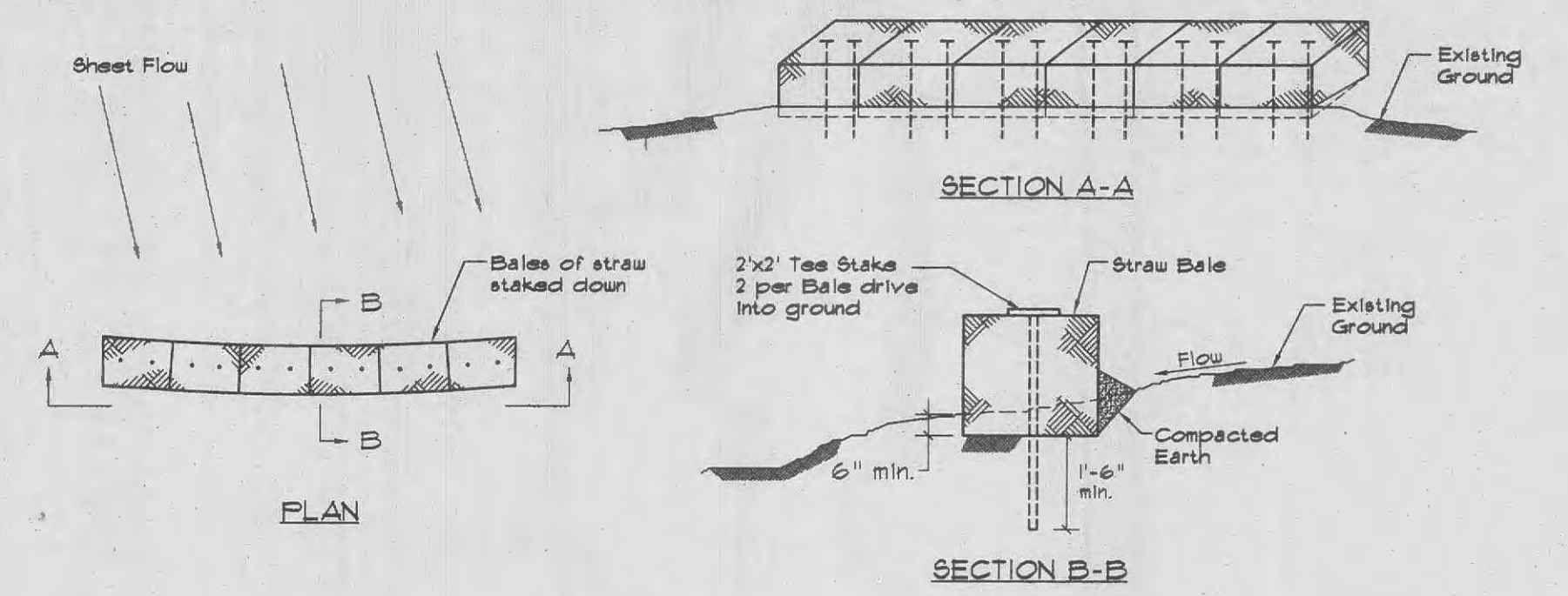
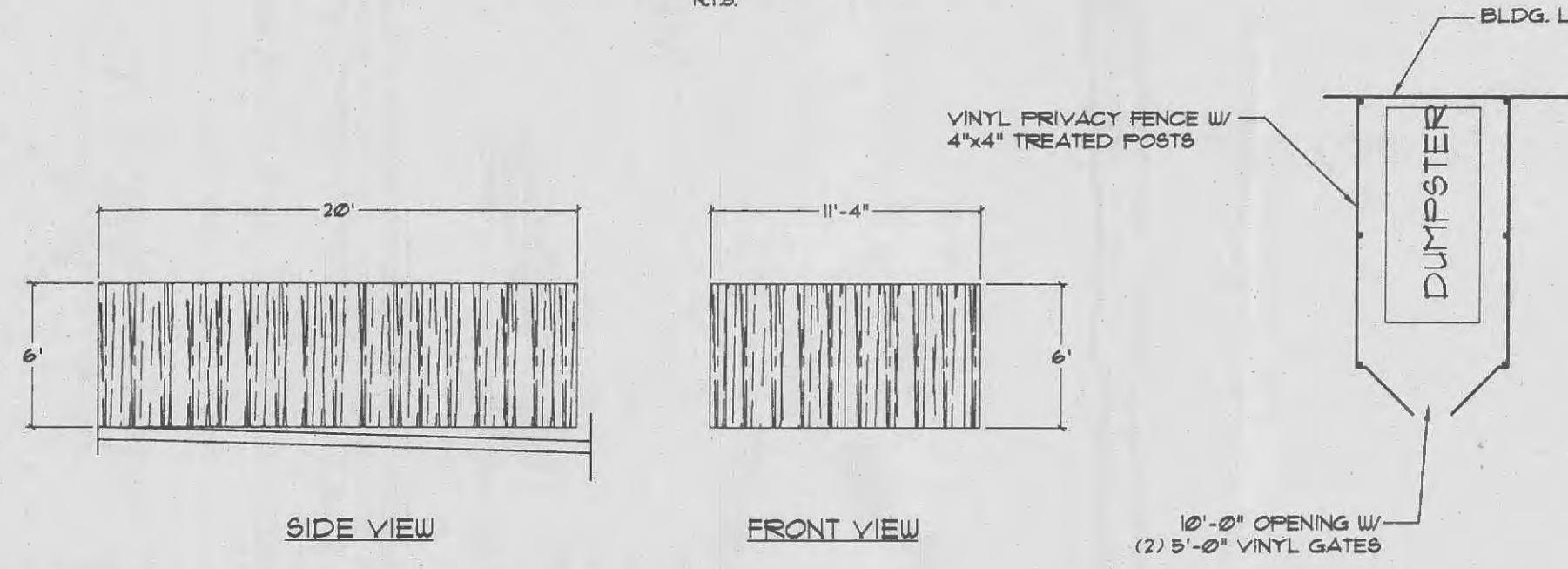


**GENERAL NOTES**

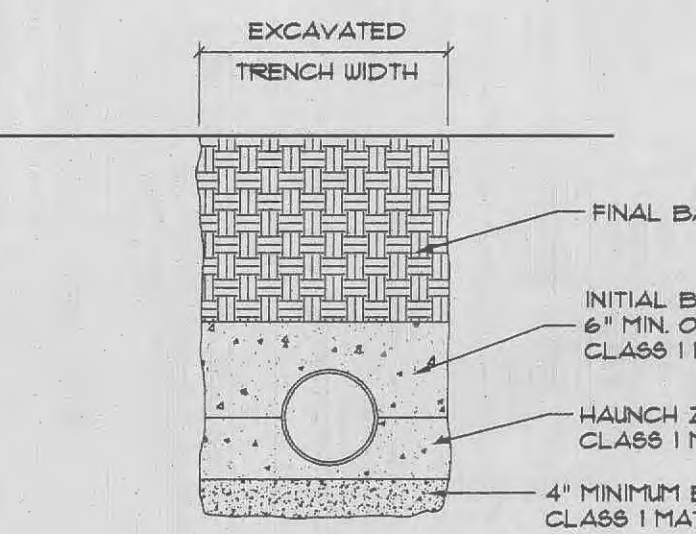
- All entrance sections within the right of way shall be P.C.C. concrete or approved asphaltic concrete pavement.
- Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "Americans with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor, prior to any construction, shall notify the Project Engineer.
- All storm sewers on site are private.
- All downspouts on the south side of the building will tie into underground storm sewer. Downspouts on the north side of the building discharge into ground to yard drains.
- Water meter to be located per Water Company directions.
- Lighting values will be reviewed and approval by the Planning Division illumination attributable to exterior lighting, as measured at the property line, shall not exceed 0.5 foot-candles.
- All utilities will be located underground.



**SILTATION CONTROL DETAIL**  
N.T.S.

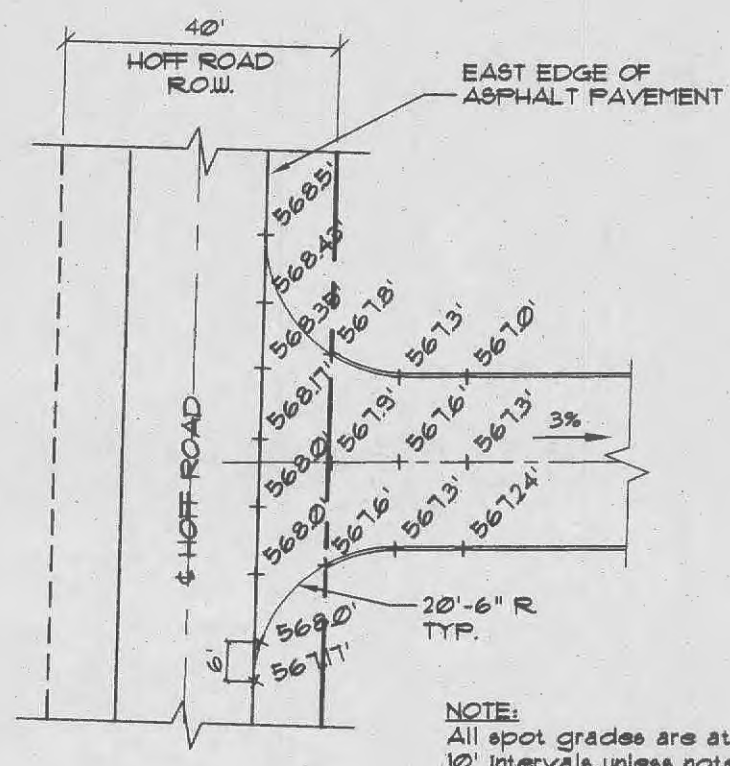


**TRASH ENCLOSURE ELEV. & PLAN VIEW**  
N.T.S.

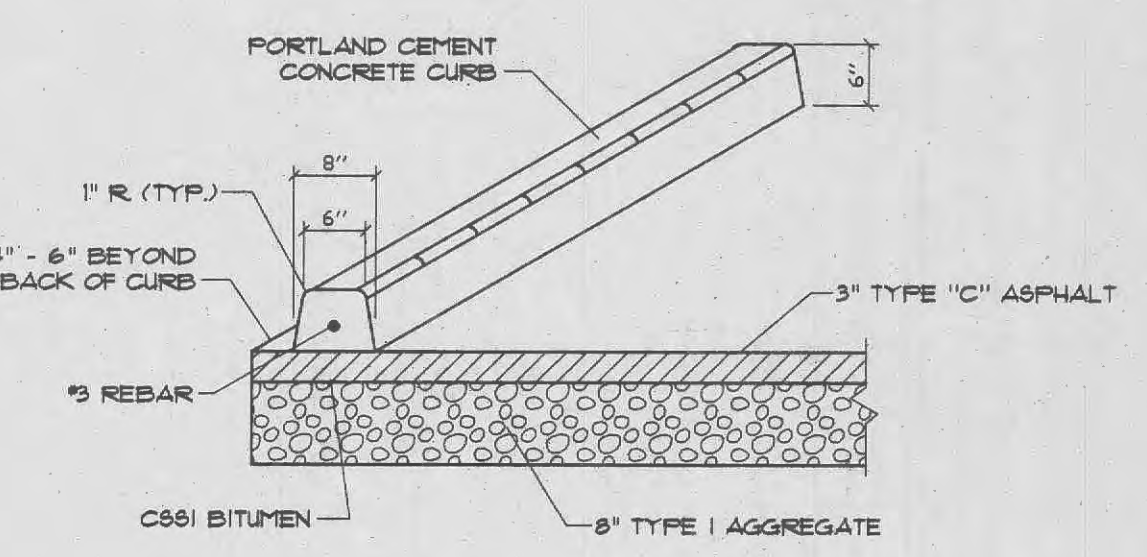


- The use of High Density Polyethylene Corrugated pipe AD&S, N12 or Equal will be permitted as an acceptable alternative to reinforced concrete pipe per City of St. Peters approval. In all areas outside City of St. Peters right-of-way, pipe shall meet A.S.T.M. D-2521 and A.A.S.H.T.O. M-294-S21. Concrete flared end sections and inlet structures shall be required. Pipes must have smooth interior wall and is not to be used inside City of St. Peters Public Right-of-Way.
- All concrete pipe or HDPE pipe shall be installed with o-ring rubber type gaskets per M&D, Standard Construction Specifications or Manufacturer.
- 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 in situ 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.
- Backfill in the area up to the springline should be carefully placed and compacted to achieve a minimum E value of 1000 psi as detailed in ASTM D-2321. 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.
- 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.

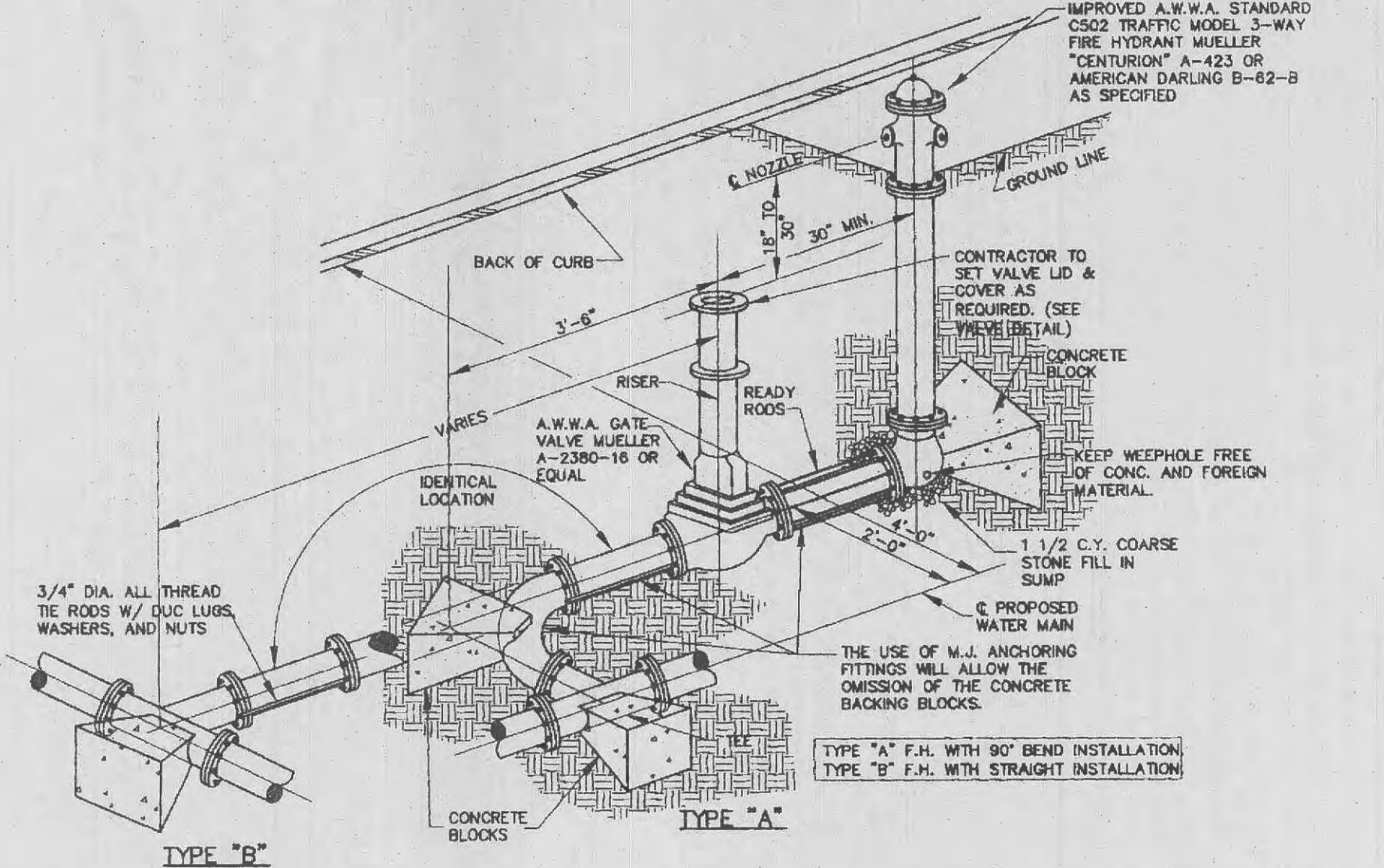
**HD.P.E. PIPE DETAIL**  
N.T.S.



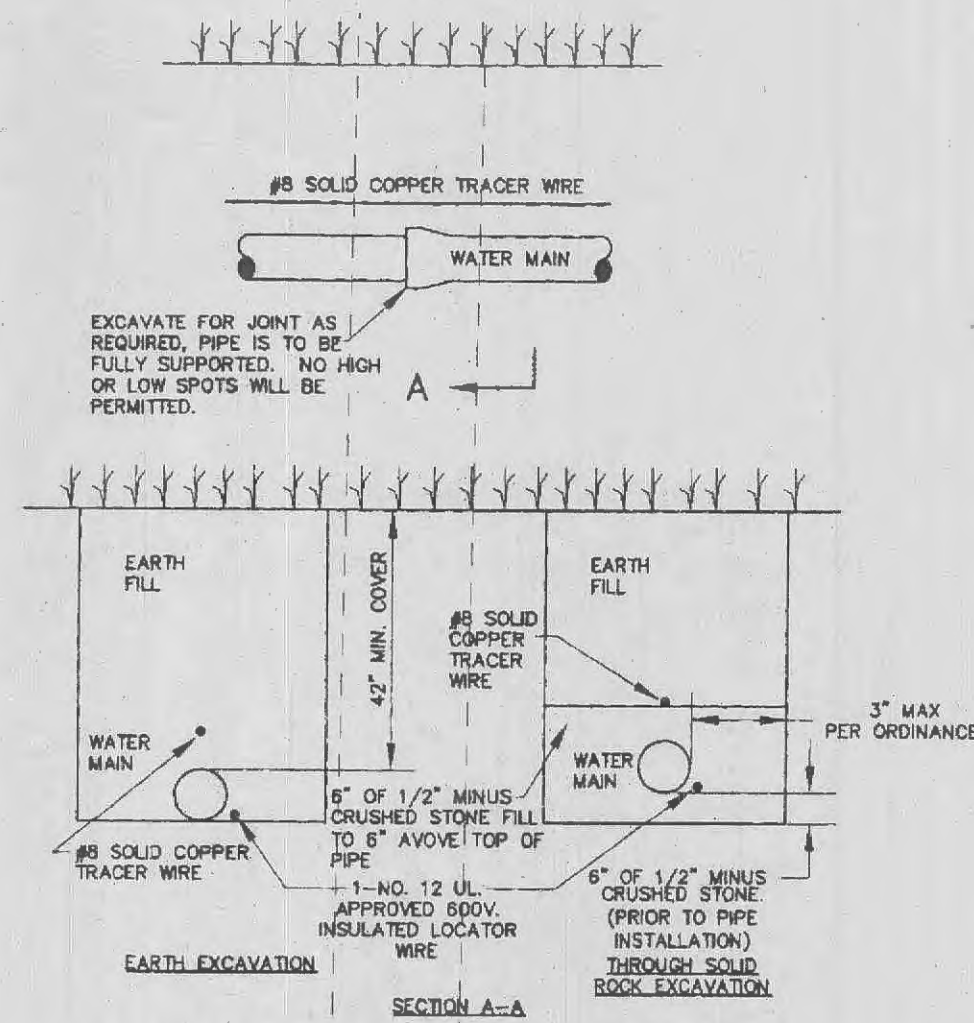
**ENLARGED ENTRANCE DETAIL**  
N.T.S.



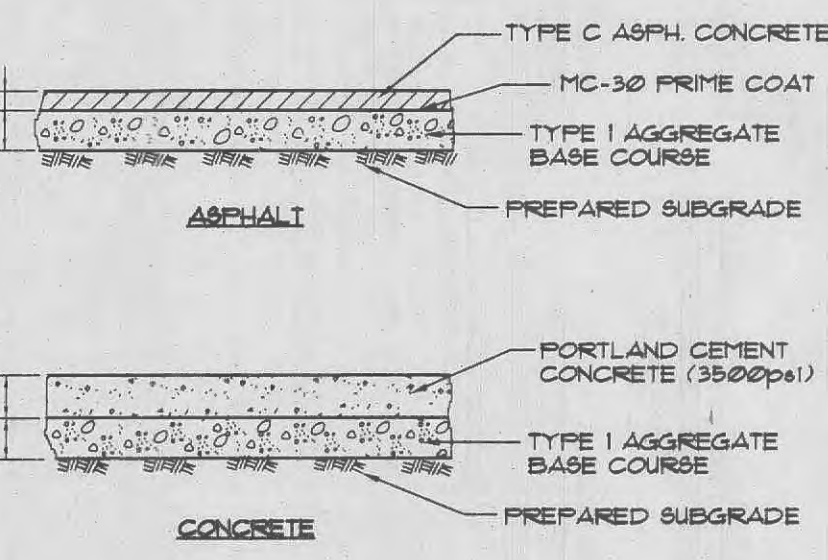
**CONCRETE CURB DETAIL**  
N.T.S.



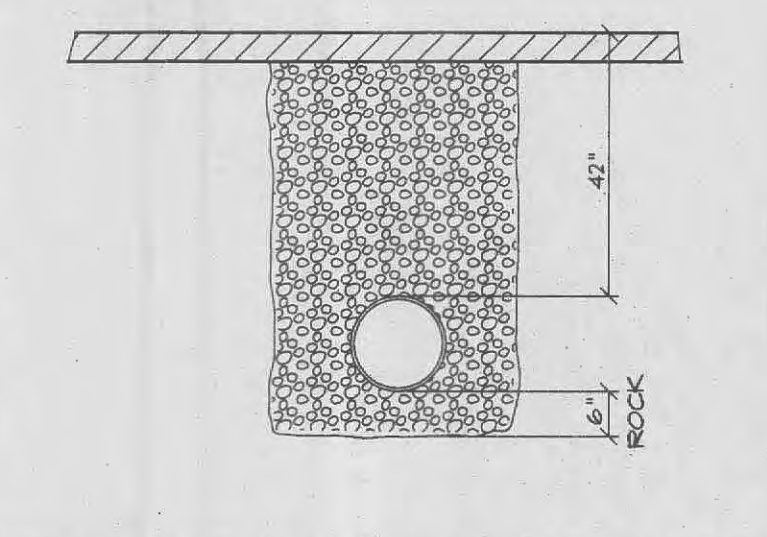
**FIRE HYDRANT DETAIL**  
NOT TO SCALE



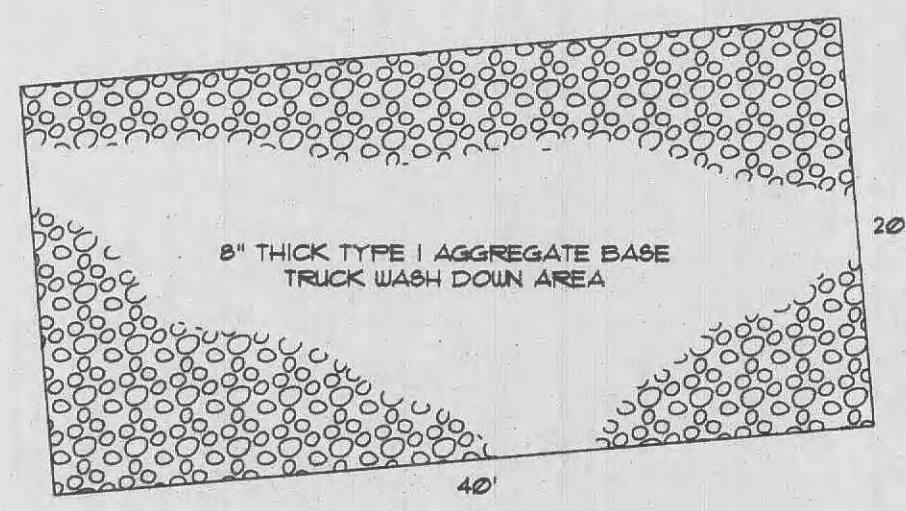
**TYPICAL WATER MAIN INSTALLATION DETAILS**  
NOT TO SCALE



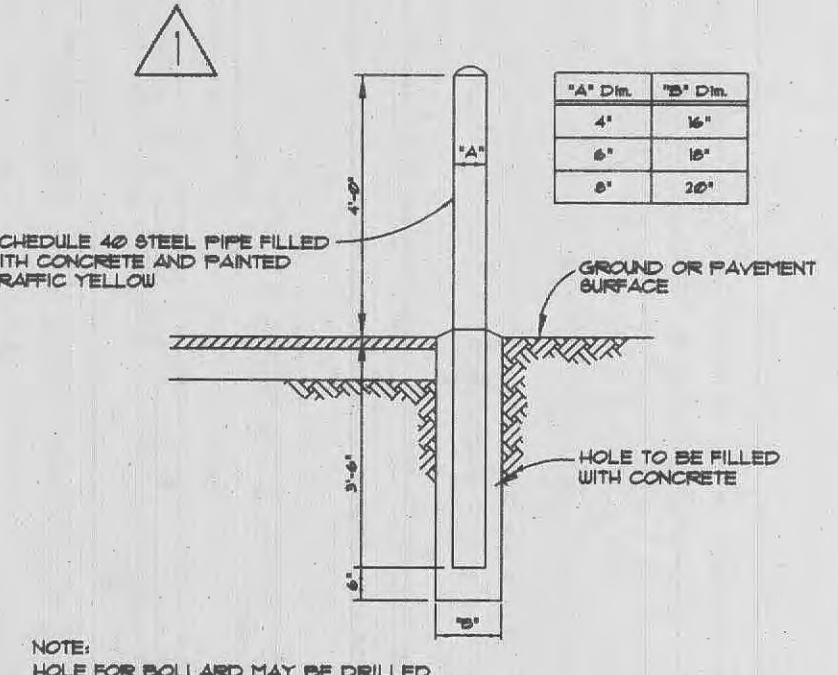
**PAVEMENT DETAILS**  
N.T.S.



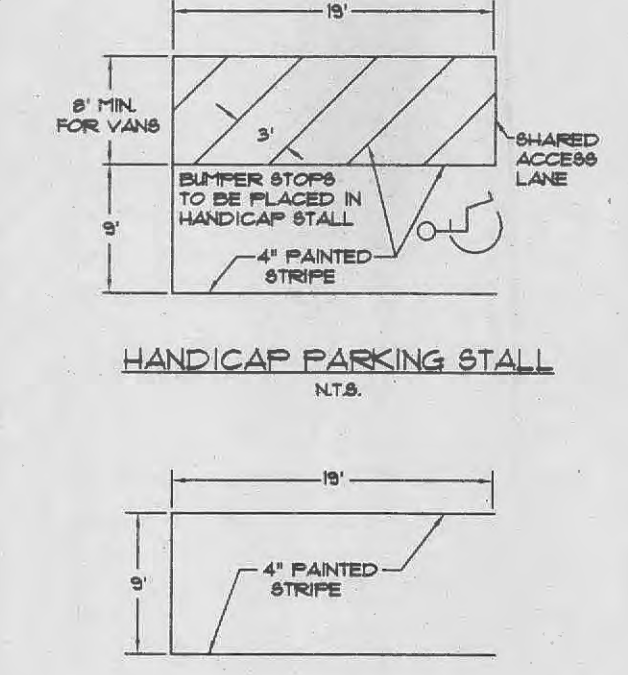
**TYP. WATER/SEWER TRENCH DETAIL UNDER PAVEMENT**  
N.T.S.



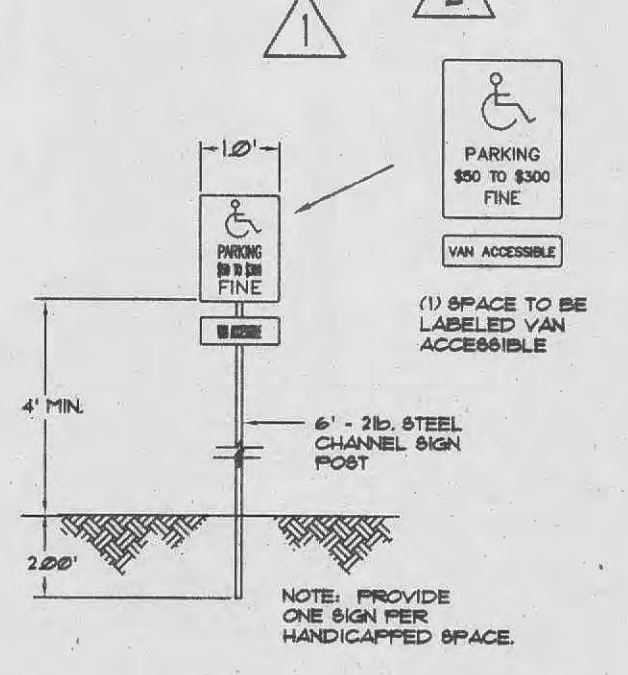
**TEMPORARY CONSTRUCTION ENTRANCE & WASH DOWN AREA**  
N.T.S.



**PIPE BOLLARD**  
N.T.S.



**TYPICAL PARKING STALL**  
N.T.S.



**HANDICAPPED PARKING SIGN**  
N.T.S.

**PART 1 - GENERAL**

- Developer must supply City construction inspectors with soil reports prior to or during site soil testing.
- No slopes shall be steeper than 3 (horizontal) : 1 (vertical).
- The Contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The Contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may, at their option, direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement or in new or existing storm sewers or ditches shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.
- All filled places under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Standard Proctor Test AASHTO T-99.
- All filled places in proposed roads shall be compacted from the bottom of the fill up. A soils engineer concurrent with grading and backfilling operations shall verify all tests.
- Provide granular backfill around sewer and water lines within 10' of edge of pavement curb and in 1 to 1 shear plane of the road, and under pavement.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- Earthwork Contractor shall perform all grading work and excavating and shall place fill and backfill in areas specified.
- Contractors shall visit the site and carefully examine the conditions of the premises to determine the amount of work, equipment and materials required for this branch of work, in order to prepare the site in every respect necessary to construct and place all materials for all new pavement, as shown and called for on the Drawings.
- Earthwork Contractor shall be solely responsible for computing the quantities and types of materials to be excavated and handled and for the amount of the backfilling and filling to be done to establish the lump sum costs for general excavation in order to perform completely all work required as shown and called for on the Drawings.
- Excavation and backfilling for underground utilities and mechanical trades (for pipes, conduits, etc.) will be done under these respective Contracts.
- Earthwork Contractor shall cooperate fully with other trades in all phases of the work so that the work under this heading will be coordinated with the sequence and operations of such other trades.

**PART 2 - SITE PREPARATION**

- At the start of operation, construct all fencing, strip the topsoil of areas to have cut or fill by any approved method.
- Stockpile topsoil on site where directed by Architect and/or his representative.
- Remove all trees, shrubs, and stumps, concrete slabs, asphalt paving and curbs as encountered within the building, paving and all disturbed areas.
  - Within the building area, grub and remove all stumps, roots larger than 3" in diameter and matted roots.
  - Stumps in lawn and paving areas shall have a minimum fill cover of 2'-0".
  - Removed plant material to be disposed of off-site.
- Protect all trees not noted to be removed.

**PART 3 - EXCAVATING**

- Excavate to elevations and contour shown.
- Removal and disposal of unsuitable material will be as directed and approved by the Architect.
- Convey all water pumped or bailed from excavations to a point of discharge in a manner that will not cause a hazard to public health, or damage to public or private property or to work completed or in progress.
- Rock Excavation: When rock is encountered within the limits of the excavation, immediately notify the engineer for purposes of measurement, category and volume of rock excavation. Earthwork Contractor shall continue excavation within limits of Base Bid.

**PART 4 - FILLING AND GRADING**

- Do all excavating, filling, backfilling and grading necessary as shown on the grading plan.
  - Grade not otherwise indicated shall be given uniform levels or slopes between contours.
  - Abrupt changes in slopes shall be rounded.
- Proof Rolling:
  - Before placing fill and after completing excavations to new grades, proof roll the entire construction area with a heavy vibratory roller or other equipment approved by Architect.
  - Remove soft or loose material revealed, and replace with specified compacted material.

**4.2.3 Material for Fill:**

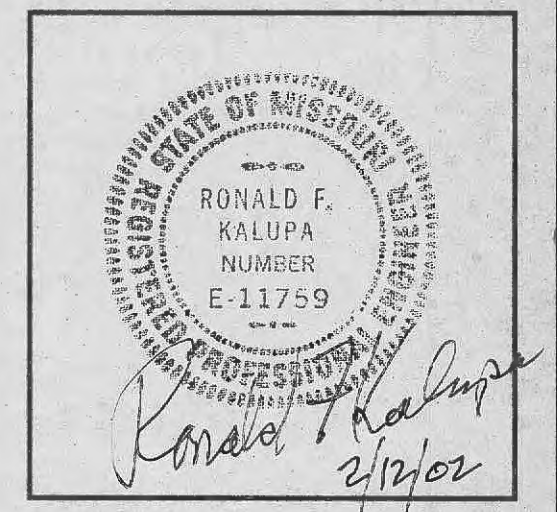
- Mainly clay or granular material containing a minimum of vegetable matter or humus, reasonably free from branches, roots or other organic material and free from all building debris, masonry and stones larger than 5" in diameter. Stones larger than two inches in diameter shall not be permitted in the upper 6" of the fill material. The plasticity index shall not be more than 15.
- Within the Building Area: Earth, clay or granular materials excavated from the site, free of expansive clay or organic matter as approved by Soils Engineer, or off-site material as approved by the Architect. The plasticity index shall not be more than 15. The liquid limit shall be less than 50.
- Fills or embankments shall be constructed at the elevations and to the lines, grades and subgrades indicated on the Drawings and as directed by the Architect.
  - The completed fill shall correspond to the proposed elevations shown on the Drawings or meet requirements of the particular cases.
  - All suitable material removed from the excavations may be used in forming the necessary fill, except otherwise noted.

**PART 5 - COMPACTION**

- Deposit fill in layers not exceeding eight (8) inches.
- Earth compaction shall be accomplished by the use of mobilized earth compaction equipment or other acceptable mechanical compactor.
  - Fill material shall be compacted to 90% of the maximum dry density as determined by Modified Proctor Test, ASTM D - 155.

**EARTHWORK**

NO.	DESCRIPTION	DATE
1	Revisions per City of O'Fallon letter 12/25/01	01/11/01
2	Revisions per City of O'Fallon letter 01/11/01	01/23/01



**STRUCTURAL SYSTEMS, INC.**

DESIGN CONTRACTORS

(314) 966 - 5920

616 South Kirkwood Road  
St. Louis, Missouri 63122

Proposed Building for:

**TRUE & TRUE**

950 Hoff Road  
O'Fallon, MO 63366  
(636) 272-7100

**SPECIFICATIONS & CONSTRUCTION DETAILS**

DRAWN: RRR  
CHECKED: R.E.O.  
SCALE: 1" = 6'-0"  
ISSUE DATE: 01/25/01  
SBL JOB NUMBER: 01-025  
DRAWING NUMBER: **C2 of 11**

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