

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-6\_0617.dgn

DRAWING DATE: JUNE, 2017

**IDAHO TRANSPORTATION DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

**GUARDRAIL TERMINAL BURIED-IN-BACKSLOPE**

REQUIRES SHEET 2 OF 2

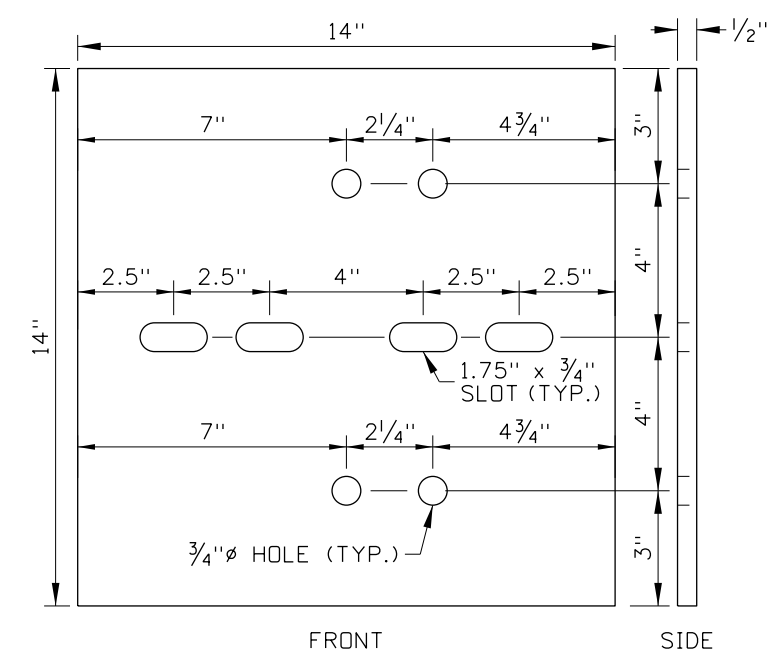
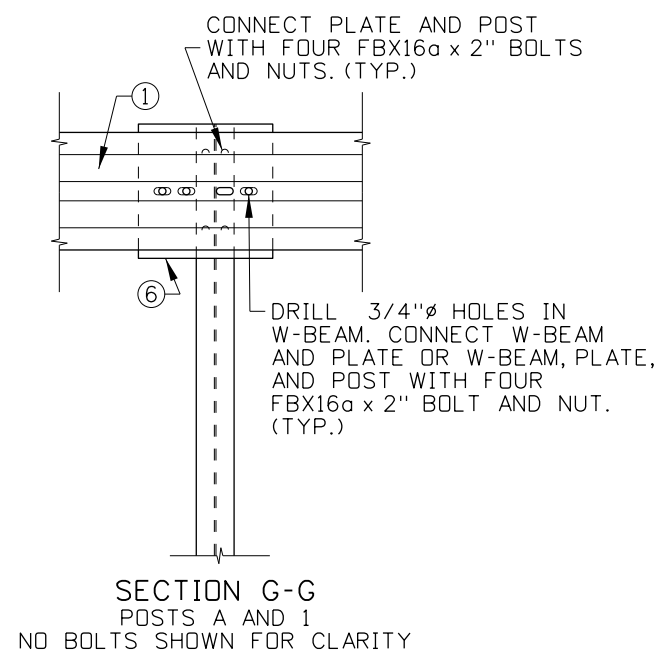
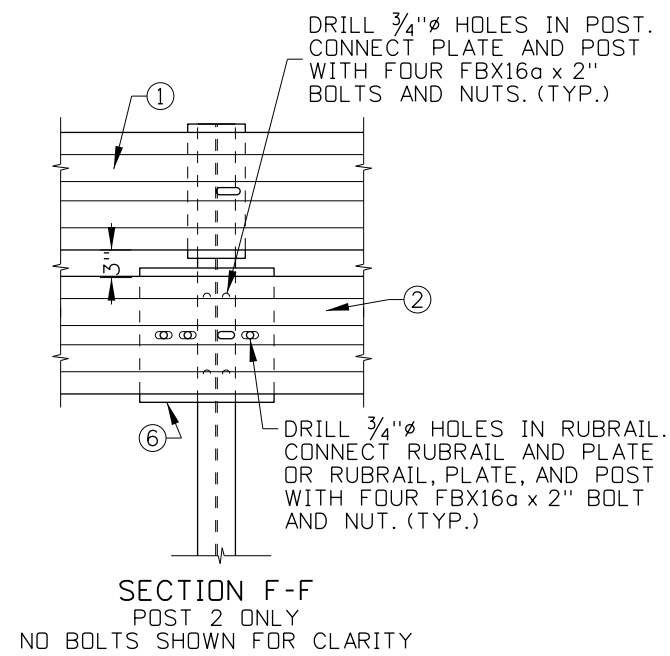
**English**

STANDARD DRAWING NO. **612-6**

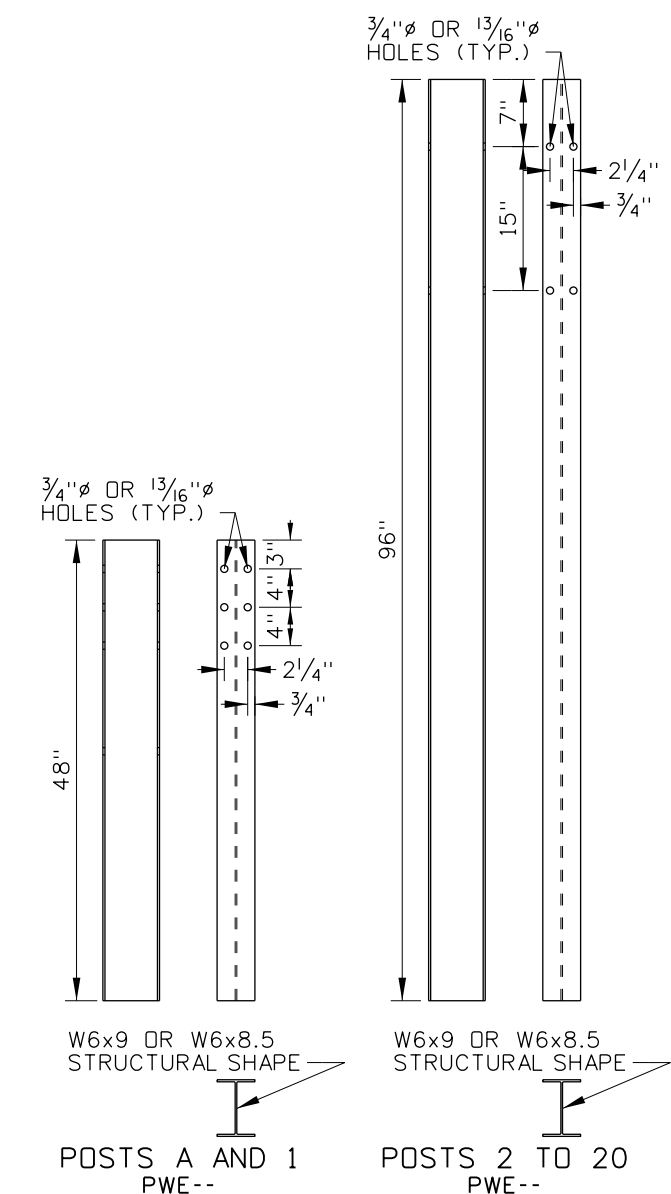
SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: RYAN D. LANCASTER  
DATE ORIGINAL SIGNED: JUNE 9, 2017



⑥ GALVANIZED STEEL PLATE DETAIL



③④ WIDE-FLANGE POST DETAILS

BURIED-IN-BACKSLOPE TERMINAL HARDWARE COMPONENTS TABLE			
ITEM NO.	COMPONENT DESCRIPTION	QTY.	TF-13 NAME
①	4-SPACE W-BEAM GUARDRAIL (W-BEAM)	10	RWM14a
②	4-SPACE W-BEAM GUARDRAIL (RUBRAIL)	9	RWM14a
③	96" WIDE-FLANGE GUARDRAIL POSTS	19	PWE--
④	48" WIDE-FLANGE GUARDRAIL POSTS	2	PWE--
⑤	W-BEAM BLOCKOUT	19	PDB01b OR POLYETHYLENE
⑥	GALVANIZED STEEL PLATE	3	-
⑦	$\frac{5}{8}$ " GUARDRAIL SPLICE BOLT AND RECESSED NUT	97	FBB01
⑧	$\frac{5}{8}$ " GUARDRAIL BOLT AND RECESSED NUT	19	FBB03
⑨	$\frac{5}{8}$ " X 2" HEX HEAD BOLT & NUT	36	FBX16a
⑩	$\frac{5}{8}$ " X 5" HEX HEAD BOLT & NUT	1	FBX16a
⑪	$\frac{5}{8}$ " FLAT WASHER	153	FWC16a

NOTES

- USE THE BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL WHERE A NATURAL BACKSLOPE IS REASONABLY CLOSE TO THE POINT WHERE THE BARRIER IS INTRODUCED. THE BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL ELIMINATES THE POSSIBILITY OF AN END-ON IMPACT WITH THE GUARDRAIL END AND REDUCES THE LIKELIHOOD OF VEHICULAR INTRUSION BEHIND THE BARRIER.
- INSTALL THE BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL WHERE THE DITCH FORESLOPE IS 4:1 OR FLATTER. ENSURE THAT THE DITCH BACKSLOPE IS 2:1 OR STEEPER.
- ADJUST OFFSET DISTANCES WHEN THE DITCH FORESLOPE WIDTH IS LESS THAN 6 FEET WIDE. WHEN THE FORESLOPE WIDTH IS LESS THAN 6 FEET WIDE, THE LENGTH BETWEEN POST 8 AND THE NORMAL 31" W-BEAM GUARDRAIL CAN BE SHORTENED. ENSURE THAT AT LEAST 75 FEET OF COMBINED BURIED-IN-BACKSLOPE TERMINAL AND 31" W-BEAM GUARDRAIL PRECEDE A HAZARD.
- SPACE POSTS 6'-3". SPLICE TERMINAL W-BEAM AT POSTS. TRANSITION TO 31" W-BEAM GUARDRAIL POST SPACING BETWEEN POSTS 20 AND 21.
- FOR POSTS 8 THROUGH 20, ENSURE THAT THE TOP OF W-BEAM GUARDRAIL IS 31" ABOVE THE ADJACENT SHOULDER ELEVATION. THE W-BEAM HEIGHT AT POSTS A THROUGH 7 MAY BE REDUCED TO ENSURE THAT THE RUBRAIL IS BURIED AT POST 2 AND THAT THE W-BEAM GUARDRAIL IS BURIED AT POSTS A AND 1.
- POSTS 2 THROUGH 7 CAN BE SHORTER THAN 96" IF THE GUARDRAIL HEIGHT IS AS SHOWN IN SECTION D-D AND AT LEAST 48" OF THE POST IS EMBEDDED IN SOIL.
- ATTACH THE RUBRAIL TO THE BACK OF POST 20. FIELD BEND THE RUBRAIL BETWEEN POSTS 19 AND 20.
- PAINT DRILLED HOLES WITH TWO THICK APPLICATIONS OF ZINC-RICH PAINT THAT MEETS MIL-P-21035.
- DRAWING NOT TO SCALE.

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