

EXISTING CITY OF NEWBEDFORD ROADWAY,
 DRAINAGE, SEWER & WATER EASEMENT (100' WIDE)
 (SEE DEED BK.1571/PG.276 & PLAN BK.77/PG.48 & DOC. #70177)

TITLE REFERENCE:
 LAND COURT CERTIFICATE #21272 (DOC. #97784)
 PLAN REFERENCE:
 LAND COURT CERTIFICATE #21272 (DOC. #97784)
 PLAN BOOK 77, PAGE 48
 (REFERENCES RECORDED AT THE BRISTOL
 COUNTY REGISTRY OF DEEDS 530)
 SITE LOCATION: BULLHORN & 50 PHILLIPS ROAD
 NEW BEDFORD, MASSACHUSETTS
 ASSESSORS REFERENCES:
 MAP 132 LOT 1, MAP 134 LOT 5)

LOT 1
 N/F
 AREA 68.79 ACRES
 MULTILAYER COATING
 TECHNOLOGIES, LLC

EXISTING DRAINAGE EASEMENT
 100' X 20'
 (PLAN BK.77/PG.48)

FIELD ENGINEERING CO. INC.
 CONSULTING ENGINEERS

110 INDUSTRIAL DRIVE
 110 BOX 1781 MA 02739
 TEL: (508) 758-2782
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THE CROCKER BUILDING
 4 COURT STREET SUITE 104
 TAUNTON, MA 02786
 TEL: (508) 824-9279
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Revisions	
No.	Description
2	RELOADING BOOK AREA
1	REV FOR SITE PLAN REVIEW
0088	5/7/14

Scale: 1"=100'

Drawn By: DTB
 Designed By: RRR/DTB
 Checked By: RRR
 Issued For: PERMITTING



PROPOSED SITE DEVELOPMENT
LEGAL, LLC

100 DUCHAINE BOULEVARD
 NEW BEDFORD, MASSACHUSETTS

Drawing Title: EXISTING CONDITIONS

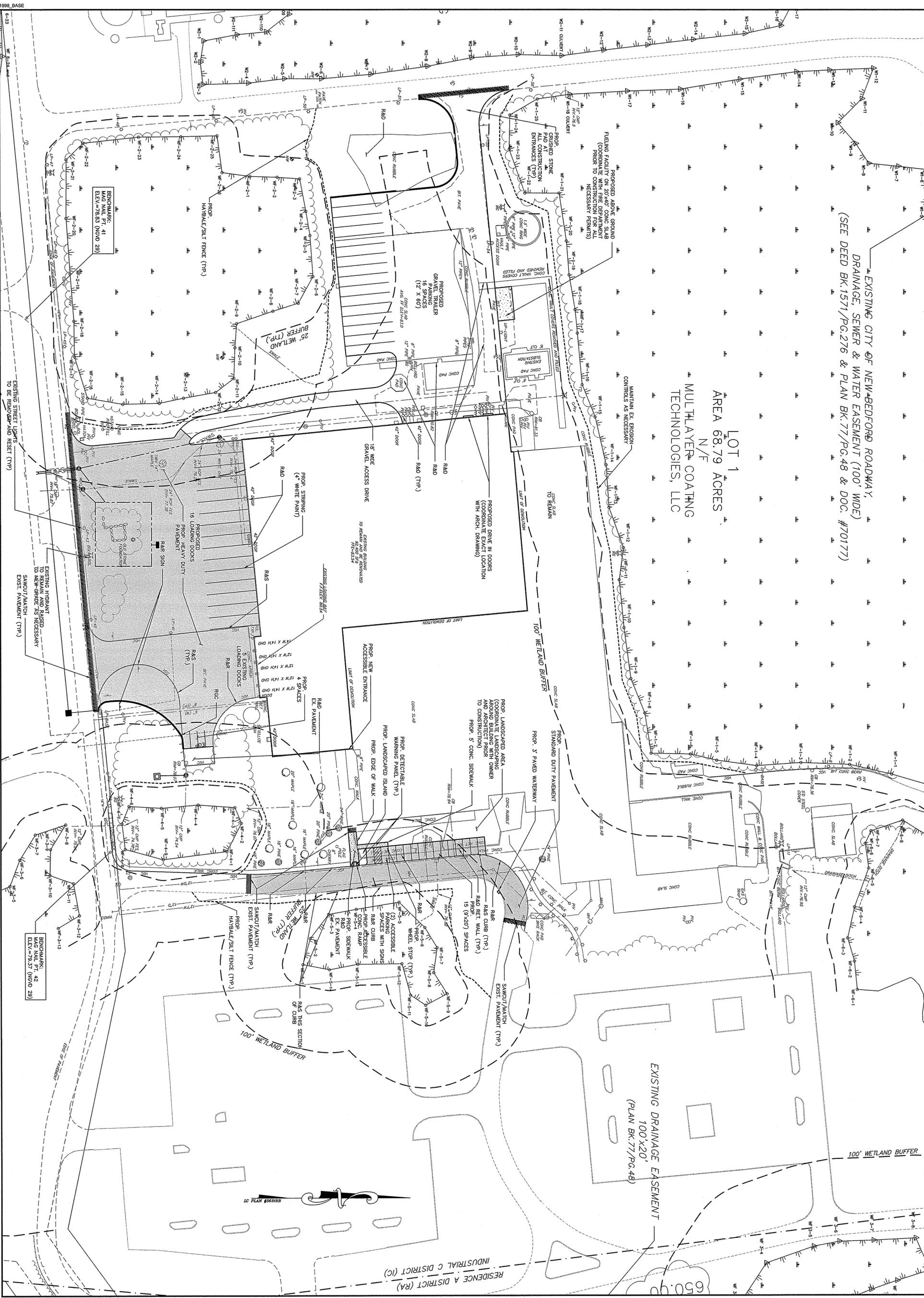
Project No: 1998

Sheet: 3 OF 9

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EXISTING CITY OF NEW-BEDFORD ROADWAY,
 DRAINAGE, SEWER & WATER EASEMENT (100' WIDE)
 (SEE DEED BK.1571/PG.276 & PLAN BK.77/PG.48 & DOC. #70177)

LOT 1
 AREA 68.79 ACRES
 N/F
 MULTILAYER COATING
 TECHNOLOGIES, LLC



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Revisions			
No.	Description	Date	App'd
2	REV. LOADING DOCK AREA, SIGN, RRR		
1	REV. FOR SITE PLAN REVIEW	5/8/14	RRR

Date: 5/7/14
 Scale: 1"=50'

PERMITTING

Drawn by	Designed by	Checked by
DTB	RRR/DTB	RRR
Issued For		



PROPOSED SITE DEVELOPMENT
LOGAL, LLC

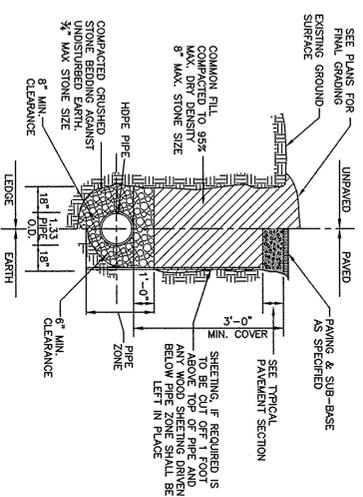
100 DUCHAINE BOULEVARD
 NEW BEDFORD, MASSACHUSETTS

Drawing Title
SITE LAYOUT

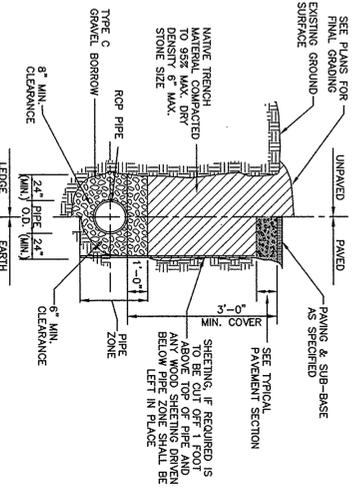
Project No.
 1998

Sheet
 5 OF 9

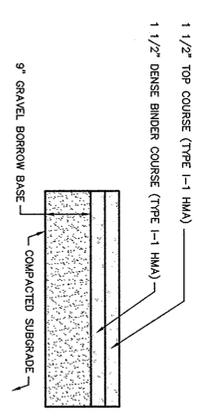
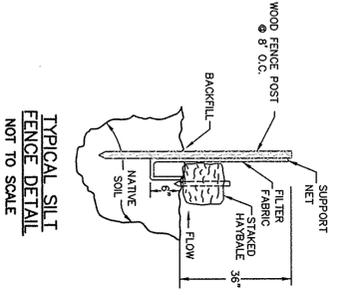
SL-1



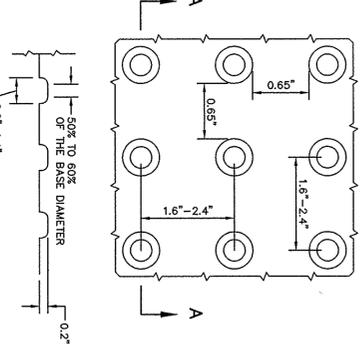
1. TYPE C GRAVEL BORROW SHALL CONFORM TO MASSDOT SPECIFICATION M1.03.0
2. CRUSHED STONE SHALL CONFORM TO MASSDOT SPECIFICATION M12.01.4



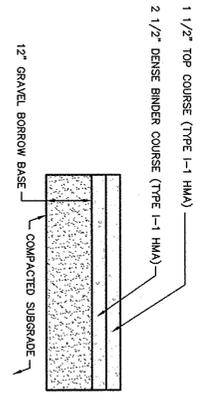
1. TYPE C GRAVEL BORROW SHALL CONFORM TO MASSDOT SPECIFICATION M1.03.0 2" MAX STONE SIZE
2. TRENCH WIDTH SHALL BE AS REQUIRED TO PROVIDE ADEQUATE SPACING DURING CONSTRUCTION IN ACCORDANCE WITH ALL APPLICABLE TRENCHING AND SHORING REGULATIONS.



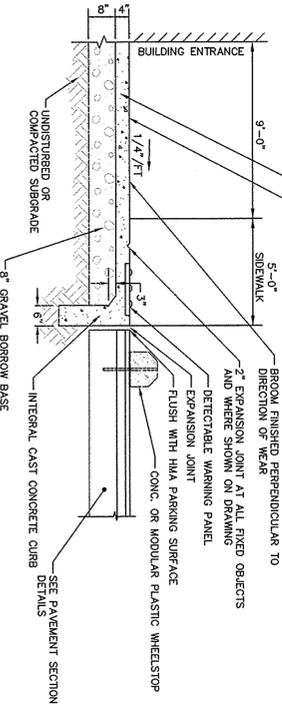
1. GRAVEL BORROW BASE SHALL CONFORM TO MASSDOT STANDARD SPECIFICATIONS FOR GRAVEL BORROW SEC. M1.03.0 TYPE B COMPACTED TO 95% MAX. DRY DENSITY IN 6\"/>
- 2. SPECIFICATIONS FOR GRAVEL BORROW SEC. M1.03.0 TYPE B COMPACTED TO 95% MAX. DRY DENSITY IN 6\"/>
- 3. SPECIFICATIONS FOR CLASS 1 TYPE L-1 BITUMINOUS CONCRETE PAVEMENT SEC. 440.2. SUBMIT JOB-MAX FORMULA TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.



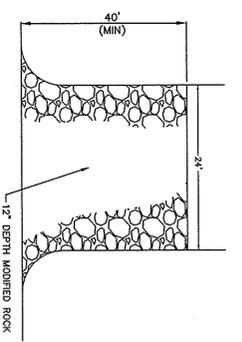
- NOTE:
1. PANELS SHALL BE 24x48x1/4\"/>
 - 2. PANELS SHALL BE YELLOW IN COLOR UNLESS OTHERWISE SPECIFIED.



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\"/>
- 2. SPECIFICATIONS FOR GRAVEL BORROW SEC. M1.03.0 TYPE B COMPACTED TO 95% MAX. DRY DENSITY IN 6\"/>
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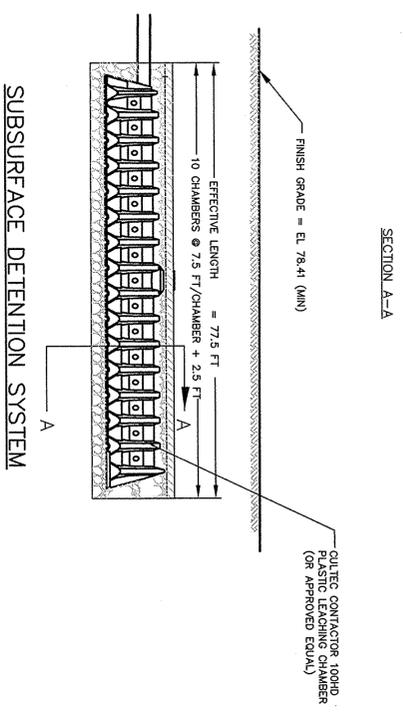
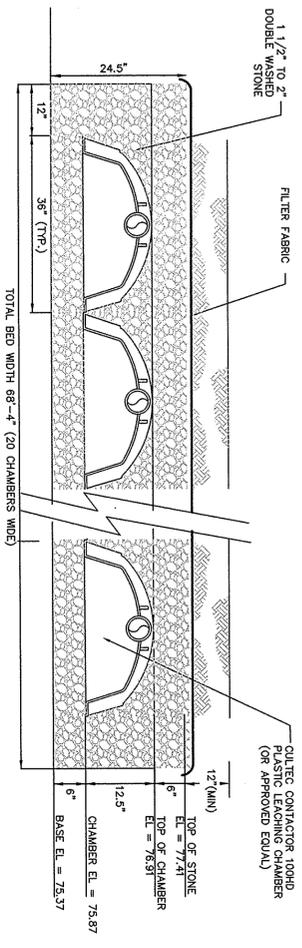


- NOTES:
1. SCORE JOINT SPACING MIN. - 4'-0\"/>
 - 2. EQUAL SPACING BETWEEN EXPANSION JOINTS, 32'-0\"/>
 - 3. CEMENT CONCRETE SHALL CONFORM TO MASSDOT SPEC. M4.02.00 AND SHALL HAVE 4000 PSI COMPRESSIVE STRENGTH @ 28 DAYS WITH A CEMENT CONTENT OF 869#/C.Y.; MAX. AGGREGATE SIZE 3/8"



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

- CONSTRUCTION SEQUENCING AND PHASING NOTES
1. INSTALL PROPOSED SITUATION CONTROL MEASURES AS SHOWN ON THESE PLANS (REFER TO EROSION AND SEDIMENTATION CONTROL PROGRAM ON SHEET 1-1 FOR ADDITIONAL INFORMATION ON SITUATION CONTROL PRACTICES TO BE USED THROUGHOUT THE SITE)
 2. NOTIFY CONSERVATION COMMISSION AGENT FOLLOWING INSTALLATION OF SITUATION CONTROL, PRIOR TO ANY MAJOR EXCAVATION TAKING PLACE
 3. CONSTRUCT TEMPORARY DRAINAGE SWALES WITH 1/4\"/>
 - 4. CONSTRUCT CRUSHED STONE DRIVEWAY APPROXS.
 - 5. PERFORM SITE AND BUILDING CONSTRUCTION.
 - 6. STABILIZE ALL DISTURBED SURFACES FOLLOWING COMPLETION OF CONSTRUCTION.
 - 7. CONNECT DESIGNED DRAINAGE STRUCTURES AND FILL TEMPORARY SWALES AND SEDIMENT BASINS WHERE APPLICABLE.
 - 8. REMOVE ANY SEGMENT FROM BOREHOLE/STATION USES AS TEMPORARY SEDIMENT BASINS PRIOR TO FINAL LOADING AND SEEDING.
 - 9. REMOVE SITUATION CONTROLS UPON FULL STABILIZATION OF FINISHED SURFACES.



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Revisions			
No.	Description	Date	App'd
2	REV/LOADING DOCK/AREA	5/20/14	RRR
1	REV FOR SITE PLAN REVIEW	5/20/14	RRR

Date: 5/7/14

Scale: N.T.S.

Drawn By: DTB
Designed By: RRR/DTB
Checked By: RRR

PERMITTING

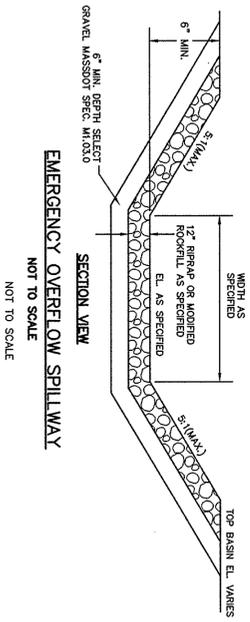
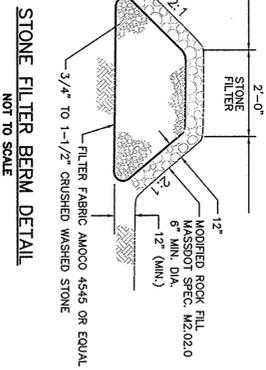
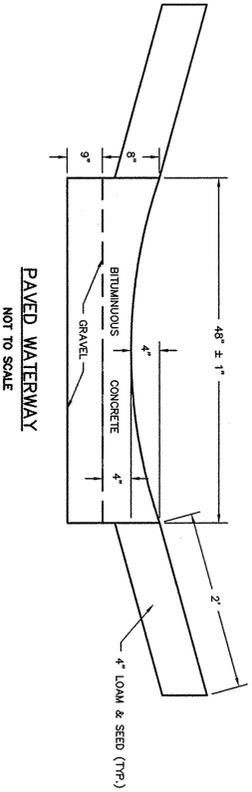
PROPOSED SITE DEVELOPMENT
LEGAL, LLC

100 DUCHAINE BOULEVARD
NEW BEDFORD, MASSACHUSETTS

Drawing Title: **DETAIL SHEET 1**

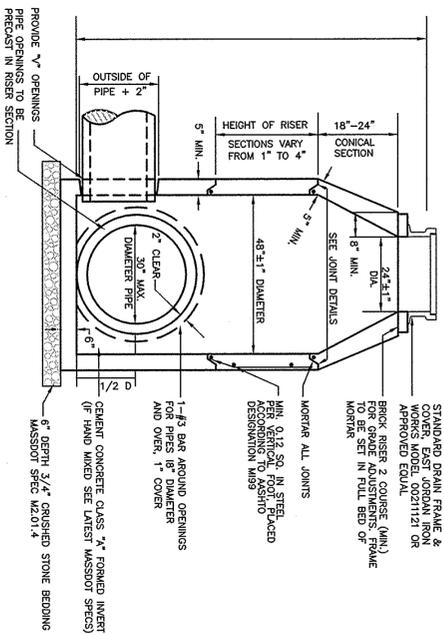
Project No.: 1998
Sheet: 7 OF 9

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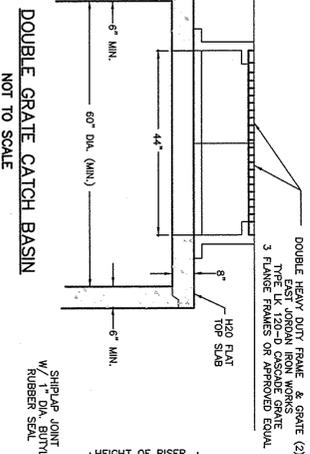


BIORETENTION AREA SECTION
NOT TO SCALE

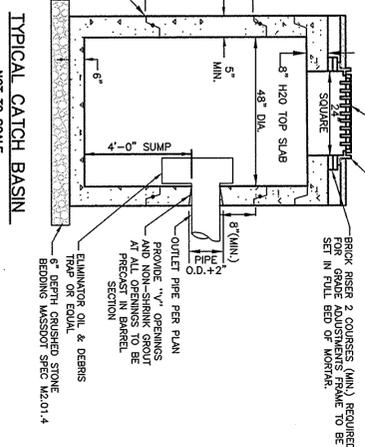
- 1.) PLANTING SOIL MIX SHALL BE A MIXTURE OF SAND COMPOST AND SOIL COMPRISED OF THE FOLLOWING:
40% SAND
20-30% SCREENED TOP-SOIL
20-30% COMPOST
CLAY CONTENT < 5%
PH 5.5-6.5
SOLUBLE SALT < 500 PPM
- 2.) SAND BED SHALL CONFORM TO ASTM D422 MAX. STONE SIZE - 3/4" INCH AND NO GREATER THAN 30% PASSING NO. 200 SIEVE.
- 3.) BOTTOM AREA TO BE PLANTED WITH A MIX OF 2" PLUGS OF SWITCH GRASS, BROOD SEED, AND FOX SEED TO BE SPACED APPROXIMATELY 24" O.C.
- 4.) BIORETENTION AREA SLOPES TO BE SEED WITH NEW ENGLAND WETLAND PLANTS, INC. (OR APPROVED EQUAL)



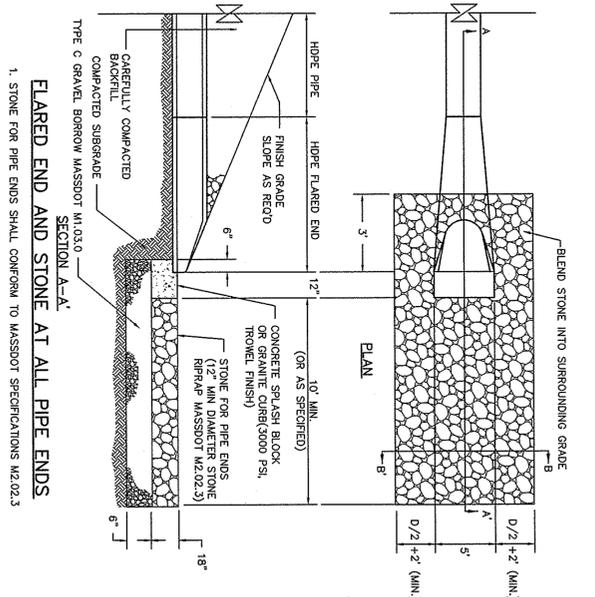
- NOTES:
1. MANHOLE DESIGN TO CONFORM TO ASTM C478 LATEST REVISION.
2. CONCRETE SHALL BE WET CAST 4000 P.S.I. @ 28 DAYS.
3. USE FLAT TOP SLAB WHERE FINISHED GRADE ELEVATIONS PROHIBIT THE USE OF A CONE SECTION.
4. ALL MANHOLE JOINTS WITH NON-SHRINK MORTAR.
5. WHERE DRAIN MANHOLES OF GREATER DIAMETER ARE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



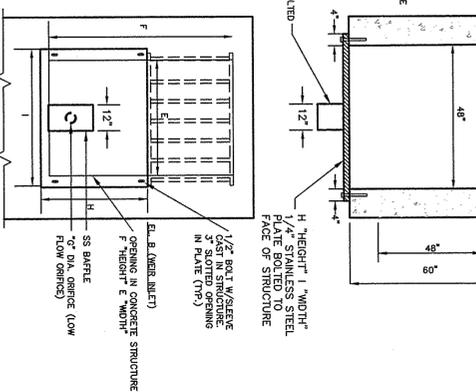
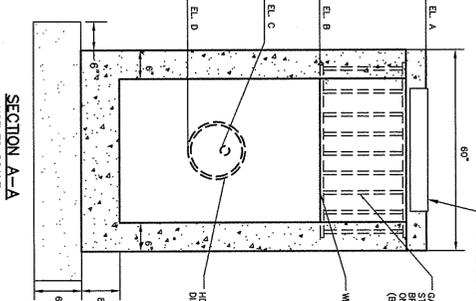
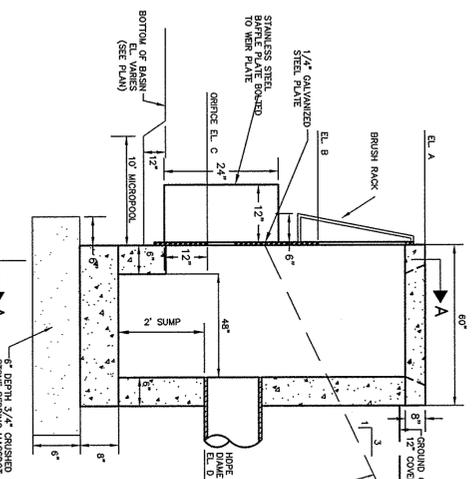
- NOTES:
1. CATCH BASIN DESIGN TO CONFORM TO ASTM C478 LATEST REVISION.
2. CONCRETE SHALL BE WET CAST 4000 P.S.I.
3. OUTSIDE FACE OF ALL MANHOLE JOINTS WITH NON-SHRINK MORTAR.
4. RESEE SECTION ON DETAIL BIOWASH DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.



- NOTES:
1. CATCH BASIN DESIGN TO CONFORM TO ASTM C478 LATEST REVISION.
2. CONCRETE SHALL BE WET CAST 4000 P.S.I. @ 28 DAYS.
3. RILL OUTSIDE FACE OF ALL MANHOLE JOINTS WITH NON-SHRINK MORTAR.
4. RESEE SECTION ON DETAIL BIOWASH DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.



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



FLOW CONTROL STRUCTURE
NOT TO SCALE

STRUCTURE:	A	B	C	D	E	F	G	H	I
BIORETENTION AREA 3	78.00'	76.50'	75.50'	75.00'	48"	36"	4"	18"	54"



PERMITTING

Drawn By: RRD/DTB
Designed By: RRD/DTB
Checked By: RRR
Issued For: N.T.S.

Revisions	Date	Description	By	App'd
2	5/7/14	REV FOR SLOPE AREA	RRR	RRR
1	5/7/14	REV FOR SITE PLAN REVIEW	RRR	RRR

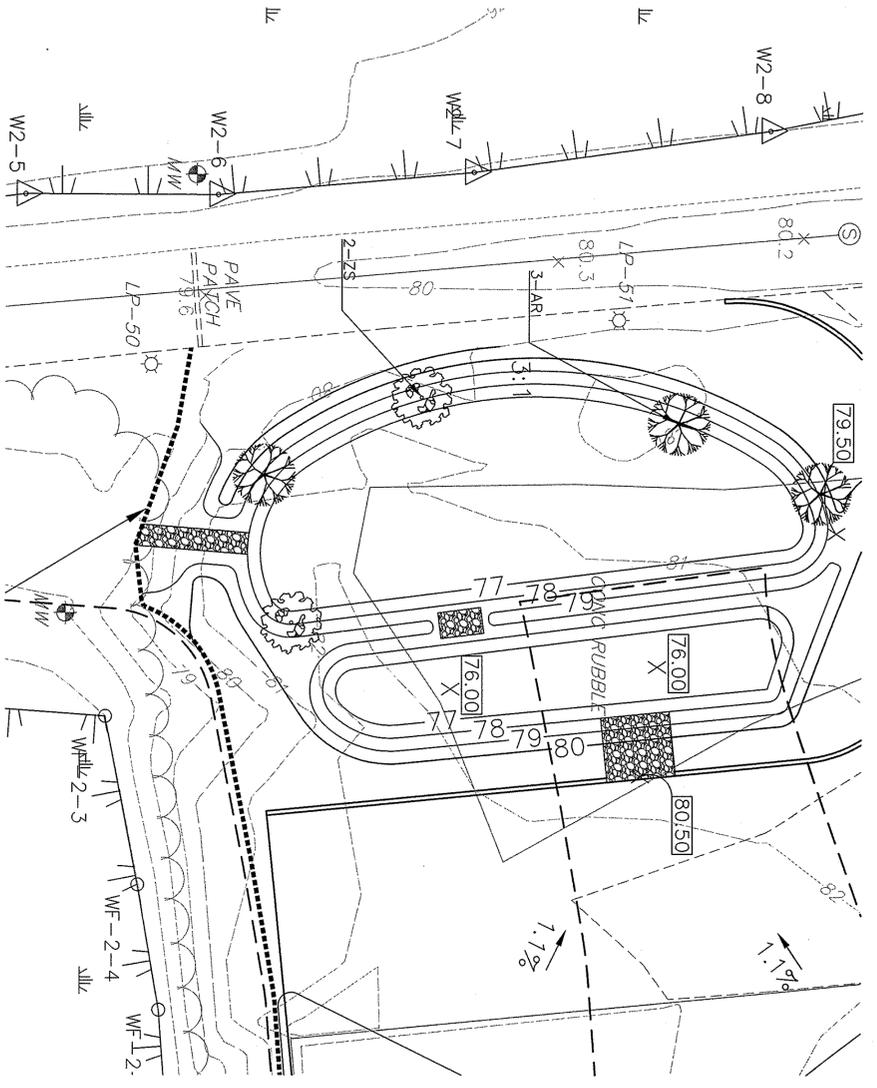
FIELD ENGINEERING CO., INC.
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PROPOSED SITE DEVELOPMENT
LOGAL, LLC
100 DUCHAINE BOULEVARD
NEW BEDFORD, MASSACHUSETTS

Drawing Title
DETAIL SHEET 2

Project No. 1998
Sheet 8 OF 9

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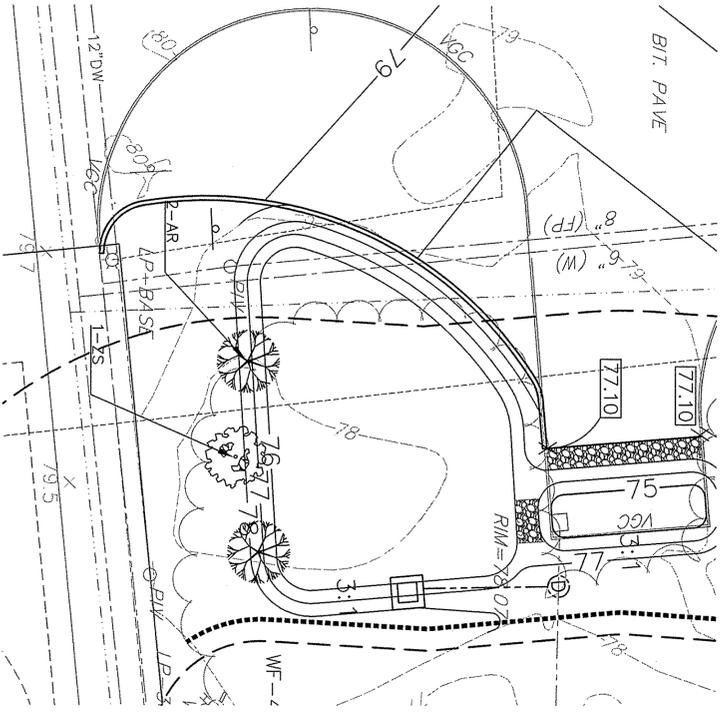


BIORETENTION AREA 1-PLANTING DETAIL
1"=20'

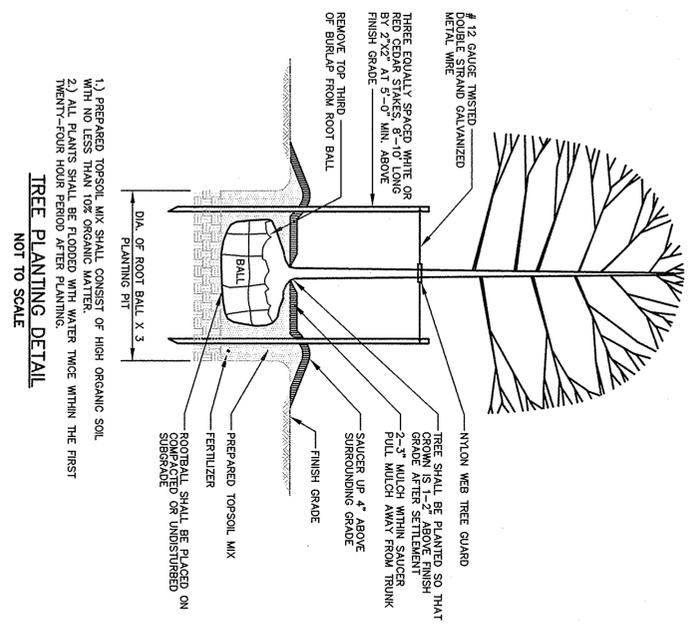
PLANT LIST	QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
5	AR		ACER RUBRUM "RED SUNSET"	RED SUNSET RED MAPLE	3" GAL.	AS SHOWN	B&B
3	ZS		ZELKOVA SERRATA "GREEN VASE"	GREEN VASE JAPANESE ZELKOVA	3" GAL.	AS SHOWN	CONTAINER

BIORETENTION AREA PLANTING NOTES
 1.) BOTTOM AREAS OF THE FOUR BIORETENTION AREAS 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.) BIORETENTION AREA SLOPES TO BE SEDED WITH NEW ENGLAND CONSERVATION/MULCHF MIX AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS, INC. (OR APPROVED EQUAL)

- PLANTING NOTES**
1. PLANT MATERIAL SHALL BE PLISHED AND INSTALLED AS INDICATED, INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS, AND CLEAN-UP.
 2. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, WOOLLY 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 SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A QUANTITY EQUAL TO THAT STATED ABOVE.
 4. INSURE 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 27 AFTER PLANTING AND WATERING.
 5. QUANTITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN STOCK AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
 6. ALL PLANTS SHALL BE PLANTED IN TRANSPORTED TOP SOIL THAT IS THOROUGHLY SHOWN ON PLANTING DETAILS. FASE AND REPLANT ANY PLANT WHICH SETTLER MORE THAN 2" AFTER PLANTING AND WATERING.
 7. FERTILIZER FOR WOODY PLANTS SHALL BE SLOW RELEASE, PELLETED AND SUITABLE FOR RELEASE UNDER SATURATED SOIL CONDITIONS. FERTILIZER SHALL BE OSMOCOTE 18-9-11, 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 MUD OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPACED WITH 1/2" TOLERANCE 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. SET ALL PLANTS PLUMB AND STRAIGHT. LOCATE PLANT IN THE CENTER OF THE PIT.
 12. ALL PLANTS PLUMB AND STRAIGHT. LOCATE PLANT IN THE CENTER OF THE PIT. REMOVE CONTAINER GROW 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 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 APPROVED BY THE OWNER'S REPRESENTATIVE. ANY PLANTING INSTALLED IN CONFLICT WITH THE APPROVED LANDSCAPE PLAN SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE. FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL REQUIRE THE REMOVAL OF THE PLANTING IN QUESTION. THIS REQUIREMENT DOES NOT APPLY TO SEEDING OR SOODING OR PLANTINGS SPECIFICALLY FOR SOIL STABILIZATION.
 16. THE CONTRACTOR SHALL SUBMIT A MATERIALS LIST INCLUDING THE SPECIES, SIZE, AND NUMBER OF PLANTS TO THE OWNER FOR APPROVAL PRIOR TO THE ORDERING OF PLANTS. ALL PLANTING SHALL BE COORDINATED WITH THE OWNER PRIOR TO INSTALLATION.



BIORETENTION AREA 3-PLANTING DETAIL
1"=20'



- TREE PLANTING DETAIL**
NOT TO SCALE
- 1.) PREPARED TOP-SOIL MIX SHALL CONSIST OF HIGH ORGANIC SOIL WITH NO LESS THAN 10% ORGANIC MATTER.
 - 2.) ALL PLANTS SHALL BE FLOODED WITH WATER TWICE WITHIN THE FIRST TWENTY-FOUR HOUR PERIOD AFTER PLANTING.

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

PERMITTING

Scale: 1"=20'

Drawn By: DTB
 Designed By: RRR/DTB
 Checked By: RRR

Issued For: PERMITTING

Revisions	No.	Description	Date	By	App'd
	1	PER/LOADING DOCK AREA	5/20/14	RRR	

LAND-1

Project No. 1998
 Sheet 9 OF 9

Drawing Title: BIORETENTION AREA LANDSCAPING PLAN