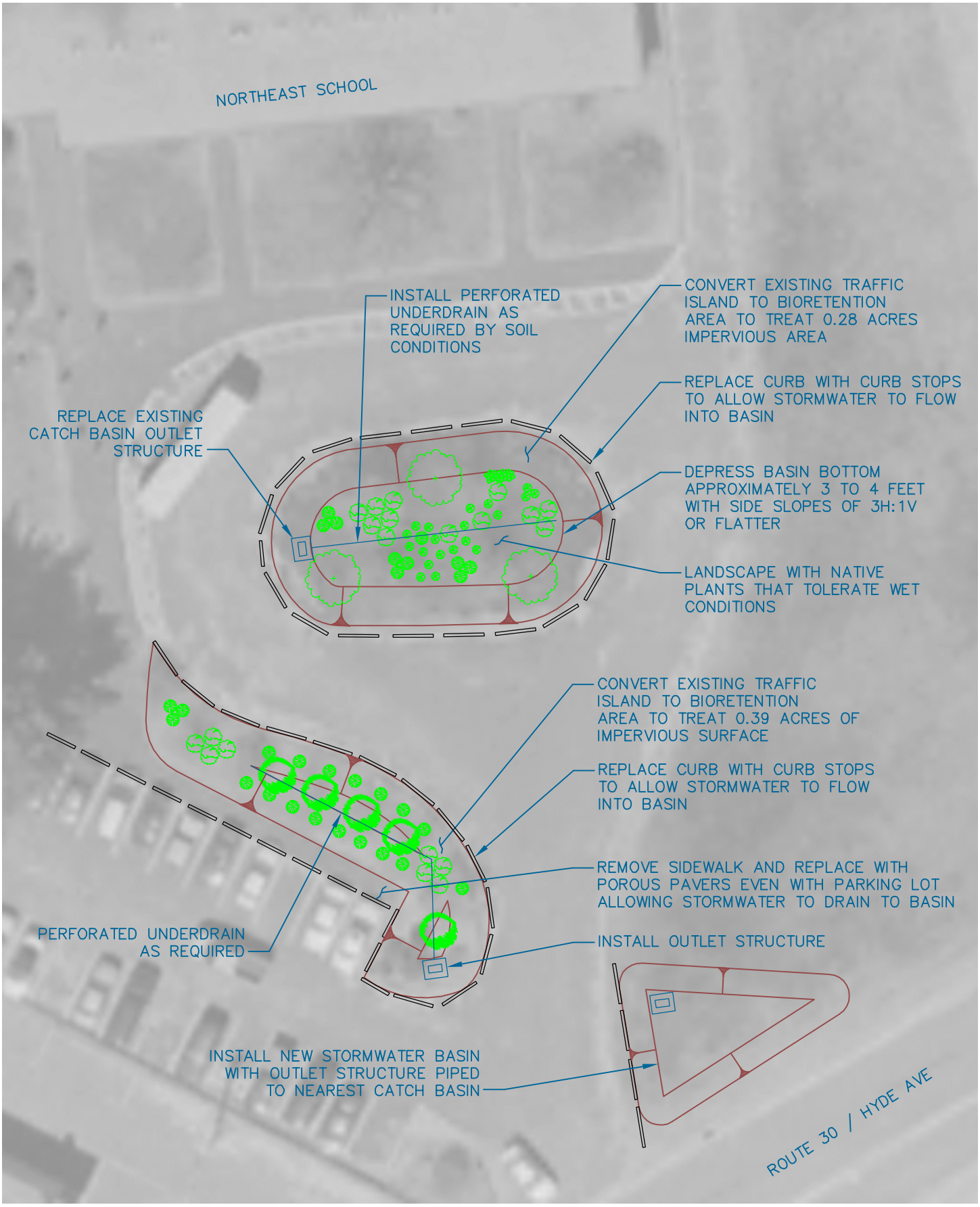

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

STORMWATER RETROFIT CONCEPT

NORTHEAST SCHOOL

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

1

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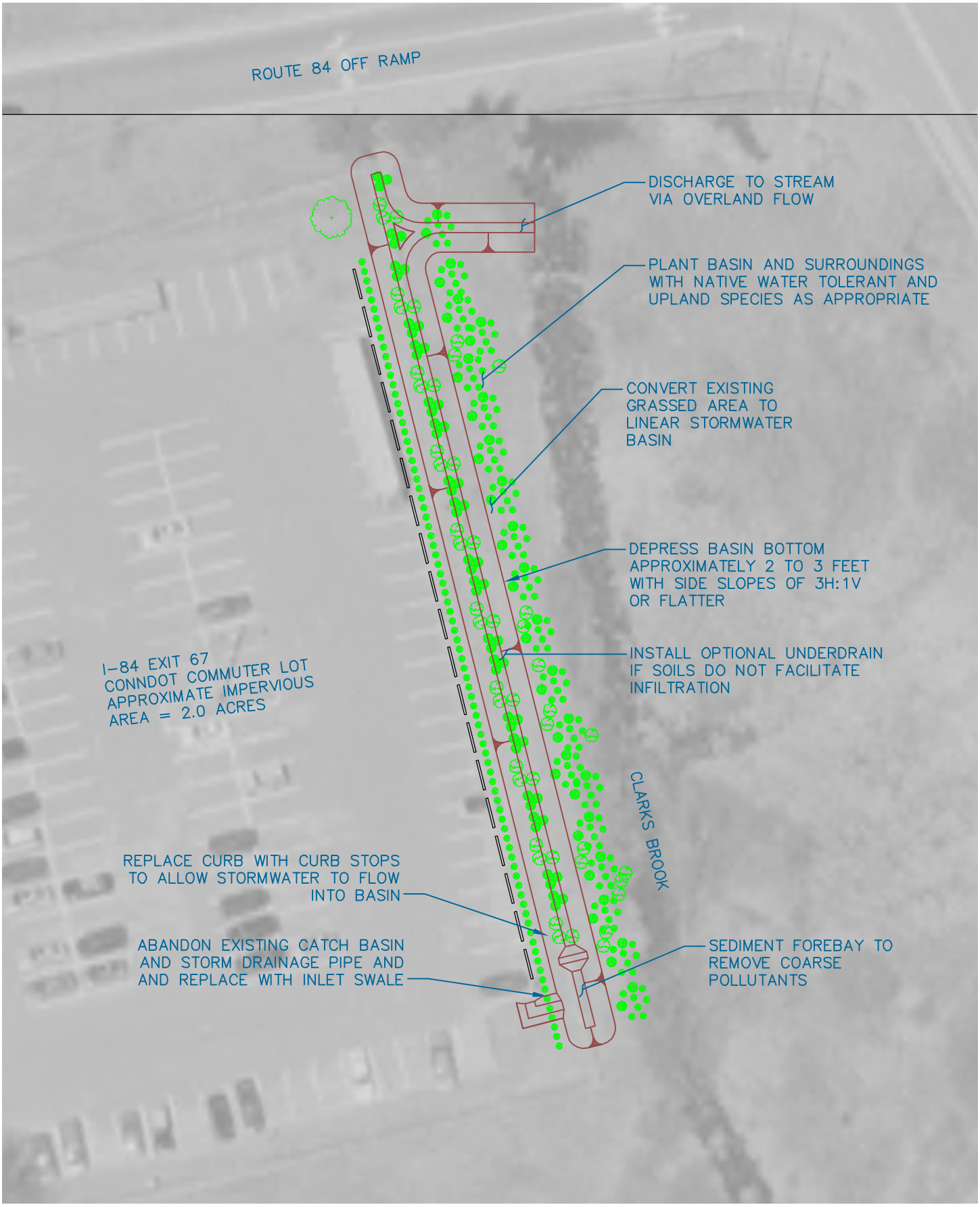

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STORMWATER RETROFIT CONCEPT

I-84 EXIT 67 COMMUTER LOT

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

2

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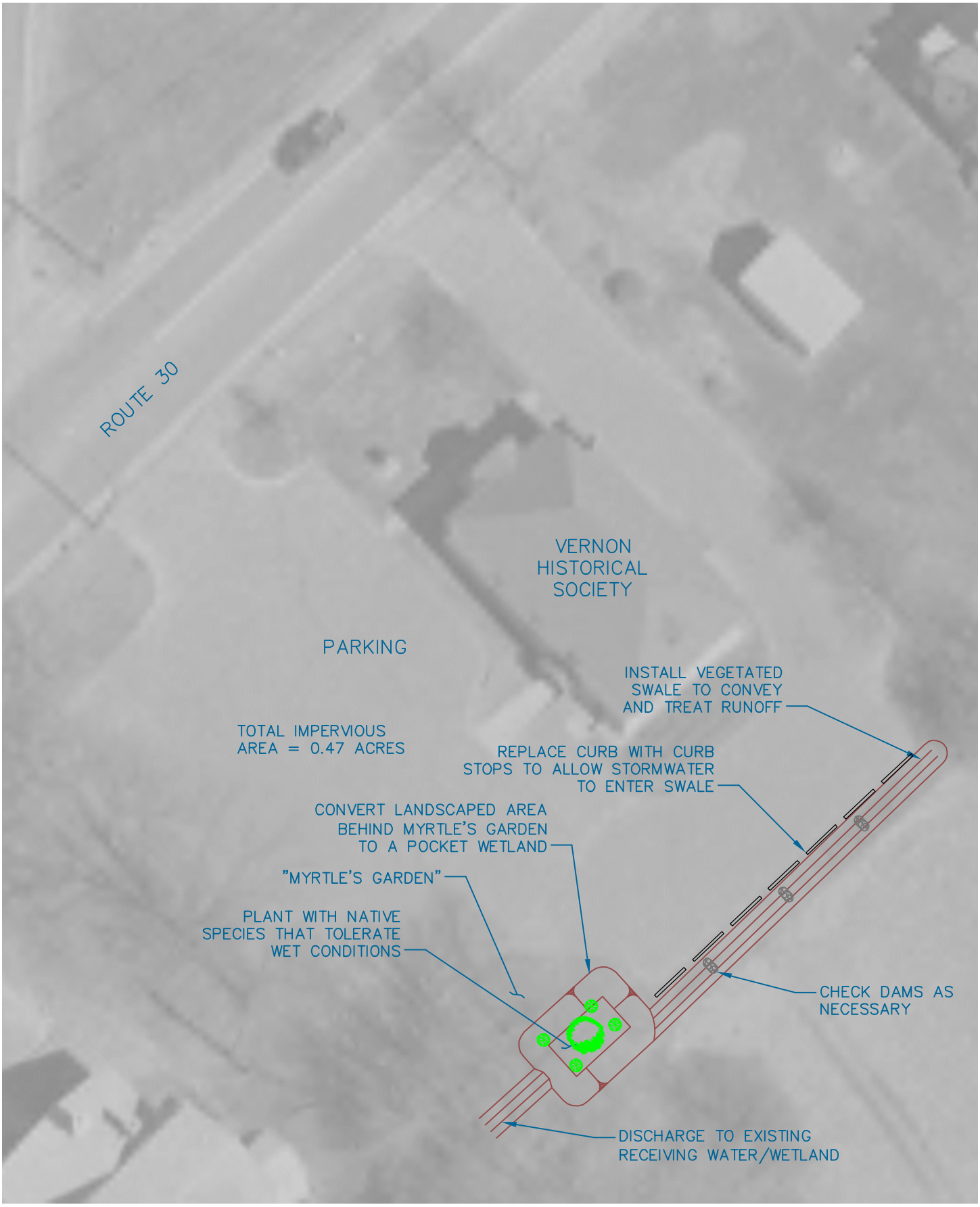

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

STORMWATER RETROFIT CONCEPT

VERNON HISTORICAL SOCIETY

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

3

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STORMWATER RETROFIT CONCEPT

VERNON FIRE STATION

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PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

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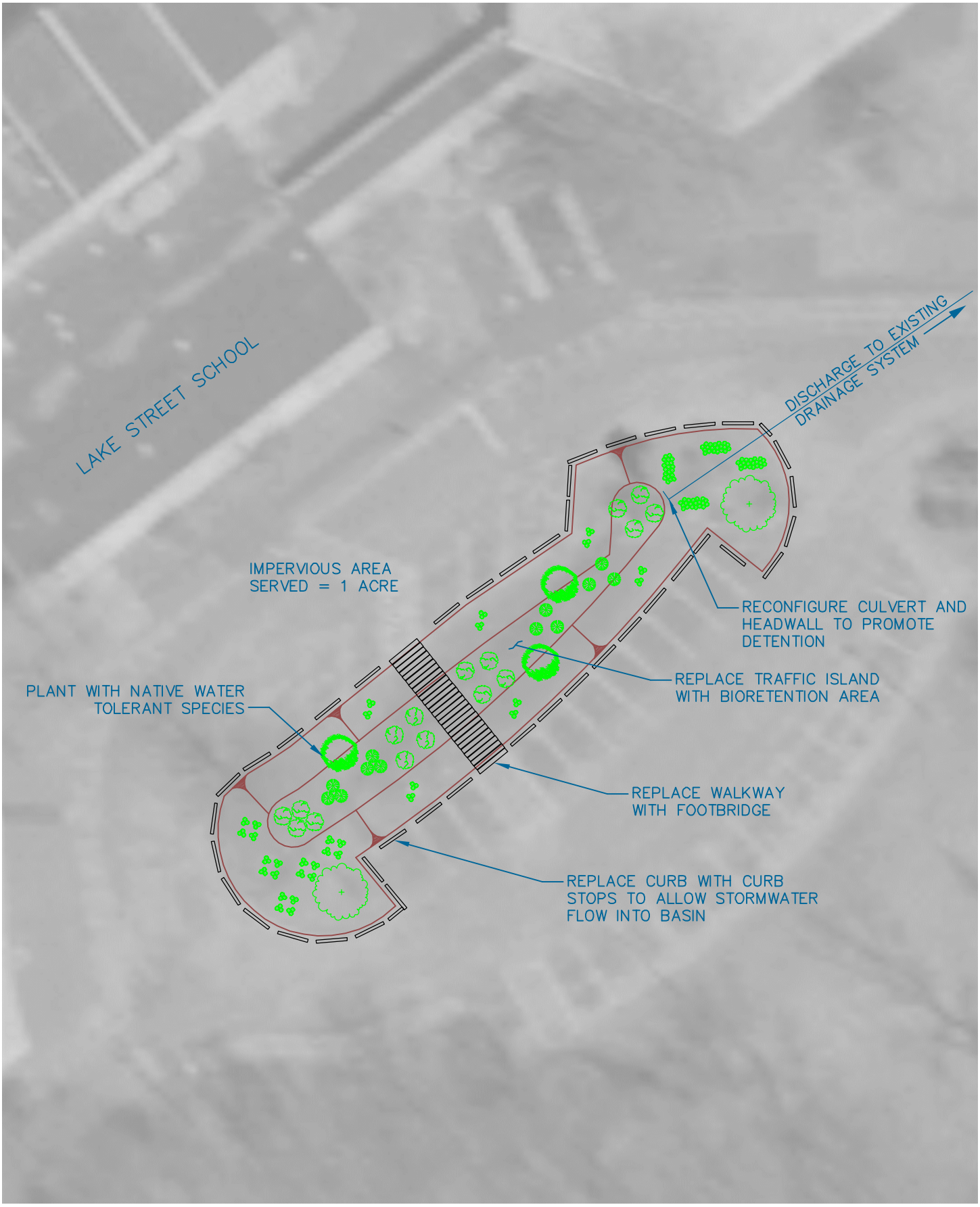

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

STORMWATER RETROFIT CONCEPT

LAKE STREET SCHOOL

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

File Path: H:\DWG\P2005\0257\A20\Plan\20050257A20CON001.dwg, Layout: LAKE ST SCHOOL Tue, Feb 24, 2009 - 11:15 AM User: DButtrick

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STORMWATER RETROFIT CONCEPT

BOLTON NOTCH POND

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

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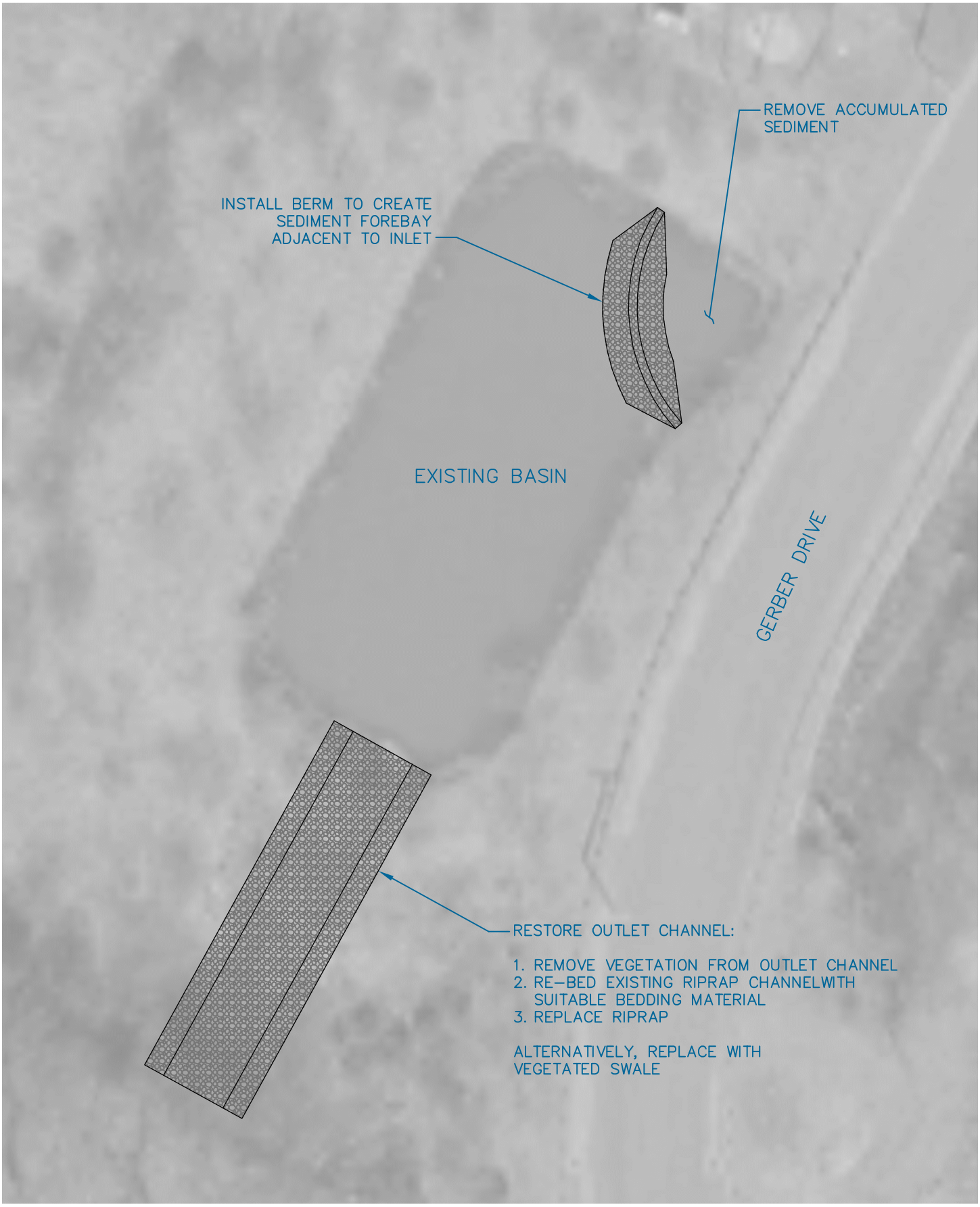

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

STORMWATER RETROFIT CONCEPT

GERBER TECHNOLOGIES BASIN

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.:	20050257.A20
DATE:	FEBRUARY 2009

7

File Path: H:\DWG\P2005\0257\A20\Plan\20050257A20CON001.dwg, Layout: GERBER TECH Tue, Feb 24, 2009 - 11:15 AM User: DButtrick

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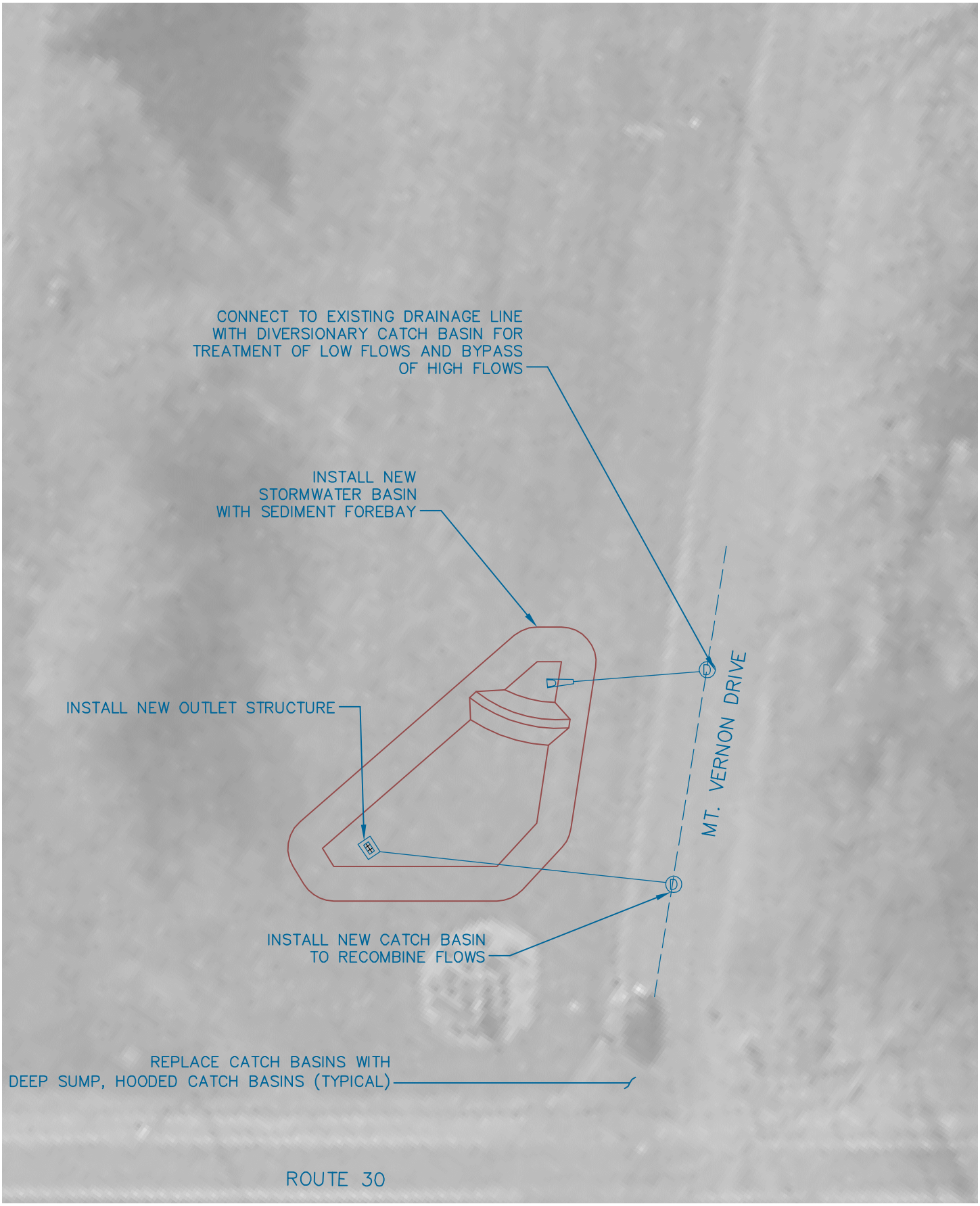

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STORMWATER RETROFIT CONCEPT

MOUNT VERNON APARTMENTS

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

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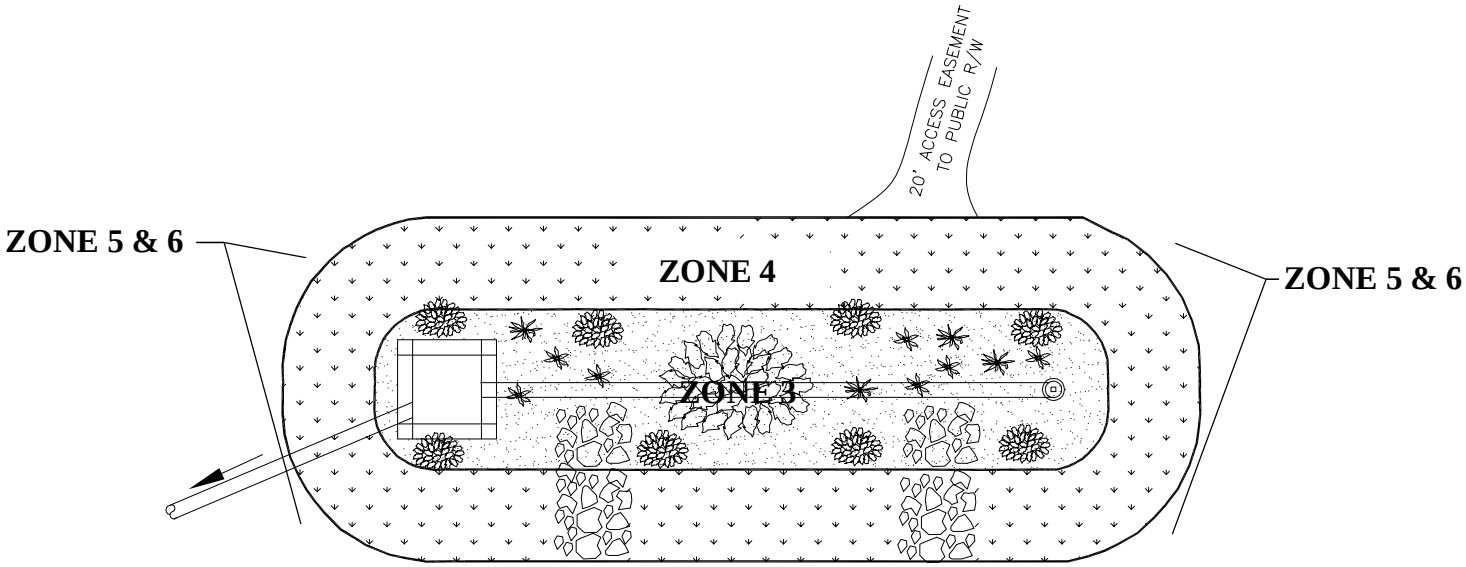
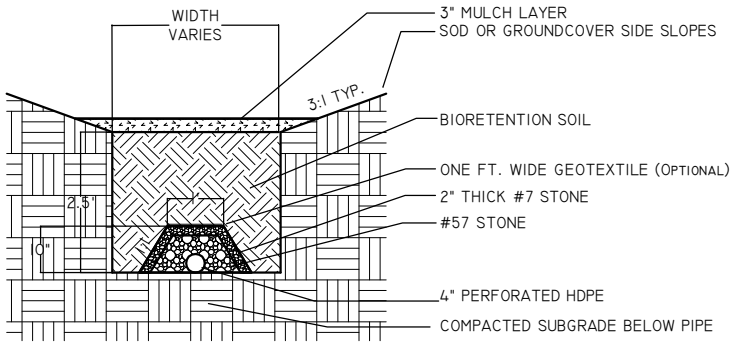


PLAN

NOTES:

1. PLANTING ZONES AND PLANT SELECTION PER DETAIL SHEET 7
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



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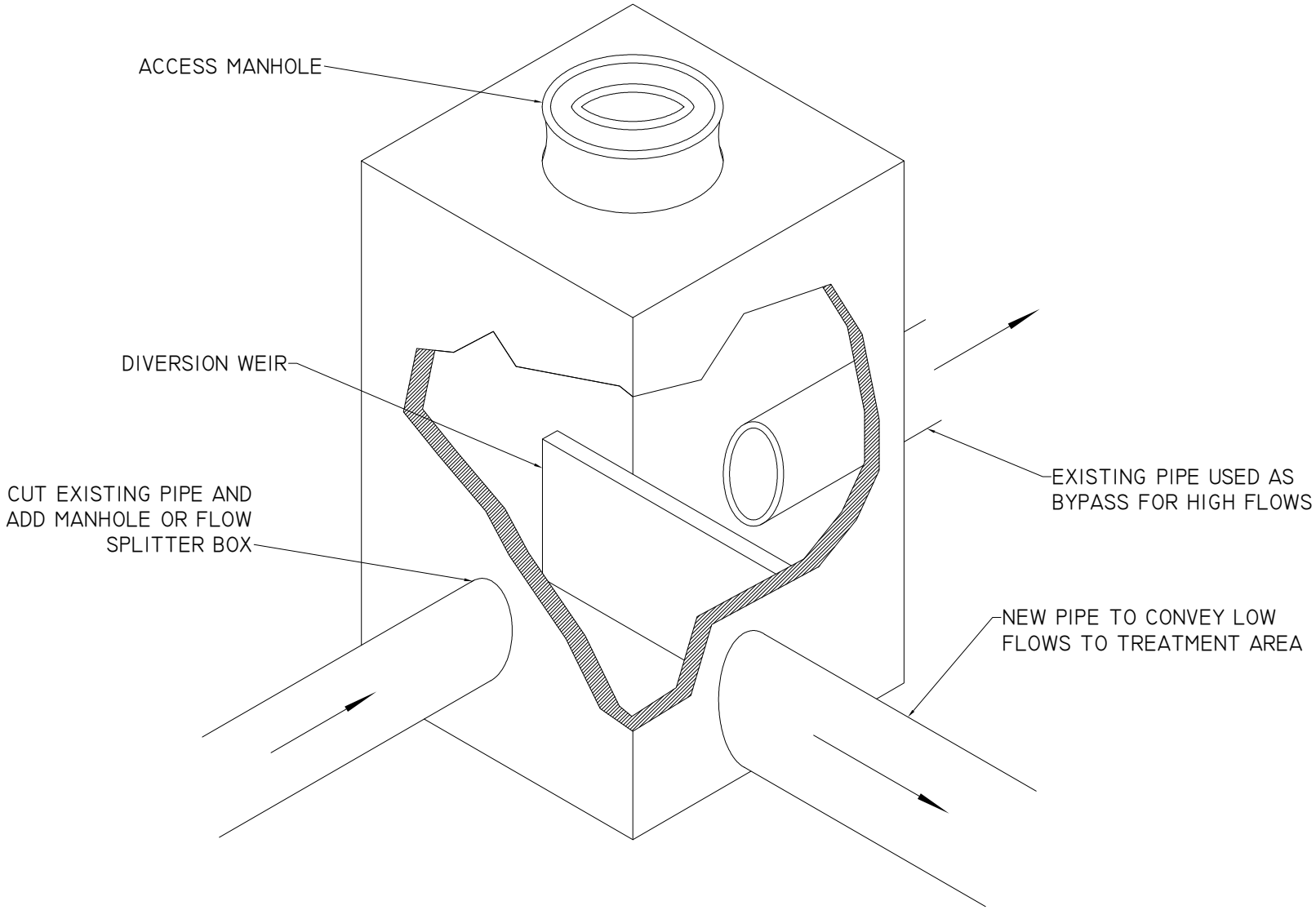
STORMWATER RETROFIT DETAILS

BIORETENTION AREA

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

DET 1



ADAPTED FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004)

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

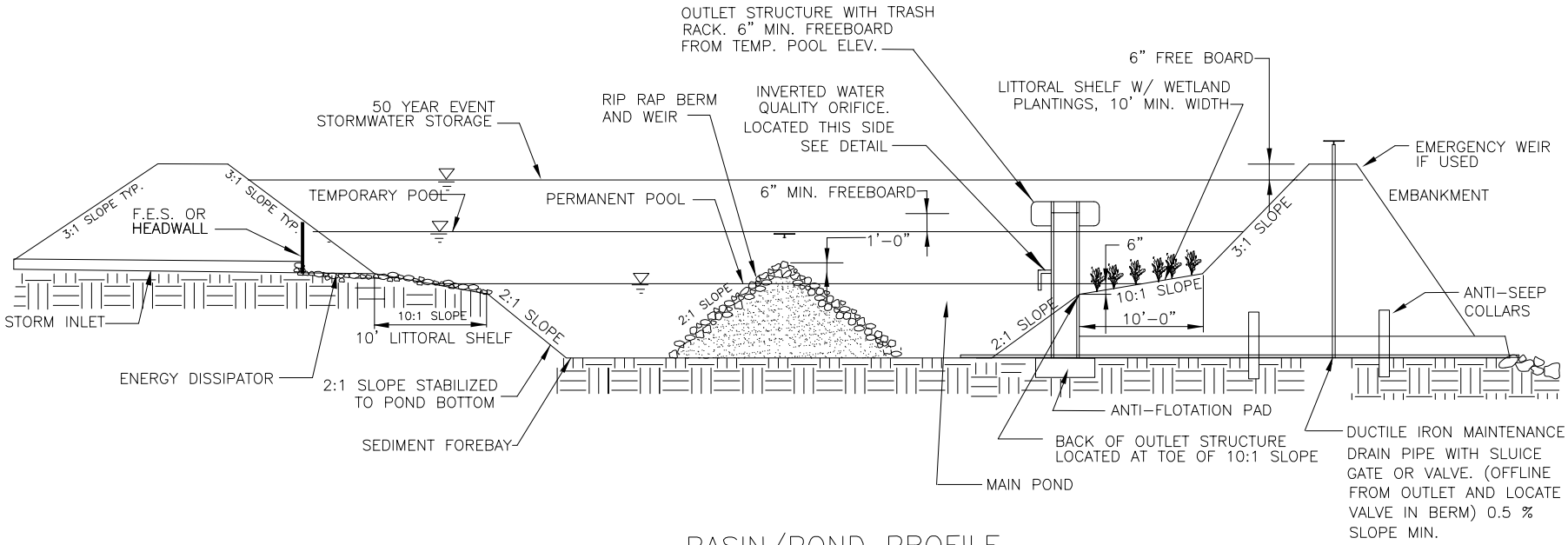
STORMWATER RETROFIT DETAILS

FLOW SPLITTER

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

DET 2



BASIN/POND PROFILE

NOTES:

1. 4-6 INCH LAYER OF AMENDED SOIL IS RECOMMENDED IN ANY AREA WHERE PLANTINGS ARE REQUIRED

ADAPTED FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004) AND THE CHARLOTTE - MECKLENBURG, NC POST-CONSTRUCTION BMP DESIGN MANUAL (APRIL 2008)

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

STORMWATER RETROFIT DETAILS

STORMWATER BASIN / POND PROFILE

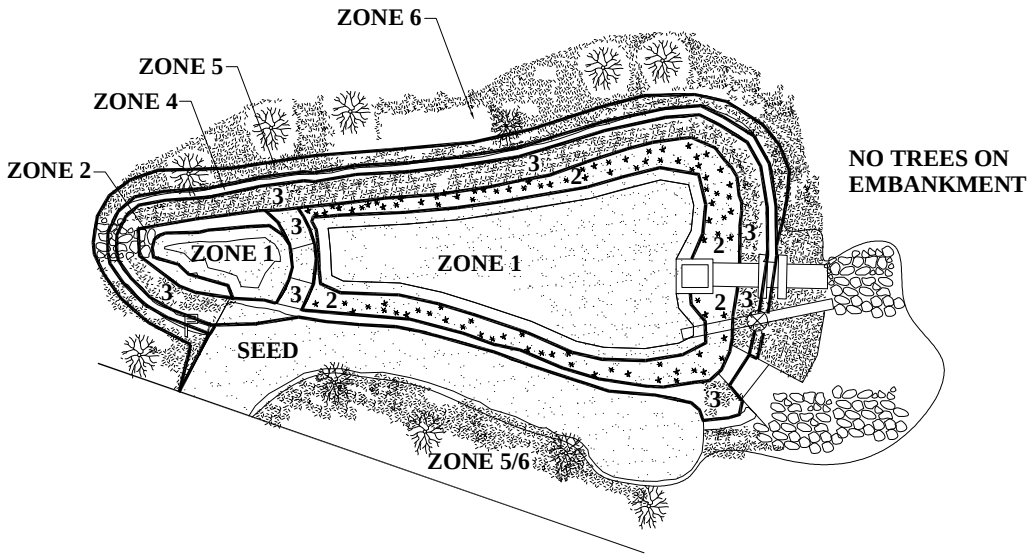
TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

DET 3

NOTES:

1. PLANTINGS ZONES AND PLANT SELECTION PER NOTES ON DETAIL SHEET 7
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



PLAN VIEW
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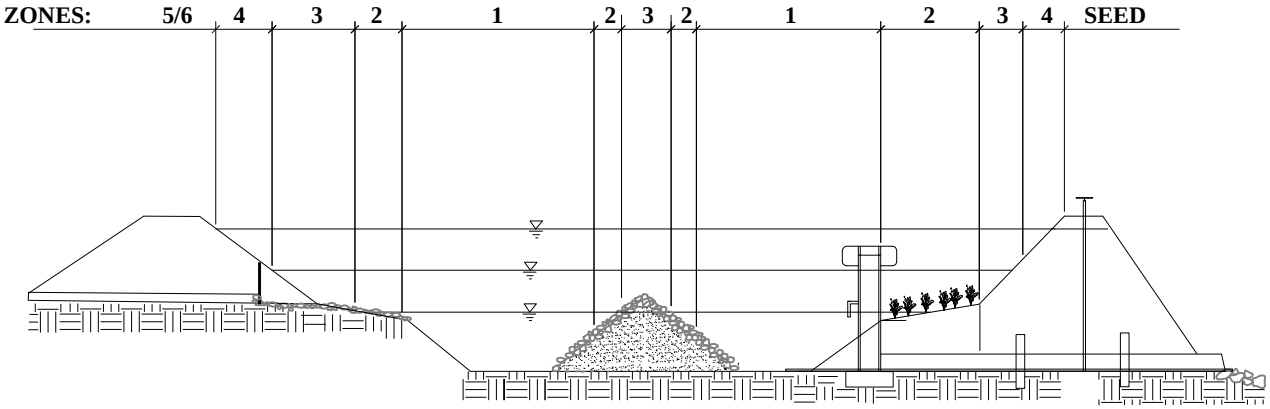

POND CROSS SECTION

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

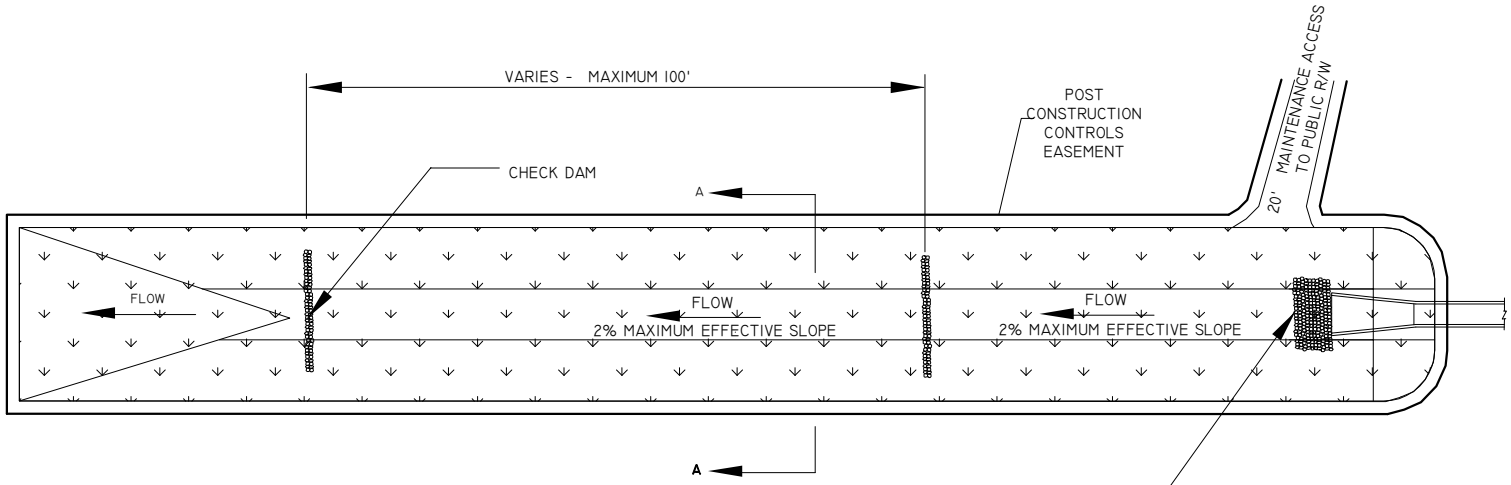
STORMWATER RETROFIT DETAILS

POND PLANTING PLAN

TANKERHOOSEN RIVER WATERSHED CONNECTICUT

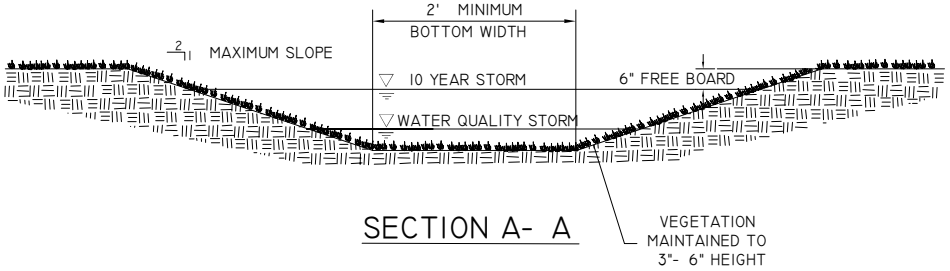
PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

DET 4

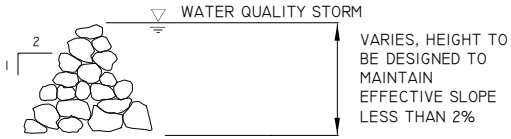


PLAN

PROFILE



SECTION A- A



CHECK DAM AND FOREBAY BERM DETAIL

NOTES:

1. CONNECT GRASS SWALE EASEMENT TO A DEDICATED PUBLIC RIGHT OF WAY WITH A 20-FOOT ACCESS EASEMENT.

ADAPTED FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004) AND THE CHARLOTTE - MECKLENBURG, NC POST-CONSTRUCTION BMP DESIGN MANUAL (APRIL 2008)

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FRIENDS OF THE HOCKANUM RIVER LINEAR PARK

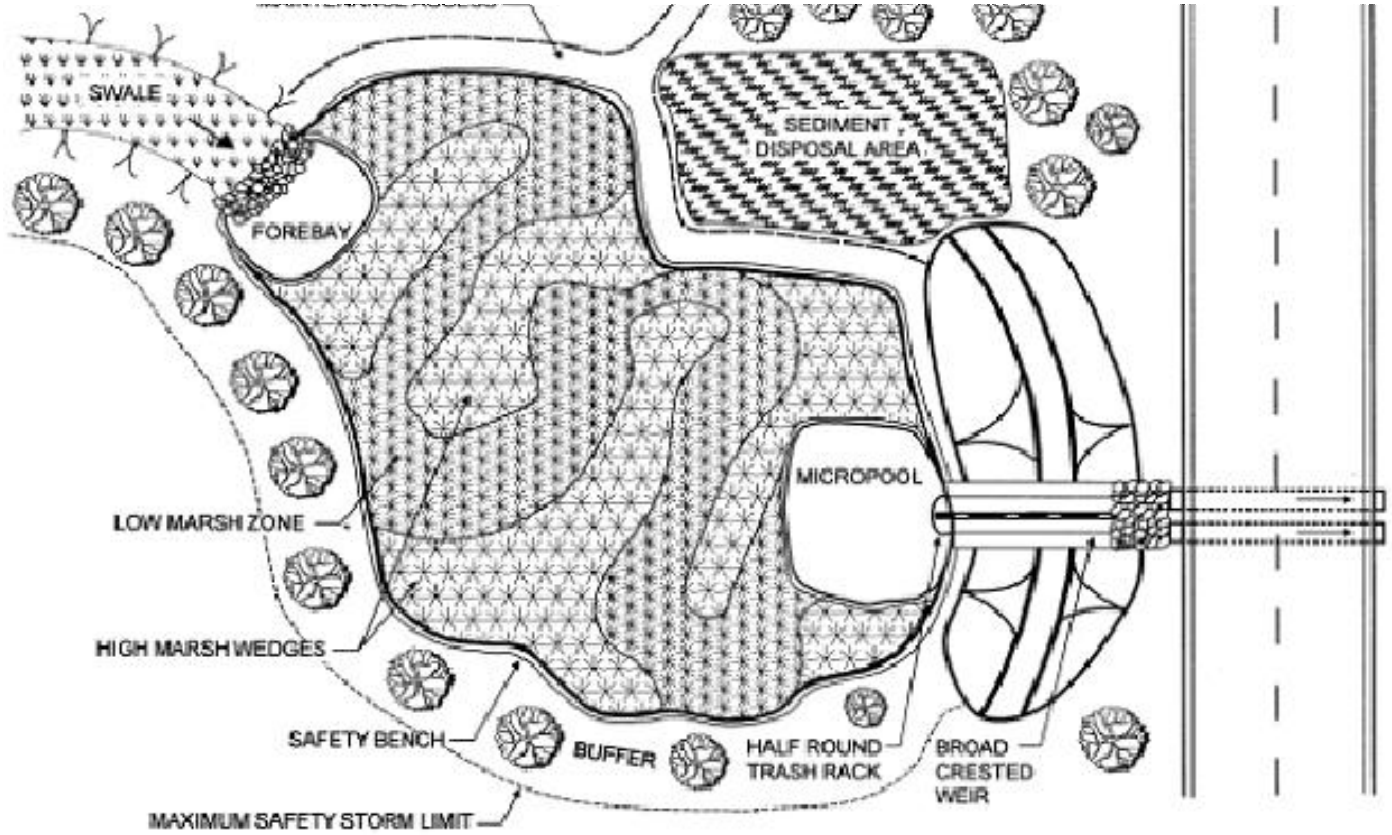
STORMWATER RETROFIT DETAILS

VEGETATED SWALE

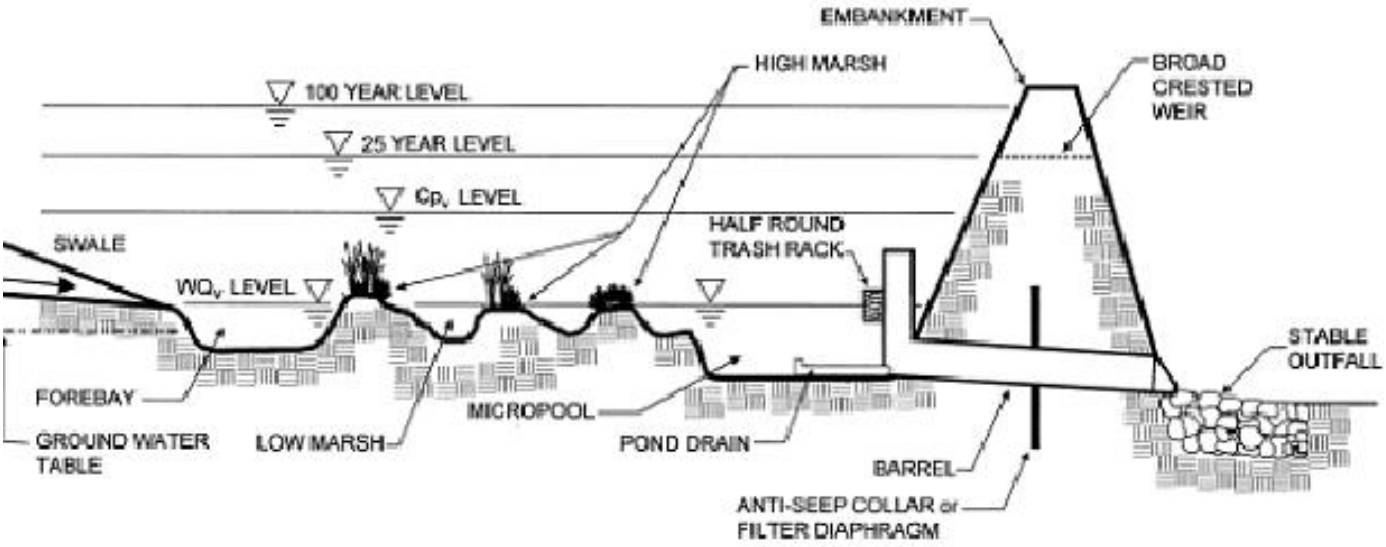
TANKERHOOSEN RIVER WATERSHED CONNECTICUT

PROJ. No.: 20050257.A20
DATE: FEBRUARY 2009

DET 5



PLAN VIEW



PROFILE

SOURCE: CENTER FOR WATERSHED PROTECTION

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File Path: H:\DWG\P2005\0257A20\Plan\20050257A20DET001.dwg, Layout: POCKWET Tue, Feb 24, 2009 - 12:17 PM User: DButtrick
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STORMWATER STRUCTURE PLANTING ZONES		
ZONE	DESCRIPTION	
1	DEEP WATER AREA	INUNDATED WITH 1 TO 3 FEET OF WATER THROUGHOUT THE GROWING SEASON
2	SHALLOW WATER BENCH	INUNDATED WITH 0.5 TO 1 FOOT OF WATER THROUGHOUT THE GROWING SEASON
3	SHORELINE FRINGE	REGULARY INUNDATED, RANGING FROM 0.5 FT ABOVE TO 0.5 FT.BELOW THE PERMANENT POOL ELEVATION
4	RIPARIAN FRINGE	PERIODICALLY OR SEASONALLY INUNDATED, FROM 0.5 FT. ABOVE THE PERMANENT POOL ELEVATION TO THE APPROXIMATE 2- YEAR STORM WATER SURFACE ELEVATION
5	FLOODPLAIN TERRACE	INFREQUENTLY OR IRREGULARLY INUNDATED, FROM THE APPROXIMATE 2- YEAR WATER SURFACE ELEVATION TO THE 10- YEAR WATER SURFACE ELEVATION
6	UPLAND	ABOVE THE 10- YEAR WATER SURFACE ELEVATION

GENERAL PLANTING NOTES:

Grasses, Forbs, and Sedges in Zones 1, 2 and 3. Plant selections should be appropriate for the field environmental conditions of the planting site.
•Zone 1 – Deep Water Emergents: The designer should employ a method of "triangular spacing", and an approximate density of about 0.5 plants per square foot. A minimum of 2 herbaceous species shall be selected, for placement in each of the Zone 1 planting areas.
•Zone 2 – Shallow Water Bench Emergents: The designer should employ a method of "triangularspacing", and an approximate density of about 0.5 plants per square foot. A minimum of 3 herbaceous species shall be selected, for placement in each of the Zone 2 planting areas.
•Zone 3 – Shoreline Fringe: The designer should employ a method of "triangular spacing", and an approximate density of about 0.5 plants per square foot. A minimum of 4 herbaceous species shall be selected, for placement in each of the Zone 3 planting areas.

Grasses, Forbs, and Sedges (Seed Mixes) in Zones 4, 5 and 6.
•Zone 4 –Riparian Fringe, Zone 5 –Floodplain Terrace and Zone 6 – Planting zones shall receive preparation and seeding, with an appropriate seed mix, for establishing Native Wet Meadow, or Native Dry Meadow.

Trees, Shrubs, and Vines in Zones 4, 5 and 6 (ALL BMP's EXCEPT BIORETENTION): In designing and executing the plantings for Zone 4 –Riparian Fringe, Zone 5 –Floodplain Terrace and Zone 6 – Upland Plantings, the designer should consider the following:
•Employ a method of "random spacing", and a density of 1000 stems per acre. A full 70% of the species shall be Large Maturing Deciduous Tree species, and 30% shall be Small Maturing Deciduous Tree, Evergreen Tree, Deciduous Shrub, or Evergreen Shrub species.
•A minimum of 5 Large Maturing Deciduous Tree species shall be selected for each planting area and a minimum of 3 Small Maturing Deciduous Tree, Evergreen Tree, Deciduous Shrub or Evergreen Shrub species shall be selected for each planting area.
•The use of 3 plants of the same genus does not constitute the minimum selection and should be avoided.
•In addition to the 5 large stock tree and the 3 small stock tree requirements, each planted area shall contain, interspersed randomly among the stock, large maturing decidious trees at a planting density of 20 trees per acre, and a minimum size of two–inch caliper (2"cal.).

Trees, Shrubs, and Vines in BIORETENTION AREAS ONLY: In designing and executing the plantings for Bioretention Areas, the designer should consider the following:
•Employ a method of "random spacing", and a density of 2000 stems per acre. A maximum of 10% of the species shall be Large Maturing Deciduous Tree species, and 90% shall be Small Maturing Deciduous Tree, Evergreen Tree, Deciduous Shrub, or Evergreen Shrub species. Up to 25% of the Small Maturing Tree requirement (90%) may be substituted with certain grasses that grow to 3–ft to 5–ft in height if planted in five or seven–gallon pots.
•A minimum of 3 Large Maturing Deciduous Tree species shall be selected for each planting area, and
a minimum of 3 Small Maturing Deciduous Tree, Evergreen Tree, Deciduous Shrub or Evergreen Shrub species shall be selected for each planting area.
•The use of 3 plants of the same genus does not constitute the minimum selection and should be avoided.

ADAPTED FROM THE CONNECTICUT STORMWATER QUALITY MANUAL (2004) AND THE CHARLOTTE – MECKLENBURG, NC POST–CONSTRUCTION BMP DESIGN MANUAL (APRIL 2008)