

--- STANDARD A-4 CATCH BASIN STONE -----SIDEWALK OR \_\_\_\_ C OF STRUCTURE ESPLANADE PORTLAND CEMENT MORTAR STANDARD FRAME AND - STANDARD FRAME AND COVER COVER - ADJUST TO GRADE WITH BRICK, (3 COURSES MIN.; 8 COURSES MAX.) METAL RINGS, CONCRETE RINGS, OR RUBBER RINGS AS APPROVED BY PROJECT SOLDIER BRICK (BOTH SIDES UNDER STONE) - SEE PIPE CONNECTION DETAIL 2'-8 1/2" OUTLET PIPE (SIZE AS SPECIFIED WITH WITH CATCH BASIN TRAP) RAM-NEK GASKET OR \_\_\_\_\_ RAM-NEK GASKET OR-EQUAL EQUAL 4 .. ∢ .; · . SECTION B-B SECTION A-A C OF STRUCTURE ALL JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR BRICK/JOINT DETAIL TOP SLAB PLAN VIEW COVER, FRAME AND STONE

PRECAST CONCRETE CATCH BASIN - TYPE "E"

TYPICAL CATCH BASIN AT CURB IN BRIGHTON AVE R.O.W.

I. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. 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.

4. ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" 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 THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.

8. STORM AND SEWER MANHOLES SHALL HAVE SOLID COVERS WITH ONE DRILLED PICK HOLE.

9. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

## GENERAL NOTES FOR MANHOLES

AND CATCH BASINS NOT TO SCALE

FOR CATCH BASINS IN LAWN SECTIONS INSTALL BEEHIVE FRAME AND GRATE NEENAH R-2560-E1 (OR APPROVED FOR CBS IN PAVED AREAS INSTALL FLAT FRAME AND GRATE NEENAH R-2500 (OR APPROVED EQUAL) FINISH GRADE — FOR DRAINAGE MANHOLES (DMH) USE 24" DIA CAST IRON FRAME AND SOLID COVER - MORTAR PARGE COAT BRING TO GRADE WITH BRICK COURSES MIN I AND MAX 3 COURSES 0 0 PRECAST REINFORCED CONCRETE CONE SECTION PRECAST REINFORCED CONCRETE BARREL SECTION(S) AS REQUIRED BUTYL RUBBER GASKET TO BE USED ON ALL JOINTS SEE NOTE 4 PRECAST REINFORCED CONCRETE \_\_\_ BASE SECTION - PIPE OPENING TO BE CAST AS REQUIRED PLAN \_ 24" COMPACTED GRANULAR BORROW AROUND STRUCTURE — 3/4" DIA. CRUSHED

PRECAST CONCRETE CATCH BASIN / DRAINAGE MANHOLE (ONSITE)

I. CONCRETE 4000 PSI AFTER 28 DAYS.

NOT TO SCALE

C4.4

2. REINFORCING H-20 LOADING 4x4 / 4x4 WWM. SLAB TOP - NO. 5 BARS.

3. EACH CASTING TO HAVE LIFTING HOLES TO BE FILLED WITH NON-SHRINK MORTAR. 4. INSIDE DIAMETER SHALL BE 4' FOR CATCH BASINS IN PAVEMENT AND 3' FOR FIELD INLETS.

NOTE: EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY USE ANY COMBINATION OF JACK HAMMERING AND SAW CUTTING THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE. NON SHRINK GROUT AND No. I WIRE CUT BRICKS NEW PLASTIC PIPE OR CATCH BASIN WALL

NOT TO SCALE

C4.4

TYPICAL PIPE CONNECTION TO EXISTING STRUCTURE DETAIL

One Karen Dr., Suite 2A | Westbrook, Maine 04092

ph: 207.553.9898 www.walsh-eng.com

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WILLIAM R.

WALSH. III

2 11/18/14 Revised Cover Sheet and Zoning Summary
2 2/17/15 Revised Per City Staff Review Comments SWC WRW 4 3/6/15 Revised Per City Staff Review Comments SWC WRW

257 SWC WRW Checked:

Drawn:

SITE DETAILS