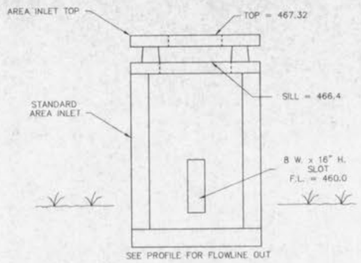
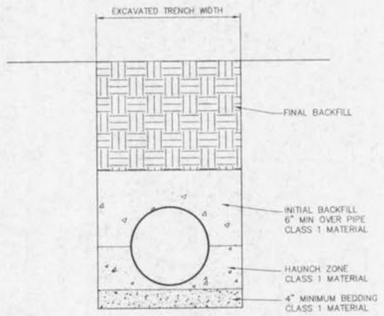


OVERFLOW STRUCTURE DETAIL OS-2

NOT TO SCALE



1. The use of High Density Polyethylene Corrugated pipe A.D.S. N12 or Equal will be permitted as an acceptable alternative to reinforced concrete pipe. Pipe shall meet A.S.T.M. D-2321 and AASHTO M-294-921. Concrete flared end sections and inlet structures shall be required. Pipe must have smooth interior wall and is not to be used inside the Public Right-of-Way.

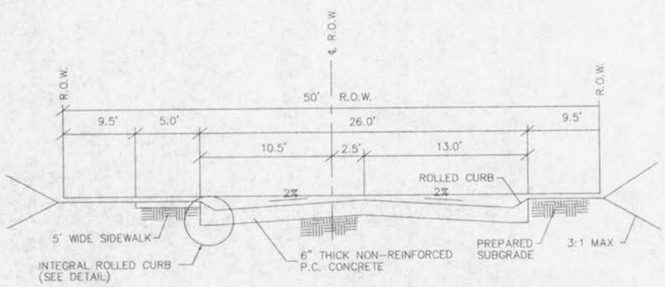
All concrete pipe or HDPE pipe shall be installed with o-ring rubber type gaskets per M.S.D. Standard Construction Specifications or Manufacturer.

2. In typical conditions the minimum trench width is determined by the size of the pipe and the ability to get compaction equipment between the pipe and the trench walls. The minimum trench width should not be less than the outside diameter plus 16 inches or the pipe outside diameter times 1.25 plus 12 inches; whichever is greater. High speed trenchers may enable satisfactory installation of pipe in narrower trenches. Poor insitu soil conditions such as peat, muck, running sands, or expansive clays will require substantially wider backfill as well as deeper foundation and bedding. Trench width and foundation depth should be based on a thorough site investigation.

3. Backfill in the area up to the springline should be carefully placed and compacted to achieve a minimum E value of 1,000 psi as detailed in ASTM D2321. A minimum of 12" of backfill should be placed and compacted above the crown of the pipe. It is typical for trenches to be backfilled entirely with Type I or Type II materials when under pavement.

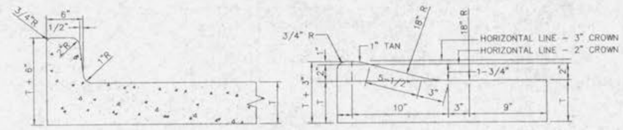
4. Flexible pipe should never be installed in a concrete cradle, as done for rigid pipe in a Class A installation. This type of installation could create concentrated forces at the ends of the cradle when the pipe has deformed.

H.D.P.E. PIPE DETAIL



CONCRETE PAVEMENT DETAIL

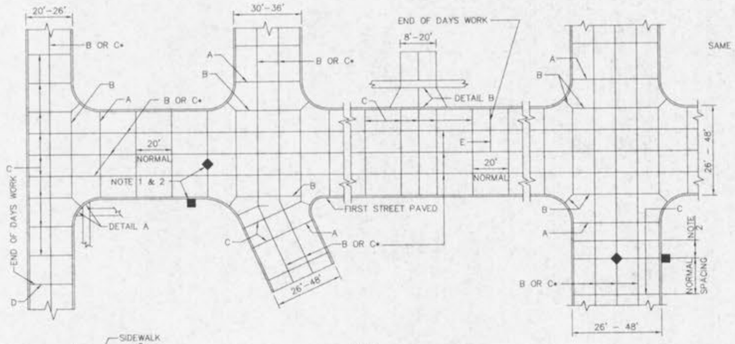
NOT TO SCALE

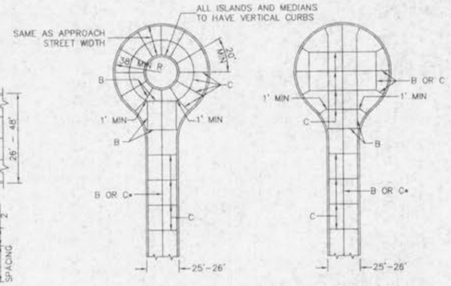


INTEGRAL VERTICAL CURB

INTEGRAL ROLLED CURB

INTEGRAL CURB PAVEMENT TYPICAL SECTIONS AND DETAILS



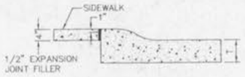


CUL-DE-SAC OPEN CENTER

N.T.S.

CUL-DE-SAC FULLY PAVED

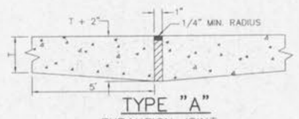
N.T.S.



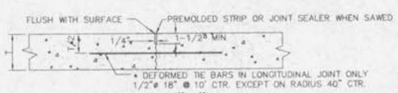
NOTE:
JOINT FILLER MATERIAL SHALL MEET ASTM DESIGNATIONS AS FOLLOWS:
BITUMINOUS TYPE.....ASTM D-944-53
NONEXTRUDING & RESILIENT BITUMINOUS TYPE (FIBER).....ASTM 1751-60T
NONEXTRUDING & RESILIENT NONBITUMINOUS TYPE (RUBBER)...ASTM D-1752-60T

PLAN OF JOINT LOCATION

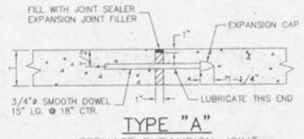
N.T.S.



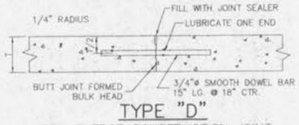
TYPE "A"
EXPANSION JOINT



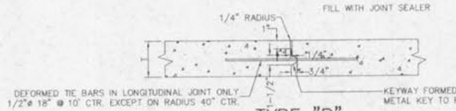
TYPE "C"
SAWED OR PREMOLDED STRIP
LONGITUDINAL OR TRANSVERSE



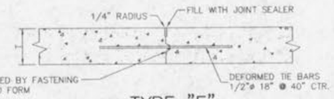
TYPE "A"
ALTERNATE EXPANSION JOINT



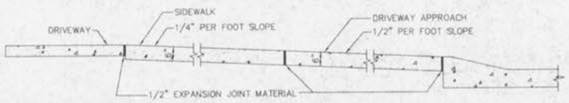
TYPE "D"
TRANSVERSE CONSTRUCTION JOINT



TYPE "B"
LONGITUDINAL
CONSTRUCTION JOINT

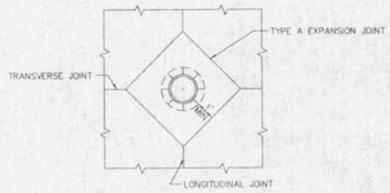


TYPE "E"
TIED TRANSVERSE
CONSTRUCTION JOINT



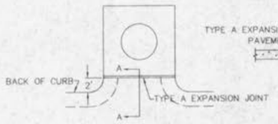
INTEGRAL CURB DETAIL "B"
AT DRIVEWAYS

N.T.S.



MANHOLE BOXING

N.T.S.



INLET JOINT

N.T.S.

SECTION A-A

N.T.S.

NOTES

1) ALL CATCH BASINS SHALL BE SEPARATED FROM THE PAVEMENT AND CURB BY EXPANSION JOINT MATERAIL EXTENDING COMPLETELY THROUGH CURB AND SLAB. MANHOLE CASTINGS WITHIN THE PAVEMENT LIMITS SHALL BE BOXED IN AS SHOWN.

2) WHEN A JOINT FALLS WITHIN 5 FEET OF OR CONTACTS BASIN, MANHOLES OR OTHER STRUCTURES, SHORTEN ONE OR MORE PANELS EITHER SIDE OF OPENING TO PERMIT JOINT TO FALL ON ROUND STRUCTURES AND AT OR BETWEEN CORNERS OF RECTANGULAR STRUCTURES.

3) T = 6" ON LOCAL STREET.

4) T = 7" ON MAJOR OR THRU STREET.

\\ASH\DWG\9600PLUS\9603C\cv.dwg Tue Sep 01 14:32:11 1998 STATION 24 INC