STA. TO STA.

FED. ROAD DIST. NO. | ILLINOIS | FED. AID | PROJECT

CONTRACT NO. 62388

SHEETS NO.

243 141

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The Illinois Coil-Lock Anchor Bolt is a proprietary

for epoxy grout

"d" Holes with zerk

27	20	44	6
33	26	51	10
39	32	54	13
51	44	73	15
67	60	86	25

30

36

48

64

44 6
51 10
Anchor Bolt (See Bearing Details
for number, size and length.)

Top of base plate

Bearing Seat

End of Goove coil lock

4 mm wide x 2 mm deep groove in anchor bolt with 3 mm \$\phi\$ coil wire

PLAN-COIL WIRE

ILLINOIS COIL-LOCK ANCHOR BOLT

3 mm Notch

# MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed. The epoxy grout shall be a two-component, epoxy resin bonding system comforming to ASTM C 881, Type I, Crade 1 and of a Class suitable for the temperature at installation.

### INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

 With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.

2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

### ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.

A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	"L"	Туре
S. Abut.	329	A307
Pier 1	396	A325
Pier 2	396	A325
Pier 3	396	A325
Pier 4	396	A307
Pier 5	396	A307
Pier 6 (Unit I)	329	A307
Pier 8	329	A307
Pier 9	329	A307
Pier 11 (Unit III)	256	A307
Pier 12	396	A307
Pier 13	396	A325
Pier 14	396	A307
Pier 15 (Unit III)	329	A307
Pier 15 (Unit IV)	329	A307
Pier 16	396	A325
Pier 17	396	A307
N. Abut.	256	A307

ASTM F 1554 (Fy = 724 MPa), ASTM A 449 and AASHTO M 314 (Fy = 724 MPa) anchor bolts may be substituted for the anchor bolts shown above.

#### GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted. Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming. The anchor bolts, furnished and installed and including the epoxy grout or capsules shall be paid for as Anchor Bolts, for the diameter specified.

All dimensions are in millimeters (mm) except as noted,

# ANCHOR BOLT DETAILS FOR BEARINGS

REVISIONS	ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME DATE	THE PROPERTY OF THE PROPERTY OF
	SOUTHWEST HIGHWAY OVER
	B&O RAILROAD AND STONY CREEK
	FAU 3578 SECTION 15V B-1-R-1
	STRUCTURE NUMBER 016-2771
	COOK COUNTY STATION 4+716.497
	SCALE: NONE DRAWN BY: E. Mroozek
	DATE: 6/17/09 CHECKED BY: G. Hattestad

**ABB-1 (M)** 4-30-99

