

LEGEND

L.D. - NOMINAL PIPE SIZE
 O.D. - OUTSIDE DIAMETER OF PIPE
 H - COVER ABOVE TOP OF PIPE
 A - EMBEDDED BELOW PIPE (SEE TABLE)

TABLE OF EMBEDDED DEPTHS BELOW PIPE

L.D.	A MIN. SOIL	A MIN. ROCK
27" & SMALLER	3"	6"

GRANULAR BEDDING SHALL BE CRUSHED ROCK OR PEA GRAVEL WITH NOT LESS THAN 95% PASSING 1/2" (95% PASSING 3/4" FOR 30" AND LARGER PIPE) AND NOT LESS THAN 95% RETAINED ON A #4. TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING.

COMPACTED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. D698, OR GRADED AGGREGATE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF COMPACTED BACK FILL.

TAMPED BACK FILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, HAND PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK, AND TAMPED AROUND CONDUIT PIPE. GRANULAR BACK FILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF TAMPED BACK FILL.

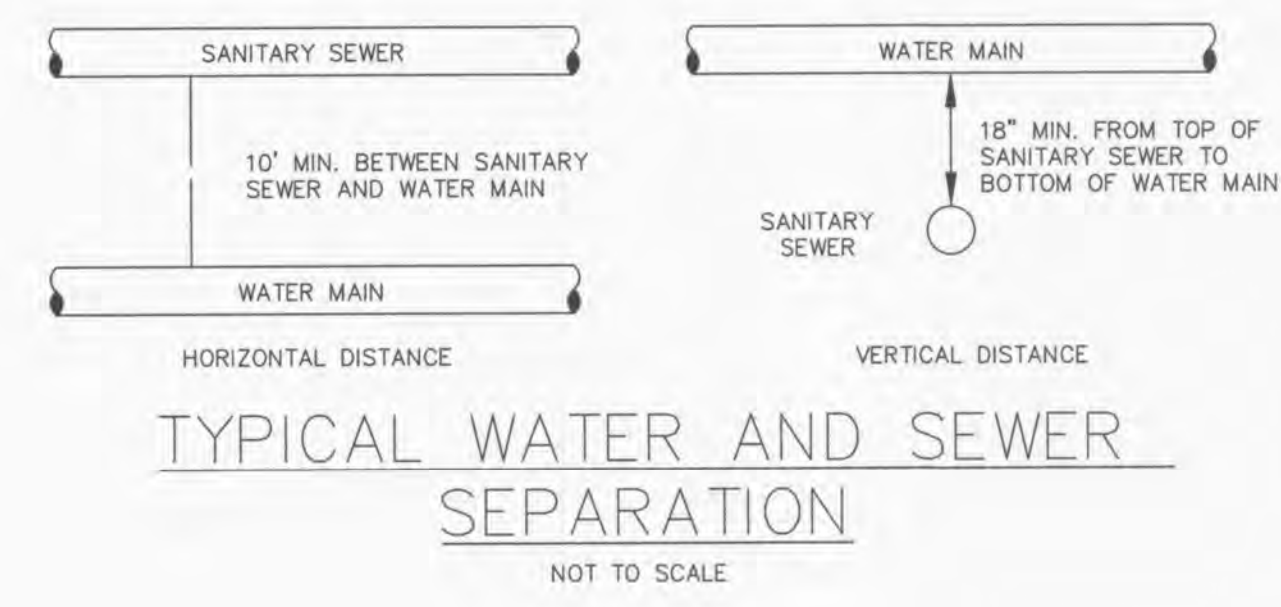
TRENCH BACK FILL SHALL BE AS REQUIRED IN THE "LAYING AND BACK FILL" SECTION OF THE DETAILED SPECIFICATIONS.

EMBEDDING THE TYPE OF EMBEDDING TO BE USED SHALL BE AS SPECIFIED IN THE PLANS AND SPECIFICATIONS.

TRACER WIRE REQUIRED ON ALL WATER MAINS

WATER MAIN EMBEDDED
NOT TO SCALE

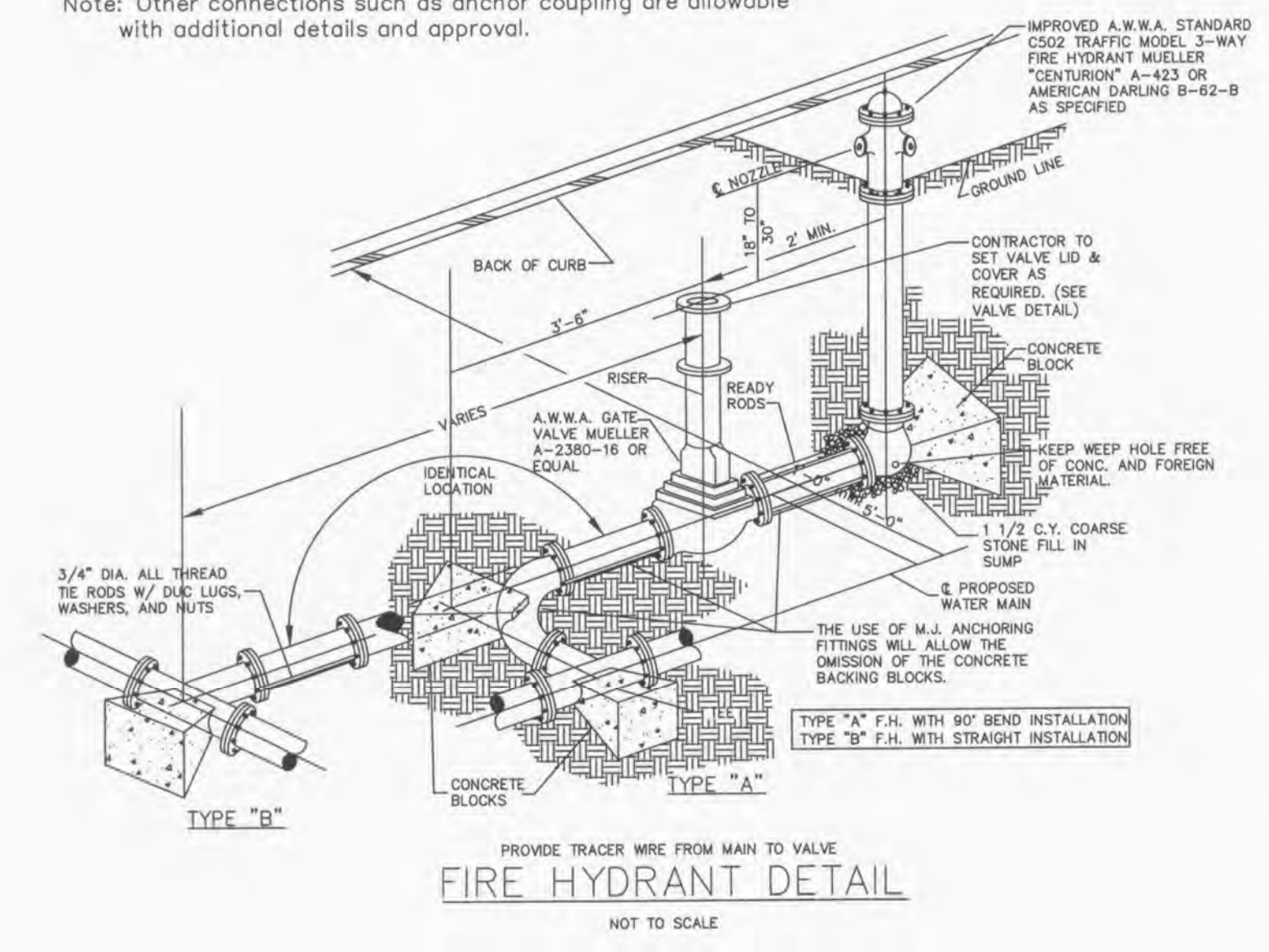
CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI
WATER MAIN EMBEDDED



TYPICAL WATER AND SEWER SEPARATION
NOT TO SCALE

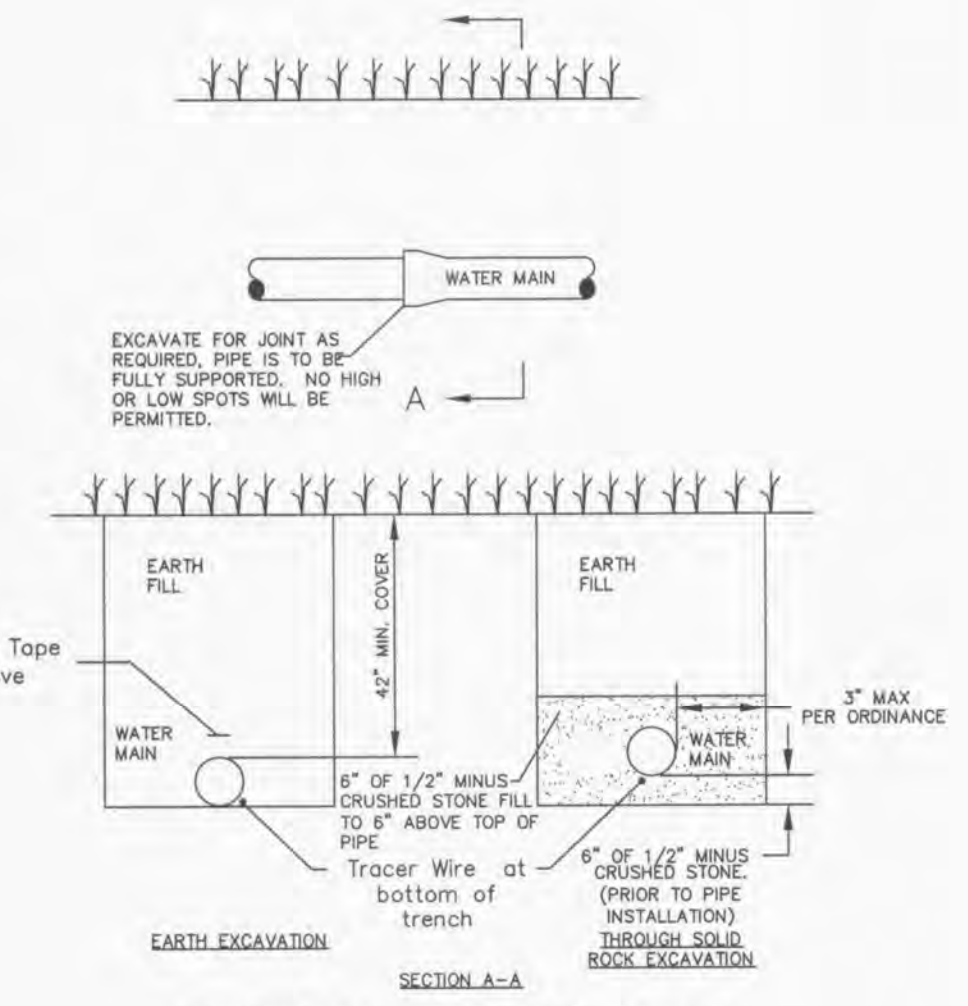
CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI
WATER AND SEWER SEPARATION DETAIL

Note: Other connections such as anchor coupling are allowable with additional details and approval.



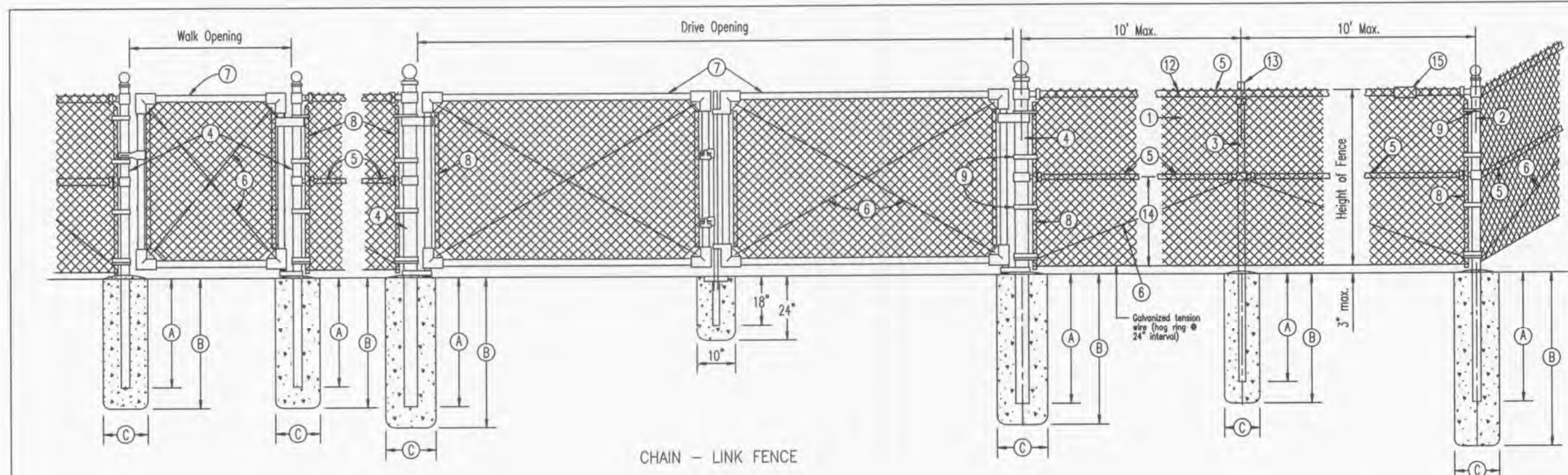
FIRE HYDRANT DETAIL
NOT TO SCALE

CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI
FIRE HYDRANT DETAILS



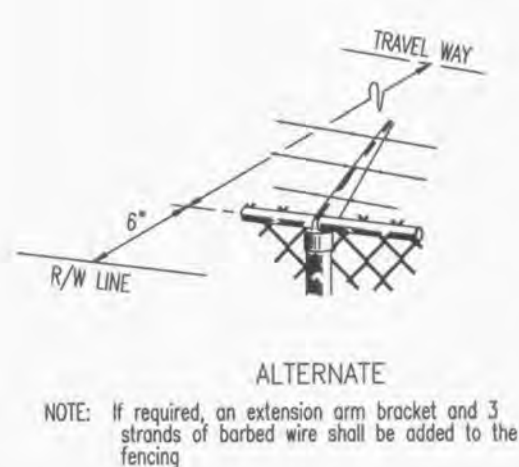
TYPICAL WATER MAIN INSTALLATION DETAILS
NOT TO SCALE

CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 O'FALLON, MISSOURI
WATER MAIN INSTALLATION DETAIL



CHAIN - LINK FENCE

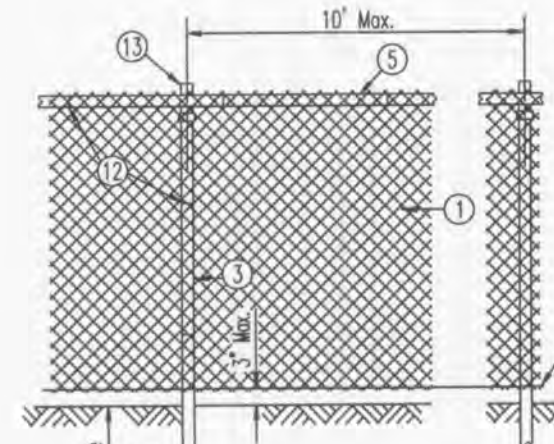
- GENERAL NOTES**
- Do not scale drawing. Follow dimensions.
 - Material shall be either zinc-coated steel, aluminum-coated, or vinyl coated steel fencing.
 - Weights of materials shown in table are for steel. Sizes shown are applicable for all materials.
 - Pull Post shall be used at sharp breaks in vertical grade or at approximate 500' centers on straight runs or as directed by the engineer.
 - Drilled holes (C) in solid rock shall provide a diameter of not less than two inches greater than the maximum transverse dimension of the post section.
 - Alternate for Top Rail and Brace (S) may be tubular 1-3/8" O.D. (2003) at 1.55 pounds per foot (tolerance - 5%; + no limit).
 - Concrete for footings shall be Class B. A quick setting polyurethane foam may be used in lieu of concrete for line post or line post may be driven as shown on the plans.
 - Gate slope and the direction of swing shall be as shown on the plans.
 - For description of materials and installation requirements refer to Standard Drawing C607.11 entitled "Chain-Link Fence."
 - The details shown are adapted from the Missouri Department of Transportation.



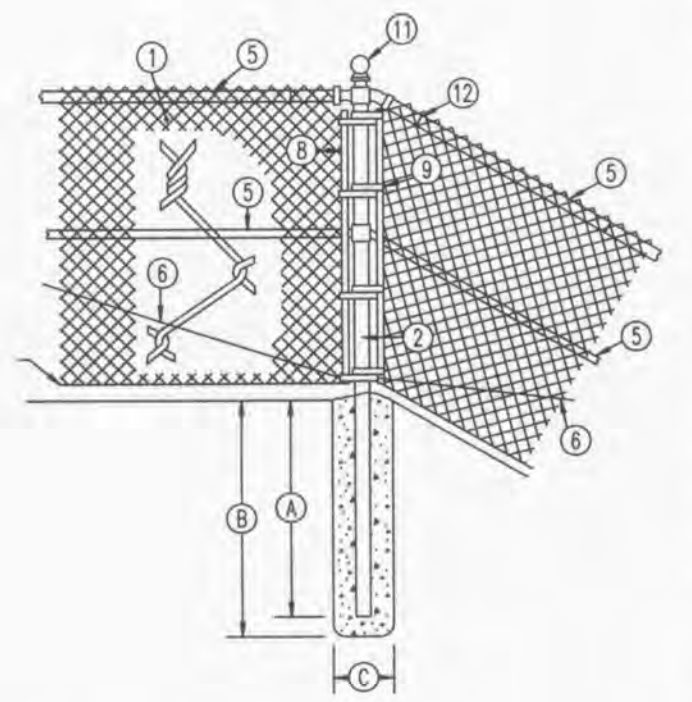
NOTE: If required, an extension arm bracket and 3 strands of barbed wire shall be added to the fencing

Description	Height of Fence						
	48"		60"		72"		
	Size	#/ft.	Size	#/ft.	Size	#/ft.	
End Corner, & Pull Post (A)	30"	3.65	36"	5.79	36"	5.79	
Line Post (B) x (C)	1-1/2" x 10"	2.72	2"	3.65	42" x 12"	3.85	
	H-Sect.	2.25	3.28	2.25	3.28	5" x 3.28	
Top Rail and Brace (D)	24"	2.7	27"	3.6	36"	3.6	
	(B) (C)	30" x 10"	2.72	36" x 12"	5.79	42" x 10"	
Gate Post * (Single Gate or 1 leaf of double) Width over 18"	6" and less	2" ϕ	3.65	2-1/2" ϕ	5.79	2-1/2" ϕ	5.79
	13" and less	2-1/2" ϕ	5.79	3-1/2" ϕ	9.10	3-1/2" ϕ	9.10
	18" and less	3-1/2" ϕ	9.10	6" ϕ	18.97	6" ϕ	18.97
Truss Rod (E)	6" ϕ	18.97	8" ϕ	24.70	8" ϕ	24.70	
	1-1/4"	2.27	1-1/4"	2.27	1-1/4"	2.27	
Gate Frame (F)	All Widths	3/8"	2.72	1-1/2" ϕ	2.72	1-1/2" ϕ	2.72

* (A), (B) and (C), same as for (D)



NOTE: If post cannot be driven to depths indicated because of rocky soils or other conditions, they shall be removed and replaced in footings. Post tops shall be protected against damage and all posts which are damaged during installation shall be removed and replaced.



- LEGEND**
- Fabric
 - End, Corner, or Pull Post
 - Line Post
 - Gate Post
 - Top Rail & Brace
 - Truss Rod
 - Gate Frame
 - Stretcher Bar - 1/4" x 3/4" Pl.
 - Stretcher Bar Band
 - End or Corner Clamp
 - Post Top - other than Line Post
 - Fabric Ties
 - Line Post Ties
 - 1/2" Fabric Height or as recommended by Mfg.
 - Expansion Sleeve

SAINT CHARLES COUNTY
 HIGHWAY DEPARTMENT
 ST. CHARLES, MISSOURI

CHAIN-LINK FENCE

DATE: December, 2000 DRAWING C607.10

PROJECT TITLE

BROOKSIDE VILLAGE A

PRS No. 03029L0MB.01R

PICKETT, RAY & SILVER INC

CIVIL ENGINEERING, LAND SURVEYING, AND NATURAL RESOURCES SERVICES
 110 W. Main Street, Suite 201
 St. Peters, MO 65357
 Phone (636) 397-1211 Fax (636) 397-1104
 www.prsinc.com

ENGINEER'S AUTHENTICATION
 THE RESPONSIBILITY FOR PROFESSIONAL ENGINEERING LIABILITY ON THIS PROJECT IS HEREBY LIMITED TO THE SET OF PLANS AUTHENTICATED BY THE SEAL, SIGNATURE, AND DATE HEREON ATTACHED. RESPONSIBILITY IS DISCLAIMED FOR ALL OTHER ENGINEERING PLANS INVOLVED IN THIS PROJECT AND SPECIFICALLY EXCLUDED HEREON AFTER THIS DATE UNLESS REAUTHENTICATED.

PICKETT, RAY & SILVER, INC. MO LICENSE #000326

DOUGLAS S. TIEMAN
 PROFESSIONAL ENGINEER LICENSE E-23343

Developer / Owner Information
Lombardo Homes of St. Louis, LLC
 2299 Technology Drive, Suite 150
 O'Fallon, Missouri 63368

50 YEARS

CITY OF O'FALLON Water Details and Fence Details

P+Z No. 2603.04

City No.

Page No.

37 of 40