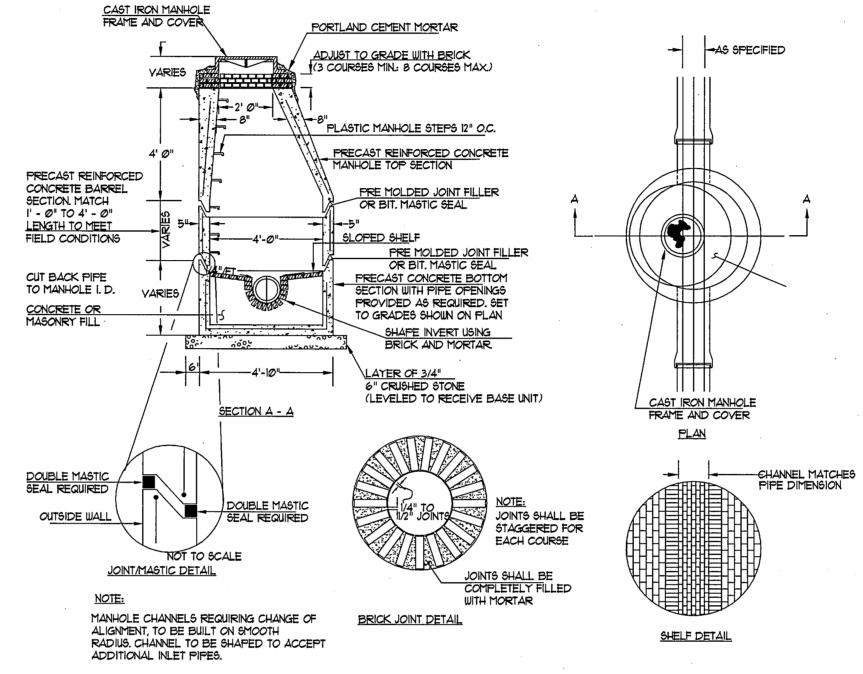
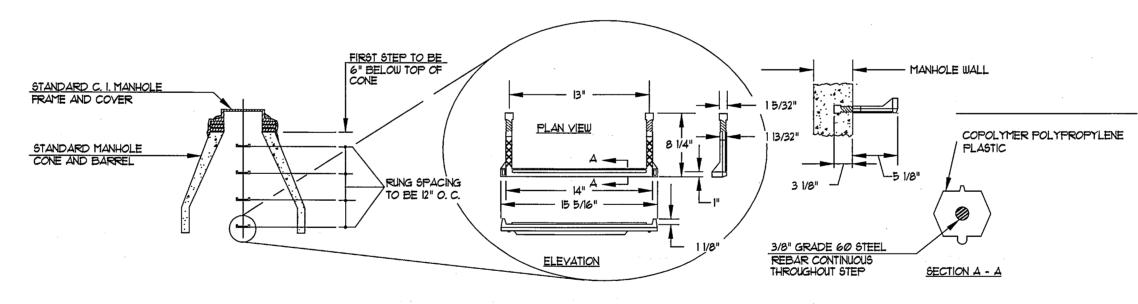


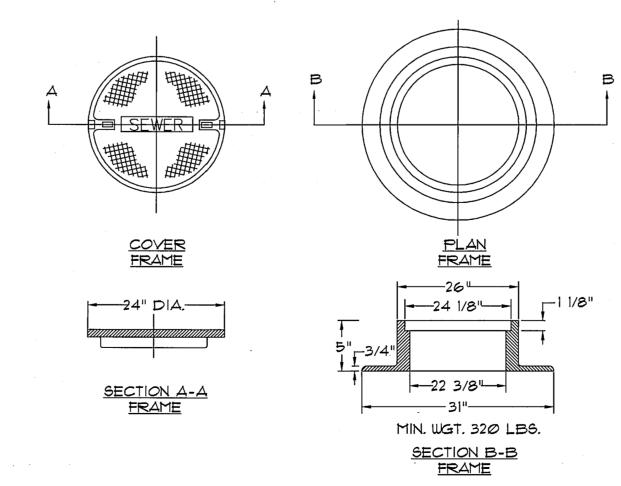
# TYPICAL PAVEMENT GRADING ON SLOPES FOR CATCH BASIN AND INLET NOT TO SCALE



# PRECAST CONCRETE MANHOLE TYPE "A"



## PLASTIC MANHOLE STEPS NOT TO SCALE



NOTE:

1. ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS
SHALL BE 24" x 5". ALL SANITARY MANHOLE COVERS AND SHALL
HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN
MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.

CAST IRON MANHOLE COVER AND FRAME NOT TO SCALE

### GENERAL NOTES FOR MANHOLES AND CATCH BASINS

- I. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000-169. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- 2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-67.
- 3. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- ALL MANHOLES SHALL HAVE A BITUMINOUS
  WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. 9.
  IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL
  BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/6"
  THICK AFTER THE MORTAR HAS SET, THE SURFACE
  SHALL BE WATERPROOFED AS REQUIRED BY
  SUPPLEMENTAL SPECIFICATIONS SECTION 604.
- 5. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
- 6. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
  7. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON
- ALL PRECAST MANHOLES AND CATCH BASING SHALL BE IDENTIFIED BY <u>STATION</u> AND <u>OFFSET</u>, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.

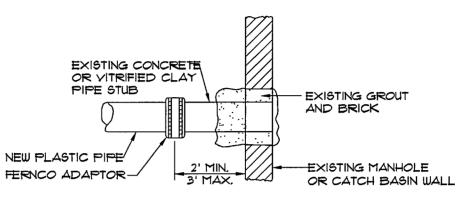
  3. EXISTING MANHOLES, CATCH BASING, FRAMES, AND

PORTLAND.

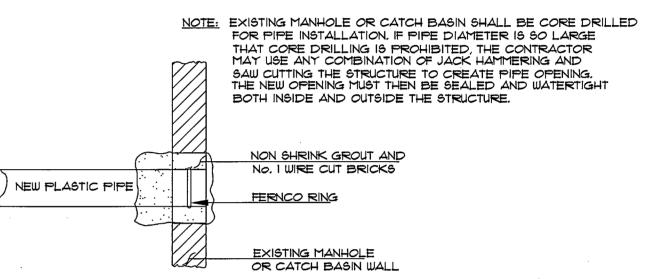
ALL WORK WITHIN THE STREET RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.

COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF

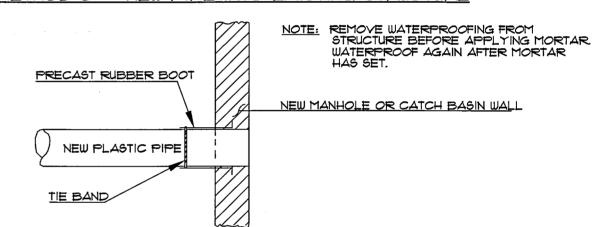
- O. ALL CATCH BASIN OUTLET PIPES SHALL BE INSTALLED WITH AN OIL AND FLOATABLES SEPARATOR. THE SEPARATOR SHALL BE THE "SNOUT" OR AN APPROVED EQUAL AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 11. MANHOLE FRAME, GRATE AND COVERS SHALL COMPLY WITH CITY OF PORTLAND TECHNICAL STANDARDS AND REQUIREMENTS



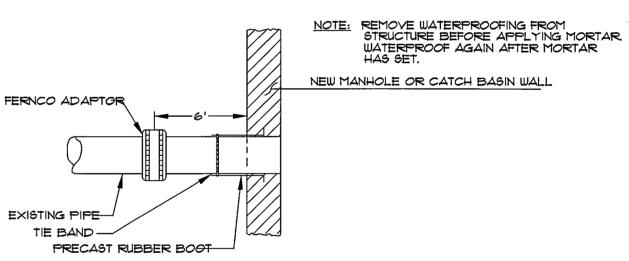
#### METHOD 4 - NEW PIPE TO EXISTING STRUCTURE STUB



#### METHOD 3 - NEW PIPE INTO EXISTING STRUCTURE

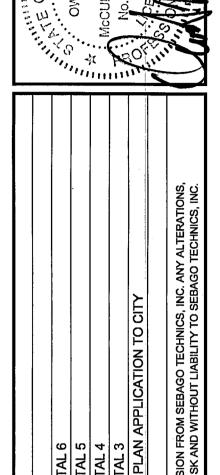


#### METHOD 2 - NEW CONSTRUCTION



METHOD 1 - EXISTING PIPE INTO NEW STRUCTURE

PLASTIC PIPE CONNECTION DETAIL NOT TO SCALE



 E
 WTC
 10-15-13
 CITY SUBMITTAL 6

 D
 WTC
 10-03-13
 CITY SUBMITTAL 5

 C
 WTC
 09-17-13
 CITY SUBMITTAL 4

 B
 WTC
 09-03-13
 CITY SUBMITTAL 4

 A
 WTC
 09-03-13
 CITY SUBMITTAL 3

 A
 WTC
 07-29-13
 SUBMIT SITE PLAN APPLICATION 1

 REV:
 BY:
 DATE:
 STATUS:

 THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECH

 MAL
 AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILIT

APORT LOFTS

URY / HANCOCK STREET

AND, MAINE

NEWBURY STREET, LLC

DATE SCALE
07-26-13 AS SHOWN

SHEET 12 OF 14

### -MAX. LENGTH= 2'-0" -MORTAR JOINTS (IF FLEXIBLE PIPE, USE FLEXIBLE MANHOLE CONNECTION WITH STAINLESS PRECAST BASE SECTION SEE NOTE 1 -6" OF 34" CRUSHED STONE 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 EAST JORDAN FOUNDRY 5250, OR APPROVED EQUAL. 5. DRAINAGE MANHOLE FRAME AND COVER TO BE EAST JORDAN FOUNDRY 1122, TYPE A, OR APPROVED EQUAL. COVER SHALL BE 6. ALL DRAIN MANHOLES SHALL HAVE SHELVES AND CHANNELS INSTALLED. TYPICAL DRAINAGE MANHOLE/CATCH BASIN NOT TO SCALE GRANITE INLET STONE **\-R**=3" SECTION A-A

PREMOLDED

JOINT FILLER

-SEE NOTES FOR CASTINGS

MIN. 1 CRS. MAX. 3 CRS.

OR SLAB MAY BE USED.

-ADJUST TO GRADE WITH BRICK

CONCENTRIC CONE SECTION

-PRECAST BARREL SECTION

SHOWN, ECCENTRIC CONE

-CEMENT MORTAR

AS REQUIRED

TYPE A-4 GRANITE CATCH BASIN INLET STONE DETAIL

(FOR EXISTING BASIN AT HANCOCK STREET)

NOT TO SCALE