

SOUTHEAST PARKING EXPANSION PLANS

ACCOMPANYING AN

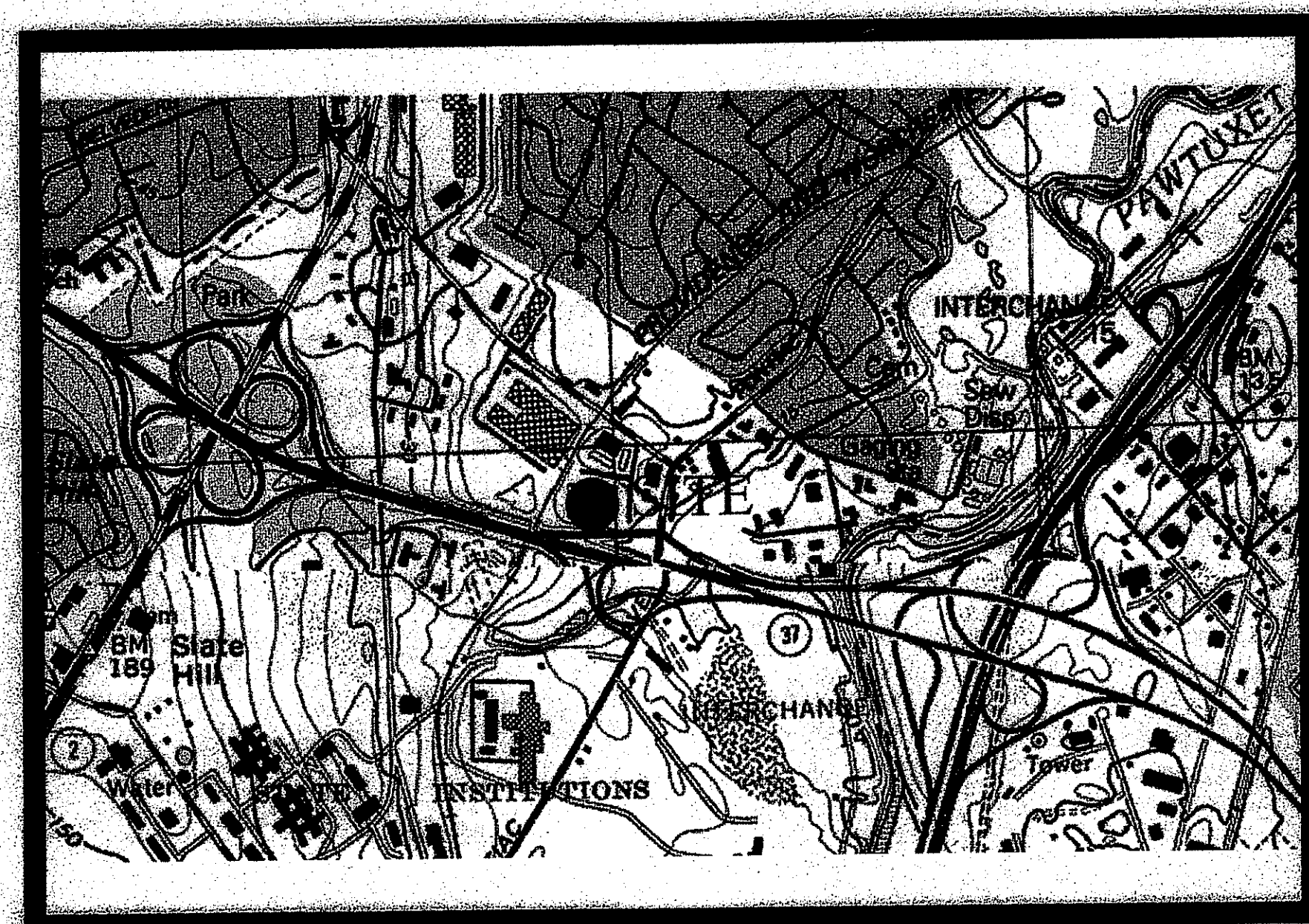
RIDEM Wetlands Preliminary Determination Submission

(A.P. 14, LOTS 2, 10 & 11)

LOCATED AT:

100 SOCKANOSSETT CROSS ROAD CRANSTON, RHODE ISLAND

OCT 18 2013



LOCUS MAP
N.T.S.

PREPARED FOR:

100 SOCKANOSSET LLC
1414 ATWOOD AVENUE
JOHNSTON, RI 02919

JOB No. 5471.03
MAY 20, 2013

SHEET INDEX

LAST REVISED

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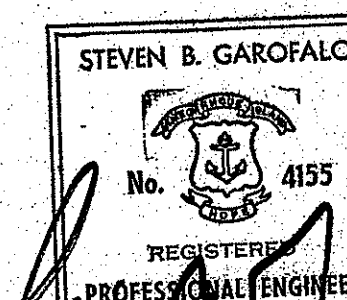
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED OCT 30 2013 FILE # 13-0092
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Mark D. Wenzel

PREPARED BY:

GAROFALO

GAROFALO & ASSOCIATES, INC.
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS
85 CORLISS STREET, P.O. BOX 6145, PROVIDENCE, RI 02940
(PH) 401-273-6000 (FX) 401-273-1000



Steven B. Garofalo
10-17-13



SURVEY NOTES:

1. THE EXISTING CONDITIONS INDICATED ON THESE PLANS REFLECT SURVEY INFORMATION FROM PLAN TITLED "EXISTING CONDITIONS PLAN FOR 100 SOCKANOSSET PARK", PREPARED BY GAROFALO & ASSOCIATES, INC. DWG. NO. 5471-ECS.DWG, DATED AUGUST 19, 1999, MODIFIED TO REFLECT ONSITE IMPROVEMENTS INDICATED ON SUBSEQUENT SITE PLANS (2002, 2004). SUPPLEMENTAL ON-GROUND SURVEY PERFORMED WITHIN THE WORK ZONE INDICATED ON THIS PLAN. CONTRACTOR SHALL REVIEW PREVIOUSLY DEVELOPED SURVEY AND CONSTRUCTION PLANS AND INSPECT EXISTING SITE CONDITIONS PRIOR TO INITIATING ANY CONSTRUCTION.
2. THE WETLAND/ASSF FLAGGING INDICATED ON THESE PLANS WAS PERFORMED BY A QUALIFIED WETLANDS SPECIALIST AND HAS BEEN PROFESSIONALLY SURVEYED AND LOCATED BY ACCURATE SURVEY METHODS.

ZONING DATA

M-2 INDUSTRIAL
 SETBACKS:
 FRONT - 40 FEET
 SIDE - 25 FEET
 REAR - 30 FEET
 MAX. BLDG. HEIGHT - 35 FEET
 MIN. LOT WIDTH & FRONTAGE - 200 FEET
 MIN. LOT AREA - 60,000 S.F.
 MAX. LOT COVERAGE - 60%

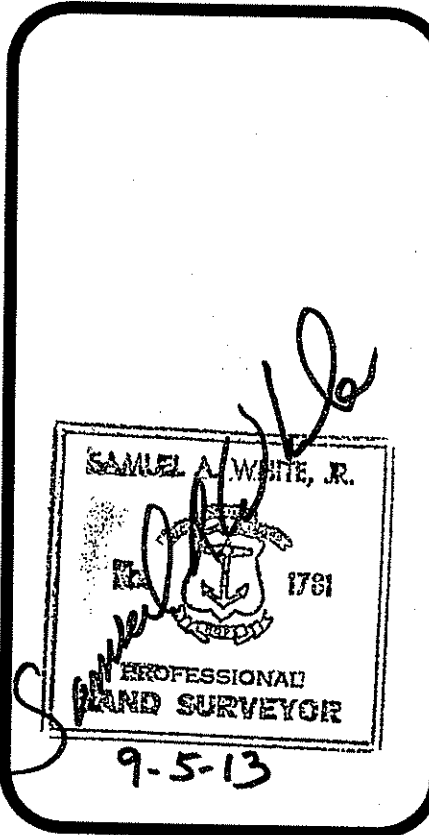
*REFER TO CITY OF CRANSTON ZONING ORDINANCE FOR FURTHER INFORMATION.

**SOUTHEAST PARKING EXPANSION
 EXISTING CONDITIONS PLAN**

FOR
100 SOCKANOSSET PARK
 SITUATED AT
 100 SOCKANOSSET CROSS ROAD
 CRANSTON, RHODE ISLAND
 PREPARED FOR:
100 SOCKANOSSET LLC

OCT 18 2013

NO.	REVISION	BY	DATE
1	RIDEM COMMENTS	PJD	9/04/13



GAROFALO
 GAROFALO & ASSOCIATES, INC.
 ENGINEERS / LAND PLANNERS / SURVEYORS

86 CORLISS STREET
 P.O. BOX 6145
 PROVIDENCE, RI 02940
 TEL. 401-273-6000

JOB NO. 5471-03	DRAWN BY MNB
DWG. NO. 5471-03-BASE	CHECKED SBG
SCALE: 1"=20'	APPROVED SBG
SHEET	DATE: MAY 20, 2013

ECS1

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SITE LEGEND

EXISTING	NEW	DESCRIPTION
B	B	BASLINE (LAYOUT)
C	C	CENTERLINE (LAYOUT)
D	D	STORM DRAIN
E	E	ELECTRIC (UNDERGROUND)
F	F	FIRE SERVICE
FD	FD	FOOTING DRAIN
FM	FM	FORCEMAIN
G	G	GAS
OHW	OHW	OVERHEAD WIRE
S	S	PROPERTY LINE
T	T	SANITARY SEWER
W	W	TELEPHONE
W	W	WATER
64	64	CONTOUR
x 64.0	x 64.00	SPOT GRADE
x 64.0 (BC)	x 64.00 (BC)	SPOT GRADE (BOT. OF CURB)
x 64.5 (TC)	x 64.50 (TC)	SPOT GRADE (TOP OF CURB)
64.5 (BW)	64.50 (BW)	SPOT GRADE (BOT. OF WALL)
64.5 (TW)	64.50 (TW)	SPOT GRADE (TOP OF WALL)
BCC	BCC	BITUMINOUS CONC. CURB
CCB	CCB	CAPE COD BERM
PCC	PCC	PRECAST CONC. CURB
PCSMC	PCSMC	PRECAST SLOPED MOUNT. CURB
SGC	SGC	SLOPED GRANITE CURB
VGC	VGC	VERTICAL GRANITE CURB
x x x x	x x x x	CHAINLINK FENCE (CLF)
□ □ □ □	□ □ □ □	POST & RAIL FENCE
◇	◇	BORING LOCATION
□ CB	□ CB#1	CATCH BASIN
□ CB(DG)	□ CB(DG)#1	DOUBLE GRATE CATCH BASIN
CTB ▴	CTB ▴	CONCRETE THRUST BLOCK
DMH	DMH	DRAIN MANHOLE
FES	FES	FLARED END STRUCTURE
SMH	SMH	SEWER MANHOLE
W	W	WATER SERVICE
U	U	UTILITY POLE
P	P	FIRE HYDRANT
G	G	GATE VALVE AND CURB BOX
H	H	HANDICAP SYMBOL (PRKG. SPACE)
SEV	SEV	HEADWALL
TP	TP	SIGN
W	W	WETLAND
SEV	SEV	SOIL EVALUATION LOCATION
TP	TP	TEST PIT LOCATION
FDC	FDC	FIRE DEPARTMENT CONNECTION
EMH	EMH	ELECTRIC MANHOLE (EMH)
TMH	TMH	TELEPHONE MANHOLE (TMH)
GEN	GEN	TRANSFORMER PAD
GEN	GEN	GENERATOR PAD
GCO	GCO	GROUND CLEANOUT
PB	PB	ELECTRIC PULL BOX
LP	LP	SIGHT LIGHT POLE
---	---	CONTINUOUS ROW OF FILTREXX
---	---	PAVEMENT SAWCUT & MATCH TO EXISTING
7.1.0	7.1.0	RIDOT STD. DETAIL REFERENCE
X	X	DETAIL REFERENCE
OX.X	OX.X	DETAIL NUMBER
		DRAWING SHEET

DEMOLITION NOTES

- THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES (I.E. THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA). ALL AREAS SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AS DETERMINED BY THE ENGINEER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL INSTALL FILTREXX SILT/ROCK AND/OR OTHER EROSION CONTROL MEASURE SHALL BE PLACED ON ALL DOWNGRADIENT SLOPES, AS WELL AS LOCATIONS INDICATED ON THE SITE PLANS PRIOR TO BEGINNING ANY DEMOLITION WORK.
- DISPOSAL OF DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS. OFF-SITE DISPOSAL OF UNSUITABLE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL MUNICIPAL REQUIREMENTS.
- CONTRACTOR SHALL OBTAIN ALL DEMOLITION PERMITS AS REQUIRED BY THE CITY OF CRANSTON AND THE STATE OF RHODE ISLAND. ALL WORK OUTLINED SHALL ADHERE TO ANY ADDITIONAL CONDITIONS OUTLINED THEREIN.
- REMOVED PAVING MATERIAL MAY BE PULVERIZED ON-SITE & REUSED WHEN MIXED WITH OTHER MATERIAL, PROVIDED IT MEETS THE REQUIREMENTS OF THE DOCUMENTS & THE SOILS LABORATORY.
- DISPOSAL OF PAVEMENT MUST BE AT AN APPROVED OFF-SITE LOCATION. BROKEN PAVEMENT MATERIAL SHALL NOT BE DISPOSED OF OR COVERED ON-SITE UNLESS IT IS PROPERLY PULVERIZED USING SOILS LABORATORY APPROVED METHODS & ONLY IN AREAS APPROVED BY THE GEO-TECHNICAL ENGINEER.
- IN AREAS WHERE THE FINISH MATERIAL WILL BE PAVEMENT, REMOVE TO THE INDICATED SUB-GRADE LEVEL, PROOF ROLL, TEST AND PROCEED WITH PLACEMENT OF NEW GRAVEL COURSE TO THE SPECIFIED THICKNESS.
- ALL EXISTING BASE COURSE MATERIAL MAY BE USED FOR FILL IN AREAS SPECIFYING ORDINARY BORROW.
- PERIMETER FENCING SHALL BE INSTALLED AROUND ENTIRE PROJECT UNLESS OTHERWISE AUTHORIZED BY OWNER.

UTILITY NOTES

- THE CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND ALL LOCAL AUTHORITIES & UTILITY COMPANIES TO VERIFY LOCATIONS OF UTILITIES WITHIN THE AREA 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES. LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY, LOCATE AND PROTECT EXISTING UTILITIES IN THE FIELD WHETHER OR NOT SHOWN ON THE DRAWINGS.
- ALL WORK SHALL BE IN COMPLETE ACCORDANCE WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
- THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE OF CURBING, PAVING AND COMPACTED SUBGRADE. THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER & ALL LOCAL UTILITY COMPANIES 48 HOURS BEFORE EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS DISCOVERED IN THE PLANS.
- THE CONTRACTOR SHALL REMOVE ANY ABANDONED FOUNDATIONS, UTILITY STRUCTURES, BURIED DEBRIS ETC. WHICH INTERFERE WITH THE INSTALLATION OF THE UTILITY WORK. ALL SUCH STRUCTURES SHALL BE COMPLETELY REMOVED AND THE EXCAVATED AREA SHALL BE BACKFILLED WITH COMPACTED GRAVEL IN 12" LIFTS TO 95% COMPACTION TO 6" BELOW THE BOTTOM OF THE UTILITY AND PIPE.
- COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTION TO THE DENSITY OF 95% OF THE THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED ONE FOOT IN COMPACTION FILL THICKNESS. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF PROJECT APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL PIPING LAYOUT INDICATED ON THESE PLANS IS DIAGRAMMATIC ONLY AND DOES NOT SHOW ALL THE REQUIRED FITTINGS FOR PROPER ALIGNMENT. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS TO OBTAIN PROPER ALIGNMENT AND FOR EXISTING UTILITY CONNECTIONS BASED UPON FIELD CONDITIONS.
- STORM DRAINS 12" AND OVER SHALL BE SMOOTH INTERIOR WALL AND EXTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE CAPABLE OF WITHSTANDING (H-20) LOAD UNLESS NOTED OTHERWISE. PIPE SHALL BE JOINED USING BELL & SPIGOT JOINTS MEETING OR EXCEED ASTM F2648. THE JOINT SHALL BE SOIL-TIGHT AND GASKETS SHALL MEET OR EXCEED ASTM F477. HDPE PIPE SHALL BE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS INC. (ADS), HANCOX PIPE OR LANE PIPE. ALL STORM DRAINAGE PIPING SHALL BE LAID ON A SMOOTH CONTINUOUS GRADE WITH NO VISIBLE BENDS AT THE JOINTS. WHERE INDICATED ON DRAWINGS REINFORCED CONCRETE PIPE (RCP) PIPE SHALL BE CLASS III RCP WITH "0" RING GASKET JOINTS

SOIL EROSION AND SEDIMENT CONTROL NOTES

- DISTURBANCE OF SOIL SURFACES IS REGULATED BY STATE LAW. ALL WORK SHALL COMPLY WITH THE CURRENT CONSTRUCTION STANDARDS & SPECIFICATIONS OF THE CITY OF CRANSTON AND THE RHODE ISLAND SOIL EROSION & SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- THE SOIL EROSION CONTROL MEASURES SHOWN AND DETAILED HEREIN SHOULD BE CONSIDERED THE MINIMUM ACCEPTABLE STANDARDS FOR THE PROJECT. THE INITIAL METHOD OUTLINED IS INTENDED TO ROUTE ALL PRACTICABLE SURFACE WATER FROM THE EXCAVATION AREAS INTO EROSION CONTROL FACILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, ALLAY DUST AND INSTALL ANY ADDITIONAL PROTECTIVE MEASURES NECESSARY TO CONTROL RUNOFF FROM THE SITE DURING CONSTRUCTION ACTIVITIES AND ENSURE THAT THE PROJECT SITE AND ALL ADJACENT PROPERTIES ARE MAINTAINED IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- THE LIMIT OF WORK SHALL BE STAKED OUT IN THE FIELD TO ENSURE THAT ALL WORK WILL OCCUR WITHIN THE APPROVED LIMITS OF DISTURBANCE.
- PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES ON SITE, A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON SITE TO ESTABLISH SUPERVISORY AND INSPECTION PROCEDURES FOR SEDIMENT AND EROSION CONTROL MEASURES. THE MEETING SHALL BE ATTENDED BY THE CONTRACTOR, APPLICANT/OWNER, ENGINEER AND THE LOCAL SOIL & EROSION CONTROL PROFESSIONAL.
- THE EROSION CONTROL MEASURES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL & MAINTAIN EROSION CONTROL DEVICES FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION.
- THE EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY RAINSTORM TO ENSURE THEY ARE FUNCTIONING PROPERLY. REPAIR ANY DAMAGED AREAS IMMEDIATELY AND REMOVE ALL CAPTURED SEDIMENT AS REQUIRED. A "WALK THROUGH" INSPECTION OF THE CONSTRUCTION SITE SHOULD BE COMPLETED BEFORE ANTICIPATED RAINFALL EVENTS.
- ADDITIONAL EROSION CONTROL MEASURES SHALL BE PLACED AS DIRECTED BY THE ENGINEER OR THE LOCAL SOIL & EROSION CONTROL PROFESSIONAL.
- DEWATERING OF ALL EXCAVATIONS SHALL BE PUMPED THROUGH DEWATERING BAGS AND DISCHARGED INTO A TEMPORARY SALUTATION BASIN WITHIN THE APPROVED PROJECT LIMIT OF DISTURBANCE.
- AT NO TIME SHALL SILT LADEN WATER BE ALLOWED TO ENTER ENVIRONMENTALLY SENSITIVE AREAS, EXISTING OR NEW DRAINAGE SYSTEMS. RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED THROUGH A TEMPORARY SILTATION BASIN & EROSION CONTROL MEASURES PRIOR TO ENTERING ANY ENVIRONMENTALLY SENSITIVE AREA OR DRAINAGE SYSTEM.
- CONTRACTOR SHALL REDUCE SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES CAUSED BY CONSTRUCTION ACTIVITIES. CONSTRUCTION ACTIVITIES SHALL BE SO SCHEDULED SO THAT THE LEAST AREA OF DISTURBED SOIL IS EXPOSED AT ONE TIME. IN DISTURBED AREAS NOT SUBJECT TO TRAFFIC, CONTRACTOR SHALL USE TEMPORARY SEEDING AND MULCHING OPERATIONS. IN DISTURBED AREAS SUBJECT TO TRAFFIC, CONTRACTOR SHALL SPRINKLE SURFACE WITH WATER TO MINIMIZE DUST. DUST CONTROL MEASURES SHALL BE MAINTAINED THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR OTHER GROUND COVER SHALL BE PLANTED WITH GRASS ON 4" THICKNESS OF TOPSOIL. IF SEEDING CANNOT BE COMPLETED IMMEDIATELY, DISTURBED AREAS SHALL BE STABILIZED WITH A SPREAD HAY MULCH APPROPRIATELY ANCHORED OR EROSION CONTROL BLANKET.
- SURFACE STABILIZATION MUST BE IMPLEMENTED WITH 14 DAYS AFTER CONSTRUCTION ACTIVITY IN A PORTION OF THE SITE HAS CEASED OR BEEN TEMPORARY HALTED.
- INSTALL REINFORCED SILT BARRIER AROUND STOCKPILE AREAS, TRUCK WASH DOWN AREAS AND VEHICLE REFUELING AREAS.
- TRUCK WASH DOWN AREA SHALL BE A MINIMUM 20'x20' AREA SURROUNDED BY A STONE REINFORCED SILT BARRIER. ACCUMULATED SOIL, SEDIMENT OR CONCRETE SHALL BE EITHER RECYCLED ON SITE OR DISPOSED OF AT AN OFF-SITE LOCATION.
- CONSTRUCTION VEHICLE REFUELING AREA SHALL BE A MINIMUM 20'x20' AREA SURROUNDED BY A STONE REINFORCED SILT BARRIER. THE DEPTH SHALL BE DETERMINED IN THE FIELD. AREA SHALL BE SCRAPED AND REDRESSED MONTHLY. SCRAPED MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED OFF-SITE LOCATION.
- AS SOON AS PAVING IS COMPLETED, ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF ANY ACCUMULATED SEDIMENT AND DEBRIS. THEREAFTER, CLEAN UP SHOULD FOLLOW LONG TERM MAINTENANCE PLAN.
- REMOVE CONSTRUCTION FENCE, SILT BARRIER AND EROSION CONTROL MEASURES ONLY AFTER ESTABLISHMENT OF PERMANENT VEGETATION.

SITE GRADING NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY GAROFALO & ASSOCIATES, INC. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH TOWN SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.

STORMWATER SYSTEM MAINTENANCE NOTES:

THE DRAINAGE SYSTEMS ARE TO BE MONITORED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD BY THE CONTRACTOR. DURING CONSTRUCTION THE CONTRACTOR SHALL BE REQUIRED TO KEEP A WEEKLY LOG OF ALL INSPECTIONS AND REQUIRED MAINTENANCE. THIS LOG SHALL BE MADE AVAILABLE TO THE RIDEM, DPW & ENGINEER AT ALL TIMES. UPON COMPLETION OF THE PROJECT THE CONTRACTOR MUST DO A FINAL FULL MAINTENANCE & CLEAN UP OF THE STORMWATER MANAGEMENT SYSTEM AND THE SITE. UPON COMPLETION OF THE CONTRACTOR'S FINAL MAINTENANCE & CLEAN UP OF THE PROJECT, MONITORING OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF:

100 SOCKANOSSET LLC
1414 ATWOOD AVENUE
JOHNSTON, RI
401.273.6800

HEREAFTER REFERRED TO AS THE OWNER.

THE OWNER SHALL DESIGNATE A QUALIFIED PROFESSIONAL ENTITY OR INDIVIDUAL TO PERFORM ALL MONITORING. THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE ENTITY OR INDIVIDUAL SHALL BE PROVIDED TO THE RIDEM & LOCAL DPW. THE OWNER'S REPRESENTATIVE SHALL BE REQUIRED TO KEEP A LOG OF ALL REQUIRED INSPECTIONS AND MAINTENANCE REQUIRED. THE LOG SHALL BE MADE AVAILABLE TO THE RIDEM, DPW AND ENGINEER AT ALL TIMES.

CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS:
(RESPONSIBILITY OF CONTRACTOR)

1. FILTREXX SILT SOXX:

MONITOR FILTREXX SILT SOXX ON A WEEKLY BASIS AND AFTER EVERY RAIN STORM EVENT AND REPAIR OR REPLACE ANY DAMAGED AREAS IMMEDIATELY. IMMEDIATELY CLEAN THE FILTREXX SILT SOXX IF SIX INCHES OR MORE OF SEDIMENT HAS ACCUMULATED ON THE FILTREXX SILT SOXX.

2. PAVED AREAS:

PARKING LOTS, PUBLIC & PRIVATE ROADWAYS AND GUTTERS SHALL BE SWEEP CLEAN OF ALL SEDIMENT & DEBRIS. SWEEPING & REMOVAL OF DEBRIS SHALL BE PERFORMED ON A WEEKLY BASIS AT A MINIMUM.

3. PERIMETER SAND FILTER:

SAND FILTER SHALL BE INSPECTED AFTER EVERY RAIN STORM EVENT AND SHALL BE MONITORED FOR ACCUMULATION OF SEDIMENT. REMOVE & DISPOSE ACCUMULATED SEDIMENT AND DEBRIS BY HAND. ANY OIL OR GREASE FOUND IN THE BASIN AT THE TIME OF INSPECTION MUST BE CLEANED UP WITH OIL ABSORPTION PADS AND DISPOSED OF AT AN APPROVED OFF-SITE LOCATION. MAINTAIN ALL EROSION CONTROL MEASURES DURING THE COURSE OF CONSTRUCTION.

DISPOSAL OF ALL SEDIMENT AND DEBRIS MUST IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES & REGULATIONS.

POST CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS:
(RESPONSIBILITY OF OWNER)

1. PAVED AREAS:

PARKING LOTS, ROADS AND ALL ACCESS WAYS AND GUTTERS MUST BE SWEEP CLEAN OF ALL SEDIMENT AND DEBRIS ON BI-ANNUAL BASIS IN MARCH AND OCTOBER OF EACH YEAR.

2. PERIMETER SAND FILTER:

DURING THE SIX MONTHS AFTER CONSTRUCTION THE SAND FILTER MUST BE INSPECTED AFTER PRECIPITATION EVENTS OF TWO INCHES OR MORE TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, INSPECTION SHALL OCCUR BI-ANNUALLY, IN MARCH AND OCTOBER, AND AFTER STORM EVENTS OF TWO INCHES OR MORE.

BI-ANNUALLY INSPECT THE SAND FILTER SEDIMENT CHAMBER AND SAND BED. REMOVE ANY ACCUMULATED SEDIMENT FROM CHAMBER AND REMOVE ANY TRASH COLLECTED ON GRATES. IF FILTER BED HAS AN INCH OR MORE OF SEDIMENT IT SHALL BE REMOVED AND REPLACED WITH NEW SAND. OWNER SHALL FOLLOW THE STORMWATER OPERATION AND MAINTENANCE PLAN.

DISPOSAL OF ALL SEDIMENT AND DEBRIS MUST IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES & REGULATIONS.

THE RESULTS OF THE INSPECTIONS, ALONG WITH THE DETERMINATION OF ANY REMEDIAL WORK THAT MAY BE FOUND TO BE NECESSARY AS A RESULT OF THE INSPECTION, SHALL BE SUBMITTED TO THE RIDEM & LOCAL DPW WITHIN (30) DAYS OF THE INSPECTION. PROVISIONS FOR INSPECTIONS AND ANY REMEDIAL REPAIRS DEEMED NECESSARY SHALL BE THE RESPONSIBILITY OF THE OWNER.

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Master D. Wenzel
REGISTERED LAND SURVEYOR
NO. 10000

SOUTHEAST PARKING EXPANSION
GENERAL NOTES AND LEGEND

FOR
100 SOCKANOSSET PARK

SITUATED AT

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CRANSTON, RHODE ISLAND

PREPARED FOR:

100 SOCKANOSSET LLC

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PROVIDENCE, RI 02940
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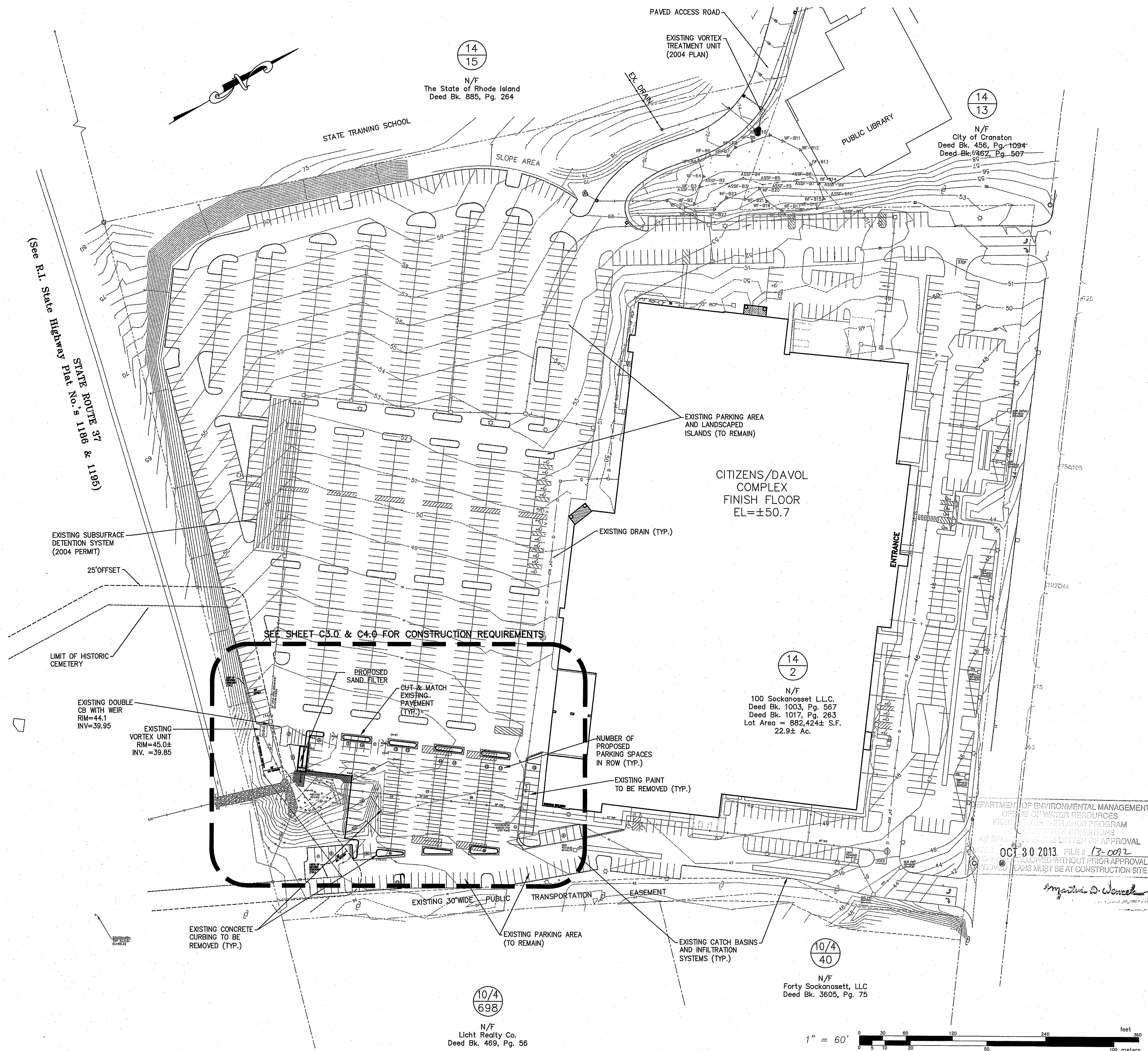
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MAX. LOT COVERAGE - 60%

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INFORMATION.

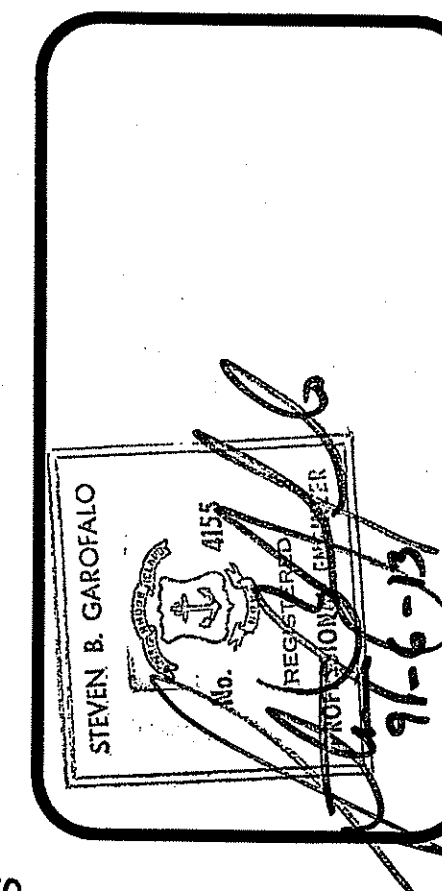
[illegible]

REFERENCE:
THE EXISTING CONDITIONS INDICATED ON THESE PLANS
REFLECT SURVEY INFORMATION FROM PLAN TITLED
"EXISTING CONDITIONS PLAN FOR 100 SOCKANOSSET
PARCELS PREPARED BY GARFALGO & ASSOCIATES, INC. DWG.
NO. 5471, SCS.DWG. DATED AUGUST 19, 1995, MODIFIED TO
REFLECT ONSITE IMPROVEMENTS INDICATED ON
SUBSEQUENT SITE PLANS BUT NOT VERIFIED BY SURVEY
METHODS. CONTRACTOR SHALL REVIEW PREVIOUSLY
DEVELOPED SURVEY AND CONSTRUCTION PLANS AND
INSPECT EXISTING SITE CONDITIONS PRIOR TO INITIATING
ANY CONSTRUCTION. SEE GENERAL NOTES SHEET C3.



SOUTHEAST PARKING EXPANSION
OVERALL PLAN
FOR
100 SOCKANOSSET PARK
SITUATED AT
100 SOCKANOSSET CROSS ROAD
CRANSTON, RHODE ISLAND
PREPARED FOR:
100 SOCKANOSSET LLC

NO.	REVISION	BY	DATE
1	RIDEM COMMENTS	PJD	9/04/13



GAROFALO
GAROFALO & ASSOCIATES, INC.
ENGINEERS / LAND PLANNERS / SURVEYORS

85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, RI 02940
TEL. 401-273-6000

JOB NO. 5471-03	DRAWN BY MNE
DWG. NO. 5471-03-BASE	CHECKED SBG
	APPROVED SBG
SCALE: 1"=60'	DATE: MAY 20, 2103

SHEET

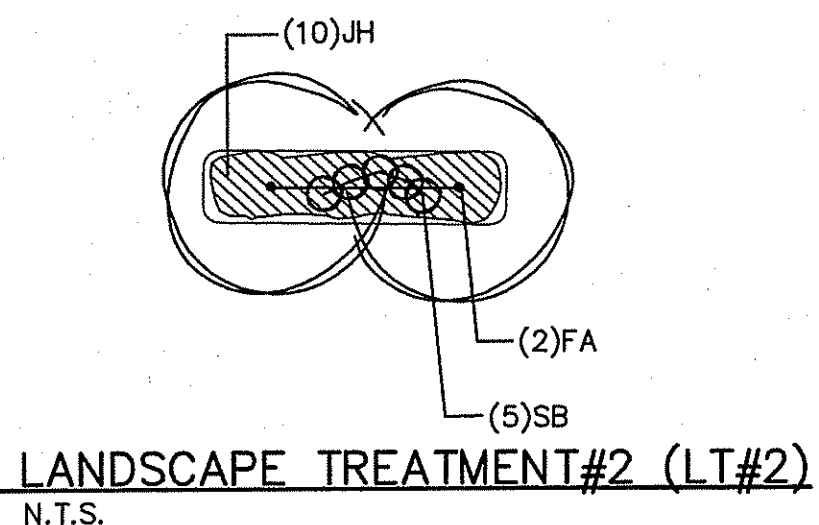
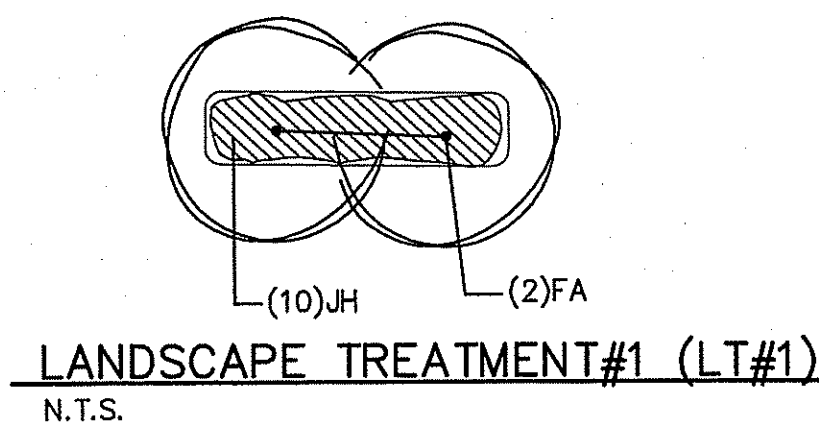
C2.0

SHEET 4 OF 7

SURVEY NOTES:

1. THE EXISTING CONDITIONS INDICATED ON THESE PLANS REFLECT SURVEY INFORMATION FROM PLAN TITLED "EXISTING CONDITIONS PLAN FOR 100 SOCKANOSSET PARK", PREPARED BY GAROFALO & ASSOCIATES, INC. DWG. NO. 5471-ECS.DWG, DATED AUGUST 19, 1999, MODIFIED TO REFLECT ONSITE IMPROVEMENTS INDICATED ON SUBSEQUENT SITE PLANS (2002, 2004). SUPPLEMENTAL ON-GROUND SURVEY PERFORMED WITHIN THE WORK ZONE INDICATED ON THIS PLAN. CONTRACTOR SHALL REVIEW PREVIOUSLY DEVELOPED SURVEY AND CONSTRUCTION PLANS AND INSPECT EXISTING SITE CONDITIONS PRIOR TO INITIATING ANY CONSTRUCTION.

2. THE WETLAND/ASSF FLAGGING INDICATED ON THESE PLANS WAS PERFORMED BY A QUALIFIED WETLANDS SPECIALIST AND HAS BEEN PROFESSIONALLY SURVEYED AND LOCATED BY ACCURATE SURVEY METHODS.



PLANT LIST:

Key	Botanical Name Common Name	Qty.	Size	Notes
FA	Fraxinus americana 'Autumn Applause' <i>Autumn Applause Seedless Ash</i>	20	2.5"-3" cal	B&B
SB	Spirea bumalda 'Gold Flame' <i>Gold Flame Spirea</i>	20	24"-30"	container
JH	Juniperus horizontalis 'Bar Harbor' <i>Bar Harbor Juniper</i>	100	24"-30"	5' O.C.

APPROVAL BLOCK

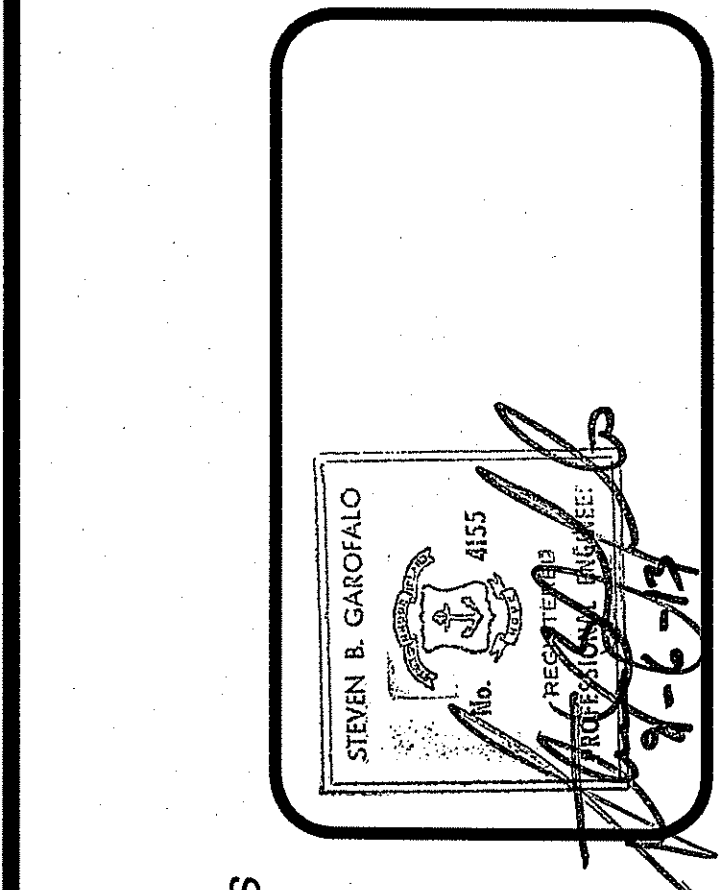
SITE PLAN REVIEW COMMITTEE	DATE

ZONING DATA

M-2 INDUSTRIAL
SETBACKS:
FRONT - 40 FEET
SIDE - 25 FEET
REAR - 30 FEET
MAX. BLDG. HEIGHT - 35 FEET
MIN. LOT WIDTH & FRONTAGE - 200 FEET
MIN. LOT AREA - 60,000 S.F.
MAX. LOT COVERAGE - 60%
*-REFER TO CITY OF CRANSTON ZONING ORDINANCE FOR FURTHER INFORMATION.

SOUTHEAST PARKING EXPANSION
SITE LAYOUT PLAN
FOR
100 SOCKANOSSET PARK
SITUATED AT
400 SOCKANOSSET CROSS ROAD
CRANSTON, RHODE ISLAND
PREPARED FOR:
100 SOCKANOSSET LLC
18 2013

NO.	REVISION	BY	DATE
1	RIDEM COMMENTS	PJD	9/04/13

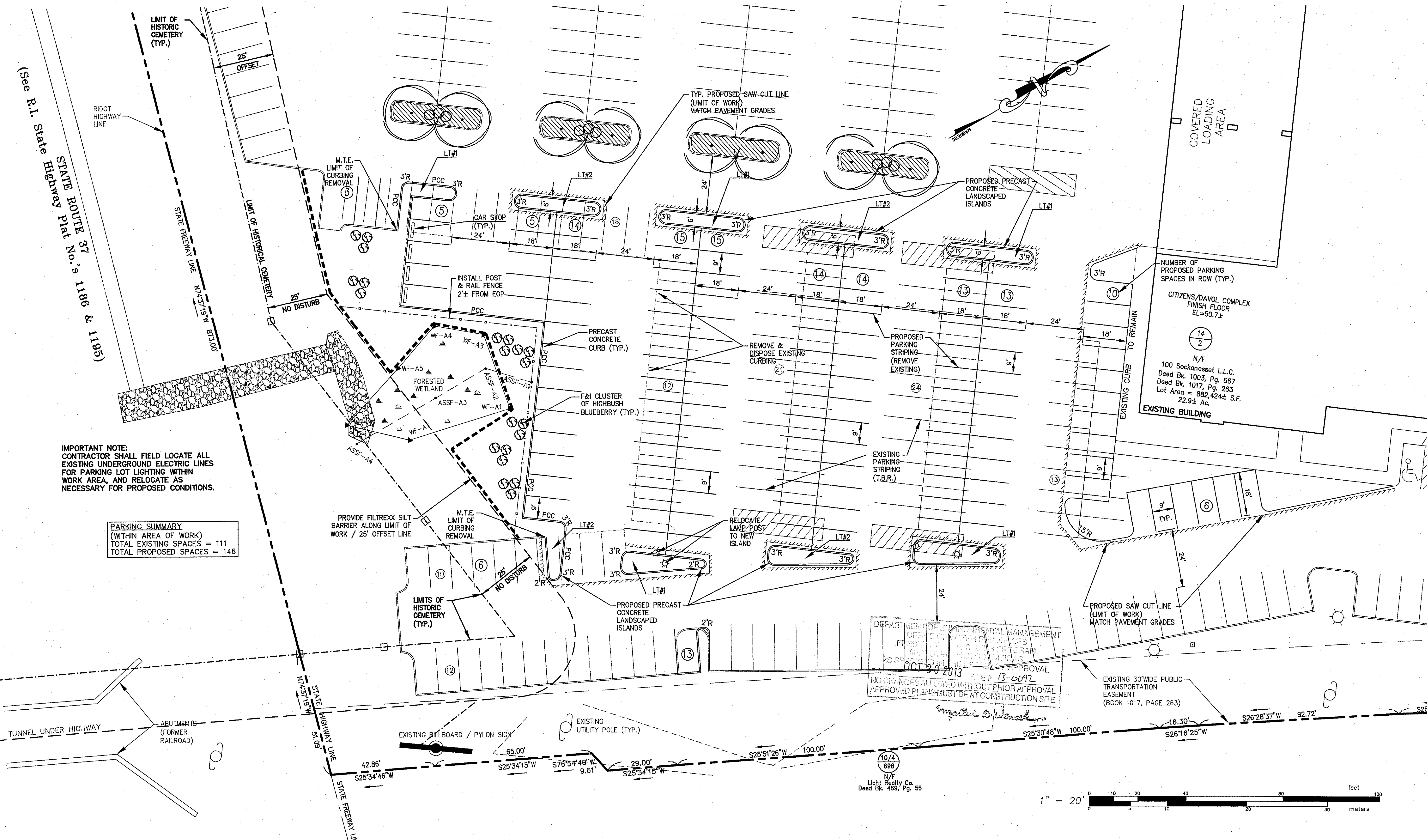


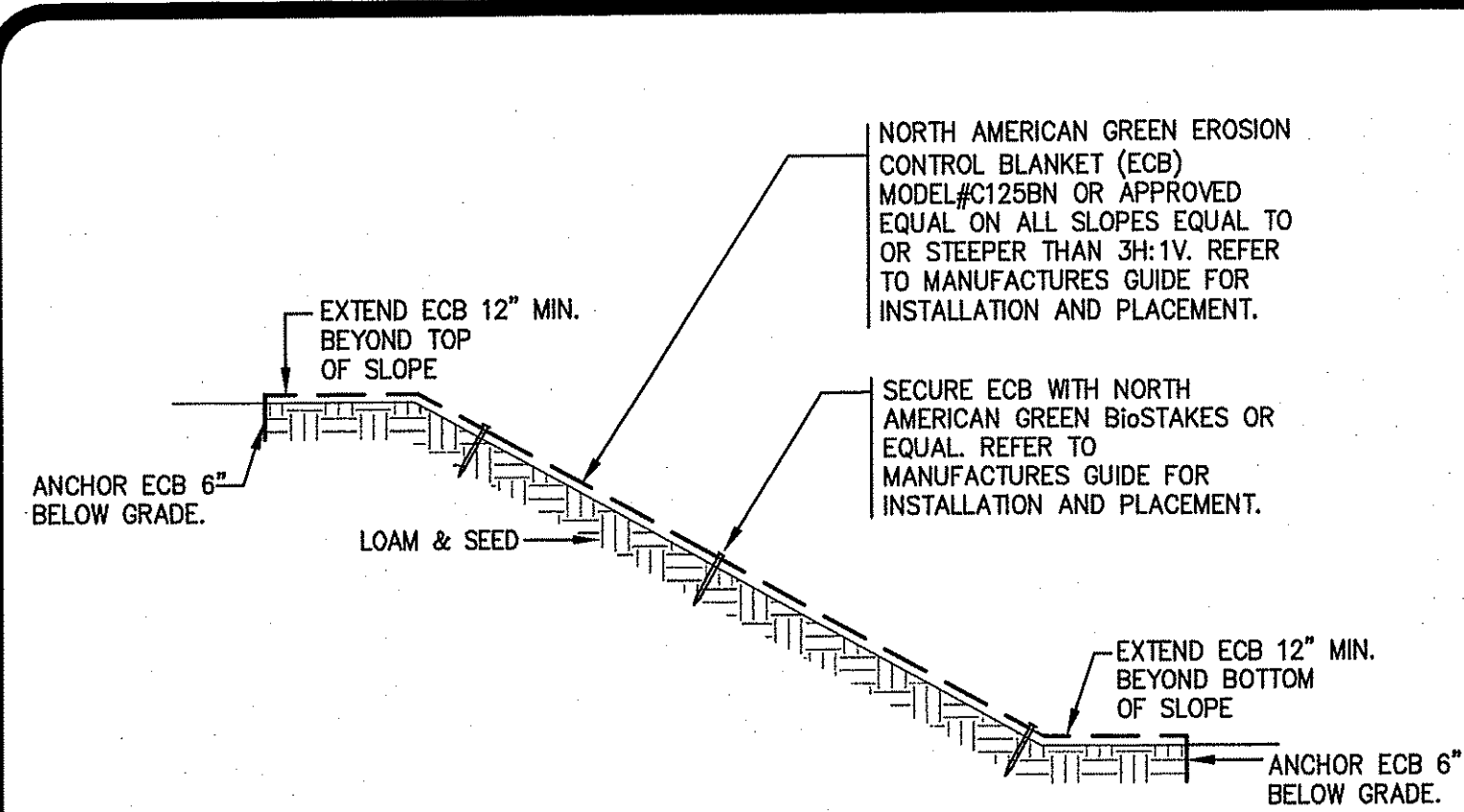
GAROFALO
GAROFALO & ASSOCIATES, INC.
ENGINEERS / LAND PLANNERS / SURVEYORS

85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, RI 02940
TEL. 401-273-8000

JOB NO. 5471-03	DRAWN BY MNB
DWG. NO. 5471-03-BASE	CHECKED SBG
SCALE: 1"=20'	APPROVED SBG
SHEET	DATE: MAY 20, 2013

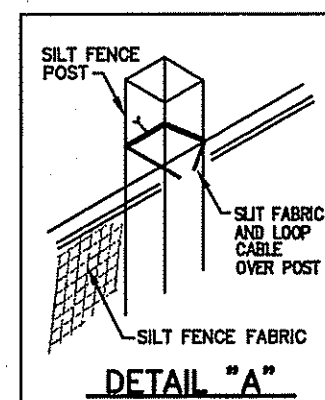
C3.0



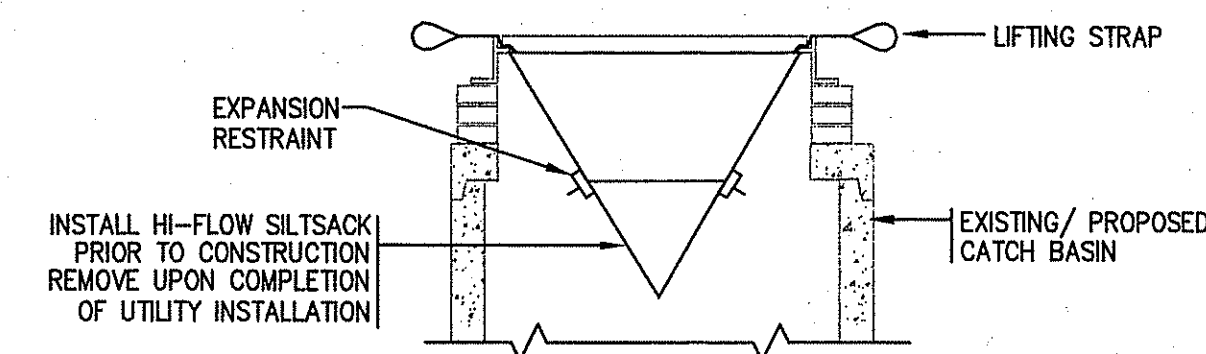


SLOPE PROTECTION TREATMENT DETAIL
N.T.S.

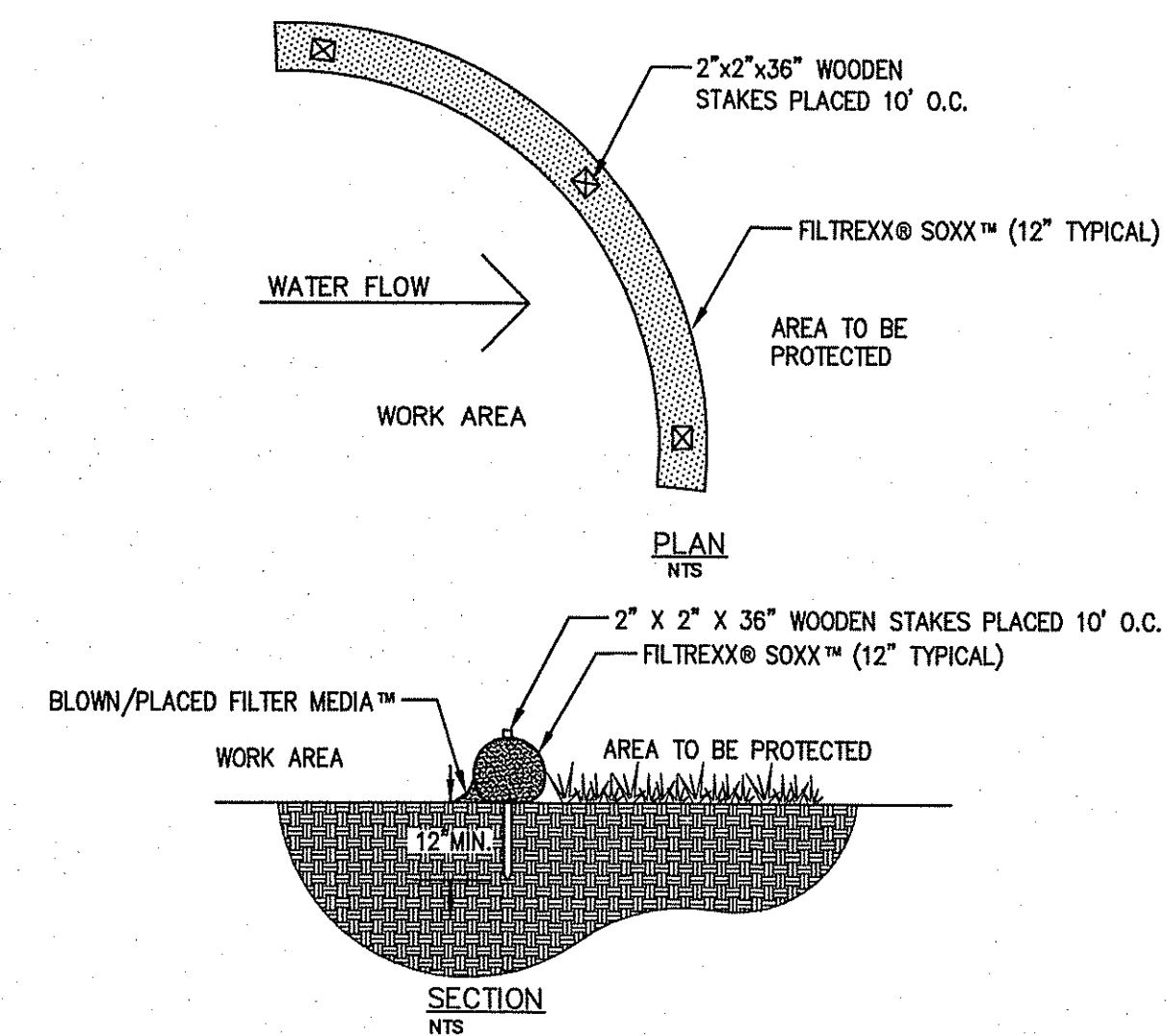
- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 2. STD. 9.1.0 IS INSTALLED "TIGHT" AGAINST SILT FENCE FABRIC. THOROUGHLY COMPACT EXCAVATED SOIL BACK INTO TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICE. SILT FENCE FABRIC SHALL NOT BE SLIT.
 3. STD. 9.1.0 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2"x4'-6" (MAX.) OAK POST FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND REVIN, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 4. 1"x1"x4'-6" (MAX.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 5. SILT FENCE AND BALED HAY SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.



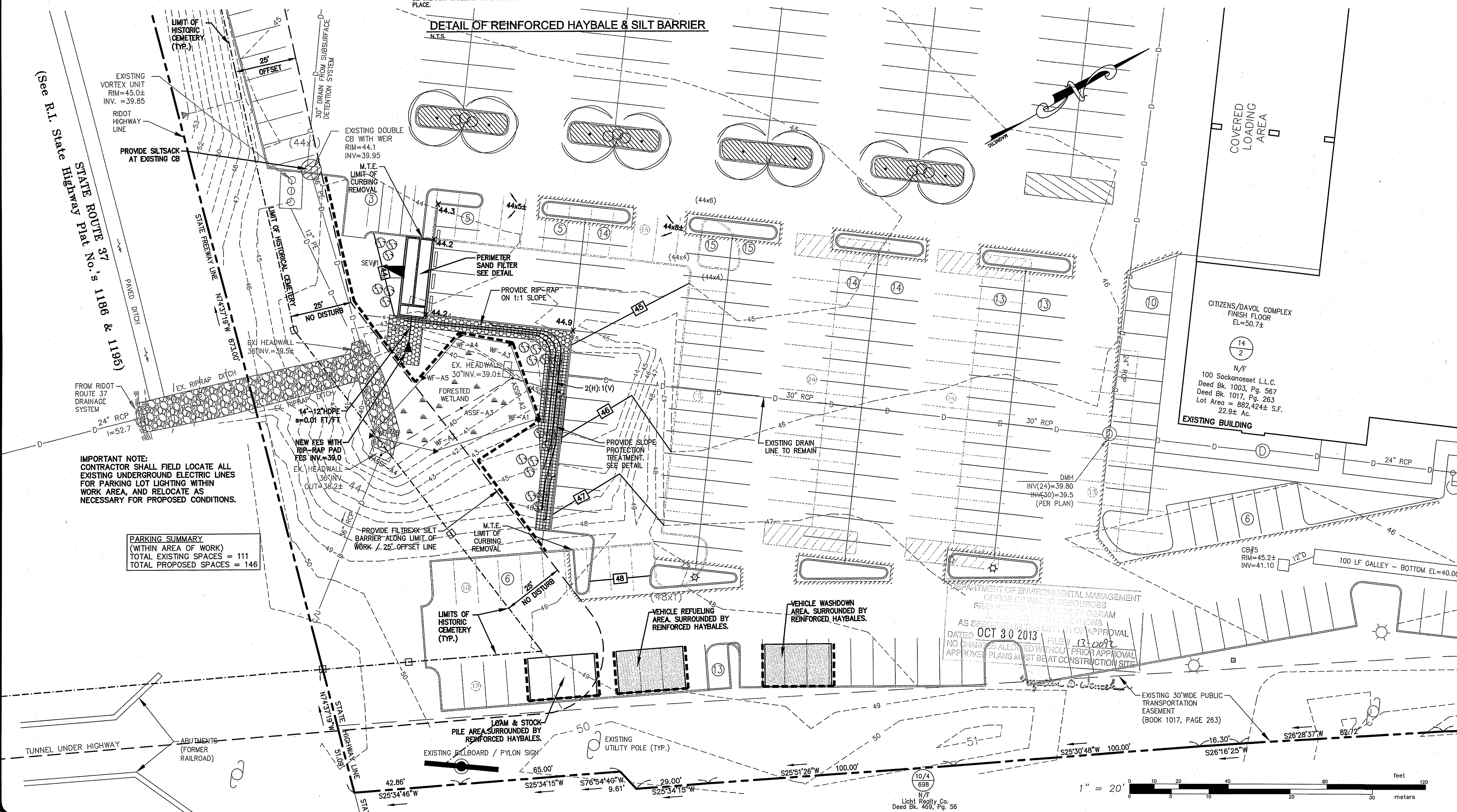
DETAIL OF REINFORCED HAYBALE & SILT BARRIER
N.T.S.



SILTSACK® AT CATCH BASIN DETAIL
N.T.S.



FILTREXX® SEDIMENT CONTROL
N.T.S.



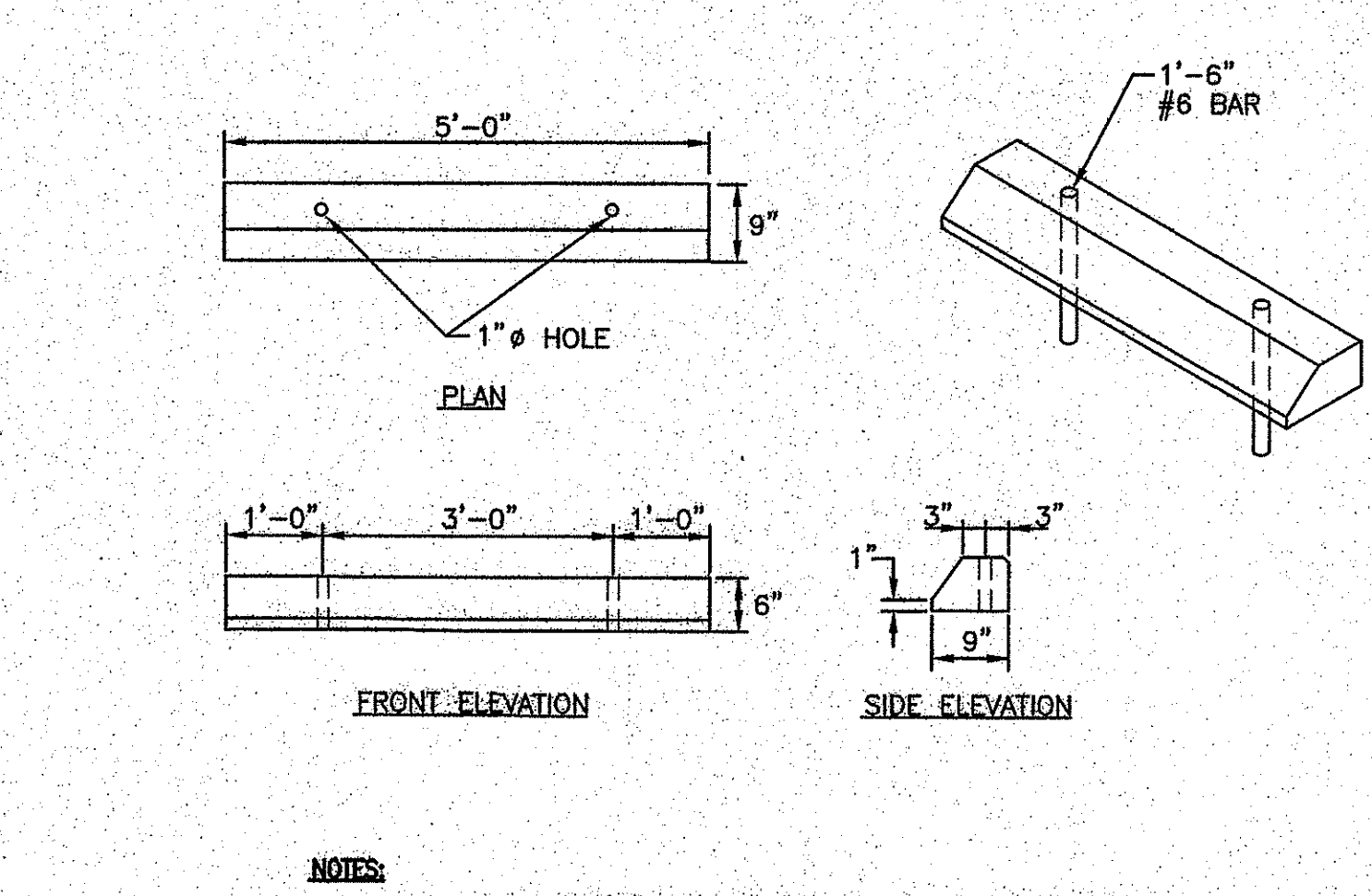
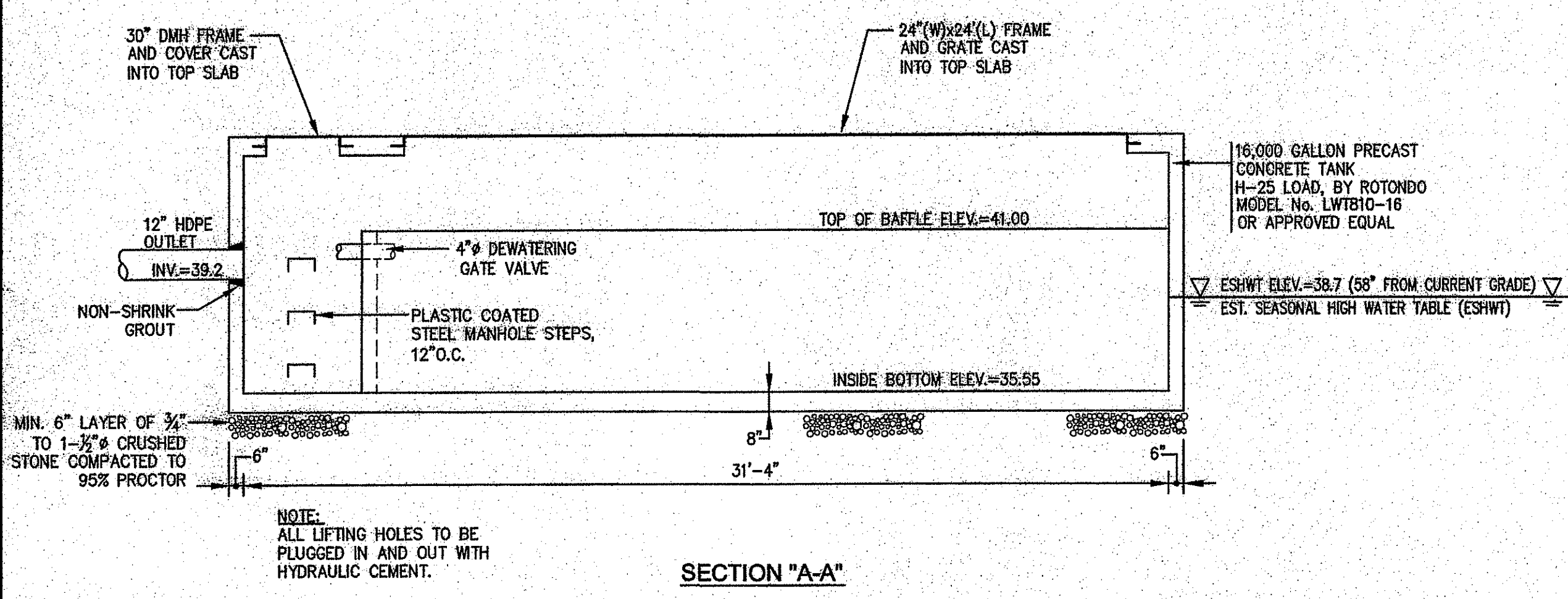
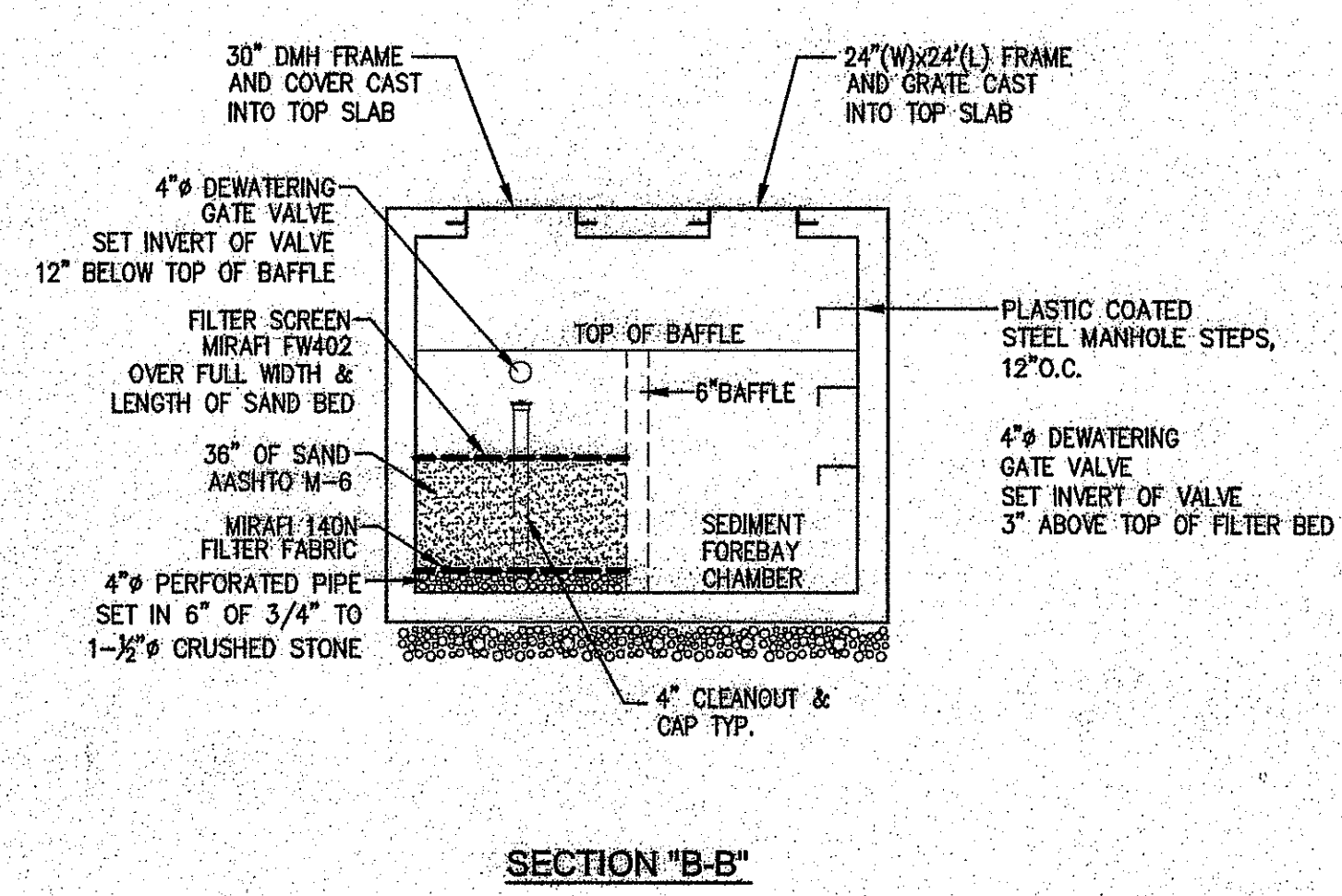
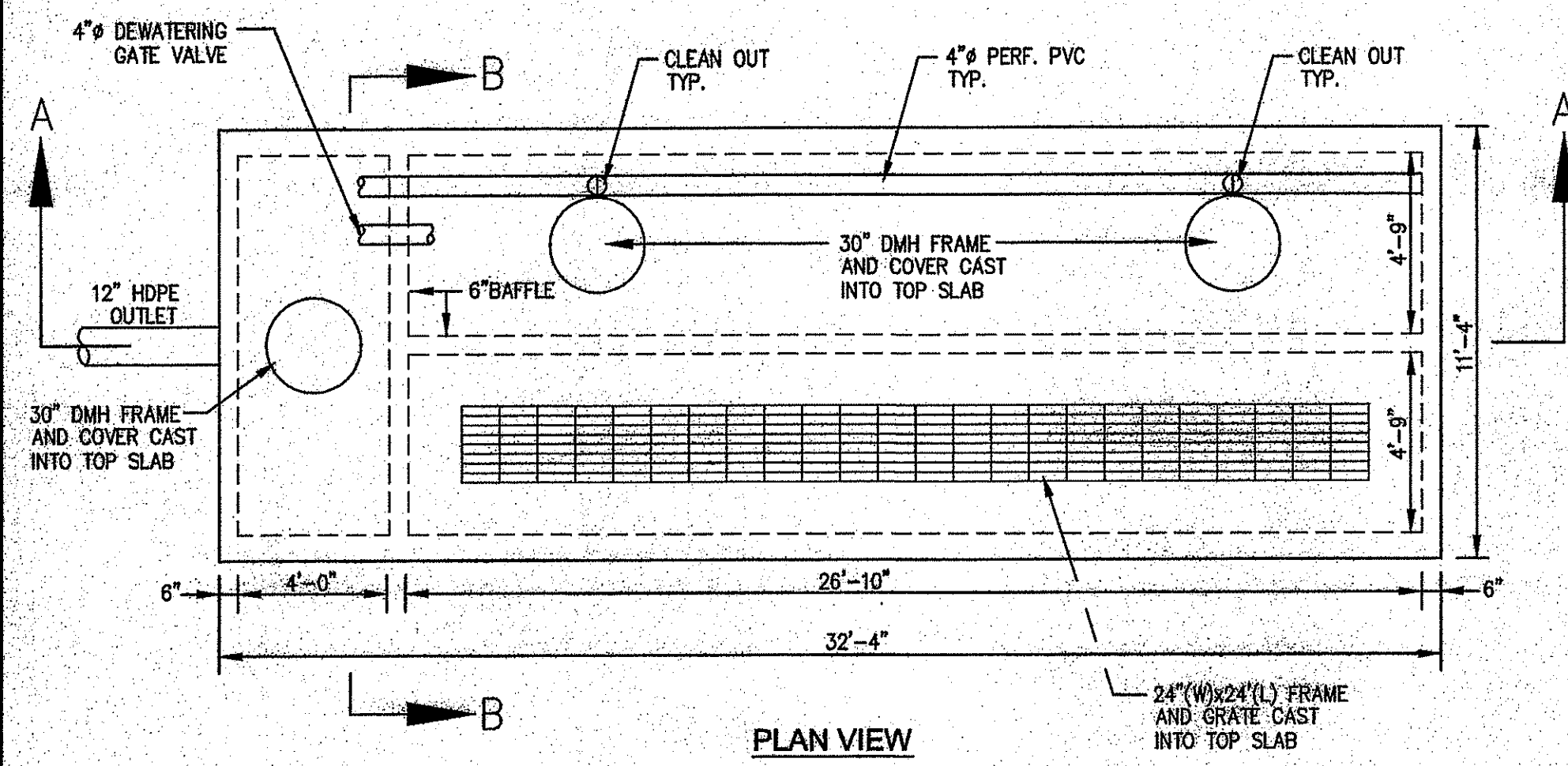
GAROFALO
GAROFALO & ASSOCIATES, INC.
ENGINEERS / LAND PLANNERS / SURVEYORS

85 CORLISS STREET
P.O. BOX 6145
PROVIDENCE, RI 02940
TEL. 401-273-6000

JOB NO. 5471-03
DWG. NO. 5471-03-BASE
SCALE: 1" = 20'
SHEET

DRAWN BY MNB
CHECKED SBG
APPROVED SBG
DATE: MAY 20, 2013

C4.0



BUOYANCY CALCULATIONS FOR 16,000 GALLON PRECAST CONC. SEPTIC TANK

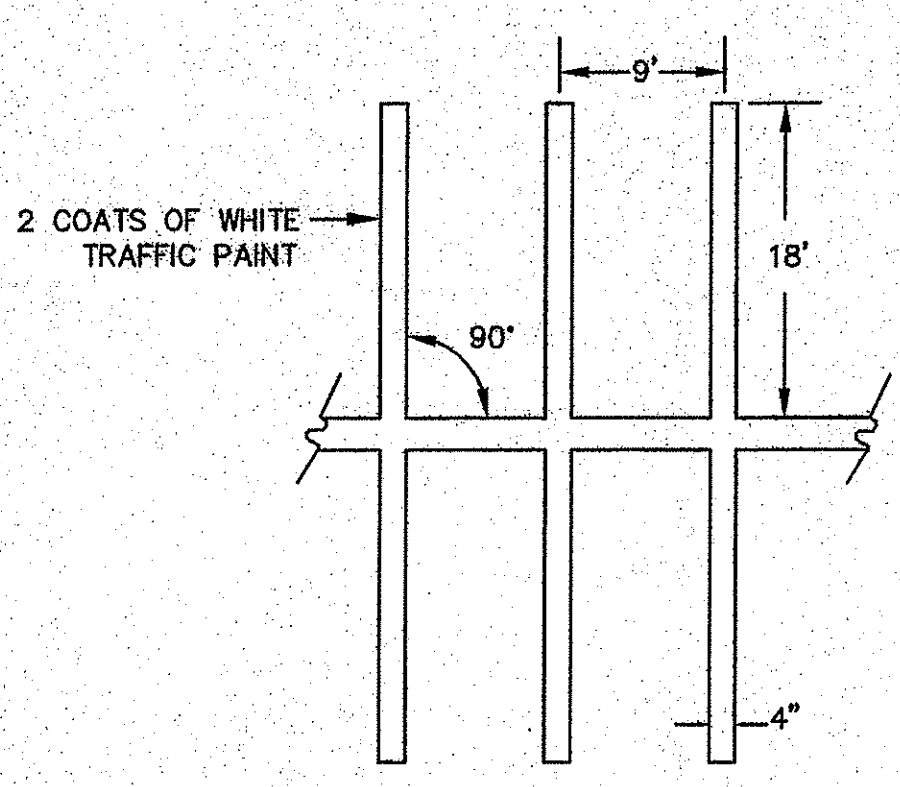
WEIGHT OF MATERIALS:
 WEIGHT OF CONCRETE = 150 pcf
 WEIGHT OF EARTH = 110 pcf
 WEIGHT OF WATER = 62.4 pcf
 WEIGHT OF SEPTIC TANK (EMPTY) = 133,350 lbs.
 WEIGHT OF SAND IN TANK = (LENGTH x WIDTH x SAND DEPTH)(WT. OF SAND)
 = (26.83' x 4.75' x 3.4') (62.4 pcf)
 = 38,997 lbs.
 WEIGHT OF TANK + WEIGHT OF SAND = 172,347 lbs.

ASSUMPTIONS:
 WATER AT 58° FROM SEV#1
 ELEVATION = 38.7 (FROM CONTOUR EL.=43.5)

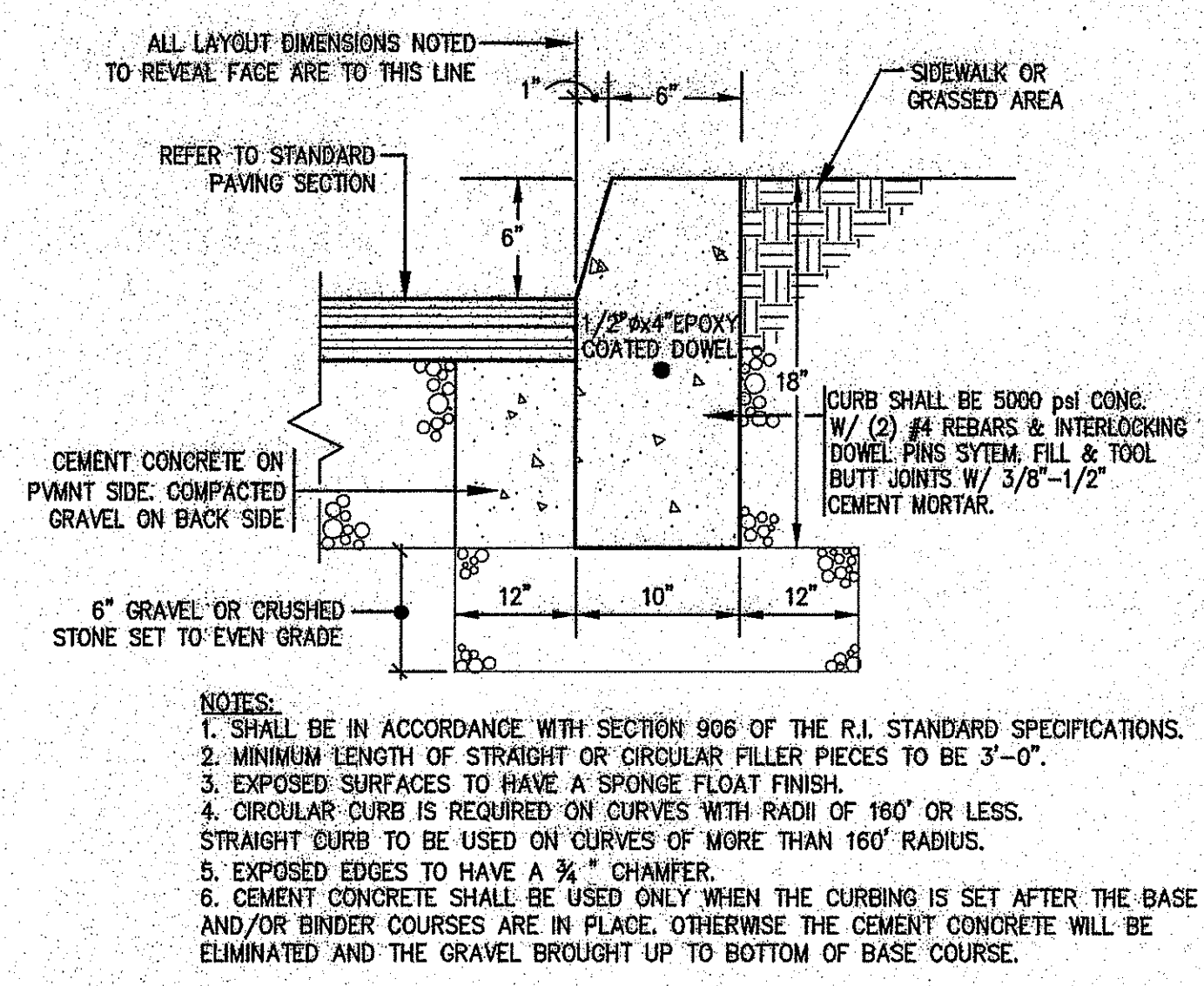
HYDROSTATIC PRESSURE = (LENGTH x WIDTH x HEIGHT OF WATER IN TANK)(WEIGHT OF WATER)
 HYDROSTATIC PRESSURE = (32.33' x 11.33' x 3.8') (62.4 pcf)
 HYDROSTATIC PRESSURE = 86,857 lbs.

HYDROSTATIC PRESSURE < WEIGHT OF TANK + WEIGHT OF SAND (OK)

PERIMETER SAND FILTER DETAIL
N.T.S.



PAVEMENT STRIPING DETAIL
N.T.S.

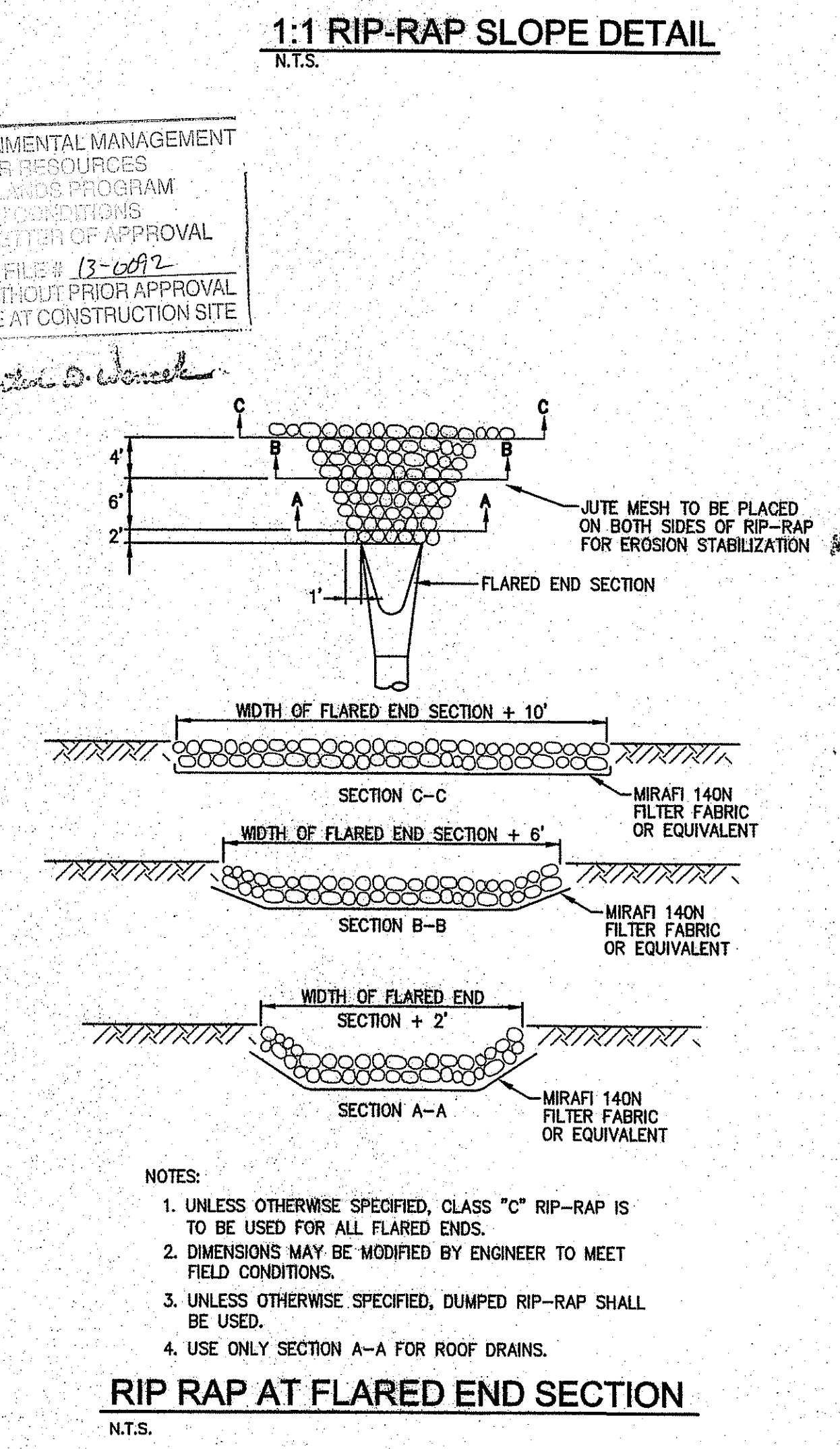


DETAIL OF PRECAST CONCRETE CURB
N.T.S.

PRECAST CONCRETE FLARED END SECTION
(RIDOT STD. 2.3.0) N.T.S.

NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE R.I. STANDARD SPECIFICATIONS.

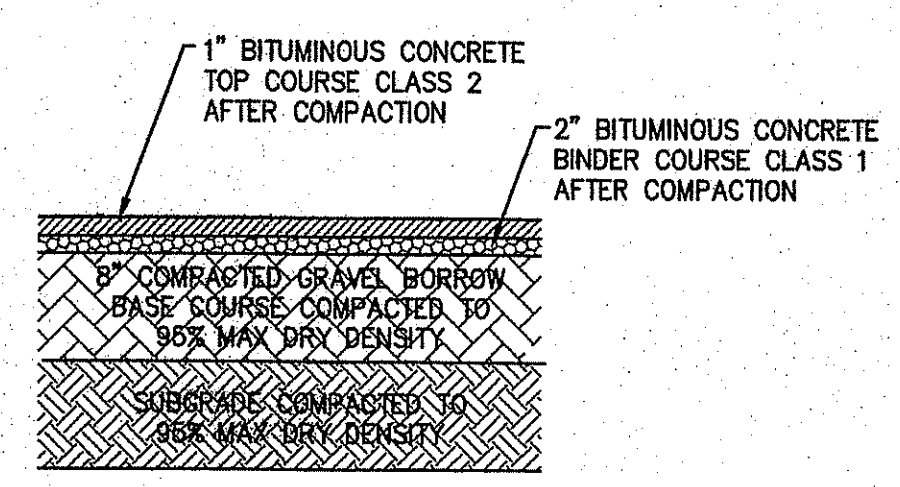
DIMENSIONS								REINFORCEMENT
DIA.	A	B	C	D	E	R	T	ONE LAYER REINFORCEMENT IN CENTER OF WALL MIN. AREA OF EACH WAY (SQ. IN./FT.)
1'-0"	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	9"	2"	0.048
1'-3"	6"	2'-3"	3'-10"	6'-1"	2'-6"	11"	2 1/4"	0.054
1'-6"	8"	2'-6"	3'-10"	6'-1"	3'-0"	12"	2 1/2"	0.060
2'-0"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	1'-2"	3"	0.072
2'-6"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	1'-3"	3 1/2"	0.084
3'-0"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	1'-8"	4"	0.096
3'-6"	1'-9"	5'-9"	2'-11"	8'-2"	6'-6"	1'-10"	4 1/2"	0.108
4'-0"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	1'-10"	5"	0.120
4'-6"	2'-3"	6'-5"	2'-11"	8'-4"	7'-8"	2'-0"	5 1/2"	0.132
5'-0"	2'-6"	5'-0"	3'-3"	8'-3"	8'-0"	2'-0"	6"	0.144



RIP RAP AT FLARED END SECTION
N.T.S.

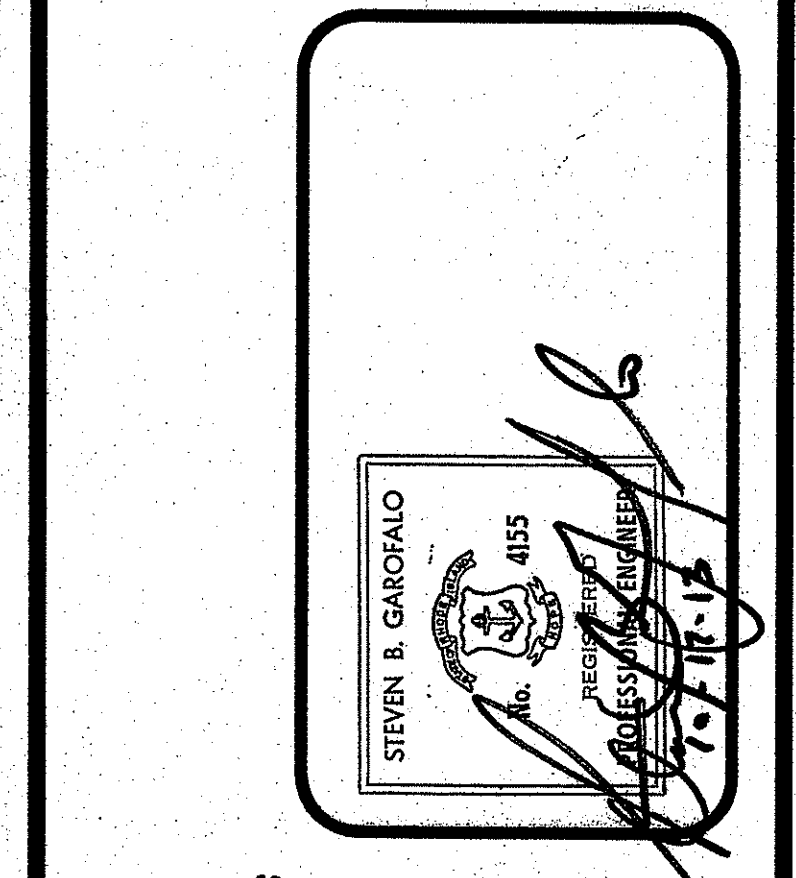
STANDARD PAVEMENT DETAIL
N.T.S.

NOTES:
 1. ALL THICKNESS SHOWN ARE COMPACTED DIMENSIONS.
 2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 3. SUBMIT MIX DESIGN TO THE CIVIL ENGINEER OF RECORD AT LEAST 30 DAYS PRIOR TO BEGINNING ASPHALT PAVING OPERATIONS. MIX DESIGNS OVER ONE YEAR OLD WILL NOT BE ACCEPTED. MIX DESIGNS SUBMITTAL SHALL FOLLOW THE LATEST EDITION OF THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



SOUTHEAST PARKING EXPANSION
CONSTRUCTION DETAILS
 FOR
100 SOCKANOSSET PARK
 SITUATED AT
 100 SOCKANOSSET CROSS ROAD
 CRANSTON, RHODE ISLAND
 PREPARED FOR:
 100 SOCKANOSSET LLC

NO.	REVISION	BY	DATE
1	RIDEM COMMENTS	PJD	9/04/13
2	RIDEM COMMENTS	PJD	10/16/13



GAROFALO
 GAROFALO & ASSOCIATES, INC.
 ENGINEERS / LAND PLANNERS / SURVEYORS

85 CORLISS STREET
 P.O. BOX 6145
 PROVIDENCE, RI 02940
 TEL: 401-273-9000

JOB NO. 5471-03	DRAWN BY MNB
DWG. NO. 5471-03-BASE	CHECKED SBG
SCALE: AS NOTED	APPROVED SBG
SHEET	DATE: MAY 20, 2103

C5.0