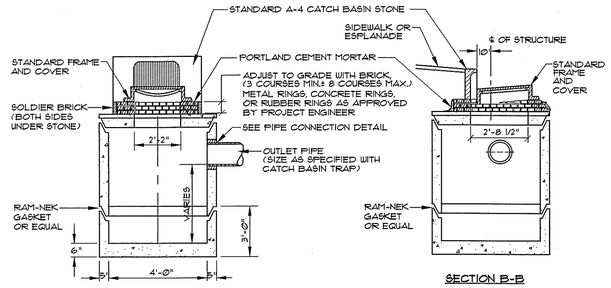
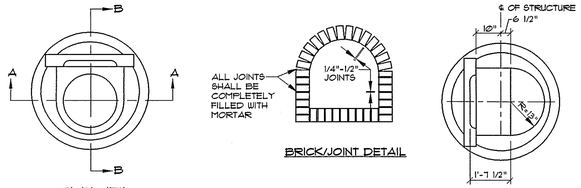
PORTLAND STANDARD



SECTION A-A

SECTION B-B

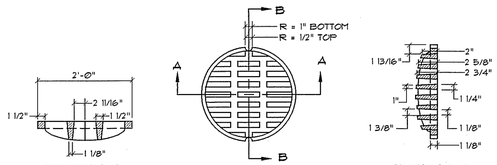


PLAN VIEW
COVER, FRAME AND STONE

BRICK/JOINT DETAIL

PLAN VIEW
TOP SLAB

PRECAST CONCRETE CATCH BASIN - TYPE "E"

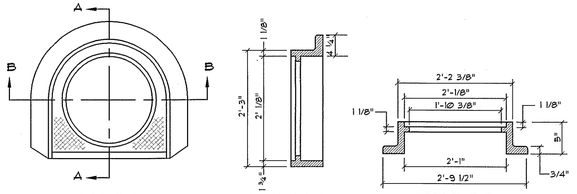


SECTION A-A

PLAN VIEW

SECTION B-B

GRATE DETAIL



PLAN VIEW

SECTION A-A

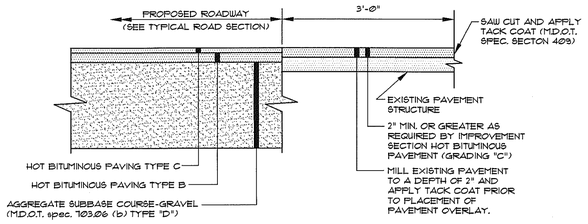
SECTION B-B

FRAME DETAIL

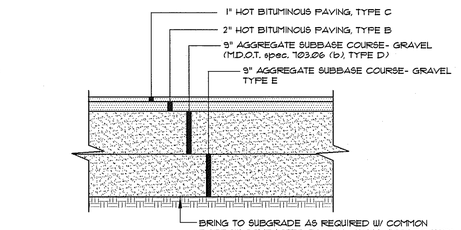
TYPE "D" - FRAME & COVER

NOTES:
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS FOR APPROVAL.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO ACCOMMODATE 2' MIN. GRATE (H-20 LOADING & BICYCLE SAFE). PROVIDE SHOP DRAWINGS FOR ENGINEER'S / OWNER REPRESENTATIVE'S APPROVAL.

CATCH BASIN W/ GRANITE HEADSTONE
NOT TO SCALE

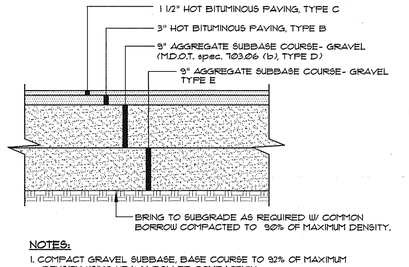


TYPICAL PAVEMENT JOINT
NOT TO SCALE



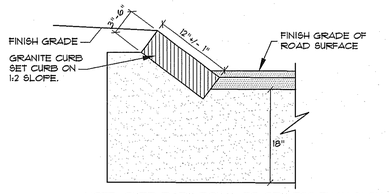
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

TYP. PAVED PARKING LOT SECTION
NOT TO SCALE



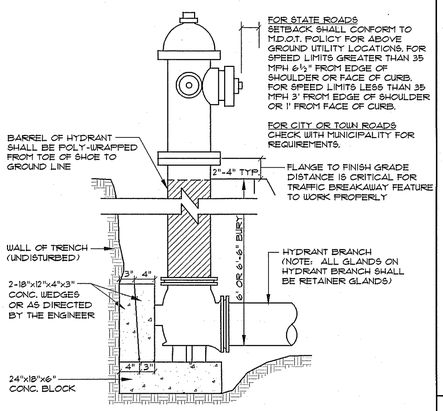
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

HEAVY DUTY BITUMINOUS PAVEMENT
NOT TO SCALE

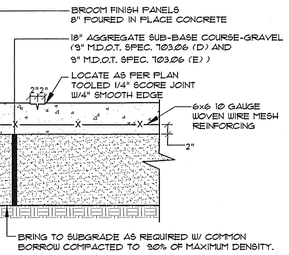


NOTE: CURB RADII EQUAL TO OR LESS THAN 3' SHALL BE CONSTRUCTED FROM SOLID FLAME CUT GRANITE (BULL NOSE)

SLOPED GRANITE CURB
NOT TO SCALE

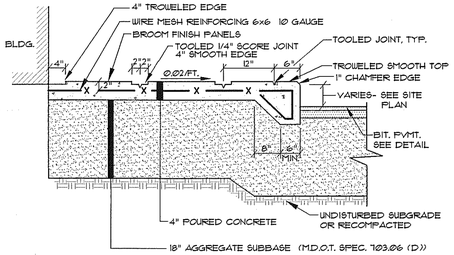


TYPICAL HYDRANT INSTALLATION
NOT TO SCALE



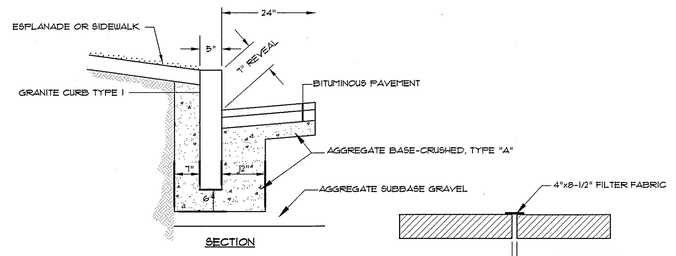
NOTES:
1. COMPACT GRAVEL SUB-BASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

HEAVY DUTY CONCRETE PAVEMENT
NOT TO SCALE



NOTE:
INSTALL 5'-0" SQUARE AREA BY 4' DEEP OF FROST-FREE MATERIAL BELOW ALL HANDICAP RAMPS AND ENTRY POINTS AT BUILDING.

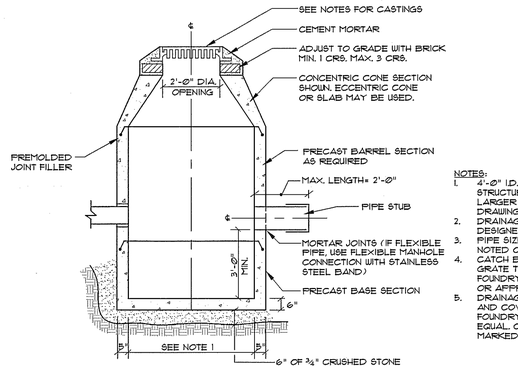
CONCRETE SIDEWALK
NOT TO SCALE



SECTION

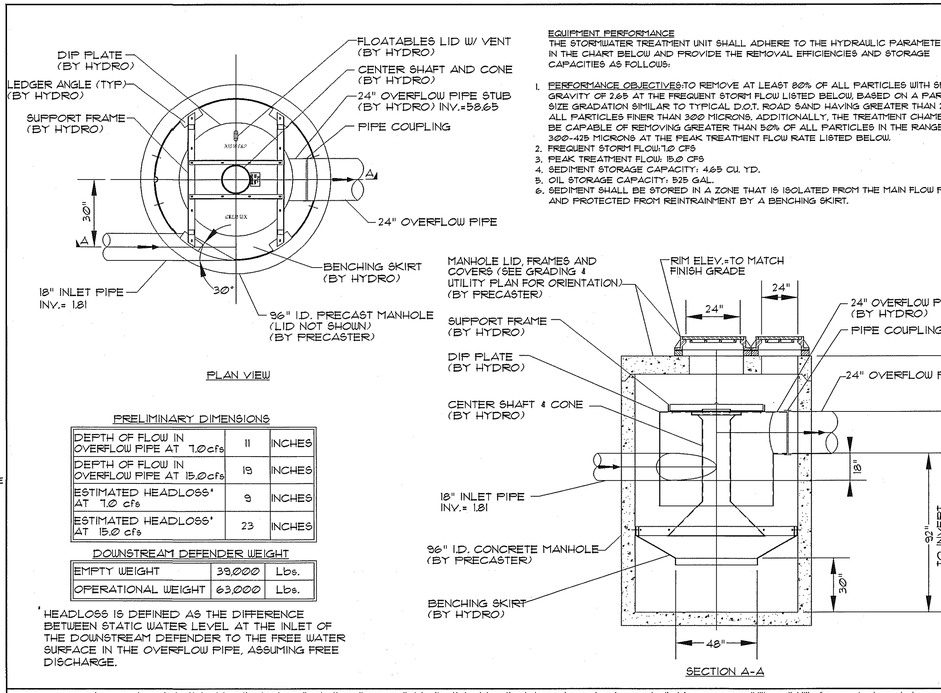
PLAN

INSTALLATION OF NEW GRANITE CURB
NOT TO SCALE



NOTES:
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE ETHERIDGE FOUNDRY 84248, TYPE M OR C OR APPROVED EQUAL.
5. DRAINAGE MANHOLE FRAME AND COVER TO BE ETHERIDGE FOUNDRY M1485 OR APPROVED EQUAL. COVER SHALL BE MARKED "DRAIN".

TYPICAL CATCH BASIN
NOT TO SCALE



EQUIPMENT PERFORMANCE
THE STORMWATER TREATMENT UNIT SHALL ADHERE TO THE HYDRAULIC PARAMETERS GIVEN IN THE CHART BELOW AND PROVIDE THE REMOVAL EFFICIENCIES AND STORAGE CAPACITIES AS FOLLOWS:

1. PERFORMANCE OBJECTIVES:TO REMOVE AT LEAST 80% OF ALL PARTICLES WITH SPECIFIC GRAVITY OF 2.65 AT THE FREQUENT STORM FLOW LISTED BELOW, BASED ON A PARTICLE SIZE GRADATION SIMILAR TO TYPICAL D.O.T. ROAD SAND HAVING GREATER THAN 20% OF ALL PARTICLES FINER THAN 300 MICRONS. ADDITIONALLY, THE TREATMENT CHAMBER MUST BE CAPABLE OF REMOVING GREATER THAN 50% OF ALL PARTICLES IN THE RANGE OF 300-425 MICRONS AT THE PEAK TREATMENT FLOW RATE LISTED BELOW.
2. FREQUENT STORM FLOW: 1.0 CFS
3. PEAK TREATMENT FLOW: 15.0 CFS
4. SEDIMENT STORAGE CAPACITY: 4.65 CU. YD.
5. OIL STORAGE CAPACITY: 525 GAL.
6. SEDIMENT SHALL BE STORED IN A ZONE THAT IS ISOLATED FROM THE MAIN FLOW PATH AND PROTECTED FROM REINTRAINMENT BY A BENCHING SKIRT.

PRELIMINARY DIMENSIONS

DEPTH OF FLOW IN OVERFLOW PIPE AT 7.0cfs	11	INCHES
DEPTH OF FLOW IN OVERFLOW PIPE AT 15.0cfs	19	INCHES
ESTIMATED HEADLOSS* AT 7.0 cfs	9	INCHES
ESTIMATED HEADLOSS* AT 15.0 cfs	23	INCHES

DOWNSTREAM DEFENDER WEIGHT

EMPTY WEIGHT	39,000	Lbs.
OPERATIONAL WEIGHT	63,000	Lbs.

*HEADLOSS IS DEFINED AS THE DIFFERENCE BETWEEN STATIC WATER LEVEL AT THE INLET OF THE DOWNSTREAM DEFENDER TO THE FREE WATER SURFACE IN THE OVERFLOW PIPE, ASSUMING FREE DISCHARGE.

STORMWATER TREATMENT STRUCTURE
NOT TO SCALE

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STATE OF MAINE · JAN B. WIEGMAN · 5852 · REGISTERED PROFESSIONAL ENGINEER · 3/14/06

REV.	BY:	DATE:	STATUS:
C	JBSW	03-14-06	ISSUED FOR CONSTRUCTION
B	JBSW	12-16-05	RELEASED FOR DEMOLITION AND FOUNDATION
A	NJS	12/09/04	REVISED PER CITY COMMENTS

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Westbrook, Maine 04092-1339
Tel (207) 856-0277

PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN
04187	.	JBSW	NJS	BRF/LFH

Rev By Date Description

Date	Scale
Drawn by	Checked Eng.
Checked Prod.	Approved by
Title	

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Portland, Maine 04102
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fax: (207) 756-6212
email: hiltech@hil-tech.com

DETAILS
OF:
SOMERSET MARKETPLACE
FRANKLIN ARTERIAL AND FOX STREET
PORTLAND, MAINE
FOR:
FRANKLIN & SOMERSET PORTLAND ME, LLC
550 BOWE ST. 6TH FLOOR
AUSTIN, TX 78703

CAD Ref:	
Project No.	
Drawing No.	Rev.

DATE	SCALE
10-28-04	AS SHOWN

SHEET C-7

04187D