

MAINTENANCE NOTES

THE FOLLOWING IS A LIST OF THE RECOMMENDED GUIDELINES TO USE FOR MAINTAINING STORMWATER MANAGEMENT AND CONVEYANCE FACILITIES. THESE GUIDELINES ARE TO BE USED AS RECOMMENDATIONS, AND ARE NOT INTENDED TO BE A FULL AND COMPLETE SET OF REQUIREMENTS AND CIRCUMSTANCES THAT MAY AFFECT THE FUNCTIONING OF THE FACILITIES. CARE, DILIGENCE, AND COMMON SENSE SHOULD BE USED WHEN MAINTAINING THESE FACILITIES. ANY PROBLEMS OR DEFICIENCIES FOUND SHOULD BE ADDRESSED IMMEDIATELY, AND PROPER PROFESSIONAL ASSISTANCE MAY BE REQUIRED, AND SHOULD BE SOUGHT WHEN NEEDED TO ENSURE THAT THE FACILITIES REMAIN IN A CONDITION FOR OPTIMAL PERFORMANCE.

1. THE STORM WATER DETENTION BASIN AND THEIR OUTLET STRUCTURES AND PIPES SHALL BE VISUALLY INSPECTED ANNUALLY PRIOR TO HURRICANE SEASON AND AFTER EVERY MAJOR STORM EVENT.
 - a. AREAS OF THIN OR BARE OF VEGETATION SHALL BE RAKED, SEEDED AND MULCHED ACCORDING TO THE ORIGINAL SPECIFICATIONS.
 - b. REPAIRS TO THE PERMANENT EROSION CONTROL BLANKET SHALL BE PERFORMED IF NEEDED.
 - c. THE WEIR STRUCTURE AND OUTLET PIPES MUST BE KEPT FREE OF DEBRIS, AND SHALL BE CLEARED OF DEBRIS AND LITTER.
 - d. THE POND SHALL BE KEPT CLEAR OF FLOATING DEBRIS WHICH MAY CLOG THE OUTLET STRUCTURE.
 - e. LAWN AND VEGETATED AREAS SHALL BE KEPT MOWED AND PROPERLY GROOMED TO PREVENT OVERGROWTH FROM COMPROMISING THE REQUIRED VOLUMES IN THE BASIN. VEGETATION SHALL NOT BE MOWED TO LESS THAN 12" WITHIN THE BASIN BOTTOMS AND SIDE SLOPES.
 - f. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE POND EVERY 1-5 YEARS, AS NEEDED DUE TO CONDITIONS AND INSPECTIONS.
2. ALL STORM INLETS AND TRENCH DRAINS AND THEIR PIPES SHALL BE VISUALLY INSPECTED ANNUALLY PRIOR TO HURRICANE SEASON AND AFTER EVERY MAJOR STORM EVENT. ANY SEDIMENT OR DEBRIS THAT HAS COLLECTED IN THE STRUCTURES OR THE PIPES SHALL BE REMOVED.
3. ALL PERMANENT SWALES AND GHUTS SHALL BE VISUALLY INSPECTED IN JUNE.
 - a. ANY NECESSARY REPAIRS, REGRADING, SEEDING AND MULCHING SHALL BE COMPLETED BEFORE JULY 1, OF THAT YEAR.
 - b. AREAS OF THIN OR BARE OF VEGETATION SHALL BE RAKED, SEEDED AND MULCHED ACCORDING TO THE ORIGINAL SPECIFICATIONS.
4. MOWING/TRIMMING OF BASIN SLOPE AREAS SHOULD BE PERFORMED AS NEEDED, HOWEVER VEGETATION ON THE BASIN SLOPES AND IN THE BOTTOM OF THE BASIN SHALL NOT BE MOWED TO LESS THAN 12" IN HEIGHT.
5. THE FOLLOWING CHECKLIST MAY BE USED TO AID IN THE MAINTENANCE AND INSPECTION PROGRAM ON-SITE:
 - a. OBSTRUCTIONS OF THE INLET OR OUTLET DEVICES BY TRASH AND DEBRIS.
 - b. EXCESSIVE EROSION OR SEDIMENTATION.
 - c. CRACKING OR SETTLING.
 - d. ANIMAL BURROWING.
 - e. SLOWLY DRAINING BASIN OR INLETS.
 - f. ALGAE GROWTH, STAGNANT POOLS, OR NOXIOUS ODORS.
 - g. POOR OR DISTRESSED VEGETATION.
 - h. DISTRESSED AQUATIC VEGETATION.
 - i. DETERIORATED, CRACKED, OR DAMAGED TRENCH DRAINS, INLETS, PIPES AND CONDUITS.
 - j. WASHOUTS, BULGES, OR SUMPS.
 - k. SEEPAGE.
 - l. UNSTABLE SIDE SLOPES AND EMBANKMENTS.
 - m. DETERIORATION OF CHANNELS.
 - n. SIGNS OF VANDALISM.
 - o. PIPING ALONG OUTLET BARREL.
 - p. DETERIORATION/SCOURING AT ENERGY DISSIPATORS OR ROCK RIP-RAP.
 - q. OUTLET PROTECTION.
 - r. SEDIMENTATION CLOGGING RIP-RAP AREAS.
6. FOR ALL SEDIMENT REMOVAL, THE ACCUMULATED SEDIMENT SHALL BE EITHER REMOVED FROM THE SITE OR DISPOSED OF ON-SITE AT AN APPROVED DISPOSAL AREA. PRIOR TO ON-SITE DISPOSAL OF SEDIMENT, THE OWNER SHALL ACQUIRE THE APPROPRIATE EARTH DISTURBANCE PERMITS, DISTURBED AREAS FOR REMOVAL AND PLACEMENT OF SEDIMENT SHALL BE RAKED, SEEDED AND MULCHED ACCORDING TO THE ORIGINAL SPECIFICATIONS.
7. OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE REQUIRED, INCLUDING PERMANENT STORMWATER BASINS, GHUT CHANNEL, STORM SEWER AND STORM STRUCTURES.
8. OWNER SHALL ENSURE STANDING WATER IN THE BASINS REMAIN FREE OF MOSQUITO OR OTHER PEST INFESTATION BY REGULAR INSPECTION AND TREATMENT AS NECESSARY.

GENERAL NOTES

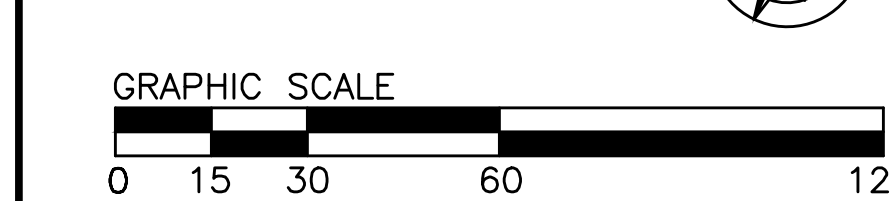
1. CONTRACTOR SHALL INSPECT AND VERIFY ALL FIELD DIMENSIONS AND SITE CONDITIONS SHOWN HEREIN BEFORE PROCEEDING WITH THE WORK. DISCREPANCIES BETWEEN FIELD CONDITIONS AND THESE PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO ANY COMMENCEMENT OF THE WORK. ONCE CONSTRUCTION HAS BEGUN CONTRACTOR SHALL NOT USE FIELD INFORMATION DISCREPANCIES AS THE BASIS FOR CHANGE ORDER CLAIMS.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

KEY

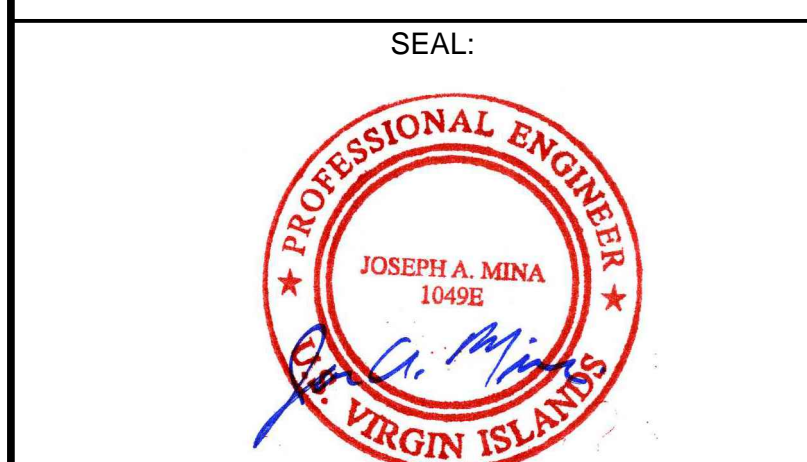
- ESTCT Existing Cistern For Roof Drain Collection
- OTIN PROVIDE OIL AND TRASH INTERCEPTOR VAULT
- OTS PROVIDE OUTLET STRUCTURE
- PTD PROVIDE TRENCH DRAIN
- RSB PROVIDE RIP RAP STONE BED
- SDTD PROVIDE TRENCH DRAIN SEDIMENT TRAP
- STCT PROVIDE CISTERN FOR ROOF DRAIN COLLECTION
- STEW PROVIDE CONCRETE ENDWALL
- STPD PROVIDE STORM PRE-TREATMENT DEVICE
- STPUP PROVIDE PEDESTRIAN UNIT PAVEMENT UNDER DRAIN
- STS PROVIDE STORM SEWER
- STUB PROVIDE STORM UNDERGROUND BASIN
- SWMA PROVIDE STORMWATER MANAGEMENT AREA
- VCBS PROVIDE PERMANENT TURF REINFORCEMENT MATTING
- VSID PROVIDE VERTICAL STONE INTERCEPTOR DRAIN

LEGEND

- Right of Way Line
- Property Line
- Storm Sewer Pipe
- Fence Line
- Contour
- Building Adjacent
- Building
- Roof Overhang
- FEMA 100Yr Floodplain
- Soil Boundary with Soil Types
- Spot Elevation
- Storm Sewer Inlet
- Storm Sewer Headwall
- Manhole
- Dry Stone Retaining Wall
- Signs
- Trees
- Existing Cistern
- Existing Curb
- Existing Concrete Paving
- Existing Fence
- Existing Generator on Concrete Pad
- Existing Open Space Area
- Existing Ramp
- Existing Septic
- Existing Stairs
- Existing Stairs and Landing
- Existing Transformer on Concrete Pad
- BUILDING
- PAVEMENT TO BE REMOVED
- FUTURE BUILDING
- NEW PEDESTRIAN UNIT PAVERS
- NEW LANDSCAPE AREA
- NEW CONCRETE PAVING
- NEW CONCRETE SIDEWALK
- NEW PERMEABLE PAVERS
- NEW PERMANENT TURF REINFORCEMENT MATTING
- NEW ROCK STABILIZATION BLANKET
- NEW CONTOUR
- NEW SPOT GRADE
- PARKING SPACES
- NEW MANHOLE
- OH
- SD
- NEW OUTLET STRUCTURE
- NEW SEDIMENT TRAP
- NEW STORM LINE
- NEW SANITARY LINE
- NEW SANITARY FORCE MAIN
- NEW WATER LINE
- NEW RECYCLED WATER LINE
- NEW UNDERGROUND ELECTRIC LINE
- NEW UNDERGROUND STORM WATER MANAGEMENT AREA
- NEW VERTICAL STONE INTERCEPTOR DRAIN
- NEW TRENCH DRAIN
- NEW END WALL



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Date	06-23-14	Revision	1	FINAL CZM SUBMISSION	JAM
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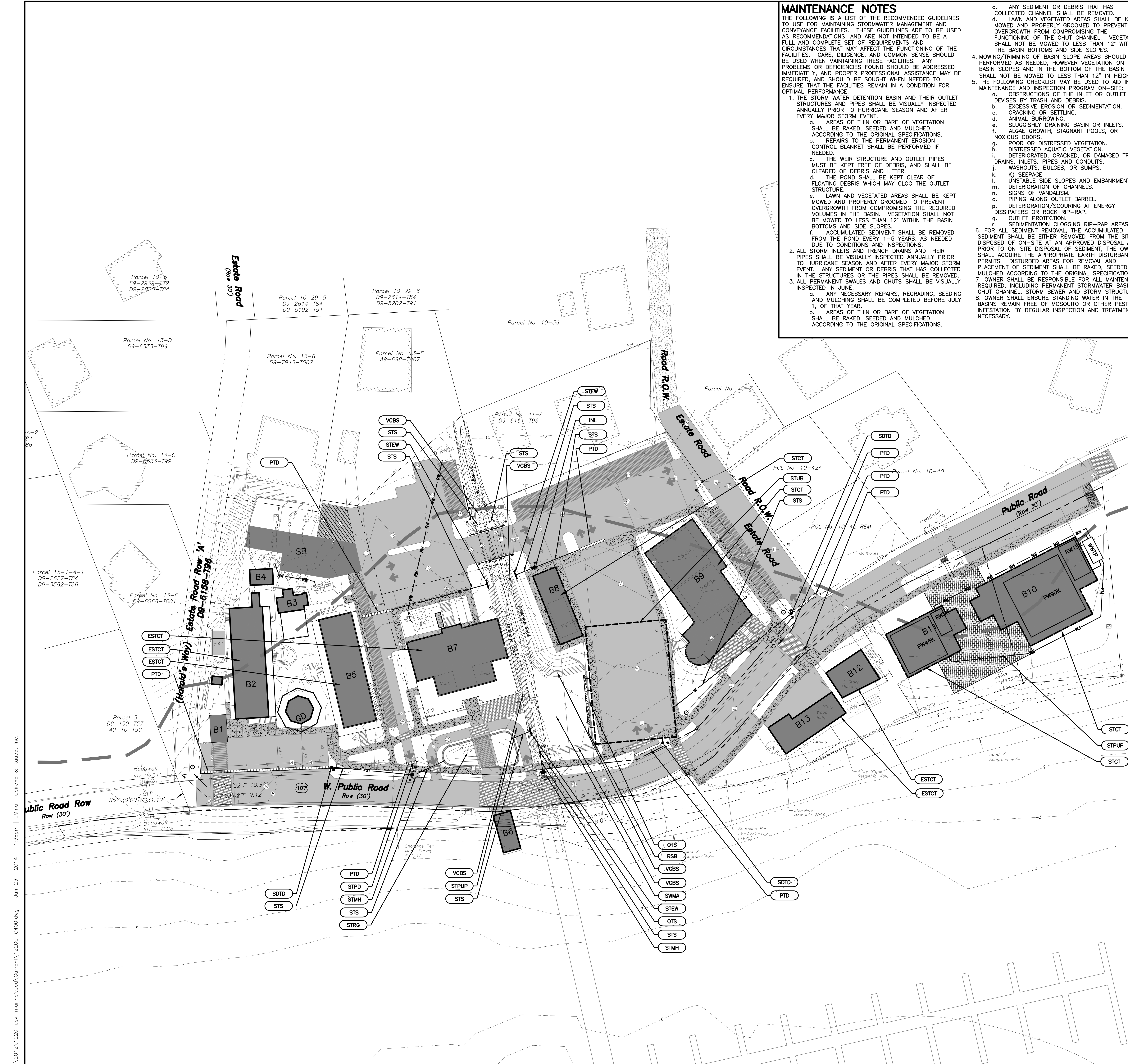
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STORM WATER MANAGEMENT PLAN PROJECT AREA

Project No:	1220	Drawing No:	C400
Drawn By:	RMB	Scale:	1" = 30'
Approved By:	JAM	Date:	28MAR14
Sheet:	11 of 15		



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SEQUENCE OF CONSTRUCTION

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE.
2. ALL EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. ONLY LIMITED DISTURBANCE IS PERMITTED TO PROVIDE ACCESS TO THE EROSION AND SEDIMENT CONTROL AREAS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
3. OUTLINE EACH STAGE'S LIMIT OF DISTURBANCE ORANGE BARRIER FENCE TO PROTECT FROM ENCROACHMENT AND TO DEFINE WORK AREAS. NO DISTURBANCE OUTSIDE OF THESE AREAS IS PERMITTED UNTIL AREA WITHIN THE ACTIVE STAGE IS STABILIZED.
4. STAGE 1 - ROADWAY WORK ALONG ROUTE 107 AND ADJACENT PARKING AND WALKWAY IMPROVEMENTS.
 - a. INSTALL CONSTRUCTION ACCESS AND MATERIALS STORAGE AREA ON LOTS 10-17 & 18 AS SHOWN ON PLANS. INSTALL ROCK CONSTRUCTION ENTRANCE. INSTALL PERIMETER CONSTRUCTION FENCING AROUND TEMPORARY CONTRACTOR PARKING AND LAYDOWN AREA. INSTALL TEMPORARY GRAVEL PARKING BED. INSTALL TEMPORARY TRAILERS FOR CONSTRUCTION OFFICES.
 - b. INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN. FILTER FABRIC FENCE AS INDICATED ON PLANS.
 - c. BEGIN MARINA/DOCK CONSTRUCTION. REFER TO PLANS BY OTHERS FOR SPECIFIC WORK WITHIN SUBMERGED LANDS AREAS.
 - d. CONSTRUCT ABOVE GROUND AREAS OF STORMWATER MANAGEMENT AREA.
5. STAGE 2 - PARCELS REMAINDER 13, 13A AND 13 B IMPROVEMENTS.
 - a. INSTALL ROCK CONSTRUCTION ENTRANCE.
 - b. INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN, AND FILTER FABRIC FENCE AS INDICATED ON PLANS.
 - c. CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
 - d. STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 - e. ROUGH GRADE ROADWAY TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT. PREPARE SOIL FOR INSTALLATION OF NEW ROADWAY PER USVI PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
 - f. INSTALL UNDERGROUND UTILITIES. (ELECTRIC, SANITARY, WATER, AND OTHER CONNECTIONS TO THE DOCK STRUCTURE)
 - g. INSTALL GRAVEL BASE COURSE.
 - h. INSTALL CONCRETE SURFACE COURSE.
 - i. ALLOW APPROPRIATE CURING TIME PRIOR TO DIRECTING TRAFFIC ONTO NEW ROADWAY SURFACES.
 - vi. WHEN AREAS OF INSTALLED ROADWAY ARE SUITABLE FOR USE, BEGIN WORK ON OPPOSITE SIDE OF ROADWAY IN SAME MANNER AS DESCRIBED ABOVE.
 - h. FINE GRADE AND COMPLETE LANDSCAPING IN AREAS THAT WILL NOT BE DISTURBED IN THE FUTURE.
 - i. AFTER STAGE 1 AREA STABILIZATION HAS BEEN ACHIEVED, STAGE SPECIFIC TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
6. STAGE 3 - PARCEL 41 REMAINDER AND ESTATE ROAD IMPROVEMENTS.
 - a. INSTALL ROCK CONSTRUCTION ENTRANCE.
 - b. INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN, AND FILTER FABRIC FENCE AS INDICATED ON PLANS.
 - c. CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
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 - e. ROUGH GRADE DRIVEWAY, BUILDING, AND LOT AREAS TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
 - f. CONSTRUCT STORMWATER MANAGEMENT IMPROVEMENTS.
 - g. WORK SHALL BE CONSTRUCTED AT A TIME OF NO FLOW.
 - h. INSTALL TRENCH DRAINS, STORM SEWER, HEADWALLS, PERMANENT ROCK ENERGY DISSIPATORS, INLET PROTECTION AND WATER FEATURE/BASIN IN FRONT OF BUILDING 7.
 - i. INSTALL SANITARY SEWER TREATMENT AND PIPING, PERMANENT ROCK ENERGY DISSIPATORS, AND REMAINING UNDERGROUND UTILITIES.
 - j. FINE GRADE BUILDING, DRIVEWAY AND PARKING AREAS. SPREAD TOPSOIL. CONSTRUCT SUBBASE FOR PARKING AREAS AND DRIVEWAYS.
 - k. INSTALL CONCRETE SURFACE COURSE AND SIDEWALKS. ALLOW APPROPRIATE CURING TIME PRIOR TO DIRECTING TRAFFIC ONTO NEW ROADWAY SURFACES.
 - l. AFTER STAGE 2 AREA STABILIZATION HAS BEEN ACHIEVED, STAGE SPECIFIC TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
7. STAGE 4 - PARCEL 10-17, 18, & 19.
 - a. USE ROCK CONSTRUCTION ENTRANCE AND OTHER CONTROLS ALREADY IN PLACE ON LOT 10-17, 18 & 19.
 - b. CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
 - c. STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE OR COMPOST SILT SOCK AND UNDERGROUND BASIN AREA.
 - d. MULCHING TO THE STOCKPILES. STOCKPILE SLOPES MUST NOT EXCEED 35 FEET. STOCKPILE HEIGHTS MUST BE 2:1 OR FLATTER.
 - e. ROUGH GRADE DRIVEWAY, BUILDING, AND LOT AREAS TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
 - f. CONSTRUCT STORMWATER MANAGEMENT IMPROVEMENTS AND UTILITIES.
 - g. FINISH GRADE REMAINING LOT AREAS, SPREAD TOPSOIL, CONSTRUCT LANDSCAPING, AND PERMANENTLY SEED AND STABILIZE.
 - h. AFTER STAGE 4 AREA STABILIZATION HAS BEEN ACHIEVED, ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
 - i. REMOVE SILT FENCE/COMPOST SILT SOCK.
 - ii. REMOVE PERIMETER BARRIER.
 - iii. REMOVE INLET FILTERS.
 - iv. REMOVE ALL TEMPORARY LAYDOWN AREA MATERIALS AND FENCING.
 - v. REMOVE ROCK CONSTRUCTION ENTRANCE.
 - vi. REMOVE ANY REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS AND SEED AND STABILIZE ANY REMAINING DISTURBED AREAS.
8. STAGE 5 - FUTURE BUILDING AREAS.
 - a. FUTURE BUILDING CONSTRUCTION SHALL PROCEED ON A BUILDING TO BUILDING BASIS, AS REQUIRED.
 - i. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE, COMPOST SILT SOCK, AND OTHER FACILITIES AS DIRECTED ON THE BUILDING PERMIT PLANS.
 - ii. CONTRACTOR/OWNER IS RESPONSIBLE FOR ENSURING THAT NO EROSION OR CONTAMINATED MATERIALS ARE DISCHARGED DURING THIS STAGE OF CONSTRUCTION.
 - iii. CONSTRUCT BUILDINGS AND ASSOCIATED IMPROVEMENTS AND UTILITIES.
 - iv. FINISH GRADE REMAINING LOT AREAS, CONSTRUCT LANDSCAPING, AND PERMANENTLY SEED AND STABILIZE ON A BUILDING BY BUILDING BASIS AS THE BUILDINGS ARE CONSTRUCTED.
 - v. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY. GRADE AND PERMANENTLY SEED REMAINING DISTURBED AREAS.

- 107 FRONTAGE.
 - i. REMOVE PERIMETER BARRIER FENCE SPECIFIC TO STAGE 2 WORK.
 - ii. NO CONTROLS WITHIN THE STORMWATER MANAGEMENT AREA SHALL BE REMOVED AT THIS STAGE.
6. STAGE 3 - PARCEL 41 REMAINDER AND ESTATE ROAD IMPROVEMENTS.
 - a. INSTALL ROCK CONSTRUCTION ENTRANCE.
 - b. INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN, AND FILTER FABRIC FENCE AS INDICATED ON PLANS.
 - c. CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
 - d. STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
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 - f. CONSTRUCT STORMWATER MANAGEMENT IMPROVEMENTS.
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 - j. FINE GRADE BUILDING, DRIVEWAY AND PARKING AREAS. SPREAD TOPSOIL. CONSTRUCT SUBBASE FOR PARKING AREAS AND DRIVEWAYS.
 - k. INSTALL CONCRETE SURFACE COURSE AND SIDEWALKS. ALLOW APPROPRIATE CURING TIME PRIOR TO DIRECTING TRAFFIC ONTO NEW ROADWAY SURFACES.
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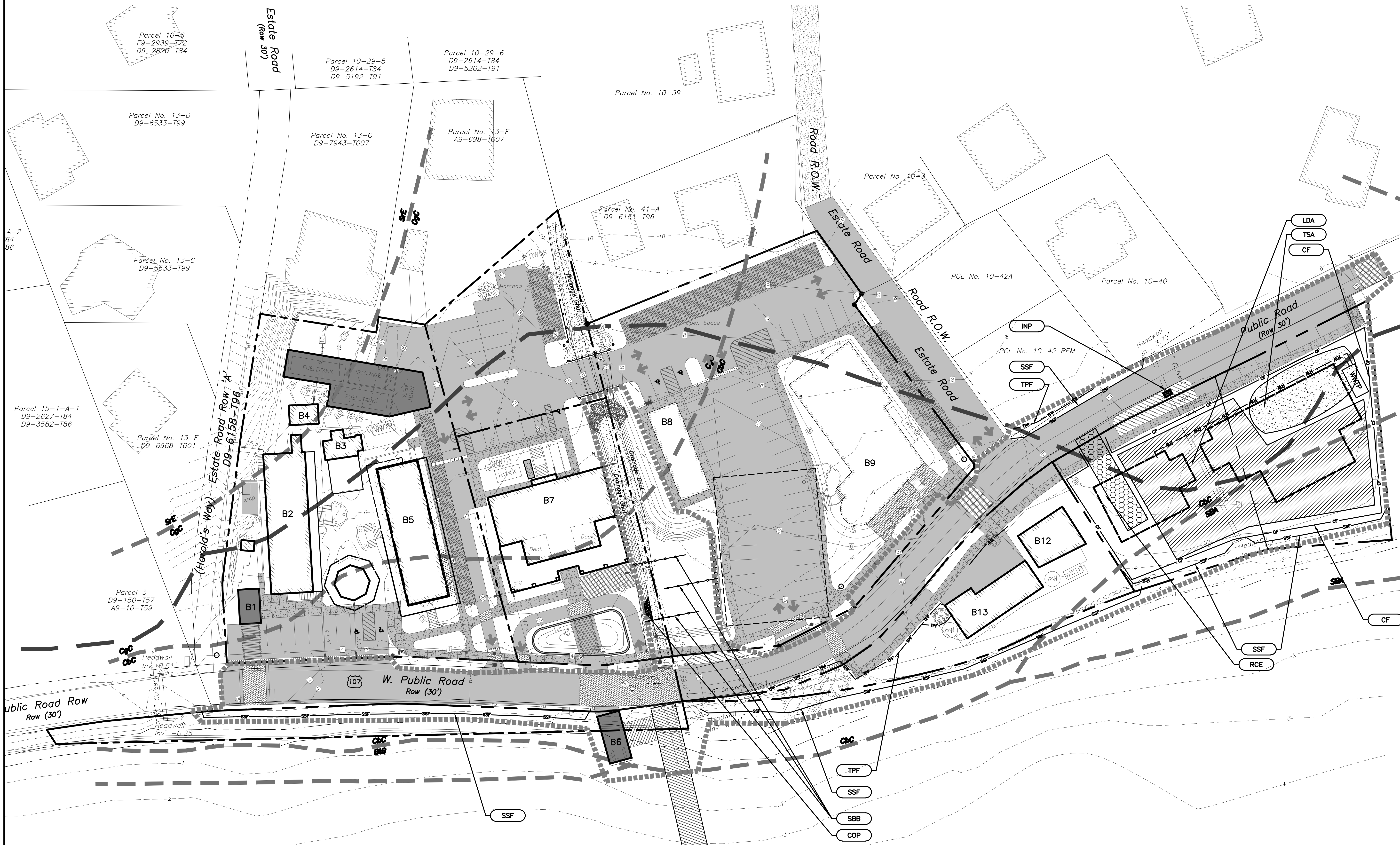
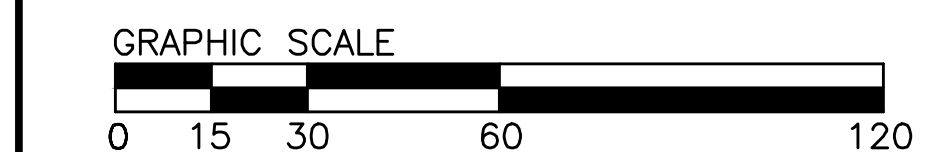
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2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

KEY

- CF PROVIDE CONSTRUCTION SECURITY FENCE
- COP PROVIDE RIP-RAP CULVERT OUTLET PROTECTION
- INP PROVIDE INLET PROTECTION
- LDA PROVIDE MATERIALS LAYDOWN AND TEMPORARY CONTRACTOR PARKING AREA
- RCE PROVIDE ROCK CONSTRUCTION ENTRANCE
- SBB PROVIDE SEDIMENT BASIN BAFFLE
- SSF PROVIDE SUPER SILT FENCE
- TPF PROVIDE TREE PROTECTION FENCE
- TSA PROVIDE TOPSOIL STOCKPILE AREA

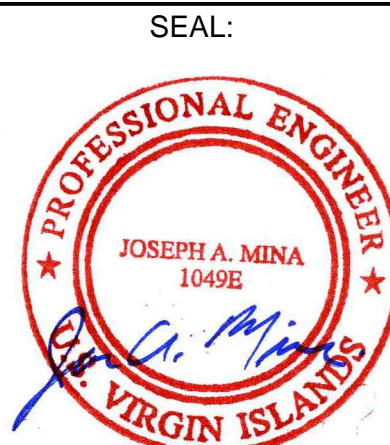
LEGEND

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- Fence Line
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- Building
- Roof Overhang
- FEMA 100yr Floodplain
- Soil Boundary with Soil Types
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- NEW PERMANENT TURF REINFORCEMENT MATTING
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- NEW CONTOUR
- NEW SPOT GRADE
- PARKING SPACES
- NEW MANHOLE
- MTS NEW OUTLET STRUCTURE
- SD NEW SEDIMENT TRAP
- ST NEW STORM LINE
- S NEW SANITARY LINE
- N NEW SANITARY FORCE MAIN
- W NEW WATER LINE
- RW NEW RECYCLED WATER LINE
- E NEW UNDERGROUND ELECTRIC LINE
- NEW UNDERGROUND STORM WATER MANAGEMENT AREA
- NEW VERTICAL STONE INTERCEPTOR DRAIN
- NEW TRENCH DRAIN
- NEW END WALL



YACHT CLUB AT SUMMER'S END

CORAL BAY, ST. JOHN, USVI
 The Summer's End Group, LLC
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EROSION & SEDIMENT CONTROL PLAN OVERALL AND STAGE 1

Project No:	1220	Drawing No:	C500
Drawn By:	RMB	Approved By:	JAM
Scale:	1" = 30'	Date:	28MAR14
Date:	28MAR14	Sheet:	12 of 15



STAGE 2 - PARCELS REMAINDER 13, 13A AND 13 B IMPROVEMENTS.

- INSTALL ROCK CONSTRUCTION ENTRANCE.
- INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN, AND FILTER FABRIC FENCE AS INDICATED ON PLANS.
- CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
- STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- ROUGH GRADE DRIVEWAY, BUILDING, AND LOT AREAS TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
- INSTALL CULVERTS ON GHUT.
- INSTALL TRENCH DRAINS, STORM SEWER, HEADWALLS, PERMANENT ROCK ENERGY DISSIPATORS, INLET PROTECTION AND WATER FEATURE/BASIN IN FRONT OF BUILDING.
- INSTALL SANITARY SEWER TREATMENT AND PIPING, PERMANENT ROCK ENERGY DISSIPATORS, AND REMAINING UNDERGROUND UTILITIES.
- FINE GRADE BUILDING, DRIVEWAY AND PARKING AREAS. SPREAD TOPSOIL. CONSTRUCT SUBBASE FOR PARKING AREAS AND DRIVEWAYS.
- INSTALL CONCRETE SURFACE COURSE AND SIDEWALKS. ALLOW APPROPRIATE CURING TIME PRIOR TO DIRECTING TRAFFIC ONTO NEW ROADWAY SURFACES.
- AFTER STAGE 2 AREA STABILIZATION HAS BEEN ACHIEVED, STAGE SPECIFIC TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
- REMOVE SILT FENCE ALONG GHUT AND ALONG ROUTE 107 FRONTAGE.
- REMOVE PERIMETER BARRIER FENCE SPECIFIC TO STAGE 2 WORK.
- NO CONTROLS WITHIN THE STORMWATER MANAGEMENT AREA SHALL BE REMOVED AT THIS STAGE.

STAGE 3 - PARCEL 41 REMAINDER AND ESTATE ROAD IMPROVEMENTS.

- INSTALL ROCK CONSTRUCTION ENTRANCE.
- INSTALL TREE PROTECTION FENCE AROUND TREES AND VEGETATED AREAS TO REMAIN, AND FILTER FABRIC FENCE AS INDICATED ON PLANS.
- CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
- STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- ROUGH GRADE DRIVEWAY, BUILDING, AND LOT AREAS TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
- CONSTRUCT STORMWATER MANAGEMENT UNDERGROUND BASIN AREA.
- WORK SHALL BE CONSTRUCTED AT A TIME OF NO FLOW.
- ROUGH GRADE TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
- INSTALL BLOCK WALL OUTLET STRUCTURE AND PIPING TO CONNECT TO ABOVE GROUND BASIN AREA. INSTALL RIP-RAP FILTER.
- INSTALL R-TANK UNDERGROUND BASIN PER DETAILS AND MANUFACTURERS INSTRUCTIONS.
- INSTALL CONNECTIONS TO ATTACHED STORM SEWER SYSTEMS PRIOR TO WRAPPING IN LINER.
- ROUGH GRADE PARKING AREA ABOVE BASIN TO PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
- INSTALL TRENCH DRAINS, INLETS, STORM SEWERS, HEADWALLS, PERMANENT ROCK ENERGY DISSIPATORS, AND INLET PROTECTION.
- INSTALL SANITARY SEWER TREATMENT AND PIPING, AND REMAINING UNDERGROUND UTILITIES.
- FINE GRADE BUILDING, DRIVEWAY AND PARKING AREAS. CONSTRUCT SUBBASE FOR PARKING AREAS AND DRIVEWAYS.
- INSTALL CONCRETE SURFACE COURSE AND SIDEWALKS. ALLOW APPROPRIATE CURING TIME PRIOR TO DIRECTING TRAFFIC ONTO NEW ROADWAY SURFACES.
- AFTER STAGE 3 AREA STABILIZATION HAS BEEN ACHIEVED, STAGE SPECIFIC TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
- REMOVE PERIMETER BARRIER FENCE SPECIFIC TO STAGE 3 WORK.
- CONVERT BASIN TO PERMANENT CONDITIONS.
 - REMOVE TEMPORARY BAFFLE STRUCTURE.
 - REMOVE ANY ACCUMULATED SEDIMENT IN THE BOTTOM AND DISPOSE OF APPROPRIATELY.
 - FINE GRADE TO PROPOSED ELEVATION AND GRADIENT.
 - SPREAD TOPSOIL AND INSTALL EROSION CONTROL BLANKET IN THE BOTTOM OF THE ABOVE GROUND BASIN.
 - REMOVE TEMPORARY PLYWOOD OVER BASIN ORIFICE OPENINGS AND REMOVE FILTER BAG INLET PROTECTION FROM OUTLET STRUCTURE.

GENERAL NOTES

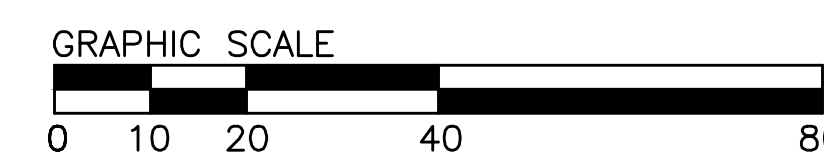
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KEY

- PROVIDE RIP-RAP CULVERT OUTLET PROTECTION
- PROVIDE INLET PROTECTION
- PROVIDE SUPER SILT FENCE
- PROVIDE ROCK CONSTRUCTION ENTRANCE
- PROVIDE TREE PROTECTION FENCE

LEGEND

- Right of Way Line
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YACHT CLUB AT SUMMER'S END

CORAL BAY, ST. JOHN, USVI
 Prepared for:
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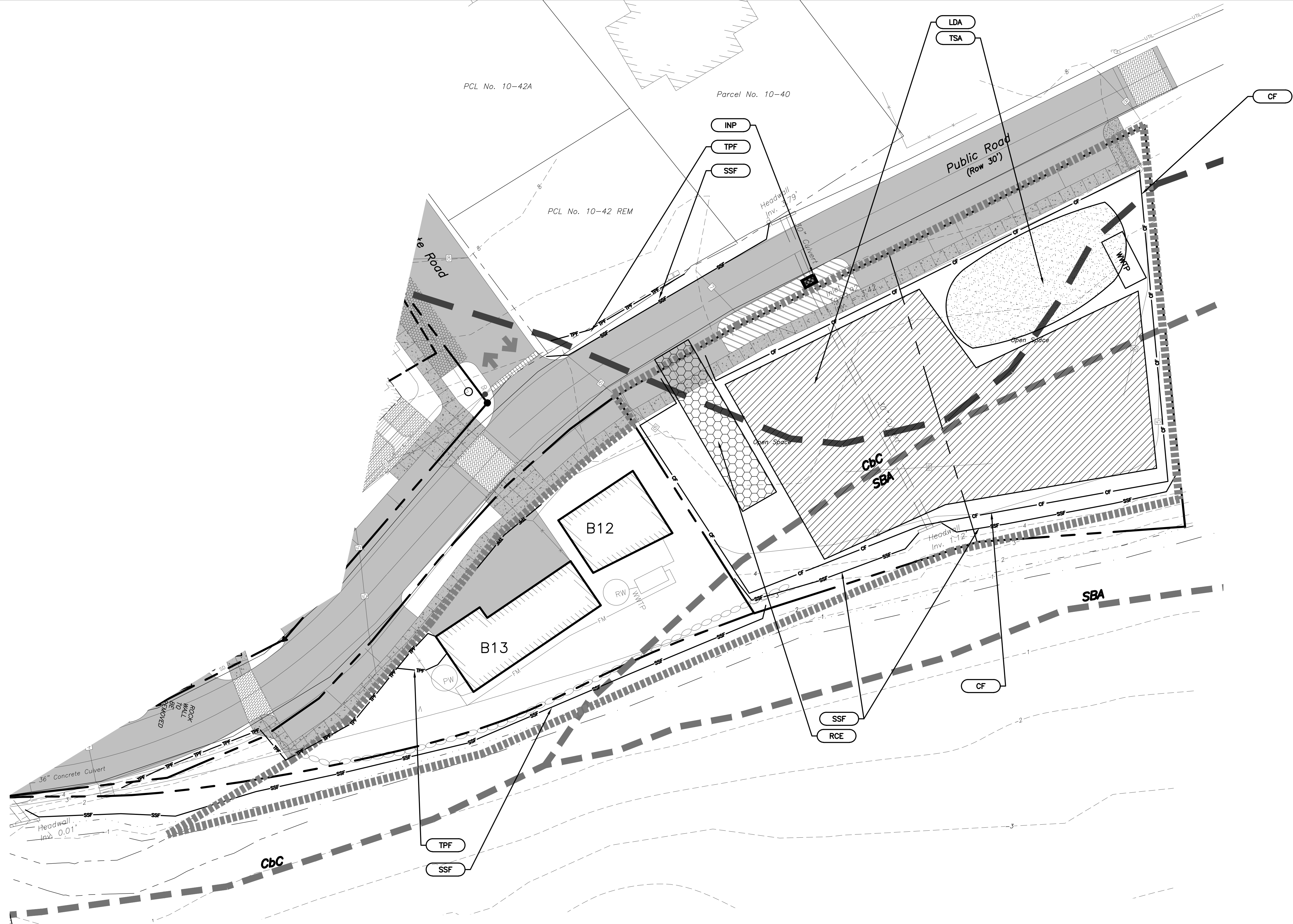
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Drawing Title:

EROSION & SEDIMENT CONTROL PLAN STAGE 2 AND 3

Project No:	1220	Drawing No:	
Drawn By:	RMB	Scale:	1" = 20'
Approved By:	JAM	Date:	28MAR14
		Sheet	13 of 15

C501



7. STAGE 4 – PARCEL 10-17, 18, & 19.

- USE ROCK CONSTRUCTION ENTRANCE AND OTHER CONTROLS ALREADY IN PLACE ON LOT 10-17, 18 & 19.
- CLEAR AND GRUB AREAS WITHIN STAGE. REMOVE EXISTING STRUCTURES, CONCRETE, GRAVEL AREAS.
- STRIP TOPSOIL FROM PROPOSED AREAS. REMOVE OR STOCKPILE TOPSOIL WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE OR COMPOST SILT SOCK AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- ROUGH GRADE DRIVEWAY, BUILDING, AND LOT AREAS TO THE PROPOSED SUB-GRADE ELEVATION AND GRADIENT.
- CONSTRUCT IMPROVEMENTS TO EXISTING BUILDINGS ON LOT 10-19.
 - INSTALL NEW WATER AND SANITARY SEWER TREATMENT FACILITIES.
 - INSTALL PARKING AREAS AND OTHER ASSOCIATED IMPROVEMENTS AND UTILITIES.
 - FINISH GRADE REMAINING LOT AREAS, SPREAD TOPSOIL, CONSTRUCT LANDSCAPING, AND PERMANENTLY SEED AND STABILIZE.
 - AFTER STAGE 4 AREA STABILIZATION HAS BEEN ACHIEVED, ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
- REMOVE SILT FENCE/COMPOST SILT SOCK.
 - REMOVE PERIMETER BARRIER.
 - REMOVE INLET FILTERS.
 - REMOVE ALL TEMPORARY LAYDOWN AREA MATERIALS AND FENCING.
 - REMOVE ROCK CONSTRUCTION ENTRANCE.
 - REMOVE ANY REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS AND SEED AND STABILIZE ANY REMAINING DISTURBED AREAS.

8. STAGE 5 – FUTURE BUILDING AREAS.

- FUTURE BUILDING CONSTRUCTION SHALL PROCEED ON A BUILDING TO BUILDING BASIS, AS REQUIRED.
- INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES INCLUDING SILT FENCE, COMPOST SILT SOCK, AND OTHER FACILITIES AS DIRECTED ON THE BUILDING PERMIT PLANS.
- CONTRACTOR/OWNER IS RESPONSIBLE FOR ENSURING THAT NO EROSION OR CONTAMINATED MATERIALS ARE DISCHARGED DURING THIS STAGE OF CONSTRUCTION.
- CONSTRUCT BUILDINGS AND ASSOCIATED IMPROVEMENTS AND UTILITIES.
- FINISH GRADE REMAINING LOT AREAS, CONSTRUCT LANDSCAPING, AND PERMANENTLY SEED AND STABILIZE ON A BUILDING BY BUILDING BASIS AS THE BUILDINGS ARE CONSTRUCTED.
- THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY. GRADE AND PERMANENTLY SEED REMAINING DISTURBED AREAS.

GENERAL NOTES

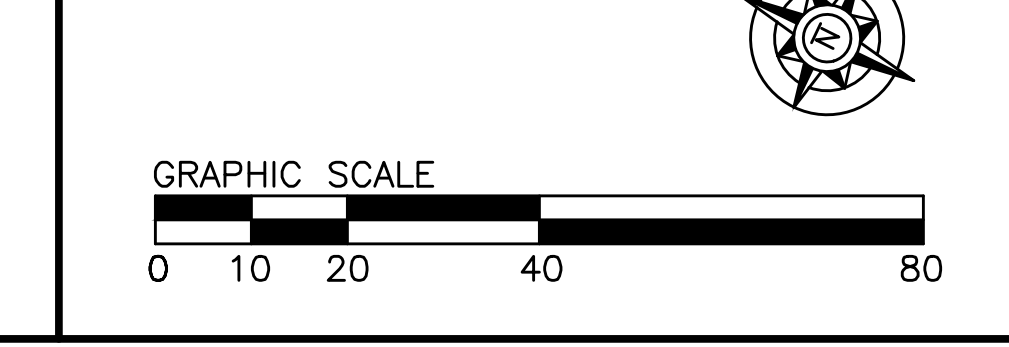
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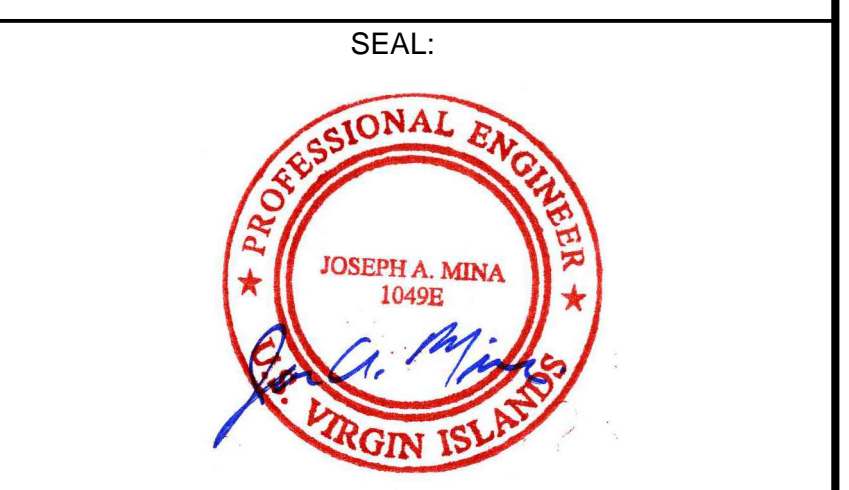
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EROSION & SEDIMENT CONTROL PLAN STAGE 4

Project No.:	1220	Drawing No.:	C502
Drawn By:	RMB	Scale:	1" = 20'
Approved By:	JAM	Date:	28MAR14
Sheet:	14 of 15		

EROSION & SEDIMENT POLLUTION CONTROL BMP'S

NO MORE THAN 4 ACRES TOTAL WILL BE DISTURBED DURING SITE DEVELOPMENT. THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO MINIMIZE EROSION AND SEDIMENTATION POLLUTION CREATED BY SITE CONSTRUCTION:

LIMITED AREA OF DISTURBANCE
NO SITE CLEARING OR GRADING IS PROPOSED WHICH IS NOT ESSENTIAL TO THE IMMEDIATE PHASE OF CONSTRUCTION OF THE PROJECT WILL OCCUR. IN GENERAL, WORK WILL PROCEED ON A PARCEL BY PARCEL SERIES IN ACCORDANCE WITH THE DETAILED SEQUENCING OF CONSTRUCTION PROVIDED ON THE PLANS. AREAS OF VEGETATION TO REMAIN UNDISTURBED WILL BE PROTECTED BY TREE PROTECTION FENCING.

STABILIZED CONSTRUCTION ENTRANCE
TEMPORARY CONSTRUCTION ENTRANCES WILL BE PROVIDED FOR EACH STAGE OF WORK AT APPROPRIATE LOCATIONS TO ALLOW ACCESS FOR CONSTRUCTION VEHICLES TO ENTER THE SITE. THE ENTRANCES WILL BE CLEANING MUD AND DIRT FROM VEHICLE TIRES BEFORE EXITING THE SITE.

SILT FENCE & COMPOST SILT SOCK
SILT FENCE AND COMPOST SILT SOCK WILL BE PROVIDED TO FILTER SEDIMENT FROM SMALL OVERLAND (SHEET) FLOW AREAS AND ALONG THE TOE OF SLOPE OF SOIL STOCKPILES. ROCK FILTER SOCKS WILL BE USED IN THOSE AREAS WHERE THE SILT FENCE MAY BECOME INEFFECTIVE.

TEMPORARY TOPSOIL STOCKPILES
TEMPORARY TOPSOIL STOCKPILES WILL BE PROVIDED FOR TO PROTECT AVAILABLE TOPSOIL AND REDISTRIBUTE IT ON SITE WHERE POSSIBLE. STOCKPILES SHALL BE PROTECTED WITH TEMPORARY SEEDING AND BE PROVIDED WITH SILT FENCE OR SILT SOCKS ALONG THE DOWNSTREAM PERIMETER. STOCKPILES SHALL BE NO GREATER THAN 35' HIGH WITH SIDE SLOPES OF 2:1 MAX.

SEDIMENTATION BASIN
THE SEDIMENT BASIN IS A TEMPORARY STRUCTURE TO BE IN PLACE DURING THE PERIOD OF EARTH DISTURBANCE. FOLLOWING THE STABILIZATION OF THE SITE, THE SEDIMENT BASIN WILL BE ALTERED TO FUNCTION AS PERMANENT STORMWATER DETENTION BASIN STRUCTURES. A TEMPORARY OUTLET WILL BE INSTALLED TO PROVIDE SEDIMENT STORAGE AND DEWATERING TIME.

PIPE OUTLET PROTECTION
PIPE-RAP APRON PROTECTION WILL BE PROVIDED AT THE OUTFALL OF ALL TEMPORARY AND PERMANENT OUTLET PIPES.

TEMPORARY SEEDING AND MULCHING
DISTURBED AREAS SHALL RECEIVE A TEMPORARY SEED MIXTURE AND MULCH AS SHOWN ON THE PLANS. IN ADDITION, SOIL STOCKPILE AREAS AND SEDIMENT BASINS/TRAPS ARE TO BE SEEDING AND MULCHED WITH A TEMPORARY SEED MIXTURE TO PROMOTE RAPID VEGETATED STABILIZATION.

PERMANENT SEEDING AND MULCHING
IMMEDIATELY AFTER FINAL GRADING IS COMPLETED, ALL DISTURBED AREAS WILL BE PERMANENTLY STABILIZED WITH A PERMANENT SEED MIXTURE AND MULCH.

EROSION & SEDIMENT CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE STANDARDS AND SPECIFICATIONS OF THE DEPARTMENT OF PLANNING AND NATURAL RESOURCES. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.
- NO WORK SHALL COMMENCE UNTIL PERMITS FOR SOIL DISTURBANCE HAVE BEEN OBTAINED. THE TPDES PERMITTEE/CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PLANNING AND NATURAL RESOURCES OF THE DATE OF THE PRE-CONSTRUCTION MEETING.
- PRIOR TO PERMANENT SEEDING SOILS TESTING SHALL BE PERFORMED TO DETERMINE THE APPROPRIATE FERTILIZER AND OTHER AMENDMENT APPLICATIONS. FERTILIZER AND OTHER AMENDMENTS SHALL BE APPLIED PER THE RECOMMENDATIONS OF A LICENSED LANDSCAPE PROFESSIONAL. PERMANENT VEGETATION SHOULD BE ESTABLISHED AT THE EARLIEST POSSIBLE DATE. WATERING, MOWING AND FERTILIZING PROGRAMS SHALL BE CONTINUED UNTIL VEGETATIVE COVER IS ADEQUATELY ESTABLISHED AND AS REQUIRED ON A PERMANENT BASIS TO MAINTAIN THE COVER.
- STRAW MULCH OR HAY MULCH AT THE RATE OF 3.0 TONS/ACRES SHOULD BE APPLIED IN CONJUNCTION WITH ALL TEMPORARY AND PERMANENT SEEDING ACTIVITIES. MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. HYDROSEEDING MAY BE USED IN LIEU OF MULCHING. ADEQUATE PROTECTION SHALL BE PROVIDED (TEMPORARY TREE PROTECTION OR CONSTRUCTION SECURITY FENCE) SHALL BE PROVIDED TO KEEP LIVESTOCK FROM DISTURBING NEWLY PLANTED AND MULCHED AREAS.
- IF SOIL IS APPLIED, THE FOLLOWING REQUIREMENTS SHALL APPLY:
 - THE SUBSOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOIL.
 - PLANT SOD OR PLUGS ON 12" CENTERS. USE SOD STRIPS ON ERODIBLE SLOPES AND OTHER CRITICAL AREAS.
 - LAY SOD ALONG THE CONTOUR, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP.
 - PLACE SOD STRIPS WITH SNUG, EVEN JOINTS AND STAGGER THE JOINTS FROM STRIP TO STRIP TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER.
 - ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO ENSURE THAT THE ROOTS ARE IN SOLID CONTACT WITH THE SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHT TO PREVENT VOIDS THAT WOULD CAUSE AIR DRYING OF THE ROOTS.
 - ON STEEP SLOPES, SECURE SOD TO SURFACE SOIL WITH WOODEN PEGS OR WIRE STAPLES.
 - IMMEDIATELY FOLLOWING PLANTING, WATER SOD UNTIL MOISTURE PENETRATES THE SOIL LAYER. AFTER THE FIRST 2 WEEKS, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
- ANY DISTURBED AREA ON WHICH VEGETATION HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 6 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- DIVERSIONS, CHANNELS, SEDIMENT BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- EROSION AND SEDIMENTATION POLLUTION CONTROL MEASURES MUST BE STRUCTURALLY SOUND, AND PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
- TEMPORARY EROSION AND SEDIMENTATION POLLUTION CONTROL MEASURES, IN ADDITION TO THOSE SHOWN ON THIS PLAN, SHALL BE PROVIDED BY THE PERMITTEE/CONTRACTOR IF THERE IS EVIDENCE OF SILT, SEDIMENT AND/OR MUD LEAVING THE SITE DURING CONSTRUCTION.
- THE PERMITTEE/CONTRACTOR MUST DEVELOP, AND HAVE APPROVED BY THE DPNR, A SEPARATE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW, OR OTHER WORK AREA NOT DETAILED IN THE PERMITTED PLAN, WHETHER LOCATED WITHIN OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- THE PERMITTEE/CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROLS.
- UTILITY LINE TRENCH EXCAVATION REQUIREMENTS:
 - LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN

- ONE DAY.
 - LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAXIMUM OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE.
 - WATER THAT ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS.
 - ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE AT THE END OF EACH WEEK OR WITHIN THE NEXT TWO CALENDAR DAYS IF DAILY BACKFILLING HAS BEEN DELAYED.
- STORMWATER INLETS WHICH DO NOT DISCHARGE TO A SEDIMENT BASIN MUST BE PROTECTED UNTIL THEIR DRAINAGE AREA IS STABILIZED.
 - LIMIT OF DISTURBANCE APPROXIMATELY EQUAL TO A MINIMUM OF 3' INSIDE OF PROPERTY LINE.
 - UNLESS OTHERWISE SHOWN ON THE PLANS, THE EROSION CONTROL BLANKET USED FOR STABILIZATION SHALL AT A MINIMUM BE EASTCOAST EROSION BLANKET ECC-2 DOUBLE NET COCONUT ROLLED EROSION CONTROL PRODUCT (OR APPROVED EQUIV.). THE BLANKET SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS. SEE DETAILS FOR ADDITIONAL EROSION CONTROL BLANKET SPECIFICATIONS.
 - THE EROSION AND SEDIMENT POLLUTION CONTROL MEASURES SHOWN ON THIS PLAN HAVE BEEN PREPARED IN ACCORDANCE WITH REQUIREMENTS OF THE DPNR, CAIRONE & KAUPP, INC. DOES NOT TAKE RESPONSIBILITY IN OBSERVING AND CERTIFYING THE CONSTRUCTION OF THESE FACILITIES UNLESS REQUESTED SPECIFICALLY BY THE OWNER AND/OR CONTRACTOR. THEREFORE, CAIRONE & KAUPP, INC. DOES NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF IMPROPER CONSTRUCTION AND/OR MAINTENANCE OF FACILITIES DURING CONSTRUCTION.

SEEDING SPECIFICATIONS

- TEMPORARY SEEDING SHALL BE PERFORMED ON ALL DISTURBED SOIL AREAS IN WHICH ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED. MINIMUM SPECIFICATIONS ARE AS FOLLOWS, REFER TO THE LANDSCAPE PLAN AND CONSULT WITH A LOCAL LANDSCAPE PROFESSIONAL FOR APPROPRIATE SUBSTITUTIONS OR FOR ADDITIONAL SEEDING SPECIFICATIONS:
- ON RELATIVELY LEVEL, UN-GRADED AREAS WHERE THE SOIL IS UNSUITABLE FOR GROWING VEGETATION, SPREAD A 2"-6" LAYER OF GOOD TOPSOIL BEFORE PLANTING. REFER TO TABLE 3, SEDIMENT & EROSION CONTROL ON CONSTRUCTION SITES FIELD GUIDE, BY DPNR & THE UNIVERSITY OF THE VIRGIN ISLANDS.
- USE ANNUAL GRASSES (SUCH AS RYE OR FESCUE) TO PROVIDE TEMPORARY COVER. COMMON BERMUDA OR BAHIA GRASS (OR OTHER PERENNIALS, SEE TABLE 4, IBD) CAN ALSO BE ADDED TO THE SEED MIX TO PROVIDE LONGER-TERM STABILIZATION ON BARE SOILS THAT WILL BE REDISTURBED BEFORE CONSTRUCTION IS COMPLETE, BUT NOT FOR A CONSIDERABLE AMOUNT OF TIME.
- PLANT GRASSES DURING THE RAINY SEASON, IF POSSIBLE, AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS. SUPPLEMENTAL WATER WILL BE NEEDED IF GRASS IS PLANTED DURING DRY SEASON. IT MAY ALSO BE NECESSARY TO INCREASE THE SEED RATE TO ACCOUNT FOR LOSS TO BIRDS AND PESTS. REPAIR SMALL BARE SPOTS AS NEEDED BY RESEEDING AND/OR MULCHING.
- MOW GRASSED SWALES AND EMBANKMENTS FREQUENTLY TO CONTROL WEEDS AND UNWANTED WOODY VEGETATION. MOWING HEIGHT SHOULD BE AT LEAST 3" ABOVE GROUND.
- PERMANENT SEEDING SHALL BE PERFORMED ON ALL DISTURBED SOIL AREAS THAT ARE AT FINISHED GRADE, AND ALL DISTURBED SOIL AREAS THAT WILL NOT BE DISTURBED WITHIN ONE YEAR. MINIMUM SPECIFICATIONS ARE AS FOLLOWS, REFER TO THE LANDSCAPE PLAN AND CONSULT WITH A LOCAL LANDSCAPE PROFESSIONAL FOR APPROPRIATE SUBSTITUTIONS OR FOR ADDITIONAL SEEDING SPECIFICATIONS:
- INSTALLATION SPECIFICATIONS FOR PERMANENT SEEDING AND PLANTING ARE SIMILAR TO THOSE FOR TEMPORARY SEEDING. ESTABLISH PERMANENT GRASS OR OTHER VEGETATION BY SEEDING, SODDING OR PLANTING IMMEDIATELY AFTER SEEDING PREPARATION IS COMPLETED. SEE TABLE 8 (SEDIMENT & EROSION CONTROL ON CONSTRUCTION SITES FIELD GUIDE, BY DPNR & THE UNIVERSITY OF THE VIRGIN ISLANDS) FOR INFORMATION ON LAWN GRASSES APPROPRIATE FOR USE IN THE VIRGIN ISLANDS. CONTACT THE UVI COOPERATIVE EXTENSION SERVICE FOR INFORMATION ON NATIVE PLANTS AND PLANTING.
- APPLY GRASS SEED UNIFORMLY BY HAND, SEEDER, OR HYDROSEEDER. IF SEEDING ON STEEP (>15%) SLOPES OR DURING THE RAINY SEASON, PROTECT THE GRASS SEED, PLANTS AND SOIL WITH MULCH OR EROSION CONTROL BLANKETS.
- REPAIR SMALL BARE SPOTS BY RE-SEEDING AND/OR MULCHING.
- MOW GRASS FREQUENTLY TO CONTROL WEEDS. MOWING HEIGHT SHOULD BE AT LEAST 2" ABOVE GROUND. (HEIGHT SHOULD BE HIGHER DURING THE DRY SEASON AND DROUGHT AND WITHIN THE GHUT AND SWAI BASIN AREAS).
- NEW VEGETATION MAY NEED TO BE FERTILIZED FOR THE FIRST 2 OR 3 YEARS AFTER PLANTING TO MAINTAIN DENSITY AND IMPROVE VIGOR. FERTILIZE ACCORDING TO SOIL TEST RESULTS.
- USE HERBICIDES AS DIRECTED BY MANUFACTURER AND ACCORDING TO TERRITORIAL AND FEDERAL RULES AND REGULATIONS (CONTACT DPNR-DEP OR UVI COOPERATIVE EXTENSION SERVICE FOR DETAILS).
- PRIOR TO PERMANENT SEEDING SOILS TESTING SHALL BE PERFORMED TO DETERMINE THE APPROPRIATE FERTILIZER AND SOIL AMENDMENTS. FERTILIZER AND AMENDMENTS SHALL BE APPLIED PER THE RECOMMENDATIONS OF A LICENSED LANDSCAPE PROFESSIONAL. PERMANENT VEGETATION SHALL BE ESTABLISHED AT THE EARLIEST POSSIBLE DATE. WATERING, MOWING AND FERTILIZING PROGRAMS SHALL BE CONTINUED UNTIL VEGETATIVE COVER IS ADEQUATELY ESTABLISHED.

MAINTENANCE OF E&S CONTROL FACILITIES

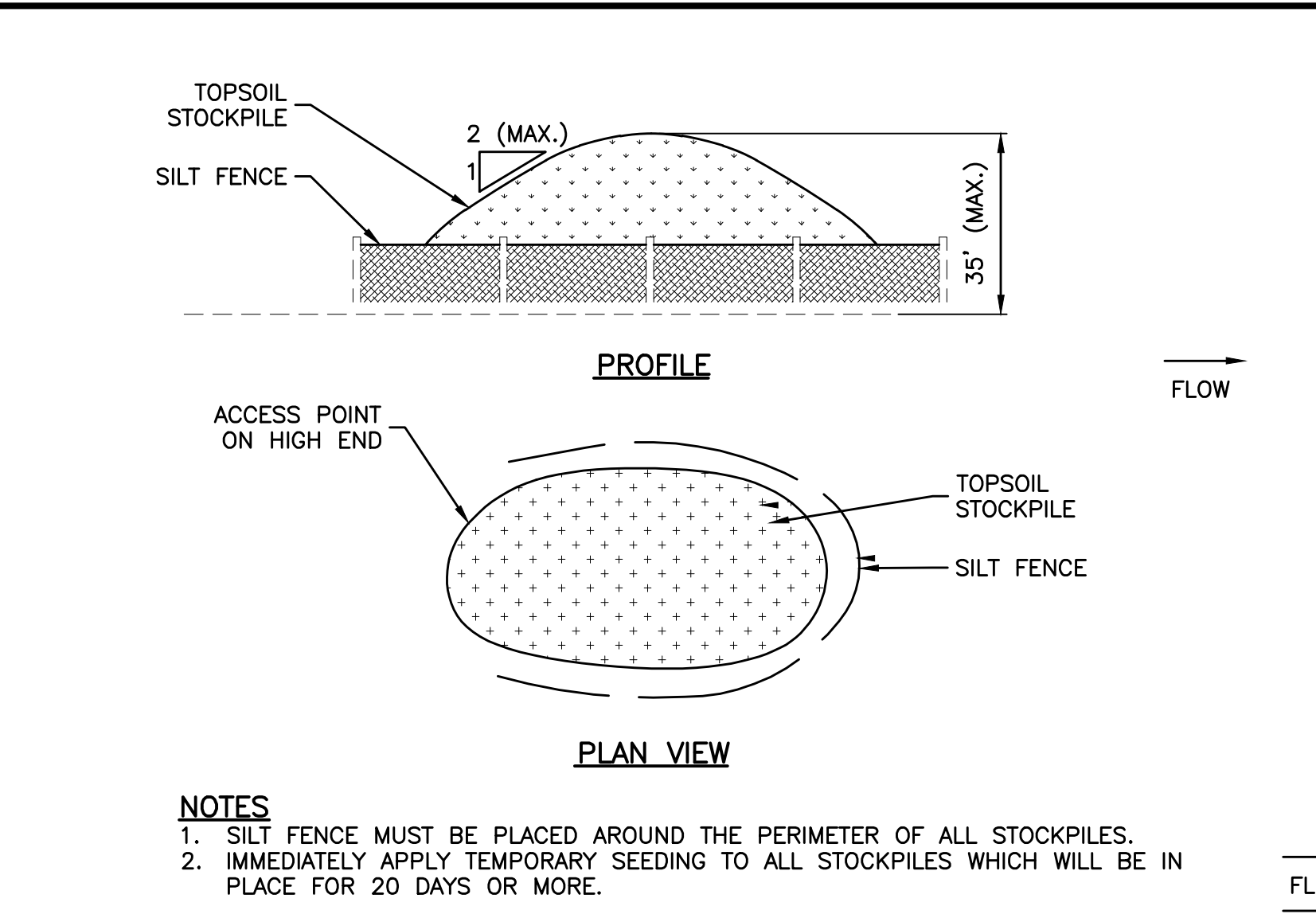
ALL EROSION AND SEDIMENT POLLUTION CONTROL DEVICES AND FACILITIES SHALL BE PROPERLY MAINTAINED AND INSPECTED ON A REGULAR BASIS TO ENSURE FUNCTIONALITY. REFER TO PLANS FOR DETAILS FOR MAINTENANCE. IN GENERAL, ALL DEVICES MUST BE INSPECTED WEEKLY AND IF NEEDED, REPAIRED. INSPECTIONS AND REPAIRS (IF NEEDED) SHOULD ALSO BE PERFORMED AFTER EVERY STORM EVENT TO ENSURE CONTINUED PROTECTION. PRIOR TO LARGER PREDICTED STORM EVENTS, INSPECTION AND REPAIR (IF NEEDED) SHALL BE PERFORMED BEFORE THE STORM.

METHOD OF LAND CLEARING

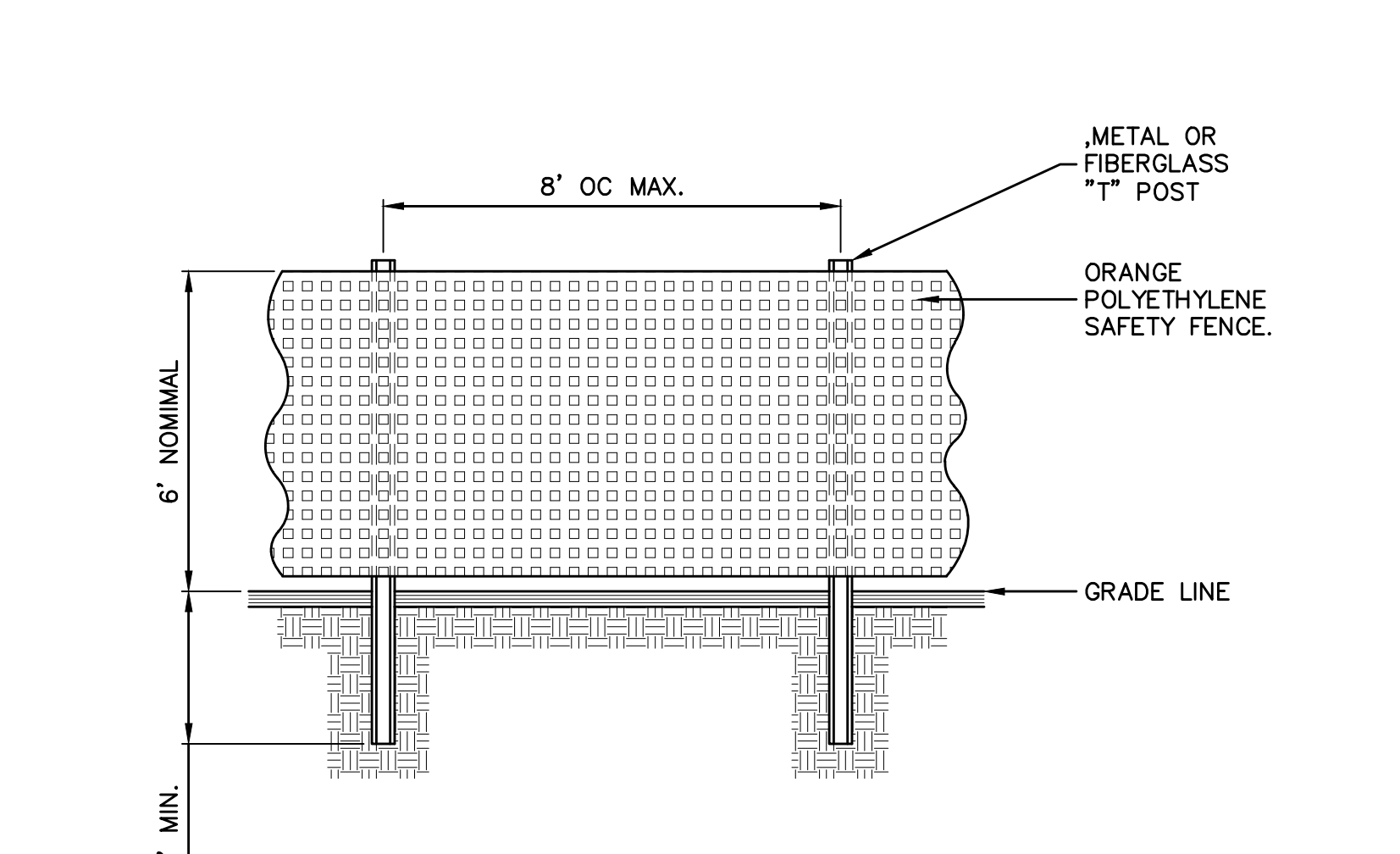
LAND CLEARING REQUIRED FOR MINIMAL AS THE PROPERTIES ARE CURRENTLY PRIMARILY CLEARED. LIMITED AREAS OF CLEARING WILL BE REQUIRED. WITHIN THESE AREAS, CLEARING SHALL BE PERFORMED BY CUTTING VEGETATION PRIOR TO REMOVING ROOTMASS. NO CLEARING SHALL BE PERFORMED BY RIPPING VEGETATION OUT OF THE GROUND WITH ROOTMASS IN TACT. ALL REMOVED MATERIALS SHALL BE CHIPPED AND MULCHED ON-SITE AND UTILIZED EITHER IN EROSION CONTROL FACILITIES AND DEVICES, OR MIXED INTO THE TOPSOIL IN LANDSCAPED AREAS SOIL TO PROVIDE ADDITIONAL ORGANICS FOR THE PLANTINGS.

PROVISIONS TO PRESERVE TOPSOIL AND LIMIT SITE DISTURBANCE

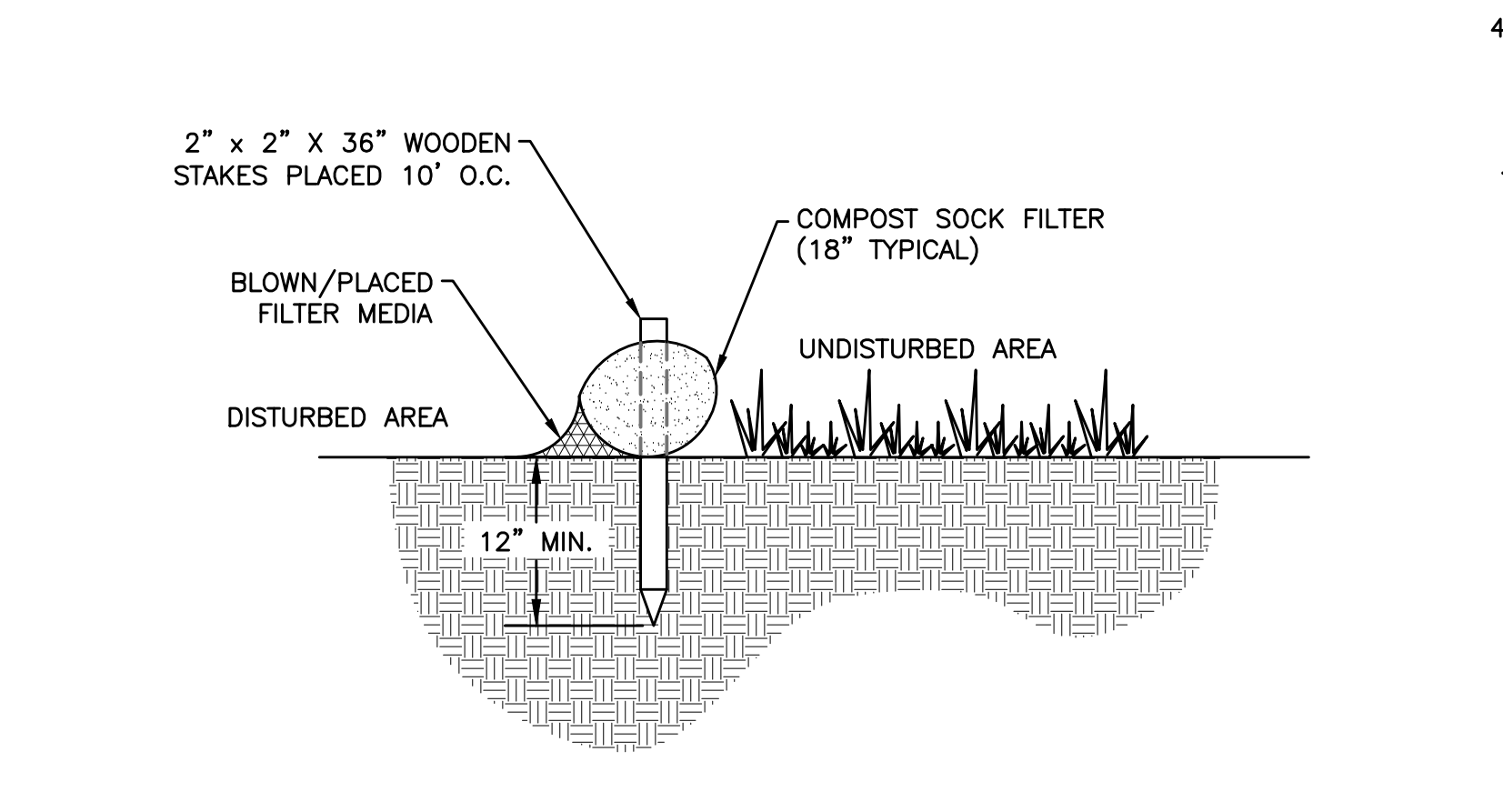
PRIOR TO CONSTRUCTION ANY TOPSOIL FOUND ON THE SITE WILL BE REMOVED AND STOCKPILED. PROTECTED WITH TEMPORARY PLANTINGS AND SILT FENCE OR OTHER EROSION PROTECTION TECHNIQUES (PER THE PLANS PROVIDED) AND UPON COMPLETION OF THE PROJECT WILL BE RE-DISTRIBUTED WITHIN THE LANDSCAPED AREAS OF THE SITE. SHOULD THERE BE EXCESS TOPSOIL, THE REMAINING MATERIAL WILL BE MOVED TO OTHER LOCATIONS WITHIN THE CORAL BAY COMMUNITY TO SUPPLEMENT LANDSCAPED AREAS ON OTHER SITES WITHIN CORAL BAY.



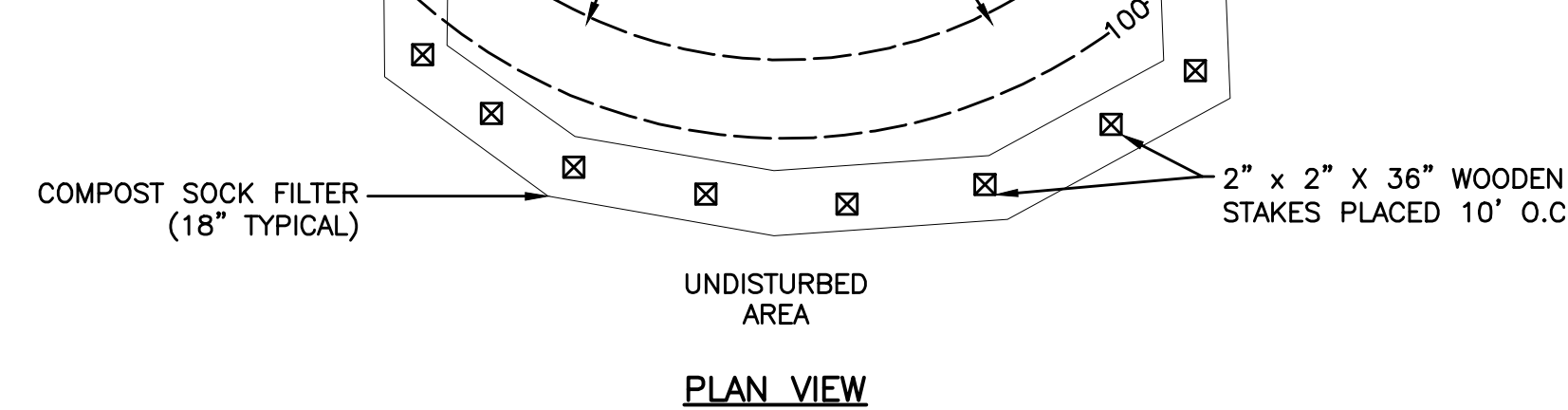
3 TOPSOIL STOCKPILE AREA
C510 NOT TO SCALE



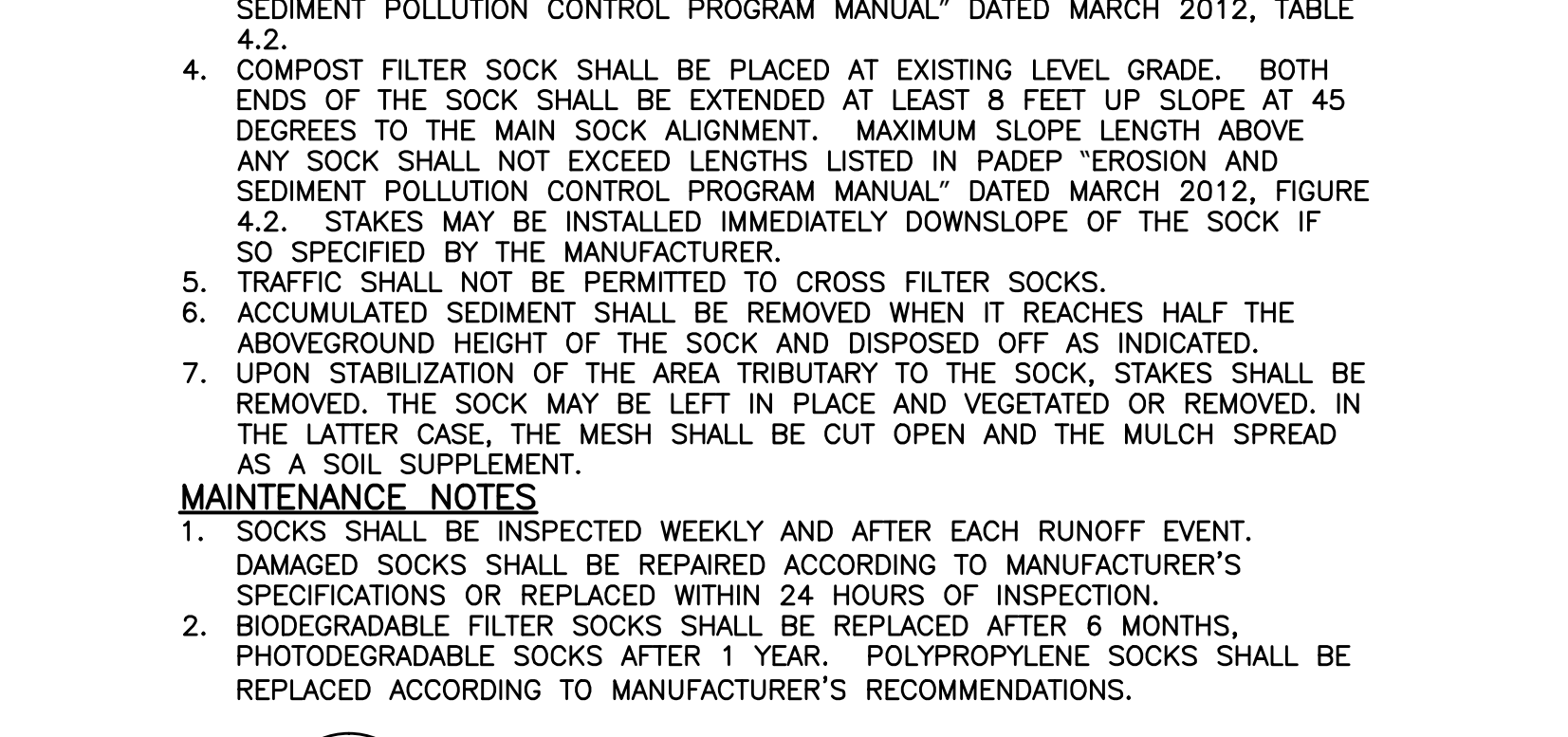
4 INLET PROTECTION
C510 NOT TO SCALE



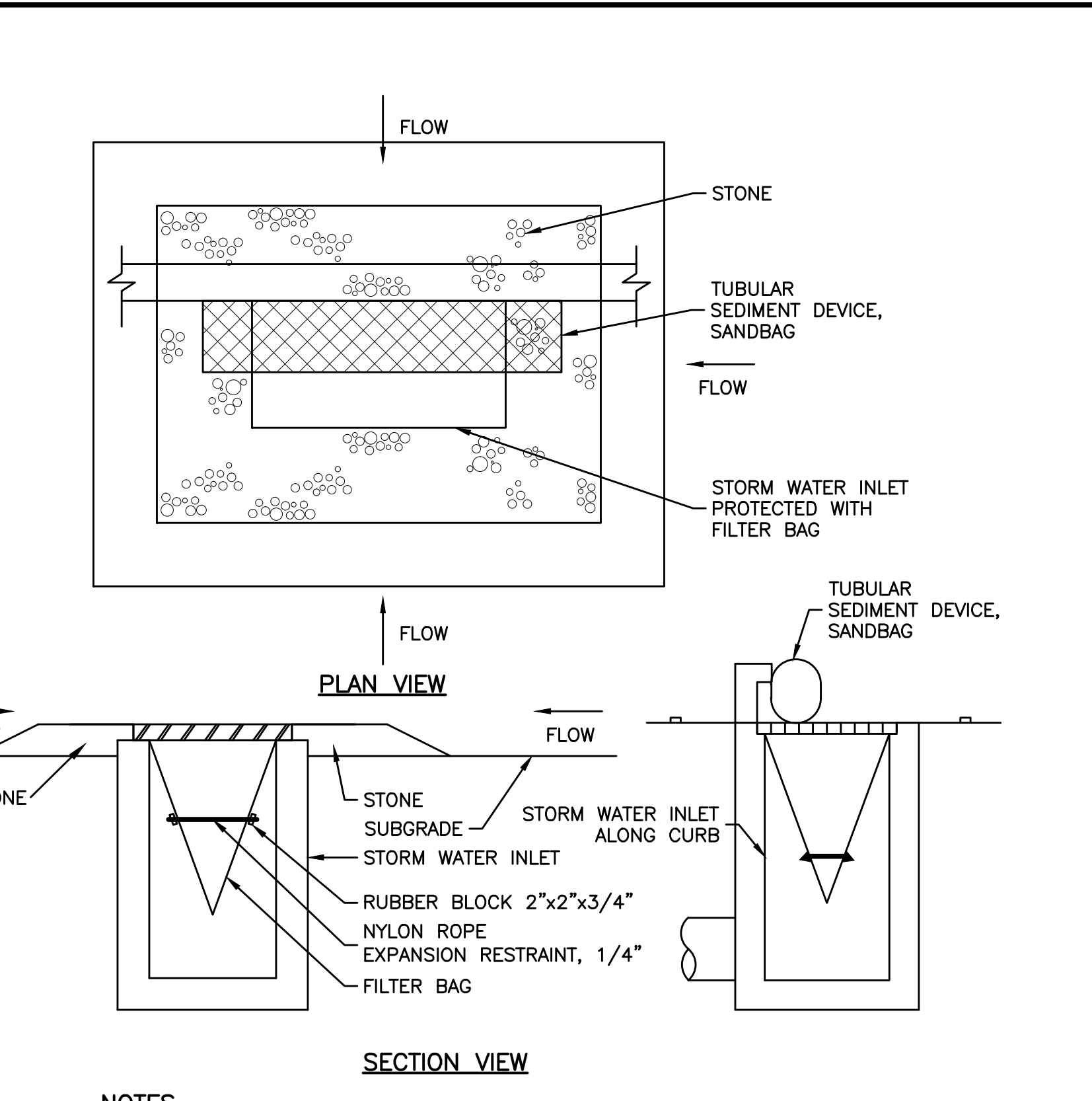
8 CONSTRUCTION FENCE
C510 NOT TO SCALE



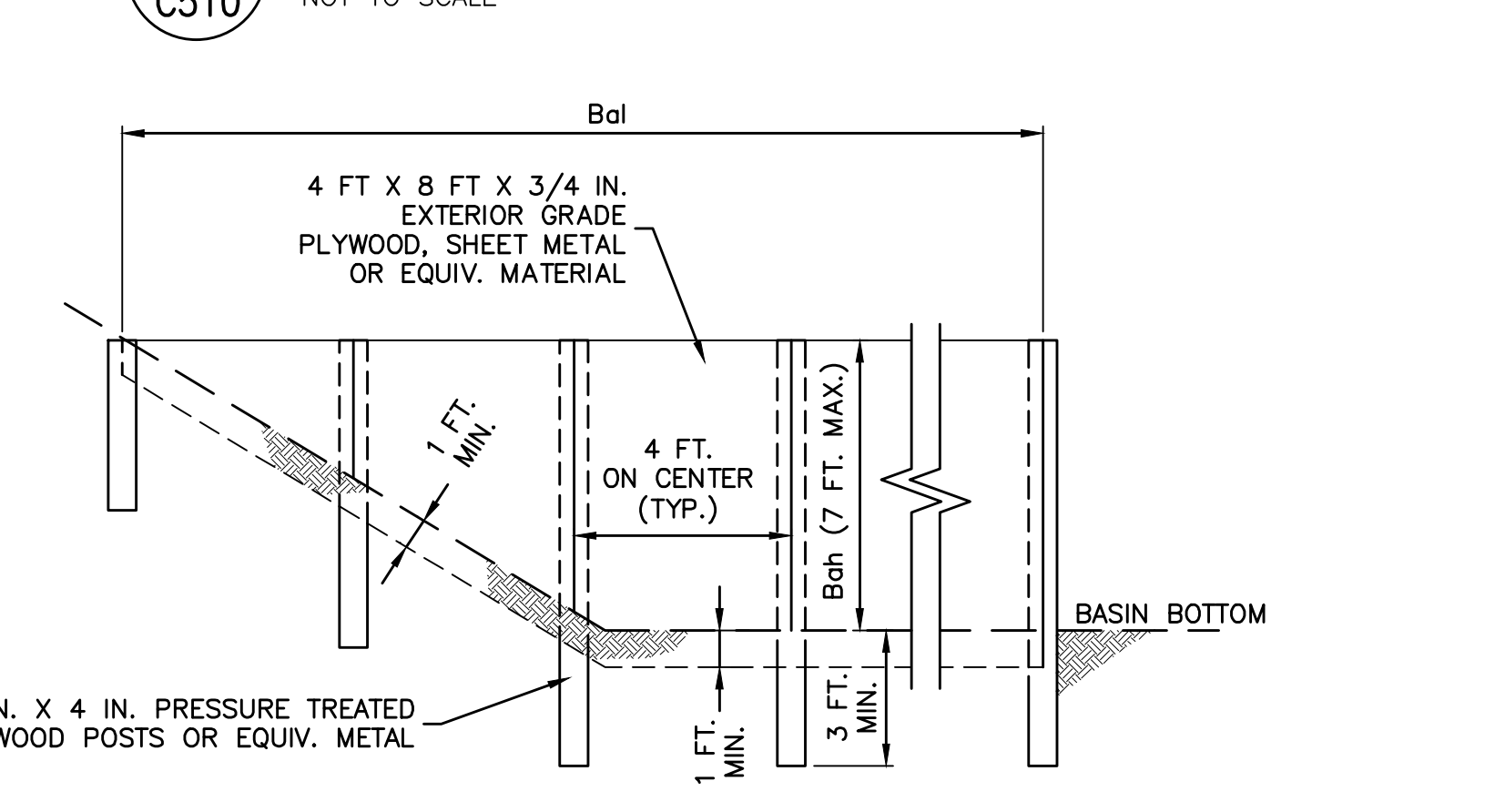
6 BAFFLE
C510 NOT TO SCALE



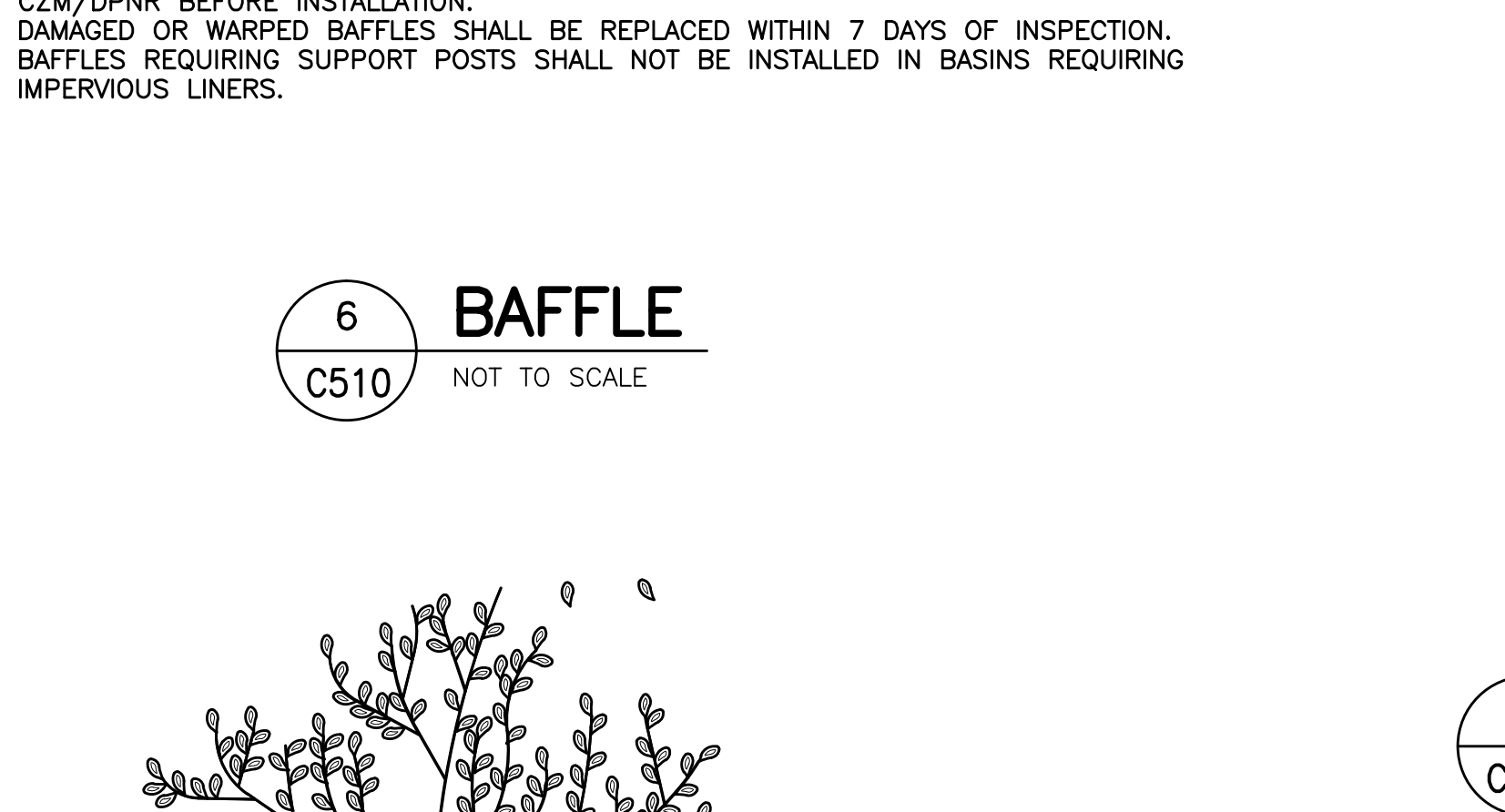
1 ROCK CONSTRUCTION ENTRANCE
C510 NOT TO SCALE



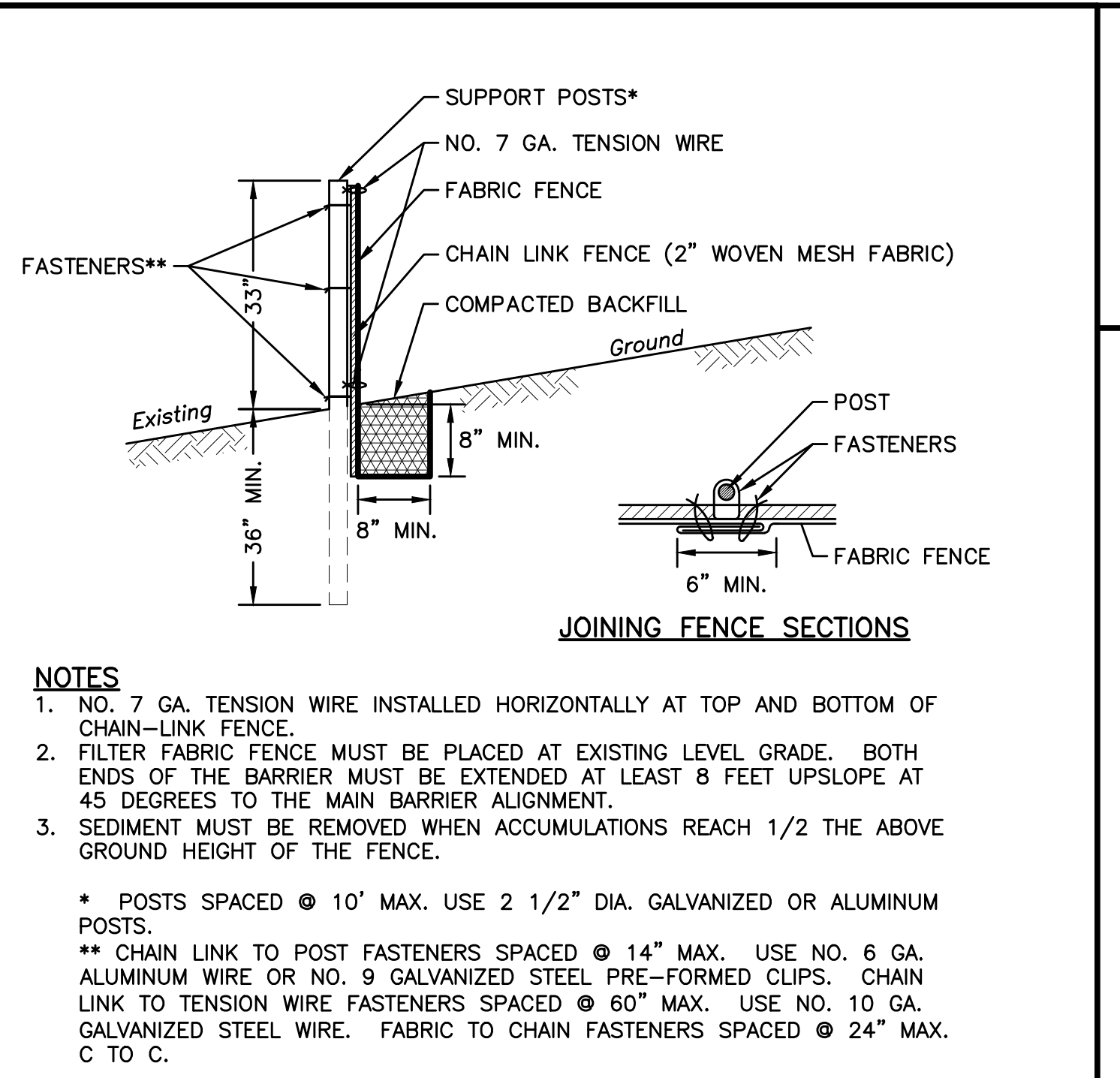
2 SUPER FILTER FABRIC FENCE
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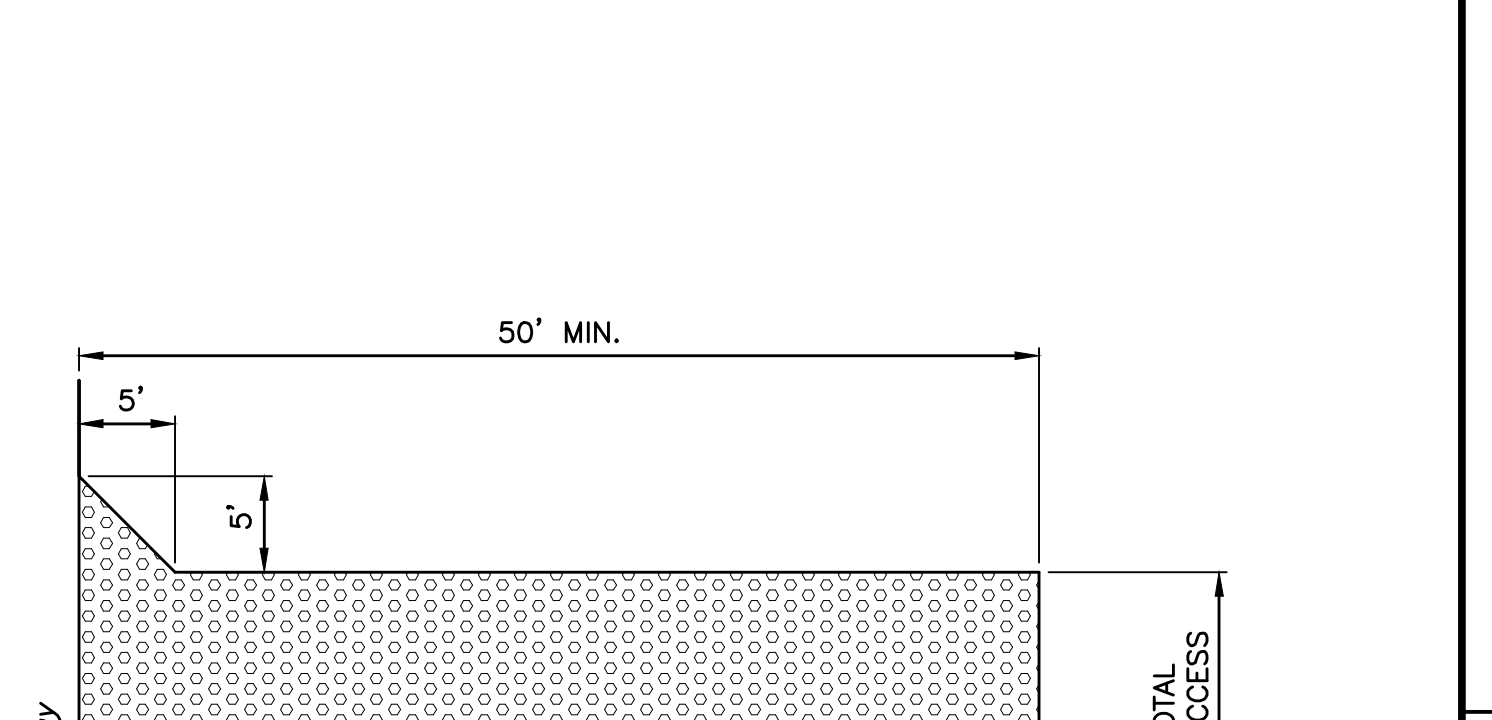
5 TREE PROTECTION FENCE
C510 NOT TO SCALE



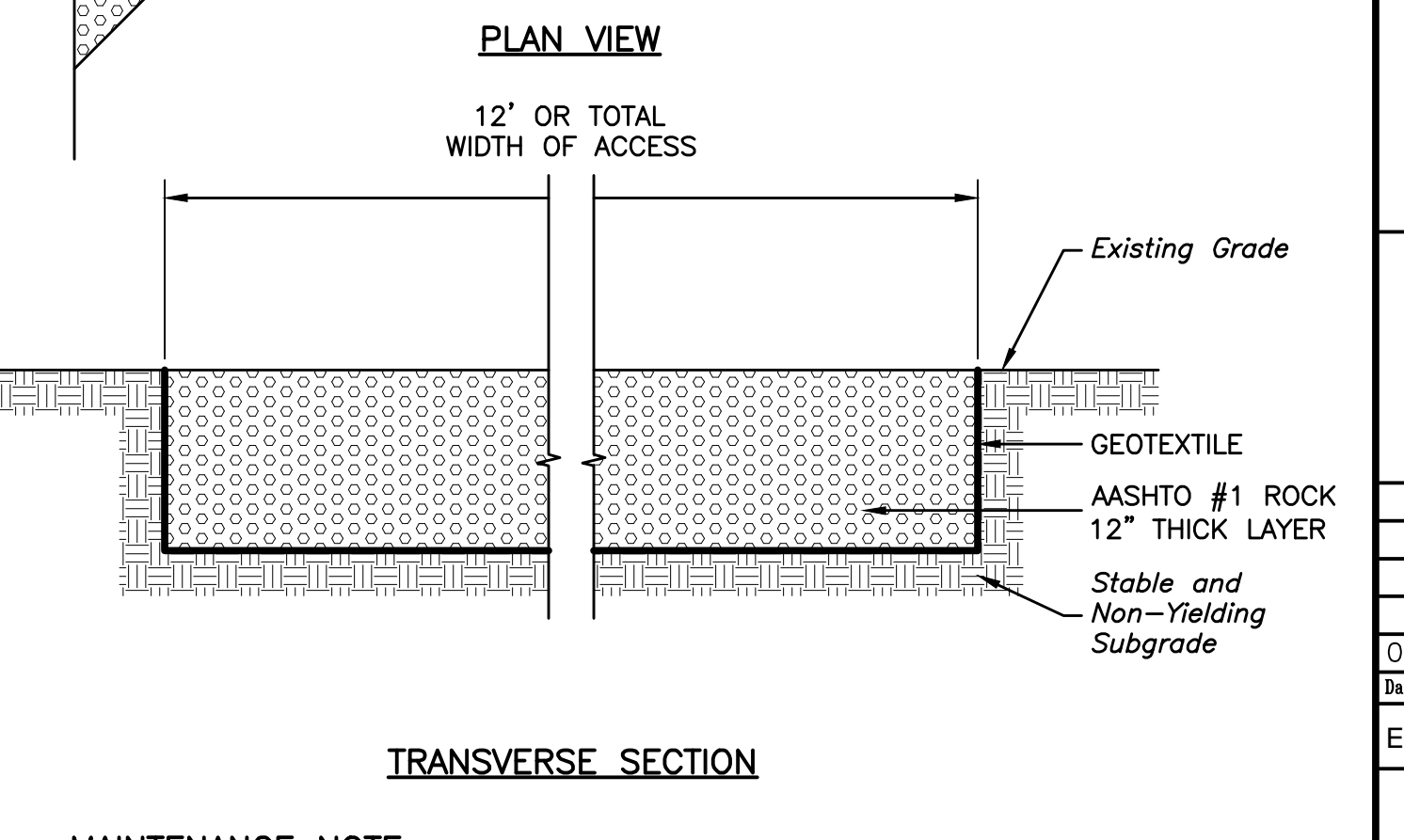
7 TEMPORARY LAYDOWN AREA
C510 NOT TO SCALE



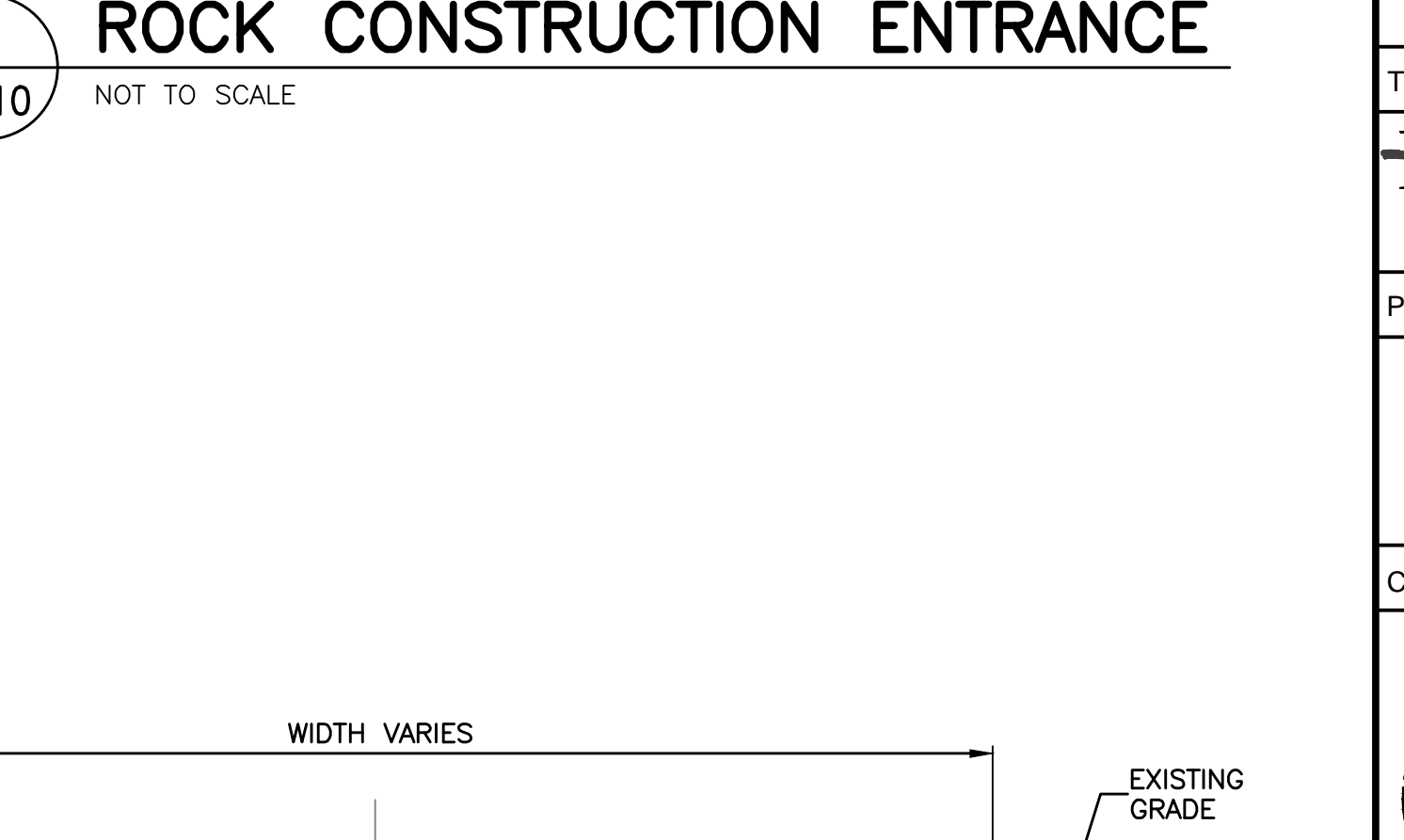
5 TREE PROTECTION FENCE
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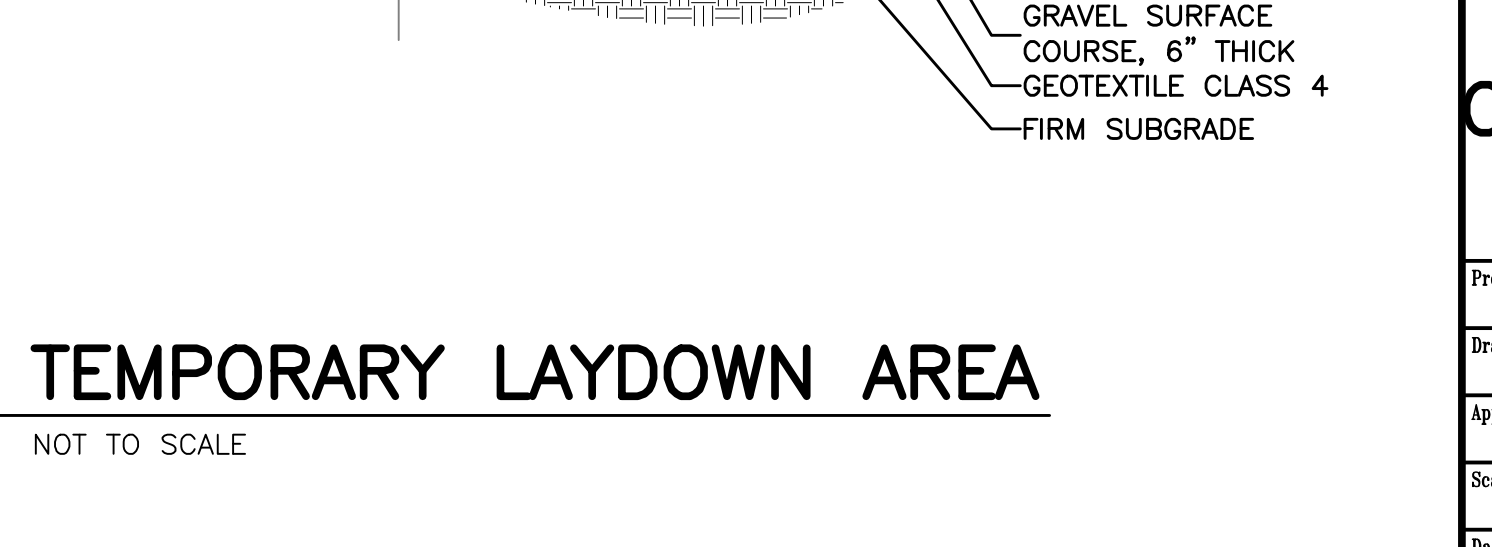
22 COMPOST FILTER SOCK
C510 NOT TO SCALE



3 TOPSOIL STOCKPILE AREA
C510 NOT TO SCALE



4 INLET PROTECTION
C510 NOT TO SCALE



8 CONSTRUCTION FENCE
C510 NOT TO SCALE

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06-23-14	1	FINAL C2M SUBMISSION	JAM
Date	No.	Revision	By

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EROSION & SEDIMENT CONTROL PLAN DETAILS

Project No.	1220	Drawing No.	C510
Drawn By:	RMB	Checked By:	JAM
Approved By:	JAM	Date:	28MAR14
Scale:		Sheet	15 of 15

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