

UNIFIED LAND USE REGULATIONS

400 Attachment 5

City of Sullivan

Appendix C. Specifications For Street Design and Construction

C-1: DESIGN SPEED, SIGHT DISTANCE, CENTERLINE RADIUS

	Minor	Local	Sub-Collector	Collector
Design speed	25 mph	25 mph	30 mph	35 mph
Minimum sight distance on vertical curve	150 feet	150 feet	200 feet	200 feet
Minimum centerline radius	100 feet	150 feet	200 feet	250 feet

C-2: CUT AND FILL SLOPES

Cut and fill slopes on any street right-of-way may not be steeper than 2:1.

C-3: SIGHT DISTANCES AT INTERSECTIONS

- A. At no-stop intersections, the intersection shall be constructed so that a person standing at a location on the centerline of any street ninety (90) feet from the intersection of the street centerlines has an unobstructed view to a point located on the centerline of the intersecting street ninety (90) feet (in either direction) from the intersection of the street centerlines. See Standard Drawing No. 1.
- B. Subject to Subsection (C), at stop intersections, the intersection shall be constructed so that a person standing ten (10) feet back of the intersection of right-of-way lines on the stop street has an unobstructed view to a point on the right-of-way line of the intersecting through street located seventy (70) feet from the intersection of the right-of-way lines. See Standard Drawing No. 2.
- C. At stop intersections where a residential street intersects with a State-maintained primary road, the intersection shall be constructed so that a person standing thirty (30) feet back of the intersection of right-of-way lines on the stop street has an unobstructed view to a point on the centerline of the through street located one hundred fifty (150) feet from the intersection of the street right-of-way lines. See Standard Drawing No. 3.

C-4: RADIUS AT STREET INTERSECTIONS

At street intersections, the intersections of the paved surfaces shall be rounded with a minimum radius as shown in Standard Drawings No. 4 and No. 5. Where streets intersect at less than right angles, a greater radius may be required.

SULLIVAN CITY CODE

C-5: CLEARING AND GRUBBING

Clearing and grubbing shall be performed within the limits shown on the plans. All timber, brush, roots, stumps, trees or other vegetation cut during the clearing operations shall become the contractor's responsibility to dispose of and shall be either removed from the project by him/her or satisfactorily disposed of on-site.

C-6: GRADING AND COMPACTION

Streets shall be graded in accordance with the lines and grade set by the engineer. Before placing curb and gutter or base on the graded subgrade, the subgrade shall be compacted to ninety-five percent (95%) AASHTO T99 for a depth of six (6) inches and then shall be proof rolled in the presence of the engineer. Places that are found to be loose, or soft, or composed of unsuitable materials, whether in the subgrade or below it, must be dug out and refilled with suitable material. All embankments or fills shall be made in eight (8) inches horizontal lifts of suitable material. The fill shall be rolled with sufficient compactive effort to achieve a ninety-five percent (95%) AASHTO T99 compaction.

C-7: STREET BASE

Base course for streets shall generally be eight (8) inches thick, unless otherwise directed by the City of Sullivan City Engineer, and shall be crushed stone conforming to Section 1007, Aggregate for Base of the Missouri Standard Specifications for Highway Construction, current edition. The stone base course shall be placed in four (4) inch layers, watered as necessary and compacted to one hundred percent (100%) AASHTO T99. The contractor shall be responsible for keeping the stone base free of contamination from clay or other foreign materials. Handling and placement of stone base shall all be in accordance with City of Sullivan specifications.

C-8: STREET SURFACES

The asphalt surface course shall meet the appropriate Sections of the Missouri Standard Specifications for Highway Construction, current edition. The asphalt shall be placed in two (2) inch layers and shall be handled and placed in accordance with City of Sullivan specifications. Concrete or "chip and seal" may be used upon approval of the City Engineer and shall conform to the City of Sullivan specifications.

C-9: PAVEMENT SECTION VARIATIONS

Sections C-6, C-7 and C-8 set the standards that shall apply under normal soils conditions. Soil tests are to be run for all street design and a pavement design made by a qualified soils engineer. Under these circumstances, the City Engineer may allow pavement sections constructed to lesser standards than those set forth above (for good soils) or require pavement sections constructed to greater standards than those set forth above (for unstable soils).

C-10: STREET CROSS SECTIONS

Streets shall be constructed and utilities located in accordance with Standard Drawing No. 6 or No. 7.

UNIFIED LAND USE REGULATIONS

C-11: CURB AND GUTTER

- A. The concrete curb and gutter shall be constructed according to the lines and grades established by the engineer. The concrete shall meet the State highway requirements. The curb and gutter shall be twenty-four (24) inches wide and shall have a vertical curb face. The forms shall be of metal, free of marks or kinks and shall be rigidly held in position. The engineer shall approve the positioning of the forms before concrete is poured. The concrete shall be placed in the forms in a manner to prevent segregation and tamped or vibrated sufficiently to prevent honeycombs. The concrete shall be finished smooth and even by means of rollers or floats. Expansion joints shall be provided every thirty (30) feet and false joints every ten (10) feet.
- B. Curb and gutter shall be constructed in accordance with Standard Drawing No. 8.

C-12: SIDEWALKS

Sidewalk construction shall be similar to street construction, with subgrade compacted to ninety percent (90%) AASHTO T99. Concrete sidewalks shall be four (4) inches thick (increasing to six (6) inches thick at driveway entrances) and shall be at least four (4) feet wide. Expansion joints shall be provided every thirty (30) feet; false joints at five (5) feet.

C-13: WHEELCHAIR RAMPS

Where required, wheelchair ramps shall be constructed in accordance with Standard Drawing No. 9.

C-14: STORMWATER RUNOFF CONTROL

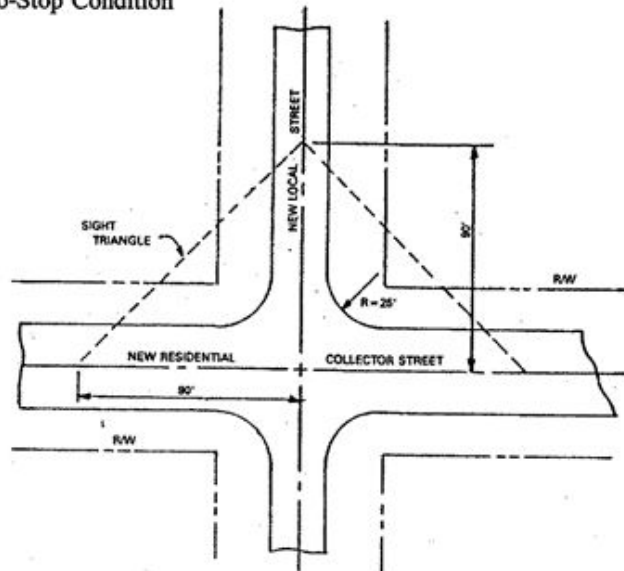
- A. The minimum design frequency for storm runoff shall be ten (10) years for storm sewer collection and twenty-five (25) years for cross drainage (i.e., drainage facilities crossing a street).
- B. All storm drainage pipe shall be acceptable to the City and no pipe may be smaller than fifteen (15) inches in diameter.
- C. Culvert outlet protection and swale erosion protection shall be designed based on a 10-year storm.
- D. All storm drainage structures and pipes shall be designed and constructed in accordance with City of Sullivan specifications and Standard Drawings No. 10 through No. 14. However, in case of a conflict, the standard drawings shall prevail.

C-15: SEDIMENTATION CONTROL

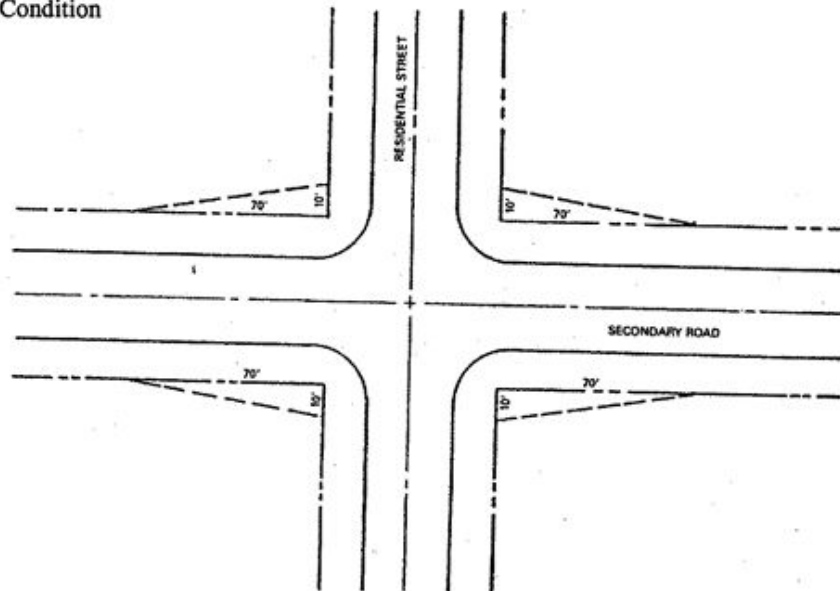
Road shoulders, swales, back-of-curbs and cut and fill banks shall be completely dressed up by the contractor and seeded as soon as possible and any time ground will remain bare for more than thirty (30) days during construction. During the growing off-season, mulching is the preferred method.

SULLIVAN CITY CODE

Standard Drawing No. 1
Recommended Street Connection
Sight Distance for No-Stop Condition

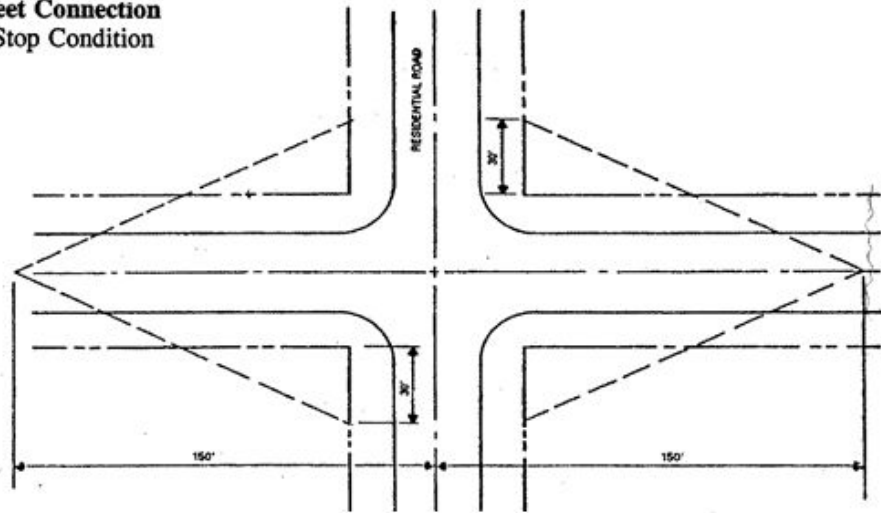


Standard Drawing No. 2
Recommended Street Connection
Sight Distance for Stop Condition

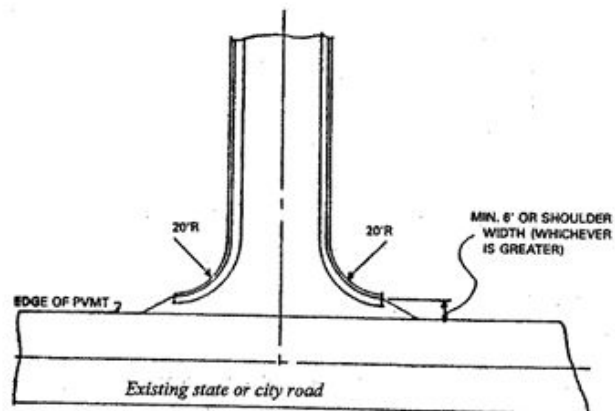


UNIFIED LAND USE REGULATIONS

Standard Drawing No. 3
Recommended Street Connection
Sight Distance for Stop Condition



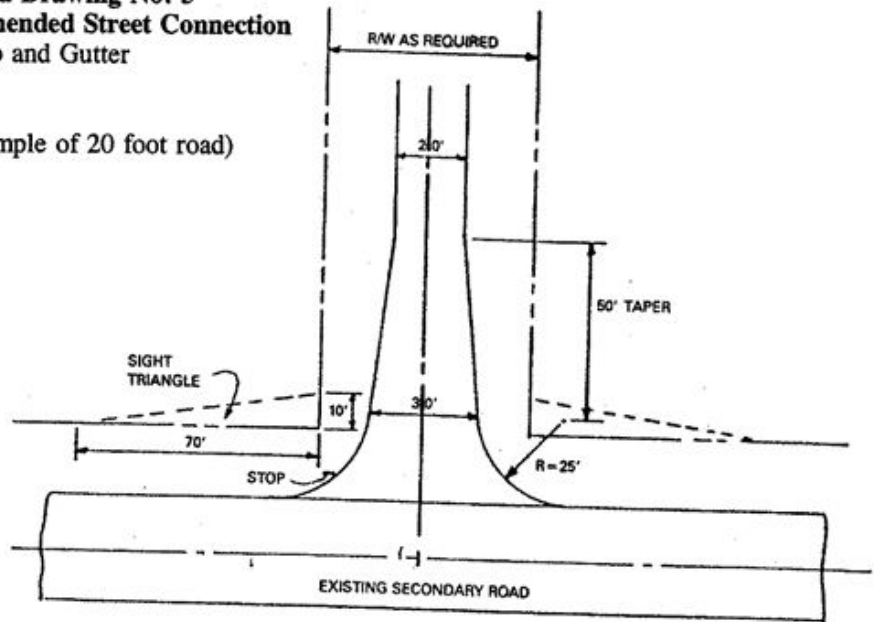
Standard Drawing No. 4
Recommended Street Connection
Curb and Gutter



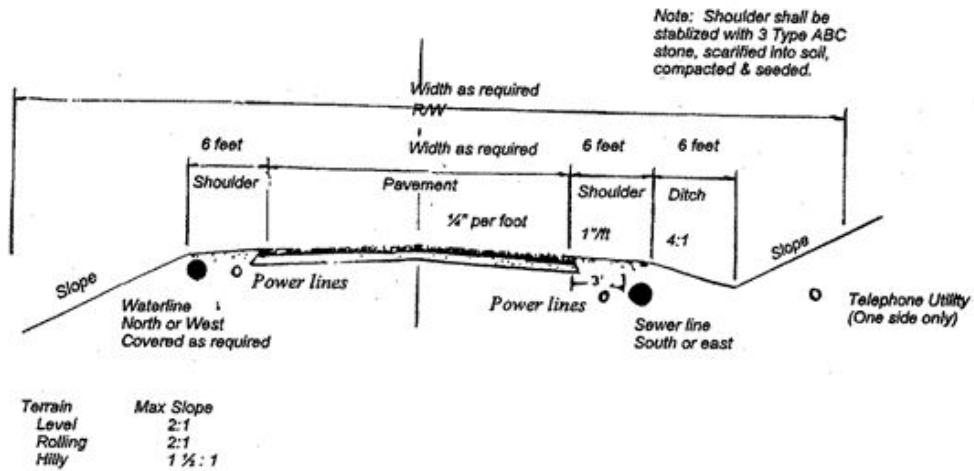
SULLIVAN CITY CODE

Standard Drawing No. 5
Recommended Street Connection
No Curb and Gutter

(An example of 20 foot road)

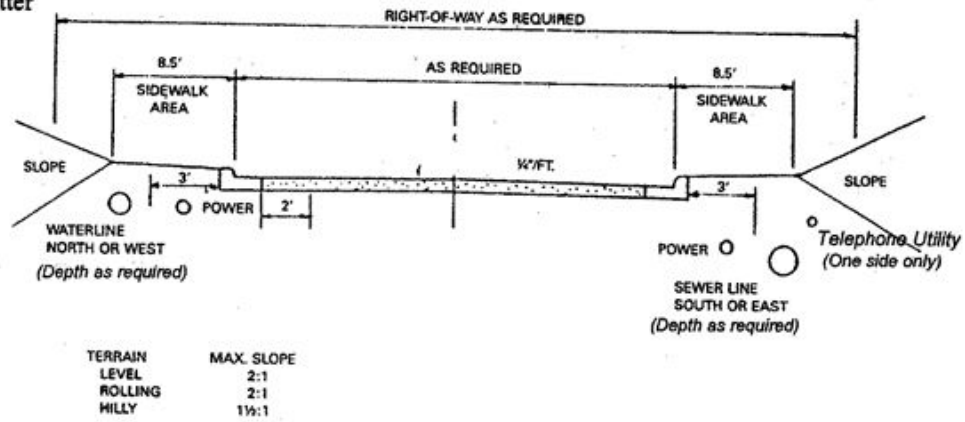


Standard Drawing No. 6
Residential Street
No Curb and Gutter



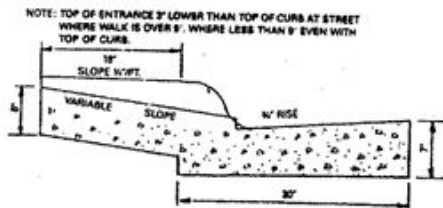
UNIFIED LAND USE REGULATIONS

Standard Drawing No. 7
Residential Street
Curb and Gutter

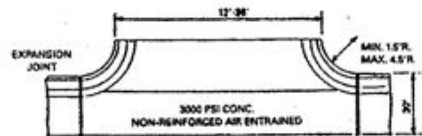


Standard Drawing No. 8
Standard Curb and Gutter

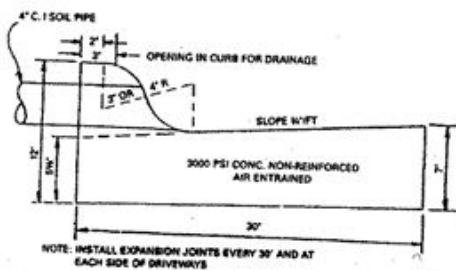
Concrete Driveway and Gutter



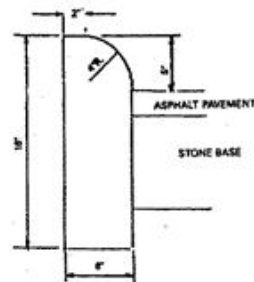
Plan of Driveway Entrance



Curb and Gutter



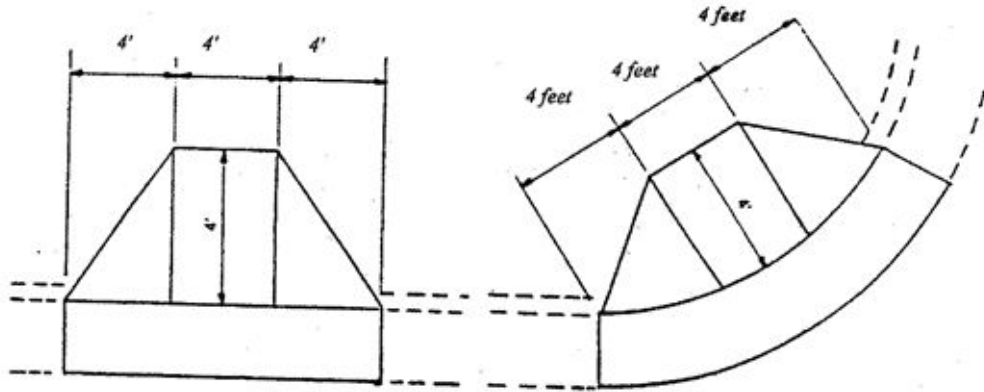
Traffic Island Curb



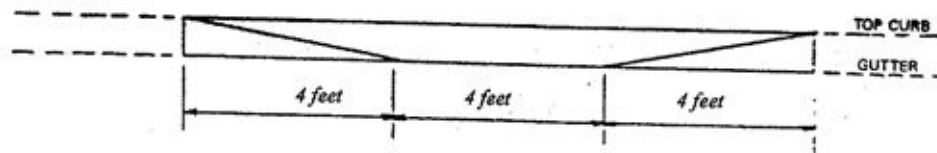
SULLIVAN CITY CODE

Standard Drawing No. 9
Standard Wheel Chair Ramp

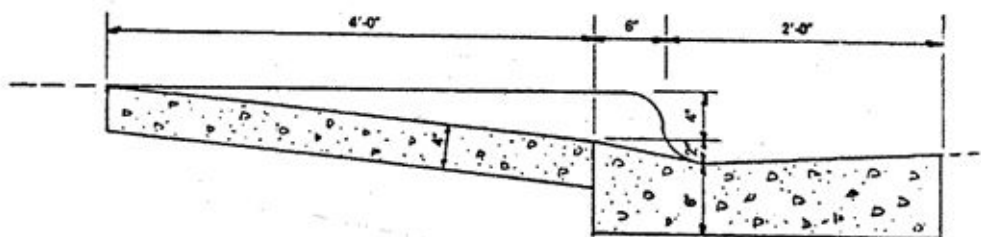
Plan



Front Elevation



Section Thru Ramp

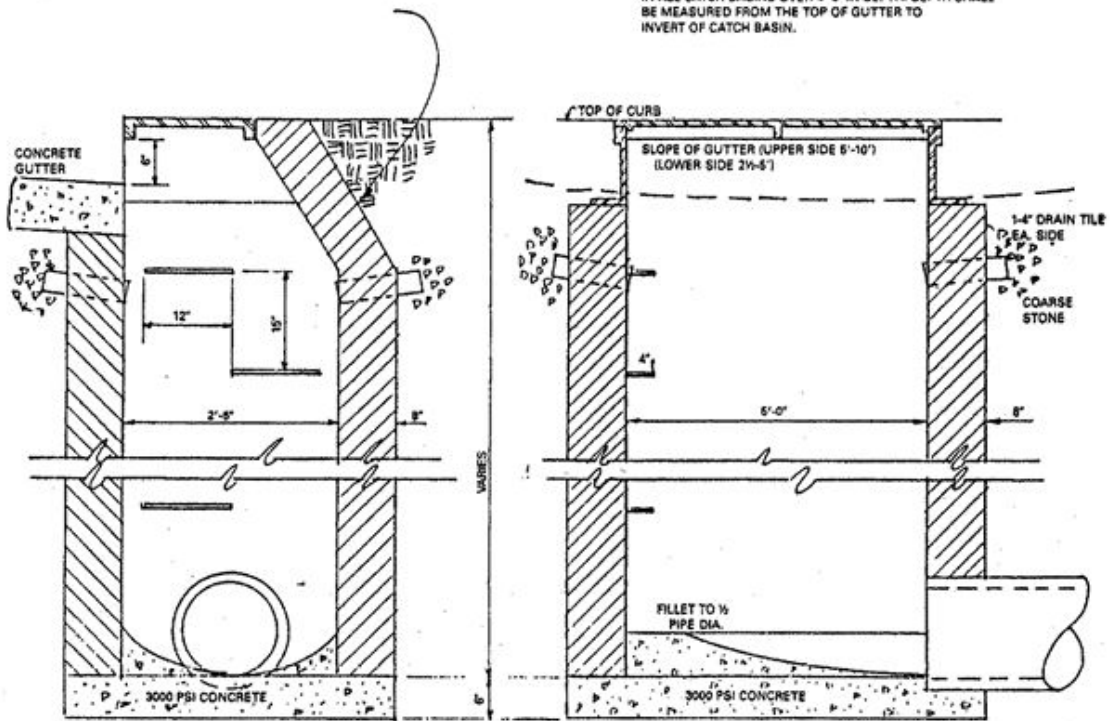


UNIFIED LAND USE REGULATIONS

Standard Drawing No. 10 Standard Catch Basin

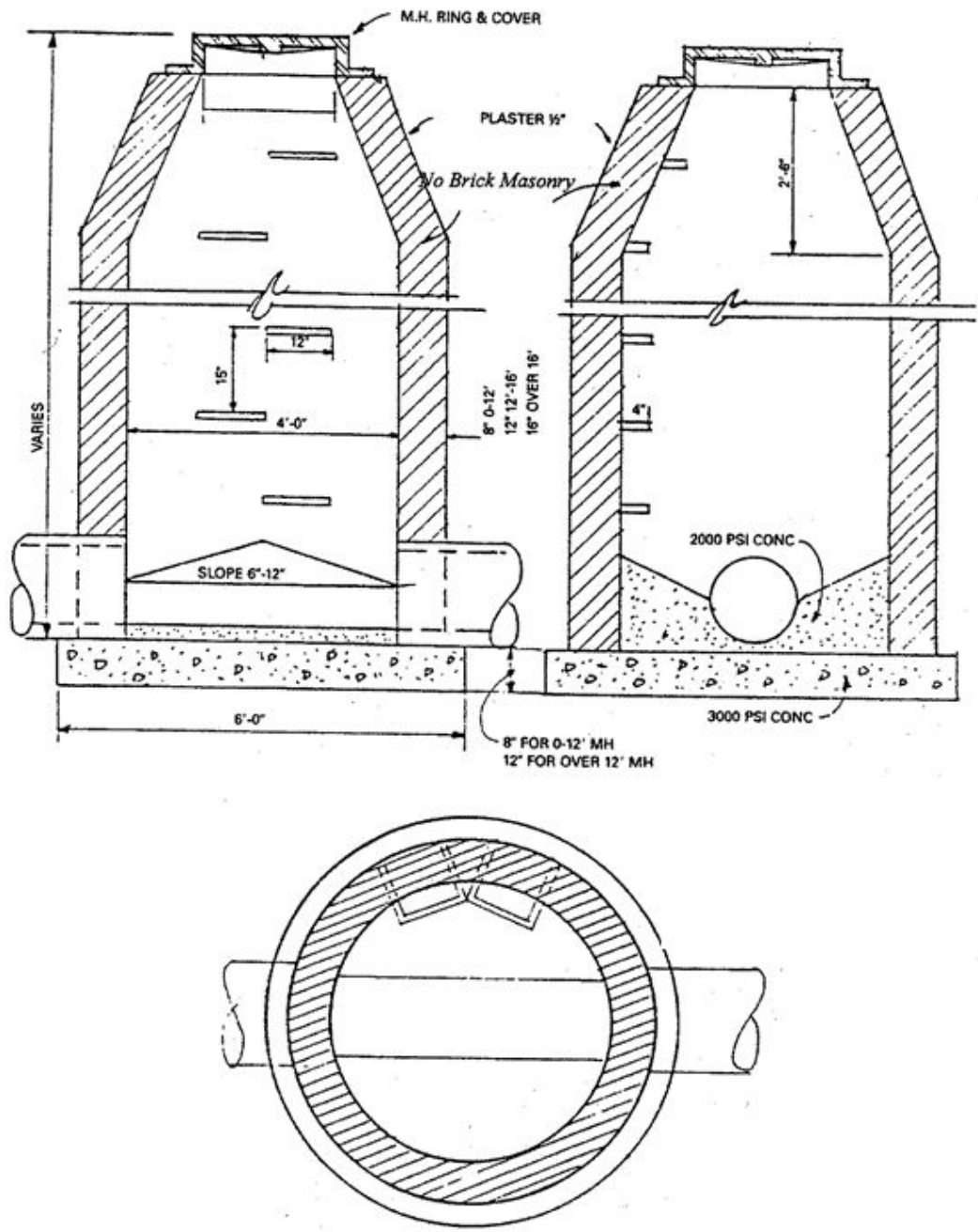
Note: No brickwork

NOTE: CAST IRON MANHOLE STEPS SHALL BE INSTALLED
IN ALL CATCH BASINS OVER 4'-0" IN DEPTH. DEPTH SHALL
BE MEASURED FROM THE TOP OF GUTTER TO
INVERT OF CATCH BASIN.



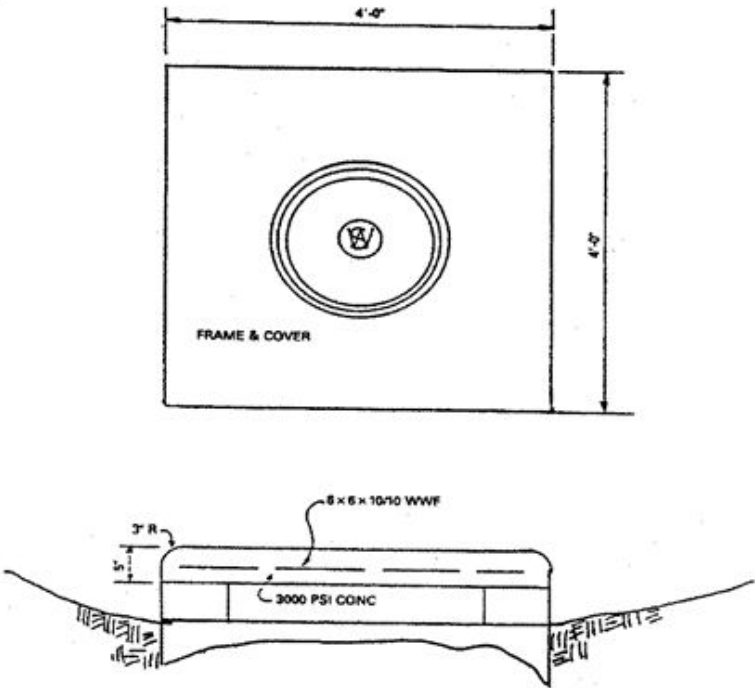
SULLIVAN CITY CODE

Standard Drawing No. 11
Storm Water Manhole

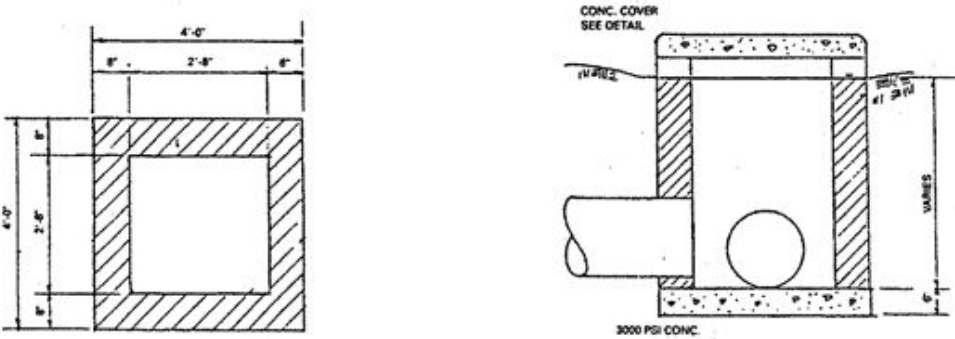


UNIFIED LAND USE REGULATIONS

Standard Drawing No. 12
Yard Inlet Cover

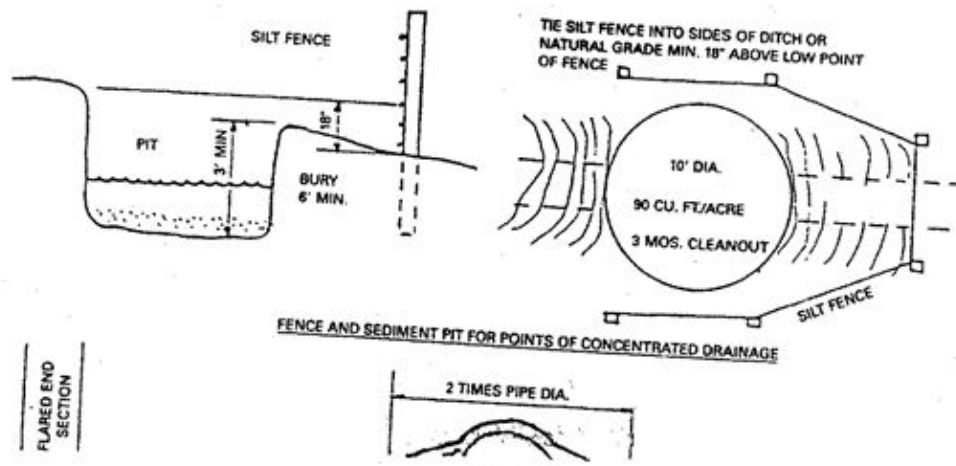


Standard Drawing No. 13
Yard Inlet



SULLIVAN CITY CODE

Standard Drawing No. 14 Sedimentation Control



Standard Drawing No. 15 Optional Residential Curb

