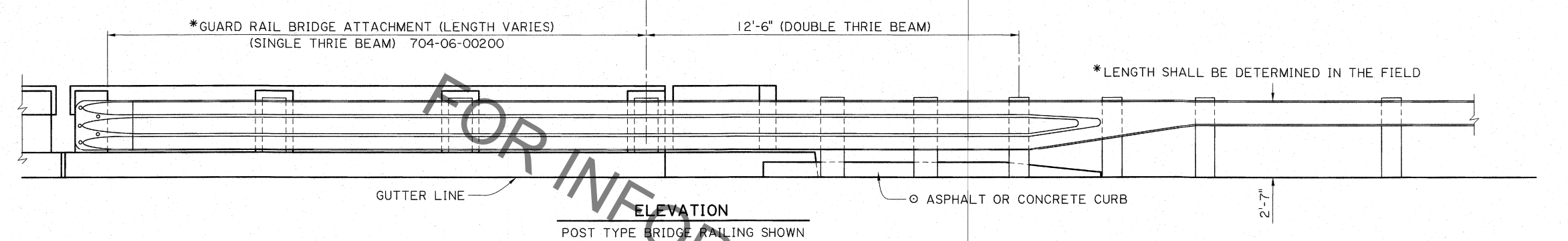
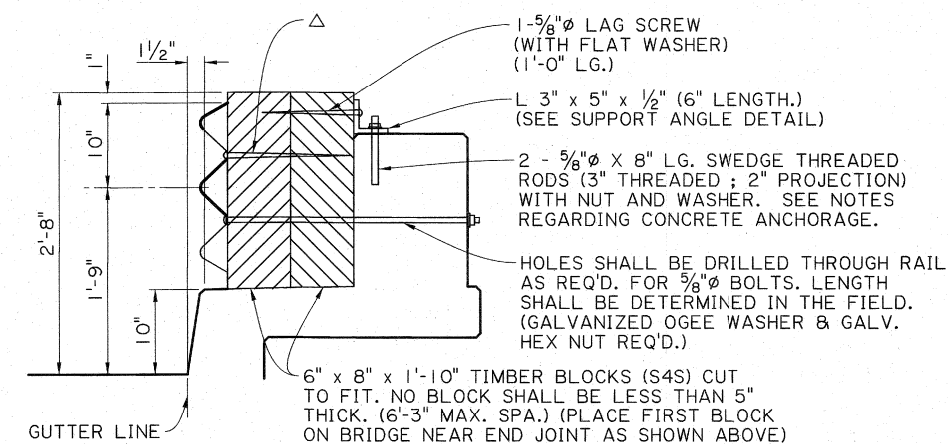


(MOUNT TO TOP OF RAIL FOR BLOCK BACKUP) THE HOLES MAY BE OFFSET TO ACHIEVE INSTALLATION BUT THE 1/2" EDGE DISTANCE SHALL BE MAINTAINED.

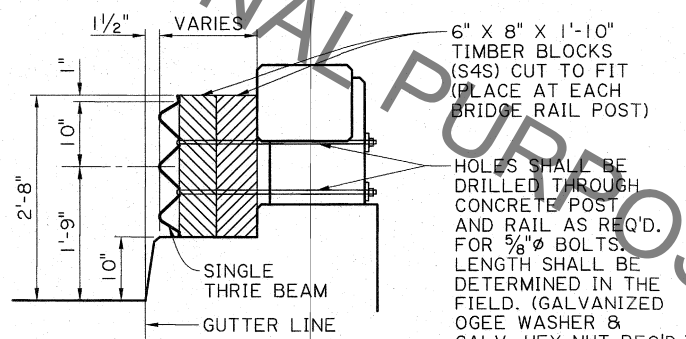


SUPPORT ANGLE

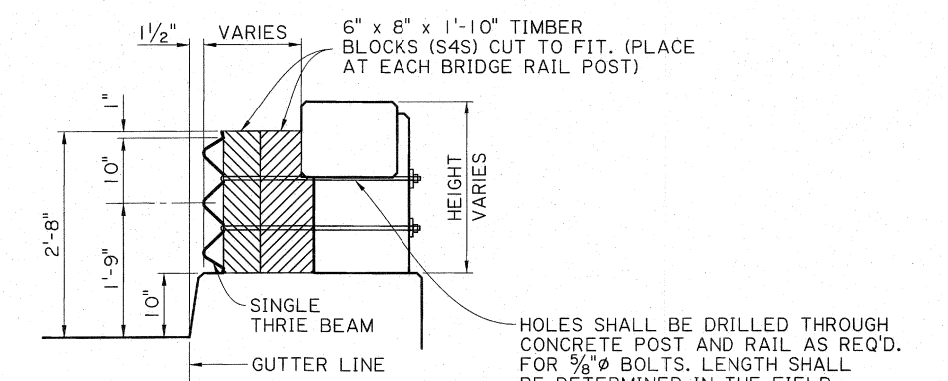
Δ 5/8" LAG SCREW (WITH PLATE WASHER) SHALL PENETRATE TO THE BACK OF THE REAR BLOCK (LENGTH TO BE DETERMINED IN THE FIELD)



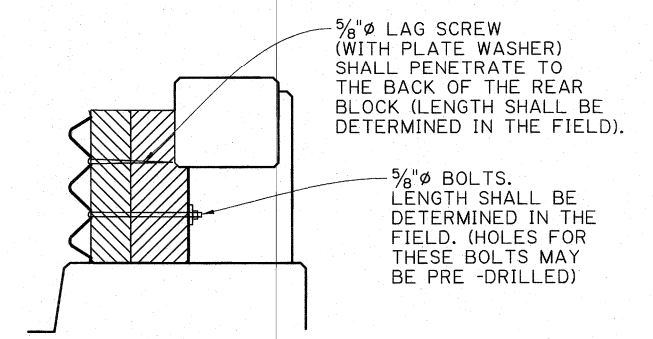
SECTION A-A SOLID WALL RAILING



SECTION A-A POST AND RAIL BRIDGE RAIL



SECTION A-A POST AND RAIL BRIDGE RAIL



VIEW AT GUARD RAIL SPLICES

NOTES:

- FOR ADDITIONAL INFORMATION ON GUARD RAIL, SEE STANDARD PLANS FOR HIGHWAY GUARD RAIL (MASH).
- FOR CURB & TRANSITION INFORMATION, SEE STANDARD PLANS FOR HIGHWAY GUARD RAIL (MASH), SHEET 3 OF 11.
- ALL MATERIALS AND LABOR REQ'D. TO PLACE THE GUARD RAIL ONTO THE BRIDGE SHALL BE PAID FOR UNDER ITEM 704-06-00200.
- IF THE EXISTING CONCRETE IS DAMAGED DUE TO DRILLING HOLES FOR BOLTS AND RODS, THE CONTRACTOR SHALL REPAIR THE DAMAGE WITH THE APPROPRIATE MATERIALS AT HIS EXPENSE AND TO THE SATISFACTION OF THE PROJECT ENGINEER.
- EXISTING HANDRAIL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE PROJECT ENGINEER.
- ALL HOLES (VERTICAL OR HORIZONTAL) DRILLED INTO AN EXISTING CONCRETE STRUCTURE SHALL BE 3/4". THEY SHALL BE CLEANED WITH COMPRESSED AIR AND MADE FREE OF ANY OIL OR RESIDUE. HOLES SHALL BE FILLED WITH AN EPOXY INJECTION SYSTEM LISTED ON THE APPROVED MATERIALS LIST, PRODUCT CATEGORY "CONCRETE ANCHOR SYSTEMS." PLACE ROD IN HOLE IMMEDIATELY AND WAIT FOR THE MANUFACTURER'S CURE TIME.
- THE LOWER BOLTS IN THE GUARD RAIL AT EACH POST SHALL BE ON THE ONCOMING TRAFFIC SIDE.
- IF TIMBER BLOCKS ARE LESS THAN 3" ABOVE THE CONCRETE RAIL IN THE SOLID RAIL ALTERNATE, THE METHOD SHOWN IN THE POST AND RAIL BRIDGE RAIL ALTERNATE SHALL BE UTILIZED.
- THE LENGTHS OF THE LAG SCREWS SHALL BE VERIFIED BY THE PROJECT ENGINEER BEFORE INSTALLATION TO ACHIEVE THE PENETRATION CALLED FOR IN THE SOLID WALL ALTERNATE.
- IF APPROACH SLAB FLARES EXIST, A 1'-0" X 1'-0" HOLE SHALL BE CUT THRU THE CONCRETE IN THE PROPER LOCATION TO INSTALL POST. AFTER POST IS IN PLACE, COMPACT SOIL AROUND POST AND REDRESS THE SLAB WITH CONCRETE TO THE FINISHED ELEVATION. (NO DIRECT PAY).
- ALL STRUCTURAL STEEL SHALL BE ASTM A36 AND GALVANIZED. ALL 5/8" BOLTS SHALL BE ASTM A307.
- THIS DETAIL WAS DEVELOPED AND APPROVED FOR USE UNDER NCHRP REPORT 350. AS PER LADOT'S MASH IMPLEMENTATION POLICY, ITS CONTINUED USE IS ALLOWED WHILE A MASH ALTERNATIVE IS DEVELOPED OR EVALUATED.

SHEET NUMBER		PARISH		CONTROL SECTION		STATE PROJECT	
P. FOSSIER	C. GAUDRY	J. DOUCET	P. FOSSIER	K. BRAUNER	DESIGN CHECK		
DETAIL CHECK		REVIEW		SERIES #			

KURT M. BRAUNER  
License No. 30567  
PROFESSIONAL ENGINEER  
IN  
CIVIL ENGINEERING

*Kurt M. Brauner*  
4/22/22

APPROVED BY CHIEF ENGINEER: *Christy P. Kelly* DATE: 5/3/2022

GUARD RAIL TERMINATING ON BRUSH CURB BRIDGE RAIL

STANDARD PLAN GRR-13

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT  
BRIDGE AND STRUCTURAL DESIGN