



**LIGHTING GENERAL NOTES**

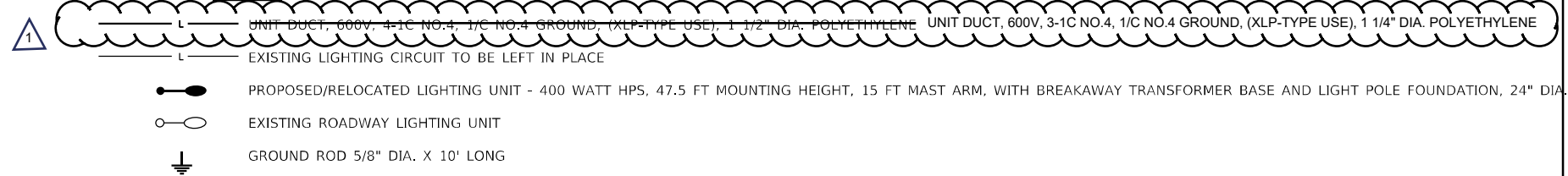
- PRIOR TO THE INSTALLATION OF THE NEW CABLES, UNDERGROUND CONDUITS, CONCRETE ENCASED CONDUITS, UNIT DUCTS, HANDHOLES, JUNCTION BOXES, LIGHT POLE FOUNDATIONS, CONTROLLER FOUNDATIONS AND APPURTENANCES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLES AND UNDERGROUND UTILITIES.  
  
THE CONTRACTOR SHALL CALL J.U.L.I.E. TO AID IN THIS TASK.
- THE CONTRACTOR SHALL VERIFY ALL OF THE DATA SHOWN ON THE CONTRACT PLANS AND REFERENCE DRAWINGS, WHICH WOULD AFFECT THEIR WORK UNDER THIS CONTRACT.
- ALL NEW CABLES, CONDUITS, HANDHOLES, JUNCTION BOXES AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. PROPOSED ROUTING OF THE UNDERGROUND CONDUITS, AS SHOWN IN THE PLANS, IS FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY THE ACTUAL ROUTING LOCATION IN THE FIELD WITH THE APPROVAL OF THE ENGINEER.
- ALL SPLICES SHALL BE HEAT SHRINK AND WATERPROOF AND INSTALLED INSIDE LIGHT POLE BASES OR JUNCTION BOXES. NO DIRECT BURIED SPLICES SHALL BE ALLOWED.
- THE ELECTRICAL MATERIAL SHALL BE NEW AND OF THE TYPE AND KINDS APPROVED BY THE FOLLOWING ORGANIZATIONS:  
  
NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION  
INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS  
ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA  
AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
U.S. DEPARTMENT OF TRANSPORT AT ION  
UNDERWRITERS LABORATORIES  
AMERICAN STANDARD INSTITUTE  
INSULATED POWER CABLE ENGINEERS ASSOCIATION
- UNDERGROUND CONDUITS AND CABLE DUCTS SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICTS WITH UNDERDRAINS AND OTHER UTILITIES.
- WHERE MULTIPLE CABLE DUCTS OR UNDERGROUND CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL SHALL BE CONTINUOUS BETWEEN EACH CABLE DUCT OR UNDERGROUND CONDUIT FOR THE LENGTH OF THE COMMON TRENCH.
- EXPANSION ANCHORS (THREADED INSERTS) SHALL BE A MINIMUM OF 2 INCHES LONG AND HOT-DIPPED GALVANIZED AS MADE BY PARABOLT, KWIK-BOL T OR WEJ-IT.
- HOUSESIDE SHIELDS SHALL BE USED ON ALL NEW LUMINAIRES ADJACENT TO RESIDENTIAL AREAS AND SHALL BE INCLUDED IN THE COST OF THE ROADWAY LUMINAIRE PAY ITEM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ANY SPLICES NECESSARY FOR A COMPLETE AND OPERATIONAL LIGHTING CIRCUIT SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM CABLE DUCT, OF THE TYPE SPECIFIED ON THE PLANS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- CONTRACTOR SHALL TAKE OVER MAINTENANCE OF EXISTING ROADWAY LIGHTING CONTROLLERS. COST SHALL BE PAID UNDER PAY ITEM Z0033028, MAINTAIN OF LIGHTING SYSTEM, PER CALENDAR MONTH.
- ALL NEW PERMANENT LIGHT POLES TO BE INSTALLED SHALL HAVE A SET BACK OF 3 FEET MINIMUM, FROM THE FACE OF CURB TO THE CENTER OF THE LIGHT POLE FOUNDATION.
- LIGHT POLES TO BE RELOCATED SHALL BE DONE WITHOUT INTERRUPTION TO THE EXISTING LIGHTING SYSTEM.
- ONCE NEW LIGHT POLE FOUNDATION IS INSTALLED, DISCONNECT CONDUCTORS AND RELOCATE POLE. THIS WORK IS TO BE PERFORMED IN ONE SEAMLESS MOVE PRIOR TO DUSK TO AVOID ANY INTERRUPTION.

**LIGHTING BILL OF MATERIALS**

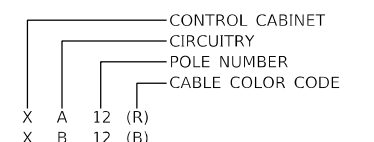
ITEM NUMBER	SP	PAY ITEM NUMBER	ITEM	UNIT	IDOT QUANTITY	HARVEY QUANTITY
1		81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT		90
2		81603105	UNIT DUCT, 600V, 4-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT		1061
3	*	82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH		1
4	*	83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH		1
5		83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT		39
6		83800506	BREAKAWAY DEVICE, COUPLING WITH ALUMINUM SKIRT OVER STAINLESS STEEL SCREEN	EACH		12
7		84400105	RELOCATE EXISTING LIGHTING UNIT	EACH		2
8	*	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO		6

\* INDICATES SPECIALTY ITEM

**LEGEND**



**CIRCUIT DESIGNATION SCHEME**



1 REVISED SHEET 4/15/2022

USER: jdoe  
 MODEL: Detail  
 FILE NAME: PLOT\_209\_004\_IDOT\_PTB\_190\_14\_Phase II\_Van-Van-Design-WD\_1\_62H26CDDICADD\_Sheets\IDOT\26-Sub\LightingNotes.dgn



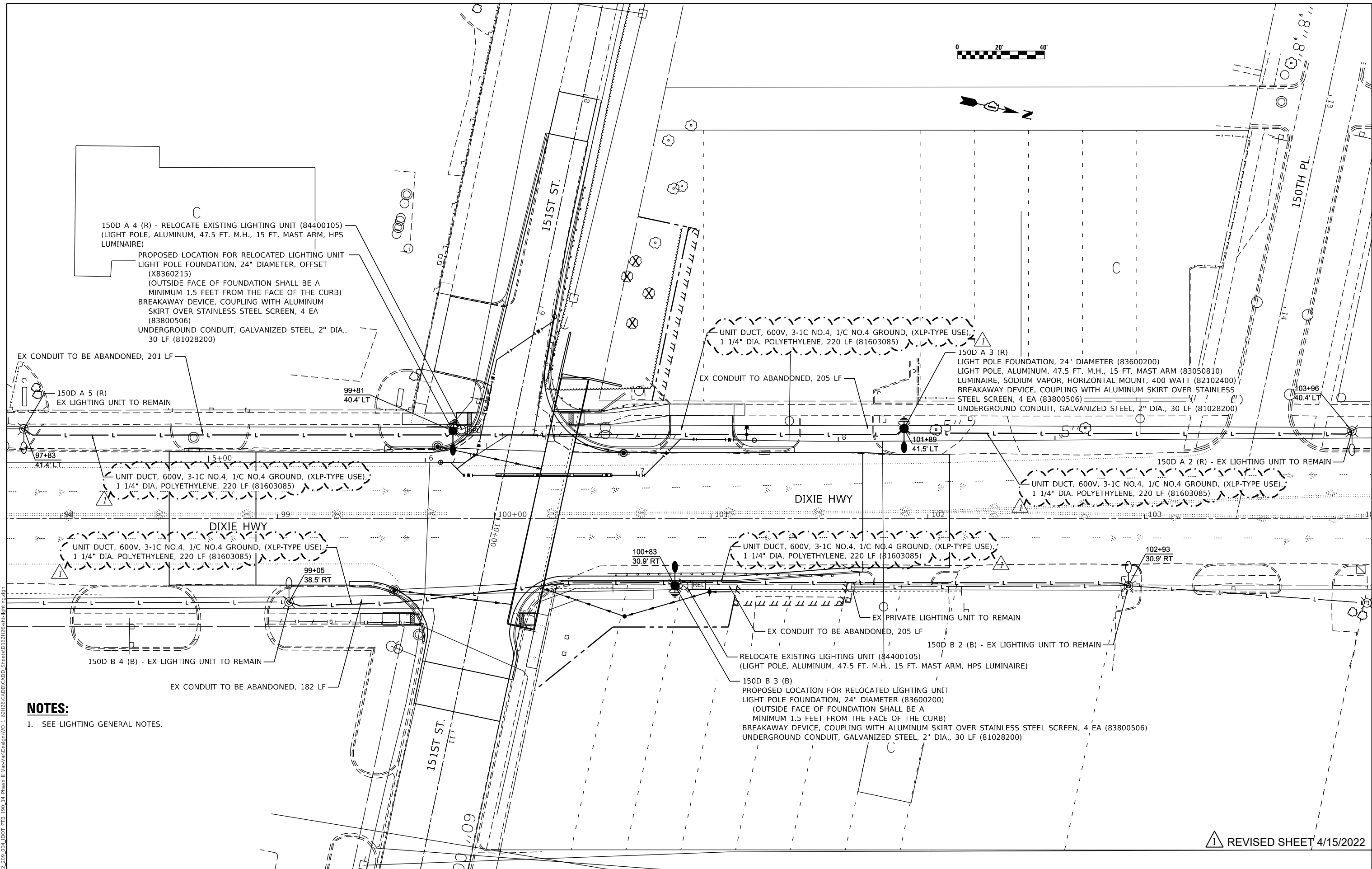
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY LIGHTING  
LIGHTING GENERAL NOTES AND BILL OF MATERIALS**

SCALE: N/A SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	2018-068-B	COOK	95	57
CONTRACT NO. 62H26				
ILLINOIS FED. AID PROJECT NHPPY(XHR)(640)				



**NOTES:**  
 1. SEE LIGHTING GENERAL NOTES.

REVISION 1 REVISED SHEET 4/15/2022

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 MICHEL Detail  
 FILE NAME: PLOT\_209\_004\_IDOT\_PTB\_190\_14 Phase II Var-VariDesignW0\_1\_62H26CADD\CADD\_Sheets\02H26-eh-lighting.dwg



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ROADWAY LIGHTING  
 PLAN - DIXIE HIGHWAY & 151st STREET**

SCALE: 40,0000 ' / in. SHEET 2 OF 3 SHEETS STA. 97+00 TO STA. 103+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	2018-068-B	COOK	95	58
CONTRACT NO. 62H26				
ILLINOIS FED. AID PROJECT NHPP-YXHR(640)				

Benchmark: Chiseled square in center of south corner of west headwall. Elev. 605.817

Existing Structure: S.N. 016-1342 is an 11'-7" clear span reinforced concrete slab bridge supported on wall abutments, approx. 100'-9" wide and with an approx. 12° skew. Wall abutments are supported on spread footings. Bridge terminates with T-type reinforced concrete wingwalls at the west end and a buried concrete masonry bulkhead with a 60" concrete pipe at the east end.

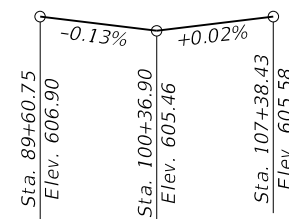
One lane of traffic in each direction to be maintained using staged construction.

Precast alternate is not allowed.

No Salvage.

**UTILITY LEGEND**

- E— Underground Electric
- W— Underground Water
- S— Storm Sewer



**PROFILE GRADE**

Along  $\bar{C}$  Dixie Highway

**WATERWAY INFORMATION**

Flood		Freq. Yr.	Q C.F.S.	Opening Ft <sup>2</sup>		Nat. H.W.E.		Head - Ft.		Headwater El.	
				Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design		10	66	42.1	48.9	600.24	0.05	-0.02	600.29	600.22	
Base		50	100	73.5	75.0	604.37	0.10	0.02	604.47	604.39	
Overtopping		100	135	73.5	75.0	605.52	0.20	0.05	605.72	605.57	
Max. Calc.		>10, <50	500	250	73.5	75.0	605.73	0.26	0.00	605.99	605.73

Drainage Area = 1.2 Sq. Mi. Low Grade Elev. 605.5 @ Sta. 100+25  
 2-yr Q = 36 CFS 10-yr velocity = 1.58 ft/s (exist.) 1.35 ft/s (prop.)

**DESIGN SPECIFICATIONS**

2017 AASHTO LRFD Bridge Design Specifications Customary U.S. Units, 8th Edition

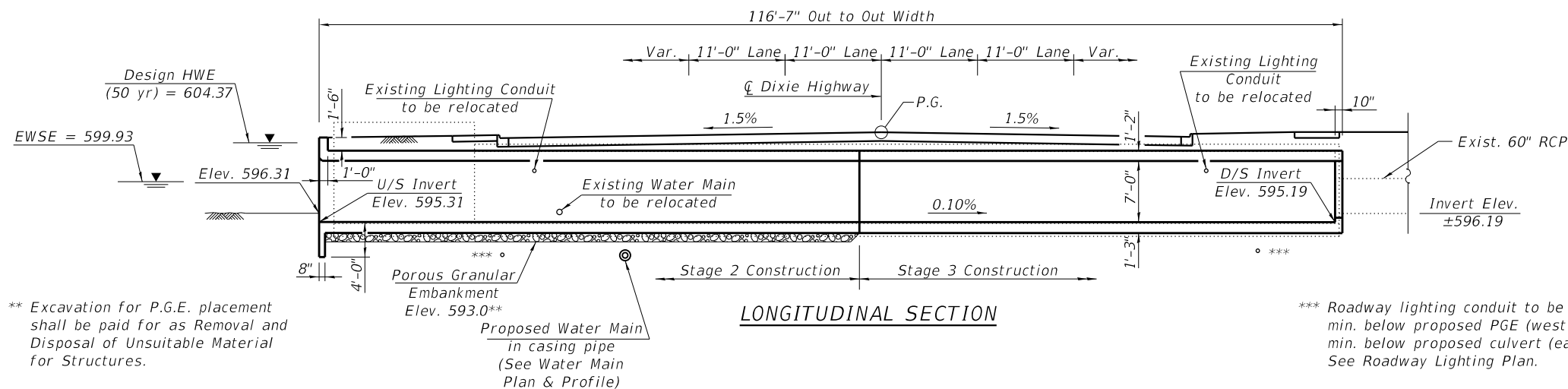
**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN STRESSES**

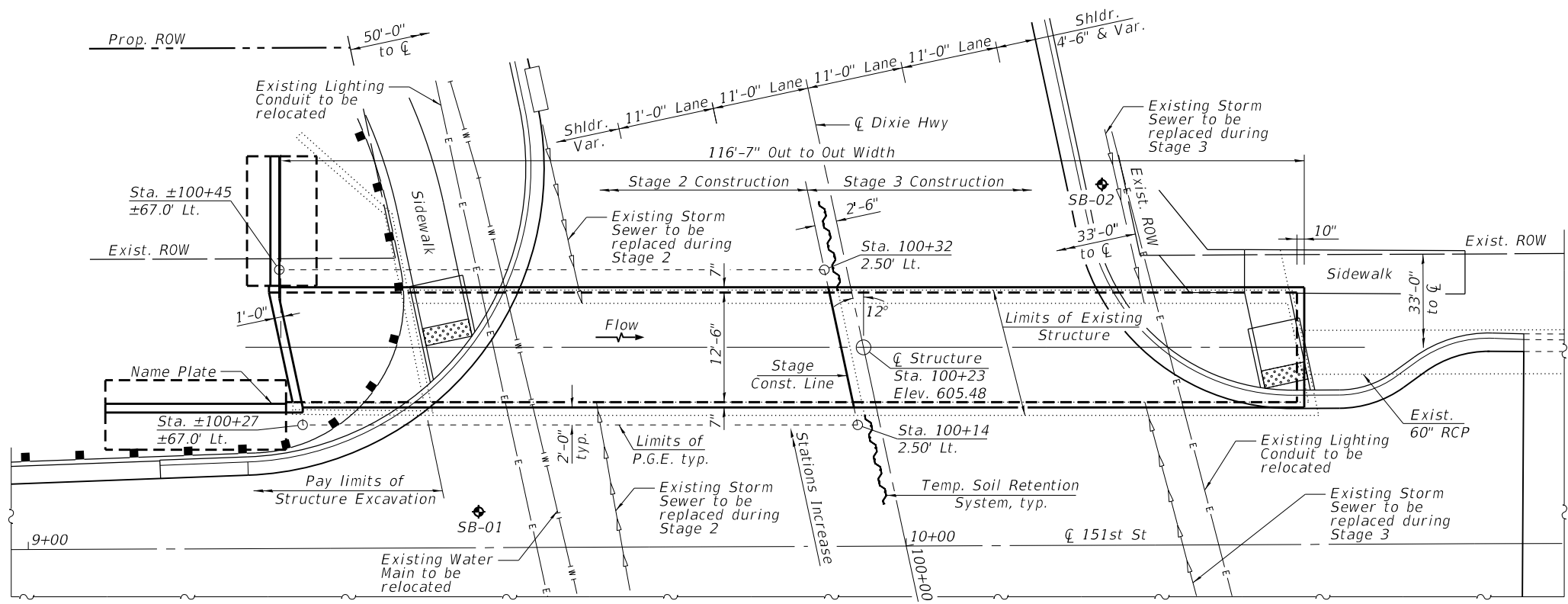
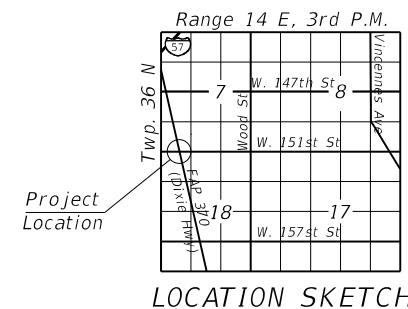
**FIELD UNITS**

- f'c = 3,500 psi
- f'c = 4,000 psi (Superstructure)
- fy = 60,000 psi (Reinforcement)

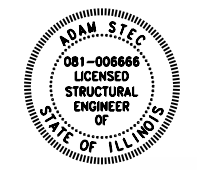


\*\* Excavation for P.G.E. placement shall be paid for as Removal and Disposal of Unsuitable Material for Structures.

\*\*\* Roadway lighting conduit to be relocated 12" min. below proposed PGE (west side) or 12" min. below proposed culvert (east side). See Roadway Lighting Plan.



**APPROVED**  
For Structural Adequacy Only  
*Adam Stec*  
Engineer of Bridges & Structures



DATE: 3/12/21  
LICENSE EXPIRES 11/30/22

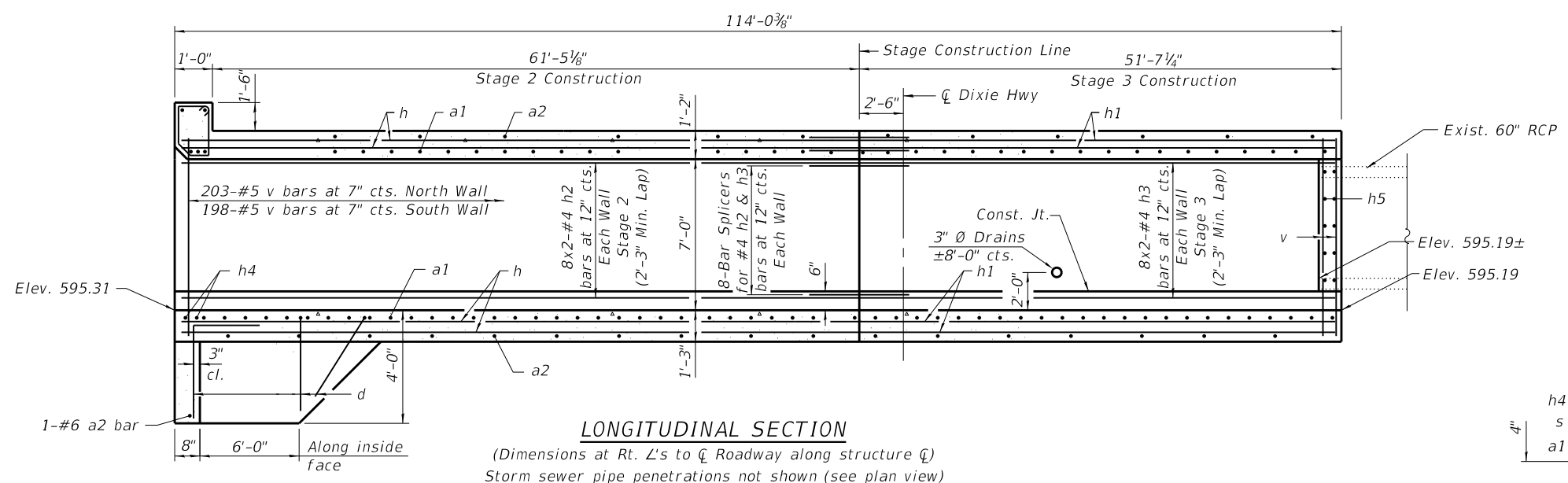
**GENERAL PLAN AND ELEVATION**  
**DIXIE HIGHWAY OVER DIXIE CREEK**  
**F.A.P. RTE. 370 - SEC 2018-068-B**  
**COOK COUNTY**  
**STATION 100+23**  
**STRUCTURE NO. 016-1670**

REVISIONS SHEET 4/15/2022

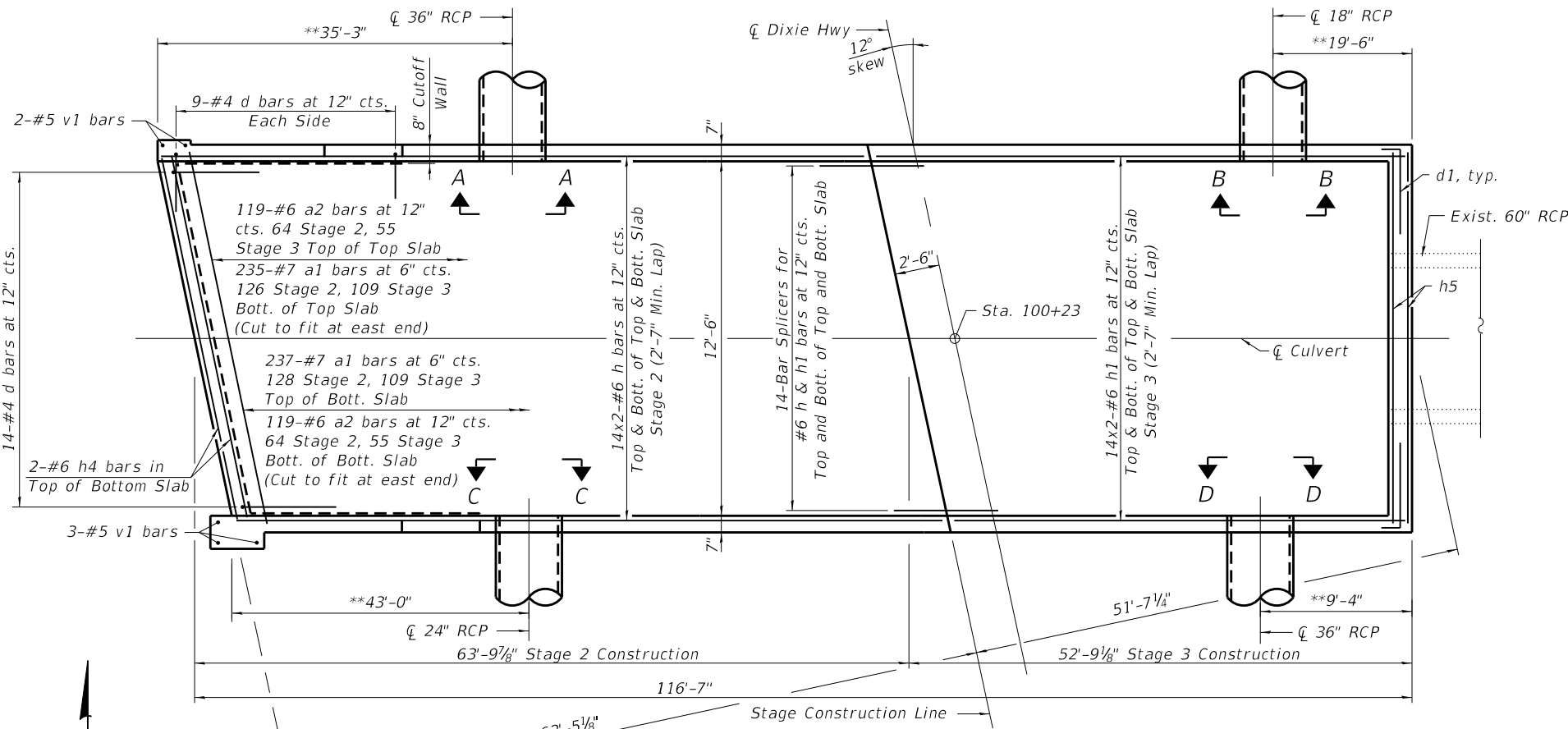
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		FILE - 0161670-62H26-001-GPE.dgn							COOK	95	65
									CONTRACT NO. 62H26		

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**LONGITUDINAL SECTION**  
 (Dimensions at Rt. L's to C Roadway along structure C)  
 Storm sewer pipe penetrations not shown (see plan view)



**PLAN**

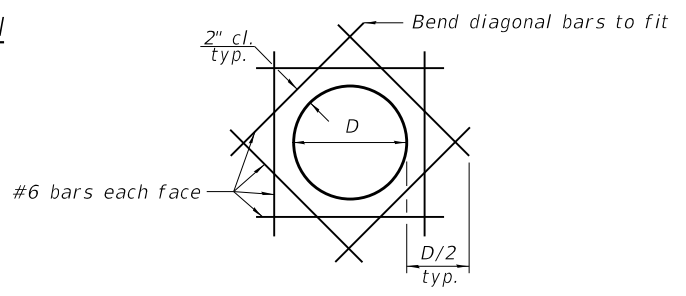


\*\* Coordinate storm sewer penetration locations with Drainage Plans.

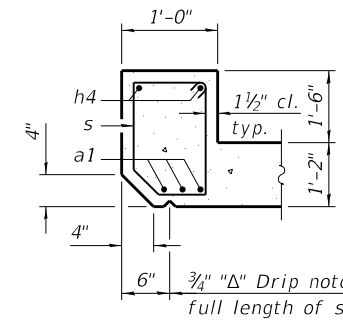
**STORM SEWER TABLE**

View	Type	Invert	D	Diag. Bars	Vert./Horiz. Bars
A-A	36" RCP	597.93	44"	x	x1
B-B	18" RCP	599.50	23"	x2	x3
C-C	24" RCP	599.02	30"	x4	x5
D-D	36" RCP	597.87	44"	x	x1

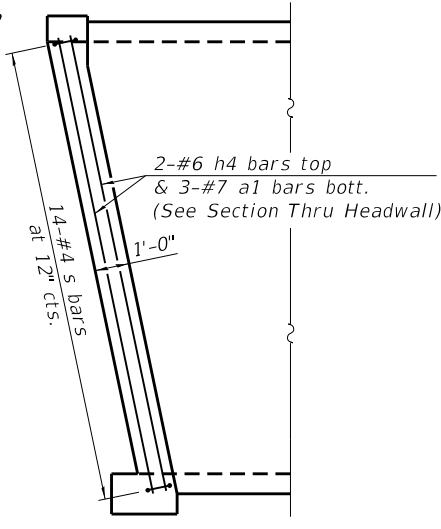
Notes:  
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
 See Sheet 5 of 9 for wingwall details and Bill of Material.



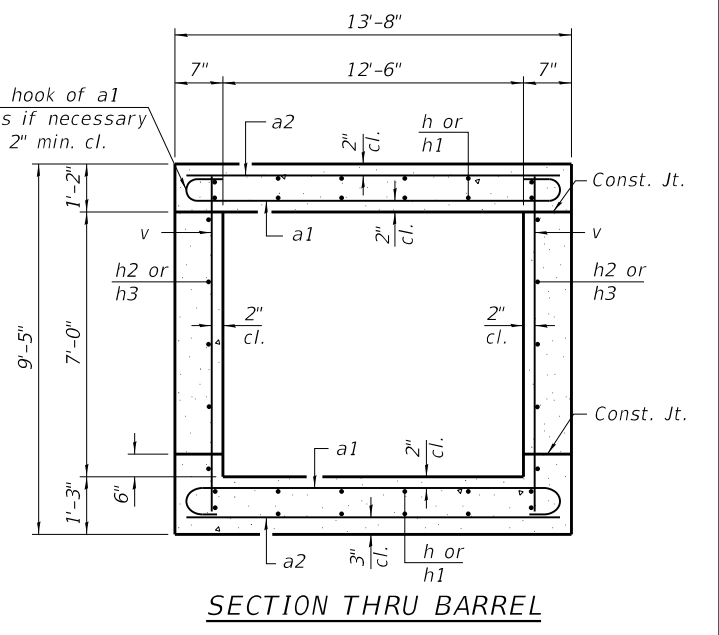
**STORM SEWER PIPE PENETRATION DETAILS**  
 See Drainage Plans for additional information



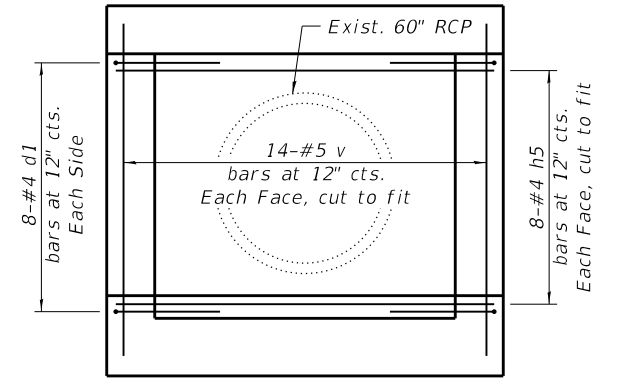
**SECTION THRU HEADWALL**



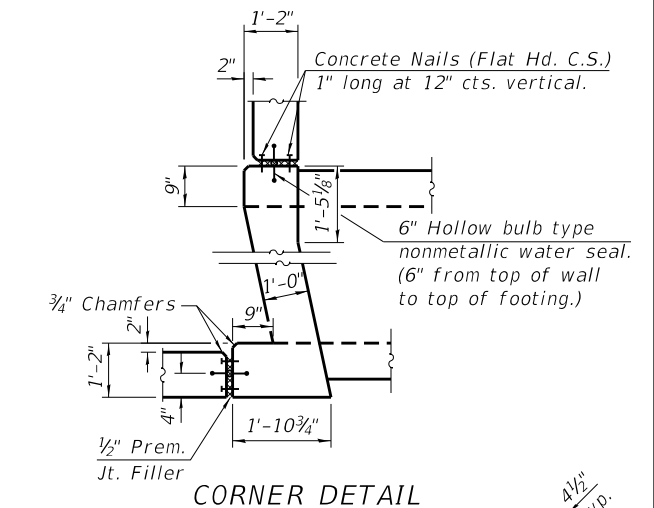
**SHOWING HEADWALL PARTIAL PLAN**



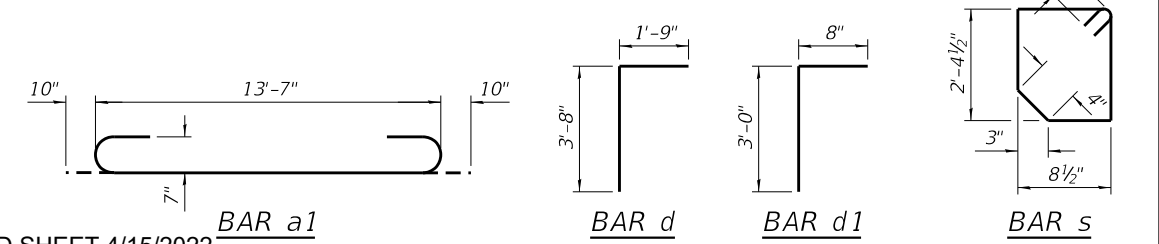
**SECTION THRU BARREL**



**EAST END WALL ELEVATION**



**CORNER DETAIL**



**BAR a1**

**BAR d**

**BAR d1**

**BAR s**



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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

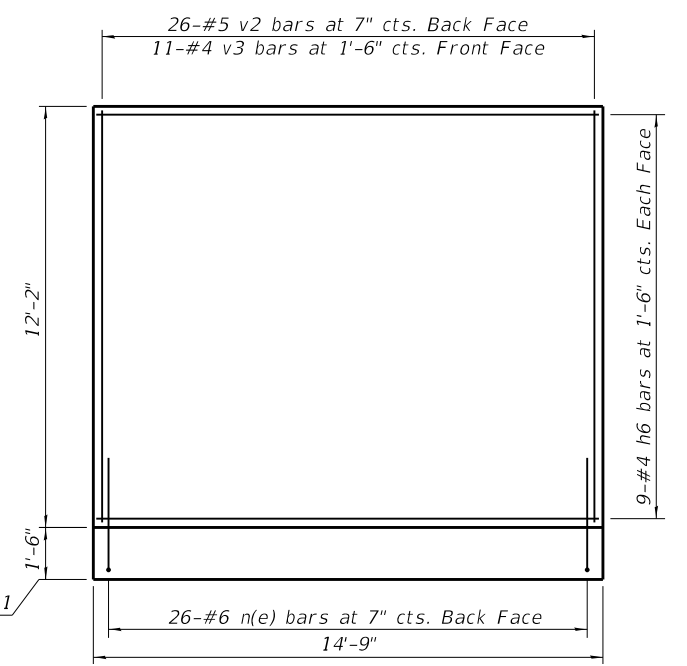
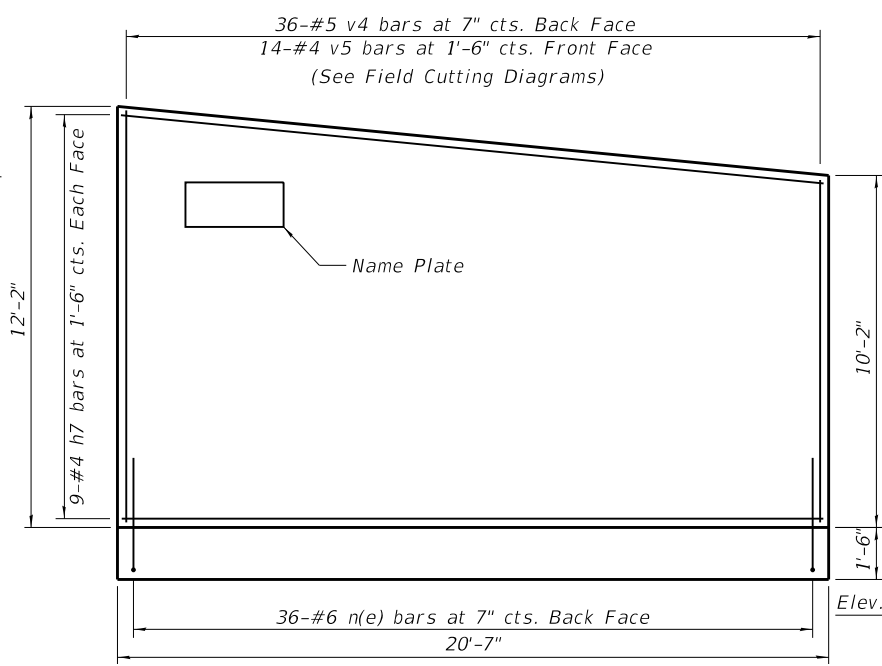
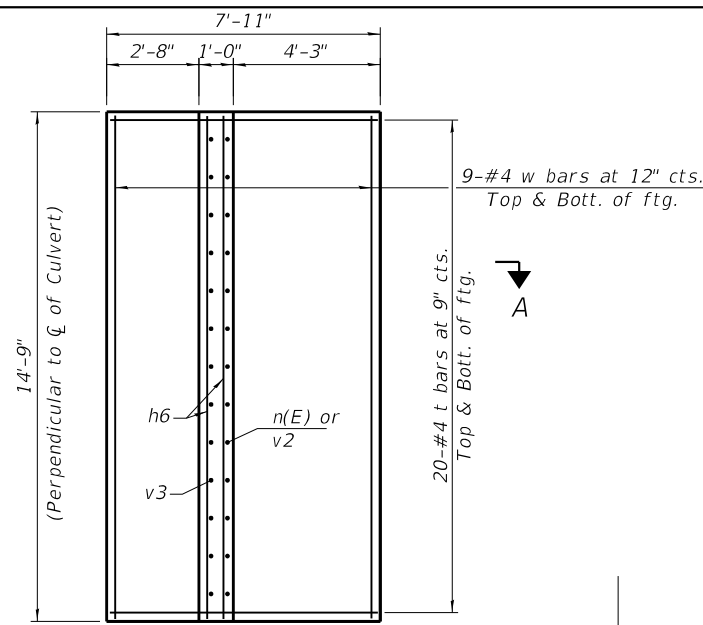
**CULVERT DETAILS STRUCTURE NO. 016-1670**

SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	2018-068-B	COOK	95	68
ILLINOIS FED. AID PROJECT YXHR(640)			CONTRACT NO. 62H26	

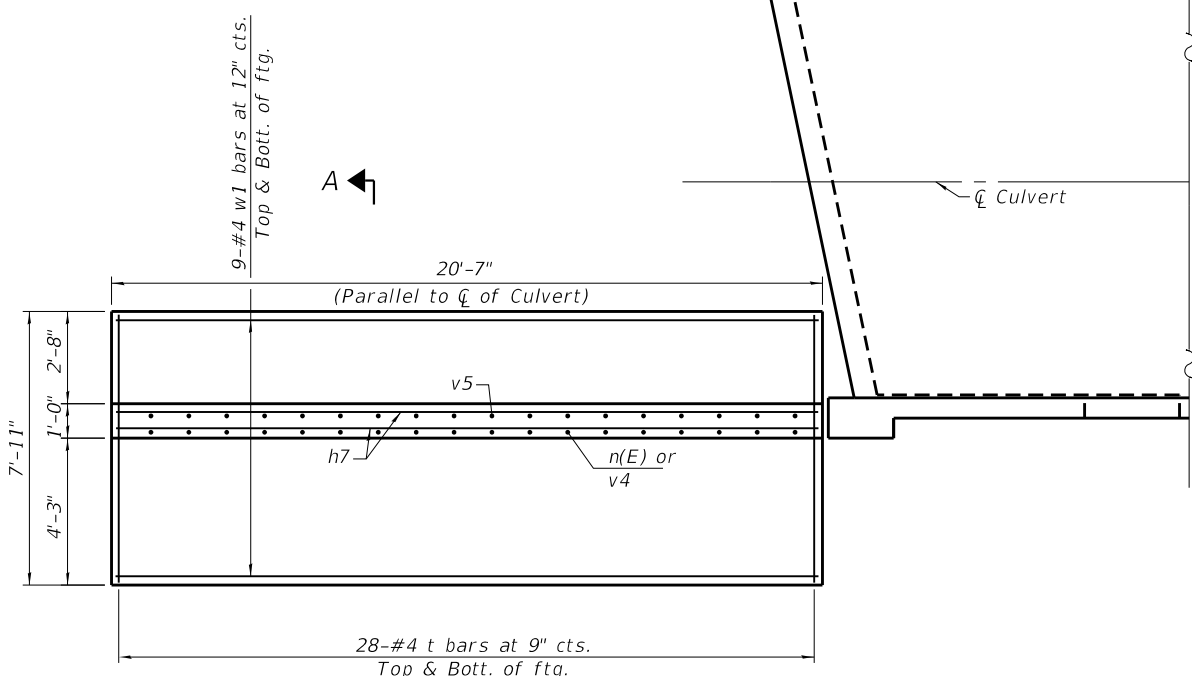
REVISD SHEET 4/15/2022

Note:  
See Sheet 4 of 9 for culvert details.

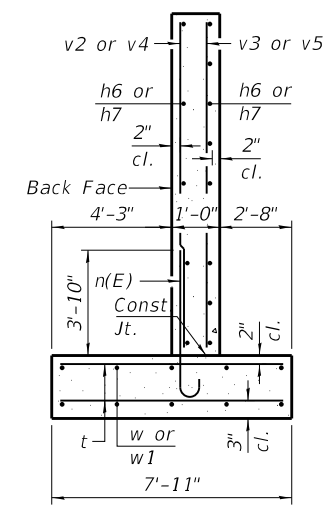


**SOUTH WINGWALL ELEVATION**  
Looking South

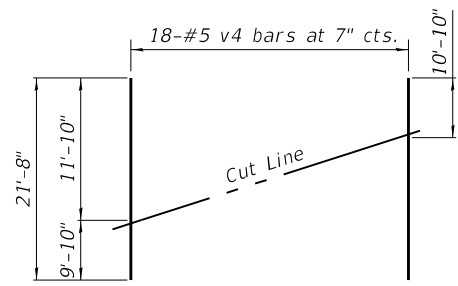
**NORTH WINGWALL ELEVATION**



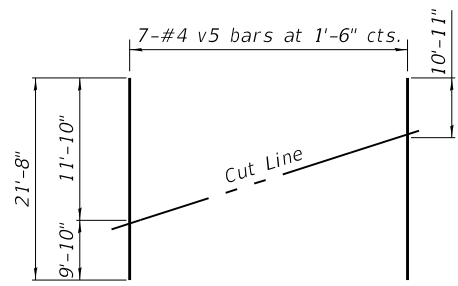
**PLAN**



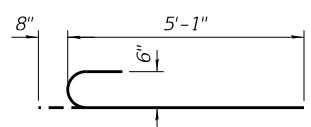
**SECTION A-A**  
(Max. Applied Service Bearing Pressure = 2.5 ksf)



**FIELD CUTTING DIAGRAM**  
Order v4 bars full length and cut as shown.



**FIELD CUTTING DIAGRAM**  
Order v5 bars full length and cut as shown.



**BAR n(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1	475	#7	15'-3"	U
a2	239	#6	13'-7"	U
d	32	#4	5'-5"	L
d1	16	#4	3'-8"	L
h	112	#6	33'-3"	—
h1	112	#6	28'-3"	—
h2	32	#4	33'-4"	—
h3	32	#4	27'-1"	—
h4	4	#6	13'-6"	—
h5	16	#4	13'-0"	—
h6	18	#4	14'-5"	—
h7	18	#4	20'-3"	—
n(E)	62	#6	5'-9"	U
s	14	#4	6'-9"	U
t	96	#4	7'-7"	—
v	429	#5	9'-0"	—
v1	5	#5	13'-3"	—
v2	26	#5	11'-10"	—
v3	11	#4	11'-10"	—
v4	18	#5	21'-8"	—
v5	7	#4	21'-8"	—
w	18	#4	14'-5"	—
w1	18	#4	20'-3"	—
x	8	#6	6'-8"	—
x1	8	#6	5'-10"	—
x2	4	#6	6'-8"	—
x3	4	#6	5'-10"	—
x4	4	#6	6'-8"	—
x5	4	#6	5'-10"	—
Concrete Box Culverts	Cu. Yd.		214.9	
Reinforcement Bars	Pound		38,400	
Reinforcement Bars, Epoxy Coated	Pound		540	
Bar Splicers	Each		72	

REVISED SHEET 4/15/2022

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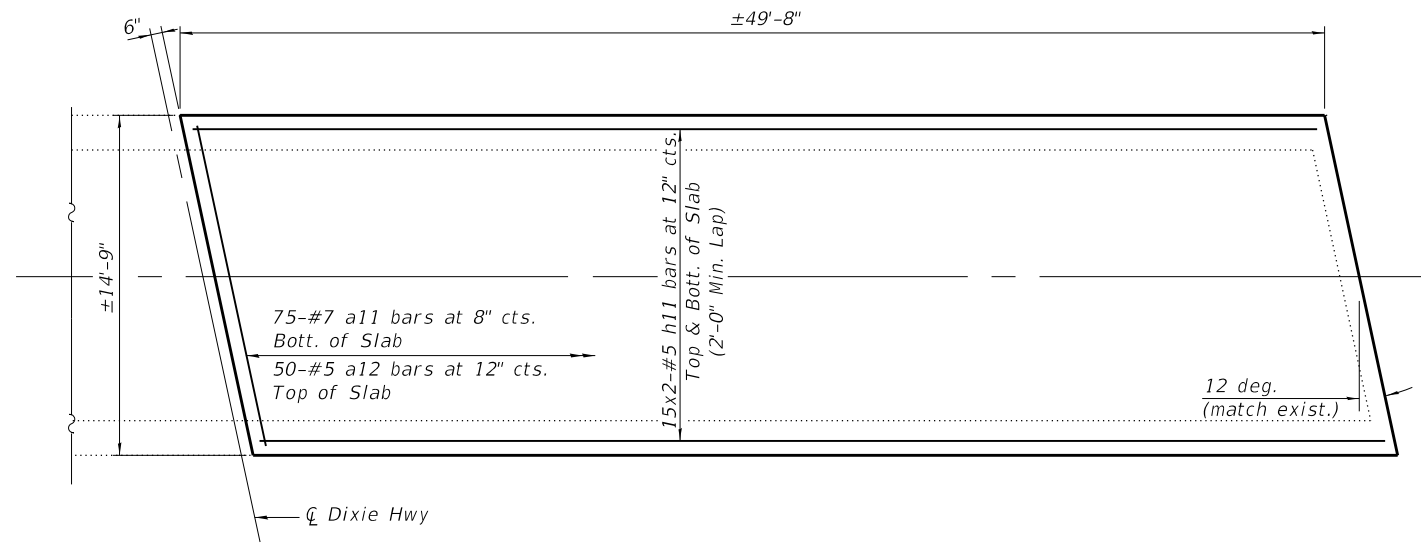
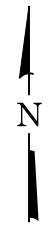
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WINGWALL DETAILS  
STRUCTURE NO. 016-1670**

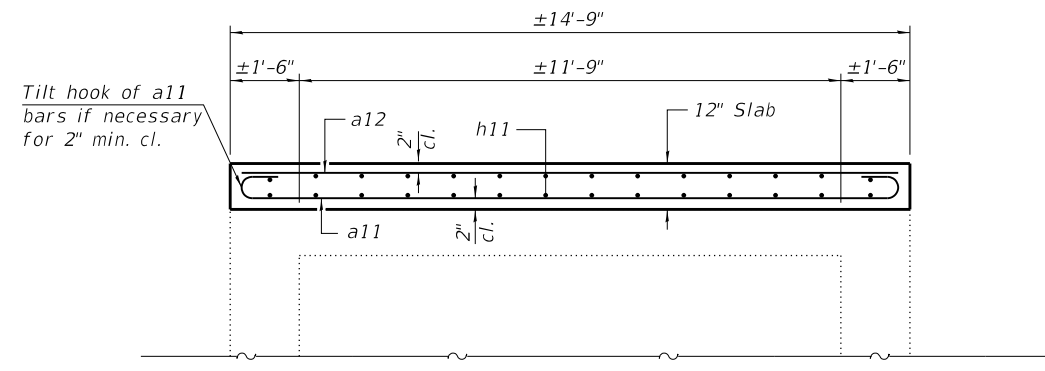
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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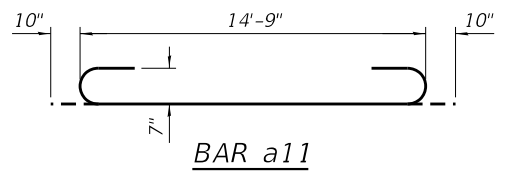
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PLAN



SECTION



**NOTE**

Remove existing pavement to expose top of existing structure prior to placing temporary slab. Exercise care during removal operations to avoid damaging existing structure.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a11	75	#7	16'-5"	
a12	50	#5	14'-9"	
h11	60	#5	25'-9"	
Concrete Superstructure			Cu. Yd.	27.2
Reinforcement Bars			Pound	4,900

REVISD SHEET 4/15/2022



USER NAME = astec	DESIGNED - AS	REVISED -
	DRAWN - AS	REVISED -
PLOT SCALE = 0:2.0000 " = 1" / in.	CHECKED - BLB	REVISED -
PLOT DATE = 1/31/2022	DATE - 1/31/2022	FILE - 0161670-62H26-006-TEMPSLAB.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY STRUCTURAL SLAB DETAILS  
STRUCTURE NO. 016-1670

SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	2018-068-B	COOK	95	70
			CONTRACT NO. 62H26	
ILLINOIS FED. AID PROJECT YXHR(640)				