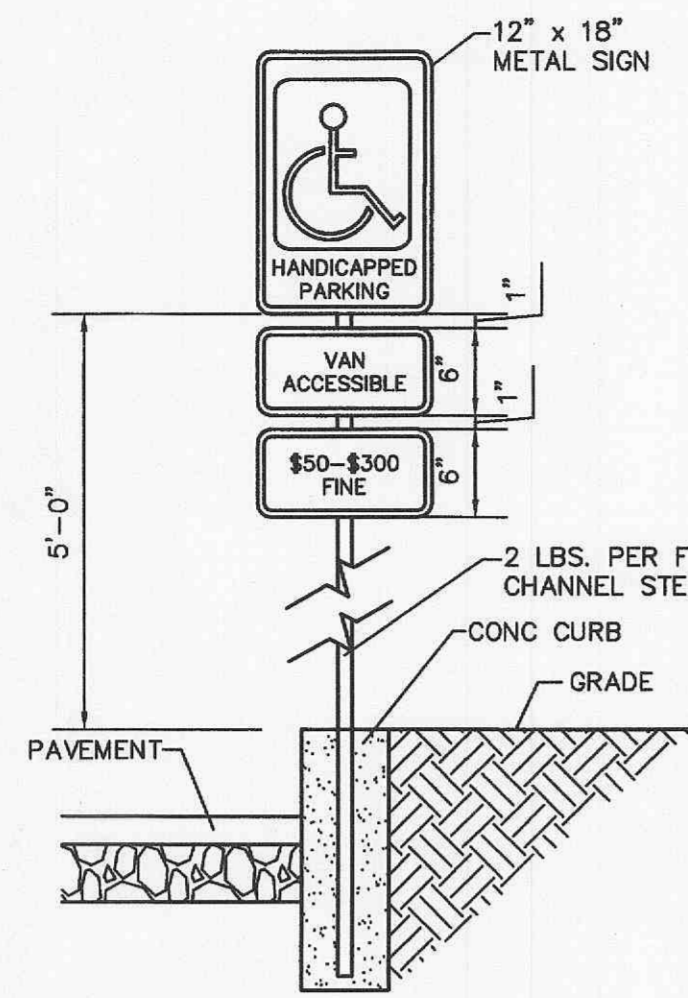


**Construction Notes**

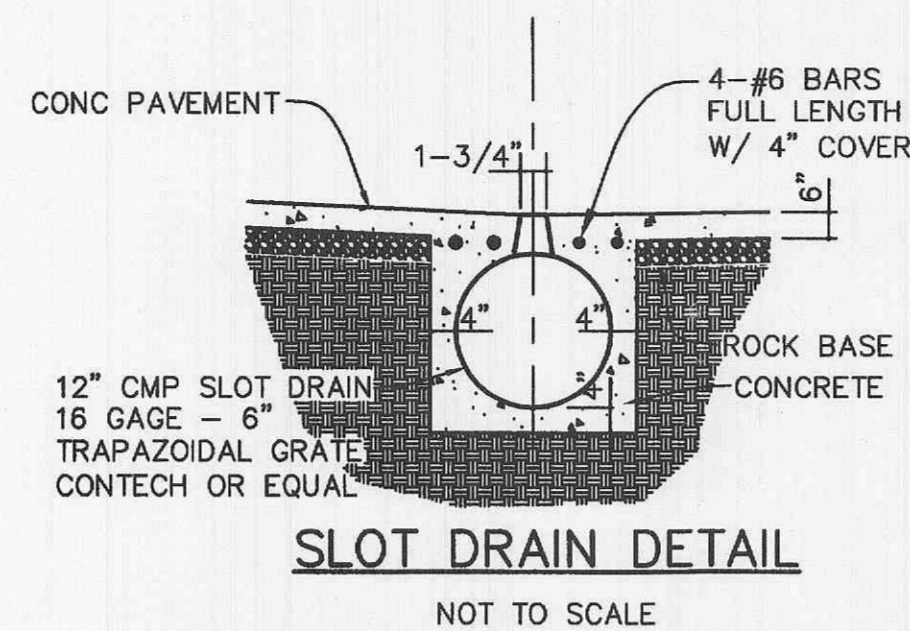
- Rip rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion on and off site.
- Developer must supply City construction inspectors with soil reports prior to or during site soil testing. The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:
  - Maximum dry density
  - Optimum moisture content
  - Maximum and minimum allowable moisture content
  - Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Standard Proctor Test ASSHTO T-99, Method C" (ASTM D-698). Proctor type must be designated on document
  - Curve must have at least 5 density points with moisture content and sample locations listed on document
  - Specific Gravity
  - Natural moisture content
  - Liquid Limit
  - Plastic Limit
- 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 shall be removed immediately. Any depositing of silts or mud in new or existing storm sewers or swales 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 fill placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test ASSHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. The moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- No slopes shall be steeper than 3 (horizontal) to 1 (vertical).
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American 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. (Ensure at least one 8' wide handicap access aisle is provided and curb ramps do not project into handicap access aisle).
- Brick shall not be used in the construction of storm sewer structures.
- Provide a marking on the storm sewer inlets. The City will allow the following markers and adhesive procedures as shown in the label below or an approved equal by Almetek Industries. Peel and stick adhesive pads will not be allowed.
 

Manufacturer	Size	Adhesive	Style	Message (Part #)	Website
ACP International	3 7/8"	Epoxy	Crystal Cap	No Dumping Drains To Waterways (SD-W-C)	www.acpinternational.com
DAS Manufacturing, Inc.	4"	Epoxy	Standard Style	No Dumping Drains To Stream (#SD5)	www.dasmanufacturing.com
- Joints shall be gasketed O-ring type.
- Provide 5/8" dia. trash bar for all inlets.
- Brick shall not be used in the construction of sanitary sewer structures.
- Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City standards.
- All sign locations and sizes must be approved separately through the Planning Division.
- All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City and MoDOT). Signs designating street name shall be on the opposite side of the street from traffic control signs.
- Graded areas that are to remain bare for over 2 weeks are seeded and mulched. (DNR requirement).
- Ensure all erosion control systems are inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-hour inch of rain or more.
- HDPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field test.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.
- All trenches under, or adjacent to proposed pavement shall be backfilled to subgrade elevation with compacted 3/4" minus crushed limestone. Crushed limestone shall be compacted to 90% density as determined by the Modified Proctor Test. All other trenches within the road right of way shall be backfilled with suitable earth embankment material free from rubbish and debris and lumps, clods or rocks larger than 2 inches placed in 6" layers and compacted to the same density as above. Trenches not in road right-of-way or under or adjacent to pavement may be backfilled with earth embankment material defined above, jetted and neatly rounded to allow for subsequent settlement, unless otherwise directed by the Engineer.
- All concrete pipe shall be reinforced concrete pipe and meet current A.S.T.M. Specification C-76 and shall be Class III unless otherwise noted on profiles.
- The City of O'Fallon shall also be contacted for utility locates under its maintenance responsibility. This may include water, sanitary, storm, and traffic locates.
- All utilities will be located underground.
- Traffic control is to be per MODOT or MUTCD, whichever is most stringent.
- Provide a 0.20 drop through all structures and manholes.
- Fire Hydrant to be satisfactory to Cottleville Fire Protection District meeting ANSI/AWWA C-502, latest edition.
- Fire Hydrant shall have not less than two 2 1/2" outlets and one 4 1/2" outlet, a 5 1/2" valve, a 6" barrel and shall be of the breakaway design, frost free with chain, left hand open design and have National Standard Threads.
- Fire Hydrant shall be provided with a control valve in the hydrant connection such that the hydrant can be removed from service without shutting off water supply to other fire hydrants.
- There shall be no obstruction, i.e., plantings, bushes, trees, signs, light standards, mailboxes, etc. within six (6) feet of any fire hydrant.

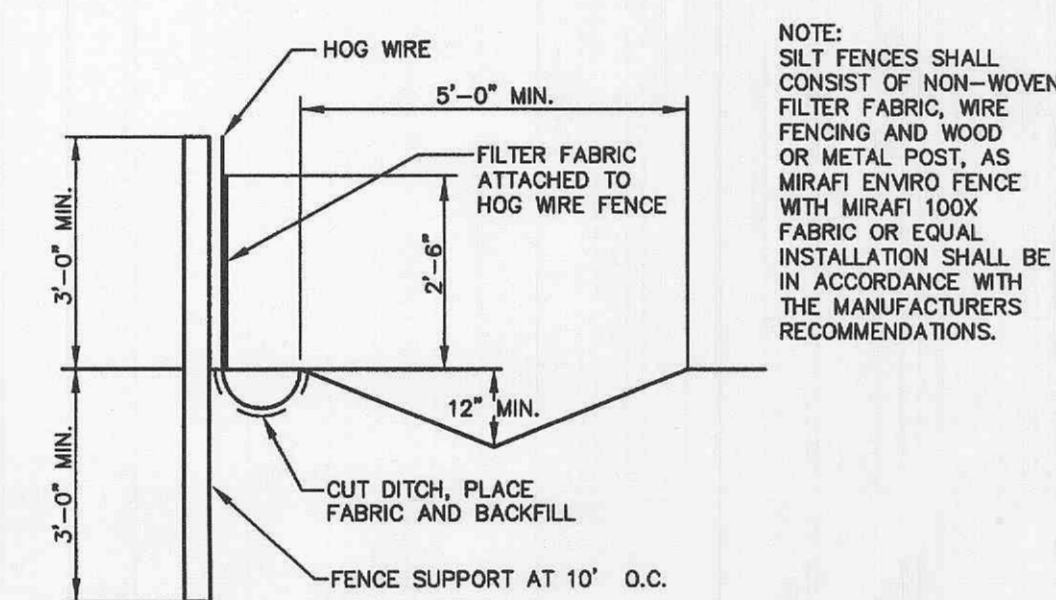


**HANDICAPPED SIGN**  
NOT TO SCALE

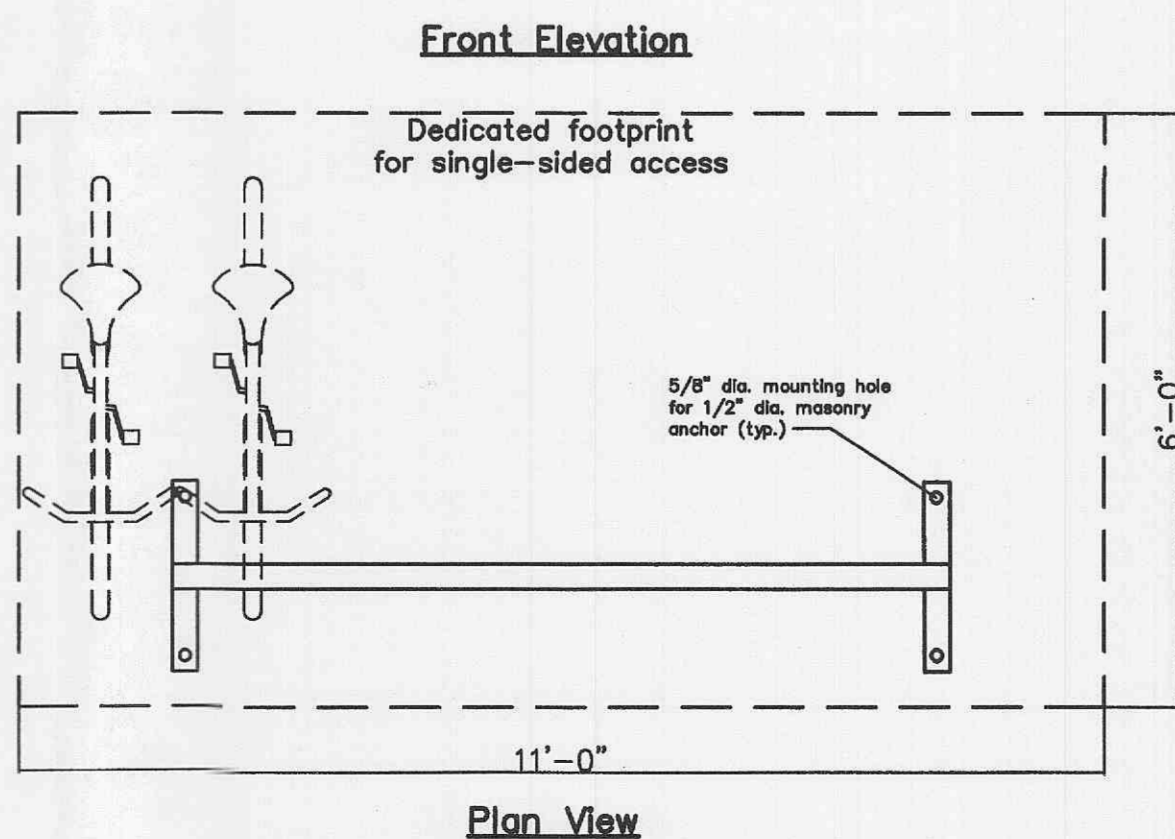
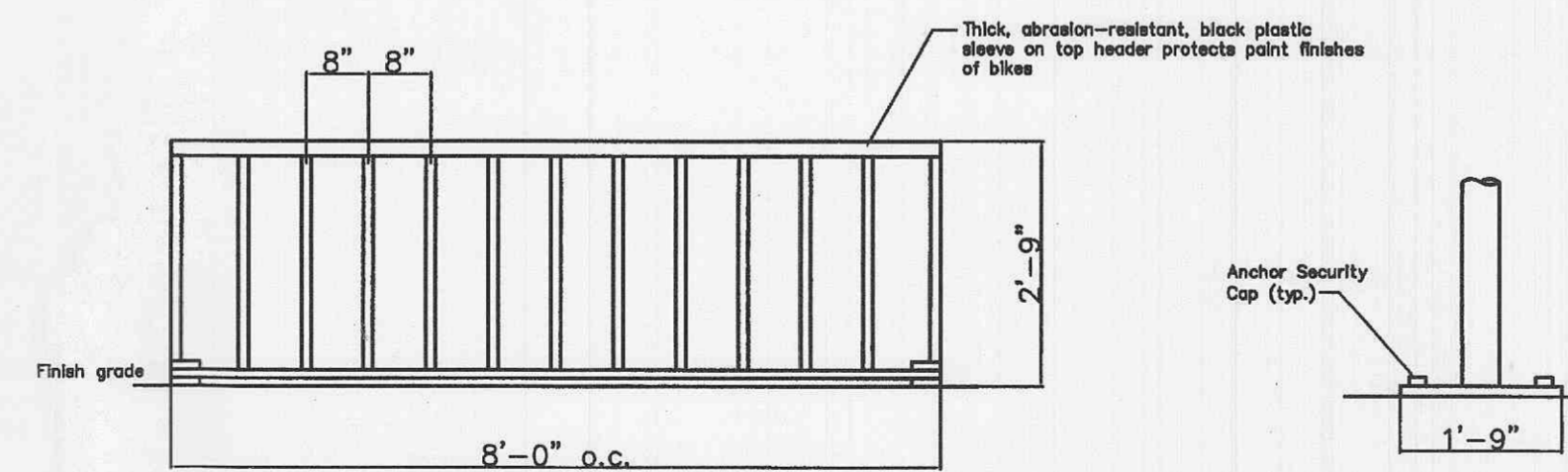
STANDARD SIGN FACE, STANDARD HIGHWAY DEPARTMENT, OR CITY STREET DEPARTMENT GAUGE, LETTERS AND BORDERS. THE GALVANIZED U CHANNEL POST 7'-0" LONG, SET 3'-0" INTO GRADE, SET BOTTOM OF "PARKING" SIGN 4'-0" ABOVE FINISHED GRADE. USE VAN ACCESSIBLE SIGN ONLY WHEN APPLICABLE.



**SLOT DRAIN DETAIL**  
NOT TO SCALE



**SILTATION CONTROL FENCE & SWALE**

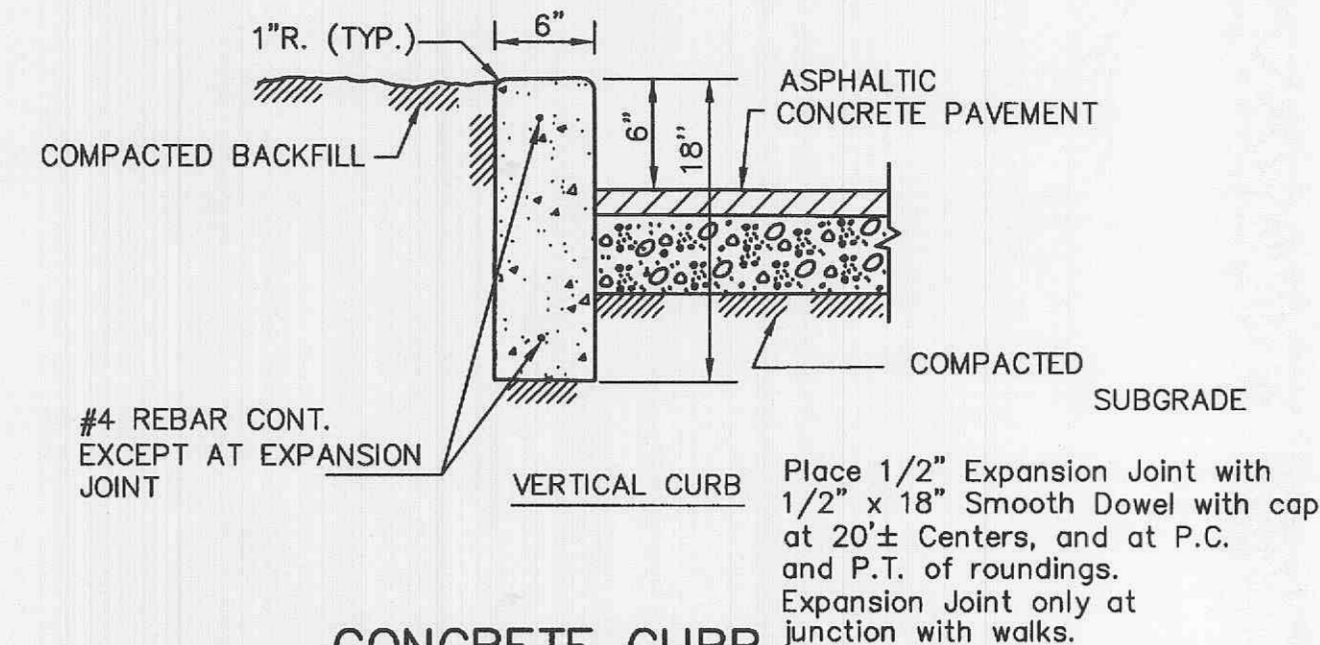


**ORDERING INFORMATION**

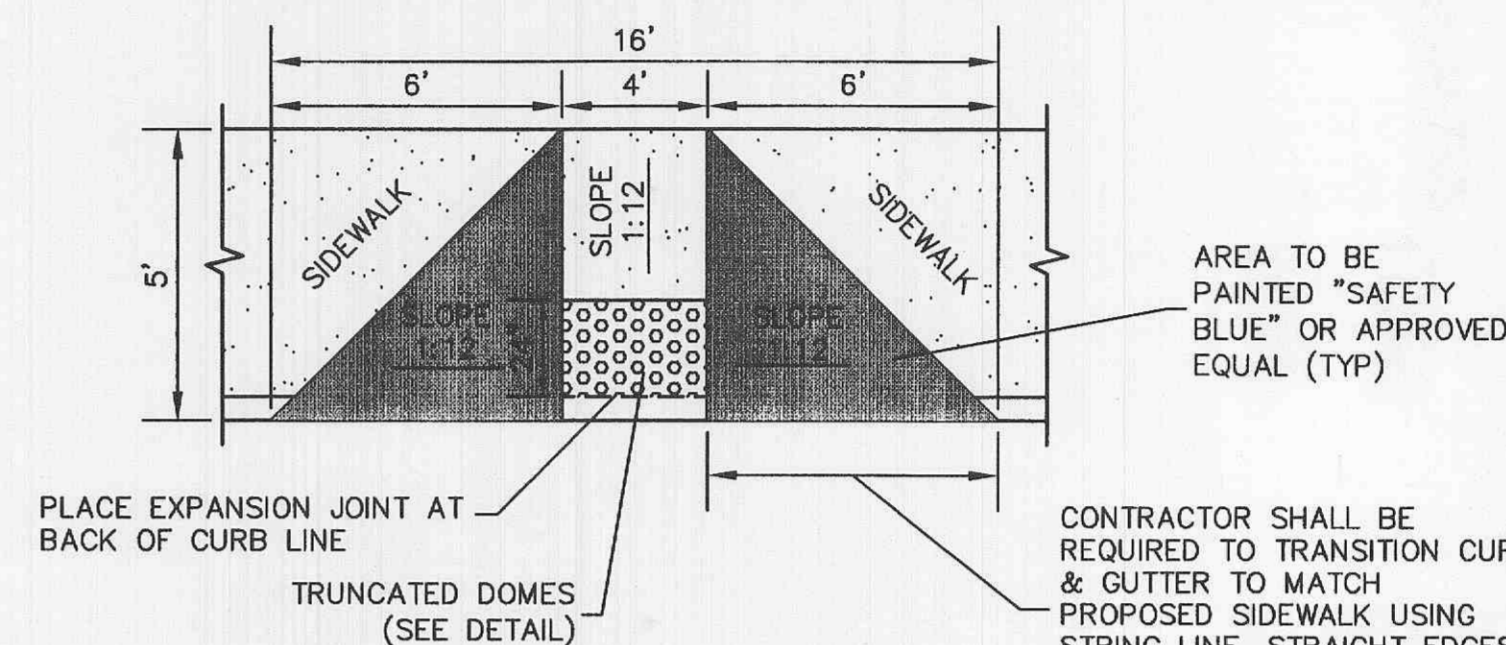
Bike-Standard-Rail  
Moderate Security Bike Racks

Model #	Length (o.c.)	Bike Capacity	1 side	2 side
BSR-4.8	2'-8"	3	6	
BSR-8.8	5'-4"	5	10	
BSR-12.8	8'-0"	7	14	
BSR-16.8	10'-8"	9	18	
BSR-20.8	13'-4"	11	22	
BSR-24.8	16'-0"	13	26	

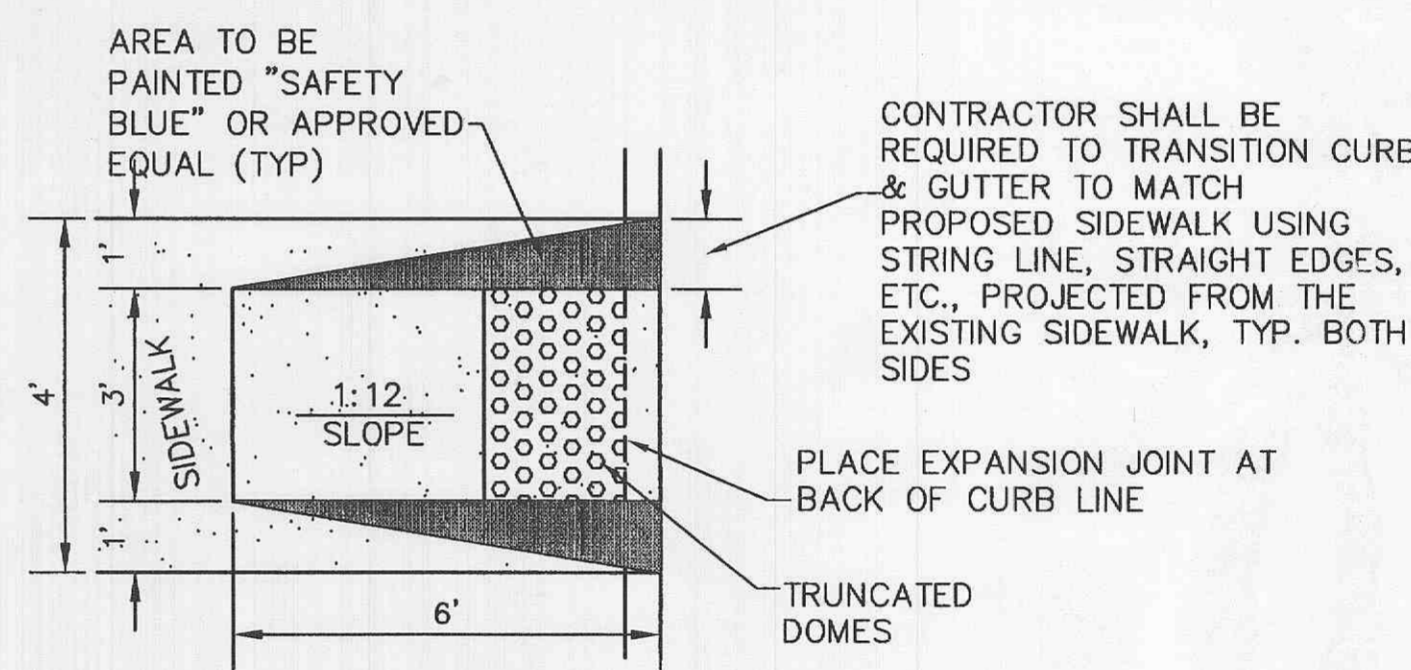
**BIKE RACK DETAIL (OR EQUIVALENT)**



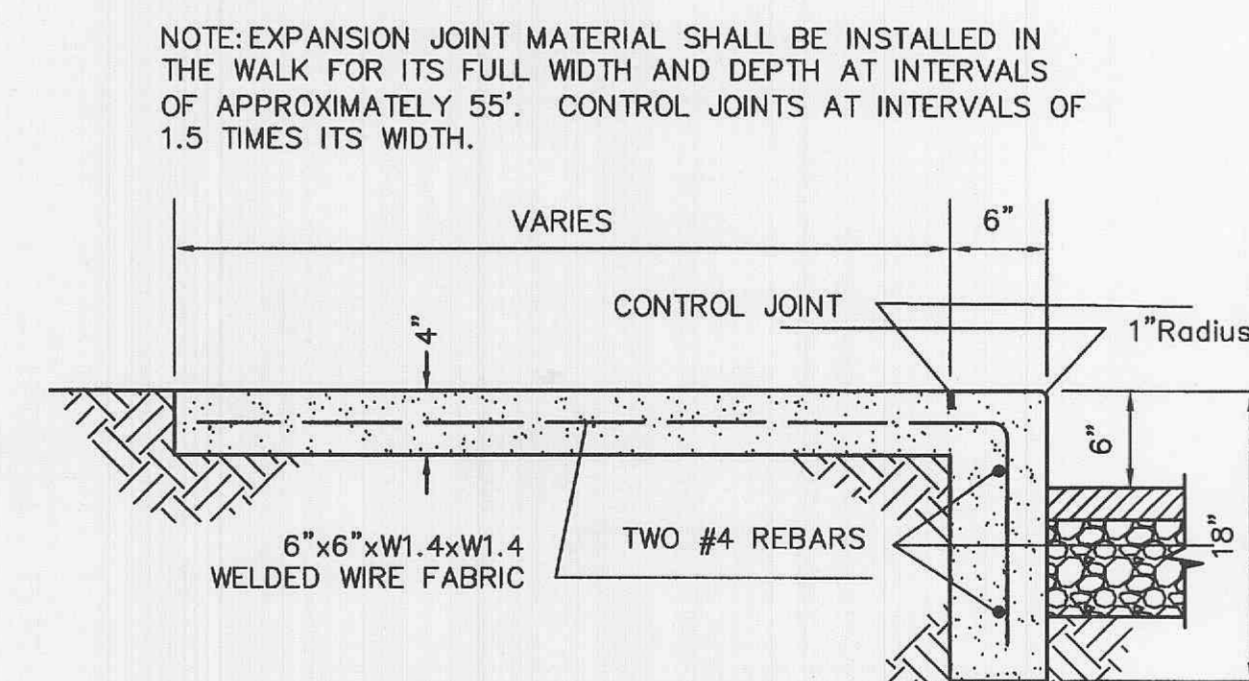
**CONCRETE CURB**  
NOT TO SCALE



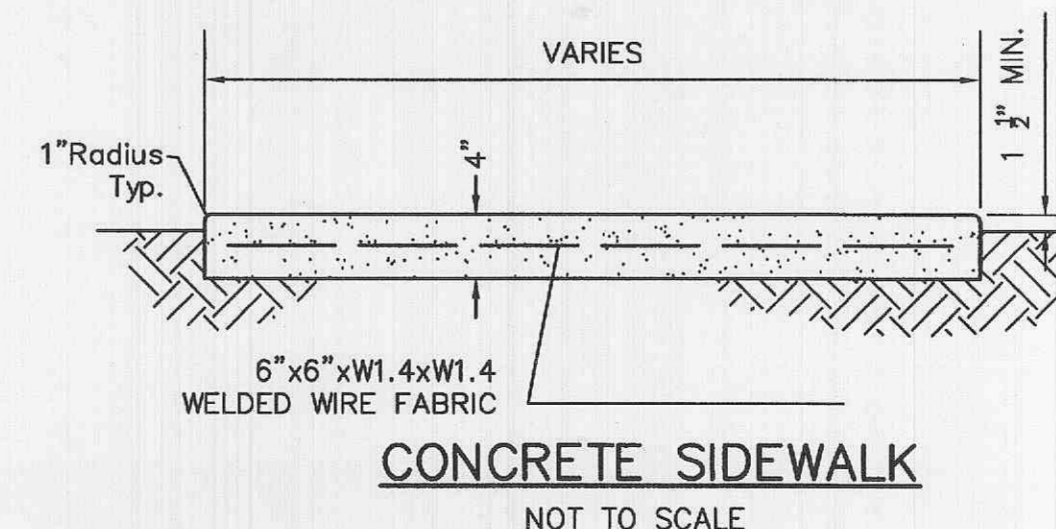
**Typ. Handicap Ramp Plan**  
NOT TO SCALE



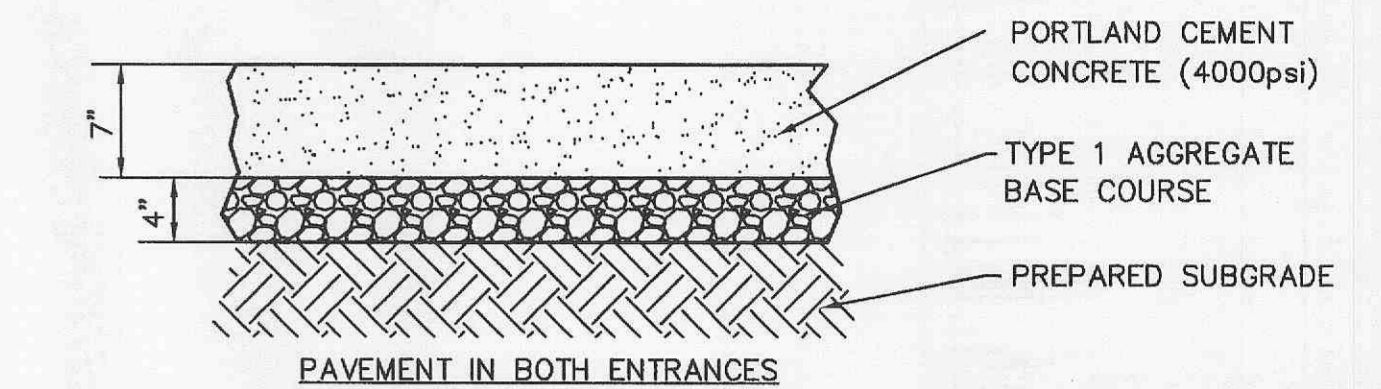
**Typ. Handicap Ramp Plan**  
NOT TO SCALE



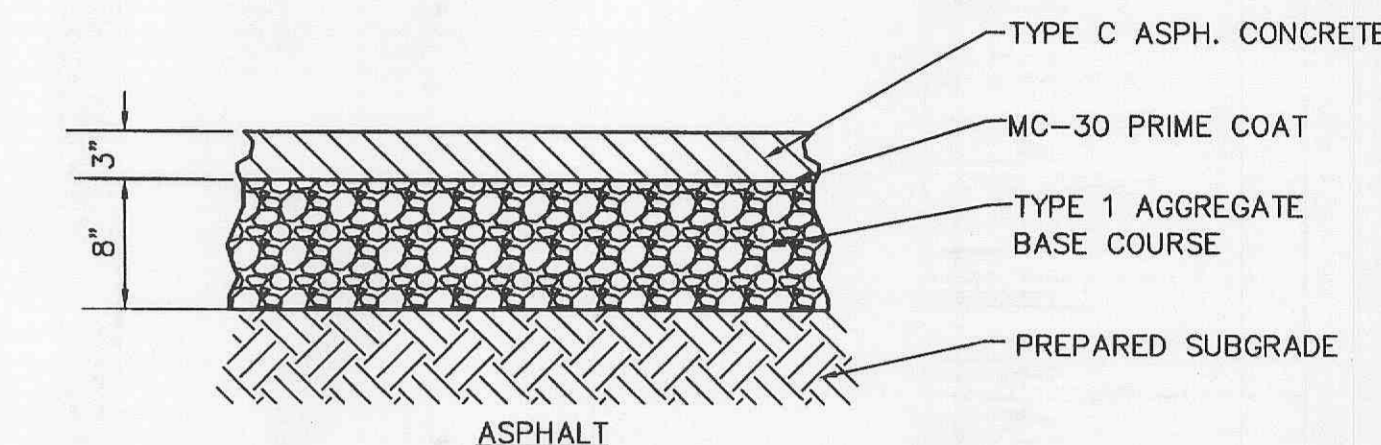
**INTEGRAL SIDEWALK/CURB**



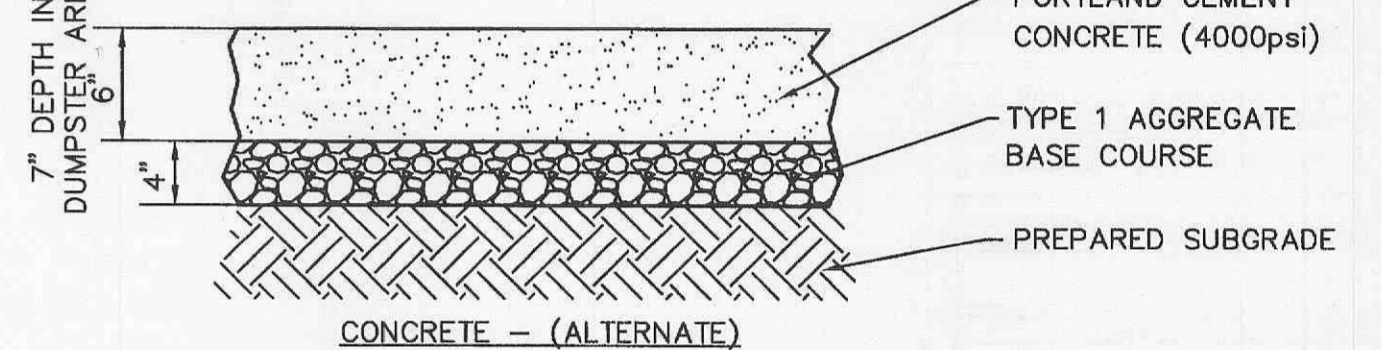
**CONCRETE SIDEWALK**  
NOT TO SCALE



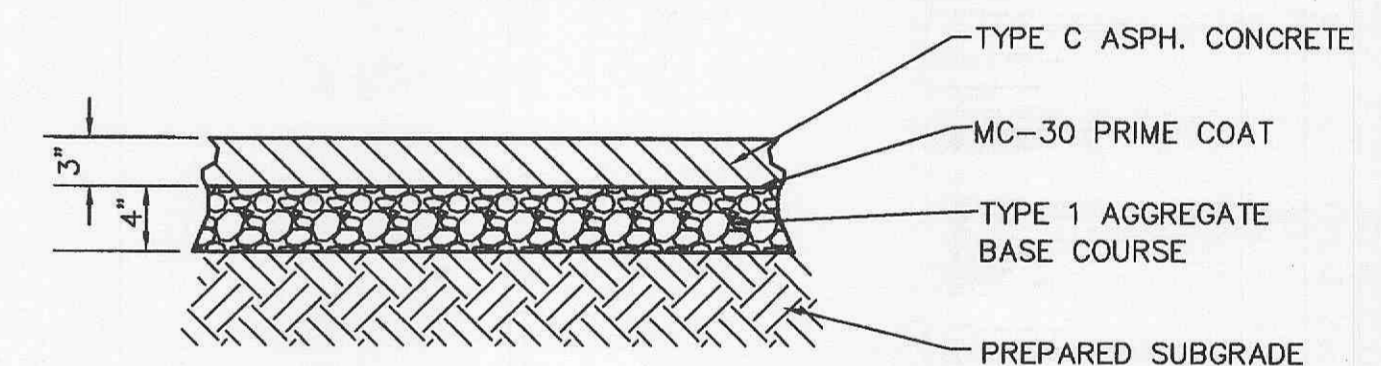
**PAVEMENT DETAILS**  
NOT TO SCALE



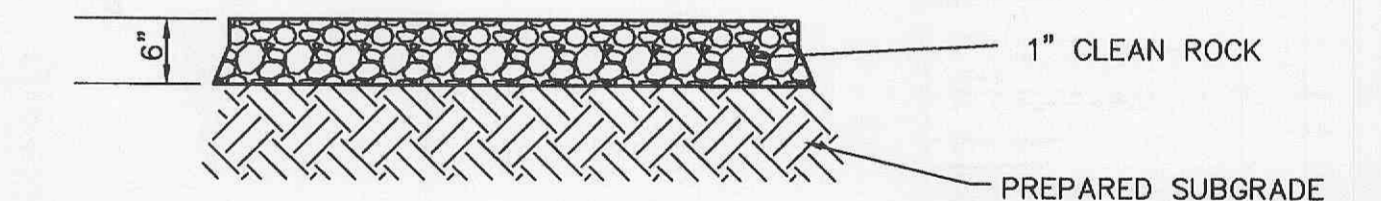
**PAVEMENT DETAILS**  
NOT TO SCALE



**PAVEMENT DETAILS**  
NOT TO SCALE



**ASPHALT MULTI-USE TRAIL**  
NOT TO SCALE



**TRUCK WASHDOWN AREA**  
NOT TO SCALE

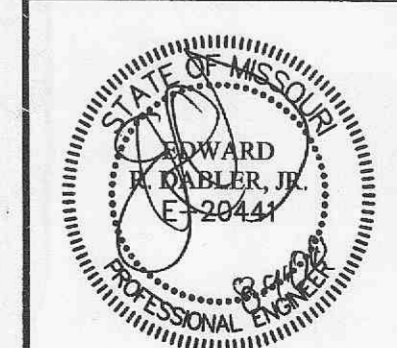
The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

NO.	REVISIONS

**CONSTRUCTION NOTES / DETAILS**  
**Kingsmill Crossing - Out Lot**

Prepared for: **WATERWAY GAS & WASH**  
727 GODDARD AVENUE  
CHESTERFIELD, MO. 63005  
636-537-1111

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the clayton engineering company, inc.  
ENGINEERS • SURVEYORS • PLANNERS  
11920 WESTLINE INDUSTRIAL DRIVE  
ST. LOUIS, MISSOURI 63146  
(314) 692-8888 FAX: (314) 692-8888  
clayton-engineering.com

Designed	ERD
Drawn	AJM
Checked	ERD
Date	4/17/06
Project Number	05048
Sheet Number	4 of 6