

MILL WOODS PARK BEACH MAINTENANCE

154 Prospect Street Wethersfield, CT



CONSTRUCTION DOCUMENTS 2.21.2013

Prepared for The Town of Wethersfield, Connecticut

Department of Parks and Recreation
Kathleen Bagley
Director

CONTENTS

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| L-1.0 | Grading and Utility Plan |
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Prepared by:

- Scope of Work:
1. Install drainage swale above beach area and install yard drain.
 2. Install concrete curb and underdrain along pond edge.
 3. Replace existing sand and portion of clay at beach area with new sand.
 4. Install underdrain in beach area and connect to existing catch basin.

TD

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LEGEND

| EXISTING | PROPOSED |
|----------|---------------------------------------|
| | BUILDING |
| | WETLAND LINE |
| | ROAD EDGE (100' FLOODWAY LINE) |
| | 100 YEAR FLOOD ZONE LINE |
| | CONTOUR 1 FT |
| | CONTOUR 5 FT |
| | SPOT ELEVATION |
| | FLOW ARROW |
| | STORM DRAINAGE PIPE |
| | SANITARY SEWER |
| | WATER LINE |
| | GAS LINE |
| | CATCH BASIN / YARD DRAIN |
| | MANHOLE |
| | TREE |
| | TREE PROTECTION |
| | EVERGREEN TREE |
| | CHAIN LINK FENCE |
| | HAYBALES |
| | SILT FENCE |
| | SAND AREA |
| | NEW LAWN AREA |
| | RENOVATED LAWN AREA (ALTERNATE #2) |
| | TEST PIT |

| TEST PIT DATA |
|---------------------------------------|
| TP 1 |
| 0'-7" BEACH SAND |
| 16'-48" DENSE REDDISH BROWN SILT |
| 36"-48" H2O INFILUX |
| TP 2 |
| 0'-6" BEACH SAND |
| 6'-48" DENSE REDDISH BROWN SILT |
| 36" H2O INFILUX |
| TP 3 |
| 0'-9" BEACH SAND (SAND BOX DUMP AREA) |
| 9'-48" VERY DENSE REDDISH BROWN SILT |
| TP 4 |
| 0'-3" BEACH SAND |
| 3'-48" DENSE REDDISH BROWN SILT |
| 36"-48" H2O INFILUX |

DEMOLITION NOTES

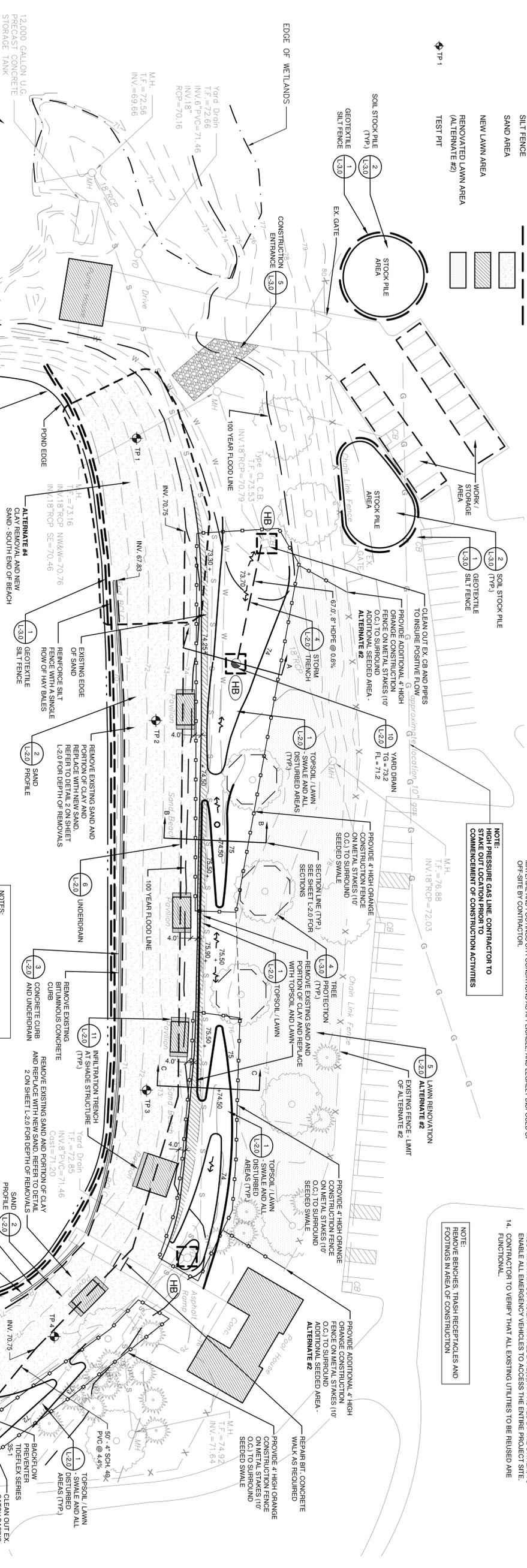
- CONTRACTOR SHALL STRIP AND STORE TOPSOIL IN ALL AREAS TO BE DISTURBED OR REGRADED.
- ALL MATERIAL TO BE REMOVED SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AWAY FROM THE SITE OR DELIVERED AS DIRECTED BY THE OWNER.
- LOCATION OF ALL UTILITIES ARE SHOWN DIAGRAMMATICALLY & MAY BE INCOMPLETE. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DONE BY THIS WORK SHALL BE REPAIRED BY THE CONTRACTOR.
- PROTECTION OF ALL EXISTING TREES TO REMAIN SHALL BE A PRIORITY. INSTALL TREE PROTECTION AS INDICATED. DO NOT STROKE, PARRY OR PERFORM ANY MECHANICAL OPERATIONS WITHIN THE DRILL LINE OF EXISTING TREES AS INDICATED IN THE DETAILS. NO STORAGE OF MATERIALS OR SOIL SHALL BE ALLOWED IN THESE AREAS. ALL FILL AND REMOVAL SHALL BE ACCORDANCE WITH THESE AREAS. ALL FILL AND REMOVAL SHALL BE COMPLETED BY HAND UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING TREES AND VEGETATION. DAMAGE TO VEGETATION SHALL BE REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS BY THE CONTRACTOR.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL CONTACT ALL BEFORE YOU DIG AT 1.800.922.4455. THE RESPECTIVE UTILITY COMPANIES AND LOCAL AUTHORITIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES. ANY COSTS INCURRED BY THE CONTRACTOR AS A RESULT OF FAILURE TO CONTACT PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- OWNER'S REPRESENTATIVE SHALL BE CONSULTED BEFORE ANY WORK SHALL COMMENCE.
- PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FROM ANY UTILITY COMPANY OR OTHER GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE WORK.
- CAME SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO HIS CONTRACT OPERATIONS.
- CONTRACTOR SHALL PROTECT AND SUSTAIN IN NORMAL SERVICE ALL EXISTING UTILITIES, STRUCTURES, EQUIPMENT, ROADWAYS AND DRIVEWAYS.
- CONTRACTOR SHALL MAINTAIN PROPER SIGNS, BARRICADES, AND FENCES TO PROPERLY PROTECT THE WORK EQUIPMENT, PERSONS AND PROPERTY FROM DAMAGE.
- ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS APPLICABLE, AND LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR.

GRADING AND UTILITY NOTES

- PROPOSED GRADES INDICATE INTENT. THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS AS REQUIRED TO MEET FIELD CONDITIONS.
- WHERE FIELD CONDITIONS CALL FOR ON-SITE ADJUSTMENTS OF FINISHED GRADES, THE OWNER'S REPRESENTATIVE SHALL NAME THE FINAL DETERMINATION.
- CONTRACTOR TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE JOB AND BE RESPONSIBLE FOR THE SAME. NOTIFY SITE PLANNER OF DISCREPANCIES PRIOR TO BEGINNING WORK.
- EROSION CONTROL FABRIC TO BE USED ON ALL SLOPES GREATER THAN 3:1
- STRIP AND STOCKPILE TOPSOIL FOR REUSE ON SITE
- ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE STANDARDS.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE STANDARDS.
- ALL EXCESS MATERIAL EXCEPT TOPSOIL SHALL BE LEGALLY DISPOSED OF OUTSIDE THE PROJECT LIMITS.
- REFERENCE IS MADE IN THESE DOCUMENTS TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND CONSTRUCTION (FORM 816, 826R AND SUPPLEMENTS THERETO).
- DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S OR ANY OF HIS SUBCONTRACTORS ACTIVITIES DURING THE CONSTRUCTION PROCESS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING DURING THE EXECUTION OF HIS WORK.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS DEVELOPED FROM THE BEST AVAILABLE INFORMATION. THE ACTUAL LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF EXCAVATION ACTIVITIES.
- ACCESS AND UTILITIES TO EXISTING FACILITIES MUST BE MAINTAINED BY THE CONTRACTOR AT NO ADDITIONAL TRAVEL TO THE OWNER. THE CONTRACTOR MUST MAINTAIN SUFFICIENT TRAVEL LANE(S), APPROVED BY THE OWNER TO ENABLE ALL EMERGENCY VEHICLES TO ACCESS THE ENTIRE PROJECT SITE.
- CONTRACTOR TO VERIFY THAT ALL EXISTING UTILITIES TO BE REUSED ARE FUNCTIONAL.

NOTE:
HIGH PRESSURE GAS LINE. CONTRACTOR TO STAKE OUT LOCATION PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES

NOTE:
REMOVE BENCHES, TRASH RECEPTACLES AND FOOTINGS IN AREA OF CONSTRUCTION



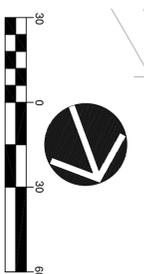
NOTE: WETLANDS FLAGGED AND FIELD SURVEYED BY THE TOWN OF WETHERSFIELD

UPPER POND

MILL WOODS SWIM POND

PLAN REFERENCE

PLAN INFORMATION WAS TAKEN FROM A PLAN ENTITLED "PLAN AND PROFILE, SCALE 1" = 40', DATED JANUARY 29, 1999, BY MAQUIRE GROUP, INC., NEW BRITAIN, CT AND AS BUILT PLANS



Professional Seal

MILL WOODS PARK BEACH MAINTENANCE

154 PROSPECT STREET WETHERSFIELD, CT

Prepared For:
TOWN OF WETHERSFIELD, CT

Consultant:
Simplified Site Design
DESIGN LLC
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Sheet Description:
Grading and Utility Plan

Rev:

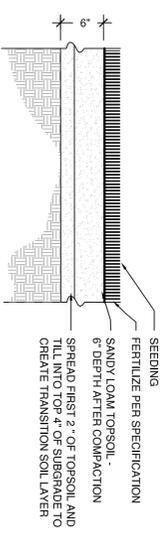
Issue Date:
February 21, 2013

Scale:
1" = 30'

Drawn by:
GM

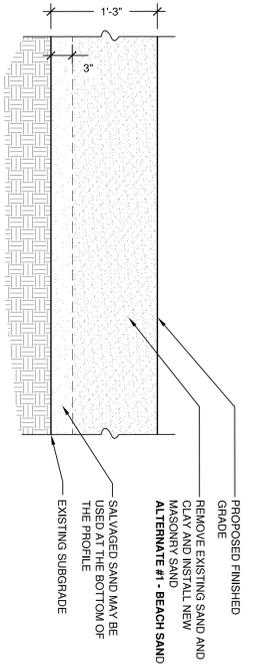
Project number:
5629-L

Sheet #:
L-1.0

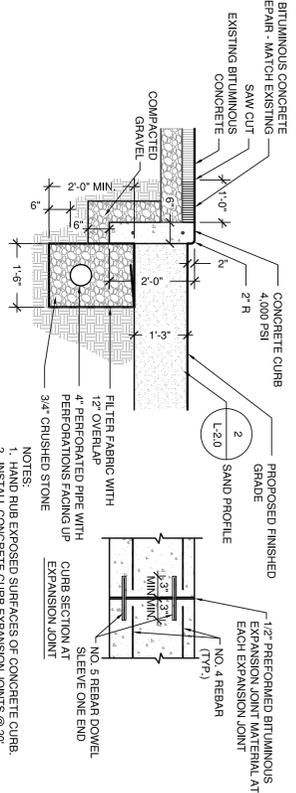


1 TOPSOIL/LAWN
SCALE: 1" = 1'-0"

NOTE: CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND WATERING OF GRASS UNTIL FINAL ACCEPTANCE.

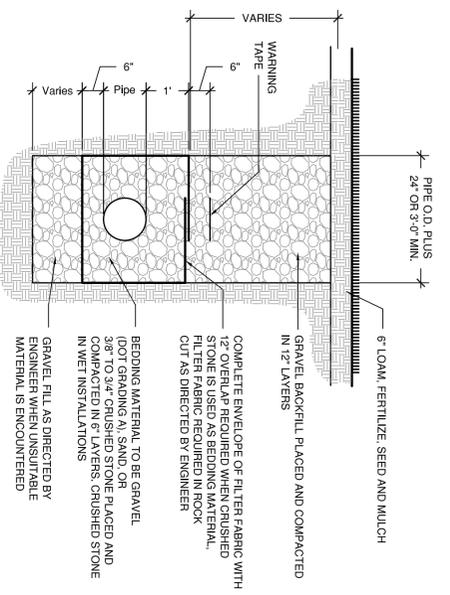


2 SAND PROFILE
SCALE: 1" = 1'-0"

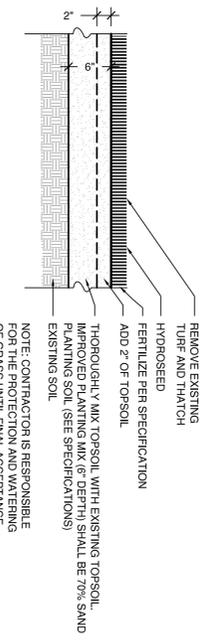


3 CONCRETE CURB AND UNDERDRAIN
SCALE: 1/2" = 1'-0"

NOTES:
1. HAND RUB EXPOSED SURFACES OF CONCRETE CURB.
2. INSTALL CONCRETE CURB EXPANSION JOINTS @ 20' O.C. AND CONSTRUCTION JOINTS @ 10' O.C.
3. O.C. AND CONSTRUCTION JOINTS SHALL BE CAST ON SITE FORMED.
4. CONCRETE CURB SHALL BE CAST ON SITE FORMED PER CONTRACTOR'S PREFERENCE.

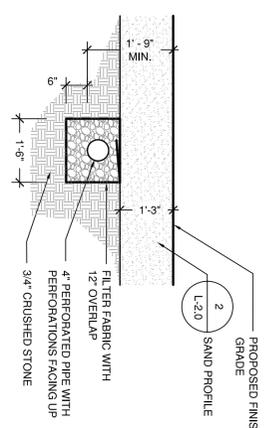


4 STORM TRENCH
SCALE: 1/2" = 1'-0"

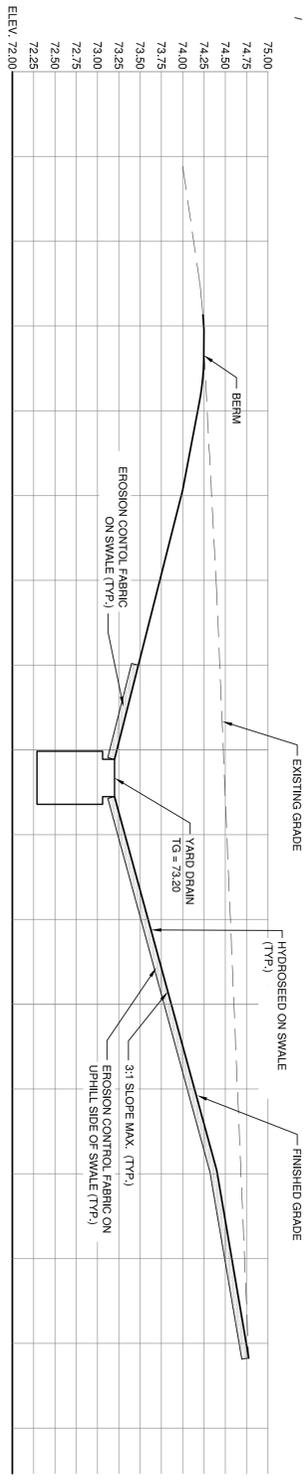


5 LAWN RENOVATION
SCALE: 1" = 1'-0"

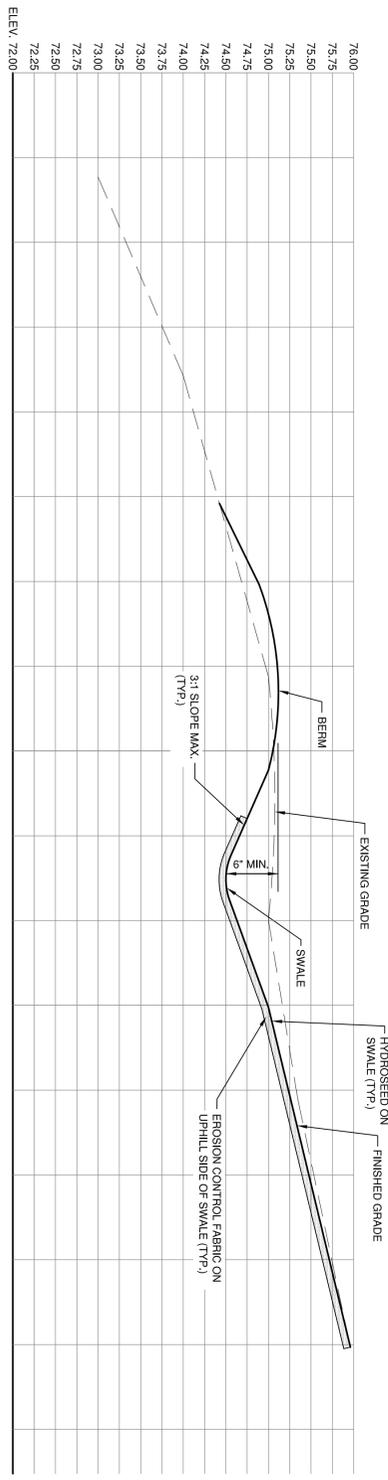
NOTE: CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND WATERING OF GRASS UNTIL FINAL ACCEPTANCE.



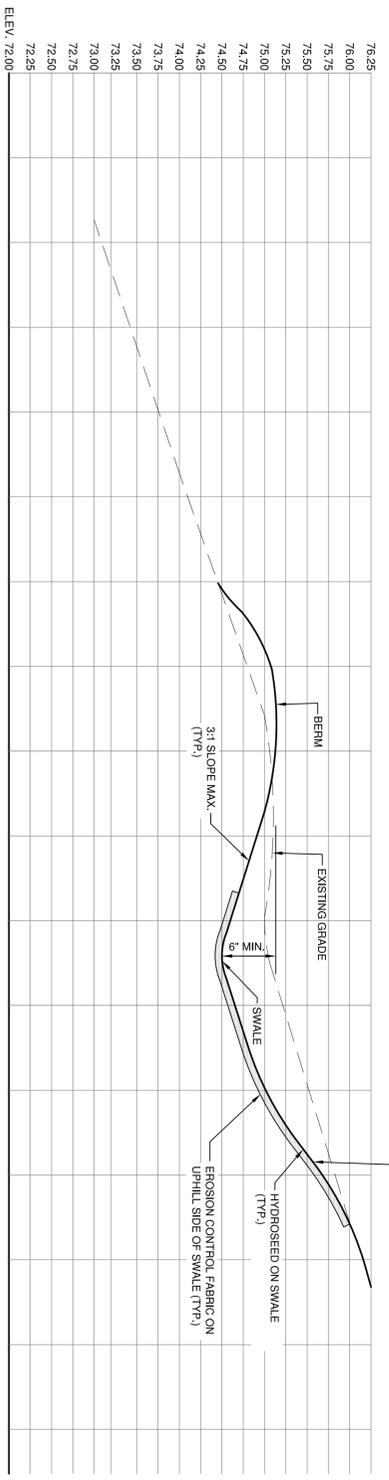
6 UNDERDRAIN
SCALE: 1/2" = 1'-0"



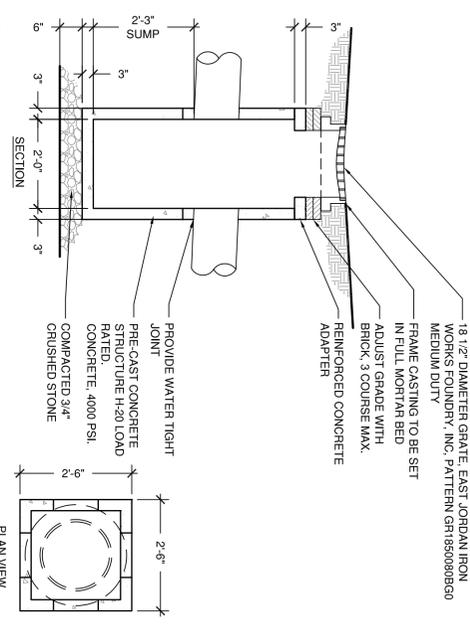
7 SECTION A-A
1" = 4'-0" HORIZ
1" = 1'-0" VERT.



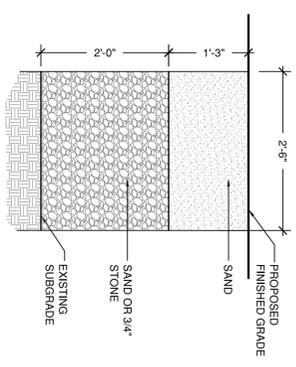
8 SECTION B-B
1" = 4'-0" HORIZ
1" = 1'-0" VERT.



10 YARD DRAIN
SCALE: 1/2" = 1'-0"



11 INFILTRATION TRENCH AT SHADE STRUCTURE
SCALE: 3/4" = 1'-0"



NOTE:
CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION ON EROSION CONTROL FABRIC REFER TO EROSION CONTROL NOTES ON SHEET L-3.0 FOR FABRIC TYPE REQUIRED.

Professional Seal

Site Details

| | |
|--------------------|-------------------|
| Sheet Description: | Site Details |
| Rev: | |
| Issue Date: | February 21, 2013 |
| Scale: | AS SHOWN |
| Drawn by: | GM |
| Project number: | 36229-L |
| Sheet #: | L-2.0 |

MILL WOODS PARK BEACH MAINTENANCE

154 PROSPECT STREET WETHERSFIELD, CT

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Consultant

SEDIMENTATION AND EROSION CONTROL

PER STATE OF CONNECTICUT PUBLIC ACT 83-388
All applicable practices recommended by the 2002 CT Guidelines for Soil Erosion & Sediment Control are included by reference.

1. DESCRIPTION

The project consists of maintenance of the existing beach area along the pond. This includes installing new curbing and underground piping, installing new curbing and underground piping along the beach edge and installing drainage swales above the beach area.

2. SCHEDULE

The project construction shall be begun and be completed in Spring 2013.

3. DESIGN AND CRITERIA

Note: The Contractor shall name one individual as the Sediment and Erosion Control Supervisor whose primary responsibility will be the maintenance of all on-site erosion control measures. He will keep a daily log of all activities related to the proposed construction activities. The log will be made available to inspectors.

A. GEOTEXTILE SILT FENCE (GSF) - Shall be non-woven material, minimum .36" high and fastened to wood stakes. Silt fence shall be installed with end runs turned up grade at 45 degrees for a distance of 10 feet. (See detail this sheet).

B. TEMPORARY SEEDING (TS)

- Contractor shall scarify the soil to a depth of 2" before applying fertilizer, limestone and seed.
- Seed may be applied by hand or mechanically. Seed application shall be uniform. Seed rate shall be in accordance with the 2002 CT Guidelines for Soil Erosion and Sediment Control. Seeding rates by 10% when hydroseeding. Limestone (fertilizer and seed may be applied in slurry).

Contractor shall mulch areas (MS) immediately following seeding. (Note: In the event seeding operations are not feasible due to seasonal restrictions or extended inclement weather patterns, the Contractor shall install an Erosion Control Blanket over exposed soils.)

C. PERMANENT SEEDING (PS)

- Contractor shall apply topsoil and fine grade all areas before the permanent seeding. Contractor shall apply limestone and fertilizer as needed in accordance with soil tests.
- Remove all surface stones ½ inch and larger. Remove all other debris and/or seed beds.
- Apply seed within 7 days after establishing final grades. See planting plan.

HAY BALE BARRIER (HB) - Shall be made of hay or straw with 40 pounds minimum weight and 120 pounds maximum weight, held together by wire or wire. (See detail this sheet).

CONSTRUCTION ENTRANCE (CE) - Shall be an angular stone (DOT Standard Spec. Section M.01.01 size #3) pad, a minimum of 12 wide and 50" long. (See detail this sheet).

EROSION CONTROL BLANKET (ECB) - Erosion mat shall be placed on all swales as noted on the drawings to protect against rainfall and soil moisture content to enhance vegetation growth. The blanket shall be made of a combination of fiber and soil. Fiber combination sewn together with lightweight netting. Use North American green S150. Temporary hay mulch to be applied to areas less than 3:1 slope and all areas to be left barren over the winter. Mulch rate to be 70 pounds/1000 sq ft.

4. APPLICATION/GENERAL PROCEDURES

Soil erosion and sediment control measures will be installed prior to any site disturbance, and development will proceed according to a specific construction sequence. The objective is to minimize sedimentation runoff through implementation of conventional soil sedimentation and erosion control practices currently recommended by the 2002 CT Guidelines for Soil Erosion and Sediment Control.

- Earthwork will be scheduled for periods when soil saturation is low and soil loss hazard is at a minimum.
- Suspend earthwork for major storm events and implement additional sedimentation and erosion control measures as necessary.
- There shall be no cuts or fill exposed for longer than 30 days. The established procedure of temporarily seeding and/or cover with erosion protection (mat or hay) shall be followed to insure minimal soil loss.

5. MONITORING AND MAINTENANCE PROGRAM

- For the duration of the project construction, the Contractor shall monitor the effectiveness of all erosion and sediment control devices to insure their efficient operation.
- The responsibility for performing periodic checks of the protection system in place and to coordinate cleaning and repair operations shall be assigned to the General Contractor's project representative.
- All sedimentation and erosion control devices shall be checked for the adequacy of the control systems prior to severe storm weather forecasts. Inspect control system during and after storms to determine necessary repairs.
- Repairs to sedimentation control systems dictated by the project representative shall be done within 24 hours of the directive or as soon as possible prior to storm warnings.
- Replacement materials for the devices utilized must be readily available for repairs.
- Clean sedimentation and erosion control devices as directed by the project representative.
- Placement of temporary sedimentation and erosion control devices that are not shown on plans, but are required due to Contractor's operations, shall be placed at the discretion of the project representative.
- Dust control shall be in accordance with the standard state specification Form 816'.

6. SPECIFIC MAINTENANCE MEASURES SHALL BE AS FOLLOWS:

- GEOTEXTILE SILT FENCE (GSF)** - Inspect GSF at least once a week, and within 24 hours of the end of any storm event of 0.5-inch or greater. Repair or replace the fence within 24 hours of observed failure.
- HAY BALE BARRIER (HB)** - Inspect HB at least once a week, and within 24 hours of the end of any storm event of 0.5-inch or greater. Repair or replace the hay bales within 24 hours of observed failure.

CONSTRUCTION ENTRANCE (CE) - Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Repair any measures used to trap sediment as needed. Immediately remove all sediment spalls, dropped, washed or left clean at the end of each day.

D. SEEDING (TEMPORARY & PERMANENT)

Inspected seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and fill erosion.

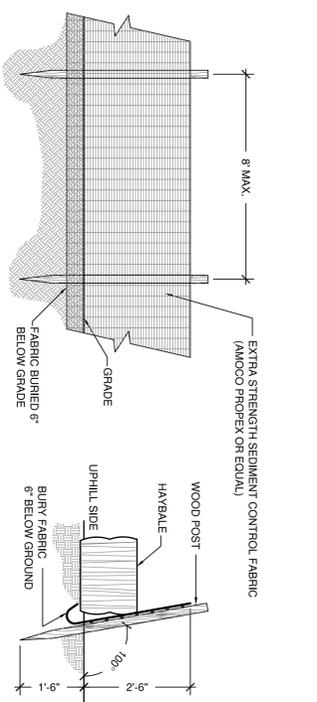
Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Bird feeding may be a problem if mulch was applied too thinly to protect seed. Re-seed and re-mulch. If movement was the result of wind, then repair erosion damage (if any), reapply seed and mulch and apply mulch anchoring. If failure was caused by concentrated runoff, repair erosion damage, re-seed and re-apply mulch with anchoring or use Temporary Erosion Control Blanket measure.

Continue inspections until the grasses are firmly established. Grasses shall not be mowed until they are at least 4 inches high. Mowing shall be done on a regular basis to prevent overgrowth and to survive severe weather conditions (approximately 80% vegetative surface cover).

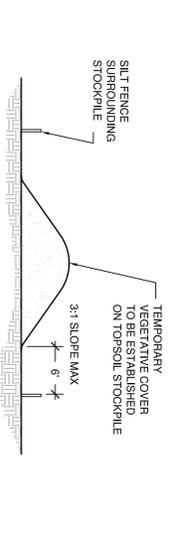
7. CONSTRUCTION SEQUENCE

A construction plan shall be submitted to town staff for approval prior to the start of construction activities.

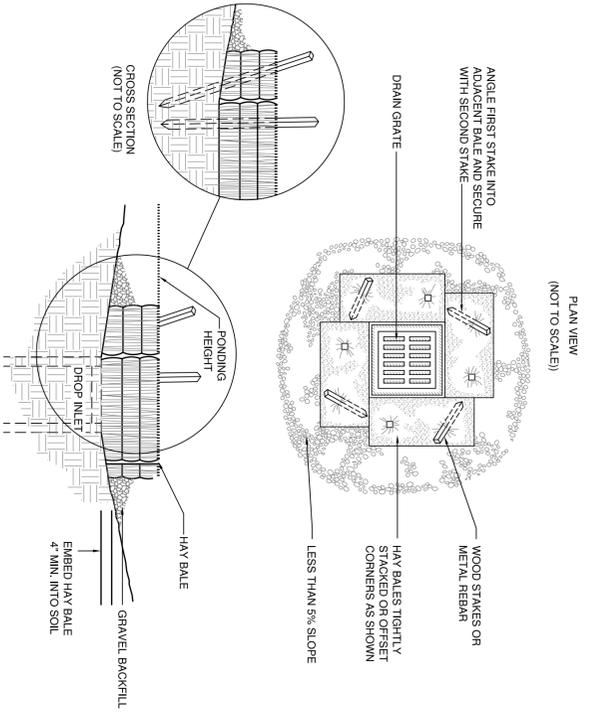
- Flag the limits of construction.
- Hold pre-construction meeting. (Call before you dig - 1.800.822.4455)
- Install perimeter erosion and sediment controls and tree protection devices in accordance with the ERS plan.
- Remove turf, strip and stockpile all topsoil that is within the construction area.
- Remove sand and clay at beach area.
- Install concrete curb and drainage piping along pond edge.
- Install rain gutters or existing shade structures and drainage piping at beach area. Connect drainage piping to existing catch basin.
- Install yard drain and drainage piping.
- Install beach sand and clay at beach area.
- Grade slopes and swales above beach area and place topsoil.
- Final grade topsoil areas, take seed and mulch.
- Alter site is stabilized remove temporary erosion and sediment controls (e.g. geotextile silt fences).



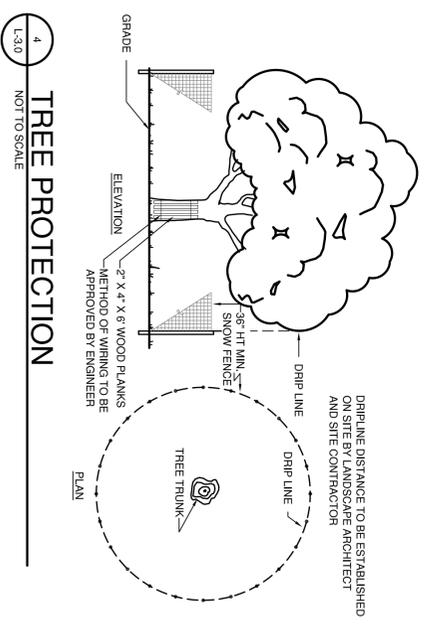
1 GEOTEXTILE SILT FENCE / HAYBALE (GSF)
SCALE: 1/2"=1'-0"



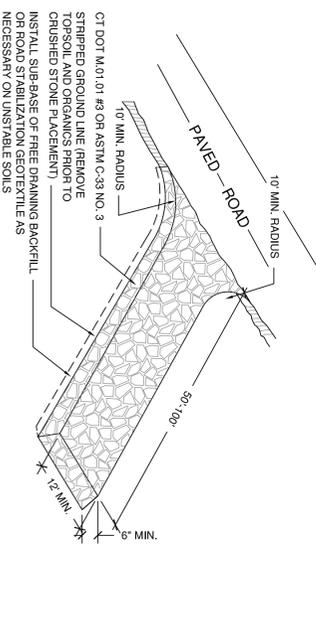
2 TOPSOIL STOCK PILE AREA
SCALE: 1/2"=1'-0"



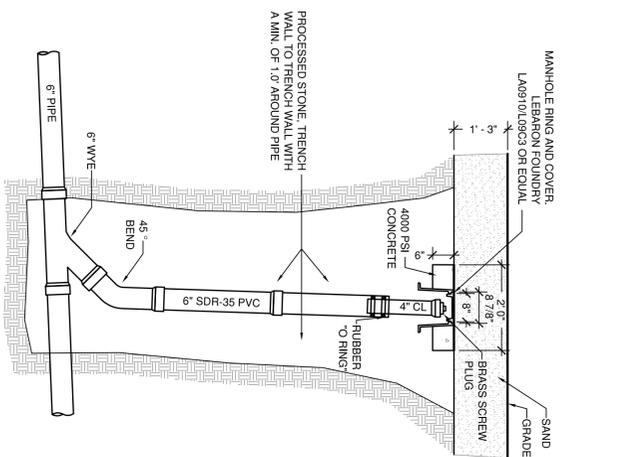
3 HAY BALE BARRIER (HB) AT CATCH BASIN
SCALE: 1/2"=1'-0"



4 TREE PROTECTION
SCALE: 1/2"=1'-0"



5 CONSTRUCTION ENTRANCE (CE)
SCALE: 1/2"=1'-0"



6 CLEANOUT
SCALE: 1/2"=1'-0"

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BEACH MAINTENANCE**

154 PROSPECT STREET WETHERSFIELD, CT

Professional Seal

Sheet Description:
Erosion and Soil Sedimentation Control Narrative and Details

Issue Date: February 21, 2013

Scale: AS SHOWN
Project number: 3629-L
Sheet #: L-3.0