COMBINATION TYPE 3 MANHOLES.

FOR TYPE I, II, IV AND V INLETS ON 48" CENTER THE OPENING OVER THE ROOF SLAB.

NOTE:

TYPE 3 MANHOLE ROOF SLAB

TYPE 1 SECTION A-A

TYPE 3 MANHOLE

*MINIMUM WEIGHT FOR FRAME AND LID IS 1800 LBS (816 KG). TOOLS MUST BE CARRIED TO A LOCATION 10 FT (3 M) FROM THE MANHOLE. THE FRAME AND LID MAY BE USED IF APPROVED BY THE FACILITY OWNER RESPONSIBLE FOR MAINTENANCE OF THE MANHOLE.

THE MANHOLE STEPS THAT ARE METALLIC AND COATED WITH COPOLYMER POLYPROPYLENE, OR AN APPROVED EQUAL. THE MINIMUM USE WILL BE AS GOOD OR BETTER THAN THE ONES SHOWN, OR IF IT IS MORE ADAPTABLE TO EXISTING CONDITIONS.

THE ECCENTRIC CONE TRANSITION WILL BE PERMITTED WHEN ITS USE WILL BE AS GOOD OR BETTER THAN THE ONES SHOWN, OR IF IT IS MORE ADAPTABLE TO EXISTING CONDITIONS.

THE CONSTRUCTION AND REINFORCEMENT OF THE BASE FOR EACH TYPE MUST BE CONFORMING TO THE CONDITIONS AND THE WEIGHT OF THE SUPER-STRUCTURE. REINFORCEMENT SHOWN IS ILLUSTRATIVE ONLY. USE MANHOLE STEPS THAT ARE METALLIC AND COATED WITH COPOLYMER POLYPROPYLENE, OR AN APPROVED EQUAL. THE MINIMUM USE WILL BE AS GOOD OR BETTER THAN THE ONES SHOWN, OR IF IT IS MORE ADAPTABLE TO EXISTING CONDITIONS.

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** STANDARD UNLESS OTHERWISE NOTED ON THE PLANS.

** NOTE: ALL CONCRETE IS CLASS GENERAL OR APPROVED EQUAL.

* SEE QUALIFIED PRODUCTS LIST FOR APPROVED GRATES.

UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

SEE DETAILED DRAWING NO. 604-02 FOR DIAMETER, SLAB THICKNESS AND REINFORCING REQUIREMENTS FOR COMBINATION TYPE 3 MANHOLE. DO NOT USE TYPE II COMBINATION INLETS FOR MANHOLE DEPTHS GREATER THAN 4 FEET (1.2 m).
NOTE:
ALL CONCRETE IS CLASS
GENERALLY OR APPROVED EQUAL.
* SEE QUALIFIED PRODUCTS LIST
FOR APPROVED GRATES.

UNITS SHOWN IN BRACKETS ( ) ARE
METRIC AND ARE IN MILLIMETERS (mm)
UNLESS OTHER UNITS ARE SHOWN.

SEE DETAIL DRAWING NO. 604-02 FOR DIAMETER,
SLAB THICKNESS AND REINFORCING REQUIREMENTS
FOR COMBINATION TYPE 3 MANHOLE, TYPE IV DROP
INLET. WHEN COMBINATION MANHOLE DEPTHS ARE
GREATER THAN 4 FEET (1.2 m), OFFSET THE ACCESS
HOLE OVER THE MANHOLE STEPS.

NOTE:
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**SECTION A-A**

- **Curb to Grate**
  - 25" (635 mm) 
  - 3" (76.2 mm) 
  - 33 3/4" (857.3 mm) **

- **Structure & Grate**
  - 33 3/4" (857.3 mm) 
  - 7" (178 mm) 

- **Roof Slab**
  - 40" (1016 mm) 

- **Opening in Roof Slab**
  - 32" (812.8 mm) 

- **Curb to Grate (Typical)**
  - 25" (635 mm) 
  - 3" (76.2 mm) 
  - 33 3/4" (857.3 mm) **

- **Flowline of Curb and Gutter**
  - 48" (1219.2 mm) 

- **Concrete Adjusting Rings**
  - 2" (50.8 mm) - 12" (304.8 mm) Max.

- **Notations**
  - All Concrete is Class General or Approved Equal
  - See Plans for Locations and Quantities
  - See Qualified Products List for Approved Grates
  - Type I and Type V Grates Are Interchangeable

**SECTION B-B**

- **Straight Bar Grate**
  - 20" (508 mm) 

- **Vanes**
  - 1 3/8" (34.9 mm)

- **Slope**
  - 30° (162.0 °)

- **Top Back of Curb**
  - 1 1/2" (38.1 mm) 

**SECTION C-C**

- **Straight Bar Grate**
  - 20" (508 mm) 

- **Vane**
  - 1 3/8" (34.9 mm)

- **Slope**
  - 30° (162.0 °)

- **Top Back of Curb**
  - 1 1/2" (38.1 mm) 

**NOTES:**
- All Concrete is Class General or Approved Equal
- See Plans for Locations and Quantities
- Type I and Type V Grates Are Interchangeable
- Vanes and Straight Bar Grates Are Interchangeable
- Slope is Positive Drainage
- Curb and Gutter Section Into Flowline of Curb and Gutter Section Into Inlet
- Set All Final Inlet Elevation to Ensure Positive Drainage
- Provide Safety Lug on Straight Bar Grate
-**
**NOTES:**

- ALL CONCRETE IS CLASS GENERAL OR APPROVED EQUAL.
- SEE PLANS FOR LOCATIONS AND QUANTITIES.
- SET ALL FINAL INLET GRATE ELEVATIONS TO ENSURE THAT POSITIVE DRAINAGE IS PROVIDED FROM THE CURB AND GUTTER SECTION INTO THE INLET.
- **STANDARD UNLESS OTHERWISE NOTED ON PLANS.**
- CURB SLOPE AND OFFSET IS TO THE CENTER OF THE STRUCTURE.
- TYPE III AND TYPE VI GRATES ARE INTERCHANGEABLE WITH THE SAME FRAME AND HAVE THE ABILITY TO BE INSTALLED AT ANY DIRECTION. INSTALL GRATE TO MATCH FLOW DIRECTION SHOWN.
- PROVIDE SAFETY LUG ON STRAIGHT BAR GRATE BETWEEN EACH BAR.
- **SEE QUALIFIED PRODUCTS LIST FOR APPROVED GRATES.**

**UNITS SHOWN IN BRACKETS ([ ]), ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.**
UNLESS OTHER UNITS ARE SHOWN.
METRIC AND ARE IN MILLIMETERS (mm)

FLOWLINE
BACK OF CURB
(DRAWING 621-00)
NEEDED (SEE DETAIL
ADJUSTING RING AS
NEW SIDEWALK OR BUFFER

TYPE B CURB INLET

ADJUSTING RING AS
REQUIRED (SEE DETAIL
DRAWING NO. 001)

SECTION A-A

ROOF SLAB
NOTE: SEE DETAIL DRAWING NO. 004-02
FOR REINFORCING REQUIREMENTS

NOTE:
SEE PLANS FOR LOCATION AND QUANTITIES.
PLAN STATION AND OFFSET IS CENTER OF STRUCTURE.

SET ALL FINAL INLET GRADE ELEVATIONS TO
ENSURE THAT POSITIVE DRAINAGE IS PROVIDED.
WHEN USED AS A COMBINATION M.H. AND THE
DEPTH IS GREATER THAN 6 (1200), OFFSET
THE ACCESS HOLE/GRADE OVER THE M.H. STEPS.

SEE QUALIFIED PRODUCTS LIST FOR APPROVED GRATES.

NOTE: SEE DETAIL DRAWING NO. 004-02
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