

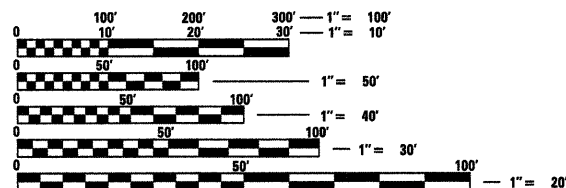
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 46137		

INDEX OF SHEETS

SHEET NO.	SHEET TITLE
1	COVER SHEET
2	SUMMARY & SCHEDULE OF QUANTITIES, STANDARDS, AND GENERAL NOTES
3	DEMOLITION PLAN
4	PROPOSED LAYOUT
5	SIDEWALK DETAILS
6	ELECTRICAL PLAN
7	LIGHT AIMING CHARTS
8	GATE OPERATOR & LIGHT DETAILS
9	CONCRETE REMOVAL
10&11	PORCH DETAILS

LEGEND

- EXISTING FENCE
- EXISTING WATER VALVE
- ⊕ EXISTING FIRE HYDRANT
- ⊙ EXISTING YARD HYDRANT
- - - EXISTING WATER FOUNTAIN
- ⊥ EXISTING SIGN
- ⊥ EXISTING FLAG POLE
- EXISTING CATCH BASIN
- ⊙ EXISTING DECIDUOUS TREE
- ⊙ EXISTING CONIFEROUS TREE
- EXISTING BUSH
- EXISTING SPOT LIGHT



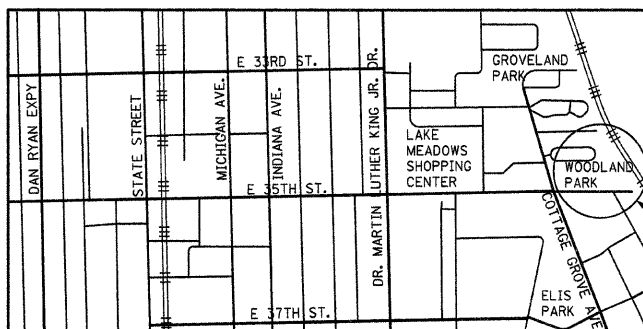
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

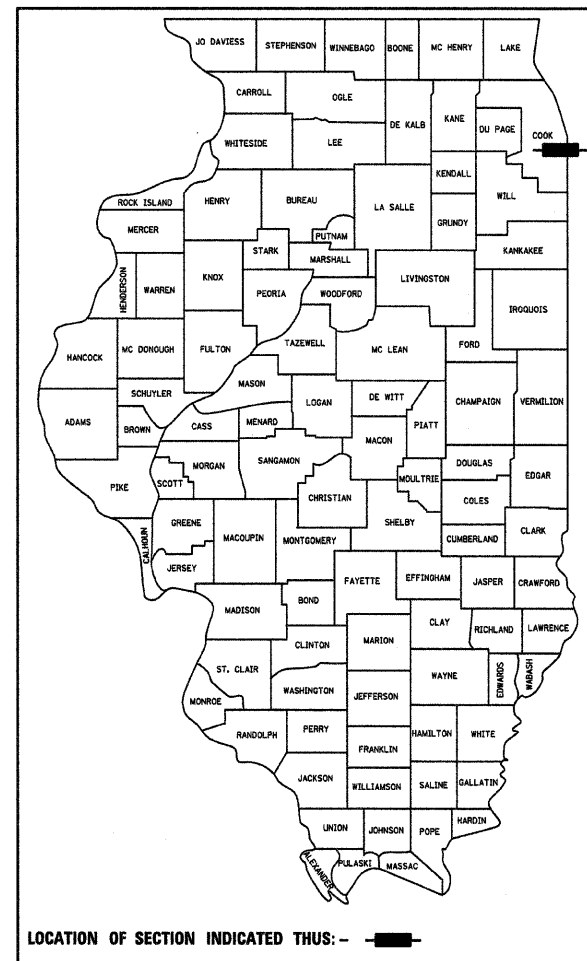
PROJECT ENGINEER
PROJECT MANAGER

CONTRACT NO. 46137

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**
IDOT /IHPA STATEWIDE
STEPHEN DOUGLAS TOMB STATE HISTORIC SITE
SIDEWALK IMPROVEMENTS
COOK COUNTY
C-30-002-11



PROPOSED IMPROVEMENTS

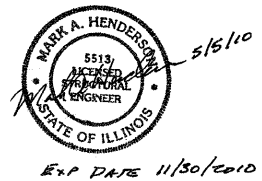
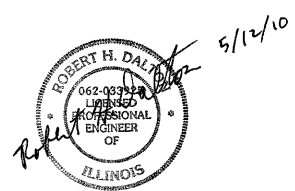


LOCATION OF SECTION INDICATED THUS: - [thick bar] -

PROFESSIONAL SEALS

PROFESSIONAL SEAL OF ROBERT H. DALTON P.E.
COVERS THE FOLLOWING SHEETS: 1-8

PROFESSIONAL SEAL OF MARK HENDERSON, S.E.
COVERS THE FOLLOWING SHEETS: 9-11



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 25 2010
William R. Frey, Jr.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 13 2010
Scott E. Stitt, P.E., Jr.
acting ENGINEER OF DESIGN AND ENVIRONMENT

August 13 2010
Christine M. Reed, Jr.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

URBAN
100% STATE
5/17/10

SUMMARY OF QUANTITIES			
CODE #	PAY ITEM	UNITS	TOTAL
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	47
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	62.1
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	71.8
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	559
42400800	DETECTABLE WARNINGS	SQ FT	12
44000100	PAVEMENT REMOVAL	SQ YD	4.4
44000600	SIDEWALK REMOVAL	SQ FT	361
50102400	CONCRETE REMOVAL	CU YD	1.7
50300225	CONCRETE STRUCTURES	CU YD	9.2
50800105	REINFORCEMENT BARS	POUND	640
67100100	MOBILIZATION	L SUM	1
X0323941	OPERATING MACHINERY	L SUM	1
X0327047	FORMED CONCRETE REPAIR	SQ FT	26
XX001758	WOOD FENCE REMOVAL	FOOT	8
*XX002063	LIGHTING SYSTEM COMPLETE	L SUM	1
*XX002065	LIGHTING UNIT COMPLETE	EACH	7
XX003461	EARTH EXCAVATION, SPECIAL	L SUM	1
XX005951	REMOVE AND REPLACE EXISTING STONE WALL	SQ FT	526.8
XZ186500	ASPHALTIC EMULSION SLURRY SEAL	SQ YD	597.4
Z0050600	REMOVE AND RESET ORNAMENTAL FENCE	FOOT	425
X0326218	FIBER-MODIFIED ASPHALT CRACK SEALING	FOOT	200

*Specialty Items

MOBILIZATION	
LOCATION	QUANTITY (LSUM)
ENTIRE PROJECT	1 LSUM
TOTAL =	1 LSUM

LIST OF STANDARDS

- 424001-05 - CURB RAMPS FOR SIDEWALKS
- 701006-03 - OFF-ROAD OPERATIONS, 2L, 2W, 4.5M (15') TO 600 MM (24") FROM PAVEMENT EDGE
- 701901-01 TRAFFIC CONTROL DEVICES

MIXES AND APPLICATION RATE TABLES

PRIME APPLICATION RATES	
BIT MATLS PR CT	ASP EMUL SLURRY SEAL
0.075 GAL/SQ YD	20 LB/SQ YD

GENERAL NOTES

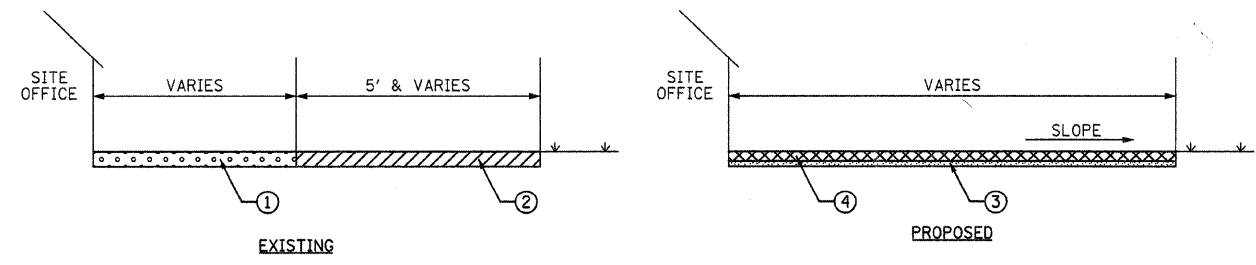
- ALL ELEVATIONS ARE REFERENCED TO ELEVATIONS ESTABLISHED BY VASCONCELLES ENGINEERING CORP.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. IF THE ENGINEER DECIDES TO HAVE THE CONTRACTOR RESET THE MONUMENT, THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.
- THE CONTRACTOR SHALL CONTACT J.U.L.I.E. PRIOR TO ANY EXCAVATION TO HAVE ALL PUBLIC AND PRIVATE UTILITIES LOCATED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.26 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS (800) 892-0123. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED. SEE SPECIAL PROVISIONS FOR STATUS OF UTILITIES, WITH UTILITY COMPANIES LISTED.
- ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT AS INCLUDED IN THE PLANS.
- ALL DETAILS IN THE PLANS SHALL GOVERN CONSTRUCTION OF THIS PROJECT, AND IN CASE OF CONFLICT WITH ANY STANDARD DRAWINGS INCLUDED, THE SAID DETAILS SHALL TAKE PRECEDENCE AND GOVERN.

MISCELLANEOUS ITEMS									
LOCATION (STATION TO STATION)	LIGHTING SYSTEM COMPLETE (L SUM)	LIGHTING UNIT COMPLETE (EACH)	EARTH EXCAVATION SPECIAL (L SUM)	REMOVE & RESET FENCE (FOOT)	REMOVE & REPLACE STONE WALL (SQ FT)	OPERATING MACHINERY (L SUM)	FORMED CONCRETE REPAIR (SQ FT)	CONCRETE STRUCTURES (CU YD)	REINFORCEMENT BARS (POUND)
DOUGLAS TOMB HOUSE									
ENTIRE PROJECT	1	7	1					6.9	330
ADJACENT TO WEST GATE				390	526.8	1			
ALONG SOUTH PROPERTY LINE				35			26	2.3	310
SITE OFFICE									
TOTAL =	1	7	1	425	526.8	1	26	9.2	640

PAVING SCHEDULE						
LOCATION	PC CONC SIDEWALK 5 (SQ FT)	AGG BASE CSE B 4 (SQ YD)	DETECTABLE WARNINGS (SQ FT)	CRACK SEALING (FOOT)	PRIME COAT (GALLON)	ASPHALTIC EMULSION SLURRY SEAL (SQ YD)
DOUGLAS TOMB HOUSE						
SITE OFFICE & ADJACENT BUILDINGS	559.0	62.1	12		71.8	597.4
ACCESS DRIVE AND PATH				200		
TOTAL =	559.0	62.1	12	200	71.8	597.4

REMOVAL ITEMS					
LOCATION (STATION TO STATION)	SIDEWALK REMOVAL (SQ FT)	WOOD FENCE REMOVAL (FOOT)	TREE REMOVAL OVER 15 (UNIT)	PAVEMENT REMOVAL (SQ YD)	CONCRETE REMOVAL (CU YD)
DOUGLAS TOMB HOUSE					
ENTIRE PROJECT			47		
SITE OFFICE & ADJACENT BUILDINGS	361	8		4.4	1.7
TOTAL =	361	8	47	4.4	1.7

- ① EXISTING AGGREGATE
- ② EXISTING SIDEWALK
- ③ PROPOSED 4" AGGREGATE BASE COURSE, TYPE B
- ④ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH



SIDEWALK SECTION
NOT TO SCALE

FILE NAME =	USER NAME = #USER#	DESIGNED - T.T.P.	REVISED -
#FILEL#		DRAWN - S.D.K.	REVISED -
		CHECKED - R.H.D.	REVISED -
		DATE - 5/12/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY & SCHEDULE OF QUANTITIES, STANDARDS, & GENERAL NOTES
STEPHEN DOUGLAS TOMB STATE HISTORIC SITE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	2
CONTRACT NO. 46137				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

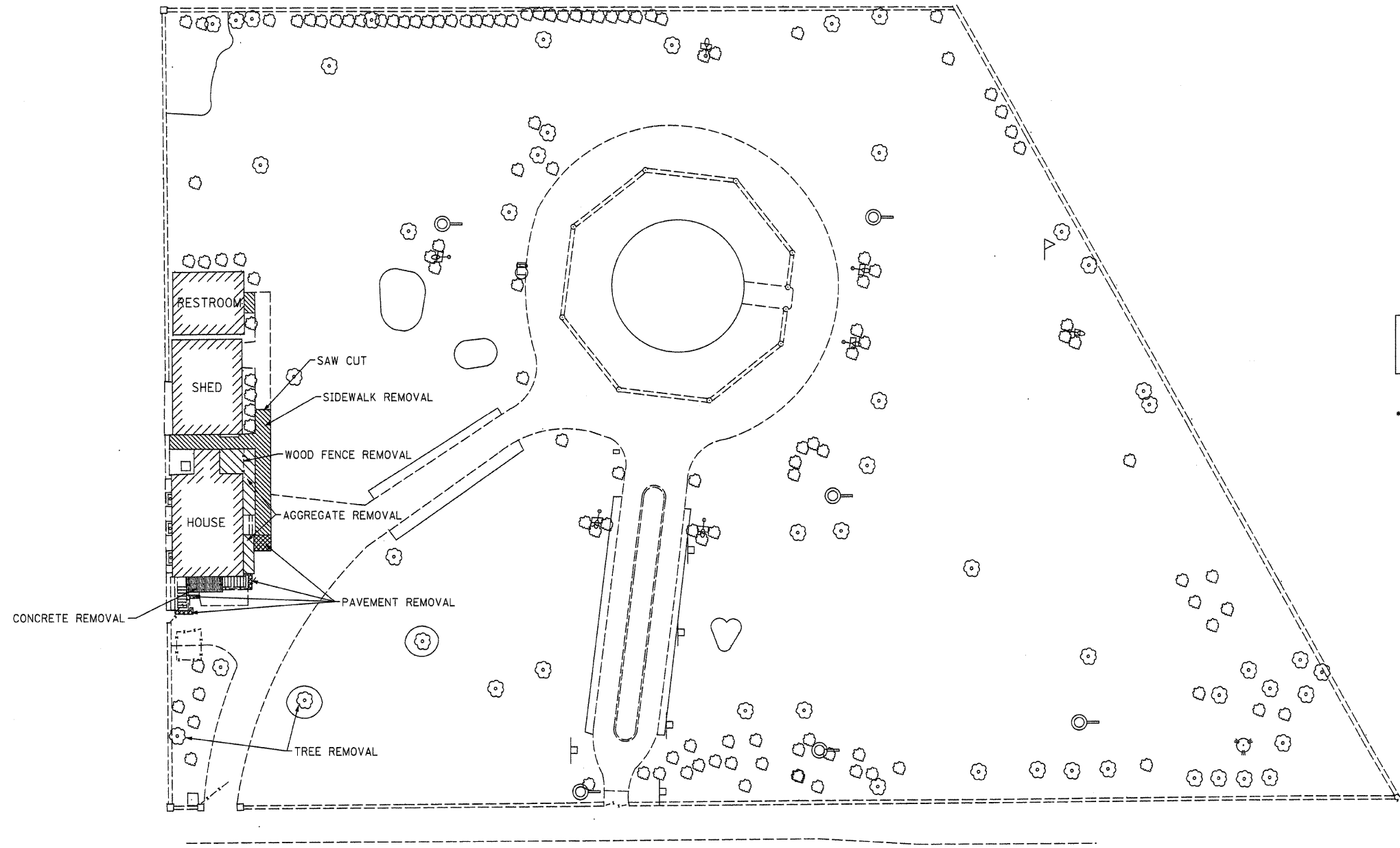
JOB NO. 250-061-Q VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107



- AGGREGATE REMOVAL
- SIDEWALK REMOVAL
- PAVEMENT REMOVAL
- CONCRETE REMOVAL

B.M. #1
 LOCATED ON W. CAP BOLT ON FIRE HYDRANT
 AT THE S.W. CORNER OF S. LAKE PARK AVE.
 & E. 35TH ST. ELEV.= 100.00

* NOTE
 FOR PORCH DETAILS SEE SHEETS 9,10,&11





E 35TH STREET

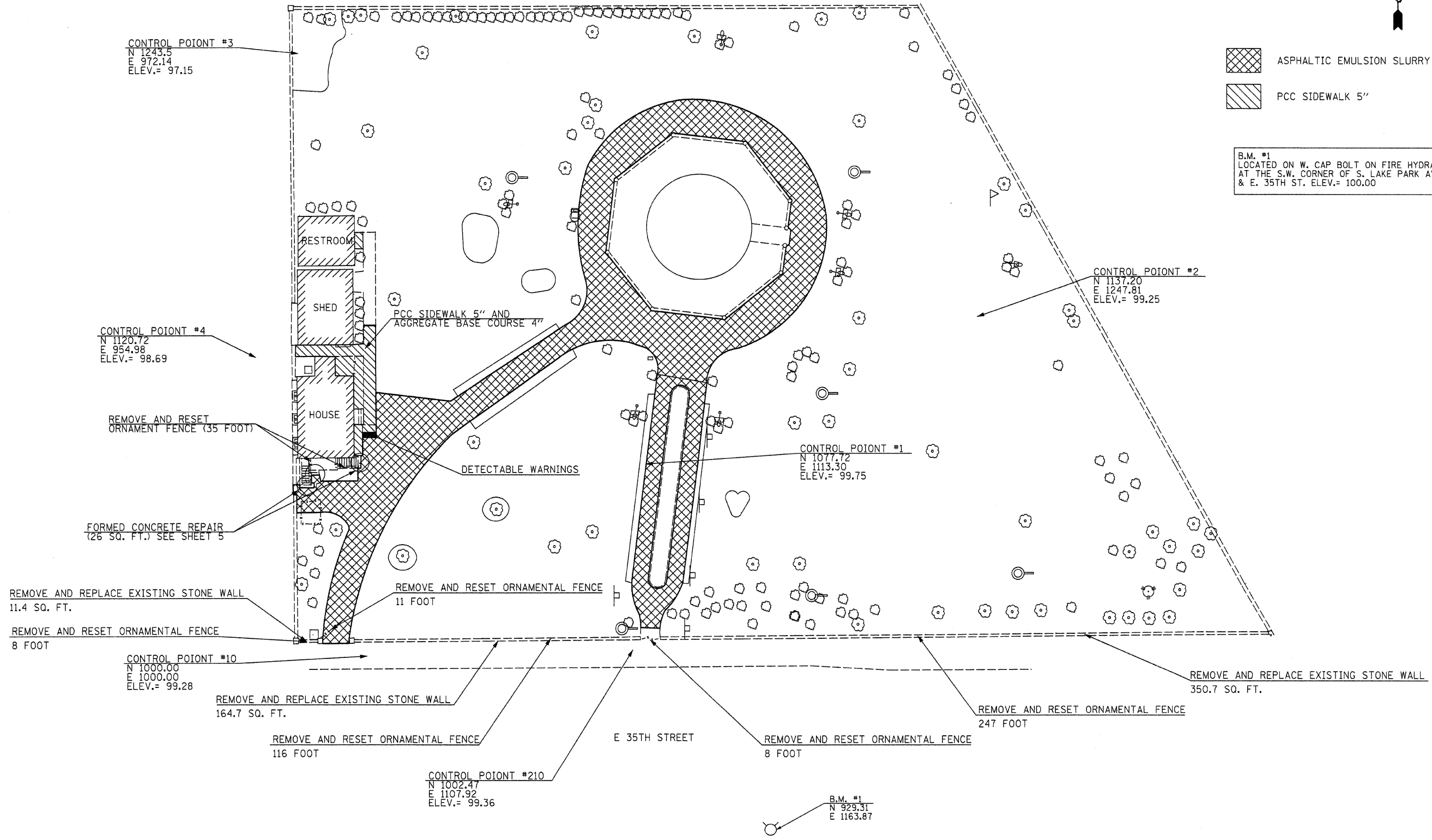
B.M. #1
 N 929.31
 E 1163.87

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - R.H.D	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DEMOLITION PLAN STEPHEN DOUGLAS TOMB STATE HISTORIC SITE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - J.H.F.	REVISED -		SCALE: 1" = 20' SHEET NO. 3 OF - SHEETS STA. TO STA.					COOK	11	3
		CHECKED - T.T.P.	REVISED -							CONTRACT NO. 46137		
		DATE - 5/12/10	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



-  ASPHALTIC EMULSION SLURRY SEAL
-  PCC SIDEWALK 5"

B.M. #1
 LOCATED ON W. CAP BOLT ON FIRE HYDRANT
 AT THE S.W. CORNER OF S. LAKE PARK AVE.
 & E. 35TH ST. ELEV.= 100.00



CONTROL POINT #3
 N 1243.5
 E 972.14
 ELEV.= 97.15

CONTROL POINT #4
 N 1120.72
 E 954.98
 ELEV.= 98.69

CONTROL POINT #2
 N 1137.20
 E 1247.81
 ELEV.= 99.25

CONTROL POINT #1
 N 1077.72
 E 1113.30
 ELEV.= 99.75

REMOVE AND RESET
 ORNAMENT FENCE (35 FOOT)

FORMED CONCRETE REPAIR
 (26 SQ. FT.) SEE SHEET 5

REMOVE AND REPLACE EXISTING STONE WALL
 11.4 SQ. FT.

REMOVE AND RESET ORNAMENTAL FENCE
 8 FOOT

CONTROL POINT #10
 N 1000.00
 E 1000.00
 ELEV.= 99.28

REMOVE AND REPLACE EXISTING STONE WALL
 164.7 SQ. FT.

REMOVE AND RESET ORNAMENTAL FENCE
 116 FOOT

CONTROL POINT #210
 N 1002.47
 E 1107.92
 ELEV.= 99.36

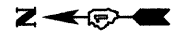
E 35TH STREET

REMOVE AND RESET ORNAMENTAL FENCE
 8 FOOT

REMOVE AND RESET ORNAMENTAL FENCE
 247 FOOT

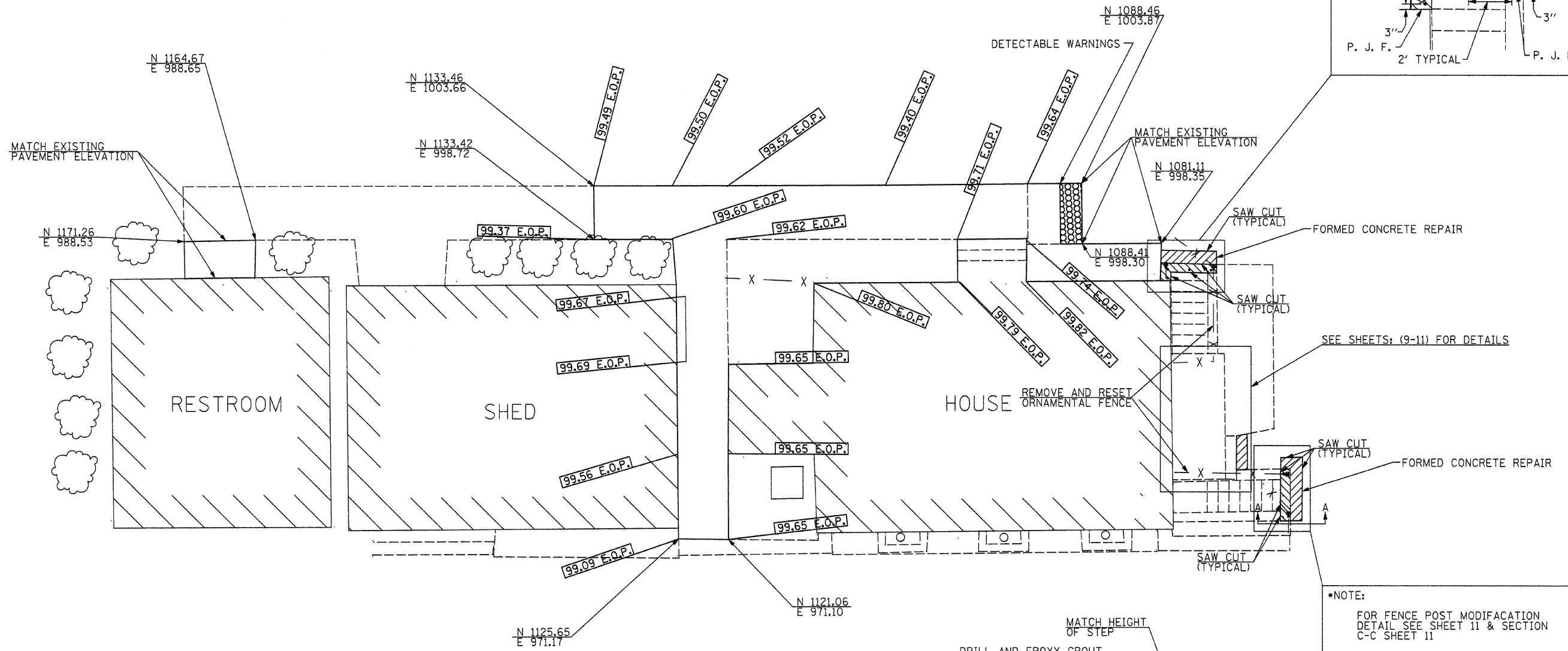
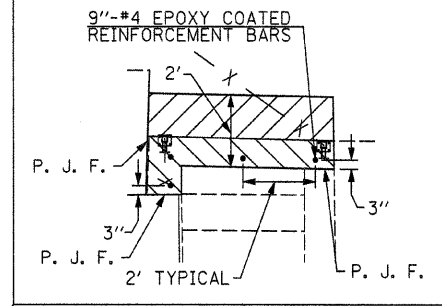
REMOVE AND REPLACE EXISTING STONE WALL
 350.7 SQ. FT.

FILE NAME =	USER NAME = #USER#	DESIGNED - R.H.D	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LAYOUT STEPHEN DOUGLAS TOMB STATE HISTORIC SITE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - J.H.F.	REVISED -		SCALE: 1" = 20'	SHEET NO. 4 OF 11 SHEETS	STA.	TO STA.	COOK	11	4	
		CHECKED - T.T.P.	REVISED -		CONTRACT NO. 46137							
		DATE - 5/12/10	REVISED -		FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							
					JOB NO. 250-061-0 VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107							

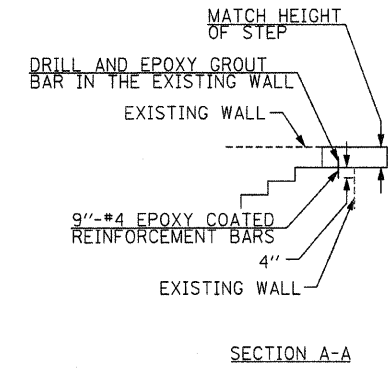


- CONCRETE REMOVAL AREA
(FULL HEIGHT OF FIRST STEP)
- REMOVE ASPHALT SURFACE AND BASE
FOR A DEPTH EQUAL TO THE FULL
HEIGHT OF THE FIRST STEP

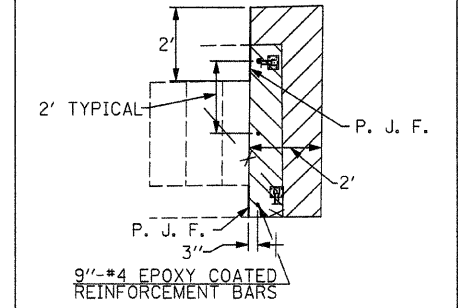
•NOTE:
FOR FENCE POST MODIFICATION
DETAIL SEE SHEET 11 & SECTION
C-C SHEET 11
P. J. F. = PREFORMED JOINT FILLER



SEE SHEETS: (9-11) FOR DETAILS



•NOTE:
FOR FENCE POST MODIFICATION
DETAIL SEE SHEET 11 & SECTION
C-C SHEET 11
P. J. F. = PREFORMED JOINT FILLER



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - R.H.D	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIDEWALK DETAILS STEPHEN DOUGLAS TOMB STATE HISTORIC SITE	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	
		DRAWN - J.H.F.	REVISED -		SCALE: 1" = 5'	SHEET NO. 5 OF 11 SHEETS	STA.	TO STA.	COOK	11
		CHECKED - T.T.P.	REVISED -		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				
		DATE - 5/12/10	REVISED -		CONTRACT NO. 46137					

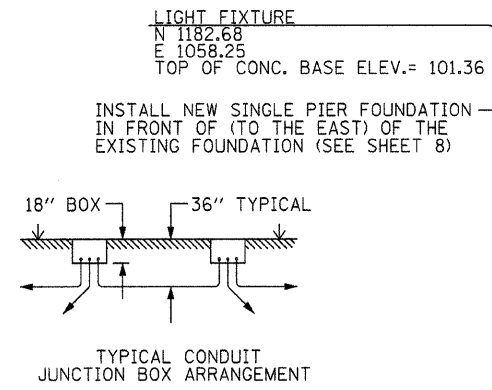
JOB NO. 250-061-Q VASCONCELLES ENGINEERING CORP. DESIGN FIRM REGISTRATION NUMBER 184-002107

WIRING SCHEDULE				
CIRCUIT	WIRE SIZE		CONDUIT NOTE 1	USAGE
	SIZE	QUANTITY		
1	#10	2	3/4" PVC	LTG
	#12G	1		
2	#8	2	3/4" PVC	RECEPT.
	#12G	1		
3	#10	2	3/4" PVC	LTG
	#12G	1		
4	#10	2	3/4" PVC	RECEPT.
	#12G	1		

NOTES: 1. ALL CONDUIT TO BE PVC EXCEPT AT FOUNDATIONS OR AS OTHERWISE NOTED

LEGEND

- EXISTING FENCE
- o EXISTING WATER VALVE
- u EXISTING FIRE HYDRANT
- o EXISTING YARD HYDRANT
- EXISTING WATER FOUNTAIN
- F EXISTING SIGN
- P EXISTING FLAG POLE
- o EXISTING CATCH BASIN
- o EXISTING DECIDUOUS TREE
- o EXISTING CONIFEROUS TREE
- o EXISTING BUSH
- o EXISTING SPOT LIGHT
- h_w PROPOSED RECEPTACLE
- RGS SCHEDULE 40 RIGID GALVANIZED STEEL CONDUIT
- PVC SCHEDULE 40 PVC CONDUIT
- "A#" PULLBOX; A= PULLBOX TYPE, #= PULLBOX NUMBER & SIZE



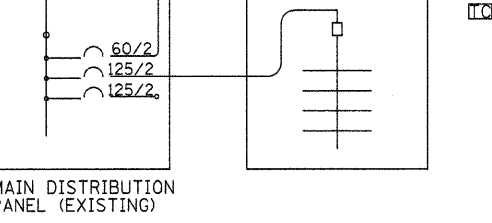
PUSH CONDUITS UNDER ROADWAY. CONDUITS TO BE RGS TO 2' EITHER SIDE OF PAVED SURFACE

REMOVE EXISTING #12 WIRES FROM CONDUIT. REINSTALL NEW 3#10THWN FROM PANEL BOARD TO NEW GATE OPERATOR

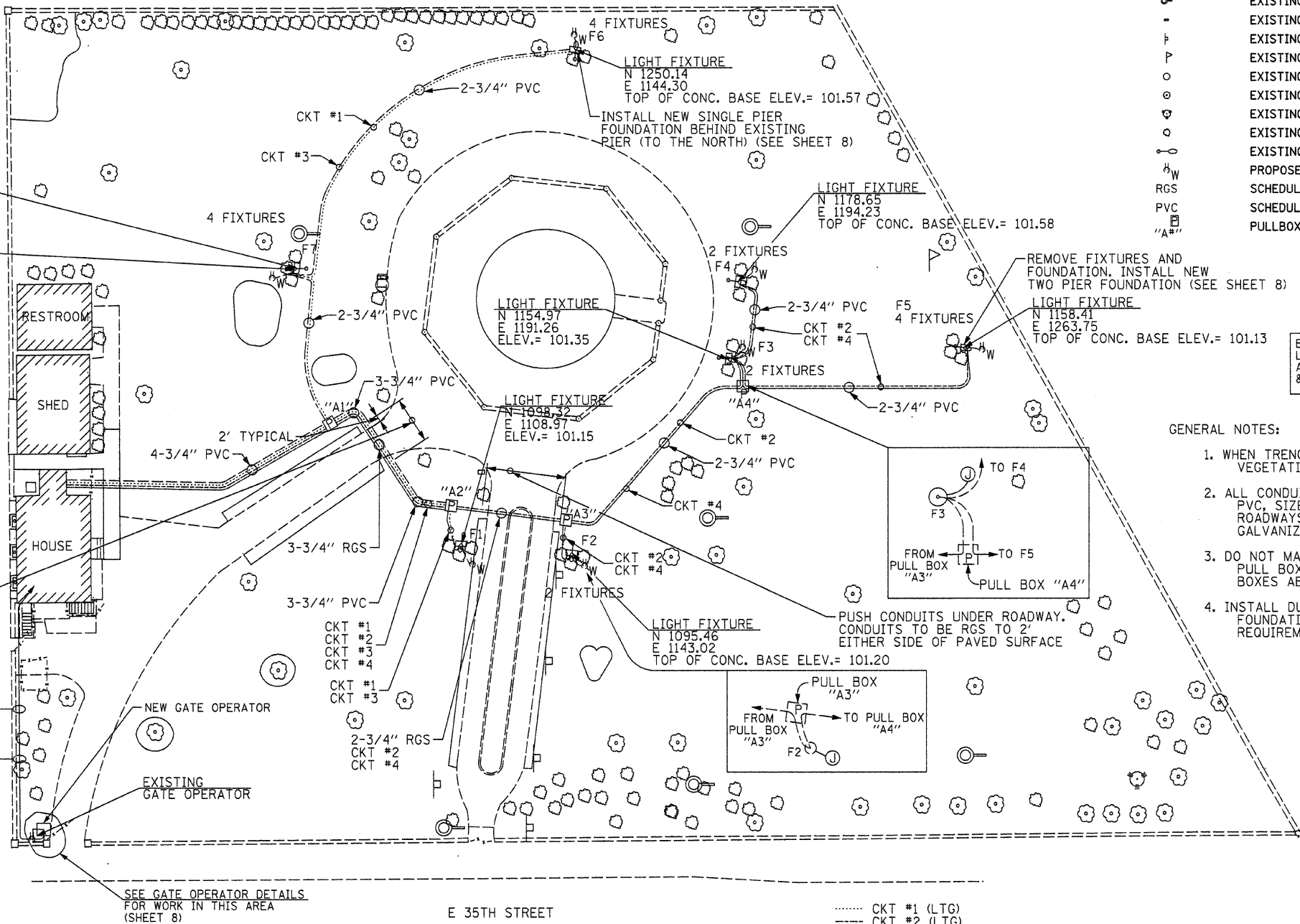
REFASTEN CONDUIT TO FENCE CURB

INCOMING SERVICE 120/240VA, 1PH, 3W

MAIN SERVICE DISCONNECT TO REMAIN



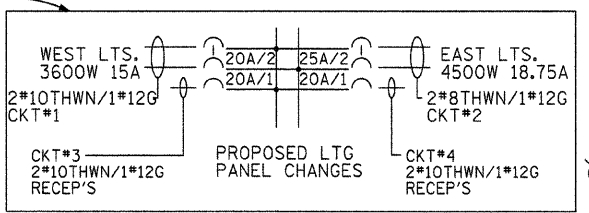
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#FILE#		DRAWN - J.H.F.	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - T.T.P.	REVISED -
	PLOT DATE = #DATE#	DATE - 5/12/10	REVISED -



- GENERAL NOTES:
- WHEN TRENCHING AVOID DAMAGE TO EXISTING VEGETATION - FLOWER BEDS, SHRUBS, TREES.
 - ALL CONDUITS UNDERGROUND TO BE SCHEDULE 40 PVC, SIZE AS NOTED, EXCEPT UNDER PAVED ROADWAYS IT SHALL BE SCHEDULE 40 RIGID GALVANIZED STEEL (RGS).
 - DO NOT MAKE SPLICES IN GROUND MOUNTED PULL BOXES ("A"). MAKE SPLICES IN JUNCTION BOXES ABOVE GRADE ON LIGHT FIXTURE FOUNDATIONS.
 - INSTALL DUPLEX OUTLET AT EACH LIGHT FIXTURE FOUNDATION. OUTLET ENCLOSURE TO MEET REQUIREMENTS OF NEC ARTICLE 406.8 (B)(1).

B.M. #1 LOCATED ON W. CAP BOLT ON FIRE HYDRANT AT THE S.W. CORNER OF S. LAKE PARK AVE. & E. 35TH ST. ELEV.= 100.00

- CKT #1 (LTG)
- CKT #2 (LTG)
- CKT #3 (RECEP)
- CKT #4 (RECEP)



PULLBOX SCHEDULE	
TYPE	DESCRIPTION
A-	13"x24"x18" D FIBERGLASS PULL BOX, WHEEL LOAD RATED 15,000 LBS. VERTICAL/800 LBS. LATERAL, TIER 15, HA COVER, ENCLOSURE STYLE PT, COVER STYLE PG HUBBLE QUAZITE, OR EQUAL. LID TO BE MARKED "LIGHTING"

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLAN
STEPHEN DOUGLAS TOMB STATE HISTORIC SITE

SCALE: 1" = 20' SHEET NO. 6 OF 11 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	6
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 46137	

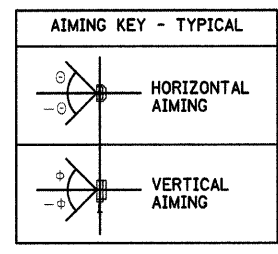
LUMINAIRE SCHEDULE					
FIXTURE #	MANUFACTURER, OR EQUAL	MODEL #	LAMP	BEAM ANGLE	COMMENTS
F1a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F1b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F2a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F2b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F3a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F3b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F4a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F4b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F5a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F5b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F5c	BEGA	7881 MH	ED-28MH	8°	NARROW BEAM, 250W, AIM TO DOUGLAS STATUE
F5d	BEGA	7881 MH	ED-28MH	8°	NARROW BEAM, 250W, AIM TO DOUGLAS STATUE
F6a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F6b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F6c	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F6d	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F7a	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F7b	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W
F7c	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL
F7d	BEGA	7882 MH	ED-28MH	8/40°	FLAT BEAM, 250W, TURN VERTICAL

GENERAL NOTE:
 AIMING ANGLES SHOWN ARE FOR INITIAL AIMING ONLY. FINAL AIMING SHALL BE ACCOMPLISHED AT NIGHT IN THE PRESENCE OF THE OWNER AND THE ENGINEER. WORK ASSOCIATED WITH OBTAINING FINAL AND ACCEPTABLE AIMING SHALL BE CONSIDERED A PART OF THE WORK AND WILL NOT BE CONSIDERED FOR EXTRA PAYMENT

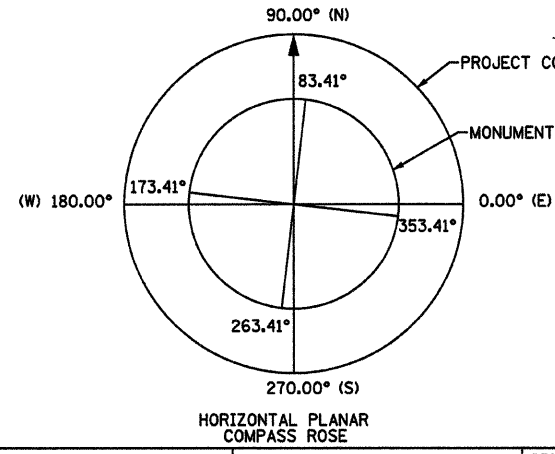
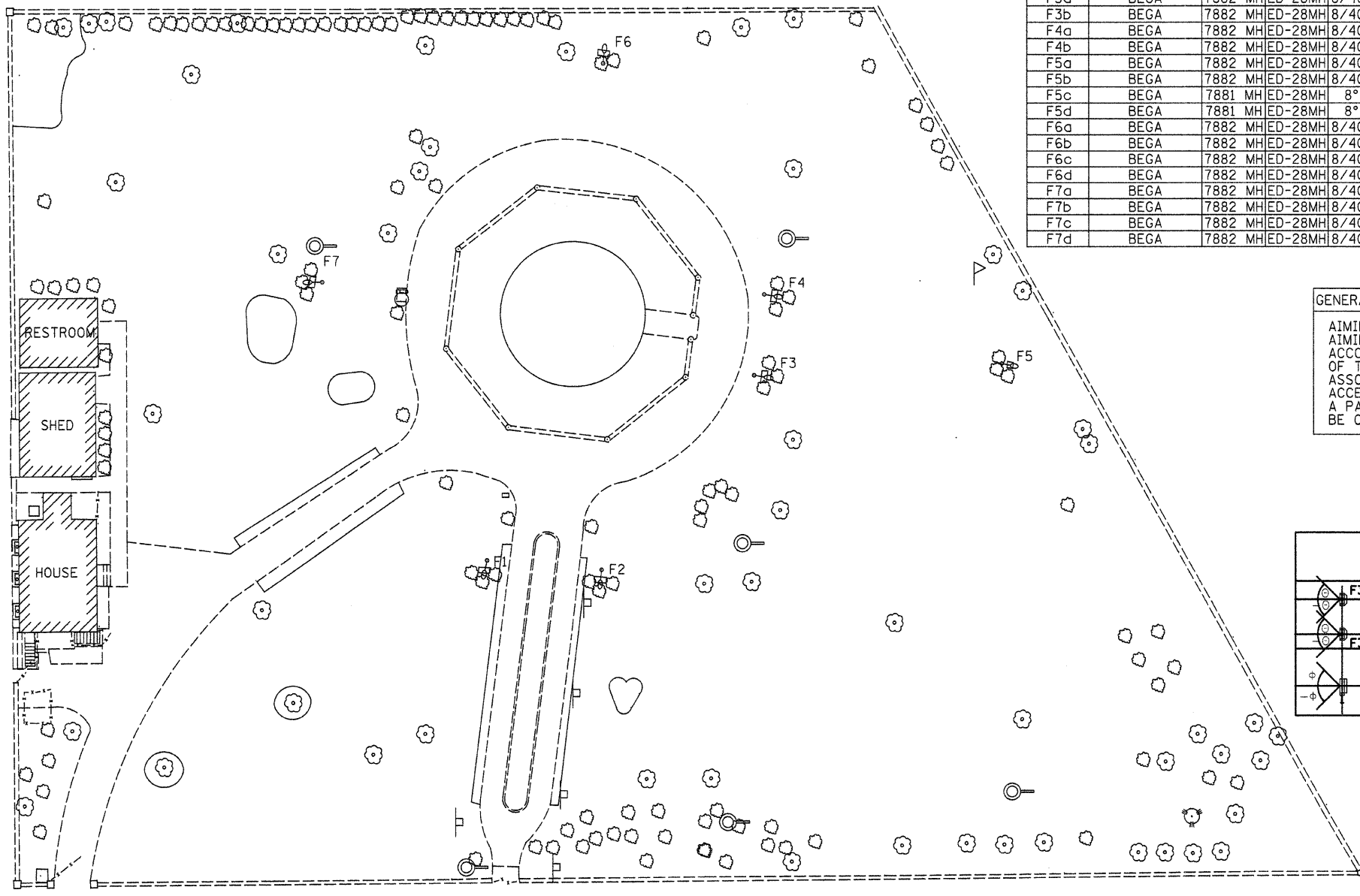
AIMING KEY F6a, F6b F6c, F6d				
	F6a	F6b	F6c	F6d
HORIZONTAL AIMING	5°	9°	7°	7°
VERTICAL AIMING	3°	6°	15°	28.5°

AIMING KEY F7a, F7b F7c, F7d				
	F7a	F7b	F7c	F7d
HORIZONTAL AIMING	4°	8°	7°	7°
VERTICAL AIMING	3°	6°	18°	18°

AIMING KEY F3a, F3b F4a, F4b				
	F3a	F3b	F4a	F4b
HORIZONTAL AIMING	16°	19°	5°	2°
VERTICAL AIMING	3.5°	18°	28°	8°



THE "a", "b", "c", AND "d" DESIGNATIONS ON THE AIMING KEYS REPRESENT THE INDIVIDUAL LIGHT FIXTURES AS DIRECTED TOWARD THE MONUMENT. THE "a" AND "c" DESIGNATIONS REPRESENT THE RIGHT LOWER AND HIGHER FIXTURES, RESPECTIVELY. THE "b" AND "d" DESIGNATIONS REPRESENT THE LEFT LOWER AND HIGHER FIXTURES, RESPECTIVELY, AS YOU FACE THE FRONT OF THE FIXTURE.



MONUMENT CARDINAL POINTS ARE ROTATED 6.59° CLOCKWISE FROM PROJECT CARDINAL POINTS. SEE HORIZONTAL PLANAR COMPASS ROSE

ANGLES SHOWN IN THE AIMING KEYS ARE IN RELATION TO THE PROJECT CARDINAL POINTS

AIMING KEY F1a, F1b F2a, F2b				
	F1a	F1b	F2a	F2b
HORIZONTAL AIMING	18°	20°	4°	6°
VERTICAL AIMING	3°	32.5°	19°	6°

AIMING KEY F5a, F5b F5c, F5d				
	F5a	F5b	F5c	F5d
HORIZONTAL AIMING	7°	7°	7°	7°
VERTICAL AIMING	18°	18°	36°	36°

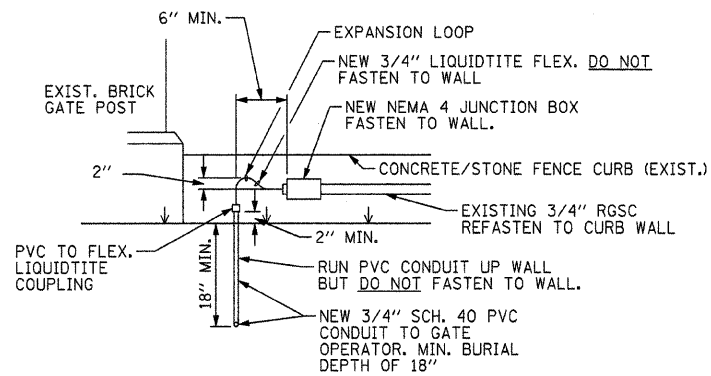
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

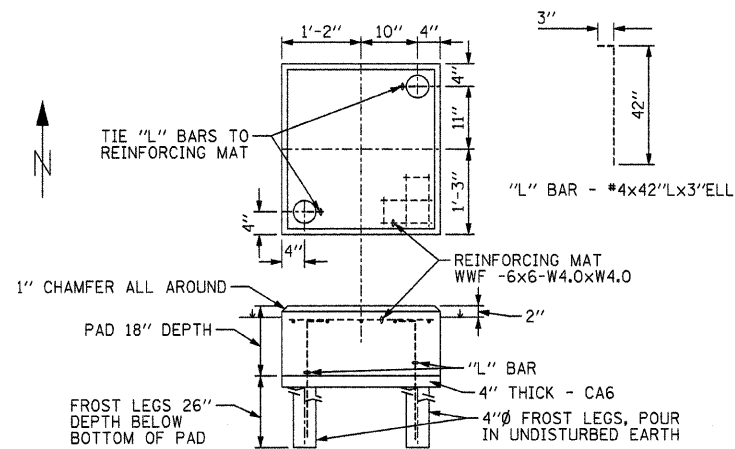
LIGHT AIMING CHARTS
 STEPHEN DOUGLAS TOMB STATE HISTORIC SITE

SCALE: 1" = 20' SHEET NO. 7 OF 11 SHEETS STA. TO STA.

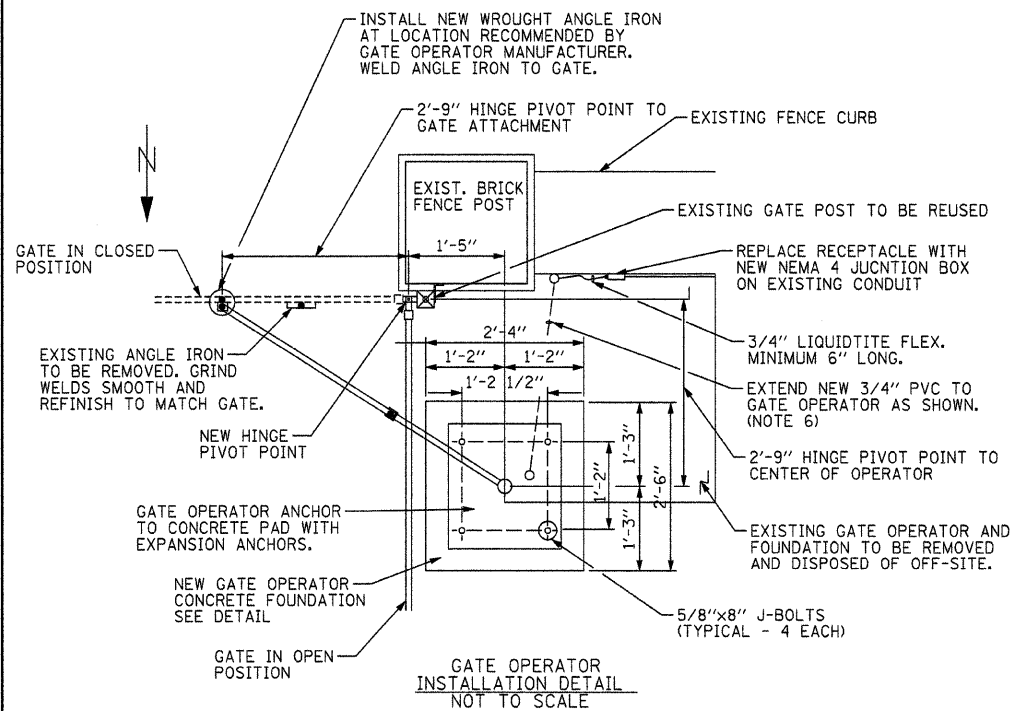
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	7
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 46137	



GATE OPERATOR CONDUIT INSTALLATION NOT TO SCALE



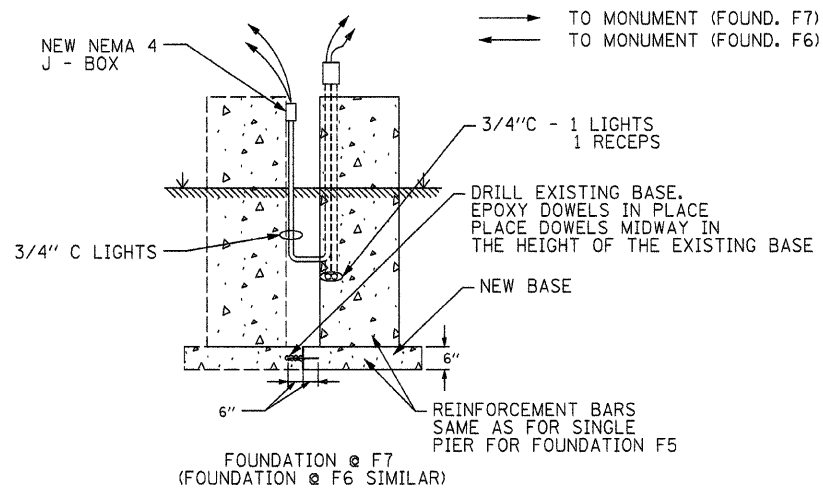
GATE OPERATOR FOUNDATION NOT TO SCALE



GATE OPERATOR INSTALLATION DETAIL NOT TO SCALE

NOTES:

- GATE OPERATOR SHALL BE LINEAR CORPORATION, OR EQUAL, SWING GATE OPERATOR, MODEL SWC-111. OPERATOR SHALL HAVE 1 HP, SINGLE PHASE MOTOR AND OPERATE FROM 120V, 1 PH. POWER. GATE OPERATOR SHALL BE CAPABLE OF OPENING A MAXIMUM NINETEEN (19) FOOT LONG GATE WEIGHING 1000 POUNDS. UNIT SHALL BE CONTINUOUS DUTY RATED AND SHALL OPEN THE GATE FULLY IN 11-14 SECONDS.
- GATE OPERATOR SHALL HAVE EASILY ACCESSIBLE ADJUSTABLE CAM OPERATED LIMITS, A UL325/UL991 COMPLIANT 24 VDC CONTROL MODULE, EXTERNAL RESET BUTTON, POWER ON/OFF BUTTON, 115V ACCESSORY POWER OUTLET, INTEGRATED 3-BUTTON CONTROL STATION. CONTROLLER SHALL INCLUDE AN INTEGRATED RADIO RECEIVER, PLUG-IN LOOP DETECTOR CAPABILITY, AND SURGE PROTECTION.
- GATE OPERATOR SHALL HAVE A HEAVY-DUTY ZINC-PLATED STEEL CHASIS, RIGHT-ANGLE GEAR REDUCER, 1" DIAMETER OUTPUT SHAFT, ADJUSTABLE TORQUE LIMITER, HEAVY-DUTY PILLOW BLOCK BEARINGS AND UNIVERSAL PAD MOUNT FRAME.
- PROVIDE A MINIMUM OF TWO BATTERY OPERATED REMOTE CONTROLS. CONTROLS SHALL PROVIDE OPEN/STOP/CLOSE PUSH BUTTONS AND LED INDICATION OF CURRENT OPERATION.
- VERIFY ALL MANUFACTURER'S DATA FOR DIMENSIONS, ANCHOR BOLT TEMPLATE AND ANCHOR BOLT SIZES, FOUNDATION SIZES AND REQUIREMENTS.
- LOCATE CONDUIT STUB UP AT PAD PER MANUFACTURER'S REQUIREMENTS.

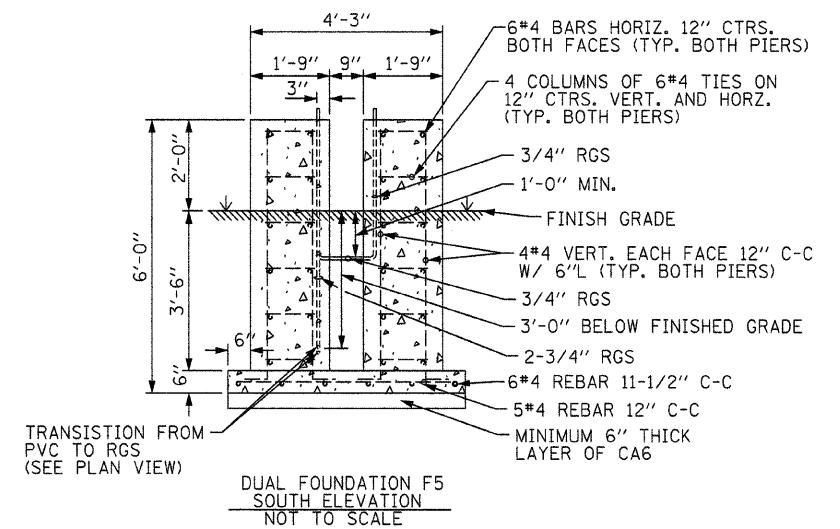


FOUNDATION BILL OF MATERIAL

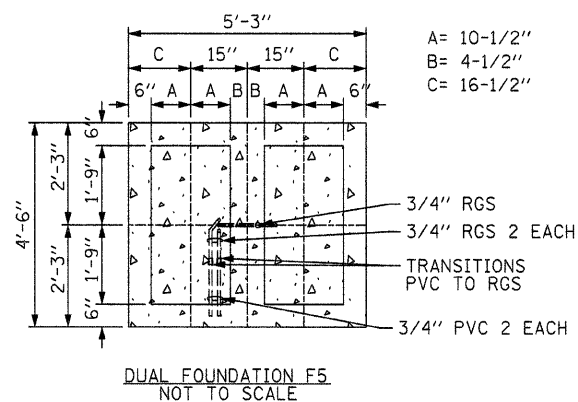
LOCATION	NO	SIZE	LENGTH	SHAPE
F5	24	#4	3'-0"	
F5	24	#4	4'-3"	
F5	16	#4	6'-0"	
F5	5	#4	4'-9"	
F5	6	#4	4'-0"	
F7	12	#4	3'-0"	
F7	12	#4	4'-3"	
F7	8	#4	6'-0"	
F7	3	#4	2'-3"	
F7	3	#4	4'-0"	
GATE OPER.	2	#4	3'-9"	
GATE OPER.	1	WWF	2'X2'	
CONCRETE STRUCTURES			CU. YD.	6.9
REINFORCEMENT BARS			POUNDS	330

NOTES:

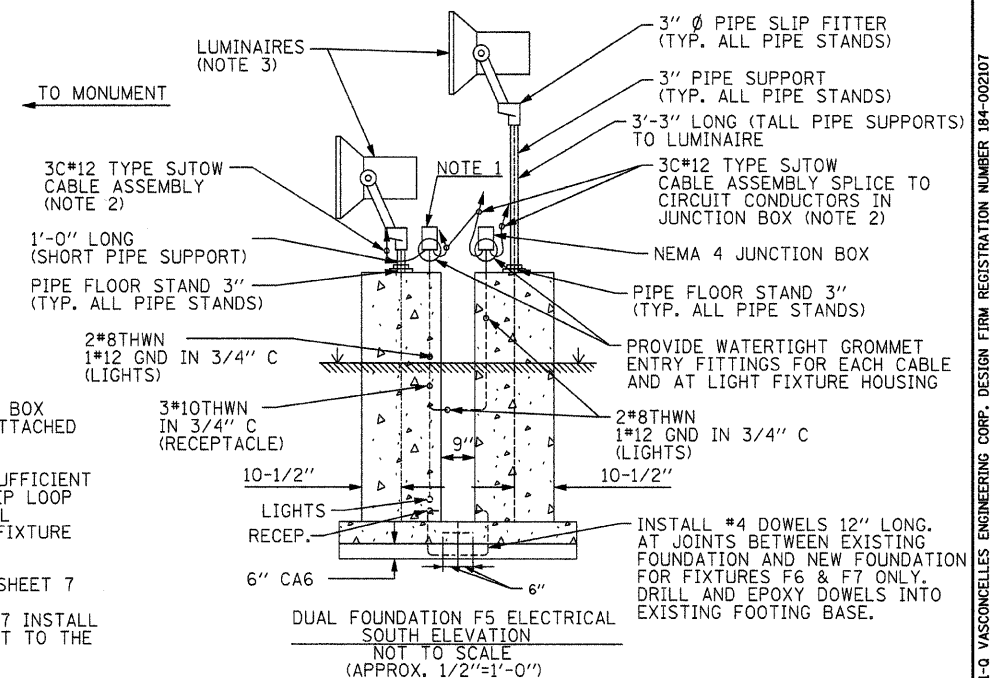
- INSTALL WEATHERPROOF BOX WITH DUPLEX OUTLET ATTACHED TO JUNCTION BOX
- INSTALL CABLE WITH SUFFICIENT LENGTH TO PROVIDE DRIP LOOP AND TO ALLOW FOR FULL ADJUSTMENT OF LIGHT FIXTURE (MIN. LENGTH = 8'-0")
- SEE AIMING SCHEDULE SHEET 7
- AT FIXTURES F6 AND F7 INSTALL A SINGLE PIER ADJACENT TO THE EXISTING PIERS



DUAL FOUNDATION F5 SOUTH ELEVATION NOT TO SCALE



DUAL FOUNDATION F5 NOT TO SCALE



DUAL FOUNDATION F5 ELECTRICAL SOUTH ELEVATION NOT TO SCALE (APPROX. 1/2"=1'-0")

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#FILEL#		DRAWN - J.H.F.	REVISED -
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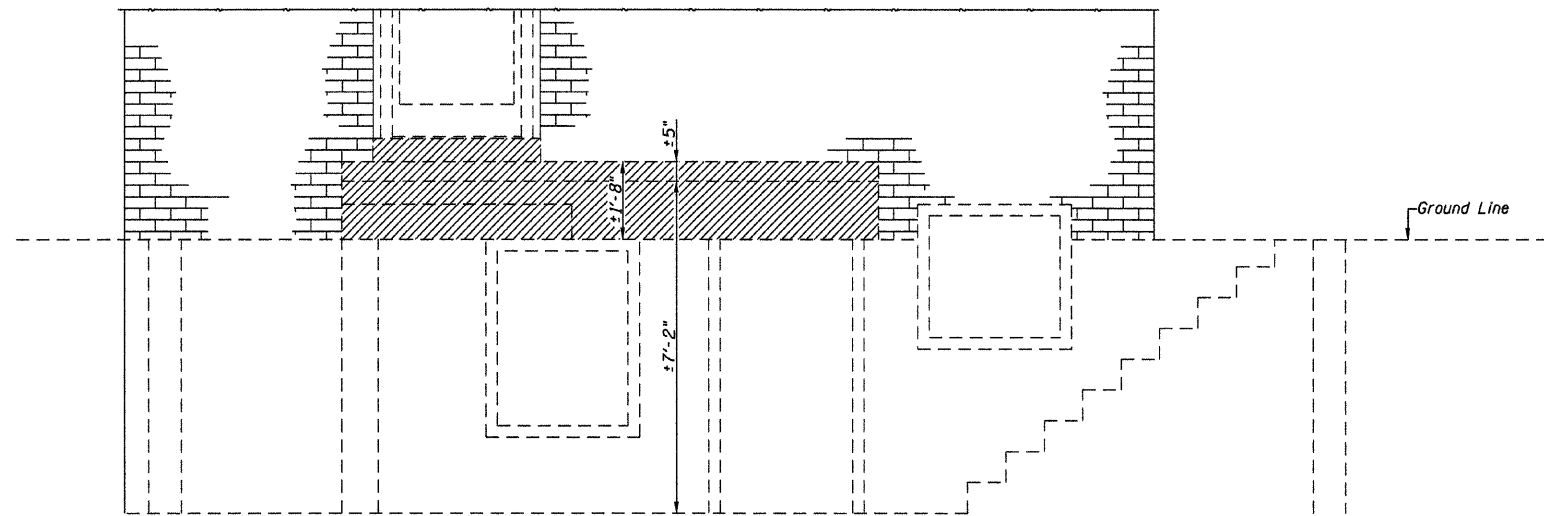
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GATE OPERATOR & LIGHT DETAILS STEPHEN DOUGLAS TOMB STATE HISTORIC SITE

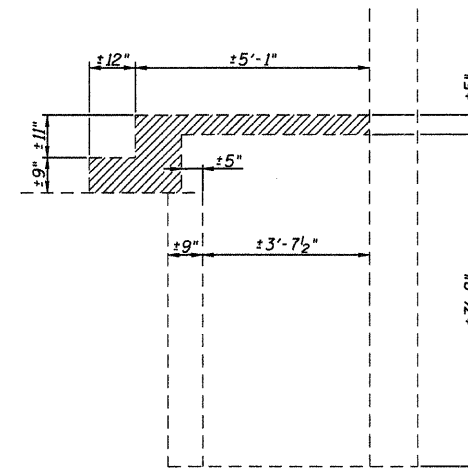
SCALE: 1" = 20' SHEET NO. 8 OF 11 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	8
CONTRACT NO. 46137				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

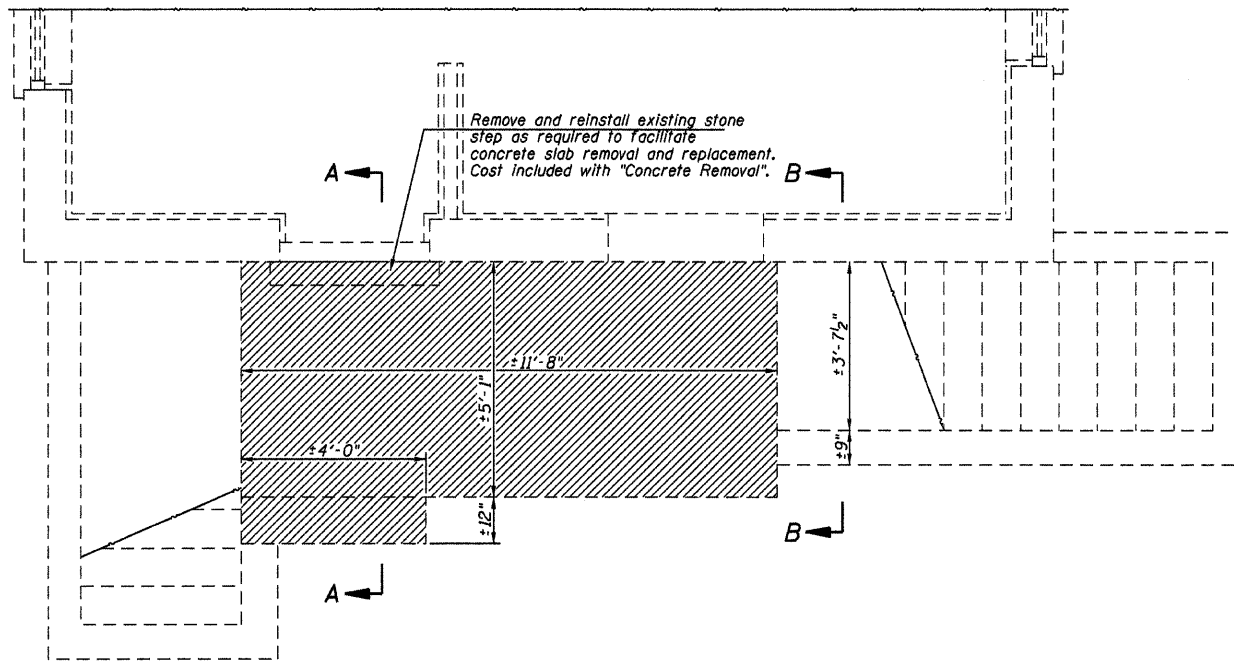
JOB NO. 09-014A ALLEN HENDERSON & ASSOC., INC. DESIGN FIRM REGISTRATION NUMBER 184-001907



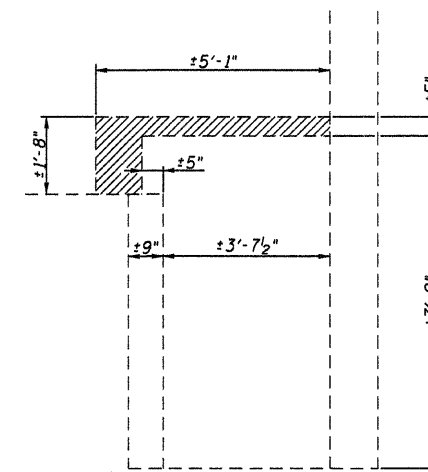
ELEVATION



SECTION A-A



PLAN



SECTION B-B

- Indicates concrete removal

BILL OF MATERIAL

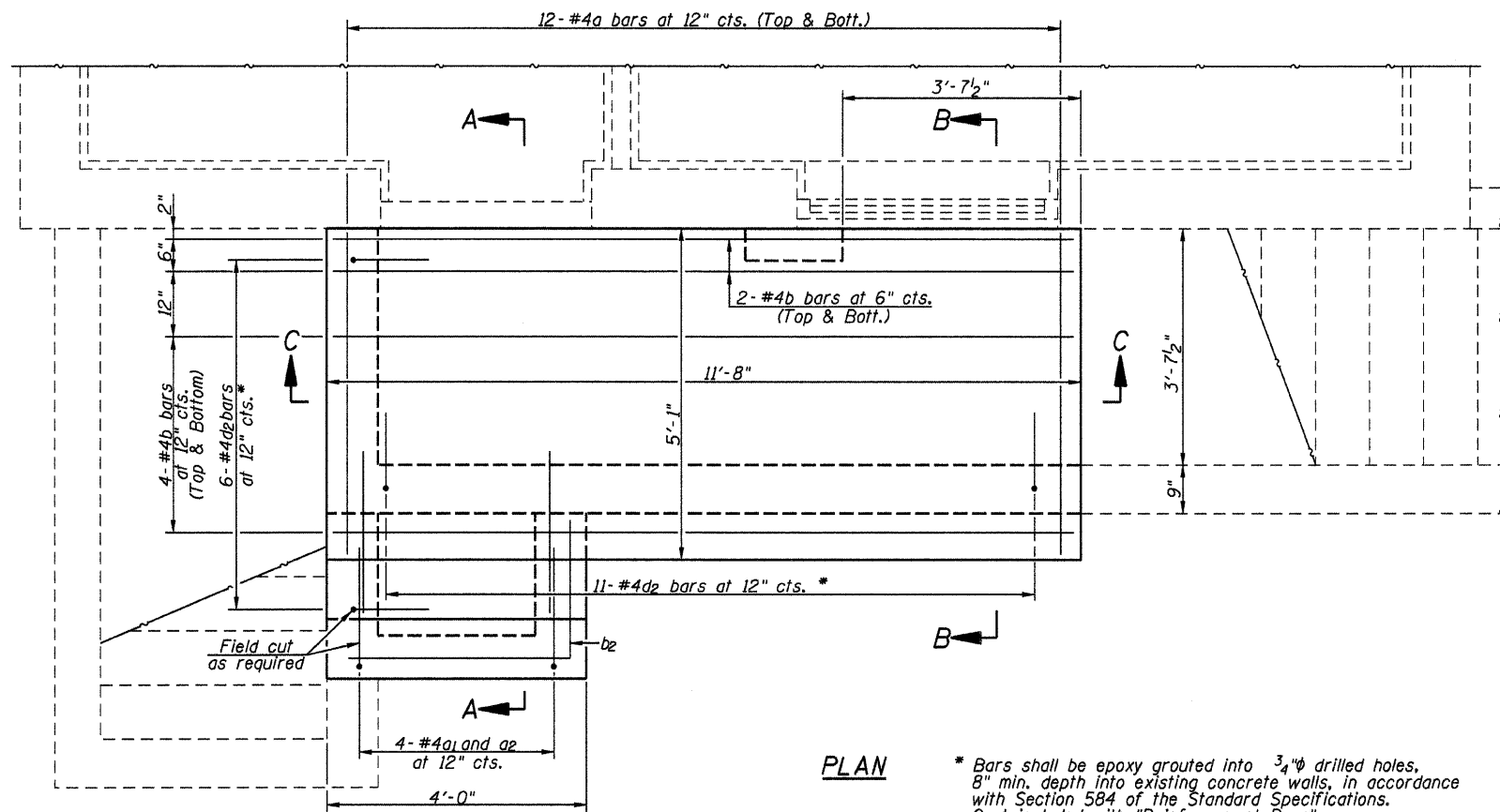
Concrete Removal	Cu. Yds.	1.7
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#FILE#		DRAWN -	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

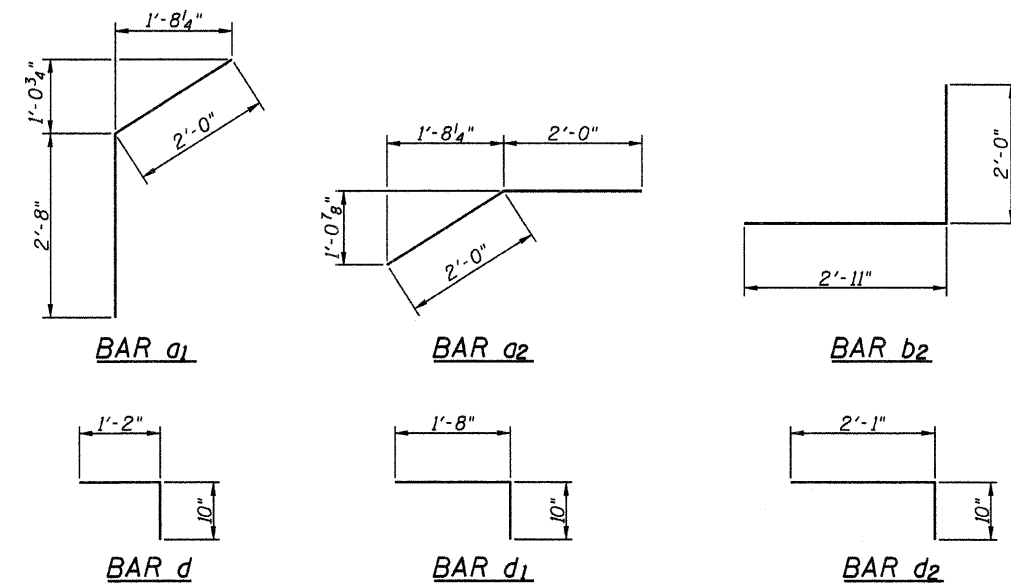
CONCRETE REMOVAL				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	11	9
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



PLAN

* Bars shall be epoxy grouted into $\frac{3}{4}$ " drilled holes, 8" min. depth into existing concrete walls, in accordance with Section 584 of the Standard Specifications. Cost included with "Reinforcement Bars".



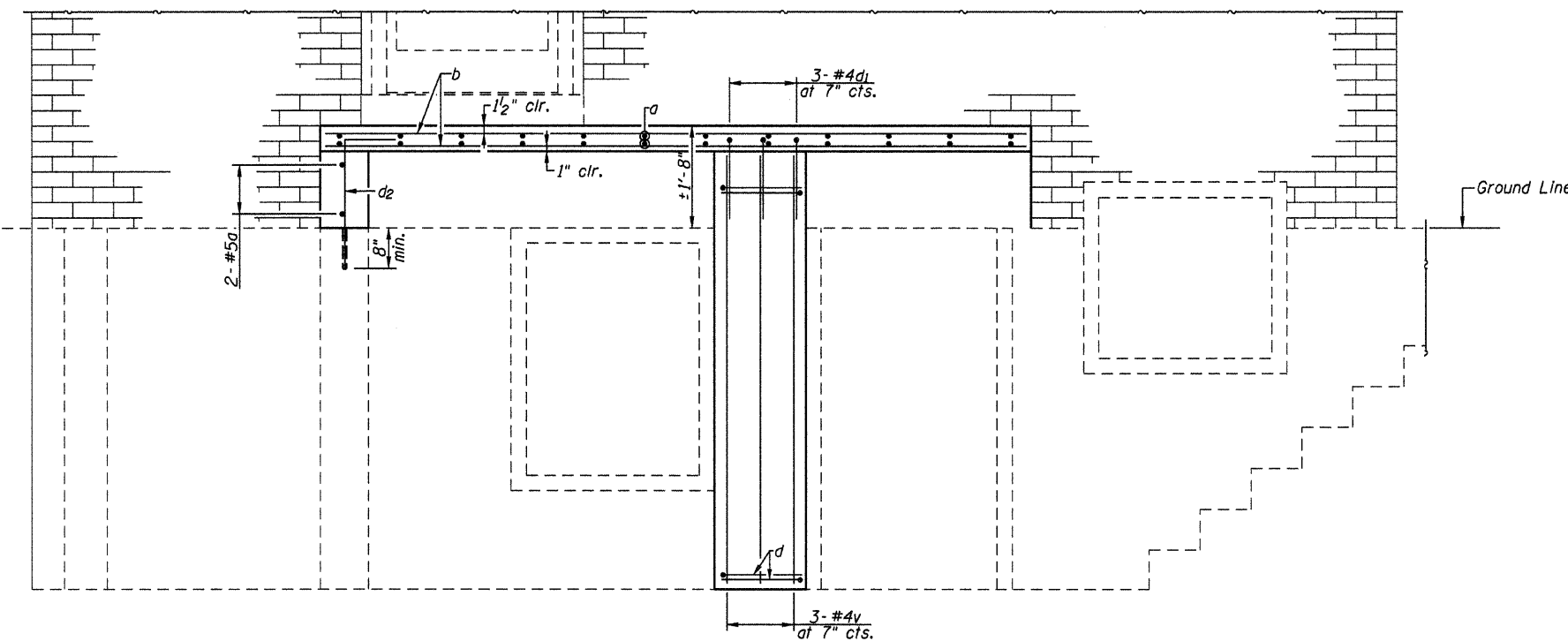
DESIGN LOAD

Live Load = 100 psf.

DESIGN STRESSES

$f'_c = 3500$ psi

$f_y = 60,000$ psi (reinforcement)



SECTION C-C

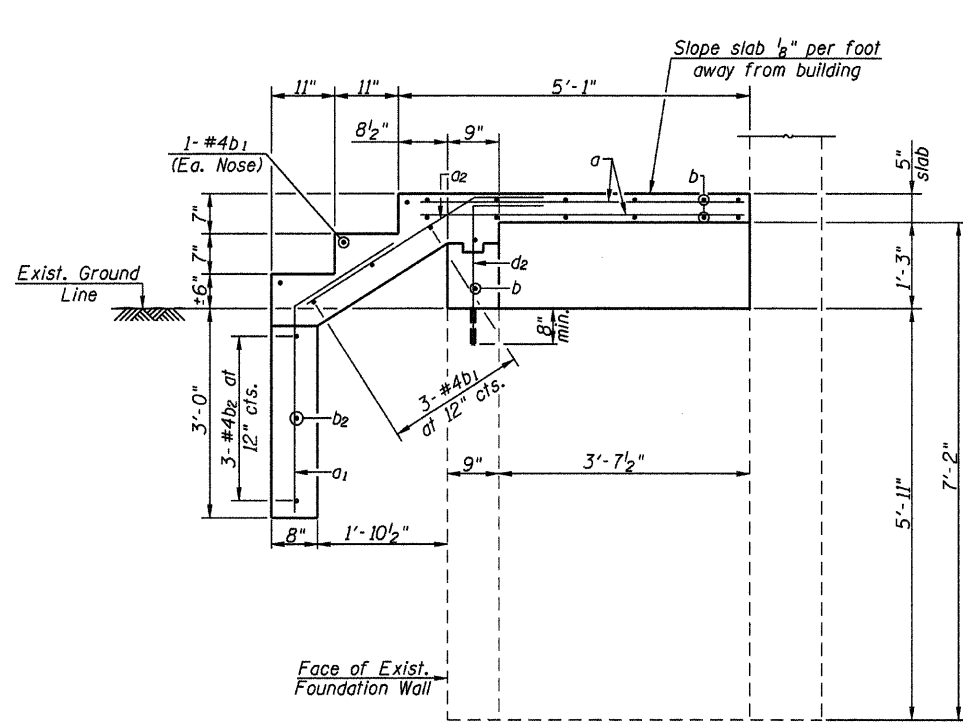
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	26	#4	4'-9"	—
a ₁	4	#4	4'-8"	—
a ₂	4	#4	4'-0"	—
b	14	#4	11'-4"	—
b ₁	6	#4	3'-8"	—
b ₂	3	#4	4'-11"	—
d	14	#4	2'-0"	—
d ₁	3	#4	2'-6"	—
d ₂	17	#4	2'-11"	—
v	3	#4	6'-8"	—
Concrete Structures			Cu. Yds.	2.3
Reinforcement Bars			Pounds	310

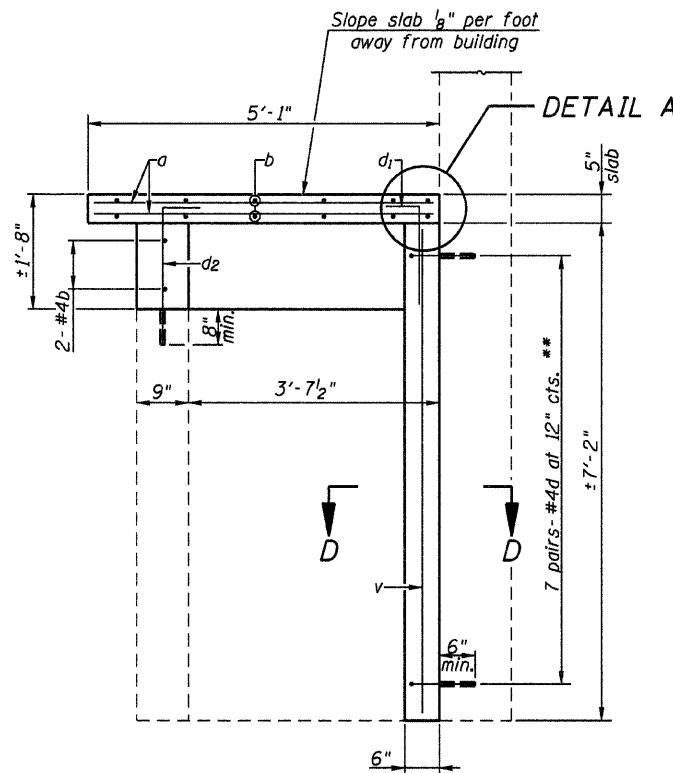
Notes:
 Reinforcement bars shall conform to the requirements of ASTM A706.
 All exposed edges shall have a standard $\frac{3}{4}$ " chamfer.
 Work this sheet with Sheet 11 of 11.

JOB NO. 09-014A ALLEN HENDERSON & ASSOC., INC. DESIGN FIRM NUMBER 184-001907

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PORCH DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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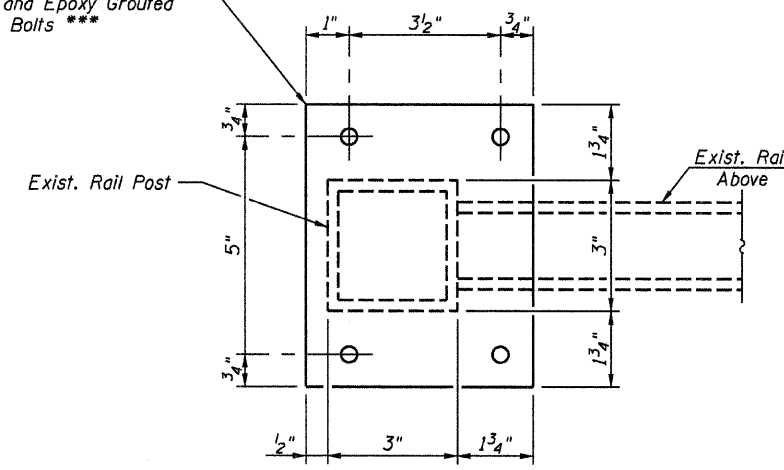
SECTION A-A



SECTION B-B

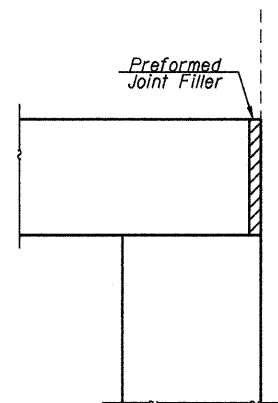
** Bars shall be epoxy grouted into $\frac{3}{4}$ " ϕ drilled holes, 6" min. depth into the existing concrete wall, in accordance Section 584 of the Standard and Specifications. Cost included with "Reinforcement bars."

R 6 1/2" x 3/8" x 5 1/4" w/4-3/8" ϕ Drilled and Epoxy Grouted Anchor Bolts ***

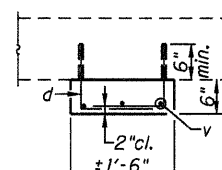


SECTION C-C

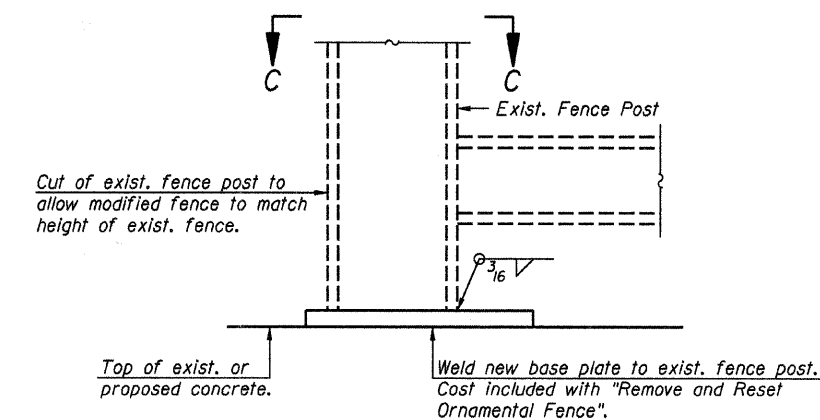
*** Anchor bolts shall be epoxy grouted into $\frac{5}{8}$ " ϕ drilled holes, $3\frac{3}{8}$ " min. depth into concrete, in accordance with Section 584 of The Standard Specifications. Cost included with "Remove and Reset Ornamental Fence."



DETAIL A



SECTION D-D



FENCE POST MODIFICATION DETAIL

Note: Work this sheet with sheet 10 of 11.

JOB NO. 09-014A ALLEN HENDERSON & ASSOC., INC. DESIGN FIRM NUMBER 184-001907

FILE NAME =	USER NAME = #USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PORCH DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
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								ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.						