## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

LIFTING LOOP DETAIL

-3" Radius

-1¼′′ ¢ Conduit

Top of Beam

 $3 = \frac{l_2}{2}$   $\phi$  270 ksi strands

| ROUTE NO.           | ROUTE NO. SECTION   |            | COUNTY       |        | SHEET<br>NO. | SHEET NO. 16 |
|---------------------|---------------------|------------|--------------|--------|--------------|--------------|
| FAP 773<br>IL 121   | (108BR -<br>3)B - 1 | CUMBERLAND |              | 96     | 51           | 22 SHEETS    |
| FED. ROAD DIST. NO. |                     | 1LLIN0IS   | FED. AID PRO | DJECT- |              |              |

SHEET. NO. 16

Contract # 74237

## <u>NOTES</u>

Inserts for 34" \$ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

The nominal diameter shall be  $^{\prime}_{2}$  '' and the nominal cross-sectional area shall be 0.153 sq. in.

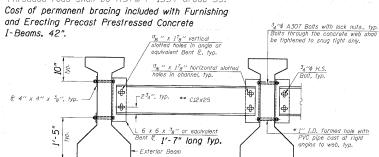
Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

A minimum  $2'_2{''}$   $\phi$  lifting pin shall be used to engage the lifting loops

during handling.

Cut  $G_6$  bars when necessary to maintain  $1_2^{\prime\prime}$  clearance. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates and studs shall be galvanized according to AASHTO

Threaded rods shall be ASTM F 1554 Grade 55.



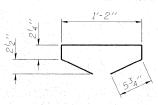
PERMANENT BRACING DETAILS

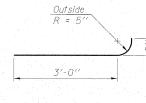
Notes:
All material for bracing shell be hat dip galvanized according to AASHTO MIII unless otherwise noted.
Two hardened washers are required for each set of oversized holes,
All holes shall be  $\frac{G_{10}}{G_{10}}$  (\*) unless otherwise noted.  $\frac{G_{10}}{G_{10}}$  "X 3" x 3" plate washers are required over all slated holes heal be galvanized occording to AASHTO M232.
Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

\* Fabricator shall locate to miss strands within permissible tolerances.

\*\* Alternate C12x30 channels are permitted to facilitate material acquisition

The affernate, if utilized, shall be provided at no extra cost to the Department.





BAR G4

BAR G5

BAR G6

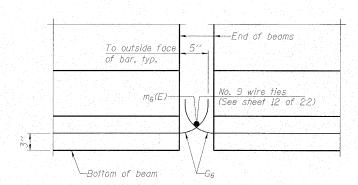
# Outside

BAR G2

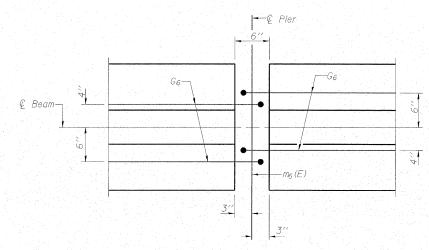
# BILL OF MATERIAL

| Item                            | Unit | Total |
|---------------------------------|------|-------|
| Furnishing and Erecting Precast |      |       |
| Prestressed Concrete            | Ft.  | 812   |
| I-Beams, 42''                   |      |       |

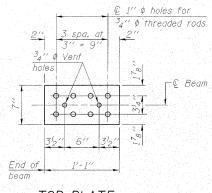
42" PPC I-BEAM DETAILS IL ROUTE 121 OVER MULE CREEK F.A.P. RTE. 773 - SECTION (108BR-3)B-1 CUMBERLAND COUNTY STATION 399+34.00 STRUCTURE NO. 018-0062



## ELEVATION OF BEAM AT PIER

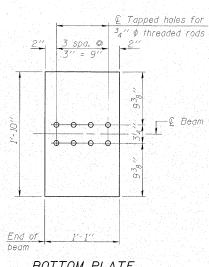


## PLAN OF BEAM AT PIER

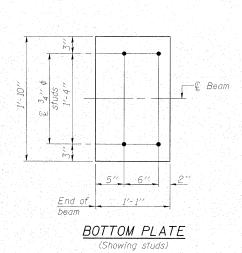


TOP PLATE





BOTTOM PLATE (Showing threaded rods)



Outside R = 2" BAR GI

DRAWN

CHECKED - RJA