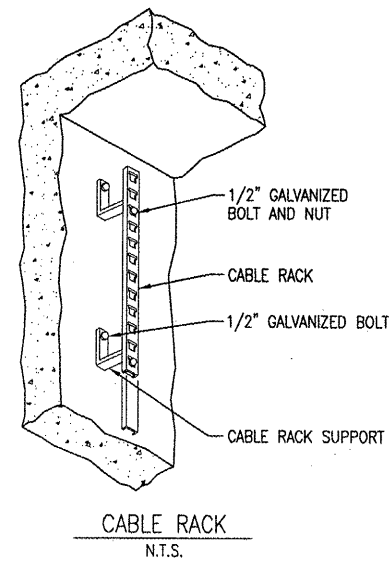
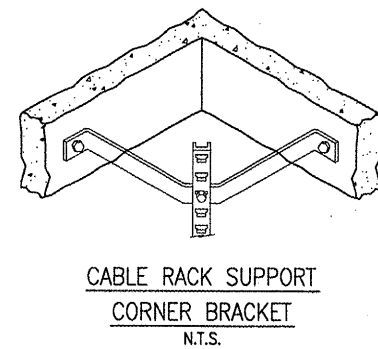
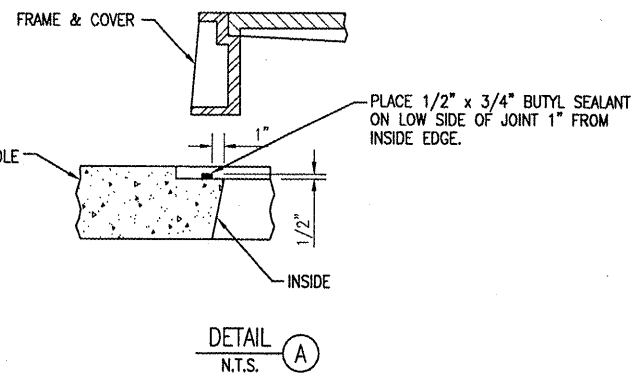


4'x4' AIRPORT MANHOLE DETAILS  
N.T.S.



PRECAST 4'x4' AIRPORT MANHOLE NOTES

1. 4'x4' AIRPORT MANHOLE SHALL BE CONSTRUCTED TO MEET THE FOLLOWING:

DESIGN CRITERIA:

- 1) DESIGN SPECIFICATIONS: ACI 318, ASTM C858, FAA AC 150/5320-6D
- 2) DESIGN LOADING:  
B727-200 (210,000 LB. TAXI WEIGHT, 97,600 LB. MAX. GEAR)  
B777-200/300 (752,000 LB. TAXI WEIGHT, 352,000 LB. MAX. GEAR)
- 3) LIVE LOAD SURCHARGE: 24.5% OF THE WHEEL LOAD SOIL PRESSURE
- 4) CONCRETE COMPRESSIVE STRENGTH:  $F'_c = 5,000$  PSI
- 5) REINFORCING STEEL: ASTM A706,  $F_y = 60,000$  PSI

DESIGN ASSUMPTIONS:

- 1) GROUND WATER LEVEL: 3'-6" BELOW GRADE
- 2) EARTH COVER: 0'-8" - 2'-0"
- 3) LIVE LOAD IMPACT:  $I = 20\%$
- 4) COEFFICIENT OF ACTIVE EARTH PRESSURE:  $K_a = 0.3$
- 5) SPECIFIC WEIGHT OF STD. AGGREGATE CONCRETE: 150 PCF
- 6) SPECIFIC WEIGHT OF DRY EARTH: 100 PCF
- 7) SPECIFIC WEIGHT OF SATURATED EARTH: 120 PCF
- 8) EQUIVALENT FLUID PRESSURE OF DRY EARTH: 30 PSF
- 9) EQUIVALENT FLUID PRESSURE OF SATURATED EARTH: 80 PSF

2. AIRPORT MANHOLE FRAME & LID SHALL BE CAPABLE OF WITHSTANDING MINIMUM 100,000 POUND LOADS AS CALLED FOR IN FAA ADVISORY CIRCULAR AC 150/5320-6D APPENDIX 3 ITEM 2.d. (1). AIRPORT MANHOLE FRAME & LID SHALL BE NEENAH CATALOG NO. R-3492-A OR APPROVED EQUAL. LID FOR HIGH VOLTAGE MANHOLE SHALL BE LABELED "HIGH VOLTAGE". LID FOR LOW VOLTAGE MANHOLE SHALL BE LABELED "LOW VOLTAGE".
3. COORDINATE DUCT BANK INTERFACE & OPENINGS WITH THE MANHOLE MFR. CONTRACTOR SHALL SLOPE DUCT BANK TO PRECAST MANHOLE OPENINGS. ALL OPENINGS SHALL BE SEALED WATERTIGHT AFTER DUCT BANK INSTALLATION.
4. 4'x4' AIRPORT MANHOLE SHALL BE MANUFACTURED BY HARTFORD CONCRETE PRODUCTS, INC., 1400 N. WABASH AVE., P.O. BOX 660, HARTFORD CITY, IN. 47348, PHONE 765-348-3506 OR 1-800-428-8110, OR APPROVED EQUIVALENT.
5. 4'x4' AIRPORT MANHOLE SHALL BE PAID FOR UNDER ITEM AR110715 ELECTRICAL MANHOLE SPECIAL PER EACH.

REVISION	BY	DATE

COLES COUNTY AIRPORT AUTHORITY  
COLES COUNTY AIRPORT

IL PROJ.: MTO-3762 A.I.P. PROJ.: 3-17-0066-B20

IBI Project No. 07A0101D_0800	04/04/08
Revision R-541ELE.DWG	03/24/08
Scale NONE	03/24/08
Date	04/03/08
LAYOUT	KNL
DRAWN	MY
REVIEWED	CAH

**HANSON**  
Hanson Professional Services Inc.  
1525 South Sixth Street  
Springfield, Illinois 62705-2886  
Offices Nationwide

REPLACE ELECTRICAL DUCT IN FRONTAL AREA  
4' x 4' x 4'  
AIRPORT MANHOLE

MAY 14, 2008 1:02 PM KINCA00394  
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