



NOTES:

1. GENERAL – This detail is for standard manholes where incoming/outgoing lines have a minimum cover of six (6) feet over the top of pipe. Manhole installations proposed to have less than six (6) feet of cover over incoming/outgoing pipes require prior district approval and shall be constructed in conformance with the minimum depth manhole detail.
2. MANHOLE SIZING – Generally, manholes shall be sized in accordance with the following table. The District may require larger manholes where design angles of the pipes at the manholes do not permit construction of a bench large enough to accommodate maintenance and inspection of the system.
 

| A. Two Way Manholes |                | Minimum Manhole    |
|---------------------|----------------|--------------------|
| Maximum Nominal     | Pipe Sizes     | Inside Diameter    |
| 18" or smaller      | 18" or smaller | 4'-0"              |
| 21" to 36"          | 21" to 36"     | 5'-0"              |
| 42" and up          | 42" and up     | Sizing by District |

  

| B. Three and Four Way Manholes |            | Minimum Manhole |
|--------------------------------|------------|-----------------|
| Maximum Nominal                | Pipe Sizes | Inside Diameter |
| 3-way 8"                       | 3-way 8"   | 4'-0"           |
| 4-way 8"                       | 4-way 8"   | 4'-0"           |
| 3-way 12"                      | 3-way 12"  | 4'-0"           |
| 4-way 12"                      | 4-way 12"  | 5'-0"           |
| 3-way 18"                      | 3-way 18"  | 5'-0"           |
| 4-way 18"                      | 4-way 18"  | 6'-0"           |

Three and four way manholes having a pipe larger than 18" will require a special design by the design engineer.
3. MANHOLES BASES
  - A. Manhole bases shall be cast in place. Precast manholes may be used for dead end manholes and 180° two way manholes with prior District approval.
  - B. Manhole benches shall slope 1" per foot towards the manhole invert and have a brushed non-skid finish.
  - C. Manhole inverts shall be formed or shaped and shall have a smooth finish.
  - D. Block-outs for future pipes shall require prior District approval and shall extend a minimum of six inches outside of the manhole base. See the block out detail for additional information.
  - E. See Manhole Base Deflector Detail for required drops through manholes.
4. RING AND COVER REQUIREMENTS – All ring and covers shall be cast iron. Aluminum ring and covers are required in unpaved drainage ways. Ring and covers shall be 24-inches in diameter for 4 foot I.D. manholes, 30-inch for 5 foot I.D. manholes and two piece 36-inch by 24-inch for 6 foot I.D. manholes. Refer to appropriate ring and cover detail for additional requirements.
5. INTERMEDIATE PLATFORMS – At the district's discretion, Manholes having a height of twenty (20) feet or more from rim to invert may require intermediate manhole platforms. See Intermediate Platform Construction Detail for additional information.
6. INTERIOR COATING – Outfall 2nd drop manholes shall be lined with 20 miles of Sikagard No. 62, or approved equal, applied in 4-7 mil layers, per manufacturer's specifications.

STANDARD  
MANHOLE