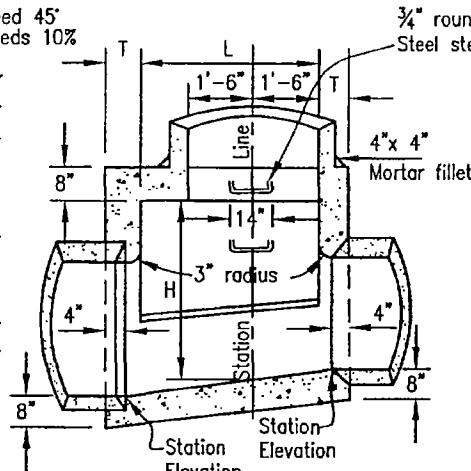
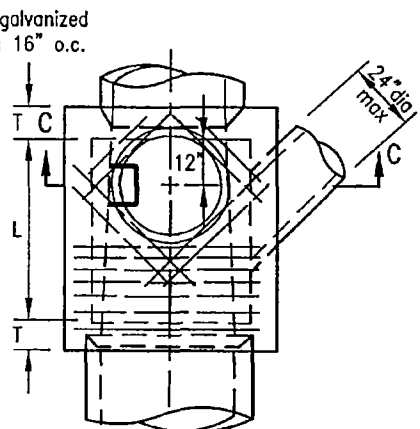


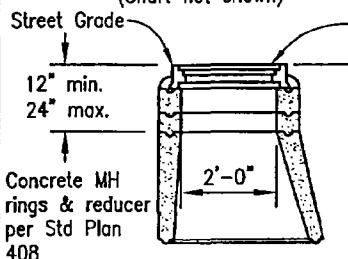
All steel reinforcement
#4@4" o.c. **PLAN**
(Shaft not shown)



SECTION B-B



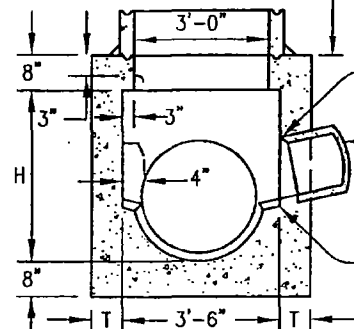
All steel reinforcement
1/2" Dia 4" o.c.
DETAIL N
(Shaft not shown)
See Note M



Street Grade
12" min.
24" max.
Concrete MH rings & reducer per Std Plan 408

Manhole frame and cover per Std. Plan 407
Minimum 2'-10 1/2" for paved streets
Minimum 3'-6" for unpaved areas

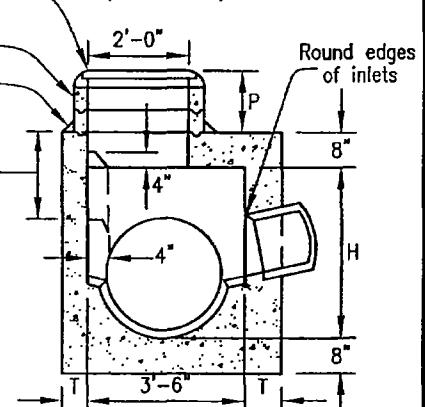
	Max.	Min.
For paved streets	11"	8 1/2"
For unpaved streets	16"	15"



SECTION A-A

Street Grade
Concrete rings per Std. Plan 408
4" x 4" mortar fillet
Omit this step in paved streets
1'-4" for paved streets
2'-2" for unpaved streets
Round edges of inlets
Max. 24" diameter side inlet. Use Std Plan 315 (Junction Structure III) for side inlets >24" diameter.
Inlet elevation applies at this point

Street Grade (See Note P)



SECTION C-C

GENERAL NOTES:

- H- Height H (in Sec. A-A and Sec. B-B) shall be not less than 4'-0", but may be increased at option of the Engineer provided that the value of M shall be not less than the minimum specified and that the reducer shall be used. For H (in Sec. C-C) see Note P.
- L- Length L shall be 4' unless otherwise shown on improvement plan.
- M- Shaft shall be constructed as per Sec. C-C and Detail N when depth M from street grade to top of box is less than 2'-10 1/2" for paved streets of 3'-6" for unpaved streets.
- P- Depth may be reduced to an absolute limit of 6" when larger values of P would reduce H (in Sec. C-C) to 3'-6" or less.
- T- T shall be 8" for values of H up to and including 8'. T shall be 10" for values of H and over 8'
- 1. Steps shall be 3/4" round, galvanized steel and anchored not less than 6" in the walls of the structures. Unless otherwise shown steps shall be placed 1'-4" on center. The lowest step shall be not more than 2' above the ledge at the side of manhole floor.
- 2. Reinforcing steel shall be 1/2" round, deformed, straight bars 1 1/2" clear from face of concrete.
- 3. Stations of manholes shown on improvement plan apply at centerline of shaft.
 - 4. Floor of manhole shall be steel troweled.
 - 5. Rings, reducers, and pipe for access shaft shall be seated in 1:2 mortar and neatly pointed or wiped inside shaft.
 - 6. Ledge shall be sloped at 2" per foot.
 - 7. Manhole shaft shall be 4'-0" and Junction Structure bottom width shall be increased to 4'-0" minimum when M > 15'. Use Std. Plan 408 with 6" thickness when M > 15'.
 - 8. Raise m.h. frames and cover 18" above finish surface when in unpaved areas.



4-2-04
DATE APPROVED

[Signature]
PUBLIC WORKS DIRECTOR/C.E.
[Signature]
ASSISTANT CITY ENGINEER

CITY OF ORANGE PUBLIC WORKS DEPARTMENT

JUNCTION STRUCTURE TYPE I
(OUTLET DIAMETER-39" OR LESS)

STANDARD
PLAN No.
313