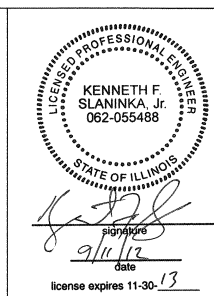


| | |
|---------------|----------------|
| — A — A — | AERIAL UTILITY |
| - - - - - | UNKNOWN |
| — CTV — CTV — | CABLE TV |
| — T — T — | TELEPHONE |
| — G — G — | GAS |
| — E — E — | ELECTRIC |
| — W — W — | WATER |
| — FO — FO — | FIBER OPTIC |
| — S — S — | SEWER |
| ⊕ | TBE TEST HOLE |

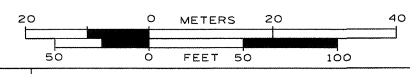
| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
| COM-ED = ELECTRIC | |
| LEVEL 3 = FIBER OPTIC | |
| PEOPLES = GAS | |

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ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



TBE Job No. IL09510463
SUE Plan Page: 5 of 10



Utility Quality Level "A" : Visually Verified Test Hole
 Utility Quality Level "B" : Designating/Test Holes not Visually Verified
 Utility Quality Level "C" : Research with Survey
 Utility Quality Level "D" : Records Research

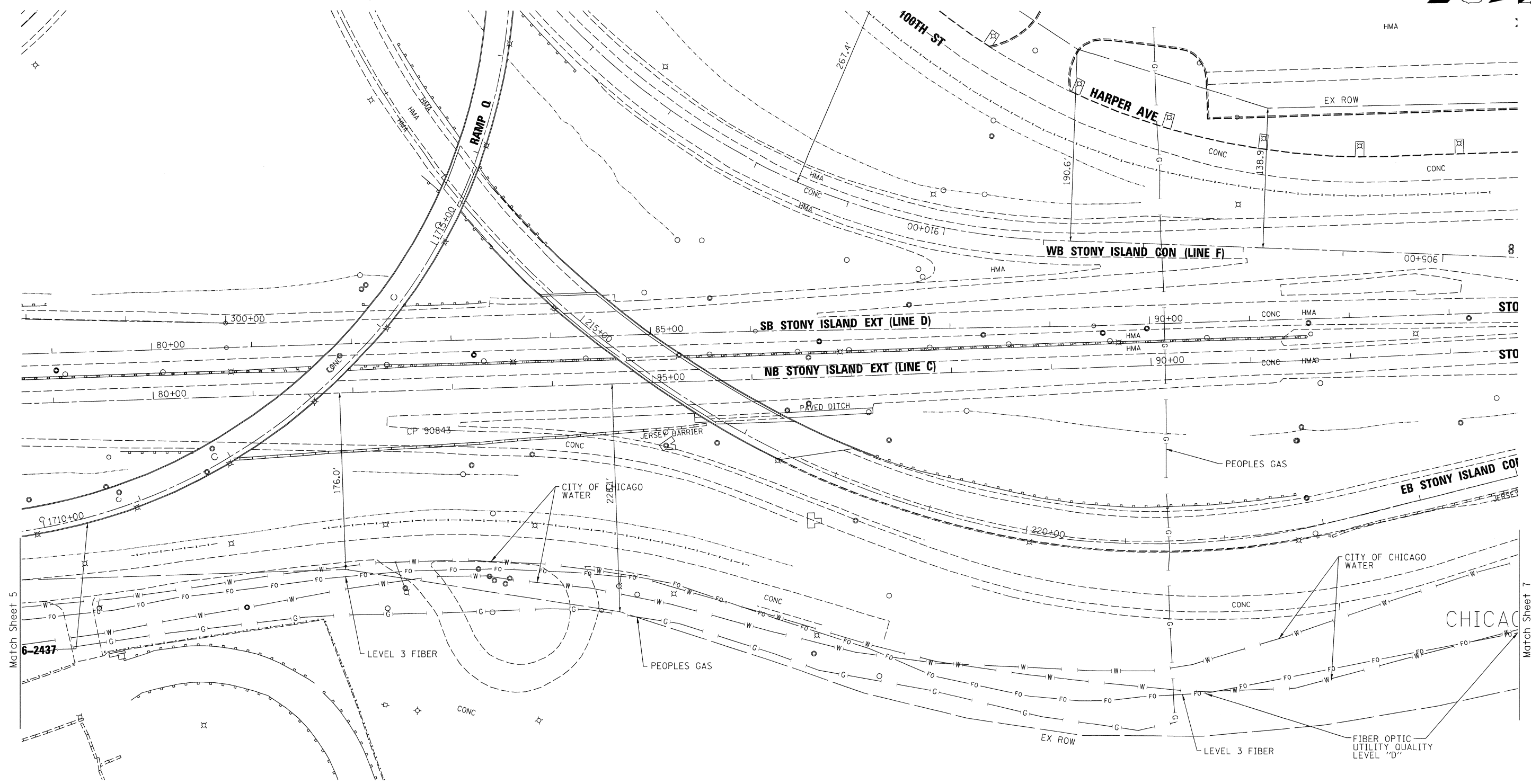
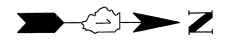
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|----------|---------|---------|--|
| DESIGNED | EG | REVISED | |
| DRAWN | KLC | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 3/06/12 | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|-------------|----------|------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 101 |
| FED. ROAD DIST. NO. | | ILLINOIS | IDOT Project No. | |

Contract No. 60V61

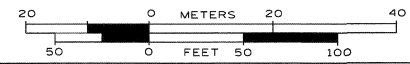
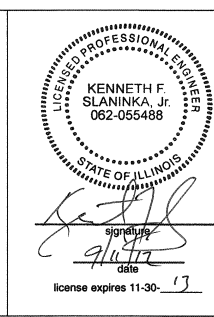


| | |
|---------------|----------------|
| — A — A — | AERIAL UTILITY |
| — B — B — | UNKNOWN |
| — CTV — CTV — | CABLE TV |
| — T — T — | TELEPHONE |
| — G — G — | GAS |
| — E — E — | ELECTRIC |
| — W — W — | WATER |
| — FO — FO — | FIBER OPTIC |
| — S — S — | SEWER |
| — T — T — | TBE TEST HOLE |

| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
| COM-ED = ELECTRIC | |
| LEVEL 3 = FIBER OPTIC | |
| PEOPLES = GAS | |

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Utility Quality Level "A" : Visually Verified Test Hole
 Utility Quality Level "B" : Designating/Test Holes not Visually Verified
 Utility Quality Level "C" : Research with Survey
 Utility Quality Level "D" : Records Research

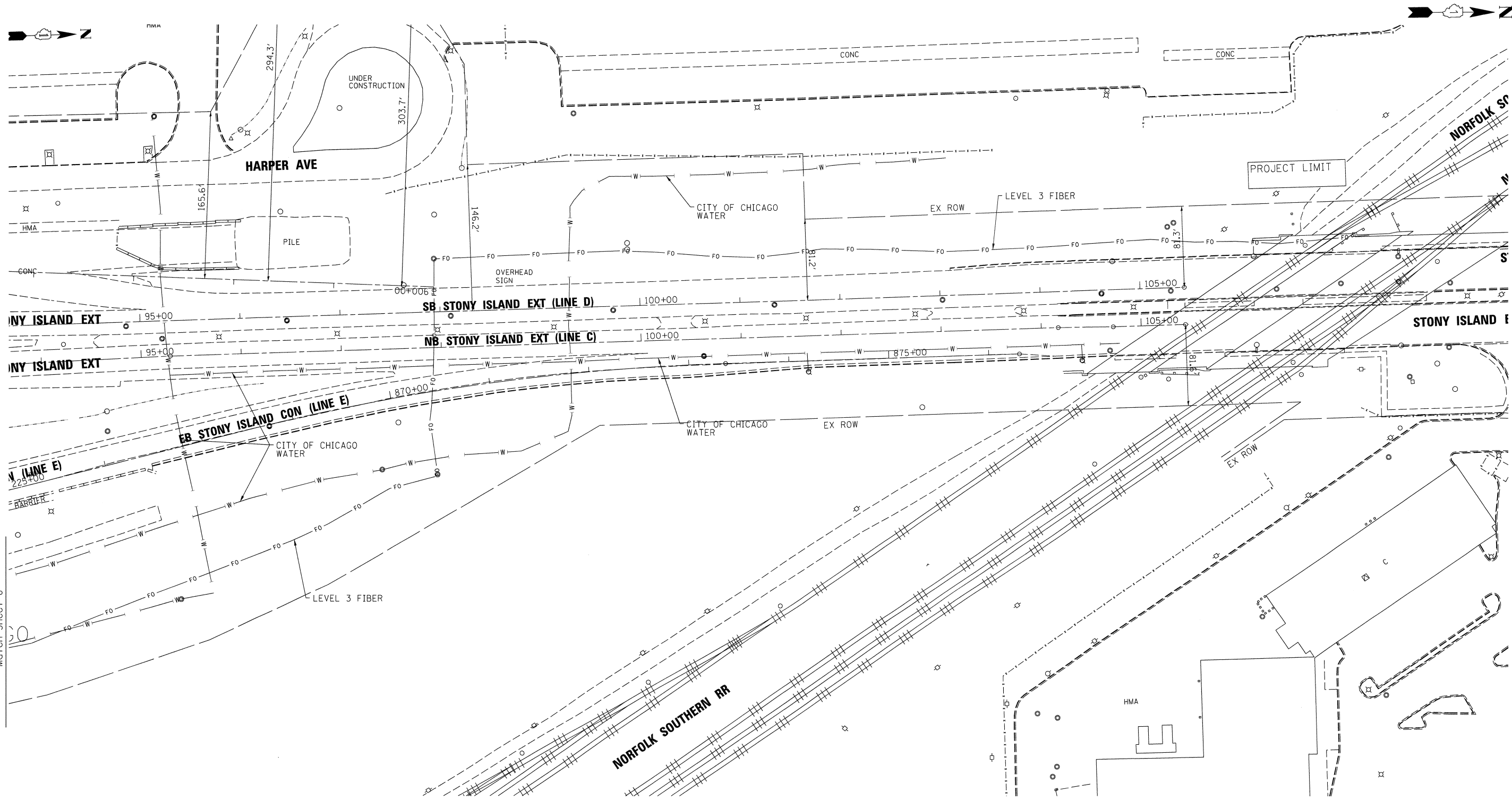
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|---------------------|---------|
| DESIGNED <i>EG</i> | REVISED |
| DRAWN <i>KLC</i> | REVISED |
| CHECKED <i>KFS</i> | REVISED |
| DATE <i>3/06/12</i> | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| | | | | |
|---------------------|---------------------|---------------------------|--------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 102 |
| FED. ROAD DIST. NO. | | ILLINOIS IDOT Project No. | Contract No. 60V61 | |

TBE Job No. IL09510463
 SUE Plan Page: 6 of 10



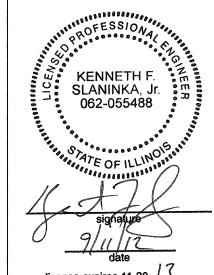
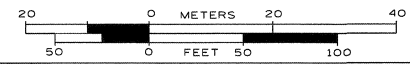
Match Sheet 6

| | |
|---------------|----------------|
| — A — A — | AERIAL UTILITY |
| — — — — | UNKNOWN |
| — CTV — CTV — | CABLE TV |
| — T — T — | TELEPHONE |
| — G — G — | GAS |
| — E — E — | ELECTRIC |
| — W — W — | WATER |
| — FO — FO — | FIBER OPTIC |
| —) —) — | SEWER |
| — * — * — | TBE TEST HOLE |

| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
| COM-ED = ELECTRIC | |
| LEVEL 3 = FIBER OPTIC | |
| PEOPLES = GAS | |

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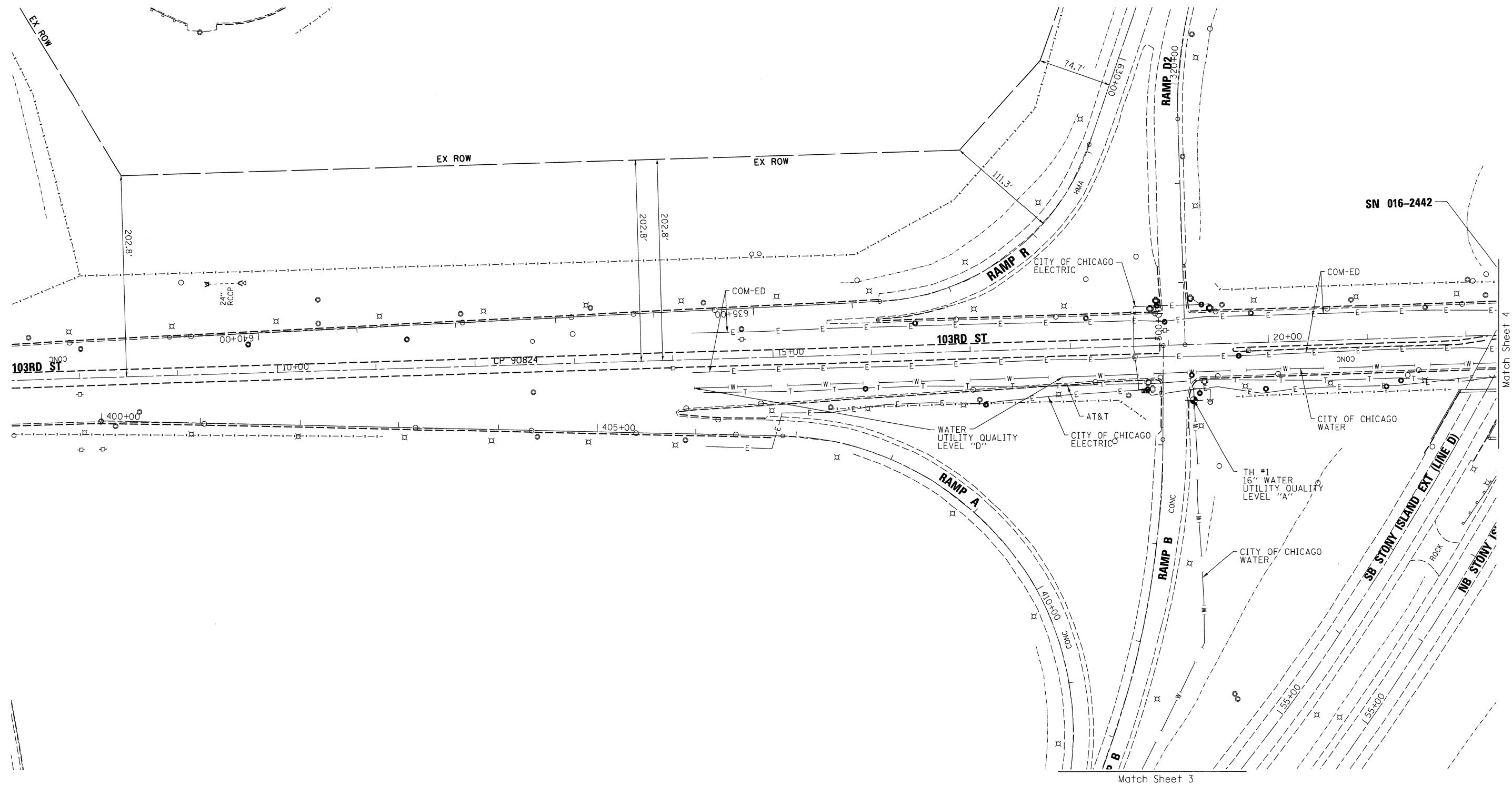
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|---------------------|---------|
| DESIGNED <i>EG</i> | REVISED |
| DRAWN <i>KLC</i> | REVISED |
| CHECKED <i>KFS</i> | REVISED |
| DATE <i>3/06/12</i> | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| | | | | |
|---|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 103 |
| Contract No. 60V61 | | | | |
| FED. ROAD DIST. NO. [ILLINOIS] IDOT Project No. | | | | |

TBE Job No. IL09510463
 SUE Plan Page: 7 of 10



Match Sheet 3

Match Sheet 4

SN 016-2442

| | | |
|---------|-------|----------------|
| — A — | A | AERIAL UTILITY |
| — — — | — — — | UNKNOWN |
| — CTV — | CTV | CABLE TV |
| — T — | T | TELEPHONE |
| — G — | G | GAS |
| — E — | E | ELECTRIC |
| — W — | W | WATER |
| — FO — | FO | FIBER OPTIC |
| — S — | S | SEWER |
| ⊙ | | TBE TEST HOLE |

| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
| COM-ED = ELECTRIC | |
| LEVEL 3 = FIBER OPTIC | |
| PEOPLES = GAS | |

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ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



TBE Job No. IL09510463_507
SUE Plan Page: 8 of 10

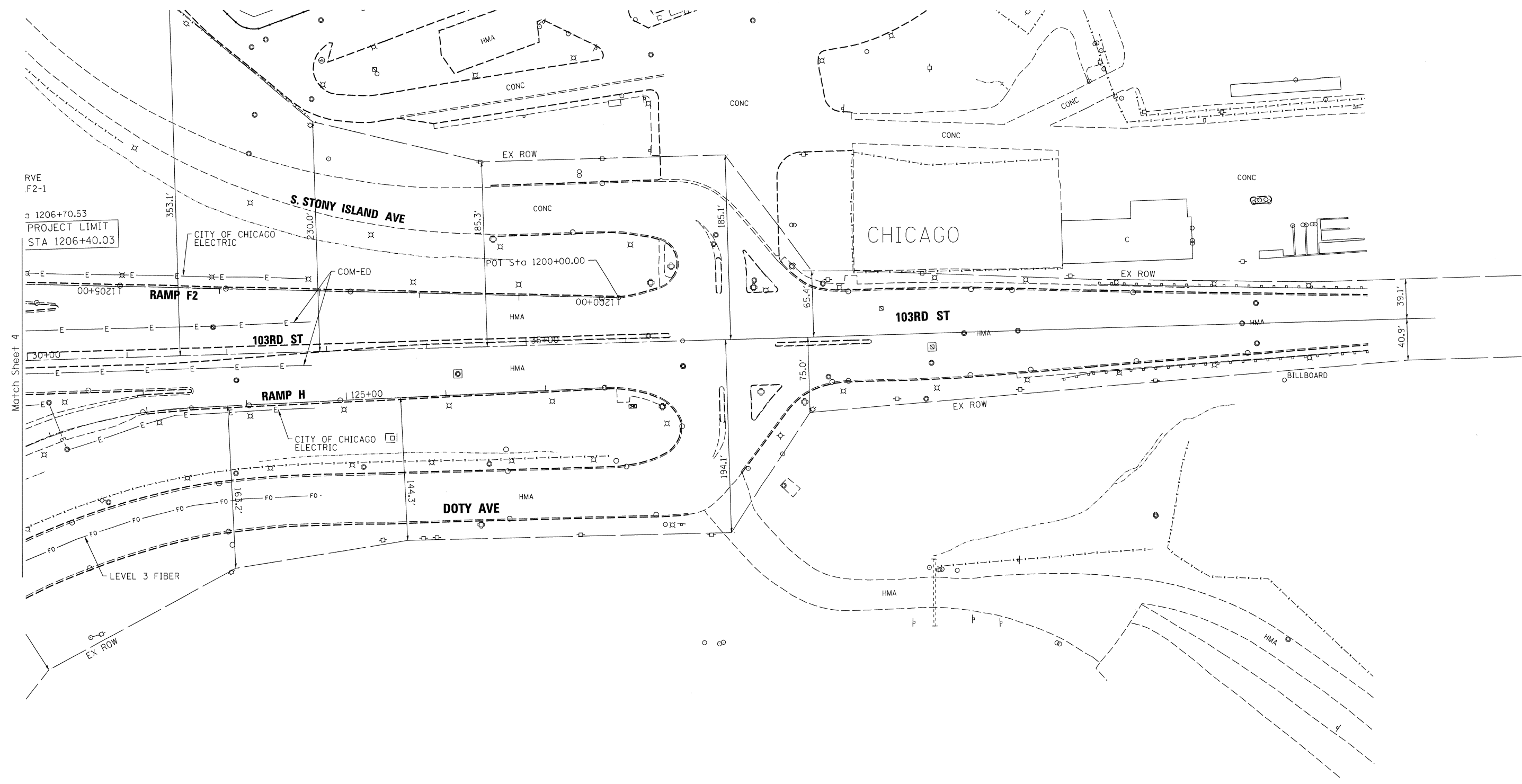
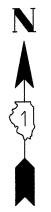
Utility Quality Level "A" : Visually Verified Test Hole
Utility Quality Level "B" : Designating/Test Holes not Visually Verified
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

| | | | |
|----------|---------|---------|----------------------|
| DESIGNED | EG | REVISED | 9/07/12 ADDED TH 1-2 |
| DRAWN | KLC | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 3/06/12 | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| | | | | |
|---------------------|-------------|---------------------------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 1212-060-BR | COOK | 285 | 104 |
| FED. ROAD DIST. NO. | | ILLINOIS IDOT Project No. | | |
| | | Contract No. 60V61 | | |

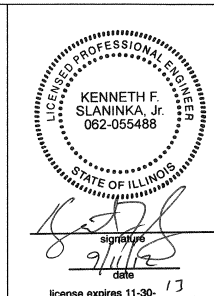


| | |
|---------------|----------------|
| — A — A — | AERIAL UTILITY |
| - - - - - | UNKNOWN |
| — CTV — CTV — | CABLE TV |
| — T — T — | TELEPHONE |
| — G — G — | GAS |
| — E — E — | ELECTRIC |
| — W — W — | WATER |
| — FO — FO — | FIBER OPTIC |
| — S — S — | SEWER |
| ⊕ | TBE TEST HOLE |

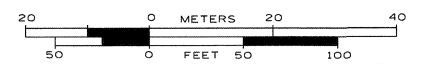
| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
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TBE Job No. IL09510463
SUE Plan Page: 9 of 10



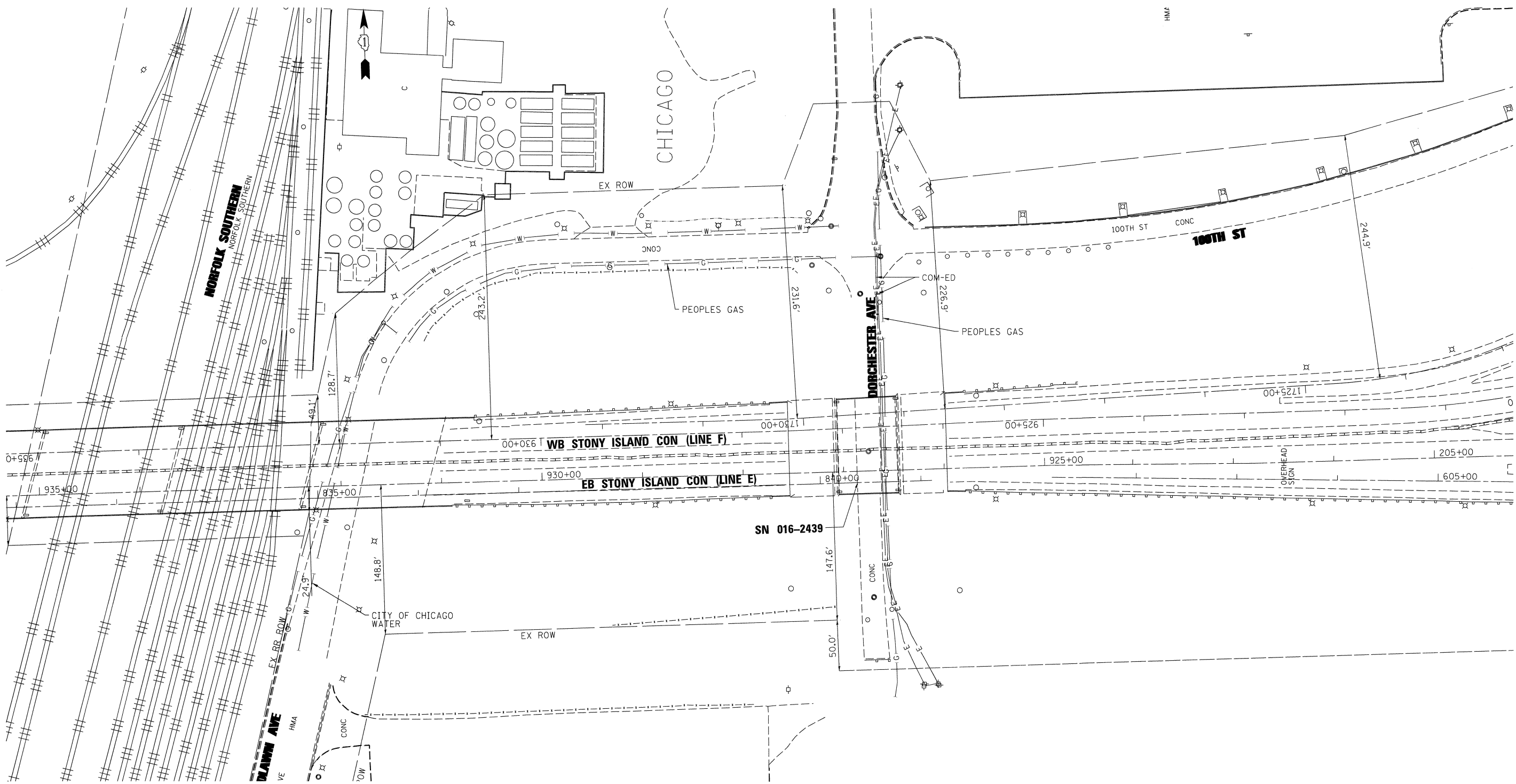
Utility Quality Level "A" : Visually Verified Test Hole
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 Utility Quality Level "C" : Research with Survey
 Utility Quality Level "D" : Records Research

| | | | |
|----------|---------|---------|--|
| DESIGNED | EG | REVISED | |
| DRAWN | KLC | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 3/06/12 | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
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| FED. ROAD DIST. NO. ILLINOIS IDOT Project No. | | | Contract No. 60V61 | |

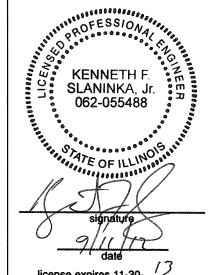
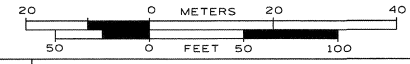


| | |
|---------------|----------------|
| — A — A — | AERIAL UTILITY |
| - - - - - | UNKNOWN |
| — CTV — CTV — | CABLE TV |
| — T — T — | TELEPHONE |
| — G — G — | GAS |
| — E — E — | ELECTRIC |
| — W — W — | WATER |
| — FO — FO — | FIBER OPTIC |
| — S — S — | SEWER |
| ⊕ | TBE TEST HOLE |

| UTILITY OWNERS | |
|----------------------------|--|
| AT&T = TELEPHONE | |
| CITY OF CHICAGO = ELECTRIC | |
| CITY OF CHICAGO = WATER | |
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| | | | |
|----------|---------|---------|--|
| DESIGNED | EG | REVISED | |
| DRAWN | KLC | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 3/06/12 | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94 at Stony Island
Chicago, IL

| | | | | |
|---------------------|-------------|---------------------------|--------------------|-----------|
| F.A.J. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 106 |
| FED. ROAD DIST. NO. | | ILLINOIS IDOT Project No. | Contract No. 60V61 | |

TBE Job No. IL09510463
SUE Plan Page: 10 of 10

VERIFIED UTILITY INFORMATION

| TEST HOLE # | SIZE & TYPE | NORTHING | EASTING | EXISTING TOP ELEVATION | EXISTING CUT | REFERENCE ELEVATION | COMMENTS |
|-------------|-------------|------------|------------|------------------------|--------------|---------------------|---------------------|
| 1 | 16" W | 1836921.68 | 1187979.53 | 578.95' | 6.03' | 584.98' | UTILITY QUALITY "A" |
| 2 | N/A | 1836430.49 | 1188340.55 | 576.27' | 10.00' | 586.27' | UTILITY QUALITY "D" |
| 3 | N/A W | 1836432.77 | 1188352.84 | 574.98' | 10.20' | 585.18' | UTILITY QUALITY "B" |
| | | | | | | | |
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NOTES

ABBREVIATIONS

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

TH #2 - Unable to designate and pinpoint 48" water but excavation attempt was made in suspected area and could not find the utility. Large rocks and ground water infiltration within the excavated hole prevented us from excavating any deeper than 10'.

TH #3 - Unable to verify size & material due to extreme water infiltration within the excavated hole. However, by utilizing the air lance we were able to feel the top of what we believe to be the 48" water main.

W = WATER



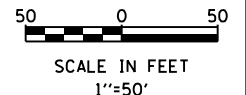
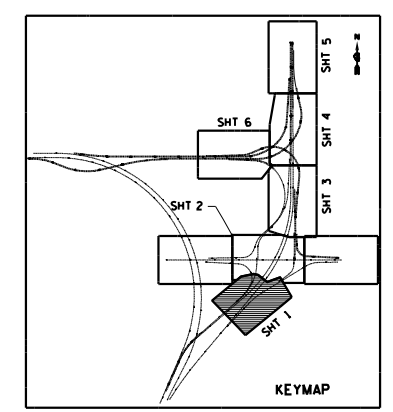
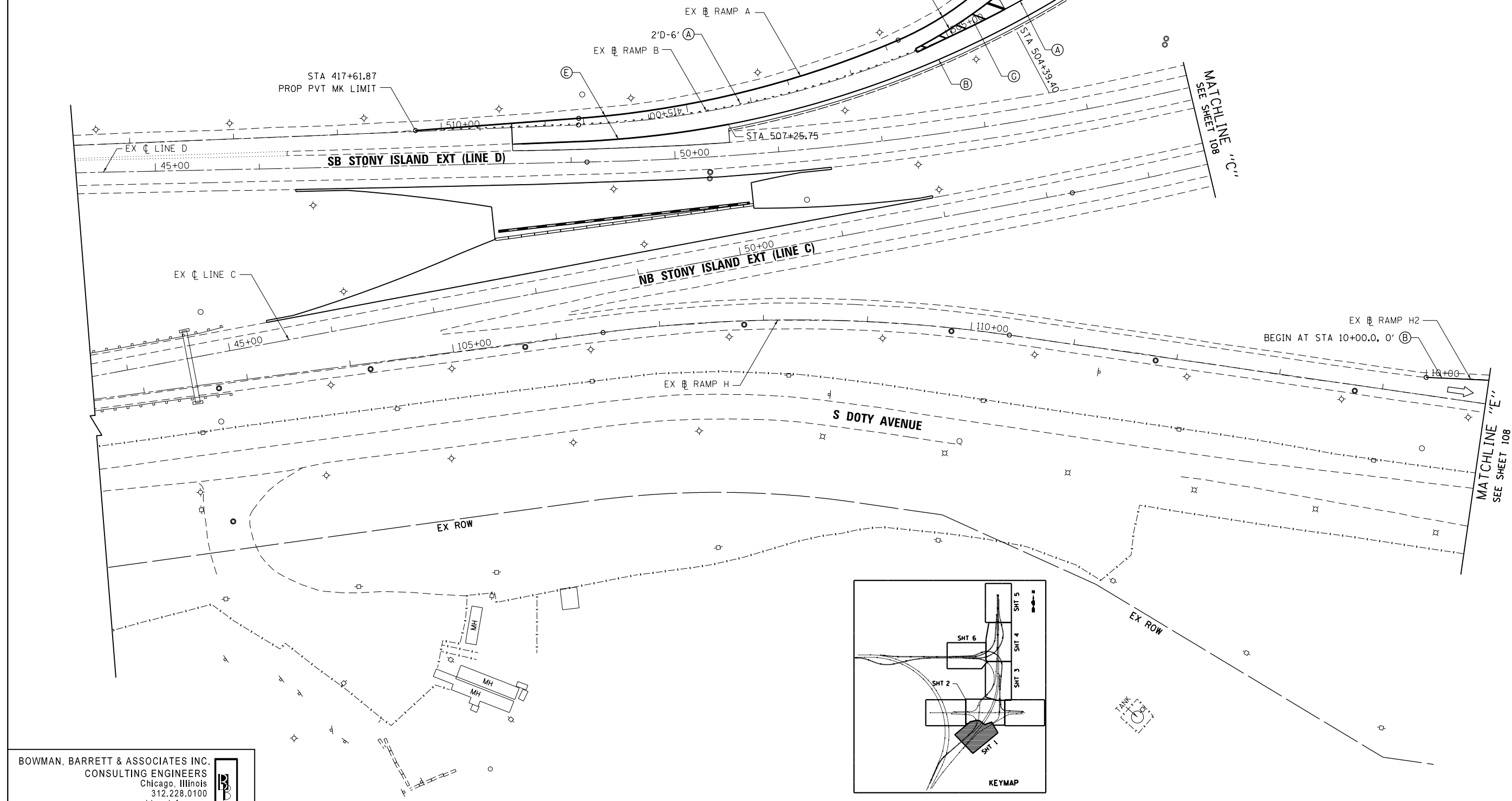
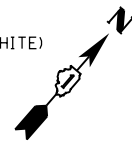
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
* PLANNING * UTILITY ENGINEERING/LOCATING

Checked By:
Date: 10/9/12 TBE Job No. IL09510507, 511

| | | | | | | | | | | | |
|---------------------|------------------------------------|---|---|------|---------|-----------------------|----------------------------|-----------------------------------|-------------------------|-----------------------|--|
| DESIGNED <i>ED</i> | REVISED <i>10/02/12 ADDED TH 3</i> | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | I-94 at Stony Island Chicago, IL | | | F.A.I. RTE. <u>94</u> | SECTION <u>2012-060-BR</u> | COUNTY <u>Cook</u> | TOTAL SHEETS <u>285</u> | SHEET NO. <u>106A</u> | |
| DRAWN <i>SRK</i> | REVISED | | SHEET NO. | STA. | TO STA. | FED. ROAD DIST. NO. | ILLINOIS | Contract <u>60V61</u> Job No.: | | | |
| CHECKED <i>KFS</i> | REVISED | | | | | | | | | | |
| DATE <i>9/10/12</i> | REVISED | | | | | | | | | | |

LEGEND:

- | | |
|--|--|
| (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE) | (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE) |
| (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW) | (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE) |
| (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE) | (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW) |
| (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW) | (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE) |
| (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE) | (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE) |
| (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW) | (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE) |
| (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE) | (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW) |
| (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE) | (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE) |
| (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE) | |



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 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

| | | | |
|-------------|-----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - JK | REVISED - |
| #FILE# | | DRAWN - JK | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - RR | REVISED - |
| | PLOT DATE = 12/7/2012 | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING & SIGNING PLAN
 STONY ISLAND EXTENSION - RAMPS A & B**

SCALE: 1"=50' SHEET NO. 1 OF 6 SHEETS STA. TO STA.

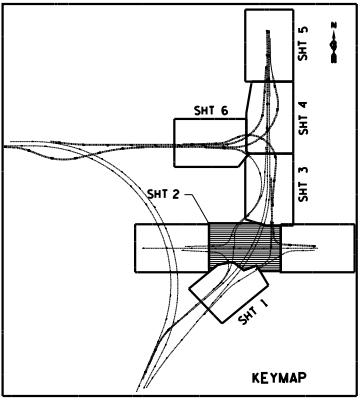
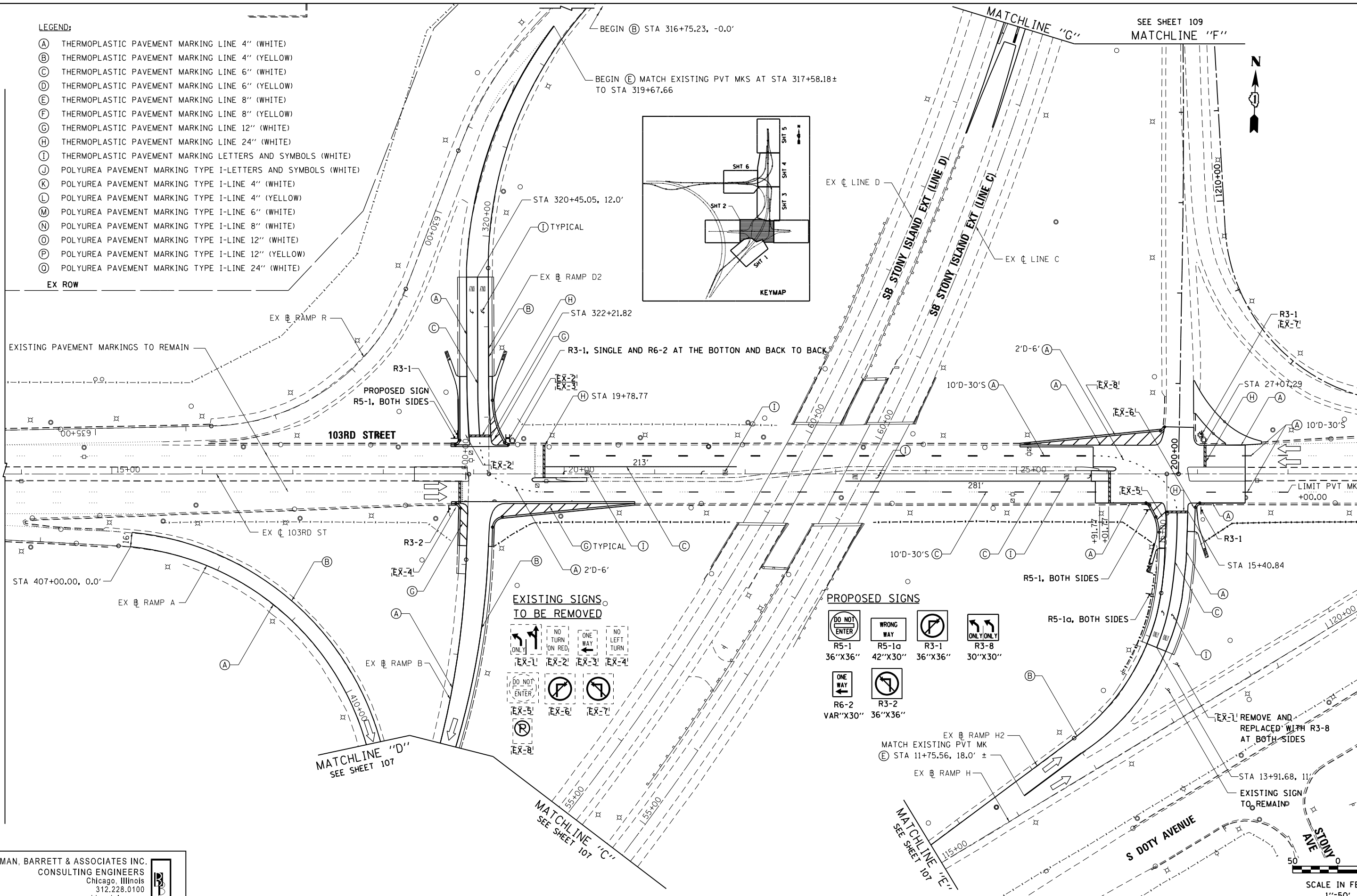
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|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 107 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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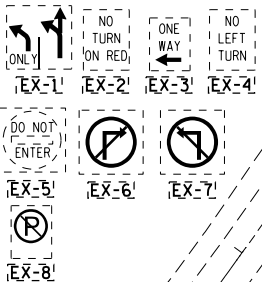
LEGEND:

- (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE)
- (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW)
- (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE)
- (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW)
- (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE)
- (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW)
- (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE)
- (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE)
- (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE)
- (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE)
- (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE)
- (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW)
- (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE)
- (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE)
- (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE)
- (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW)
- (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE)

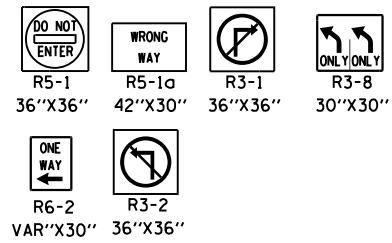
EX ROW



EXISTING SIGNS TO BE REMOVED



PROPOSED SIGNS



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| | | | |
|-------------|------------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - JK | REVISED - |
| *FILE# | | DRAWN - JK | REVISED - |
| | PLOT SCALE = *SCALE* | CHECKED - RR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING & SIGNING PLAN
RAMP B, RAMP D2 & 103RD STREET**

SCALE: 1"=50' SHEET NO. 2 OF 6 SHEETS STA. TO STA.

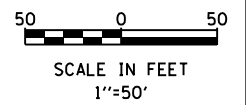
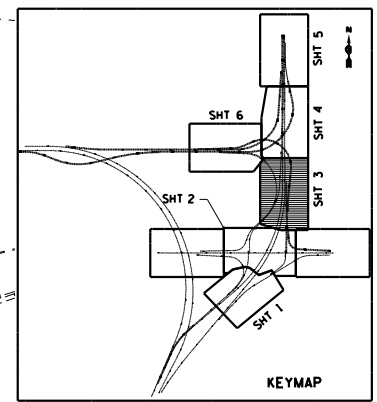
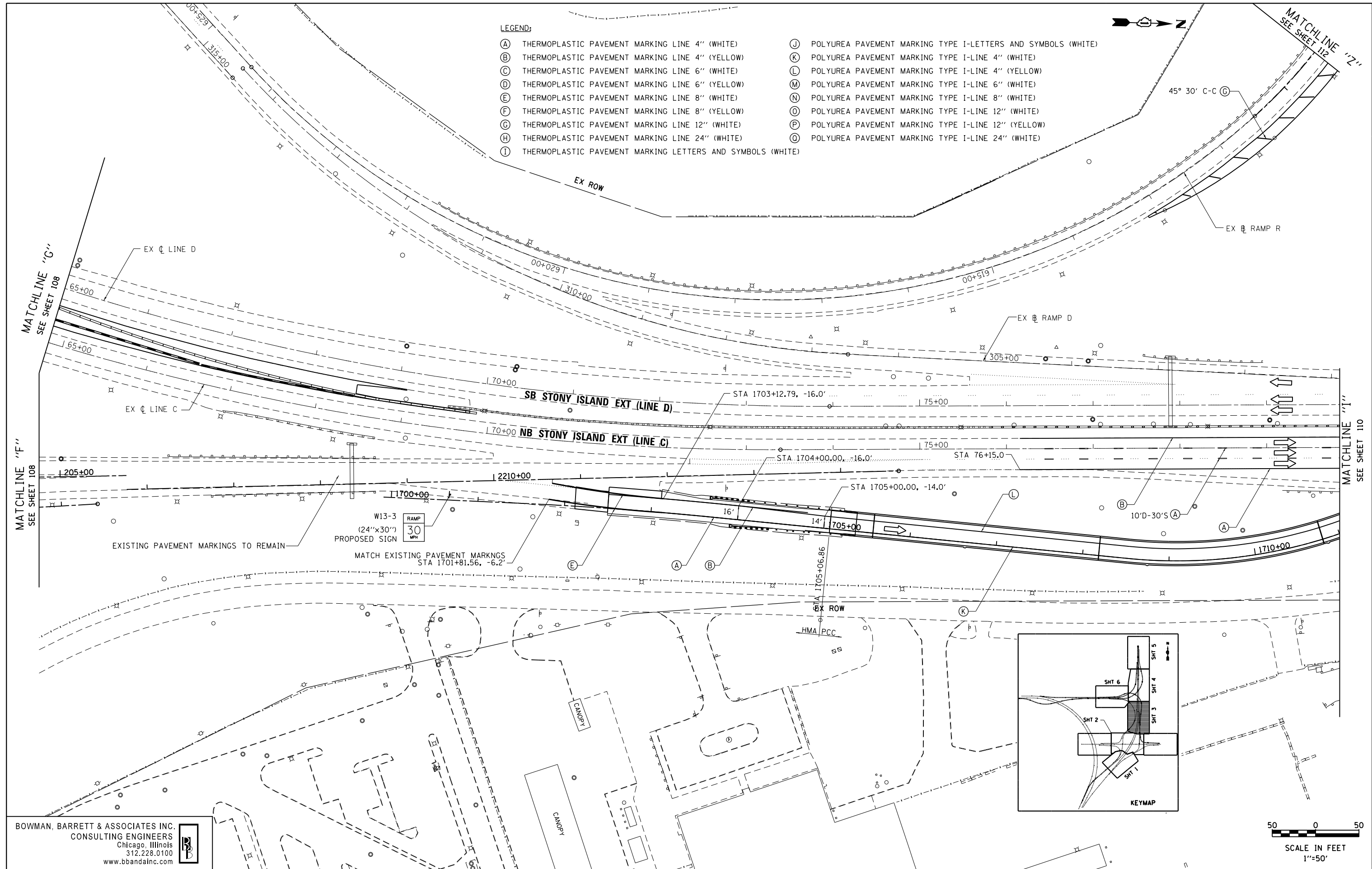
| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 108 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

SCALE IN FEET
1"=50'

S:\1072-05-CADD\1068\61_Sheets\1068\61-shrty.pmk-02.dgn

LEGEND:

- | | |
|--|--|
| (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE) | (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE) |
| (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW) | (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE) |
| (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE) | (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW) |
| (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW) | (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE) |
| (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE) | (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE) |
| (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW) | (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE) |
| (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE) | (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW) |
| (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE) | (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE) |
| (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE) | |



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| | | | |
|-------------|-----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - JK | REVISED - |
| *FILEL\$ | | DRAWN - JK | REVISED - |
| | PLOT SCALE = *SCALE* | CHECKED - RR | REVISED - |
| | PLOT DATE = 12/7/2012 | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING & SIGNING PLAN
 STONY ISLAND EXTENSION - RAMP Q**

SCALE: 1"=50' SHEET NO. 3 OF 6 SHEETS STA. TO STA.

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 109 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

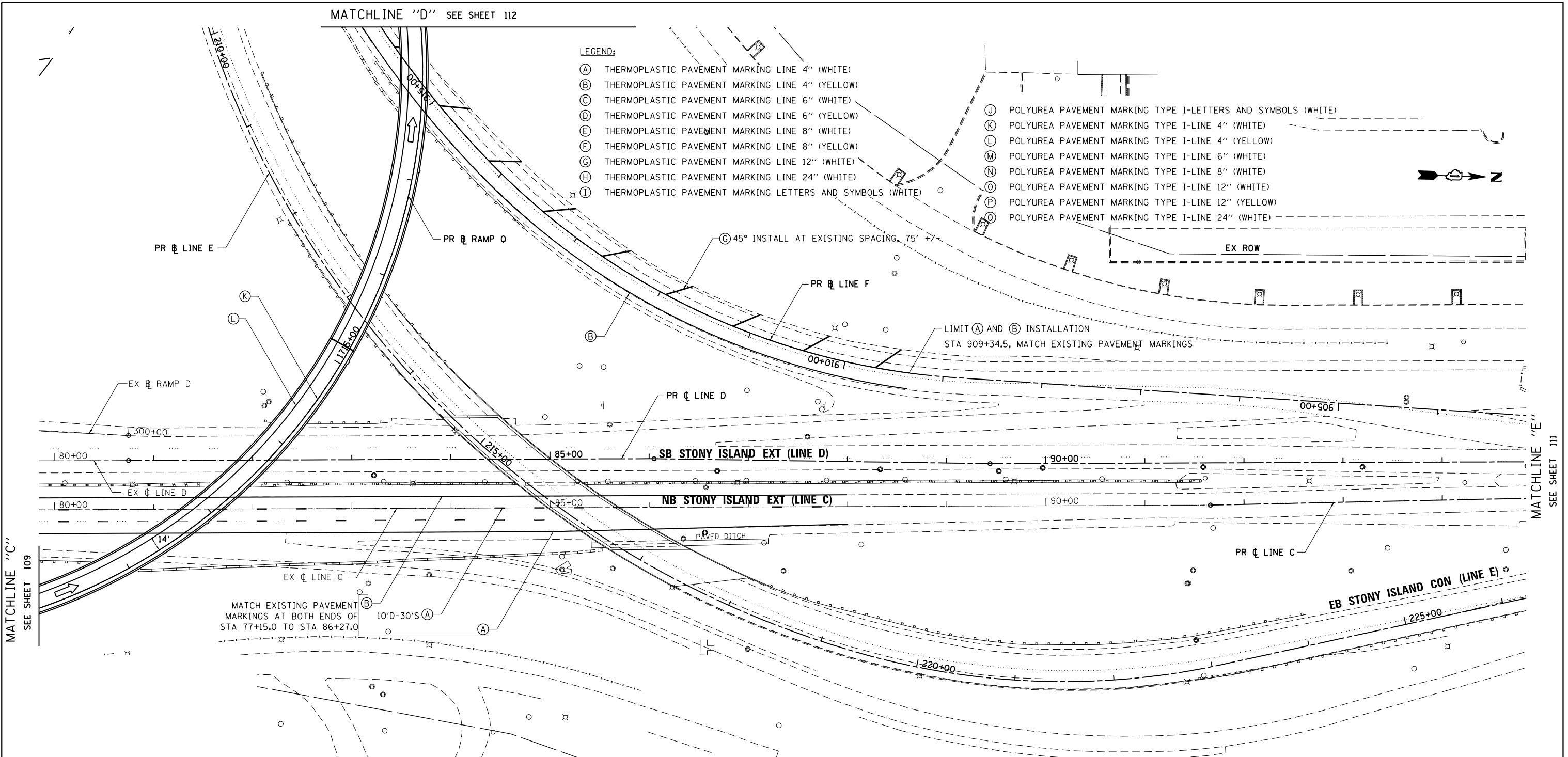
S:\1072-05-CADD\1068\61_Sheets\1068\61-shr-pmk-03.dgn

MATCHLINE "D" SEE SHEET 112

LEGEND:

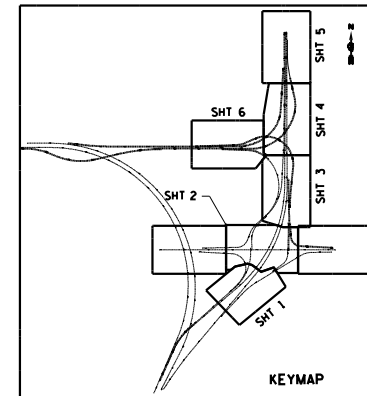
- (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE)
- (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW)
- (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE)
- (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW)
- (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE)
- (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW)
- (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE)
- (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE)
- (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE)

- (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE)
- (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE)
- (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW)
- (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE)
- (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE)
- (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE)
- (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW)
- (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE)



MATCHLINE "C" SEE SHEET 109

MATCHLINE "E" SEE SHEET 111



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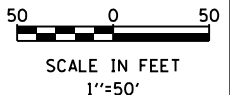
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| USER NAME = default | DESIGNED - JK | REVISED - |
| PLOT SCALE = *SCALE* | DRAWN - JK | REVISED - |
| PLOT DATE = 12/7/2012 | CHECKED - RR | REVISED - |
| | DATE - 11/08/2012 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING & SIGNING PLAN
STONY ISLAND EXTENSION - RAMP Q

SCALE: 1"=50' SHEET NO. 4 OF 6 SHEETS STA. TO STA.

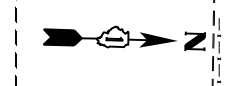
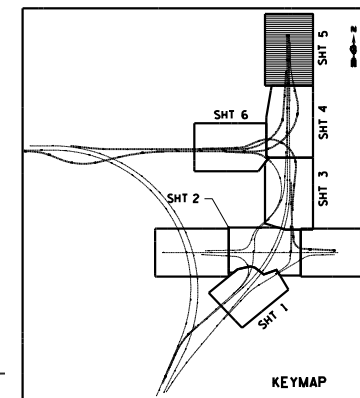
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|--------------------|---------------------|-------------|------------------|---------------------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 110 |
| CONTRACT NO. 60V61 | | | | ILLINOIS FED. AID PROJECT |



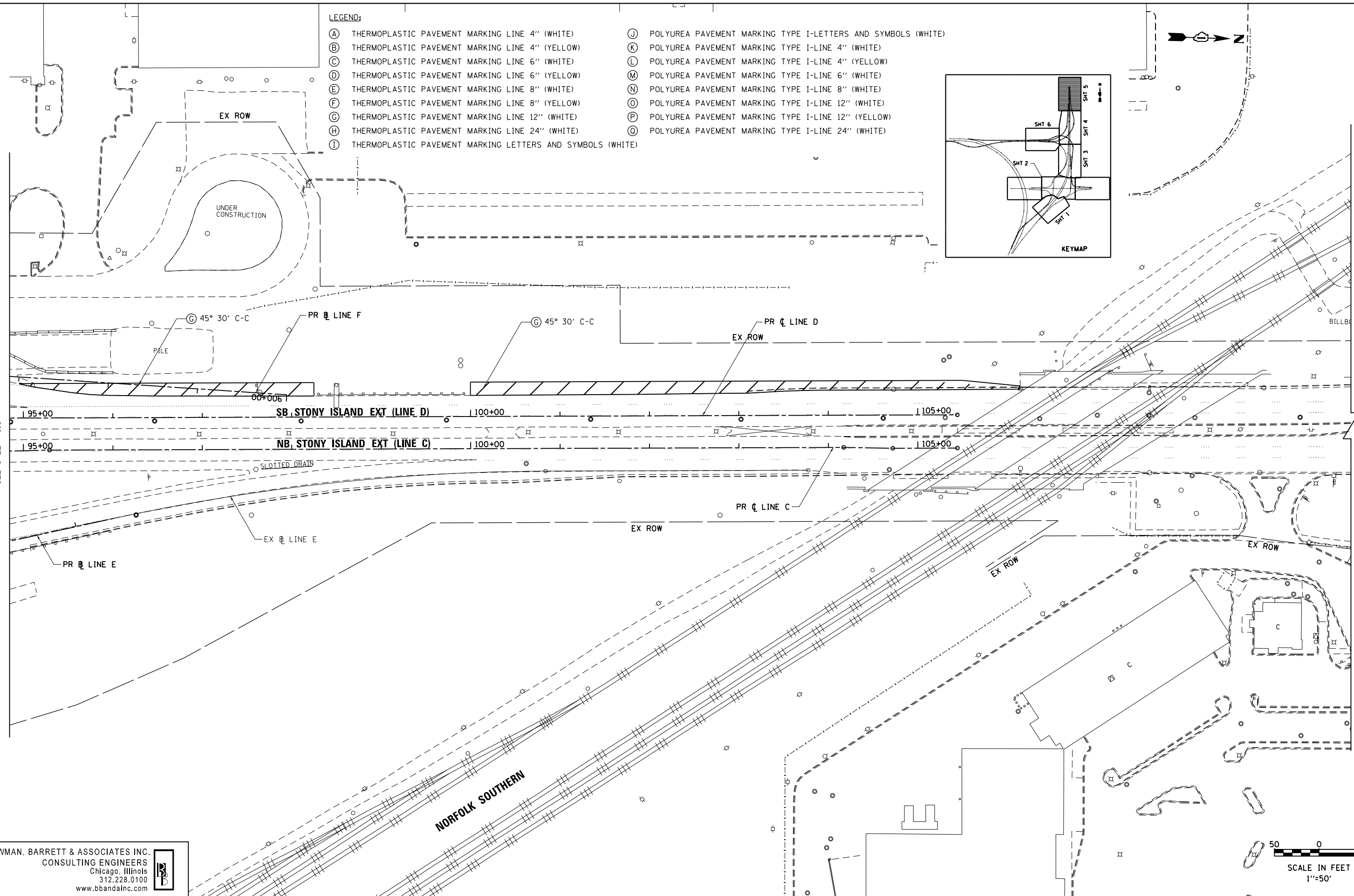
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LEGEND:

- | | |
|--|--|
| (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE) | (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE) |
| (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW) | (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE) |
| (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE) | (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW) |
| (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW) | (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE) |
| (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE) | (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE) |
| (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW) | (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE) |
| (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE) | (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW) |
| (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE) | (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE) |
| (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE) | |



MATCHLINE "J"
SEE SHEET 110



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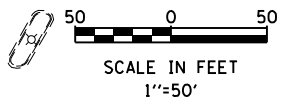
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| FILE NAME = #FILE# | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

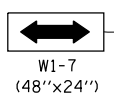
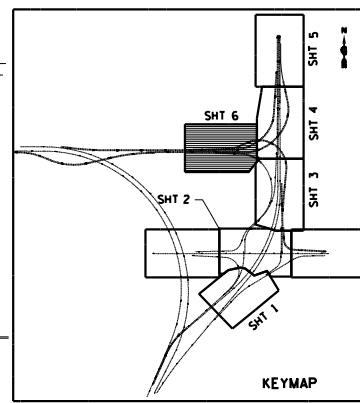
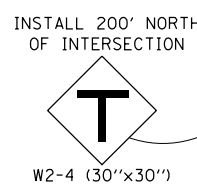
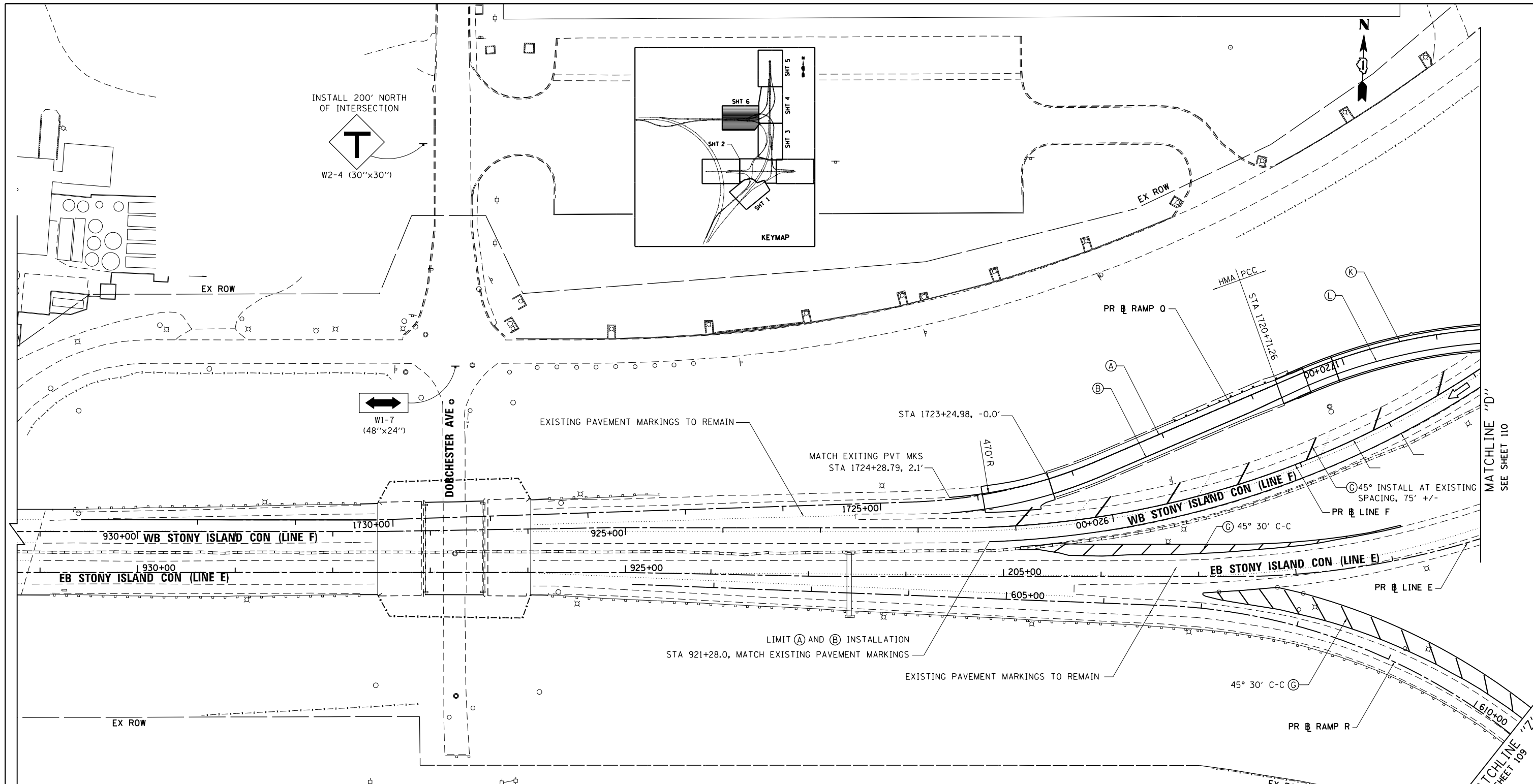
**PROPOSED PAVEMENT MARKING & SIGNING PLAN
STONY ISLAND EXTENSION - RAMP Q**

SCALE: 1"=50' SHEET NO. 5 OF 6 SHEETS STA. TO STA.

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 111 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |



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EXISTING PAVEMENT MARKINGS TO REMAIN

MATCH EXISTING PVT MKS
STA 1724+28.79, 2.1'

LIMIT (A) AND (B) INSTALLATION
STA 921+28.0, MATCH EXISTING PAVEMENT MARKINGS

EXISTING PAVEMENT MARKINGS TO REMAIN

LEGEND:

- (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE)
- (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW)
- (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE)
- (D) THERMOPLASTIC PAVEMENT MARKING LINE 6" (YELLOW)
- (E) THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE)
- (F) THERMOPLASTIC PAVEMENT MARKING LINE 8" (YELLOW)
- (G) THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE)
- (H) THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE)
- (I) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (WHITE)
- (J) POLYUREA PAVEMENT MARKING TYPE I-LETTERS AND SYMBOLS (WHITE)
- (K) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (WHITE)
- (L) POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (YELLOW)
- (M) POLYUREA PAVEMENT MARKING TYPE I-LINE 6" (WHITE)
- (N) POLYUREA PAVEMENT MARKING TYPE I-LINE 8" (WHITE)
- (O) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (WHITE)
- (P) POLYUREA PAVEMENT MARKING TYPE I-LINE 12" (YELLOW)
- (Q) POLYUREA PAVEMENT MARKING TYPE I-LINE 24" (WHITE)

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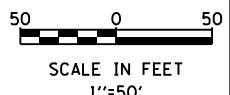
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| #FILE# | | DRAWN - JK | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - RR | REVISED - |
| | PLOT DATE = 12/7/2012 | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING & SIGNING PLAN
STONY ISLAND CONNECTOR - RAMP Q**

SCALE: 1"=50' SHEET NO. 6 OF 6 SHEETS STA. TO STA.

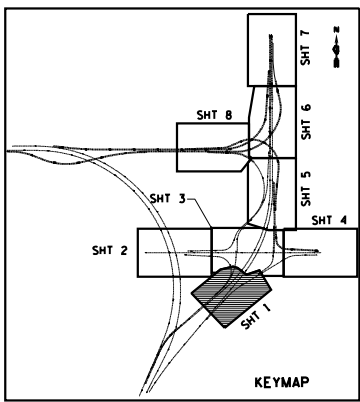
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|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 112 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |



MATCHLINE "D"
SEE SHEET 110

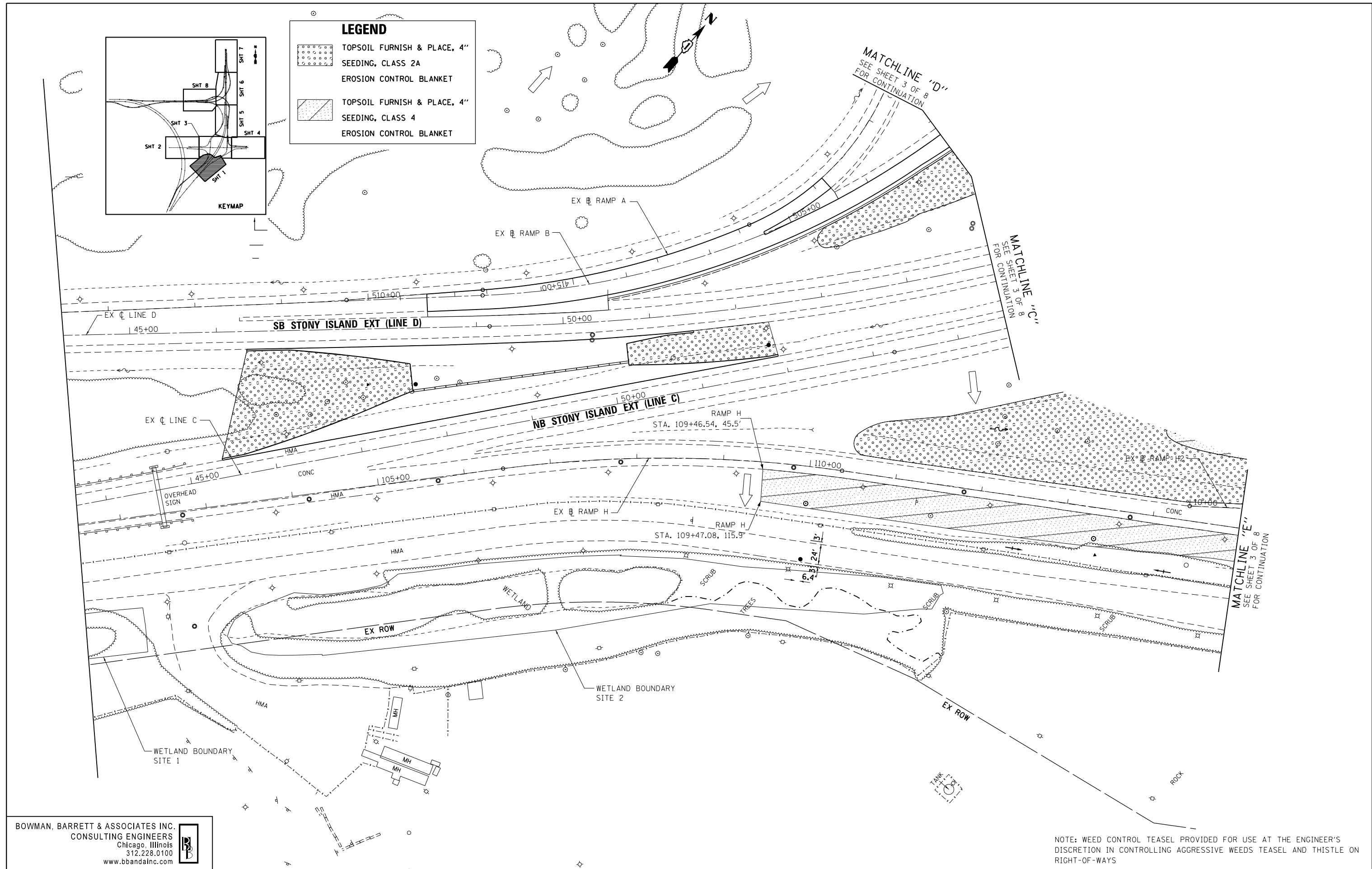
MATCHLINE "Z"
SEE SHEET 109

S:\1072-05-CADD\1060\61_Sheets\1060\61-shk\p.m.k.-06.dgn



LEGEND

| | |
|--|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |



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NOTE: WEED CONTROL TEASEL PROVIDED FOR USE AT THE ENGINEER'S DISCRETION IN CONTROLLING AGGRESSIVE WEEDS TEASEL AND THISTLE ON RIGHT-OF-WAYS

| | | | |
|-------------|----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - | REVISED - |
| #FILE# | | DRAWN - | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE = 11/08/2012 | REVISED - |

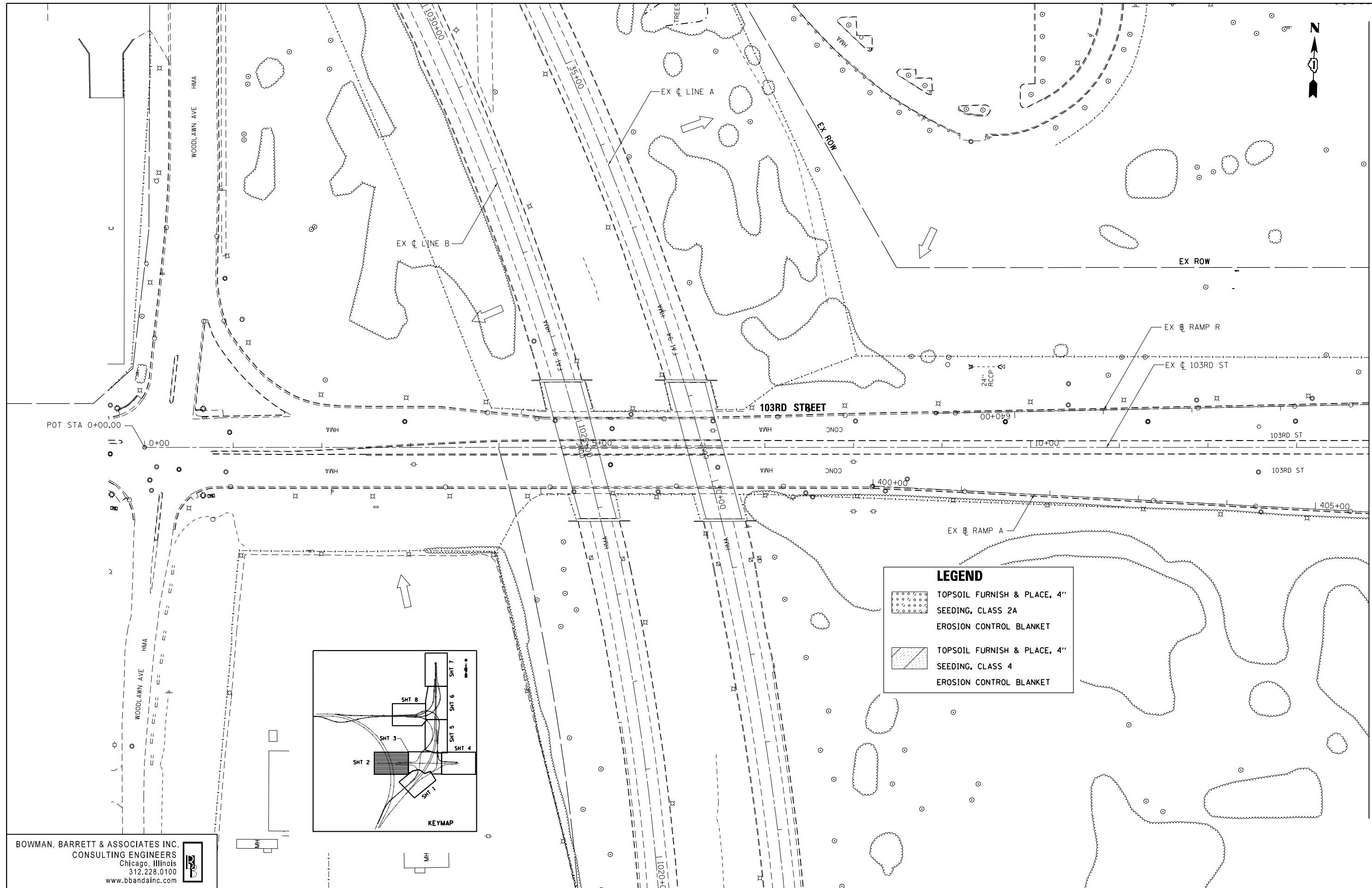
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
 STONY ISLAND EXTENSION**

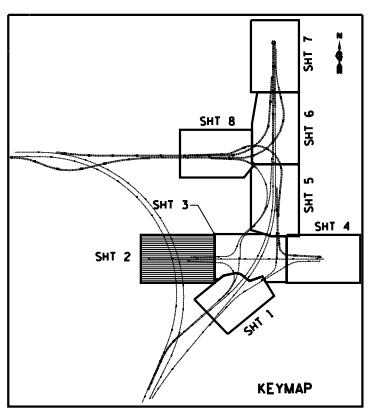
SCALE: 1"=50' SHEET NO. 1 OF 8 SHEETS STA. TO STA.

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 113 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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| LEGEND | |
|--------|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |



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| | | | |
|-------------------------|----------------------|-------------------|-----------|
| FILE NAME = *FILEL\$ | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = *SCALE* | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE - 11/08/2012 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

| | |
|------------------|-------------------------|
| LANDSCAPING PLAN | |
| 103RD STREET | |
| SCALE: 1"=50' | SHEET NO. 2 OF 8 SHEETS |
| STA. | TO STA. |

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 114 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

MATCHLINE "P"
 SEE SHEET 3 OF 8
 FOR CONTINUATION

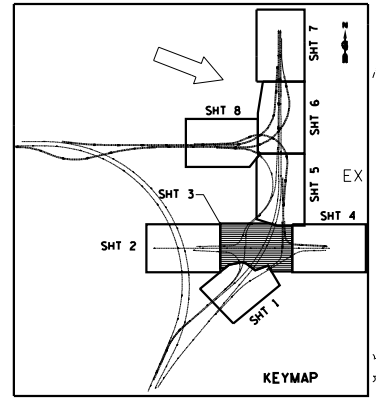
SV:1072-05-CADD\0160V61_Sheets\0160V61-sh1-Indep02.dgn

SEE SHEET 5 OF 81
FOR CONTINUATION
MATCHLINE "F"



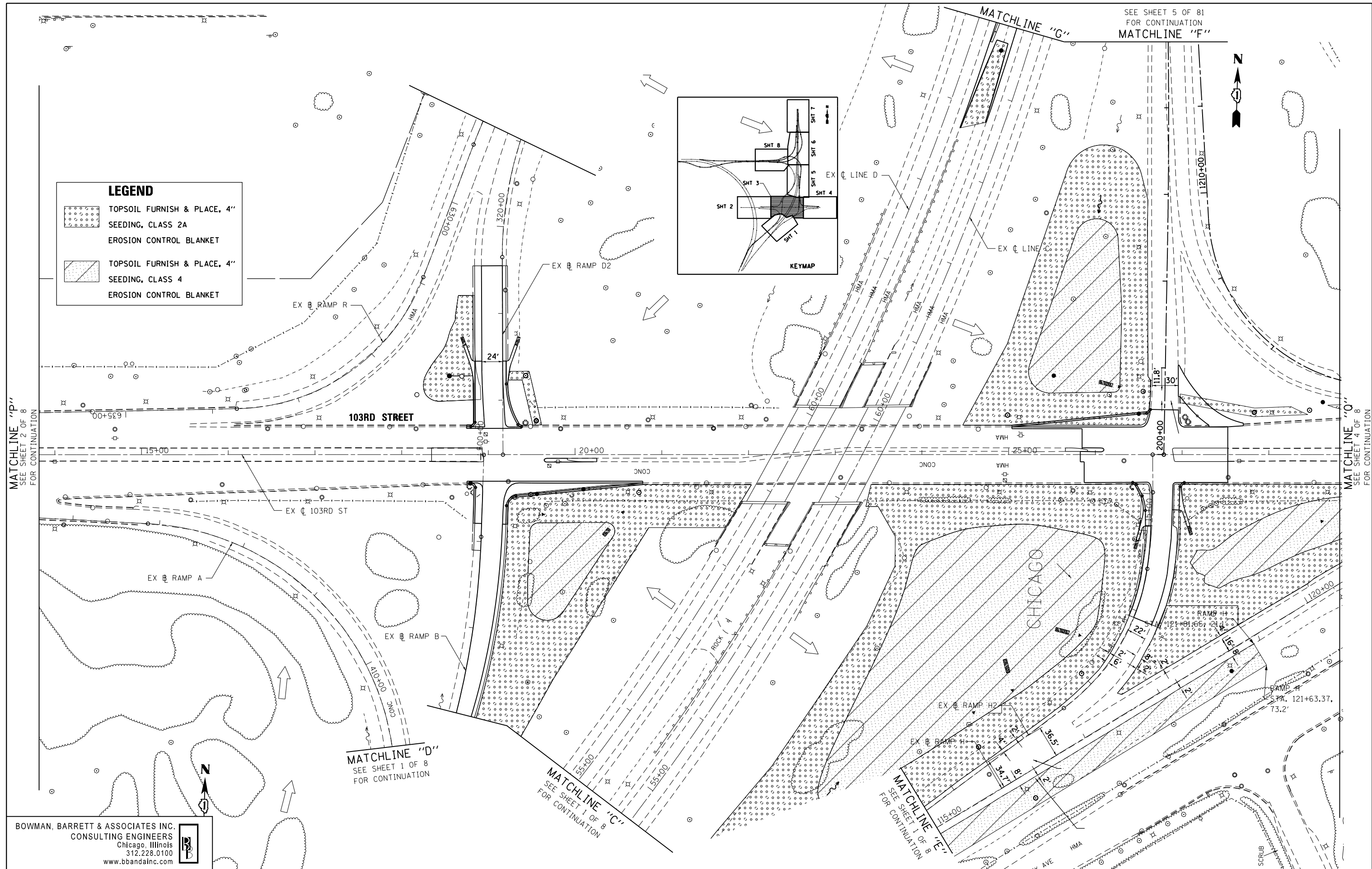
LEGEND

| | |
|--|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |



MATCHLINE "P"
SEE SHEET 2 OF 8
FOR CONTINUATION

MATCHLINE "Q"
SEE SHEET 4 OF 8
FOR CONTINUATION



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| | | | |
|-------------|----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - | REVISED - |
| #FILE# | | DRAWN - | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE - 11/08/2012 | REVISED - |

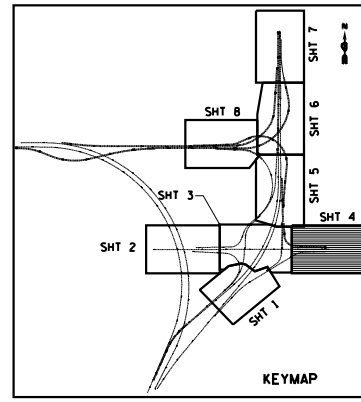
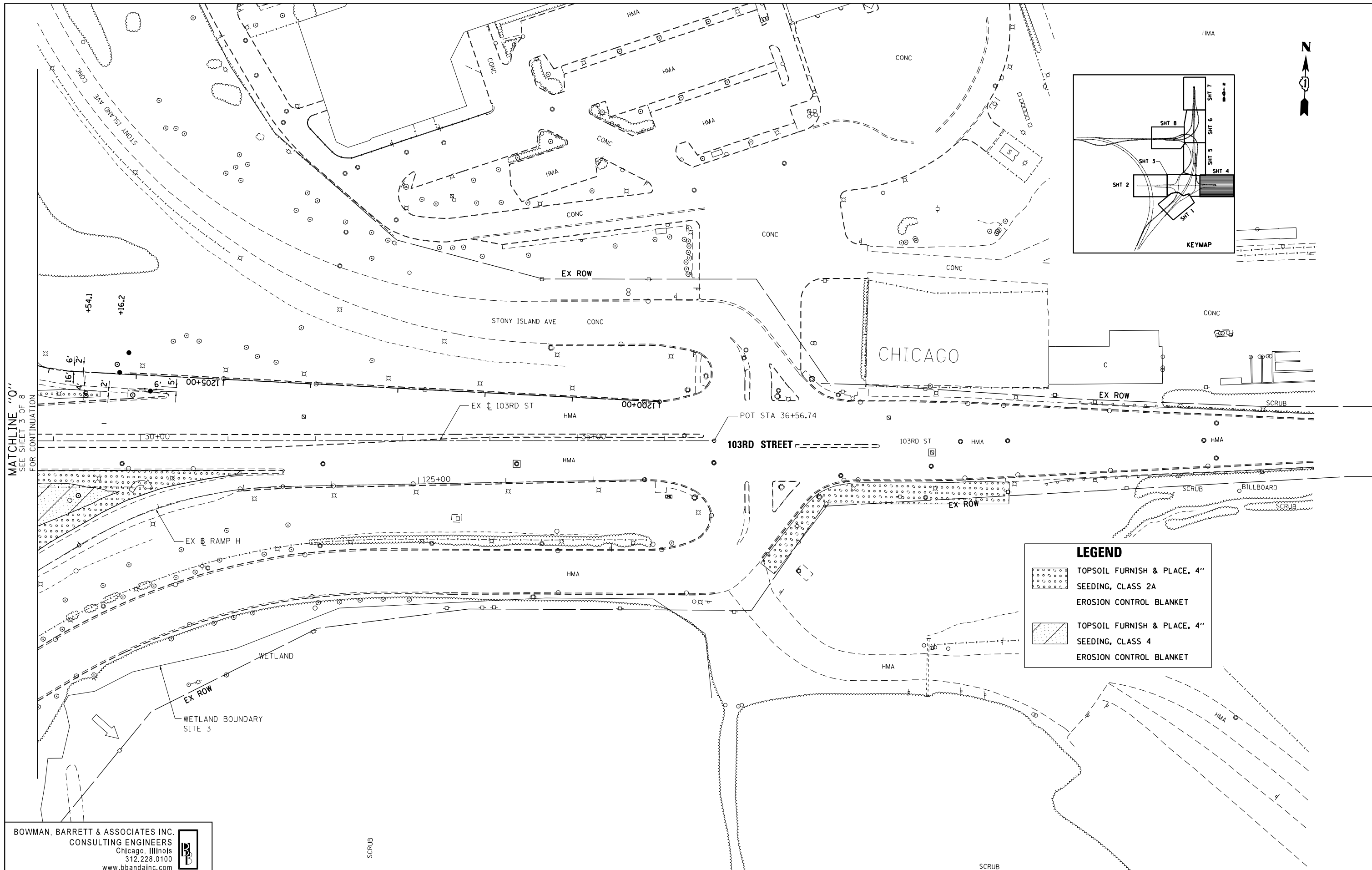
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
103RD STREET**

SCALE: 1"=50' SHEET NO. 3 OF 8 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 115 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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MATCHLINE "Q"
SEE SHEET 3 OF 8
FOR CONTINUATION

| LEGEND | |
|--------|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |

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| | | | |
|-----------------------|---------------------|-------------------|-----------|
| FILE NAME = #FILE# | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 11/08/2012 | REVISED - |

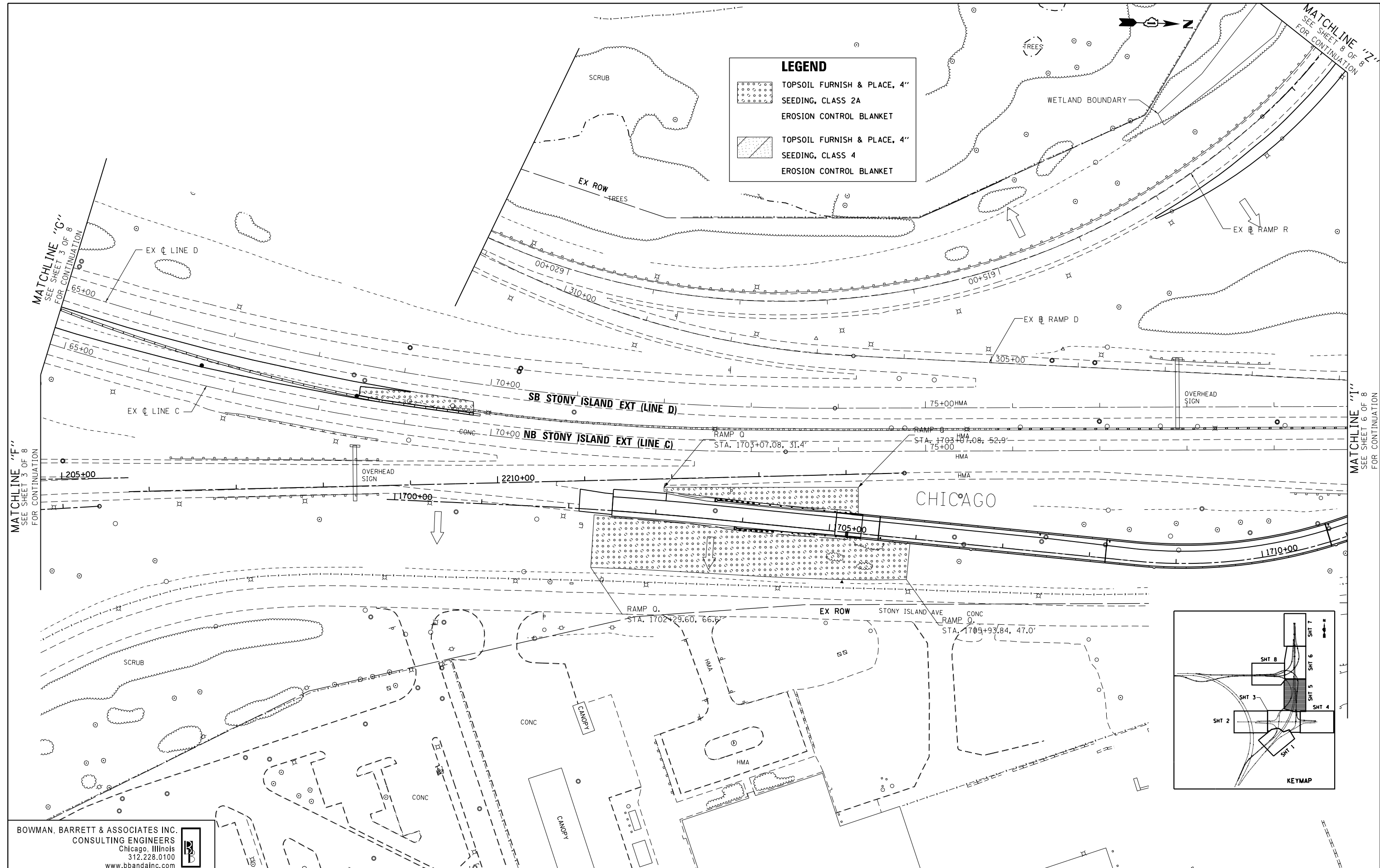
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
103RD STREET**

SCALE: 1"=50' SHEET NO. 4 OF 8 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 116 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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LEGEND

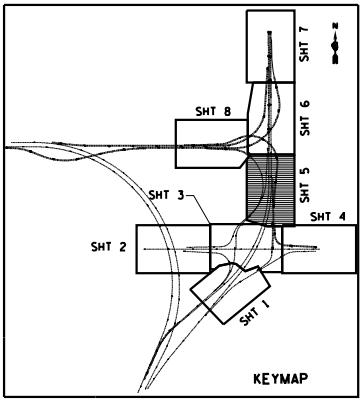
| | |
|---------------------------|-----------------------------|
| [Pattern: Dotted] | TOPSOIL FURNISH & PLACE, 4" |
| [Pattern: Dotted] | SEEDING, CLASS 2A |
| [Pattern: Dotted] | EROSION CONTROL BLANKET |
| [Pattern: Diagonal Lines] | TOPSOIL FURNISH & PLACE, 4" |
| [Pattern: Diagonal Lines] | SEEDING, CLASS 4 |
| [Pattern: Diagonal Lines] | EROSION CONTROL BLANKET |

MATCHLINE "F"
SEE SHEET 3 OF 8
FOR CONTINUATION

MATCHLINE "G"
SEE SHEET 3 OF 8
FOR CONTINUATION

MATCHLINE "I"
SEE SHEET 6 OF 8
FOR CONTINUATION

MATCHLINE "J"
SEE SHEET 9 OF 8
FOR CONTINUATION



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

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| FILE NAME = | USER NAME = default | DESIGNED - | REVISED - |
| #FILE# | | DRAWN - | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE = 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 5 OF 8 SHEETS STA. TO STA.

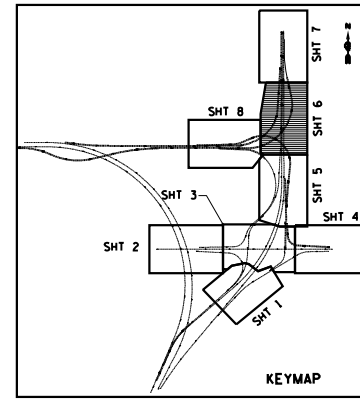
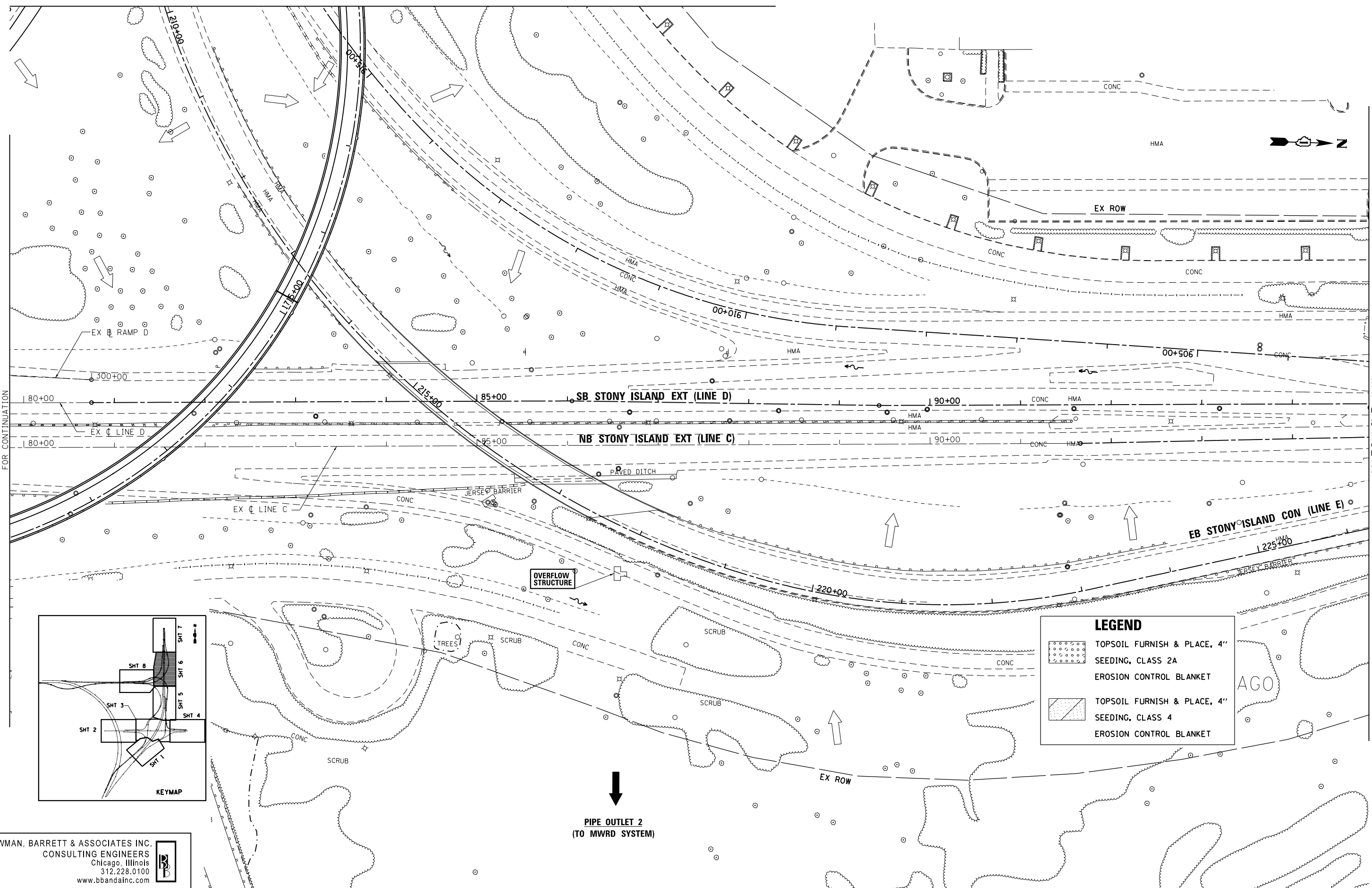
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|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 117 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

S:\1072-05-CADD\1060V61_Sheets\1060V61-shr-landscap05.dgn

MATCHLINE "O" SEE SHEET 8 OF 8 FOR CONTINUATION

MATCHLINE "I" SEE SHEET 5 OF 8 FOR CONTINUATION

MATCHLINE "J" SEE SHEET 7 OF 8 FOR CONTINUATION



LEGEND

| | |
|--|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |

PIPE OUTLET 2
(TO MWRD SYSTEM)

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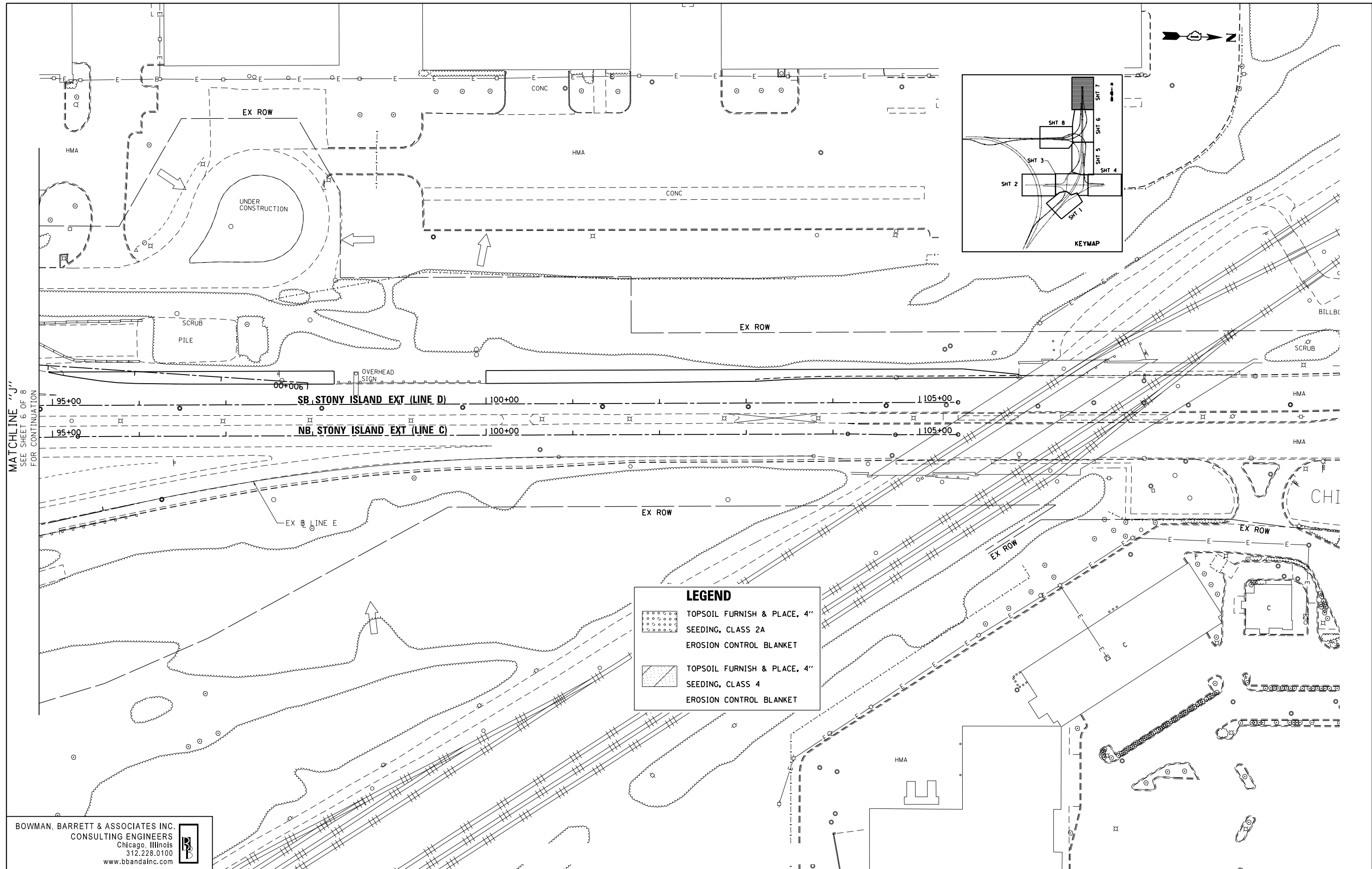
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|-----------------------|---------------------|-------------------|-----------|
| FILE NAME = #FILE# | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 11/08/2012 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|------------------------|-------------------------|--------------|---------|
| LANDSCAPING PLAN | | TOTAL SHEETS | |
| STONY ISLAND EXTENSION | | 285 | |
| SCALE: 1"=50' | SHEET NO. 6 OF 8 SHEETS | STA. | TO STA. |

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 118 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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MATCHLINE "J"
SEE SHEET 6 OF 8
FOR CONTINUATION

LEGEND

| | |
|--|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |

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312.228.0100
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| | | | |
|-----------------------|---------------------|-------------------|-----------|
| FILE NAME = #FILE# | USER NAME = default | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 11/08/2012 | REVISED - |

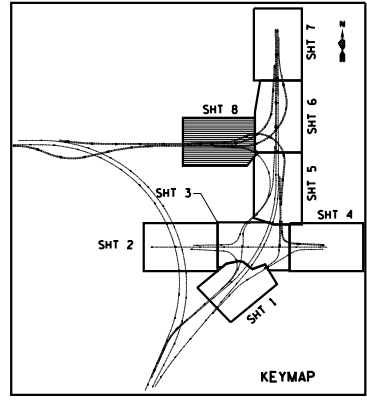
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 7 OF 8 SHEETS STA. TO STA.

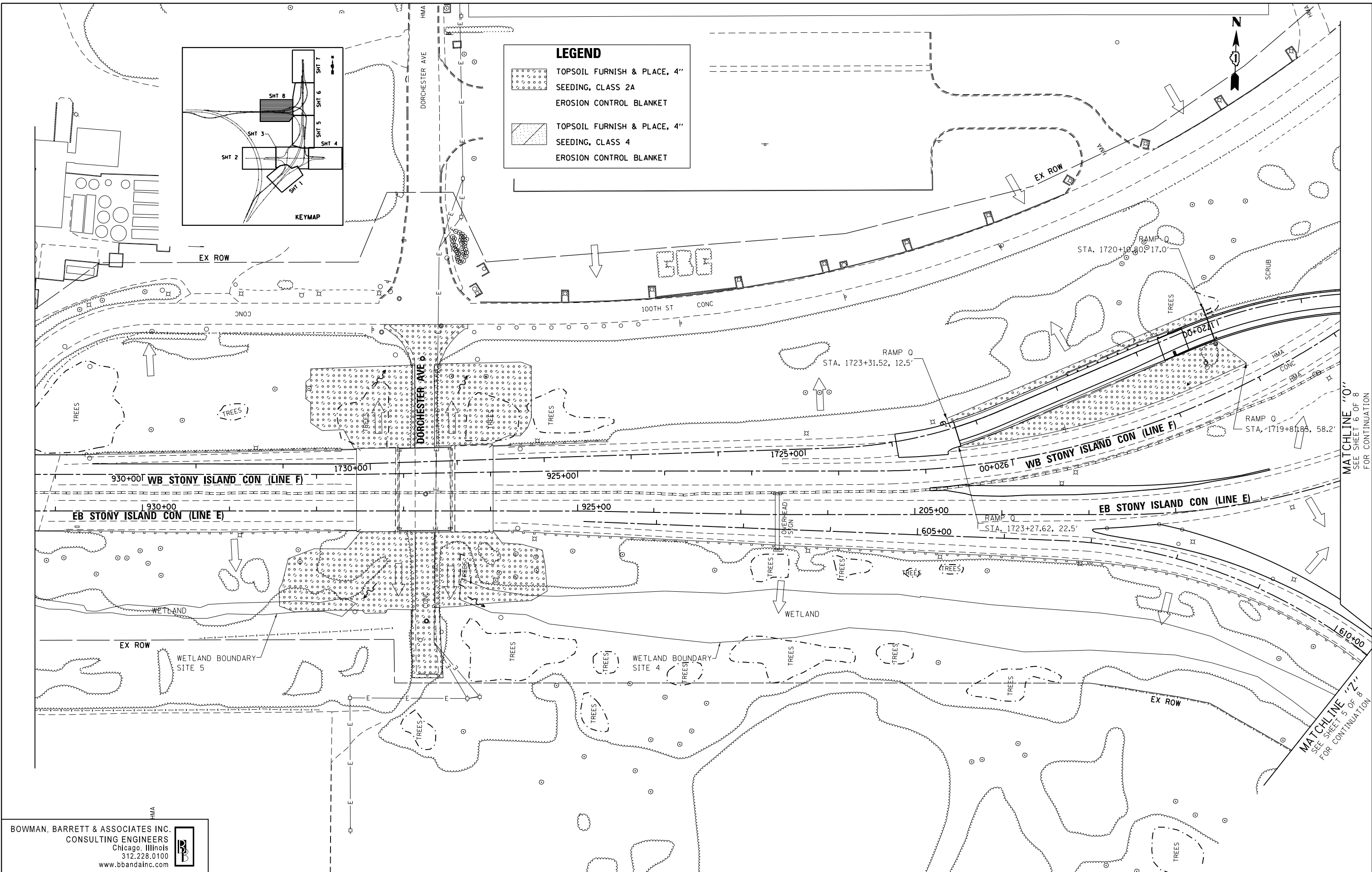
| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 119 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

S:\1072-05-CADD\1060V61_Sheets\1060V61-ark-landscape07.dgn



LEGEND

| | |
|--|-----------------------------|
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 2A |
| | EROSION CONTROL BLANKET |
| | TOPSOIL FURNISH & PLACE, 4" |
| | SEEDING, CLASS 4 |
| | EROSION CONTROL BLANKET |



MATCHLINE "0"
SEE SHEET 6 OF 8
FOR CONTINUATION

MATCHLINE "Z"
SEE SHEET 5 OF 8
FOR CONTINUATION

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| | | | |
|-------------|-----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = default | DESIGNED - | REVISED - |
| #FILE# | | DRAWN - | REVISED - |
| | PLOT SCALE = #SCALE# | CHECKED - | REVISED - |
| | PLOT DATE = 12/7/2012 | DATE - 11/08/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
STONY ISLAND CONNECTOR**

SCALE: 1"=50' SHEET NO. 8 OF 8 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 120 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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**TRAFFIC SIGNAL
SCHEDULE OF QUANTITIES**

| ITEM | UNIT | QUANTITY | | |
|---|------|-----------------------|-----------------------|-------|
| | | RAMP B/D2 & 103RD ST. | RAMP F/H2 & 103RD ST. | TOTAL |
| ELECTRIC CABLE IN A CONDUIT, TRACER NO. 14, 1C | FOOT | 505 | 338 | 843 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 | 1 | 2 |
| TEMPORARY TRAFFIC SIGNAL INSTALLATION | EACH | 1 | 1 | 2 |
| MAST ARM, STEEL, MONOTUBE 30 FT. | EACH | 1 | 1 | 2 |
| MAST ARM, STEEL, MONOTUBE 35 FT. | EACH | 1 | 1 | 2 |
| MAST ARM, STEEL, MONOTUBE 40 FT. | EACH | 1 | 1 | 2 |
| ATC CONTROLLER, TRAFFIC, 16 LOAD BAY, P CABINET | EACH | 1 | 1 | 2 |
| TRENCH BACKFILL WITH SCREENINGS (CDOT) | FOOT | 860 | 1,049 | 1,909 |
| BREAKDOWN EXSTING HANDHOLE (CDOT) | EACH | 2 | 1 | 3 |
| BREAKDOWN MANHOLE (CDOT) | EACH | 2 | 3 | 5 |
| BREAKDOWN FOUNDATION (CDOT) | EACH | 8 | 8 | 16 |
| COAXIAL JUMPER CABLE (CDOT) | EACH | 1 | 1 | 2 |
| COAXIAL CABLE IN A CONDUIT (CDOT) | FOOT | 254 | 620 | 874 |
| COILABLE CONDUIT, HDPE #80, DIRECTIONAL BORING, 2" (CDOT) | FOOT | 0 | 300 | 300 |
| CONCRETE FOUNDATION FOR TYPE "P" BASE MOUNTED TRAFFIC SIGNAL CONTROLLER (CDOT) | EACH | 1 | 1 | 2 |
| CONCRETE FOUNDATION, 20" DIAMETER, 3/4" ANCHOR RODS, 13" BOLT CIRCLE (CDOT) | EACH | 2 | 2 | 4 |
| CONCRETE FOUNDATION, 30" DIAMETER, 1 1/2" ANCHOR RODS, 16 1/2" BOLT CIRCLE (CDOT) | EACH | 2 | 2 | 4 |
| CONCRETE FOUNDATION, 30" DIAMETER, 1 1/4" ANCHOR RODS, 17 1/4" BOLT CIRCLE (CDOT) | EACH | 1 | 1 | 2 |
| DRILL MANHOLE OR HANDHOLE, CHICAGO | EACH | 0 | 1 | 1 |
| ELECTRIC CABLE IN CONDUIT NO. 14, 19/C (CDOT) | FOOT | 870 | 807 | 1,677 |
| ELECTRIC CABLE IN CONDUIT NO. 4, 1/C (CDOT) | FOOT | 2,972 | 1,372 | 4,344 |
| ELECTRIC CABLE IN CONDUIT, 3/C # 14, FOR VIDEO (CDOT) | FOOT | 254 | 620 | 874 |
| ELECTRICAL HANDHOLE, 30", 24" FRAME AND LID (CDOT) | EACH | 3 | 3 | 6 |
| ELECTRICAL HANDHOLE, HEAVY DUTY, 36", 24" FRAME AND LID (CDOT) | EACH | 2 | 2 | 4 |
| ELECTRICAL MANHOLE, 3' X 4' X 4', 24" FRAME AND LID (CDOT) | EACH | 1 | 1 | 2 |
| FIBER OPTIC ADD-IN FOR LOCAL CONTROLLER (CDOT) | EACH | 0 | 1 | 1 |
| FIBER OPTIC ADD-IN FOR MASTER CONTROLLER (CDOT) | EACH | 1 | 0 | 1 |
| FIBER OPTIC STAR MODEM (CDOT) | EACH | 1 | 1 | 2 |
| FIBER OPTIC HYBRID CABLE IN CONDUIT (CDOT) | FOOT | 505 | 338 | 843 |
| HARNESS CABLE, #16, 8/C (CDOT) | FOOT | 300 | 300 | 600 |
| INTERFACE PANEL, 2 CAMERA (CDOT) | EACH | 1 | 1 | 2 |
| POLE, STEEL, ANCHOR BASE, 11" DIA., 3-GAUGE, 34'-6" (CDOT) | EACH | 1 | 1 | 2 |
| POLE, STEEL, ANCHOR BASE, 12-1/2" DIA. 3-GAUGE, 34'-6" (CDOT) | EACH | 2 | 2 | 4 |
| CONDUIT IN TRENCH, 2" PVC, SCHEDULE 80, CDOT | FOOT | 0 | 300 | 300 |
| UNDERGROUND CONDUIT, SCHEDULE 40 PVC, 2" DIAMETER, CDOT | FOOT | 1,533 | 648 | 2,181 |
| PVC CONDUIT IN TRENCH, 3" (SCHEDULE 40) (CDOT) | FOOT | 177 | 188 | 365 |
| PVC CONDUIT IN TRENCH, 3" (SCHEDULE 80) (CDOT) | FOOT | 882 | 783 | 1,665 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, CHICAGO | LSUM | 1 | 1 | 2 |
| SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 3-SECTION, BRACKET MOUNTED (CDOT) | EACH | 5 | 5 | 10 |
| SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 3-SECTION, MAST ARM MOUNTED(CDOT) | EACH | 5 | 5 | 10 |
| SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 5-SECTION, BRACKET MOUNTED (CDOT) | EACH | 1 | 1 | 2 |
| SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 5-SECTION, MAST ARM MOUNTED (CDOT) | EACH | 1 | 1 | 2 |
| TRAFFIC SIGNAL POST, ALUMINUM, 15 FT. (CDOT) | EACH | 2 | 2 | 4 |
| VIDEO CABLE HARNESS (CDOT) | EACH | 1 | 2 | 3 |
| VIDEO DETECTION CAMERA (CDOT) | EACH | 2 | 2 | 4 |
| VIDEO DETECTION POWER SUPPLY (CDOT) | EACH | 1 | 1 | 2 |
| VIDEO PROCESSOR CARD AND RACK (CDOT) | EACH | 1 | 1 | 2 |

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 12/6/2012

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

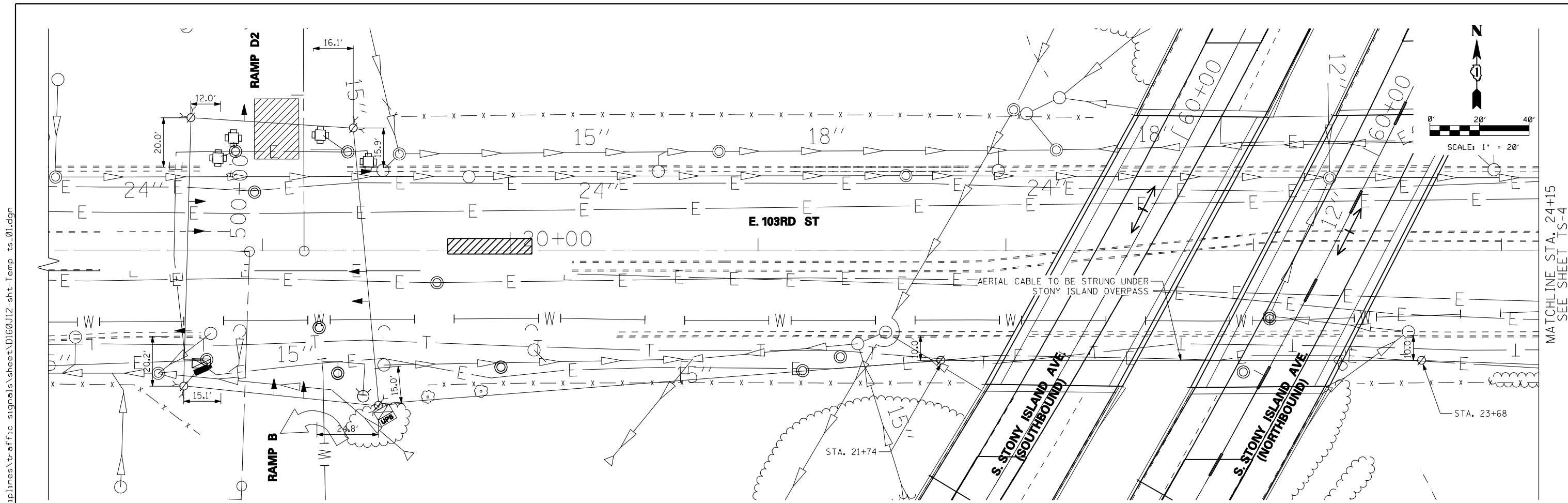


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL
SCHEDULE OF QUANTITIES**

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

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 121 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |



MATCHLINE STA. 24+15
SEE SHEET TS-4

LEGEND

- VIDEO DETECTION CAMERA
- WOOD POLE, CLASS 5 OR BETTER, 60FT
- VIDEO DETECTION ZONE

TEMPORARY SIGNAL INSTALLATION PLAN

1" = 20'
(ALL STAGES)

NOTES FOR TEMPORARY TRAFFIC SIGNALS:

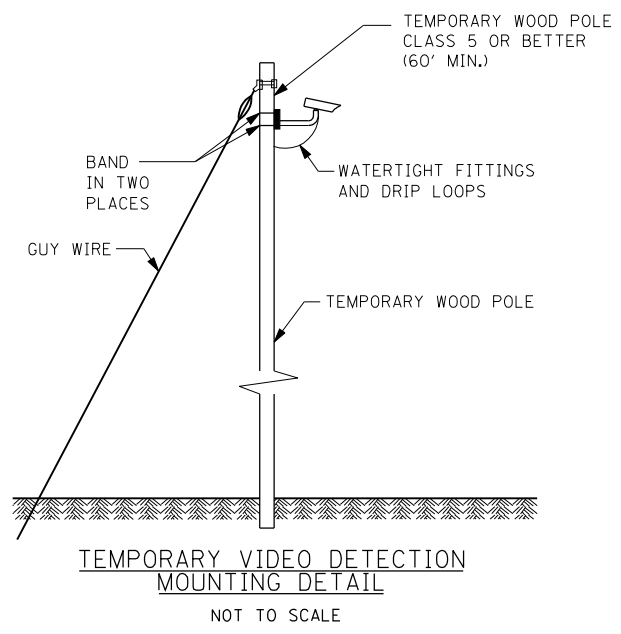
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON. IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

NOTES FOR TEMPORARY TRAFFIC SIGNALS (CONTD):

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

CONSTRUCTION NOTES

1. INSTALLATION AND REMOVAL OF WOOD POLES, SPANS, TETHER, CABLES, HARDWARE REQUIRED FOR TEMPORARY SIGNALS SHALL BE DONE IN A MANNER APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL AND SHALL BE CONSIDERED INCLUDED IN THE COST OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
2. CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL GENERATORS IN ORDER TO PROVIDE POWER TO THE EXISTING SIGNALS DURING DISRUPTION OF POWER WHILE REPLACING EXISTING POWER CABLE. THE GENERATOR SHALL PROVIDE POWER NECESSARY TO OPERATE ALL TRAFFIC SIGNAL EQUIPMENT. THIS WORK SHALL BE DONE DURING OFF PEAK WITHIN 6 HOURS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
NOT TO SCALE

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | DRAWN - SA | REVISED - |
| PLOT DATE = 12/6/2012 | CHECKED - BKS | REVISED - |
| | DATE - 12/07/2012 | REVISED - |

| | |
|-------------------|-----------|
| DESIGNED - SA | REVISED - |
| DRAWN - SA | REVISED - |
| CHECKED - BKS | REVISED - |
| DATE - 12/07/2012 | REVISED - |

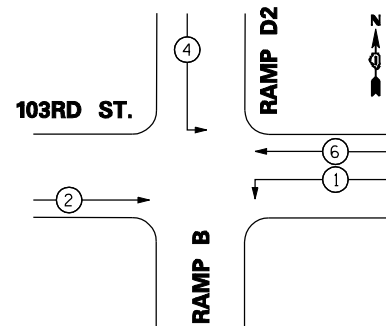


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

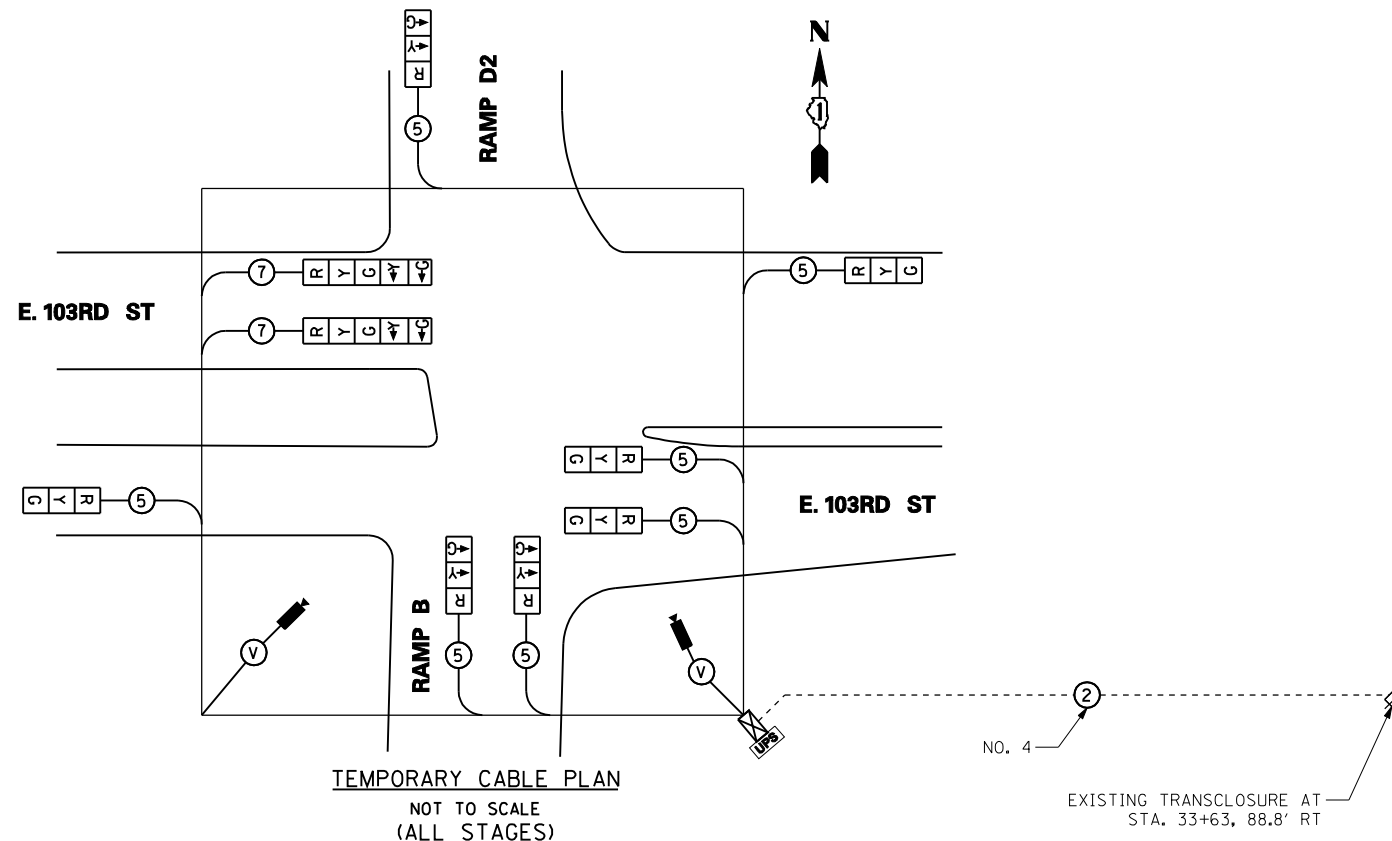
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|--|-------------------------|
| TEMPORARY TRAFFIC CONTROL SIGNAL PLAN | |
| 103RD ST. & STONY ISLAND AVE. RAMP B /RAMP D2 | |
| SCALE: AS NOTED | SHEET NO. 1 OF 4 SHEETS |
| STA. | TO STA. |

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 122 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

TEMPORARY PHASE DESIGNATION DIAGRAM



LEGEND
 ○ → DUAL ENTRY PHASE
 • NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY CABLE PLAN
 NOT TO SCALE
 (ALL STAGES)

CONSTRUCTION NOTES
 CONTRACTOR SHALL INSTALL CDOT APPROVED SIGNAL TIMING FOR TEMPORARY SIGNAL OPERATION AT THIS LOCATION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

TEMPORARY TRAFFIC SIGNAL INSTALLATION
 ELECTRICAL SERVICE REQUIRMENTS
 103RD STREET & STONY ISLAND AVE SB RAMP

| TYPE | NO. LAMPS | WATTAGE INCAND. -LED. | % OPERATION | TOTAL WATTAGE |
|--------------|-----------|-----------------------|-------------|---------------|
| SIGNAL (RED) | 9 | 17 | 0.50 | 76.50 |
| (YELLOW) | 9 | 25 | 0.25 | 56.25 |
| (GREEN) | 6 | 15 | 0.25 | 22.50 |
| ARROW | 7 | 12 | 0.10 | 8.40 |
| PED. SIGNAL | | | 1.00 | |
| CONTROLLER | 1 | 100 | 1.00 | 100.00 |
| FLASHER | | | | |
| CAMERAS | 1 | 150 | 1.00 | 150.00 |
| | | | TOTAL = | 413.65 |

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/ DISTRICT 1
 201 W CENTER COURT/ SCHAMBERG, IL 60196-1096

ENERGY SUPPLY CONTACT: STEVE FITZGERALD
 PHONE: (708) 235-2327
 COMPANY: COMED

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| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

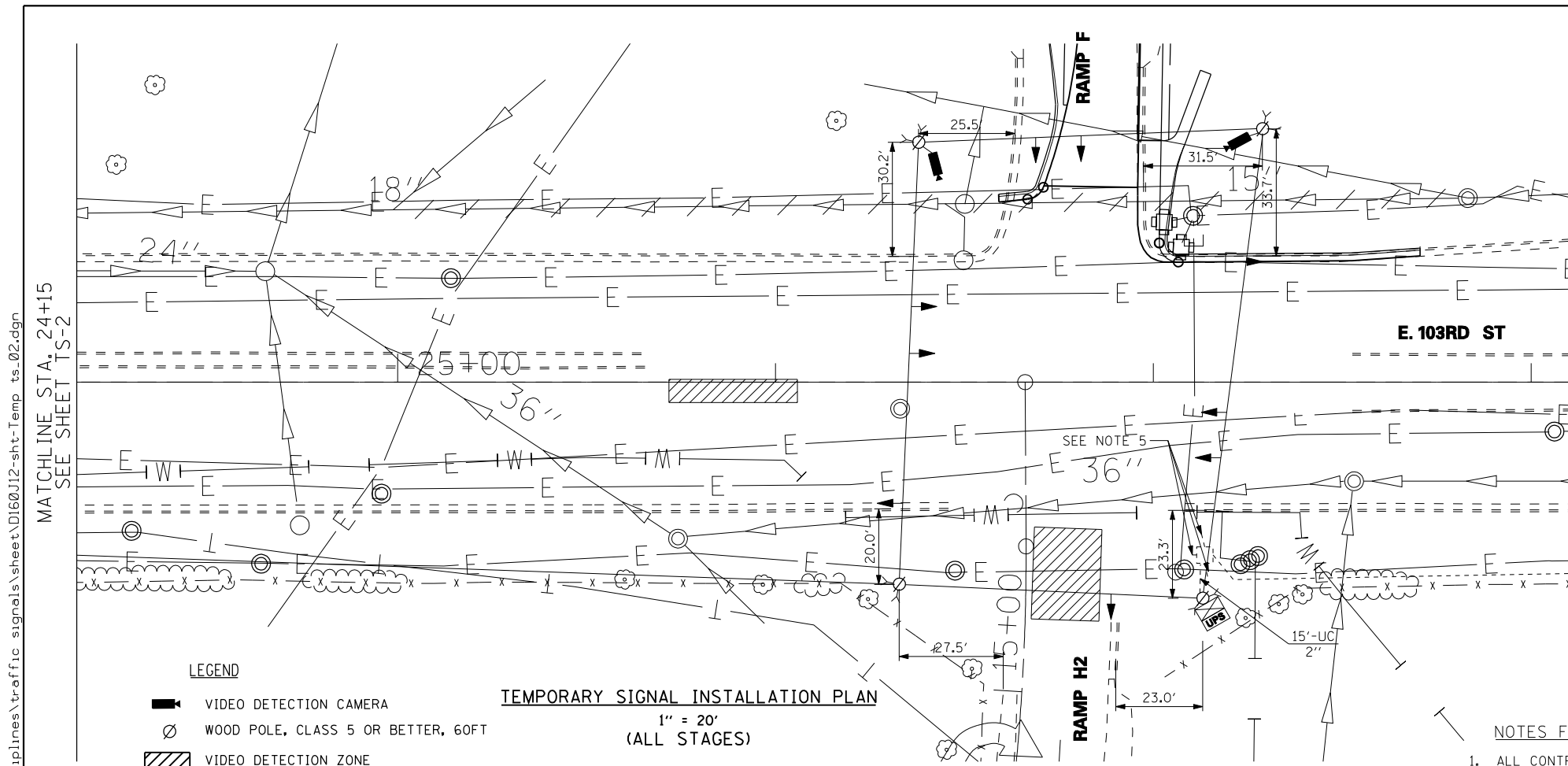


STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC CONTROL SIGNAL PLAN
 103RD ST. & STONY ISLAND AVE. RAMP B /RAMP D2

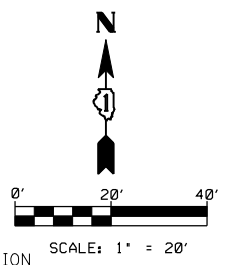
SCALE: NONE SHEET NO. 2 OF 4 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------------------|-------------|------------------|--------------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 123 |
| | | | | CONTRACT NO. 60V61 |
| ILLINOIS FED. AID PROJECT | | | | |



CONSTRUCTION NOTES

1. INSTALLATION AND REMOVAL OF WOOD POLES, SPANS, TETHER, CABLES, HARDWARE REQUIRED FOR TEMPORARY SIGNALS SHALL BE DONE IN A MANNER APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL AND SHALL BE CONSIDERED INCLUDED IN THE COST OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
2. CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL GENERATORS IN ORDER TO PROVIDE POWER TO THE EXISTING SIGNALS DURING DISRUPTION OF POWER WHILE REPLACING EXISTING SERVICE CABLE. THE GENERATOR SHALL PROVIDE POWER NECESSARY TO OPERATE ALL TRAFFIC SIGNAL EQUIPMENT. THIS WORK SHALL BE DONE DURING OFF PEAK WITHIN 6 HOURS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION."
3. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF EXISTING HANDHOLE.
4. ONE CONDUIT SHALL BE USED BY SERVICE CABLE AND OTHER SHALL BE USED FOR INTERCONNECT.
5. INSTALL CONDUIT STUB ON MANHOLE FOR INSTALLATION OF CONDUIT PER TRAFFIC CONTROL SIGNAL PLAN.
6. CONNECTION COUPLING BETWEEN COILABLE CONDUIT AND PVC CONDUIT SHALL BE INSTALLED IN A MANNER AS APPROVED BY THE ENGINEER.
7. REFER TO TS-5 FOR TEMPORARY VIDEO DETECTION MOUNTING DETAIL.

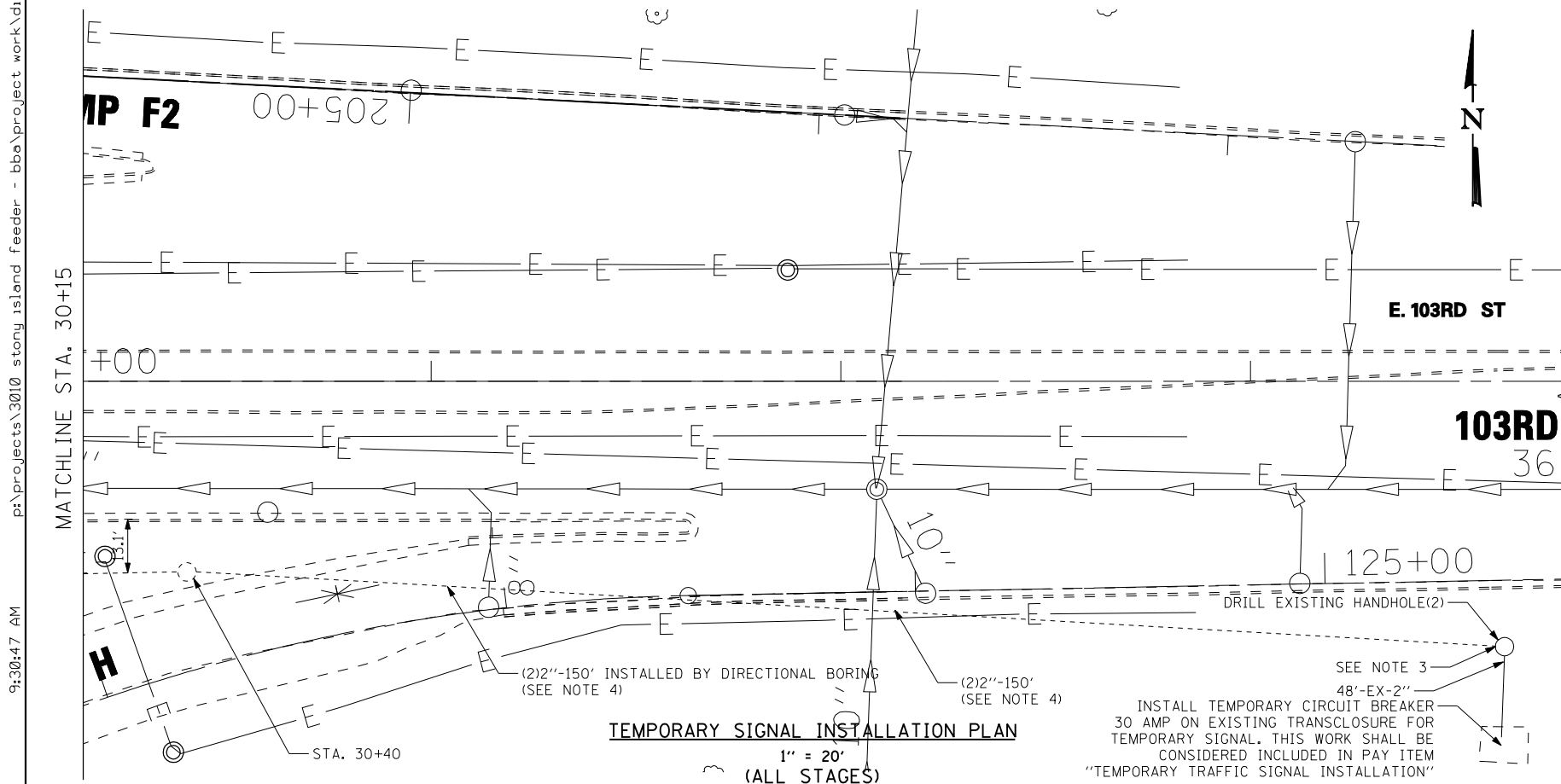


- LEGEND**
- VIDEO DETECTION CAMERA
 - WOOD POLE, CLASS 5 OR BETTER, 60FT
 - VIDEO DETECTION ZONE

TEMPORARY SIGNAL INSTALLATION PLAN
1" = 20"
(ALL STAGES)

NOTES FOR TEMPORARY TRAFFIC SIGNALS:

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



TEMPORARY SIGNAL INSTALLATION PLAN
1" = 20"
(ALL STAGES)

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | DRAWN - SA | REVISED - |
| PLOT DATE = 12/6/2012 | CHECKED - BKS | REVISED - |
| | DATE - 12/07/2012 | REVISED - |

| | |
|-------------------|-----------|
| DESIGNED - SA | REVISED - |
| DRAWN - SA | REVISED - |
| CHECKED - BKS | REVISED - |
| DATE - 12/07/2012 | REVISED - |



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

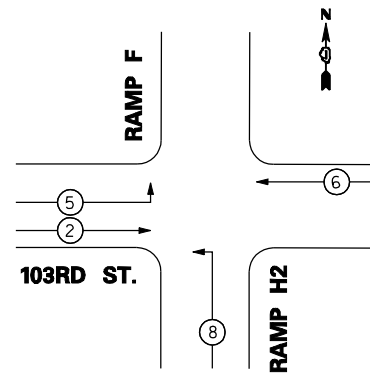
TEMPORARY TRAFFIC CONTROL SIGNAL PLAN
103RD ST. & STONY ISLAND AVE. RAMP F/RAMP H2
SCALE: AS NOTED | SHEET NO. 3 OF 4 SHEETS | STA. TO STA.

| | | | | |
|---------------------------|---------------------|-------------|------------------|--------------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 124 |
| | | | | CONTRACT NO. 60V61 |
| ILLINOIS FED. AID PROJECT | | | | |

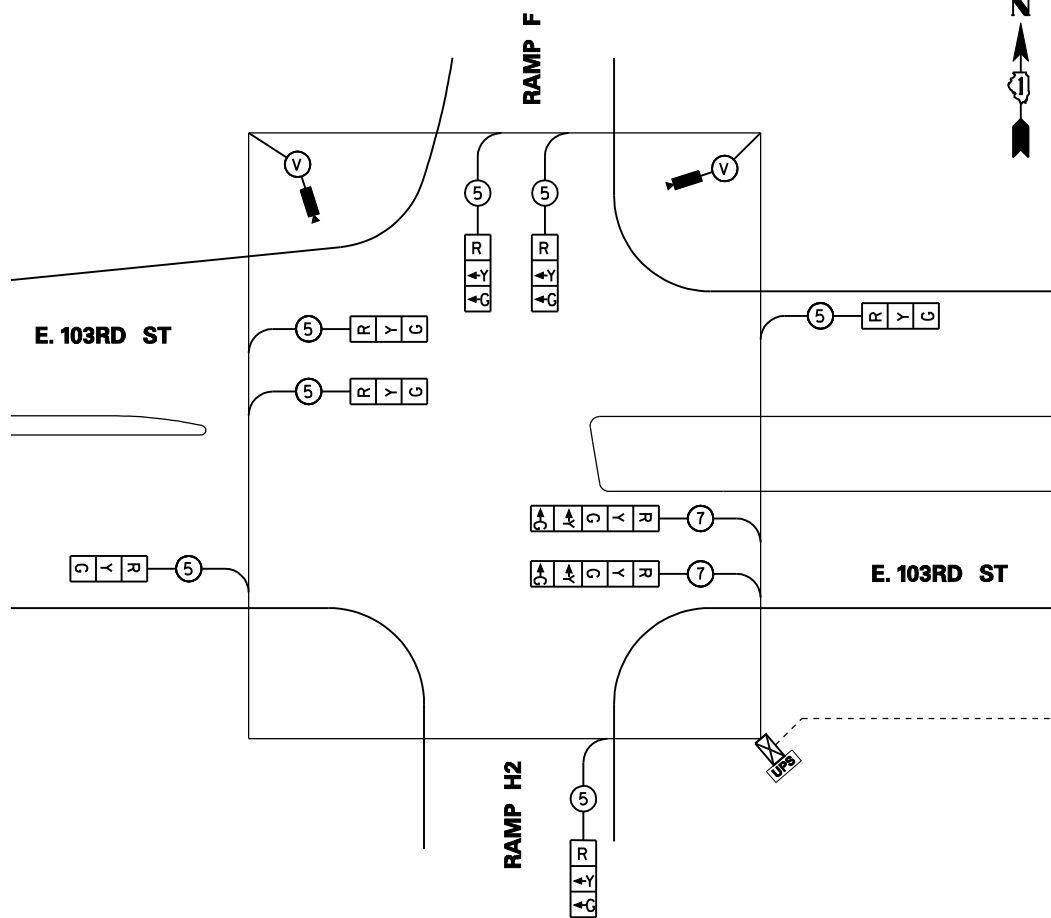
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12/6/2012 9:30:49 AM p:\projects\3010 stony island feeder - bbe\project work\disciplines\traffic_signals\sheet\0160J12-sht-Temp_ts.03.dgn

TEMPORARY PHASE DESIGNATION DIAGRAM



LEGEND
 ○ — DUAL ENTRY PHASE
 • NUMBER REFERS TO ASSOCIATED PHASE



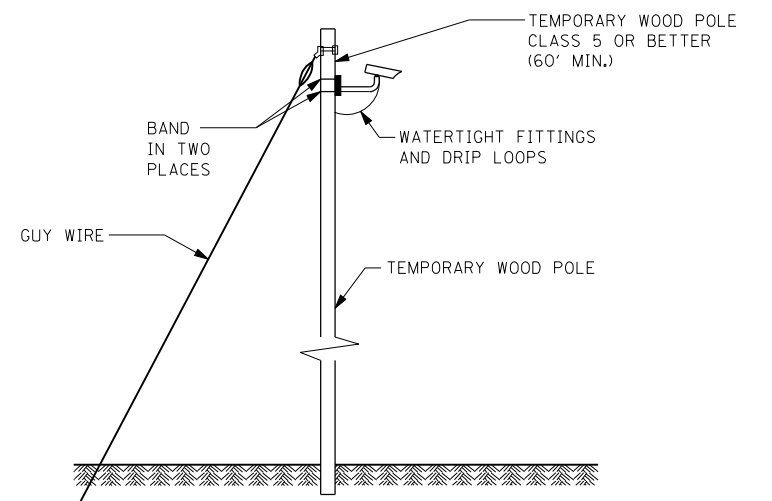
TEMPORARY CABLE PLAN

NOT TO SCALE
(ALL STAGES)



CONSTRUCTION NOTES

CONTRACTOR SHALL INSTALL CDOT APPROVED SIGNAL TIMING FOR TEMPORARY SIGNAL OPERATION AT THIS LOCATION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

NOT TO SCALE

TEMPORARY TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIRMENTS
103RD STREET & STONY ISLAND AVE NB RAMP

| TYPE | NO. LAMPS | WATTAGE INCAND. -LED. | % OPERATION | TOTAL WATTAGE |
|--------------|-----------|-----------------------|-------------|---------------|
| SIGNAL (RED) | 9 | 17 | 0.50 | 76.50 |
| (YELLOW) | 9 | 25 | 0.25 | 56.25 |
| (GREEN) | 6 | 15 | 0.25 | 22.50 |
| ARROW | 7 | 12 | 0.10 | 8.40 |
| PED. SIGNAL | | | 1.00 | |
| CONTROLLER | 1 | 100 | 1.00 | 100.00 |
| FLASHER | | | | |
| CAMERAS | 1 | 150 | 1.00 | 150.00 |
| | | | TOTAL = | 413.65 |

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/ DISTRICT 1
201 W CENTER COURT/ SCHAUMBERG, IL 60196-1096

ENERGY SUPPLY CONTACT: STEVE FITZGERALD
PHONE: (708) 235-2327
COMPANY: COMED

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |



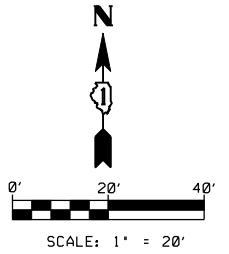
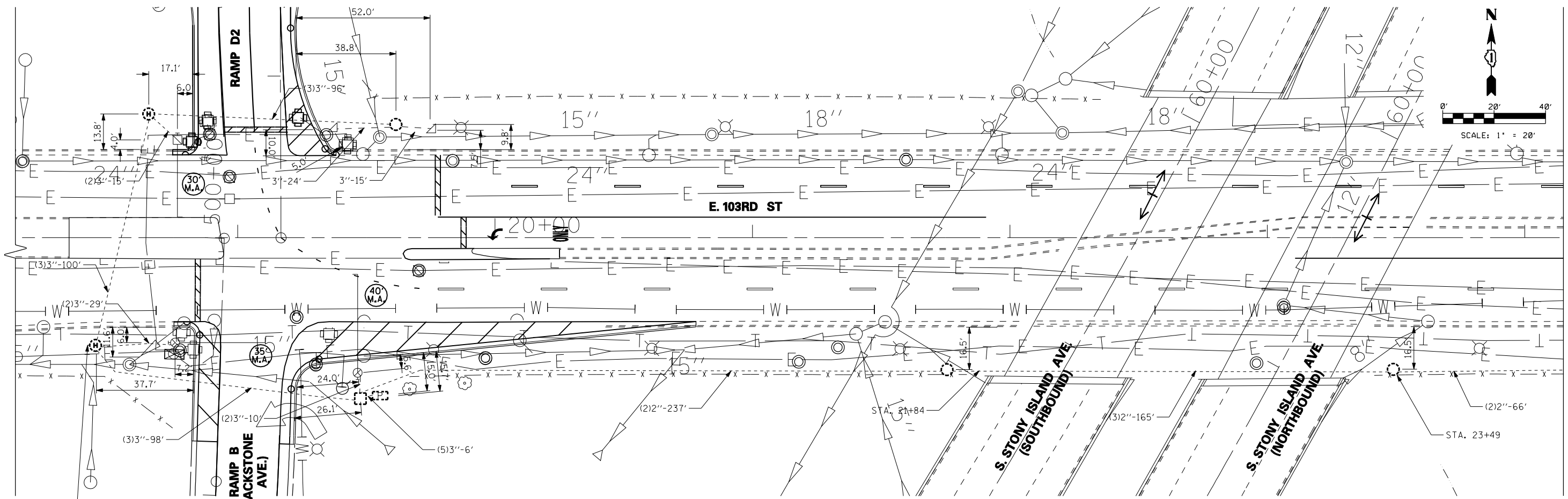
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC CONTROL SIGNAL PLAN
103RD ST. & STONY ISLAND AVE. RAMP F / RAMP H2

SCALE: NONE SHEET NO. 4 OF 4 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 125 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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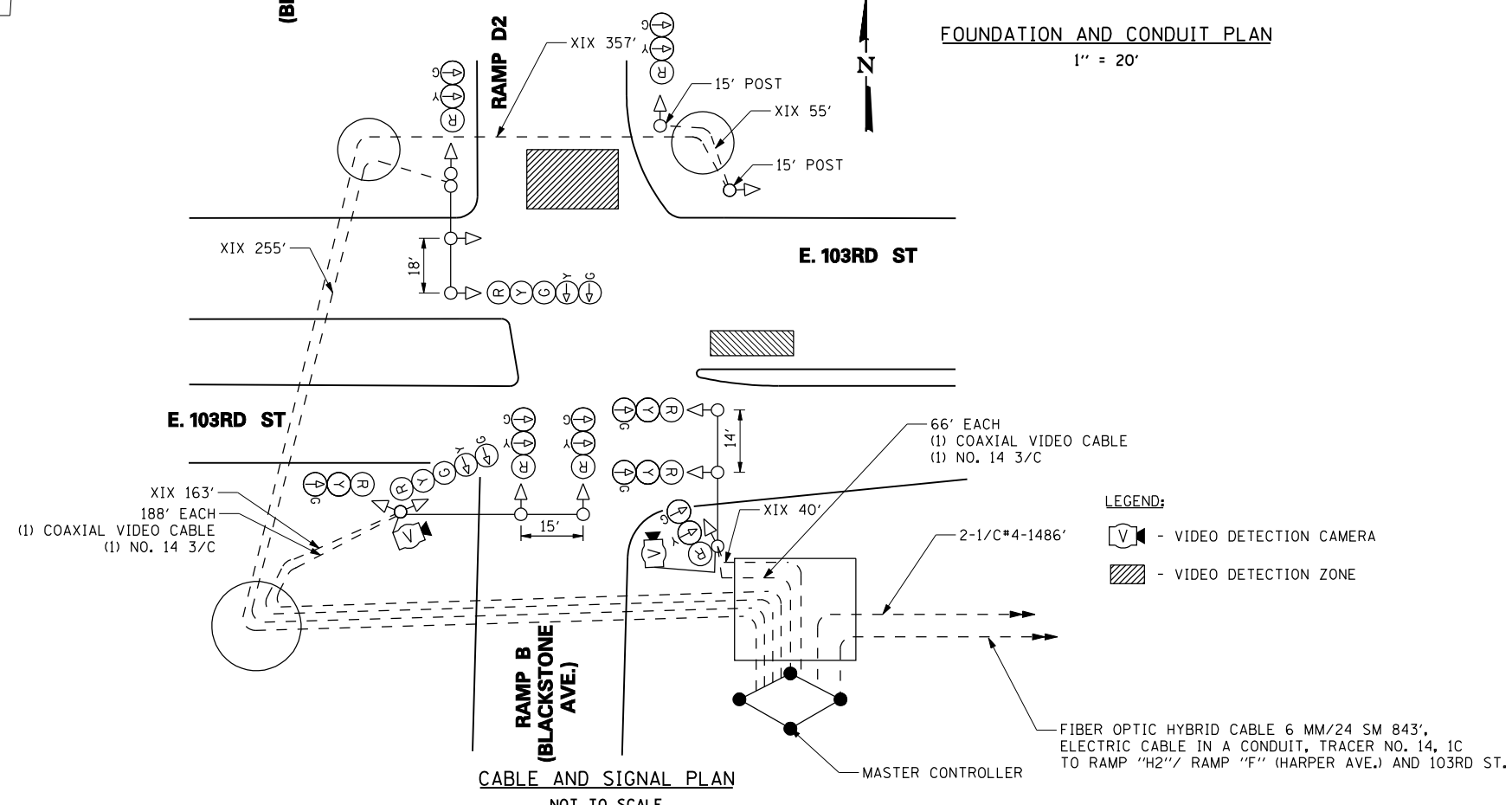


MATCHLINE STA. 24+15
SEE SHEET TS-8

FOUNDATION AND CONDUIT PLAN
1" = 20'

CONSTRUCTION NOTES

1. ALL FOUNDATIONS TO BE INSTALLED PER DRAWINGS #828 AND #888
2. FOR CODE SHEET SEE DRAWING #826
3. CONDUITS SHALL BE SCHEDULE 40 UNDER SIDEWALK OR PARKWAY AND SCHEDULE 80 UNDER PAVEMENT UNLESS OTHERWISE SPECIFIED.
4. NON SIGNAL UTILITY WORK SHOWN FOR REFERENCE ONLY.
5. INSTALL POWER AND FIBER OPTIC CABLES IN SEPARATE CONDUITS BETWEEN RAMP SIGNALS.
6. CONTROLLER SHALL BE ATC WITH FIBER OPTIC INTERFACE AND MODEM.



LEGEND:
 - VIDEO DETECTION CAMERA
 - VIDEO DETECTION ZONE

CABLE AND SIGNAL PLAN
NOT TO SCALE

DWG. NO.
22884
-1
DATE: 08/03/2012

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

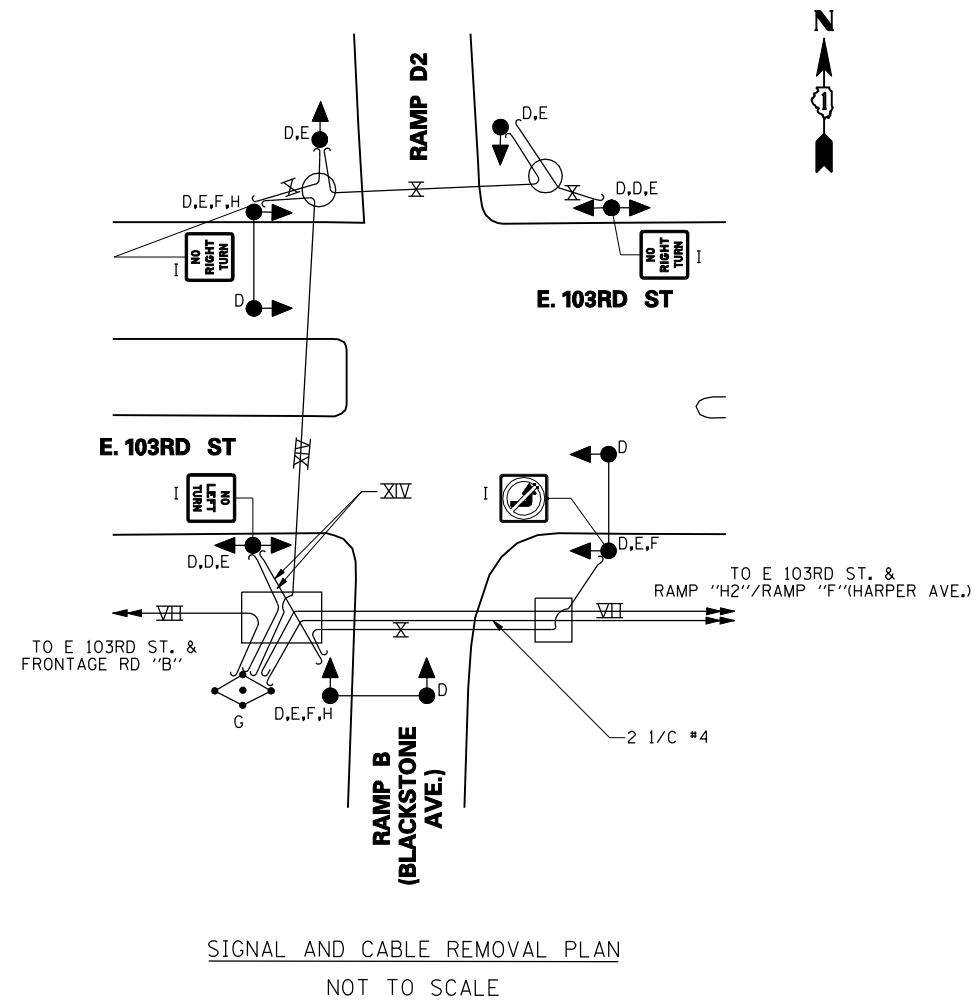


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

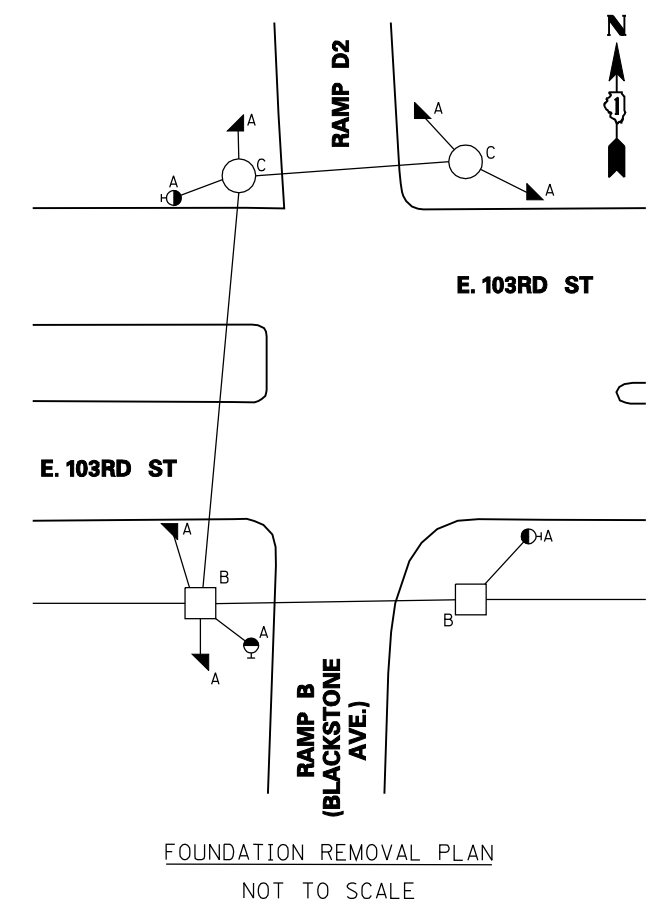
TRAFFIC CONTROL SIGNAL PLAN
103RD ST. & STONY ISLAND AVE. RAMP B /RAMP D2
SCALE: AS NOTED | SHEET NO. 1 OF 4 SHEETS | STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 126 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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- REMOVAL LEGEND**
- A - BREAK DOWN FOUNDATION
 - B - BREAK DOWN MANHOLE
 - C - BREAK DOWN HANDHOLE
 - D - REMOVE TRAFFIC SIGNAL
 - E - REMOVE TRAFFIC SIGNAL POST OR POLE
 - F - REMOVE TRAFFIC SIGNAL MAST ARM
 - G - REMOVE TRAFFIC SIGNAL CONTROLLER
 - H - REMOVE STREET LIGHTING MAST ARM AND LUMINAIRE
 - I - REMOVE ILLUMINATED SIGN



| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |



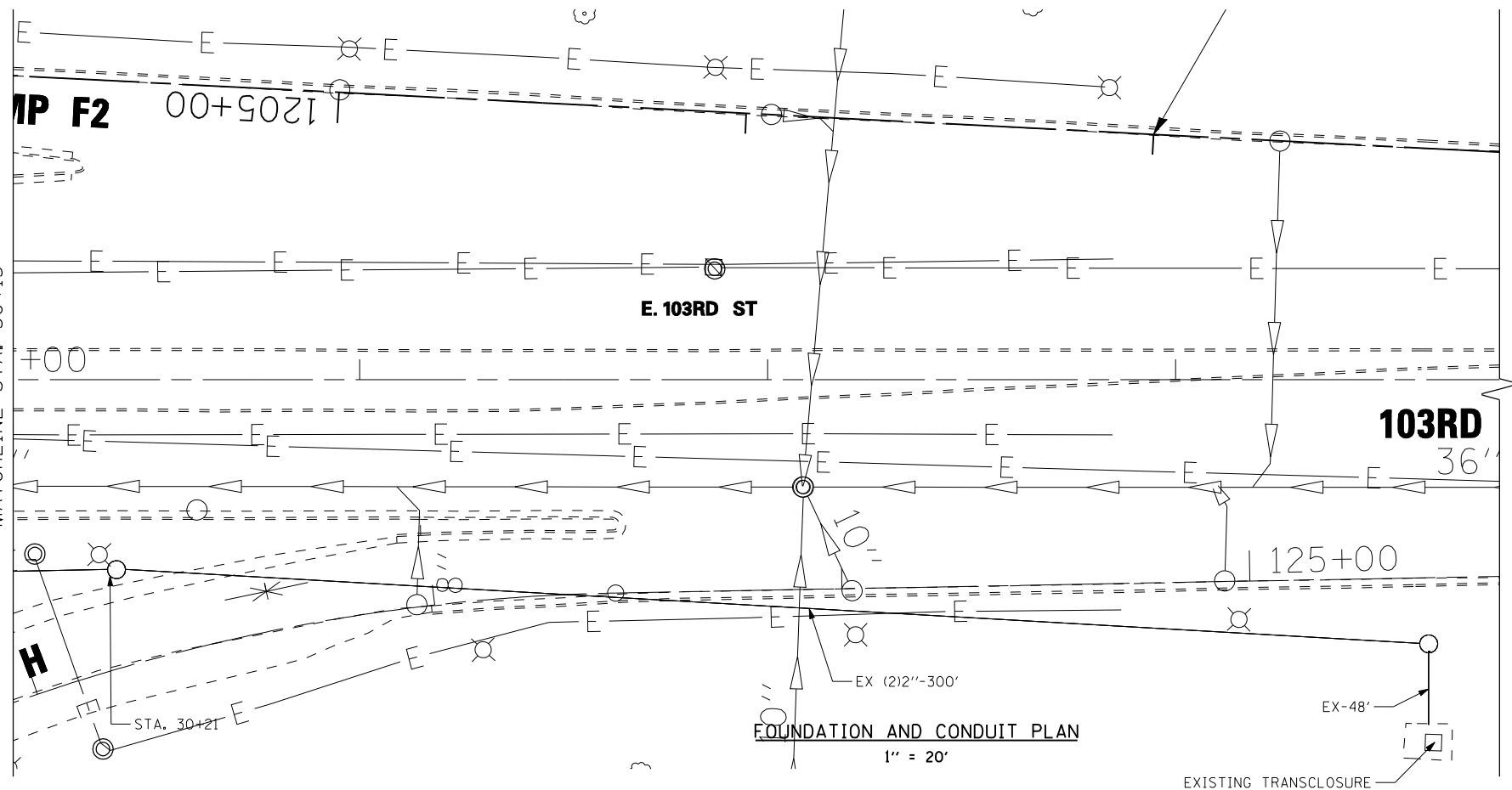
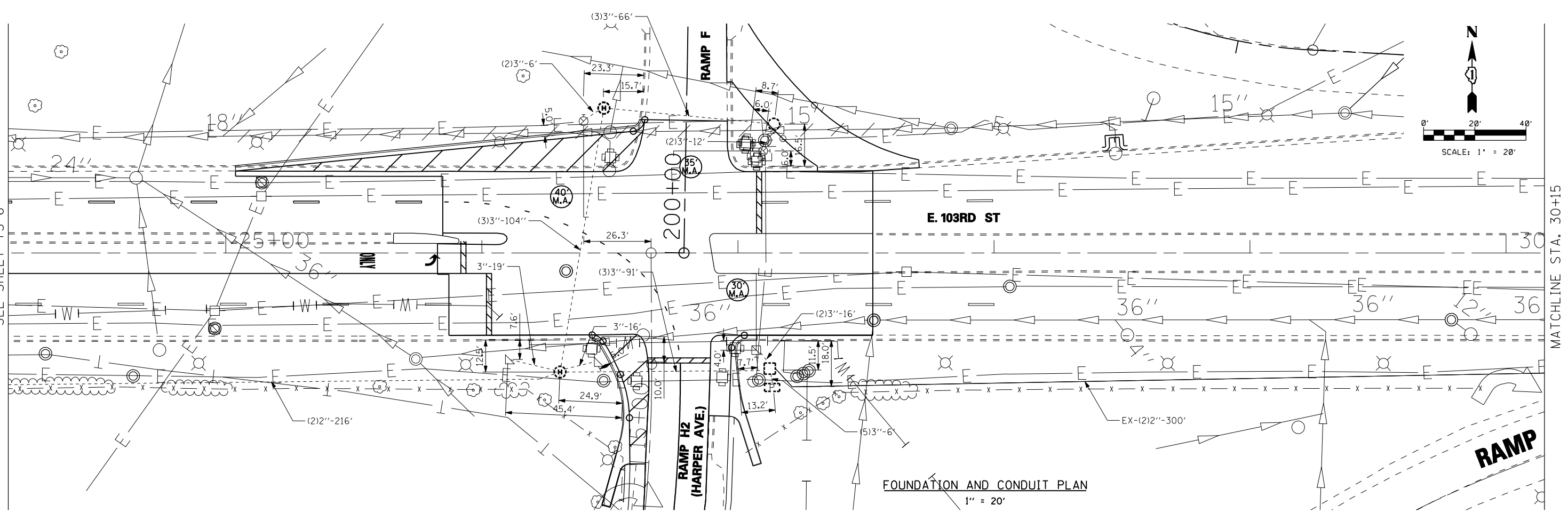
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| TRAFFIC CONTROL SIGNAL PLAN | | | |
|---|-------------------------|------|---------|
| 103RD ST. & STONY ISLAND AVE. RAMP B /RAMP D2 | | | |
| SCALE: NONE | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA. |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 127 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60V61 | |

DWG. NO.
 22884
 -2
 DATE: 08/03/2012

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CONSTRUCTION NOTES

1. ALL FOUNDATIONS TO BE INSTALLED PER DRAWINGS *828 AND *888
2. FOR CODE SHEET SEE DRAWING *826
3. CONDUITS SHALL BE SCHEDULE 40 UNDER SIDEWALK OR PARKWAY AND SCHEDULE 80 UNDER PAVEMENT UNLESS OTHERWISE SPECIFIED.
4. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF THE EXISTING CONDUIT IN FIELD. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED INCLUDED IN INTERCEPT EXISTING CONDUIT PAY ITEM.
5. NON-SIGNAL UTILITY WORK SHOWN FOR REFERENCE ONLY.
6. CONTROLLER SHALL BE ATC WITH FIBER OPTIC INTERFACE AND MODEM.

DWG. NO.
22884
-3
DATE: 08/03/2012

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | DRAWN - SA | REVISED - |
| PLOT DATE = 12/6/2012 | CHECKED - BKS | REVISED - |
| | DATE - 12/07/2012 | REVISED - |

| | |
|-------------------|-----------|
| DESIGNED - SA | REVISED - |
| DRAWN - SA | REVISED - |
| CHECKED - BKS | REVISED - |
| DATE - 12/07/2012 | REVISED - |



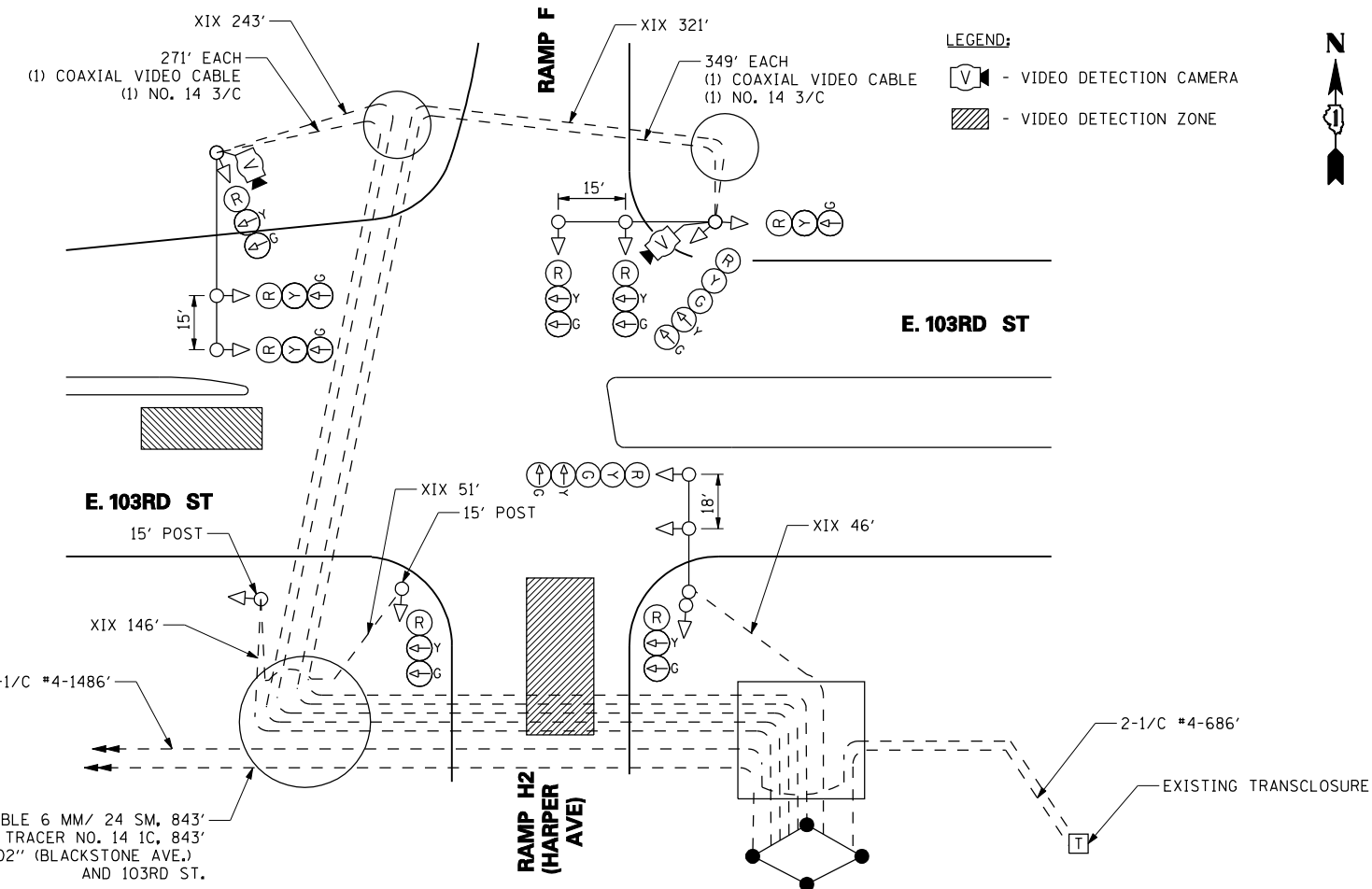
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL SIGNAL PLAN
103RD ST. & STONY ISLAND AVE. RAMP F/RAMP H2**

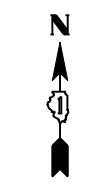
SCALE: AS NOTED SHEET NO. 3 OF 4 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 128 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

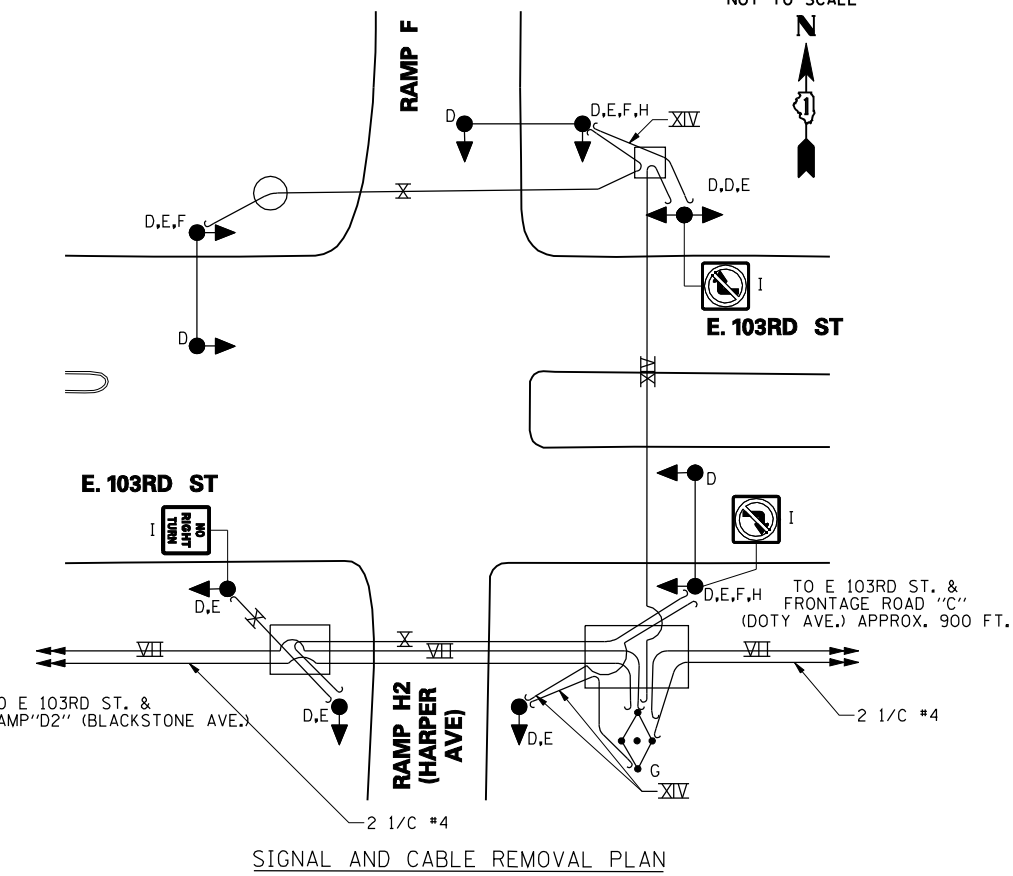
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LEGEND:
 - VIDEO DETECTION CAMERA
 - VIDEO DETECTION ZONE

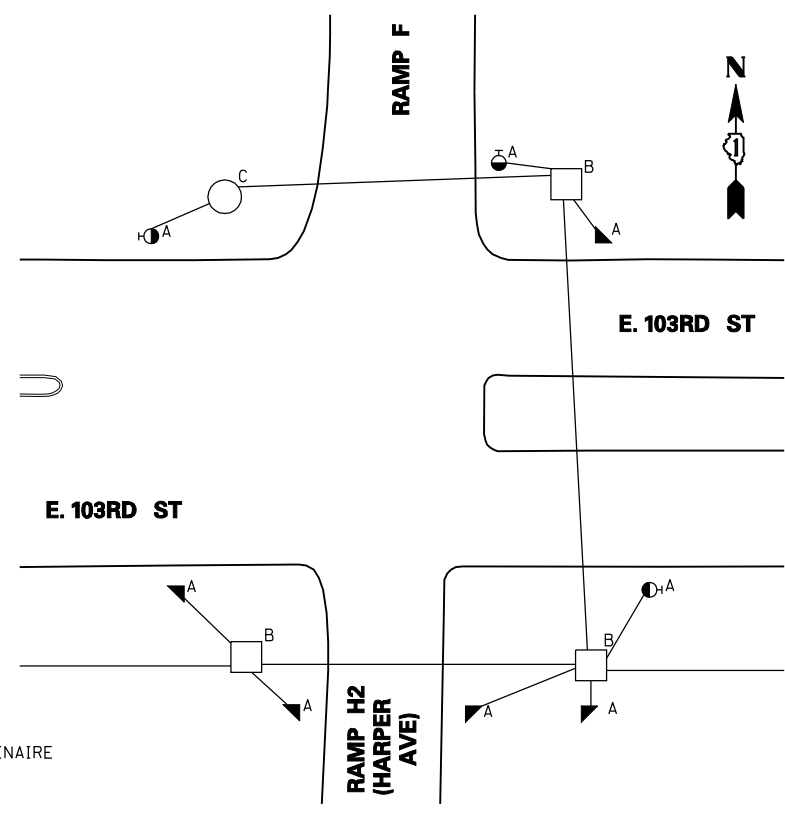


CABLE AND SIGNAL PLAN
NOT TO SCALE



REMOVAL LEGEND
 A - BREAK DOWN FOUNDATION
 B - BREAK DOWN MANHOLE
 C - BREAK DOWN HANDHOLE
 D - REMOVE TRAFFIC SIGNAL
 E - REMOVE TRAFFIC SIGNAL POST OR POLE
 F - REMOVE TRAFFIC SIGNAL MAST ARM
 G - REMOVE TRAFFIC SIGNAL CONTROLLER
 H - REMOVE STREET LIGHTING MAST ARM AND LUMINAIRE
 I - REMOVE ILLUMINATED SIGN

SIGNAL AND CABLE REMOVAL PLAN
NOT TO SCALE



FOUNDATION REMOVAL PLAN
NOT TO SCALE

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

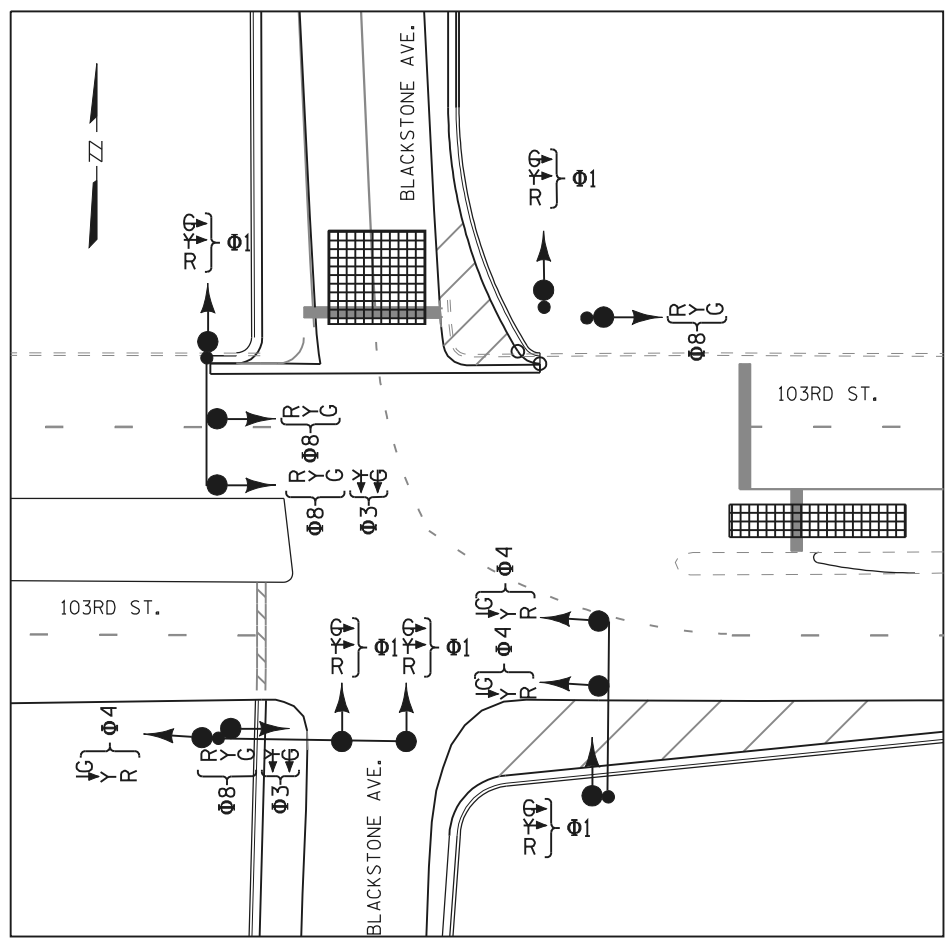
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|---|--------------------------------------|
| TRAFFIC CONTROL SIGNAL PLAN | |
| 103RD ST. & STONY ISLAND AVE. RAMP F / RAMP H2 | |
| SCALE: NONE | SHEET NO. 4 OF 4 SHEETS STA. TO STA. |

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 129 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

DWG. NO.
22884
-4
DATE: 08/03/2012

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| DIAL | CYCLE LENGTH | OFFSET | TIMES OF OPERATION | FLASH OPERATION |
|------|--------------|--------|--------------------------------|-----------------|
| 1 | 85" | 0" | ALL OTHER TIMES | R01, R04, R08 |
| 2 | 85" | 0" | 6:00 AM TO 10:00 AM, MON - FRI | ALL ARROWS OFF |
| 3 | 85" | 0" | 3:00 PM TO 7:00 PM, MON - FRI | |
| 4 | | | | |
| | | | | |



**S. BLACKSTONE AVE
 & E. 103RD ST.**

DIAL 1

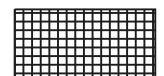
| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | 8 | | 5 | 27 | | | | 27 |
| VEHICLE EXT. | 5 | | 5 | | | | | |
| MAX GREEN | 28 | | 15 | | | | | |
| YELLOW CHANGE | 4 | | 4 | 4 | | | | 4 |
| RED CLEARANCE | 1 | | | 2 | | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | LEAD | | LEAD | | | | | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |

DIAL 2

| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | 8 | | 5 | 27 | | | | 27 |
| VEHICLE EXT. | 5 | | 5 | | | | | |
| MAX GREEN | 28 | | 15 | | | | | |
| YELLOW CHANGE | 4 | | 4 | 4 | | | | 4 |
| RED CLEARANCE | 1 | | | 2 | | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | LEAD | | LEAD | | | | | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |

DIAL 3

| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | 8 | | 6 | 28 | | | | 28 |
| VEHICLE EXT. | 5 | | 4 | | | | | |
| MAX GREEN | 28 | | 14 | | | | | |
| YELLOW CHANGE | 4 | | 4 | 4 | | | | 4 |
| RED CLEARANCE | 1 | | | 2 | | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | LEAD | | LEAD | | | | | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |



- VIDEO CAMERA DETECTION ZONE

CITY OF CHICAGO
 DEPARTMENT OF TRANSPORTATION
 TRAFFIC SIGNAL TIMING SCHEDULE

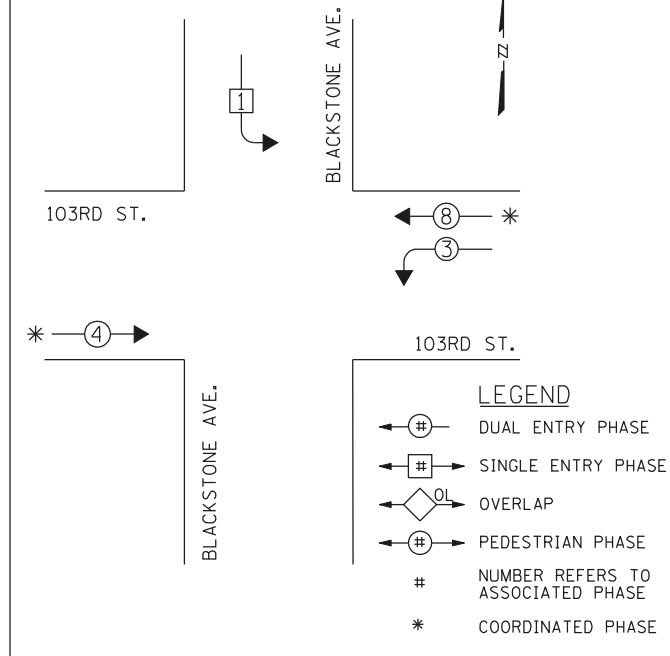
S. BLACKSTONE AVE. & E. 103RD ST.

10300 S./1436 E.
 DESIGNED BY: SA
 DATE: 1/18/2013
 CHECKED BY: JW
 DATE: 1/18/2013

APPROVED: _____
 TRAFFIC ENGINEER: _____
 PAGE 1 OF 1

SENT: _____ INSTALLED: _____

CONTROLLER SEQUENCE



| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 1/25/2013 | DATE - 12/07/2012 | REVISED - |



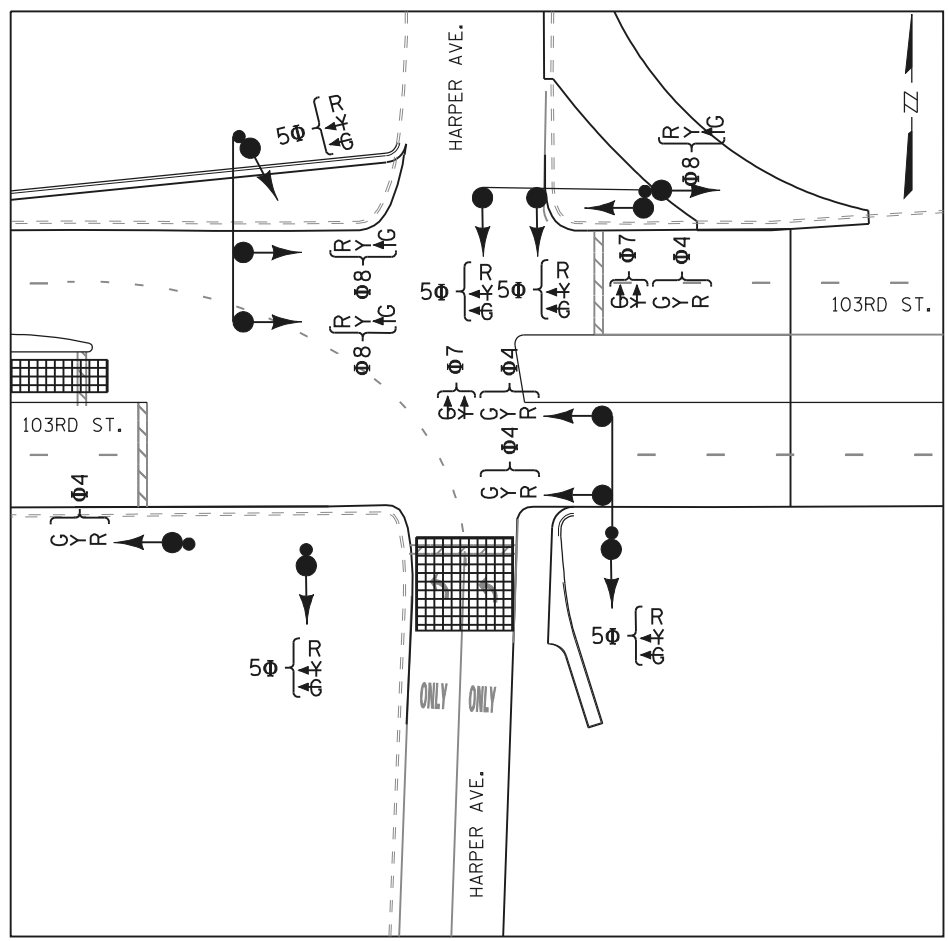
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PERMANENT
 TRAFFIC SIGNAL TIMING**
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

| | | | | |
|--------------------|---------------------|-------------|---------------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 130 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

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| DIAL | CYCLE LENGTH | OFFSET | TIMES OF OPERATION | FLASH OPERATION |
|------|--------------|--------|--------------------------------|-----------------|
| 1 | 85" | 29" | ALL OTHER TIMES | Φ4, Φ5, Φ8, |
| 2 | 85" | 29" | 6:00 AM TO 10:00 AM, MON - FRI | ALL ARROWS OFF |
| 3 | 85" | 40" | 3:00 PM TO 7:00 PM, MON - FRI | |
| 4 | | | | |



S. HARPER AVE.
& E. 103RD ST.

DIAL 1

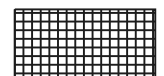
| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | | | | 36 | 7 | | 7 | 36 |
| VEHICLE EXT. | | | | | 5 | | 5 | |
| MAX GREEN | | | | | 17 | | 17 | |
| YELLOW CHANGE | | | | 4 | 4 | | 4 | 4 |
| RED CLEARANCE | | | | 2 | 1 | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | | | | | LEAD | | LEAD | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |

DIAL 2

| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | | | | 36 | 7 | | 7 | 36 |
| VEHICLE EXT. | | | | | 5 | | 5 | |
| MAX GREEN | | | | | 17 | | 17 | |
| YELLOW CHANGE | | | | 4 | 4 | | 4 | 4 |
| RED CLEARANCE | | | | 2 | 1 | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | | | | | LEAD | | LEAD | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |

DIAL 3

| PHASE NUMBER | PHASE | | | | | | | |
|------------------|-------|----|------|-------|------|----|------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DIRECTION | SBLT | NB | WBLT | EB | NBLT | SB | EBLT | WB |
| MIN GREEN | | | | 31 | 6 | | 8 | 31 |
| VEHICLE EXT. | | | | | 5 | | 5 | |
| MAX GREEN | | | | | 11 | | 28 | |
| YELLOW CHANGE | | | | 4 | 4 | | 4 | 4 |
| RED CLEARANCE | | | | 2 | 1 | | | 2 |
| WALK | | | | | | | | |
| PED CLEARANCE | | | | | | | | |
| SPLITS | | | | | | | | |
| SEQUENCE | | | | | LEAD | | LEAD | |
| ADVANCE PED(LPI) | | | | | | | | |
| RECALL | | | | COORD | | | | COORD |



- VIDEO CAMERA DETECTION ZONE

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL TIMING SCHEDULE

S. HARPER AVE. & E. 103RD ST.

10300 S./1501 E.

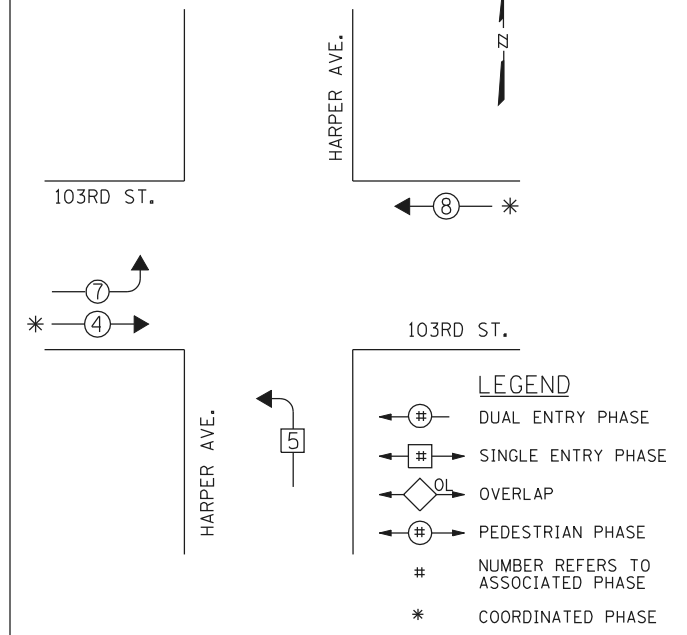
DESIGNED BY: SA
DATE: 1/18/2013
CHECKED BY: JW
DATE: 1/18/2013

APPROVED: _____
TRAFFIC ENGINEER:

PAGE 1 OF 1

SENT: _____ INSTALLED: _____

CONTROLLER SEQUENCE



| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 1/25/2013 | DATE - 12/07/2012 | REVISED - |



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PERMANENT
TRAFFIC SIGNAL TIMING
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------------------|-------------|------------------|--------------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 130A |
| ILLINOIS FED. AID PROJECT | | | | CONTRACT NO. 60V61 |

pi:\projects\3010_stony_island_feeder - bbe\project_work\disciplines\traffic_signals\sheet\0160J12-sht-TSD-01.dgn

| PROPOSED | PRESENT | |
|----------|---------|--|
| | | SIGNAL, TRAFFIC 3 SECTION 1-WAY ADJUSTABLE, 12" OR AS NOTED |
| | | SIGNAL, TRAFFIC 3 SECTION 2-WAY ADJUSTABLE, 12" OR AS NOTED |
| | | SIGNAL OPTICALLY PROGRAMMED |
| | | SIGNAL, PEDESTRIAN, DON'T WALK/WALK |
| | | SIGNAL FACE ARROW, 12" COLOR AS NOTED |
| | | SIGNAL FACE, 1 SECTION YELLOW/GREEN ARROW DUAL INDICATION |
| | | PUSH BUTTON, PEDESTRIAN |
| | | SIGN, ILLUMINATED, WITH MESSAGE OR SYMBOL AS INDICATED |
| | | MAST ARM, MONOTUBE, STEEL. SIZE AS INDICATED (SEE DWG. #870) |
| | | MAST ARM, TRUSS, ALUMINUM. SIZE AS INDICATED |
| | | CONTROLLER, TRAFFIC SIGNAL, PEDESTAL OR BASE MOUNTED AS INDICATED |
| | | CONTROLLER, STREET LIGHTING, PEDESTAL OR BASE MOUNTED. (DWG. 876 or 880) |
| | | CONTROLLER, STREET LIGHTING, POLE MOUNTED (DWG. #11940) |
| | | POLE, WOOD, COMMONWEALTH EDISON COMPANY, SERVICE |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 7 GA. 10" DIA. AND 15" B.C. 24"x7" FND. W/1/4" ANCHOR RODS DRG. #818. |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA. 10" DIA. AND 15" B.C. 24"x9" FND. W/1/4" ANCHOR RODS DRG. #810 (16", 20" or 26" M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 11" DIA. AND 17 1/4" B.C. 30"x9" FND. W/1/4" ANCHOR RODS DRG. #816. (30' M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE 34'-6", 3 GA. 12 1/2" DIA. AND 16 1/2" B.C. 30"x11" FND. W/1/2" ANCHOR RODS DRG. #817. (35', 40' or 44' M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA. 10" DIA., WITH 3 GA. BAL. HSG. BASE AND 17 1/4" B.C. ON 30"x9" FND. W/ 11/4" ANCHOR RODS DRG. #816. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 7 GA. WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #716. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 3 GA., WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #719. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 7 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 3 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 7 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6" 7 GA., ALUM. BHB AND FND. WITH 15" B.C.-24"x7" WITH 1" ANCHOR RODS DRG. #691. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., ALUM. DHB AND FND. WITH 15" B.C. 24"x7" WITH 1" ANCHOR RODS DRG. #691. |
| | | POLE, CITY ALUMINUM, WITH ROUND BAL. HSG. BASE, 25', 28', or 30' ON FND. WITH 14" B.C., ACQUIRED FROM CHICAGO PARK DISTRICT. |
| | | POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 7 GA., TAPERED TUBULAR. (DWG. #658) |
| | | POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 3 GA., TAPERED TUBULAR. (DWG. #658) |
| | | POLE, CITY STEEL, EMBEDDED. (ACQUIRED FROM CTA) |
| | | COLUMN, ELEVATED STRUCTURE |
| | | POLE, WOOD. (SIZE AS NOTED) |
| | | POLE, FOUNDATION WITH ELBOWS AS INDICATED. (SIZE AS NOTED) |
| | | POLE, ORNAMENTAL OR OTHER, AS INDICATED ON THE PLANS |

| PROPOSED | PRESENT | |
|----------|---------|---|
| | | HANDHOLE, HEAVY DUTY, 36" I.D. (DWG.#866) |
| | | HANDHOLE, CIRCULAR WITH 24" FRAME & COVER, 30" I.D. (#867) |
| | | MANHOLE, CITY 3'X4'X4' DWG. #729 or 730; 4'X6'X6' DWG. #732 or 733. |
| | | FOUNDATION, CONTROLLER OR PEDESTAL, 13" B.C., 20"X5' (DWG. #709) |
| | | FOUNDATION, TRAFFIC CONTROLLER DWG. #854. F.A. TERMINAL FND. DWG. #11972 |
| | | FOUNDATION, TRAFFIC TYPE "P", BASE MOUNT. (DWG. #888) |
| | | FOUNDATION, CONTROLLER STREET LIGHT, SPECIAL, 100A & 200A. (DWG.#876 & # 880) |
| | | FOUNDATION, TRANSCLOSURE; TRANSCLOSURE HOUSING. (DWG.# 583 & #891) |
| | | CONTROLLER, UNDERPASS LIGHTING 120V. & 240V. (DWG. #860 & #861) |
| | | MANHOLE, UTILITY, E=COMMONWEALTH EDISON; T=ILL. BELL TEL.; G=PEOPLES GAS; W=CITY WATER; P=CHGO. PARK DISTRICT; CTA=C.T.A.; S= SEWER |
| | | JUNCTION BOX, IN PAVEMENT (DWG. #815) |
| | | DETECTOR LOOP IN PAVEMENT |
| | | CONDUIT or P.V.C., NUMBER, SIZE & TYPE. (AS NOTED) |
| | | CONDUIT or P.V.C. ENCASED IN CONCRETE. (SECTION or NUMBER OF CONDUIT INDICATED) |
| | | LUMINAIRE, H.P.S.V. 400W LAMP, 240V, SEMI-CUTOFF |
| | | LUMINAIRE, H.P.S.V. 400W LAMP, 240V, CUTOFF |
| | | LUMINAIRE, H.P.S.V. 310W LAMP, 240V |
| | | LUMINAIRE, H.P.S.V. 310W LAMP 240V, CUTOFF |
| | | LUMINAIRE, H.P.S.V. 150W LAMP, 240V |
| | | LUMINAIRE, H.P.S.V. 150W LAMP, 120V |
| | | LUMINAIRE, H.P.S.V. 250W LAMP, 120V, (ALLEY LIGHT) |
| | | LUMINAIRE, H.P.S.V. 250W LAMP, 120V |
| | | TERMINAL, CABINET F.A. & P.C. |
| | | FIRE ALARM BOX, MOUNTED |
| | | FIRE ALARM BOX, POLE MOUNTED |
| | | CABLE, TRAFFIC SIGNAL, COMMUNICATION, 1-PAIR #14 SHIELDED, IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C- #4, 600 V. EPR. IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2 1/C-#2 or #1/0 600V. EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#10 or #6, 600V NSRI, IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 7/C-#12 or #14, 600V, EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 10/C-#12 or #14, 600V, EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 14/C-#12 600V. EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 19/C-#12 or #14, 600V, EPR IN CONDUIT |
| | | CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN PARKWAY |
| | | CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN CONDUIT |
| | | CABLE, STREET LIGHT, 2 1/C-#6 EPRN 600V. & 1 1/C-#8 GREEN, TRIPLEXED, IN CONDUIT |
| | | CABLE, STREET LIGHT, 3 1/C-#1/0, or #2/0, or #4, 600V. EPR IN CONDUIT |
| | | WIRE, STREET LIGHT, 2 1/C-#6, HDNS. AERIAL |
| | | WIRE, STREET LIGHT, 2 1/C-#6 & 1 1/C #8, HDNS. AERIAL |
| | | CABLE, STREET LIGHT AERIAL, 3 1/C-#4 or #2 SELF SUPPORTING, 600V EPR |
| | | WIRE, F.A. & P.C. AERIAL, 1/C-#10, NUMERAL DENOTES QUANTITY |
| | | CABLE, F.A. & P.C. AERIAL, W/ MESSENGER #19-(NUMBER OF PAIRS AS INDICATED) |
| | | CABLE, F.A. & P.C. AERIAL, SELF SUPPORTING, #19-(NUMBER OF PAIRS AS INDICATED) |
| | | CABLE, F.A. & P.C., IN CONDUIT, #19-(NUMBER OF PAIRS AS INDICATED) |
| | | DOWNLIGHT ASSEMBLY. (DWG. #850) |
| | | LIGHT, TRAFFIC SAFETY ISLAND |
| | | FLASHING BEACON & DOWNLIGHT |

ORNAMENTAL LUMINAIRES

| PROPOSED | EXISTING | |
|----------|----------|---------------------|
| | | 310W PENDANT (240V) |
| | | 400W PENDANT (240V) |
| | | 250W PENDANT (240V) |
| | | 150W ACORN (120V) |
| | | 150W ACORN (240V) |
| | | 50W ACORN (240V) |
| | | 100W ACORN (240V) |
| | | 150W GLOBE (240V) |
| | | 100W GLOBE (240V) |
| | | 50W GLOBE (240V) |

| | | |
|--|-------------------------------|--------------------------------|
| C 04-01-02 | REVISED/REDRAW | R. POOL/B.I. |
| B 12-4-01 | ADDED ORNAMENTAL SYMBOLS | |
| A 8-6-96 | REDRAWN | |
| DATE | REVISION | |
| STANDARD CODE FOR TRAFFIC SIGNALS/ STREET LIGHTING | | |
| CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL ENGINEERING | | |
| DRAFTSMAN: R. IVY | CHIEF DRAFTSMAN: R. CARTER | ENGINEER: R. POOL/R.C./W.T. |
| SUPERVISING ENGINEER: ELEC. DESIGN ENGR. | | DWG. NO. 826 |
| ENGINEER OF ELECTRICALITY: | | |
| GEN'L. SUPT. OF CONSTRUCTION: | | |
| DEPUTY COMMISSIONER: | | |
| SIZE: 22" X 36" | SCALE: | DATE: |

12/6/2012 9:31:20 AM

| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| | DRAWN - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |



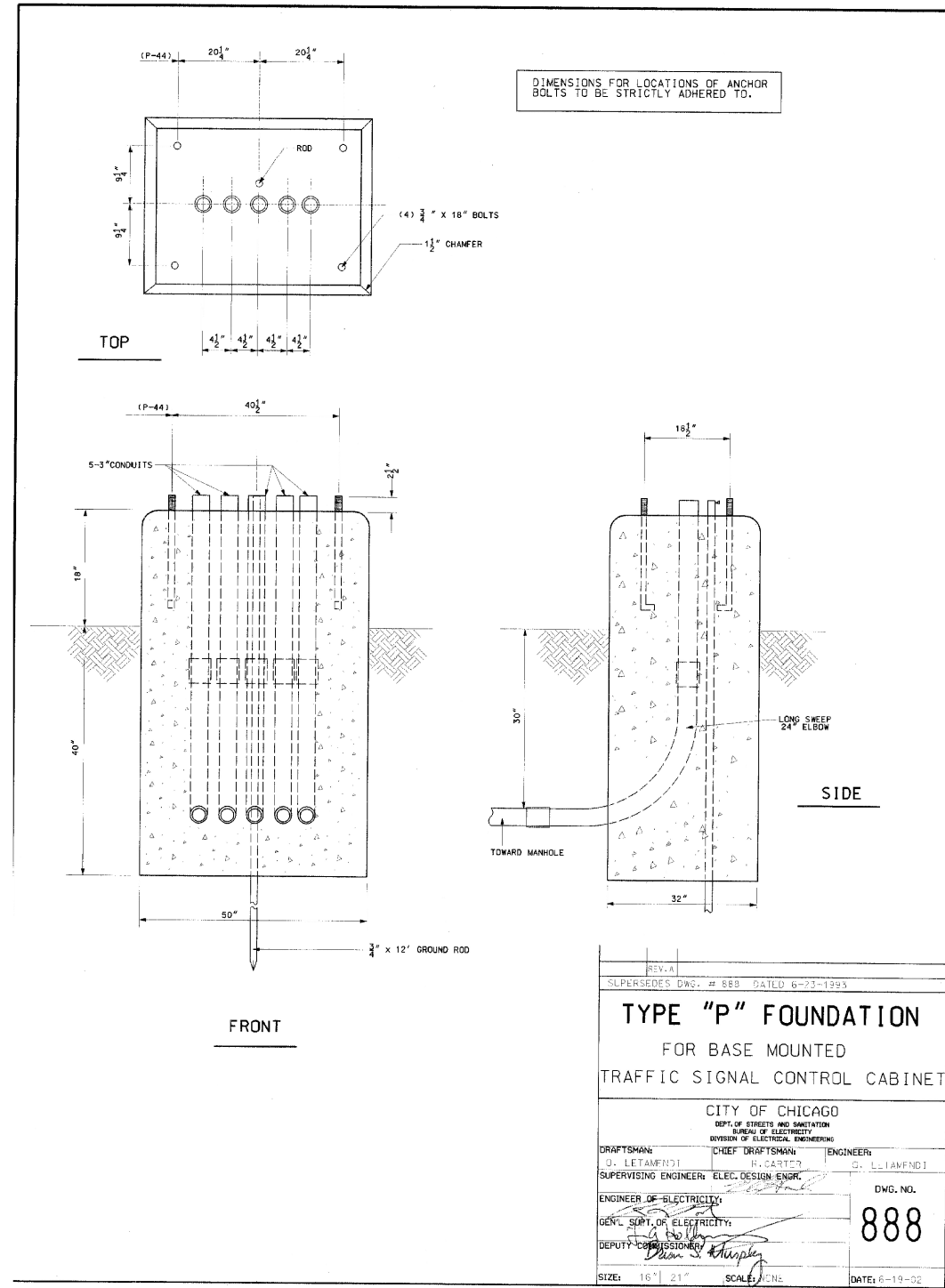
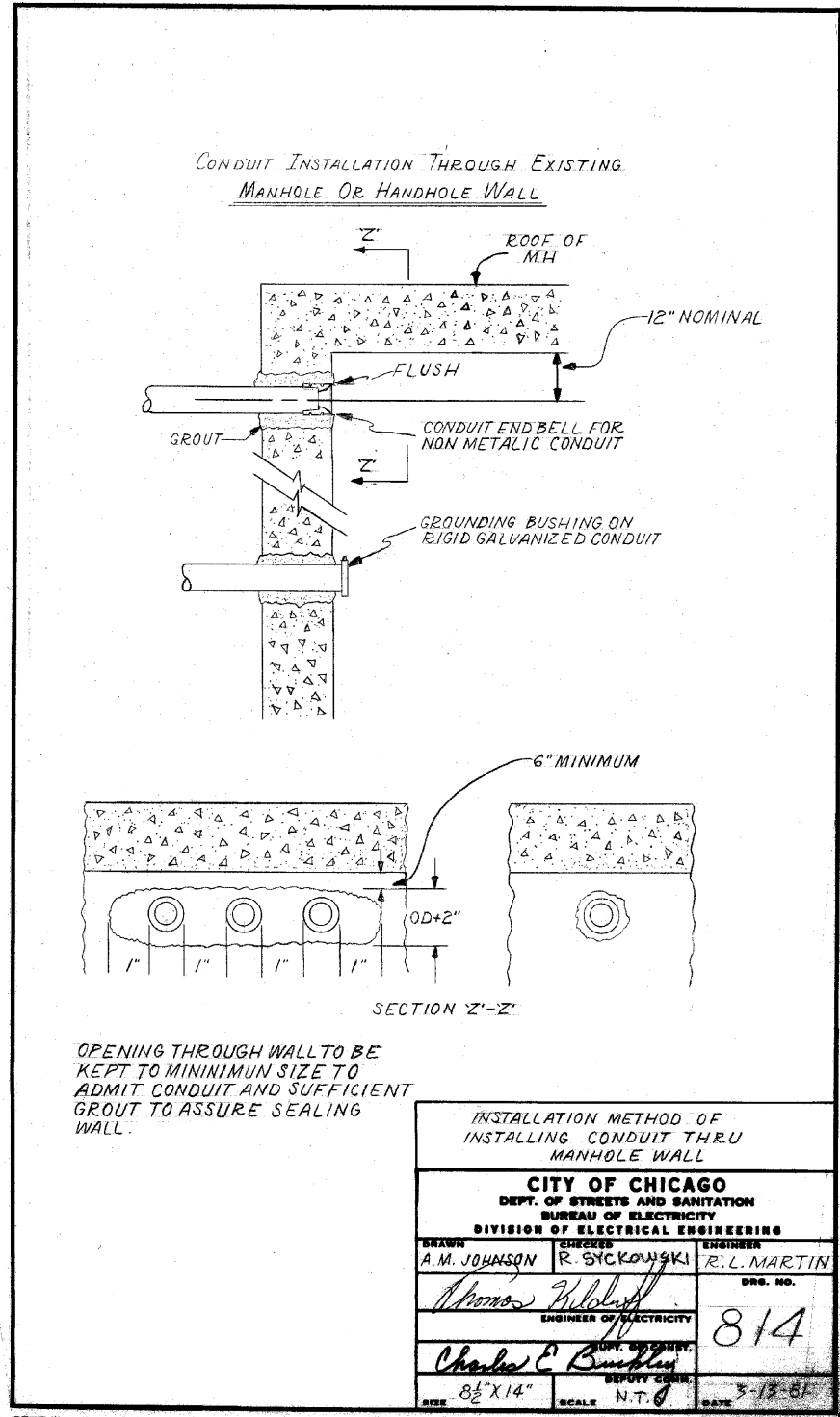
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL DETAILS

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

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 131 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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 12/6/2012



| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | DRAWN - SA | REVISED - |
| PLOT DATE = 12/6/2012 | CHECKED - BKS | REVISED - |
| | DATE - 12/07/2012 | REVISED - |

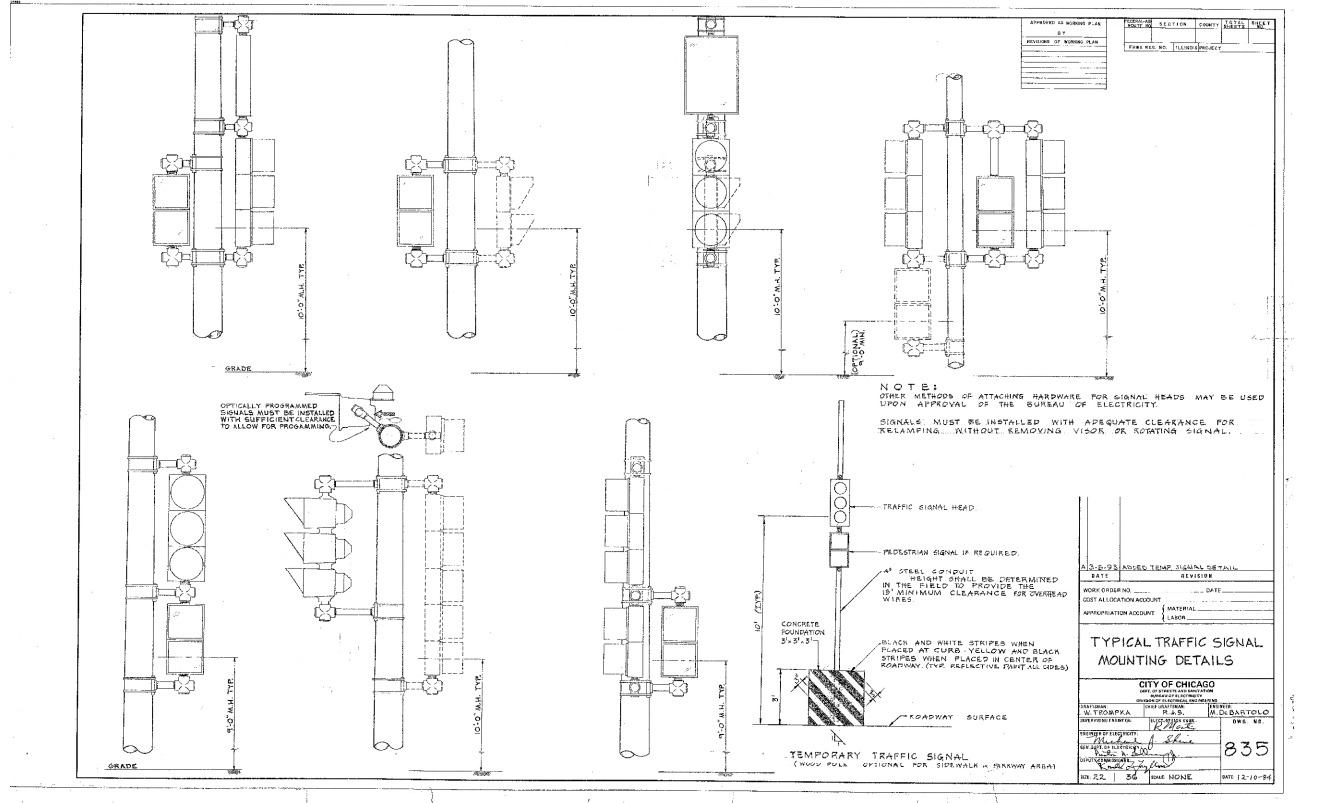
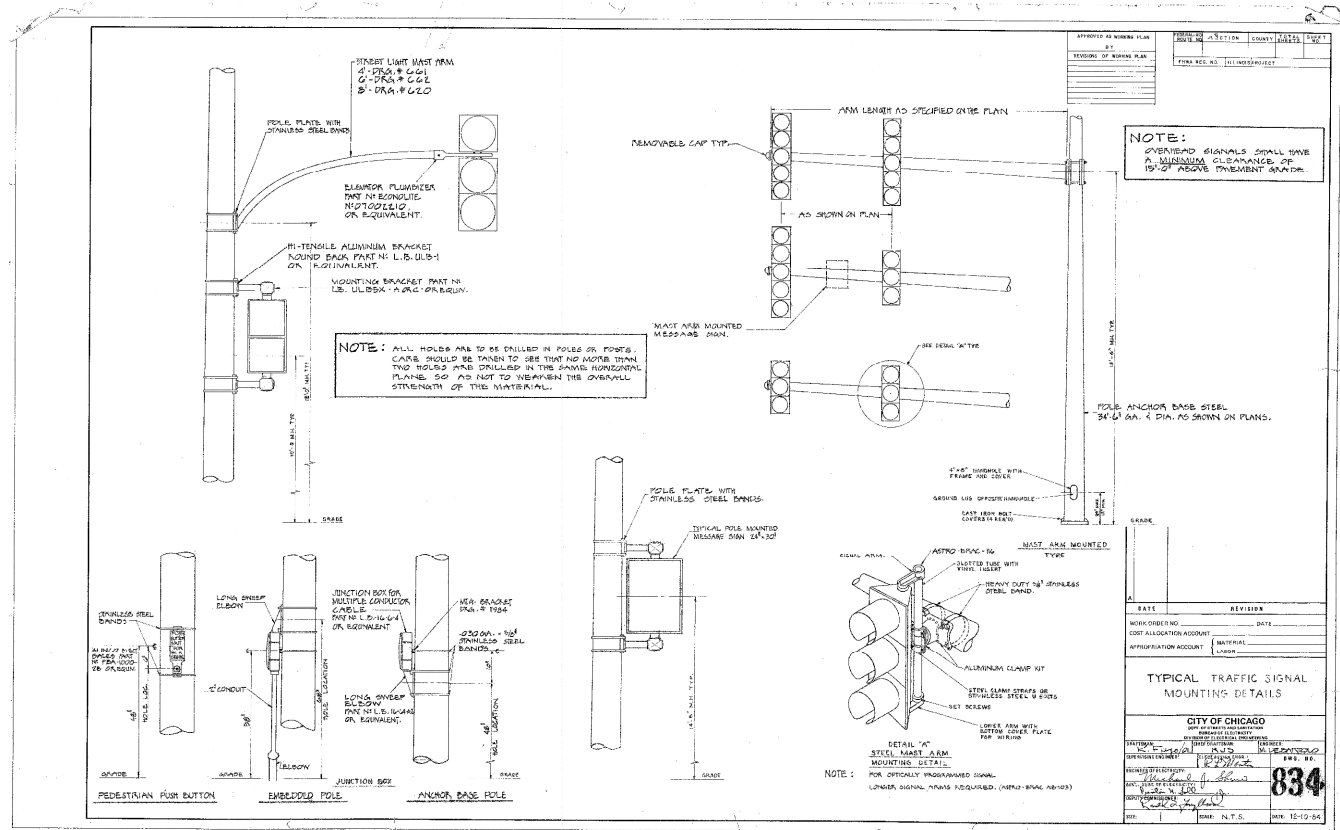
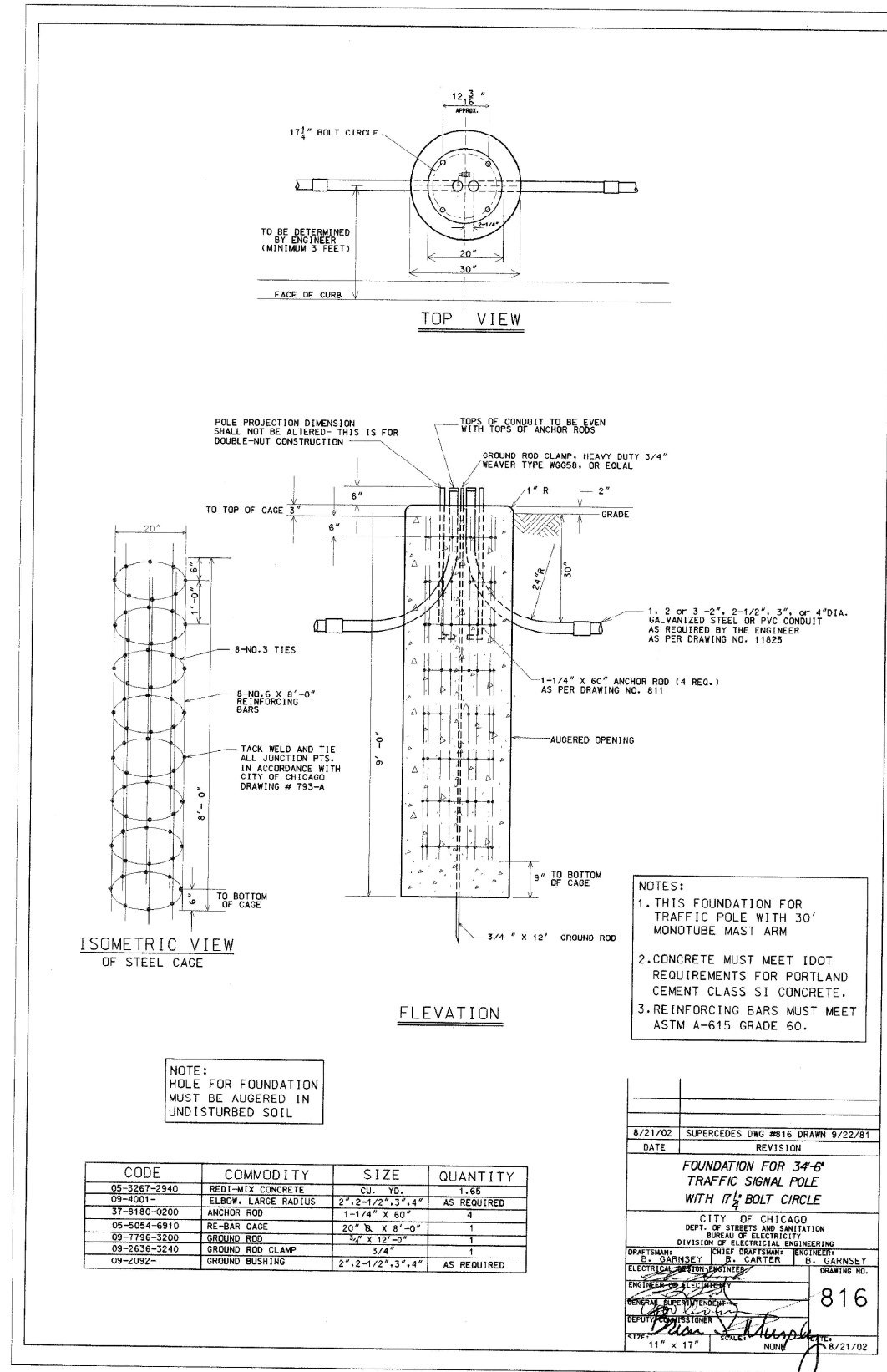


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | |
|-------------------------------|-----------|-----------|------|---------|
| TRAFFIC SIGNAL DETAILS | | | | |
| SCALE: | SHEET NO. | OF SHEETS | STA. | TO STA. |

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 132 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | CHECKED - BKS | REVISED - |
| PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

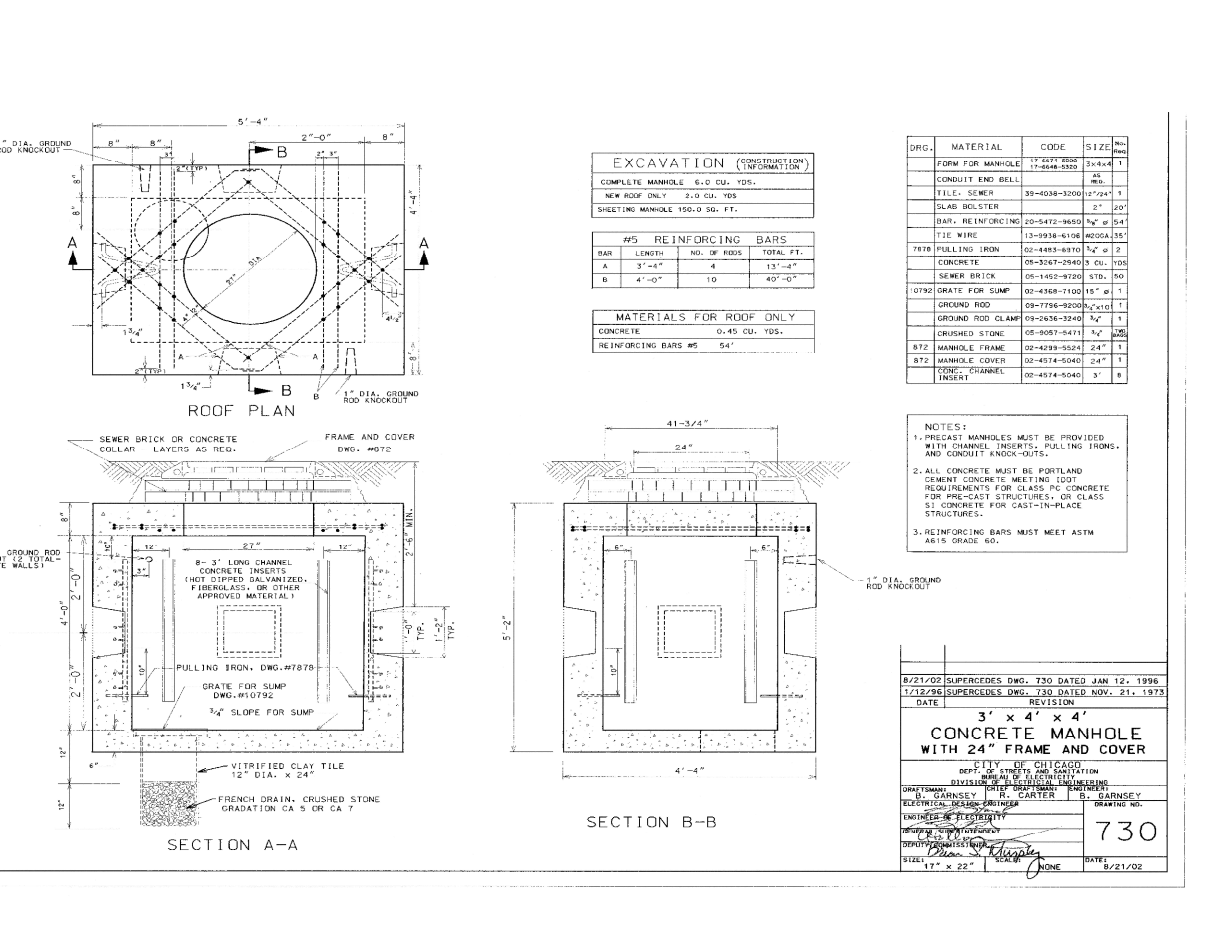
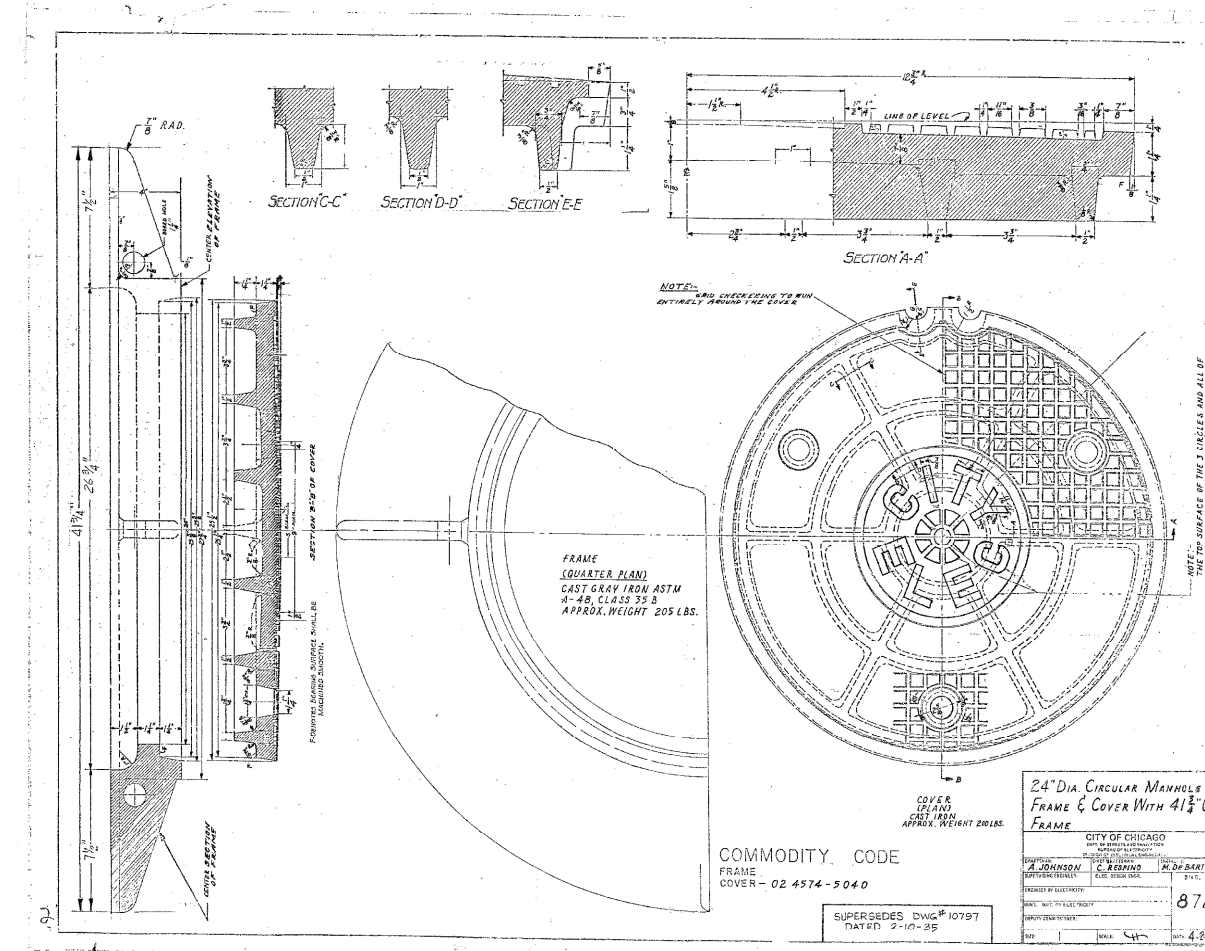
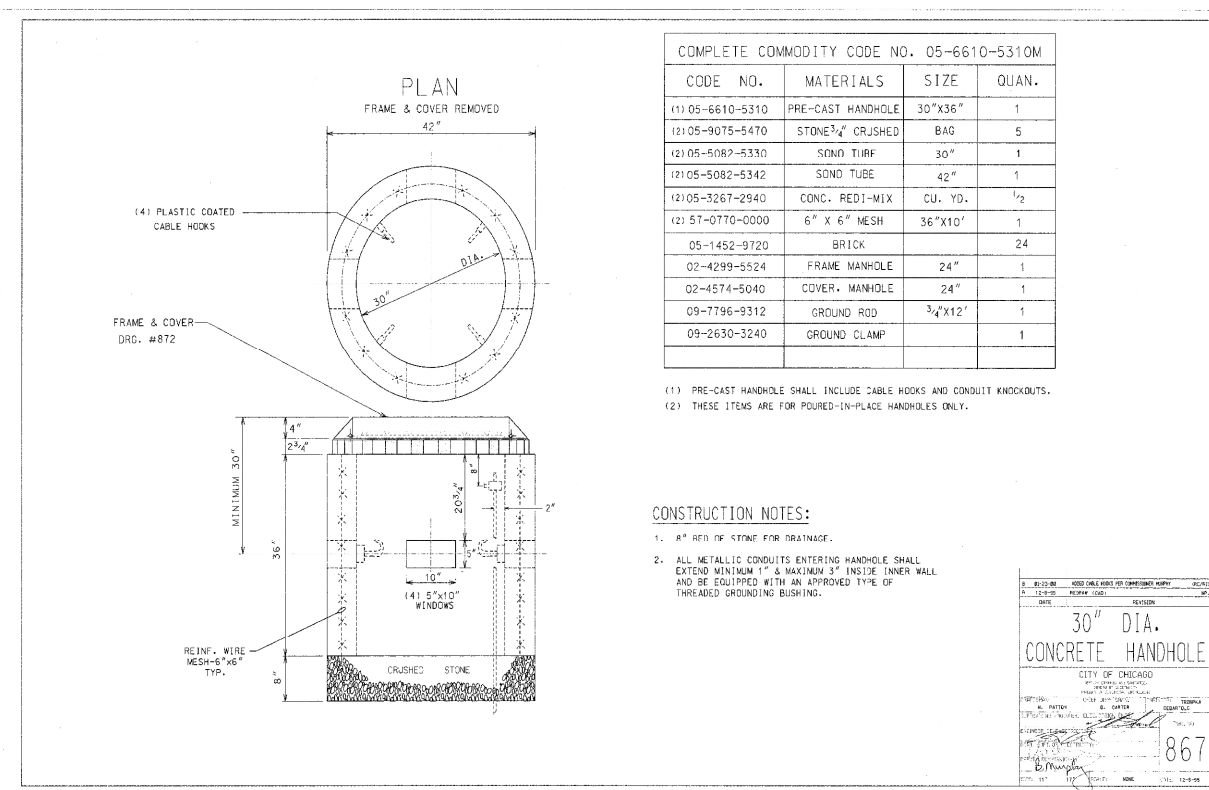
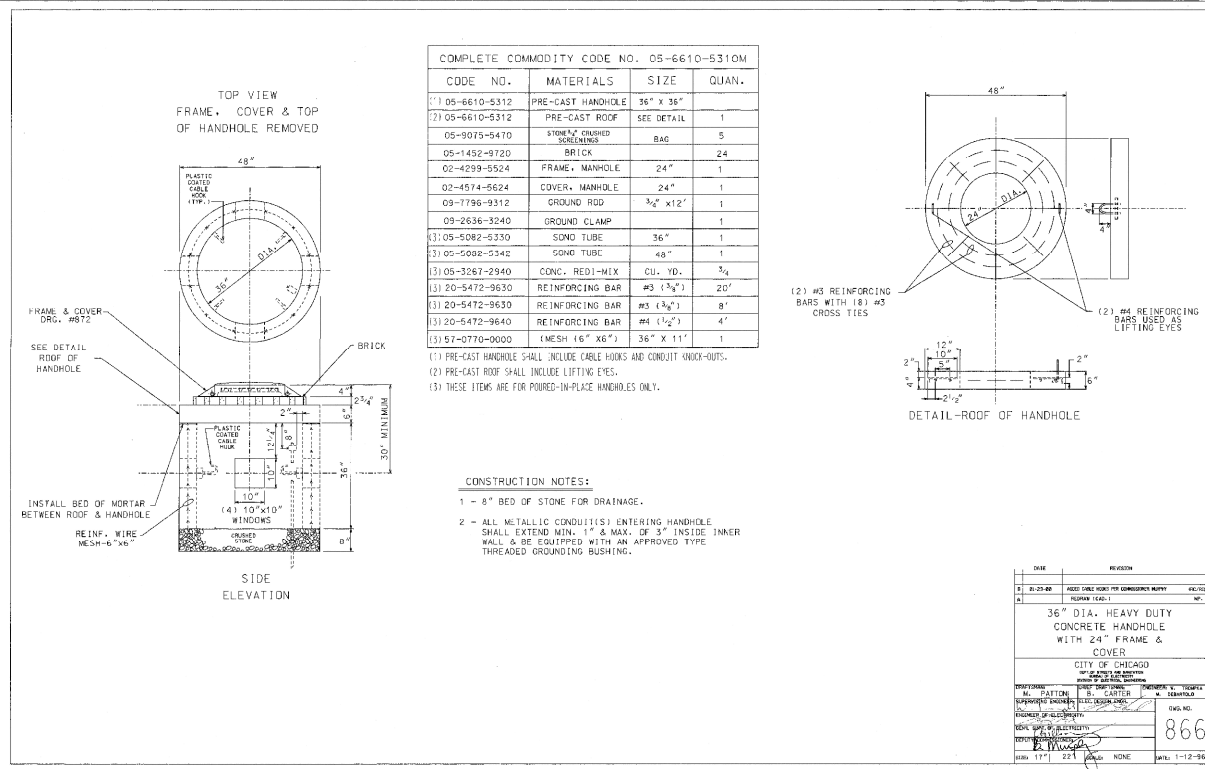


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

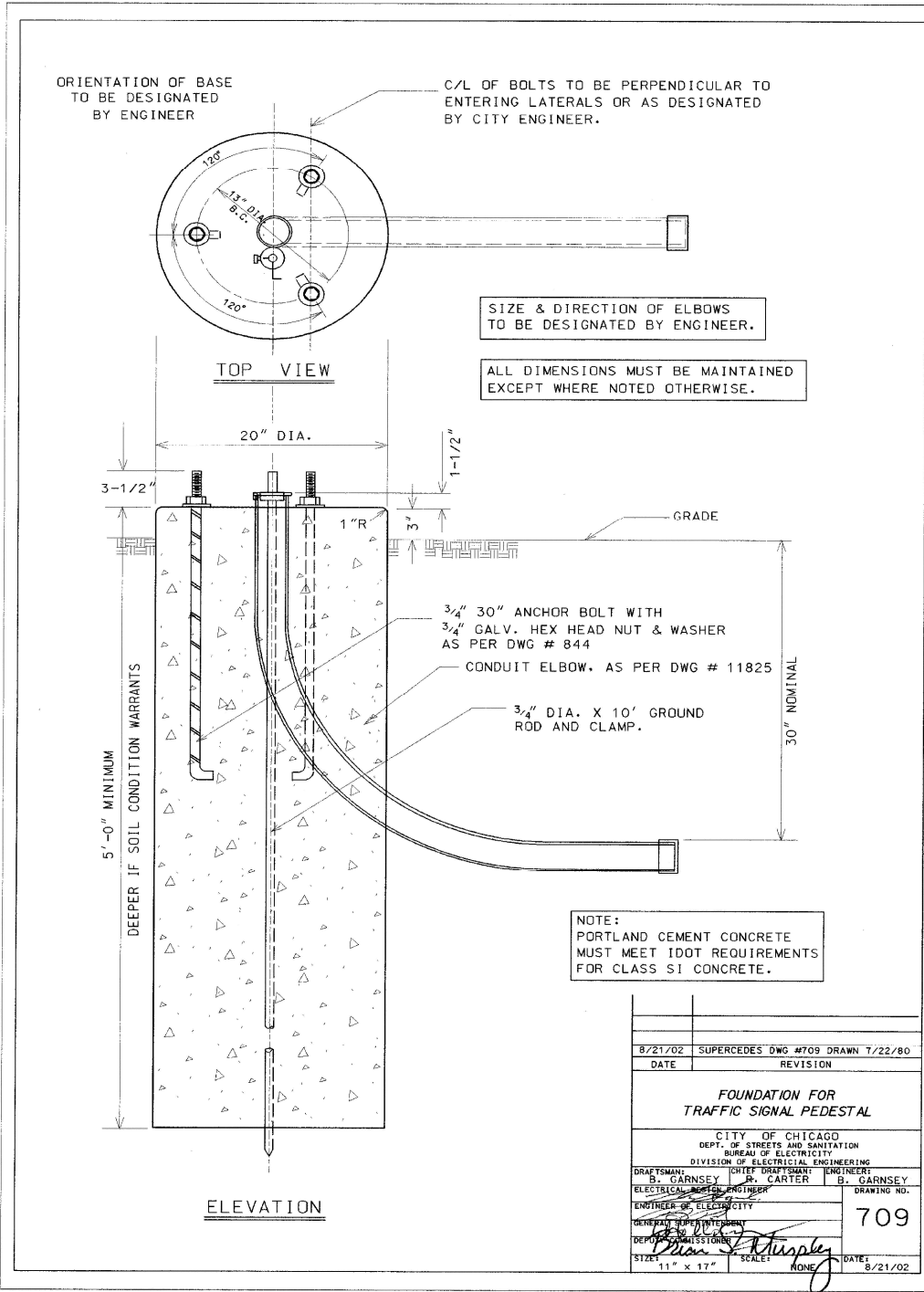
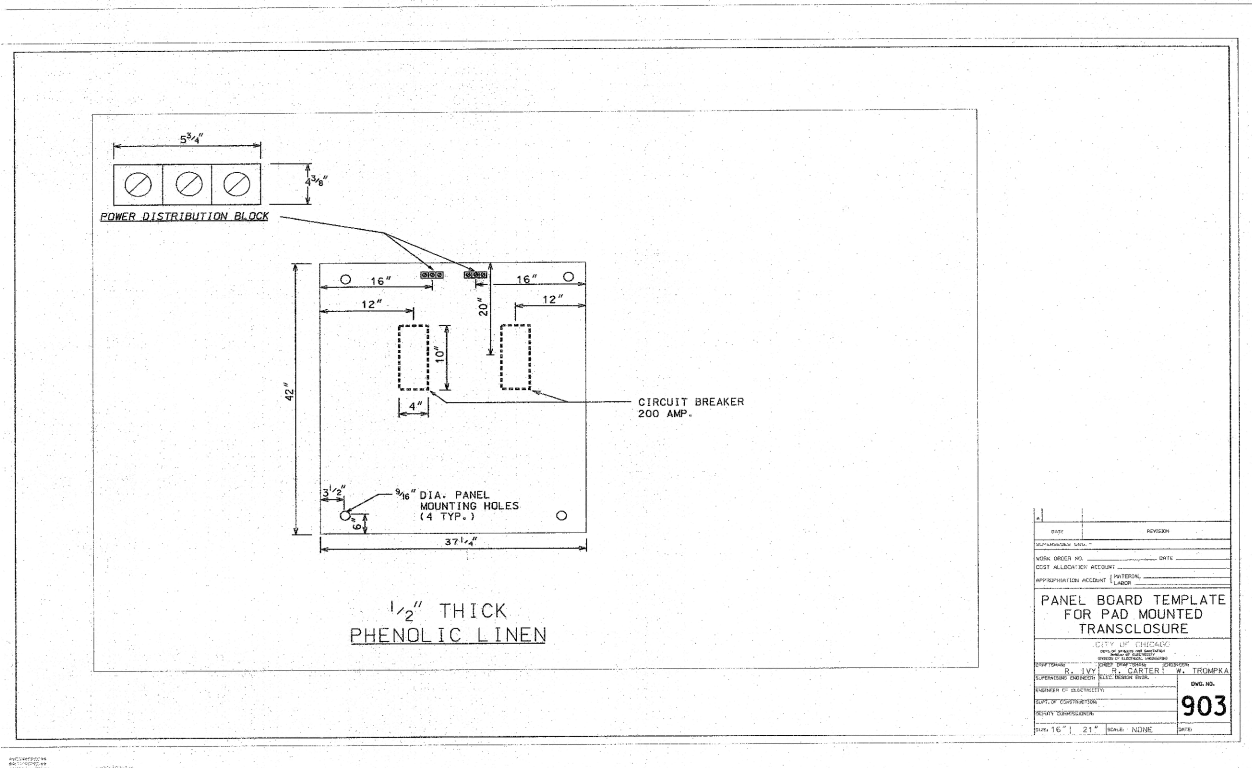
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|--------|-----------|-----------|------|---------|
| SCALE: | SHEET NO. | OF SHEETS | STA. | TO STA. |
|--------|-----------|-----------|------|---------|

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 133 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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| | | |
|--|---|--|
| <p>7 CONDUCTOR - T POINT STRIP</p> <p>7 - COMMON WHITE 6 - WHITE BLK. TR. E & W RED 5 - BLACK - SOLID - AMBER 4 - BLUE - - GREEN 3 - RED - - N & S RED 2 - ORANGE - - AMBER 1 - GREEN - - GREEN</p> | <p>14 CONDUCTOR - 10 POINT STRIP</p> <p>10 - COMMON WHITE 9 - RED WHITE TRACER 8 - ORANGE - - 7 - GREEN - - 6 - RED - BLACK TRACER 5 - ORANGE - - 4 - GREEN - - 3 - RED - SOLID 2 - ORANGE - SOLID 1 - GREEN - SOLID</p> <p>GREEN BLUE TRACER ORANGE - - SPliced & TAPED RED - - BLACK - SOLID</p> | <p>22 CONDUCTOR - CODE 19 CODE - OMIT '19-'21-'22</p> <p>1 - WH RED/BLACK TR. COMMON 2 - WH RED/GREEN TR. COMMON (SPARE) 3 - R BLACK TR. NO. BOUND 4 - A - - 5 - O - - 6 - R SOLIDS - SO. BOUND 7 - A - - 8 - O - - 9 - BK - NEON OR ARROW 10 - R BLUE TR. EAST BOUND 11 - A - - 12 - O - - 13 - R WHITE TR. WEST BOUND 14 - A - - 15 - O - - 16 - BL SOLID - SPECIAL 17 - BL AMBER TR. - 18 - BL WHITE TR. - 19 - WH RED TR. - 20 - WH SOLID - 21 - WH BLACK TR. - 22 - BK WHITE TR. -</p> |
| <p>10 CONDUCTOR - T POINT STRIP</p> <p>7 - COMMON - WHITE 6 - RED BLK. TR. E & W RED 5 - ORANGE BLK. TR. - AMBER 4 - GREEN BLK. TR. - GREEN 3 - RED - SOLID N & S RED 2 - ORANGE - - AMBER 1 - GREEN - - GREEN</p> <p>SOLID BLUE SOLID BLACK BLUE BLK. TR.</p> | <p>14 CONDUCTOR - 14 POINT STRIP</p> <p>14 - COMMON WHITE 13 - BLACK 12 - RED - BLUE TRACER 11 - ORANGE - - 10 - GREEN - - 9 - RED - WHITE TRACER 8 - ORANGE - - 7 - GREEN - - 6 - RED - BLACK TRACER 5 - ORANGE - - 4 - GREEN - - 3 - SOLID RED 2 - SOLID ORANGE 1 - SOLID GREEN</p> | <p>SPLIT CORNER</p> <p>SOLID WHITE TRACERS BLACK TRACERS BLUE TRACERS</p> |
| <p>10 CONDUCTOR - 10 POINT STRIP</p> <p>10 - COMMON - WHITE 9 - BLUE BLK. TRACER 8 - BLACK - SOLID 7 - BLUE - SOLID 6 - RED BLK. TRACER E & W RED 5 - ORANGE BLK. - AMBER 4 - GREEN BLK. - GREEN 3 - RED - SOLID N & S RED 2 - ORANGE - SOLID AMBER 1 - GREEN - SOLID GREEN</p> <p>* - SOLID BLUE - GREEN LIGHT * - SOLID BLACK - AMBER * - BLUE BLK. TR. RED IF USED</p> | <p>STRAIGHT CORNER</p> <p>N & S - SOLID COLORS E & W - BLACK TRACERS</p> | <p>TRAFFIC CONTROL SIGNALS STRIP WIRING LAYOUT</p> <p>REVISIONS</p> <p>CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL OPERATIONS</p> <p>DESIGNED BY: SA DRAWN BY: SA CHECKED BY: BKS DATE: 12/07/2012</p> <p>12268-A</p> |

| | |
|---|-----------------------------------|
| 8/21/02 | SUPERCEDES DWG MT09 DRAWN 1/22/80 |
| DATE | REVISION |
| FOUNDATION FOR TRAFFIC SIGNAL PEDESTAL | |
| CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING | |
| DRAFTSMAN: B. GARNSEY | CHECKED: J. CARTER |
| ELECTRICAL ENGINEER | ENGINEER |
| ENGINEER OF ELECTRICITY | DRAWING NO. 709 |
| GENERAL SUPERVISOR | DATE: 8/21/02 |
| SCALE: NONE | |



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL DETAILS

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

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 135 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

s:\projects\3010_stony_island_feeder - bbe\project work\disciplines\traffic_signals\sheet\0160J12-sht-TSD-07.dgn 9:32:15 AM 12/6/2012

PROVIDE SUFFICIENT MAST ARM RISE (3' MIN.) SO THAT MAST ARM REMAINS SLIGHTLY ABOVE HORIZONTAL WHEN LOADED WITH A 5 SECTION SIGNAL AT THE FAR END AND A 3 SECTION SIGNAL APPROXIMATELY 10' FROM FAR END.

SEE DETAIL I
SEE DETAIL II

PROVIDE 1/2" - 1 1/2" DIA. OPENING IN BOTTOM OF MAST ARM APPROXIMATELY 3' FROM CLAMP. PROVIDE HANGING POINT IN OPENING FOR WIRE PROTECTION.

SEE "ARM DATA" TABLE

POLE SHAFT EXISTING IN PLACE OR PROVIDED BY OTHERS

INDICATES MAX. AND MIN. I. D. RANGE FOR WIRE CLAMP

0.00 - 0.00

I. D. TAG TO BE MARKED ON THE TOP OF THE POLE AS INDICATED, USING A "Grip-Mark" FASTENER.

DETAIL I
I. D. TAG

| SIGNAL ARM ATTACHMENT DATA | | | | | |
|----------------------------|--------|--------|--------|--------|---------------|
| CLAMP RANGE | "A" | "B" | "C" | "D" | "E" |
| 7.45" - 7.95" | 7.25" | 9.92" | 10.80" | 10.32" | 1.00" X 7.50" |
| 8.45" - 8.95" | 9.00" | 10.66" | 13.06" | 12.50" | 1.00" X 8.00" |
| 9.95" - 10.45" | 10.25" | 12.66" | 15.30" | 13.50" | 1.25" X 8.50" |

ARM DATA

| CLAMP RANGE (INCHES) | POLE END (INCHES) | SIGNAL END (INCHES) | LENGTH (FEET) | GAUGE | WEIGHT (POUNDS) | TEST LOAD (POUNDS) | MAX. DEFLECTION (INCHES) |
|----------------------|-------------------|---------------------|---------------|-------|-----------------|--------------------|--------------------------|
| 7.45-7.95 | 7.0 | 4.76 | 16 | 7 | 241 | 1700 | 6.5 |
| 7.45-7.95 | 7.0 | 4.20 | 20 | 7 | 214 | 1300 | 12.0 |
| 7.45-7.95 | 7.0 | 3.36 | 20 | 7 | 315 | 1000 | 24.0 |
| 8.45-8.95 | 8.0 | 3.80 | 30 | 7 | 409 | 1100 | 29.0 |
| 9.95-10.45 | 9.0 | 4.10 | 35 | 7 | 529 | 1200 | 36.0 |
| 9.95-10.45 | 9.0 | 3.40 | 40 | 7 | 559 | 1000 | 52.0 |
| 9.95-10.45 | 10.0 | 3.64 | 44 | 7 | | 1200 | 57.0 |

NOTES:

- TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A555 GRADE C, 60,000 PSI MINIMUM YIELD STRENGTH WITH A LINEAR TAPER -0.14"/FT.
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
- ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESIGNATION: A153
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
- ARM ASSEMBLY TO BE DEGREASED, CLEANED, CHEMICALLY PRETREATED, GIVEN AN EXTERIOR THERMOSETTING POLYESTER POWDER COAT, AND AN INTERIOR THERMOPLASTIC HYDRO-CARBON RESIN POWDER COAT. ALL PAINTING TO BE IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 8, PAINTING.
- MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
- HOLE IN CLAMP TO BE 4.0" (MIN.) - HOLE TO BE GRIND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.

0.13" X 1.50" COTTER PIN (HOLE SET IN PLACE)

(4) SIZE "6" HEX HEAD BOLTS WITH (1) HEX NUTS & WASHERS

HOLE IN POLE FIELD DRILLED FOR 0.63" X 2" HEX BOLT

0.36" THICK PLATE

SEE NOTE 8

0.13" X 1.50" COTTER PIN (HOLE SET IN PLACE)

DETAIL II
ARM ATTACHMENT

870

FIBER OPTIC PATCH PANEL FOR CITY OF CHICAGO TRAFFIC SIGNAL CONTROLLER

THIS PANEL WAS SUPPLIED FOR C.B.D. INTERCONNECT AND IS TO BE THE STANDARD FOR ALL CITY INSTALLATIONS

FIBER OPTIC PATCH PANEL
CITY OF CHICAGO
CHIEF ENGINEER: ROBERT CARTER
ENGINEER: WALTER TROMPER
DWG. NO. 909
DATE: 11-01-02

ISOMETRIC VIEW OF STEEL CAGE

ELEVATION

NOTES:

- THIS FOUNDATION FOR TRAFFIC POLE WITH 36", 40", & 44" MONOTUBE
- CONCRETE MUST MEET DOT REQUIREMENTS FOR PORTLAND CEMENT CLASS S1 CONCRETE.
- REINFORCING BARS MUST MEET ASTM A-615 GRADE 60.

| CODE | COMMODITY | SIZE | QUANTITY |
|--------------|---------------------|-----------------------|-------------|
| 05-1257-2940 | REDI-MIX CONCRETE | CU. YD. | 2.20 |
| 04-4001 | ELBOW, LARGE RADIUS | 2" X 2" X 3" X 4" | AS REQUIRED |
| 31-8180-0380 | ANCHOR ROD | 1-1/2" X 40" | 1 |
| 05-6084-0310 | PRE-BEAR CAGE | 20" DIA. X 8'-0" | 1 |
| 05-7795 | GROUND ROD | 3/4" X 18'-0" | 1 |
| 05-2092 | GROUND BUSHING | 2" X 1-1/2" X 3" X 4" | AS REQUIRED |

FOUNDATION FOR 36" TRAFFIC SIGNAL POLE WITH 16" BOLT CIRCLE

871

TOP VIEW
FRAME, COVER & TOP OF HANDHOLE REMOVED

SIDE ELEVATION

| CODE NO. | MATERIALS | SIZE | QUAN. |
|-----------------|----------------------------------|------------|-------|
| 01-05-6610-5312 | PRE-CAST HANDHOLE | 36" X 36" | 1 |
| 01-05-6610-5312 | PRE-CAST 30" X 30" X 4" CONCRETE | SEE DETAIL | 2 |
| 05-9015-5470 | STONE 3/4" CRUSHED | BAG | 5 |
| 05-1452-9120 | BRICK | | 24 |
| 02-4293-5024 | FRAME, MANHOLE | 30" | 1 |
| 02-4574-5024 | COVER, MANHOLE | 30" | 1 |
| 09-7798-9312 | GROUND ROD | 3/4" X 12" | 1 |
| 09-2636-3240 | GROUND CLAMP | | 1 |
| 11-05-5082-5330 | SONO TUBE | 36" | 1 |
| 11-05-5082-5342 | SONO TUBE | 48" | 1 |
| 11-05-3267-2940 | CONC. REDI-MIX | CU. YD. | 1 |
| 11-20-5472-9630 | REINFORCING BAR | #3 (3/8") | 40' |
| 11-20-5472-9630 | REINFORCING BAR | #3 (3/8") | 16' |
| 11-20-5472-9640 | REINFORCING BAR | #4 (1/2") | 8' |
| 11-57-0770-0000 | (MESH 16" X 6") | 36" X 11" | 1 |

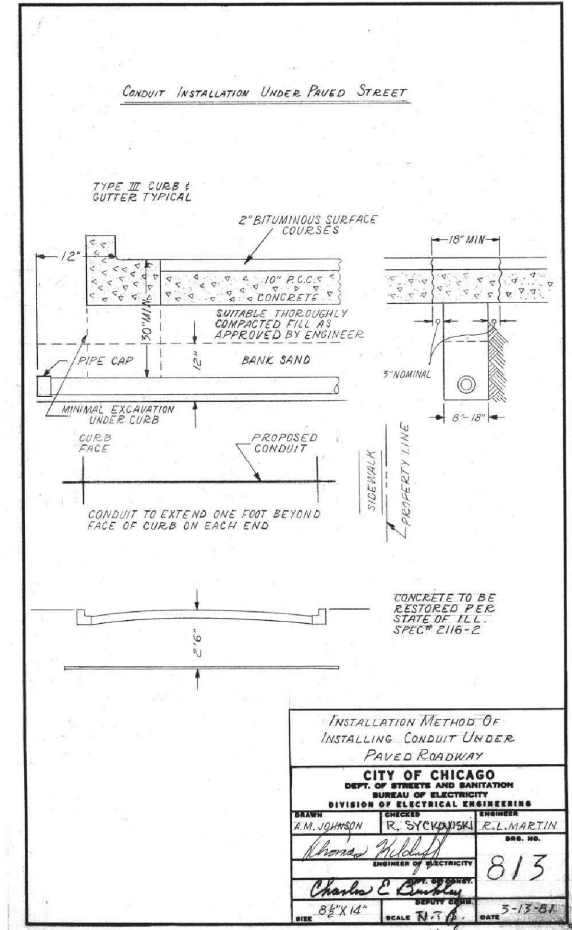
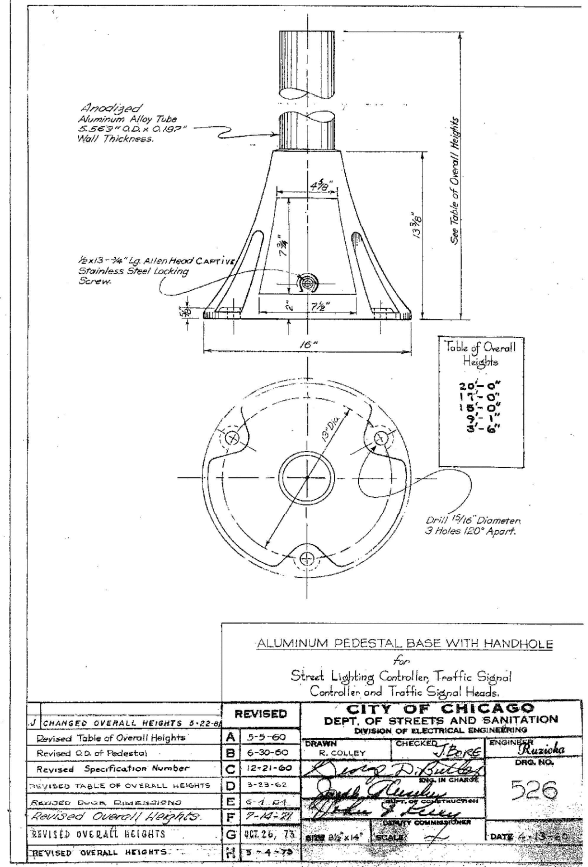
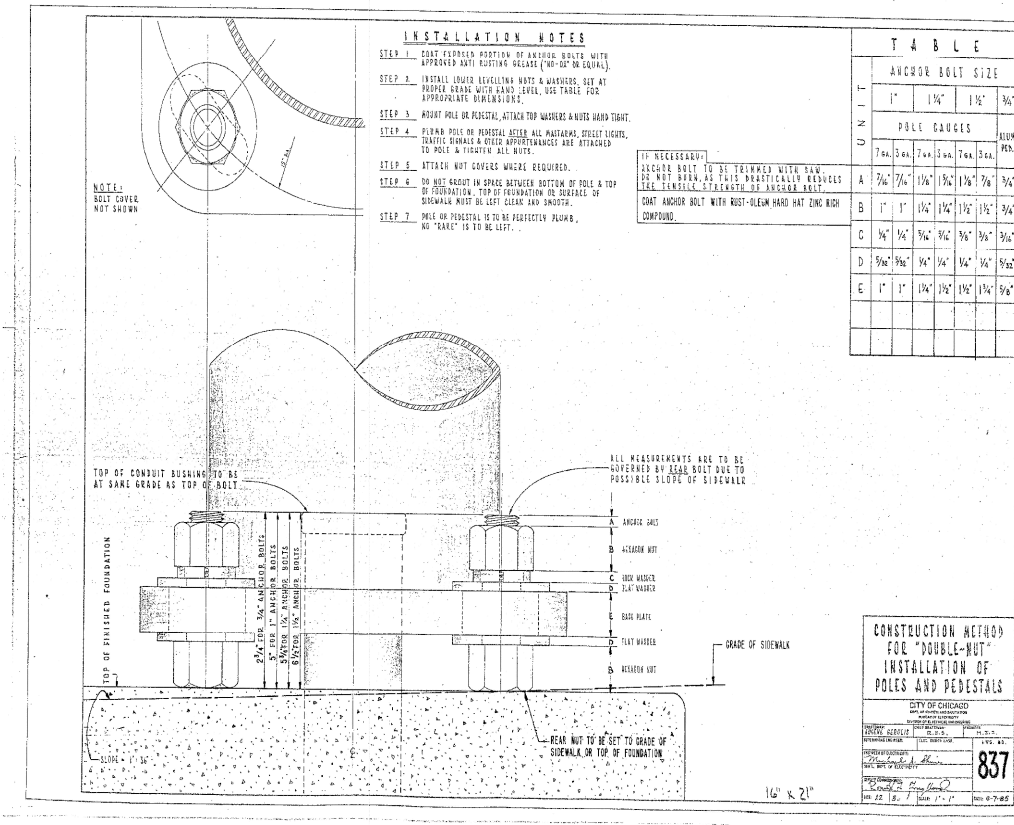
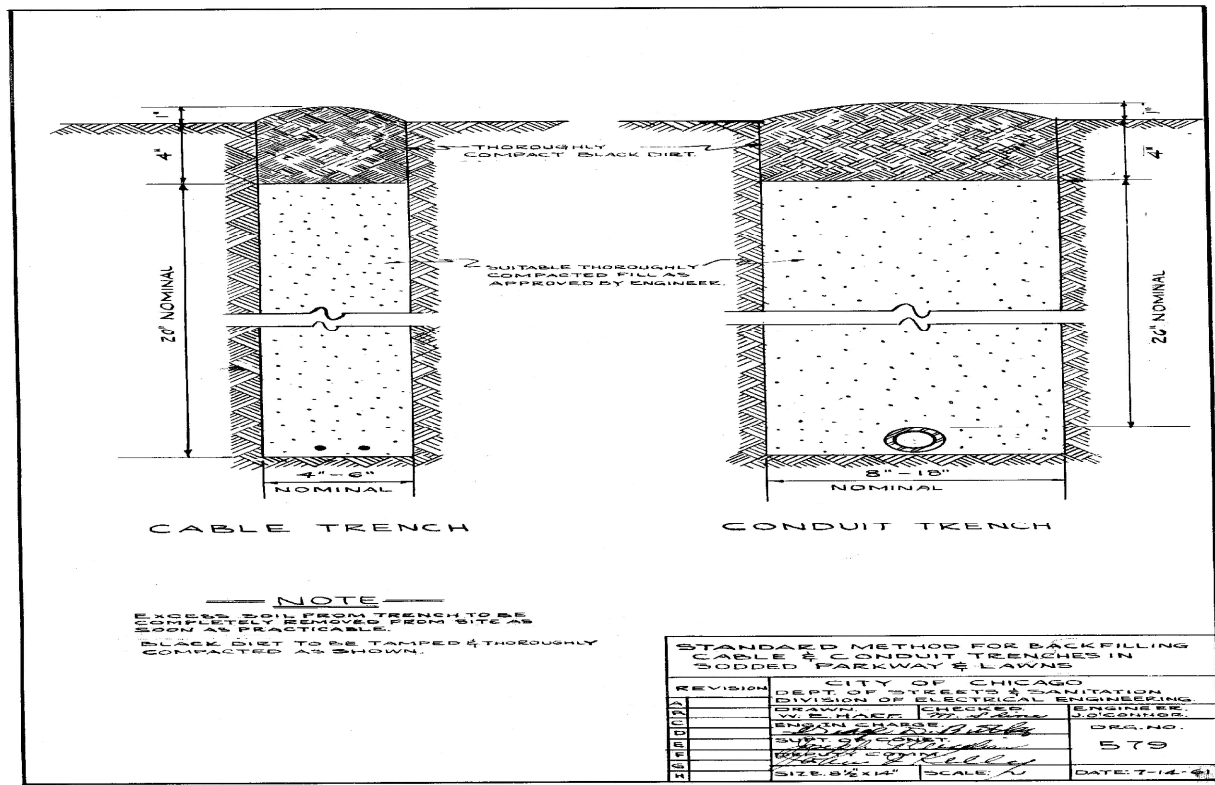
CONSTRUCTION NOTES:

- 8" BED OF STONE FOR DRAINAGE.
- ALL METALLIC CONDUITS ENTERING HANDHOLE SHALL EXTEND MIN. 1' & MAX. OF 3" INSIDE INNER WALL & BE EQUIPPED WITH AN APPROVED TYPE THREADED GROUNDING BUSHING.

DETAIL-ROOF & FLOOR OF HANDHOLE

871

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| | | |
|----------------------------|-------------------|-----------|
| USER NAME = sadhikari | DESIGNED - SA | REVISED - |
| PLOT SCALE = 50.000' / IN. | DRAWN - SA | REVISED - |
| PLOT DATE = 12/6/2012 | CHECKED - BKS | REVISED - |
| | DATE - 12/07/2012 | REVISED - |



**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

| | | | | |
|---------------------------|-------------|--------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 137 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60V61 | |

IDOT LEGEND

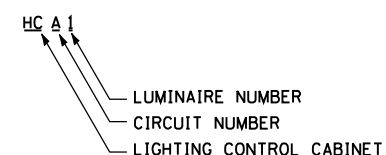
- PROPOSED LIGHTING UNIT
47.5' M.H., 6' DAVIT ARM., WITH 400W, 240V HPS LUMINAIRE, TYPE M-C-II, 6 AMP FUSE
- PROPOSED LIGHTING UNIT
47.5' M.H., 15' DAVIT ARM., WITH 400W, 240V HPS LUMINAIRE, TYPE M-C-II, 6 AMP FUSE
- TEMPORARY LIGHTING UNIT
50' M.H., 15' MAST ARM., WITH 400W, 240V HPS LUMINAIRE, TYPE M-C-III, 6 AMP FUSE
- EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED TO IDOT
- TEMPORARY LIGHTING UNIT TO BE LEFT IN PLACE AT CONCLUSION OF CONTRACT
50' M.H., 15' MAST ARM, 400W HPS LUMINAIRE
- EXISTING LIGHTING UNIT
- RIGID GALVANIZED STEEL CONDUIT SLEEVE
BELOW PAVEMENT, SIZE AS INDICATED
- EXISTING UNIT DUCT
- UNIT DUCT, AS SPECIFIED IN PLANS
- AERIAL CABLE, AS SPECIFIED IN PLANS
- EXISTING AERIAL CABLE
- PROPOSED LIGHTING CONTROLLER CABINET,
240/480V, SINGLE PHASE, 3 WIRE
- WOOD POLE, SIZE AS NOTED
- PROPOSED ELECTRIC UTILITY SERVICE CONNECTION
- EXISTING ELECTRIC UTILITY SERVICE CONNECTION
- GROUND ROD, 5/8" x 10'
- JUNCTION BOX, SIZE AND TYPE AS NOTED
- EXISTING LIGHTING CONTROLLER CABINET

| ABBREVIATIONS | |
|---------------|------------------------------|
| ABBREVIATION | DESCRIPTION |
| AC | ALTERNATING CURRENT |
| A/C | AERIAL CABLE |
| AFG | ABOVE FINISHED GRADE |
| CB | CIRCUIT BREAKER |
| CKT | CIRCUIT |
| CM | CENTIMETER |
| CNC | COILABLE NONMETALLIC CONDUIT |
| CT | CURRENT TRANSFORMER |
| CP | CONTROL PANEL |
| DIA | DIAMETER |
| DMS | DIGITAL MESSAGE SIGN |
| E | EXISTING UNIT TO REMAIN |
| ECA | ELECTRIC CABLE ASSEMBLY |
| FT | FEET OR FOOT |
| FND MET | FOUNDATION METAL |
| FU | FUSE |
| GND | GROUND |
| HID | HIGH INTENSITY DISCHARGE |
| HPS | HIGH PRESSURE SODIUM |
| JB | JUNCTION BOX |
| KVA | KILOVOLT-AMPERE |
| KW | KILOWATTS |
| M | METER |
| M.A. | MAST ARM |
| M.H. | MOUNTING HEIGHT |
| NO. | NUMBER |
| PH | PHASE |
| RGC | RIGID GALVANIZED CONDUIT |
| RGS | RIGID GALVANIZED STEEL |
| STA | STATION |
| T | TEMPORARY LIGHTING UNIT |
| TB | TRANSFORMER BASE |
| TC | TRIPLEXED CABLE |
| TMP | TEMPORARY |
| UD | UNIT DUCT |
| WP | WOOD POLE |
| XFMR | TRANSFORMER |

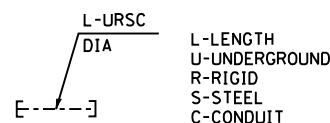
GENERAL NOTES:

- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL SPECIFICATIONS (LATEST EDITION), AS WELL AS THE NATIONAL ELECTRICAL CODE.
- ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEMS.
- WHEREVER TEMPORARY AERIAL CABLE IS REQUIRED TO CROSS AN EXISTING AND/OR PROPOSED ROADWAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 20 FEET OF VERTICAL CLEARANCE OVER THE ROADWAY AT ALL TIMES.
- UNLESS NOTED OTHERWISE, ALL TEMPORARY LIGHTING EQUIPMENT SHALL BE LEFT IN PLACE AT THE CONCLUSION OF THE CONTRACT AS DENOTED ON THE INTERIM LIGHTING PLAN, AND ITS MAINTENANCE TRANSFERRED TO IDOT. THE INTERIM LIGHTING WILL BE REMOVED AND REPLACED WITH A PERMANENT LIGHTING SYSTEM IN A FUTURE CONTRACT.
- THE EXISTING IDOT LIGHT POLES, MAST ARMS, LUMINAIRES AND BREAKAWAY DEVICES BEING REMOVED SHALL BE SALVAGED TO IDOT.
- THE EXISTING CDOT LIGHT POLES, MAST ARMS, LUMINAIRES AND BREAKAWAY DEVICES BEING REMOVED SHALL BE SALVAGED TO CDOT.
- GROUND RODS ARE INCLUDED IN THE COST OF THE ITEM FOR WHICH THEY ARE INSTALLED, INCLUDING WOOD LIGHT POLES.
- THE CONTRACTOR SHALL COORDINATE THE REMOVAL/INSTALLATION OF LIGHTING EQUIPMENT WITH THE CONSTRUCTION STAGING SO THAT AT NO TIME SHALL THE ROADWAY IS LEFT UNLIT.
- ALL PROPOSED TEMPORARY WOOD POLES AND APPURTENANCES ARE SHOWN DIAGRAMMATICALLY ON THE PLANS, THE ACTUAL LOCATIONS IN THE FIELD SHALL BE APPROVED BY THE ENGINEER.
- WORK SHALL BE PERFORMED WITH ALL APPLICABLE LOCAL AND NATIONAL ELECTRIC CODES, THE IDOT STANDARD SPECIFICATIONS (LATEST EDITION), IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
- CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION (CDOT) SUPPLEMENTAL SPECIFICATIONS AMEND AND SUPERSEDE THE LATEST PROVISIONS OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE CONSTRUED TO BE A PART THEREOF, SUPERSEDING ANY CONFLICTING PROVISIONS THEREFORE APPLICABLE TO THE WORK WITHIN THE JURISDICTION OF THE CITY OF CHICAGO.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR FOR LOCATES OF IDOT CONDUITS AND CABLES.

CALL OUT LEGEND:



CALL OUT SAMPLES:



CDOT LEGEND

- PROPOSED 400W HPS MSIII LUMINAIRE WITH
12' STEEL TRUSS MAST ARM ATTACHED
TO TRAFFIC SIGNAL COMBINATION POLE
- EXISTING STREET LIGHT POLE WITH 310W HPS
LUMINAIRE TO REMAIN IN PLACE
- EXISTING STREET LIGHT POLE, MAST ARM, AND
LUMINAIRE TO BE REMOVED AND SALVAGED TO CDOT

IDOT LIGHTING BILL OF MATERIALS

| ITEM | UNIT | QUANTITY |
|--|--------|----------|
| CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC | FOOT | 1517 |
| UNIT DUCT, 600V, 3-1/C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE | FOOT | 437 |
| ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 | FOOT | 1603 |
| ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2 | FOOT | 4809 |
| AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE | FOOT | 2858 |
| LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT | EACH | 9 |
| LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 6 FT. DAVIT ARM | EACH | 7 |
| LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM | EACH | 2 |
| LIGHT POLE FOUNDATION, 24" DIAMETER | FOOT | 19 |
| BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE | EACH | 2 |
| REMOVAL OF LIGHTING UNIT, SALVAGE | EACH | 26 |
| REMOVAL OF POLE FOUNDATION | EACH | 26 |
| TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM | EACH | 12 |
| TEMPORARY WOOD POLE, 60 FT., CLASS 4 | EACH | 1 |
| TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, 400 WATT | EACH | 12 |
| LUMINAIRE SAFETY CABLE ASSEMBLY | EACH | 9 |
| MAINTENANCE OF LIGHTING SYSTEM | CAL MO | 8 |
| JUNCTION BOX, NON-METALLIC, EMBEDDED IN STRUCTURE, 21" X 11" X 8" | EACH | 2 |

CDOT LIGHTING BILL OF MATERIALS

| ITEM | UNIT | QUANTITY |
|--|-------|----------|
| REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 2160 |
| FUSE, IN-LINE, 10 AMP | EACH | 12 |
| CABLE SPLICE SPECIAL | EACH | 6 |
| ELECTRICAL EQUIPMENT REMOVAL AND SALVAGE | EACH | 2 |
| INTERCEPT EXISTING CONDUIT | EACH | 7 |
| MAINTENANCE OF EXISTING LIGHTING SYSTEM COMPLETE | L SUM | 1 |
| BREAK DOWN STREET LIGHT FOUNDATION (CDOT) | EACH | 2 |
| CONDUIT IN TRENCH, 2" PVC, SCHEDULE 80, CDOT | FOOT | 90 |
| ELECTRIC CABLE IN CONDUIT, TRIPLEX, 2 1/C NO.6, 1/C NO.8 (CDOT) | EACH | 874 |
| LUMINAIRE, STREET LIGHT, HPS, 400 WATT, 240 VOLT, ARTERIAL, SEMI-CUTOFF (CDOT) | EACH | 6 |
| MAST ARM, TRUSS, STEEL, ARTERIAL, 12 FOOT (CDOT) | EACH | 6 |
| TRENCH AND BACKFILL FOR ELECTRICAL CONDUIT (CDOT) | FOOT | 578 |
| UNDERGROUND CONDUIT, SCHEDULE 40 PVC, 2" DIAMETER, CDOT | FOOT | 488 |



| PROPOSED | PRESENT | |
|----------|---------|--|
| | | SIGNAL, TRAFFIC 3 SECTION 1-WAY ADJUSTABLE, 12" OR AS NOTED |
| | | SIGNAL, TRAFFIC 3 SECTION 2-WAY ADJUSTABLE, 12" OR AS NOTED |
| * | | SIGNAL OPTICALLY PROGRAMMED |
| | | SIGNAL, PEDESTRIAN, DON'T WALK/WALK |
| | | SIGNAL FACE ARROW, 12" COLOR AS NOTED |
| | | SIGNAL FACE, 1 SECTION YELLOW/GREEN ARROW DUAL INDICATION |
| | | PUSH BUTTON, PEDESTRIAN |
| | | SIGN, ILLUMINATED, WITH MESSAGE OR SYMBOL AS INDICATED |
| | | MAST ARM, MONOTUBE, STEEL, SIZE AS INDICATED (SEE DWG. #870) |
| | | MAST ARM, TRUSS, ALUMINUM, SIZE AS INDICATED |
| | | CONTROLLER, TRAFFIC SIGNAL, PEDESTAL OR BASE MOUNTED AS INDICATED |
| | | CONTROLLER, STREET LIGHTING, PEDESTAL OR BASE MOUNTED. (DWG. 876 or 880) |
| | | CONTROLLER, STREET LIGHTING, POLE MOUNTED (DWG. #11940) |
| | | POLE, WOOD, COMMONWEALTH EDISON COMPANY, SERVICE |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 7 GA. 10" DIA. AND 15" B.C. 24" X 9" FND. W/ 1 1/4" ANCHOR RODS DRG. #818. |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA. 10" DIA. AND 15" B.C. 24" X 9" FND. W/ 1 1/4" ANCHOR RODS DRG. #818 (16', 20' or 26' M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 11" DIA. AND 17 1/4" B.C. 30" X 9" FND. W/ 1 1/4" ANCHOR RODS DRG. #816. (30' M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE 34'-6", 3 GA. 12 1/2" DIA. AND 16 1/2" B.C. 30" X 11" FND. W/ 1 1/2" ANCHOR RODS DRG. #817. (35', 40' or 44' M.A.) |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA. 10" DIA., WITH 3 GA. BAL. HSG. BASE AND 17 1/4" B. C. ON 30" X 9" FND. W/ 1 1/4" ANCHOR RODS DRG. #816. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 7 GA. WITH STEEL BAL. HSG. BASE AND FND. W/ 10" D. B.C. AND 1" ANCHOR RODS DRG. #716. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 3 GA., WITH STEEL BAL. HSG. BASE AND FND. W/ 10" D. B.C. AND 1" ANCHOR RODS DRG. #719. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 7 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B. |
| | | POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 3 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 7 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6" 7 GA., ALUM. BHB AND FND. WITH 15" B.C. 24" X 7" WITH 1" ANCHOR RODS DRG. #691. |
| | | POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., ALUM. BHB AND FND. WITH 15" B.C. 24" X 7" WITH 1" ANCHOR RODS DRG. #691. |
| | | POLE, CITY ALUMINUM, WITH ROUND BAL. HSG. BASE, 25', 28', or 30' ON FND. WITH 14" B.C., ACQUIRED FROM CHICAGO PARK DISTRICT. |
| | | POLE, CITY STEEL, EMBEDDED, 4" X 9" X 35' 7 GA., TAPERED TUBULAR. (DWG. #658) |
| | | POLE, CITY STEEL, EMBEDDED, 4" X 9" X 35' 3 GA., TAPERED TUBULAR. (DWG. #658) |
| | | POLE, CITY STEEL, EMBEDDED. (ACQUIRED FROM CTA) |
| | | COLUMN, ELEVATED STRUCTURE |
| | | POLE, WOOD. (SIZE AS NOTED) |
| | | POLE, FOUNDATION WITH ELBOWS AS INDICATED. (SIZE AS NOTED) |
| | | TWIN ARM ORNAMENTAL LIGHTING LUMINAIRE H.P.S.V. & LAMP, (VARIOUS BY CONTRACTOR) DWG. #873 |
| | | SINGLE ORNAMENTAL LIGHTING LUMINAIRE H.P.S.V. & LAMP, (VARIOUS BY CONTRACTOR) DWG. #898 & 899 |

| PROPOSED | PRESENT | |
|----------|---------|---|
| | | HANDHOLE, HEAVY DUTY, 36" I.D. (DWG.#866) |
| | | HANDHOLE, CIRCULAR WITH 24" FRAME & COVER, 30" I.D. (#867) |
| | | MANHOLE, CITY 3' X 4' X 4' DWG. #729 or 730; 4' X 6' X 6' DWG. #732 or 733. |
| | | FOUNDATION, CONTROLLER OR PEDESTAL, 13" B.C., 20" X 5' (DWG. #709) |
| | | FOUNDATION, TRAFFIC CONTROLLER DWG. #854. F.A. TERMINAL FND. DWG. #11972 |
| | | FOUNDATION, TRAFFIC TYPE "P", BASE MOUNT. (DWG. #888) |
| | | FOUNDATION, CONTROLLER STREET LIGHT, SPECIAL, 100A & 200A. (DWG.#876 & # 880) |
| | | FOUNDATION, TRANSCLOSURE; TRANSCLOSURE HOUSING. (DWG.# 583 & #891) |
| | | CONTROLLER, UNDERPASS LIGHTING 120V. & 240V. (DWG. #860 & #861) |
| | | MANHOLE, UTILITY, E=COMMONWEALTH EDISON; T=ILL.BELL TEL.; G=PEOPLES GAS; W=CITY WATER; P=CHGO PARK DISTRICT; CTA=C.T.A.; S= SEWER |
| | | JUNCTION BOX, IN PAVEMENT (DWG. #815) |
| | | DETECTOR LOOP IN PAVEMENT |
| | | CONDUIT or P.V.C., NUMBER, SIZE & TYPE. (AS NOTED) |
| | | CONDUIT or P.V.C. ENCASED IN CONCRETE. (SECTION or NUMBER OF CONDUIT INDICATED) |
| | | CONDUIT UNDER PAVEMENT, (BY PAVT CONTRACTOR) 3"- LENGTH AS NOTED. |
| | | LUMINAIRE, H.P.S.V. AND LAMP, 400W, 240V, WITH INTEGRAL BALLAST |
| | | LUMINAIRE, H.P.S.V. AND LAMP, 310W, 240V, WITH INTEGRAL BALLAST |
| | | LUMINAIRE, H.P.S.V. AND LAMP, 195W, 240V, WITH INTEGRAL BALLAST |
| | | LUMINAIRE, H.P.S.V. AND LAMP, 150W, 240V, WITH INTEGRAL BALLAST |
| | | LUMINAIRE, H.P.S.V. AND LAMP, 90W, 240V, WITH INTEGRAL BALLAST (ALLEY LIGHT). |
| | | LUMINAIRE, INCANDESCENT AND LAMP, 300W, 240V. |
| | | TERMINAL, CABINET F.A. & P.C. |
| | | FIRE ALARM BOX, POLE MOUNTED |
| | | FIRE ALARM BOX, POLE MOUNTED |
| | | CABLE, TRAFFIC SIGNAL, COMMUNICATION, 1-PAIR #14 SHIELDED, IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C- #4, 600 V. EPR. IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2 1/C-#2 or #1/0 600V. EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#10 or #6, 600V NSRI, IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 7/C-#12 or #14, 600V, EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 10/C-#12 600V. EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 14/C-#14, 600V. EPR IN CONDUIT |
| | | CABLE, TRAFFIC SIGNAL, 19/C-#12 600V, EPR IN CONDUIT |
| | | CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN PARKWAY |
| | | CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN CONDUIT |
| | | CABLE, STREET LIGHT, 2 1/C-#6 EPRN 600V. & 1 1/C-#8 GREEN, TRIPLEXED, IN CONDUIT |
| | | CABLE, STREET LIGHT, 3 1/C-#1/0, or #2/0, or #4, 600V. EPR IN CONDUIT |
| | | WIRE, STREET LIGHT, 2 1/C-#6, HDNS. AERIAL |
| | | WIRE, STREET LIGHT, 2 1/C-#6 & 1 1/C #8, HDNS. AERIAL |
| | | CABLE, STREET LIGHT AERIAL, 3 1/C-#4 or #2 SELF SUPPORTING, 600V EPR |
| | | WIRE, F.A. & P.C. AERIAL, 1/C-#10, NUMERAL DENOTES QUANTITY |
| | | CABLE, F.A. & P.C. AERIAL, W/ MESSENGER #19-(NUMBER OF PAIRS AS INDICATED) |
| | | CABLE, F.A. & P.C. AERIAL, SELF SUPPORTING, #19-(NUMBER OF PAIRS AS INDICATED) |
| | | CABLE, F.A. & P.C., IN CONDUIT, #19-(NUMBER OF PAIRS AS INDICATED) |
| | | DOWNLIGHT ASSEMBLY. (DWG. #850) |
| | | LIGHT, TRAFFIC SAFETY ISLAND |
| | | FLASHING BEACON & DOWNLIGHT |

| | | |
|---|--------------------|------------|
| A | 8-6-96 | REDRAWN |
| DATE | REVISION | |
| SUPERSEDES DWG. # | | |
| WORK ORDER NO. | DATE | |
| COST ALLOCATION ACCOUNT | | |
| APPROPRIATION ACCOUNT | MATERIAL | |
| | LABOR | |
| STANDARD CODE FOR TRAFFIC SIGNAL DRAWING | | |
| CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING | | |
| DRAFTSMAN | CHIEF DRAFTSMAN | ENGINEER |
| C. WINTERS | R. CARTER | C. WINTERS |
| SUPERVISING ENGINEER | ELEC. DESIGN ENGR. | |
| ENGINEER OF ELECTRICITY: | | DWG. NO. |
| GEN'L Supt. OF CONSTRUCTION: | | 826 |
| DEPUTY COMMISSIONER: | | |
| SIZE: 22" 36" | SCALE: | DATE: |

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|----------------------|-------------------|-----------|
| FILE NAME : | USER NAME : rswanson | DESIGNED : JL | REVISED : |
| | | DRAWN : BKG | REVISED : |
| | | CHECKED : MKR | REVISED : |
| | | DATE : 12/07/2012 | REVISED : |

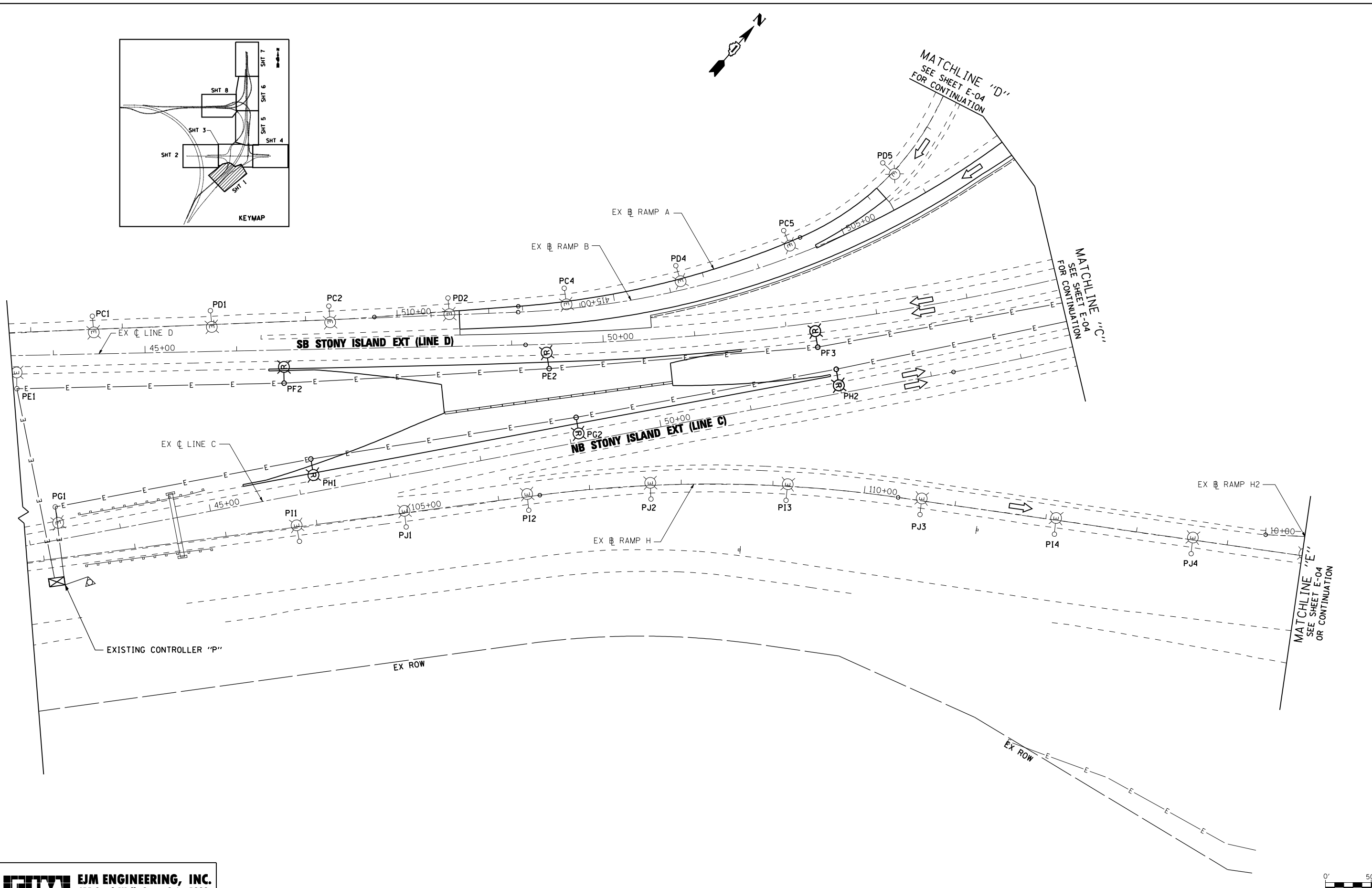
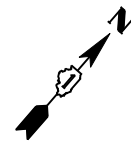
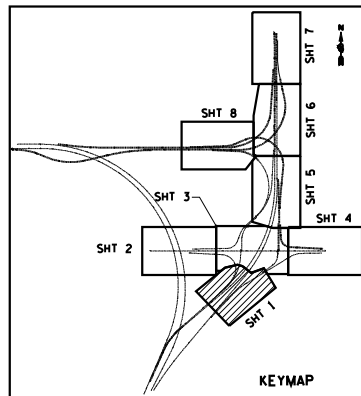
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING GENERAL NOTES AND LEGEND
STONY ISLAND EXTENSION**

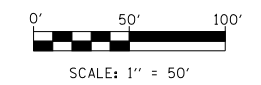
SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 139 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-02



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 Chicago, Illinois 60607



| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
 STONY ISLAND EXTENSION**

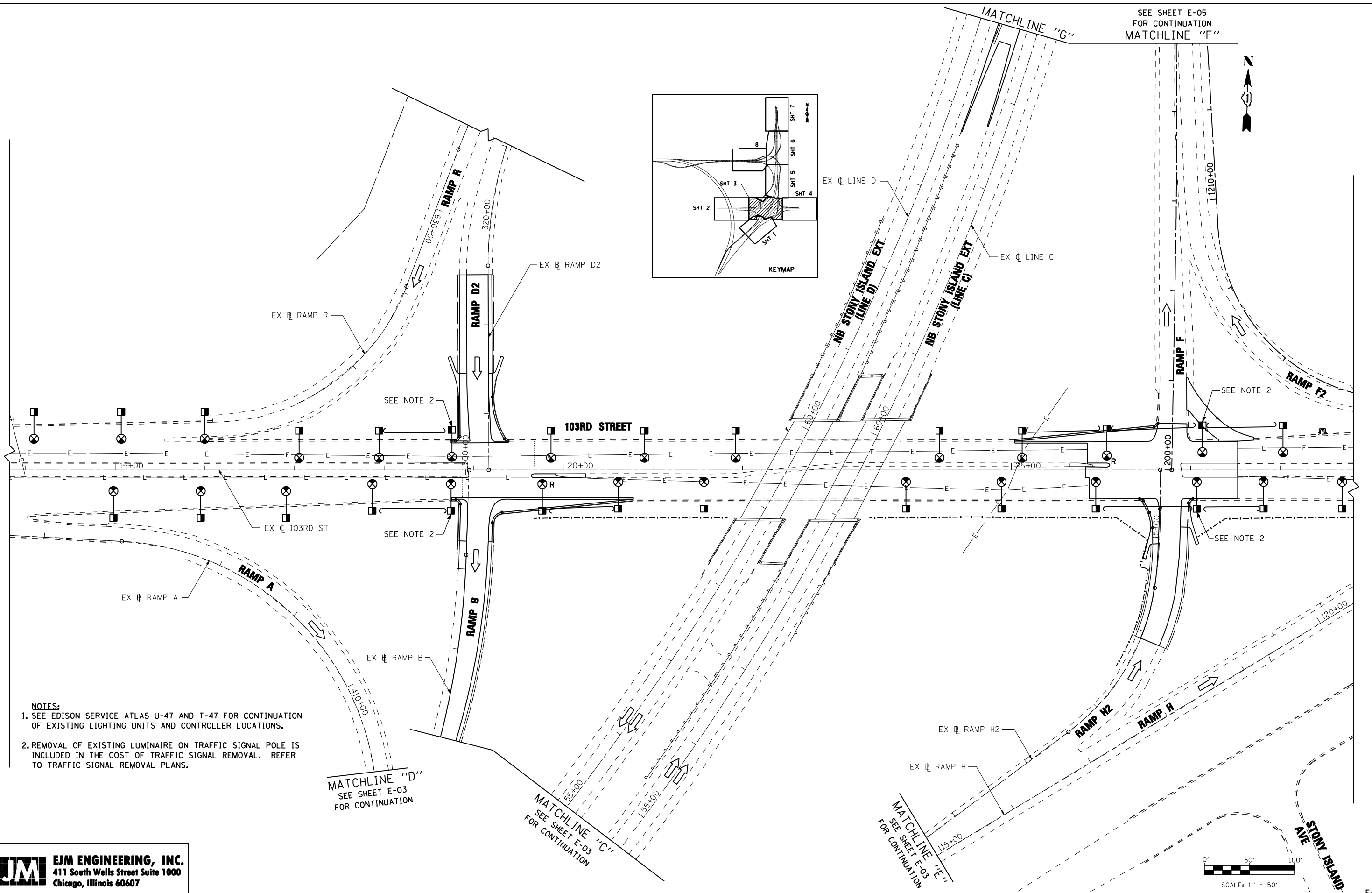
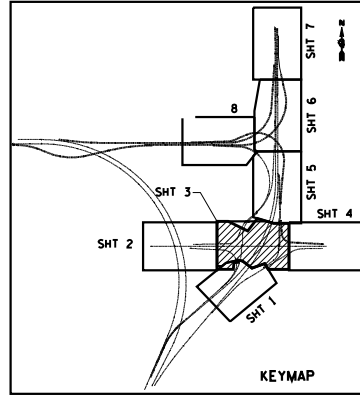
SCALE: 1"=50' SHEET NO. 1 OF 5 SHEETS STA. 43+65 TO STA. 54+57

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 140 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-03

D:\projects\3810 stony island feeder - bba\project work\cadd sheets\16061-mt-light\03.dgn

SEE SHEET E-05
FOR CONTINUATION
MATCHLINE "F"

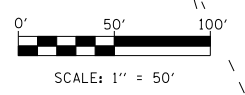


- NOTES:**
- SEE EDISON SERVICE ATLAS U-47 AND T-47 FOR CONTINUATION OF EXISTING LIGHTING UNITS AND CONTROLLER LOCATIONS.
 - REMOVAL OF EXISTING LUMINAIRE ON TRAFFIC SIGNAL POLE IS INCLUDED IN THE COST OF TRAFFIC SIGNAL REMOVAL. REFER TO TRAFFIC SIGNAL REMOVAL PLANS.

MATCHLINE "D"
SEE SHEET E-03
FOR CONTINUATION

MATCHLINE "C"
SEE SHEET E-03
FOR CONTINUATION

MATCHLINE "E"
SEE SHEET E-03
FOR CONTINUATION



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| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

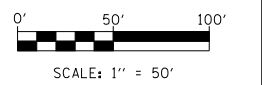
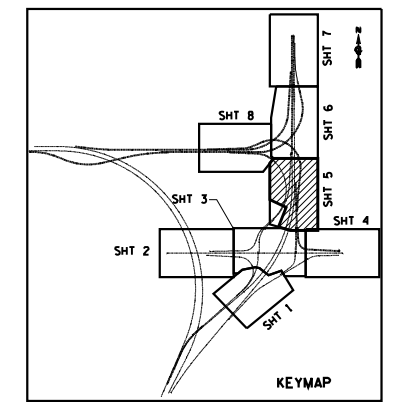
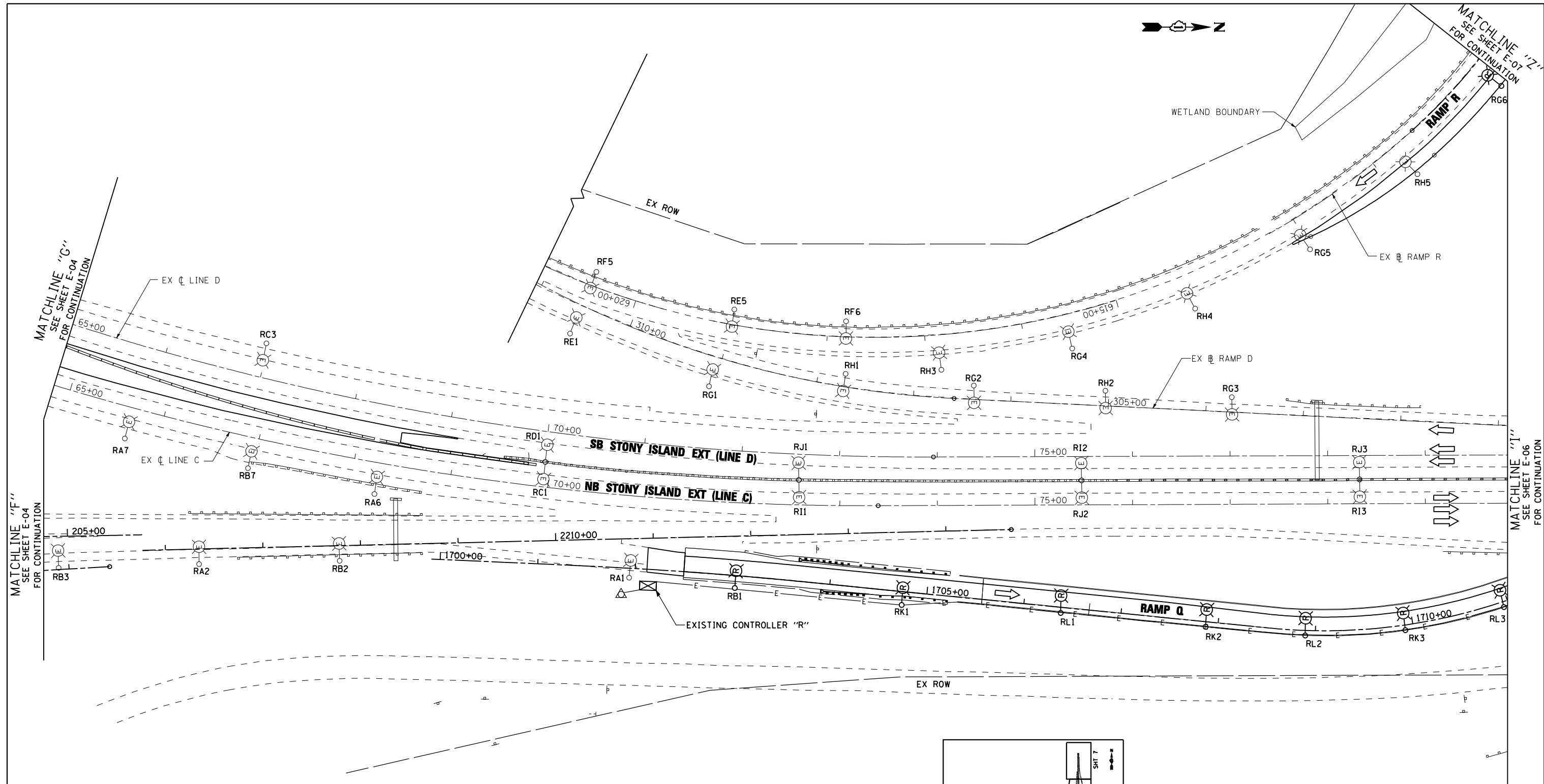
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
103RD STREET**

SCALE: 1"=50' SHEET NO. 2 OF 5 SHEETS STA. 13+81 TO STA. 28+82

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 141 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-04
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 Chicago, Illinois 60607

| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
 STONY ISLAND EXTENSION**

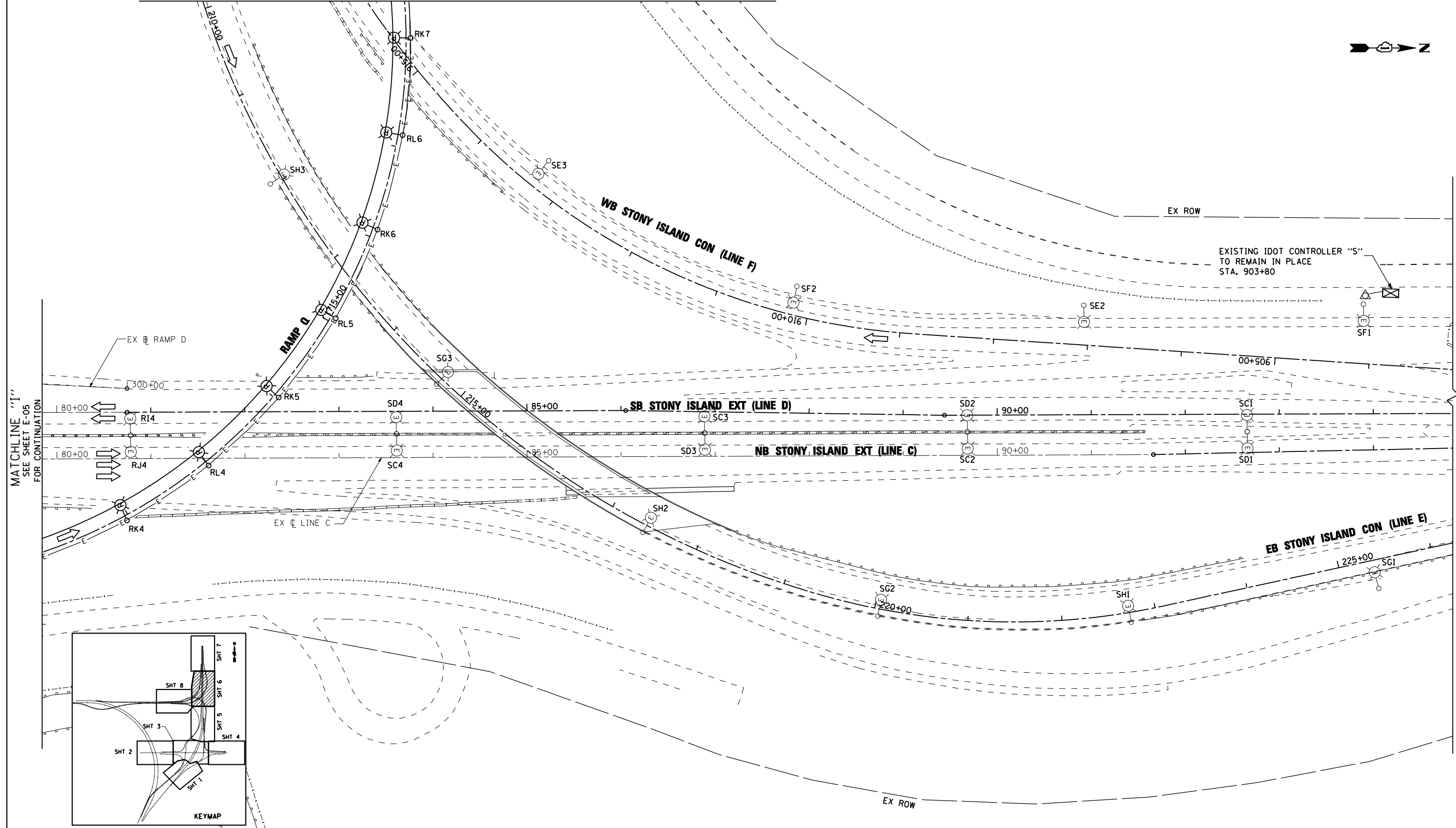
SCALE: 1"=50' SHEET NO. 3 OF 5 SHEETS STA. 65+00 TO STA. 79+84

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 142 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

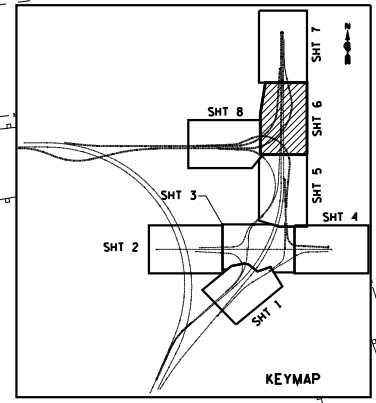
E-05

s:\projects\3810 stony island feeder - bba\project work\cadd sheets\160V61-mt-light-05.dgn

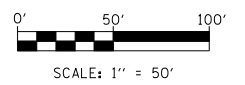
MATCHLINE "O" SEE SHEET E-07 FOR CONTINUATION



MATCHLINE "I" SEE SHEET E-05 FOR CONTINUATION



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 Chicago, Illinois 60607



| | | | |
|-------------|----------------------|-------------------|-----------|
| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | | CHECKED - MKR | REVISED - |
| | | DATE - 12/07/2012 | REVISED - |
| | | | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

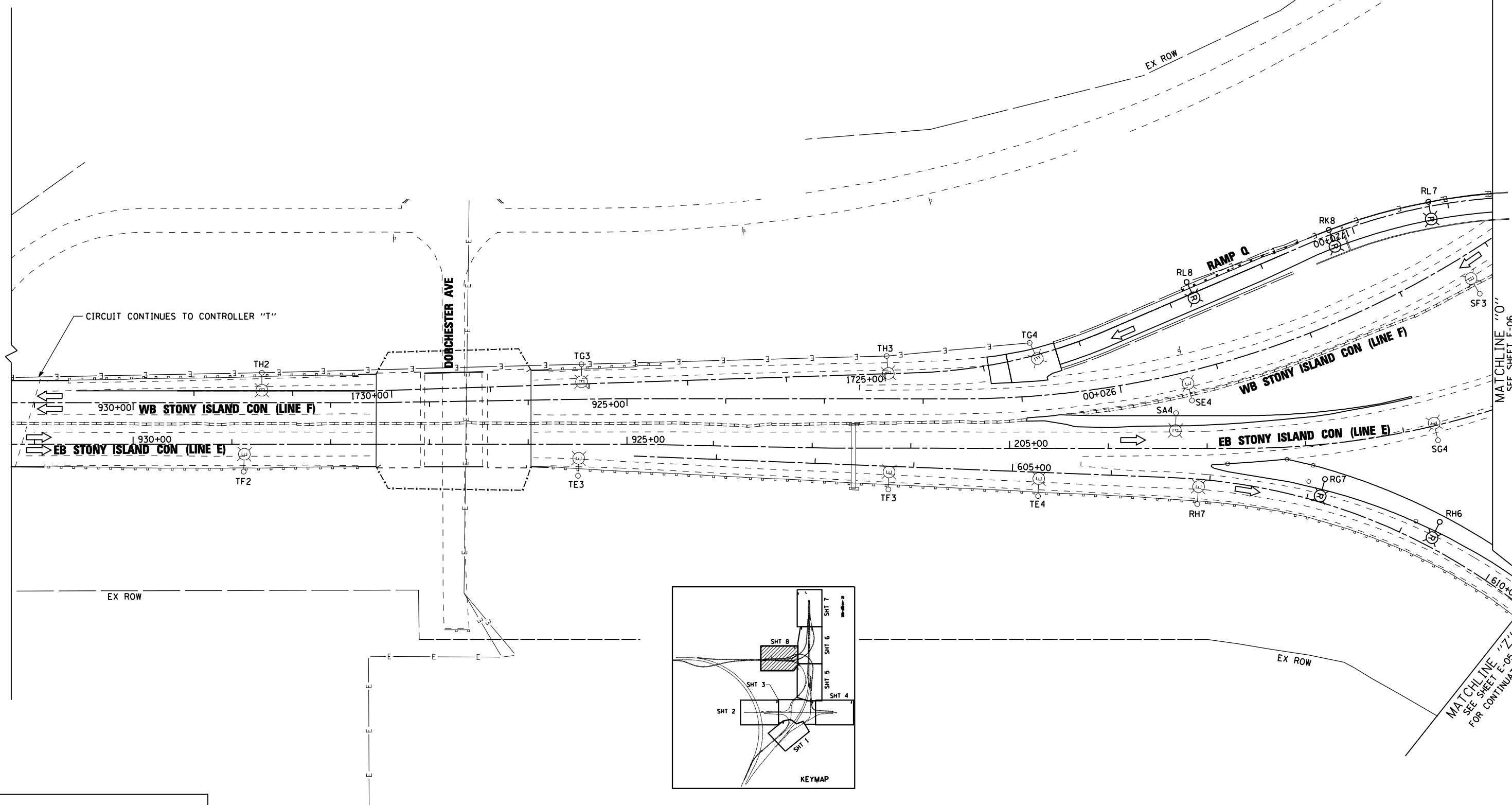
**LIGHTING REMOVAL PLAN
 STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 4 OF 5 SHEETS STA. 79+84 TO STA. 94+85

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 143 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

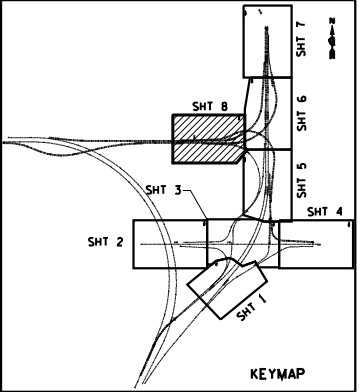
E-06

s:\projects\3810 stony island feeder - bba\project work\cadd sheets\16061-mt-light-06.dgn



MATCHLINE "O"
SEE SHEET E-06
FOR CONTINUATION

MATCHLINE "Z"
SEE SHEET E-05
FOR CONTINUATION



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411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|-----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

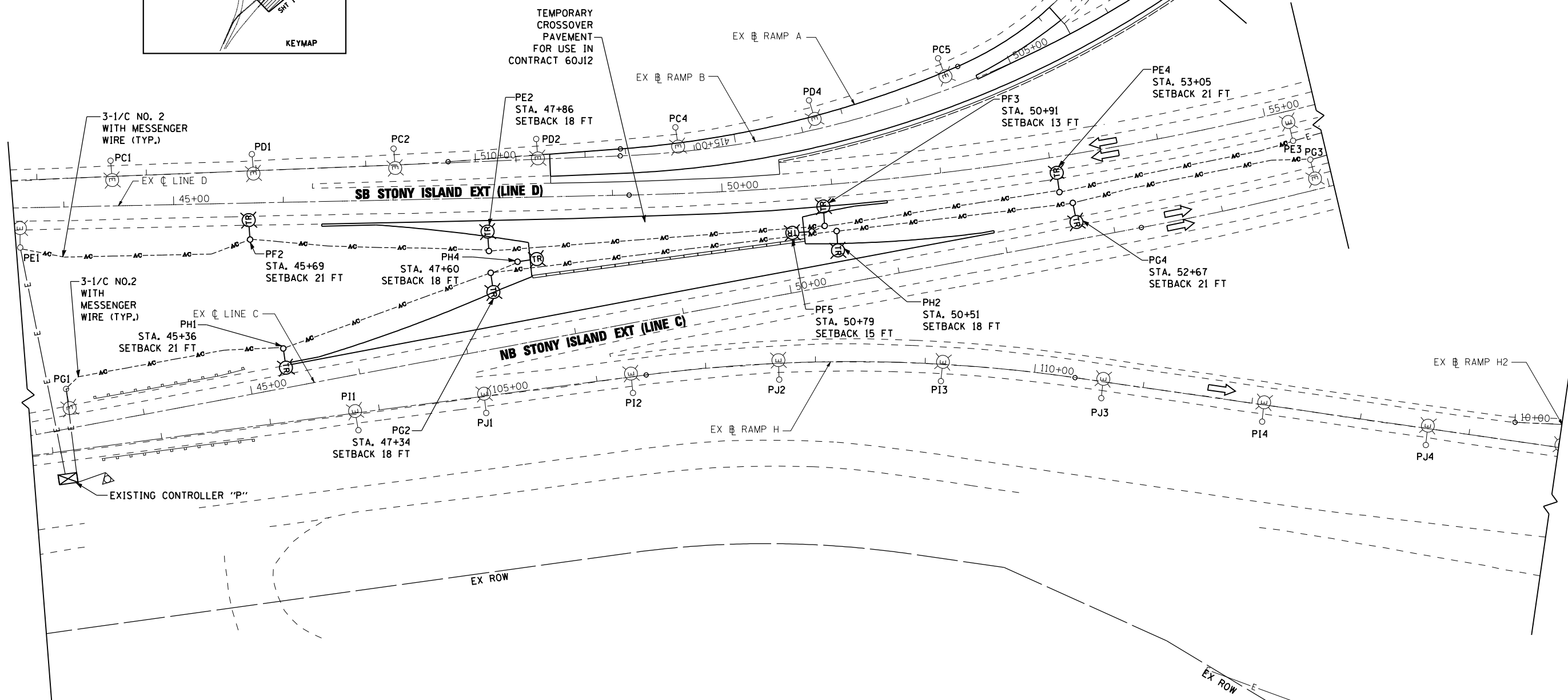
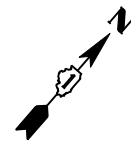
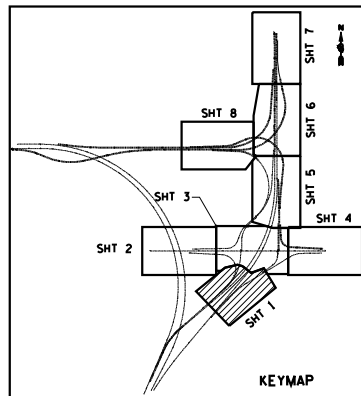
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
STONY ISLAND CONNECTOR**

SCALE: 1"=50' SHEET NO. 5 OF 5 SHEETS STA. 928+77 TO STA. 209+93

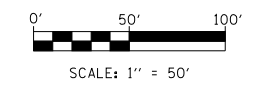
| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 144 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |

E-07



- NOTE:**
- POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE. SETBACKS AT CROSSOVER AREA ARE REFERENCED TO EDGE OF TEMPORARY CROSSOVER PAVEMENT (SETBACKS FOR POLES LOCATED NEAR CENTER OF CROSSOVER ARE REFERENCED TO SOUTH EDGE OF PAVEMENT).
 - LIGHTING UNITS PF5 AND PH4 ARE FOR ILLUMINATION OF CROSSOVER, AND SHALL BE INSTALLED AND TESTED IN THIS CONTRACT, BUT WILL BE ACTIVATED IN CONTRACT 60J12.

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 Chicago, Illinois 60607



| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

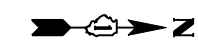
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | | | |
|---|-------------------------|--------------------------|--|
| TEMPORARY LIGHTING PLAN STONY ISLAND EXTENSION | | | |
| SCALE: 1"=50' | SHEET NO. 1 OF 3 SHEETS | STA. 43+65 TO STA. 54+57 | |

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 145 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-08

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60 FT WOOD POLE
STA. 612+46
18 FT RT

WETLAND BOUNDARY

MATCHLINE 'Z'
SEE SHEET E-10
OR CONTINUATION

RAMP R

EX RAMP R

EXISTING ILLUMINATED
SIGN TO REMAIN IN PLACE

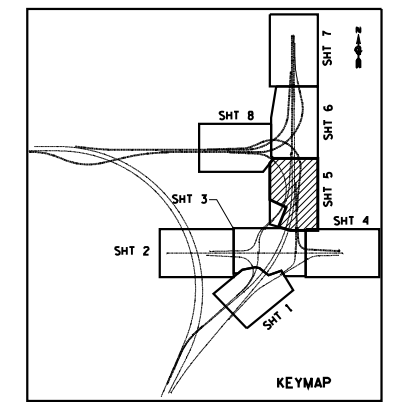
EX RAMP D

RAMP Q

SB STONY ISLAND EXT (LINE D)

NB STONY ISLAND EXT (LINE C)

EXISTING CONTROLLER "R"
APPROXIMATE LOCATION FOR
DIAGRAMMATIC PURPOSES ONLY



0' 50' 100'
SCALE: 1" = 50'

NOTES:
1. POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO
CENTER OF POLE.

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|-----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

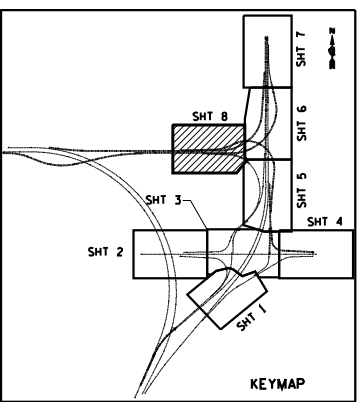
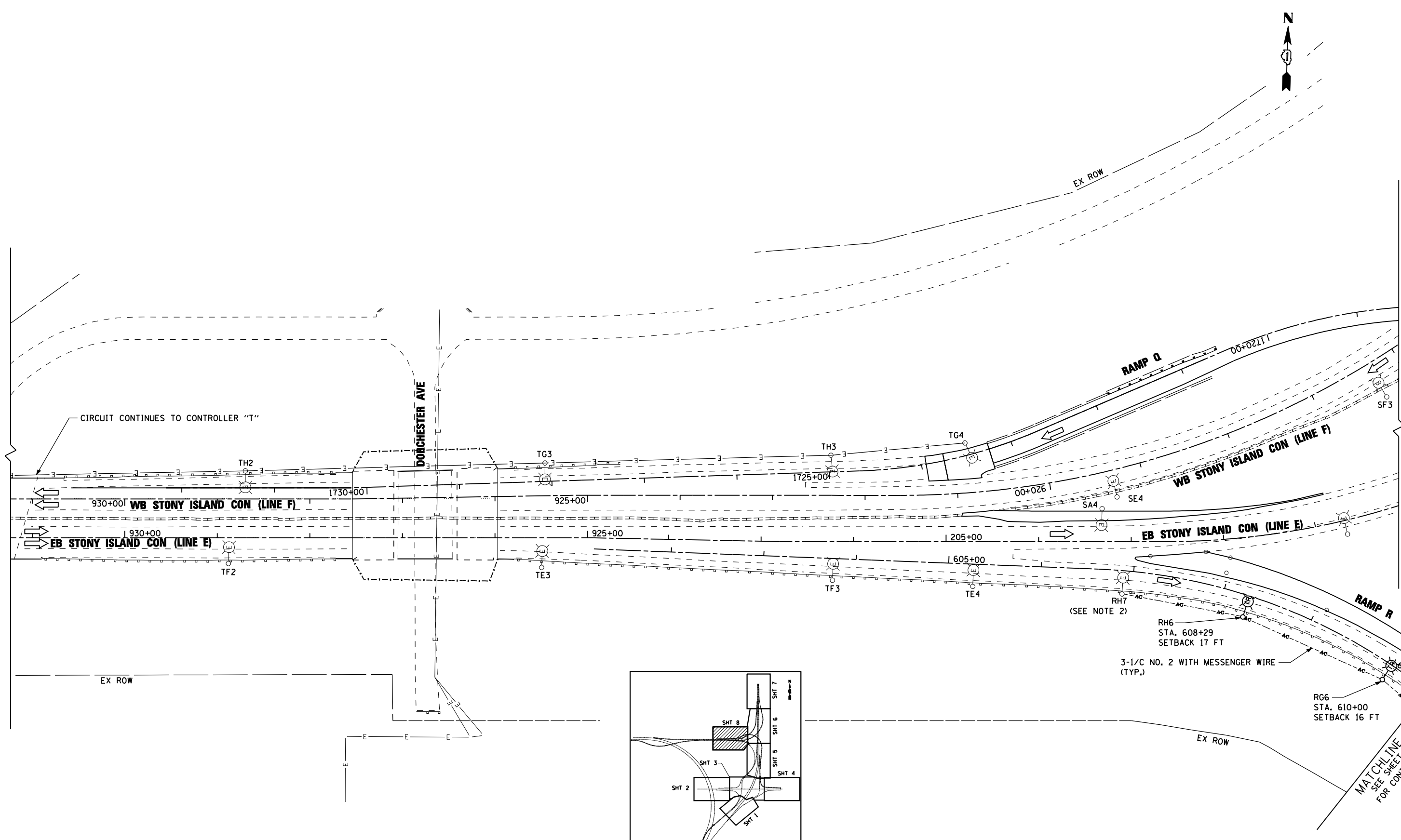
**TEMPORARY LIGHTING PLAN
STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 2 OF 3 SHEETS STA. 65+00 TO STA. 79+84

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 146 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-09

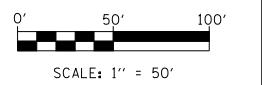
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- NOTES:**
1. POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE.
 2. TEMPORARILY CONNECT EXISTING LIGHTING UNIT RH7 TO CIRCUIT G.

3-1/C NO. 2 WITH MESSENGER WIRE (TYP.)

MATCHLINE "Z"
FOR CONTINUATION
SEE SHEET E-09



EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|---------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000"/ IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING PLAN
STONY ISLAND CONNECTOR**

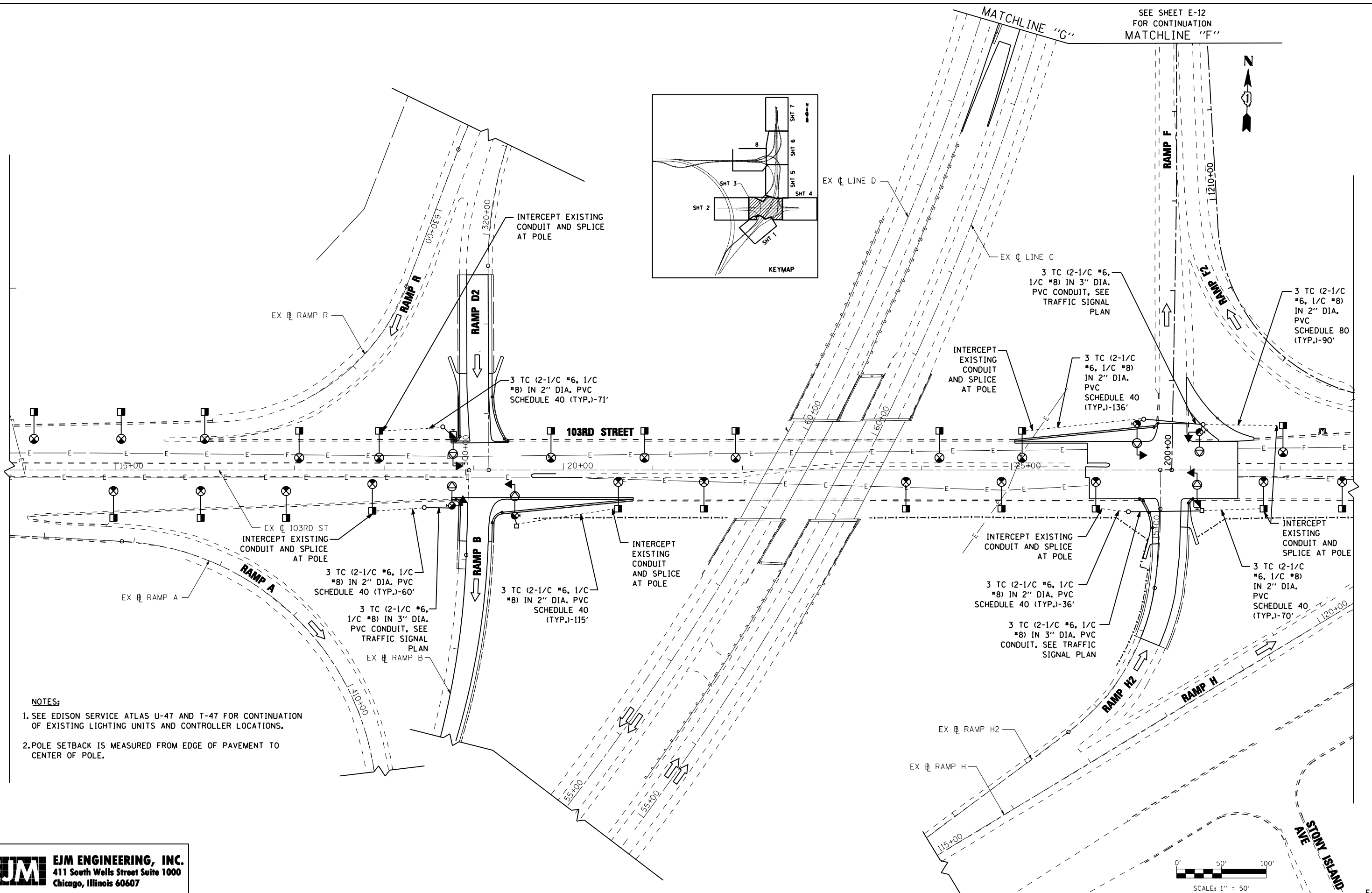
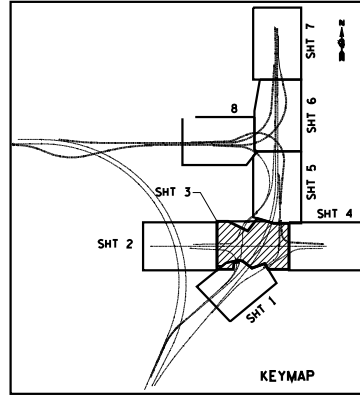
SCALE: 1"=50' SHEET NO. 3 OF 3 SHEETS STA. 928+77 TO STA. 209+93

| | | | | |
|--------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 147 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT

E-10

SEE SHEET E-12
FOR CONTINUATION
MATCHLINE "F"



- NOTES:**
1. SEE EDISON SERVICE ATLAS U-47 AND T-47 FOR CONTINUATION OF EXISTING LIGHTING UNITS AND CONTROLLER LOCATIONS.
 2. POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE.

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/18/2012 | DATE = 12/07/2012 | REVISED - |

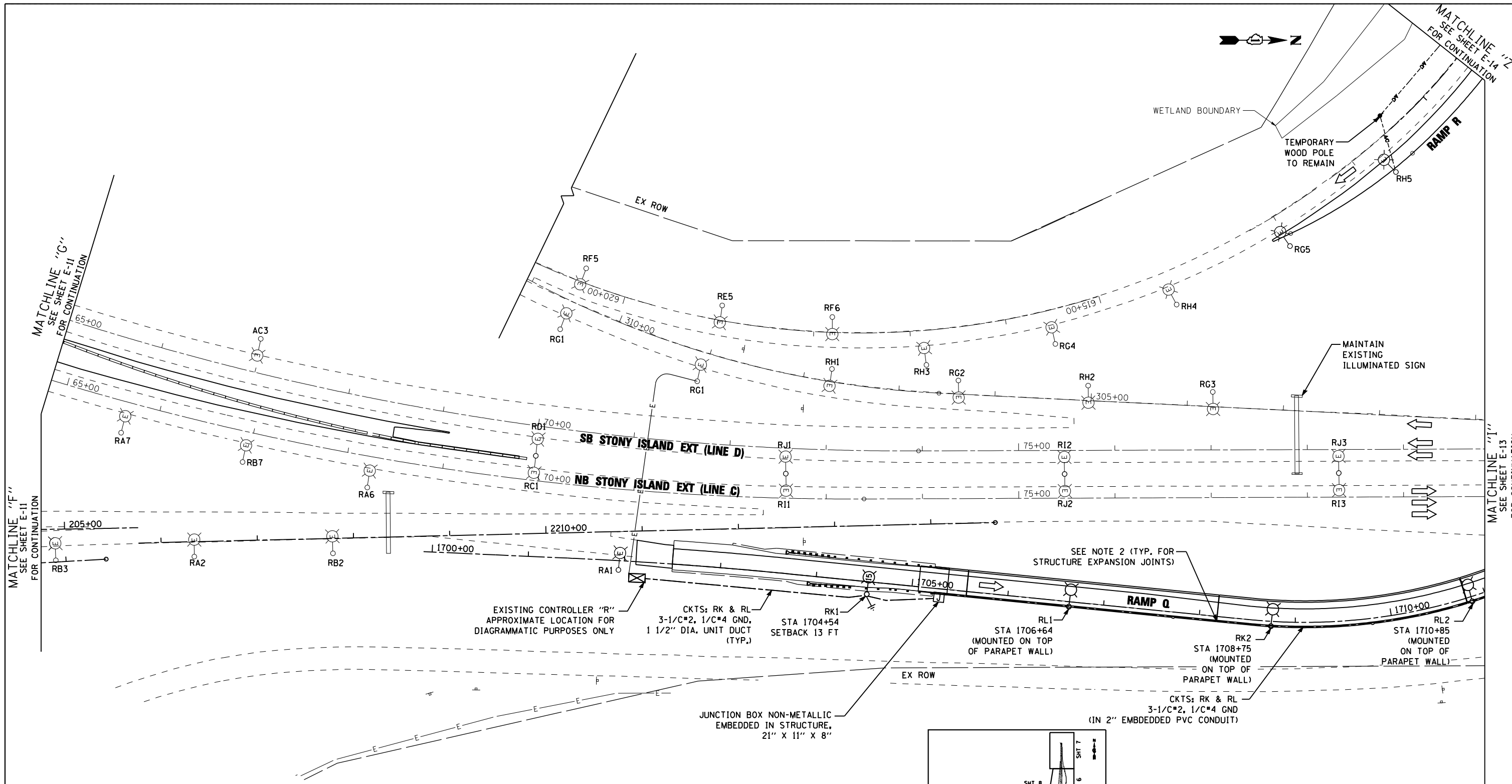
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN
103RD STREET**

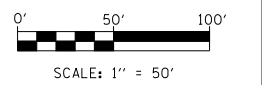
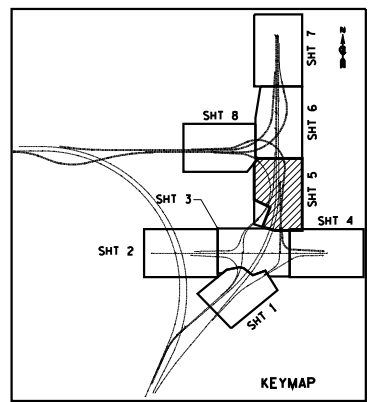
SCALE: 1"=50' SHEET NO. 1 OF 4 SHEETS STA. 13+81 TO STA. 28+82

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 148 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

E-11
D:\projects\3810 stony island feeder - bba\project work\cadd sheets\16061-st-11ght-11.dgn



- NOTES:**
1. POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE.
 2. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. REFER TO SHEET E-26 FOR DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.



EJM ENGINEERING, INC.
 411 South Wells Street Suite 1000
 Chicago, Illinois 60607

| | | | |
|-------------|-----------------------------|-------------------|-----------|
| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 2/11/2013 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN
 STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 2 OF 4 SHEETS STA. 65+00 TO STA. 79+84

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 149 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

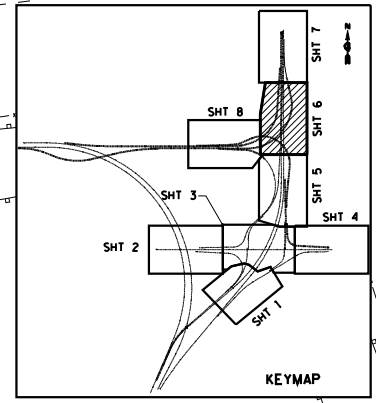
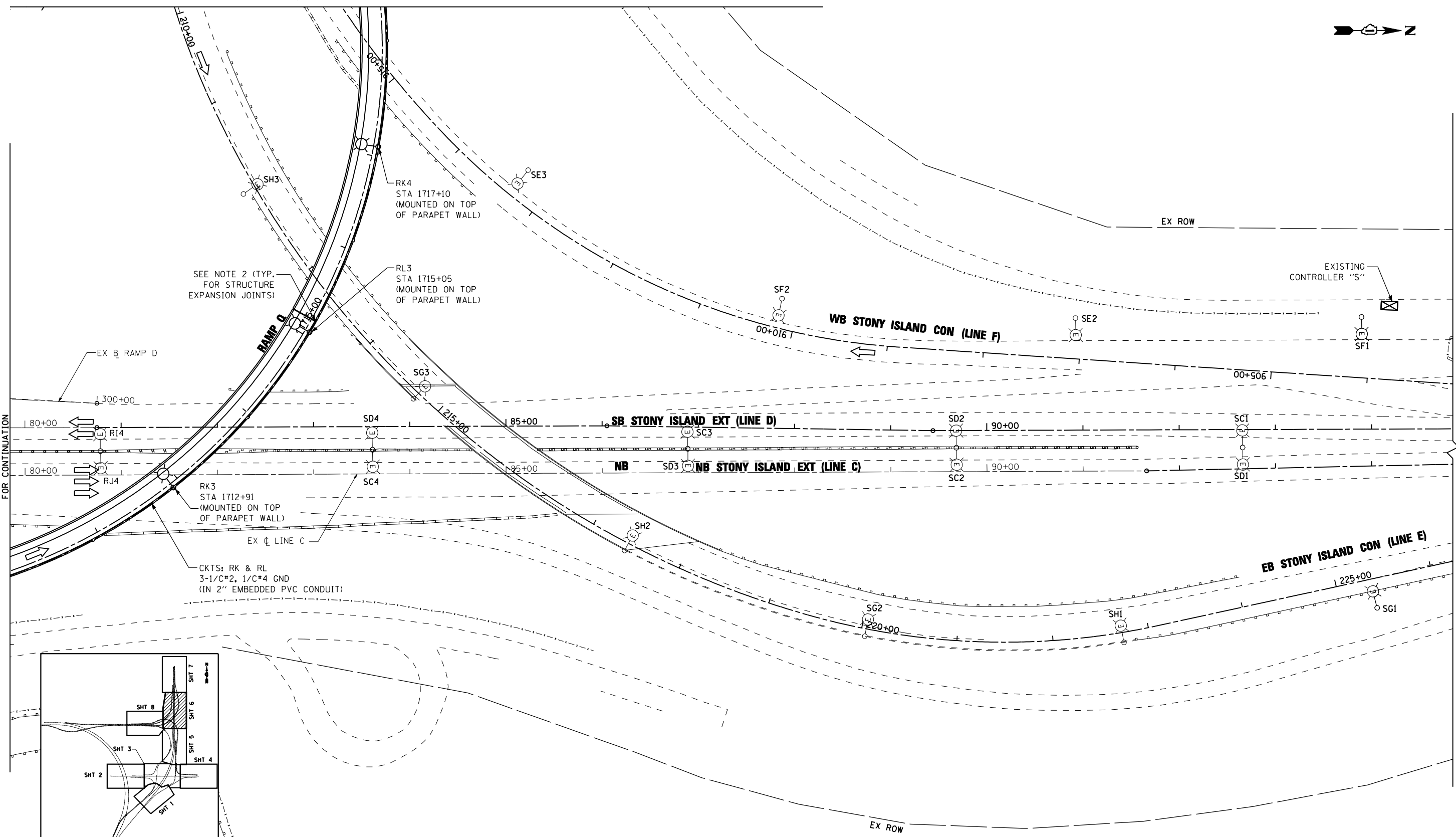
E-12

S:\Projects\3810 Stony Island Feeder - BBA\Project Work\CADD Sheets\1168061-akt-light-12.dgn

MATCHLINE "0" SEE SHEET E-14 FOR CONTINUATION

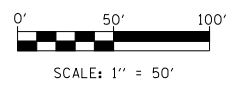


MATCHLINE "1" SEE SHEET E-12 FOR CONTINUATION



- NOTES:**
- POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE.
 - PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. REFER TO SHEET E-26 FOR DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.

EJM ENGINEERING, INC.
 411 South Wells Street Suite 1000
 Chicago, Illinois 60607



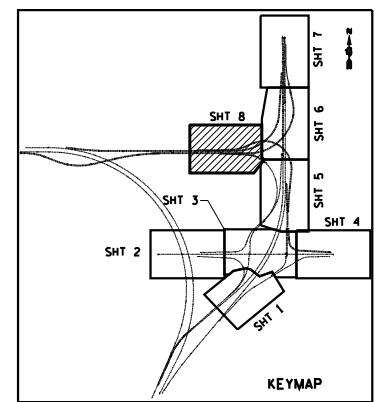
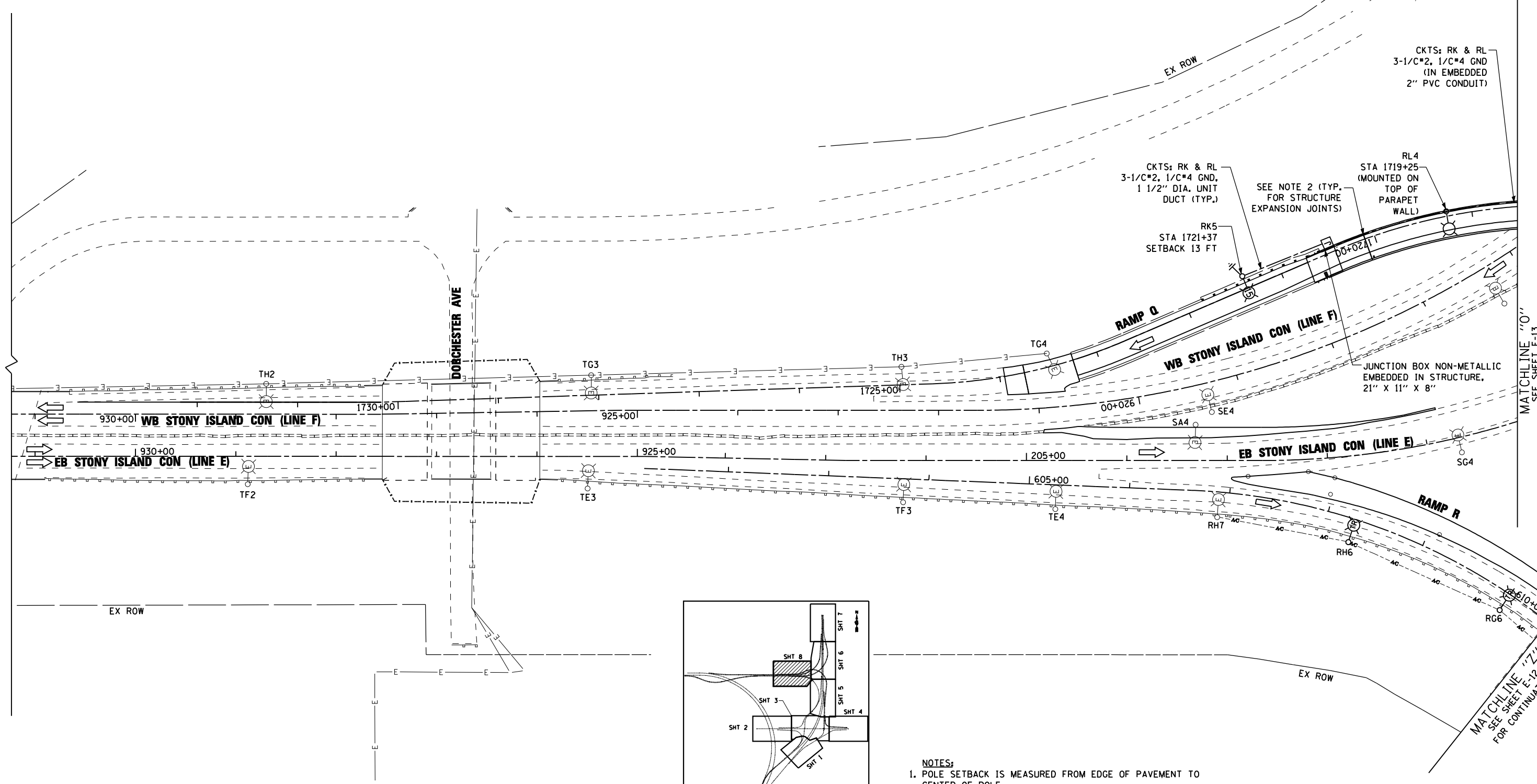
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| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | | CHECKED - MKR | REVISED - |
| | | DATE - 12/07/2012 | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | | |
| | PLOT DATE = 2/11/2013 | | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

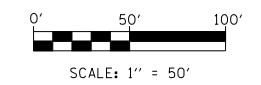
**PROPOSED LIGHTING PLAN
 STONY ISLAND EXTENSION**

SCALE: 1"=50' SHEET NO. 3 OF 4 SHEETS STA. 79+84 TO STA. 94+85

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 150 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



- NOTES:**
- POLE SETBACK IS MEASURED FROM EDGE OF PAVEMENT TO CENTER OF POLE.
 - PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. REFER TO SHEET E-26 FOR DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.



MATCHLINE "O"
SEE SHEET E-13
FOR CONTINUATION

MATCHLINE "Z"
SEE SHEET E-12
FOR CONTINUATION

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

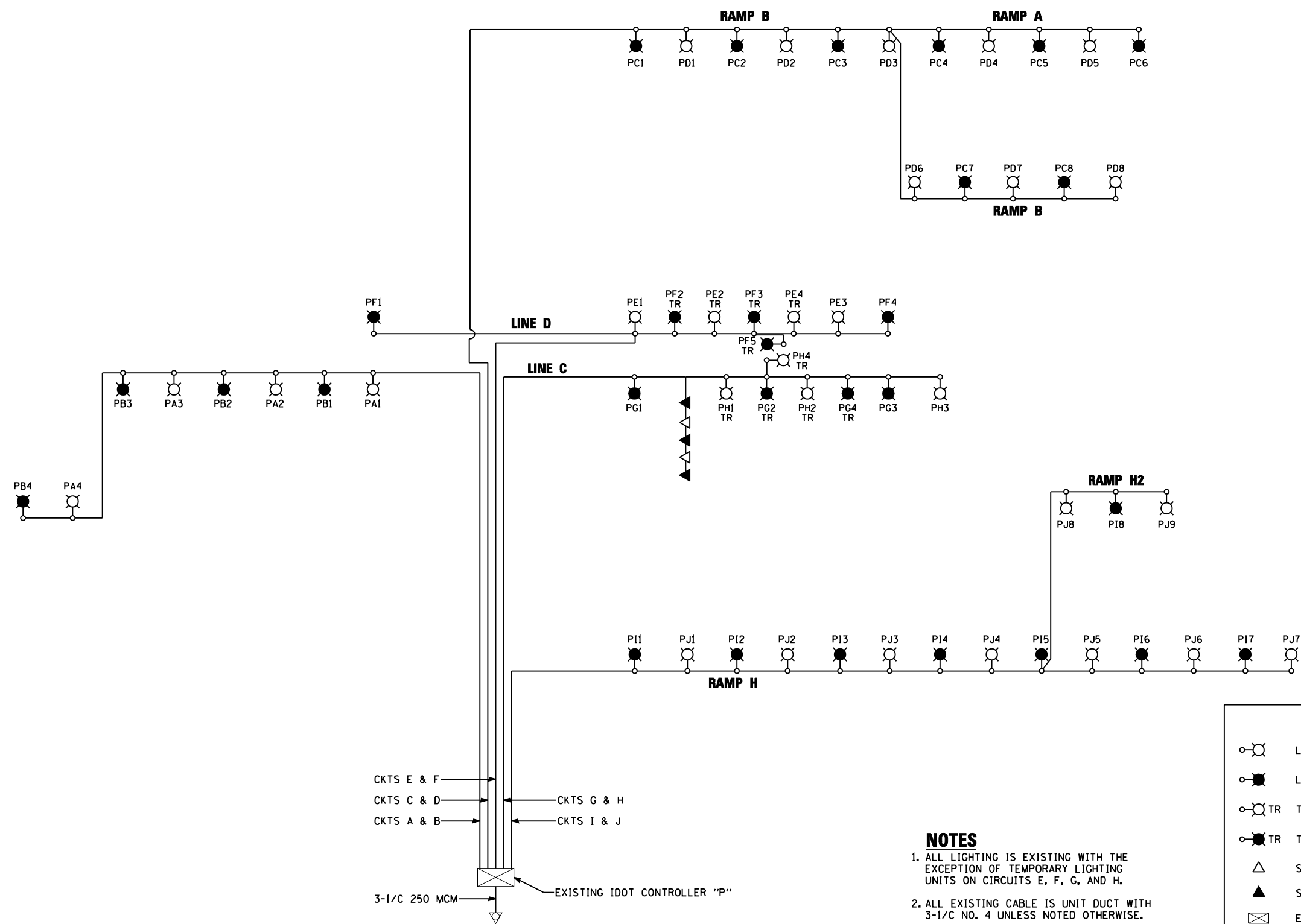
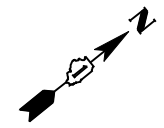
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|-------------|-----------------------------|-------------------|-----------|
| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 2/11/2013 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN
STONY ISLAND CONNECTOR**

SCALE: 1"=50' SHEET NO. 4 OF 4 SHEETS STA. 928+77 TO STA. 209+94

| | | | | |
|--------------------|-------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 151 |
| CONTRACT NO. 60V61 | | | ILLINOIS FED. AID PROJECT | |



| LEGEND | |
|--------|--|
| | LIGHTING UNIT ON RED PHASE |
| | LIGHTING UNIT ON BLACK PHASE |
| | TEMPORARY LIGHTING UNIT ON RED PHASE |
| | TEMPORARY LIGHTING UNIT ON BLACK PHASE |
| | SIGN LUMINAIRE ON RED PHASE |
| | SIGN LUMINAIRE ON BLACK PHASE |
| | EXISTING LIGHTING CONTROLLER, 240/480V, SINGLE PHASE, 3 WIRE |
| | EXISTING ELECTRIC SERVICE LOCATION |

- NOTES**
1. ALL LIGHTING IS EXISTING WITH THE EXCEPTION OF TEMPORARY LIGHTING UNITS ON CIRCUITS E, F, G, AND H.
 2. ALL EXISTING CABLE IS UNIT DUCT WITH 3-1/C NO. 4 UNLESS NOTED OTHERWISE.

EJM ENGINEERING, INC.
 411 South Wells Street Suite 1000
 Chicago, Illinois 60607

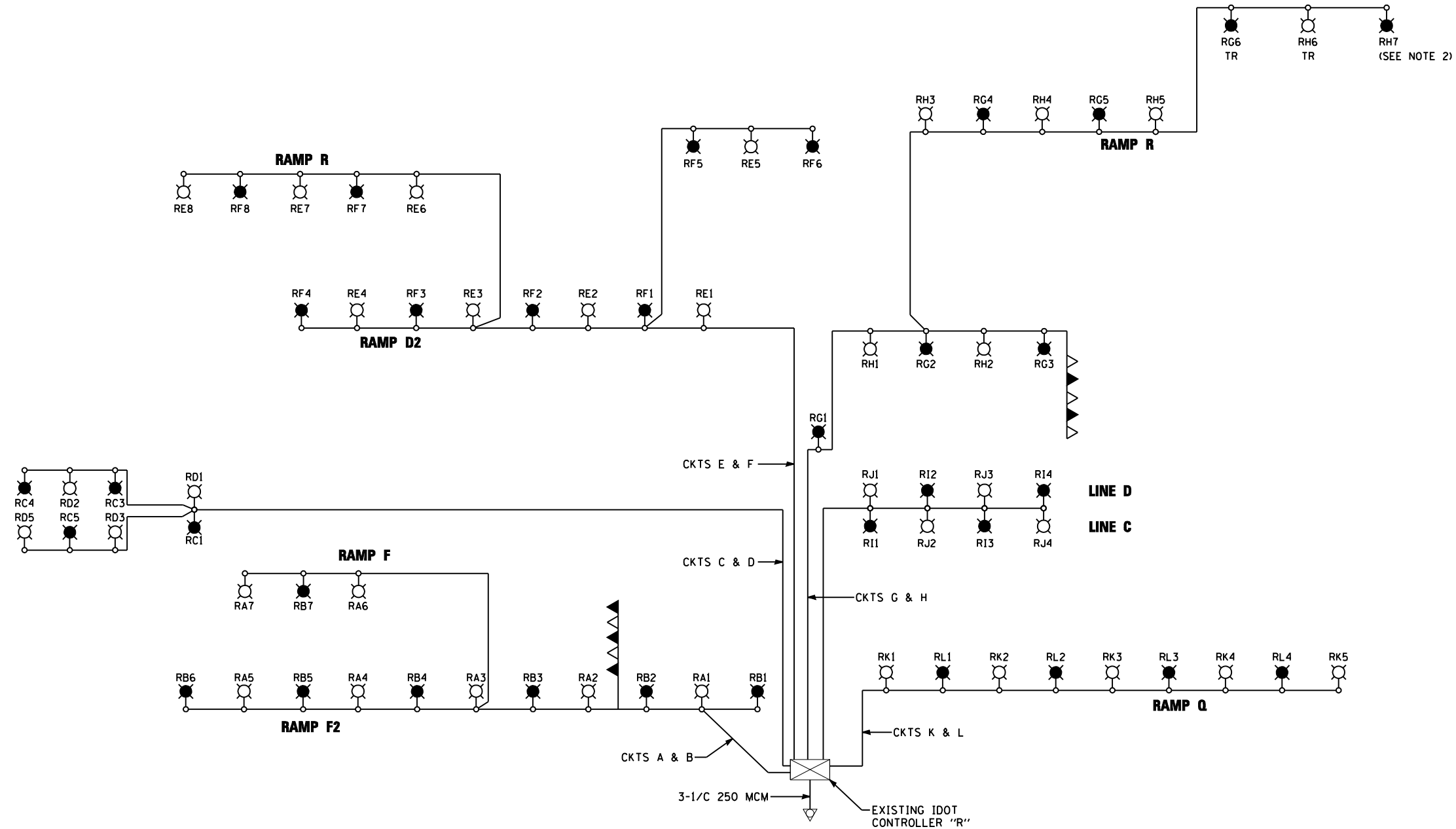
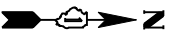
| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STONY ISLAND EXTENSION
 SINGLE LINE DIAGRAM - CONTROLLER "P"**

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

| | | | | |
|---------------------------|-------------|--------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 151A |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60V61 | |



NOTES

1. ALL LIGHTING IS EXISTING WITH THE EXCEPTIONS OF TEMPORARY LIGHTING UNITS RG6 AND RH6 AND NEW LIGHTING UNITS RK1-RK5 AND RL1-RL4.
2. EXISTING LIGHTING UNIT TO BE CONNECTED TO CIRCUIT G. SEE SHEET E-10.
3. ALL EXISTING CABLE IS UNIT DUCT WITH 3-1/C NO. 4 UNLESS NOTED OTHERWISE.

| LEGEND | |
|--------|--|
| | LIGHTING UNIT ON RED PHASE |
| | LIGHTING UNIT ON BLACK PHASE |
| | TEMPORARY LIGHTING UNIT ON RED PHASE |
| | TEMPORARY LIGHTING UNIT ON BLACK PHASE |
| | SIGN LUMINAIRE ON RED PHASE |
| | SIGN LUMINAIRE ON BLACK PHASE |
| | EXISTING LIGHTING CONTROLLER, 240/480V, SINGLE PHASE, 3 WIRE |
| | EXISTING ELECTRIC SERVICE LOCATION |

EJM ENGINEERING, INC.
 411 South Wells Street Suite 1000
 Chicago, Illinois 60607

| | | | |
|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 1/4/2013 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STONY ISLAND EXTENSION
 SINGLE LINE DIAGRAM - CONTROLLER "R"**

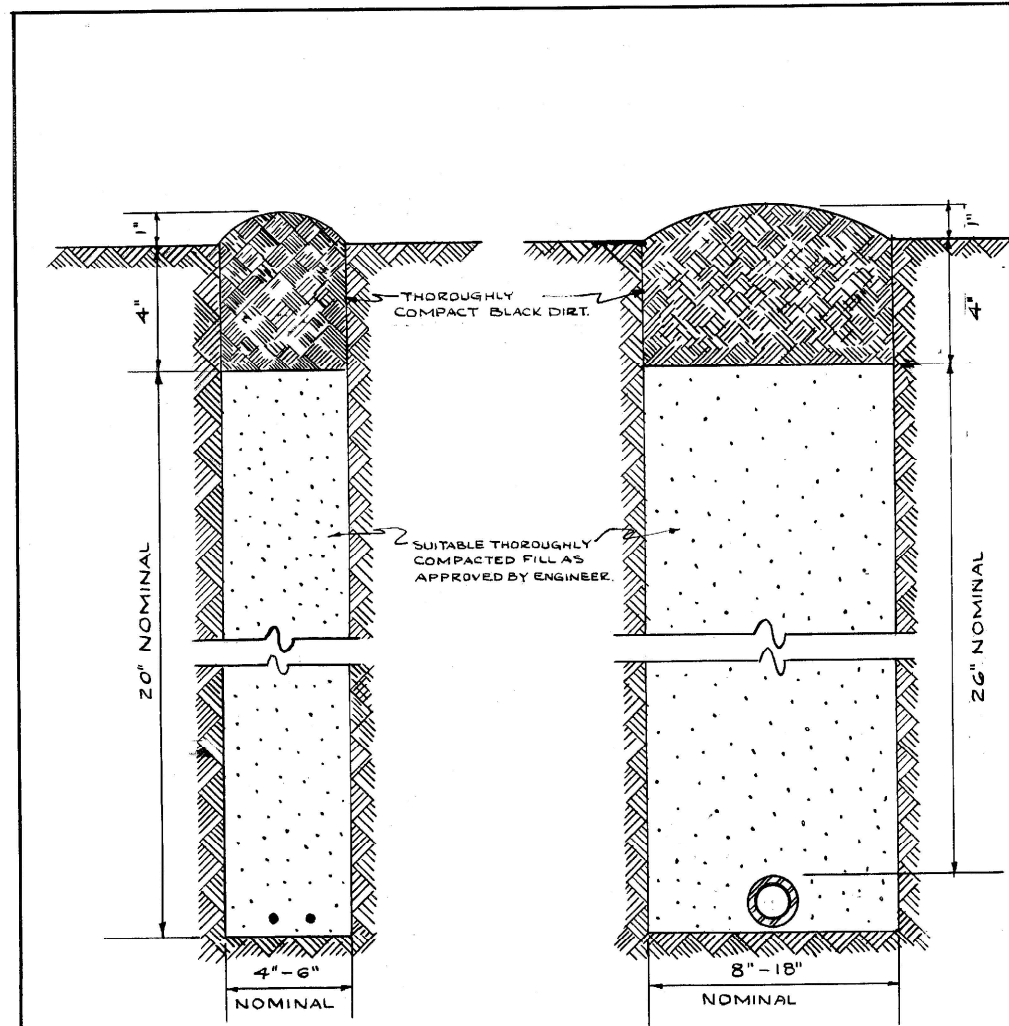
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|--------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 151B |
| CONTRACT NO. 60V61 | | | | |

E-14B

ILLINOIS FED. AID PROJECT

S:\Projects\3810 Stony Island Feeder - BBA\Project - Work\CADD Sheets\161601-akt-lighting-1.dgn



NOTE

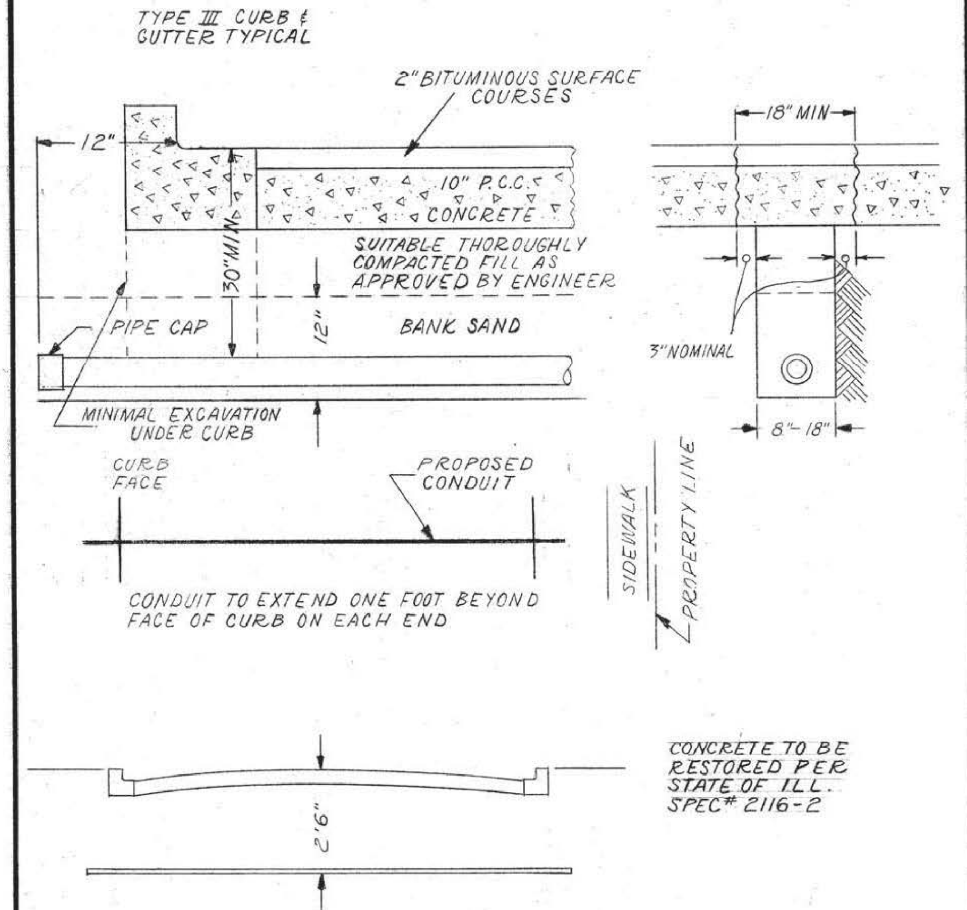
EXCESS SOIL FROM TRENCH TO BE COMPLETELY REMOVED FROM SITE AS SOON AS PRACTICABLE.

BLACK DIRT TO BE TAMPED & THOROUGHLY COMPACTED AS SHOWN.

STANDARD METHOD FOR BACKFILLING CABLE & CONDUIT TRENCHES IN SODDED PARKWAY & LAWNS

| REVISION | CITY OF CHICAGO DEPT. OF STREETS & SANITATION DIVISION OF ELECTRICAL ENGINEERING | | |
|----------|--|------------|---------------|
| A | DRAWN. | CHECKED. | ENGINEER. |
| B | W. E. HAEP | M. J. HINE | J. O'CONNOR |
| C | ENGR. IN CHARGE. | | DRG. NO. |
| D | D. M. P. KELLEY | | 579 |
| E | Supt. of Const. | | |
| F | DEPUTY COMM. | | |
| G | D. M. P. KELLEY | | |
| H | SIZE 8 1/2 X 14" | SCALE | DATE: 7-14-81 |

CONDUIT INSTALLATION UNDER PAVED STREET



| INSTALLATION METHOD OF INSTALLING CONDUIT UNDER PAVED ROADWAY | | |
|---|--------------|---------------|
| CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING | | |
| DRAWN | CHECKED | ENGINEER |
| A.M. JOHNSON | R. SYCKOWSKI | R.L. MARTIN |
| DRG. NO. | | 813 |
| Thomas Hilduff ENGINEER OF ELECTRICITY | | |
| DEPUTY COMM. | | DATE: 3-13-81 |
| Charles E. Burley | | |
| SIZE 8 1/2 X 14" | SCALE N.T.S. | |

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

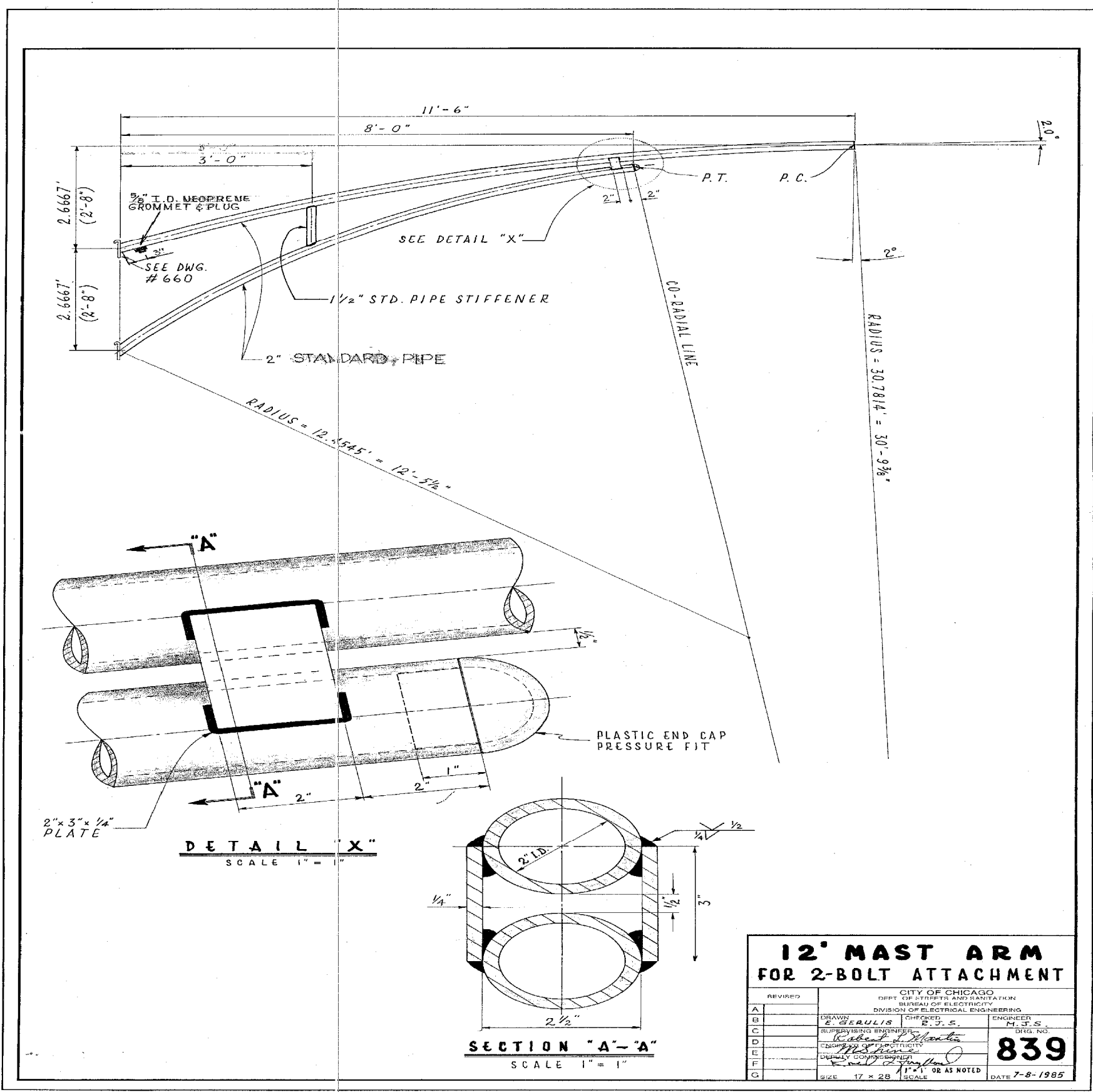
| FILE NAME : | USER NAME : | DESIGNED : | REVISED : |
|-------------|-------------|------------|-----------|
| | rswanson | JL | |
| | | BKG | |
| | | MKR | |
| | | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STANDARD DETAILS

SCALE: NONE SHEET NO. 1 OF 12 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 152 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



**12' MAST ARM
FOR 2-BOLT ATTACHMENT**

| | | | |
|---------|---|---------------------|------------------------|
| REVISED | CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING | | |
| A | DRAWN E. GERULIS | CHECKED R. J. S. | ENGINEER M. J. S. |
| B | SUPERVISING ENGINEER Robert J. S. [Signature] | | DWG. NO. 839 |
| C | DESIGNED [Signature] | | DATE 7-8-1985 |
| D | ELECTRICITY | | |
| E | DEPT. OF STREETS AND SANITATION | | |
| F | SCALE 1" = 1" OR AS NOTED | | |
| G | SIZE 17 x 28 | SCALE | DATE 7-8-1985 |

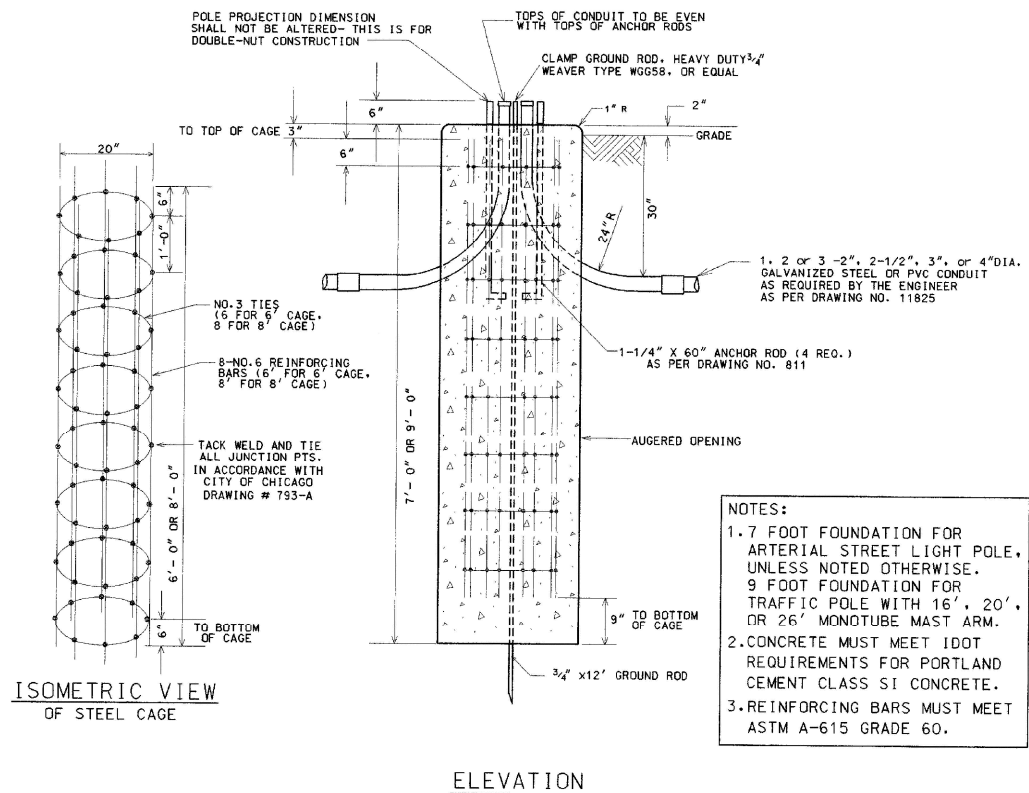
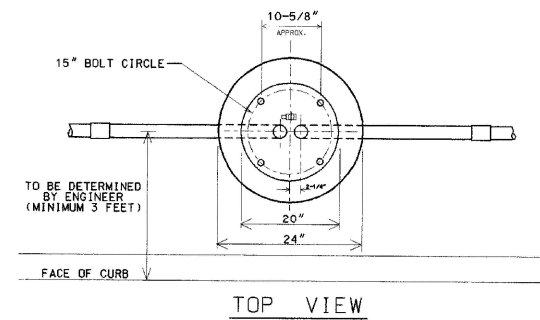
EJM EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|---------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000"/ IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | |
|------------------|---------------------------------------|
| STANDARD DETAILS | |
| SCALE: NONE | SHEET NO. 2 OF 12 SHEETS STA. TO STA. |

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 153 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



NOTES:

1. 7 FOOT FOUNDATION FOR ARTERIAL STREET LIGHT POLE, UNLESS NOTED OTHERWISE. 9 FOOT FOUNDATION FOR TRAFFIC POLE WITH 16', 20', OR 26' MONOTUBE MAST ARM.
2. CONCRETE MUST MEET IDOT REQUIREMENTS FOR PORTLAND CEMENT CLASS SI CONCRETE.
3. REINFORCING BARS MUST MEET ASTM A-615 GRADE 60.

NOTE: HOLE FOR FOUNDATION MUST BE AUGURED IN UNDISTURBED SOIL

| CODE | COMMODITY | SIZE | QUANTITY |
|--------------|---------------------|----------------------|--------------|
| 05-3267-2940 | REDI-MIX CONCRETE | CU. YD. | 0.82 OR 1.05 |
| 09-4001- | ELBOW, LARGE RADIUS | 2", 2-1/2", 3", 4" | VARIES |
| 37-0180-0200 | ANCHOR ROD | 1-1/4" X 60" | 4 |
| 05-5054-6910 | RE-BAR CAGE | 20" X 6' (or 8') | 1 |
| 09-7796-9200 | GROUND ROD | 3/4" X 12'-0" | 1 |
| 09-2636-3240 | GROUND ROD CLAMP | 3/4" | 1 |
| 09-2092- | GROUND BUSHING | 2", 2-1/2", 3" OR 4" | VARIES |

| | |
|---|-----------------------------------|
| 8/21/02 | SUPERCEDES DWG #818 DRAWN 4/21/81 |
| DATE | REVISION |
| FOUNDATION FOR 3'-6" ARTERIAL STREET LIGHT OR TRAFFIC SIGNAL POLE - 3 OR 7 GAUGE WITH 15" BOLT CIRCLE | |
| CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING | |
| DRAFTSMAN: B. GARNSEY | ENGINEER: R. CARTER |
| ELECTRICAL DESIGN ENGINEER | DRAWING NO. 818 |
| ENGINEER IN CHARGE | |
| GENERAL SUPERVISOR | |
| DEPUTY COMMISSIONER | |
| SIZE: 11" x 17" | SCALE: NONE |



| | | | |
|-------------|-----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

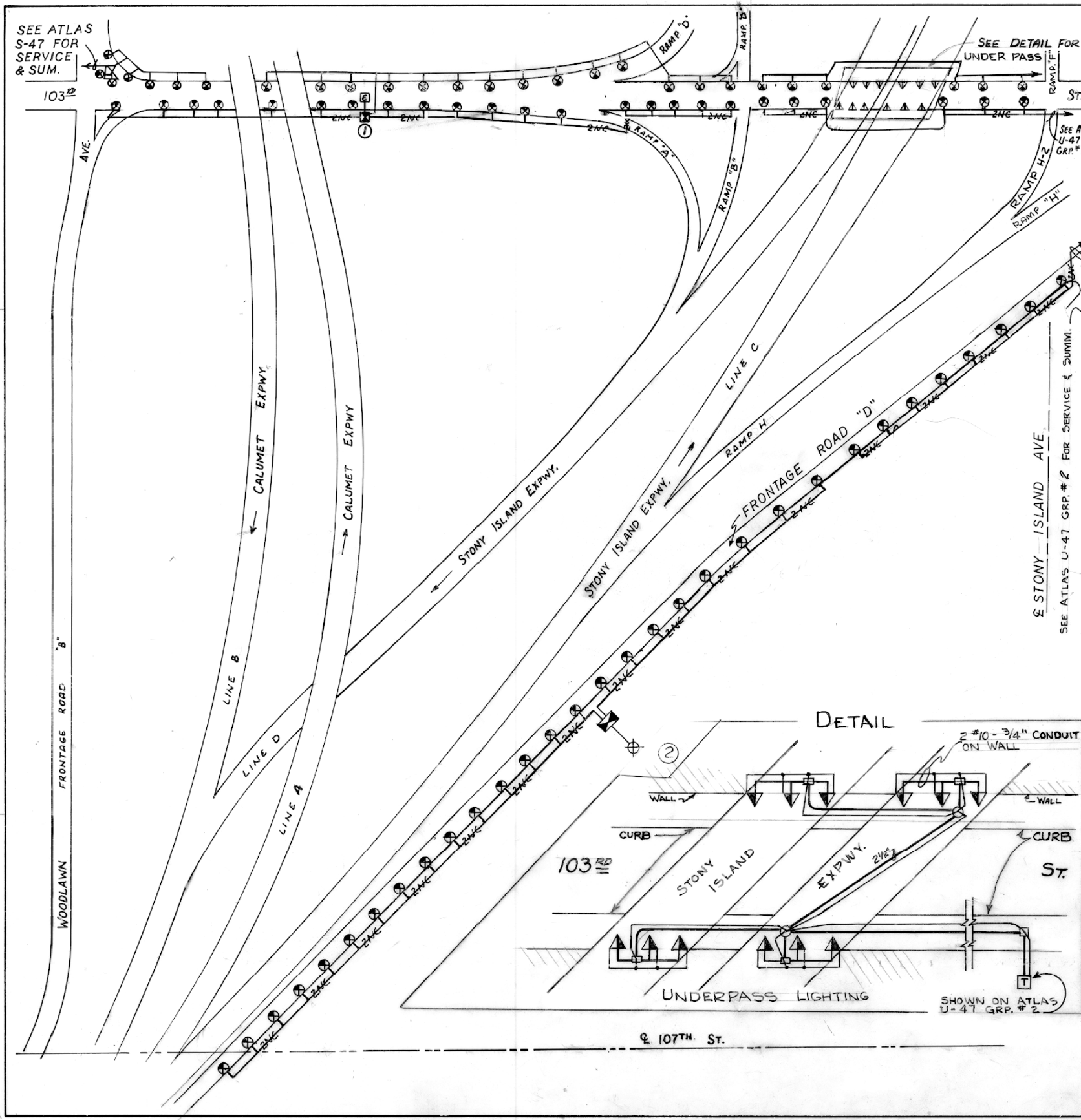
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STANDARD DETAILS

SCALE: NONE SHEET NO. 3 OF 12 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 154 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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SEE ATLAS S-47 FOR SERVICE & SUM.

SEE DETAIL FOR UNDER PASS

SEE ATLAS U-47 GRP #2

SEE ATLAS U-47 GRP #2 FOR SERVICE & SUMM.

| SUMMARY | | | CODE |
|----------|------------------------|------------|------|
| GRP. NO. | HIGH PRESS. SOD. LAMPS | UNDER-PASS | |
| 1 | 32 | | |
| 2 | 23 | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| TOTAL | 55 | | |

341 W.L.P.H.P.S.V

| REV. | DATE | W. O. | TEXT OF REVISION |
|------|----------|-----------|--|
| G | 5-7-90 | | ALL GRPS. CONV. TO PE. |
| F | 10-17-79 | OPER DIV. | ADDED 23-341 W. Lps. TO NEW GRP. 2 AMJ |
| E | 2-18-77 | 1617004 | REMOVE (32) 452W LPS & INSTALL (32) 341W LPS H.P.S.V. IN GRP #1 PCG |
| D | 1-2-75 | 110161 | ADDED 32-452W LPS TO GRP #1 |
| C | 8-10-72 | 110161 | ADDED (23)-452W LPS, W/B.I.B. ON FRONTAGE RD "D" SUMM. ON ATLAS U-47 GRP #2 R.J.S. |
| B | 7-27-72 | | ADDED GRP #1 13-452W LPS W/B.I.B. COUNTY FILE C-2-5 |
| A | 5-22-72 | 38842 | ADD 5-452W LPS W/B.I.B. ON 103RD ST SUMM. IN ATLAS U-47, GRP #2. L.M. |

CITY OF CHICAGO
DEPARTMENT OF STREETS & SANITATION
DIVISION OF ELECTRICAL ENGINEERING

EDISON SERVICE
ATLAS NO. T-47

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

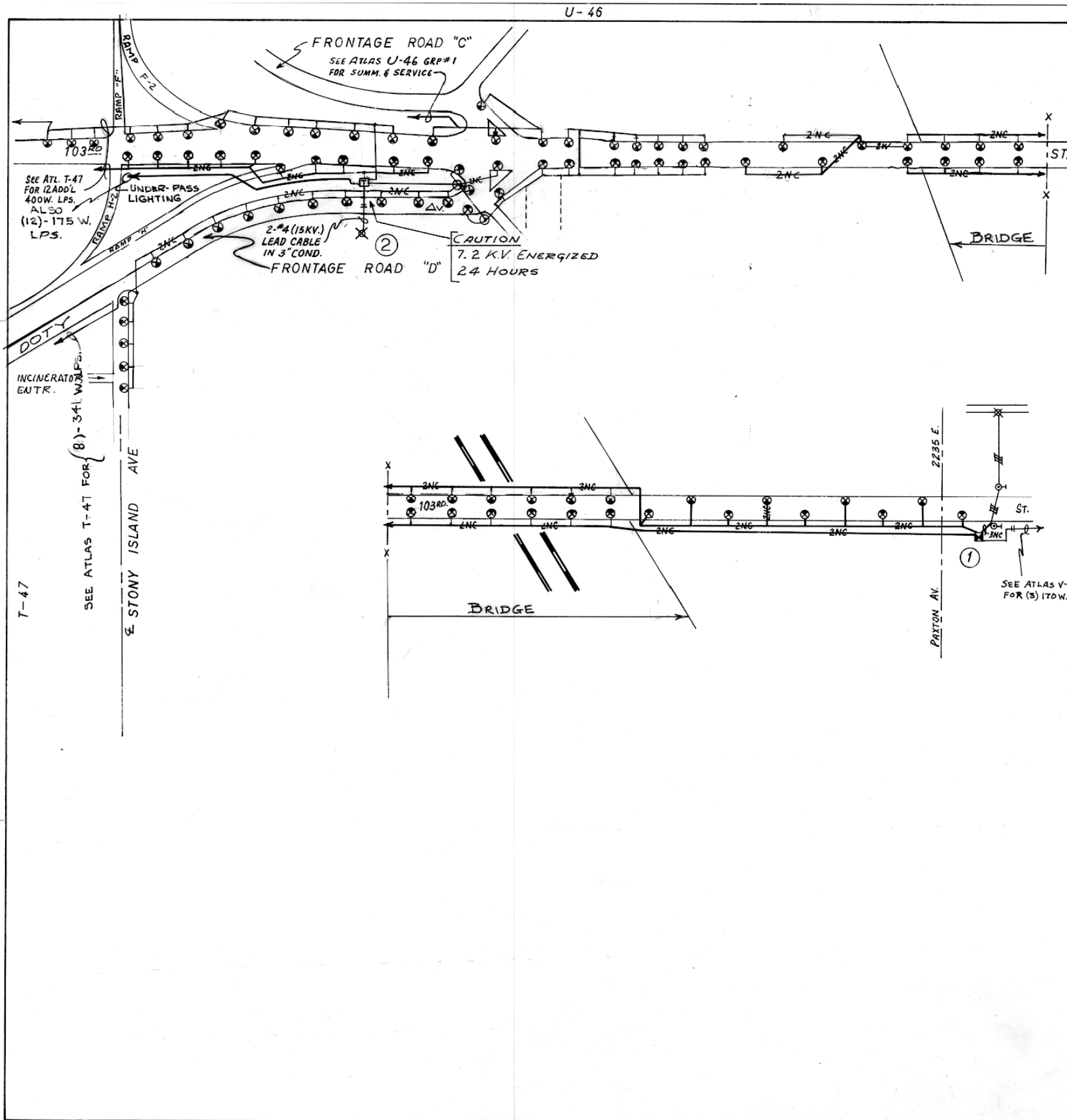
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|-------------|----------------------------|-------------------|-----------|
| FILE NAME : | USER NAME : rswanson | DESIGNED : JL | REVISED : |
| | | DRAWN : BKG | REVISED : |
| | PLOT SCALE = 50.000' / IN. | CHECKED : MKR | REVISED : |
| | PLOT DATE = 12/6/2012 | DATE : 12/07/2012 | REVISED : |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

SCALE: NONE SHEET NO. 4 OF 12 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 155 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



| SUMMARY | | | | CODE | |
|----------|------|------|---------|------------|-----|
| GRP. NO. | H. | P.S. | V. LPS. | UNDEP. PAK | |
| 1 | 1090 | 215 | 341 | 170 | 176 |
| 2 | | | 74 | 3 | 12 |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| TOTAL | | | 107 | 3 | 12 |

- ⊗ 341 W. L.P.H.P.S.V. 240V
- ▲ 175 W. M.V. HOLOPHANE WALLPAK
- 300 W. 4,000 L. INCAN. 240 V.
- ⊠ FLUORESCENT LUM. WATTAGE AS NOTED
- ▲ 250 W. 8,000 L. PHOTO-ELECTRIC CELL
- ⊗ 130 W. 4,000 L. PHOTO-ELECTRIC CELL

| | | |
|---|---|--|
| M | 4-19-93 | ADD. 5-341W. IN GRP. 2, DRG. 89-105 |
| L | 5-30-90 | ALL GRPS. CONV. TO PE. |
| K | 12-1-79 W.O. 171119 | ADDED 3-170W. LPS. TO GRP. 1 SHOWN ON ATLAS V-47 |
| J | OPER DIV 10-17-79 | REM. 23-341W. LPS. FROM GRP. 2 |
| I | 2-21-77 W.O. NO. 1617004 | REMOVE (132) 452W. LPS. & INSTALL (125) 341W. LPS. H.P.S.V. 240 V. IN GRP'S 1, 2 |
| H | 1-2-75 110161 | ADDED (40)-452W. LPS. TO GRP. 2 REMOVED (6)-452W. FROM GRP. 1 |
| G | FROM COUNTY HWY DE'S 10-3-72 110161 | ADDED (12)-175W. UNDER-PASS LIGHTS TO GRP. #2 LPS. SHOWN ON ATLAS T-47 |
| F | 8-10-72 110161 | ADDED (23)-452W. LPS. W/B.I.B. TO GRP. #2 SHOWN ON ATLAS T-47 |
| E | 7-27-72 | REPLACED 1-1090W. L.P. W/1452W. L.P. & REM. 1-452W. L.P. GRP #2 |
| D | 5-22-72 38842 | ADD 8-452W. LPS. TO GRP. #1. & REM 49-452W. LPS. & ADD 15-452W. LPS. W/B.I.B. & 1-1090W. L.P. W/B.I.B. TO GRP. #2. |
| C | 1-11-72 110161 | EDISON SERVICE REVISED IN GRP. #2, FROM AERIAL TO U.G. |
| B | 11-22-71 110161 | REM. 15-452W. LPS. W/B.I.B. & ADD 23 452W. LPS. W/B.I.B. TO GRP. #2. |
| A | 11-11-71 110161 | REM. 8-452W. LPS. FROM GRP. #2, SHOWN ON ATL. T-46A. & REDRAWN L.P. |

CITY OF CHICAGO
DEPARTMENT OF STREETS & SANITATION
DIVISION OF ELECTRICAL ENGINEERING

EDISON SERVICE
ATLAS NO. U-47

DATE: 11-22-71

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|----------------------|-------------------|-----------|
| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | | CHECKED - MKR | REVISED - |
| | | DATE - 12/07/2012 | REVISED - |

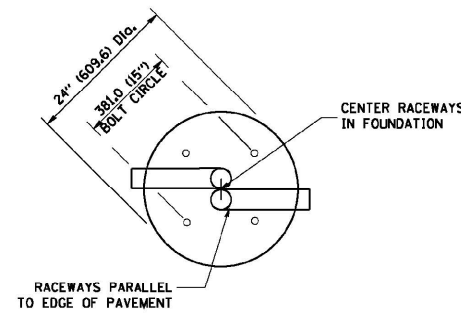
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| STANDARD DETAILS | |
|------------------|--------------------------|
| SCALE: NONE | SHEET NO. 5 OF 12 SHEETS |
| STA. | TO STA. |

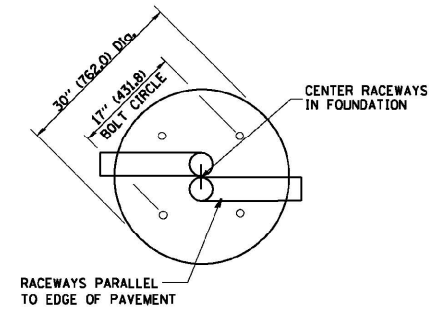
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 156 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

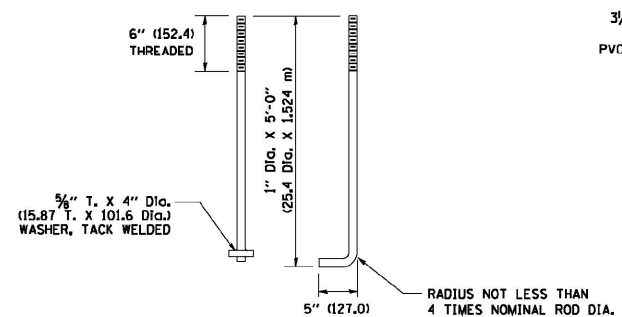
| SOIL CONDITIONS | DESIGN DEPTH "D" OF FOUNDATION | |
|-------------------------------------|--------------------------------|--------------------|
| | SINGLE ARM POLE | TWIN ARM POLE |
| SOFT CLAY Qu = 0.375 TON/SQ. FT. | 13'-0" (3.96 m) | 15'-0" (4.57 m) |
| MEDIUM CLAY Qu = 0.75 TON/SQ.FT | 9'-6" (2.93 m) | 10'-9" (3.23 m) |
| STIFF CLAY Qu = 1.50 TON/SQ. FT. | 7'-0" (2.13 m) | 8'-0" (2.44 m) |
| LOOSE SAND φ = 34° | 9'-0" (2.74 m) | 10'-0" (3.05 m) |
| MEDIUM SAND φ = 37.5° | 8'-3" (2.52 m) | 9'-0" (2.74 m) |
| DENSE SAND φ = 40° | 7'-9" (2.36 m) | 9'-0" (2.74 m) |



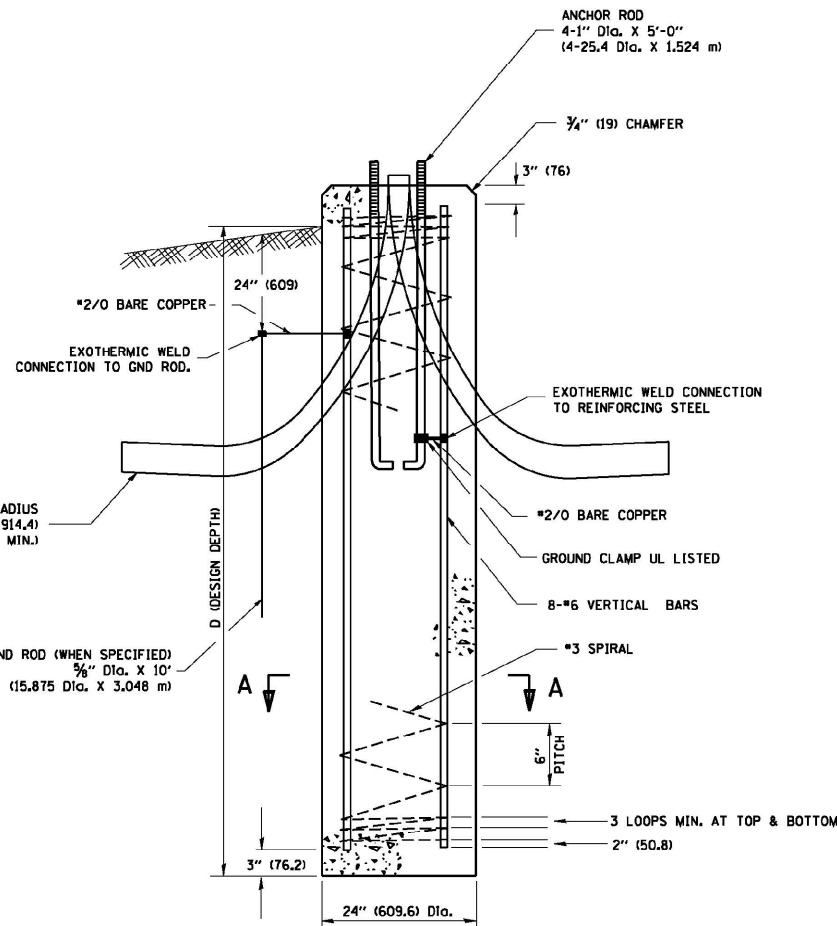
TOP VIEW



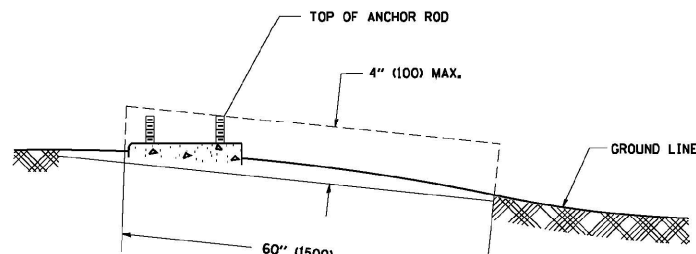
TOP VIEW



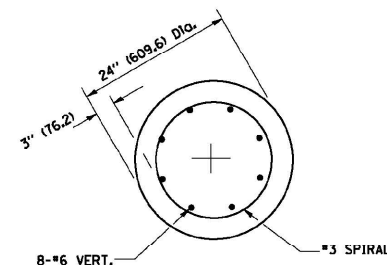
ANCHOR ROD DETAIL



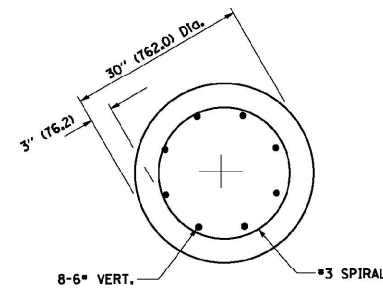
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

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411 South Wells Street Suite 1000
Chicago, Illinois 60607

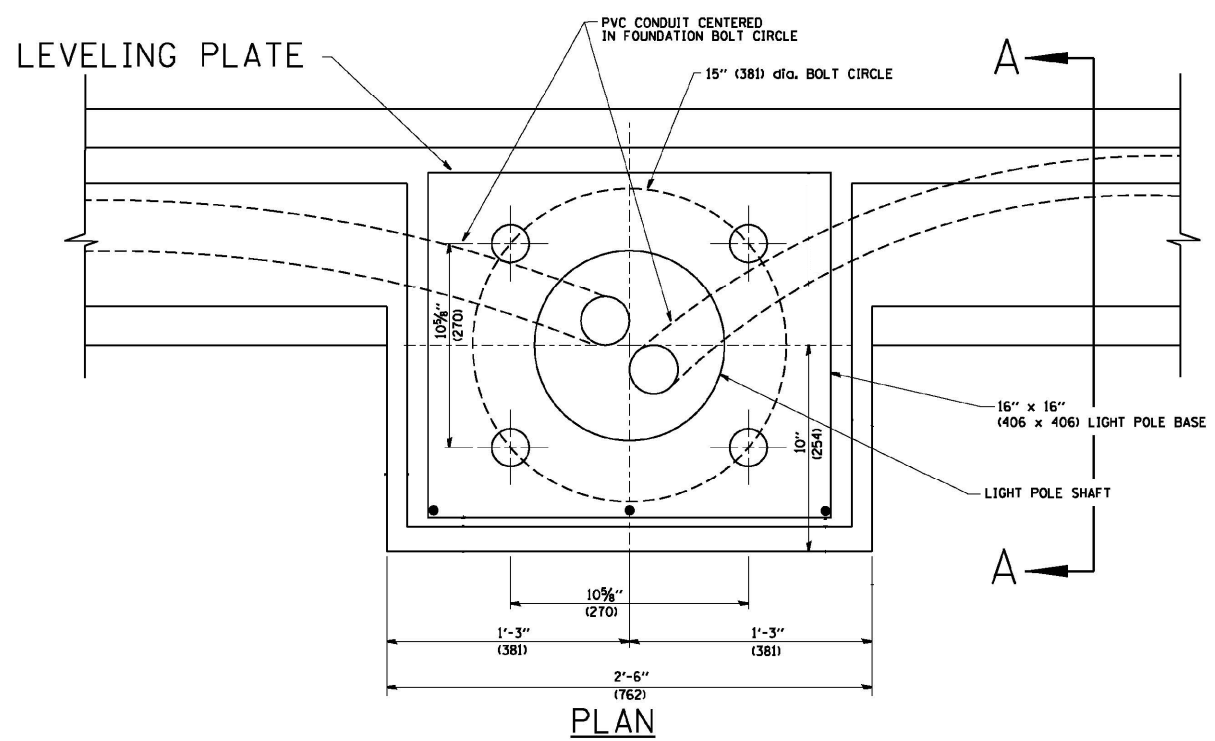
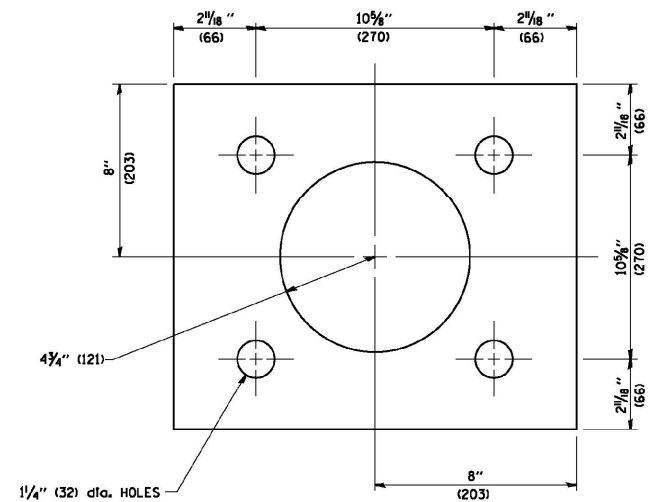
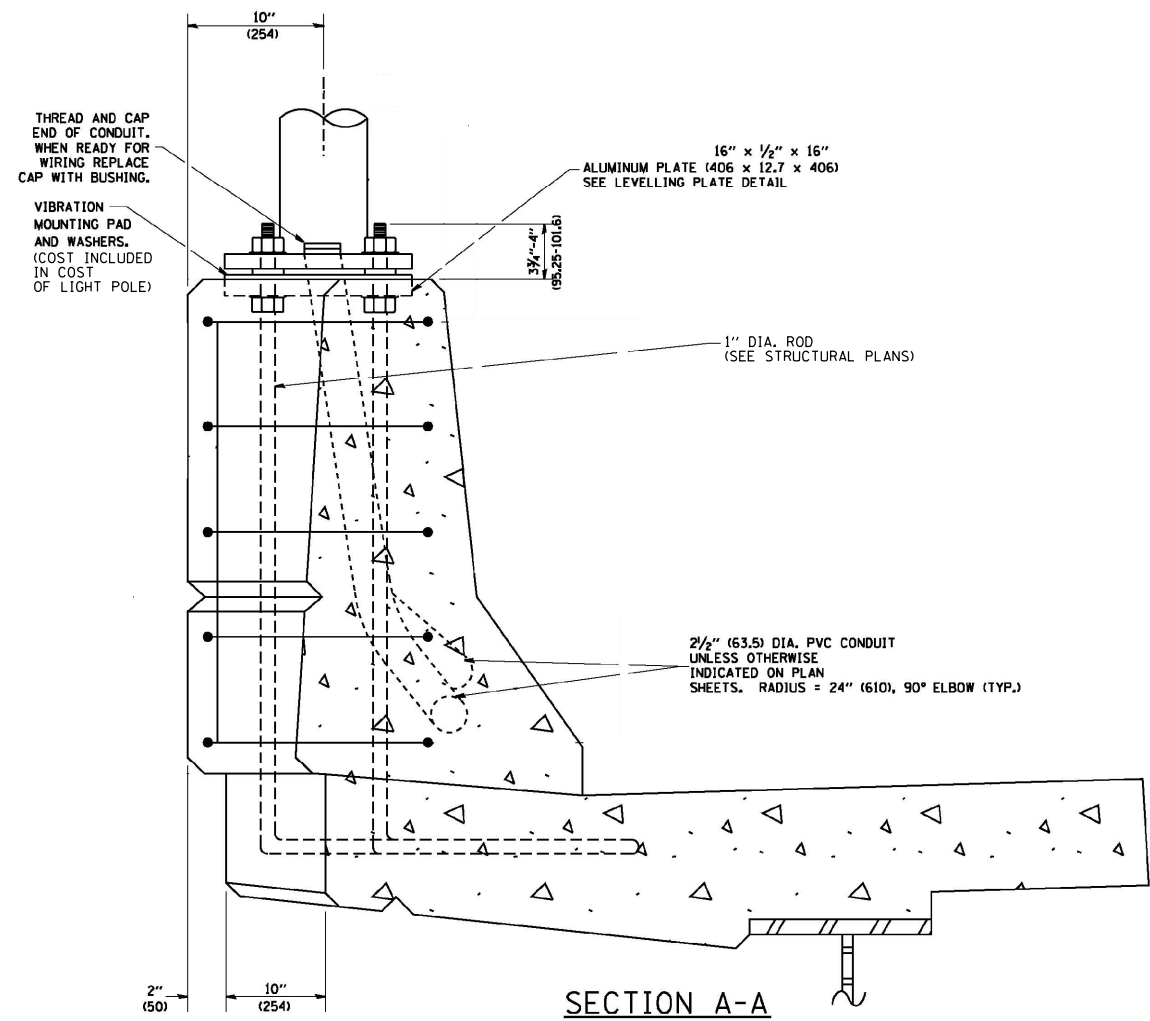
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| FILE NAME : | USER NAME : rswanson | DESIGNED : JL | REVISED : |
| | | DRAWN : BKG | REVISED : |
| | PLOT SCALE = 50.0000' / IN. | CHECKED : MKR | REVISED : |
| | PLOT DATE = 12/6/2012 | DATE : 12/07/2012 | REVISED : |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
40' (12.192 m) TO 47' 12" (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE

| | | | |
|-------------|--------------------------|------|---------|
| SCALE: NONE | SHEET NO. 6 OF 12 SHEETS | STA. | TO STA. |
|-------------|--------------------------|------|---------|

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE.: | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 157 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



- NOTES**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. LEVEL LIGHT POLE PLATES, USING THE FLANGE NUTS, PRIOR TO POURING THE PARAPET WALL. THE TOP OF THE PLATE SHALL BE AT THE SAME ELEVATION AS THE FINISHED CONCRETE PARAPET.
 3. THE COST OF ANCHOR BOLTS, CONDUIT, LEVELLING PLATE AND FOUNDATION IS INCLUDED IN THE COST OF THE BRIDGE STRUCTURE.

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 411 South Wells Street Suite 1000
 Chicago, Illinois 60607

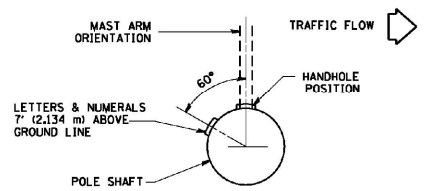
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| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

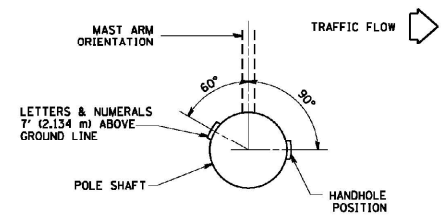
**LIGHT POLE MOUNTED ON CONCRETE PARAPET WALL
 15" (381 mm) BOLT CIRCLE**

| | |
|-------------------------|---------------------------------------|
| STANDARD DETAILS | |
| SCALE: NONE | SHEET NO. 7 OF 12 SHEETS STA. TO STA. |

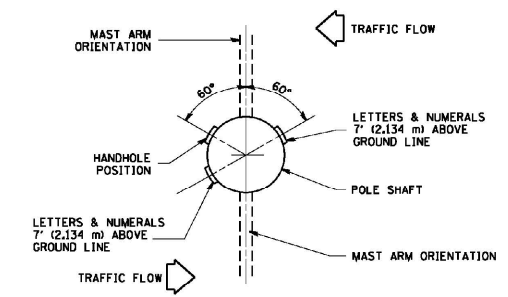
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| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 158 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



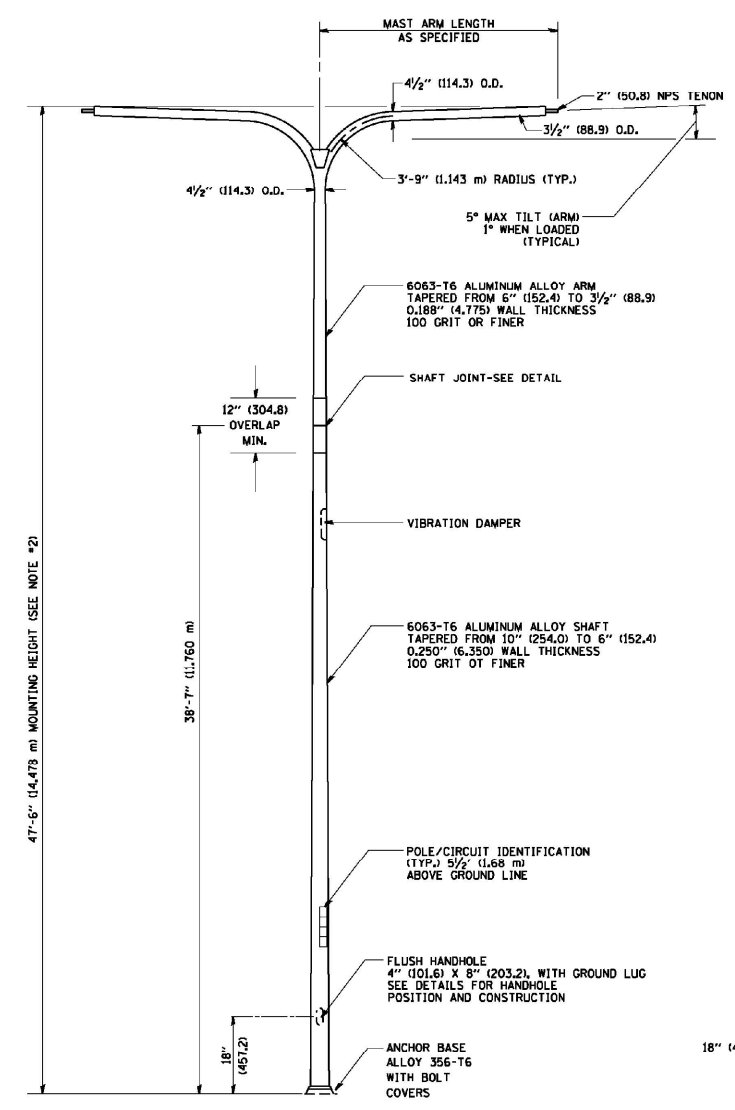
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



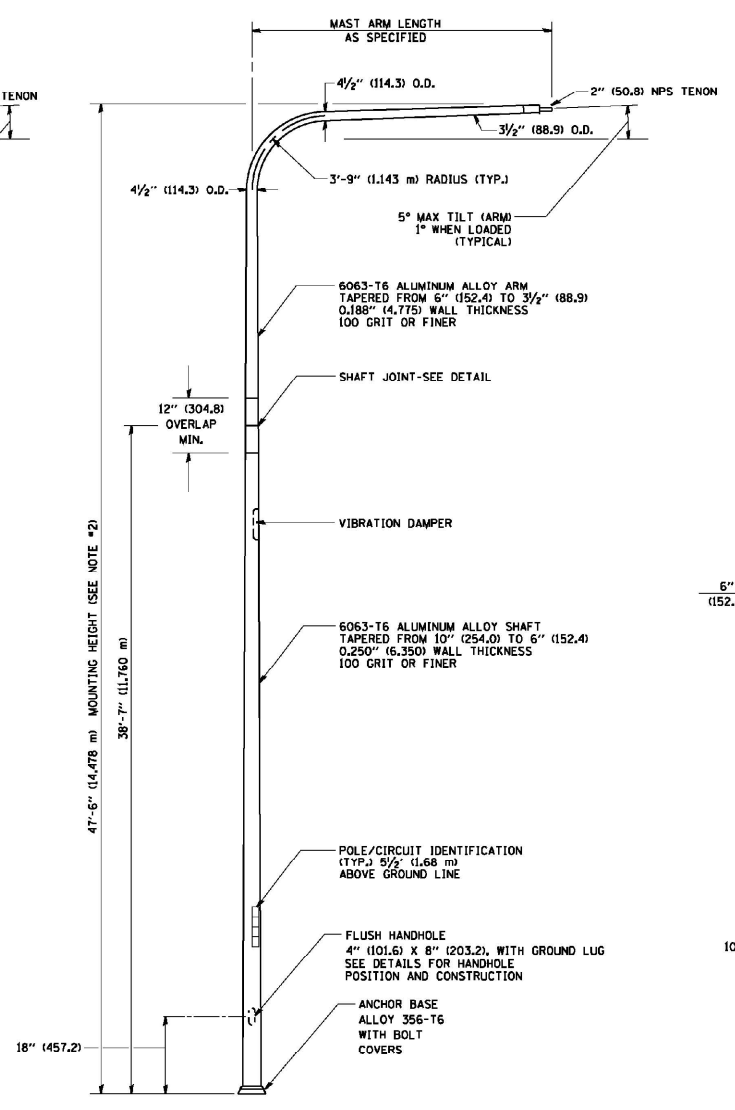
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

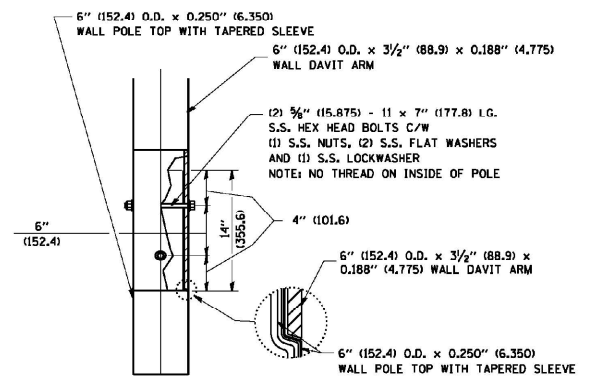


TWIN ARM POLE

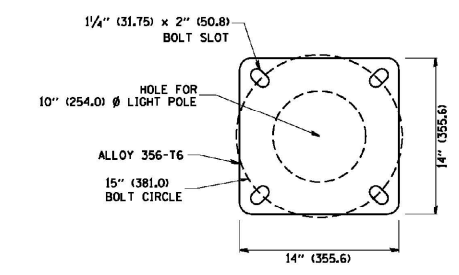


SINGLE ARM POLE

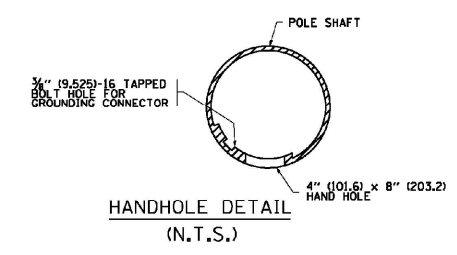
- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
 3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C25, T&B SP4DL OR APPROVED EQUAL.
 6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
 7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
 8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



DAVIT ARM CONNECTION
[14" (355.6) OVERLAP SHOWN]



LIGHT POLE BASE PLATE DETAIL
(FOR POLE MOUNTED ON 15 INCH (381.0) BOLT CIRCLE FOUNDATION)



| | | | | | | | | | | | |
|---|-----------------------------|---------------------------|--|---|---|-------------------------|-------------|---------|---|--------------|--------------|
| FILE NAME = W:\diststd\22x34\be418.dgn | USER NAME = geglennob | DESIGNED - DRAWN - LEY | REVISED - D. DREW 04-02-92 REVISED - D. DREW 05-07-92 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DAVIT LIGHT POLE 47'-6" (14.478 m) MOUNTING HEIGHT | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - | REVISED - R. TOMSONS 09-06-00 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | BE-410 | | CONTRACT NO. |
| | PLOT DATE = 1/4/2008 | DATE - | REVISED - R. TOMSONS 09-02-03 | | | | | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | |
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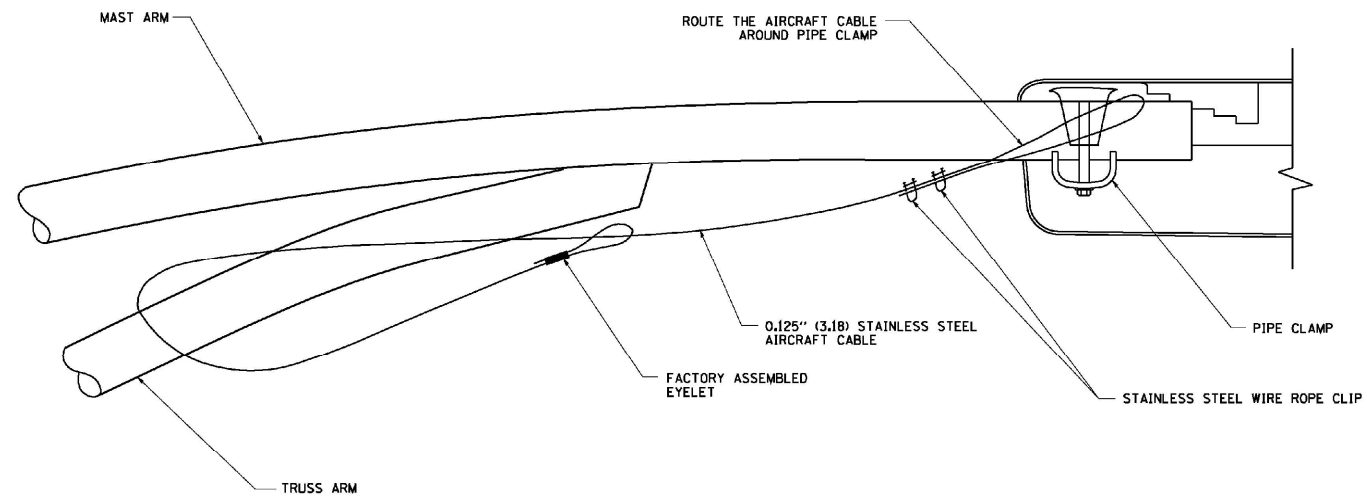


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| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
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| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

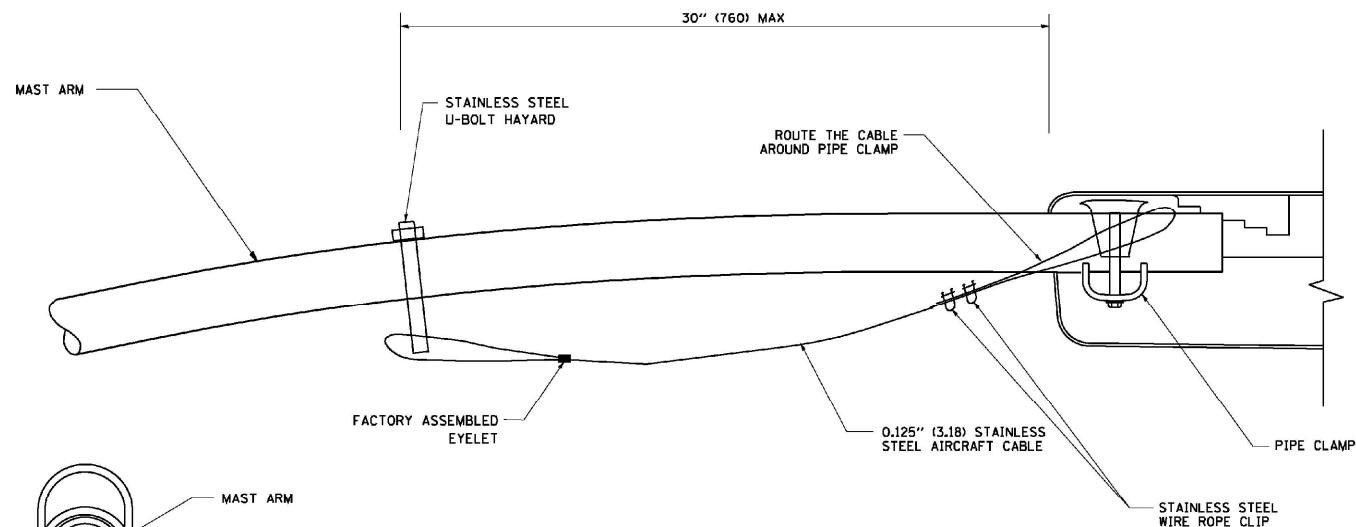
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|---|--------------------------|
| STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | |
| SCALE: NONE | SHEET NO. 8 OF 12 SHEETS |
| STA. | TO STA. |

| | |
|-------------------------|--------------------------|
| STANDARD DETAILS | |
| SCALE: NONE | SHEET NO. 8 OF 12 SHEETS |
| STA. | TO STA. |

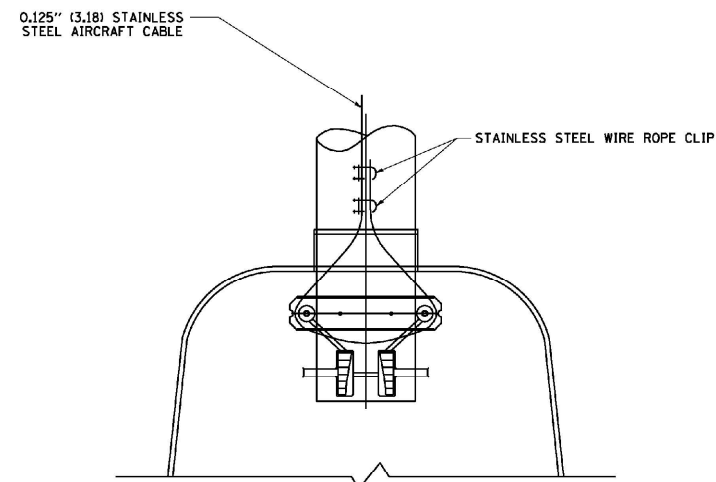
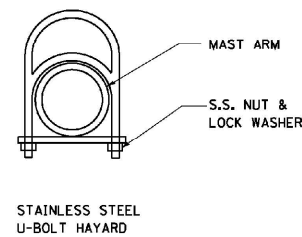
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| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 159 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



SIDE VIEW (TRUSS ARM)
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.



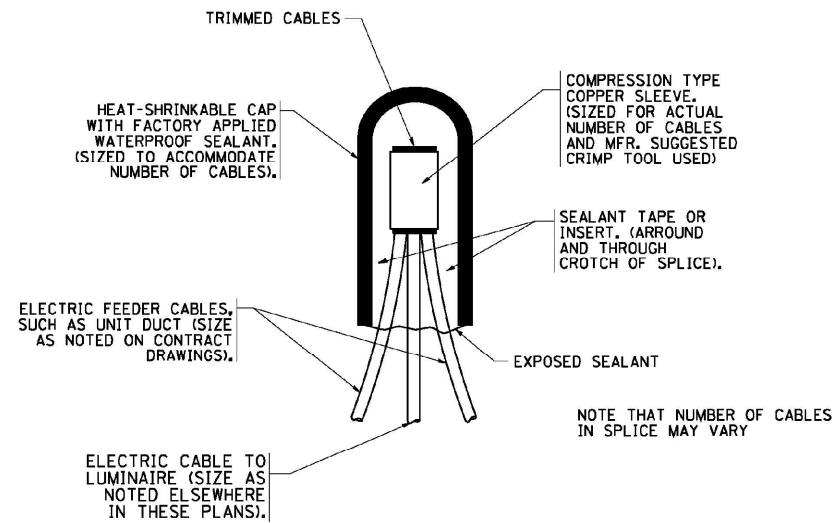
BOTTOM VIEW
N.T.S.

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
 2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
 3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
 4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

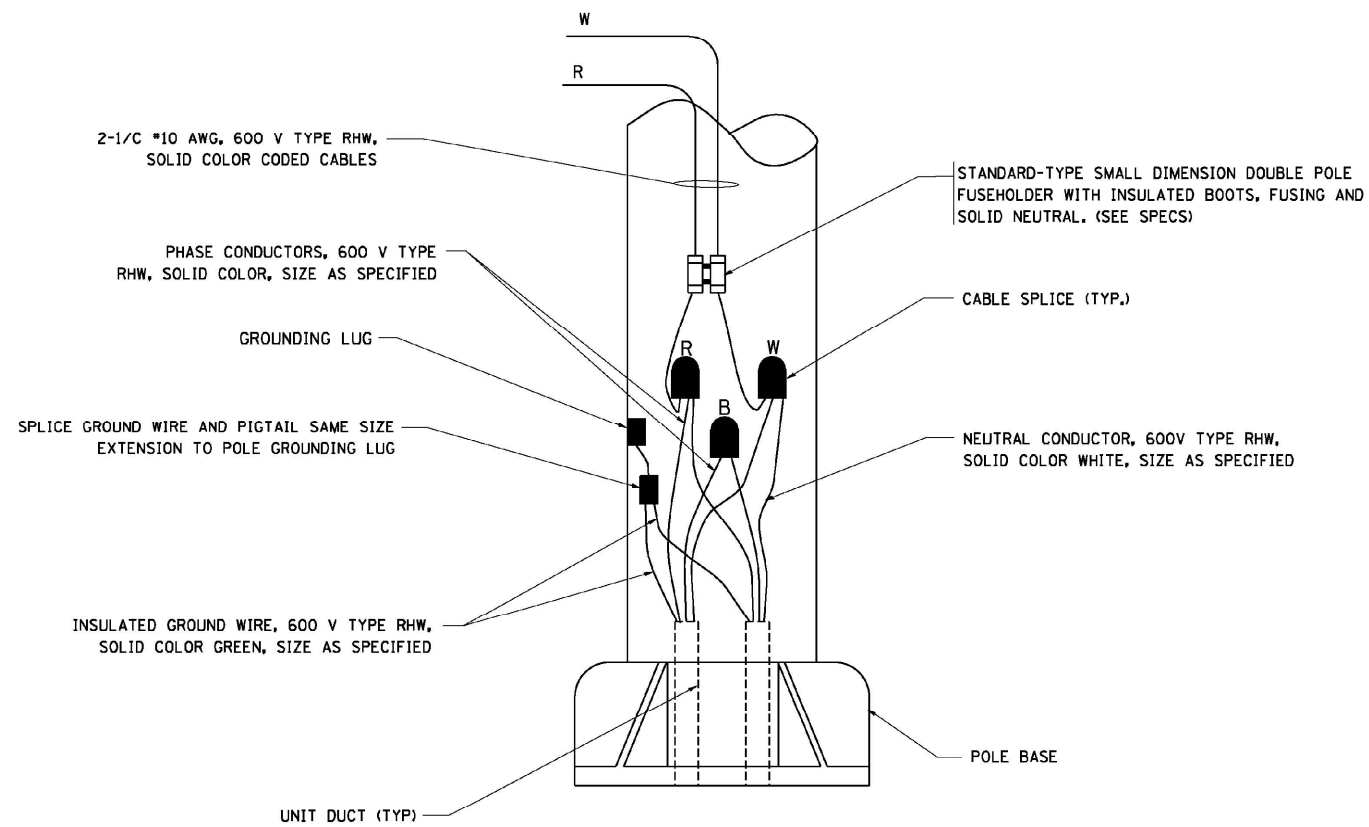
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| | PLOT SCALE = 50.000' / IN. | CHECKED - | REVISOR - | | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | BE-701 | CONTRACT NO. | | |
| | PLOT DATE = 1/4/2008 | DATE - | REVISOR - | | | | | | | FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT | | |
| | | | | | | | | | | | | | |

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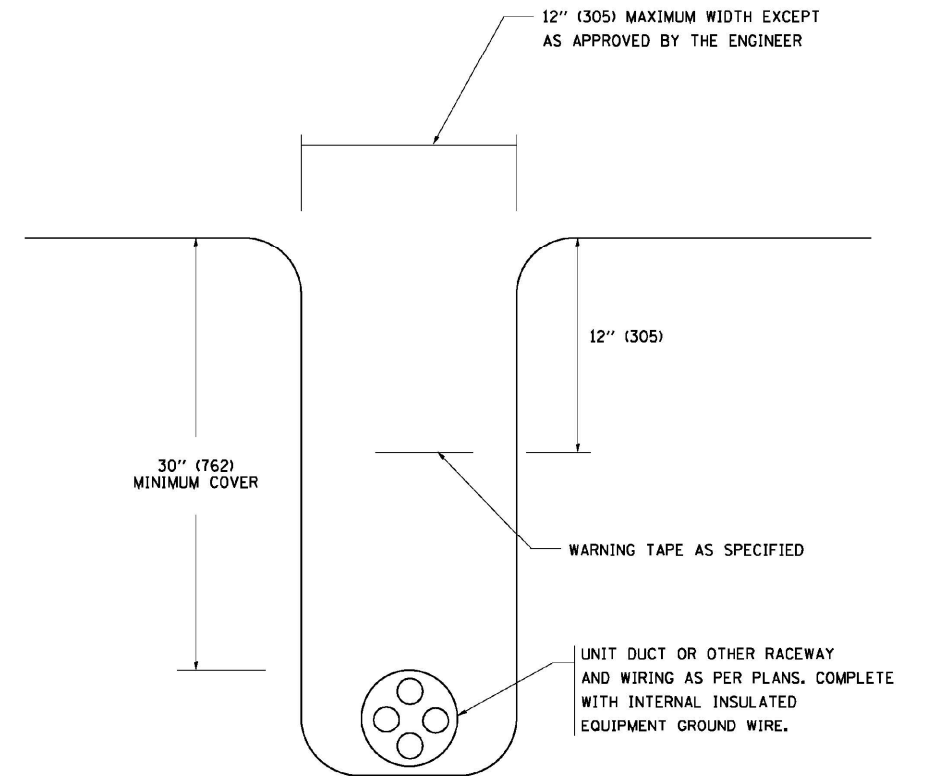
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| | PLOT SCALE = 50.000' / IN. | CHECKED - | REVISOR - | | | SCALE: NONE | SHEET NO. 9 OF 12 SHEETS | STA. | TO STA. | 94 | 2012-060-BR | COOK | 285 | 160 |
| | PLOT DATE = 12/6/2012 | DATE - | REVISOR - | | | | | | | | | | | |
| | | | | | | | | | | | | | | |



TYPICAL SPLICE DETAIL
N.T.S.



POLE WIRING DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.

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411 South Wells Street Suite 1000
Chicago, Illinois 60607

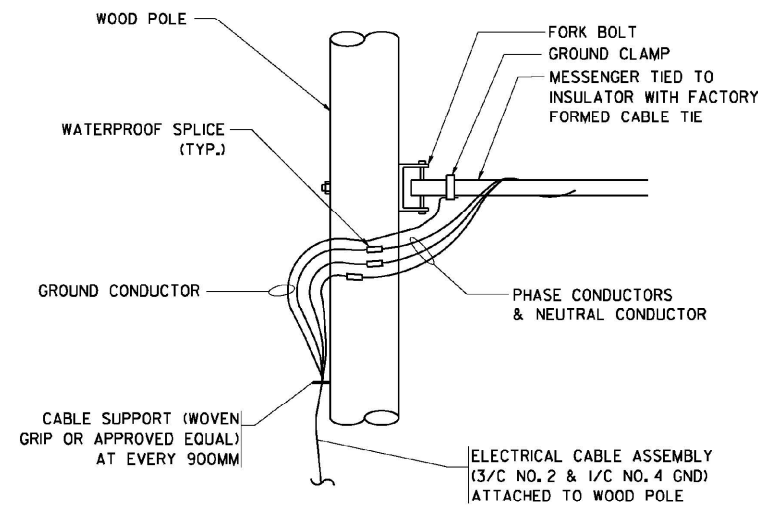
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| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000" / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

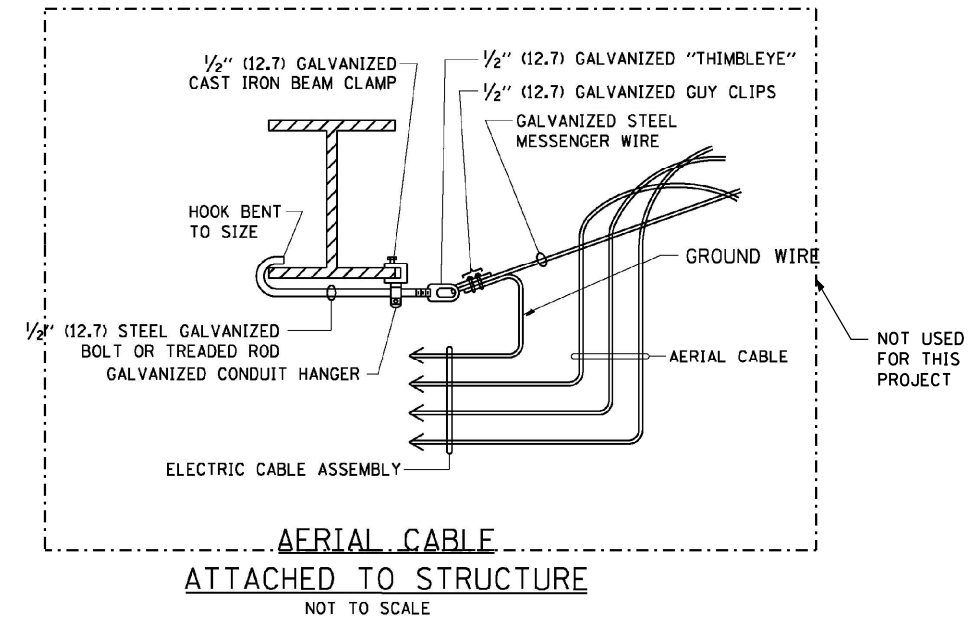
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| SCALE: NONE | | SHEET NO. 10 OF 12 SHEETS | STA. TO STA. |
|-------------|--|---------------------------|--------------|

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 161 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

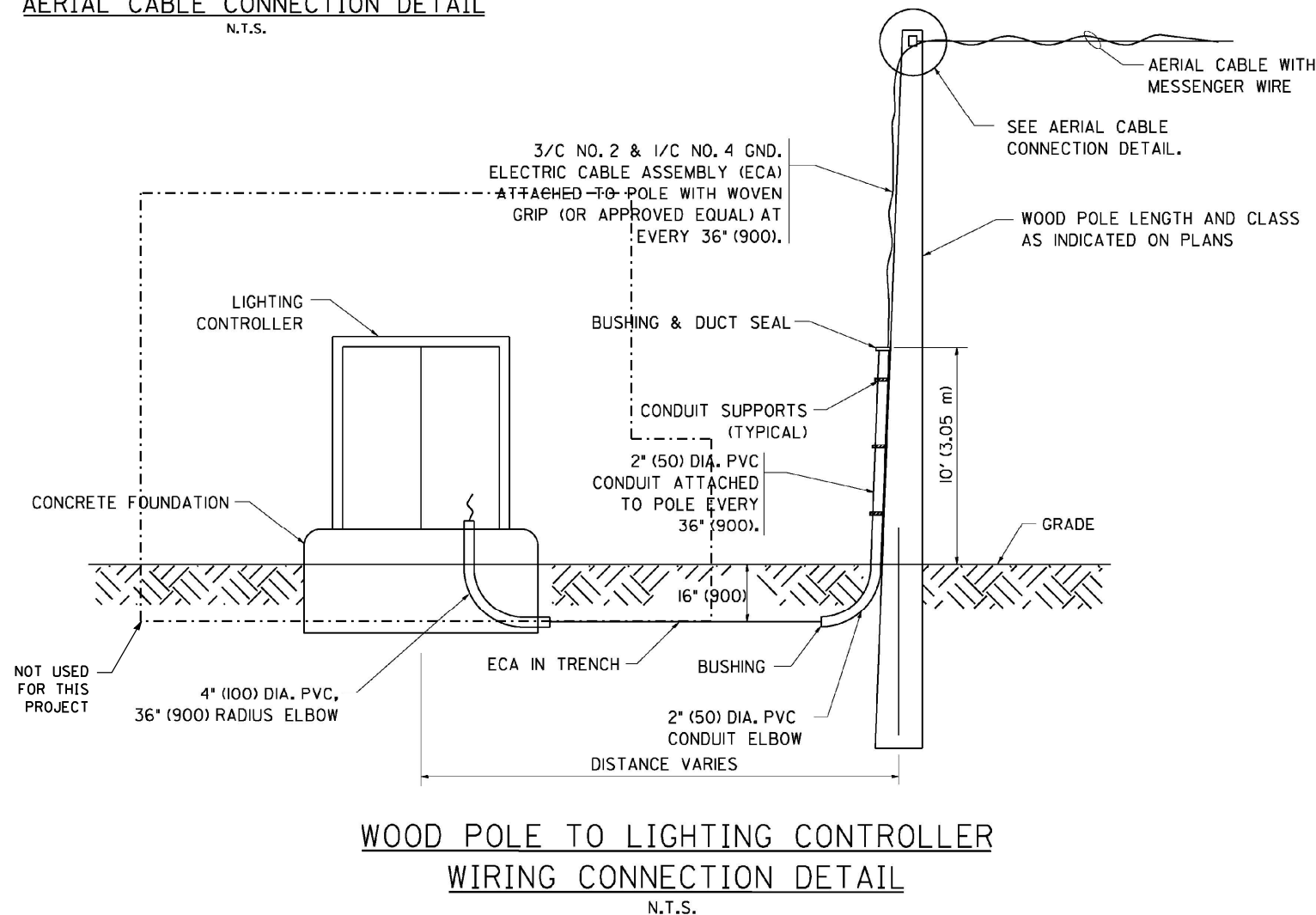
E-24
d:\projects\3810 stony island feeder - bba\project work\cadd sheets\DI60V61-mt-light-24.dgn



AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

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Chicago, Illinois 60607

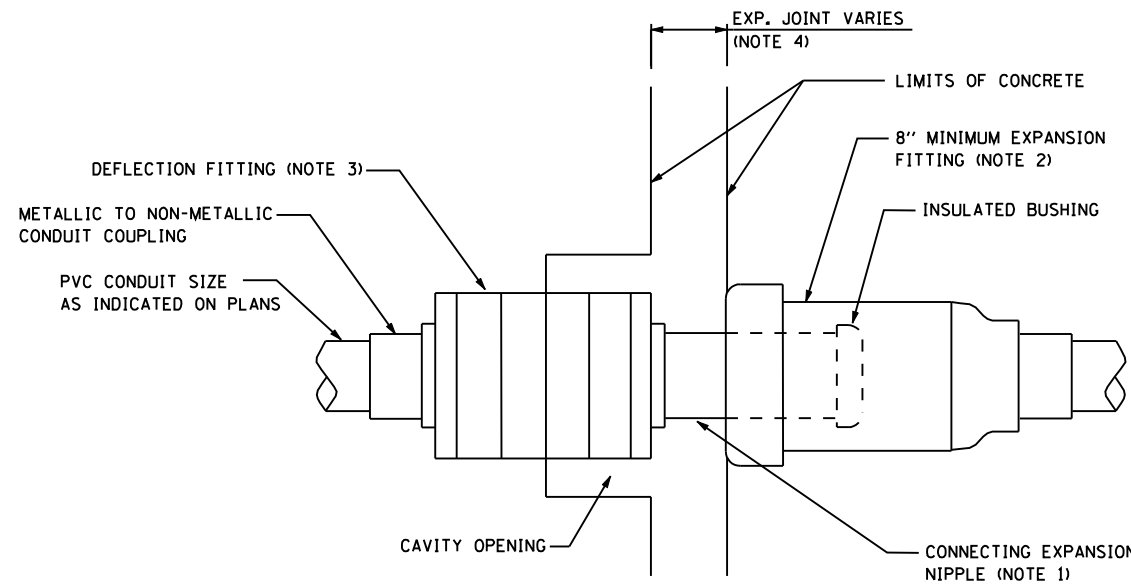
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| FILE NAME : | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.000" / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 12/6/2012 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STANDARD DETAILS

SCALE: NONE SHEET NO. 11 OF 12 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 162 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

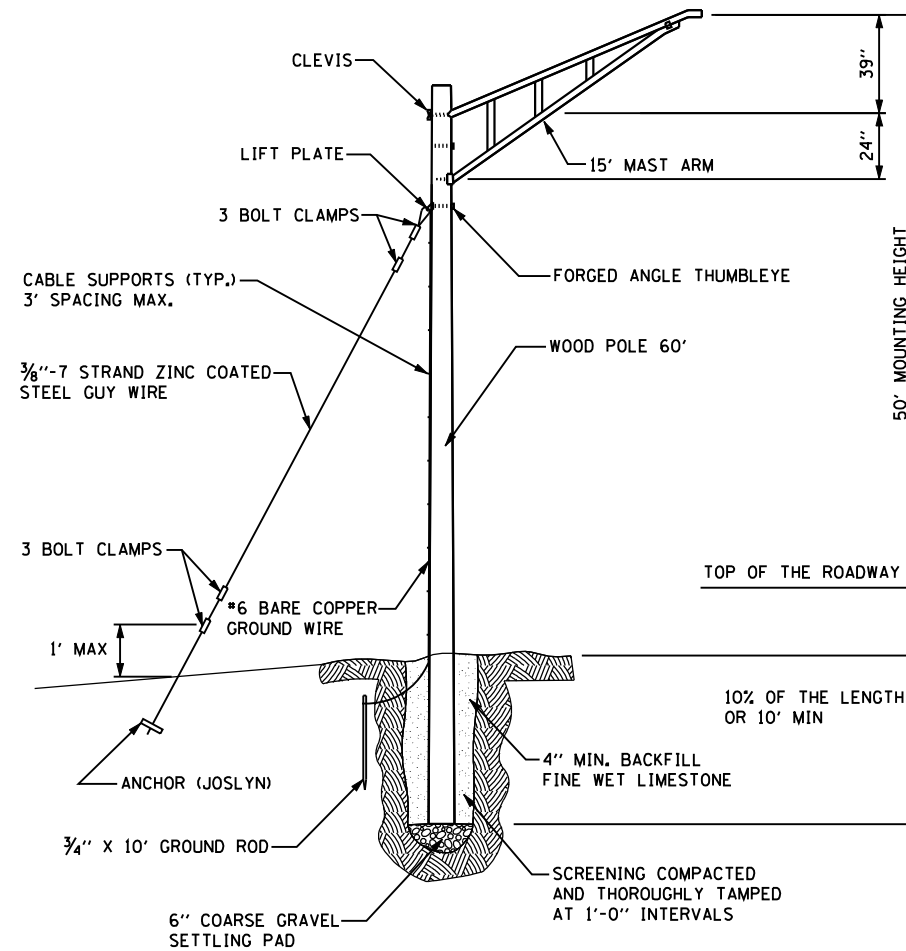


CONDUIT EXPANSION/DEFLECTING COUPLING

NOT TO SCALE

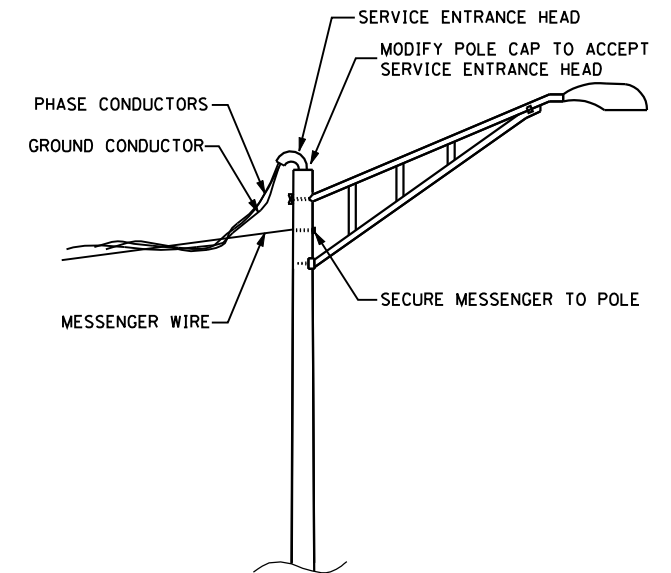
NOTES:

1. PROVIDE REQUIRED LENGTH OF CONNECTING EXPANSION NIPPLE. REFER TO STRUCTURAL DRAWINGS FOR THE EXPANSION JOINT CHARACTERISTICS.
2. THE BARREL OF THE FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE ON ONE SIDE OF THE EXPANSION JOINT.
3. A CAVITY OPENING, IF REQUIRED, SHALL BE 3" LARGER DIA. AND A MAX. DEPTH OF HALF OF THE DEFLECTION FITTING SHALL BE CENTERED IN THE OPENING AND EMBEDDED IN THE CONCRETE ONLY UP TO THE DEFLECTION FITTING CENTER.
4. REFER TO STRUCTURAL PLANS FOR EACH EXPANSION JOINT WIDTH, AND OTHER STRUCTURAL DETAILS.



TEMPORARY WOOD/LIGHT POLE DETAIL

NOT TO SCALE

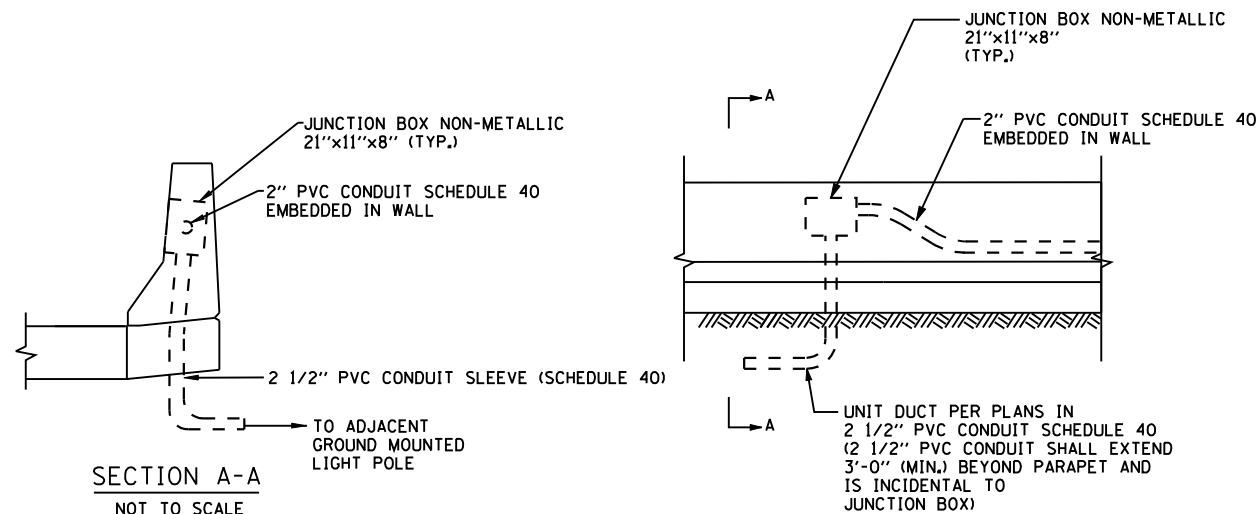


TEMPORARY POWER FEED TO EXISTING ALUMINUM POLE

NOT TO SCALE

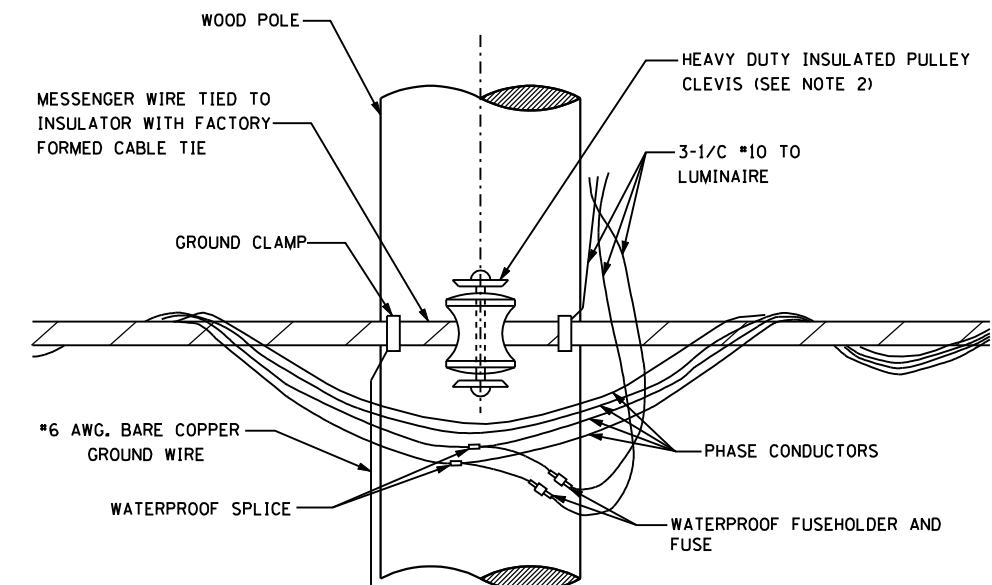
NOTES:

1. COST OF SERVICE ENTRANCE HEAD, MODIFICATION OF POLE CAP AND CONNECTION ARE INCIDENTAL TO THE PAY ITEM "MAINTENANCE OF LIGHTING SYSTEM".
2. WITH THE APPROVAL OF THE ENGINEER, A SECONDARY CABLE SPREADER SECURED TO THE POLE MAY BE USED IN CONJUNCTION WITH THE QUADRUPEX IN LIEU OF THE HEAVY DUTY INSULATED PULLEY CLEVIS.
3. WHEREVER THE TEMPORARY AERIAL CABLE IS REQUIRED TO CROSS AN EXISTING AND/OR PROPOSED ROADWAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 20 FEET OF VERTICAL CLEARANCE OVER THE ROADWAY AT ALL TIMES.



UNDERGROUND TO EMBEDDED CONDUIT TRANSITION

NOT TO SCALE



TEMPORARY LIGHT POLE CABLE ATTACHMENT DETAIL

NOT TO SCALE

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|-------------|-----------------------------|-------------------|-----------|
| FILE NAME = | USER NAME = rswanson | DESIGNED - JL | REVISED - |
| | | DRAWN - BKG | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - MKR | REVISED - |
| | PLOT DATE = 2/11/2013 | DATE - 12/07/2012 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STANDARD DETAILS

SCALE: NONE SHEET NO. 12 OF 12 SHEETS STA. TO STA.

| | | | | |
|--------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 163 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT

Bench Mark: Iron pipe approximately 72' northwest of Pier 4, approximately 93' southwest of Pier 5, and approximately 13' east of Northbound Stony Island Extension edge of shoulder. Elevation 584.63.

Existing Structure: Structure No. 016-2437 was constructed in 1972 by the Cook County Department of Highways. The superstructure consists of four curved steel plate girders with fourteen spans arranged in four continuous units. The deck has a constant out-to-out width of 28'-0", consisting of a composite 7 1/2" reinforced concrete slab with a 1 1/2" bituminous concrete overlay. The back-to-back of abutment length of the bridge is 1450'-5". Abutment 1 is a sand-filled vaulted concrete abutment. Abutment 2 is a vaulted abutment with P.P.C. I-beams supporting a concrete slab. All abutments and approach bents are founded on steel H-Piles. The hammerhead piers are supported on a round column and caisson with a belled end. The ramp is to be closed and traffic is to be detoured during construction.

No salvage.

DESIGN STRESSES

FIELD UNITS (New Construction)

f'c = 3,500 psi
 fy = 60,000 psi (reinforcement)
 fy = 50,000 psi (structural steel)

FIELD UNITS (Exist. Construction)

f'c = 3,500 psi
 fy = 40,000 psi (reinforcement - unless noted)
 fy = 60,000 psi (reinforcement - pier shafts and subpiers)
 fy = 36,000 psi (structural steel - unless noted)
 fy = 50,000 psi (structural steel - select flange plates)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

SEISMIC DATA

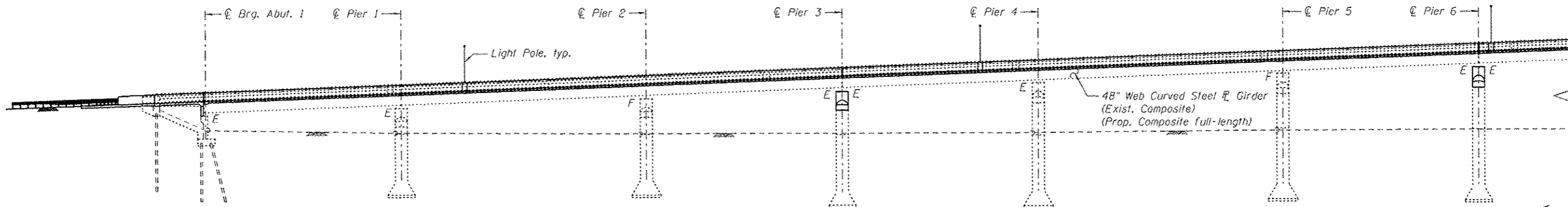
Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.038g
 Site Coefficient (S) = 1.0

LOADING HS20-44 & ALT. MILITARY

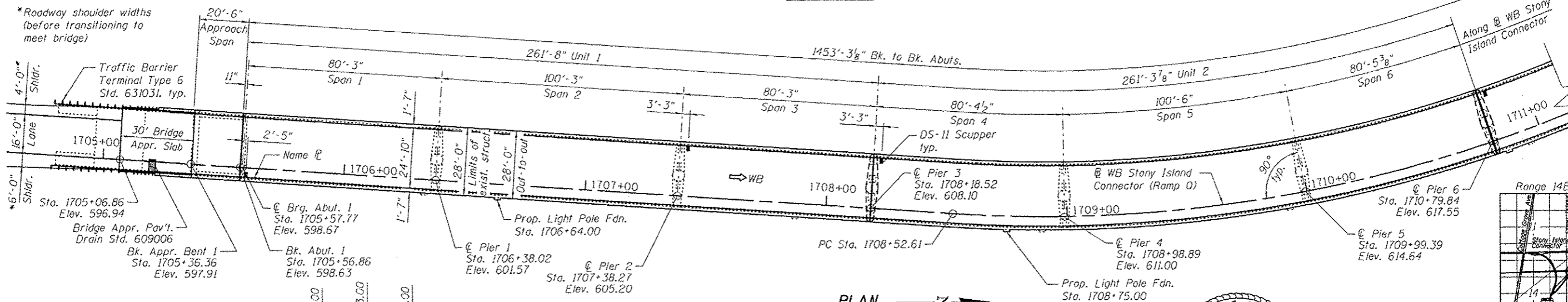
Allow 50#/sq. ft. for future wearing surface.

SCOPE OF WORK

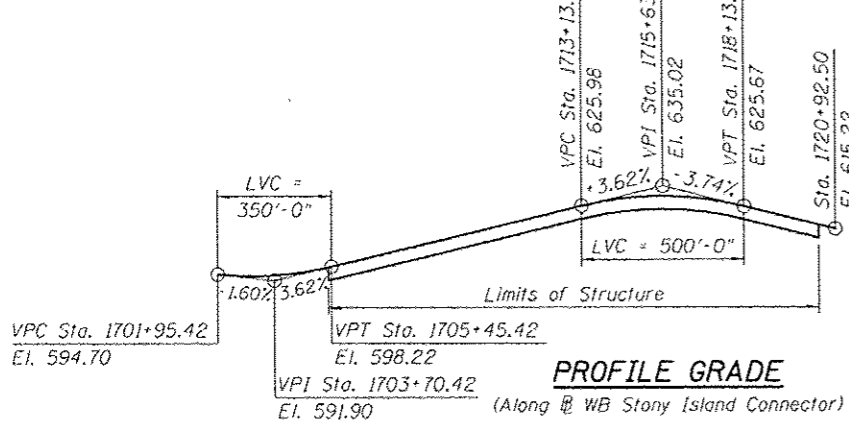
1. Remove and replace deck, vaulted abutment approach span slabs, and approach pavements.
2. Remove and replace abutment backwalls.
3. Remove and replace pier caps at Pier 3 and Pier 6.
4. Remove and replace bearings at all abutments and piers except Pier 10.
5. Remove PPC I-beams at Abutment 2, fill the abutment vault with expanded polystyrene fill and replace with slab span.
6. Crack injection and formed concrete repairs at abutments and piers.
7. Clean and paint steel superstructure, install stud shear connectors on girders in negative moment regions, and retrofit select flange splices.
8. Remove and replace drainage system.



ELEVATION



PLAN



PROFILE GRADE

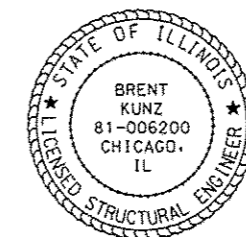
CURVE DATA

(@ WB Stony Island Connector)
 P.I. = Sta. 1718+26.06
 $\Delta = 118^\circ 54' 55''$ LT
 $D = 9^\circ 58' 31''$
 $T = 973.45'$
 $L = 1192.10'$
 $E = 555.90'$
 $R = 574.38'$
 $e = 6.0\%$
 P.C. = Sta. 1708+52.61
 P.T. = Sta. 1720+44.71

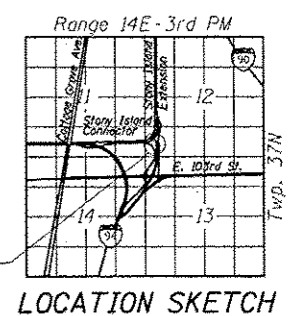
APPROVED

For Structural Adequacy Only

Carl R. King
 Engineer of Bridges & Structures



SIGNED: *Brent Kunz*
 DATE: December 07, 2012
 EXPIRES: November 30, 2014



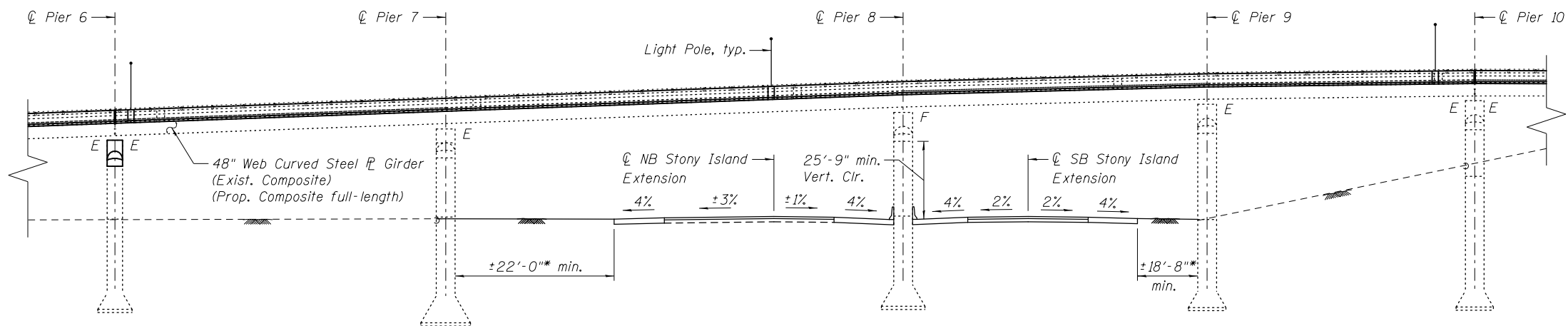
LOCATION SKETCH

GENERAL PLAN & ELEVATION I
WB STONY ISLAND CONNECTOR (RAMP Q)
OVER STONY ISLAND EXTENSION
 F.A.I. RTE. 94 - SEC. 2012-060-BR
COOK COUNTY
STATION 1713+33.77
STRUCTURE NO. 016-2437

| | | | | | |
|--|-------------------------|---------------|-----------|---|------------------------------|
| BOWMAN, BARRETT & ASSOCIATES INC. CONSULTING ENGINEERS Chicago, Illinois 312.228.0100 www.bbainc.com | USER NAME = | DESIGNED - TL | REVISOR - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SHEET NO. S-1 OF S-83 SHEETS |
| | PLLOT SCALE = | CHECKED - BAK | REVISOR - | | |
| | PLLOT DATE = 11/08/2012 | DRAWN - TL | REVISOR - | | |
| | | CHECKED - BAK | REVISOR - | | |

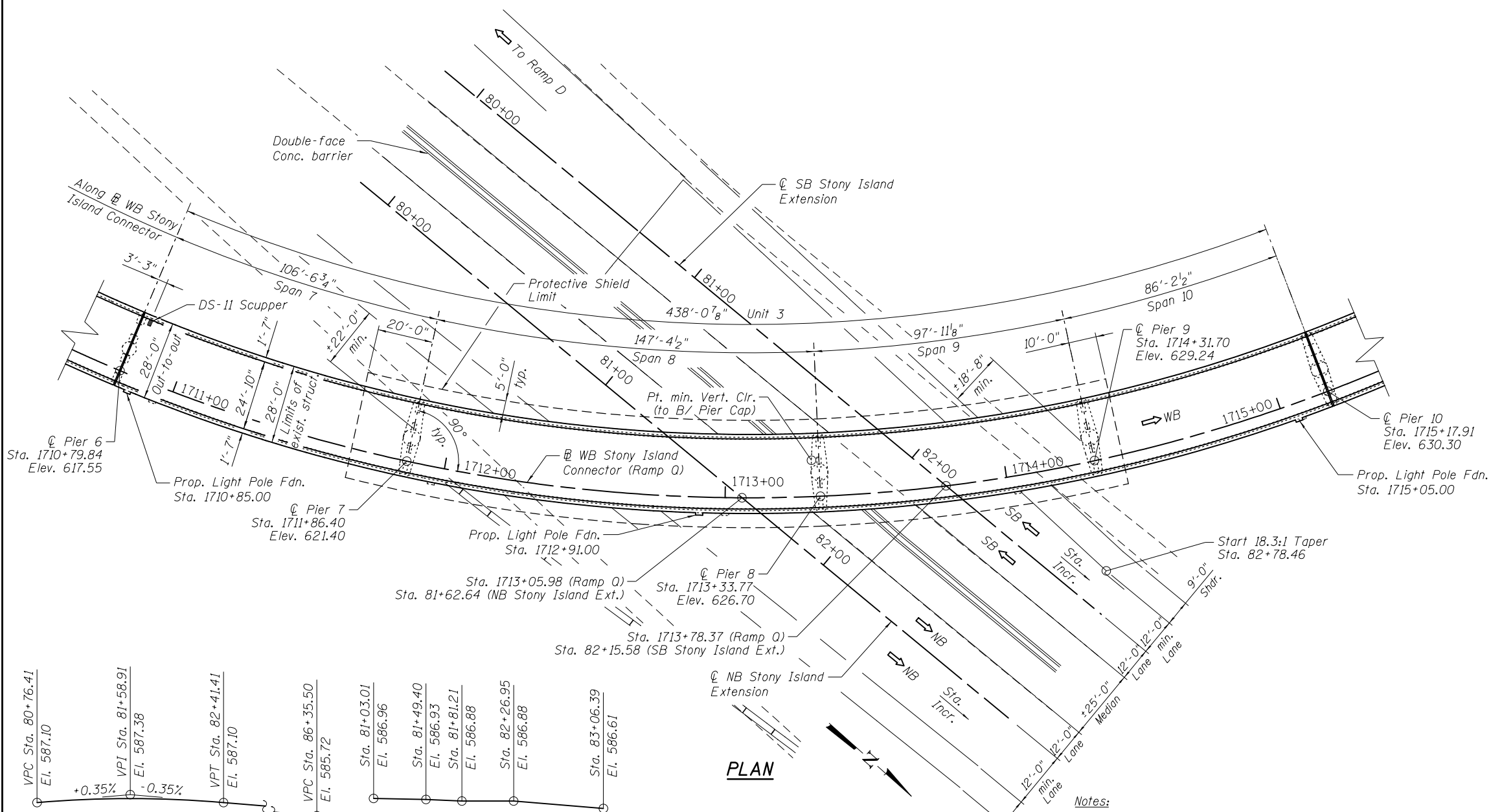
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-------------|--------|--------------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 164 |
| | | | CONTRACT NO. 60V61 | |

2/26/08 PM
 12/7/2012
 S:\172\95.CADD\Structure\1718\1718-01-01.dgn



ELEVATION

*Horizontal Dimensions @ Rt. L's



PLAN



PROFILE GRADE
(Along SB Stony Island Extension)

PROFILE GRADE
(Along NB Stony Island Extension Inside Edge of Pavement)

Notes:
The existing Profile Grade for NB Stony Island Extension was obtained from survey data.
All work shown on Stony Island Extension will be performed in a future contract.

2/26/02 PM

12/7/2012

S:\1072_05_CADD\Structure\1 SN 0162437\CADD Sheets\0162437-60J12-002-0102.dgn

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

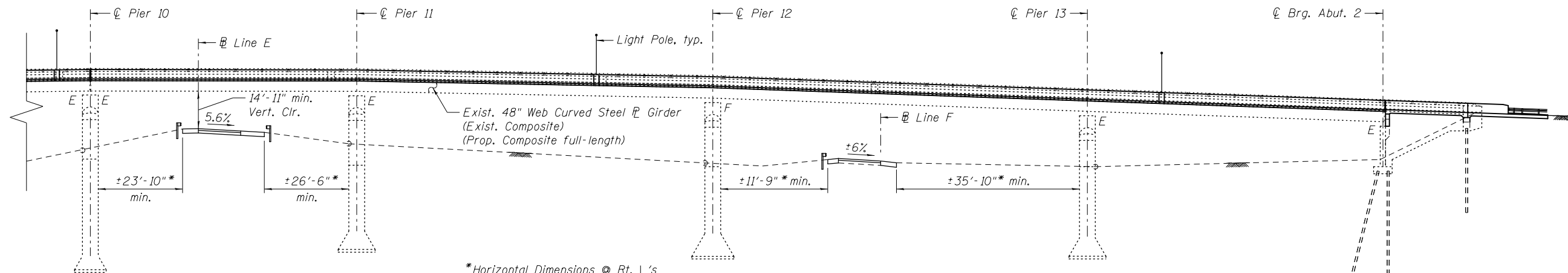
| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - TL | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION II
STRUCTURE NO. 016-2437

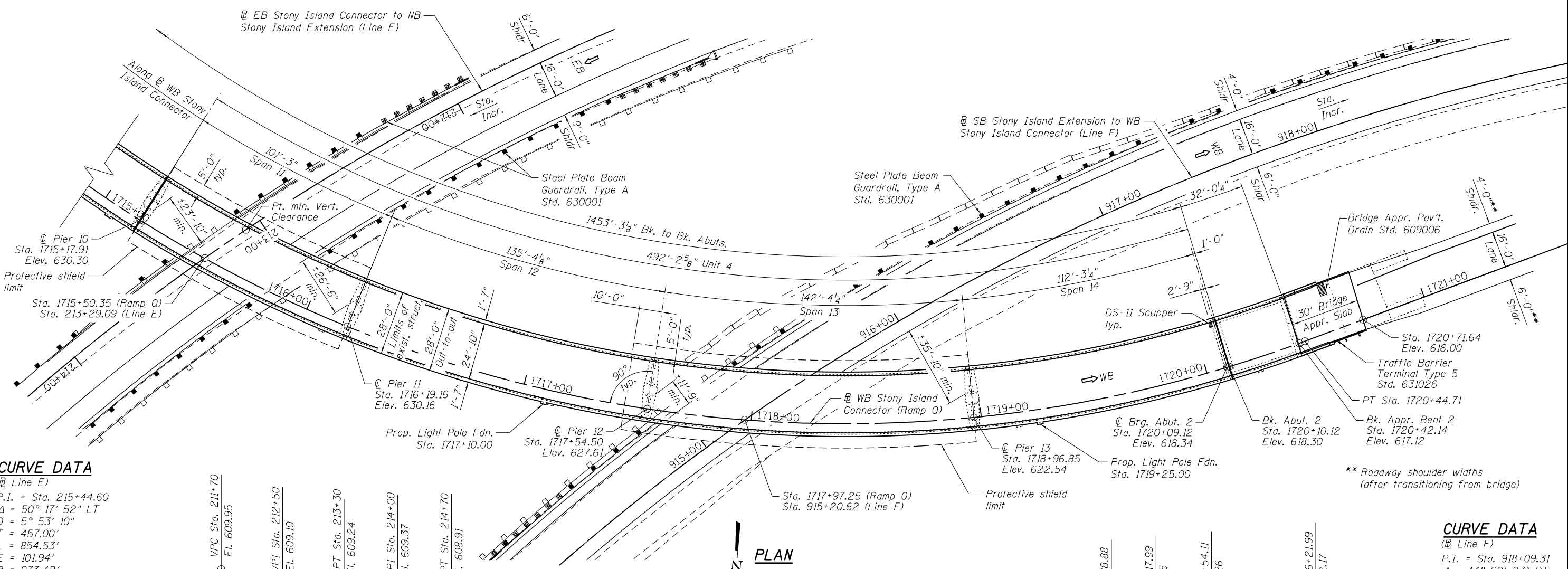
SHEET NO. S-2 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 165 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



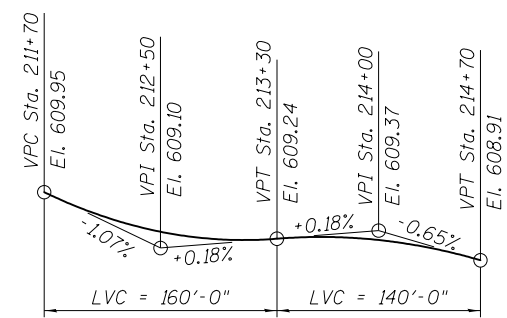
*Horizontal Dimensions @ Rt. L's

ELEVATION



CURVE DATA

(@ Line E)
 P.I. = Sta. 215+44.60
 $\Delta = 50^\circ 17' 52''$ LT
 $D = 5^\circ 53' 10''$
 $T = 457.00'$
 $L = 854.53'$
 $E = 101.94'$
 $R = 973.42'$
 $e = 5.6\%$
 P.C. = Sta. 210+87.60
 P.T. = Sta. 219+42.13

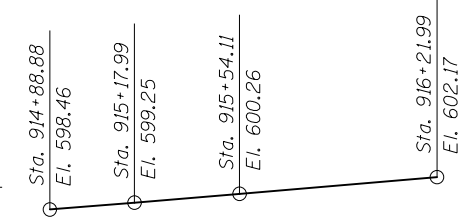


PROFILE GRADE
(Along @ Line E)

PLAN

CURVE DATA

(@ Line F)
 P.I. = Sta. 918+09.31
 $\Delta = 44^\circ 00' 23''$ RT
 $D = 5^\circ 55' 16''$
 $T = 391.02'$
 $L = 743.22'$
 $E = 76.02'$
 $R = 967.66'$
 $e = 6.0\%$
 P.C. = Sta. 914+18.29
 P.T. = Sta. 921+61.50



PROFILE GRADE
(Along @ Line F)

Notes:
 The existing Profile Grade for Line F was obtained from survey data.
 All work shown on Line E and Line F will be performed in a future contract.

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - TL | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION III
 STRUCTURE NO. 016-2437

SHEET NO. S-3 OF S-83 SHEETS

| | | | | |
|---------------------------|-----------------------|---------------|--------------------|-----------------|
| F.A.I. RTE. = 94 | SECTION = 2012-060-BR | COUNTY = COOK | TOTAL SHEETS = 285 | SHEET NO. = 166 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GENERAL NOTES

Except as otherwise specified, fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimmed the bearings.

Concrete Sealer shall be applied to all the exposed surfaces of new abutment backwalls and concrete extensions, and to all exposed surfaces of the new pier caps at Pier 3 and Pier 6.

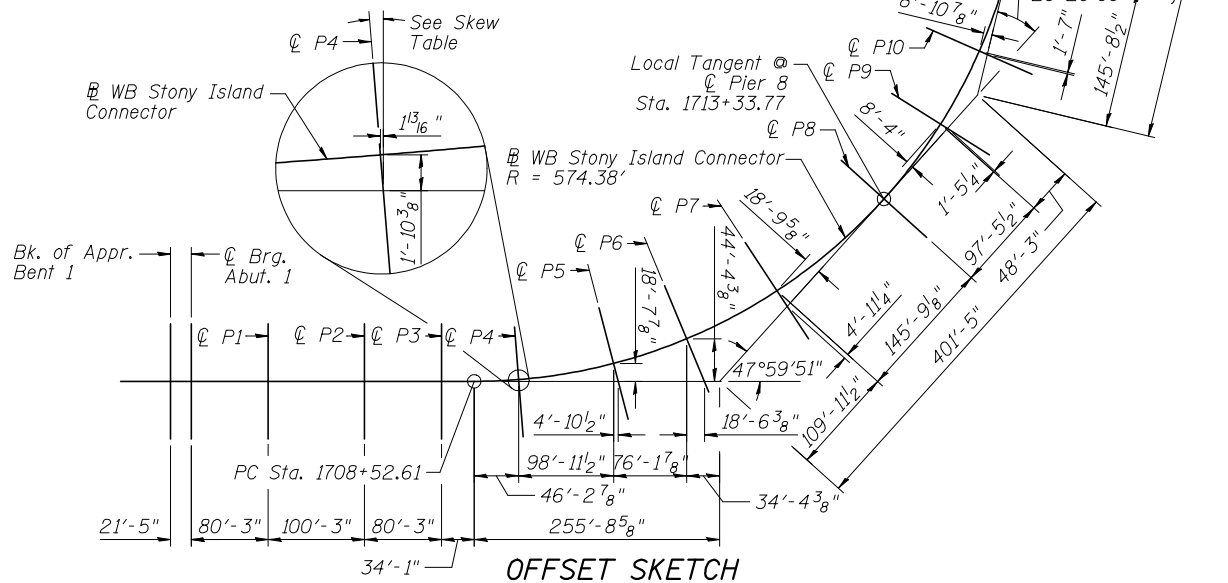
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

STATION 1713+33.77
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 94 SEC. 2012-060-BR
LOADING HS-20
STRUCTURE NO. 016-2437

NAME PLATE
See Std. 515001

SKEW TABLE

| | |
|------------------|--------------------|
| Bk. Appr. Bent 1 | 90° |
| ¢ Brg. Abut. 1 | 90° |
| ¢ Pier 1 | 90° |
| ¢ Pier 2 | 90° |
| ¢ Pier 3 | 90° |
| ¢ Pier 4 | 4°37'00" Rt. Fwd. |
| ¢ Pier 5 | 14°38'30" Rt. Fwd. |
| ¢ Pier 6 | 22°40'00" Rt. Fwd. |
| ¢ Pier 7 | 14°42'03" Lt. Fwd. |
| ¢ Pier 8 | 90° |
| ¢ Pier 9 | 9°46'08" Rt. Fwd. |
| ¢ Pier 10 | 10°06'00" Lt. Fwd. |
| ¢ Pier 11 | 90° |
| ¢ Pier 12 | 13°30'01" Rt. Fwd. |
| ¢ Pier 13 | 14°44'57" Lt. Fwd. |
| ¢ Brg. Abut. 2 | 3°32'57" Lt. Fwd. |
| Bk. Appr. Bent 2 | 3°32'57" Lt. Fwd. |



The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the masked off connection surfaces, field installed fasteners and damaged areas, which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Cleaning and painting of the existing structural steel, including the bearings at Pier 10, shall be as specified in the Special Provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP 10. All existing steel shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

Removal of all existing expansion joints shall be included with Removal of Existing Concrete Deck.

Slipforming of the parapets is not allowed.

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

Prior to construction or ordering of materials, the Contractor shall field-measure all existing bottom of beam and bearing seat elevations at each bearing to verify the concrete extension heights shown herein. Any discrepancies shall be accounted for in the concrete extensions. After the bearings are replaced, the resultant bottom of beam elevations shall match existing conditions.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|-------|---------|--------|---------|
| Concrete Removal | Cu Yd | - | 131.6 | 131.6 |
| Removal of Existing Concrete Deck | Each | 1 | - | 1 |
| Protective Shield | Sq Yd | 2,146 | - | 2,146 |
| Structure Excavation | Cu Yd | - | 17 | 17 |
| Concrete Structures | Cu Yd | 18.0 | 77.7 | 95.7 |
| Concrete Superstructure | Cu Yd | 1,786.3 | - | 1,786.3 |
| Bridge Deck Grooving | Sq Yd | 3,937 | - | 3,937 |
| Protective Coat | Sq Yd | 5,789 | - | 5,789 |
| Furnishing and Erecting Structural Steel | Pound | 6,540 | - | 6,540 |
| Stud Shear Connectors | Each | 8,097 | - | 8,097 |
| Reinforcement Bars, Epoxy Coated | Pound | 389,860 | 13,850 | 403,710 |
| Bar Splicers | Each | 40 | - | 40 |
| Mechanical Splicers | Each | - | 32 | 32 |
| Name Plates | Each | 1 | - | 1 |
| Preformed Joint Strip Seal | Foot | 81 | - | 81 |
| Elastomeric Bearing Assembly, Type I | Each | 20 | - | 20 |
| Elastomeric Bearing Assembly, Type II | Each | 16 | - | 16 |
| Anchor Bolts 1" | Each | 152 | - | 152 |
| Anchor Bolts 1 1/4" | Each | 32 | - | 32 |
| Concrete Sealer | Sq Ft | 1,460 | - | 1,460 |
| Epoxy Crack Injection | Foot | - | 221 | 221 |
| Geocomposite Wall Drain | Sq Yd | - | 43 | 43 |
| Pipe Drain Removal | Foot | 485 | - | 485 |
| Expanded Polystyrene Fill | Cu Yd | - | 145 | 145 |
| High Load Multi-Rotational Bearings, Guided Expansion, 400K | Each | 12 | - | 12 |
| Granular Backfill for Structures | Cu Yd | - | 107 | 107 |
| Jack and Remove Existing Bearings | Each | 48 | - | 48 |
| Structural Steel Repair | Pound | 5,950 | - | 5,950 |
| Approach Slab Removal | Sq Yd | 250 | - | 250 |
| Containment and Disposal of Lead Paint Cleaning Residues, No. 1 | L Sum | 1 | - | 1 |
| Cleaning Bridge Seats | Sq Ft | - | 92 | 92 |
| Cleaning and Painting Steel Bridge No. 1 | L Sum | 1 | - | 1 |
| Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches) | Sq Ft | - | 1,102 | 1,102 |
| Structural Repair of Concrete (Depth Greater Than 5 Inches) | Sq Ft | - | 116 | 116 |
| Drainage Scuppers, DS-II | Each | 5 | - | 5 |
| Drainage System | L Sum | 1 | - | 1 |
| Jacking and Cribbing | Each | 16 | - | 16 |
| Modular Expansion Joint-Swivel 6" | Foot | 50 | - | 50 |
| Pipe Underdrains for Structures 4" | Foot | - | 25 | 25 |
| Temporary Shoring and Cribbing | Each | 40 | - | 40 |

INDEX OF SHEETS

| | | | |
|------|---|-----------|--|
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| S-2 | General Plan & Elevation II | S-35 | Structural Steel Details I |
| S-3 | General Plan & Elevation III | S-36 | Structural Steel Details II |
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| S-6 | Top of Slab Elevations Layout II | S-39 | Type II Elastomeric Bearing Details |
| S-7 | Top of Slab Elevations Layout III | S-40 | HLMR Bearing Details |
| S-8 | Top of Slab Elevations I - Unit 1 | S-41 | Fixed Bearing Details |
| S-9 | Top of Slab Elevations II - Unit 1 | S-42 | Abutment 1 Removal and Repair Details I |
| S-10 | Top of Slab Elevations III - Unit 2 | S-43 | Abutment 1 Removal and Repair Details II |
| S-11 | Top of Slab Elevations IV - Unit 2 | S-44 | Abutment 2 Removal and Repair Details I |
| S-12 | Top of Slab Elevations V - Unit 3 | S-45 | Abutment 2 Removal and Repair Details II |
| S-13 | Top of Slab Elevations VI - Unit 3 | S-46 | Abutment 2 Removal and Repair Details III |
| S-14 | Top of Slab Elevations VII - Unit 4 | S-47 | Abutment 2 Removal and Repair Details IV |
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| S-16 | Top of Slab Elevations - Approach Slabs and Spans | S-49 | Pier 3 Removal and Repair Details |
| S-17 | Superstructure Plan I & Cross Section | S-50 | Pier 3 Cap Reconstruction Details |
| S-18 | Superstructure Plan II | S-51 | Pier 4 Repair Details |
| S-19 | Superstructure Plan III | S-52 | Pier 5 Repair Details |
| S-20 | Superstructure Plan IV | S-53 | Pier 6 Removal and Repair Details |
| S-21 | Superstructure Details I | S-54 | Pier 6 Cap Reconstruction Details |
| S-22 | Superstructure Details II | S-55 | Pier 7 Repair Details |
| S-23 | Superstructure Details III | S-56 | Pier 8 Repair Details |
| S-24 | Superstructure Details IV | S-57 | Pier 9 Repair Details |
| S-25 | Abutment 1 Approach Span | S-58 | Pier 10 Repair Details |
| S-26 | Abutment 2 Approach Span | S-59 | Pier 11 Repair Details |
| S-27 | Bridge Approach Slab 1 Plan | S-60 | Pier 12 Repair Details |
| S-28 | Bridge Approach Slab 1 Details | S-61 | Pier 13 Repair Details |
| S-29 | Bridge Approach Slab 2 Plan | S-62 | Pier Modification Details |
| S-30 | Bridge Approach Slab 2 Details | S-63 | Bar Splicer Assembly and Mechanical Splicer Detail |
| S-31 | Preformed Joint Strip Seal | S-64 thru | |
| S-32 | Modular Expansion Joint Seal | S-83 | Existing Plans (For Information Only) |
| S-33 | Drainage Scupper Details | | |

| | | | |
|---|------------------------|----------------|-----------|
| BOWMAN, BARRETT & ASSOCIATES INC. CONSULTING ENGINEERS Chicago, Illinois 312.228.0100 www.bbainc.com | USER NAME = | DESIGNED - IYL | REVISED - |
| | PLOT SCALE = | CHECKED - BAK | REVISED - |
| | PLOT DATE = 02/11/2013 | DRAWN - MTR | REVISED - |
| | | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 016-2437

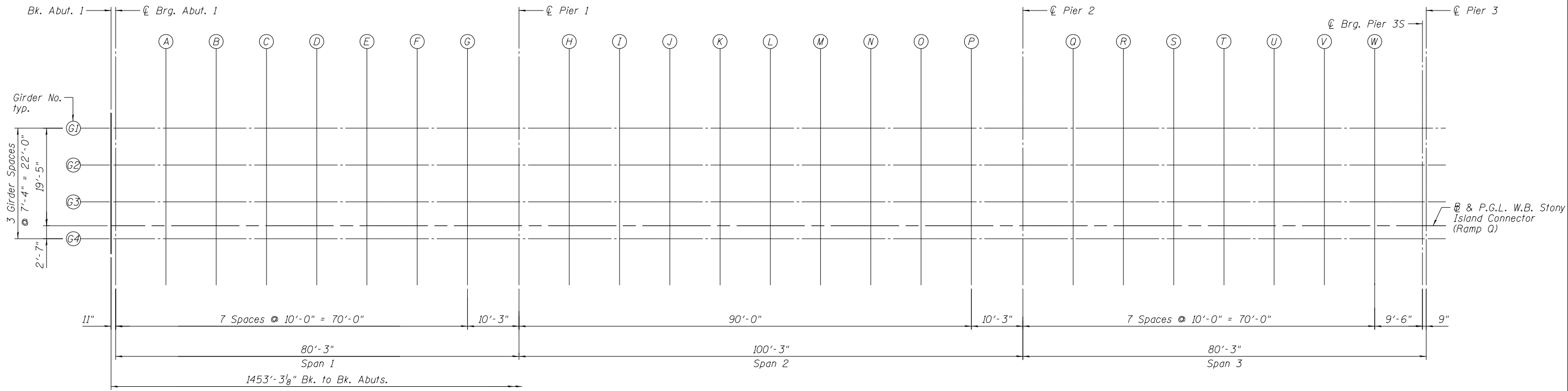
SHEET NO. S-4 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 167 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

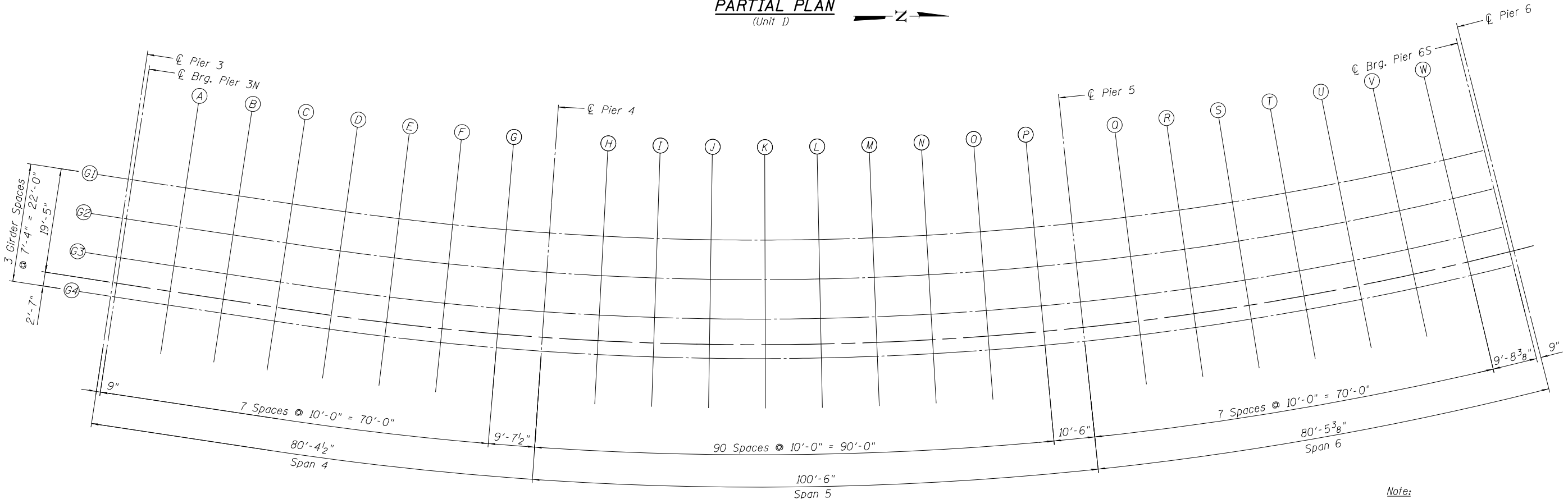
2/26/04 PM

12/7/2012

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W.B. Stony Island Connector (Ramp 0)



Note:
Horizontal dimensions measured along
W.B. Stony Island Connector (Ramp 0)

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

| | | |
|------------------------|----------------|-----------|
| USER NAME = | DESIGNED - IYL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS LAYOUT I
STRUCTURE NO. 016-2437

SHEET NO. S-5 OF S-83 SHEETS

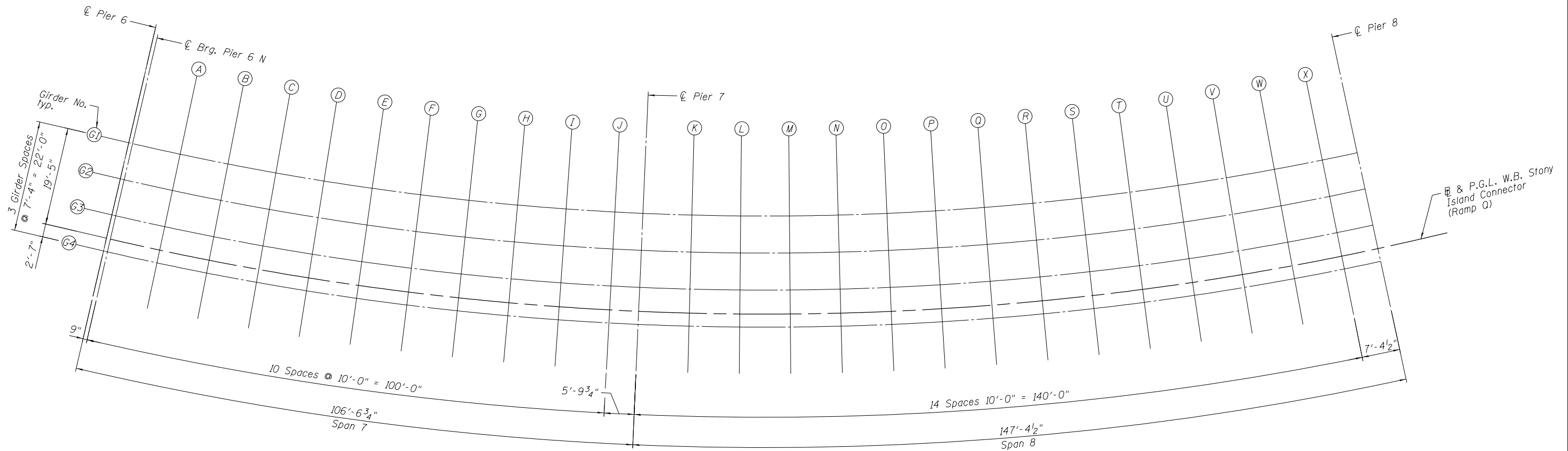
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 168 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT

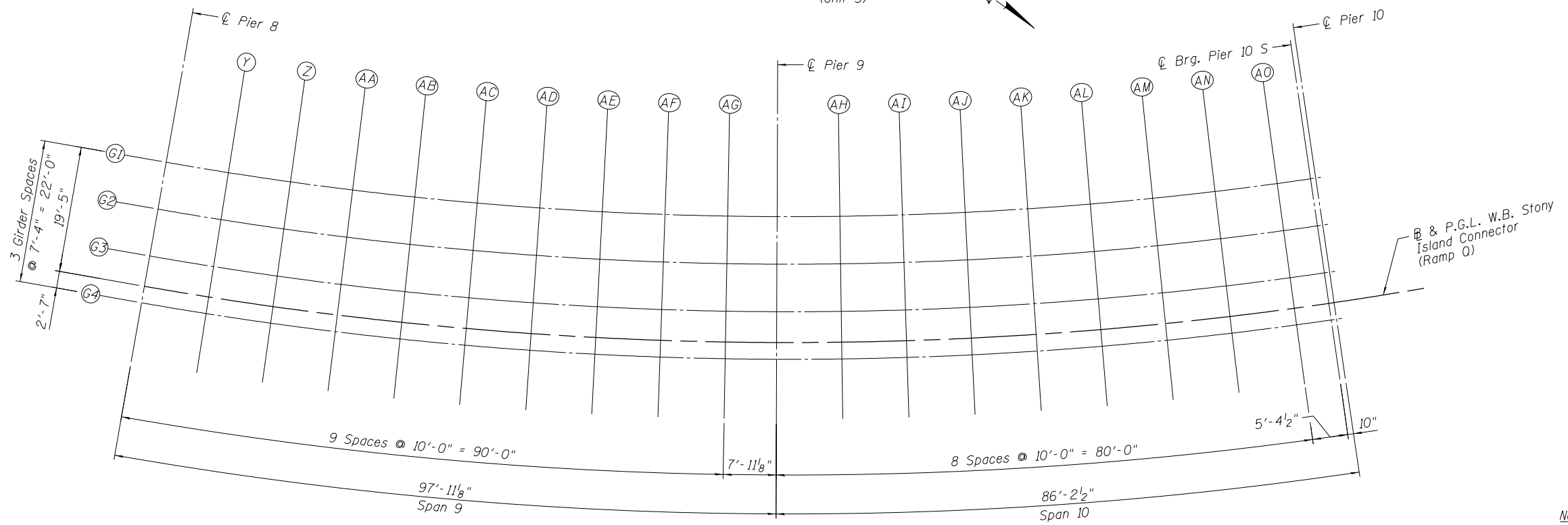
2/26/04 PM

12/7/2012

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PARTIAL PLAN
(Unit 3)



PARTIAL PLAN
(Unit 3)

Note:
Horizontal dimensions measured along
& W.B. Stony Island Connector (Ramp Q)

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312.228.0100
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| | | |
|------------------------|----------------|-----------|
| USER NAME = | DESIGNED - IYL | REVISED - |
| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS LAYOUT II
STRUCTURE NO. 016-2437

SHEET NO. S-6 OF S-83 SHEETS

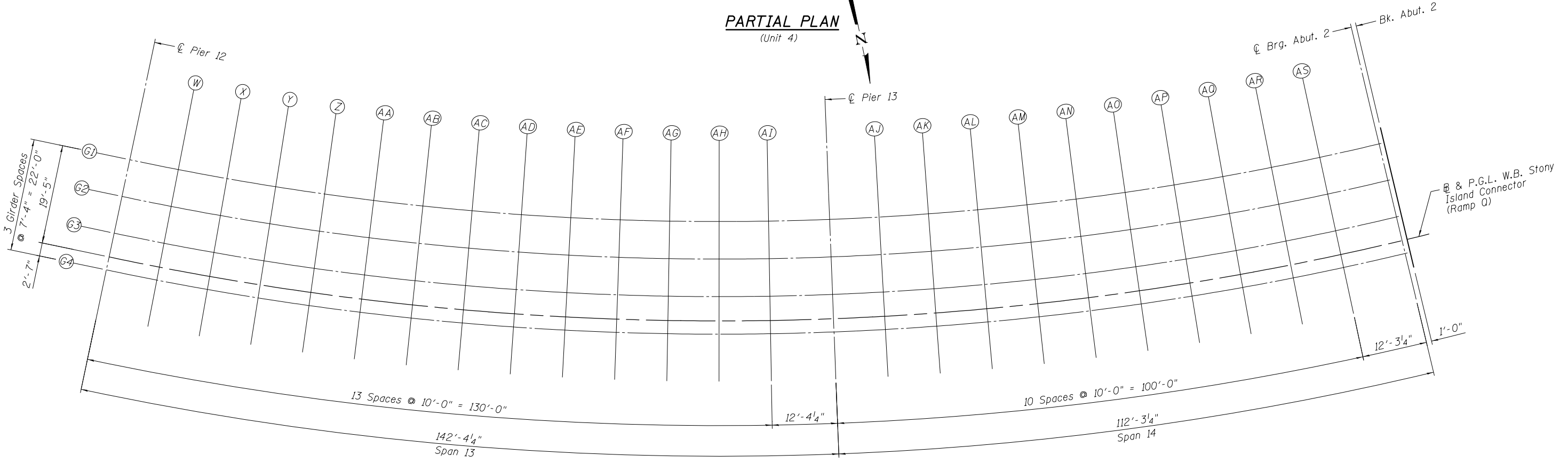
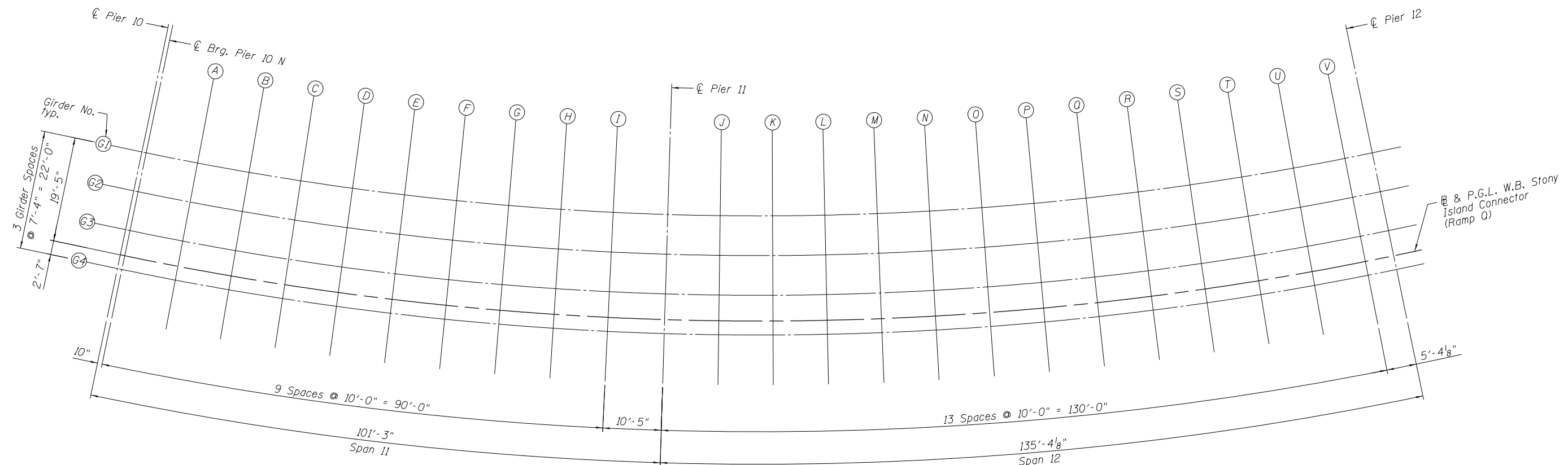
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 169 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT

2/26/05 PM

12/7/2012

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Note:
Horizontal dimensions measured along
W.B. Stony Island Connector (Ramp Q)

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| | | |
|------------------------|----------------|-----------|
| USER NAME = | DESIGNED - IYL | REVISED - |
| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS LAYOUT III
STRUCTURE NO. 016-2437

SHEET NO. S-7 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 170 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT

GIRDER G1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. Abut 1 | 1705+56.86 | -19.42 | 599.02 | 599.02 |
| ⊘ Brg. Abut. 1 | 1705+57.77 | -19.42 | 599.06 | 599.06 |
| A | 1705+67.77 | -19.42 | 599.42 | 599.44 |
| B | 1705+77.77 | -19.42 | 599.78 | 599.82 |
| C | 1705+87.77 | -19.42 | 600.14 | 600.19 |
| D | 1705+97.77 | -19.42 | 600.50 | 600.55 |
| E | 1706+07.77 | -19.42 | 600.86 | 600.90 |
| F | 1706+17.77 | -19.42 | 601.23 | 601.25 |
| G | 1706+27.77 | -19.42 | 601.59 | 601.59 |
| ⊘ Pier 1 | 1706+38.02 | -19.42 | 601.96 | 601.96 |
| H | 1706+48.02 | -19.42 | 602.32 | 602.33 |
| I | 1706+58.02 | -19.42 | 602.68 | 602.70 |
| J | 1706+68.02 | -19.42 | 603.04 | 603.08 |
| K | 1706+78.02 | -19.42 | 603.40 | 603.46 |
| L | 1706+88.02 | -19.42 | 603.73 | 603.79 |
| M | 1706+98.02 | -19.42 | 604.02 | 604.07 |
| N | 1707+08.02 | -19.42 | 604.32 | 604.35 |
| O | 1707+18.02 | -19.42 | 604.61 | 604.63 |
| P | 1707+28.02 | -19.42 | 604.90 | 604.91 |
| ⊘ Pier 2 | 1707+38.27 | -19.42 | 605.20 | 605.20 |
| Q | 1707+48.27 | -19.42 | 605.49 | 605.50 |
| R | 1707+58.27 | -19.42 | 605.79 | 605.81 |
| S | 1707+68.27 | -19.42 | 606.08 | 606.12 |
| T | 1707+78.27 | -19.42 | 606.37 | 606.42 |
| U | 1707+88.27 | -19.42 | 606.67 | 606.72 |
| V | 1707+98.27 | -19.42 | 606.96 | 607.00 |
| W | 1708+08.27 | -19.42 | 607.25 | 607.28 |
| ⊘ Brg. Pier 3 S | 1708+17.77 | -19.42 | 607.53 | 607.53 |
| ⊘ Pier 3 | 1708+18.52 | -19.42 | 607.55 | 607.55 |

GIRDER G2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. Abut 1 | 1705+56.86 | -12.08 | 598.88 | 598.88 |
| ⊘ Brg. Abut. 1 | 1705+57.77 | -12.08 | 598.91 | 598.91 |
| A | 1705+67.77 | -12.08 | 599.27 | 599.30 |
| B | 1705+77.77 | -12.08 | 599.63 | 599.68 |
| C | 1705+87.77 | -12.08 | 599.99 | 600.05 |
| D | 1705+97.77 | -12.08 | 600.36 | 600.41 |
| E | 1706+07.77 | -12.08 | 600.72 | 600.76 |
| F | 1706+17.77 | -12.08 | 601.08 | 601.10 |
| G | 1706+27.77 | -12.08 | 601.44 | 601.45 |
| ⊘ Pier 1 | 1706+38.02 | -12.08 | 601.81 | 601.81 |
| H | 1706+48.02 | -12.08 | 602.17 | 602.18 |
| I | 1706+58.02 | -12.08 | 602.53 | 602.56 |
| J | 1706+68.02 | -12.08 | 602.90 | 602.93 |
| K | 1706+78.02 | -12.08 | 603.26 | 603.31 |
| L | 1706+88.02 | -12.08 | 603.60 | 603.65 |
| M | 1706+98.02 | -12.08 | 603.92 | 603.97 |
| N | 1707+08.02 | -12.08 | 604.23 | 604.27 |
| O | 1707+18.02 | -12.08 | 604.55 | 604.57 |
| P | 1707+28.02 | -12.08 | 604.87 | 604.88 |
| ⊘ Pier 2 | 1707+38.27 | -12.08 | 605.20 | 605.20 |
| Q | 1707+48.27 | -12.08 | 605.52 | 605.53 |
| R | 1707+58.27 | -12.08 | 605.84 | 605.86 |
| S | 1707+68.27 | -12.08 | 606.16 | 606.19 |
| T | 1707+78.27 | -12.08 | 606.48 | 606.52 |
| U | 1707+88.27 | -12.08 | 606.79 | 606.85 |
| V | 1707+98.27 | -12.08 | 607.11 | 607.16 |
| W | 1708+08.27 | -12.08 | 607.43 | 607.46 |
| ⊘ Brg. Pier 3 S | 1708+17.77 | -12.08 | 607.74 | 607.74 |
| ⊘ Pier 3 | 1708+18.52 | -12.08 | 607.76 | 607.76 |

GIRDER G3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. Abut 1 | 1705+56.86 | -4.75 | 598.73 | 598.73 |
| ⊘ Brg. Abut. 1 | 1705+57.77 | -4.75 | 598.76 | 598.76 |
| A | 1705+67.77 | -4.75 | 599.12 | 599.15 |
| B | 1705+77.77 | -4.75 | 599.49 | 599.53 |
| C | 1705+87.77 | -4.75 | 599.85 | 599.90 |
| D | 1705+97.77 | -4.75 | 600.21 | 600.26 |
| E | 1706+07.77 | -4.75 | 600.57 | 600.61 |
| F | 1706+17.77 | -4.75 | 600.93 | 600.95 |
| G | 1706+27.77 | -4.75 | 601.29 | 601.30 |
| ⊘ Pier 1 | 1706+38.02 | -4.75 | 601.66 | 601.66 |
| H | 1706+48.02 | -4.75 | 602.03 | 602.03 |
| I | 1706+58.02 | -4.75 | 602.39 | 602.41 |
| J | 1706+68.02 | -4.75 | 602.75 | 602.79 |
| K | 1706+78.02 | -4.75 | 603.11 | 603.16 |
| L | 1706+88.02 | -4.75 | 603.46 | 603.52 |
| M | 1706+98.02 | -4.75 | 603.81 | 603.86 |
| N | 1707+08.02 | -4.75 | 604.15 | 604.19 |
| O | 1707+18.02 | -4.75 | 604.50 | 604.52 |
| P | 1707+28.02 | -4.75 | 604.84 | 604.85 |
| ⊘ Pier 2 | 1707+38.27 | -4.75 | 605.20 | 605.20 |
| Q | 1707+48.27 | -4.75 | 605.54 | 605.55 |
| R | 1707+58.27 | -4.75 | 605.89 | 605.91 |
| S | 1707+68.27 | -4.75 | 606.23 | 606.27 |
| T | 1707+78.27 | -4.75 | 606.58 | 606.63 |
| U | 1707+88.27 | -4.75 | 606.92 | 606.97 |
| V | 1707+98.27 | -4.75 | 607.27 | 607.31 |
| W | 1708+08.27 | -4.75 | 607.61 | 607.63 |
| ⊘ Brg. Pier 3 S | 1708+17.77 | -4.75 | 607.94 | 607.94 |
| ⊘ Pier 3 | 1708+18.52 | -4.75 | 607.96 | 607.96 |

2/26/05 PM

12/7/2012

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS I- UNIT 1
STRUCTURE NO. 016-2437

SHEET NO. S-8 OF S-83 SHEETS

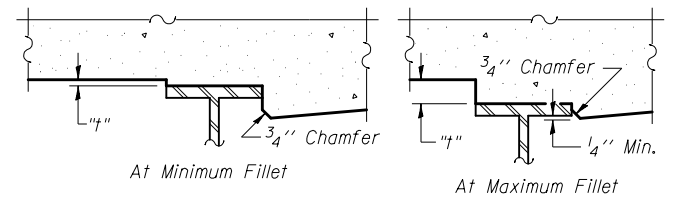
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 171 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

B & P.G.L. W.B. STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. Abut 1 | 1705+56.86 | 0.00 | 598.63 | 598.63 |
| ☉ Brg. Abut. 1 | 1705+57.77 | 0.00 | 598.67 | 598.67 |
| A | 1705+67.77 | 0.00 | 599.03 | 599.05 |
| B | 1705+77.77 | 0.00 | 599.39 | 599.43 |
| C | 1705+87.77 | 0.00 | 599.75 | 599.80 |
| D | 1705+97.77 | 0.00 | 600.11 | 600.16 |
| E | 1706+07.77 | 0.00 | 600.48 | 600.51 |
| F | 1706+17.77 | 0.00 | 600.84 | 600.86 |
| G | 1706+27.77 | 0.00 | 601.20 | 601.21 |
| ☉ Pier 1 | 1706+38.02 | 0.00 | 601.57 | 601.57 |
| H | 1706+48.02 | 0.00 | 601.93 | 601.94 |
| I | 1706+58.02 | 0.00 | 602.29 | 602.31 |
| J | 1706+68.02 | 0.00 | 602.65 | 602.69 |
| K | 1706+78.02 | 0.00 | 603.02 | 603.07 |
| L | 1706+88.02 | 0.00 | 603.38 | 603.43 |
| M | 1706+98.02 | 0.00 | 603.74 | 603.79 |
| N | 1707+08.02 | 0.00 | 604.10 | 604.14 |
| O | 1707+18.02 | 0.00 | 604.46 | 604.48 |
| P | 1707+28.02 | 0.00 | 604.82 | 604.83 |
| ☉ Pier 2 | 1707+38.27 | 0.00 | 605.20 | 605.20 |
| Q | 1707+48.27 | 0.00 | 605.56 | 605.56 |
| R | 1707+58.27 | 0.00 | 605.92 | 605.94 |
| S | 1707+68.27 | 0.00 | 606.28 | 606.32 |
| T | 1707+78.27 | 0.00 | 606.64 | 606.69 |
| U | 1707+88.27 | 0.00 | 607.00 | 607.05 |
| V | 1707+98.27 | 0.00 | 607.36 | 607.41 |
| W | 1708+08.27 | 0.00 | 607.73 | 607.75 |
| ☉ Brg. Pier 3 S | 1708+17.77 | 0.00 | 608.07 | 608.07 |
| ☉ Pier 3 | 1708+18.52 | 0.00 | 608.10 | 608.10 |

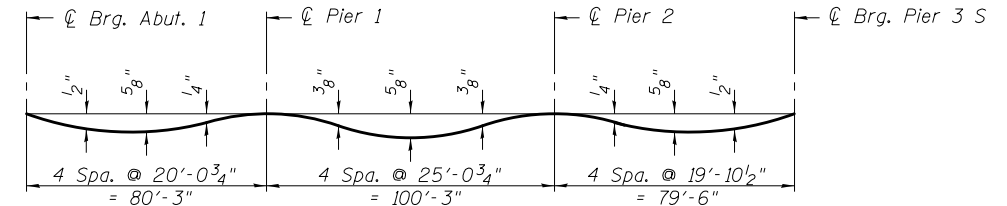
GIRDER G4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. Abut 1 | 1705+56.86 | 2.58 | 598.58 | 598.58 |
| ☉ Brg. Abut. 1 | 1705+57.77 | 2.58 | 598.62 | 598.62 |
| A | 1705+67.77 | 2.58 | 598.98 | 599.00 |
| B | 1705+77.77 | 2.58 | 599.34 | 599.38 |
| C | 1705+87.77 | 2.58 | 599.70 | 599.75 |
| D | 1705+97.77 | 2.58 | 600.06 | 600.11 |
| E | 1706+07.77 | 2.58 | 600.42 | 600.46 |
| F | 1706+17.77 | 2.58 | 600.79 | 600.81 |
| G | 1706+27.77 | 2.58 | 601.15 | 601.15 |
| ☉ Pier 1 | 1706+38.02 | 2.58 | 601.52 | 601.52 |
| H | 1706+48.02 | 2.58 | 601.88 | 601.89 |
| I | 1706+58.02 | 2.58 | 602.24 | 602.26 |
| J | 1706+68.02 | 2.58 | 602.60 | 602.64 |
| K | 1706+78.02 | 2.58 | 602.96 | 603.02 |
| L | 1706+88.02 | 2.58 | 603.33 | 603.39 |
| M | 1706+98.02 | 2.58 | 603.70 | 603.75 |
| N | 1707+08.02 | 2.58 | 604.07 | 604.11 |
| O | 1707+18.02 | 2.58 | 604.44 | 604.46 |
| P | 1707+28.02 | 2.58 | 604.81 | 604.82 |
| ☉ Pier 2 | 1707+38.27 | 2.58 | 605.19 | 605.19 |
| Q | 1707+48.27 | 2.58 | 605.56 | 605.57 |
| R | 1707+58.27 | 2.58 | 605.94 | 605.96 |
| S | 1707+68.27 | 2.58 | 606.31 | 606.34 |
| T | 1707+78.27 | 2.58 | 606.68 | 606.73 |
| U | 1707+88.27 | 2.58 | 607.05 | 607.10 |
| V | 1707+98.27 | 2.58 | 607.42 | 607.46 |
| W | 1708+08.27 | 2.58 | 607.79 | 607.81 |
| ☉ Brg. Pier 3 S | 1708+17.77 | 2.58 | 608.14 | 608.14 |
| ☉ Pier 3 | 1708+18.52 | 2.58 | 608.17 | 608.17 |



To determine "t": After all bearings have been replaced, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet S-5. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-8 thru S-9 of S-83.

2/26/05 PM

12/7/2012

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS II - UNIT 1
STRUCTURE NO. 016-2437

SHEET NO. S-9 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 172 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GIRDER G1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| ⊘ Pier 3 | 1708+18.52 | -19.42 | 607.55 | 607.55 |
| ⊘ Brg. Pier 3 N | 1708+19.27 | -19.42 | 607.58 | 607.58 |
| A | 1708+29.27 | -19.42 | 607.87 | 607.89 |
| B | 1708+39.27 | -19.42 | 608.16 | 608.20 |
| C | 1708+49.27 | -19.42 | 608.46 | 608.50 |
| D | 1708+59.27 | -19.42 | 608.75 | 608.80 |
| E | 1708+69.27 | -19.42 | 609.04 | 609.08 |
| F | 1708+79.27 | -19.42 | 609.34 | 609.36 |
| G | 1708+89.27 | -19.42 | 609.63 | 609.63 |
| ⊘ Pier 4 | 1708+98.89 | -19.42 | 609.91 | 609.91 |
| H | 1709+08.89 | -19.42 | 610.20 | 610.21 |
| I | 1709+18.89 | -19.42 | 610.56 | 610.58 |
| J | 1709+28.89 | -19.42 | 610.92 | 610.96 |
| K | 1709+38.89 | -19.42 | 611.29 | 611.34 |
| L | 1709+48.89 | -19.42 | 611.65 | 611.70 |
| M | 1709+58.89 | -19.42 | 612.01 | 612.06 |
| N | 1709+68.89 | -19.42 | 612.37 | 612.41 |
| O | 1709+78.89 | -19.42 | 612.73 | 612.75 |
| P | 1709+88.89 | -19.42 | 613.09 | 613.10 |
| ⊘ Pier 5 | 1709+99.39 | -19.42 | 613.47 | 613.47 |
| Q | 1710+09.39 | -19.42 | 613.84 | 613.84 |
| R | 1710+19.39 | -19.42 | 614.20 | 614.22 |
| S | 1710+29.39 | -19.42 | 614.56 | 614.59 |
| T | 1710+39.39 | -19.42 | 614.92 | 614.96 |
| U | 1710+49.39 | -19.42 | 615.28 | 615.33 |
| V | 1710+59.39 | -19.42 | 615.64 | 615.68 |
| W | 1710+69.39 | -19.42 | 616.01 | 616.03 |
| ⊘ Brg. Pier 6 S | 1710+79.09 | -19.42 | 616.36 | 616.36 |
| ⊘ Pier 6 | 1710+79.84 | -19.42 | 616.38 | 616.38 |

GIRDER G2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| ⊘ Pier 3 | 1708+18.52 | -12.08 | 607.76 | 607.76 |
| ⊘ Brg. Pier 3 N | 1708+19.27 | -12.08 | 607.78 | 607.78 |
| A | 1708+29.27 | -12.08 | 608.10 | 608.12 |
| B | 1708+39.27 | -12.08 | 608.42 | 608.46 |
| C | 1708+49.27 | -12.08 | 608.74 | 608.79 |
| D | 1708+59.27 | -12.08 | 609.06 | 609.10 |
| E | 1708+69.27 | -12.08 | 609.38 | 609.41 |
| F | 1708+79.27 | -12.08 | 609.70 | 609.72 |
| G | 1708+89.27 | -12.08 | 610.02 | 610.02 |
| ⊘ Pier 4 | 1708+98.89 | -12.08 | 610.32 | 610.32 |
| H | 1709+08.89 | -12.08 | 610.64 | 610.65 |
| I | 1709+18.89 | -12.08 | 611.00 | 611.02 |
| J | 1709+28.89 | -12.08 | 611.36 | 611.40 |
| K | 1709+38.89 | -12.08 | 611.73 | 611.78 |
| L | 1709+48.89 | -12.08 | 612.09 | 612.14 |
| M | 1709+58.89 | -12.08 | 612.45 | 612.50 |
| N | 1709+68.89 | -12.08 | 612.81 | 612.85 |
| O | 1709+78.89 | -12.08 | 613.17 | 613.19 |
| P | 1709+88.89 | -12.08 | 613.53 | 613.54 |
| ⊘ Pier 5 | 1709+99.39 | -12.08 | 613.91 | 613.91 |
| Q | 1710+09.39 | -12.08 | 614.28 | 614.28 |
| R | 1710+19.39 | -12.08 | 614.64 | 614.66 |
| S | 1710+29.39 | -12.08 | 615.00 | 615.03 |
| T | 1710+39.39 | -12.08 | 615.36 | 615.41 |
| U | 1710+49.39 | -12.08 | 615.72 | 615.77 |
| V | 1710+59.39 | -12.08 | 616.08 | 616.12 |
| W | 1710+69.39 | -12.08 | 616.45 | 616.47 |
| ⊘ Brg. Pier 6 S | 1710+79.09 | -12.08 | 616.80 | 616.80 |
| ⊘ Pier 6 | 1710+79.84 | -12.08 | 616.82 | 616.82 |

GIRDER G3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| ⊘ Pier 3 | 1708+18.52 | -4.75 | 607.96 | 607.96 |
| ⊘ Brg. Pier 3 N | 1708+19.27 | -4.75 | 607.99 | 607.99 |
| A | 1708+29.27 | -4.75 | 608.34 | 608.36 |
| B | 1708+39.27 | -4.75 | 608.68 | 608.72 |
| C | 1708+49.27 | -4.75 | 609.03 | 609.07 |
| D | 1708+59.27 | -4.75 | 609.37 | 609.42 |
| E | 1708+69.27 | -4.75 | 609.71 | 609.75 |
| F | 1708+79.27 | -4.75 | 610.06 | 610.08 |
| G | 1708+89.27 | -4.75 | 610.40 | 610.41 |
| ⊘ Pier 4 | 1708+98.89 | -4.75 | 610.74 | 610.74 |
| H | 1709+08.89 | -4.75 | 611.08 | 611.09 |
| I | 1709+18.89 | -4.75 | 611.44 | 611.47 |
| J | 1709+28.89 | -4.75 | 611.80 | 611.85 |
| K | 1709+38.89 | -4.75 | 612.17 | 612.22 |
| L | 1709+48.89 | -4.75 | 612.53 | 612.59 |
| M | 1709+58.89 | -4.75 | 612.89 | 612.95 |
| N | 1709+68.89 | -4.75 | 613.25 | 613.29 |
| O | 1709+78.89 | -4.75 | 613.61 | 613.63 |
| P | 1709+88.89 | -4.75 | 613.97 | 613.98 |
| ⊘ Pier 5 | 1709+99.39 | -4.75 | 614.35 | 614.35 |
| Q | 1710+09.39 | -4.75 | 614.72 | 614.72 |
| R | 1710+19.39 | -4.75 | 615.08 | 615.10 |
| S | 1710+29.39 | -4.75 | 615.44 | 615.48 |
| T | 1710+39.39 | -4.75 | 615.80 | 615.85 |
| U | 1710+49.39 | -4.75 | 616.16 | 616.22 |
| V | 1710+59.39 | -4.75 | 616.52 | 616.57 |
| W | 1710+69.39 | -4.75 | 616.89 | 616.91 |
| ⊘ Brg. Pier 6 S | 1710+79.09 | -4.75 | 617.24 | 617.24 |
| ⊘ Pier 6 | 1710+79.84 | -4.75 | 617.26 | 617.26 |

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12/7/2012

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS III - UNIT 2
STRUCTURE NO. 016-2437

SHEET NO. S-10 OF S-83 SHEETS

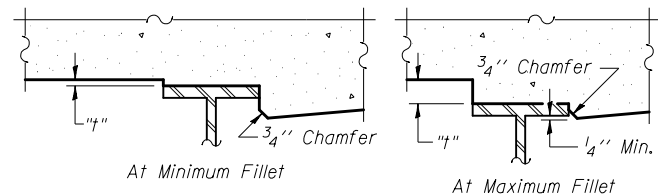
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 173 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

B & P.G.L. W.B. STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| ☉ Pier 3 | 1708+18.52 | 0.00 | 608.10 | 608.10 |
| ☉ Brg. Pier 3 N | 1708+19.27 | 0.00 | 608.12 | 608.12 |
| A | 1708+29.27 | 0.00 | 608.49 | 608.51 |
| B | 1708+39.27 | 0.00 | 608.85 | 608.89 |
| C | 1708+49.27 | 0.00 | 609.21 | 609.26 |
| D | 1708+59.27 | 0.00 | 609.57 | 609.62 |
| E | 1708+69.27 | 0.00 | 609.93 | 609.97 |
| F | 1708+79.27 | 0.00 | 610.29 | 610.32 |
| G | 1708+89.27 | 0.00 | 610.66 | 610.66 |
| ☉ Pier 4 | 1708+98.89 | 0.00 | 611.00 | 611.00 |
| H | 1709+08.89 | 0.00 | 611.37 | 611.37 |
| I | 1709+18.89 | 0.00 | 611.73 | 611.75 |
| J | 1709+28.89 | 0.00 | 612.09 | 612.14 |
| K | 1709+38.89 | 0.00 | 612.45 | 612.52 |
| L | 1709+48.89 | 0.00 | 612.81 | 612.88 |
| M | 1709+58.89 | 0.00 | 613.17 | 613.24 |
| N | 1709+68.89 | 0.00 | 613.54 | 613.58 |
| O | 1709+78.89 | 0.00 | 613.90 | 613.92 |
| P | 1709+88.89 | 0.00 | 614.26 | 614.27 |
| ☉ Pier 5 | 1709+99.39 | 0.00 | 614.64 | 614.64 |
| Q | 1710+09.39 | 0.00 | 615.00 | 615.01 |
| R | 1710+19.39 | 0.00 | 615.36 | 615.39 |
| S | 1710+29.39 | 0.00 | 615.72 | 615.77 |
| T | 1710+39.39 | 0.00 | 616.09 | 616.15 |
| U | 1710+49.39 | 0.00 | 616.45 | 616.51 |
| V | 1710+59.39 | 0.00 | 616.81 | 616.86 |
| W | 1710+69.39 | 0.00 | 617.17 | 617.20 |
| ☉ Brg. Pier 6 S | 1710+79.09 | 0.00 | 617.52 | 617.52 |
| ☉ Pier 6 | 1710+79.84 | 0.00 | 617.55 | 617.55 |

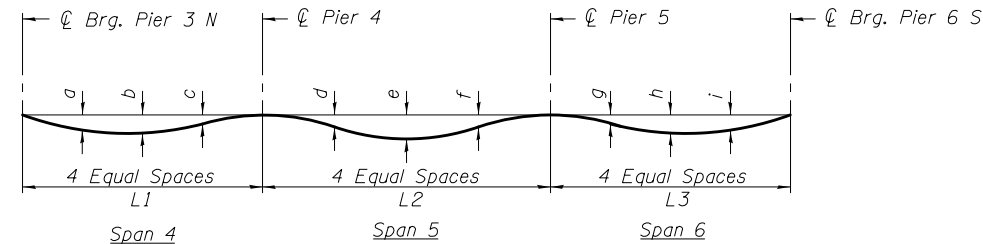
GIRDER G4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| ☉ Pier 3 | 1708+18.52 | 2.58 | 608.17 | 608.17 |
| ☉ Brg. Pier 3 N | 1708+19.27 | 2.58 | 608.20 | 608.20 |
| A | 1708+29.27 | 2.58 | 608.57 | 608.59 |
| B | 1708+39.27 | 2.58 | 608.94 | 608.98 |
| C | 1708+49.27 | 2.58 | 609.31 | 609.36 |
| D | 1708+59.27 | 2.58 | 609.68 | 609.73 |
| E | 1708+69.27 | 2.58 | 610.05 | 610.09 |
| F | 1708+79.27 | 2.58 | 610.42 | 610.44 |
| G | 1708+89.27 | 2.58 | 610.79 | 610.80 |
| ☉ Pier 4 | 1708+98.89 | 2.58 | 611.15 | 611.15 |
| H | 1709+08.89 | 2.58 | 611.52 | 611.53 |
| I | 1709+18.89 | 2.58 | 611.88 | 611.91 |
| J | 1709+28.89 | 2.58 | 612.24 | 612.29 |
| K | 1709+38.89 | 2.58 | 612.61 | 612.67 |
| L | 1709+48.89 | 2.58 | 612.97 | 613.04 |
| M | 1709+58.89 | 2.58 | 613.33 | 613.39 |
| N | 1709+68.89 | 2.58 | 613.69 | 613.74 |
| O | 1709+78.89 | 2.58 | 614.05 | 614.08 |
| P | 1709+88.89 | 2.58 | 614.41 | 614.42 |
| ☉ Pier 5 | 1709+99.39 | 2.58 | 614.79 | 614.79 |
| Q | 1710+09.39 | 2.58 | 615.16 | 615.16 |
| R | 1710+19.39 | 2.58 | 615.52 | 615.54 |
| S | 1710+29.39 | 2.58 | 615.88 | 615.93 |
| T | 1710+39.39 | 2.58 | 616.24 | 616.30 |
| U | 1710+49.39 | 2.58 | 616.60 | 616.67 |
| V | 1710+59.39 | 2.58 | 616.96 | 617.02 |
| W | 1710+69.39 | 2.58 | 617.33 | 617.36 |
| ☉ Brg. Pier 6 S | 1710+79.09 | 2.58 | 617.68 | 617.68 |
| ☉ Pier 6 | 1710+79.84 | 2.58 | 617.70 | 617.70 |



To determine "t": After all bearings have been replaced, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet S-5. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-10 thru S-11 of S-83.

DEAD LOAD DEFLECTION TABLE

| | Span 4 | | | Span 5 | | | Span 6 | | | | | |
|----------|--------|------|------|-------------|------|------|--------|--------------|------|------|------|-------------|
| | a | b | c | L1 | d | e | f | L2 | g | h | i | L3 |
| Girder 1 | 1/2" | 1/2" | 1/4" | 78'-0 5/8" | 3/8" | 5/8" | 3/8" | 97'-1 3/16" | 1/4" | 1/2" | 1/2" | 76'-11 3/4" |
| Girder 2 | 3/8" | 1/2" | 1/4" | 78'-7 1/16" | 3/8" | 5/8" | 3/8" | 98'-4 5/8" | 1/4" | 1/2" | 1/2" | 78'-0 1/16" |
| Girder 3 | 1/2" | 1/2" | 1/4" | 79'-2 3/4" | 3/8" | 3/4" | 3/8" | 99'-8" | 1/4" | 5/8" | 1/2" | 79'-0 3/8" |
| Girder 4 | 1/2" | 5/8" | 1/4" | 79'-9 7/8" | 1/2" | 7/8" | 3/8" | 100'-11 3/8" | 3/8" | 3/4" | 5/8" | 80'-0 3/4" |

2/26/06 PM

12/7/2012

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS IV - UNIT 2
STRUCTURE NO. 016-2437

SHEET NO. S-11 OF S-83 SHEETS

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 174 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GIRDER G1

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 6, Pier 7, Pier 8, Pier 9, and Pier 10 with various stationing and offsets.

GIRDER G2

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 6, Pier 7, Pier 8, Pier 9, and Pier 10 with various stationing and offsets.

GIRDER G3

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 6, Pier 7, Pier 8, Pier 9, and Pier 10 with various stationing and offsets.

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12/7/2012

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Table with 4 columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, REVISIONS.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS V - UNIT 3 STRUCTURE NO. 016-2437

SHEET NO. 5-12 OF 5-83 SHEETS

Table with 5 columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO. Values include 94, 2012-060-BR, COOK, 285, 175.

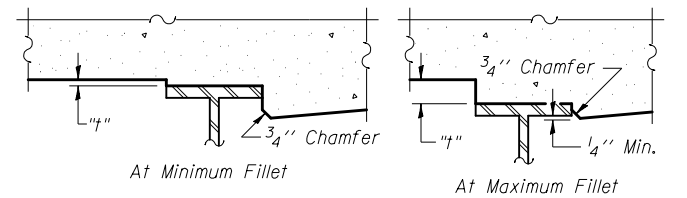
CONTRACT NO. 60V61 ILLINOIS FED. AID PROJECT

B & P.G.L. W.B. STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|------------|--------|------------------------------|--|
| ☉ Pier 6 | 1710+79.84 | 0.00 | 617.55 | 617.55 |
| ☉ Brg. Pier 6 N | 1710+80.59 | 0.00 | 617.58 | 617.58 |
| A | 1710+90.59 | 0.00 | 617.94 | 617.98 |
| B | 1711+00.59 | 0.00 | 618.30 | 618.37 |
| C | 1711+10.59 | 0.00 | 618.66 | 618.75 |
| D | 1711+20.59 | 0.00 | 619.02 | 619.11 |
| E | 1711+30.59 | 0.00 | 619.38 | 619.46 |
| F | 1711+40.59 | 0.00 | 619.75 | 619.81 |
| G | 1711+50.59 | 0.00 | 620.11 | 620.14 |
| H | 1711+60.59 | 0.00 | 620.47 | 620.48 |
| I | 1711+70.59 | 0.00 | 620.83 | 620.83 |
| J | 1711+80.59 | 0.00 | 621.19 | 621.19 |
| ☉ Pier 7 | 1711+86.40 | 0.00 | 621.40 | 621.40 |
| K | 1711+96.40 | 0.00 | 621.76 | 621.79 |
| L | 1712+06.40 | 0.00 | 622.13 | 622.19 |
| M | 1712+16.40 | 0.00 | 622.49 | 622.59 |
| N | 1712+26.40 | 0.00 | 622.85 | 622.99 |
| O | 1712+36.40 | 0.00 | 623.21 | 623.39 |
| P | 1712+46.40 | 0.00 | 623.57 | 623.78 |
| Q | 1712+56.40 | 0.00 | 623.93 | 624.15 |
| R | 1712+66.40 | 0.00 | 624.30 | 624.52 |
| S | 1712+76.40 | 0.00 | 624.66 | 624.87 |
| T | 1712+86.40 | 0.00 | 625.02 | 625.20 |
| U | 1712+96.40 | 0.00 | 625.38 | 625.53 |
| V | 1713+06.40 | 0.00 | 625.74 | 625.85 |
| W | 1713+16.40 | 0.00 | 626.10 | 626.17 |
| X | 1713+26.40 | 0.00 | 626.45 | 626.48 |
| ☉ Pier 8 | 1713+33.77 | 0.00 | 626.70 | 626.70 |
| Y | 1713+43.77 | 0.00 | 627.02 | 627.00 |
| Z | 1713+53.77 | 0.00 | 627.33 | 627.30 |
| AA | 1713+63.77 | 0.00 | 627.63 | 627.59 |
| AB | 1713+73.77 | 0.00 | 627.91 | 627.87 |
| AC | 1713+83.77 | 0.00 | 628.17 | 628.14 |
| AD | 1713+93.77 | 0.00 | 628.42 | 628.39 |
| AE | 1714+03.77 | 0.00 | 628.66 | 628.63 |
| AF | 1714+13.77 | 0.00 | 628.88 | 628.86 |
| AG | 1714+23.77 | 0.00 | 629.08 | 629.07 |
| ☉ Pier 9 | 1714+31.70 | 0.00 | 629.24 | 629.24 |
| AH | 1714+41.70 | 0.00 | 629.42 | 629.44 |
| AI | 1714+51.70 | 0.00 | 629.58 | 629.64 |
| AJ | 1714+61.70 | 0.00 | 629.73 | 629.82 |
| AK | 1714+71.70 | 0.00 | 629.87 | 629.97 |
| AL | 1714+81.70 | 0.00 | 629.99 | 630.10 |
| AM | 1714+91.70 | 0.00 | 630.09 | 630.19 |
| AN | 1715+01.70 | 0.00 | 630.18 | 630.25 |
| AO | 1715+11.70 | 0.00 | 630.26 | 630.29 |
| ☉ Brg. Pier 10 S | 1715+17.08 | 0.00 | 630.30 | 630.30 |
| ☉ Pier 10 | 1715+17.91 | 0.00 | 630.30 | 630.30 |

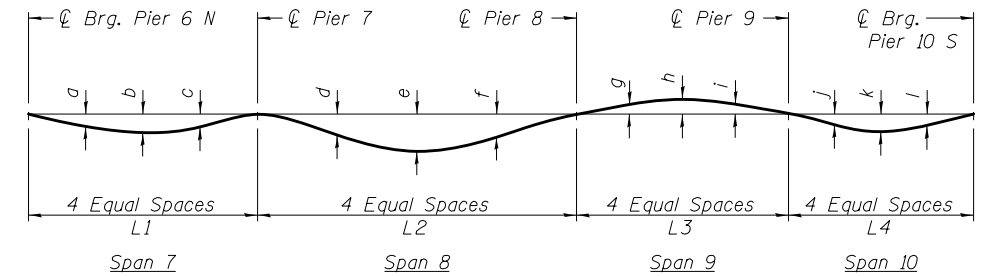
GIRDER G4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|------------|--------|------------------------------|--|
| ☉ Pier 6 | 1710+79.84 | 2.58 | 617.70 | 617.70 |
| ☉ Brg. Pier 6 N | 1710+80.59 | 2.58 | 617.73 | 617.73 |
| A | 1710+90.59 | 2.58 | 618.09 | 618.13 |
| B | 1711+00.59 | 2.58 | 618.45 | 618.52 |
| C | 1711+10.59 | 2.58 | 618.82 | 618.90 |
| D | 1711+20.59 | 2.58 | 619.18 | 619.27 |
| E | 1711+30.59 | 2.58 | 619.54 | 619.62 |
| F | 1711+40.59 | 2.58 | 619.90 | 619.96 |
| G | 1711+50.59 | 2.58 | 620.26 | 620.30 |
| H | 1711+60.59 | 2.58 | 620.62 | 620.64 |
| I | 1711+70.59 | 2.58 | 620.99 | 620.98 |
| J | 1711+80.59 | 2.58 | 621.35 | 621.34 |
| ☉ Pier 7 | 1711+86.40 | 2.58 | 621.56 | 621.56 |
| K | 1711+96.40 | 2.58 | 621.92 | 621.94 |
| L | 1712+06.40 | 2.58 | 622.28 | 622.34 |
| M | 1712+16.40 | 2.58 | 622.64 | 622.74 |
| N | 1712+26.40 | 2.58 | 623.00 | 623.14 |
| O | 1712+36.40 | 2.58 | 623.37 | 623.54 |
| P | 1712+46.40 | 2.58 | 623.73 | 623.93 |
| Q | 1712+56.40 | 2.58 | 624.09 | 624.31 |
| R | 1712+66.40 | 2.58 | 624.45 | 624.67 |
| S | 1712+76.40 | 2.58 | 624.81 | 625.02 |
| T | 1712+86.40 | 2.58 | 625.17 | 625.36 |
| U | 1712+96.40 | 2.58 | 625.54 | 625.68 |
| V | 1713+06.40 | 2.58 | 625.90 | 626.01 |
| W | 1713+16.40 | 2.58 | 626.26 | 626.32 |
| X | 1713+26.40 | 2.58 | 626.61 | 626.63 |
| ☉ Pier 8 | 1713+33.77 | 2.58 | 626.85 | 626.85 |
| Y | 1713+43.77 | 2.58 | 627.18 | 627.16 |
| Z | 1713+53.77 | 2.58 | 627.49 | 627.45 |
| AA | 1713+63.77 | 2.58 | 627.78 | 627.74 |
| AB | 1713+73.77 | 2.58 | 628.06 | 628.03 |
| AC | 1713+83.77 | 2.58 | 628.33 | 628.29 |
| AD | 1713+93.77 | 2.58 | 628.58 | 628.55 |
| AE | 1714+03.77 | 2.58 | 628.81 | 628.79 |
| AF | 1714+13.77 | 2.58 | 629.03 | 629.01 |
| AG | 1714+23.77 | 2.58 | 629.24 | 629.23 |
| ☉ Pier 9 | 1714+31.70 | 2.58 | 629.39 | 629.39 |
| AH | 1714+41.70 | 2.58 | 629.57 | 629.60 |
| AI | 1714+51.70 | 2.58 | 629.74 | 629.80 |
| AJ | 1714+61.70 | 2.58 | 629.89 | 629.98 |
| AK | 1714+71.70 | 2.58 | 630.02 | 630.13 |
| AL | 1714+81.70 | 2.58 | 630.14 | 630.25 |
| AM | 1714+91.70 | 2.58 | 630.25 | 630.35 |
| AN | 1715+01.70 | 2.58 | 630.34 | 630.41 |
| AO | 1715+11.70 | 2.58 | 630.42 | 630.44 |
| ☉ Brg. Pier 10 S | 1715+17.08 | 2.58 | 630.45 | 630.45 |
| ☉ Pier 10 | 1715+17.91 | 2.58 | 630.46 | 630.46 |



To determine "t": After all bearings have been replaced, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet S-6. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-12 thru S-13 of S-83.

DEAD LOAD DEFLECTION TABLE

| | Span 7 | | | Span 8 | | | Span 9 | | | Span 10 | | | | | | |
|----------|--------|------|------|---------------|--------|--------|--------|--------------|--------|---------|--------|--------------|------|--------|------|--------------|
| | a | b | c | L1 | d | e | f | L2 | g | h | i | L3 | j | k | l | L4 |
| Girder 1 | 7/8" | 7/8" | 3/8" | 102'-2 1/2" | 3/4" | 1 3/8" | 7/8" | 142'-4 1/16" | 0 | 1/8" | 1/8" | 94'-7 7/16" | 3/8" | 3/4" | 5/8" | 82'-6 9/16" |
| Girder 2 | 7/8" | 7/8" | 1/4" | 103'-6 7/8" | 1" | 1 3/4" | 1 1/8" | 144'-3 5/16" | - 1/8" | - 1/8" | - 1/8" | 95'-10 7/16" | 1/2" | 7/8" | 3/4" | 83'-7 13/16" |
| Girder 3 | 7/8" | 7/8" | 1/4" | 104'-11 3/16" | 1 1/4" | 2 1/8" | 1 3/8" | 146'-1 7/8" | - 1/4" | - 1/4" | - 1/4" | 97'-1 7/16" | 5/8" | 1 1/8" | 7/8" | 84'-9" |
| Girder 4 | 1" | 7/8" | 1/8" | 106'-3 1/2" | 1 1/2" | 2 3/4" | 1 3/4" | 148'-0 7/16" | - 3/8" | - 3/8" | - 1/4" | 98'-4 7/16" | 3/4" | 1 3/8" | 1" | 85'-10 3/16" |

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USER NAME =
DESIGNED - TL
CHECKED - BAK
PLOT SCALE =
DRAWN - MTR
PLOT DATE = 11/08/2012

REVISIED -
REVISIED -
REVISIED -
REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS VI - UNIT 3
STRUCTURE NO. 016-2437

SHEET NO. S-13 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 176 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GIRDER G1

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 10, Pier 11, Pier 12, Pier 13, Brg. Abut. 2, and Bk. Abut. 2.

GIRDER G2

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 10, Pier 11, Pier 12, Pier 13, Brg. Abut. 2, and Bk. Abut. 2.

GIRDER G3

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include Pier 10, Pier 11, Pier 12, Pier 13, Brg. Abut. 2, and Bk. Abut. 2.

2/26/07 PM

12/7/2012

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Table with 4 columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, and corresponding values.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS VII - UNIT 4 STRUCTURE NO. 016-2437 SHEET NO. S-14 OF S-83 SHEETS

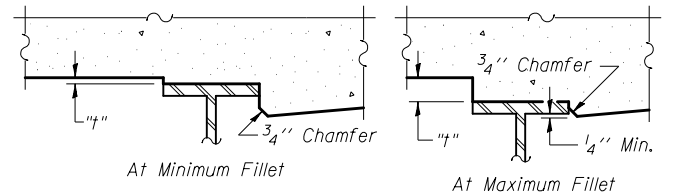
Table with 5 columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and values.

B & P.G.L. W.B. STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|------------|--------|------------------------------|--|
| ☉ Pier 10 | 1715+17.91 | 0.00 | 630.30 | 630.30 |
| ☉ Brg. Pier 10 N | 1715+18.74 | 0.00 | 630.31 | 630.31 |
| A | 1715+28.74 | 0.00 | 630.36 | 630.40 |
| B | 1715+38.74 | 0.00 | 630.39 | 630.48 |
| C | 1715+48.74 | 0.00 | 630.42 | 630.52 |
| D | 1715+58.74 | 0.00 | 630.42 | 630.54 |
| E | 1715+68.74 | 0.00 | 630.42 | 630.53 |
| F | 1715+78.74 | 0.00 | 630.40 | 630.48 |
| G | 1715+88.74 | 0.00 | 630.36 | 630.42 |
| H | 1715+98.74 | 0.00 | 630.31 | 630.34 |
| I | 1716+08.74 | 0.00 | 630.24 | 630.25 |
| ☉ Pier 11 | 1716+19.16 | 0.00 | 630.16 | 630.16 |
| J | 1716+29.16 | 0.00 | 630.06 | 630.07 |
| K | 1716+39.16 | 0.00 | 629.95 | 629.98 |
| L | 1716+49.16 | 0.00 | 629.82 | 629.87 |
| M | 1716+59.16 | 0.00 | 629.68 | 629.76 |
| N | 1716+69.16 | 0.00 | 629.53 | 629.62 |
| O | 1716+79.16 | 0.00 | 629.36 | 629.47 |
| P | 1716+89.16 | 0.00 | 629.17 | 629.28 |
| Q | 1716+99.16 | 0.00 | 628.97 | 629.08 |
| R | 1717+09.16 | 0.00 | 628.76 | 628.84 |
| S | 1717+19.16 | 0.00 | 628.53 | 628.59 |
| T | 1717+29.16 | 0.00 | 628.29 | 628.32 |
| U | 1717+39.16 | 0.00 | 628.03 | 628.04 |
| V | 1717+49.16 | 0.00 | 627.76 | 627.76 |
| ☉ Pier 12 | 1717+54.50 | 0.00 | 627.61 | 627.61 |
| W | 1717+64.50 | 0.00 | 627.31 | 627.32 |
| X | 1717+74.50 | 0.00 | 627.00 | 627.03 |
| Y | 1717+84.50 | 0.00 | 626.68 | 626.73 |
| Z | 1717+94.50 | 0.00 | 626.34 | 626.42 |
| AA | 1718+04.50 | 0.00 | 625.98 | 626.09 |
| AB | 1718+14.50 | 0.00 | 625.61 | 625.73 |
| AC | 1718+24.50 | 0.00 | 625.24 | 625.37 |
| AD | 1718+34.50 | 0.00 | 624.87 | 624.98 |
| AE | 1718+44.50 | 0.00 | 624.49 | 624.60 |
| AF | 1718+54.50 | 0.00 | 624.12 | 624.20 |
| AG | 1718+64.50 | 0.00 | 623.75 | 623.80 |
| AH | 1718+74.50 | 0.00 | 623.37 | 623.40 |
| AI | 1718+84.50 | 0.00 | 623.00 | 623.01 |
| ☉ Pier 13 | 1718+96.85 | 0.00 | 622.54 | 622.54 |
| AJ | 1719+06.85 | 0.00 | 622.16 | 622.17 |
| AK | 1719+16.85 | 0.00 | 621.79 | 621.82 |
| AL | 1719+26.85 | 0.00 | 621.41 | 621.48 |
| AM | 1719+36.85 | 0.00 | 621.04 | 621.14 |
| AN | 1719+46.85 | 0.00 | 620.67 | 620.79 |
| AO | 1719+56.85 | 0.00 | 620.29 | 620.43 |
| AP | 1719+66.85 | 0.00 | 619.92 | 620.06 |
| AQ | 1719+76.85 | 0.00 | 619.54 | 619.68 |
| AR | 1719+86.85 | 0.00 | 619.17 | 619.27 |
| AS | 1719+96.85 | 0.00 | 618.80 | 618.86 |
| ☉ Brg. Abut. 2 | 1720+09.12 | 0.00 | 618.34 | 618.34 |
| Bk. Abut. 2 | 1720+10.12 | 0.00 | 618.30 | 618.30 |

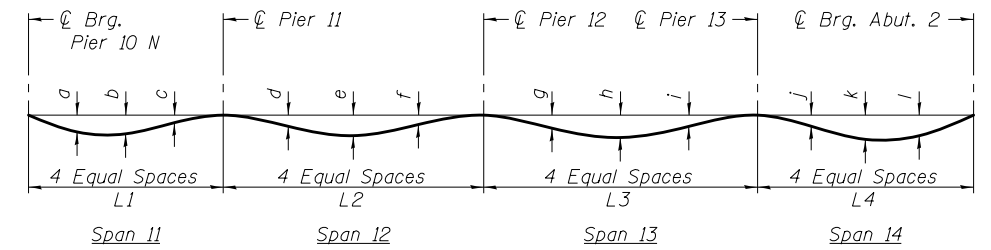
GIRDER G4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|------------|--------|------------------------------|--|
| ☉ Pier 10 | 1715+17.91 | 2.58 | 630.46 | 630.46 |
| ☉ Brg. Pier 10 N | 1715+18.74 | 2.58 | 630.46 | 630.46 |
| A | 1715+28.74 | 2.58 | 630.51 | 630.56 |
| B | 1715+38.74 | 2.58 | 630.55 | 630.63 |
| C | 1715+48.74 | 2.58 | 630.57 | 630.68 |
| D | 1715+58.74 | 2.58 | 630.58 | 630.69 |
| E | 1715+68.74 | 2.58 | 630.57 | 630.68 |
| F | 1715+78.74 | 2.58 | 630.55 | 630.64 |
| G | 1715+88.74 | 2.58 | 630.51 | 630.57 |
| H | 1715+98.74 | 2.58 | 630.46 | 630.49 |
| I | 1716+08.74 | 2.58 | 630.40 | 630.41 |
| ☉ Pier 11 | 1716+19.16 | 2.58 | 630.31 | 630.31 |
| J | 1716+29.16 | 2.58 | 630.21 | 630.22 |
| K | 1716+39.16 | 2.58 | 630.10 | 630.13 |
| L | 1716+49.16 | 2.58 | 629.98 | 629.98 |
| M | 1716+59.16 | 2.58 | 629.84 | 629.92 |
| N | 1716+69.16 | 2.58 | 629.68 | 629.78 |
| O | 1716+79.16 | 2.58 | 629.51 | 629.62 |
| P | 1716+89.16 | 2.58 | 629.33 | 629.44 |
| Q | 1716+99.16 | 2.58 | 629.13 | 629.23 |
| R | 1717+09.16 | 2.58 | 628.92 | 629.00 |
| S | 1717+19.16 | 2.58 | 628.69 | 628.75 |
| T | 1717+29.16 | 2.58 | 628.44 | 628.48 |
| U | 1717+39.16 | 2.58 | 628.19 | 628.20 |
| V | 1717+49.16 | 2.58 | 627.91 | 627.92 |
| ☉ Pier 12 | 1717+54.50 | 2.58 | 627.76 | 627.76 |
| W | 1717+64.50 | 2.58 | 627.47 | 627.48 |
| X | 1717+74.50 | 2.58 | 627.16 | 627.19 |
| Y | 1717+84.50 | 2.58 | 626.83 | 626.89 |
| Z | 1717+94.50 | 2.58 | 626.49 | 626.57 |
| AA | 1718+04.50 | 2.58 | 626.14 | 626.24 |
| AB | 1718+14.50 | 2.58 | 625.77 | 625.89 |
| AC | 1718+24.50 | 2.58 | 625.40 | 625.52 |
| AD | 1718+34.50 | 2.58 | 625.02 | 625.14 |
| AE | 1718+44.50 | 2.58 | 624.65 | 624.75 |
| AF | 1718+54.50 | 2.58 | 624.27 | 624.36 |
| AG | 1718+64.50 | 2.58 | 623.90 | 623.96 |
| AH | 1718+74.50 | 2.58 | 623.53 | 623.56 |
| AI | 1718+84.50 | 2.58 | 623.15 | 623.16 |
| ☉ Pier 13 | 1718+96.85 | 2.58 | 622.69 | 622.69 |
| AJ | 1719+06.85 | 2.58 | 622.32 | 622.33 |
| AK | 1719+16.85 | 2.58 | 621.94 | 621.98 |
| AL | 1719+26.85 | 2.58 | 621.57 | 621.64 |
| AM | 1719+36.85 | 2.58 | 621.19 | 621.29 |
| AN | 1719+46.85 | 2.58 | 620.82 | 620.95 |
| AO | 1719+56.85 | 2.58 | 620.45 | 620.59 |
| AP | 1719+66.85 | 2.58 | 620.07 | 620.22 |
| AQ | 1719+76.85 | 2.58 | 619.70 | 619.83 |
| AR | 1719+86.85 | 2.58 | 619.33 | 619.43 |
| AS | 1719+96.85 | 2.58 | 618.94 | 619.01 |
| ☉ Brg. Abut. 2 | 1720+09.12 | 2.58 | 618.47 | 618.47 |
| Bk. Abut. 2 | 1720+10.12 | 2.58 | 618.44 | 618.44 |



To determine "t": After all bearings have been replaced, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet S-7. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-14 thru S-15 of S-83.

DEAD LOAD DEFLECTION TABLE

| | Span 11 | | | Span 12 | | | Span 13 | | | Span 14 | | | | | | |
|----------|---------|--------|------|---------------|------|--------|---------|---------------|------|---------|------|--------------|------|--------|--------|--------------|
| | a | b | c | L1 | d | e | f | L2 | g | h | i | L3 | j | k | l | L4 |
| Girder 1 | 3/4" | 7/8" | 3/8" | 97'-0 5/16" | 1/2" | 1" | 1/2" | 130'-9 1/8" | 5/8" | 1" | 1/2" | 137'-6 7/16" | 1/2" | 1" | 7/8" | 108'-5 3/4" |
| Girder 2 | 7/8" | 1" | 3/8" | 98'-4 7/16" | 1/2" | 1" | 1/2" | 132'-5 13/16" | 5/8" | 1 1/8" | 5/8" | 139'-4 1/4" | 1/2" | 1 1/8" | 1" | 109'-11" |
| Girder 3 | 1" | 1 1/8" | 1/2" | 99'-7 15/16" | 5/8" | 1 1/8" | 1/2" | 134'-2 9/16" | 3/4" | 1 1/4" | 5/8" | 141'-2 1/6" | 5/8" | 1 3/8" | 1 1/8" | 111'-4 3/16" |
| Girder 4 | 1 1/8" | 1 1/4" | 1/2" | 100'-11 7/16" | 3/4" | 1 3/8" | 5/8" | 135'-11 5/16" | 7/8" | 1 1/2" | 3/4" | 142'-11 7/8" | 3/4" | 1 5/8" | 1 3/8" | 112'-9 3/8" |

2/26/07 PM

12/7/2012

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS VIII - UNIT 4
STRUCTURE NO. 016-2437

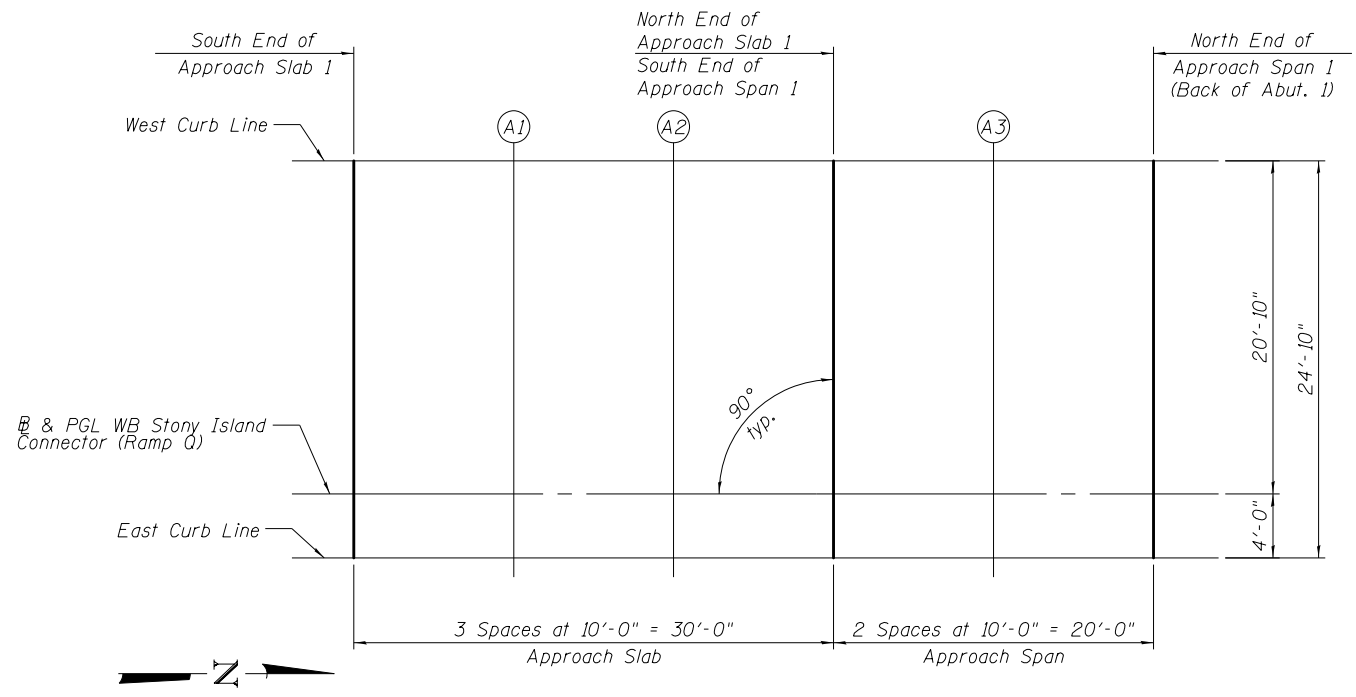
SHEET NO. S-15 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 178 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

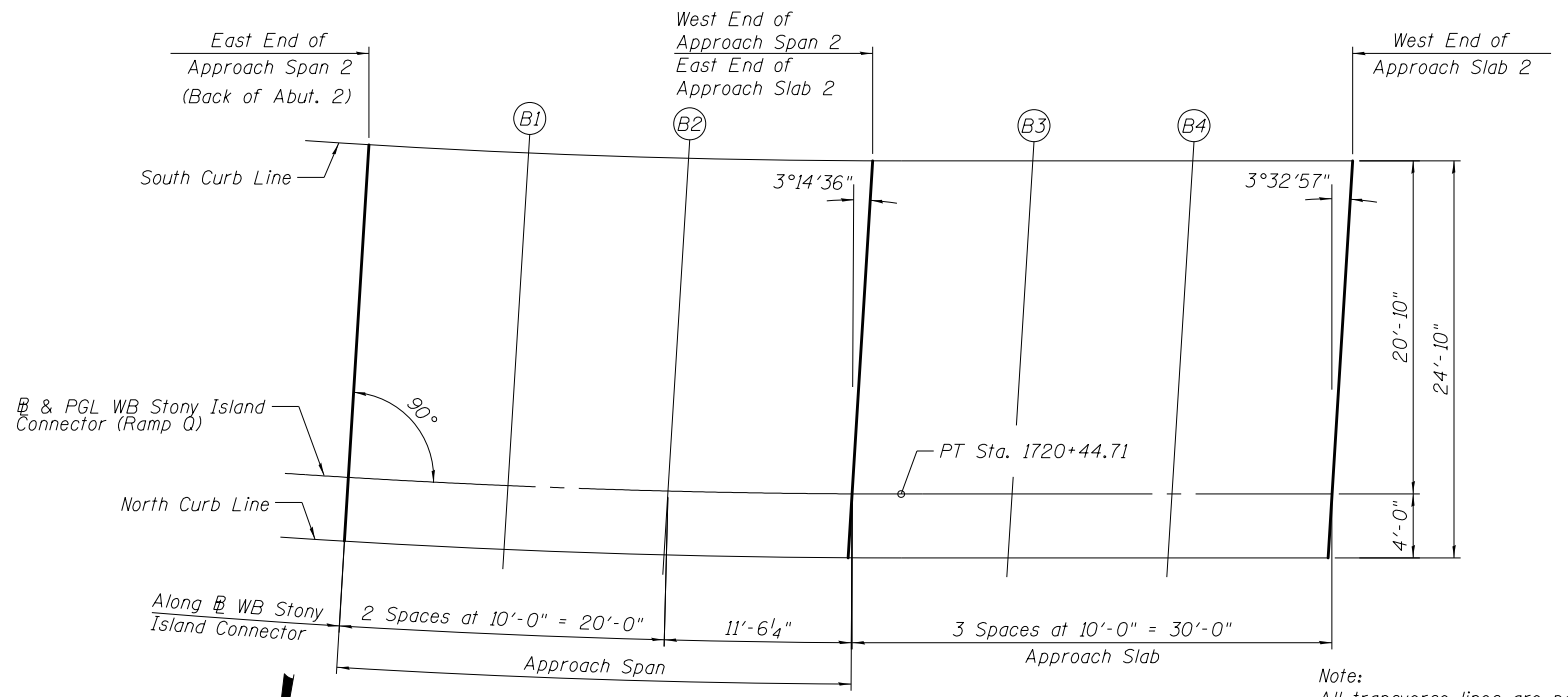
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12/7/2012

S:\1072_05_CADD\Structure\1\SN_0162437\CADD Sheet\1\062437-60J12-016-SE12.dgn



PLAN - APPROACH SLAB & APPROACH SPAN AT ABUTMENT 1



PLAN - APPROACH SLAB & APPROACH SPAN AT ABUTMENT 2

Note: All transverse lines are parallel to Back of Abutment 2.

WEST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| South End of Approach Slab 1 | 1705+06.86 | -20.83 | 597.36 |
| A1 | 1705+16.86 | -20.83 | 597.67 |
| A2 | 1705+26.86 | -20.83 | 597.99 |
| N. End Appr Slab 1 & S. End Appr Span 1 | 1705+36.86 | -20.83 | 598.33 |
| A3 | 1705+46.86 | -20.83 | 598.69 |
| North End of Approach Span 1 | 1705+56.86 | -20.83 | 599.05 |

WB STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| South End of Approach Slab 1 | 1705+06.86 | 0.00 | 596.94 |
| A1 | 1705+16.86 | 0.00 | 597.25 |
| A2 | 1705+26.86 | 0.00 | 597.58 |
| N. End Appr Slab 1 & S. End Appr Span 1 | 1705+36.86 | 0.00 | 597.92 |
| A3 | 1705+46.86 | 0.00 | 598.27 |
| North End of Approach Span 1 | 1705+56.86 | 0.00 | 598.63 |

EAST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| South End of Approach Slab 1 | 1705+06.86 | 4.00 | 596.86 |
| A1 | 1705+16.86 | 4.00 | 597.17 |
| A2 | 1705+26.86 | 4.00 | 597.50 |
| N. End Appr Slab 1 & S. End Appr Span 1 | 1705+36.86 | 4.00 | 597.84 |
| A3 | 1705+46.86 | 4.00 | 598.19 |
| North End of Approach Span 1 | 1705+56.86 | 4.00 | 598.55 |

SOUTH CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| East End of Approach Span 2 | 1720+10.12 | -20.83 | 617.21 |
| B1 | 1720+20.53 | -20.83 | 616.90 |
| B2 | 1720+30.94 | -20.83 | 616.59 |
| W. End Appr Span 2 & E. End Appr Slab 2 | 1720+42.87 | -20.83 | 616.23 |
| B3 | 1720+52.93 | -20.83 | 615.93 |
| B4 | 1720+62.93 | -20.83 | 615.63 |
| West End of Approach Slab 2 | 1720+72.93 | -20.83 | 615.33 |

WB STONY ISLAND CONNECTOR (RAMP Q)

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| East End of Approach Span 2 | 1720+10.12 | 0.00 | 618.30 |
| B1 | 1720+20.12 | 0.00 | 617.93 |
| B2 | 1720+30.12 | 0.00 | 617.55 |
| W. End Appr Span 2 & E. End Appr Slab 2 | 1720+41.64 | 0.00 | 617.12 |
| B3 | 1720+51.64 | 0.00 | 616.75 |
| B4 | 1720+61.64 | 0.00 | 616.37 |
| West End of Approach Slab 2 | 1720+71.64 | 0.00 | 616.00 |

NORTH CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|---|------------|--------|------------------------------|
| East End of Approach Span 2 | 1720+10.12 | 4.00 | 618.51 |
| B1 | 1720+20.05 | 4.00 | 618.12 |
| B2 | 1720+29.97 | 4.00 | 617.74 |
| W. End Appr Span 2 & E. End Appr Slab 2 | 1720+41.41 | 4.00 | 617.30 |
| B3 | 1720+51.39 | 4.00 | 616.91 |
| B4 | 1720+61.39 | 4.00 | 616.52 |
| West End of Approach Slab 2 | 1720+71.39 | 4.00 | 616.13 |

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| | | |
|------------------------|---------------|-----------|
| USER NAME = | DESIGNED - TL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - APPROACH SLABS AND SPANS
STRUCTURE NO. 016-2437

| | | | | |
|--------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 179 |
| CONTRACT NO. 60V61 | | | | |

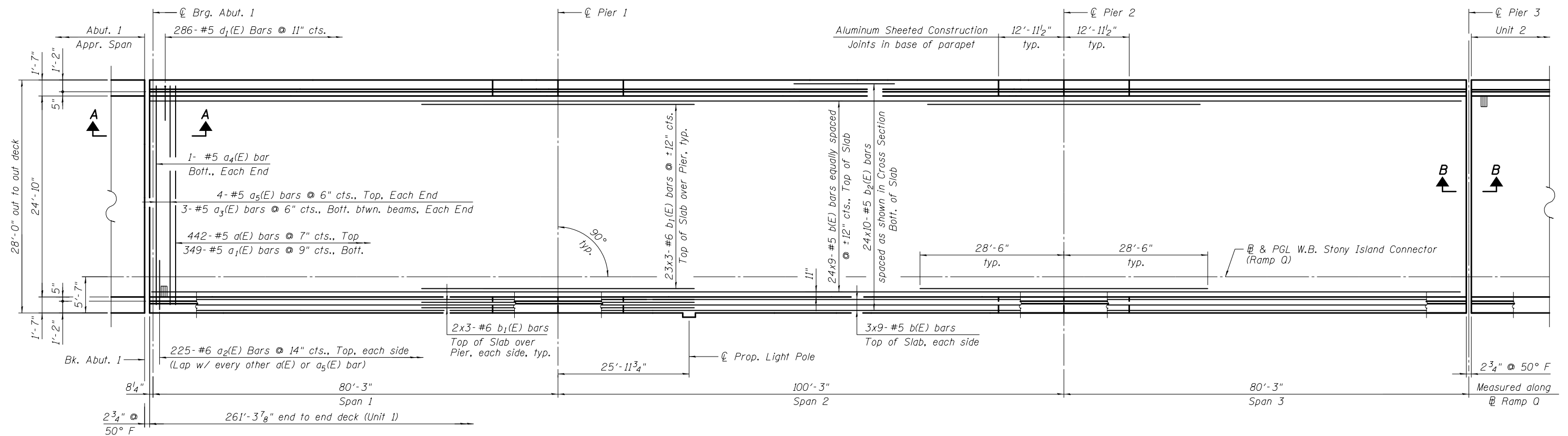
SHEET NO. S-16 OF S-83 SHEETS

ILLINOIS FED. AID PROJECT

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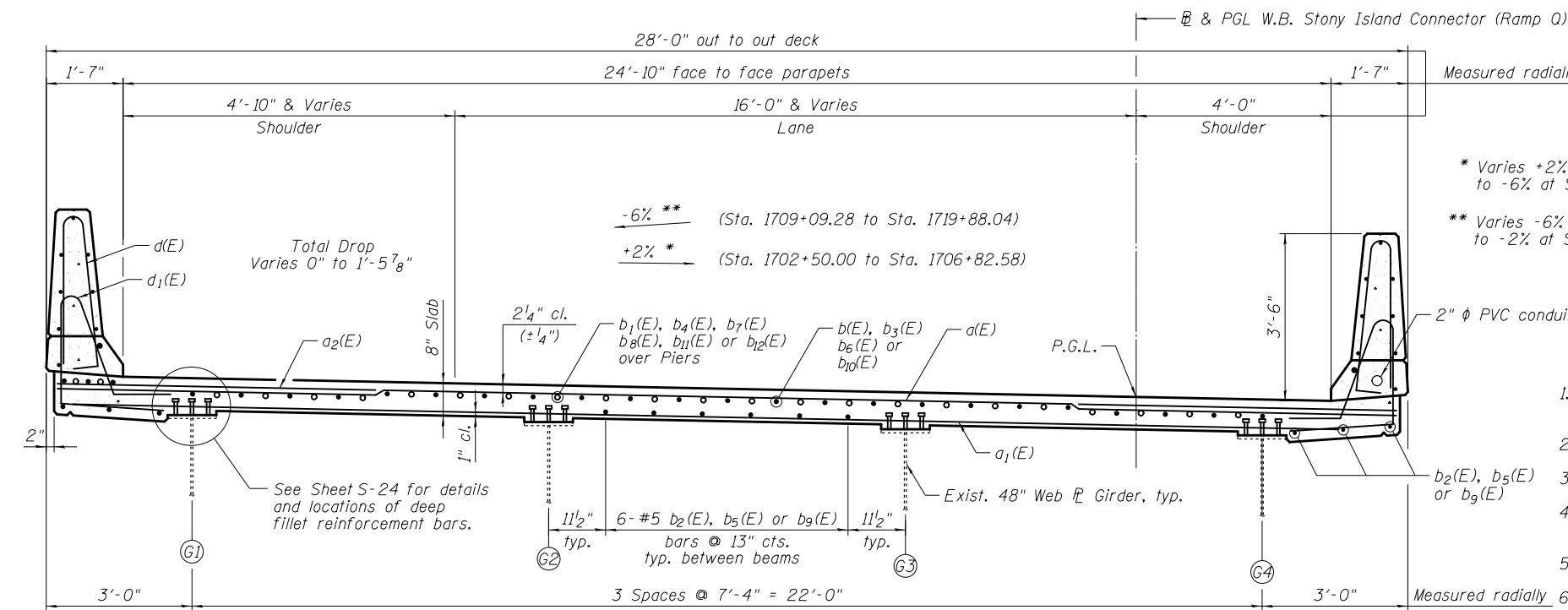
PARTIAL PLAN (Unit 1)

MIN. BAR LAP
 #5 = 3'-3"
 #6 = 3'-10"

UNIT 1 BILL OF MATERIAL

| Bar | No. | Size | Length | Shape | |
|----------------------------------|-----|------|--------|---------|--------|
| a(E) | 442 | #5 | 27'-4" | — | |
| a ₁ (E) | 349 | #5 | 27'-0" | — | |
| a ₂ (E) | 450 | #6 | 6'-6" | — | |
| a ₃ (E) | 18 | #5 | 8'-3" | — | |
| a ₄ (E) | 2 | #5 | 21'-6" | — | |
| a ₅ (E) | 8 | #5 | 27'-4" | — | |
| a ₆ (E) | 8 | #5 | 1'-6" | — | |
| a ₇ (E) | 508 | #4 | 3'-8" | — | |
| b(E) | 270 | #5 | 32'-0" | — | |
| b ₁ (E) | 162 | #6 | 21'-7" | — | |
| b ₂ (E) | 240 | #5 | 29'-1" | — | |
| b ₁₃ (E) | 30 | #4 | 25'-8" | — | |
| b ₁₄ (E) | 12 | #4 | 28'-2" | — | |
| d(E) | 572 | #5 | 6'-10" | — | |
| d ₁ (E) | 572 | #5 | 7'-6" | — | |
| d ₂ (E) | 3 | #6 | 5'-1" | — | |
| d ₃ (E) | 6 | #6 | 8'-11" | — | |
| e(E) | 56 | #4 | 16'-8" | — | |
| e ₁ (E) | 64 | #4 | 12'-7" | — | |
| e ₂ (E) | 56 | #4 | 18'-2" | — | |
| e ₃ (E) | 56 | #4 | 16'-5" | — | |
| e ₁₂ (E) | 6 | #4 | 24'-0" | — | |
| e ₁₃ (E) | 6 | #4 | 26'-0" | — | |
| e ₁₄ (E) | 6 | #4 | 23'-8" | — | |
| e ₂₁ (E) | 6 | #8 | 26'-1" | — | |
| e ₂₂ (E) | 8 | #8 | 12'-7" | — | |
| e ₂₃ (E) | 6 | #8 | 28'-2" | — | |
| e ₂₄ (E) | 6 | #8 | 25'-9" | — | |
| x(E) | 42 | #5 | 6'-4" | — | |
| Reinforcement Bars, Epoxy Coated | | | | Pound | 64,230 |
| Concrete Superstructure | | | | Cu. Yd. | 296.0 |
| Bridge Deck Grooving | | | | Sq. Yd. | 663 |
| Protective Coat | | | | Sq. Yd. | 983 |

*** Deep fillet reinforcement bars. See Sheet S-24



- Notes:
- Bars indicated thus 24x9-#5 etc. indicates 24 lines of bars with 9 lengths per line.
 - All edges shall have standard 3/4" chamfer except as noted.
 - See Sheet S-21 for Sections A-A & B-B and Superstructure Details.
 - See Sheet S-22 & S-23 for Parapet reinforcement and Sheet S-24 for Light Pole Details.
 - See Sheets S-33 & S-34 for Scupper Details.
 - Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheet S-31

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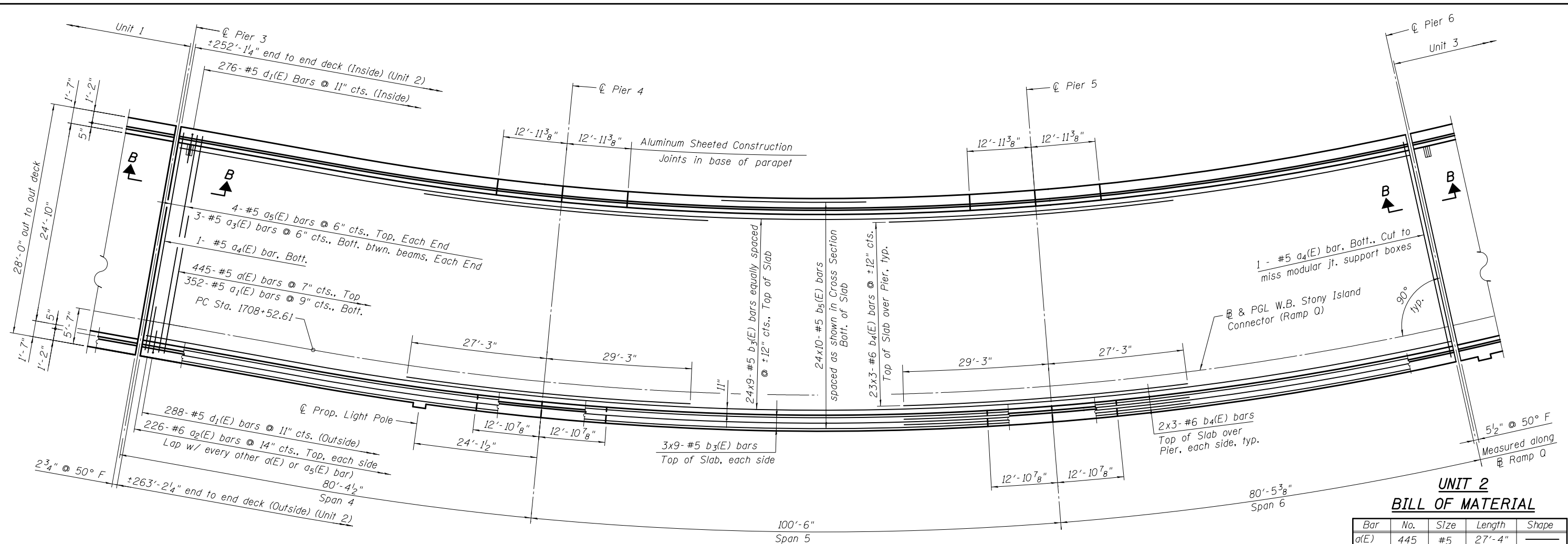
| | | |
|------------------------|----------------|-------------|
| USER NAME = | DESIGNED - IYL | REVISIONS - |
| PLOT SCALE = | CHECKED - BAK | REVISIONS - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISIONS - |
| | CHECKED - IYL | REVISIONS - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN AND CROSS SECTION I
STRUCTURE NO. 016-2437

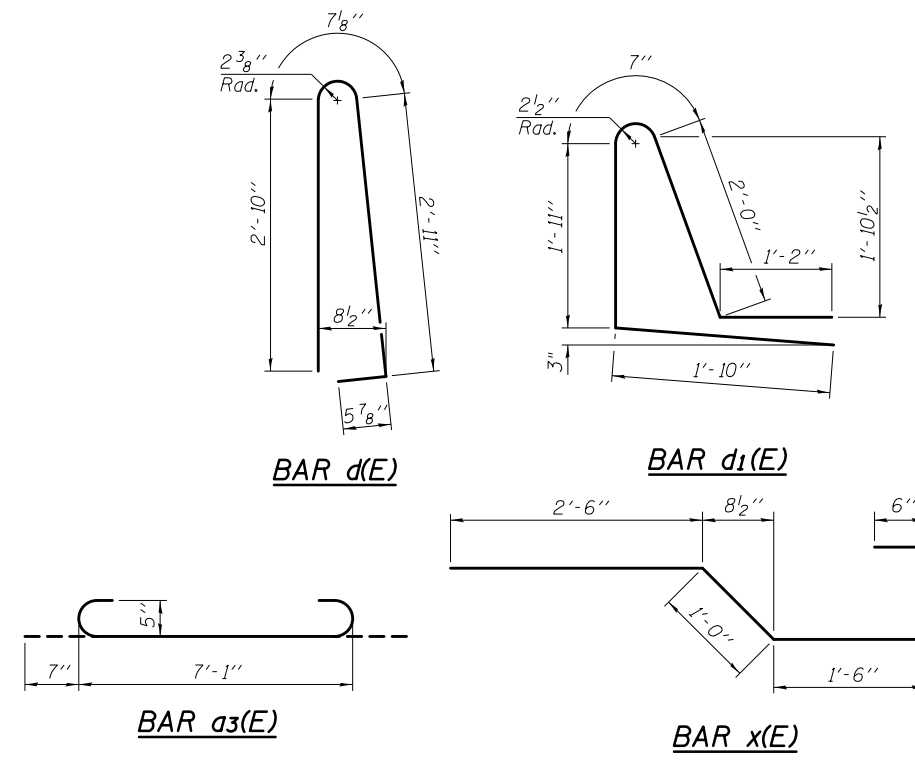
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 180 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. S-17 OF S-83 SHEETS



PARTIAL PLAN
(Unit 2)

MIN. BAR LAP
#5 = 3'-3"
#6 = 3'-10"



UNIT 2
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| a(E) | 445 | #5 | 27'-4" | — |
| a1(E) | 352 | #5 | 27'-0" | — |
| a2(E) | 452 | #6 | 6'-6" | — |
| a3(E) | 18 | #5 | 8'-3" | U |
| a4(E) | 2 | #5 | 21'-6" | — |
| a5(E) | 8 | #5 | 27'-4" | — |
| a6(E) | 8 | #5 | 1'-6" | — |
| b3(E) | 270 | #5 | 32'-2" | — |
| b4(E) | 162 | #6 | 21'-5" | — |
| b5(E) | 240 | #5 | 29'-3" | — |
| d(E) | 564 | #5 | 6'-10" | L |
| d1(E) | 564 | #5 | 7'-6" | L |
| d2(E) | 3 | #6 | 5'-1" | — |
| d3(E) | 6 | #6 | 8'-11" | L |
| e(E) | 56 | #4 | 16'-8" | — |
| e1(E) | 64 | #4 | 12'-7" | — |
| e4(E) | 28 | #4 | 18'-6" | — |
| e5(E) | 28 | #4 | 16'-0" | — |
| e7(E) | 28 | #4 | 15'-7" | — |
| e9(E) | 28 | #4 | 17'-4" | — |
| e12(E) | 12 | #4 | 24'-0" | — |
| e15(E) | 6 | #4 | 26'-6" | — |
| e21(E) | 12 | #8 | 26'-1" | — |
| e22(E) | 8 | #8 | 12'-7" | — |
| e25(E) | 6 | #8 | 28'-9" | — |
| x(E) | 42 | #5 | 6'-4" | L |
| Reinforcement Bars, Epoxy Coated | | | Pound | 62,340 |
| Concrete Superstructure | | | Cu. Yd. | 278.0 |
| Bridge Deck Grooving | | | Sq. Yd. | 654 |
| Protective Coat | | | Sq. Yd. | 970 |

2/26/09 PM

12/7/2012

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| | CHECKED - BAK | REVISED - |
| PLOT SCALE = | DRAWN - MTR | REVISED - |
| PLOT DATE = 11/08/2012 | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN II
STRUCTURE NO. 016-2437

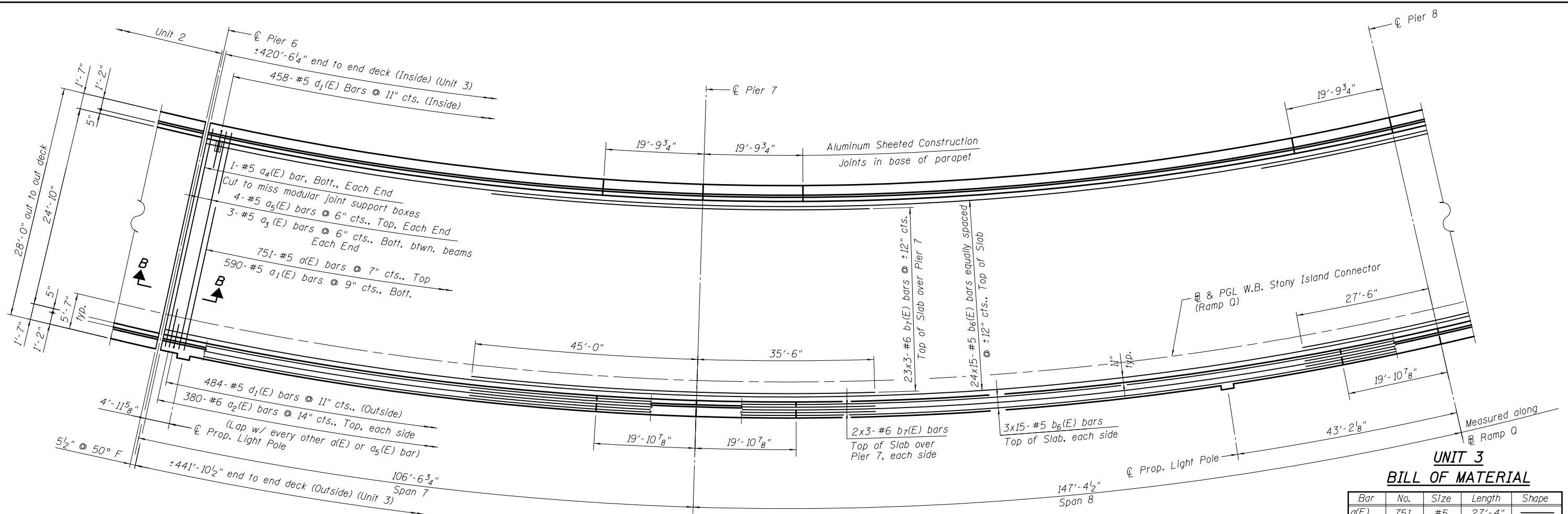
SHEET NO. S-18 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 181 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

3/4/7/26 PM

2/27/2013

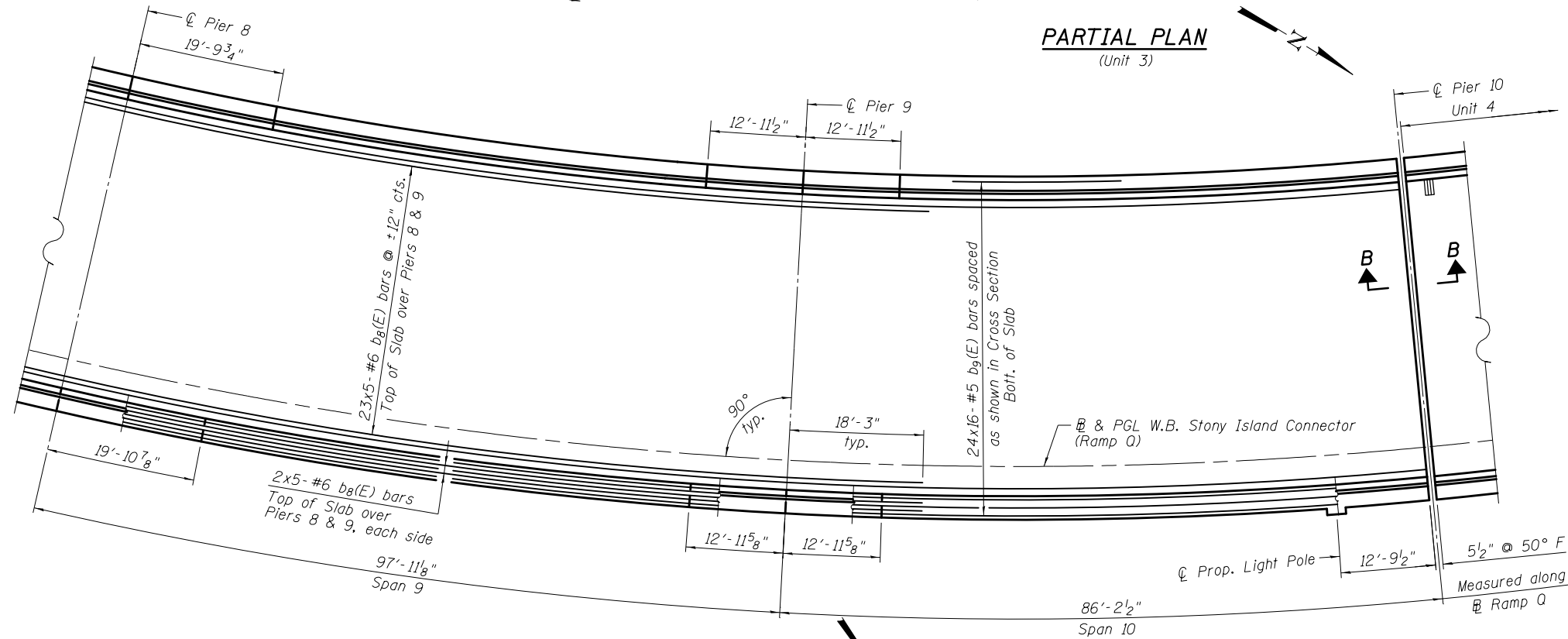
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PARTIAL PLAN
(Unit 3)

MIN. BAR LAP
#5 = 3'-3"
#6 = 3'-10"

*** Deep fillet reinforcement bars. See Sheet S-24



PARTIAL PLAN
(Unit 3)

UNIT 3
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|------------|-----|------|---------|-------|
| a(E) | 751 | #5 | 27'-4" | — |
| a1(E) | 590 | #5 | 27'-0" | — |
| a2(E) | 760 | #6 | 6'-6" | — |
| a3(E) | 18 | #5 | 8'-3" | U |
| a4(E) | 2 | #5 | 21'-6" | — |
| a5(E) | 8 | #5 | 27'-4" | — |
| a6(E) | 8 | #5 | 1'-6" | — |
| *** a8(E) | 147 | #4 | 4'-0" | U |
| b6(E) | 450 | #5 | 32'-6" | — |
| b7(E) | 81 | #6 | 29'-5" | — |
| b8(E) | 135 | #6 | 31'-10" | — |
| b9(E) | 384 | #5 | 30'-8" | — |
| *** b13(E) | 12 | #4 | 25'-8" | — |

| | | | | |
|-------|-----|----|--------|---|
| d(E) | 942 | #5 | 6'-10" | D |
| d1(E) | 942 | #5 | 7'-6" | L |
| d2(E) | 9 | #6 | 5'-1" | — |
| d3(E) | 18 | #6 | 8'-11" | U |

| | | | | |
|--------|----|----|---------|---|
| e(E) | 42 | #4 | 16'-8" | — |
| e1(E) | 32 | #4 | 12'-7" | — |
| e2(E) | 28 | #4 | 18'-2" | — |
| e5(E) | 63 | #4 | 16'-0" | — |
| e6(E) | 63 | #4 | 17'-1" | — |
| e8(E) | 64 | #4 | 19'-6" | — |
| e10(E) | 42 | #4 | 17'-10" | — |
| e11(E) | 28 | #4 | 15'-0" | — |
| e13(E) | 6 | #4 | 26'-0" | — |
| e16(E) | 14 | #4 | 23'-4" | — |
| e17(E) | 8 | #4 | 28'-9" | — |
| e22(E) | 4 | #8 | 12'-7" | — |
| e23(E) | 6 | #8 | 28'-2" | — |
| e24(E) | 8 | #8 | 25'-9" | — |
| e26(E) | 8 | #8 | 19'-6" | — |
| e27(E) | 8 | #8 | 31'-1" | — |
| e28(E) | 6 | #8 | 25'-4" | — |
| x(E) | 42 | #5 | 6'-4" | U |

CONT.
BILL OF MATERIAL

| Reinforcement Bars, Epoxy Coated | Pound | 106,240 |
|----------------------------------|---------|---------|
| Concrete Superstructure | Cu. Yd. | 482.0 |
| Bridge Deck Grooving | Sq. Yd. | 1,094 |
| Protective Coat | Sq. Yd. | 1,622 |

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| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 02/11/2013 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN III
STRUCTURE NO. 016-2437

SHEET NO. S-19 OF S-83 SHEETS

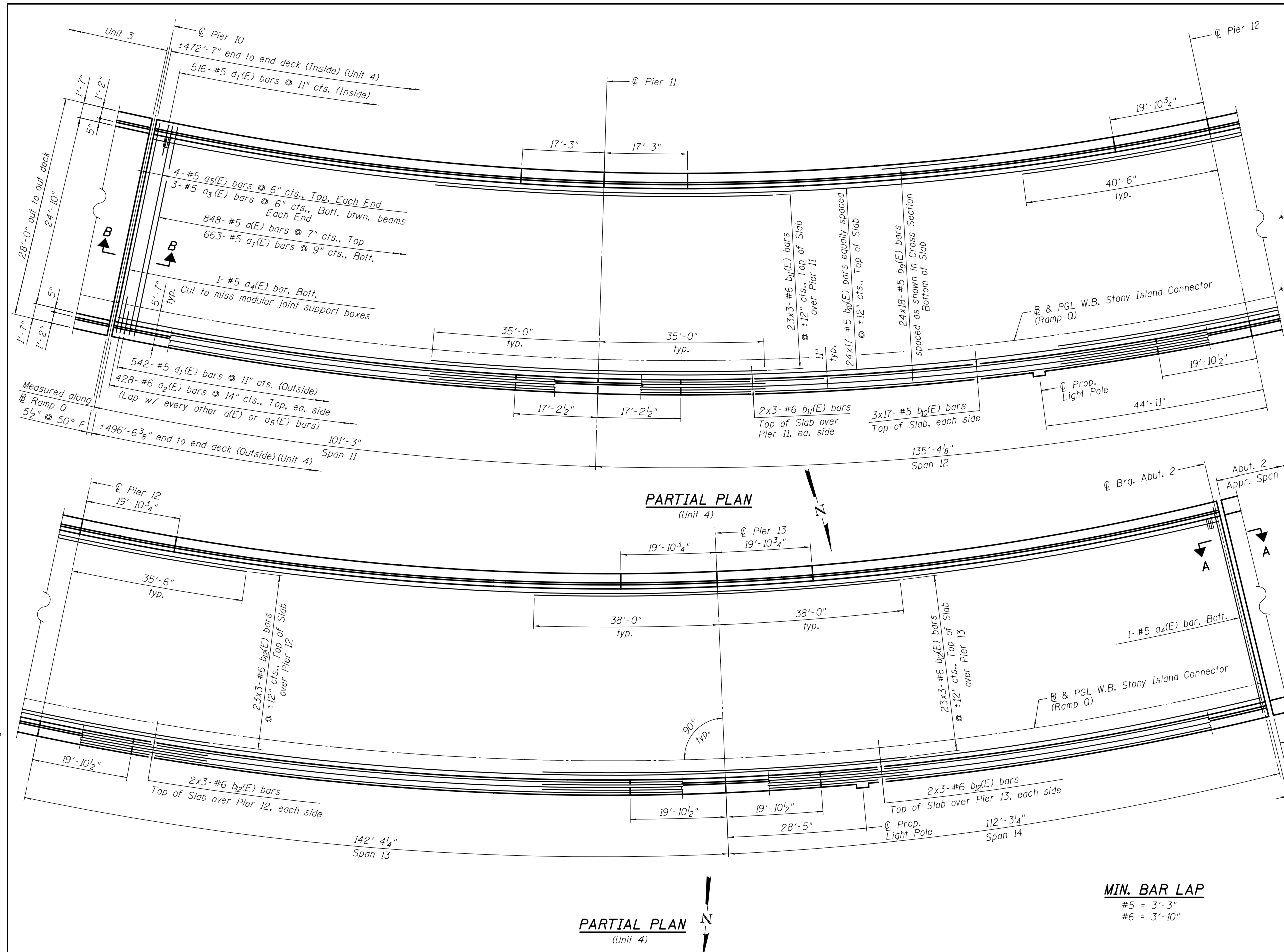
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 182 |

CONTRACT NO. 60V61
ILLINOIS FED. AID PROJECT

**UNIT 4
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|------|---------|---------|-------|
| a(E) | 848 | #5 | 27'-4" | — |
| a ₁ (E) | 663 | #5 | 27'-0" | — |
| a ₂ (E) | 856 | #6 | 6'-6" | — |
| a ₃ (E) | 18 | #5 | 8'-3" | — |
| a ₄ (E) | 2 | #5 | 21'-6" | — |
| a ₅ (E) | 8 | #5 | 27'-4" | — |
| a ₆ (E) | 16 | #5 | 1'-6" | — |
| a ₈ (E) | 17 | #4 | 4'-0" | — |
| b ₉ (E) | 432 | #5 | 30'-8" | — |
| b ₁₀ (E) | 510 | #5 | 32'-3" | — |
| b ₁₁ (E) | 81 | #6 | 25'-11" | — |
| b ₁₂ (E) | 162 | #6 | 27'-11" | — |
| b ₁₅ (E) | 2 | #4 | 16'-0" | — |
| d(E) | 1058 | #5 | 6'-10" | — |
| d ₁ (E) | 1058 | #5 | 7'-6" | — |
| d ₂ (E) | 6 | #6 | 5'-1" | — |
| d ₃ (E) | 12 | #6 | 8'-11" | — |
| e(E) | 67 | #4 | 16'-8" | — |
| e ₂ (E) | 35 | #4 | 18'-2" | — |
| e ₄ (E) | 35 | #4 | 18'-6" | — |
| e ₆ (E) | 42 | #4 | 17'-1" | — |
| e ₇ (E) | 77 | #4 | 15'-7" | — |
| e ₈ (E) | 99 | #4 | 19'-6" | — |
| e ₉ (E) | 35 | #4 | 17'-4" | — |
| e ₁₅ (E) | 8 | #4 | 26'-6" | — |
| e ₁₈ (E) | 6 | #4 | 29'-6" | — |
| e ₁₉ (E) | 8 | #4 | 27'-6" | — |
| e ₂₀ (E) | 8 | #4 | 25'-0" | — |
| e ₂₅ (E) | 8 | #8 | 28'-9" | — |
| e ₂₆ (E) | 8 | #8 | 19'-6" | — |
| e ₂₉ (E) | 8 | #8 | 25'-0" | — |
| e ₃₀ (E) | 4 | #8 | 16'-8" | — |
| e ₃₁ (E) | 8 | #8 | 29'-10" | — |
| e ₃₂ (E) | 8 | #8 | 27'-5" | — |
| x(E) | 42 | #5 | 6'-4" | — |
| Reinforcement Bars, Epoxy Coated | | Pound | 117,400 | |
| Concrete Superstructure | | Cu. Yd. | 536.0 | |
| Bridge Deck Grooving | | Sq. Yd. | 1,230 | |
| Protective Coat | | Sq. Yd. | 1,823 | |

*** Deep fillet reinforcement bars. See Sheet S-24



MIN. BAR LAP
 #5 = 3'-3"
 #6 = 3'-10"

PARTIAL PLAN (Unit 4)

2/26/09 PM 12/7/2012 S:\1072_05_CADD\Structure\1\SN_0162437\CADD Sheets\0162437-60J12-020-SP04.dgn

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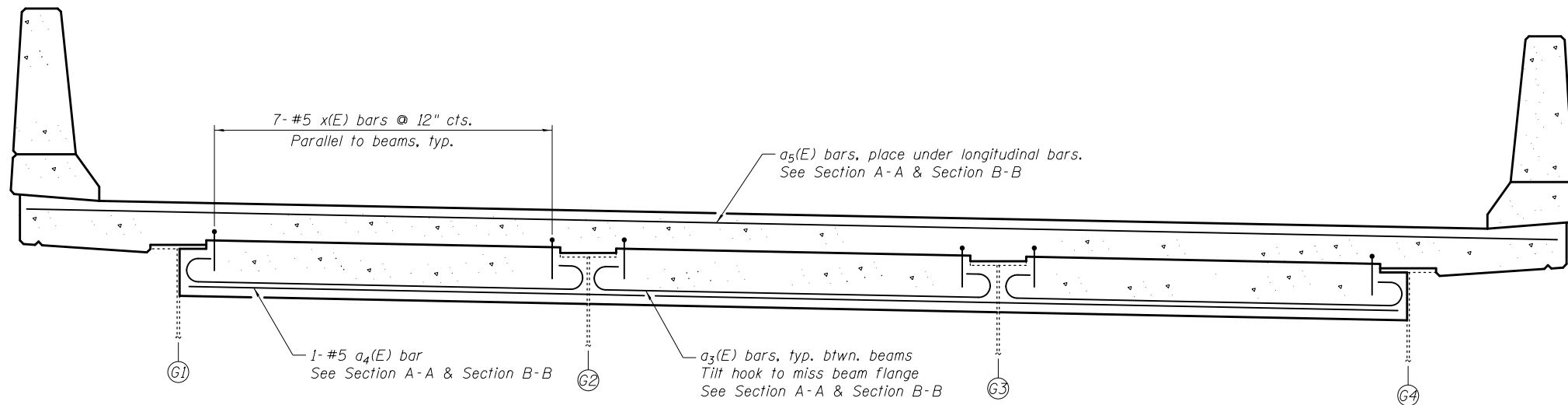
| | | |
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| USER NAME = | DESIGNED - IYL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

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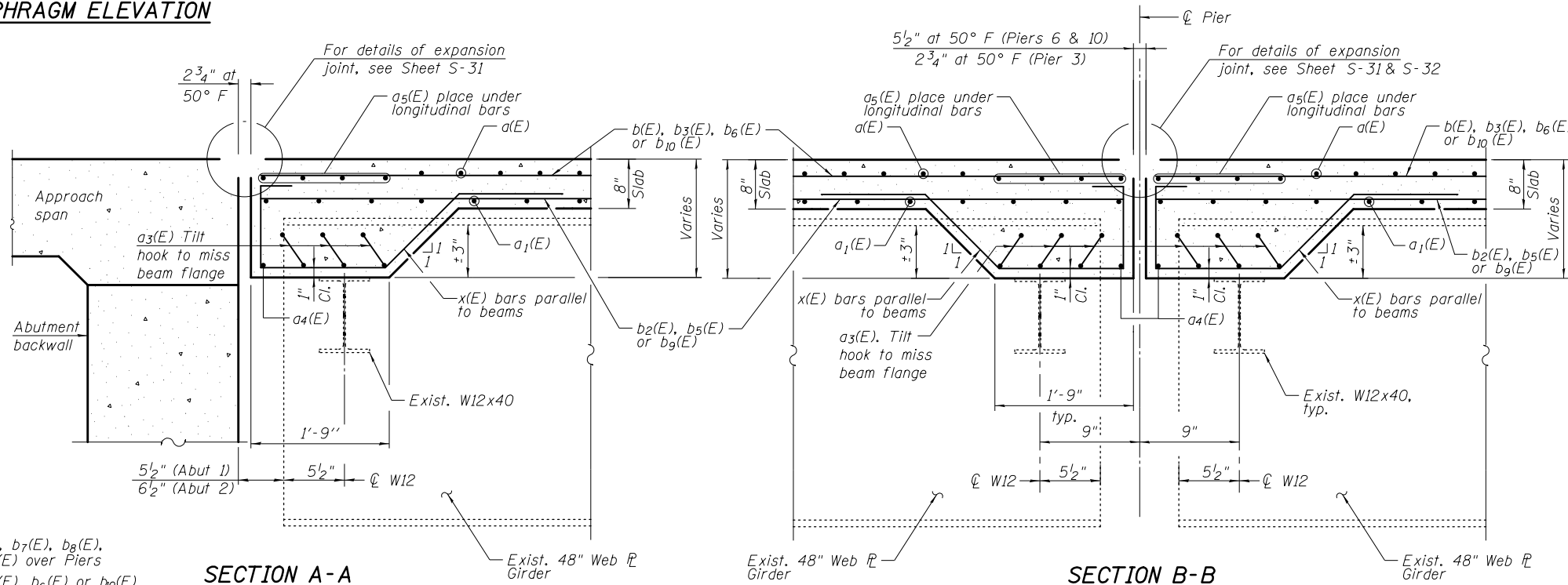
**SUPERSTRUCTURE PLAN IV
 STRUCTURE NO. 016-2437**

SHEET NO. S-20 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 183 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

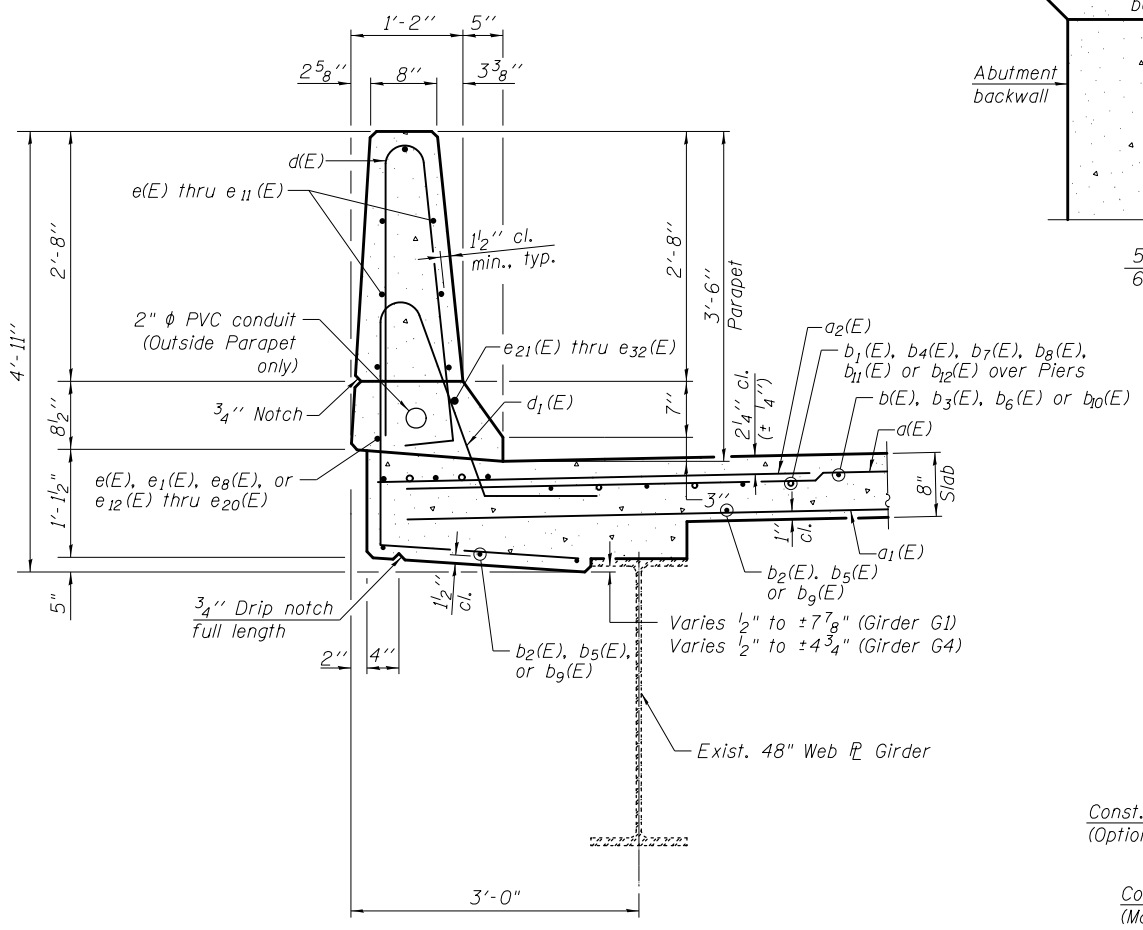


CONCRETE DIAPHRAGM ELEVATION

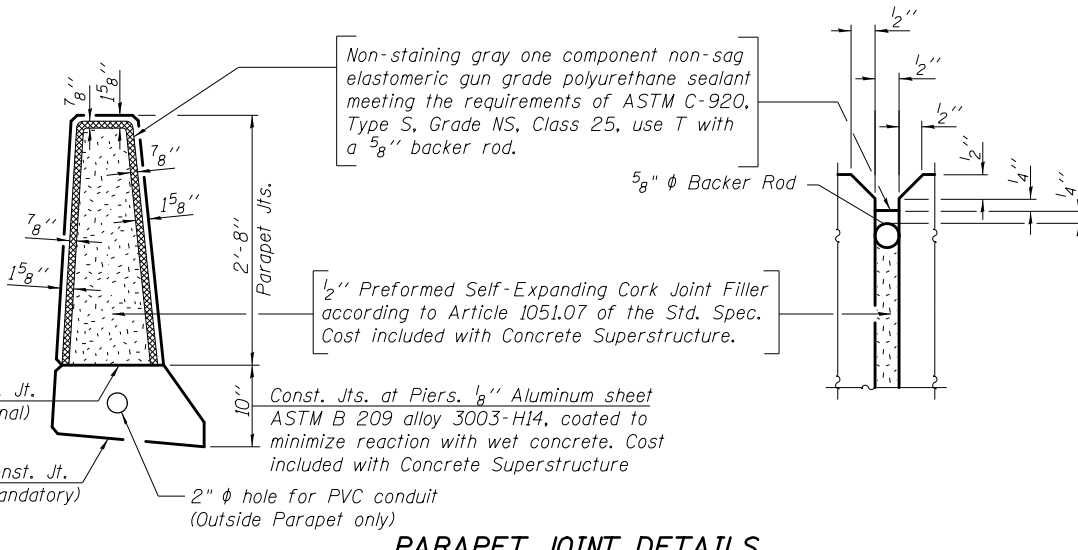


SECTION A-A

SECTION B-B



SECTION THRU PARAPET



PARAPET JOINT DETAILS

- Notes:
1. All edges shall have standard $\frac{3}{4}$ " chamfer except as noted.
 2. The Contractor may pour each deck unit end to end in one pour, starting from Abutment 1 or 2, as long as a hold down is provided for each girder at the locations shown below prior to the pour. See sheet S-24 for girder hold-down detail. For all other pouring sequences or hold-downs, the Contractor shall submit details & calculations stamped by an Illinois licensed Structural Engineer to the Engineer for review & approval. Cost included with Concrete Superstructure.

| Pour from Abut 1 to Abut 2 | | | |
|----------------------------|------|------|---------------------|
| Unit | Span | Pier | Hold Down Force (k) |
| 1 | 3 | 3 | 1 |
| 2 | 6 | 6 | 2 |

| Pour from Abut 2 to Abut 1 | | | |
|----------------------------|------|--------|---------------------|
| Unit | Span | Pier | Hold Down Force (k) |
| 1 | 1 | Abut 1 | 1 |
| 2 | 4 | 3 | 2 |
| 3 | 7 | 6 | 8 |
| 4 | 11 | 10 | 1 |

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| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

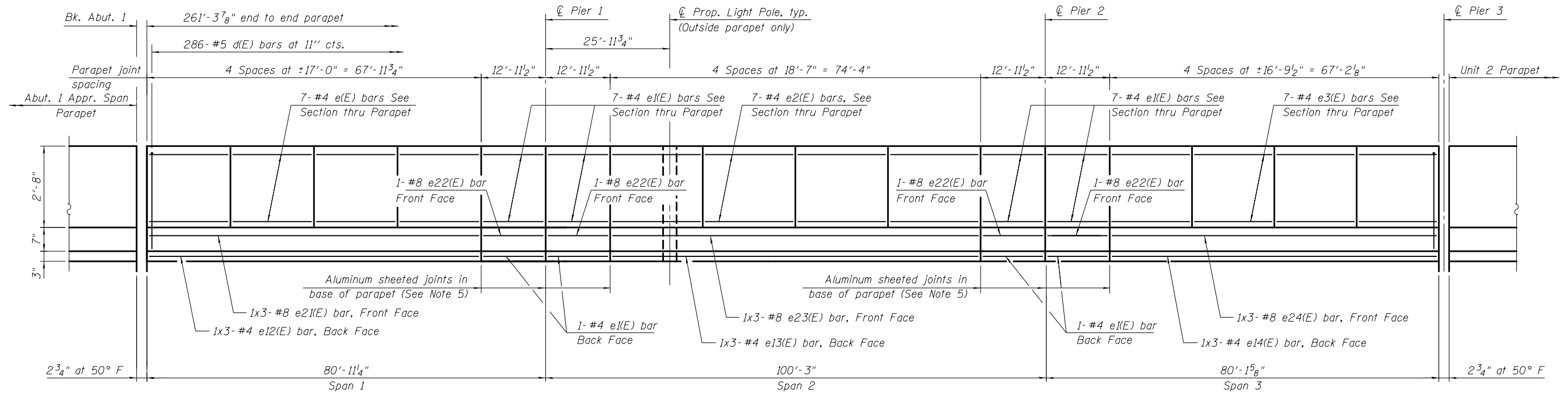
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SUPSTRUCTURE DETAILS I
STRUCTURE NO. 016-2437

SHEET NO. S-21 OF S-83 SHEETS

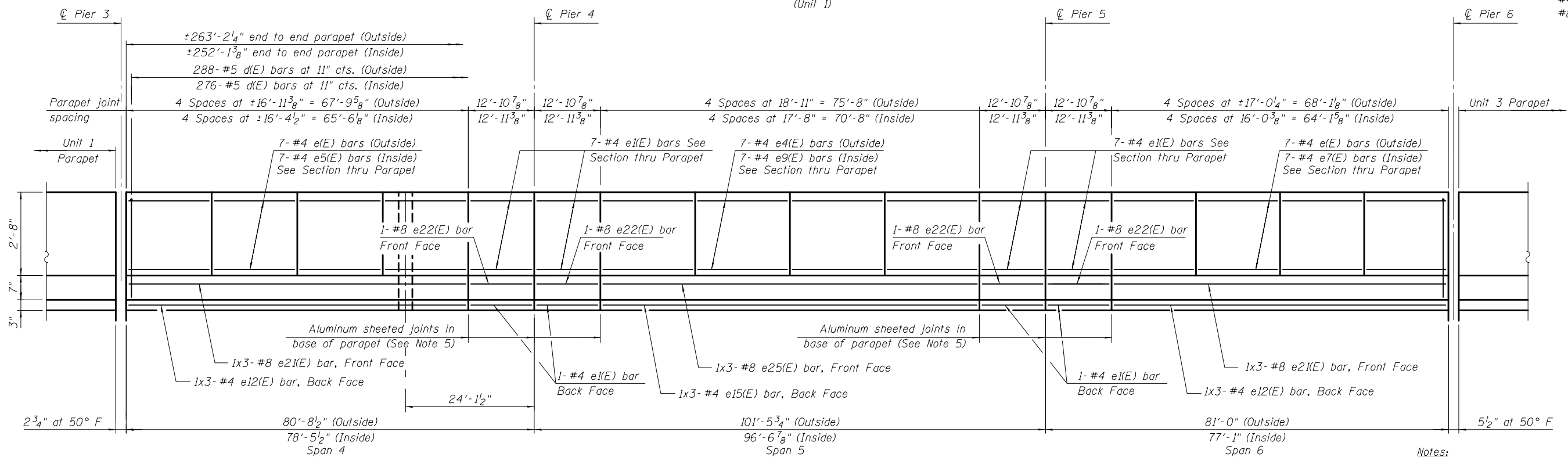
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 184 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT



INSIDE ELEVATION OF INSIDE & OUTSIDE PARAPETS

MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"



INSIDE ELEVATION OF INSIDE & OUTSIDE PARAPETS

- Notes:**
1. Bars indicated thus 1x2-#8 etc. indicates 1 line of bars with 2 lengths per line.
 2. See Sheet S-24 for light pole foundation details.
 3. See Sheet S-21 for Section thru Parapet.
 4. Reinforcement bars shall not pass thru aluminum sheets or cork joint filler. See Sheet S-21 for Parapet Joint Details.
 5. 1/8" Aluminum sheets shall be provided for Parapet Joints at Piers and either side of Piers as noted.
 6. Parapet lengths are measured along the outside face of each parapet.

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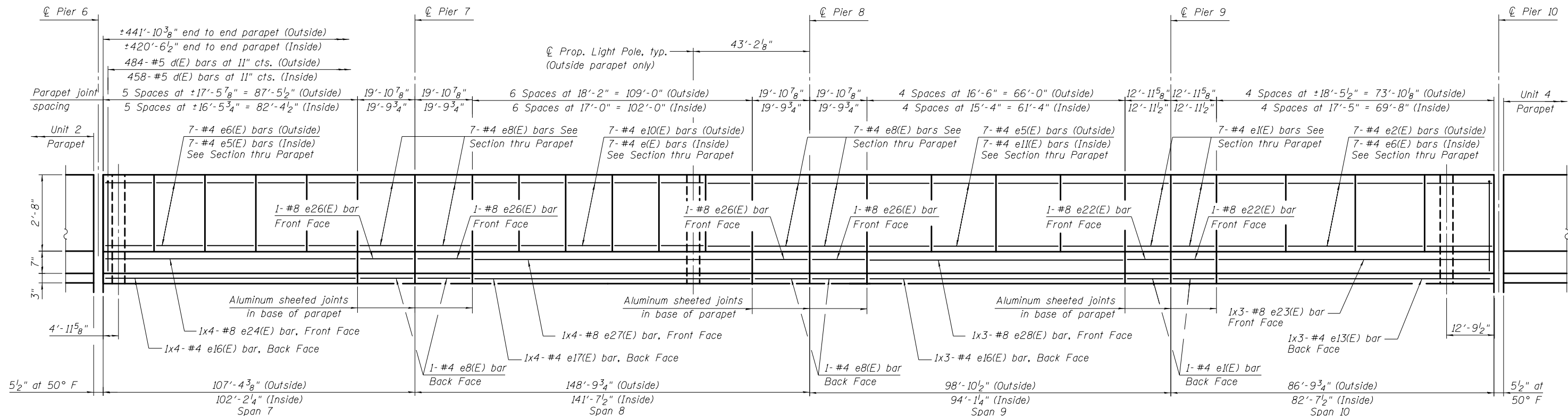
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|------------------------|----------------|----------|
| USER NAME = | DESIGNED - IYL | REVISD - |
| PLOT SCALE = | CHECKED - BAK | REVISD - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISD - |
| | CHECKED - IYL | REVISD - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS II
STRUCTURE NO. 016-2437

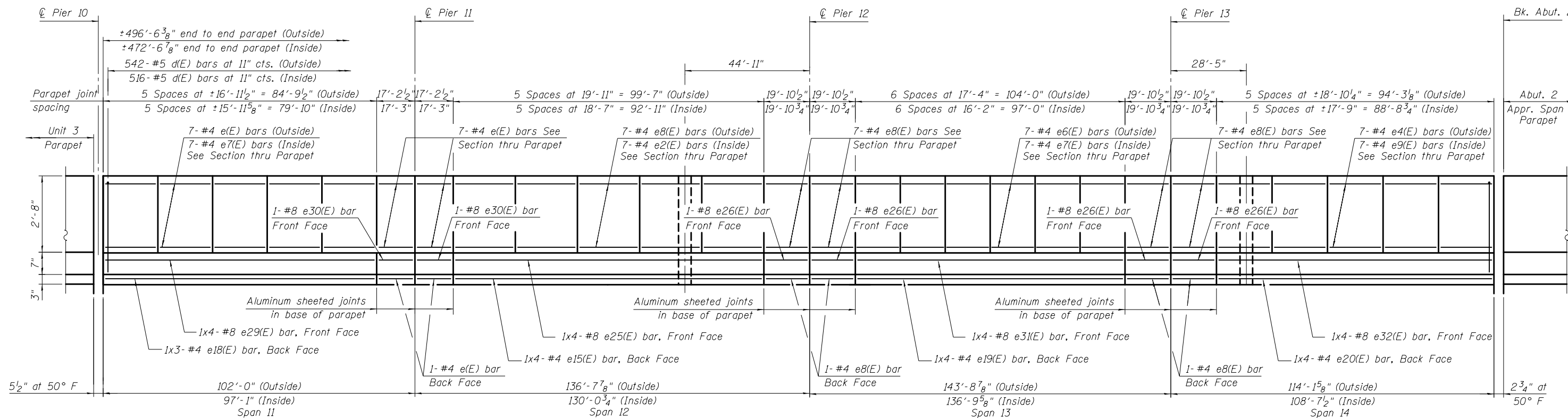
SHEET NO. S-22 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 185 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



INSIDE ELEVATION OF INSIDE & OUTSIDE PARAPETS
(Unit 3)

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



INSIDE ELEVATION OF INSIDE & OUTSIDE PARAPETS
(Unit 4)

2/26/11 PM

12/7/2012

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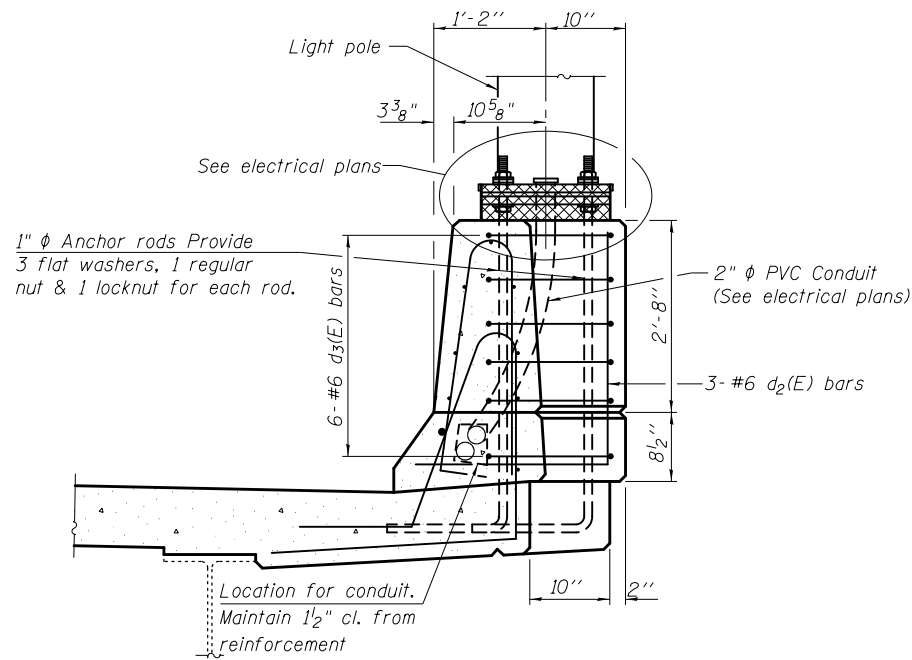
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|------------------------|----------------|-----------|
| USER NAME = | DESIGNED - IYL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS III
STRUCTURE NO. 016-2437

SHEET NO. S-23 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 186 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

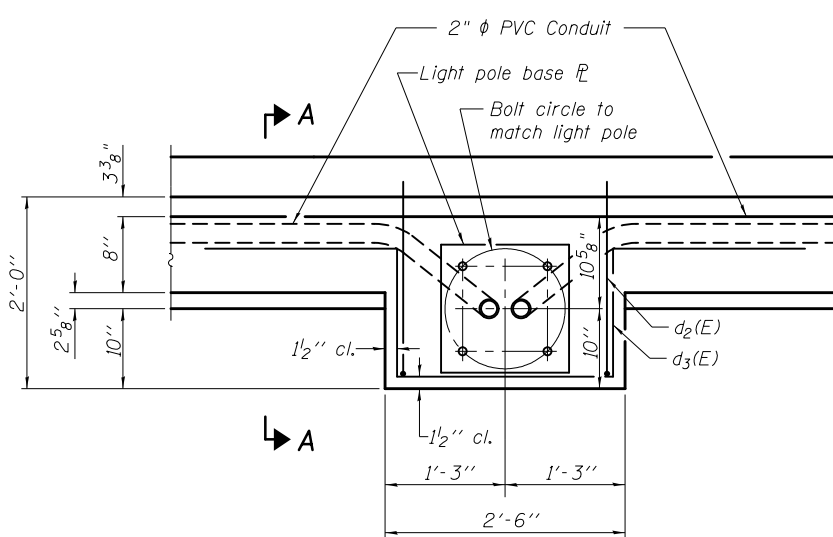


SECTION A-A

Notes:

Cost of anchor rods is included with Concrete Superstructure.

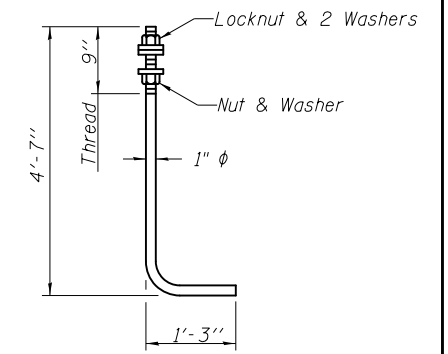
See Sheets S-17 through S-20 for bill of reinforcement bars shown.



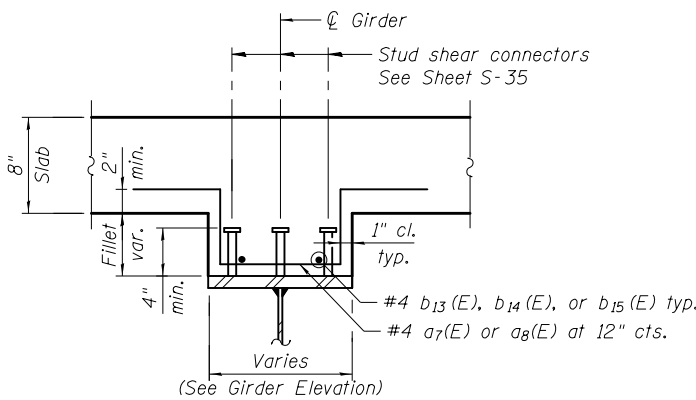
LIGHT POLE FOUNDATION PLAN

BAR d2(E)

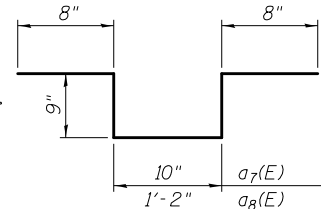
BAR d3(E)



ANCHOR ROD
(ASTM F 1554 Grade 105, full length hot dipped galvanized)

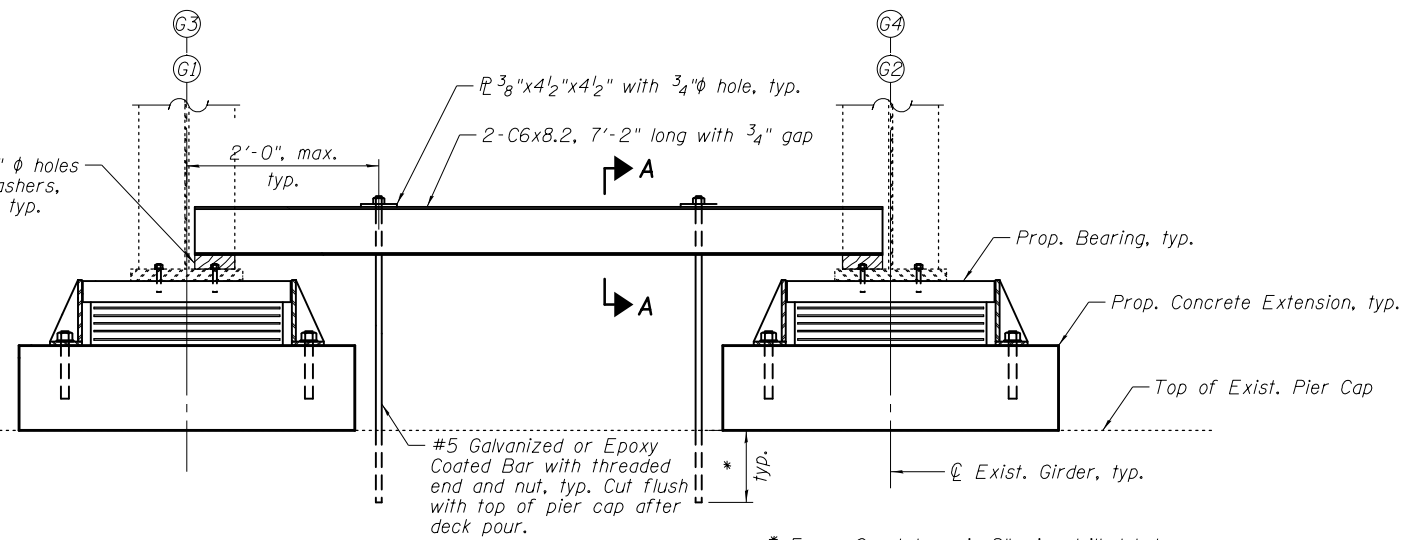


DEEP FILLET REINFORCEMENT
(For fillet heights greater than 6")

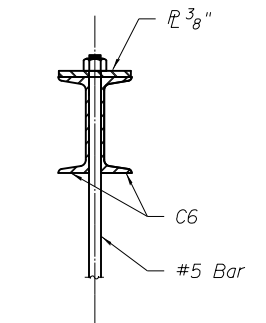


BARS a7(E) & a8(E)

5"x5" min. timber block with 1/2" φ holes for threaded studs, nuts and washers, centered under double channels, typ.



GIRDER HOLD-DOWN
(Place as close to C Brg. as feasible)



SECTION A-A

DEEP FILLET REINFORCEMENT DATA

| Location | Estimated Limits | Length (ft) | Transverse bars | Longitudinal bars |
|------------------------|------------------------------|-------------|-----------------|-------------------|
| Unit 1 Girder G1 | Sta. 1705+88 to Sta. 1706+10 | 22'-0" | 2x1- #4 a7(E) | 2x1- #4 b13(E) |
| | Sta. 1706+60 to Sta. 1707+08 | 48'-0" | 49- #4 a7(E) | 2x2- #4 b13(E) |
| Unit 1 Girders G2 & G4 | Sta. 1705+57 to Sta. 1706+10 | 53'-0" | 54- #4 a7(E) | 2x2- #4 b14(E) |
| | Sta. 1706+60 to Sta. 1707+28 | 68'-0" | 69- #4 a7(E) | 2x3- #4 b13(E) |
| Unit 1 Girder G3 | Sta. 1705+57 to Sta. 1706+10 | 53'-0" | 54- #4 a7(E) | 2x2- #4 b14(E) |
| | Sta. 1706+60 to Sta. 1707+95 | 135'-0" | 136- #4 a7(E) | 2x6- #4 b13(E) |
| Unit 3 G2 thru G4 | Sta. 1713+75 to Sta. 1714+23 | 48'-0" | 49- #4 a8(E) | 2x2- #4 b13(E) |
| Unit 4 Girder G1 | Sta. 1715+19 to Sta. 1715+35 | 16'-0" | 17- #4 a8(E) | 2x1- #4 b15(E) |

Notes:

- Bars indicated thus 2x3- #4 etc. indicates 2 lines of bars with 3 lengths per line.
- Limits of deep fillets are estimated and are subject to variation. The Contractor shall field verify fillet depths after deck forms have been set and make necessary approved adjustments prior to construction or ordering of material. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

2/26/11 PM

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DRAWN - MTR
CHECKED - IYL

REVISED -
REVISED -
REVISED -
REVISED -

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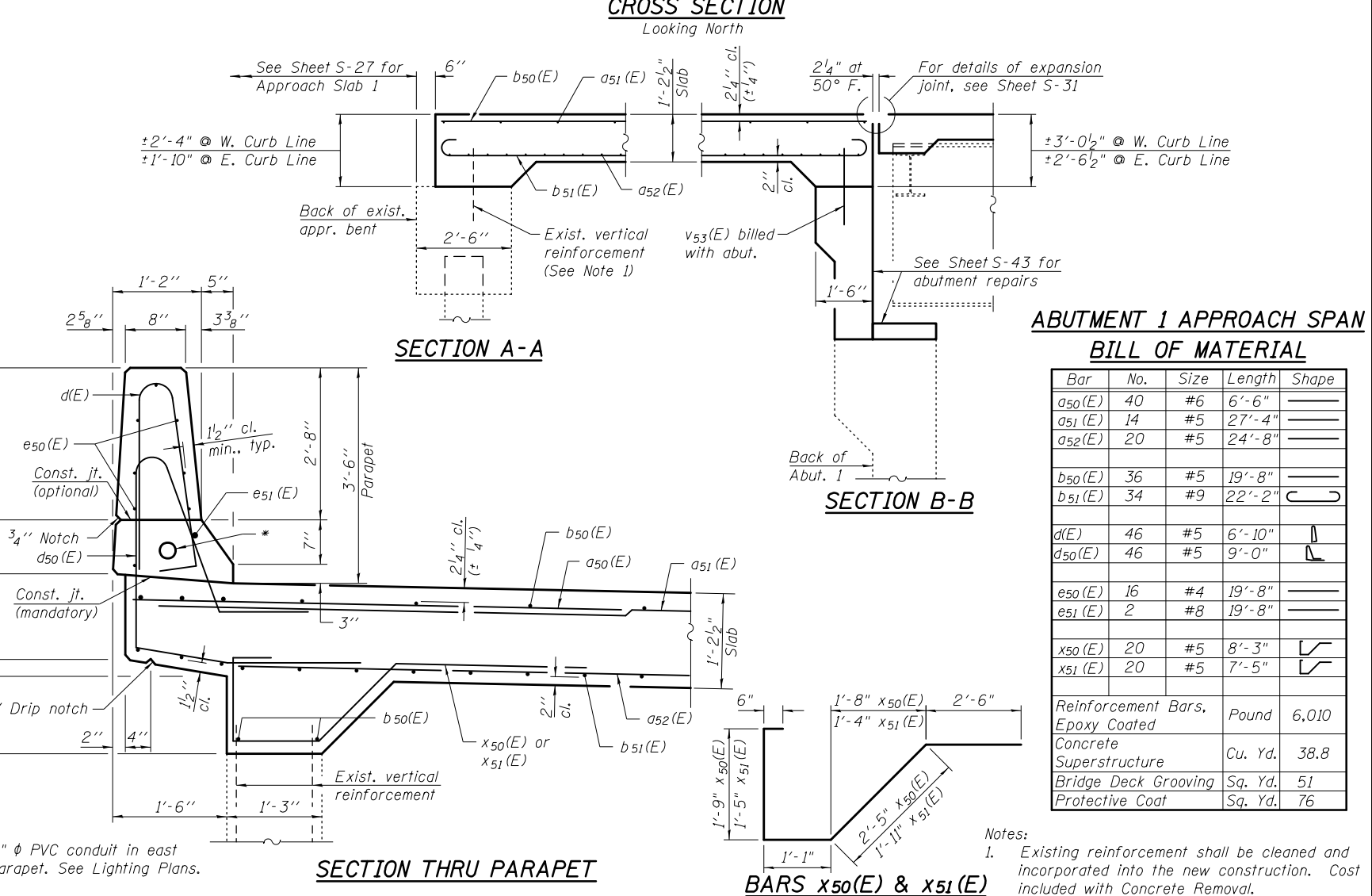
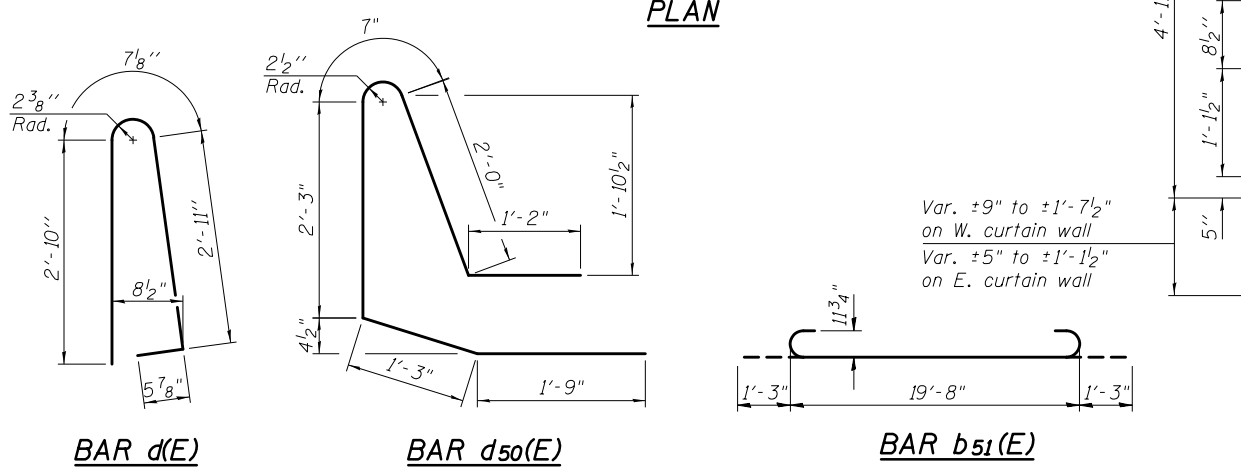
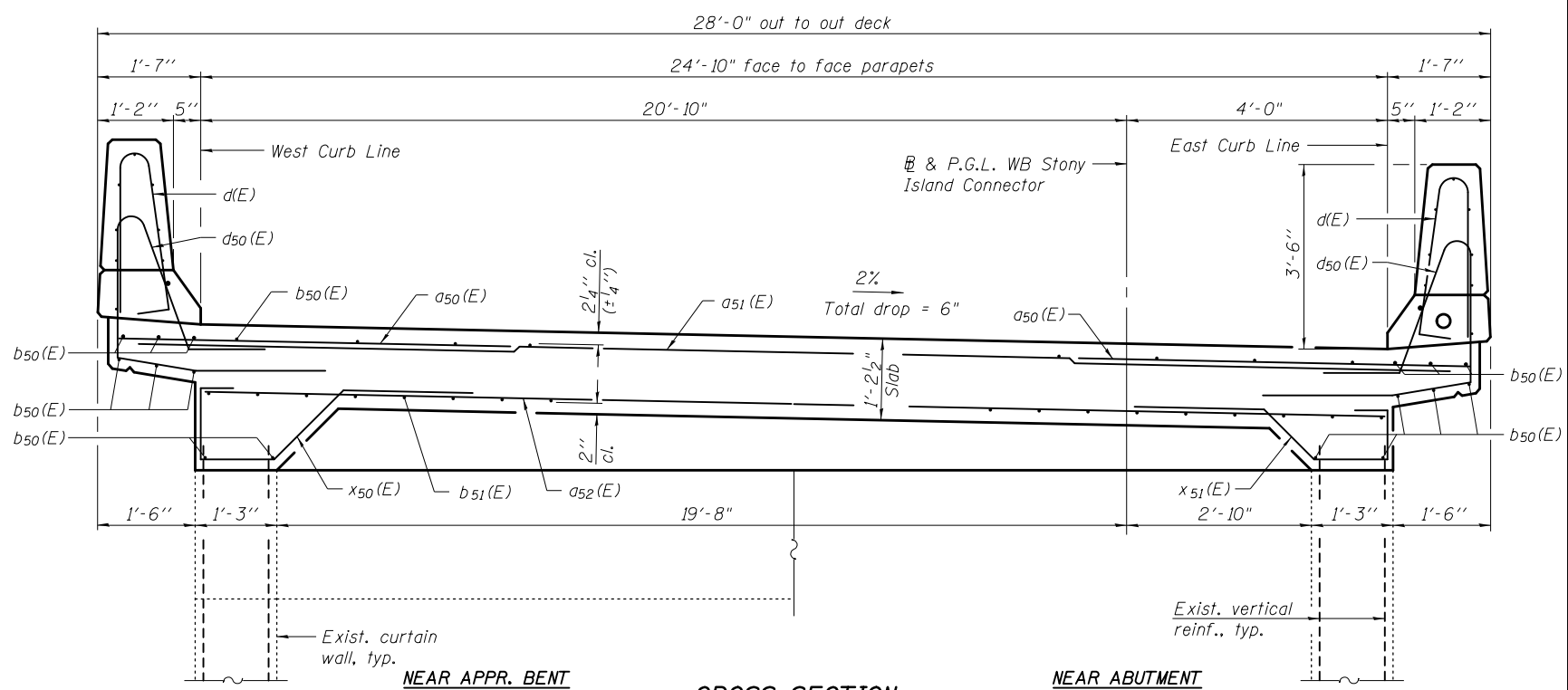
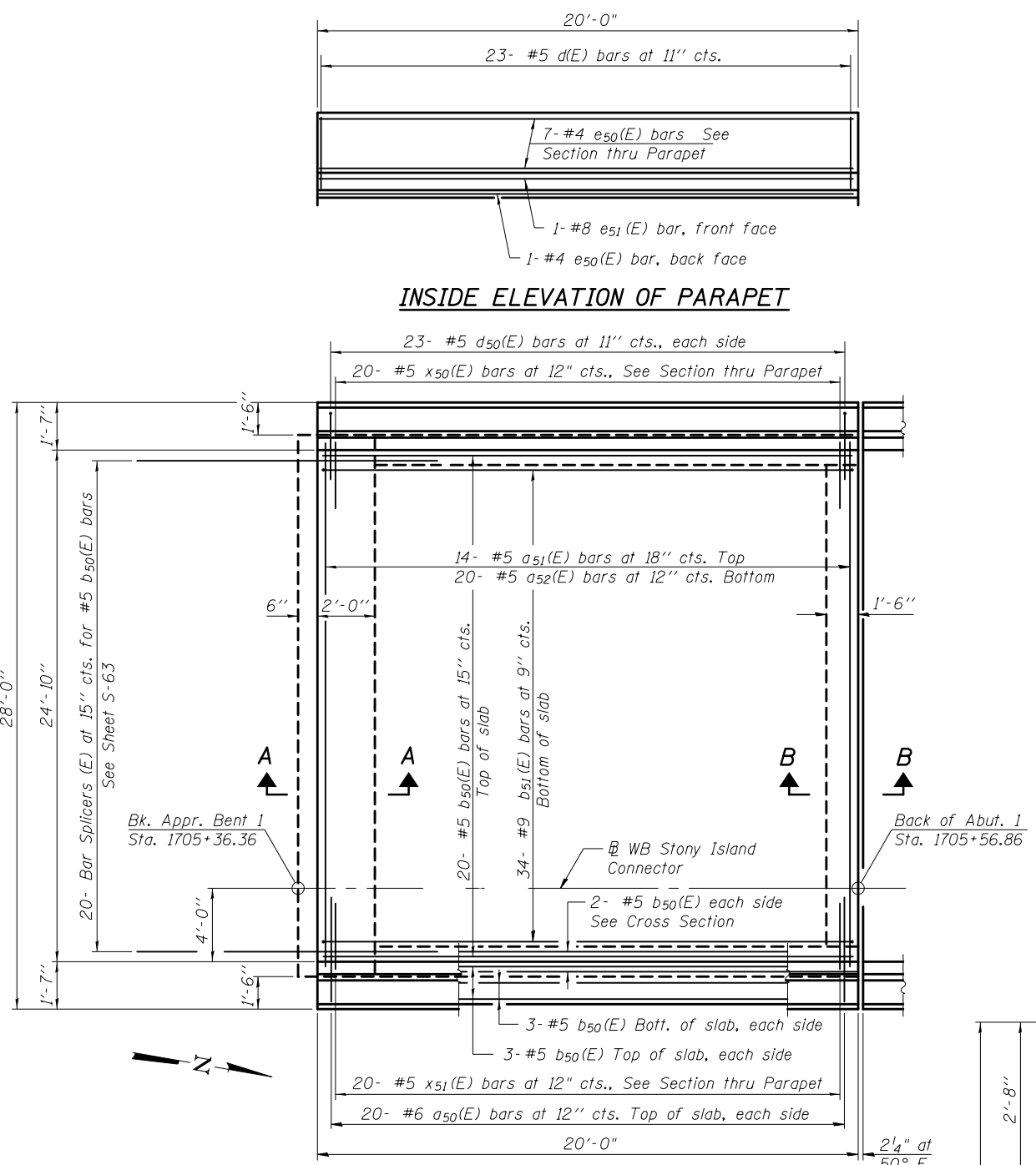
SUPERSTRUCTURE DETAILS IV
STRUCTURE NO. 016-2437

SHEET NO. S-24 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 187 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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ABUTMENT 1 APPROACH SPAN BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|------|--------|-------|
| a ₅₀ (E) | 40 | #6 | 6'-6" | — |
| a ₅₁ (E) | 14 | #5 | 27'-4" | — |
| a ₅₂ (E) | 20 | #5 | 24'-8" | — |
| b ₅₀ (E) | 36 | #5 | 19'-8" | — |
| b ₅₁ (E) | 34 | #9 | 22'-2" | — |
| d(E) | 46 | #5 | 6'-10" | ⊥ |
| d ₅₀ (E) | 46 | #5 | 9'-0" | ⊥ |
| e ₅₀ (E) | 16 | #4 | 19'-8" | — |
| e ₅₁ (E) | 2 | #8 | 19'-8" | — |
| x ₅₀ (E) | 20 | #5 | 8'-3" | ⊥ |
| x ₅₁ (E) | 20 | #5 | 7'-5" | ⊥ |
| Reinforcement Bars, Epoxy Coated | Pound | | 6,010 | |
| Concrete Superstructure | Cu. Yd. | | 38.8 | |
| Bridge Deck Grooving | Sq. Yd. | | 51 | |
| Protective Coat | Sq. Yd. | | 76 | |

Notes:
1. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

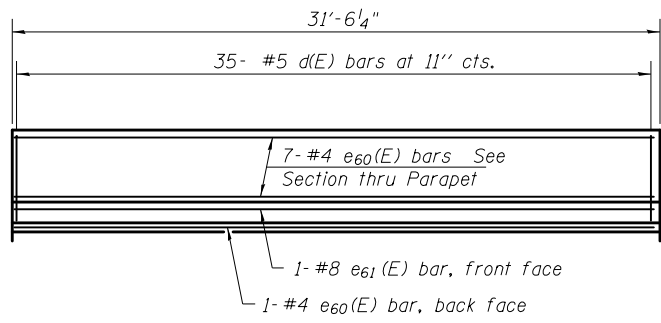
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| | | |
|------------------------|---------------|----------|
| USER NAME = | DESIGNED - TL | REVISD - |
| PLOT SCALE = | CHECKED - BAK | REVISD - |
| PLOT DATE = 11/08/2012 | DRAWN - TL | REVISD - |
| | CHECKED - BAK | REVISD - |

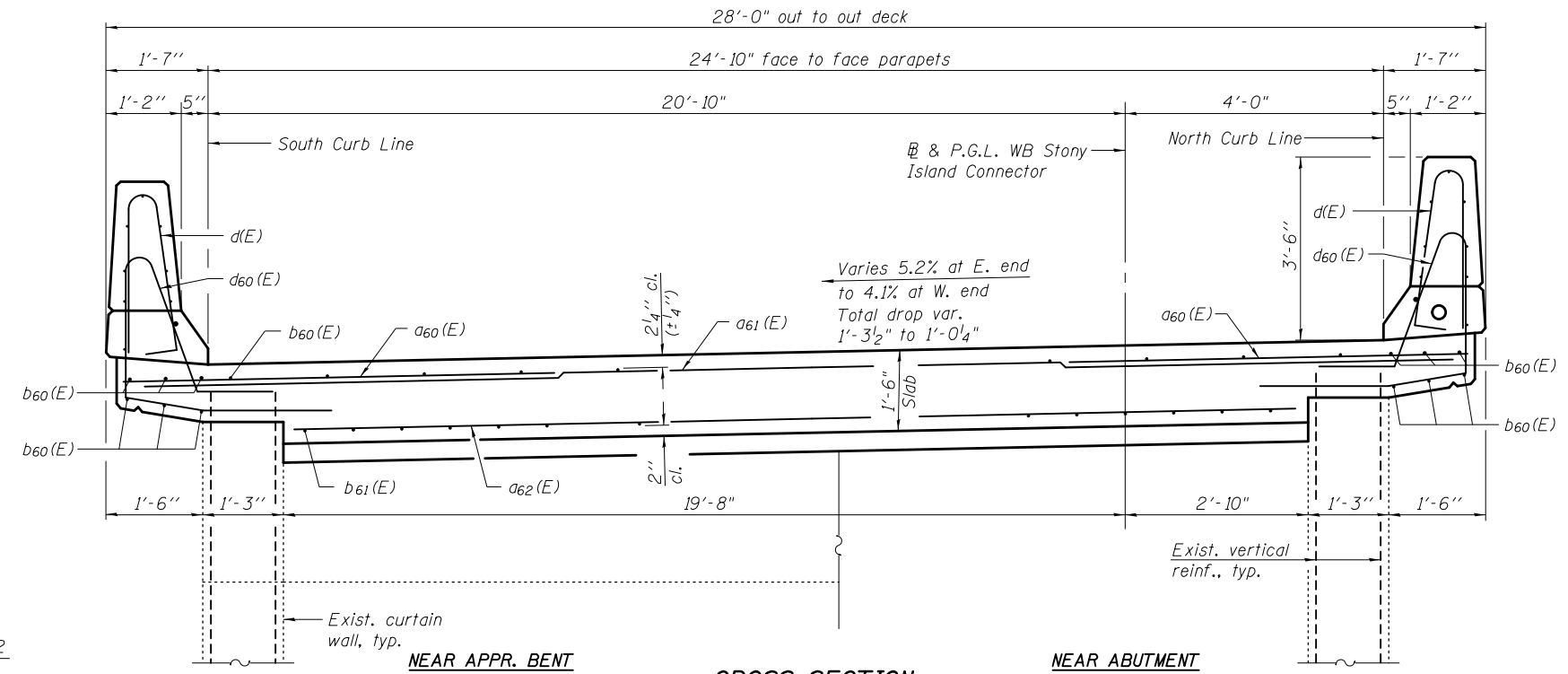
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT 1 APPROACH SPAN STRUCTURE NO. 016-2437 SHEET NO. S-25 OF S-83 SHEETS

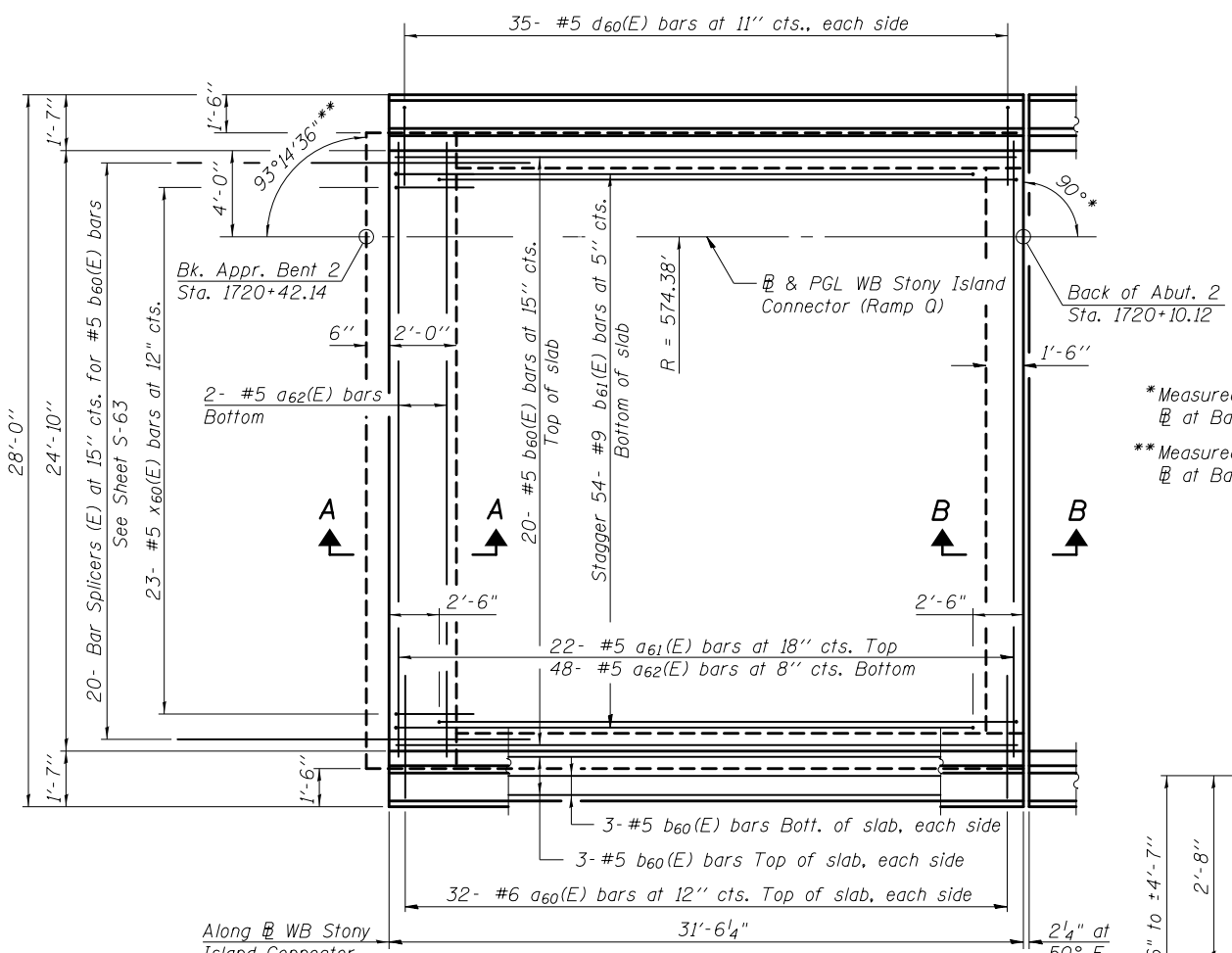
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 188 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



INSIDE ELEVATION OF PARAPET

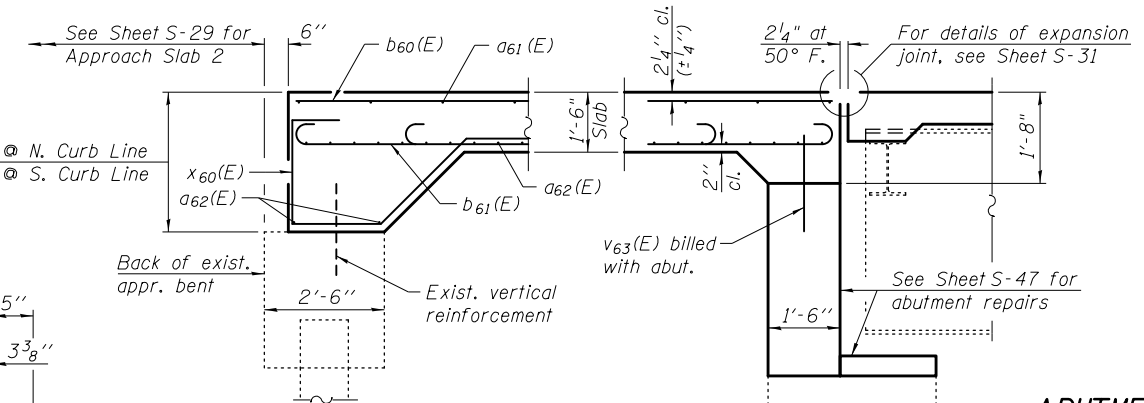


CROSS SECTION
Looking West



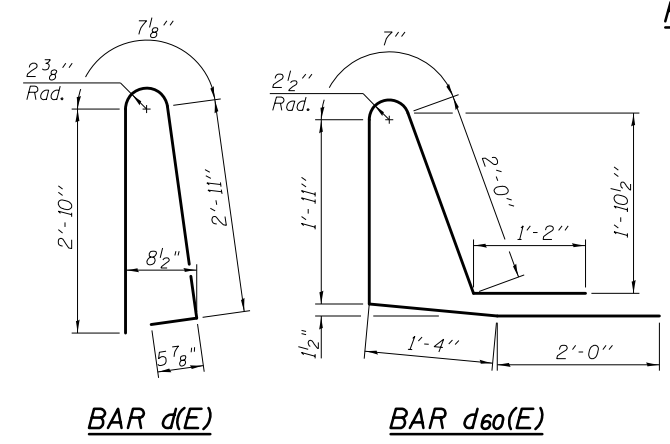
PLAN

* Measured from a line tangent to \mathbb{E} at Back of Abut. 2
 ** Measured from a line tangent to \mathbb{E} at Back of Appr. Bent 2



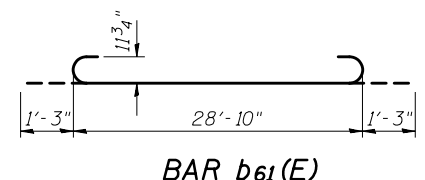
SECTION A-A

SECTION B-B

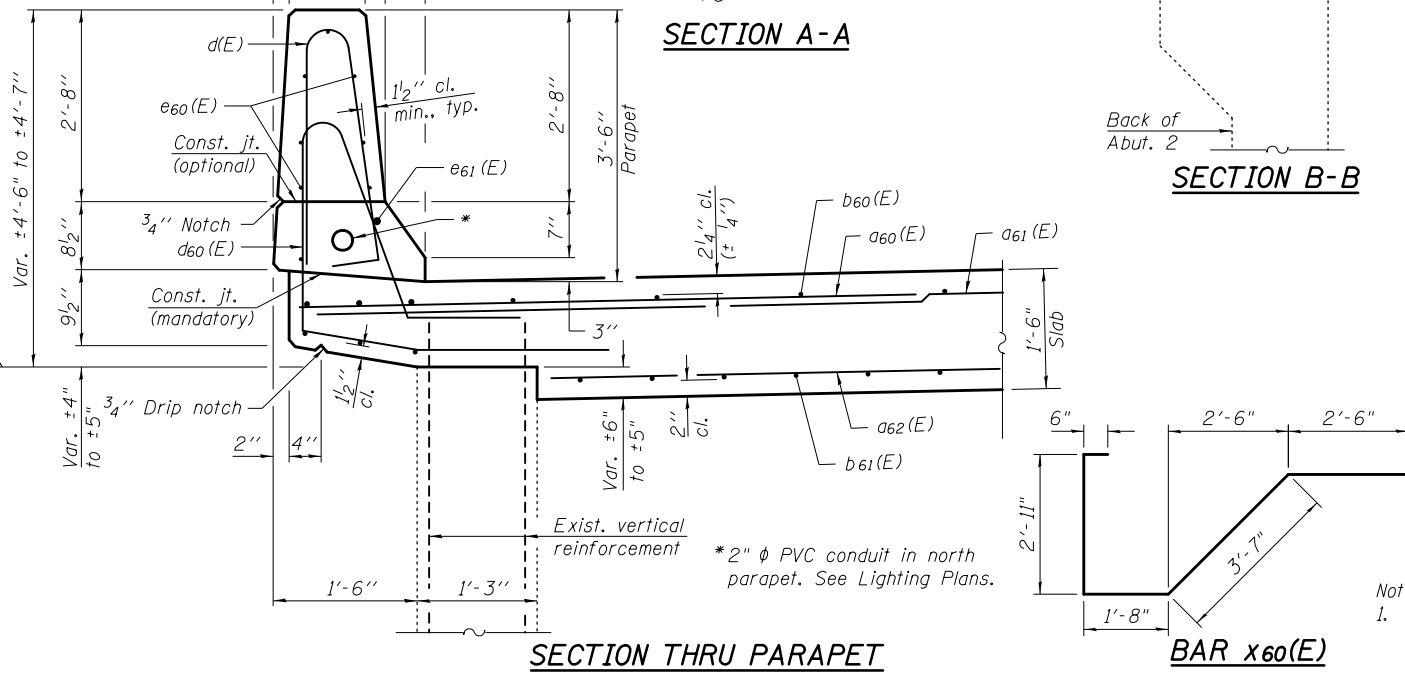


BAR d(E)

BAR d60(E)



BAR b61(E)



SECTION THRU PARAPET

BAR x60(E)

ABUTMENT 2 APPROACH SPAN
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|--------|--------|
| a60(E) | 64 | #6 | 6'-6" | — |
| a61(E) | 22 | #5 | 27'-4" | — |
| a62(E) | 50 | #5 | 22'-2" | — |
| b60(E) | 32 | #5 | 31'-2" | — |
| b61(E) | 54 | #9 | 31'-4" | U |
| d(E) | 70 | #5 | 6'-10" | ⌋ |
| d60(E) | 70 | #5 | 9'-0" | ⌋ |
| e60(E) | 16 | #4 | 31'-2" | — |
| e61(E) | 2 | #8 | 31'-2" | — |
| x60(E) | 23 | #5 | 11'-2" | ⌋ |
| Reinforcement Bars, Epoxy Coated | | Pound | | 11,130 |
| Concrete Superstructure | | Cu. Yd. | | 60.5 |
| Bridge Deck Grooving | | Sq. Yd. | | 80 |
| Protective Coat | | Sq. Yd. | | 119 |

Notes:
 1. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

2/26/12 PM

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| PLOT DATE = 11/08/2012 | DRAWN - TL | REVISD - |
| | CHECKED - BAK | REVISD - |

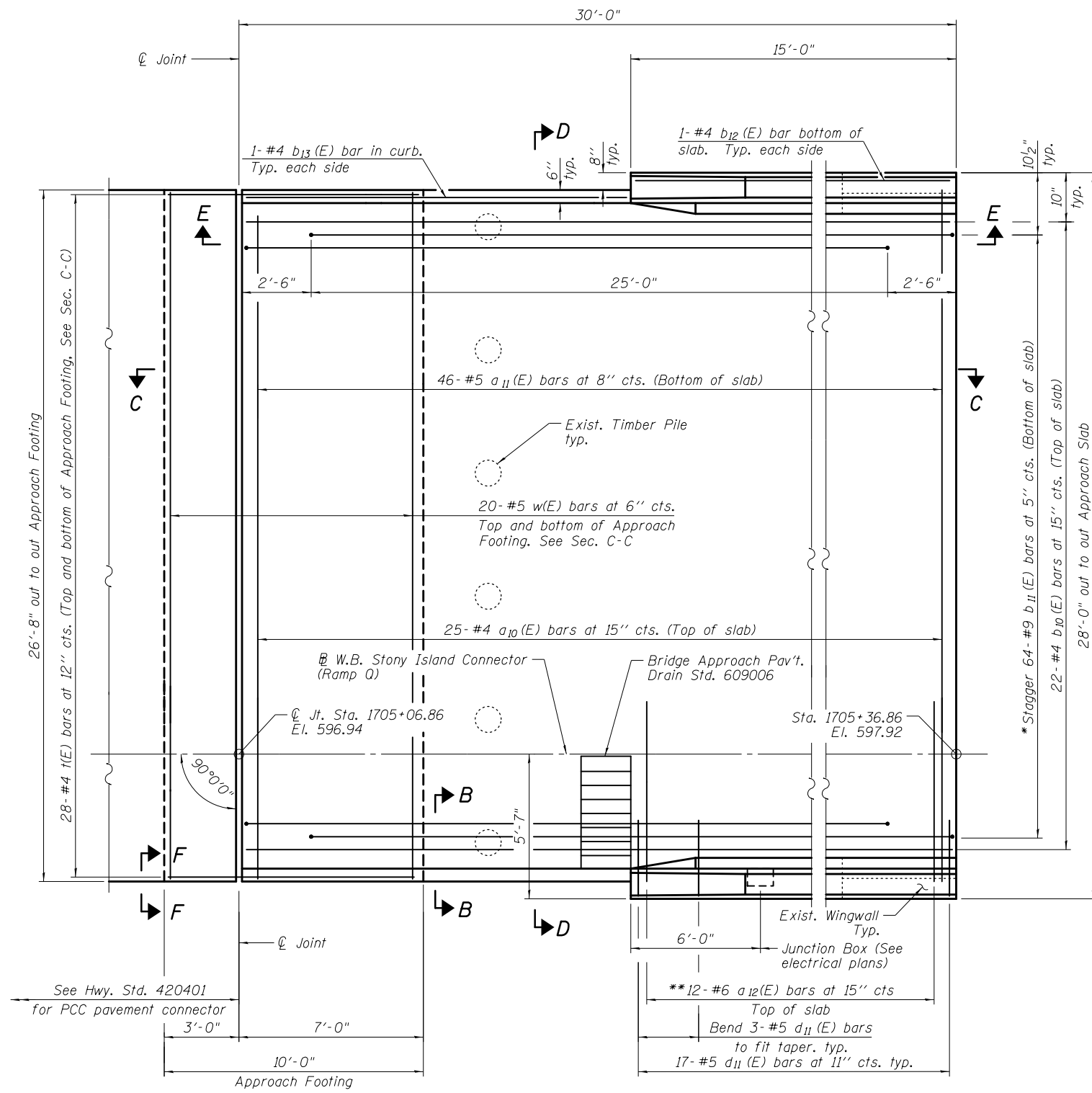
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ABUTMENT 2 APPROACH SPAN
 STRUCTURE NO. 016-2437
 SHEET NO. S-26 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 189 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

2/26/13 PM

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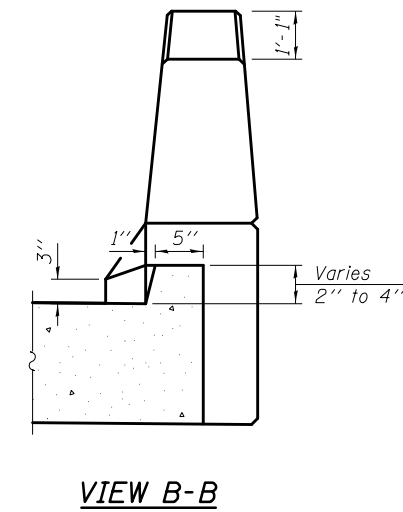
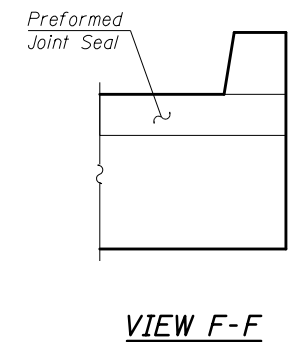
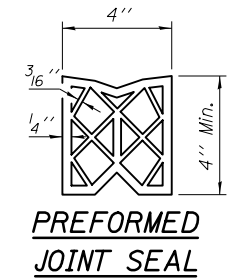
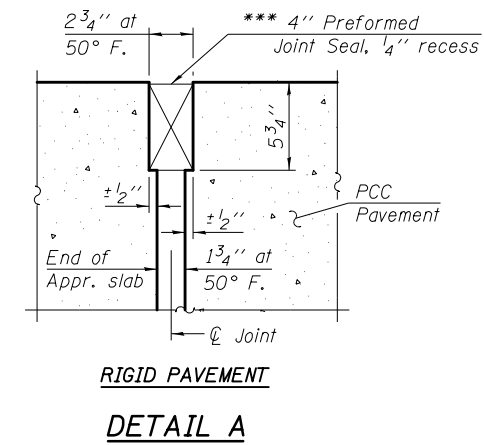


APPROACH SLAB 1 PLAN — Z —>

* Tilt #9 b₁₁(E) bars as required to maintain clearance.
** Space between a₁₀(E) bars, typ. ea. parapet.

Notes:
See sheet S-28 for Sections C-C & D-D and View E-E.
a₁₀(E) and a₁₁(E) bar spacings measured along Rdwy.

*** Cost included with Concrete Superstructure.



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| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

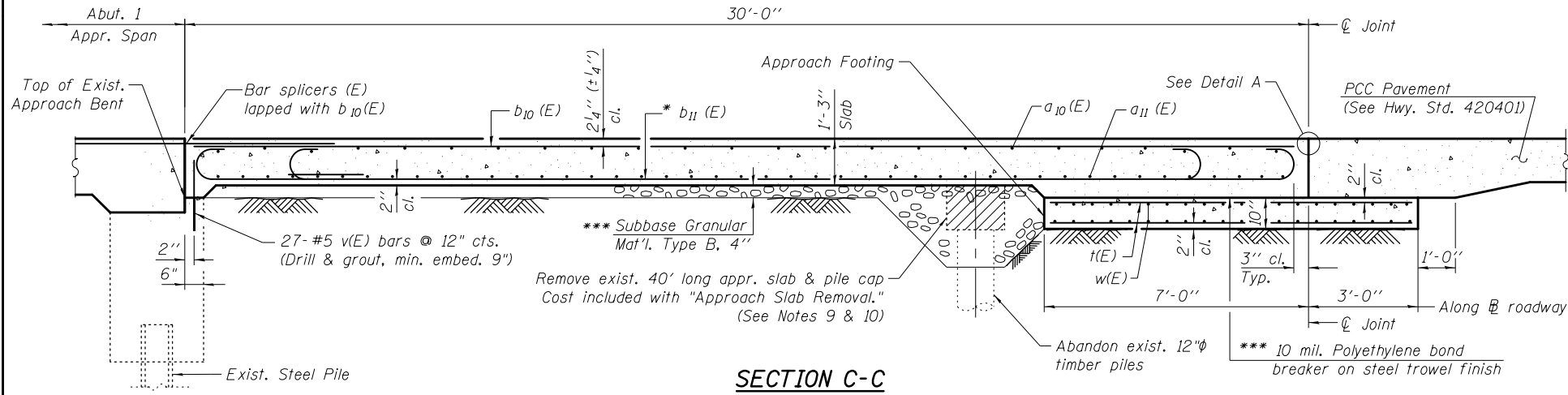
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 1 PLAN
STRUCTURE NO. 016-2437

SHEET NO. S-27 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 190 |
| CONTRACT NO. 60V61 | | | | |

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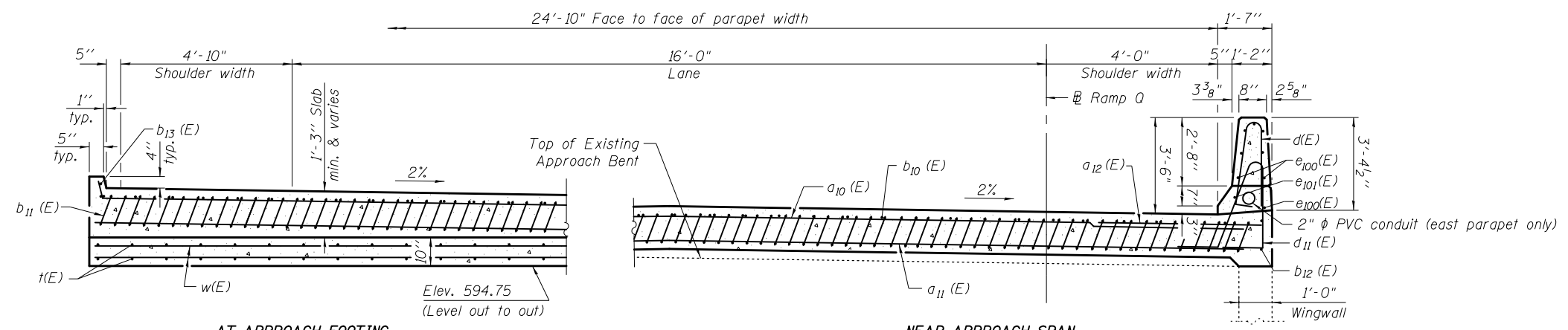


SECTION C-C

Notes:

1. See sheet S-27 for Detail A and View B-B.
2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
6. For bar splicer details, see sheet S-63.
7. Cost of excavation for approach footing included with Concrete Structures.
8. For Abutment 1 Approach Span, see sheet S-25.
9. Cost of timber pile cap removal and associated excavation included with Approach Slab Removal.
10. The excavation for pile cap removal shall be backfilled with Subbase Granular Material Type B. Cost included with Concrete Superstructure.
11. Bend existing reinforcement bars protruding from curtain walls and incorporate into new approach slab construction.

* Tilt #9 b₁₁(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.

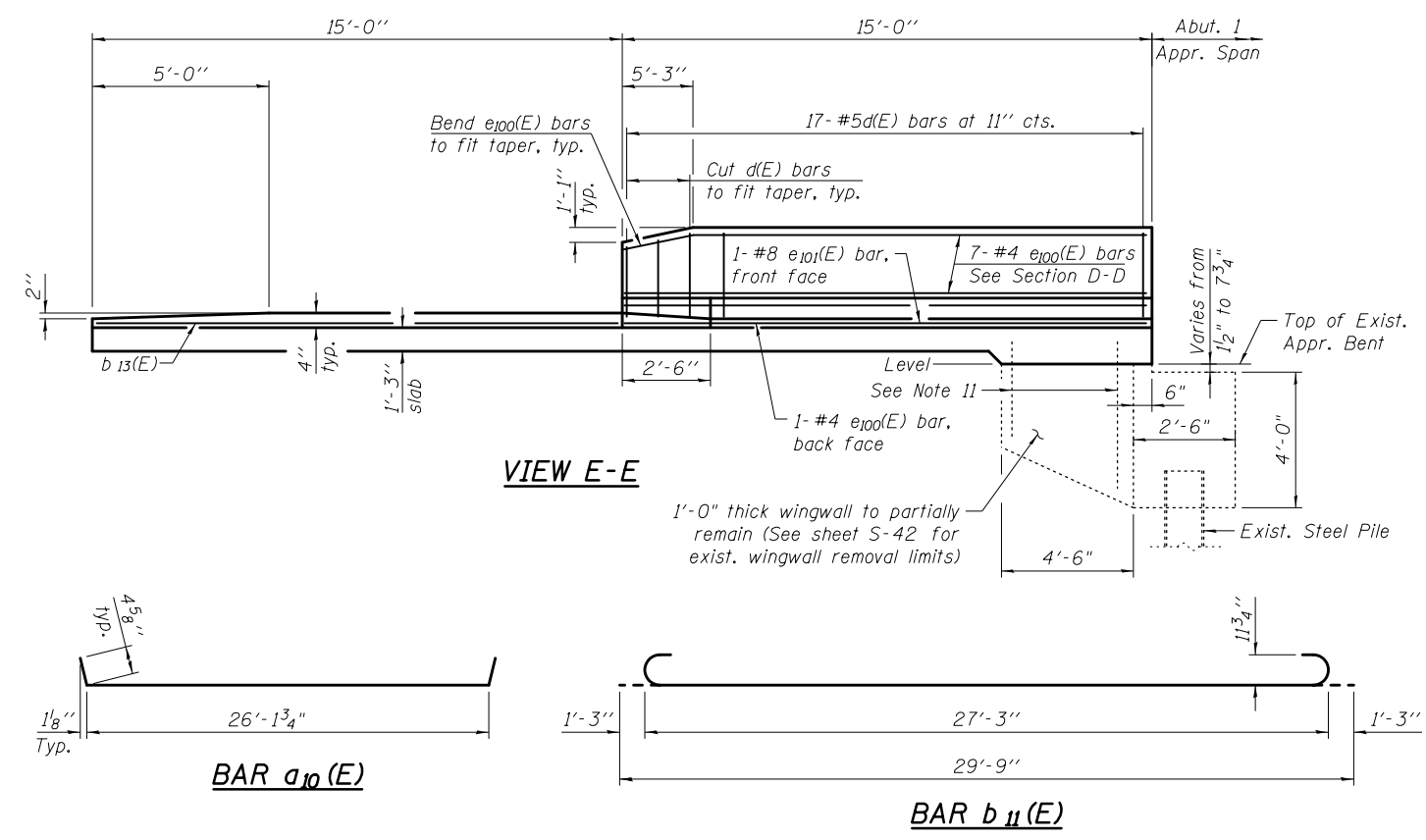


AT APPROACH FOOTING

SECTION D-D

NEAR APPROACH SPAN

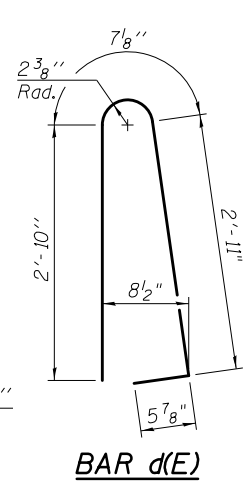
(See Plan for dimensions not shown)



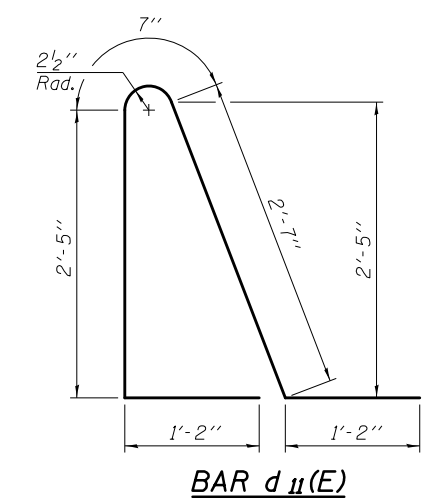
VIEW E-E

BAR a₁₀(E)

BAR b₁₁(E)



BAR d(E)



BAR d₁₁(E)

**BRIDGE APPROACH SLAB 1
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| a ₁₀ (E) | 25 | #4 | 26'-11" | — |
| a ₁₁ (E) | 46 | #5 | 26'-4" | — |
| a ₁₂ (E) | 24 | #6 | 6'-6" | — |
| b ₁₀ (E) | 22 | #4 | 29'-8" | — |
| b ₁₁ (E) | 64 | #9 | 29'-9" | — |
| b ₁₂ (E) | 2 | #4 | 14'-8" | — |
| b ₁₃ (E) | 2 | #4 | 14'-8" | — |
| d(E) | 34 | #5 | 6'-10" | — |
| d ₁₁ (E) | 34 | #5 | 7'-11" | — |
| e ₁₀₀ (E) | 16 | #4 | 14'-8" | — |
| e ₁₀₁ (E) | 2 | #8 | 14'-8" | — |
| t(E) | 56 | #4 | 9'-8" | — |
| w(E) | 40 | #5 | 26'-4" | — |
| v(E) | 27 | #5 | 1'-9" | — |
| Concrete Superstructure | | Cu. Yd. | 45.0 | |
| Concrete Structures | | Cu. Yd. | 9.0 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 11,170 | |
| Bridge Deck Grooving | | Sq. Yd. | 82 | |
| Protective Coat | | Sq. Yd. | 98 | |
| Approach Slab Removal | | Sq. Yd. | 125 | |

2/26/13 PM

12/7/2012

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| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

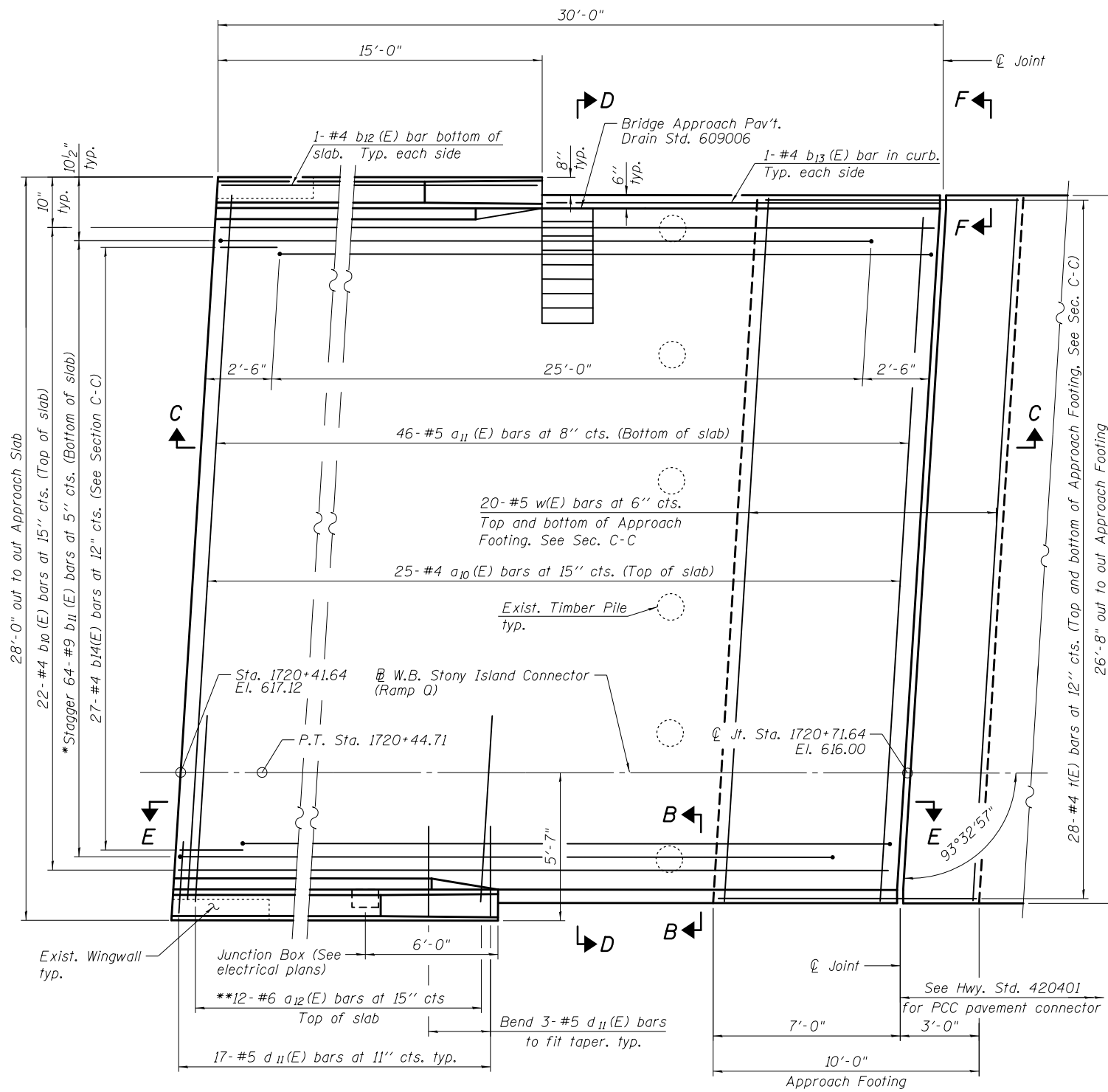
BRIDGE APPROACH SLAB 1 DETAILS
STRUCTURE NO. 016-2437

SHEET NO. S-28 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 191 |
| CONTRACT NO. 60V61 | | | | |
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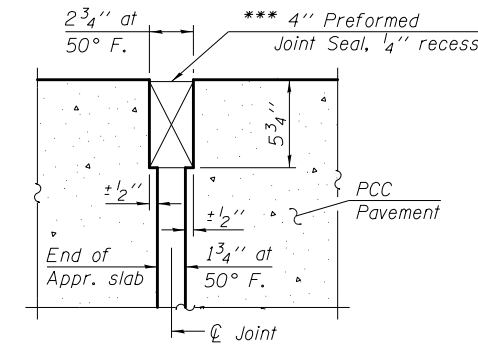


APPROACH SLAB 2 PLAN

* Tilt #9 b11(E) bars as required to maintain clearance.
 ** Space between a10(E) bars, typ. ea. parapet.

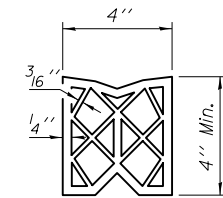
Notes:
 See sheet S-30 for Sections C-C & D-D and View E-E.
 a10(E) and a11(E) bar spacings measured along ∅ Rdwy.

*** Cost included with Concrete Superstructure.

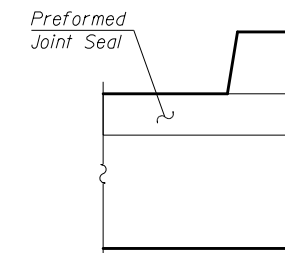


RIGID PAVEMENT

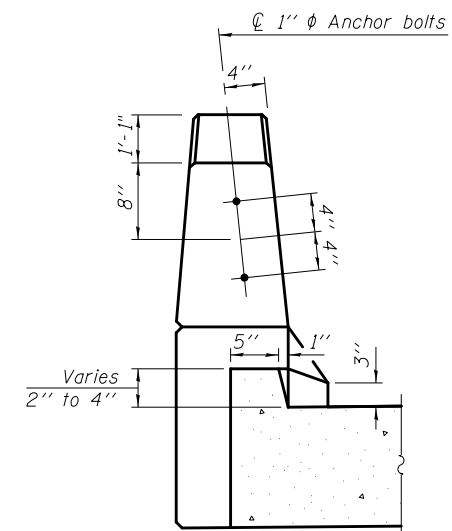
DETAIL A



PREFORMED JOINT SEAL



VIEW F-F



VIEW B-B

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| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

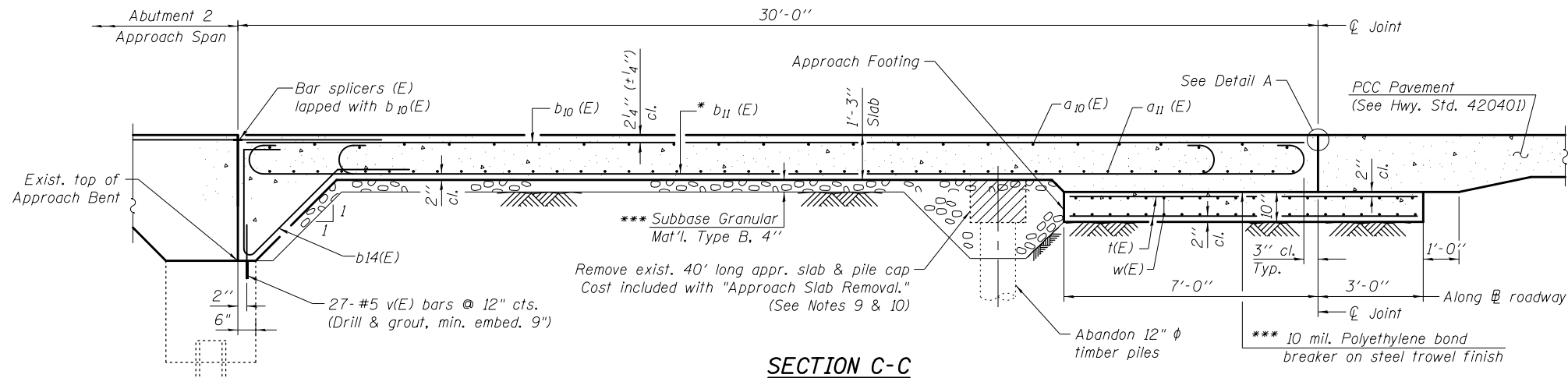
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB 2 PLAN
 STRUCTURE NO. 016-2437

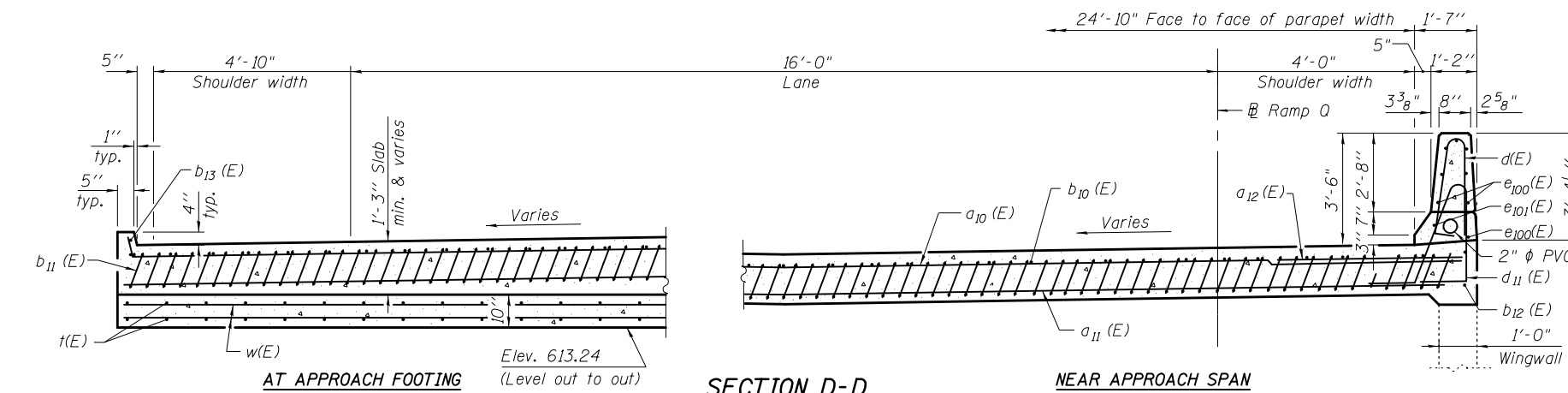
SHEET NO. S-29 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 192 |
| CONTRACT NO. 60V61 | | | | |

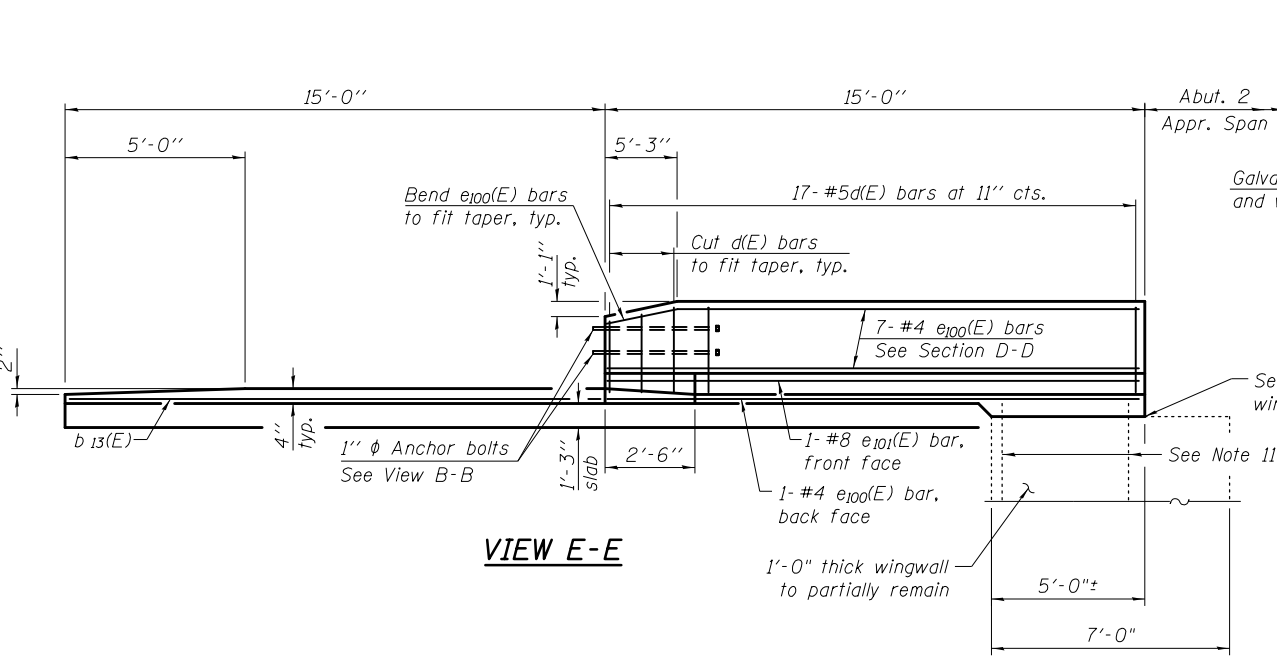
ILLINOIS FED. AID PROJECT



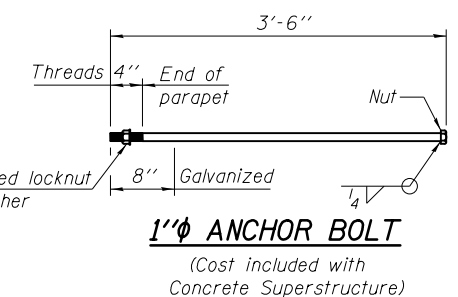
SECTION C-C



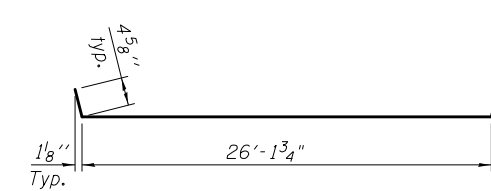
SECTION D-D



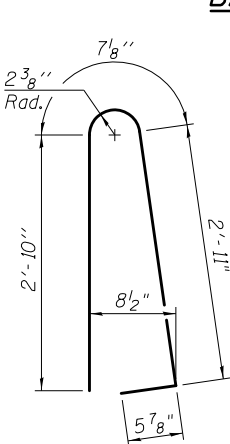
VIEW E-E



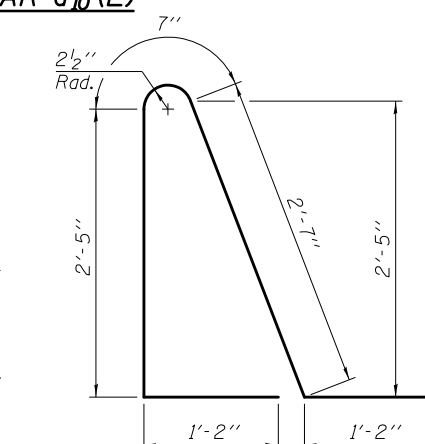
1"φ ANCHOR BOLT
(Cost included with Concrete Superstructure)



BAR a10(E)



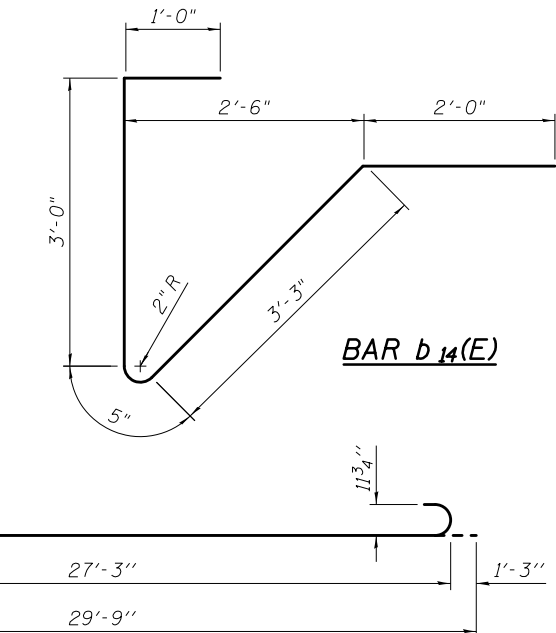
BAR d(E)



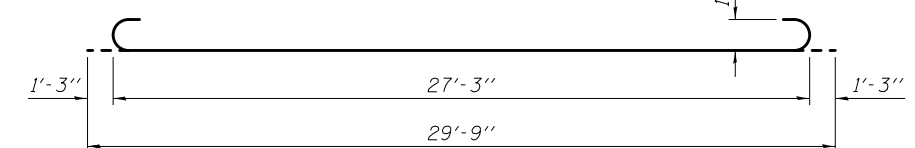
BAR d11(E)

- Notes:
- See sheet S-29 for Detail A and View B-B.
 - Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 - Approach footing concrete shall be paid for as Concrete Structures.
 - Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 - The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 - For bar splicer details, see sheet S-63.
 - Cost of excavation for approach footing included with Concrete Structures.
 - For Abutment 2 Approach Span details, see sheet S-26.
 - Cost of timber pile cap removal and associated excavation included with Approach Slab Removal.
 - The excavation for pile cap removal shall be backfilled with Subbase Granular Material Type B. Cost included with Concrete Superstructure.
 - Bend existing reinforcement bars protruding from curtain walls and incorporate into new approach slab construction.

* Tilt #9 b11(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.



BAR b14(E)



BAR b11(E)

**BRIDGE APPROACH SLAB 2
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| a10(E) | 25 | #4 | 26'-11" | ┌───┐ |
| a11(E) | 46 | #5 | 26'-4" | ┌───┐ |
| a12(E) | 24 | #6 | 6'-6" | ┌───┐ |
| b10(E) | 22 | #4 | 29'-8" | ┌───┐ |
| b11(E) | 64 | #9 | 29'-9" | ┌───┐ |
| b12(E) | 2 | #4 | 14'-8" | ┌───┐ |
| b13(E) | 2 | #4 | 14'-8" | ┌───┐ |
| b14(E) | 27 | #4 | 9'-8" | ┌───┐ |
| d(E) | 34 | #5 | 6'-10" | ┌───┐ |
| d11(E) | 34 | #5 | 7'-11" | ┌───┐ |
| e100(E) | 16 | #4 | 14'-8" | ┌───┐ |
| e101(E) | 2 | #8 | 14'-8" | ┌───┐ |
| t(E) | 56 | #4 | 9'-8" | ┌───┐ |
| w(E) | 40 | #5 | 26'-4" | ┌───┐ |
| v(E) | 27 | #5 | 1'-9" | ┌───┐ |
| Concrete Superstructure | | Cu. Yd. | 50.0 | |
| Concrete Structures | | Cu. Yd. | 9.0 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 11,340 | |
| Bridge Deck Grooving | | Sq. Yd. | 83 | |
| Protective Coat | | Sq. Yd. | 98 | |
| Approach Slab Removal | | Sq. Yd. | 125 | |

2/26/14 PM

12/7/2012

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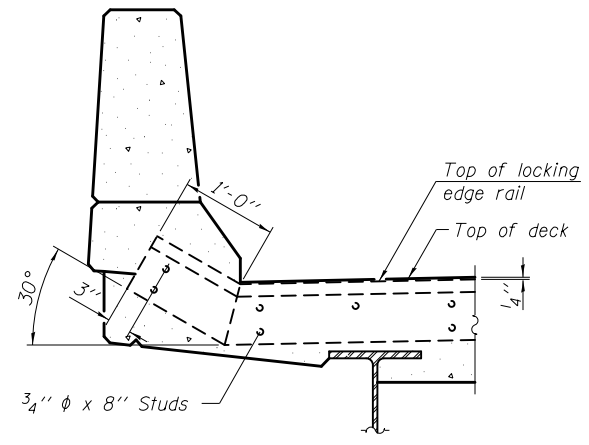
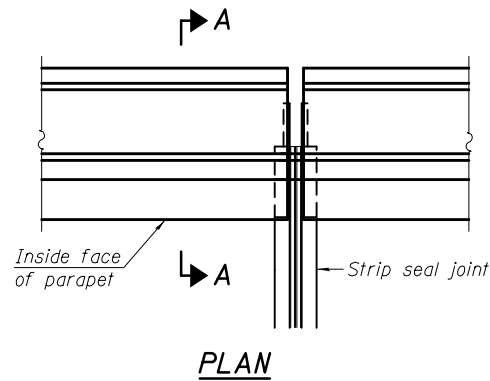
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| USER NAME = | DESIGNED - IYL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

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DEPARTMENT OF TRANSPORTATION

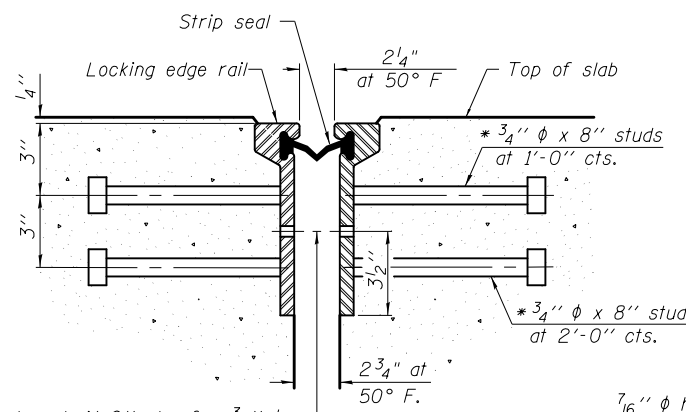
BRIDGE APPROACH SLAB 2 DETAILS
STRUCTURE NO. 016-2437

SHEET NO. S-30 OF S-83 SHEETS

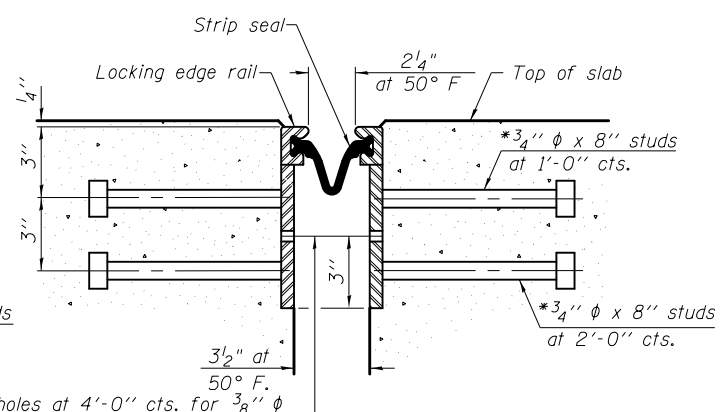
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 193 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



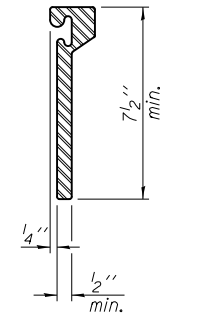
SECTION A-A



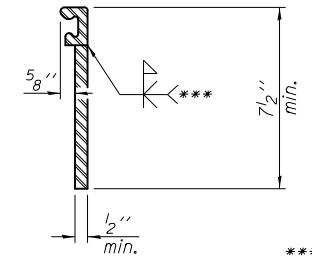
SECTION THRU ROLLED RAIL JOINT



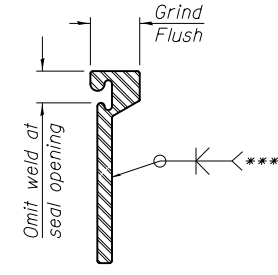
SECTION THRU WELDED RAIL JOINT



ROLLED EXTRUDED RAIL



WELDED RAIL



LOCKING EDGE RAIL SPLICE

*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAILS

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
 The manufacturer's recommended installation methods shall be followed.
 The joint opening and deck dimensions detailed on the superstructure are based on rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 feet of curbs shall be welded.

2/26/15 PM 12/7/2012 S:\1072_05_CADD\Structure\1 SN 0162437\CADD Sheets\062437-60J12-031-P.JS.dgn

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| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - IYL | REVISED - |

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 DEPARTMENT OF TRANSPORTATION

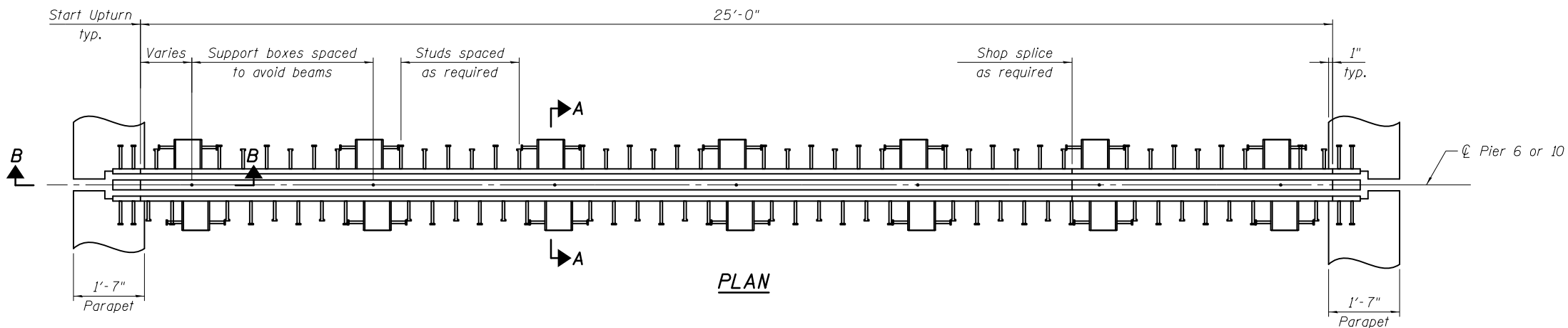
PREFORMED JOINT STRIP SEAL
 STRUCTURE NO. 016-2437

SHEET NO. S-31 OF S-83 SHEETS

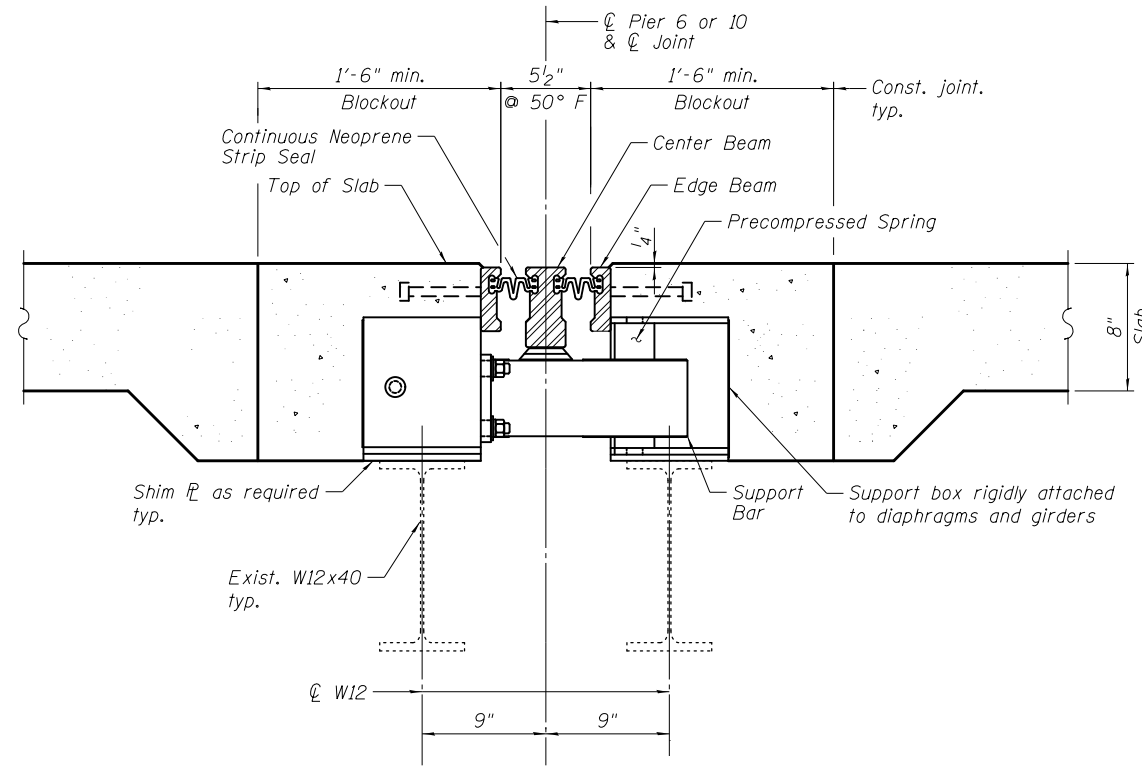
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|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 194 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

BILL OF MATERIAL

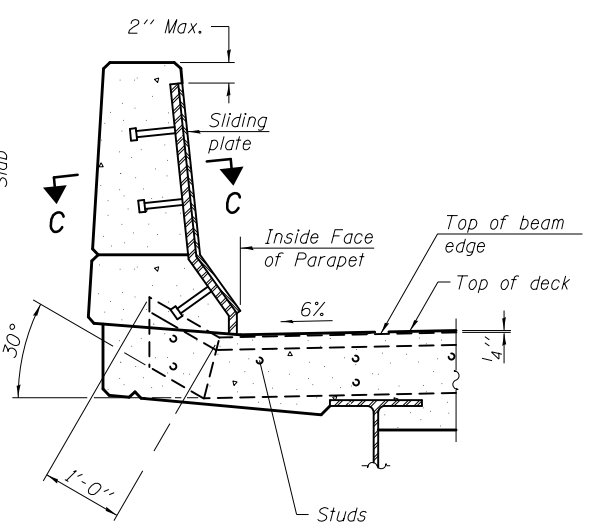
| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 81 |



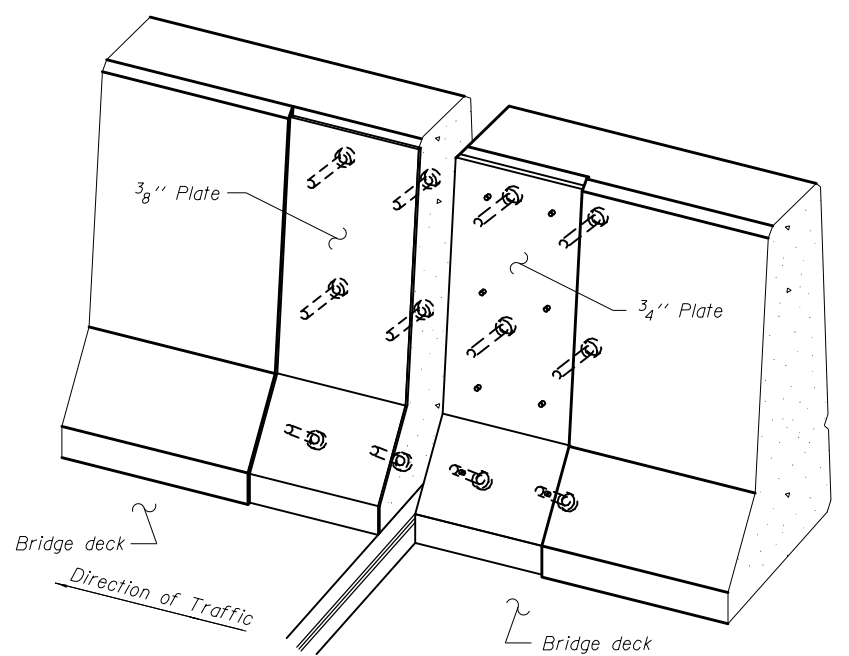
PLAN



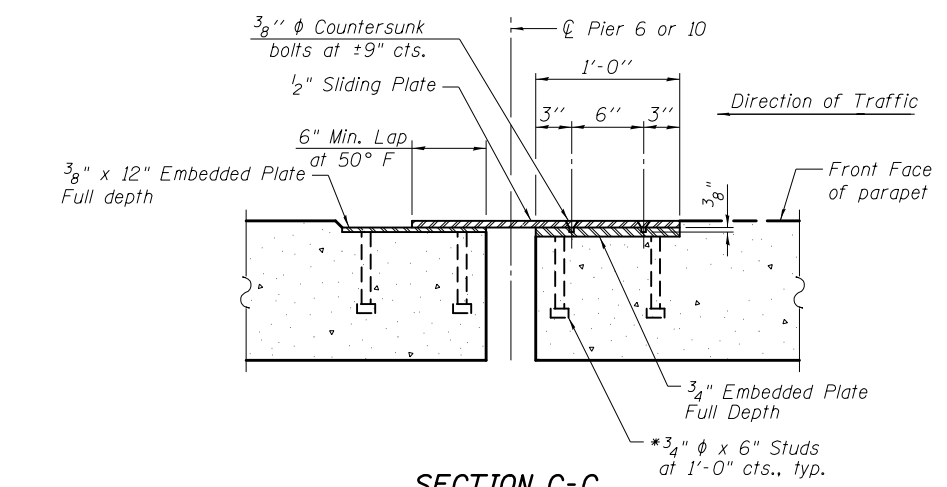
SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)



SECTION C-C

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

ESTIMATED JOINT MOVEMENTS FROM 50°F
(Along alignment of bearings)

| | |
|-----------|----------|
| Pier 6 S | 0.6" (+) |
| Pier 6 N | 1.6" (+) |
| Pier 10 S | 1.2" (+) |
| Pier 10 N | 1.5" (+) |

Notes:

- Swivel Modular Expansion Joint shall be a pre-approved system as listed in the Special Provision.
- Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer.
- Joint shall be fabricated to conform to the roadway cross-slope.
- All structural steel elements including the embedded and sliding plates shall be fabricated with AASHTO M270, Grade 50 steel, and galvanized per Article 520.03 of Standard Specs.
- See Framing Plans for beam locations.
- For end of deck details, see Sheet S-21. Required adjustments to reinforcement bars due to the actual joint used shall be made at no additional cost to the State.
- Parapet plates and anchorage studs are included in the cost of Modular Expansion Joint - Swivel 6".
- The joint configuration depicted is conceptual only. Actual dimensions and details may differ based on the manufacturer.
- The joint opening and deck dimensions detailed on the superstructure are based on the distance between the top of the edge beams shown on this sheet. The opening and deck dimensions shall be modified according to the manufacturer's recommendations to accommodate the configuration of the actual joint used. Required modifications shall be made at no additional cost to the State.
- See Sheets S-38 and S-39 for alignment of Pier 6 bearings and For Information Only sheets for alignment of Pier 10 bearings.
- Modular expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

BILL OF MATERIAL

| Item | Unit | Total |
|-------------------------------------|------|-------|
| Modular Expansion Joint - Swivel 6" | Foot | 50 |

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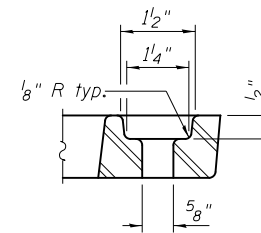
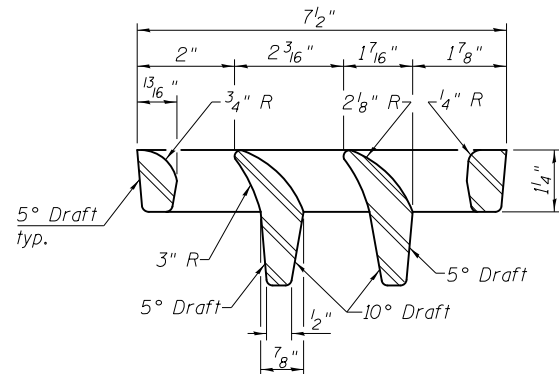
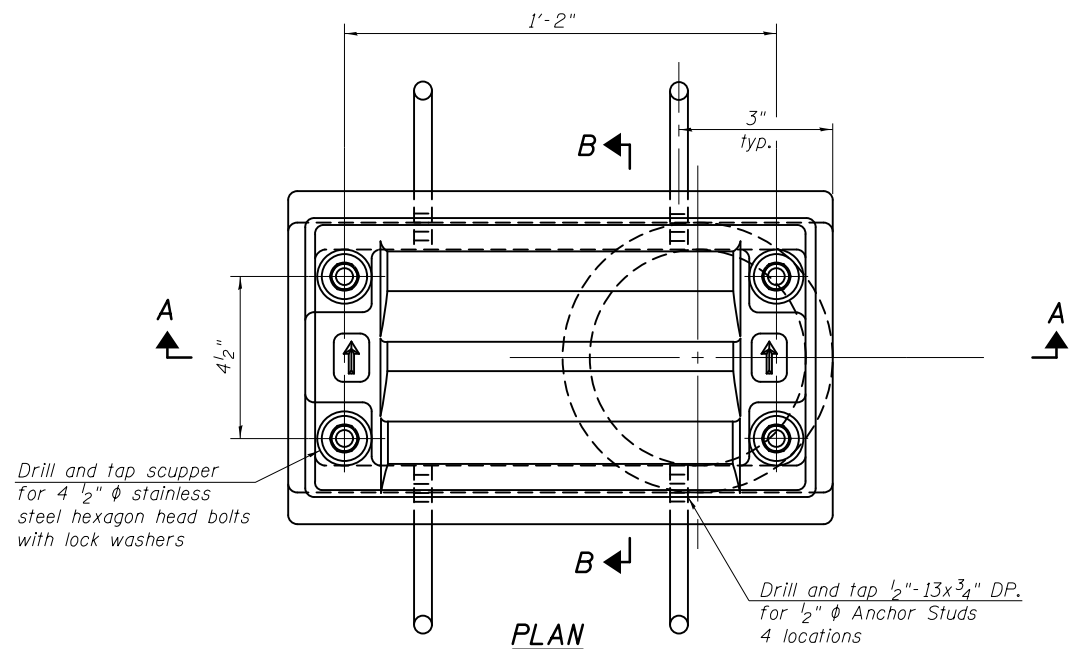
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MODULAR EXPANSION JOINT
 STRUCTURE NO. 016-2437

SHEET NO. S-32 OF S-83 SHEETS

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 195 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

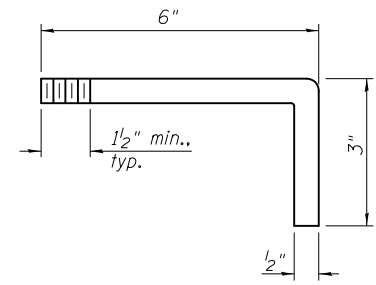
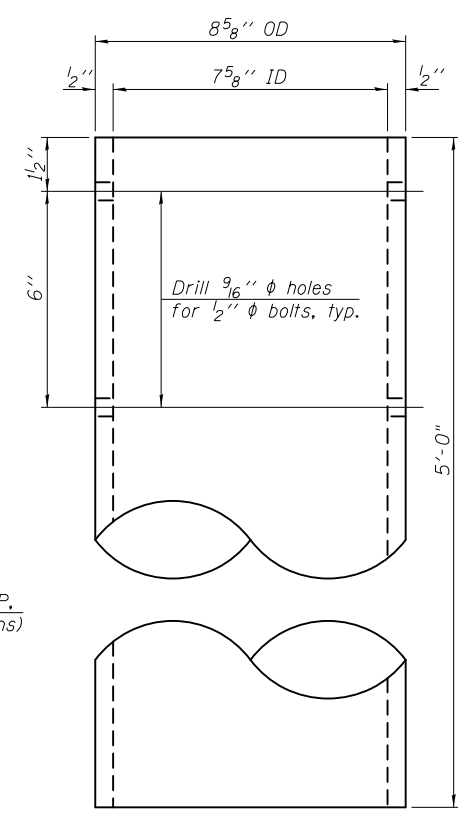
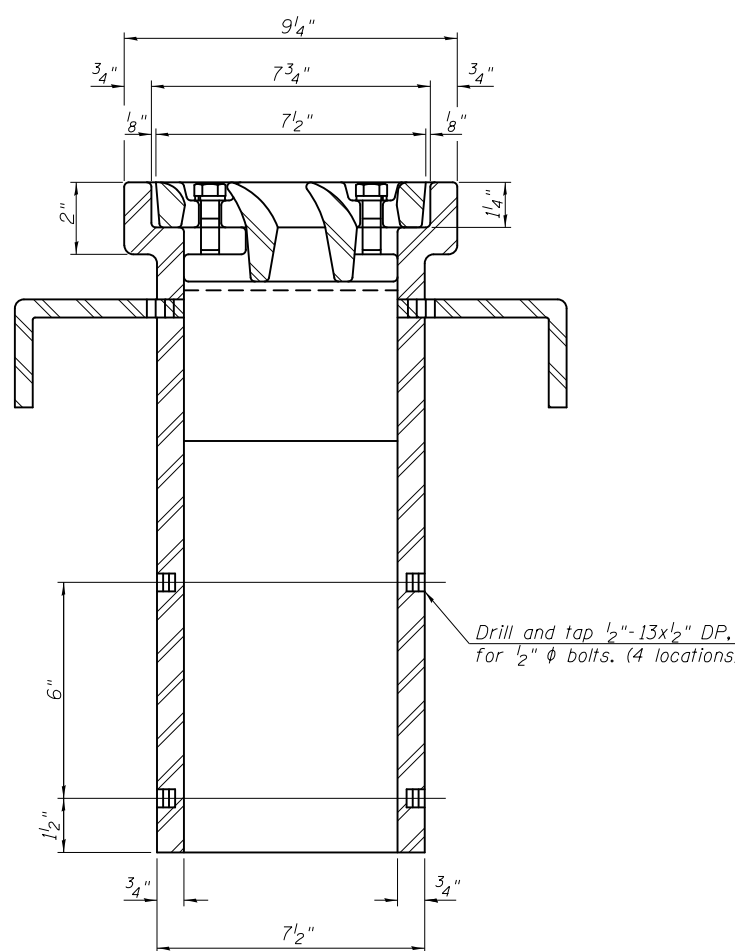
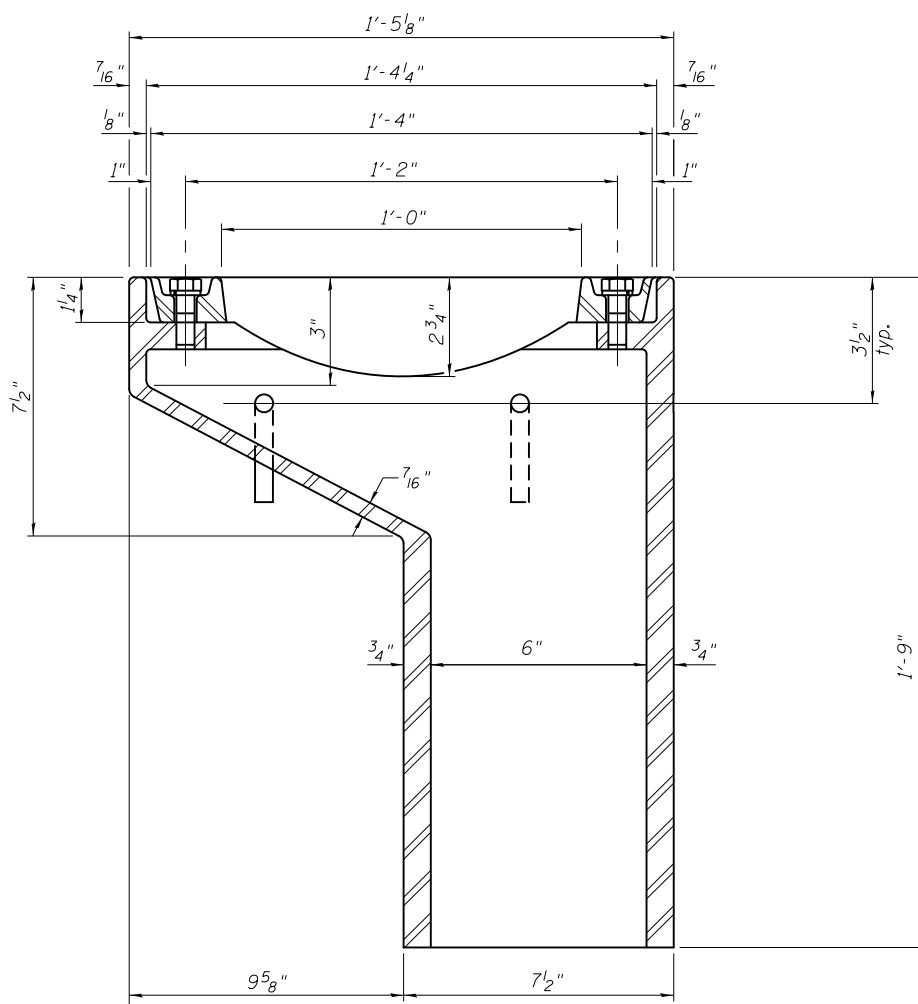
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.



ANCHOR STUD DETAIL

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|-------------------------|------|----------|
| Drainage Scupper, DS-11 | Each | 5 |

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DS-11 7-1-10

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DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 016-2437

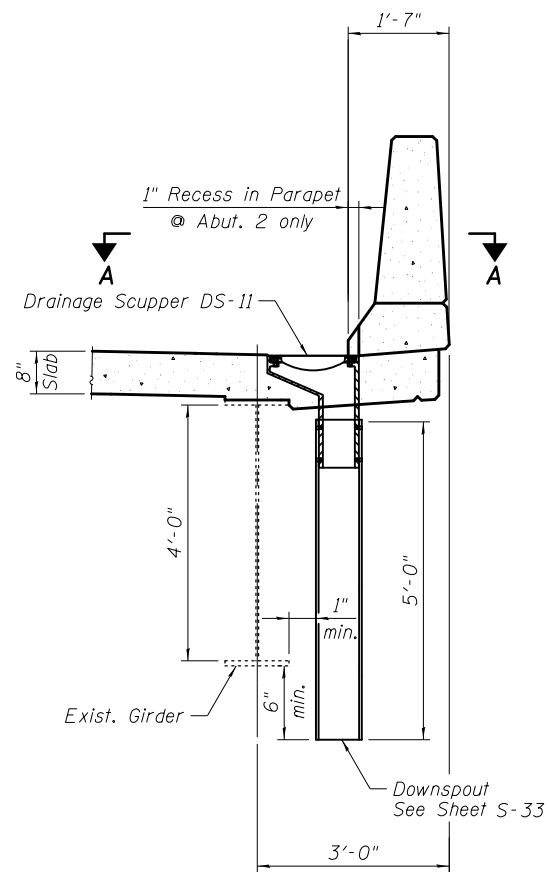
SHEET NO. S-33 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 196 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

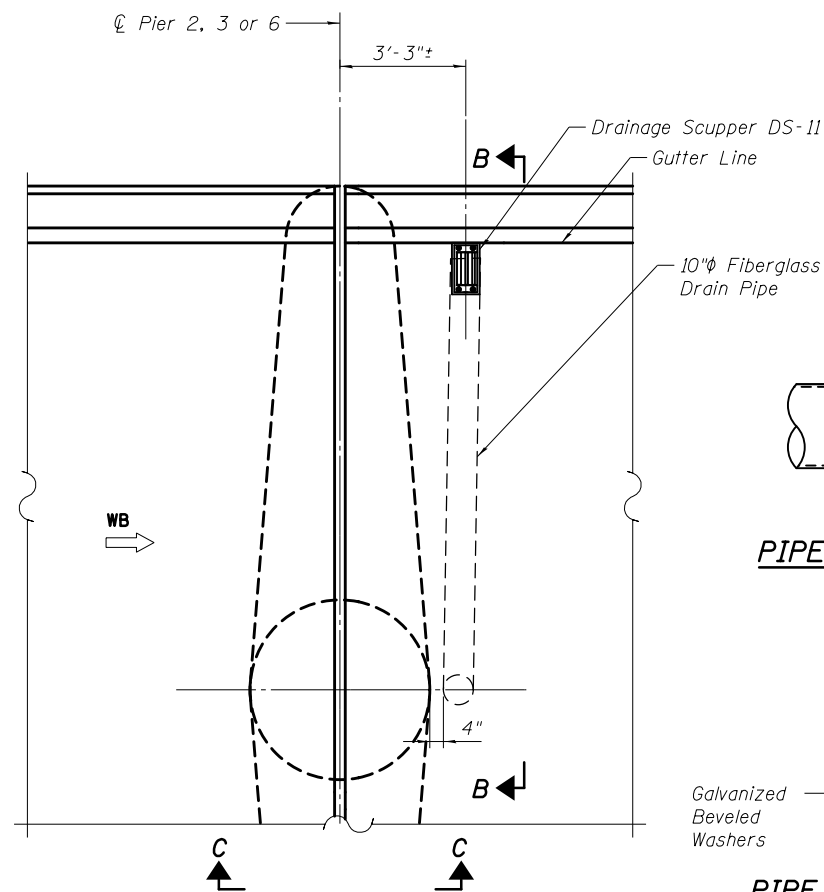
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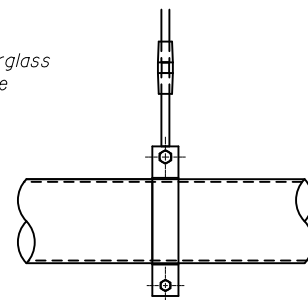


SECTION THRU SCUPPER

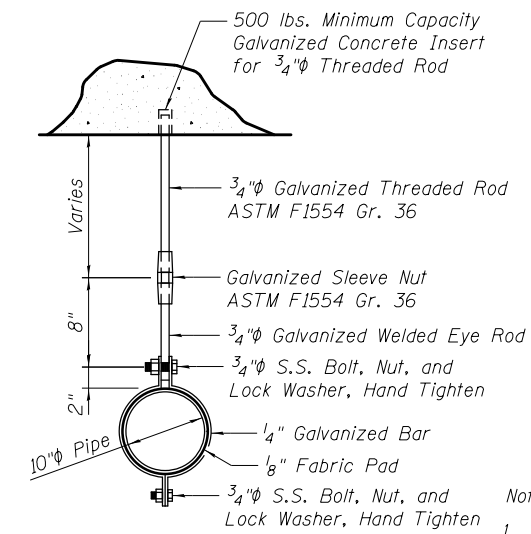


PLAN AT PIERS
(Location of Scupper)

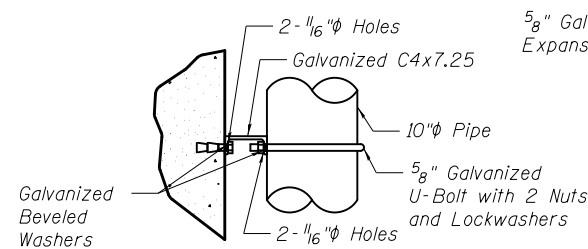
PIPE HANGER ELEVATION



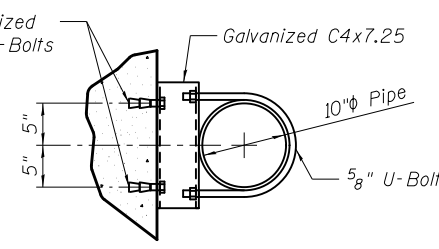
PIPE HANGER SECTION



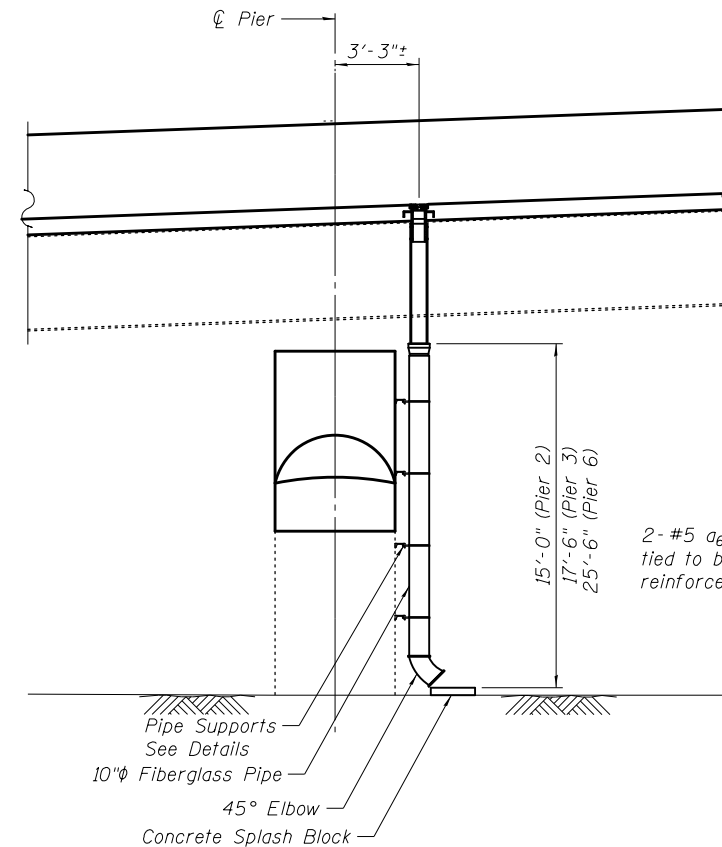
PIPE SUPPORT ELEVATION



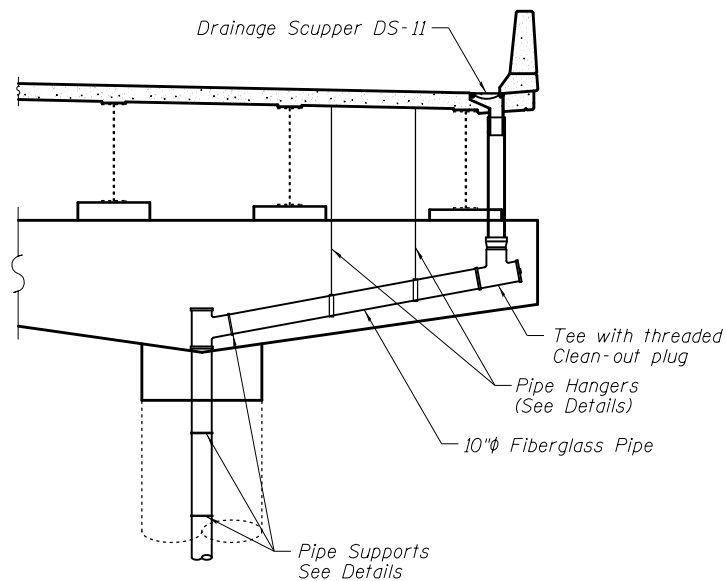
PIPE SUPPORT PLAN



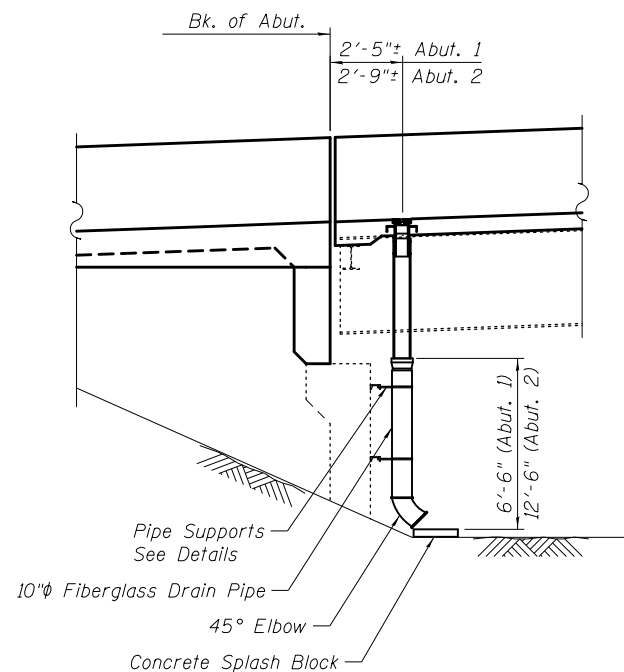
DRAINAGE SYSTEM



VIEW C-C



VIEW B-B



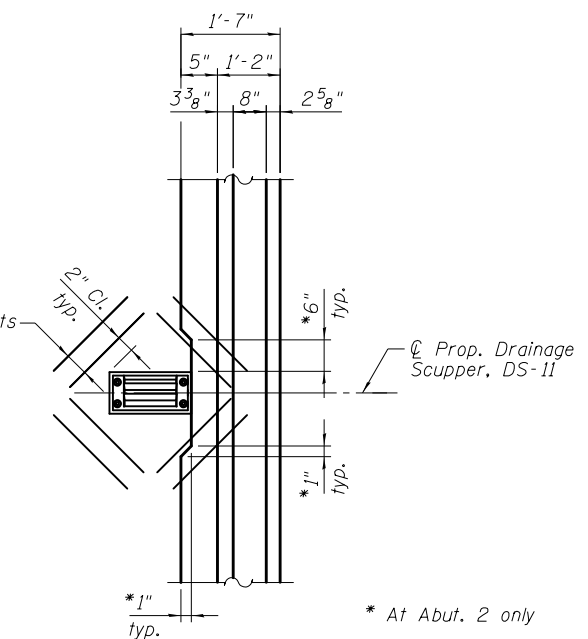
DRAINAGE SYSTEM AT ABUTMENT

Notes:

1. Cost of drain pipe, clean-out caps/plugs, pipe hangers, elbows, tees and other necessary connection pieces, including installation, shall be included in the bid price for Drainage System.
2. Adjust deck reinforcement bars as necessary to place scupper.
3. Removal and disposal of existing drainage system shall be included in the cost of Pipe Drain Removal.
4. Install a removable cap at the ground surface on the existing drain pipe extending underground. Cost included with Pipe Drain Removal. See special provision.

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--------------------|--------|----------|
| Drainage System | L. Sum | 1 |
| Pipe Drain Removal | Foot | 485 |



VIEW A-A

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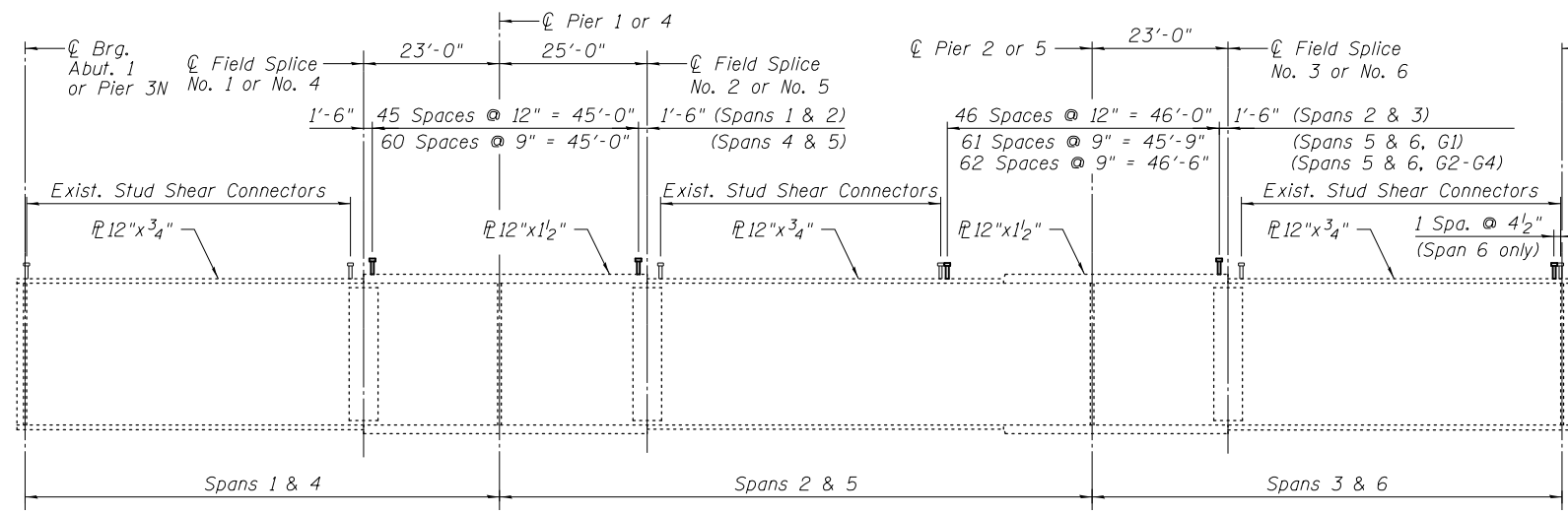
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DEPARTMENT OF TRANSPORTATION

DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 016-2437

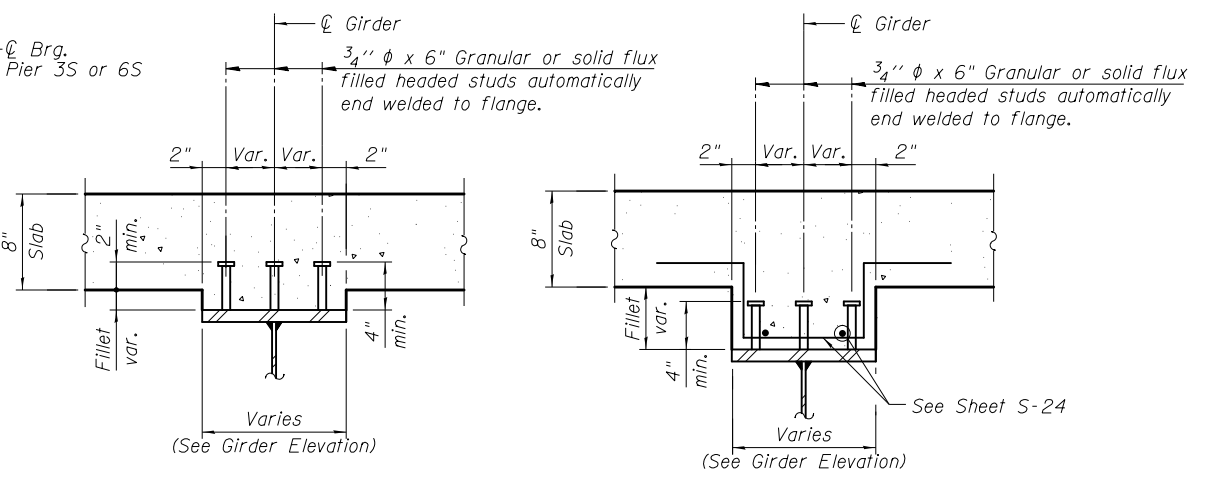
SHEET NO. S-34 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 197 |
| CONTRACT NO. 60V61 | | | | |

ILLINOIS FED. AID PROJECT



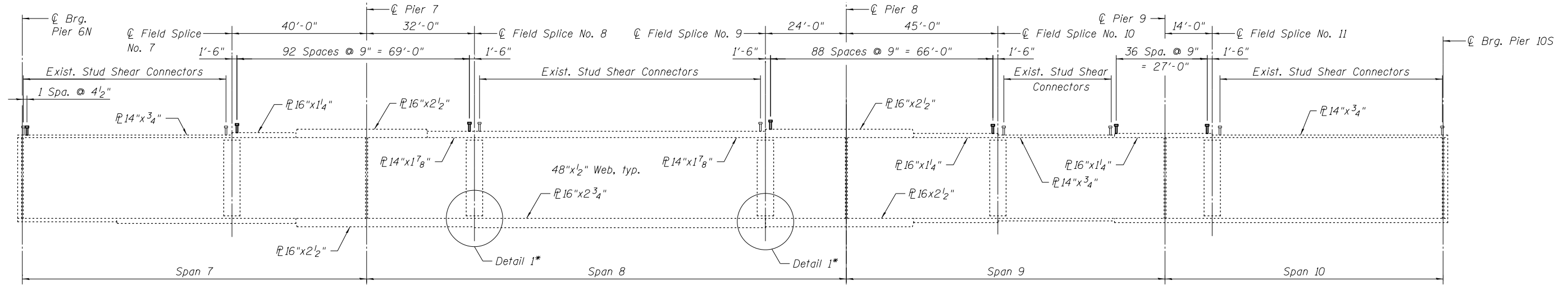
**GIRDER ELEVATION
(UNITS 1 & 2)**



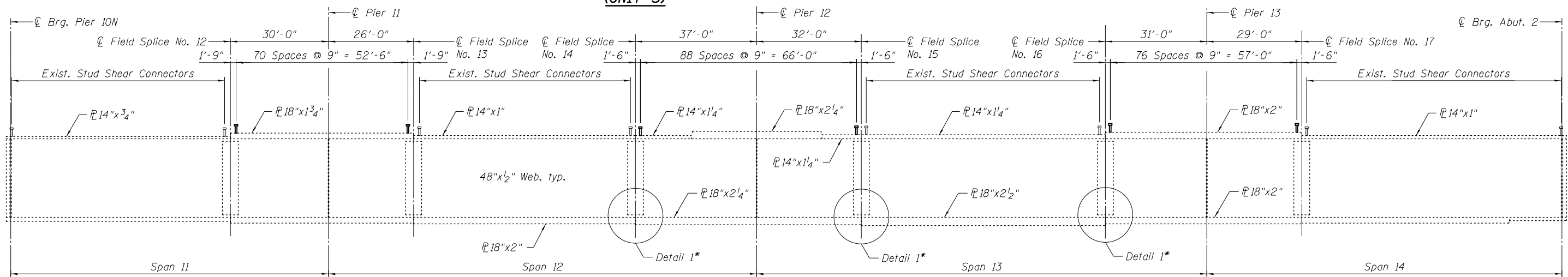
STANDARD FILLET SECTION

**DEEP FILLET SECTION
(For fillet heights greater than 6")**

STUD SHEAR CONNECTOR DETAILS



**GIRDER ELEVATION
(UNIT 3)**



**GIRDER ELEVATION
(UNIT 4)**

*See Sheet S-36

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|-----------------------|------|----------|
| Stud Shear Connectors | Each | 8,097 |

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12/7/2012

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STRUCTURAL STEEL DETAILS I
STRUCTURE NO. 016-2437

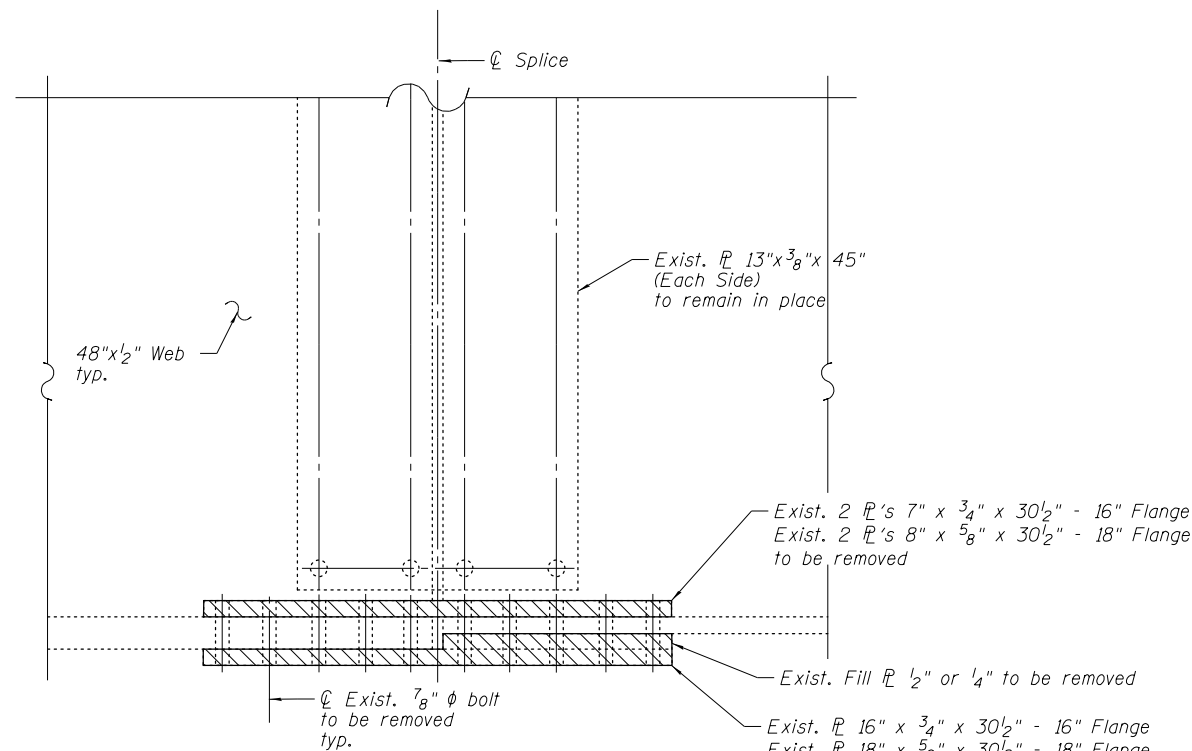
SHEET NO. S-35 OF S-83 SHEETS

| | | | | |
|---------------------------|---------------------|-------------|------------------|---------------|
| F.A.I. RTE. 94 | SECTION 2012-060-BR | COUNTY COOK | TOTAL SHEETS 285 | SHEET NO. 198 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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12/7/2012

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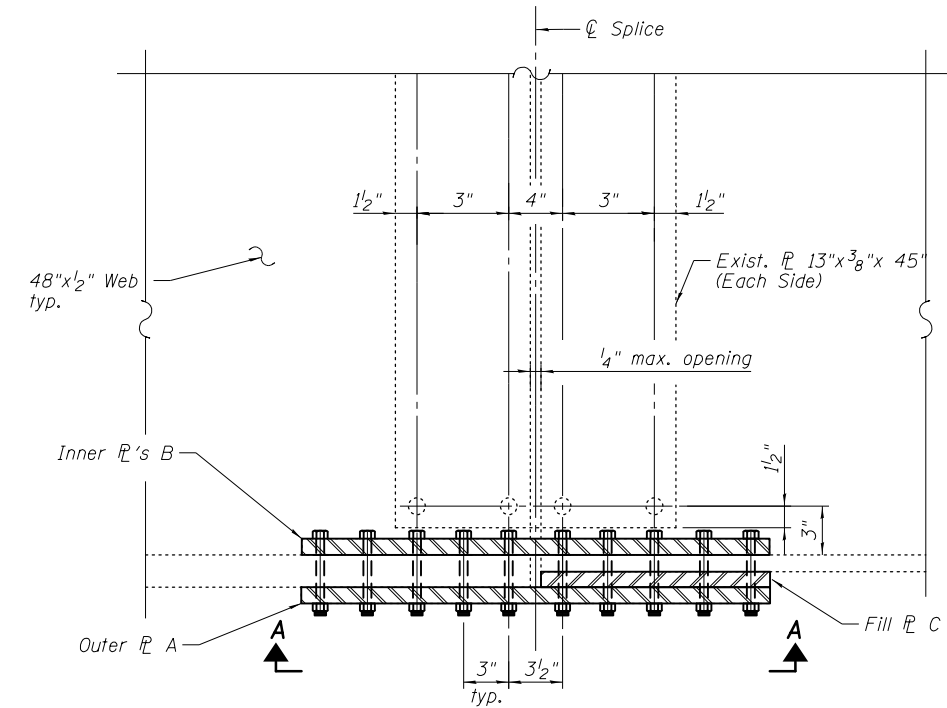


LEGEND



Removal

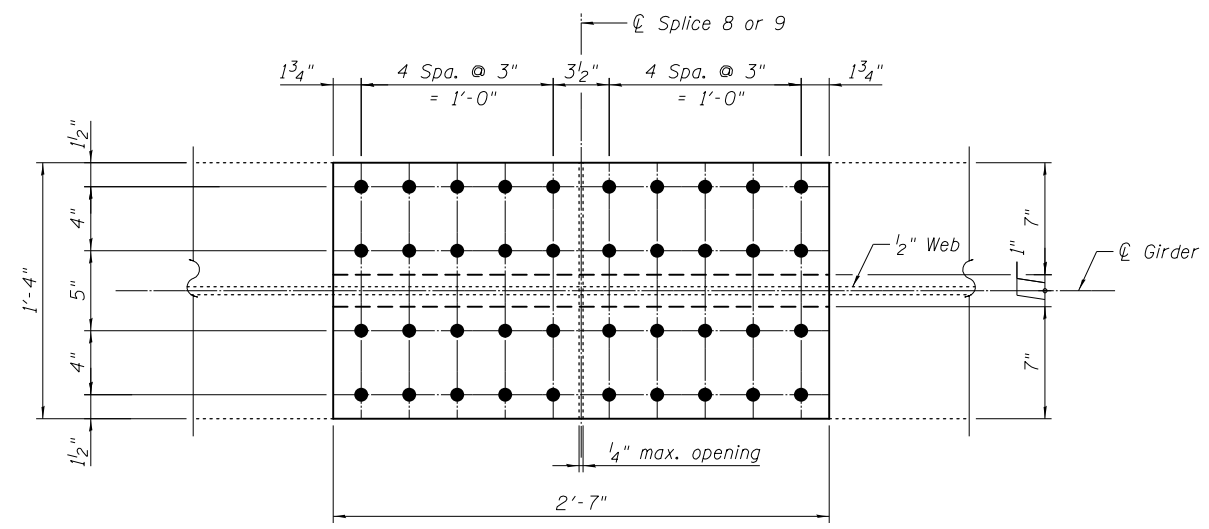
DETAIL 1
(Removal)



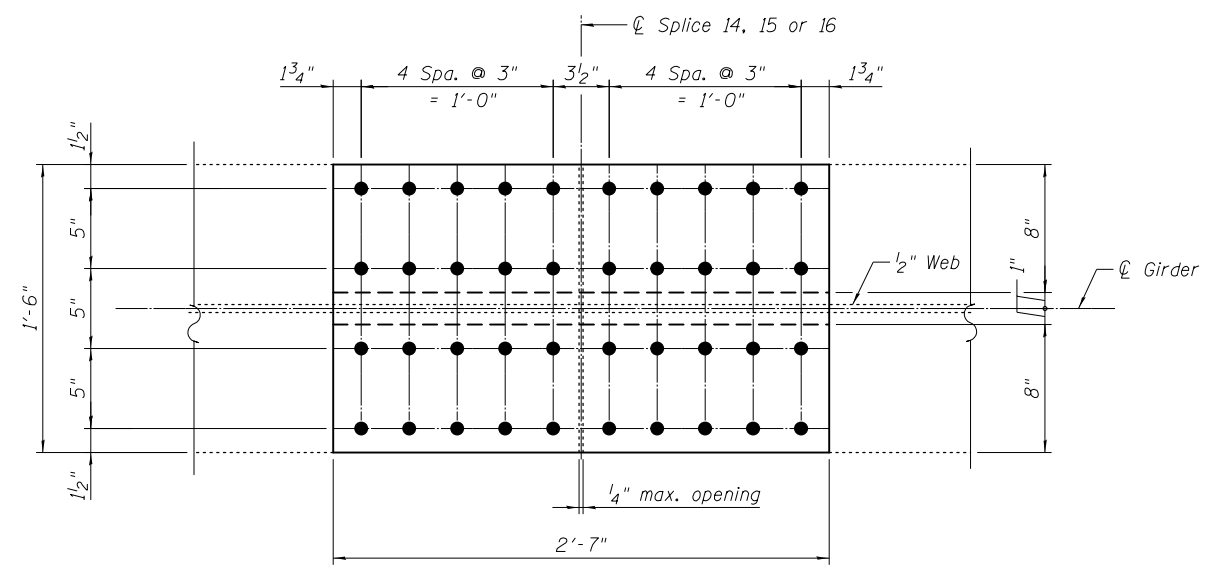
DETAIL 1
(Proposed)

NOTES:

- The splice plates and bolts shall be replaced after removal of the existing deck and prior to forming of the new deck.
- Prior to removal of the existing splice plates and bolts, Contractor shall provide temporary support to each connecting beam. The temporary support system shall be removed after the replacement is complete. Cost included with Temporary Shoring and Cribbing. See Special Provision.
- If jacking is used for the temporary support system, Contractor shall provide min jacking capacity of 70 kips (for beam dead load reaction of 45 kips) at each side of the splice.
- Work shall be performed in such a manner so as not to damage the existing structural steel that is to remain in place. If structural steel is damaged due to negligence on the part of the Contractor, the repair or replacement shall be done by the Contractor at the Contractor's expense and as directed by the Engineer.
- The Contractor shall provide adequate protection for vehicular traffic, which may be endangered by falling material during repair operations. The cost of any such protection, or of any working platforms for the repair operations, shall be considered included in the cost of Temporary Shoring and Cribbing.
- The bottom row of web splice bolts may be removed and replaced as required to replace the bottom flange bolts. Any web splice bolts removed shall be replaced with new 7/8" phi ASTM A325 high-strength bolts. Cost included with Structural Steel Repair.
- All structural steel shall conform to AASHTO M270 Grade 50 and all plates except fill plates shall conform to the Impact Testing Requirement, Zone 2. All new fasteners in the flange shall be 7/8" phi high strength ASTM A490 bolts (with threads excluded from the shear plane). Reuse existing 1" phi open holes.



VIEW A-A
(Unit 3)



VIEW A-A
(Unit 4)

SPLICE PLATE DIMENSIONS
(For All 4 Girders)

| UNIT | SPAN | SPLICE | FLANGE WIDTH | OUTER PLATE A | INNER PLATE B | FILL PLATE C |
|------|------|--------|--------------|------------------|---------------------|----------------------|
| 3 | 8 | 8 | 16" | 16" x 3/4" x 31" | (2)-7" x 7/8" x 31" | 16" x 1/4" x 15 3/8" |
| | | 9 | | 16" x 7/8" x 31" | (2)-7" x 1" x 31" | |
| 4 | 12 | 14 | 18" | 18" x 5/8" x 31" | (2)-8" x 3/4" x 31" | 18" x 1/4" x 15 3/8" |
| | | 15 | | | | 18" x 1/2" x 15 3/8" |
| | | 16 | | | | |

See Sheet S-35 for the replacement locations.

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|------------------------------|-------|----------|
| Structural Steel Repair | Pound | 5,950 |
| Temporary Shoring & Cribbing | Each | 40 |

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| | CHECKED - IYL | REVISED - |

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STRUCTURAL STEEL DETAILS II
STRUCTURE NO. 016-2437

SHEET NO. S-36 OF S-83 SHEETS

| | | | | |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94 | 2012-060-BR | COOK | 285 | 199 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| INTERIOR GIRDER MOMENT TABLE | | | | | | |
|------------------------------|--------------------|--------|-----------|--------|-----------|--------|
| Unit 1 | | | | | | |
| | 0.4 Sp. 1 | Pier 1 | 0.5 Sp. 2 | Pier 2 | 0.6 Sp. 3 | |
| I_s | (in ⁴) | 16,195 | 26,667 | 15,303 | 26,667 | 16,195 |
| $I_c(n)$ | (in ⁴) | 42,794 | 32,738 | 39,881 | 32,738 | 42,794 |
| $I_c(3n)$ | (in ⁴) | 32,706 | 32,738 | 30,678 | 32,738 | 32,706 |
| S_s | (in ³) | 674 | 1,046 | 618 | 1,046 | 674 |
| $S_c(n)$ | (in ³) | 975 | 1,129 | 901 | 1,129 | 975 |
| $S_c(3n)$ | (in ³) | 897 | 1,129 | 827 | 1,129 | 897 |
| Z | (in ³) | - | - | - | - | - |
| Q | (k/') | 0.96 | 1.02 | 0.95 | 1.02 | 0.96 |
| M_Q | (k) | 396 | 899 | 334 | 870 | 393 |
| s_Q | (k/') | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 |
| $M_s Q$ | (k) | 239 | 511 | 211 | 500 | 235 |
| M_L | (k) | 619 | 650 | 600 | 639 | 618 |
| M_I | (k) | 151 | 151 | 133 | 148 | 151 |
| $^3_3[M_L + M_I]$ | (k) | 1,283 | 1,335 | 1,222 | 1,312 | 1,282 |
| M_a | (k) | 2,393 | 3,569 | 2,296 | 3,486 | 2,483 |
| * M_u | (k) | 3,605 | - | 3,868 | - | 3,651 |
| $f_s Q$ non-comp | (ksi) | 7.05 | 10.32 | 6.48 | 9.98 | 7.00 |
| $f_s Q$ comp | (ksi) | 3.20 | 5.43 | 3.05 | 5.33 | 3.14 |
| $f_s ^3_3 [M_L + M_I]$ | (ksi) | 15.79 | 14.19 | 16.28 | 13.95 | 15.77 |
| f_s (Overload) | (ksi) | 26.04 | 29.94 | 25.81 | 29.26 | 25.91 |
| ** f_s (Total) | (ksi) | - | 38.92 | - | 38.01 | - |
| VR | (k) | 64.7 | 66.1 | 66.1 | 65.5 | 64.7 |

| INTERIOR GIRDER REACTION TABLE | | | | | |
|--------------------------------|---------|--------|--------|--------|-------|
| Unit 1 | | | | | |
| | Abut. 1 | Pier 1 | Pier 2 | Pier 3 | |
| R_Q | (k) | 45.0 | 158.9 | 156.5 | 44.7 |
| R_L | (k) | 45.8 | 63.6 | 63.3 | 45.8 |
| R_I | (k) | 11.2 | 14.8 | 14.7 | 11.2 |
| R_{Total} | (k) | 101.9 | 237.2 | 234.6 | 101.7 |

* Compact section
 ** Braced non-compact and partially braced section

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).
 $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).
 $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).
 Z : Plastic Section Modulus of the steel section in non-composite areas (in³).
 Q : Un-factored non-composite dead load (kips/ft.).
 M_Q : Un-factored moment due to non-composite dead load (kip-ft.).
 s_Q : Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s Q$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_L : Un-factored live load moment (kip-ft.).
 M_I : Un-factored moment due to impact (kip-ft.).
 M_a : Factored design moment (kip-ft.).
 $1.3 [M_Q + M_s Q + \frac{5}{3} (M_L + M_I)]$
 M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
 f_s (Overload): Sum of stresses as computed from the moments below (ksi).
 $M_Q + M_s Q + \frac{5}{3} (M_L + M_I)$
 f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.3 [M_Q + M_s Q + \frac{5}{3} (M_L + M_I)]$
 VR: Maximum ℓ + impact shear range within the composite portion of the span for stud shear connector design (kips).

| EXTERIOR GIRDER G4 MOMENT TABLE | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------------------|--------|-----------|--------|-----------|-----------|--------|-----------|---------|-----------|--------|------------|------------|---------|------------|---------|------------|---------|------------|--------|
| Unit 2 | | | | | | Unit 3 | | | | | | Unit 4 | | | | | | | | |
| | 0.4 Sp. 4 | Pier 4 | 0.5 Sp. 5 | Pier 5 | 0.6 Sp. 6 | 0.4 Sp. 7 | Pier 7 | 0.5 Sp. 8 | Pier 8 | 0.5 Sp. 9 | Pier 9 | 0.6 Sp. 10 | 0.4 Sp. 11 | Pier 11 | 0.5 Sp. 12 | Pier 12 | 0.5 Sp. 13 | Pier 13 | 0.6 Sp. 14 | |
| I_s | (in ⁴) | 17,036 | 26,667 | 16,195 | 26,667 | 17,036 | 23,599 | 55,655 | 47,035 | 55,655 | 17,948 | 28,869 | 21,951 | 22,934 | 43,606 | 31,332 | 55,775 | 38,185 | 49,632 | 29,719 |
| $I_c(n)$ | (in ⁴) | 46,940 | 33,248 | 44,059 | 33,248 | 46,940 | 70,277 | 63,460 | 107,070 | 63,460 | 48,700 | 35,814 | 63,444 | 64,801 | 50,529 | 86,369 | 63,014 | 100,185 | 56,716 | 79,826 |
| $I_c(3n)$ | (in ⁴) | 35,172 | 33,248 | 33,233 | 33,248 | 35,172 | 50,251 | 63,460 | 77,804 | 63,460 | 36,455 | 35,814 | 46,032 | 46,878 | 50,529 | 60,984 | 63,014 | 70,457 | 56,716 | 57,095 |
| S_s | (in ³) | 730 | 1,046 | 674 | 1,046 | 730 | 1,197 | 2,100 | 2,153 | 2,100 | 749 | 1,143 | 1,050 | 1,146 | 1,693 | 1,696 | 2,125 | 2,081 | 1,909 | 1,531 |
| $S_c(n)$ | (in ³) | 1,076 | 1,509 | 1,000 | 1,509 | 1,076 | 1,721 | 2,616 | 2,772 | 2,616 | 1,105 | 1,636 | 1,516 | 1,609 | 2,173 | 2,293 | 2,613 | 2,749 | 2,393 | 2,068 |
| $S_c(3n)$ | (in ³) | 984 | 1,509 | 914 | 1,509 | 984 | 1,578 | 2,616 | 2,553 | 2,616 | 1,008 | 1,636 | 1,389 | 1,480 | 2,173 | 2,113 | 2,613 | 2,534 | 2,393 | 1,906 |
| S_L | (in ³) | 24 | 36 | 21 | 36 | 24 | 64 | 107 | 117 | 107 | 32 | 53 | 53 | 67 | 95 | 108 | 121 | 135 | 108 | 95 |
| Q | (k/') | 0.87 | 0.93 | 0.87 | 0.93 | 0.87 | 0.96 | 1.14 | 1.10 | 1.14 | 0.91 | 0.98 | 0.94 | 0.92 | 1.04 | 0.99 | 1.11 | 1.04 | 1.08 | 0.97 |
| M_Q | (k) | 361 | 868 | 309 | 901 | 381 | 500 | 2,186 | 1,479 | 1,722 | -67 | 659 | 674 | 611 | 1,596 | 704 | 1,962 | 939 | 2,023 | 859 |
| s_Q | (k/') | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| $M_s Q$ | (k) | 264 | 614 | 250 | 628 | 282 | 395 | 1,292 | 768 | 1,053 | 41 | 515 | 441 | 443 | 1,015 | 475 | 1,183 | 552 | 1,204 | 581 |
| M_L | (k) | 583 | 578 | 629 | 580 | 647 | 934 | 1,053 | 1,145 | 1,031 | 634 | 598 | 726 | 880 | 945 | 1,018 | 1,144 | 1,126 | 1,067 | 1,044 |
| M_I | (k) | 146 | 116 | 157 | 116 | 162 | 234 | 211 | 286 | 206 | 159 | 120 | 181 | 220 | 189 | 392 | 229 | 281 | 213 | 261 |
| $^3_3[M_L + M_I]$ | (k) | 1,215 | 1,155 | 1,310 | 1,161 | 1,348 | 1,947 | 2,107 | 2,386 | 2,061 | 1,321 | 1,196 | 1,512 | 1,834 | 1,890 | 2,351 | 2,288 | 2,345 | 2,133 | 2,174 |
| M_a | (k) | 2,393 | 3,428 | 2,430 | 3,497 | 2,614 | 3,694 | 7,261 | 6,023 | 6,287 | 1,684 | 3,081 | 3,415 | 3,755 | 5,851 | 4,588 | 7,064 | 4,987 | 6,969 | 4,698 |
| M_{bl} | (k) | 0 | 31 | 23 | 32 | 22 | 1 | 54 | 43 | 51 | 16 | 29 | 34 | 15 | 50 | 16 | 51 | 34 | 54 | 2 |
| $f_s Q$ (non-comp) | (ksi) | 5.94 | 9.96 | 5.50 | 10.34 | 6.27 | 5.01 | 12.49 | 8.25 | 9.84 | -1.07 | 6.92 | 7.70 | 6.41 | 11.31 | 4.98 | 11.08 | 5.42 | 12.72 | 6.73 |
| $f_s Q$ (comp) | (ksi) | 3.22 | 4.88 | 3.28 | 4.99 | 3.43 | 3.00 | 5.93 | 3.61 | 4.83 | 0.49 | 3.78 | 3.80 | 3.59 | 5.60 | 2.69 | 5.43 | 2.61 | 6.04 | 3.66 |
| $f_s ^3_3 [M_L + M_I]$ | (ksi) | 13.55 | 9.19 | 15.72 | 9.23 | 15.03 | 13.57 | 9.67 | 10.33 | 9.46 | 14.35 | 8.77 | 11.97 | 13.68 | 10.43 | 12.30 | 10.51 | 10.24 | 10.70 | 12.62 |
| f_s | (ksi) | 0.00 | 10.32 | 13.12 | 10.55 | 11.14 | 0.23 | 6.11 | 4.43 | 5.71 | 6.16 | 6.56 | 7.56 | 2.64 | 6.35 | 1.77 | 5.03 | 3.00 | 5.99 | 0.24 |
| f_s (Overload) | (ksi) | 22.71 | 24.03 | 24.49 | 24.56 | 24.73 | 21.59 | 28.09 | 22.18 | 24.13 | 13.76 | 19.47 | 23.47 | 23.68 | 27.35 | 19.98 | 27.03 | 18.27 | 29.46 | 23.00 |
| f_s (Total) | (ksi) | 29.52 | 31.23 | 31.84 | 31.93 | 32.15 | 28.06 | 36.51 | 28.84 | 31.36 | 17.89 | 25.31 | 30.52 | 30.78 | 35.55 | 25.97 | 35.13 | 23.75 | 38.29 | 29.90 |
| F_{cr} (Overload) | (ksi) | 34.20 | 36.0 | 34.20 | 36.0 | 34.20 | 34.20 | 36.0 | 34.20 | 36.0 | 21.58 | 36.0 | 34.20 | 34.20 | 36.0 | 34.20 | 36.0 | 34.20 | 36.0 | 34.20 |
| VR | (k) | 23.4 | 26.0 | 27.4 | 27.4 | 27.6 | 28.0 | 26.3 | 27.6 | 27.6 | 29.8 | 29.8 | 27.5 | 28.0 | 26.2 | 27.5 | 27.5 | 27.8 | 27.8 | 28.1 |
| F_{cr} | (ksi) | 36.0 | 42.6 | 31.6 | 42.6 | 32.2 | 35.2 | 46.6 | 34.5 | 46.1 | 21.6 | 45.7 | 33.5 | 35.1 | 46.7 | 35.4 | 47.3 | 35.0 | 47.0 | 35.9 |

| EXTERIOR GIRDER G4 REACTION TABLE | | | | | | | | | | | | | | |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Unit 2 | | | | | Unit 3 | | | | | Unit 4 | | | | |
| | Pier 3 | Pier 4 | Pier 5 | Pier 6 | Pier 6 | Pier 7 | Pier 8 | Pier 9 | Pier 10 | Pier 10 | Pier 11 | Pier 12 | Pier 13 | Abut. 2 |
| R_Q | (k) | 47.0 | 159.4 | 160.8 | 50.2 | 61.0 | 241.7 | 217.2 | 149.9 | 65.8 | 64.3 | 209.9 | 227.9 | 75.8 |
| R_L | (k) | 33.6 | 51.6 | 51.7 | 40.9 | 44.5 | 66.2 | 65.9 | 53.7 | 41.3 | 44.1 | 64.0 | 68.2 | 45.6 |
| R_I | (k) | 10.1 | 12.9 | 12.9 | 12.3 | 13.3 | 16.5 | 16.5 | 13.4 | 12.4 | 13.2 | 16.0 | 17.0 | 13.7 |
| R_{Total} | (k) | 90.7 | 223.9 | 225.4 | 103.5 | 118.9 | 324.4 | 299.5 | 217.0 | 119.5 | 121.7 | 290.0 | 313.1 | 135.1 |

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).
 $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).
 $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).
 S_L : Section modulus of one flange plate for lateral flange bending (in³).
 Q : Un-factored non-composite dead load (kips/ft.).
 M_Q : Un-factored moment due to non-composite dead load (kip-ft.).
 s_Q : Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s Q$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_L : Un-factored live load moment (kip-ft.).
 M_I : Un-factored moment due to impact (kip-ft.).
 M_a : Factored design moment (kip-ft.).
 $1.3 [M_Q + M_s Q + \frac{5}{3} (M_L + M_I)]$
 M_{bl} : Factored lateral bending moment for flange plate (kip-ft.).
 f_s : Factored calculated normal stress at the edge of flange due to lateral bending (ksi).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
 $M_Q + M_s Q + \frac{5}{3} (M_L + M_I)$
 f_s (Total): Sum of stresses as computed from the moments below (ksi).
 $1.3 [M_Q + M_s Q + \frac{5}{3} (M_L + M_I)]$
 F_{cr} (Overload): Critical average flange stress at overload computed according to the 2003 AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges Section 9.5 (ksi).
 F_{cr} : Critical average flange stress (smaller of F_{cr1} or F_{cr2} for partially braced flanges and F_y for continuously braced flanges) computed according to the 2003 AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges (Sections 5.2, 5.3 and 5.4) (ksi).
 VR: Maximum ℓ + impact shear range within span for stud shear connector design (kips).

Notes:
 M_L and R_L include the effects of centrifugal force and superelevation.
 VR is computed from the HS-20 loading in Unit 1 and from the Fatigue Truck in Units 2, 3 and 4.

2/26/17 PM

12/7/2012

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| | | |
|------------------------|----------------|-----------|
| USER NAME = | DESIGNED - IYL | REVISED - |
| PLOT SCALE = | CHECKED - BAK | REVISED - |
| PLOT DATE = 11/08/2012 | DRAWN - MTR | REVISED - |
| | CHECKED - BAK | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GIRDER MOMENT AND REACTION TABLES
 STRUCTURE NO. 016-2437

SHEET NO. S-37 OF S-83 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|-----------|
| 94 | 2012-060-BR | COOK | 285 | 200 |
| CONTRACT NO. 60V61 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |