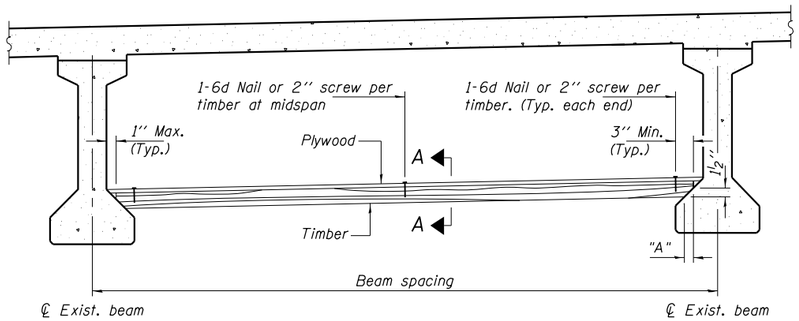
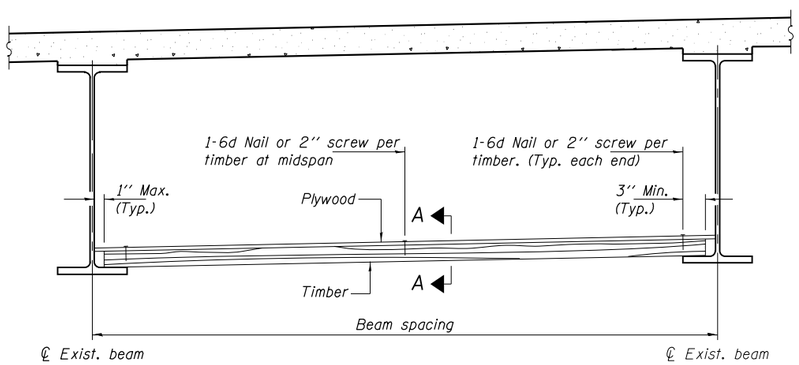
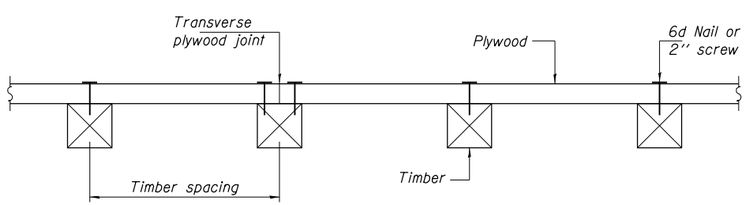
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PPC I-BEAMS AND BULB-T's



STEEL BEAMS



SECTION A-A

TIMBER SPACING

Beam Spacing (ft.)	Timber Sizes (in.)		
	4'' x 4'' with min. Fb=775 psi Fv=135 psi	4'' x 6'' with min. Fb=775 psi Fv=135 psi	6'' x 6'' with min. Fb=575 psi Fv=125 psi
	Maximum Timber Spacing (in.)		
4.5	16	16	16
4.75	16	16	16
5.0	16	16	16
5.25	16	16	16
5.5	16	16	16
5.75	16	16	16
6.0	16	16	16
6.25	12	16	16
6.5	12	16	16
6.75	12	16	16
7.0	8	16	16
7.25	8	16	16
7.5	8	16	16
7.75	8	16	16
8.0	8	12	16
8.25	8	12	16
8.5	6	12	12
8.75	6	12	12
9.0	6	8	12

PPC I-BEAMS AND BULB-T's

BEAM	"A"
36'' I-Beam	1½''
42'' I-Beam	1½''
48'' I-Beam	1½''
54'' I-Beam	1⅝''
63'' Bulb-T	3⅜''
72'' Bulb-T	3⅜''

Notes: See special provision for Permanent Protective Shield System.

Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable.

The minimum Fb and Fv values shown are the tabulated design values given in the National Design Specification for Wood Construction for No. 2 Spruce-Pine-Fir without adjustment factors applied. Better grades or other species with equal or higher allowable stresses will also be considered acceptable.

The timber spacings shown have been determined using allowable stresses with all adjustment factors necessary for the anticipated service conditions. All timber shall be treated.

Plywood shall be ⅝'' rated Exterior type plywood by APA.

Plywood shall be placed such that the face grain is perpendicular to the timber supports. When less than a full sheet (4' width) of plywood is used, the width of the strip used shall not be less than 2'.

Transverse plywood joints shall be supported by timbers.

When 4'' x 6'' timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical.

Design load = 200 psf.

BILL OF MATERIAL

Item	Unit	Total
Protective Shield (Permanent)	Sq. Yd.	3992.5

PERMANENT PROTECTIVE SHIELD

PPS-1 01-22-09

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Default	PLOT DATE = 7/12/2013	DATE -	REVISED -

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PERMANENT PROTECTIVE SHIELD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2013-0481	COOK	8	8
		CONTRACT NO. 60X06		
		ILLINOIS FED. AID PROJECT		