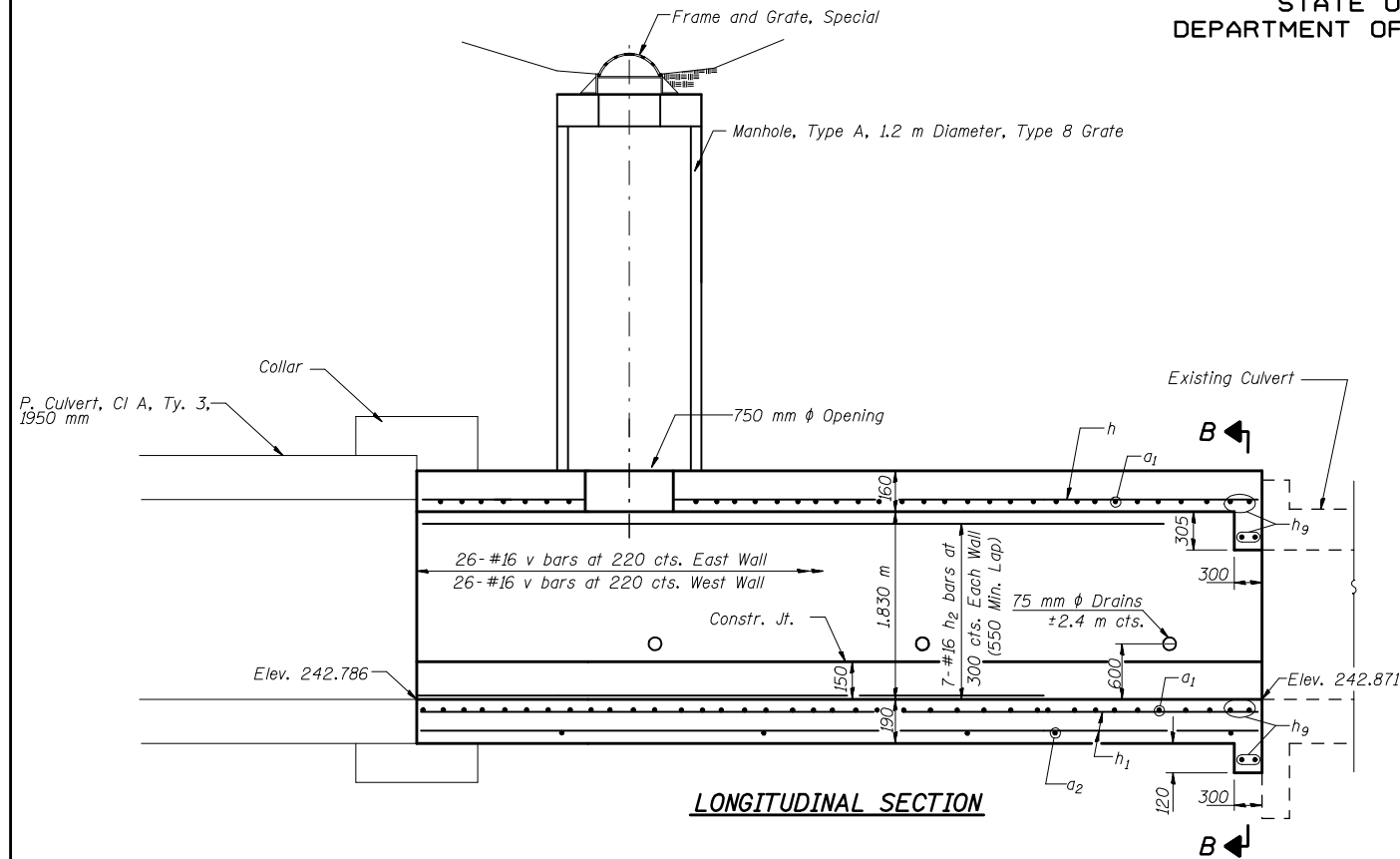
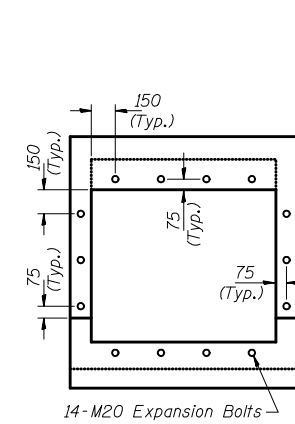


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATION	SHEET
F.A.P. 704	CDI	McLEAN	497	300A
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

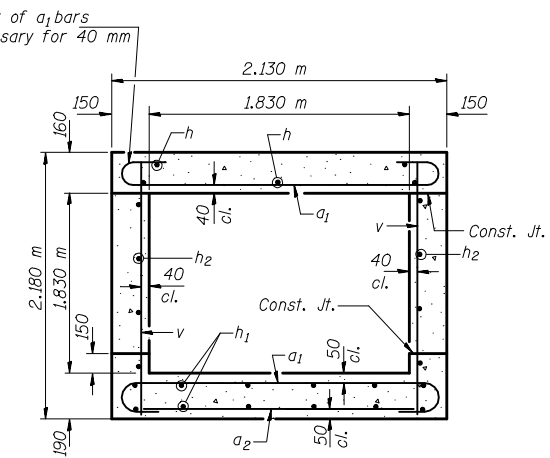


LONGITUDINAL SECTION



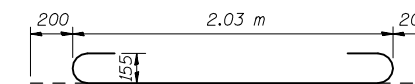
SECTION B-B

Expansion bolts shall be M20 hooked bolts. Hooked bolts shall extend a minimum of 230 mm into new concrete.



SECTION THRU BARREL

Tilt hook of a₁ bars if necessary for 40 mm min. cl.



BAR a₁

DESIGN STRESSES

f_y = 420 MPa
f'c = 24 MPa

LOADING MS18 & ALT.

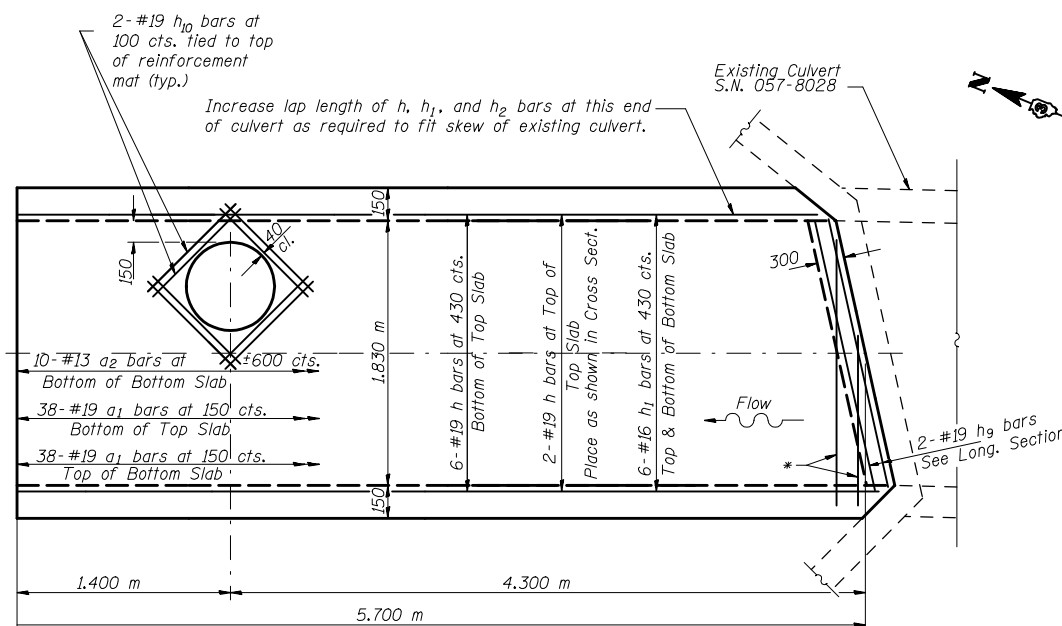
NOTES

Reinforcement Bars shall conform to the requirements of ASTM A706M Grade 420.

All dimensions are in millimeters (mm) except as noted.
All construction joints shall be bonded.

BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a ₁	76	#19	2.43	C
a ₂	10	#13	1.91	—
h	8	#19	5.62	—
h ₁	12	#16	5.62	—
h ₂	14	#16	5.62	—
h ₉	8	#19	1.89	—
h ₁₀	8	#19	1.09	—
v	52	#16	2.08	—
Concrete Box Culverts			m ³	7.6
Reinforcement Bars			kg	1151
M20 Expansion Bolts			each	14



PLAN

* a bars in skew portion of slab shall be ordered full length & cut to fit.



DESIGNED
CHECKED
DRAWN
CHECKED

CULVERT DETAILS
SPRINGFIELD ROAD
STA. 0+972.395
22.220 m RT.
F.A.P. ROUTE 704 SECTION (D)I
McLEAN COUNTY