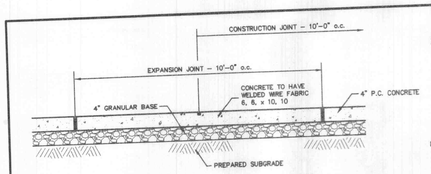
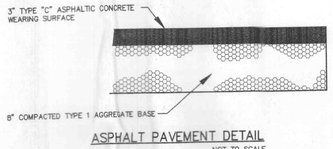
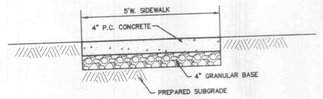
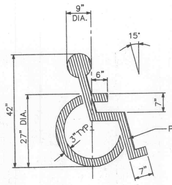




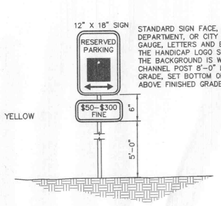
ASPHALT PAVEMENT DETAIL
NOT TO SCALE



CONCRETE SIDEWALK WITH BASE DETAIL
NOT TO SCALE



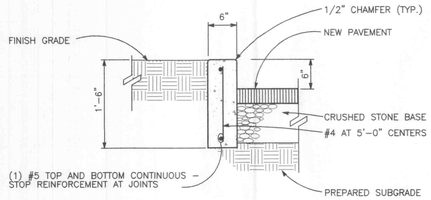
PAINTED HANDICAPPED PARKING SYMBOL
NOT TO SCALE



HANDICAP PARKING SIGN
NOT TO SCALE

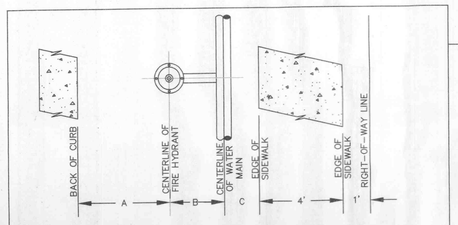
STANDARD SIGN FACE, STANDARD HIGHWAY DEPARTMENT, OR CITY STREET DEPARTMENT GAUGE, LETTERS AND BORDERS ARE GREEN, THE HANDICAP LOGO SQUARE IS BLUE AND THE BACKGROUND IS WHITE, GALVANIZED U CHANNEL POST 8'-0" LONG, SET 3'-0" INTO GRADE, SET BOTTOM OF SIGN 5'-0" ABOVE FINISHED GRADE.

VAN ACCESSIBLE HANDICAP PARKING SIGN



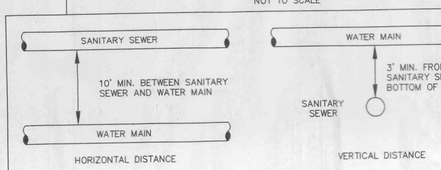
CONCRETE CURB DETAIL
NOT TO SCALE

FIRE HYDRANT DETAIL
NOT TO SCALE

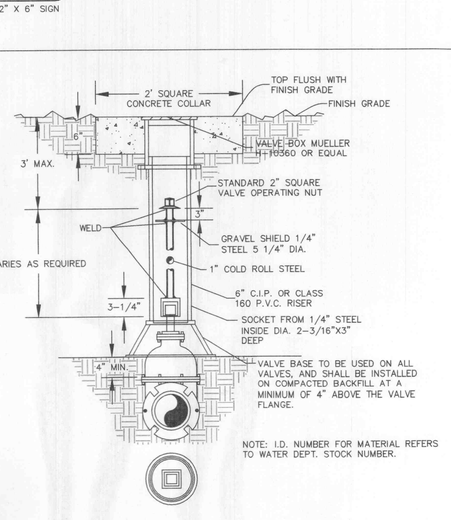


CONFIGURATION	A	B	C
50' RIGHT-OF-WAY/26' PAVEMENT/WITHOUT SIDEWALK	4'	2'	N/A
50' RIGHT-OF-WAY/26' PAVEMENT/WITH SIDEWALK	4'	2'	1'

TYPICAL WATER MAIN AND FIRE HYDRANT LOCATIONS
NOT TO SCALE



TYPICAL WATER AND SEWER SEPERATION
NOT TO SCALE

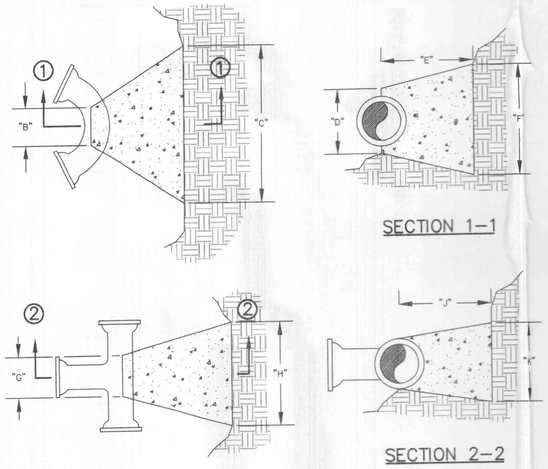


WATER VALVE DETAIL
NOT TO SCALE

INSTALLATION OF WATER MAINS

"ALWAYS KEEP THE WATER MAIN ON EASEMENT"

1. Water main should be located 5' behind the curb, as not to interfere with other utility locations.
2. All water mains should be 8 inches in diameter, the last 300' can be 6" diameter pipe. The pipe should have a Minimum Pressure Rating (PR) of 200 or SDR-21. All water mains of PVC materials shall be certified by NSF (National Sanitation Foundation) and listed in NSF Standard 61 (certified drinking water system components). Missouri DNR requires that any product which comes in contact with drinking water be listed in NSF Standard 61. If the pipe is NSF certified, it will have a stamp on the pipe that says "NSF-pw".
3. Fire hydrants must be Mueller Steamer Centurion and painted yellow in color and all valves must be Mueller mechanical joint resilient wedge gate valve.
4. All fire hydrants are to have valves flanged to the tee and (with a total length of 38" or less) hydrant swivel anchored to the valve. Clean 1" rock should be used to backfill above the weep holes of the fire hydrant.
5. The contractor shall place all fire hydrants between 1.5 (1-1/2) feet and three feet (3') from the street curb (measured from the edge of the fire hydrant).
6. These water bends (45 degree, 22-1/2 degree, 11-1/4 degree), are to be made with mechanical joint fittings using mega lugs. Ninety degree (90') bends are not allowed. The first slip joint, up and down stream after fittings, should be restrained per pipe manufacture specs.
7. Tees, 4-ways, etc. shall have concrete blocking. Concrete not to be on nuts or bolts.
8. Rocky soils shall require bedding 6" under and 6" over water pipe.
9. Concrete encasement require; to DNR Specification, when crossing storm or sanitary sewers. Sanitary: vertical is 18", horizontal is 10' – Storm: vertical is 12", horizontal is 3'. lid.
10. Must use appropriate sized casings when crossing streets.
11. Must attach coated solid core, 12 gauge tracer wire, taped to the top of the pipe. All wire must run up the outside of the valve box and come up inside the valve box under the wat
12. Use 3M waterproof splice kits for all splicing of tracer wire.
13. Any project with over 1500' of pipe should use the 2500' role of tracer wire to eliminate splicing.
14. A chlorine test is required. It must initially test at 25 PPM, or greater, and 24 hours later 10 PPM must be present. It must be tested by a City Inspector, and have 24 hours notice prior to that inspection. The main will be tested for Cl_2 every 1,200' of pipe.
15. If chlorine test fails then main must be rechlorinated.
16. The contractor will meter water and pay for it. Hydrant meters are at Public Works and require a $1,600 deposit.
17. Coliform samples should be collected every 1,200'.
18. Final Pressure Test: The water main must be pumped up to 125 PSI and maintain this pressure for one hour without any drop in pressure.
19. Gas, water, and other underground utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers including house laterals.
20. All waterline construction shall conform to current City of O'Fallon Standards and Specifications.
21. The contractor shall place the "steamer" outlet of the fire hydrant toward the street.
22. Backfill no debris larger than 6" in diameter.
23. All creek crossings will require ductile iron pipe. If less than 3' of cover, concrete encasement with rip-rap required.
24. Hydrant distances: 600'/300' – Residential/Commercial pending.
25. Easements shall be provided for water mains, and all utilities on the record plat. See record plat for location size, and width of easements.
26. The City of O'Fallon Water Department shall be notified at least 48 hours prior to construction of water mains for coordination and inspections.
27. All open mains should be properly capped when the main is unattended for more than 4 hours. Duct tape the end closed so it is visually seen.
28. All bore casings, except service lines, shall have a casing spacer every 10'.
29. All service lines under the streets are to have a 2" PVC casing installed, at a minimum of 30" depth.



SECTION 1-1

SECTION 2-2

BENDS	"B"	"C"	"D"	"E"	"F"
6"-11 1/4°	8"	15"	12"	24"	10"
6"-22 1/2°	8"	19"	12"	24"	13"
6"-45°	8"	30"	12"	24"	14"
6"-90°	8"	30"	12"	24"	27"
8"-11 1/4°	8"	20"	12"	24"	10"
8"-22 1/2°	8"	22"	12"	24"	17"
8"-45°	8"	30"	12"	24"	24"
8"-90°	8"	38"	12"	24"	36"
12"-11 1/4°	8"	30"	12"	24"	15"
12"-22 1/2°	8"	35"	12"	24"	25"
12"-45°	8"	40"	12"	24"	40"
12"-90°	8"	60"	12"	24"	52"

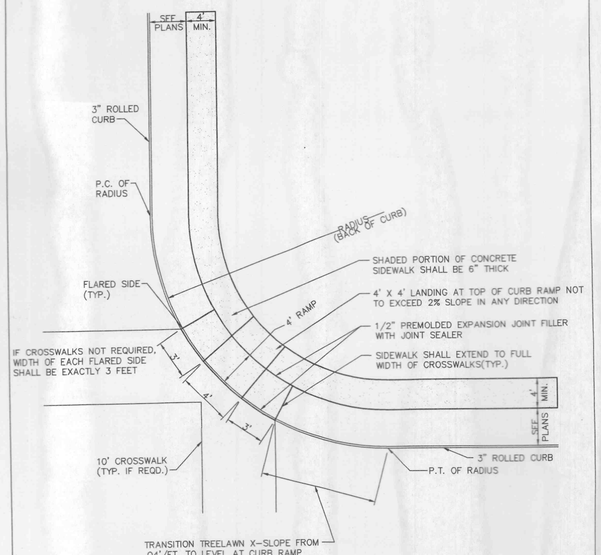
NOTES:
1. 2"& 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.

TEES	"G"	"H"	"J"	"K"
6"X6"X6"	12"	24"	24"	18"
8"X8"X6"	12"	24"	24"	18"
8"X8"X8"	12"	24"	24"	24"
12"X12"X6"	12"	24"	24"	18"
12"X12"X8"	12"	24"	24"	24"
12"X12"X12"	12"	36"	24"	36"

CUBIC FEET OF CONCRETE REQUIRED				
BEND	11 1/4°	22 1/2°	45°	90°
6"	1.7	2.4	3.5	5.5
8"	2.1	3.1	5.0	8.5
12"	3.7	5.9	9.7	17.5

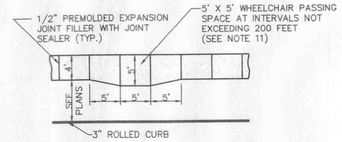
TEE X	6"	8"	12"	PLUG
6"	40	~	~	4.0
8"	40	5.0	~	5.0
12"	40	5.5	10.5	10.5

BACKING BLOCKS
NOT TO SCALE



DIAGONAL CURB RAMP-3" ROLLED CURB (TYPE 9)
NOT TO SCALE

INSERTION POINT
SCALE: 1:1
FILENAME: HCRMPSTL.DWG

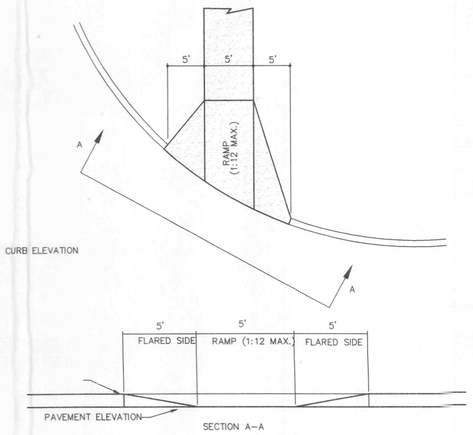


WHEELCHAIR PASSING SPACE
4' SIDEWALK WITH 3" ROLLED CURB
NOT TO SCALE

1. DO NOT SCALE DRAWING. FOLLOW DIMENSIONS.
2. SIDEWALKS AND SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE DETAILS AND THE CURRENT APPROVED "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG)
3. MINIMUM SIDEWALK WIDTH ALONG 6" VERTICAL CURB SHALL BE 5 FEET. MINIMUM SIDEWALK WIDTH ALONG 3" ROLLED CURB SHALL BE 4 FEET.
4. MAXIMUM SIDEWALK CROSS SLOPE 0.02'/FT.
5. ALL SIDEWALK SECTIONS SHALL BE 4" THICK, EXCEPT WHERE INDICATED OTHERWISE BY SHADED PORTIONS SHOWN ON DETAILS. ALL SIDEWALK SECTIONS AND CURB RAMPS, REGARDLESS OF THICKNESS, SHALL BE PAID FOR AS "CONCRETE SIDEWALK".
6. WHERE CURB RAMP MEETS PAVEMENT, BULLNOSE WILL NOT BE PERMITTED.
7. IF INTEGRAL CONCRETE CURB IS CONSTRUCTED, STRIKE A DUMMY JOINT ACROSS BOTTOM OF RAMP AT CURB LINE. IF CONCRETE CURB IS DOWELED-ON, BLOCK OUT PAVEMENT TO PROVIDE FULL DEPTH CURB ACROSS RAMP FROM OUTER POINT OF CURB TAPER TO OUTER POINT OF CURB TAPER.
8. FOR SIDEWALK LOCATIONS ON CUL-DE-SACS, REFER TO "PAVEMENT CONSTRUCTION DETAILS"
9. FOR PAVEMENT LONGITUDINAL AND TRANSVERSE JOINTS AND DOWEL AND TIE BAR REQUIREMENTS AND DIMENSIONS, REFER TO THE PAVEMENT CONSTRUCTION DETAILS FOR "JOINTS AND CURBS", STANDARD DRAWING C502.03.
10. FOR ROADWAY CROSS SLOPES, PAVEMENT TYPES, AND THICKNESSES, REFER TO "STANDARD TYPICAL SECTION".
11. THE INTERSECTION OF TWO SIDEWALKS OR THE INTERSECTION OF A SIDEWALK AND A DRIVEWAY MAY SERVE AS A WHEELCHAIR PASSING SPACE ON SIDEWALKS LESS THAN 5 FEET WIDE.

INSERTION POINT
SCALE: 1:1
FILENAME: HCRMPSTL.DWG

NOTE: 24 HOUR NOTICE REQUIRED ON ALL INSPECTIONS



HANDICAPPED RAMP DETAIL
NOT TO SCALE