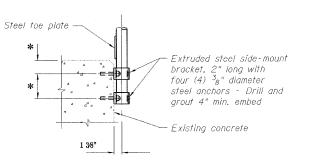
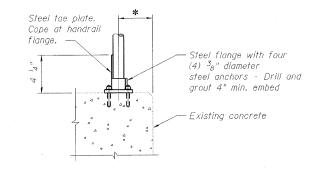


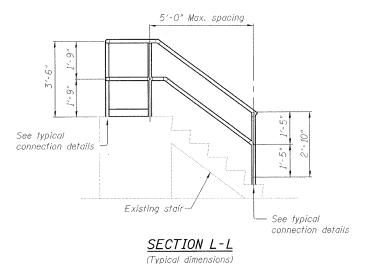
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





TYPICAL GUARDRAIL AND HANDRAIL AT STAIRWAYS

Guardrails shall be top-mounted or side-mounted, as shown on plans (Typical dimensions)

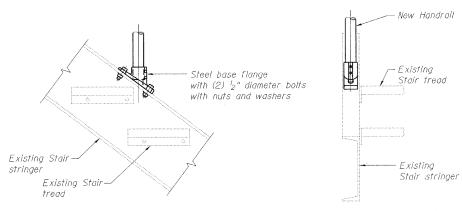


TYPICAL SIDE MOUNT CONNECTION AT CONCRETE

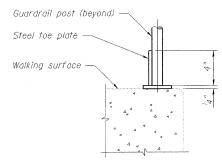
* Manufactorer's recommended dimensions

TYPICAL TOP MOUNT CONNECTION AT CONCRETE

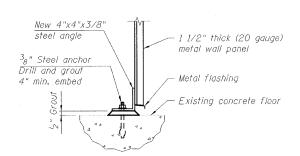
* Manufactorer's recommended dimensions



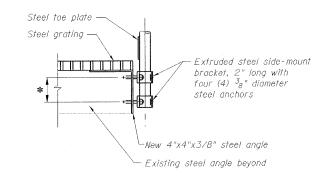
TYPICAL TOP MOUNT CONNECTION TO STRINGER



TYPICAL TOE PLATE DETAIL

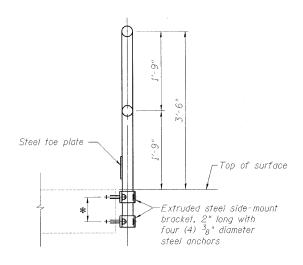


STEEL ANGLE DETAIL



TYPICAL SIDE MOUNT CONNECTION AT PLATFORM

* Manufactorer's recommended dimensions



TYPICAL GUARDRAIL SECTION

* Manufactorer's recommended dimensions

DESIGNED K. STOCKIE

CHECKED J. SHURMAN

DRAWN E. KIENSTRA

CHECKED A. HAMMAD

LEGEND:

Existing member to remain

New member

PB Americas, Inc.
230 WEST MONROE STREET,
SUITE 900
CHICAGO, IL. 60606

SHEET NO. 146	F.A.P RTE.
011221 1101 170	389
163 SHEETS	

STRUCTURE NO. 016-2445

F.A.P RTE. SECTION COUNTY SHEETS NO. 389 2424.2B-R COOK 398 227

CONTRACT NO. 60D61

FED. ROAD DIST. NO. 7 ILLLINOIS FED. AID PROJECT

STAIR RAILING DETAILS