

GENERAL NOTES:

SPECIFICATIONS: Materials And Construction Of This Structure Shall Be In Accordance With The Current Adopted USDA Forest Service Specifications For Construction Of Roads And Bridges, As Modified For This Contract.

LOG MEMBERS: Logs Used For Stringers Shall Be One Of The Species Listed In TABLE 7.1 With Minimum, Peeled, Mid-Span Log Diameters As Noted For The Various Spans And Design Loading. Native Trees To Be Used For Bridge Stringers Shall Be Straight, Sound, And Free Of Bones, Rot, Infestation, Or Disease. Stringers Shall Be Chosen From Trees With Relatively Few Limbs, And Have No Knot Greater Than $\frac{3}{4}$ In Diameter. Logs Shall Be Notched At Ends To Create A Level Bearing Surface For Logs To Provide A Level Bearing Surface For Deck Planks. Refer To PLANS For Notching Details.

TIMBER & LUMBER: Solid Sawn Timber Members Shall Conform To The Requirements Of The Grading Rules Agency For The Species, Type, And Grade Specified Below.

- DECK PLANKS, SILLS, AND BACKING PLANKS
 - Coastal Region Douglas Fir-Larch
 - Rough Sawn, No. 1 Grade
 - Grading Rules Agency - WMPA, WCLIB

BRIDGE RAILS & POSTS (See PROJECT CRITERIA)

SAWN - UNTREATED	- Redwood, S4S, No. 1 Grade Grading Rules Agency - RIS
SAWN - TREATED	- Western Red Cedar, S4S, Select Structural Grade Grading Rules Agency - WMPA, WCLIB
POLES	- Hem-Fir/Douglas Fir, S4S, No. 1 Grade Grading Rules Agency - WMPA, WCLIB
LOG STRINGERS	- Ledgepole Pine, Peeled And Dried Grading Rules Agency - NLGA

TREATMENT: See PROJECT CRITERIA For Members Identified To Be Treated And For Treatment Type. Preservative Treatment Shall Be In Accordance With The Current AWPA Specifications Using The Treatment Materials Listed Below. Treatment Will Comply With The Requirements Of The Current Edition Of WMPA's "Best Management Practices For The Use Of Treated Wood In Aquatic Environments".

SOLID SAWN LUMBER	- AWPA C4
SOLID SAWN LUMBER AND POLES USED FOR BRIDGE RAILS & POSTS	- Pentachlorophenol In Light Oil (Type C Solvent)
	- Copper Napthenate In Light Oil (Type C Solvent)
	- AWPA C2, (Above Ground Use)
	- Pentachlorophenol In Light Oil (Type C Solvent)
	- Copper Napthenate In Light Oil (Type C Solvent)
	- AWPA C2, (Above Ground Use)
	- Pentachlorophenol In Light Oil (Type C Solvent)
	- Copper Napthenate In Light Oil (Type C Solvent)
	- Oxine Copper In Light Oil (Type C Solvent)
	- CCA, ACZA, ACQ

FIELD TREATMENT: Copper Napthenate (2% Solution) Shall Be Furnished For Field Treating Of Wood. All Abrasions And Field Cuts Approved By The C.O. Shall Be Carefully Trimmed And Given Three Brush Coats Of The Field Treatment Solution. Where Approved Field Drilling Of Bolt Or Nail Holes Is Required, The Holes Shall Be Poured Full Of Preservative Prior To Inserting The Fasteners.

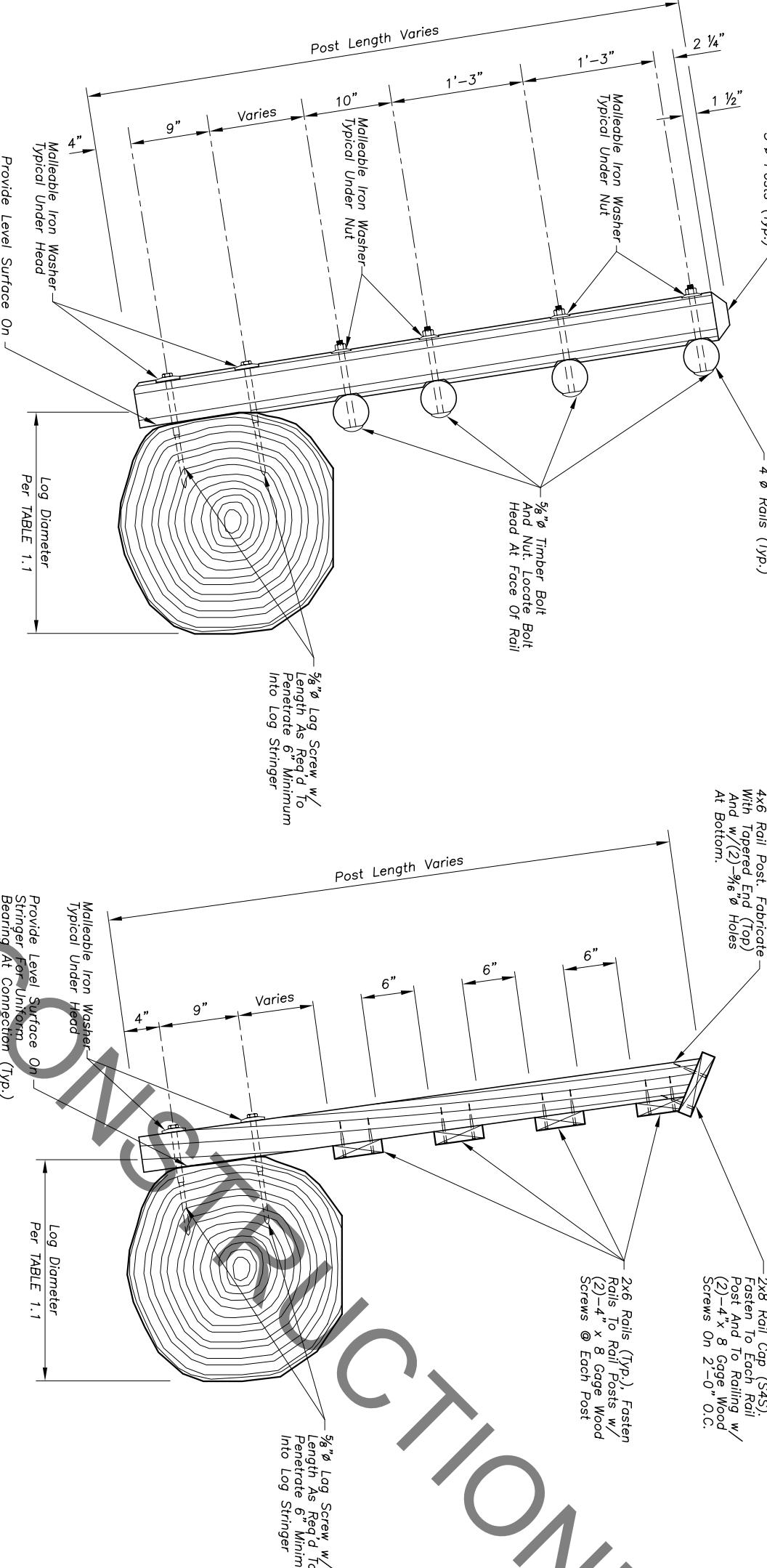
The Ends Of Untreated Log Stringers (Refer To The PROJECT DESIGN CRITERIA) Shall Also Receive Three Brush Coats Of The Field Treatment Prior To Installation Of The Backing Planks.

HARDWARE AND STRUCTURAL STEEL: See PROJECT DESIGN CRITERIA For Steel Hardware Finish. Galvanized Or Unfinished Hardware Shall Meet The Requirements Of AASHTO M270, Grade 36, With Nuts And Bolts Conforming To ASTM A307, Grade A. Weathering Steel And Hardware Shall Meet The Requirements Of AASHTO M270, Grade 50W, With Bolts And Nuts Conforming To ASTM A325, Type 3. Use Malleable Iron Washers Against Wood Unless Otherwise Noted.

When Structural Steel Is To Be Welded, The Welding Procedure Shall Be In Accordance With AWS D.1 And Shall Be Suitable For The Grade Of Steel And Intended Use Of Service.

FABRICATION: Submit Shop Drawings For All Manufactured Bridge Components (Except Sawn Deck Planks). Show All Dimensions And Fabrication Details For All Cut Or Bored Timber. Field Drilling Or Holes Shall Not Be Allowed Unless Otherwise Noted On The PLANS.

Native Trees To Be Used For Stringers Shall Be Peeled And Then Have An Additional $\frac{1}{2}$ " Of The Outer Sapwood Removed Prior To Being Used For Stringers.



POLE HANDRAIL DETAILS

Scale: $\frac{3}{4}$ " = 1'-0"

SOLID SAWN HANDRAIL DETAILS

Scale: $\frac{3}{4}$ " = 1'-0"

TABLE 1.1: SINGLE ROUND LOG STRINGER SIZE REQUIREMENTS

TIMBER SPECIES - Douglas Fir (Coastal Or Interior North) And Western Larch	
DESIGN LOADING IN POUNDS PER SQUARE FOOT	
PEDESTRIAN LOAD	GROUND SNOW LOAD
65	85
10	120
15	16"
20	16"
25	16"
30	16"
35	17"
40	17"
45	17"

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Scale: $\frac{3}{4}$ " = 1'-0"

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DESIGN AID

SINGLE LOG STRINGER TRAIL BRIDGE

DRAWING NO. R10865

DRAWING NO. R10865

SHEET 3 OF 4