BE ADDED ON TOP OR IN FRONT OF THE EXISTING FILTER SOCK IN THESE AREAS. AN ADEQUATE RESERVE OF SOCKS MUST BE KEPT ON SITE AT ALL TIMES FOR EMERGENCY AND/OR ROUTINE REPLACEMENT. SOCKS SHALL BE REMOVED ONLY AFTER EXPOSED SOILS IN THE CONTRIBUTING DRAINAGE AREA ACHIEVE FINAL STABILIZATION. SEDIMENT ACCUMULATION MUST BE REMOVED ONCE IT HAS REACHED ½ OF THE EXPOSED HEIGHT OF THE SOCK.

COMPOST FILTER SOCK

NOT TO SCALE

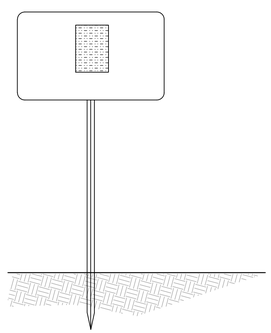


NOTES:

1. FILTER SOCK TO BE PLACED WITHIN EXISTING DITCHES AND TEMPORARY CONVEYANCE CHANNELS AS NEEDED TO PREVENT EROSION.
2. CENTER 6" LOWER THAN BANKS SPAN; EXTEND ENDS TO PREVENT BYPASS AROUND EDGES.

COMPOST FILTER SOCK FOR CHECK DAMS

NOT TO SCALE



NOTES:

1. CONSTRUCTION SITE NOTICES MUST BE POSTED.
2. POSTING IS TO BE AT JOB SITE ENTRANCE WHERE IT WILL BE VISIBLE AND LEGIBLE FROM THE PUBLIC WAY.
3. POSTING IS REQUIRED FROM THE DAY CONSTRUCTION ACTIVITIES START UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED.

JOB SITE PERMIT POSTING DETAIL

NOT TO SCALE

SPECIES	LBS/1000 S.F.	LBS/ACRE	RECOMMENDED SEEDING DATES
ANNUAL RYEGRASS	1	40	APRIL 1 TO JUNE 1 AUG 1 TO SEPT 15
FOXTAIL MILLET	0.7	30	MAY 1 TO JUNE 30
OATS	2	80	APRIL 1 TO JULY 1 AUG 15 TO SEPT 15
WINTER RYE	3	120	AUG 15 TO OCT 15

MULCH APPLICATION RATES:
HAY OR STRAW MULCH SHALL BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS. APPLICATION RATE MUST BE 2 BALES (70-90 LBS) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS PER ACRE. NO BARE SPOTS SHOWING AND SHALL ONLY BE APPLIED TO SLOPES 3:1 OR FLATTER. ANCHORING METHODS INCLUDING NETTING WITH JUTE, WOOD FIBER OR PLASTIC, OR APPLY MULCH AND TRACK SURFACE UP AND DOWN THE SLOPE SO CLEAT MARKS ARE PARALLEL TO THE CONTOURS. FOR OVERWINTER APPLICATION, THE RATE SHALL BE 150 LBS PER 1,000 SQUARE FEET OR 3 TONS/ACRE. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW; SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION.

PRACTICE MULCHING: MULCHING IS AN EROSION CONTROL PRACTICE THAT INVOLVES USING MATERIALS SUCH AS STRAW MULCH DERIVED FROM WHEAT, RICE OR BARLEY OR WOOD MULCH CONSISTING OF SHREDDED OR CHIPPED WOOD, BARK OR COMPOST. MULCHING IS HIGHLY EFFECTIVE, AND WHEN APPLIED CORRECTLY PROVIDES A LEVEL OF PROTECTION COMPARABLE TO DENSE VEGETATIVE COVER. MULCH IS ALSO VERY BENEFICIAL FOR RECENTLY PLANTED AREAS HOLDING SEEDS, FERTILIZERS, AND TOPSOIL IN PLACE, RETAINING MOISTURE, AND INSULATING PLANT ROOTS AGAINST EXTREME TEMPERATURES.

INSTALLATION: MULCH MUST BE APPLIED UNIFORMLY TO THE SOIL AND PROPERLY ANCHORED (USING STUDDED ROLLERS, TACKIFIERS OR AN ANCHORING TOOL). MULCH SHOULD NOT BE APPLIED ON SLOPES STEEPER THAN 3:1 AND SHOULD NOT BE USED IN AREAS OF CONCENTRATED FLOWS. AREA SHOULD BE ROUGHENED OR TRACKED PRIOR TO APPLICATION. AVOID APPLYING MULCH DURING OR IMMEDIATELY BEFORE RAINFALL. THERE SHOULD BE NO BARE SPOTS SHOWING EXPOSED SOILS.

** HYDRAULICALLY APPLIED MULCHES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

MAINTENANCE: MULCH SHALL BE REAPPLIED TO ANY BARE SPOTS. MAINTAIN AN UNBROKEN GROUND COVER AND REPAIR ANY DAMAGED GROUND COVER AND RE-MULCH EXPOSED AREAS. INSPECT AFTER EACH RAINFALL EVENT TO MAKE SURE THE MULCH IS NOT DISLODGED OR CAUSING EROSION.

TEMPORARY STABILIZATION MULCHING & SEEDING

No.	Date	Description
		Revisions

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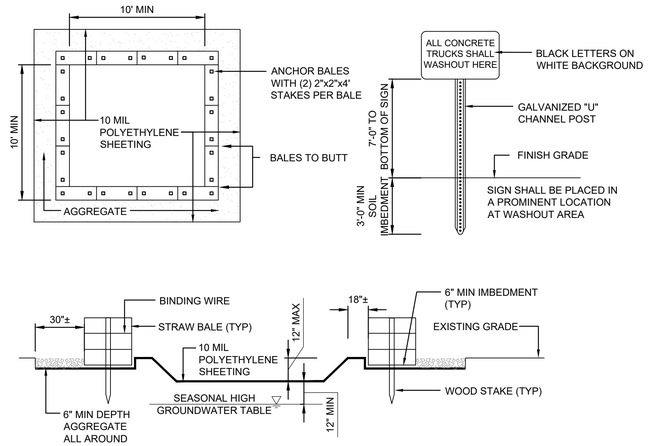
Project Title
SENA RESIDENCE

Sheet Title
EROSION AND SEDIMENT CONTROL DETAILS

SCALE	1"=20'
DRAWN	CMS
CHECKED	CEF
FILE NAME	146 GEORGETOWN
PROJECT	146 GEORGETOWN RD
ISSUE DATE	
JOB NO.	146-0521



NOTES:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

PRACTICE: MANAGING CONCRETE & MASONRY RINSE WATER AND WASTE.

CONCRETE WASHOUT AREAS CONSIST OF A PREFABRICATED OR SITE-BUILT IMPERMEABLE CONTAINMENT AREAS SIZED TO HOLD CONCRETE WASTES AND WASH WATER (INCLUDING ONE FOOT (1') FREEBOARD). CONCRETE WASHOUT AREAS ARE USED TO CONTAIN CONCRETE AND LIQUIDS WHEN THE CHUTES OF CONCRETE MIXERS AND HOPPERS OF CONCRETE PUMPS ARE RINSED OUT AFTER DELIVERY. THE WASHOUT FACILITIES CONSOLIDATE SOLIDS FOR EASIER DISPOSAL AND PREVENT RUNOFF OF LIQUIDS. THE WASH WATER IS ALKALINE AND CONTAINS HIGH LEVELS OF CHROMIUM, WHICH CAN LEACH INTO THE GROUND AND CONTAMINATE GROUNDWATER. IT CAN ALSO MIGRATE TO A STORM DRAIN, WHICH CAN INCREASE THE PH OF AREA WATERS AND HARM AQUATIC LIFE. SOLIDS THAT ARE IMPROPERLY DISPOSED OF CAN CLOG STORM DRAIN PIPES AND CAUSE FLOODING. DISCHARGE OF CONCRETE CHUTE RINSE WATER ONTO THE GROUND SURFACE IS NOT PERMITTED.

OPTIONS FOR THE MANAGEMENT OF CONCRETE CHUTE RINSE WATER INCLUDE:

MAINTAINING THE SELF-CONTAINED RINSE WATER IN THE CONCRETE TRUCK AND RETURNING IT TO THE CONCRETE SUPPLIER;

PROCURING A SERVICE THAT DELIVERS A PREFABRICATED WASHOUT CONTAINER; OR

INSTALL A WASHOUT UNIT ON SITE. IF THE ON-SITE OPTION IS SELECTED, THE FOLLOWING CONDITIONS APPLY:

- CONCRETE WASHOUTS CONSIST OF A PREFABRICATED OR SITE-BUILT IMPERMEABLE CONTAINMENT AREA SIZED TO HOLD CONCRETE WASTES AND WASH WATER (INCLUDING ONE FOOT (1') FREEBOARD).
- THE CONCRETE WASHOUTS MUST BE CONSTRUCTED PRIOR TO PLACEMENT OF CONCRETE ON-SITE.
- THE CONCRETE WASHOUT AREA MUST BE LOCATED IN AN AREA WHERE ITS LIKELIHOOD OF CONTRIBUTING TO STORM WATER DISCHARGES IS NEGLIGIBLE. WASHOUTS SHALL BE LOCATED A MINIMUM OF FIFTY FEET (50') FROM ANY STORM DRAIN INLETS, STORM WATER CONVEYANCE, SURFACE WATER OR WETLAND.

THESE SPECIALLY DESIGNATED AREAS SHOULD BE PROPERLY SIGNED AND ONSITE PERSONNEL INSTRUCTED IN THEIR PROPER USE. THE HARDENED RESIDUE FROM THE CONCRETE WASH OUT AREA WILL BE DISPOSED OF IN THE SAME MANNER AS OTHER NON-HAZARDOUS CONSTRUCTION WASTE MATERIALS OR MAY BE BROKEN UP AND USED ONSITE AS APPROPRIATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THESE PROCEDURES ARE FOLLOWED. THE CONTRACTOR MUST TRACK CONCRETE WASHOUT AREA LOCATIONS ON THE PROGRESS MAP IF THEY ARE MOVED OR IF ADDITIONAL CONCRETE WASHOUTS NEED TO BE CONSTRUCTED.

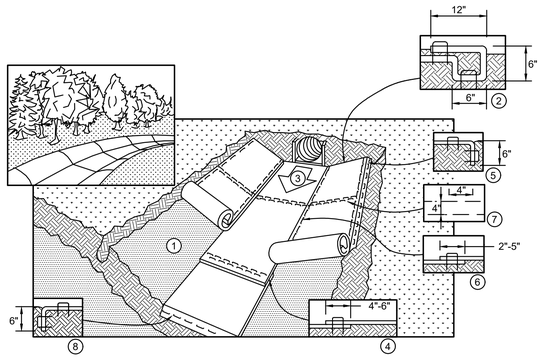
CONCRETE AND MASONRY WASTE: CONCRETE AND MASONRY WASTE IS EXPECTED TO BE GENERATED DURING SAWCUTTING OPERATIONS, MORTARED JOINTS AND CONCRETE SIDEWALK CONSTRUCTION. THE WASTE CAN MIGRATE TO A STORM DRAIN, WHICH CAN INCREASE THE PH OF AREA WATERS AND HARM AQUATIC LIFE. SOLIDS THAT ARE IMPROPERLY DISPOSED OF CAN CLOG STORM DRAIN PIPES AND CAUSE FLOODING. ALL CONCRETE AND MASONRY WASTE MUST BE LEGALLY DISPOSED OF OFF SITE.

MASONRY MIXING AREA: NON-STORMWATER DISCHARGES INTO STORM DRAINAGE SYSTEMS OR WATERWAYS CONTAINING SLURRIES FROM CONCRETE OR MORTAR MIXING OPERATIONS SHALL NOT BE PERMITTED. MASONRY MIXING AREAS SHALL BE LOCATED A MINIMUM DISTANCE OF 100 LINEAR FEET FROM DRAINAGE WAYS, INLETS AND SURFACE WATERS AND ALL STORM WATER RUNOFF FROM THESE AREAS SHALL BE CONTAINED BY A BERM OR OTHER MEASURES. RUN-ON WATER TO THESE AREAS WILL BE DIVERTED TO PREVENT MIXING OF CLEAN WATER AND WATER CONTAMINATED WITH CONCRETE SLURRY. THE CONTRACTOR SHALL PROVIDE A MORTAR MIX WASTE BUCKET(S) IN THE IMMEDIATE VICINITY OF THE MASONRY WORK AREA AND INSTRUCT THE MASONS TO DUMP EXCESS MATERIAL DIRECTLY INTO THE WASTE BUCKETS AND NOT ONTO THE ADJACENT GROUND SURFACE.

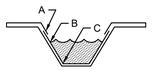
MATERIAL REMOVAL AND MAINTENANCE. CONCRETE WASHOUT AREAS DESIGNED TO PROMOTE EVAPORATION WHERE FEASIBLE. HOWEVER, IF STORED LIQUIDS HAVE NOT EVAPORATED AND THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THEM IN AN APPROVED MANNER - CHECK WITH THE LOCAL SANITARY SEWER AUTHORITY TO DETERMINE IF THERE ARE SPECIAL DISPOSAL REQUIREMENTS FOR CONCRETE WASH WATER. REMOVE LIQUIDS OR COVER THE STRUCTURES BEFORE PREDICTED RAINSTORMS TO PREVENT OVERFLOWS. PREFABRICATED AND WATERTIGHT WASHOUT CONTAINER PROVIDERS GENERALLY OFFER A VACUUM SERVICE TO REMOVE THE LIQUID MATERIAL. MAINTAIN 12 INCH FREEBOARD WITHIN WASHOUT AREA; CLEAN OUT OR CONSTRUCT ADDITIONAL WASHOUT AREAS ONCE THE PIT IS 75% FULL.

CONCRETE WASHOUT AREA

NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AFTER STAPLING. APPLY SEED TO SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND SOIL. SECURE BLANKET OVER SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET SIZE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



CRITICAL POINTS
A) OVERLAPS AND SEAMS
B) PROJECTED WATER LINE
C) CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

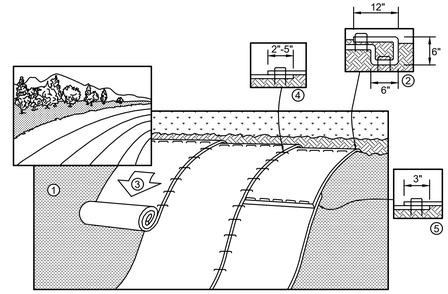
PRACTICE EROSION CONTROL BLANKETS: EROSION CONTROL BLANKETS ARE AN EROSION CONTROL PRACTICE CONSISTING OF NATURAL, BIODEGRADABLE MATERIALS FORMED INTO LONG SHEETS OR MATS THAT ARE ROLLED OUT OVER EXPOSED SOILS AND FASTENED WITH STAKES, PEGS OR STAPLES. THEY ARE USED IN AREAS WHERE HIGH RUNOFF VELOCITY MAKES TRADITIONAL MULCHING INEFFECTIVE. BLANKETS PROVIDE IMMEDIATE PROTECTION FROM SURFACE EROSION AND ALSO HELPS RETAIN SOIL MOISTURE IMPROVING SEED GERMINATION AND VEGETATION ESTABLISHMENT. BLANKETS ARE HIGHLY EFFECTIVE AT STABILIZING STEEP SLOPES (3:1 OR GREATER) AND CAN BE USED TO STABILIZE AREAS OF CONCENTRATED FLOW SUCH AS CHANNELS OR SWALES. TYPES OF BIODEGRADABLE BLANKETS ARE JUTE (NATURAL YARN FIBER); EXCELSIOR (CURLED WOOD FIBER); STRAW BLANKET; WOOD FIBER; AND COCONUT FIBER.

INSTALLATION: TO ENSURE THE EFFECTIVE USE OF BLANKETS, KEEP FIRM, CONTINUOUS CONTACT BETWEEN THE FABRIC AND THE SOIL AND PROPERLY ANCHOR. PREPARE THE SOIL BY REMOVING THE ROCKS, VEGETATION OR OTHER OBSTRUCTIONS SO THAT BLANKETS WILL HAVE COMPLETE DIRECT CONTACT WITH SOIL. SEEDING MAY BE APPLIED PRIOR TO BLANKET INSTALLATION. FOLLOW MANUFACTURER SPECIFICATIONS FOR INSTALLATION. DETAILS ARE PROVIDED ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEET FOR BOTH CHANNEL AND SLOPE APPLICATIONS.

MAINTENANCE: INSPECT FABRIC TO DETERMINE IF TEARS OR BREACHES HAVE FORMED; IF SO, REPAIR OR REPLACE THE FABRIC IMMEDIATELY. IT IS NECESSARY TO MAINTAIN CONTACT BETWEEN THE GROUND AND THE FABRIC AT ALL TIMES. REMOVE TRAPPED SEDIMENT AFTER EACH STORM EVENT.

EROSION CONTROL BLANKET DETAIL FOR CHANNEL INSTALLATION

NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACK FILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO PREPARED SOIL AND FOLD REMAINING 12" PORTION OF THE BLANKET BACK OVER SEED AND SOIL. SECURE BLANKET OVER SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS DOWN ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN
4. GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
6. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
7. EROSION CONTROL BLANKETS SHALL BE INSTALLED FOLLOWING MANUFACTURERS SPECIFICATIONS.

NOTE:

IN LOOSE SOIL CONDITIONS THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS

PRACTICE: EROSION CONTROL BLANKETS. EROSION CONTROL BLANKETS ARE AN EROSION CONTROL PRACTICE CONSISTING OF NATURAL, BIODEGRADABLE MATERIALS FORMED INTO LONG SHEETS OR MATS THAT ARE ROLLED OUT OVER EXPOSED SOILS AND FASTENED WITH STAKES, PEGS OR STAPLES. THEY ARE USED IN AREAS WHERE HIGH RUNOFF VELOCITY MAKES TRADITIONAL MULCHING INEFFECTIVE. BLANKETS PROVIDE IMMEDIATE PROTECTION FROM SURFACE EROSION AND ALSO HELPS RETAIN SOIL MOISTURE IMPROVING SEED GERMINATION AND VEGETATION ESTABLISHMENT. BLANKETS ARE HIGHLY EFFECTIVE AT STABILIZING STEEP SLOPES (3:1 OR GREATER) AND CAN BE USED TO STABILIZE AREAS OF CONCENTRATED FLOW SUCH AS CHANNELS OR SWALES. TYPES OF BIODEGRADABLE BLANKETS ARE JUTE (NATURAL YARN FIBER); EXCELSIOR (CURLED WOOD FIBER); STRAW BLANKET; WOOD FIBER; AND COCONUT FIBER.

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MAINTENANCE: INSPECT FABRIC TO DETERMINE IF TEARS OR BREACHES HAVE FORMED; IF SO, REPAIR OR REPLACE THE FABRIC IMMEDIATELY. IT IS NECESSARY TO MAINTAIN CONTACT BETWEEN THE GROUND AND THE FABRIC AT ALL TIMES. REMOVE TRAPPED SEDIMENT AFTER EACH STORM EVENT.

EROSION CONTROL BLANKET DETAIL FOR SLOPE INSTALLATION

NOT TO SCALE

No.	Date	Description

Revisions

Prepared for:
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Project Title
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Sheet Title
EROSION AND SEDIMENT CONTROL DETAILS

SCALE	1"=20'
DRAWN	CMS
CHECKED	CEF
FILE NAME	146 GEORGETOWN
PROJECT	146 GEORGETOWN RD
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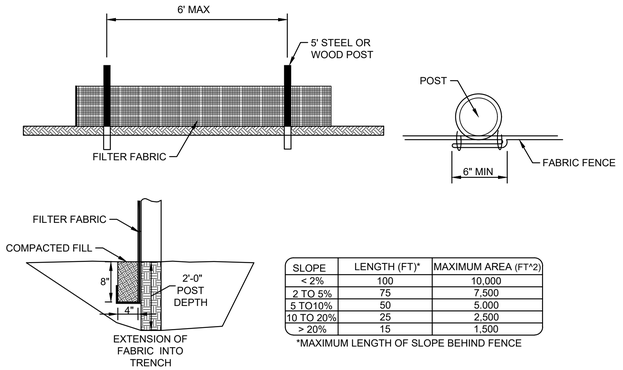


SLOPE	LENGTH (FT)*	MAXIMUM AREA (FT^2)
< 2%	100	10,000
2 TO 5%	75	7,500
5 TO10%	50	5,000
10 TO 20%	25	2,500
> 20%	15	1,500

*MAXIMUM LENGTH OF SLOPE BEHIND FENCE

NOTES:

1. FILTER FABRIC SHALL BE 36" WIDE.
2. STEEL POST SHALL BE 5'-0" IN LENGTH AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. WOOD POST SHALL BE 5'-0" IN LENGTH AND 2" IN DIAMETER.
4. SUPPORT POSTS SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE SEDIMENT FENCE (DOWNSTREAM FROM EXPECTED FLOWS)
5. ACCUMULATED SEDIMENT SHALL REMOVED WHEN IT REACHES 50% THE EXPOSED HEIGHT OF FENCE.
6. MAXIMUM DRAINAGE AREA 10,000 S.F. PER 100' OF FENCE.
7. MAXIMUM LENGTH UP-SLOPE FROM FENCE PER CHART

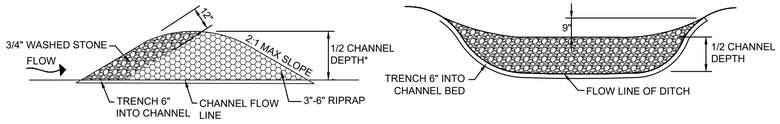
PRACTICE: SILT FENCE. SILT FENCE IS A SEDIMENT CONTROL MEASURE CONSISTING OF A LENGTH OF GEOTEXTILE FABRIC STRETCHED BETWEEN ANCHORING POSTS SPACED AT REGULAR INTERVALS. THE FENCE IS USED TO INTERCEPT FLOWS, SLOW SHEET FLOW RUNOFF AND ALLOW PONDING OF FLOW AND SEDIMENT TO SETTLE OUT. SILT FENCE IS EFFECTIVE IN TREATING LOW VELOCITY SHEET FLOW AND IS NOT INTENDED FOR USE IN AREAS OF CONCENTRATED OR CHANNELIZED FLOW. SILT FENCE MAY BE INSTALLED AS PERIMETER PROTECTION AND/OR FOR STOCKPILE CONTROL AND ALONG SLOPE BOUNDARIES THAT RECEIVE STORMWATER FLOW FROM DISTURBED AREAS.

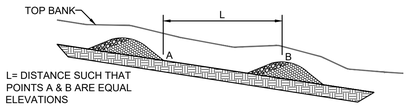
INSTALLATION REQUIREMENTS: THE GEOTEXTILE FABRIC MUST BE ENTRENCHED IN THE GROUND BETWEEN THE SUPPORT POSTS. THE STAKES USED TO ANCHOR THE FILTER FABRIC SHOULD BE WOOD OR METAL. ERECT SILT FENCE IN A CONTINUOUS FASHION FROM A SINGLE ROLL OF FABRIC TO ELIMINATE GAPS IN THE FENCE. IF A CONTINUOUS ROLL OF FABRIC IS NOT AVAILABLE, OVERLAP THE FABRIC FROM BOTH DIRECTIONS ONLY AT STAKES OR POSTS; OVERLAP AT LEAST 6 INCHES. EXCAVATE A TRENCH TO BURY THE BOTTOM OF THE FABRIC FENCE AT LEAST 8 INCHES BELOW THE GROUND SURFACE TO PREVENT GAPS FROM FORMING AT THE GROUND SURFACE. THE FENCE MUST BE LOCATED A MINIMUM OF 2 FEET FROM THE TOE OF SLOPE IN ORDER TO EFFECTIVELY TREAT RUNOFF FLOWING THROUGH THE FENCE.

MAINTENANCE: THE FABRIC MUST BE INSPECTED FOR RIPS OR TEARS AND EVIDENCE THAT IT IS NOT ANCHORED INTO THE GROUND. REPAIR OR PLACE OR REINSTALL IF ANY THERE ARE RIPS, TEARS, GAPS BETWEEN THE BOTTOM OF THE FABRIC AND THE GROUND SURFACE. FENCE SHALL BE REMOVED ONLY AFTER EXPOSED SOILS IN THE CONTRIBUTING DRAINAGE AREA ACHIEVE FINAL STABILIZATION. SEDIMENT ACCUMULATION MUST BE REMOVED ONCE IT HAS REACHED ½ OF THE EXPOSED HEIGHT OF THE FENCE.

SEDIMENT FENCE

NOT TO SCALE





SPILLWAY HEIGHT	CHANNEL SLOPE	CHECK DAM SPACING
1.5	1%	150 FT.
2.0	1%	200 FT.
1.5	2%	75 FT.
2.0	2%	100 FT.
1.5	3%	50 FT.
2.0	3%	67 FT.
1.5	4%	38 FT.
2.0	4%	50 FT.
1.5	5%	30 FT.
2.0	5%	40 FT.

*ASSUME CHANNEL DEPTH IS 2 TIMES SPILLWAY HEIGHT

NOTES:

1. THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER SHALL NOT EXCEED ONE HALF THE DEPTH OF THE CHANNEL.
2. MAXIMUM SPACING SHALL BE SO THE TOE OF THE UPSTREAM DAM IS THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
3. REMOVE SEDIMENT WHEN 25% THE HEIGHT OF THE WEIR.
4. REMOVE CHECK DAMS WHEN SITE STABILIZATION IS ACHIEVED.

NOTES:

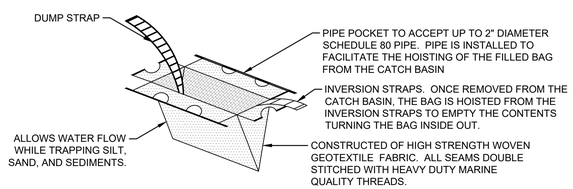
PRACTICE: STONE CHECK DAM: CHECK DAMS ARE A RUNOFF CONTROL PRACTICE CONSISTING OF A TEMPORARY STRUCTURE INSTALLED IN A TEMPORARY CONVEYANCE CHANNELS, PERPENDICULAR TO THE DIRECTION OF CONCENTRATED FLOW. CHECK DAMS SLOW THE VELOCITY OF STORM WATER FLOWS, ALLOW FLOWS TO INFILTRATE, PREVENT CHANNEL SCOUR AND ALLOW FOR THE SETTLING OF SUSPENDED SEDIMENT.

INSTALLATION REQUIREMENTS: CHECK DAMS SHALL BE SPACED BASED ON DETAIL PROVIDED ON EROSION AND SEDIMENT CONTROL DETAIL SHEET. DAMS USED IN A SERIES SHOULD BE SPACED SO THAT THE BASE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE NEXT DOWNSTREAM DAM.

MAINTENANCE REQUIREMENTS: CHECK DAMS REQUIRE ROUTINE MAINTENANCE INCLUDING REMOVAL OF ACCUMULATED SEDIMENT AND PERIODIC RESHAPING. THE CENTER OF A CHECK DAM SHOULD ALWAYS BE LOWER THAN ITS EDGES. ADDITIONAL STONE MAY HAVE TO BE ADDED TO MAINTAIN THE CORRECT HEIGHT. DURING INSPECTION, REMOVE LARGE DEBRIS, TRASH, AND LEAVES. SEDIMENT SHOULD BE REMOVED WHEN IT HAS REACHED A HEIGHT OF APPROXIMATELY ONE-HALF (1 /2) THE ORIGINAL HEIGHT OF THE DAM (MEASURED AT THE CENTER).

ROCK CHECK DAM DETAIL

NOT TO SCALE



GEOTEXTILE CATCH BASIN INLET PROTECTION

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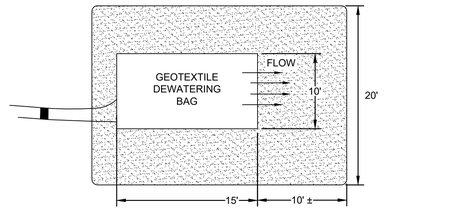
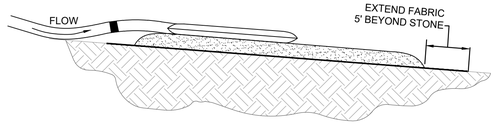


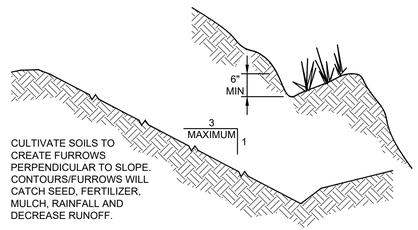


NOTES:

1. GEOTEXTILE BAG MATERIAL BASED ON PARTICLE SIZE IN PUMPED WATER, I.E., FOR COARSE PARTICLES A WOVEN MATERIAL;FOR SILTS/CLAYS A NON-WOVEN MATERIAL
2. DO NOT OVER PRESSURIZE BAG OR USE BEYOND CAPACITY.
3. LOCATE DISCHARGE SITE ON FLAT UPLAND AREAS AS FAR AWAY AS POSSIBLE FROM STREAMS, WETLANDS, OTHER RESOURCES AND POINTS OF CONCENTRATED FLOW.
4. DOWN GRADIENT FROM RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE FROM EROSION, E.G., FOREST FLOOR OR COARSE GRAVEL/STONE.
5. DISCHARGE LOCATION SHALL MEET ALL REGULATORY SETBACKS FROM WETLANDS AND OTHER WATER COURSES.

GEOTEXTILE DEWATERING BAG

NOT TO SCALE



PRACTICE: SOIL ROUGHENING. SOIL ROUGHENING IS AN EROSION CONTROL PRACTICE THAT INVOLVES CREATING GROOVES OR IMPRESSIONS IN EXPOSED SOIL SURFACES WITH TRACKED CONSTRUCTION EQUIPMENT (BULLDOZER, EXCAVATOR, ETC.). SOIL ROUGHENING MUST BE IMPLEMENTED PRIOR TO AND IN CONJUNCTION WITH TEMPORARY AND/OR PERMANENT SEEDING. SLOPES THAT ARE NOT FINE GRADED OR SMOOTHED, BUT LEFT IN A ROUGHENED CONDITION REDUCE EROSION BY DECREASING SLOPE LENGTH AND RUNOFF VELOCITY, INCREASING INFILTRATION, TRAPPING SEDIMENT, AND ALLOWING SEED TO TAKE HOLD AND GROW. IT IS CRITICALLY IMPORTANT THAT THE IMPRESSIONS BE MADE PARALLEL TO THE CONTOUR BY OPERATING TRACKED MACHINERY PERPENDICULAR (OR UP AND DOWN, NOT ALONG THE SLOPE) TO THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS IN THE SOIL. IMPROPER USE OF THIS TECHNIQUE CAN ACTUALLY ACCELERATE EROSION. SOIL ROUGHENING BY ITSELF IS A NOT AN EROSION CONTROL METHOD, AND MUST BE USED WITH TEMPORARY OR PERMANENT SEEDING.

SURFACE ROUGHENING

NOT TO SCALE

No.	Date	Description

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Project Title
SENA RESIDENCE

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