15- DAY PUBLIC NOTICE

US Army Corps of Engineers®
New England District
696 Virginia Road
Concord, MA 01742-275

Comment Period Begins: March 15, 2011
Comment Period Ends: March 30, 2011
File Number: NAE-2010-965
In Reply Refer To: Cori M. Rose
Phone: (978) 318-8306
E-mail:cori.m.rose@usace.army.mil

The District Engineer has received a permit application from the applicant below to conduct work in waters of the United States as described below.

APPLICANT: Town of Cheshire, Department of Public Works, 84 South Main Street, Cheshire, Connecticut 06410

ACTIVITY: The temporary discharge of fill in wetlands and waters over a 10,700 square foot area, and associated secondary disturbance to aquatic resources at the site from the dewatering of a 5.4 acre area of Mixville Pond to allow the removal of up to 15,000 cubic yards of accumulated sand and silt from south and western side of Upper Mixville Pond, an impoundment of the Ten Mile River.

A detailed description and plans of the activity are attached.

WATERWAY AND LOCATION OF THE PROPOSED WORK

This work is proposed within an impoundment of the Ten Mile River and Country Brook, off of Notch Road in the Town of Cheshire, Connecticut. The proposed location can be found on the USGS Southington quadrangle sheet at UTM coordinates 18 4590066 N and 685806 E.

AUTHORITY
Permits are required pursuant to:
_____Section 10 of the Rivers and Harbors Act of 1899
__X_ Section 404 of the Clean Water Act
_____Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed

activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 as amended.

SECTION 106 COORDINATION
Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION
The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any Federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

( ) Permit, License or Assent from State.
(X) Permit from Local Wetland Agency or Conservation Commission.
(X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Ms. Cori M. Rose at (978) 318-8306, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a

public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

for Diane M. Ray
Robert J. DeSista
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____

PROPOSED WORK AND PURPOSE

Proposal to discharge a total of temporary fill below ordinary high water of 10,700 and associated secondary disturbance to waters from excavation (3.4 acres) and dewatering (2.0 acres) in association with the removal of 15,000 cubic yards of accumulated sand and silt from the south and western side of Upper Mixville Pond, an impoundment of the Ten Mile River. The proposal will restore the pond to its original depth of 6 feet, and does not propose to deepen the resource. Water is to be drawn down by 7 feet from its normal pool elevation of 229 feet NGVD so that excavation can occur in the dry. The water level within Lower Mixville Pond will be lowered by 2 feet to facilitate the dewatering of the upper pond. Water will be diverted around Upper Mixville Pond to Lower Mixville Pond through the construction of a temporary bypass consisting of (4) four 36-inch reinforced concrete pipes sized to convey the 2- year storm event with riprap outlet protection. Temporary fill within wetlands and waters for the temporary bypass/diversion is 1200 square feet. Country Brook will be temporarily diverted around the upper pond through the use of pumps. Flows exceeding the 2-year event will be allowed to enter Upper Mixville Pond and work will cease until dewatering can be achieved. Access to the site will require the discharge of temporary fill within the dewatered pond basin over a 9,500 square feet area (0.22 acre) and will be removed during the completed excavation of the 3.43 acre area. A flood contingency plan has been provided. Dewatering and disposal of the excavated material is proposed for a 3.5 acre unvegetated and excessively well-drained upland site within the existing recreation area. Spoil will be placed to a depth of 3.7 feet in its unconsolidated (wet) condition and graded into existing slopes.

The work is described on the enclosed plans entitled "UPPER MIXVILLE POND SEDIMENT REMOVAL PROJECT" on 13 sheets, and dated "May 2010 and revised through January 14, 2011."

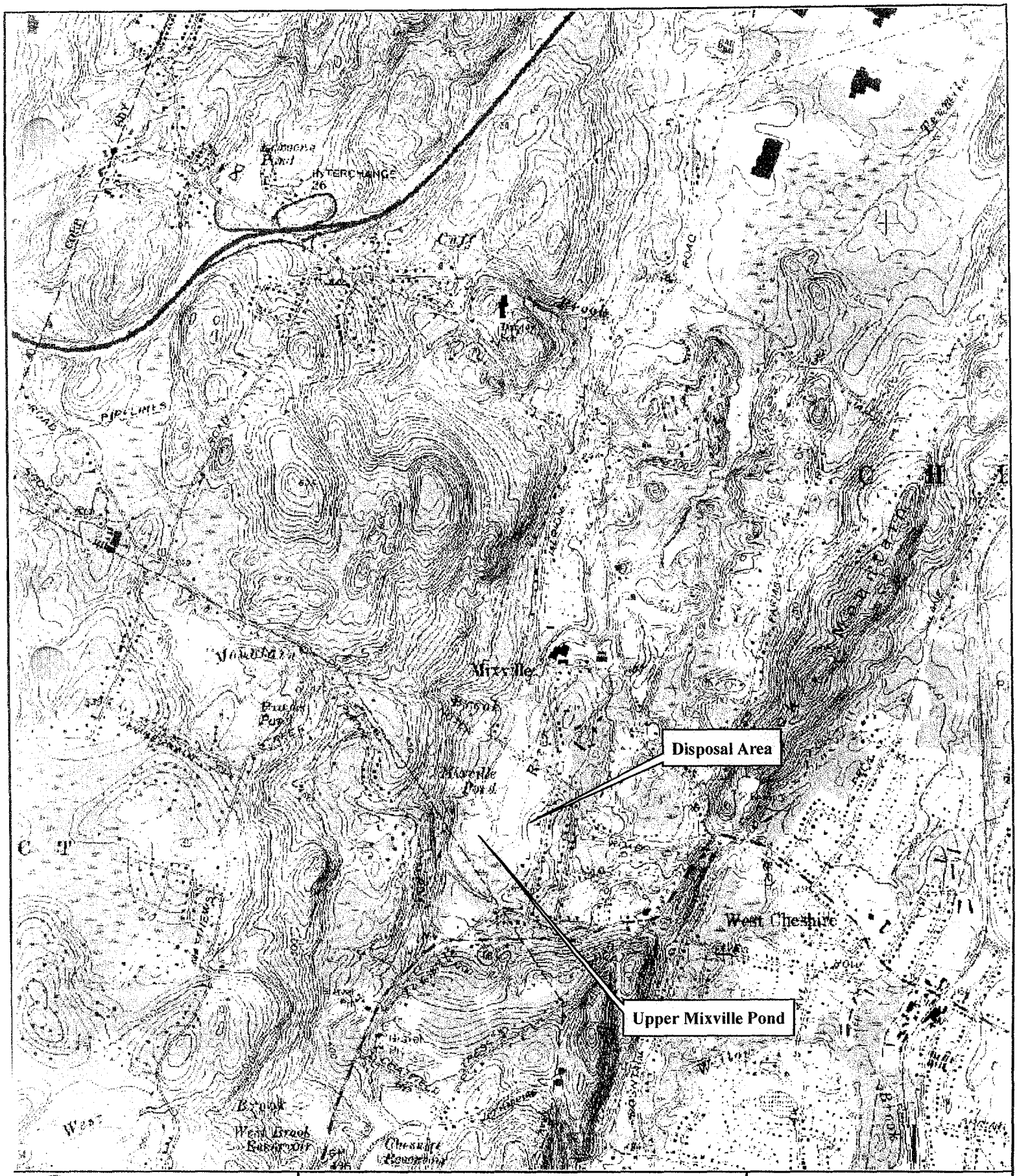
MITIGATION

During initial consultation with the applicant the work proposed the permanent discharge of fill over a 10,600 sf area for the installation of a permanent access road below ordinary high water (OHW), within the pond, and the installation of a sedimentation settling basin adjacent to Country Brook. Permanent impacts to aquatic resources have been avoided through the elimination of these aspects of the proposal. Areas of temporary fill below OHW have been minimized to those essential to obtain safe access to the excavation area and to provide adequate conveyance of flows downstream.

The proposal to maintain the pond will result in the loss of 11,152 square feet of emergent vegetation within the shallows and along the pond margins. To compensate for the loss of this vegetated habitat, the applicant proposes to replace 11,544 square feet of identical habitat within specified shallow water areas as specified below and on the attached plans.

In addition, to compensate for the modifications to the lake bottom and to enhance the lake bottom for fish habitat complexity and refuge, the applicant proposes to install aquatic habitat debris clusters consisting of stumps and cut trees of 18 to 24 inches in diameter and boulder clusters consisting of rounded river stone with an average diameter of 2 to 4 feet and a height of 4 feet.

Plant Name (Botanical)	Plant Name (Common)	Number of Plants/Plugs or Pots
Pontederia cordata	Pickerelweed	400
Sagittaria latifolia	Duck potato	400
Iris versicolor	Blue flag iris	400
Carix lurida	Lurid sedge	400
Scirpus validus	Soft stem bulrush	400
Juncus effuses	Soft rush	400
Sparganium americanum	American bur-reed	400
Carex stricta	Tussock sedge	400
Schoenoplectus acutus	Hard stem bulrush	250
Cephalanthus occidentalis	Buttonbush	250



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USGS Topographic Map (Southington Quadrangle)

LOCATION: Cheshire, CT

MMI#: 1046-59-4
MXD: H:\AttB.mxd
SOURCE: CT DEP

N

Upper Mixville Pond Sediment Removal

DATE: April 2010
SCALE: 1" =2,000'

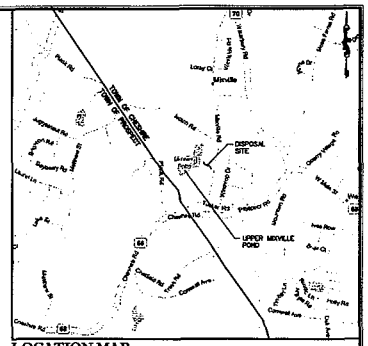
SHEET: Att. B

UPPER MIXVILLE POND SEDIMENT REMOVAL PROJECT

CT DEP WATER DIVERSION PERMIT APPLICATION

NOTCH ROAD
CHESHIRE, CONNECTICUT

MAY, 2010
REVISED: JAN. 14, 2011



LOCATION MAP SCALE: 1"=2000'

PROJECT SITE

SCALE: 1"=200'

PREPARED FOR:

TOWN OF CHESHIRE, CONNECTICUT
84 South Main Street
Cheshire, CT 06410

PREPARED BY:

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and Environmental Science
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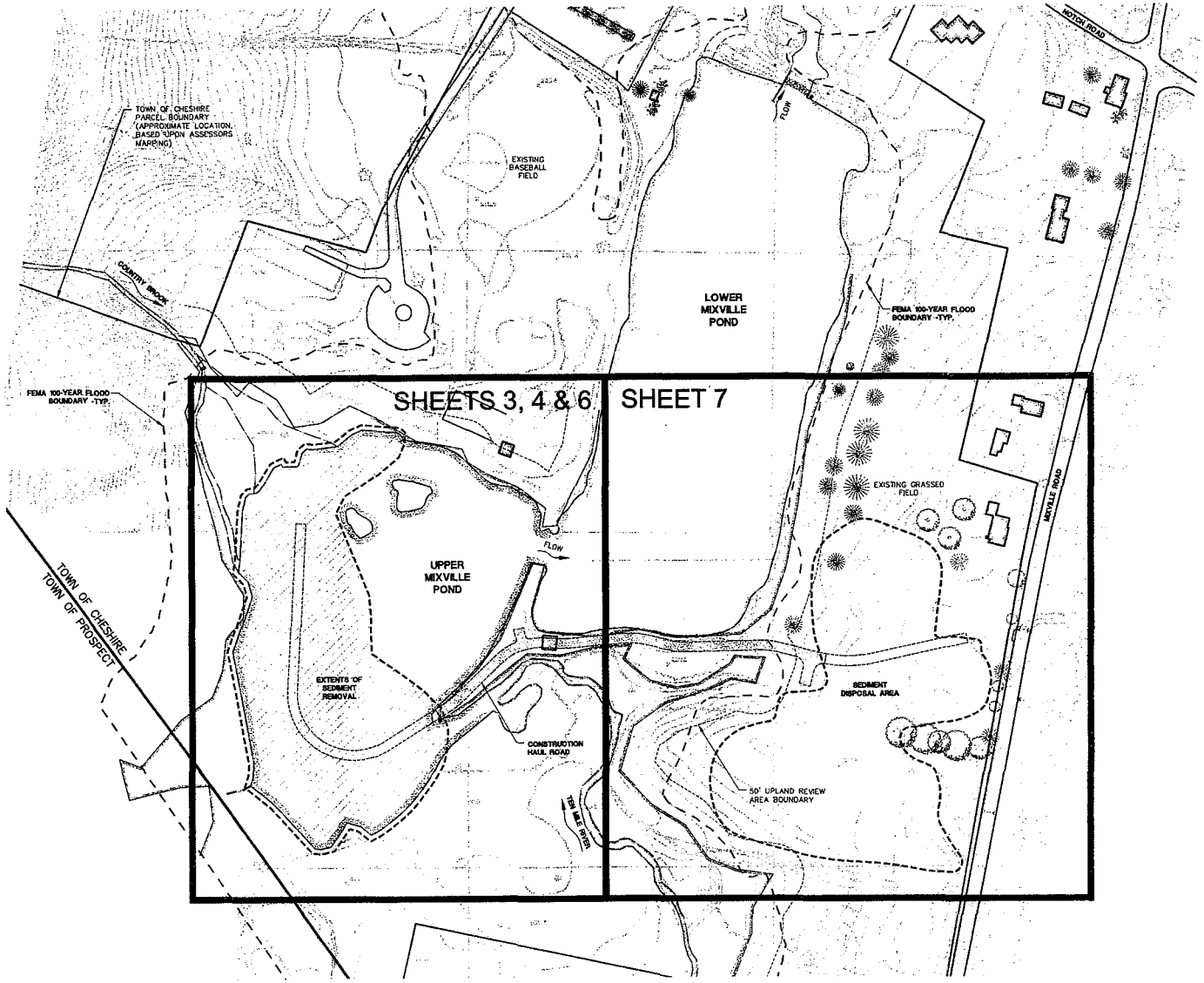
LIST OF DRAWINGS:

01	TITLE SHEET
02	MASTER PLAN – OVERALL PROJECT SITE
03	EXISTING CONDITIONS AND SEDIMENT SAMPLE LOCATIONS
04	PROPOSED CONDITIONS – SEDIMENT REMOVAL PLAN
05	PROPOSED CONDITIONS – CROSS SECTIONS
06	CONSTRUCTION PLAN – DEWATERING AND SITE ACCESS
07	CONSTRUCTION PLAN – HAUL ROAD AND DISPOSAL PLAN
08–09	CONSTRUCTION PLAN – HAUL ROAD PROFILE
10–11	CONSTRUCTION DETAILS
12	REGULATED ACTIVITIES
13	PROPOSED SITE RESTORATION AND WETLANDS MITIGATION

PLANS FOR REGULATORY APPROVAL - NOT FOR CONSTRUCTION

MMI #1046-59



SCALE IN FEET

SCALE 1"=80'

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REVISIONS

01/14/2011	CT DEP COMMENTS

MASTER PLAN - OVERALL PROJECT SITE

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

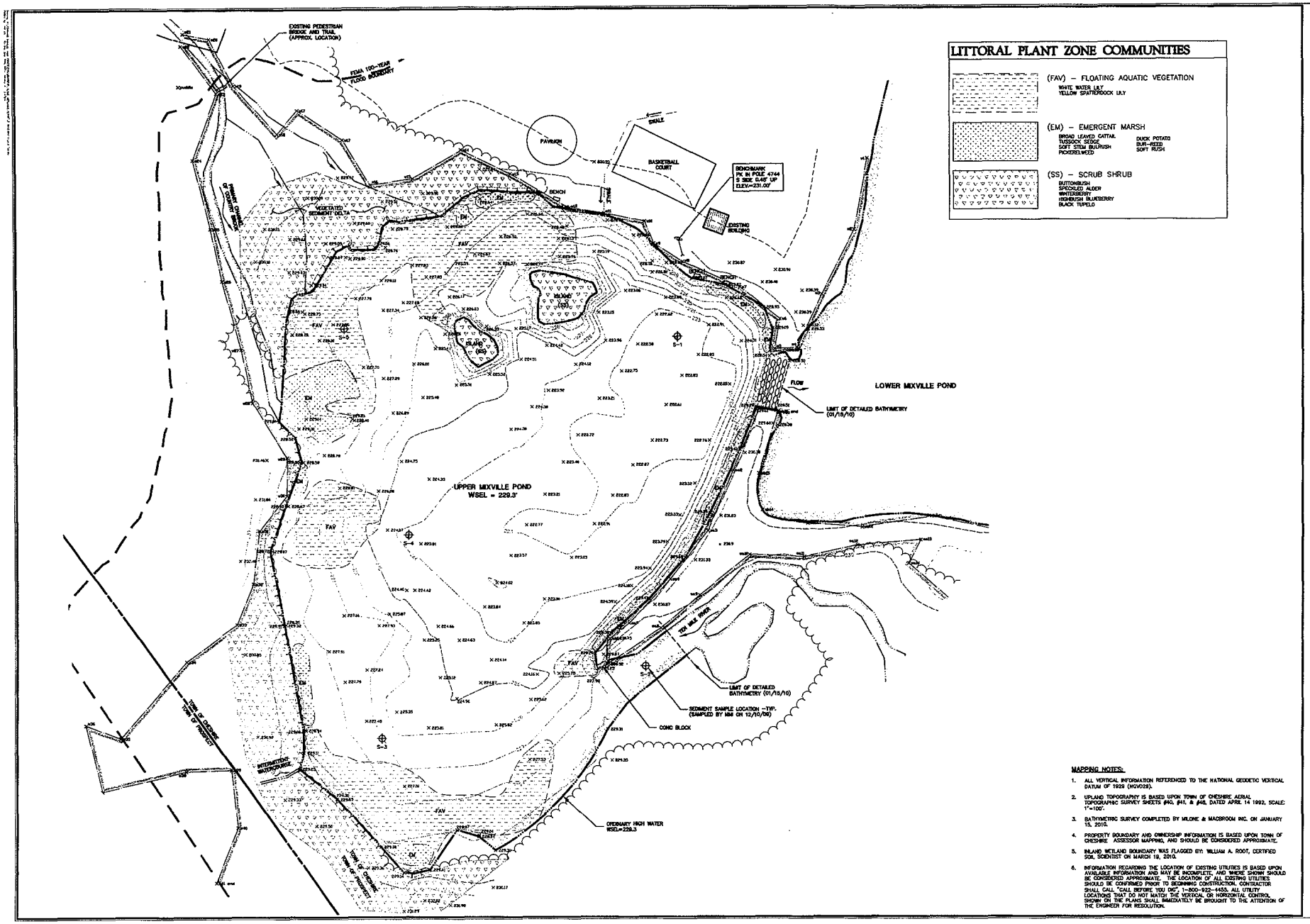
JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=80'

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 2



LITTORAL PLANT ZONE COMMUNITIES

(FAV) – FLOATING AQUATIC VEGETATION
- WHITE WATER LILY
- YELLOW SPATTERDOCK LILY

(EM) – EMERGENT MARSH
- BROAD LEAVED CATTAIL
- TUSSOCK SEDGE
- SOFT STEM BULRUSH
- PICKEREL WEED
- DUCK POTATO
- BUR-REED
- SOFT RUSH

(SS) – SCRUB SHRUB
- BUTTONBUSH
- SPECKLED ALDER
- WINTERBERRY
- HIGHBUSH BLUEBERRY
- BLACK TUPELO

MAPPING NOTES:

1. ALL VERTICAL INFORMATION REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
2. UPLAND TOPOGRAPHY IS BASED UPON TOWN OF CHESHIRE AERIAL TOPOGRAPHIC SURVEY SHEETS #40, #41, & #46, DATED APRIL 14 1992, SCALE: 1"=100'.
3. BATHYMETRIC SURVEY COMPLETED BY MILONE & MACBROOM INC. ON JANUARY 15, 2010.
4. PROPERTY BOUNDARY AND OWNERSHIP INFORMATION IS BASED UPON TOWN OF CHESHIRE ASSESSOR MAPPING, AND SHOULD BE CONSIDERED APPROXIMATE.
5. INLAND WETLAND BOUNDARY WAS FLAGGED BY: WILLIAM A. ROOT, CERTIFIED SOIL SCIENTIST ON MARCH 19, 2010.
6. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES IS BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

SCALE IN FEET
0 20 40 80
SCALE 1"=40'

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REVISIONS

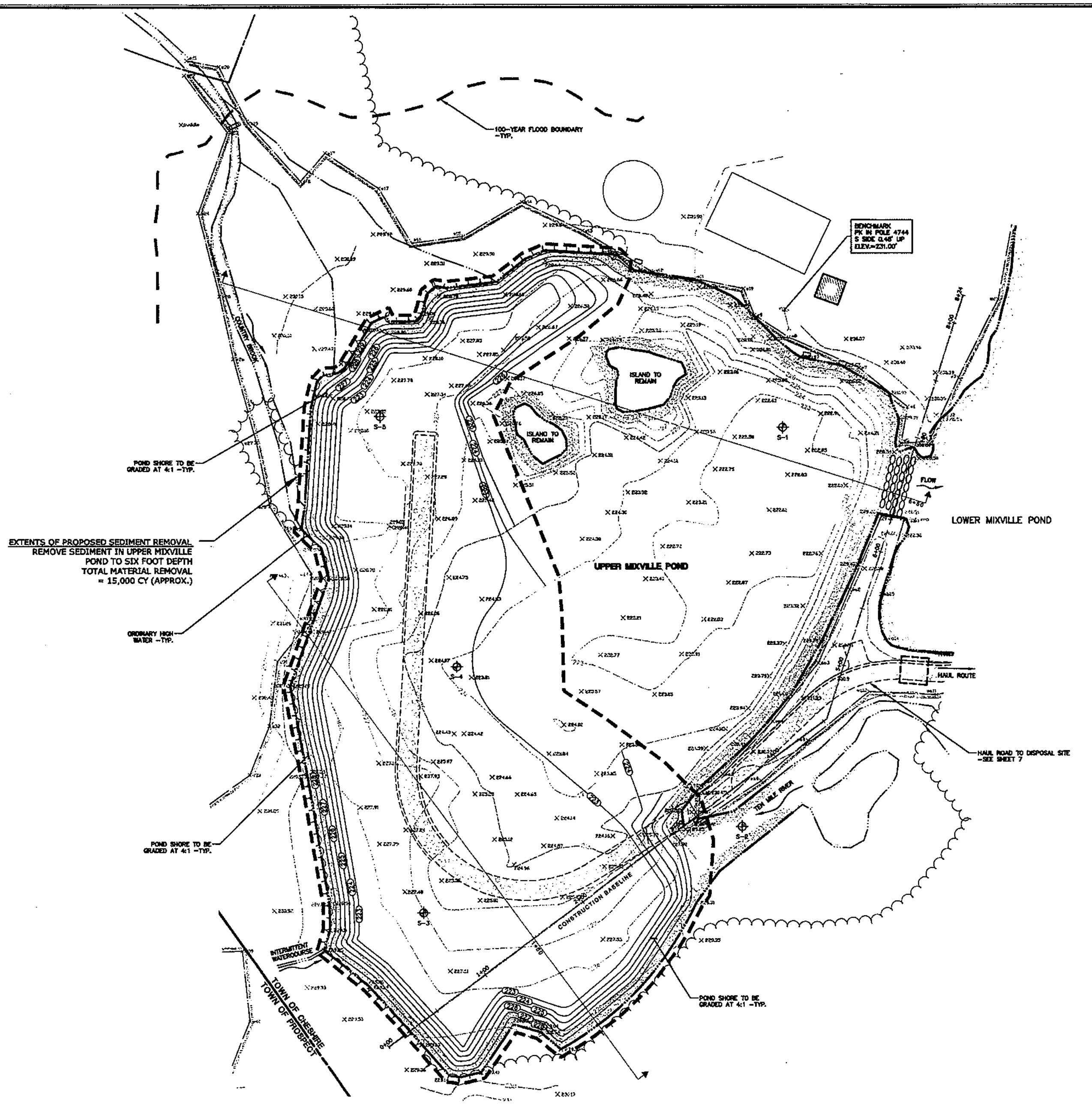
DATE	DESCRIPTION
06/16/2010	DEP SUBMIT
07/01/2010	DEP REV. COMMENTS

EXISTING CONDITIONS
UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT
NOTCH ROAD
CHESHIRE, CONNECTICUT

JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=40'
DATE MAY, 2010
PROJECT NO. 1046-59

SHEET NO. 3



SHEET INDEX

GENERAL NOTES:

1. MILONE & MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA THAT HAVE BEEN SUPPLIED BY OTHERS.
2. ALL EXISTING DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT – REVISED 2002" AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
4. ALL DISTURBED UPLAND AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL AND BE SEEDED WITH GRASS UNLESS OTHERWISE SPECIFIED ON PLANS.
5. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
6. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF CHESHIRE REQUIREMENTS.
7. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS SHALL BE STORED A MINIMUM OF FIVE FEET IN ELEVATION ABOVE THE NORMAL WATER ELEVATION, AND OUTSIDE OF THE FEMA DESIGNATED 100-YEAR FLOOD ZONE BOUNDARY.
8. EQUIPMENT REFUELING SHALL ONLY OCCUR IN ACCORDANCE WITH PROVIDED SPECIFICATIONS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRAWDOWN OF THE WATER LEVEL DURING CONSTRUCTION TO AN APPROXIMATE ELEVATION 226.0 NGVD FOR THE LOWER POND. THE UPPER POND IS TO BE ENTIRELY DEWATERED. THE CONTRACTOR SHALL COORDINATE ALL WATER DRAW DOWNS WITH THE TOWN OF CHESHIRE.
10. SEDIMENT MUST BE SUFFICIENTLY DEWATERED PRIOR TO REMOVAL TO ALLOW FOR TRANSPORTATION IN DUMP TRUCKS WITHOUT LEAKAGE. SEDIMENT DEWATERING WILL ONLY BE ALLOWED WITHIN THE POND, OR IN THE DESIGNATED DEWATERING AREA. ALL MATERIAL IS TO BE DISPOSED IN THE DESIGNATED DISPOSAL AREA, UNLESS OTHERWISE AGREED UPON BY THE TOWN OF CHESHIRE. THE CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED MATERIAL IN A MANNER THAT CONFORMS TO ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND LAWS PERTAINING TO SUCH.
11. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE TOWN'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS.
12. ALL DISTURBED AREAS INCLUDING THE EDGE OF THE POND ARE TO BE RESTORED IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL GUIDELINES PROVIDED.
13. ALL DEWATERING WATER SHALL BE DISCHARGED IN A MANNER THAT MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS.
14. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
15. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.

SCALE IN FEET 0 20 40 SCALE 1" = 40'

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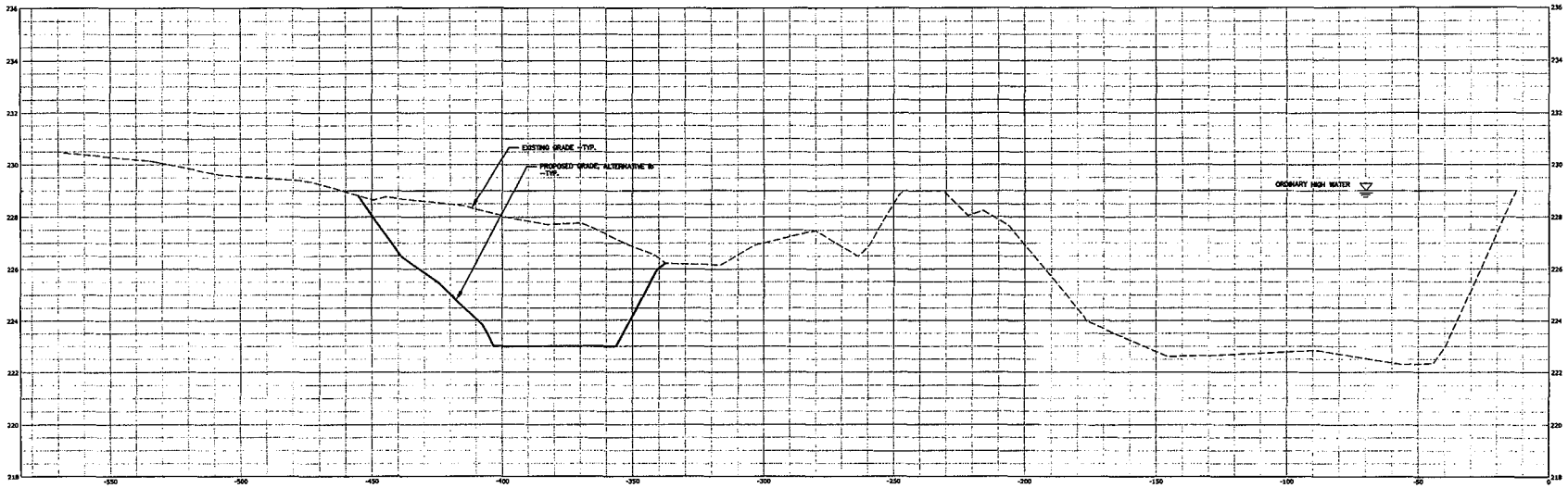
REVISIONS
01/14/2011 : CT DEP COMMENTS

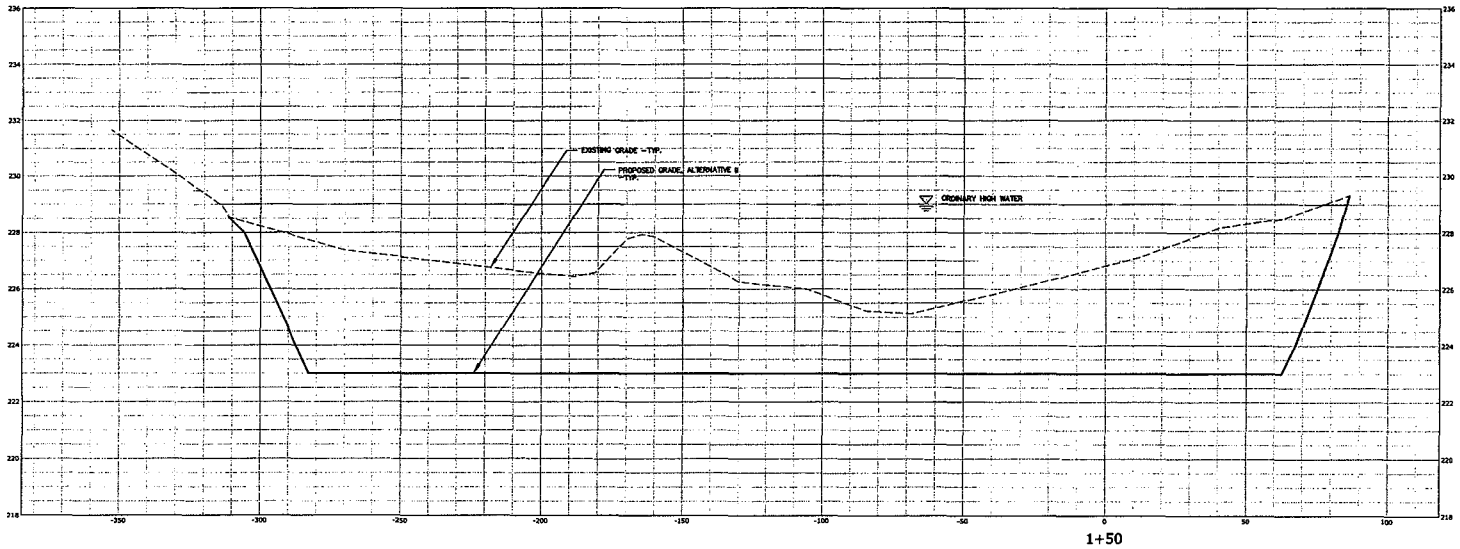
PROPOSED CONDITIONS - SEDIMENT REMOVAL PLAN

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT
NOTCH ROAD
CHESHIRE, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JCM	JCM	WAG

SCALE 1"=40'
DATE MAY, 2010
PROJECT NO. 1046-59
SHEET NO. 4





SCALE IN FEET

SCALE 1"=20'H, 1"=2'V

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REVISIONS

07/14/2011	CT DEP COMMENTS	

PROPOSED CONDITIONS - CROSS SECTIONS

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

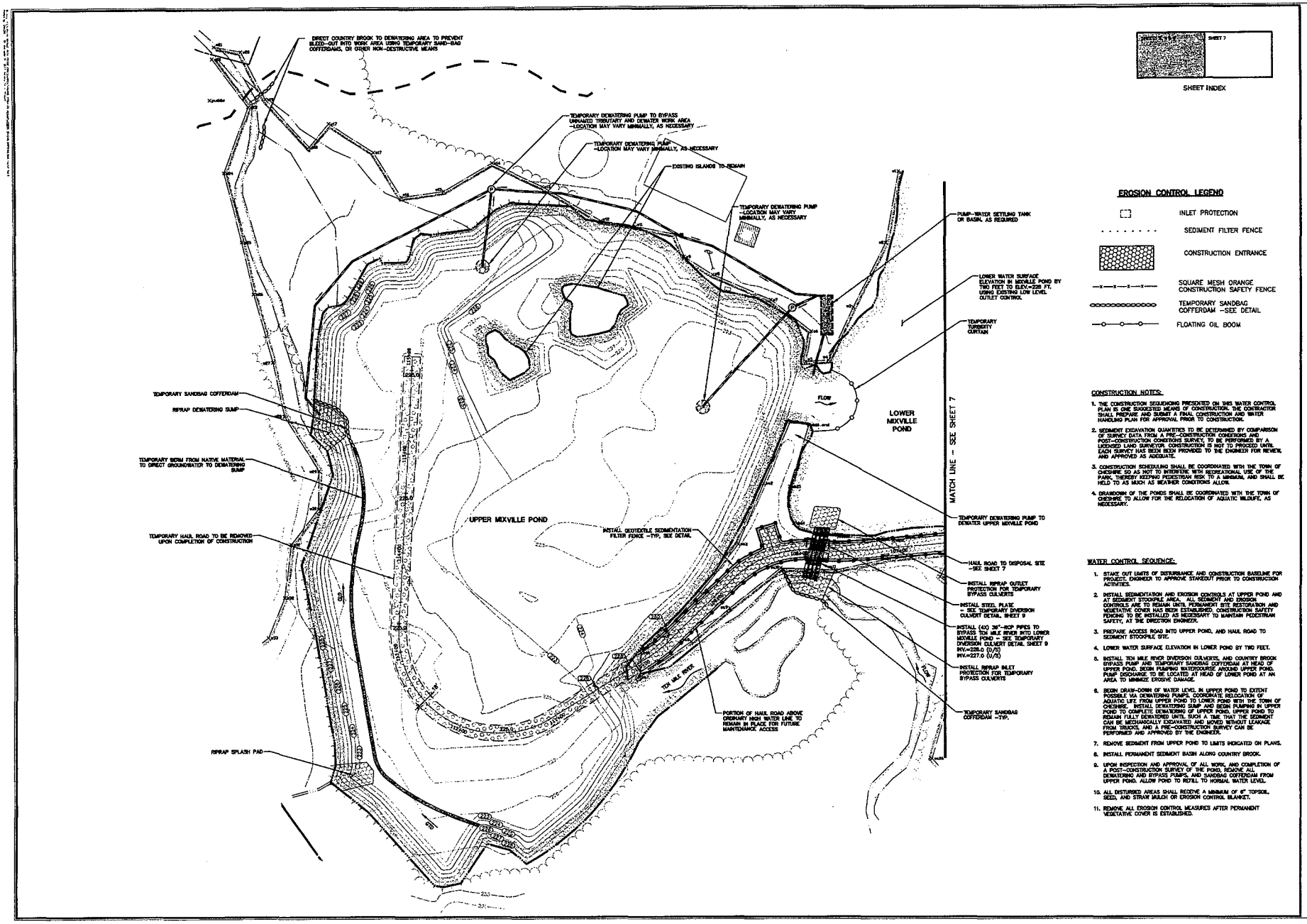
JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=20'H 1"=2'V

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 5



EROSION CONTROL LEGEND

- INLET PROTECTION
- SEDIMENT FILTER FENCE
- CONSTRUCTION ENTRANCE
- SQUARE MESH ORANGE CONSTRUCTION SAFETY FENCE
- TEMPORARY SANDBAG COFFERDAM -SEE DETAIL
- FLOATING OIL BOOM

CONSTRUCTION NOTES:

1. THE CONSTRUCTION SEQUENCING PRESENTED ON THIS WATER CONTROL PLAN IS ONE SUGGESTED MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FINAL CONSTRUCTION AND WATER HANDLING PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.
2. SEDIMENT EXCAVATION QUANTITIES TO BE DETERMINED BY COMPARISON OF SURVEY DATA FROM A PRE-CONSTRUCTION CONDITIONS AND POST-CONSTRUCTION CONDITIONS SURVEY, TO BE PERFORMED BY A LICENSED LAND SURVEYOR. CONSTRUCTION IS NOT TO PROCEED UNTIL EACH SURVEY HAS BEEN BEEN PROVIDED TO THE ENGINEER FOR REVIEW, AND APPROVED AS ADEQUATE.
3. CONSTRUCTION SCHEDULING SHALL BE COORDINATED WITH THE TOWN OF CHESHIRE SO AS NOT TO INTERFERE WITH RECREATIONAL USE OF THE PARK, THEREBY KEEPING PEDESTRIAN RISK TO A MINIMUM, AND SHALL BE HELD TO AS MUCH AS WEATHER CONDITIONS ALLOW.
4. DRAWDOWN OF THE PONDS SHALL BE COORDINATED WITH THE TOWN OF CHESHIRE TO ALLOW FOR THE RELOCATION OF AQUATIC WILDLIFE, AS NECESSARY.

WATER CONTROL SEQUENCE:

1. STAKE OUT LIMITS OF DISTURBANCE AND CONSTRUCTION BASELINE FOR PROJECT. ENGINEER TO APPROVE STAKEOUT PRIOR TO CONSTRUCTION ACTIVITIES.
2. INSTALL SEDIMENTATION AND EROSION CONTROLS AT UPPER POND AND AT SEDIMENT STOCKPILE AREA. ALL SEDIMENT AND EROSION CONTROLS ARE TO REMAIN UNTIL PERMANENT SITE RESTORATION AND VEGETATIVE COVER HAS BEEN ESTABLISHED. CONSTRUCTION SAFETY FENCING TO BE INSTALLED AS NECESSARY TO MAINTAIN PEDESTRIAN SAFETY, AT THE DIRECTION ENGINEER.
3. PREPARE ACCESS ROAD INTO UPPER POND, AND HAUL ROAD TO SEDIMENT STOCKPILE SITE.
4. LOWER WATER SURFACE ELEVATION IN LOWER POND BY TWO FEET.
5. INSTALL TEN MILE RIVER DIVERSION CULVERTS, AND COUNTRY BROOK BYPASS PUMP AND TEMPORARY SANDBAG COFFERDAM AT HEAD OF UPPER POND. BEGIN PUMPING WATERCOURSE AROUND UPPER POND. PUMP SEDIMENTATION TO BE LOCATED AT HEAD OF LOWER POND AT AN AREA TO MINIMIZE EROSIVE DAMAGE.
6. BEGIN DRAW-DOWN OF WATER LEVEL IN UPPER POND TO EXTENT POSSIBLE VIA DEWATERING PUMPS. COORDINATE RELOCATION OF AQUATIC LIFE FROM UPPER POND TO LOWER POND WITH THE TOWN OF CHESHIRE. INSTALL DEWATERING SUMP AND BEGIN PUMPING IN UPPER POND TO COMPLETE DEWATERING OF UPPER POND. UPPER POND TO REMAIN FULLY DEWATERED UNTIL SUCH A TIME THAT THE SEDIMENT CAN BE MECHANICALLY EXCAVATED AND MOVED WITHOUT LEAKAGE FROM TRUCKS, AND A PRE-CONSTRUCTION SURVEY CAN BE PERFORMED AND APPROVED BY THE ENGINEER.
7. REMOVE SEDIMENT FROM UPPER POND TO LIMITS INDICATED ON PLANS.
8. INSTALL PERMANENT SEDIMENT BASIN ALONG COUNTRY BROOK.
9. UPON INSPECTION AND APPROVAL OF ALL WORK, AND COMPLETION OF A POST-CONSTRUCTION SURVEY OF THE POND, REMOVE ALL DEWATERING AND BYPASS PUMPS, AND SANDBAG COFFERDAM FROM UPPER POND. ALLOW POND TO REFILL TO NORMAL WATER LEVEL.
10. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, SEED, AND STRAW MULCH OR EROSION CONTROL BLANKET.
11. REMOVE ALL EROSION CONTROL MEASURES AFTER PERMANENT VEGETATIVE COVER IS ESTABLISHED.

SCALE IN FEET

SCALE 1" = 40'

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REVISIONS

DATE	BY	COMMENTS
07/14/2011	CT	DEP COMMENTS

CONSTRUCTION PLAN - DEWATERING AND SITE ACCESS

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=40'

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 6

Temporary Sediment Trap Sizing Calculations:

• TST #1

Drainage Area (S.F)= 42,000 s.f.
Vt = 134 x 0.95 Ac. = 129.2 c.y. = 3488.4 c.f.
Vt = 3,488.4 c.f.

Assume 3.0 ft. depth, and Vt = A x D
At = Total Area = Vt / (Dt)
At = 3488.4 c.f. / (3.0 ft.)
At = 1,368.0 s.f.

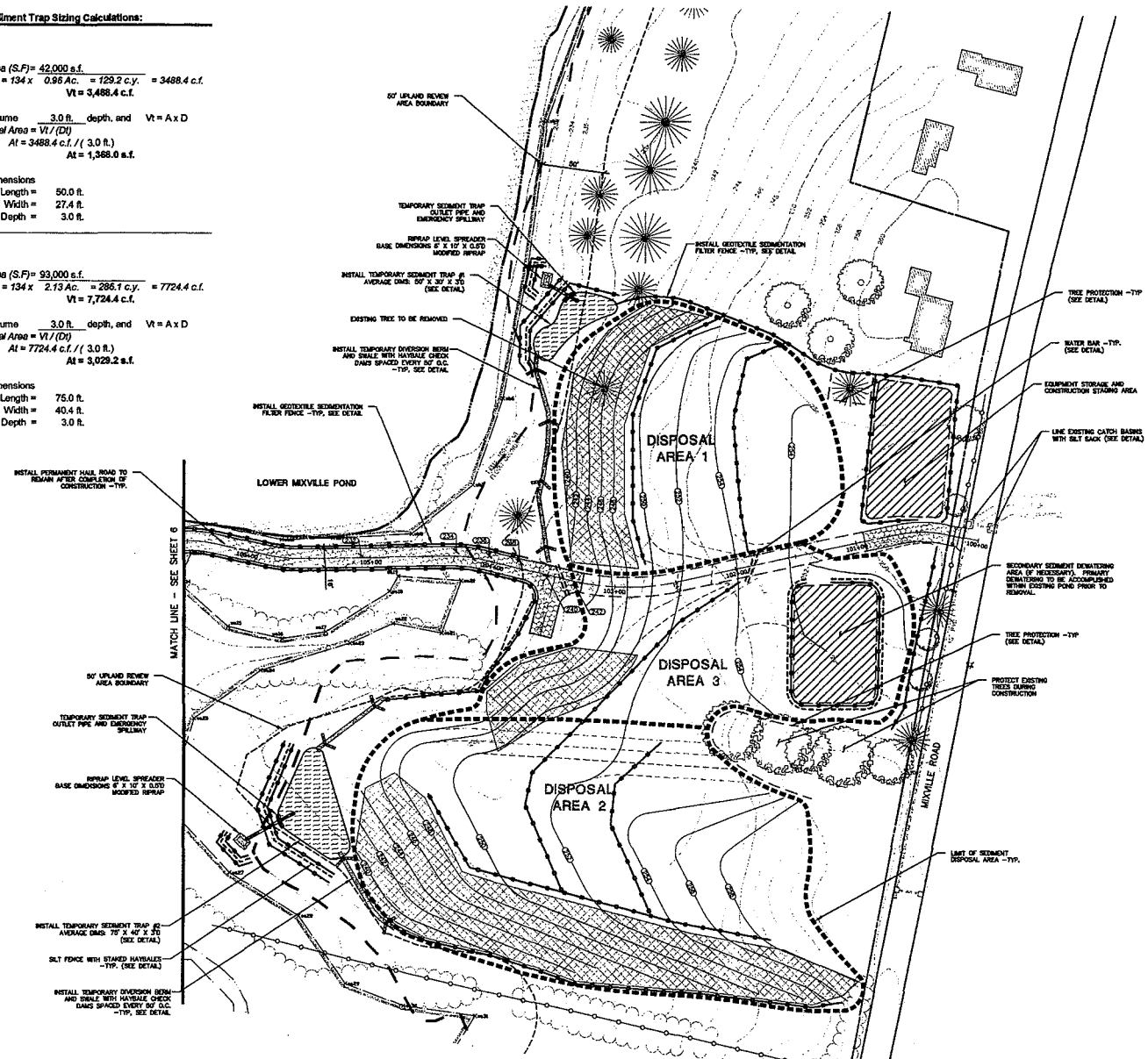
TST Dimensions
Length = 50.0 ft.
Width = 27.4 ft.
Depth = 3.0 ft.

• TST #2

Drainage Area (S.F)= 93,000 s.f.
Vt = 134 x 2.13 Ac. = 286.1 c.y. = 7724.4 c.f.
Vt = 7,724.4 c.f.

Assume 3.0 ft. depth, and Vt = A x D
At = Total Area = Vt / (Dt)
At = 7724.4 c.f. / (3.0 ft.)
At = 3,029.2 s.f.

TST Dimensions
Length = 75.0 ft.
Width = 40.4 ft.
Depth = 3.0 ft.



SHEET INDEX

SEDIMENT DISPOSAL SEQUENCE AND NOTES:

1. ALL MATERIAL REMOVED FROM THE UPPER MIXVILLE POND AND TO BE PLACED PERMANENTLY AT THE DESIGNATED ON-SITE DISPOSAL AREA SHALL BE DONE IN A MANNER THAT MINIMIZES THE POTENTIAL FOR EROSION AND THE AMOUNT OF EXPOSED/UNSTABILIZED AREAS.
2. MATERIAL PLACEMENT SHALL TAKE PLACE IN ONE OF THREE DESIGNATED AREAS, STARTING WITH "DISPOSAL AREA 1," AND PROCEEDING SEQUENTIALLY TO THE OTHER DISPOSAL AREAS. NO SEDIMENT MAY BE PLACED IN THE NEXT DISPOSAL AREA UNTIL THE ACTIVE AREA IS FULLY STABILIZED.
3. THE CONTRACTOR SHALL PLACE THE MATERIAL IN ROWS (20-FT WIDE MAX) PARALLEL TO THE PROPOSED CONTOURS, BEGINNING AT THE DOWNHILL-MOST PORTION OF THE DISPOSAL AREA AND WORKING UP-HILL. TOPSOIL SHALL BE STRIPPED TO A DEPTH OF EIGHT INCHES (8") AT EACH ROW BEFORE SEDIMENT PLACEMENT BEGINS AND STORED DIRECTLY UP-GRADIENT OF THE ACTIVE WORK AREA.
4. SEDIMENT SHALL BE PLACED TO PROPOSED GRADE IN EACH DISPOSAL AREA. IF ALL THREE AREAS ARE NOT REQUIRED, THE SEDIMENT TO REMAIN ON SITE SHALL BE GRADED SUCH THAT IT IS BLENDED INTO THE SURROUNDING EXISTING GRADE (SEE TEMPORARY CONTOURS).
5. TOPSOIL ROWS AND SEDIMENT ROWS SHALL BE SHAPED SUCH THAT THEY HELP DETAIN WATER FROM UPHILL RUNOFF, TO PREVENT SEDIMENTATION AND TURBID RUNOFF DURING PRECIPITATION EVENTS.
6. SEDIMENT THAT HAS BEEN PLACED TO PROPOSED GRADE SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH, OR HYDROSEEDED AS QUICKLY AS POSSIBLE.
7. EROSION CONTROL BLANKET SHALL BE UTILIZED ON SLOPES STEEPER THAN 4:1 SLOPE AS SHOWN ON THE PLAN, OR FOR PERMANENT STABILIZATION WHEN SEASONAL RESTRICTIONS DO NOT ALLOW SEED/MULCH.
8. NO AREA OF SEDIMENT PLACEMENT LARGER THAN A 20' WIDE BY 200' LONG ROW SHALL BE ALLOWED TO REMAIN UNSTABILIZED AT ONE TIME.
9. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF SIX INCHES (6") TOPSOIL, SEED, AND STRAW MULCH OR EROSION CONTROL BLANKET.
10. SEDIMENTATION AND EROSION CONTROLS AS SHOWN ON THIS SHEET ARE SUBJECT TO REVISION WITH CHANGING SITE CONDITIONS, AT THE DIRECTION OF THE TOWN OF CHESHIRE OR THE SUPERVISING ENGINEER.
11. EROSION CONTROLS SHALL BE MAINTAINED, REPAIRED, ALTERED, AND/OR SUPPLEMENTED AS NECESSARY UNTIL THE SITE IS FULLY STABILIZED AFTER THE COMPLETION OF CONSTRUCTION.

EROSION CONTROL LEGEND

- INLET PROTECTION
- SQUARE MESH ORANGE CONSTRUCTION SAFETY FENCE
- TEMPORARY SANDBAG COFFERDAM -SEE DETAIL
- FLOATING OIL BOOM
- WATER BAR
- (250) PROPOSED CONTOUR (FINAL)
- (250) PROPOSED CONTOUR (TEMPORARY)
- SEDIMENT FILTER FENCE
- STAKED HAYBALES
- TEMPORARY DIVERSION BERM AND SWALE WITH HAYBALE CHECK DAMS SPACED EVERY 50' O.C.
- CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
- TEMPORARY SEDIMENT TRAP
- TEMPORARY STOCKPILE OR DEWATERING AREA

N
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SCALE IN FEET
0 20 40 80
SCALE 1"=40'

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REVISIONS

07/13/2011	CT DEP COMMENTS	

CONSTRUCTION PLAN - HAUL ROAD AND SEDIMENT DISPOSAL SITE

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

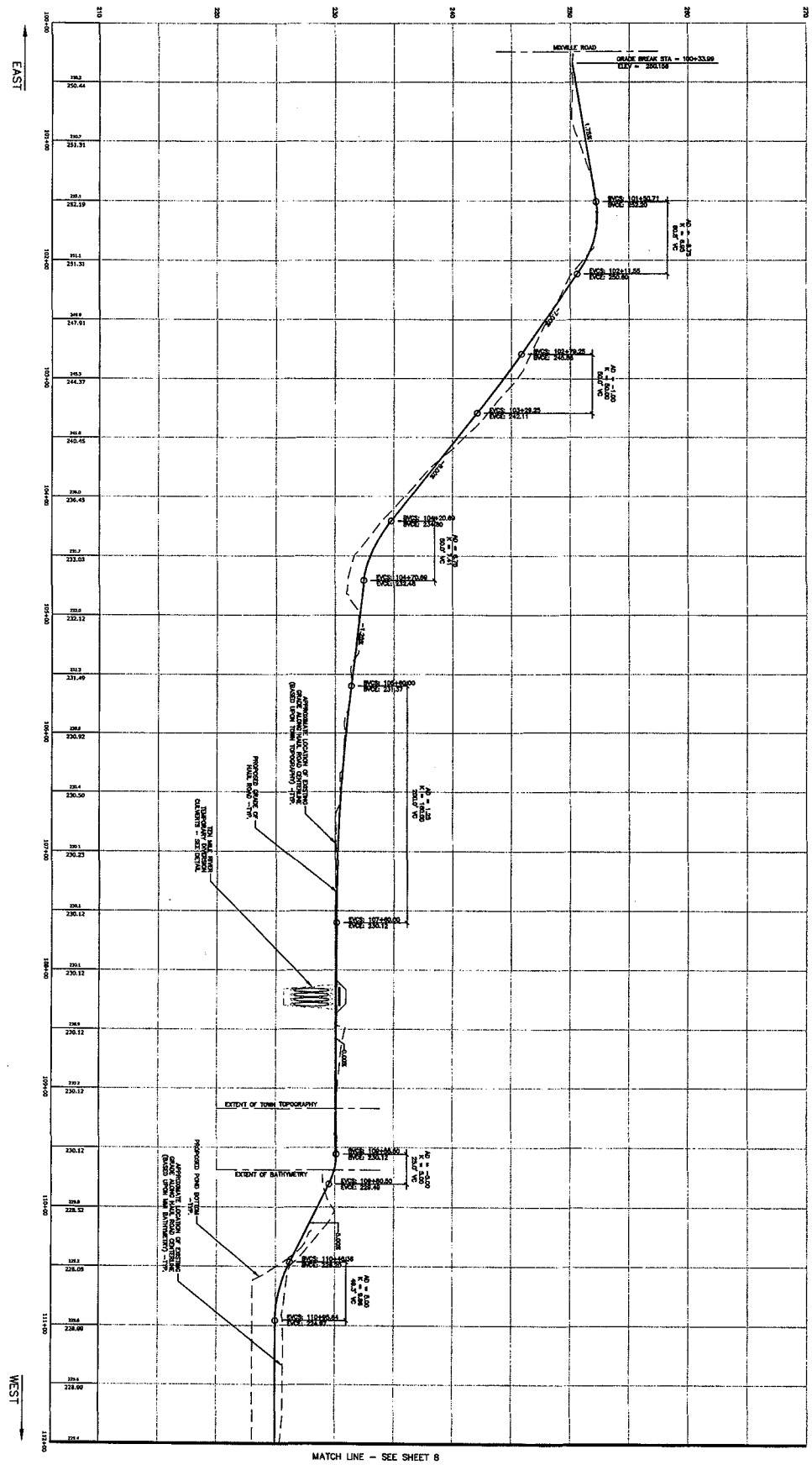
JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=40'

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 7



MATCH LINE — SEE SHEET 8

SHEET NO. 8	DESIGNED JCM	DRAWN JCM	CHECKED WAG
	SCALE 1"=40'H, 1"=4'V		
	DATE MAY, 2010		
	PROJECT NO. 1048-59		

CONSTRUCTION PLAN - HAUL ROAD PROFILE

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

REVISIONS

01/14/2011	CT DEP COMMENTS

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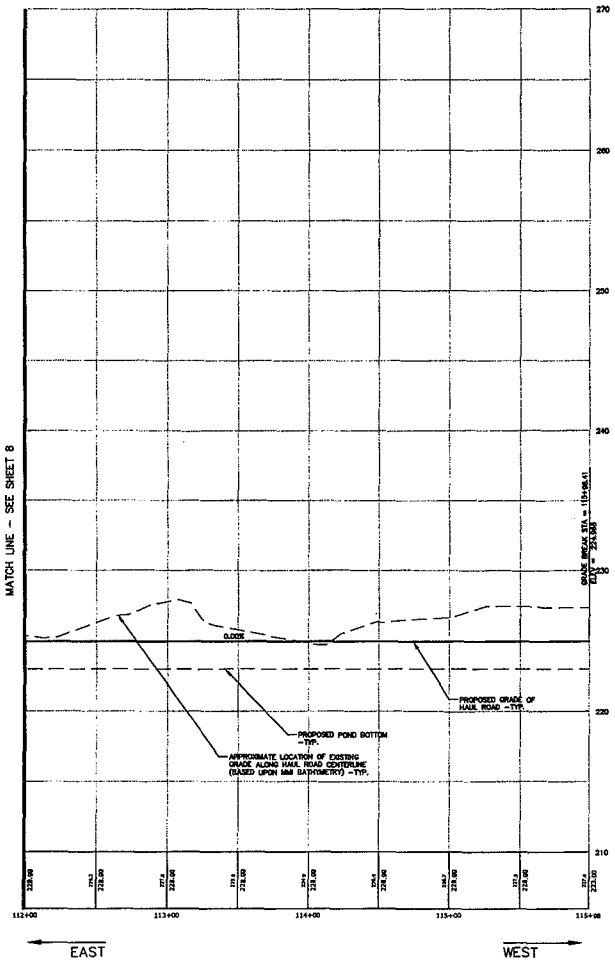
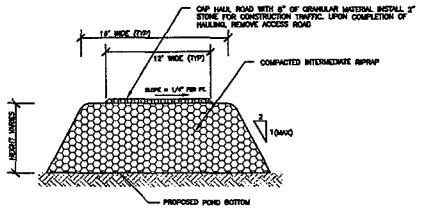
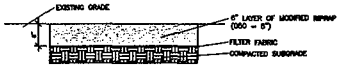
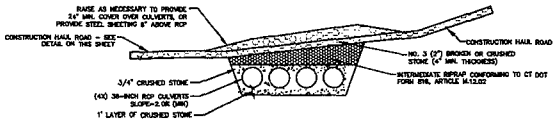




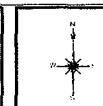
CONSTRUCTION HAUL ROAD DETAIL (IN WATER)
(N.T.S.)



PERMANENT CONSTRUCTION HAUL ROAD DETAIL (UPLAND)
(N.T.S.)



TEN-MILE RIVER TEMPORARY DIVERSION CULVERT DETAIL
(N.T.S.)



SCALE IN FEET
0 10' 20' 40'
SCALE 1"=40'

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REVISIONS

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CONSTRUCTION PLAN - HAUL ROAD PROFILE

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JCM	JCM	WAG

SCALE 1"=40'H, 1"=4'V

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 9

SEDIMENT & EROSION CONTROL SPECIFICATIONS

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
   d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
   e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
   f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.
   g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

GENERAL:

1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
2. UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
4. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.

MATERIAL:

1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF STONES (OVER 1" IN DIAMETER), LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
5. SOLUBLE SALT CONTENT OF OVER 500 PARTS PER MILLION (PPM) IS LESS SUITABLE. AVOID TIDAL MARSH SOILS BECAUSE OF HIGH SALT CONTENT AND SULFUR ACIDITY.
6. THE pH SHOULD BE MORE THAN 6.0. IF LESS, ADD LIME TO INCREASE pH TO AN ACCEPTABLE LEVEL.

APPLICATION

1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST SIX INCHES (6"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

GENERAL:

1. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQ. FT.).
4. APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS. OF 10-10-10 PER ACRE (7 LBS. PER 1,000 SQ. FT.) AND SECOND APPLICATION OF 200 LBS. OF 10-10-10- (5 LBS. PER 1,000 SQ. FT.) WHEN GRASS IS FOUR INCHES (4") TO SIX INCHES (6") HIGH. APPLY ONLY WHEN GRASS IS DRY.
5. UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
6. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

ESTABLISHMENT:

1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW OR HAY MULCH AND ANCHOR TO SLOPES GREATER THAN 3% OR WHERE CONCENTRATED FLOW WILL OCCUR.

PERMANENT VEGETATIVE COVER

GENERAL:

1. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:
   - SPREAD SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS.
   - FALL SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS. OF 10-10-10 FERTILIZER PER ACRE (14 LBS. PER 1,000 SQ. FT.).

VEGETATIVE COVER SELECTION & MULCHING

TEMPORARY VEGETATIVE COVER:
PERENNIAL RYEGRASS 3 LBS./1,000 SQ.FT.
(LOLIUM PERENNE)

PERMANENT VEGETATIVE COVER:
GENERAL SEEDING:
LOFTS – "ATHLETIC FIELD MIXTURE" (OR APPROVED EQUAL)

REBEL 30, REBEL JR. OR TRIBUTE TALL FESCUE	80%
SYDSPORT, KENTUCKY BLUEGRASS	10%
PALMER II PERENNIAL RYEGRASS	10%

SEEDING RATE: 6 LBS./1000 S.F.
SPRING SEEDING: 4/1 to 5/31
FALL SEEDING: 8/16 to 10/15

WETLAND SWALE SEEDING:
BLACKLEDGE RIVER NURSERY: "WETLAND SEED MIX" (OR "NEW ENGLAND WETMIX")
SEEDING RATE: 1 LBS./3000 S.F.
BLACKLEDGE RIVER NURSERY, INC.
MARLBOROUGH, CT.
1-860-295-1022

WILDFLOWER SEEDING:
NEW ENGLAND WETLAND PLANTS, INC.: "CONSERVATION/WILDFLOWER MIX" (OR APPROVED EQUAL)
SEEDING RATE: 15 LBS. PER ACRE
NEW ENGLAND WETLAND PLANTS, INC.
AMHERST, MA.
1-413-254-1782

TEMPORARY MULCHING:
STRAW OR HAY 70-90 LBS./1,000 SQ.FT.
(TEMPORARY VEGETATIVE AREAS)
WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:

1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
6. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS. USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

MAINTENANCE:

1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.
2. ON SITES WHERE GRASSES PREDOMINATE, BROADCAST ANNUALLY 500 POUNDS OF 10-10-10 FERTILIZER PER ACRE (12 LBS. PER 1,000 SQ. FT.) OR AS NEEDED ACCORDING TO ANNUAL SOIL TESTS.
3. ON SITES WHERE LEGUMES PREDOMINATE, BROADCAST EVERY THREE (3) YEARS OR AS INDICATED BY SOIL TEST 300 POUNDS OF 0-20-20 OR EQUIVALENT PER ACRE (8 LBS PER 1,000 SQ. FT.).

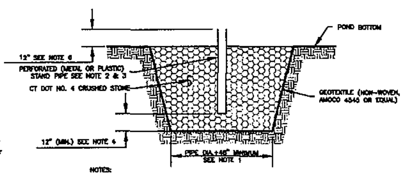
EROSION CHECKS

GENERAL:

1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

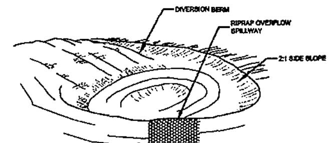
1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').



NOTES:

1. OVERALL SUMP PIT DIMENSIONS TO BE COMPATIBLE WITH ANTICIPATED SEEPAGE RATES AND PUMP TO BE USED.
2. THE STAND PIPE DIAMETER AND NUMBER OF PERFORATIONS TO BE COMPATIBLE WITH THE PUMP SIZE BEING USED.
3. PERFORATIONS IN THE STANDPIPE TO BE EITHER CIRCULAR OR SLOTS. PERFORATION SIZE SHALL NOT EXCEED 1/2" DIAMETER.
4. NO. 4 CRUSHED STONE CONFORMING TO CT DOT FORM 816, M.01.01. CRUSHED STONE SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM OF THE STANDPIPE.
5. A PROPERLY DESIGNED GEOTEXTILE TO BE PLACED BETWEEN THE EXISTING SOILS AND THE CRUSHED STONE BACKFILL.
6. THE STANDPIPE SHALL EXTEND A MINIMUM OF 12" ABOVE THE SURROUNDING GROUND.

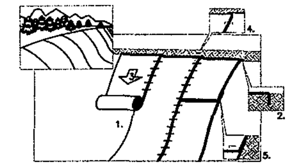
TEMPORARY CONSTRUCTION DEWATERING SUMP
N.T.S.



NOTES:
REFER TO SEDIMENT & EROSION CONTROL PLAN FOR APPROXIMATE DIMENSIONS AND REQUIRED VOLUME.

SOURCE: 2002 CT. GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

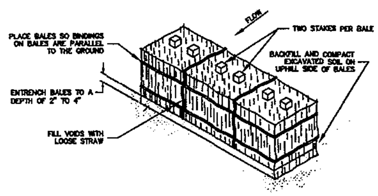
TEMPORARY SEDIMENT TRAP
N.T.S.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING S150, DO NOT SEED PREPARED AREA. S150 MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.

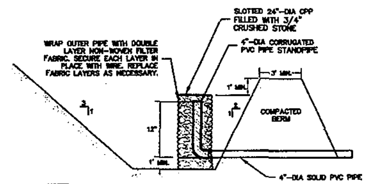
REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

APPLICATION OF EROSION CONTROL BLANKET ON SLOPES
N.T.S.



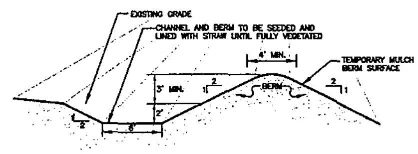
1. IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL ALL VOIDS WITH LOOSE STRAW.
2. BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS.
3. WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTLY BEHIND FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
4. UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.

STAKED HAY BALES
N.T.S.



NOTES:
1) ENCIRCLE IMPOUNDMENT AREA WITH HIGH VISIBILITY SAFETY FENCE.
2) STABILIZE CONCENTRATED FLOW AREAS ON INLET SLOPE WITH MODIFIED RIP RAP.

TEMPORARY SEDIMENT TRAP OUTLET STRUCTURE
N.T.S.



DIVERSION BERM AND SWALE
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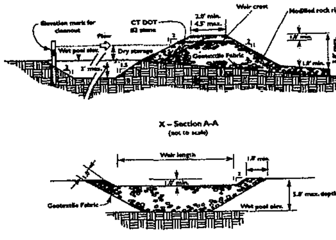
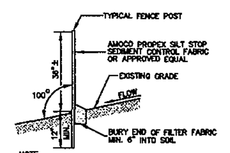


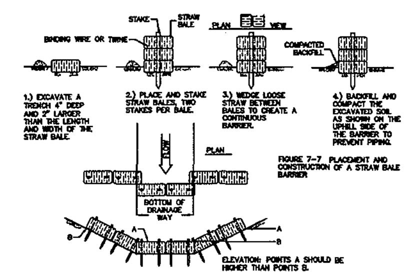
SOURCE: 2002 CT. GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

TEMPORARY SEDIMENT TRAP OVERFLOW SPILLWAY
N.T.S.



NOTE: IN LOCATIONS APPROVED BY ENGINEER OR SOIL SCIENTIST WOOD CHIP BERMS MAY BE USED IN PLACE OF SEDIMENT FILTER FENCE OR HAYBALES

SEDIMENT FILTER FENCE
N.T.S.



HAY BALE CHECK DAM
N.T.S.

REVISIONS
01/14/2011 CT DEP COMMENTS

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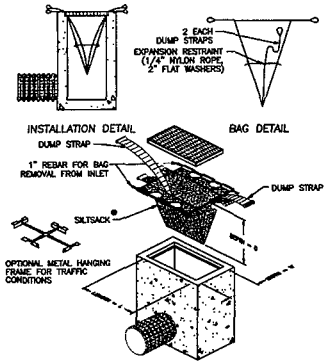
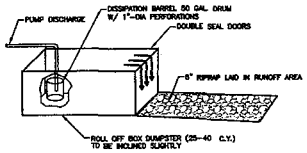
CONSTRUCTION DETAILS
UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT
NOTCH ROAD
CHESHIRE, CONNECTICUT

DESIGNED	DRAWN	CHECKED
JCM	JCM	WAG

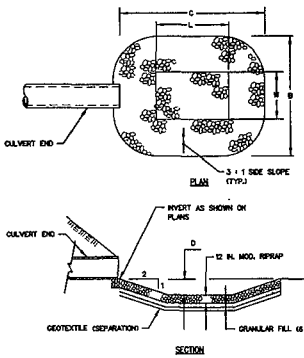
SCALE AS NOTED
DATE MAY, 2010
PROJECT NO. 1046-59
SHEET NO. 10



INLET PROTECTION (SILT SACK) DETAIL
N.T.S.



PUMP-WATER SETTLING TANK OR BASIN
N.T.S.



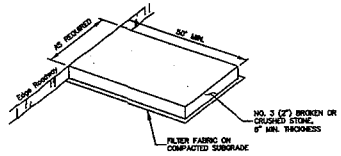
DIMENSION TABLE						
LOCATION	RIPRAP TYPE	B (FEET)	W (FEET)	C (FEET)	L (FEET)	D (FEET)
TEMPORARY SEDIMENT TRAP OUTLET	MODIFIED	10	8	8	4	0.5

RIPRAP LEVEL SPREADER
N.T.S.

SOURCE: BOOD CT DOT DRAINAGE MANUAL

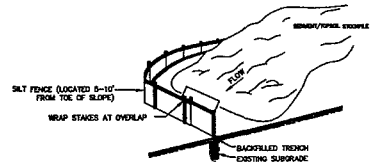
EROSION CONTROL MAINTENANCE INTERVALS

EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL
TEMPORARY SEDIMENT TRAP (TST)	– DETAIN SEDIMENT-LADEN RUNOFF FROM SMALL DISTURBED AREAS LONG ENOUGH TO ALLOW A MAJORITY OF THE SEDIMENT TO SETTLE OUT.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. STONE OUTLET SHOULD BE AT LEAST 1 FOOT BELOW CREST OF EMBANKMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATION REACHES ½ OF THE REQUIRED WET STORAGE.	– TURBID WATER – EXCESSIVE SEDIMENT ACCUMULATION – OVERTOPPING EVIDENCE	TST MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.
SILT FENCE (SF) (MODIFIED IF, STC)	– INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS. – REDUCE VELOCITY OF SHEET FLOW. – PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE THE DEPTH OF SEDIMENT IS EQUAL TO ½ THE FENCE HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	– PHYSICAL DAMAGE OR DECOMPOSITION – EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE – EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE – REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE MOST PERMANENTLY STABILIZED.
HAY BALES (HB), HAY BALE CHECK DAM (HBC)	– INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS. – REDUCE VELOCITY OF SHEET FLOW. – PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE THE DEPTH OF SEDIMENT IS EQUAL TO ½ THE HEIGHT OF THE BARRIER. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	– PHYSICAL DAMAGE OR DECOMPOSITION – EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE – EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE – REPETITIVE FAILURE	HAY BALES MAY BE REMOVED AFTER UPHILL AREAS HAVE BEEN PERMANENTLY STABILIZED.
TEMP. DIVERSION BERM/SWALE (TDB), BERM BAR (BB)	– MINIMIZE VELOCITY AND CONCENTRATION OF SHEET FLOW ACROSS CONSTRUCTION SITE TO A SEDIMENT TRAPPING FACILITY. – DIVERT WATER DRAINING FROM UNDISTURBED AREA AWAY FROM CONSTRUCTION.	WHEN LOCATED WITHIN CLOSE PROXIMITY TO ONGOING CONSTRUCTION ACTIVITIES, INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. OTHERWISE INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. REMOVE THE TEMPORARY BERM/BB AND ANY OTHER ASSOCIATED MEASURES WITHIN 24 HOURS.	– PHYSICAL DAMAGE – EXCESSIVE SCOURING/EROSION – REPETITIVE FAILURE	TEMPORARY DIVERSIONS MAY BE REMOVED ONCE CONSTRUCTION HAS CEASED AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.
CONSTRUCTION ENTRANCE (CE)	– REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE, MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF MOVEMENT OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	– SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.

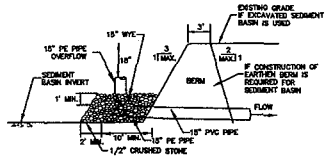


NOTE:
CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH PROMOTE VEHICULAR TRACKING OF MUD.

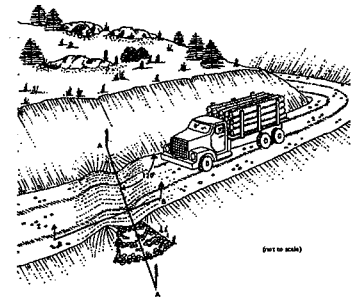
CONSTRUCTION ENTRANCE PAD
N.T.S.

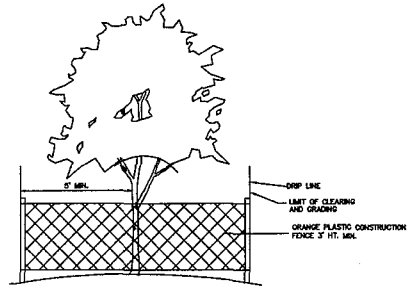


SEDIMENT/TOPSOIL STOCKPILE PROTECTION
N.T.S.

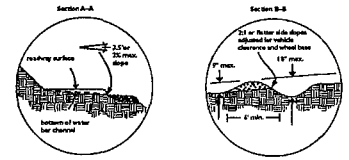


TEMPORARY SEDIMENT BASIN EMERGENCY OVERFLOW OUTLET
(not to scale)





TREE PROTECTION DETAIL
N.T.S.



WATER BAR
N.T.S.

SOURCE: BOOD CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

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07/14/2011	CT DEP COMMENTS	

CONSTRUCTION DETAILS

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE: AS NOTED

DATE: MAY, 2010

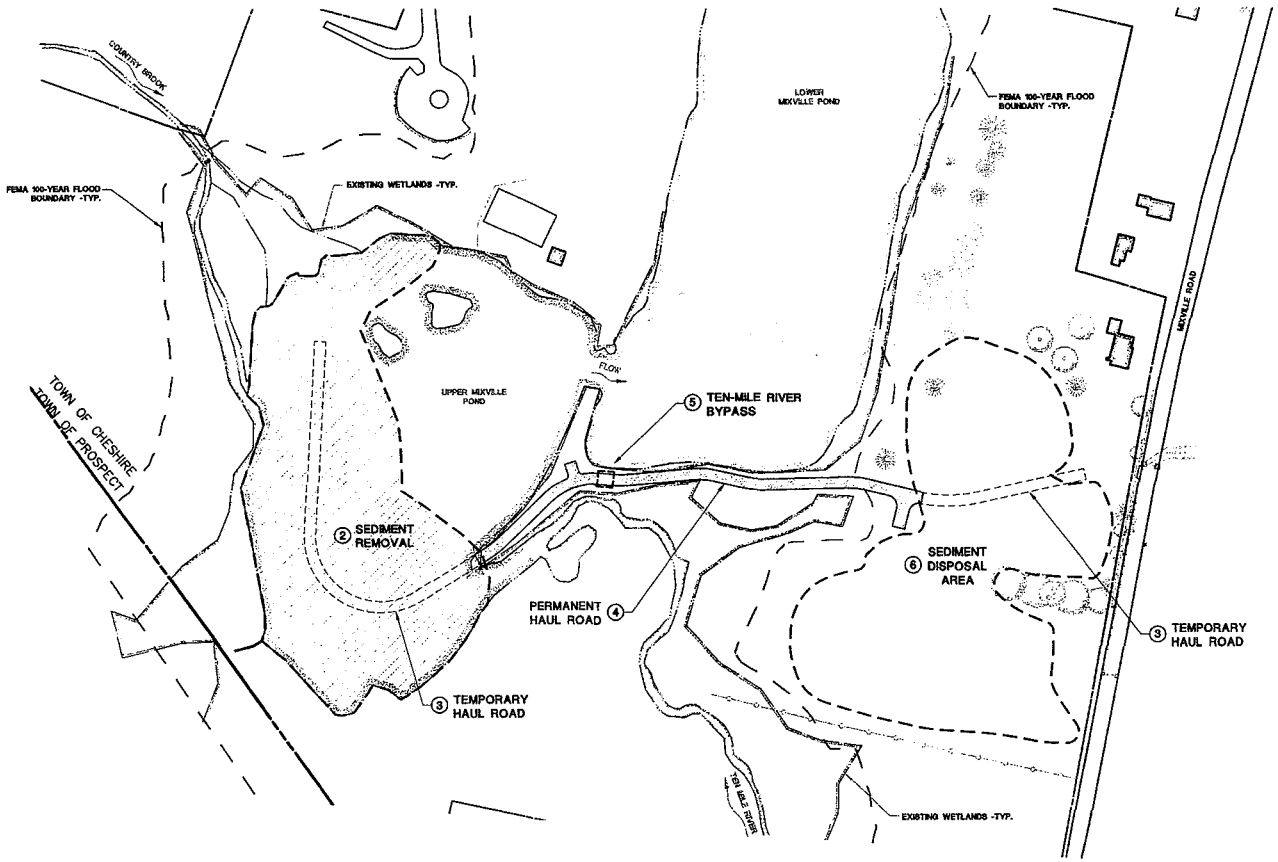
PROJECT NO. 1048-59

SHEET NO. 11

SCHEDULE OF PROPOSED DISTURBANCES

No.	Activity	Temporary / Permanent	Disturbance In-Water	Disturbance Wetland	Disturbance Upland	Cut/Fill In-Water	Cut/Fill Wetland	Cut/Fill Upland
1	Dewatering Upper Pond	T	236,965 SF	0	0	0	0	0
2	Sediment Removal	T	145,640 SF	0	0	15,000 CY Cut	0	0
3	Temporary Haul Road	T	0	0	0	0	0	0
4	Permanent Haul Road	P	0	0	11,000 SF	0	0	200 CY Cut/Fill (0 Net)
5	Ten-Mile River Bypass	T	900 SF	300 SF	700 SF	10 Fill	5 Fill	0
6	Sediment Disposal Area	P	0	0	151,500 SF	0	0	15,000 CY Fill
~~7~~	~~Sediment Basin~~	~~P~~	~~300 SF~~	~~500 SF~~	~~400 SF~~	~~45 CY Cut~~	~~75 CY Cut~~	~~60 CY Cut~~

* ITEM NO. 7 REMOVED FROM APPLICATION



REGULATED ACTIVITIES

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=80'

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 12

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01/14/2011	CT DEP COMMENTS

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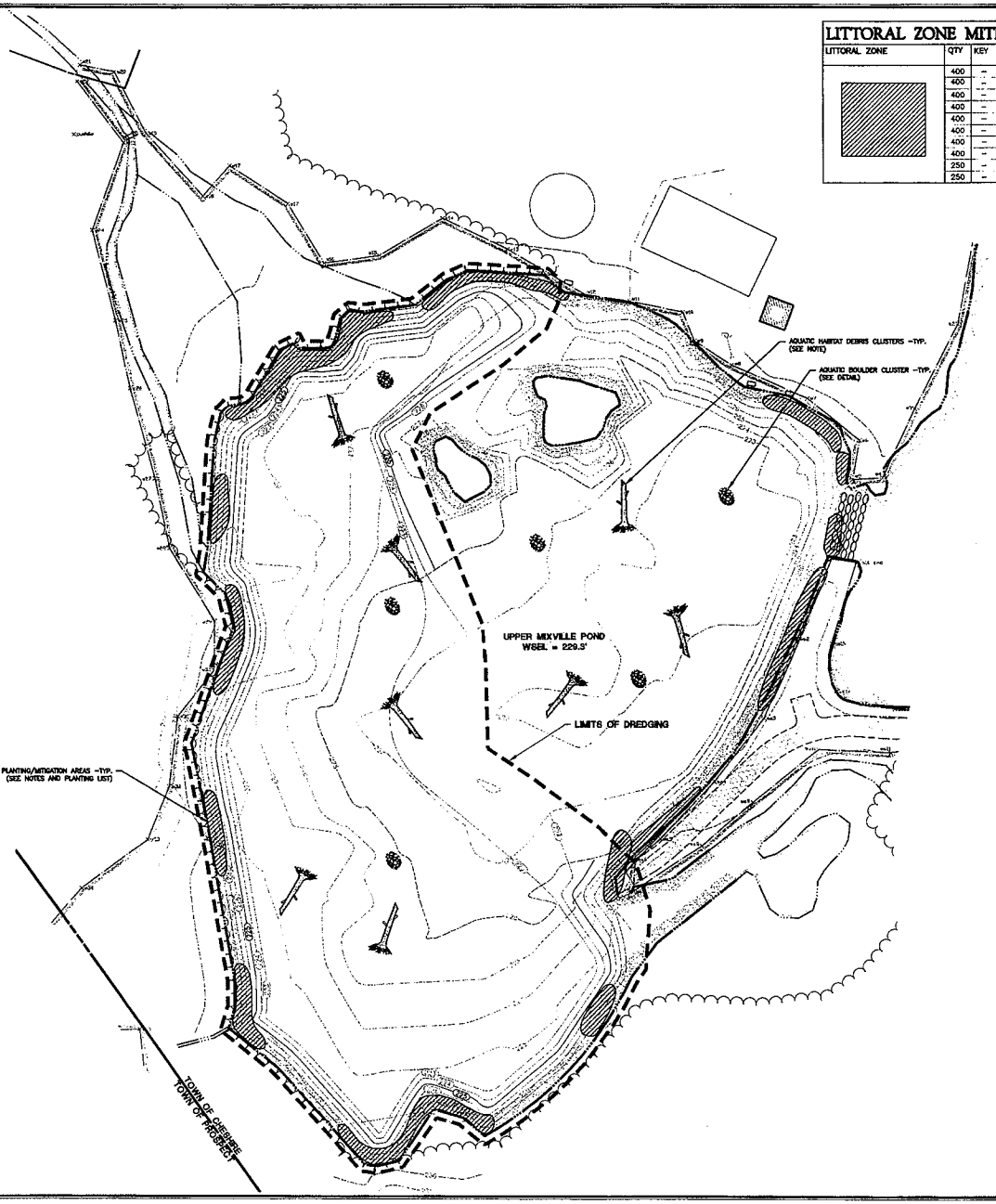


LITTORAL ZONE MITIGATION PLANTING LIST

LITTORAL ZONE	QTY	KEY	BOTANICAL NAME	COMMON NAME	COMMENTS	MAX. IN-WATER PLANTING DEPTH
	400	--	POINTEDERIA CORDATA	PICKERELWEED	2" PLUGS	≤ 18"
	400	--	SAGITTARIA LATIFOLIA	DUCK POTATO	2" PLUGS	≤ 18"
	400	--	IRIS VERSICOLOR	BLUE FLAG IRIS	2" PLUGS	≤ 6"
	400	--	CAREX LURIDA	LURID SEDGE	2" PLUGS	≤ 2"
	400	--	SCIRPUS VALIDUS	SOFT STEM BULRUSH	2" PLUGS	≤ 18"
	400	--	JUNCUS EFFUSUS	SOFT RUSH	2" PLUGS	≤ 6"
	400	--	SPARGANIUM AMERICANUM	AMERICAN BUR-REED	2" PLUGS	≤ 24"
	400	--	CAREX STRICTA	TUSSOCK SEDGE	2" PLUGS	≤ 2"
	250	--	SCHOENOPLECTUS ACUTUS	HARD STEM BULRUSH	2" PLUGS	≤ 36"
	250	--	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3 GALLONS	≤ 24"

LITTORAL ZONE MITIGATION NOTES

1. EROSION CONTROLS SHALL BE INSTALLED, REPAIRED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD OF THE WETLAND MITIGATION OR UNTIL THE SITE IS FULLY STABILIZED BY VEGETATION (SEED MIX). EROSION CONTROLS SHALL THEN BE REMOVED FROM THE SITE.

2. A WETLAND SCIENTIST SHALL BE ON SITE TO MONITOR PLANTING OF THE LITTORAL ZONE RESTORATION AREA TO ENSURE COMPLIANCE WITH THE APPROVED PLANS.

3. ALL WETLAND PLANTINGS ARE TO BE PLANTED ONLY AFTER STABILIZATION OF CONTRIBUTING DRAINAGE AREAS.

4. WETLAND PLANTINGS SHALL BE LIMITED TO THE PERIODS OF APRIL 15 – JULY 15, OR AUTUMN ONLY. QUALITY NATIVE PLANTS FROM A NURSERY SHALL BE USED.

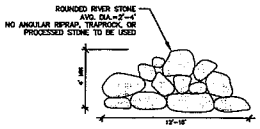
5. ALL WOODY PLANT MATERIAL SHALL BE PROVIDED IN CONTAINERS THAT ARE APPROPRIATELY SIZED FOR THE SPECIFIED PLANT. HERBACEOUS PLANT MATERIAL SHALL BE PLUGS AND CONTAINERIZED. WETLAND PLANTS SHALL HAVE BEEN GROWN IN A LOCAL/REGIONAL NURSERY.

6. SUPPLEMENTAL HERBACEOUS PLANTINGS SHALL BE CONCENTRATED IN GROUPINGS, TO BE DETERMINED.

7. HERBACEOUS PLANTINGS TO BE PLUGS TWO FOOT ON CENTER. SHRUB PLANTINGS TO BE 36" O.C. (DEPENDENT UPON SPECIES), OR AS DIRECTED BY THE SUPERVISING WETLAND SCIENTIST.

8. ALL TUBERS AND ROOT STOCK SHALL BE PUSHED ONE TO TWO INCHES DEEP INTO THE GROWING SOIL & SPACED AS SPECIFIED. PLANTS WITH GROWING STEMS SHALL BE PLANTED SUCH THAT THE GROWING STEM EXTENDS ABOVE THE SOIL SURFACE. WEDGING OF TUBERS & ROOT STOCK WITH FENCE STAPLES AND/OR EIGHT PENNY NAILS MAY BE REQUIRED IF DISLODGING & FLOATING IS A PROBLEM.

9. ALL PLANT MATERIALS SHALL CARRY A FULL GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, TO INCLUDE PROMPT TREATMENT OR REMOVAL AND REPLACEMENT OF ANY PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION BY THE LANDSCAPE ARCHITECT. ALL REPLACEMENTS SHALL BE OF THE SAME KIND AND SIZE OF PLANTS SPECIFIED IN THE PLANT LIST.



AQUATIC BOULDER CLUSTER

N.T.S.

NOTE:

AQUATIC DEBRIS CLUSTERS TO CONSIST OF STUMPS AND CUT TREES WITH MINIMUM DIAMETER (AT BREAST HEIGHT) OF 18" TO 24." TREES SHALL HAVE LARGE BRANCHES IN TACT.

SCALE IN FEET

SCALE 1"=40'

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REVISIONS

01/24/2011 CT DEP COMMENTS

PROPOSED SITE RESTORATION AND WETLAND MITIGATION PLAN

UPPER MIXVILLE POND
SEDIMENT REMOVAL PROJECT

NOTCH ROAD
CHESHIRE, CONNECTICUT

JCM	JCM	WAG
DESIGNED	DRAWN	CHECKED

SCALE 1"=40'

DATE MAY, 2010

PROJECT NO. 1046-59

SHEET NO. 13