

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 1270	SECTION 0707-CLV	COUNTY COOK	TOTAL SHEETS 11	SHEET NO. 1
ILLINOIS CONTRACT NO. 62D94				

* 11+1=12 total sheets

0-91-154-17

FOR INDEX OF SHEETS, SEE SHEET NO.

IMPROVEMENT IS LOCATED IN THE VILLAGE OF BARRINGTON

TRAFFIC DATA

2014 LAKE-COOK ROAD: 16,000

POSTED SPEED LIMIT

LAKE-COOK ROAD: 40 MPH

**PROPOSED
HIGHWAY PLANS**

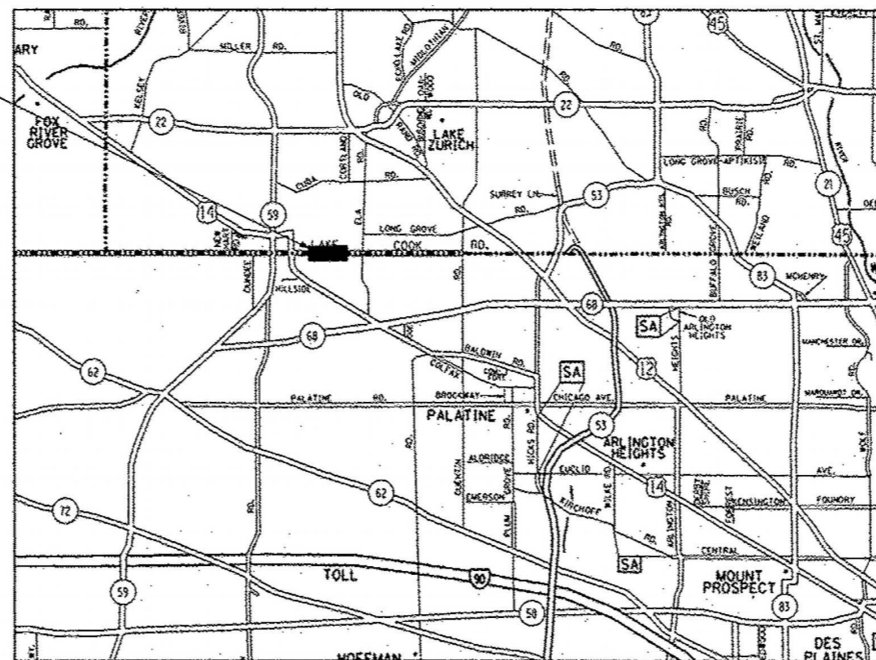
FAU 1270 - LAKE-COOK ROAD
OVER CREEK 0.6 MILES WEST OF ELA ROAD
SECTION: 0707-CLV
CULVERT REPAIR
COOK & LAKE COUNTIES

C-91-154-17

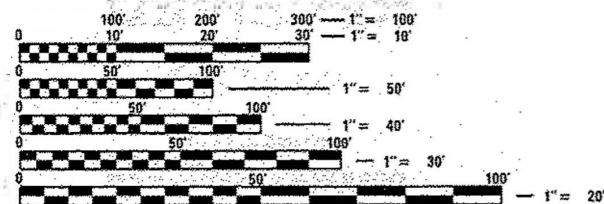


LOCATION OF SECTION INDICATED THUS: - [black rectangle]

SN 016-2221
LOCATION OF IMPROVEMENT



PALATINE TOWNSHIP



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: JEAN ALAIN MIDY (847)221-3056
PROJECT MANAGER: ISSAM RAYYAN (847)705-4178

CONTRACT NO. 62D94

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *March 23 2017*

Anthony J. Murphy
REGIONAL ENGINEER

May 2 2017
Matthew M. Addis P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 2 2017
[Signature]
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

URBAN

URBAN

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	COOK COUNTY 0014	LAKE COUNTY 0014			
50200100	STRUCTURE EXCAVATION	CU YD	60	60				
20400800	FURNISHED EXCAVATION	CU YD	7	7				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	70	70				
25000210	SEEDING, CLASS 2A	ACRE	0.1	0.1				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9				
25100630	EROSION CONTROL BLANKET	SO YD	70	70				
28000400	PERIMETER EROSION BARRIER	FOOT	55	55				
50102400	CONCRETE REMOVAL	CU YD	7.7	7.7				
50300225	CONCRETE STRUCTURES	CU YD	5.9	5.9				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1.75	0.875	0.875			
50300300	PROTECTIVE COAT	SO YD	23	23				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	820	820				
52200020	TEMPORARY SOIL RETENTION SYSTEM	SO FT	355	355				
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	123	123				
* 63000350	LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN	FOOT	37.5	37.5				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE COOK COUNTY 0014	100% STATE LAKE COUNTY 0014			
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2				
63200310	GUARDRAIL REMOVAL	FOOT	261	261				
64300750	IMPACT ATTENUATORS (SEVERE USE, NARROW), TEST LEVEL 2	EACH	2	2				
67100100	MOBILIZATION	LSUM	1	1				
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	3200	3200				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1800	1800				
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SO FT	600	600				
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	10.4	10.4				
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1				
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	1070	1070				
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	102.8	102.8				

16

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
pl\1004EB\DI\TECH\1\supp\PW\DOT\Documents\1007	Of 11004EB\DI\TECH\1\supp\PW\DOT\Documents\1007		
PLOT SCALE :	CHECKED :	REVISIED :	
PLOT DATE :	DATE :	REVISIED :	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
LAKE COOK ROAD OVER CREEK 0.6 MILES WEST OF ELA ROAD**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1270	0707-CLV	COOK	11	3
FED. ROAD DIST. NO. J			ILLINOIS	FED. AID PROJECT

SCALE: SHEET NO. OF SHEETS STA. TO STA.

REV

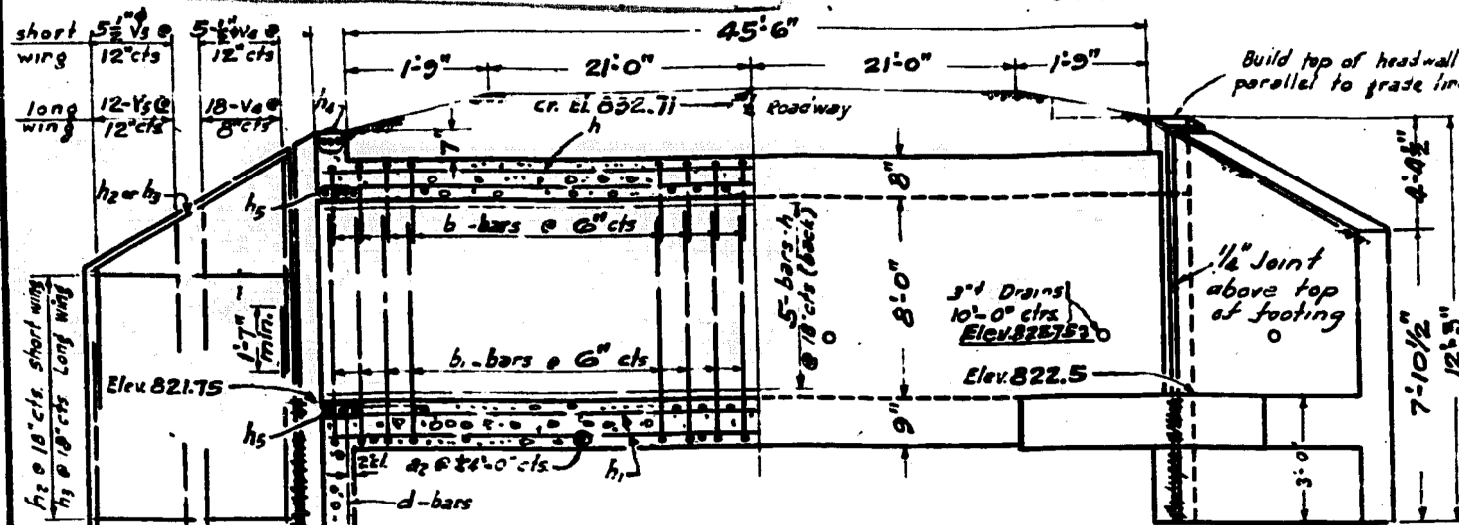
FOR INFORMATION ONLY

DEPARTMENT OF HIGHWAYS
COOK COUNTY

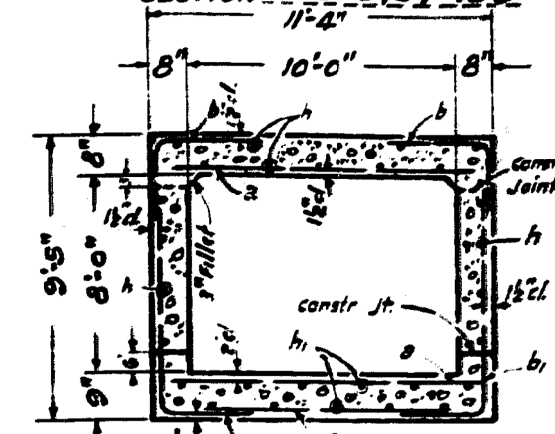
State Aid Route No.	Fiscal Year	Sheet No.	Total Sheets
100	1946	10	13

SECTION 100-0707-15D

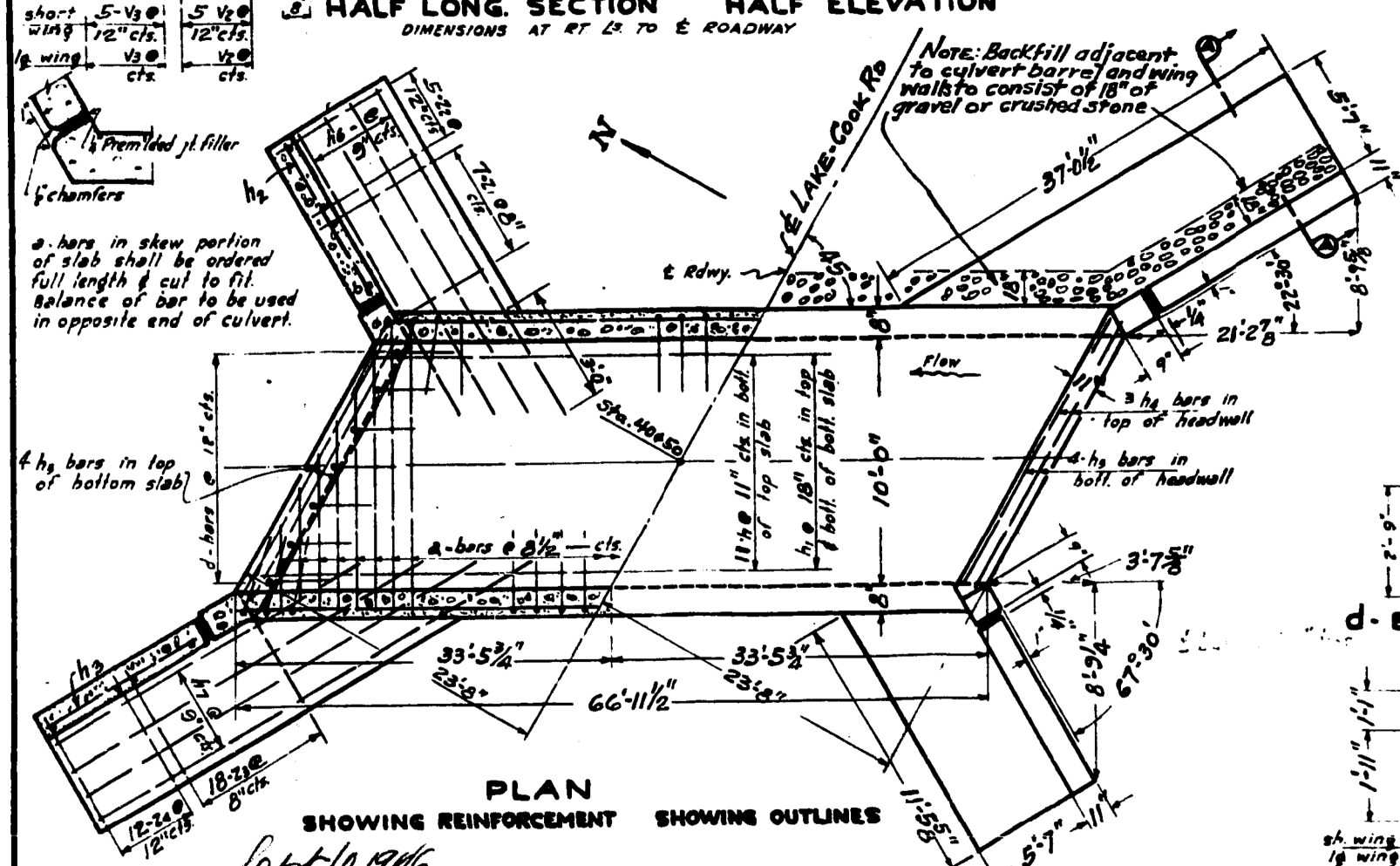
PROJECT NO.	10
TOTAL SHEETS	13
COUNTY	Cook
SECTION	100-0707
ROAD DIST. NO.	113
ILLINOIS FED. AID PROJECT-	



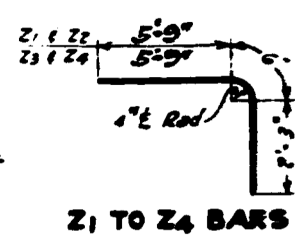
HALF LONG. SECTION HALF ELEVATION
DIMENSIONS AT RT L₂ TO E ROADWAY



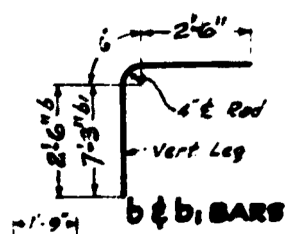
SECTION THRU BARREL



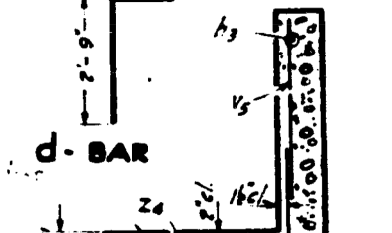
PLAN SHOWING REINFORCEMENT SHOWING OUTLINES



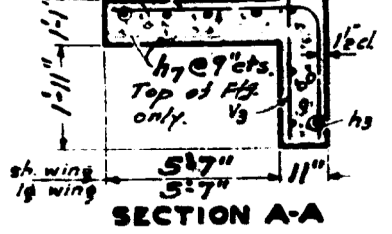
Z1 TO Z4 BARS



b & b1 BARS



d-BAR



SECTION A-A

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH
a	192	3/4"φ	11'-0"
a1	18	1"	6'-6"
b	268	1/2"φ	5'-6"
b1	268	1/2"φ	10'-3"
d	22	1/2"	4'-6"
h	78	1/2"	23'-0"
h1	48	1/2"φ	23'-0"
h2	14	1/2"	8'-6"
h3	14	1/2"	22'-0"
h4	12	3/4"φ	14'-9"
h5	16	3/4"φ	15'-3"
h6	14	5/8"φ	15'-0"
h7	28	5/8"φ	20'-0"
v1	46	5/8"φ	5'-9"
v2	34	1/2"φ	5'-9"
v3	46	5/8"φ	6'-9"
v4	34	1/2"φ	4'-6"
z1	14	5/8"φ	8'-6"
z2	10	5/8"φ	8'-6"
z3	36	5/8"φ	8'-6"
z4	24	5/8"φ	8'-6"

Class x concrete cu. Yds. 113.3
Reinforcement Bars Lbs. 11280
Gravel or Crushed Stone Cu. Yds. 95

GENERAL NOTES

Class x concrete shall be used thru-out
Exposed edges shall be beveled 3/8"
for backfilling & embankment see standard specifications.

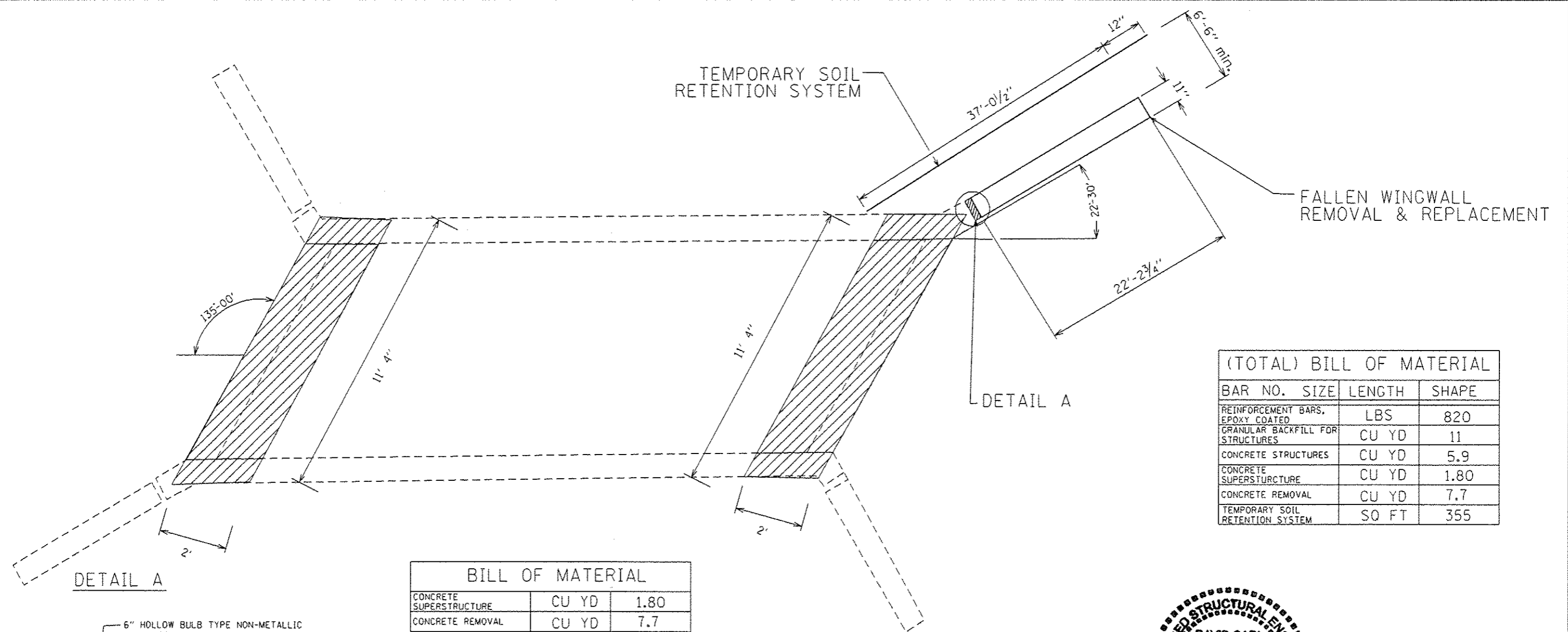
f_s = 20000 #/sq.
f_c = 1200 #/sq.
h = 10
H = 15 LOADING

LAKE-COOK RD. CULVERT
& CATTLE-PASS
STATION 40+50

STANDARD 1014
REVISED 8-28-16

APPROVED *[Signature]*
CHIEF ENGINEER

COMPUTED M.B.S.
DRAWN
CHECKED



(TOTAL) BILL OF MATERIAL

BAR NO.	SIZE	LENGTH	SHAPE
REINFORCEMENT BARS, EPOXY COATED		LBS	820
GRANULAR BACKFILL FOR STRUCTURES		CU YD	11
CONCRETE STRUCTURES		CU YD	5.9
CONCRETE SUPERSTRUCTURE		CU YD	1.80
CONCRETE REMOVAL		CU YD	7.7
TEMPORARY SOIL RETENTION SYSTEM		SO FT	355

DETAIL A

BILL OF MATERIAL

CONCRETE SUPERSTRUCTURE	CU YD	1.80
CONCRETE REMOVAL	CU YD	7.7

6" HOLLOW BULB TYPE NON-METALLIC WATER SEAL, 16" FROM TOP OF WALL TO TOP OF FOOTING (INCLUDED IN THE UNIT PRICE OF CONCRETE STRUCTURES)

CONCRETE NAILS (FLAT HD. C.S.) 1" LONG AT 12" CTS. VERTICAL (INCLUDED IN THE UNIT PRICE OF CONCRETE STRUCTURES)

1/4" PREMOULDED JOINT FILLER (INCLUDED IN THE UNIT PRICE OF CONCRETE STRUCTURES)

EPOXY NEW WATER SEAL INTO 2" WIDE SAW CUT GOOVE. EPOXY TO MEET REQ. OF ASTM C881 TYPE III, GRADE 3.

LEGEND

CONCRETE SUPERSTRUCTURE

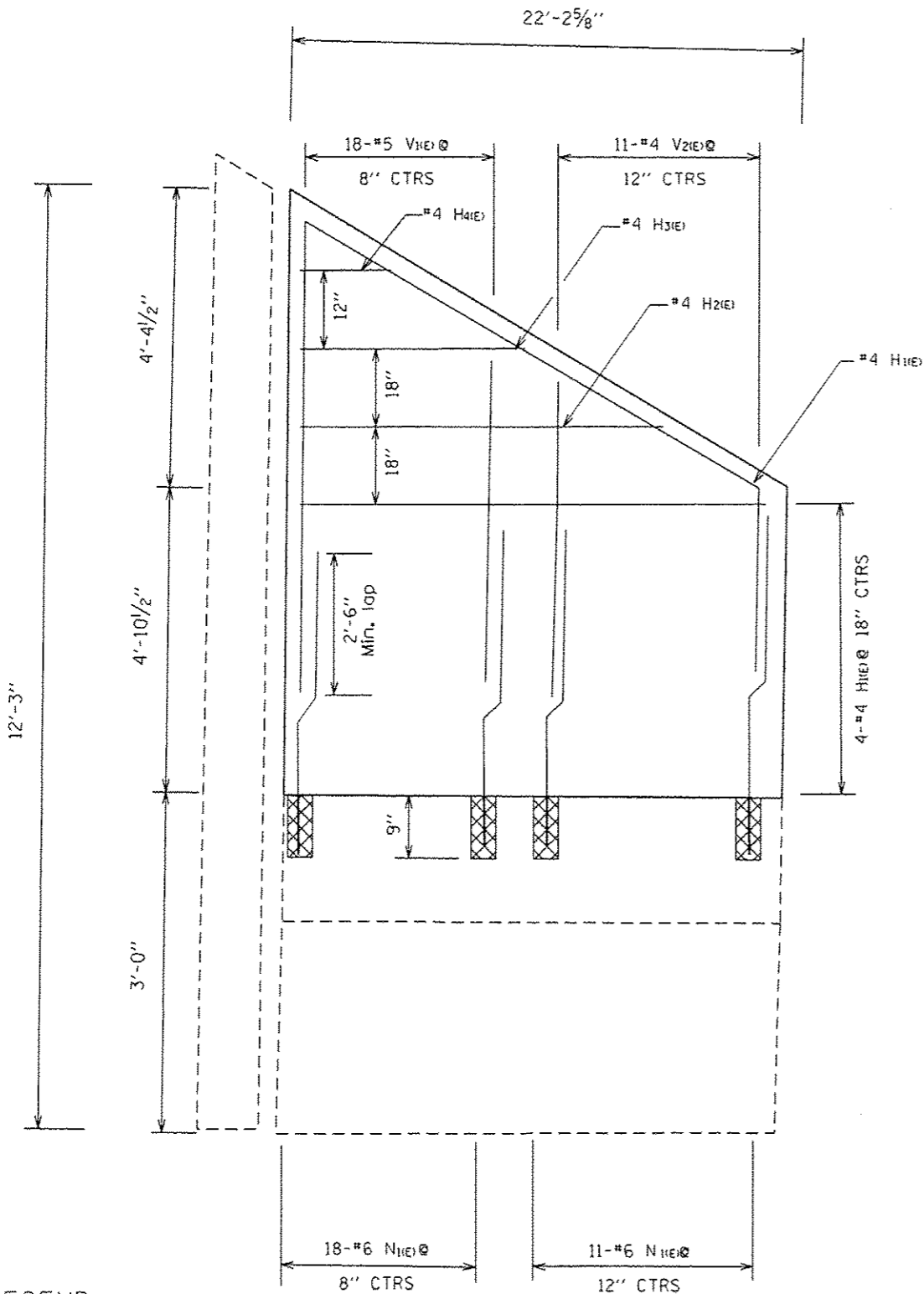
NOTES

EXISTING REINFORCEMENT BARS EXTENDING INTO REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM COST INCLUDED WITH CONCRETE REMOVAL.

REMOVAL OF THE PORTION OF THE FAILED WALL THAT HAS FALLEN SHALL BE REMOVED AND BE INCLUDED IN CONCRETE REMOVAL.

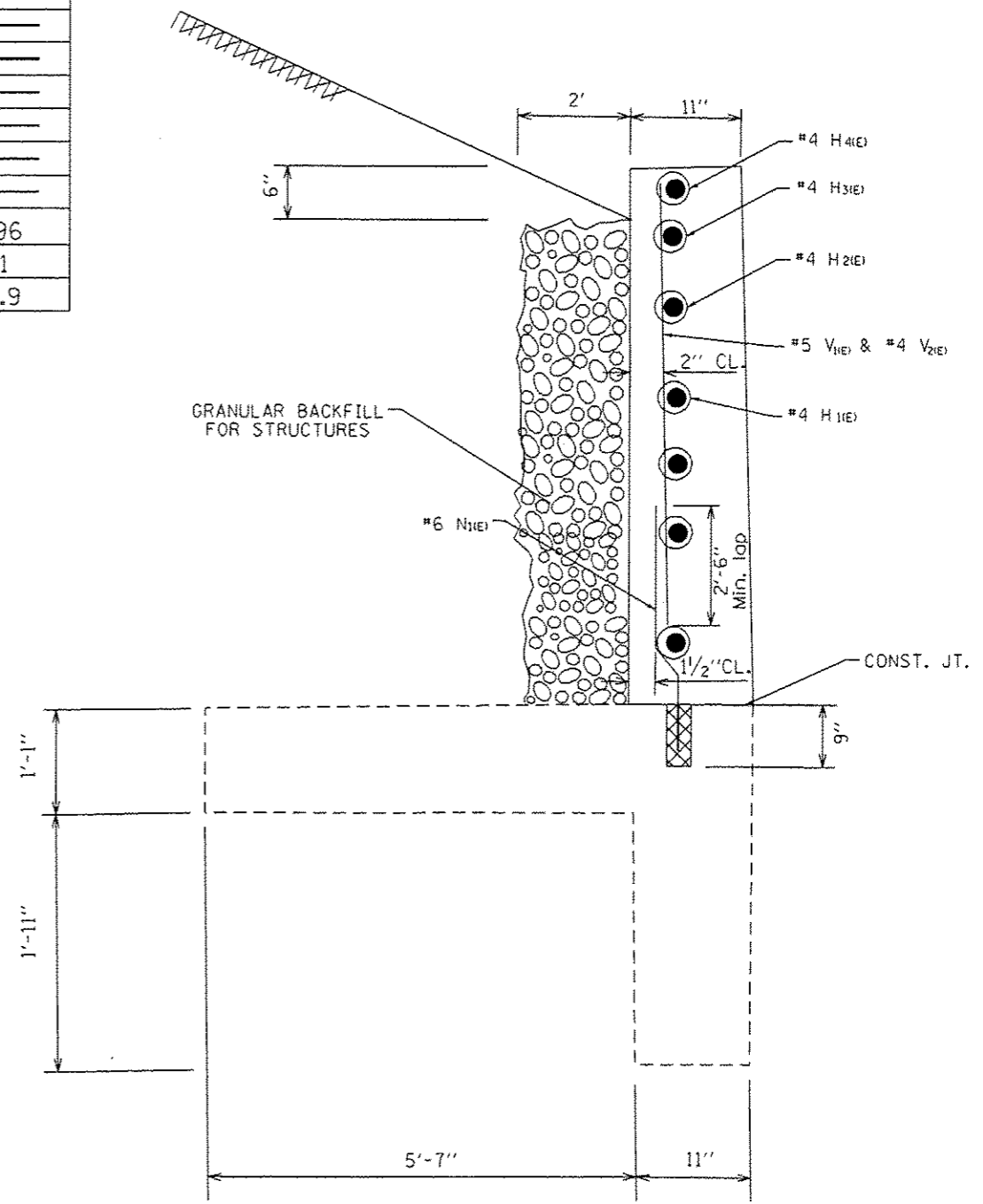


David Carl Puzey 5/12/17
Expires 11/30/18



BILL OF MATERIAL				
BAR	NO.	SIZE	LENGTH	SHAPE
N1(E)	29	#6	5'-6"	———
V1(E)	18	#5	6'-9"	———
V2(E)	11	#4	4'-6"	———
H1(E)	5	#4	22'-0"	———
H2(E)	1	#4	15'-1"	———
H3(E)	1	#4	7'-6"	———
H4(E)	1	#4	2'-5"	———
REINFORCEMENT BARS, EPOXY COATED			LBS	496
GRANULAR BACKFILL FOR STRUCTURES			CU YD	11
CONCRETE STRUCTURES			CU YD	5.9

SECTION A-A

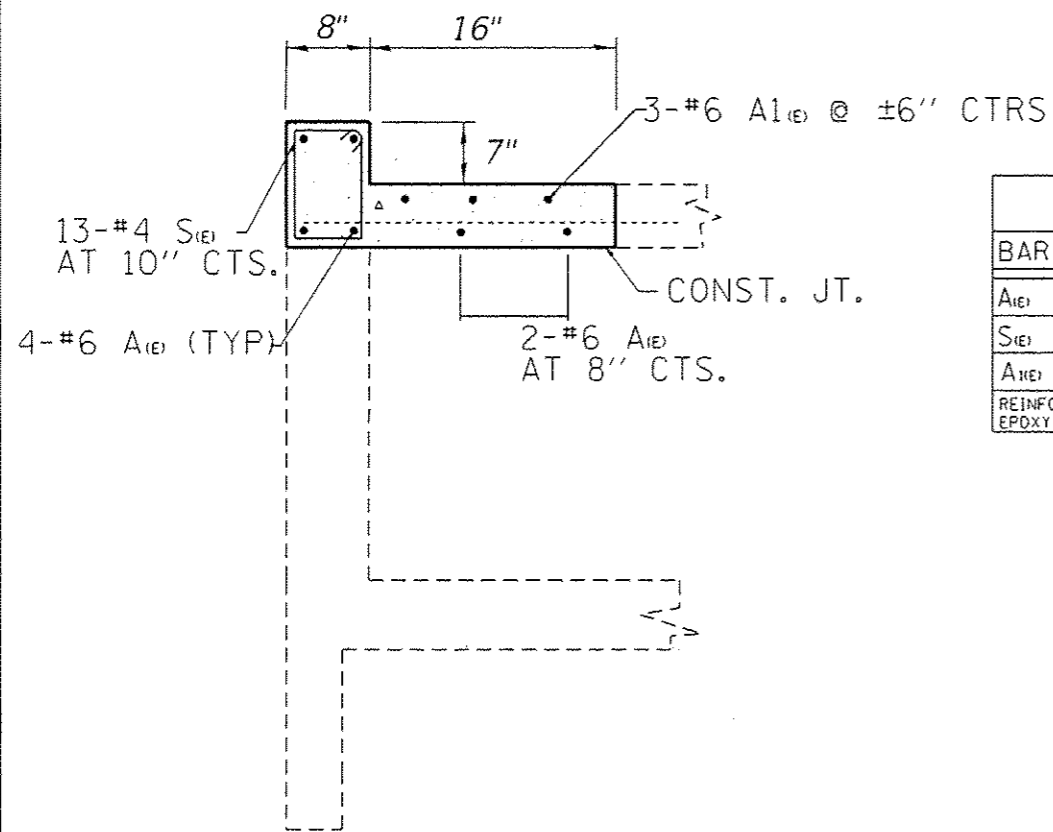


LEGEND

 DRILL AND EPOXY GROUT 9" MINIMUM IN TO EXISTING CONCRETE BASE ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATION.

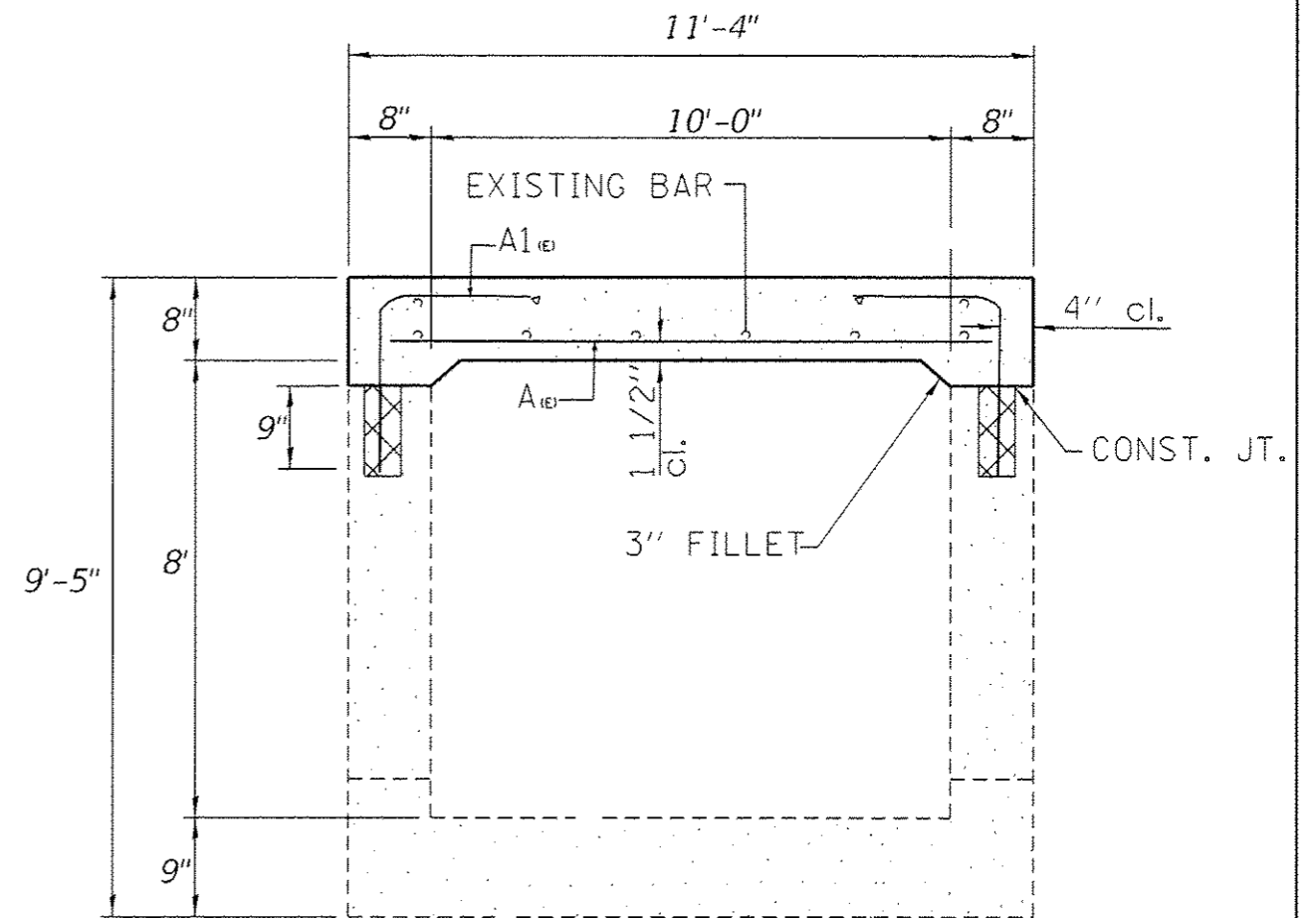
NOTES

EXISTING REINFORCEMENT BARS EXTENDING INTO REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM COST INCLUDED WITH CONCRETE REMOVAL.

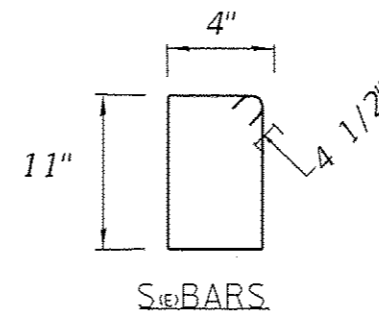
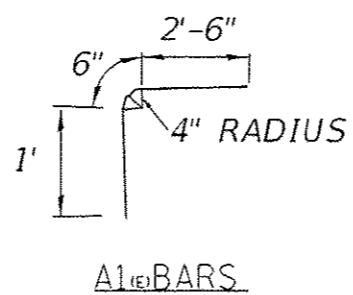


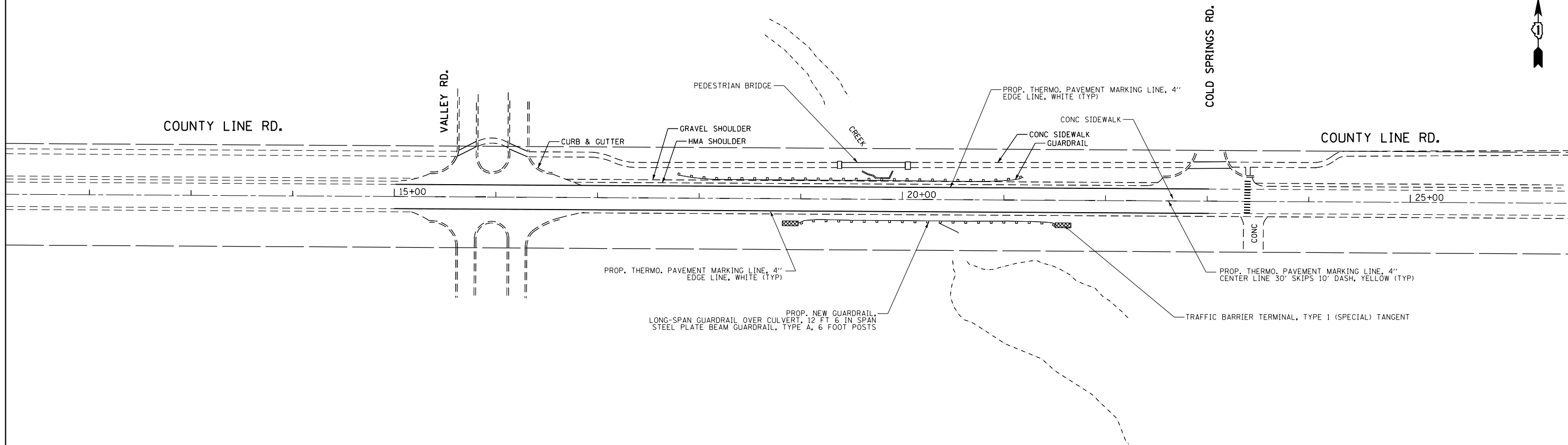
LONGITUDINAL SECTION

BAR LIST				
BAR	NO.	SIZE	LENGTH	SHAPE
A1E1	12	#6	12' 0"	—
S1E1	26	#4	3' 3"	□
A1E1	12	#5	4' 0"	└
REINFORCEMENT BARS, EPDXY COATED			LBS	324



SECTION THRU BARREL
(@ RT L'S)





FILE NAME =	USER NAME = hassann	DESIGNED -	REVISED -
p:\11084EBID\INTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI15417\Drawings\Design\DI15417-shr-plan.dgn		CHECKED -	REVISED -
Default	PLOT DATE = 3/29/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN
LAKE-COOK RD. OVER CREEK 0.6 MI. W. OF ELA RD.**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1270	0707-CLV	COOK	11	9
CONTRACT NO. 62D94				
ILLINOIS FED. AID PROJECT				

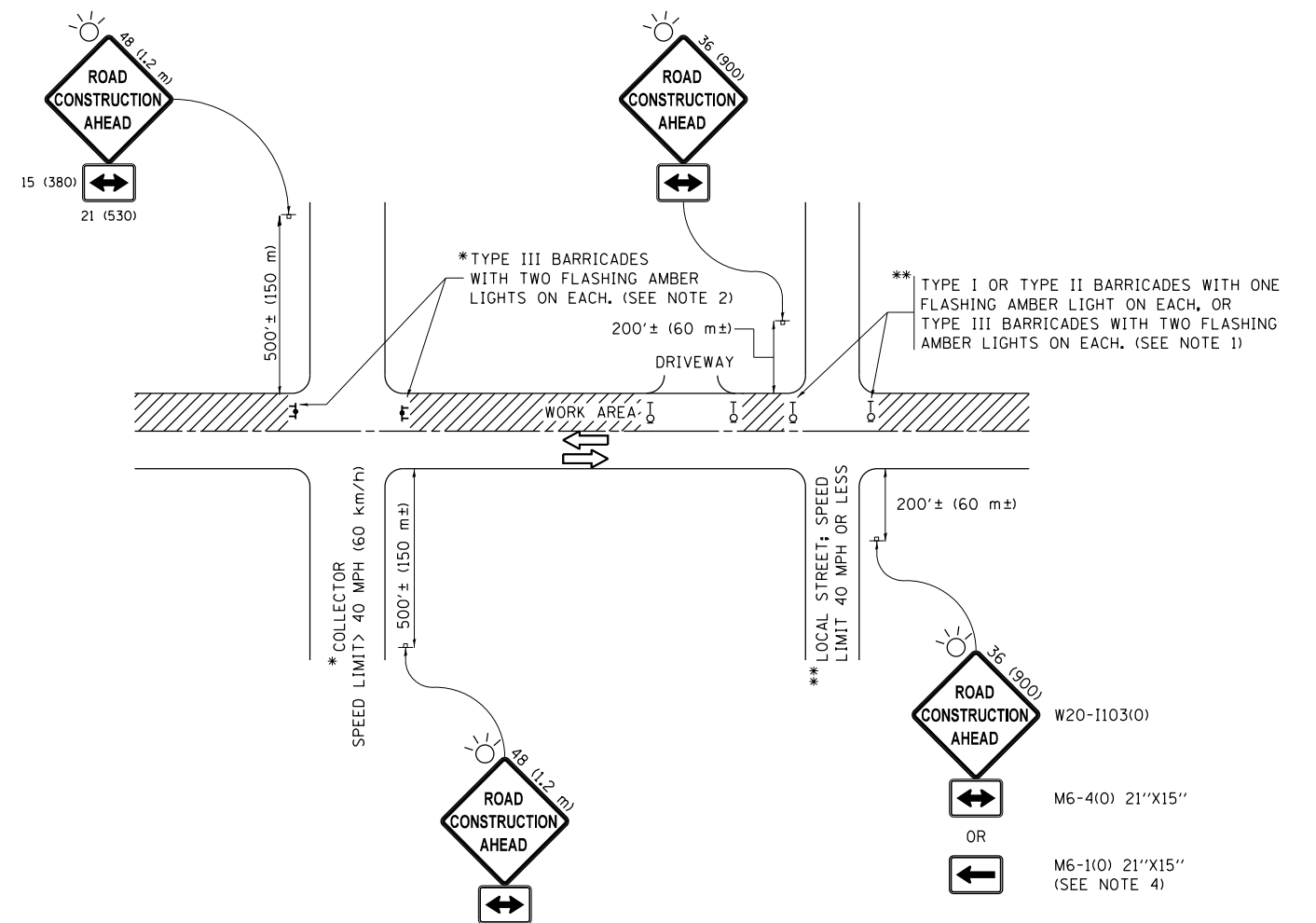
SCALE: SHEET OF SHEETS STA. TO STA.

SEECO CONSULTANTS, INC.		SOIL BORING LOG				Page 1 Of 1					
ROUTE	FAU 1270	DESCRIPTION	FAU 1270 - Culvert Wing Wall Repair				Date	4/19/17			
SECTION	0707-CLB	LOCATION	Lake Cook Road West of Ela Road				Logged By	DK			
COUNTY	Cook	STRUCTURE NO.	016-2221		(Exist.)	(Prop.)	SEC	TWP.	RNG.	PM	
Boring No.	SB-1C	Drilling Method	AASHTO T 206-09			Hammer Type	Automatic Hammer				
Station	20+35	E	D	S	U	M	E	D	S	U	M
Offset	13' R	L	E	P	C	O	L	E	P	C	O
Ground Surface El. + 95.99 +/- ft		V.	H	N	Qu	T.	V.	H	N	Qu	T.
		(M.S.L.)	(ft.)	(blows)	(TSF)	(%)	(M.S.L.)	(ft.)	(blows)	(TSF)	(%)
12" BITUMINOUS CONCRETE PAVEMENT							18.0				
FILL: CLAY, Brown and Some Dark Brown and Gray, Trace Sand and Gravel, Very Stiff to Medium, Moist (A-6)	95.0	1.0					77.5				
			2				19.0	4			
			4	3.09 B	17.7		20.0	4	1.32 B	17.3	
			6				21.0	5			
							22.0				
			7				23.0				
			2	2.50 P	20.8		24.0	5			
			6				25.0	6	1.57 B	16.7	
							26.0				
			4				27.0				
			6	0.91 B	23.5		28.0	4			
			8				29.0	5	1.24 B	16.6	
							30.0	6			
							31.0				
							32.0				
							33.0				
							34.0				
							35.0				
CLAY, Dark Brown and Gray, Trace Sand and Gravel, Stiff, Moist (A-6)	87.5	9.0	3				69.0	5			
			4	1.24 B	24.9		70.0	11	1.75 P	13.2	
			4				71.0	12			
							72.0				
							73.0				
			6				74.0				
			8	1.65 B	24.2		75.0	6			
			11				76.0	8	0.82 B	17.2	
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							200.0				

N=Standard Penetration Test-Blows per six inches to drive 2" O.D. (QU)B=Bulge S=Shear P=Penetrometer Test
 Split Spoon Sampler 24" with 140lb hammer falling 30" DRILL RIG: D-50
 4.25" Diameter Hollow Stem Augers used between Split Spoon Sample intervals unless noted otherwise.

SEECO Job No. 10612G-16

FILE NAME =	USER NAME = hassam	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOG LAKE-COOK RD. OVER CREEK 0.6 MI. W. OF ELA RD.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL08										



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

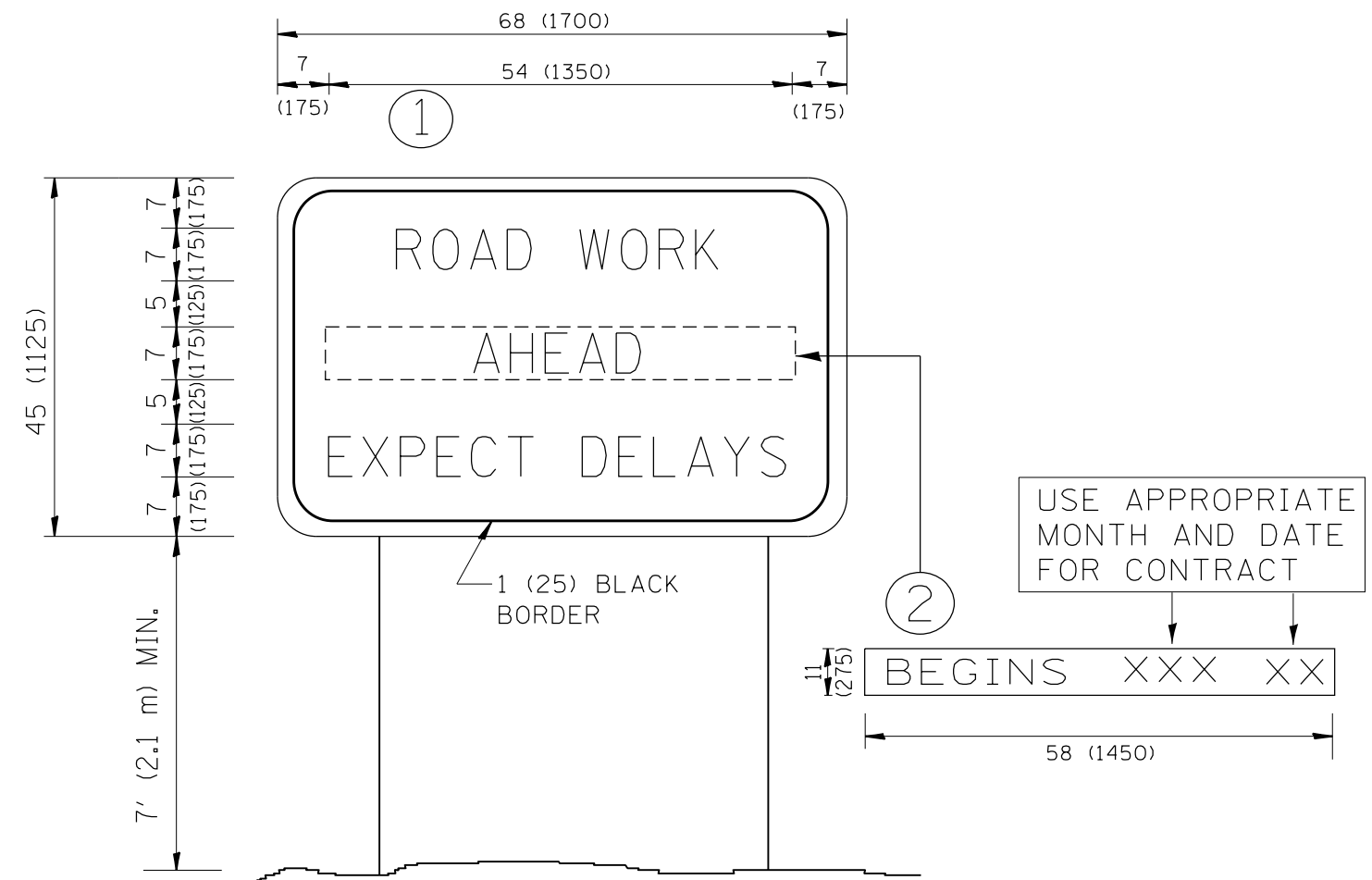
FILE NAME =	USER NAME = hassan	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI15\Drawings\Design\Diststd.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 3/29/2017	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1270	0707-CLV	COOK	11	10
TC-10			CONTRACT NO. 62094	
ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = hassann	DESIGNED -	REVISED - R. MIRS 09-15-97
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI15\DRAWING\Design\Diststd.dgn			REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 3/29/2017	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1270	0707-CLV	COOK	11	11
TC-22		CONTRACT NO. 62094		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				