

- STANDARD A-4 CATCH BASIN STONE ---SIDEWALK OR C OF STRUCTURE ESPLANADE PORTLAND CEMENT MORTAR STANDARD FRAME AND STANDARD FRAME AND 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 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 SECTION B-B OF STRUCTURE SECTION A-A ALL JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR PLAN VIEW TOP SLAB PLAN VIEW

PRECAST CONCRETE CATCH BASIN - TYPE "E"

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

COVER, FRAME AND STONE

- 1. 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 <u>STATION</u> AND <u>OFFSET</u>, 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

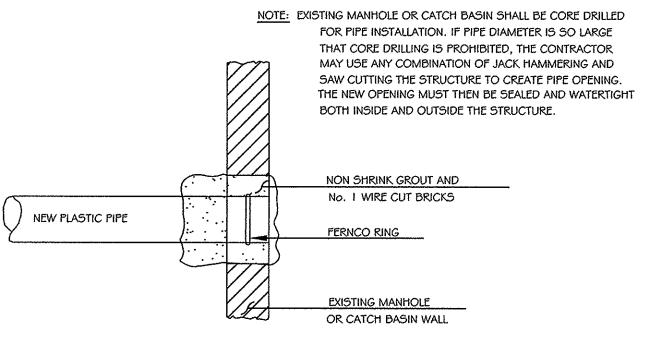
FOR CATCH BASINS IN LAWN SECTIONS INSTALL BEEHIVE - FRAME AND GRATE NEENAH R-2560-E1 (OR APPROVED - FOR CBS IN PAVED AREAS INSTALL FLAT FRAME AND GRATE NEENAH R-2500 (OR APPROVED EQUAL) FINISH GRADE - FOR DRAINAGE MANHOLES (DMH) USE 24" DIA CAST IRON FRAME AND SOLID COVER - MORTAR PARGE COAT BRING TO GRADE WITH BRICK COURSES MIN I AND MAX 3 COURSES 0 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 - INVERTS VARY, SEE ; O°O2' - O' \_ 24" COMPACTED GRANULAR BORROW AROUND STRUCTURE - 3/4" DIA. CRUSHED 1. CONCRETE 4000 PSI AFTER 28 DAYS. 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.

PRECAST CONCRETE CATCH BASIN / DRAINAGE MANHOLE (ONSITE)

TYPICAL SANITARY MANHOLE

NOT TO SCALE

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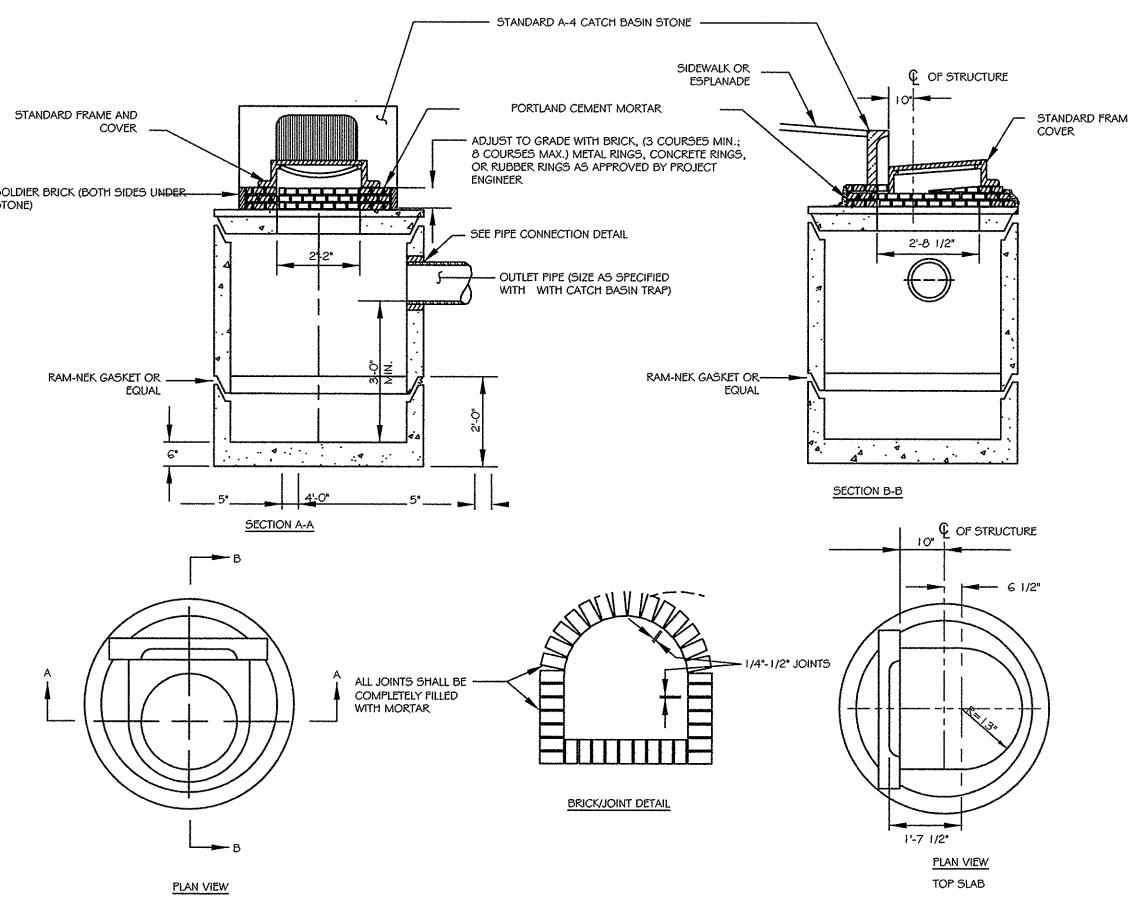


TYPICAL PIPE CONNECTION TO EXISTING STRUCTURE DETAIL NOT TO SCALE

GREER L'ENGINEERS

PINKHAM & (

MAP/LOT 265/A/1&9



NOT TO SCALE