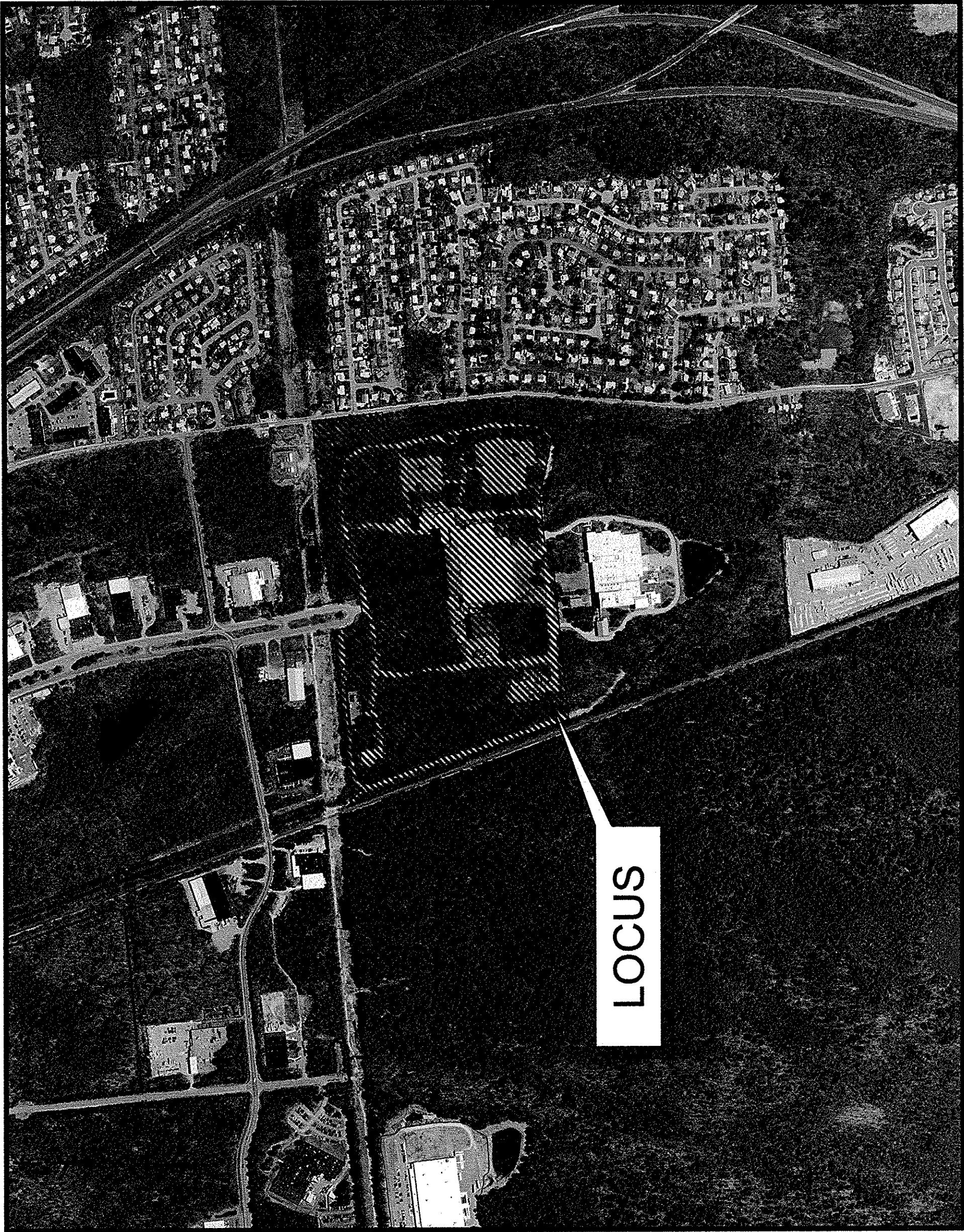


PROPOSED SITE DEVELOPMENT

LOGAL, LLC

100 DUCHAINE BOULEVARD
NEW BEDFORD, MASSACHUSETTS



SCALE: 1"=600'

ENGINEER:

FIELD ENGINEERING CO., INC.
11D INDUSTRIAL DRIVE
P.O. BOX 1178
MATTAPANSETT, MA 02739

APPLICANT/OWNER:

LOGAL, LLC.
89 BLACKMER STREET
NEW BEDFORD, MA 02744

SITE DRAWINGS

ISSUED FOR: PERMITTING
DATE ISSUED: MAY 7, 2014
LATEST ISSUE: JUNE 24, 2014

INDEX TO DRAWINGS

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SGD-1	SITE LAYOUT
D-1	SITE GRADING & DRAINAGE
D-2	DETAIL SHEET 1
LAND-1	DETAIL SHEET 2
	BIORETENTION AREA LANDSCAPING



LOT NO.	OWNER OF RECORD
132-4	WALTER C. & LENA PIRES
132-14	WELBY ROAD LLC
132-57	PENN CENTRAL CO. CONSOLIDATED RAIL CORP.
132-583	JOAO & MARIA A. BARBOSA
132-884	JAMES M III & NICOLE R. MONTAGUE
133-2	COMMONWEALTH OF MASSACHUSETTS
133-10	PENN CENTRAL CO. CONSOLIDATED RAIL CORP.
133-12	GREATER NEW BEDFORD INDUSTRIAL FOUNDATION
133-15	MULTILAYER COATING TECHNOLOGIES LLC
133-16	JOSEPH L. ABREU
133-19	N E PLASTICS CORP.
133-21	ARTHUR L. MILHENCH TRUSTEE
133-45	CP BOURG INC.
133-53	CITY OF NEW BEDFORD PUMP STATION
133-82	CNBF/ROLAND LLC. C/O CORPORATE REAL ESTATE
134-2	COMMONWEALTH ELECTRIC CO.
134-3	C/O PROPERTY TAX DEPARTMENT
134-12	COMMONWEALTH ELECTRIC CO.
134-318	PATRICK THOMAS JR. & RACHAEL L. O'BRIEN
134-408	COMMONWEALTH ELECTRIC CO.
134-342	C/O PROPERTY TAX DEPARTMENT
134-1	VICTORIA J. & DENNIS S. CRAPO
134-2	ROBERT & JESSIE D. HATHAWAY
134-1	C/O ROBERT J. HATHAWAY
134-1	CITY OF NEW BEDFORD
134-2	CITY OF NEW BEDFORD INTERCEPTING SEWER
134-6	BARRY A. BRYANT TRUSTEE, BRYANT FAMILY
134-9	IRREVOCABLE SPECIAL NEEDS TRUST
134-10	ANTONETE CHEREIA
134-11	DANIEL R. JR. & KRISTAL A. TREMBLAY
134-12	DONNA FERNANDES TRUSTEE
134-13	RAYMOND & FLORABELL SILVA IRREVOCABLE TRUST
134-14	LISA & JEFFREY SWAN
134-15	BERNARD G. & DONNA M. POYANT
134-16	EDNA SCHARD
134-82	DANIEL & RACHEL DACOSTA
134-83	MARIA BARBOSA & STACEY BARBOSA
134-84	GUILLERME E. & LAURELINA MEDINA
134-85	LORRAINE TRAVERS
134-86	LAWRENCE A. & JACQUELINE A. ST ONCE
134-87	JOAO M. & JUDITH GONSALES
134-88	VITALIA M. STUPALSKI
134-89	JEFFERY A. & LORIE A. SEPERT
134-90	RAYMOND & DIANE C. DUBOS
134-91	KEVIN P. KEIGHLEY, C/O SOVEREIGN BANK
134-92	ROBERT DEVLIN
134-93	GAIL A. BATES
134-94	ELSE A. SOARES
134-95	JOSE TAVARES
134-96	LUISA P. BARBOSA
134-97	DENNIS P. & WANDA M. BOUGHARD
134-98	GEORGE G. JR. & CHERYL LORANTOS
134-99	IRREVOCABLE SPECIAL NEEDS TRUST
134-100	

SCALE: 1"=500'

PROJECT LOCATION:

ASSESSORS MAP 133 LOT 15
NEW BEDFORD, MASSACHUSETTS

PROPOSED
SITE
DEVELOPMENT

100 DUCHAINE BOULEVARD
MAP 133 LOT 15
NEW BEDFORD, MA

FIELD ENGINEERING CO., INC.
CONSULTING ENGINEERS

11D INDUSTRIAL DRIVE
P.O. BOX 1178
MATTAPANSETT, MA 02739
TEL: (508) 758-2749
FAX: (508) 758-2849

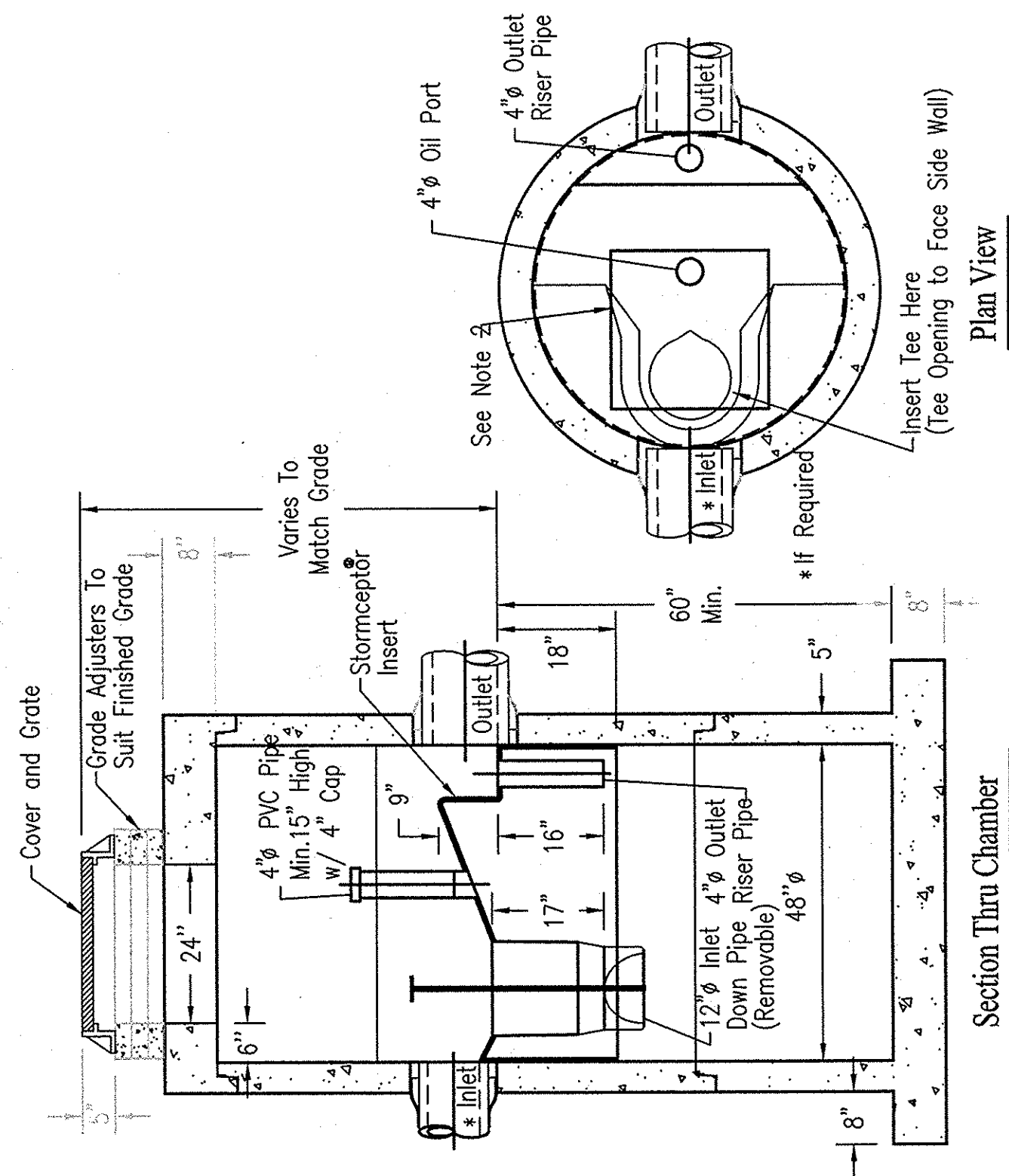
THE CROCKER BUILDING
4 COURT STREET, SUITE 104
TAUNTON, MA 02780
TEL: (508) 824-8279
FAX: (508) 824-8278

Project No. 10009





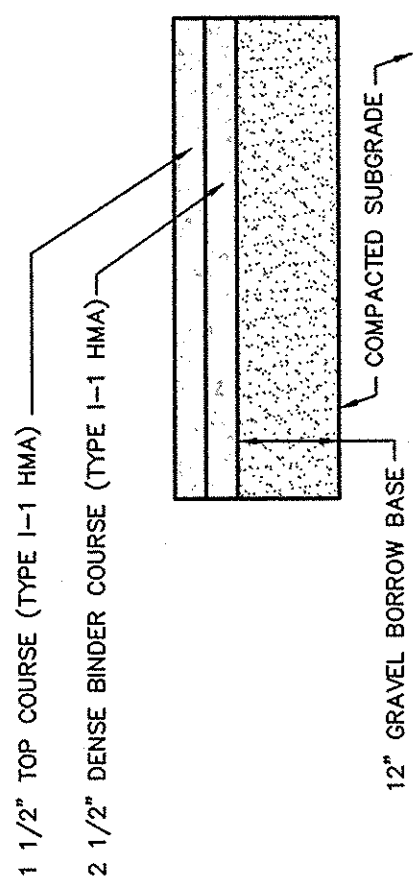
STC 450i Precast Concrete Stormceptor[®]
(450 U.S. Gallon Capacity)



Notes:

1. The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
2. The Cover Should be Positioned Over The Inlet Drop Pipe and The Oil Port.
3. The Stormceptor System is protected by one or more of the following U.S. Patents: #985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

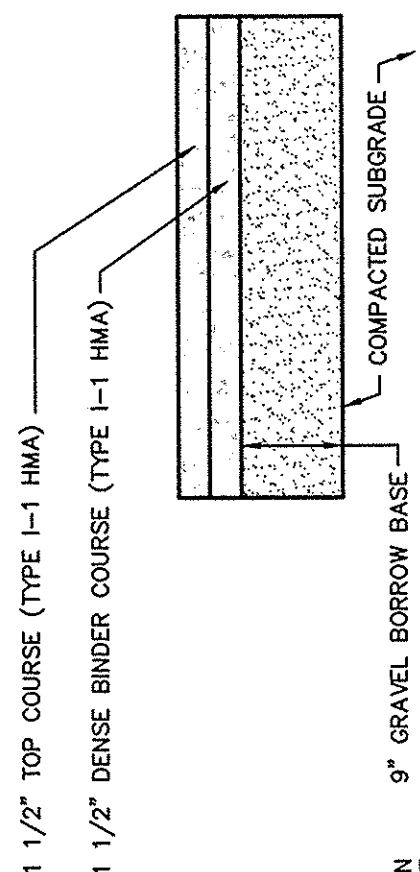
Rinker 027



1. GRAVEL BORROW BASE SHALL CONFORM TO MASSDOT STANDARD SPECIFICATIONS FOR GRAVEL BORROW SEC. M1.03.0 TYPE B COMPACTED TO 95% MAX. DRY DENSITY IN 6" MAX. LIFTS.
2. BITUMINOUS PAVEMENT SHALL CONFORM TO MASSDOT STANDARD SPECIFICATIONS FOR CLASS 1 TYPE 1-1 BITUMINOUS CONCRETE PAVEMENT SEC. 460.2. SUBMIT JOB-MIX FORMULA TO THE OWNERS REPRESENTATIVE FOR APPROVAL.

TYPICAL HEAVY DUTY PAVEMENT SECTION
NOT TO SCALE

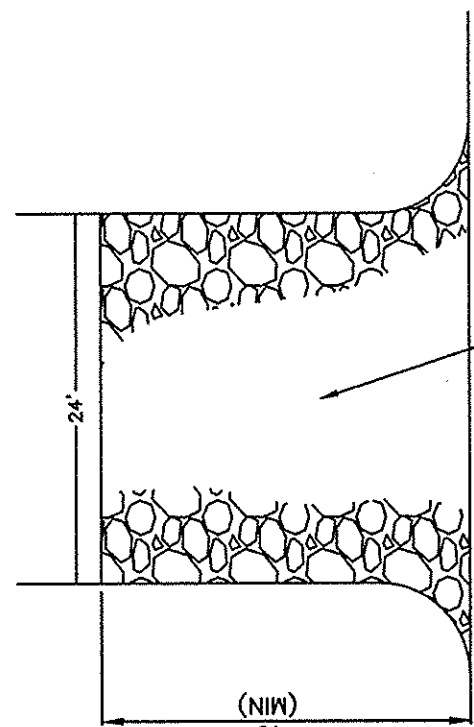
NOT TO SCALE



1. GRAVEL BORROW BASE SHALL CONFORM TO MASSDOT STANDARD SPECIFICATIONS FOR GRAVEL BORROW SEC. M1.03.0 TYPE B COMPACTED TO 95% MAX. DRY DENSITY IN 6" MAX. LIFTS.

TYPICAL STANDARD PAVEMENT SECTION
NOT TO SCALE

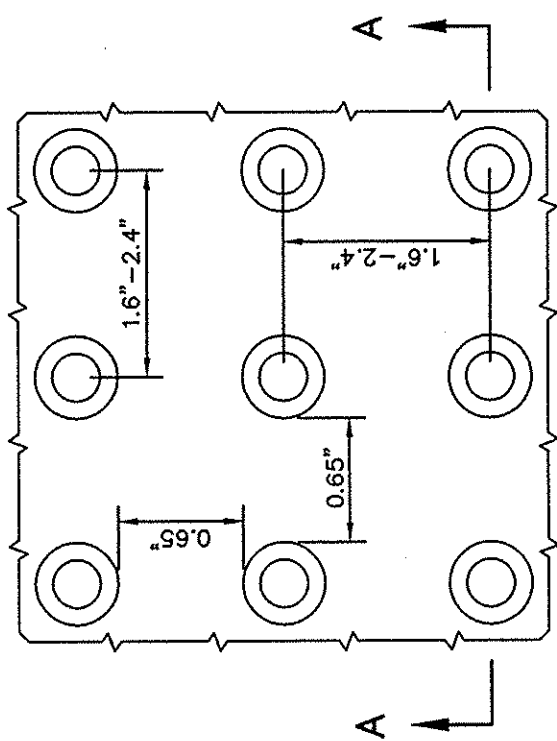
NOT TO SCALE



TEMPORARY CONSTRUCTION PAD

NOT TO SCALE

NOTE: TEMPORARY CONSTRUCTION PADS TO BE PLACED AT ALL CONSTRUCTION ENTRANCES OFF OF THE PAVED ACCESS DRIVEWAY TO MINIMIZE TRACKING OF SEDIMENT ONTO THE PUBLIC RIGHT OF WAYS.

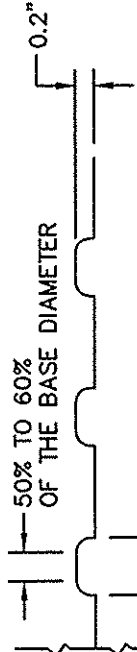


DETECTABLE WARNING
PANEL DETAIL

NOT

1. PANELS SHALL BE 2448IDPAV1 AS MANUFACTURED BY ADA SOLUTIONS, INC.
2. PANELS SHALL BE YELLOW IN COLOR UNLESS OTHERWISE SPECIFIED.

NOTE:

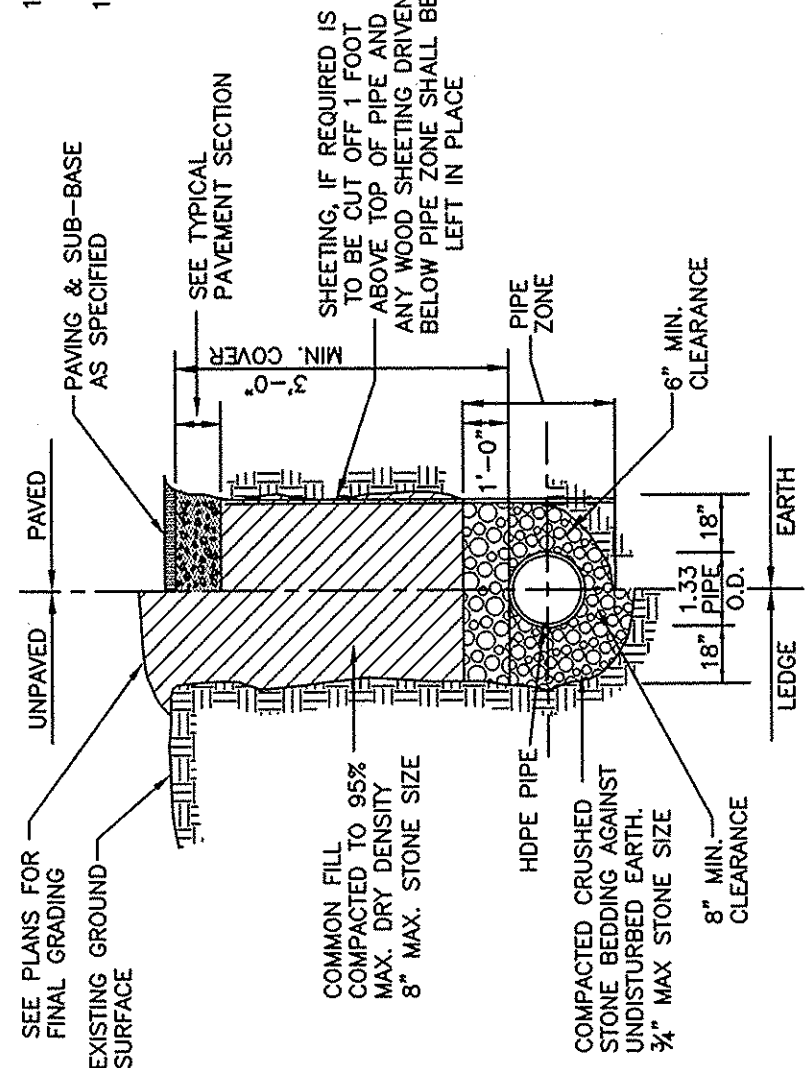


SECTION A-A

NOT TO SCALE

1. PANELS SHALL BE 2448IDPAV1 AS MANUFACTURED BY ADA SOLUTIONS, INC.
2. PANELS SHALL BE YELLOW IN COLOR UNLESS OTHERWISE SPECIFIED.

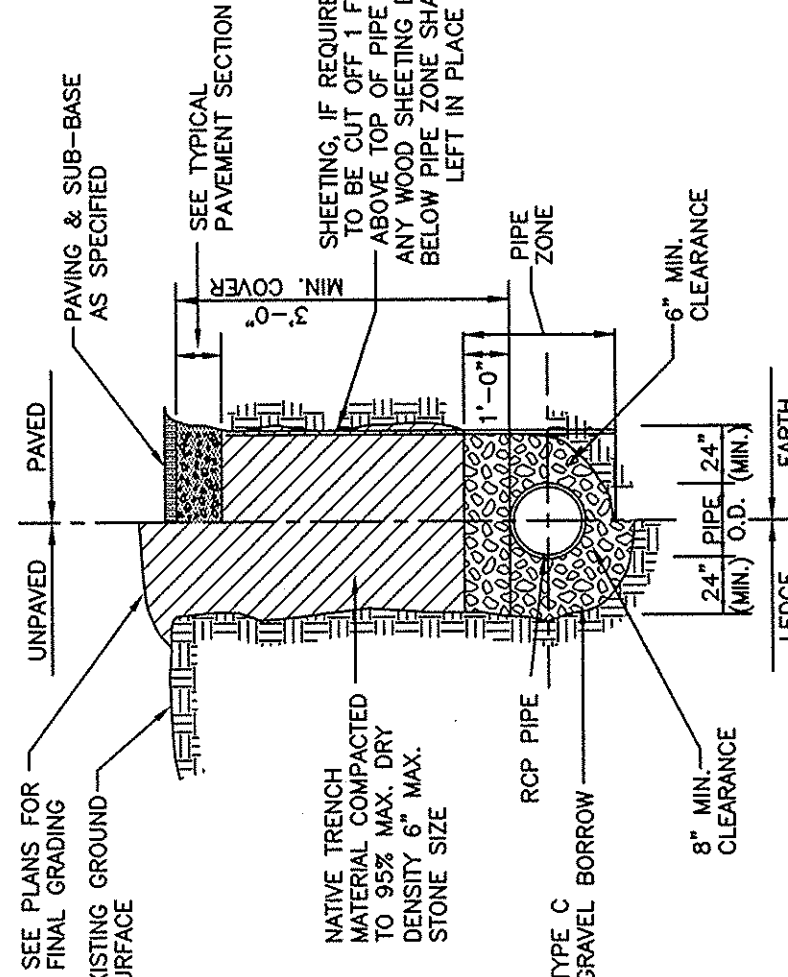
NOTE:



HDPE TRENCH DETAIL

NOT TO SCALE

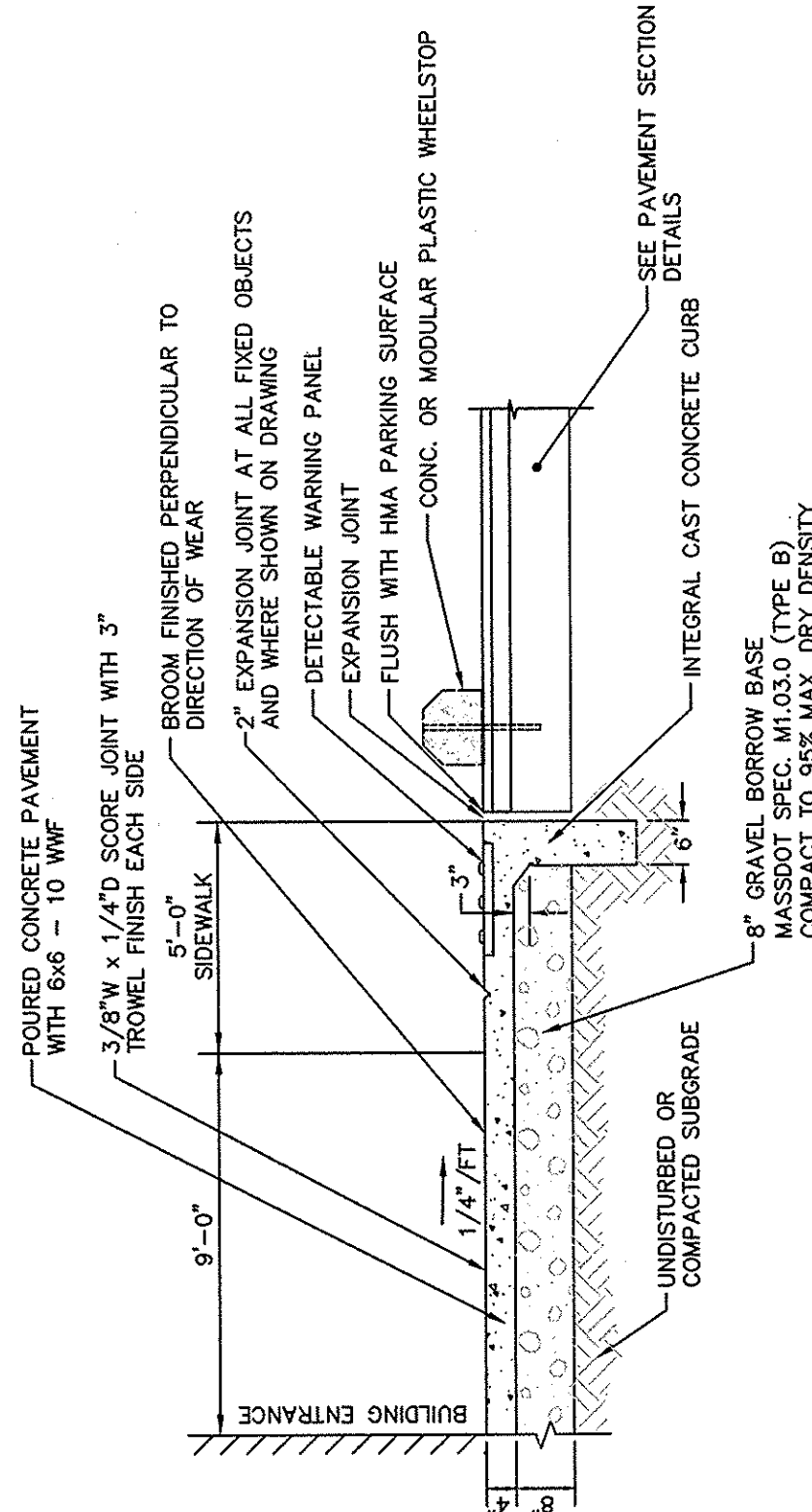
1. TYPE C GRAVEL BORROW SHALL CONFORM TO MASSDOT SPECIFICATION M1.03.0
2. CRUSHED STONE SHALL CONFORM TO _____



DI/RCP TRENCH
DETAIL/PAY LIMIT

NOT TO SCALE

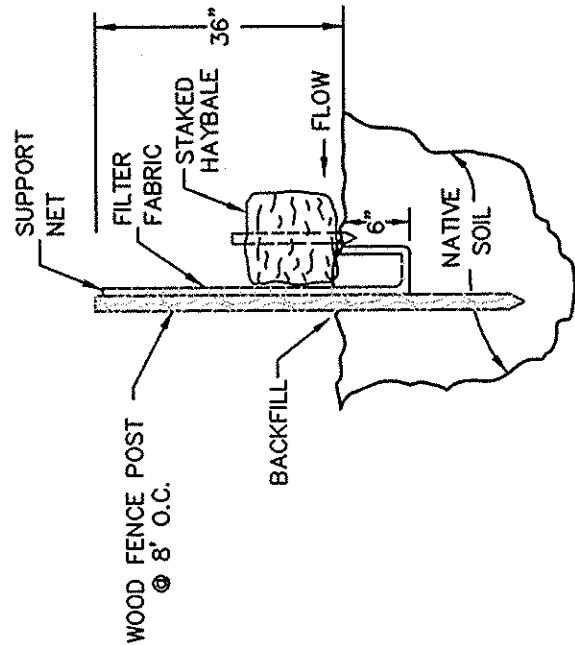
1. TYPE C GRAVEL BORROW SHALL CONFORM TO MASSDOT SPECIFICATION M1.03.0 2" MAX STONE SIZE
2. TRENCH WIDTH SHALL BE AS REQUIRED TO PROVIDE ADEQUATE SHORING DURING CONSTRUCTION IN ACCORDANCE WITH ALL APPLICABLE TRENCHING AND SHORING REGULATIONS.



CEMENT CONCRETE SIDEWALK SECTION

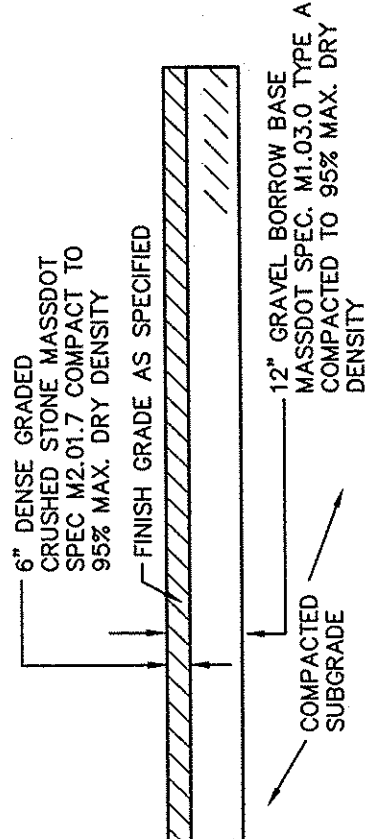
(NOT TO SCALE)

1. SCORE JOINT SPACING: MIN. - 4'-0" MAX. - 6'-0", UNLESS OTHERWISE SHOWN ON PLAN.
2. EQUAL SPACING BETWEEN EXPANSION JOINTS, 32'-0" MAX., UNLESS OTHERWISE SHOWN ON PLAN.
3. CEMENT CONCRETE SHALL CONFORM TO MASSDOT SPEC M4.02.00 AND SHALL HAVE 4,000 P.S.I. COMPRESSIVE STRENGTH @ 28 DAYS WITH A CEMENT CONTENT OF 660#/CY; MAX. AGGREGATE SIZE 3/8"



**TYPICAL SILT
FENCE DETAIL**
NOT TO SCALE

NOT TO SCALE



GRAVEL ACCESS ROAD AND
PARKING AREA SECTION

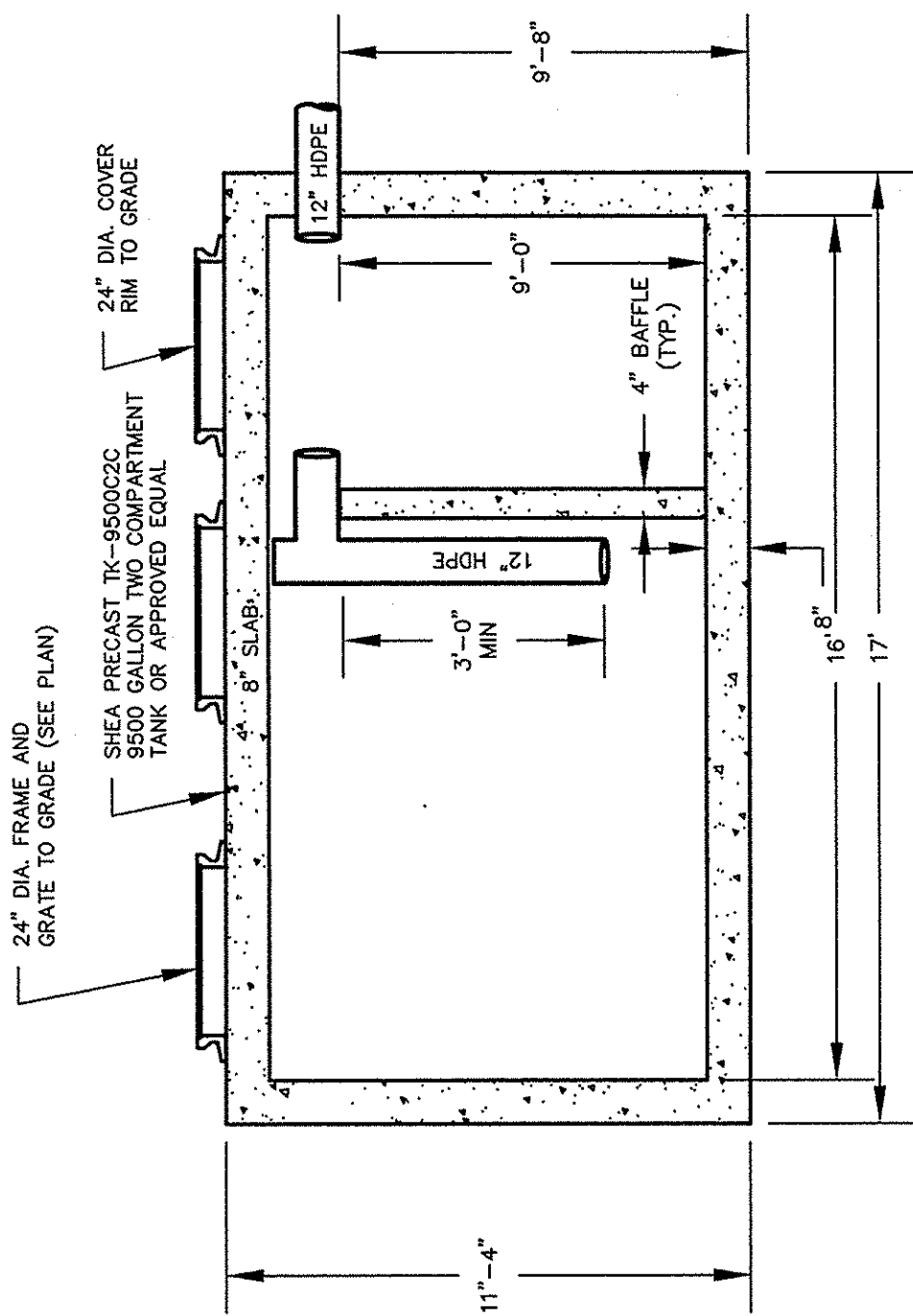
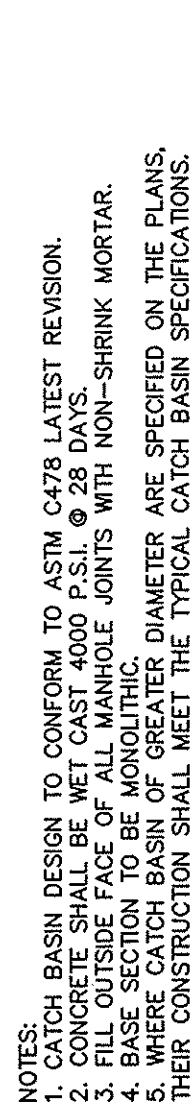
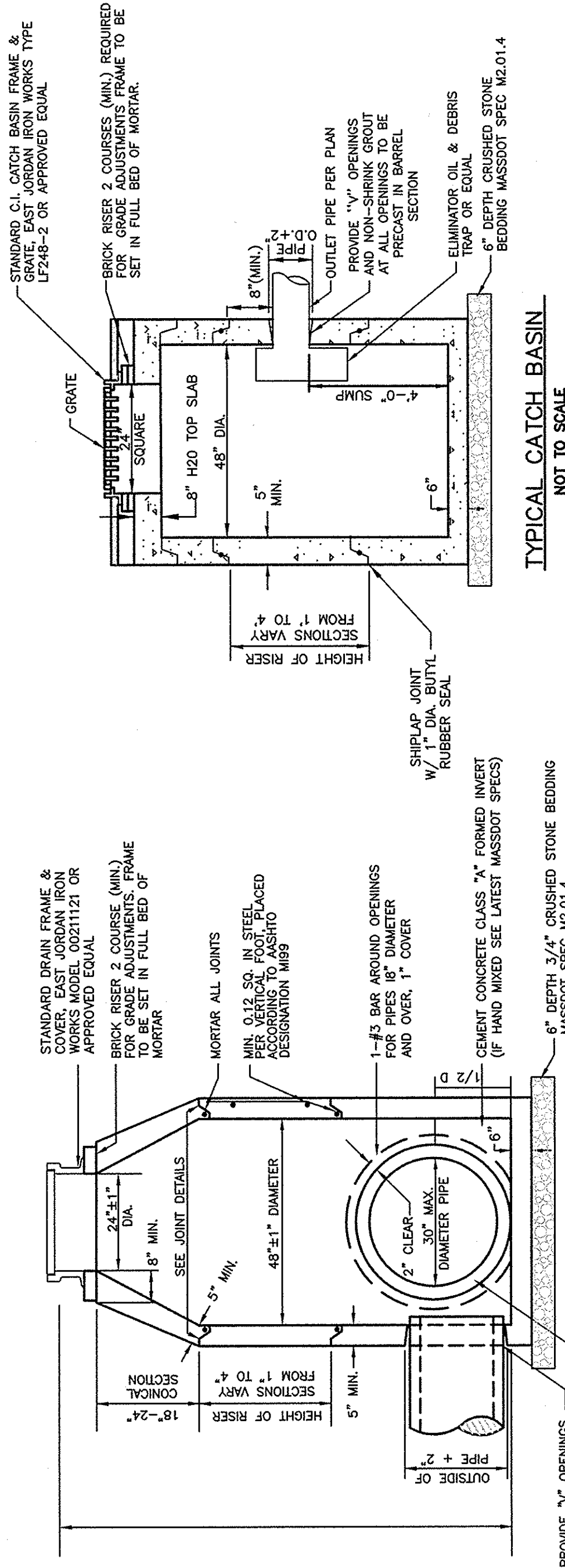
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PROPOSED SITE DEVELOPMENT
LOGAL, LLC

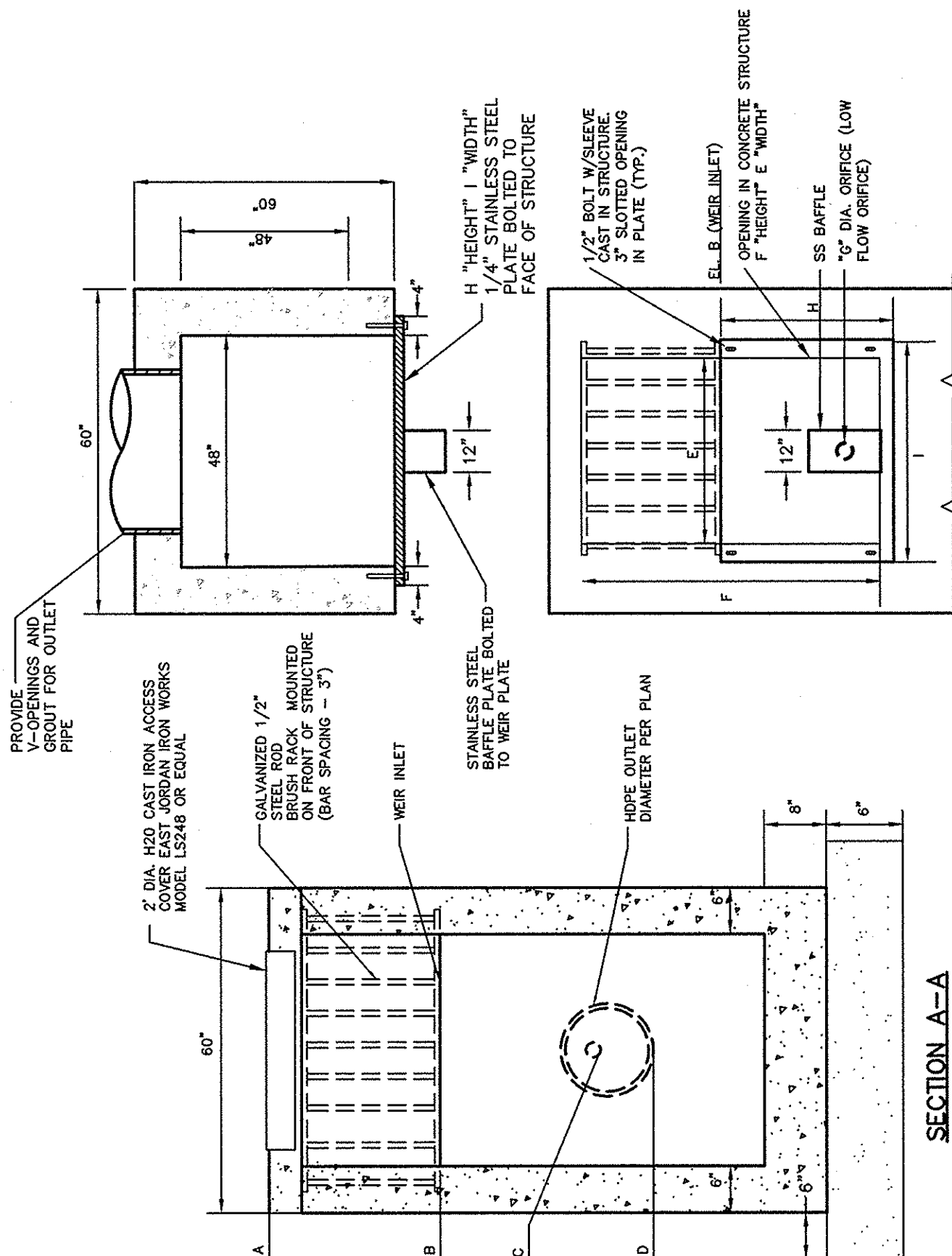
Drawing Title	DETAIL SHEET 2	
	Project No. 1998	Sheet 8 OF 9

D-2



OIL WATER SEPARATOR TANK DETAIL
NOT TO SCALE

NOTES:
1. DETAIL SHOWN FOR PERMITTING PURPOSES, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF FINAL OIL WATER SEPARATOR TANK FOR REVIEW PRIOR TO CONSTRUCTION.
2. OIL WATER SEPARATOR TANK SIZE SHALL BE EQUAL TO THE STORAGE CAPACITY OF THE PROPOSED FUELING FACILITY.

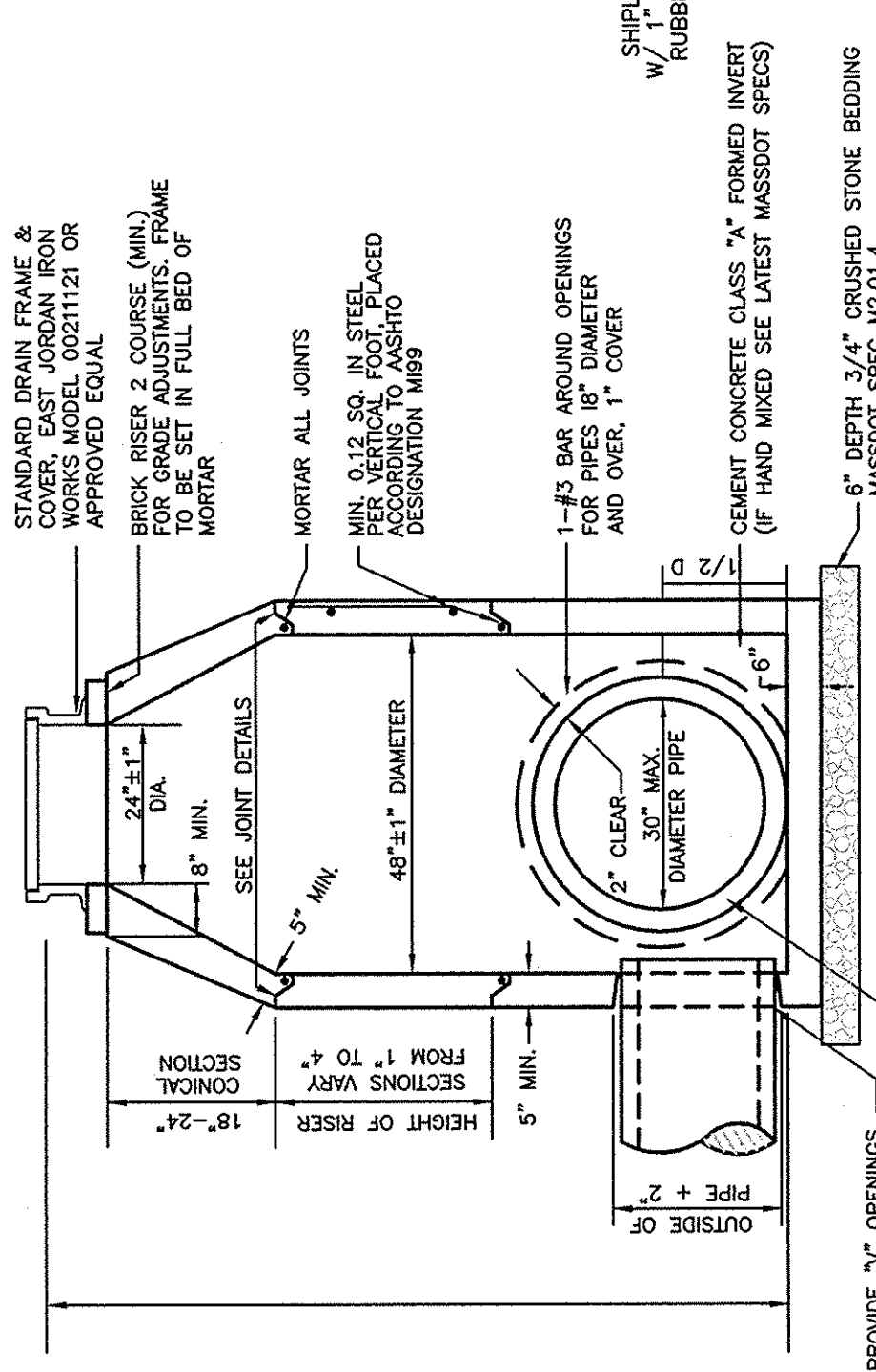


SECTION A-A
NOT TO SCALE

FLOW CONTROL STRUCTURE

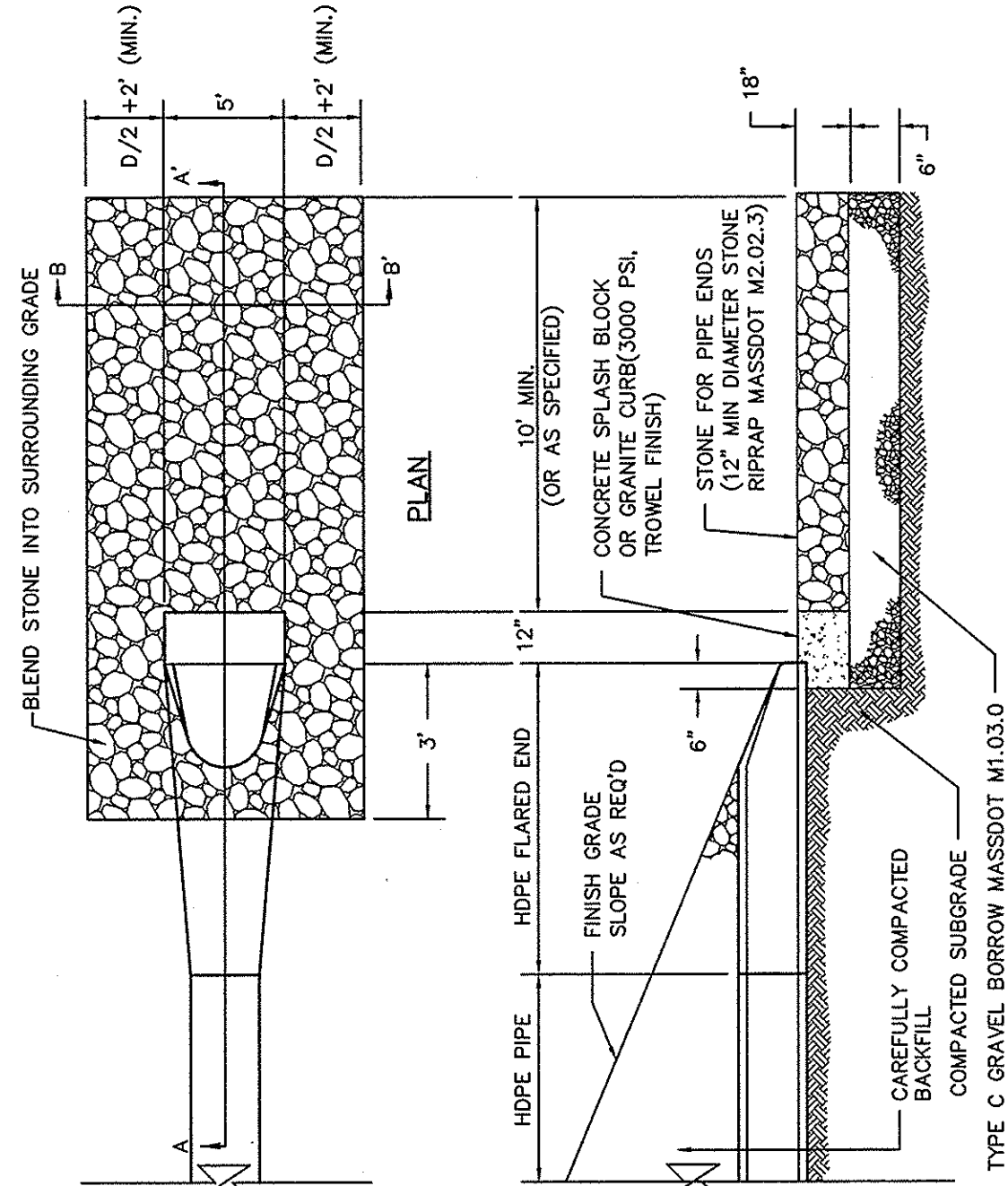
NOT TO SCALE
ELEVATION/DIMENSION TABLE

STRUCTURE:	A	B	C	D	E	F	G	H	I
WET BASIN AREA 1	78.50'	76.70'	76.00'	75.00'	48"	33"	4"	24"	54"



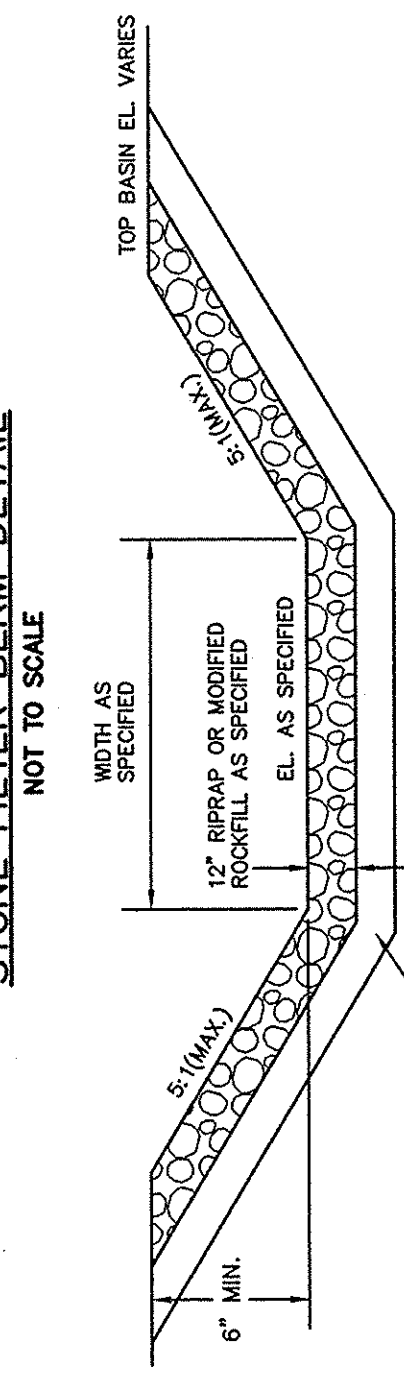
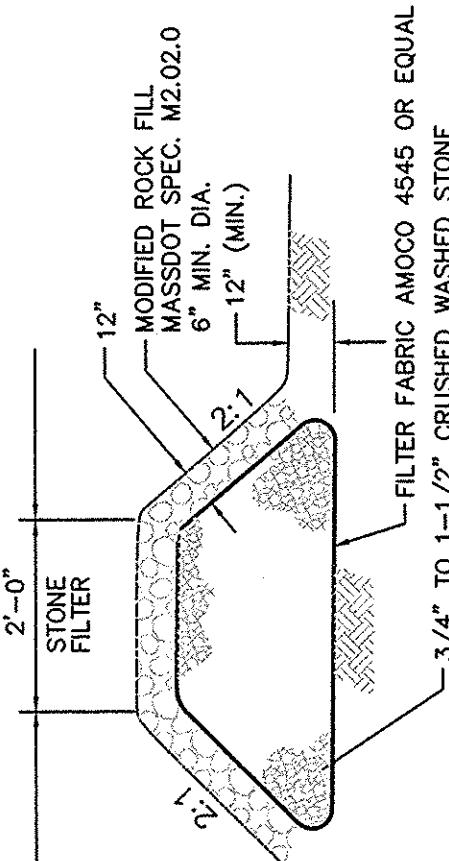
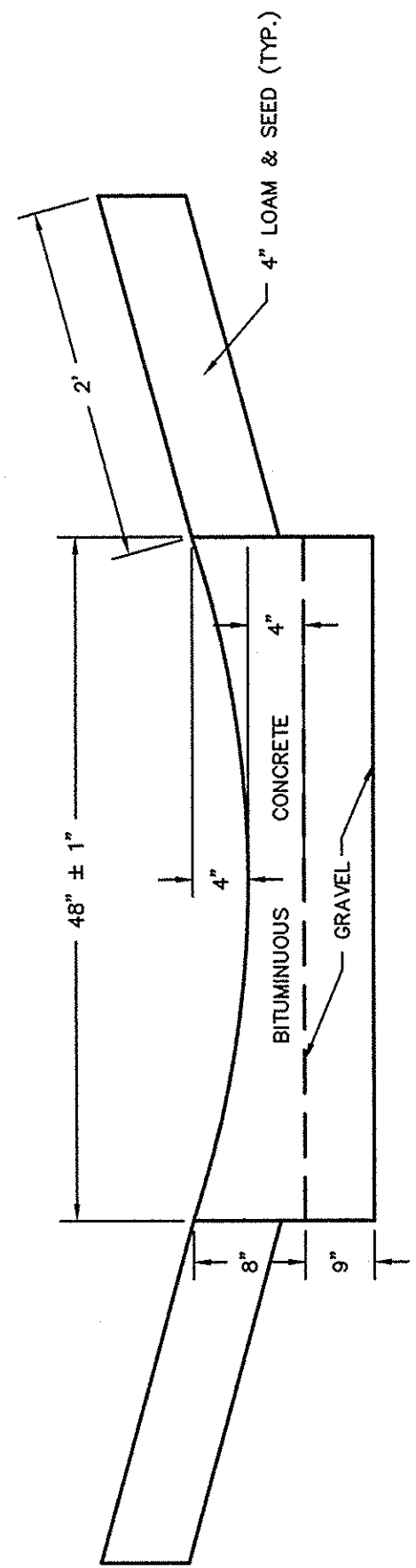
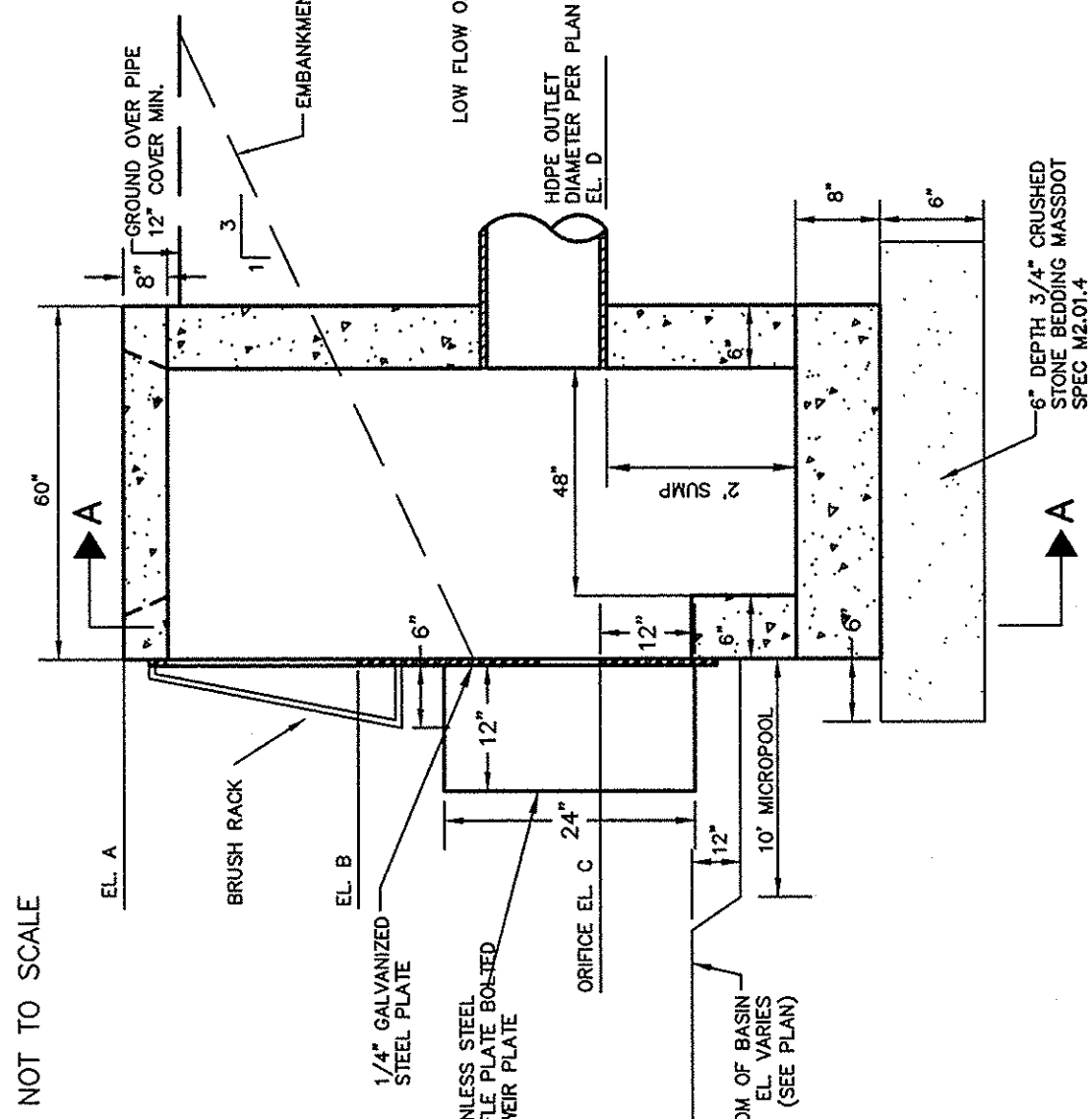
TYPICAL DRAIN MANHOLE

NOTES:
1. MANHOLE DESIGN TO CONFORM TO ASTM C478 LATEST REVISION.
2. CONCRETE SHALL BE WET CAST 4000 P.S.I. @ 28 DAYS.
3. USE FLAT TOP SLAB WHERE FINISHED GRADE ELEVATIONS PROHIBIT THE USE OF A CONE SECTION.
4. FILL OUTSIDE FACE OF ALL MANHOLE JOINTS WITH NON-SHRINK MORTAR.
5. PROVIDE JOINTS OF GREATER DIAMETER THAN THE MANHOLE.
6. ALL OTHER CONSTRUCTION SHALL MEET THE TYPICAL DRAIN MANHOLE SPECIFICATIONS.

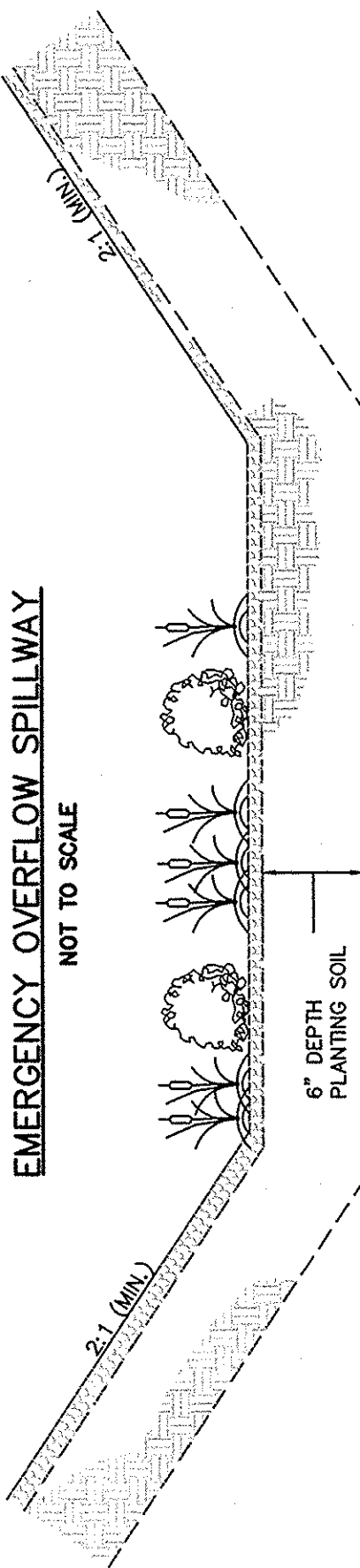


SECTION A-A'

STONE FOR PIPE ENDS SHALL CONFORM TO MASSDOT SPECIFICATIONS M2.02.3



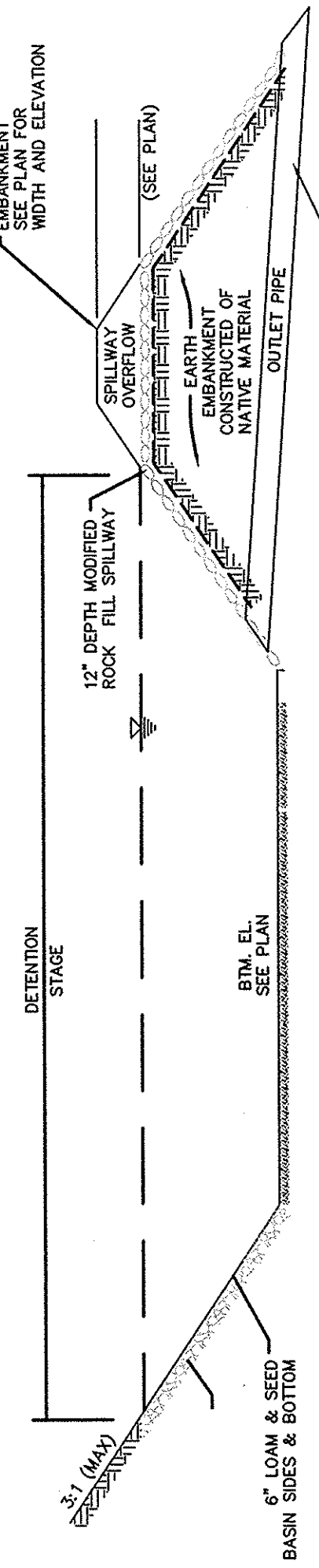
SECTION VIEW

WET BASIN AREA SECTION

1.) PLANTING SOIL MIX SHALL BE A MIXTURE OF SAND COMPOST AND SOIL COMPRISED OF THE FOLLOWING:

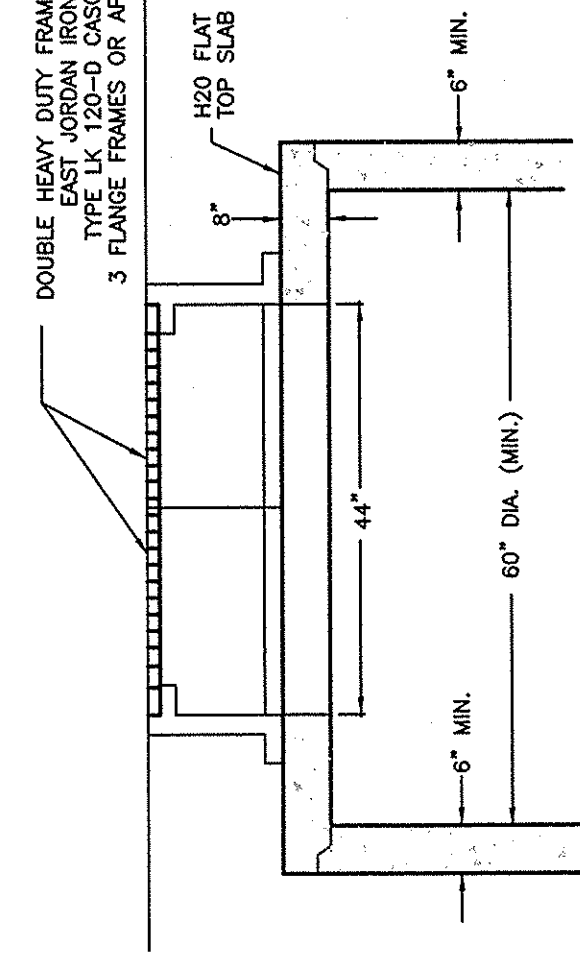
40% SAND
60% 70% SCREENED TOPSOIL

20-30% SCREENED TOP SOIL
30-40% COMPOST
CLAY CONTENT <5%



TYPICAL DETENTION BASIN

NOT TO SCALE



DOUBLE GRATE CATCH BASIN

Revisions		No.	Description	Date	Approval
		3	REV PER CON COM CONSULTANT REVIEW	9/24/14	RRR
		2	REV PER CON COM CONSULTANT REVIEW	9/6/14	RRR
		1	REV LOADING DOCK AREA	5/20/14	RRR

Drawn By	Designed By	Checked By
DTB	RRR/DTB	RRR

Issued For

PERMITTING

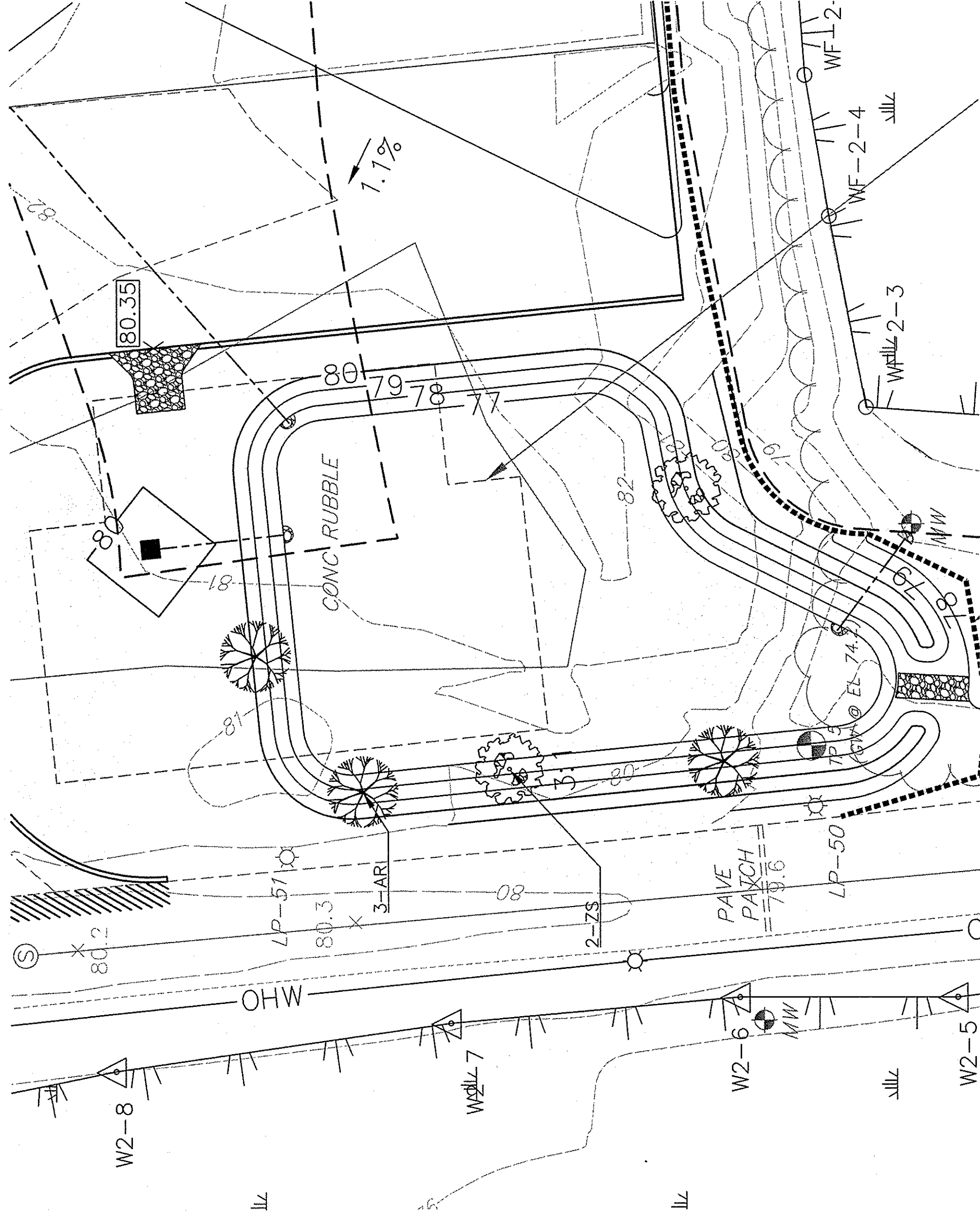


PROPOSED SITE DEVELOPMENT
LOGAL, LLC
100 DUCHAINE BOULEVARD
NEW BEDFORD, MASSACHUSETTS

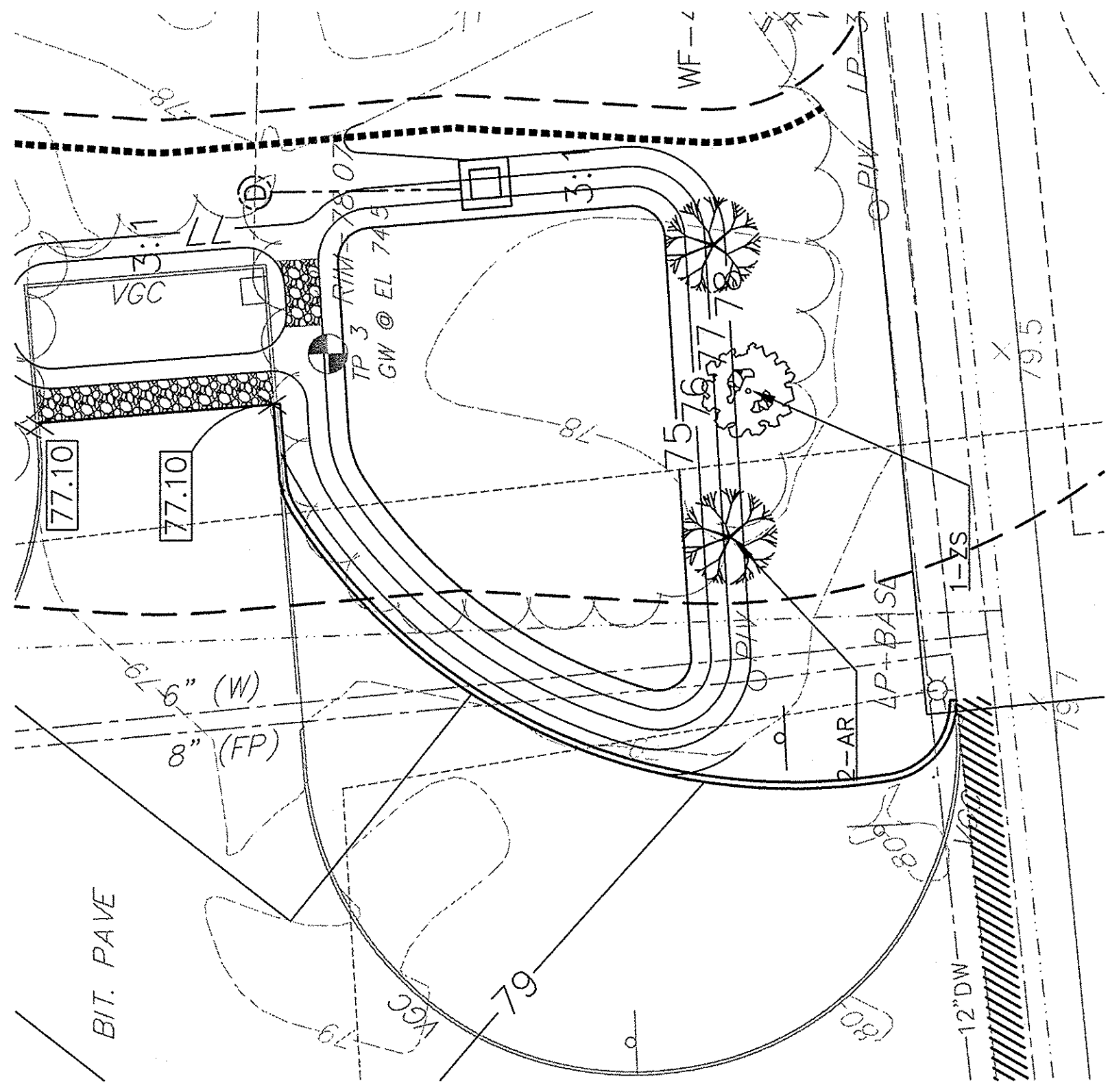
Drawing Title	
BIORETENTION AREA LANDSCAPING PLAN	
Project No. 1998	Sheet 9 OF 9
LAND-1	

PLANTING NOTES

1. PLANT MATERIAL SHALL BE FURNISHED, AND INSTALLED AS INDICATED, INCLUDING GROUND PREP, FERTILIZER, MULCH, AND WATERING. PLANT MATERIAL SHALL BE LABOR, MATERIALS, PLANTS, EQUIPMENT, INDOCENTALS, AND CLEAN-UP.
2. PLANTS SHALL BE DEVELOPED, THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WILL DEVELOP BRANCHES, DEEPLY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
3. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISIONS SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES. PLANTS SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE FOR SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
4. INsofar as it is PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN 14 DAYS. PLANTS NOT PLANTED WITHIN THIS PERIOD WILL BE REJECTED.
5. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, "NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
6. ALL PLANTS SHALL BE PLANTED IN TRANSPORTED TOP SOIL THAT IS THOROUGHLY WATERED, TAMPED, AS BACK FILL, PROGRESSIVE PLANTING MAY BE AS SHOWN ON PLANTING DETAILS. RAISE AND REPLANT ANY PLANT WHICH SETTLES MORE THAN 2" AFTER PLANTING AND WATERING.
7. FERTILIZER FOR WOODY PLANTS SHALL BE SLOW RELEASE, PELLETIZED AND SUITABLE FOR USE-UNTIL SATURATED SOIL CONDITIONS. FERTILIZER SHALL BE OSMOTEC 18-5-11, 12-14 MONTH RELEASE OR EQUAL.
8. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
9. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN ANY STATE OF FREEZING OR FROST. PLANTS SHALL BE SPRAYED WITH "MULT-PRUF" OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
10. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
11. ALL SET ALL PLANTS PLUMB AND STRAIGHT. LOCATE PLANT IN THE CENTER OF THE PIT.
12. ALL DEADWOOD, SUCKERS, AND BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. CONTAINER GROWN PLANTS SHALL NOT BE THINNED.
13. TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING. TREES SHALL BE STAKED AS SHOWN ON THE DETAIL. THE LANDSCAPE CONTRACTOR SHALL REMOVE STAKING AND GUYING AT THE END OF THE ONE YEAR MAINTENANCE AND GUARANTEE PERIOD.
14. NEW PLANTING AREAS SHALL BE ADEQUATELY IRRIGATED OR WATERED TO ESTABLISH THE PROPOSED PLANTS AND SEED AREAS.
15. PRIOR TO THE ACCEPTANCE BY THE OWNER, THE PROPOSED LANDSCAPE AS SHOWN ON THE APPROVED LANDSCAPE PLAN MUST BE INSTALLED, INSPECTED AND CONVEYED TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD.
16. THE CONTRACTOR SHALL SUBMIT A MATERIALS LIST INCLUDING THE SPECIES, SIZE, AND NUMBER OF PLANTS. THE OWNER SHALL REVIEW AND APPROVE THE ORDERING OF PLANTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPE THROUGHOUT THE GUARANTEE PERIOD.



DETENTION BASIN AREA 1-PLANTING DETAIL



WET-BASIN 1-PLANTING DETAIL

PLANT LIST						
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
5	AR	ACER RUBRUM "RED SUNSET"	RED SUNSET RED MAPLE	3" CAL.	AS SHOWN	B&B
3	ZS	ZELKOVA SERRATA "GREEN VASE"	GREEN VASE JAPANESE ZELKOVA	3" CAL.	AS SHOWN	CONTAINER

STORMWATER MANAGEMENT SYSTEM PLANTING NOTES:

1.) BOTTOM AREAS OF THE WET-BASINS TO BE PLANTED WITH A MIX OF 2" PLUGS OF SWITCH GRASS, BROOM SEDGE, AND FOX SEDGE TO BE SPACED APPROXIMATELY 24" O.C

2.) DETENTION BASIN AND WET BASIN BOTTOM AREAS AND SIDE SLOPES TO BE SEEDDED WITH NEW ENGLAND CONSERVATION WILDLIFE MIX AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS, INC. (OR APPROVED EQUAL)