

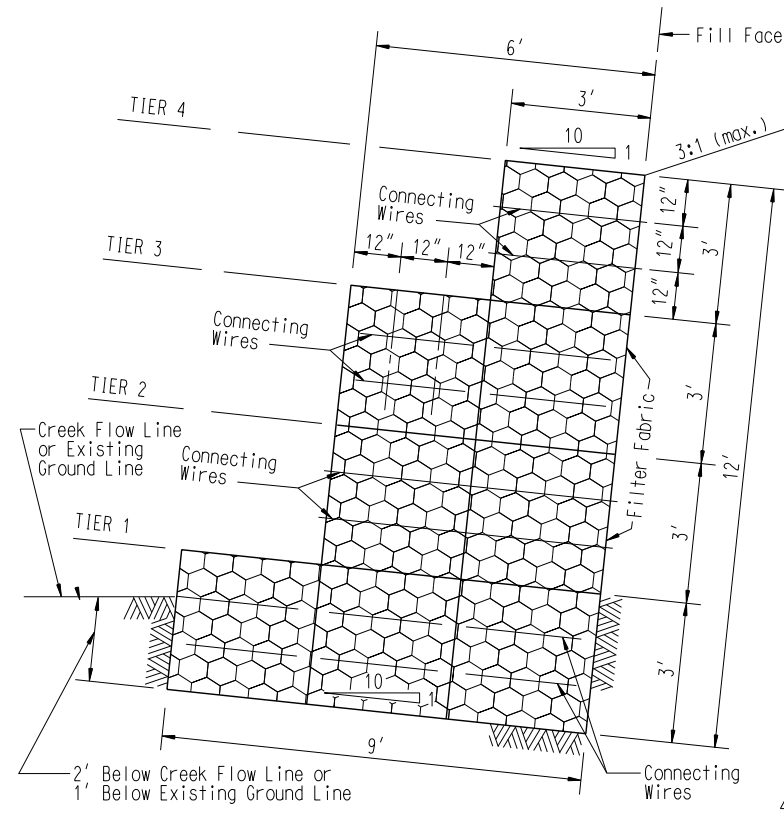
NEW	REVISIONS			
7-8-88	1-11-90	10-13-97	10-5-04	7-31-07

ST. LOUIS COUNTY PROJ.

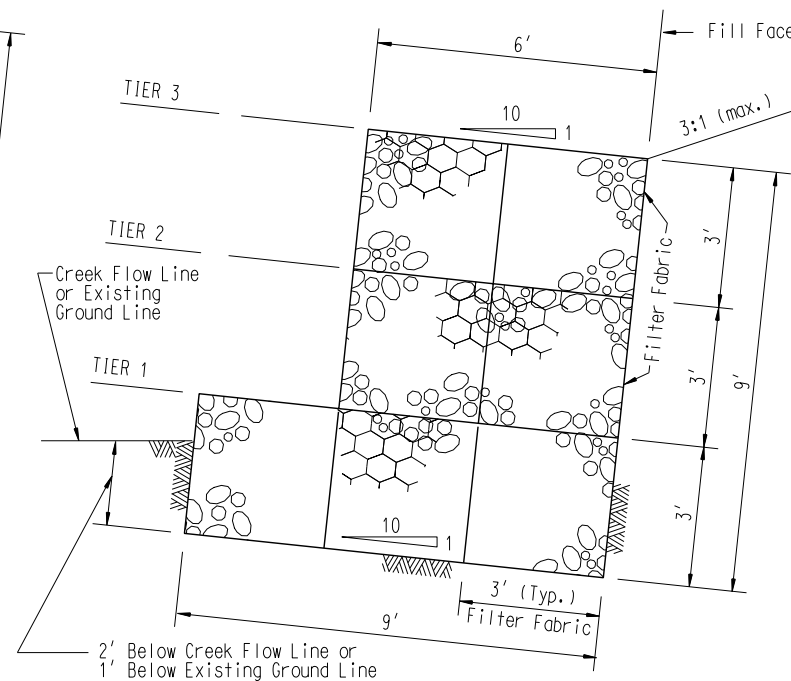
SHEET NUMBER	TOTAL SHEETS

**GENERAL NOTES**

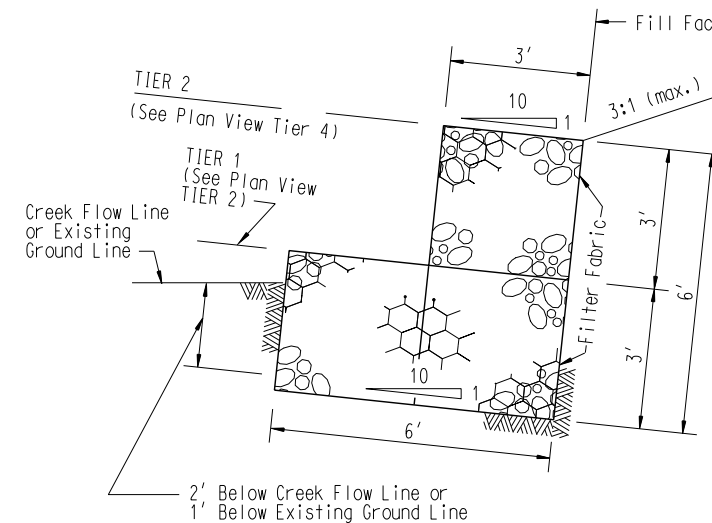
- Do not scale drawing, follow dimensions.
- The gabion baskets shall be constructed of hexagonal triple twist mesh with heavily galvanized steel wire. All steel wire used in gabion construction shall be heavily galvanized with a zinc coating exceeding federal specification requirements (00-W-461g, Cl. 3). The mesh wire diameter for the galvanized gabions shall not be less than 3mm (0.1181 in.), approximately U.S. Gage No. 11. The mesh edge wire and selvedge wire shall not be less than 3.9mm (0.1535 in.), approximately U.S. Gage No. 9. The lacing steel wire for binding gabion units together shall not be less than 2.2mm (0.0866 in.), approximately U.S. Gage No. 13 1/2. The mesh steel wire diameter for PVC coated gabions shall not be less than 2.7mm (0.1063 in.), approximately U.S. Gage No. 12. The mesh edge wire and selvedge wire shall not be less than 3.4mm (0.1338 in.), approximately U.S. Gage No. 10. The lacing wire shall not be less than 2.2mm (0.0866 in.), approximately U.S. Gage No. 13 1/2. The PVC coating shall not be less than 0.4mm (0.015 in.).
- Before placing the gabions, it is necessary to make the ground surface relatively smooth and even. The gabions are then placed in their proper location. The gabions should be placed front to front and back to back in order to expedite filling and lid lacing operations. For structural integrity, adjacent gabions must be laced along perimeter of all contact surfaces. The lacing procedure is as follows: cut a length of lacing wire approximately one and one-half times the distance to be laced but not exceeding 5 feet. Secure the wire terminal at the corner by looping and twisting, then proceed lacing with single and double loops at approximately 5 inch intervals, then securely fasten the other lacing wire terminal.
- The fill material shall consist of hard durable stone, graded between 4 to 10 inches or as approved by the Engineer. All stone must be of size sufficient to be retained within the mesh. Gabions shall be filled in lifts of one foot at a time. Two connecting wires shall be placed between each lift in each cell of all exposed faces and firmly wired. This operation is repeated until the gabions are completely filled. It is important that the mesh forming the lid be stretched tight when the gabion is wired closed in order that there can be no movement of the fill. When mechanically filling the gabions it is helpful to protect the top edges of the diaphragms and end panels from being bent or folded by stone during placement. There are methods by which this can be achieved. Rebars may be temporarily placed across the top edges of each mesh panel and laced to them to prevent movement. Alternatively lengths of pliable metal may be bent into a V shape and placed over the vertical panels to deflect the stone. During filling, the stone should be dumped from the bucket when it is in the lowest practicable position.
- The creek subgrade shall be excavated in such a manner as to provide for a 10:1 batter sloping away from the centerline of channel. Where bed rock is encountered in the excavation, the Tier 1 Basket shall be placed on a concrete base as directed by the Engineer.



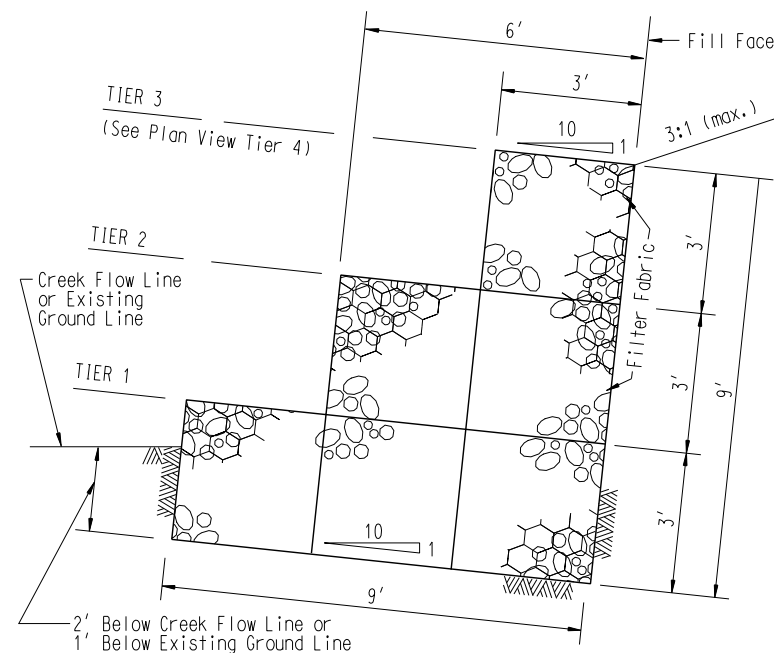
**4 TIER BASKETS**



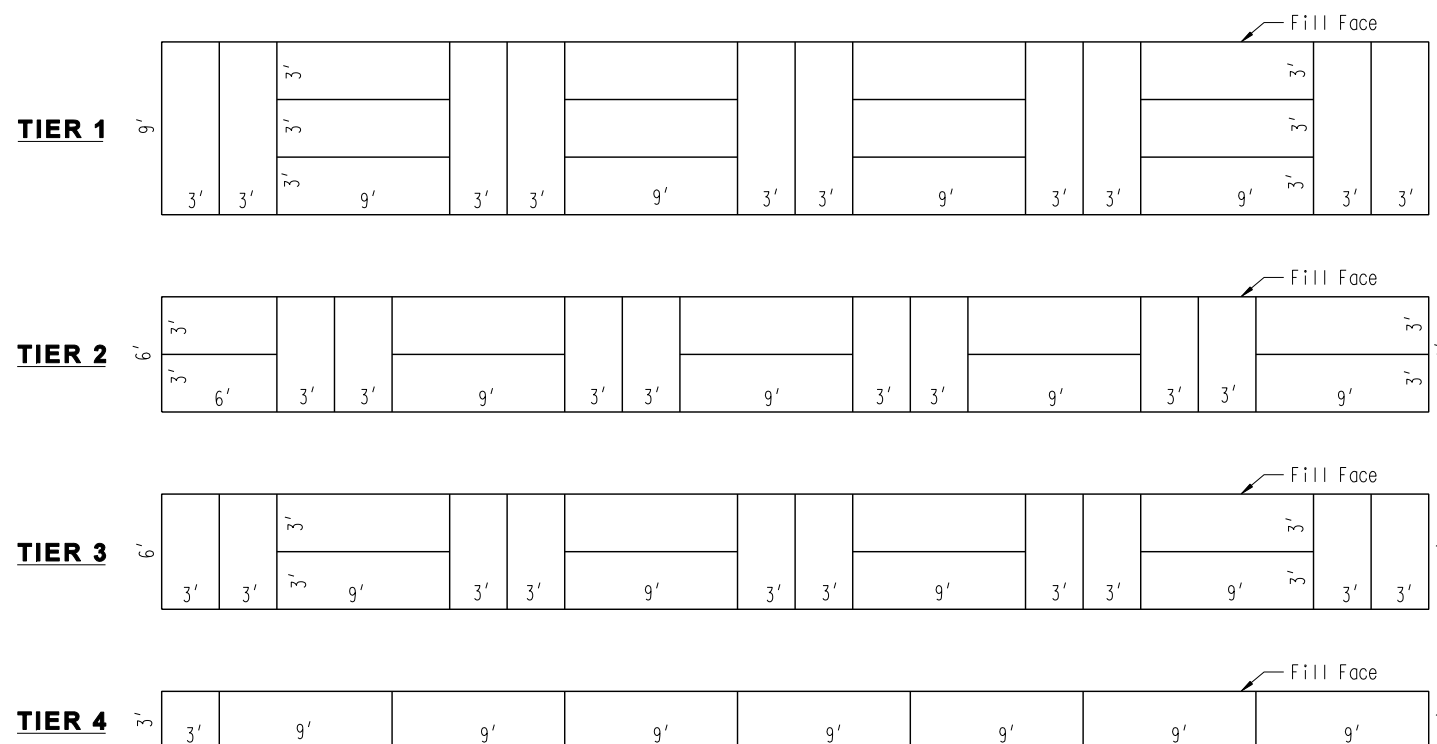
**3 TIER BASKETS**  
(Use with 4 Tier Baskets)



**2 TIER BASKETS**



**3 TIER BASKETS**  
(Alternate)



**TIER PLAN VIEW**

SAINT LOUIS COUNTY  
DEPARTMENT OF HIGHWAYS AND TRAFFIC  
CLAYTON, MISSOURI

**GABION WALLS**

REVISION DATE: July 31, 2007

DRAWING  
C611.70