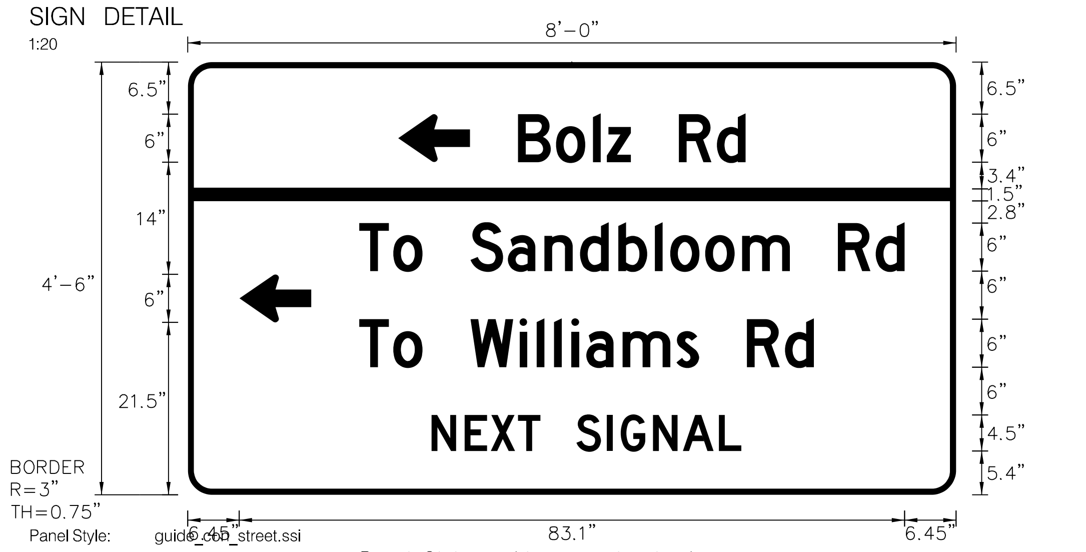
FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-04_cmt.dgn

SIGN DETAIL
1:20




BORDER
R=3"
TH=0.75"

Panel Style: guide_con_street.ssi
Dimensions are in inches.tenths

Panel Style: guide_con_street.ssi
M.U.T.C.D.: 2009 Edition

Letter locations are panel edge to lower left corner

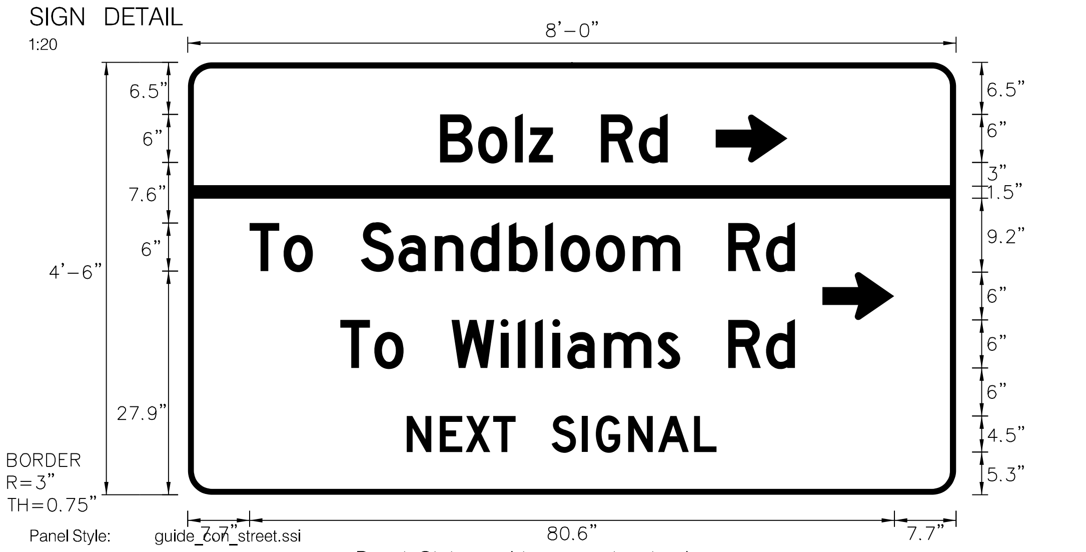
| | |
|---|---|
| SIGN NUMBER | D3-2 (3 Lines) |
| WIDTH x HGHT. | 8'-0" x 4'-6" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 3" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 26.3 | 41.6 | 6 | 9 |
| AR_Type D | 90 | 6.4 | 21.5 | 6 | 9 |

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | o | l | z | | R | d | | | | | | | | | | | | | | | D 2000 |
| 41.3 | 46 | 50.6 | 52.4 | 55.4 | 61.4 | 66.1 | | | | | | | | | | | | | | 28.4 | 6/4.5 |
| T | o | | S | a | n | d | b | l | o | o | m | | R | d | | | | | | | D 2000 |
| 21.4 | 25.7 | 29.3 | 35.3 | 40 | 44.6 | 49 | 53.8 | 58.4 | 60.3 | 64.7 | 69.3 | 75.2 | 81.2 | 86 | | | | | | 68.2 | 6/4.5 |
| T | o | | W | i | l | l | i | a | m | s | | R | d | | | | | | | | D 2000 |
| 21.4 | 25.7 | 29.3 | 35.3 | 41.5 | 43.6 | 45.8 | 47.9 | 49.8 | 54.4 | 61.1 | 63.9 | 69.9 | 74.6 | | | | | | | 56.8 | 6/4.5 |
| N | E | X | T | | S | I | G | N | A | L | | | | | | | | | | | D 2000 |
| 30.5 | 34.6 | 37.9 | 41.3 | 44.1 | 48.6 | 52.4 | 54.1 | 58.1 | 61.9 | 66.4 | | | | | | | | | | 38.7 | 4.5 |

SIGN DETAIL
1:20




BORDER
R=3"
TH=0.75"

Panel Style: guide_con_street.ssi
Dimensions are in inches.tenths

Panel Style: guide_con_street.ssi
M.U.T.C.D.: 2009 Edition

Letter locations are panel edge to lower left corner

| | |
|---|---|
| SIGN NUMBER | D3-2 (3 Lines) |
| WIDTH x HGHT. | 8'-0" x 4'-6" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 3" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 270 | 66 | 41.5 | 6 | 9 |
| AR_Type D | 270 | 79.3 | 21.8 | 6 | 9 |

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | o | l | z | | R | d | | | | | | | | | | | | | | | D 2000 |
| 31.5 | 36.3 | 40.9 | 42.6 | 45.6 | 51.6 | 56.4 | | | | | | | | | | | | | | 28.4 | 6/4.5 |
| T | o | | S | a | n | d | b | l | o | o | m | | R | d | | | | | | | D 2000 |
| 7.7 | 12 | 15.6 | 21.6 | 26.3 | 30.9 | 35.3 | 40.1 | 44.7 | 46.6 | 51 | 55.6 | 61.5 | 67.5 | 72.3 | | | | | | 68.2 | 6/4.5 |
| T | o | | W | i | l | l | i | a | m | s | | R | d | | | | | | | | D 2000 |
| 19 | 23.3 | 27 | 33 | 39.1 | 41.2 | 43.4 | 45.6 | 47.4 | 52 | 58.7 | 61.5 | 67.5 | 72.3 | | | | | | | 56.8 | 6/4.5 |
| N | E | X | T | | S | I | G | N | A | L | | | | | | | | | | | D 2000 |
| 27.4 | 31.5 | 34.7 | 38.2 | 40.9 | 45.4 | 49.3 | 51 | 55 | 58.8 | 63.3 | | | | | | | | | | 38.7 | 4.5 |

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| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

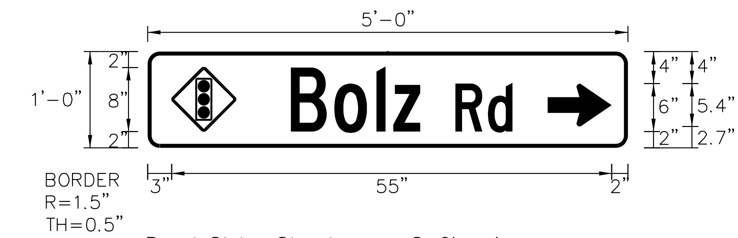
SIGNING PLAN
SIGN PLAN DETAILS

SCALE: 1:20 | SHEET 4 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 201 |

CONTRACT NO. 61G02
ILLINOIS FED. AID PROJECT

## SIGN DETAIL
1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street name 8-6in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1a |
| WIDTH x HGHT. | 5'-0" x 1'-0" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

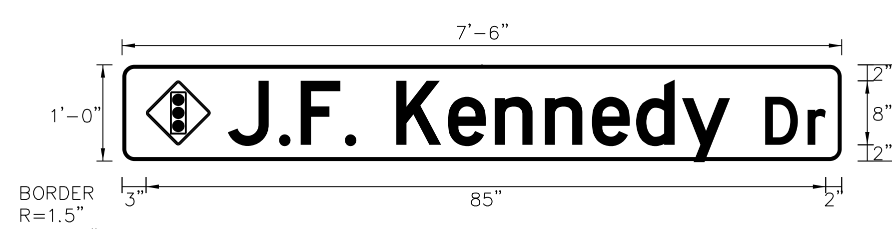
| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | 0 | 3 | 2.1 | 8 | 8 |
| | 0 | 3.1 | 2.2 | 7.8 | 7.8 |
| AR_Type D | 270 | 50 | 2.7 | 5.4 | 8 |

Panel Style: Street name 8-6in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|
| B | o | l | z | | C 2000 |
| 17.9 | 23.3 | 28.6 | 30.7 | 16.2 | 8/6 |
| R | d | | | | C 2000 |
| 38.5 | 42.5 | | | 7.1 | 6/4.5 |

## SIGN DETAIL
1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street name 8-6in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1a |
| WIDTH x HGHT. | 7'-6" x 1'-0" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | 0 | 3 | 2 | 8 | 8 |
| | 0 | 3.1 | 2.1 | 7.8 | 7.8 |

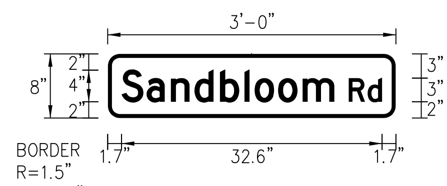
Panel Style: Street name 8-6in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | . | F | . | | K | e | n | n | e | d | y | | D 2000 |
| 13.2 | 19.6 | 22.3 | 27.9 | 29.3 | 34.3 | 40.8 | 46.6 | 52.9 | 58.8 | 64.3 | 70.1 | 62.8 | 8/6 |
| D | r | | | | | | | | | | | | D 2000 |
| 80.5 | 85.7 | | | | | | | | | | | 7.6 | 6/4.5 |

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-06.cmt.dgn

## SIGN DETAIL
1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 3'-0" x 0'-8" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

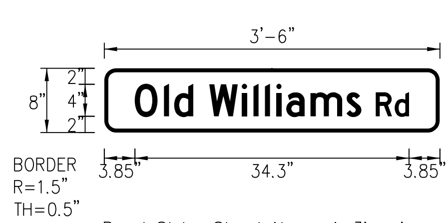
Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

**LETTER POSITIONS (X)**

| | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|
| S | a | n | d | b | l | o | o | m | | D 2000 |
| 1.7 | 4.8 | 7.9 | 10.8 | 14 | 17.1 | 18.4 | 21.3 | 24.4 | 26.6 | 4/3 |
| R | d | | | | | | | | | D 2000 |
| 30.1 | 32.5 | | | | | | | | 4.2 | 3/2.3 |

## SIGN DETAIL
1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 3'-6" x 0'-8" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

**LETTER POSITIONS (X)**

| | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O | l | d | | W | i | l | l | i | a | m | s | | D 2000 |
| 3.8 | 7.5 | 8.8 | 11.2 | 13.2 | 17.2 | 18.7 | 20.1 | 21.6 | 22.8 | 25.8 | 30.3 | 28.4 | 4/3 |
| R | d | | | | | | | | | | | | D 2000 |
| 34 | 36.4 | | | | | | | | | | | 4.2 | 3/2.3 |

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| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

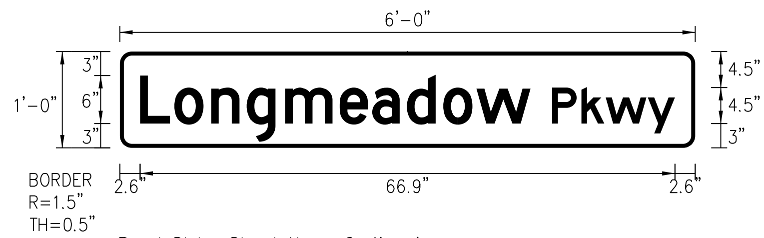
SCALE: 1:20 | SHEET 6 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 203 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

## SIGN DETAIL
1:20




Panel Style: Street Name 6-4in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D-3 |
| WIDTH x HGHT. | 6'-0" x 1'-0" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

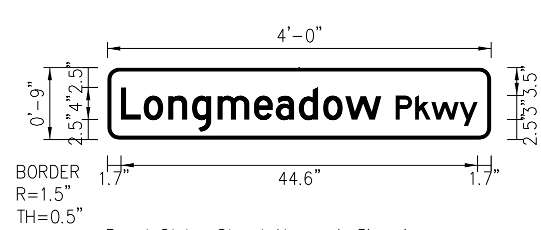
Panel Style: Street Name 6-4in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

**LETTER POSITIONS (X)**

| | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | D 2000 |
| 2.6 | 6.8 | 11.4 | 15.9 | 20.7 | 27.5 | 31.6 | 35.9 | 40.5 | 44.6 | 48.8 | 6/4.5 |
| P | k | w | y | | | | | | | | D 2000 |
| 54.1 | 57.8 | 60.8 | 66.1 | | | | | | | 15.3 | 4.5/3.4 |

## SIGN DETAIL
1:20




Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 4'-0" x 0'-9" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

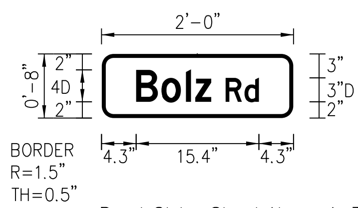
**LETTER POSITIONS (X)**

| | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | D 2000 |
| 1.7 | 4.5 | 7.6 | 10.6 | 13.8 | 18.3 | 21.1 | 23.9 | 27 | 29.7 | 32.6 | 4/3 |
| P | k | w | y | | | | | | | | D 2000 |
| 36.1 | 38.5 | 40.5 | 44 | | | | | | | 10.2 | 3/2.3 |

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-08.cmt.dgn

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 2'-0" x 0'-8" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

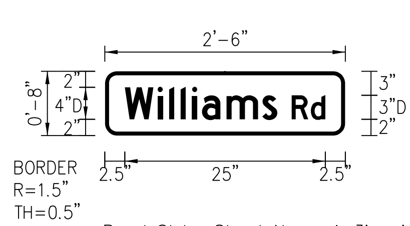
Letter locations are panel edge to lower left corner

### LETTER POSITIONS (X)

| | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|
| B | o | l | z | | D 2000 |
| 4.3 | 7.5 | 10.6 | 11.7 | 9.4 | 4/3 |
| R | d | | | | D 2000 |
| 15.5 | 17.9 | | | 4.2 | 3/2.3 |

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 2'-6" x 0'-8" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

### LETTER POSITIONS (X)

| | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|
| W | i | l | l | i | a | m | s | | D 2000 |
| 2.5 | 6.6 | 8 | 9.5 | 10.9 | 12.1 | 15.2 | 19.7 | 19 | 4/3 |
| R | d | | | | | | | | D 2000 |
| 23.3 | 25.7 | | | | | | | 4.2 | 3/2.3 |



| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 8 OF 20 SHEETS | STA. TO STA.

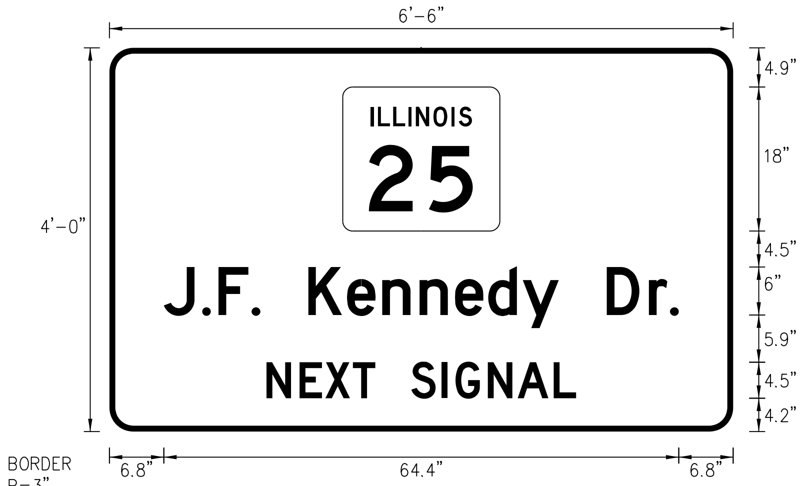
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 205 |

CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT

## SIGN DETAIL

1:20




BORDER
R=3"
TH=0.75"

Panel Style: guide_con_street.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_con_street.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| | |
|---|---|
| SIGN NUMBER | D3-2 (2 Lines) |
| WIDTH x HGHT. | 6'-6" x 4'-0" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 3" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

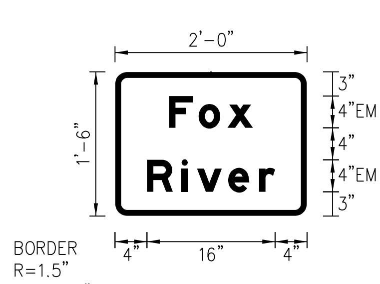
| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| M1-I100A-2-22-12 | | 20.2 | 25.1 | 19.6 | 18 |

**LETTER POSITIONS (X)**

| | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | . | F | . | | K | e | n | n | e | d | y | | D | r | . | | D 2000 |
| 6.8 | 11.6 | 13.7 | 17.8 | 18.9 | 24.9 | 29.7 | 34.1 | 38.8 | 43.2 | 47.4 | 51.7 | 56.2 | 62.2 | 67.5 | 70.1 | 64.4 | 6/4.5 |
| N | E | X | T | | S | I | G | N | A | L | | | | | | | D 2000 |
| 19.6 | 23.8 | 27 | 30.4 | 33.2 | 37.7 | 41.6 | 43.3 | 47.3 | 51.1 | 55.6 | | | | | | 38.7 | 4.5 |

## SIGN DETAIL

1:20




BORDER
R=1.5"
TH=0.75"

Panel Style: I-3.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: I-3.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

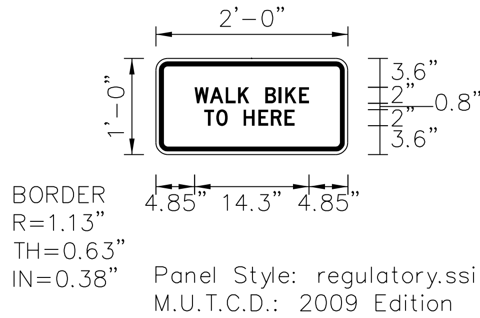
| | |
|---|---|
| SIGN NUMBER | I-3 |
| WIDTH x HGHT. | 2'-0" x 1'-6" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

**LETTER POSITIONS (X)**

| | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|
| F | o | x | | | | EM 2000 |
| 6.8 | 10.4 | 14 | | | 10.5 | 4/3 |
| R | i | v | e | r | | EM 2000 |
| 4 | 8.3 | 10.3 | 14.1 | 18 | 16 | 4/3 |

## SIGN DETAIL
1:20




Panel Style: regulatory.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | S2 2–3 |
| WIDTH x HGHT. | 2'–0" x 1'–0" |
| BORDER WIDTH | 0.63" |
| CORNER RADIUS | 1.13" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: White |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: Black/Black |

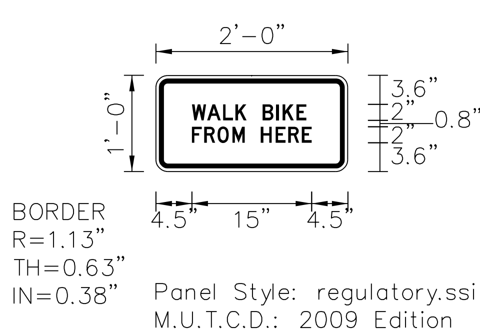
| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

Panel Style: regulatory.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|
| W | A | L | K | | B | I | K | E | | D 2000 |
| 4.8 | 6.7 | 8.7 | 10.3 | 11.7 | 13.7 | 15.4 | 16.2 | 17.9 | 14.3 | 2 |
| T | O | | H | E | R | E | | | | D 2000 |
| 6.1 | 7.6 | 9 | 11 | 12.8 | 14.4 | 16.1 | | | 11.3 | 2 |

## SIGN DETAIL
1:20




Panel Style: regulatory.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | S2 2–3 |
| WIDTH x HGHT. | 2'–0" x 1'–0" |
| BORDER WIDTH | 0.63" |
| CORNER RADIUS | 1.13" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: White |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: Black/Black |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

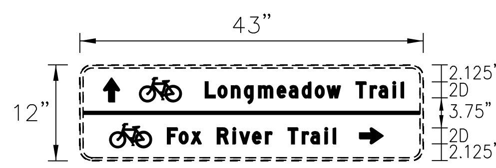
Panel Style: regulatory.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|
| W | A | L | K | | B | I | K | E | | D 2000 |
| 4.5 | 6.4 | 8.4 | 10 | 11.4 | 13.4 | 15.1 | 15.9 | 17.6 | 14.3 | 2 |
| F | R | O | M | | H | E | R | E | | D 2000 |
| 4.5 | 6.1 | 7.7 | 9.6 | 11.1 | 13.1 | 15 | 16.6 | 18.3 | 15 | 2 |

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-11_cmt.dgn

## SIGN DETAIL
1:20




BORDER
R=1.46"
TH=0.34"

Panel Style: D1-2B.ssi
M.U.T.C.D.: 1988 Edition

| | |
|---|---|
| SIGN NUMBER | FRT-01 |
| WIDTH x HGHT. | 3'-7" x 1'-0" |
| BORDER WIDTH | 0.34" |
| CORNER RADIUS | 1.46" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: Yellow/Yellow |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| ARUP | 360 | 3 | 7.4 | 2 | 3 |
| 2_56 | 0 | 7.5 | 7.4 | 5.3 | 3 |
| 2_56 | 0 | 3.7 | 1.6 | 5.3 | 3 |
| ARUP | 90 | 35 | 2.1 | 2 | 3 |

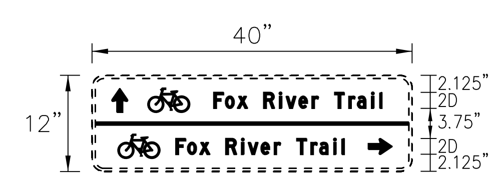
Panel Style: D1-2B.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

### LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | D |
| 15.7 | 17.3 | 19 | 20.6 | 22.4 | 24.7 | 26.2 | 27.8 | 29.5 | 30.9 | 32.6 | 34.6 | 36.4 | 37.4 | 39.2 | 40.2 | 24.8 | 2/1.5 |
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | | D |
| 11 | 12.4 | 13.9 | 15.2 | 17.2 | 19.2 | 20 | 21.6 | 23.3 | 24.1 | 26.1 | 27.8 | 28.9 | 30.7 | 31.7 | | 21 | 2/1.5 |

## SIGN DETAIL
1:20




BORDER
R=1.46"
TH=0.34"

Panel Style: D1-2B.ssi
M.U.T.C.D.: 1988 Edition

| | |
|---|---|
| SIGN NUMBER | FRT-02 |
| WIDTH x HGHT. | 3'-4" x 1'-0" |
| BORDER WIDTH | 0.34" |
| CORNER RADIUS | 1.46" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: Yellow/Yellow |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| ARUP | 360 | 2.5 | 7.4 | 2 | 3 |
| 2_56 | 0 | 7 | 7.4 | 5.3 | 3 |
| 2_56 | 0 | 3.2 | 1.6 | 5.3 | 3 |
| ARUP | 90 | 34.5 | 2.1 | 2 | 3 |

Panel Style: D1-2B.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

### LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | D |
| 15.2 | 16.7 | 18.1 | 19.4 | 21.4 | 23.4 | 24.2 | 25.8 | 27.5 | 28.3 | 30.3 | 32.1 | 33.1 | 34.9 | 35.9 | 21 | 2/1.5 |
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | D |
| 10.5 | 11.9 | 13.4 | 14.7 | 16.7 | 18.7 | 19.5 | 21.1 | 22.8 | 23.6 | 25.6 | 27.3 | 28.4 | 30.2 | 31.2 | 21 | 2/1.5 |

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| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 11 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 208 |

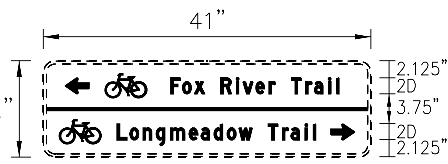
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-12_cmt.dgn

## SIGN DETAIL

1:20




BORDER
R=1.46"
TH=0.34"

Panel Style: D1-2B.ssi
M.U.T.C.D.: 1988 Edition

| | |
|---|---|
| SIGN NUMBER | FRT-03 |
| WIDTH x HGHT. | 3'-5" x 1'-0" |
| BORDER WIDTH | 0.34" |
| CORNER RADIUS | 1.46" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: Yellow/Yellow |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| ARUP | 90 | 2.7 | 7.9 | 2 | 3 |
| 2_56 | 0 | 7.7 | 7.4 | 5.3 | 3 |
| 2_56 | 0 | 2 | 1.6 | 5.3 | 3 |
| ARUP | 90 | 36 | 2.1 | 2 | 3 |

Panel Style: D1-2B.ssi
Dimensions are in inches.tenths

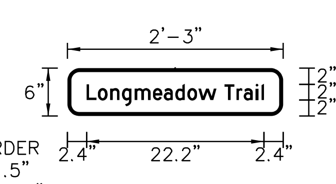
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | | | | | | | D |
| 16 | 17.4 | 18.9 | 20.2 | 22.2 | 24.2 | 25 | 26.6 | 28.2 | 29.1 | 31 | 32.8 | 33.9 | 35.7 | 36.7 | | | | | | | 21 | 2/1.5 |
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | | | | | | D |
| 9.2 | 10.8 | 12.5 | 14.1 | 15.9 | 18.2 | 19.7 | 21.4 | 23 | 24.5 | 26.1 | 28.1 | 29.9 | 31 | 32.7 | 33.8 | | | | | | 24.8 | 2/1.5 |

## SIGN DETAIL

1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 2'-3" x 0'-6" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

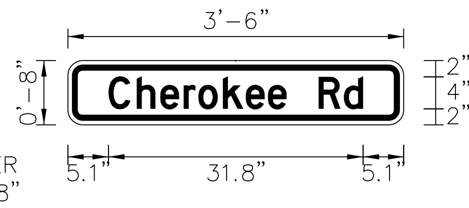
| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | | | | | | D 2000 |
| 2.4 | 3.8 | 5.3 | 6.8 | 8.4 | 10.7 | 12 | 13.5 | 15 | 16.4 | 18.6 | 19.6 | 21.1 | 22 | 23.5 | 24.3 | | | | | | 22.2 | 2/1.5 |

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-13.cmt.dgn

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | W16-8P |
| WIDTH x HGHT. | 3'-6" x 0'-8" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 1.38" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|




BORDER
R=1.38"
TH=0.75"
IN=0.5"

Panel Style: 1 Guide.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: 1 Guide.ssi
Dimensions are in inches.tenths

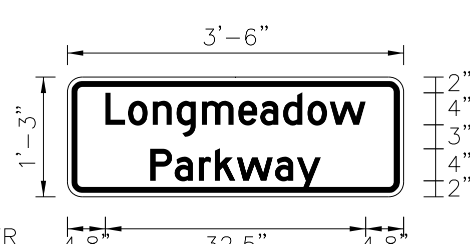
Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | h | e | r | o | k | e | e | | R | d | | D 2000 |
| 5.1 | 8.6 | 11.6 | 14.5 | 16.3 | 19.4 | 22.3 | 25 | 27.4 | 31.4 | 34.5 | 31.8 | 4/3 |

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | name |
| WIDTH x HGHT. | 3'-6" x 1'-3" |
| BORDER WIDTH | 0.75" |
| CORNER RADIUS | 1.38" |
| MOUNTING | Ground |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|




BORDER
R=1.38"
TH=0.75"
IN=0.5"

Panel Style: 1 Guide.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: 1 Guide.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | D 2000 |
| 4.8 | 7.6 | 10.7 | 13.6 | 16.8 | 21.4 | 24.1 | 27 | 30 | 32.7 | 32.5 | 4/3 |
| P | a | r | k | w | a | y | | | | | D 2000 |
| 10.4 | 13.4 | 16.4 | 18.4 | 21.1 | 25.9 | 28.7 | | | | 21.3 | 4/3 |

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| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 13 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 210 |

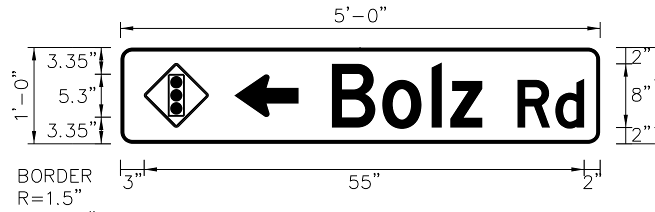
CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-14_cmt.dgn

## SIGN DETAIL

1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street name 8-6in.ssi
M.U.T.C.D.: 2009 Edition

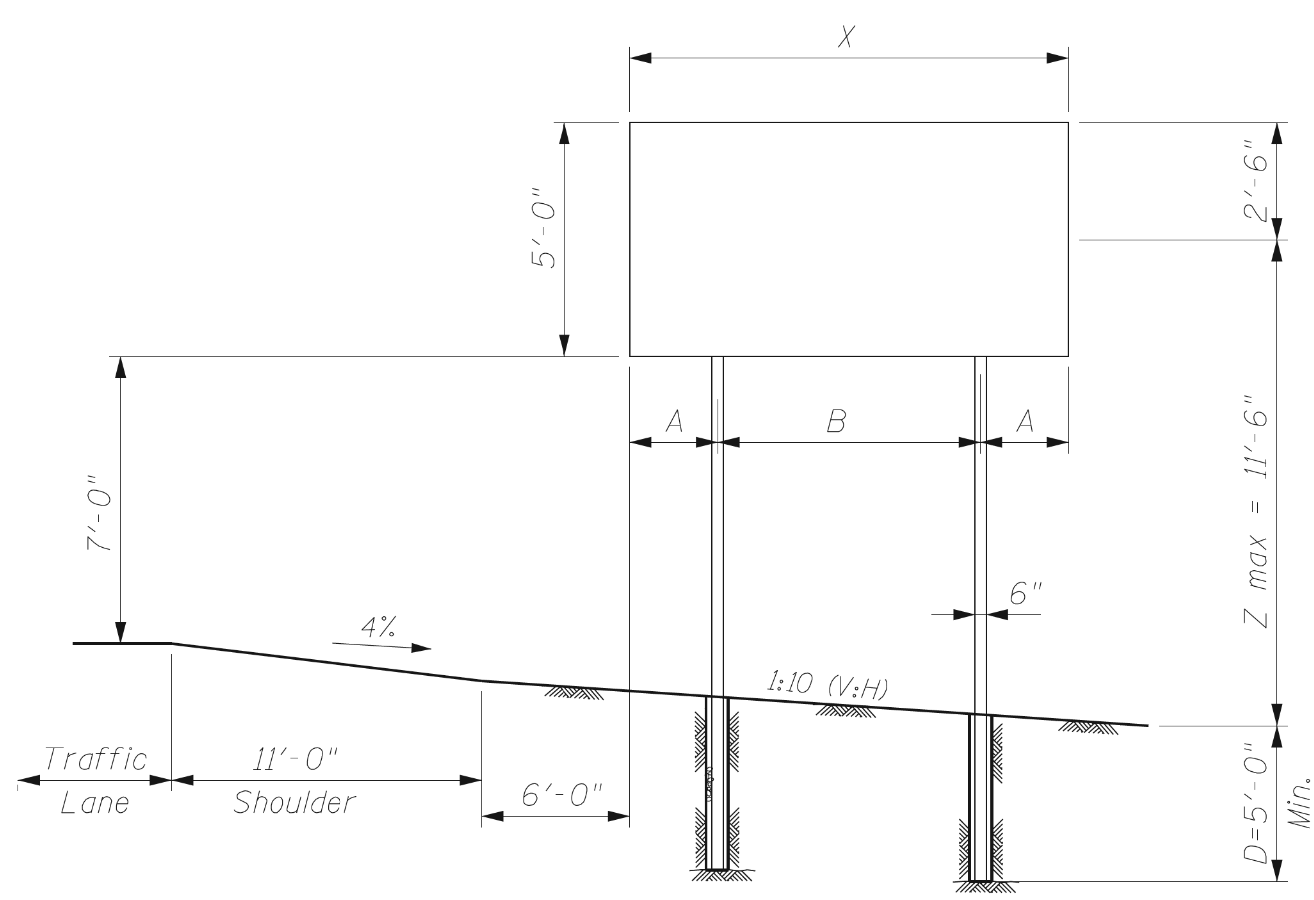
| | |
|---|---|
| SIGN NUMBER | name |
| WIDTH x HGHT. | 5'-0" x 1'-0" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Ground |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 14.3 | 3.3 | 5.3 | 8 |
| | 0 | 3 | 2.1 | 8 | 8 |
| | 0 | 3.1 | 2.1 | 7.8 | 7.8 |

Panel Style: Street name 8-6in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

| LETTER POSITIONS (X) | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|
| B | o | l | z | | D 2000 |
| 26.5 | 32.8 | 38.9 | 41.3 | 18.8 | 8/6 |
| R | d | | | | D 2000 |
| 49.7 | 54.4 | | | 8.3 | 6/4.5 |




| Sign Designation | X, ft | A, ft | B, ft |
|---|---|---|---|
| G-IT4A, C | 6.50 | 1.25 | 4.0 |
| G-IT4B | 7.50 | 1.5 | 4.5 |

SIGN ON 2-6"X6" TIMBER POSTS

CMT

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| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 14 OF 20 SHEETS | STA. TO STA.

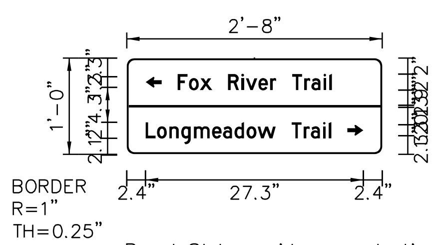
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 211 |

CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-15.cmt.dgn

## SIGN DETAIL
1:20




BORDER
R=1"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SIGN NUMBER | D1-2 (2 Dest - Arrows LR) |
|---|---|
| WIDTH x HGHT. | 2'-8" x 1'-0" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 1" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 2.4 | 8.3 | 1.3 | 2 |
| AR_Type D | 270 | 27.6 | 2.3 | 1.3 | 2 |

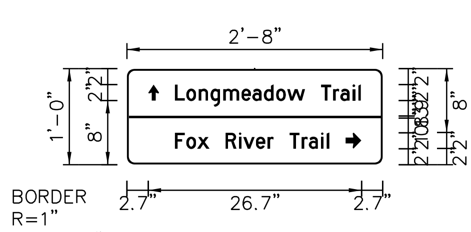
Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | | | | | | | D 2000 |
| 6.4 | 7.8 | 9.2 | 10.7 | 12.7 | 14.4 | 14.9 | 16.5 | 18 | 18.7 | 20.7 | 22.2 | 23.1 | 24.7 | 25.4 | | | | | | | 19.3 | 2/1.5 |
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | | | | | | D 2000 |
| 2.4 | 3.8 | 5.3 | 6.8 | 8.4 | 10.7 | 12.1 | 13.5 | 15 | 16.4 | 18.7 | 20.7 | 22.2 | 23.1 | 24.6 | 25.3 | | | | | | 23.2 | 2/1.5 |

## SIGN DETAIL
1:20




BORDER
R=1"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SIGN NUMBER | D1-2 (2 Dest - Arrows LR) |
|---|---|
| WIDTH x HGHT. | 2'-8" x 1'-0" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 1" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 0 | 2.7 | 8 | 1.3 | 2 |
| AR_Type D | 270 | 27.3 | 2 | 2 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | | | | | | D 2000 |
| 6 | 7.4 | 9 | 10.5 | 12.1 | 14.3 | 15.7 | 17.1 | 18.7 | 20 | 22.3 | 24.3 | 25.8 | 26.7 | 28.2 | 28.9 | | | | | | 23.3 | 2/1.5 |
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | | | | | | | D 2000 |
| 6 | 7.4 | 8.8 | 10.3 | 12.3 | 14 | 14.6 | 16.1 | 17.6 | 18.4 | 20.4 | 21.9 | 22.8 | 24.3 | 25 | | | | | | | 19.3 | 2/1.5 |

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| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
|---|---|---|
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

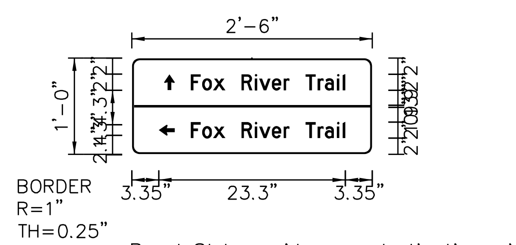
SCALE: 1:20 | SHEET 15 OF 20 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 212 |

CONTRACT NO. 61G02
ILLINOIS FED. AID PROJECT

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | D1-2 (2 Dest - Arrows LR) |
| WIDTH x HGHT. | 2'-6" x 1'-0" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 1" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=1"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 0 | 4 | 8 | 1.3 | 2 |
| AR_Type D | 90 | 3.3 | 2.3 | 1.3 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

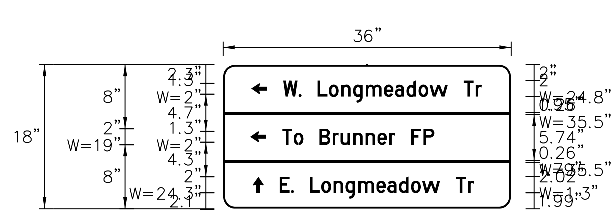
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | D 2000 |
| 7.4 | 8.8 | 10.1 | 11.7 | 13.7 | 15.3 | 15.9 | 17.5 | 18.9 | 19.7 | 21.7 | 23.2 | 24.1 | 25.6 | 26.3 | 19.3 | 2/1.5 |
| F | o | x | | R | i | v | e | r | | T | r | a | i | l | | D 2000 |
| 7.4 | 8.8 | 10.1 | 11.7 | 13.7 | 15.3 | 15.9 | 17.5 | 18.9 | 19.7 | 21.7 | 23.2 | 24.1 | 25.6 | 26.3 | 19.3 | 2/1.5 |

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | D1-3 (3 Dest - Arrows LLR) |
| WIDTH x HGHT. | 3'-0" x 1'-6" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Overhead |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=1.5"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 3.5 | 14.3 | 1.3 | 2 |
| AR_Type D | 90 | 3.4 | 8.3 | 1.3 | 2 |
| AR_Type D | 0 | 3.7 | 2 | 1.3 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

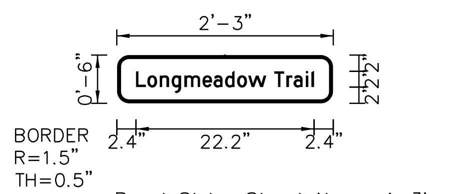
| | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | . | | L | o | n | g | m | e | a | d | o | w | | T | r | | D 2000 |
| 7.5 | 9.4 | 9.8 | 11.8 | 13.2 | 14.8 | 16.2 | 17.8 | 20.1 | 21.5 | 22.9 | 24.4 | 25.8 | 28.1 | 30.1 | 31.6 | 24.8 | 2/1.5 |
| T | o | | B | r | u | n | n | e | r | | F | P | | | | | D 2000 |
| 7.4 | 8.8 | 10 | 12 | 13.7 | 14.7 | 16.3 | 17.8 | 19.3 | 20.8 | 21.5 | 23.5 | 25.1 | | | | 19 | 2/1.5 |
| E | . | | L | o | n | g | m | e | a | d | o | w | | T | r | | D 2000 |
| 7.1 | 8.5 | 8.9 | 10.9 | 12.3 | 13.8 | 15.3 | 16.9 | 19.2 | 20.5 | 22 | 23.5 | 24.9 | 27.1 | 29.1 | 30.6 | 24.3 | 2/1.5 |

## SIGN DETAIL

1:20

| | |
|---|---|
| SIGN NUMBER | D3-1 |
| WIDTH x HGHT. | 2'-3" x 0'-6" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Street Name 4-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

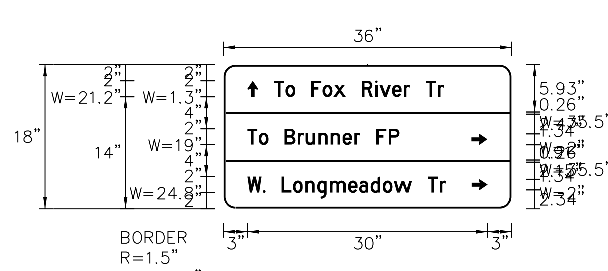
| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | o | n | g | m | e | a | d | o | w | | T | r | a | i | l | | | | | | | D 2000 |
| 2.4 | 3.8 | 5.3 | 6.8 | 8.4 | 10.7 | 12.1 | 13.5 | 15 | 16.4 | 18.7 | 19.7 | 21.2 | 22.1 | 23.6 | 24.3 | | | | | | 22.2 | 2/1.5 |

## SIGN DETAIL

1:20

| | |
|---|---|
| SIGN NUMBER | D1-3 (3 Dest - Arrows LLR) |
| WIDTH x HGHT. | 3'-0" x 1'-6" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Overhead |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 0 | 3 | 14 | 1.3 | 2 |
| AR_Type D | 270 | 31 | 8 | 1.3 | 2 |
| AR_Type D | 270 | 31 | 2.3 | 1.3 | 2 |




BORDER
R=1.5"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

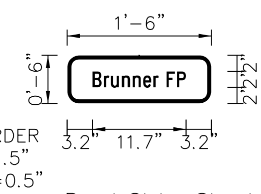
LETTER POSITIONS (X)

| | | | | | | | | | | | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T | o | | F | o | x | | R | i | v | e | r | | T | r | | | | | | | | D 2000 |
| 6.3 | 7.8 | 9 | 11 | 12.4 | 13.7 | 15.3 | 17.3 | 19 | 19.5 | 21.1 | 22.6 | 23.3 | 25.3 | 26.8 | | | | | | | 21.2 | 2/1.5 |
| T | o | | B | r | u | n | n | e | r | | F | P | | | | | | | | | | D 2000 |
| 3 | 4.4 | 5.6 | 7.6 | 9.3 | 10.3 | 11.8 | 13.4 | 14.9 | 16.3 | 17.1 | 19.1 | 20.6 | | | | | | | | | 19 | 2/1.5 |
| W | . | | L | o | n | g | m | e | a | d | o | w | | T | r | | | | | | | D 2000 |
| 3 | 4.9 | 5.3 | 7.3 | 8.7 | 10.2 | 11.7 | 13.3 | 15.6 | 16.9 | 18.4 | 19.9 | 21.3 | 23.5 | 25.5 | 27 | | | | | | 24.8 | 2/1.5 |

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-18.cmt.dgn

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | 6in Bottom |
| WIDTH x HGHT. | 1'-6" x 0'-6" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 6-3in.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|

Panel Style: Street Name 6-3in.ssi
Dimensions are in inches.tenths

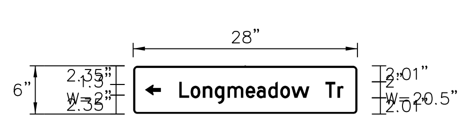
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| B | r | u | n | n | e | r | | F | P | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | C 2000 |
| 3.2 | 4.6 | 5.4 | 6.8 | 8.2 | 9.5 | 10.8 | 11.4 | 12.4 | 13.7 | 11.7 | 2/1.5 |

## SIGN DETAIL
1:20

| | |
|---|---|
| SIGN NUMBER | D1-1 (1 Dest - Arrow L or R) |
| WIDTH x HGHT. | 2'-4" x 0'-6" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 0.5" |
| MOUNTING | Ground |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |




BORDER
R=0.5"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 1.5 | 2.3 | 1.3 | 2 |

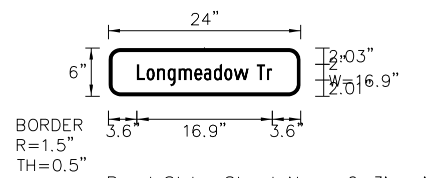
Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| L | o | n | g | m | e | a | d | o | w | | T | r | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | D 2000 |
| 5.7 | 7.2 | 8.7 | 10.2 | 11.8 | 14.1 | 15.4 | 16.9 | 18.4 | 19.8 | 22 | 24 | 25.5 | 20.5 | 2/1.5 |

## SIGN DETAIL
1:20




BORDER
R=1.5"
TH=0.5"

Panel Style: Street Name 6-3in.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | 6in Bottom |
| WIDTH x HGHT. | 2'-0" x 0'-6" |
| BORDER WIDTH | 0.5" |
| CORNER RADIUS | 1.5" |
| MOUNTING | Ground |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| | | | | | |

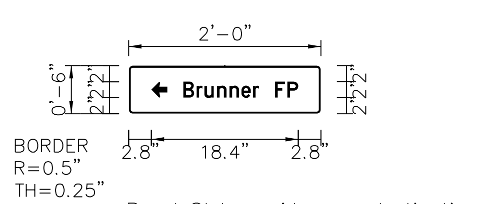
Panel Style: Street Name 6-3in.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| L | o | n | g | m | e | a | d | o | w | | T | r | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.6 | 4.8 | 6.1 | 7.4 | 8.8 | 10.7 | 11.9 | 13.1 | 14.5 | 15.6 | 17.5 | 18.5 | 19.8 | | | | | | | | 16.9 | C 2000 2/1.5 |

## SIGN DETAIL
1:20




BORDER
R=0.5"
TH=0.25"

Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| | |
|---|---|
| SIGN NUMBER | D1-1 (1 Dest - Arrow L or R) |
| WIDTH x HGHT. | 2'-0" x 0'-6" |
| BORDER WIDTH | 0.25" |
| CORNER RADIUS | 0.5" |
| MOUNTING | Telescoping Steel |
| BACKGROUND | TYPE: Reflective |
| | COLOR: Green |
| LEGEND/BORDER | TYPE: Reflective |
| | COLOR: White/White |

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 90 | 2.8 | 2 | 2 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| B | r | u | n | n | e | r | | F | P | | | | | | | | | | | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.8 | 8.5 | 9.5 | 11 | 12.6 | 14.1 | 15.5 | 16.3 | 18.3 | 19.8 | | | | | | | | | | | 14.4 | D 2000 2/1.5 |



| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 19 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 216 |

CONTRACT NO. 61G02

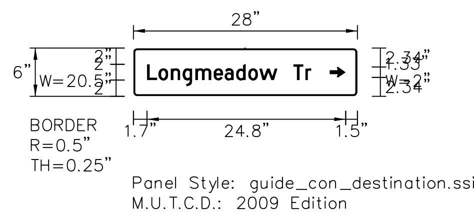
ILLINOIS FED. AID PROJECT

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC-sht-signing-panel-details-20.cmt.dgn

## SIGN DETAIL

1:20

| SIGN NUMBER | D1-1 (1 Dest – Arrow L or R) | |
|---|---|---|
| WIDTH x HGHT. | 2'-4" x 0'-6" | |
| BORDER WIDTH | 0.25" | |
| CORNER RADIUS | 0.5" | |
| MOUNTING | Ground | |
| BACKGROUND | TYPE: | Reflective |
| | COLOR: | Green |
| LEGEND/BORDER | TYPE: | Reflective |
| | COLOR: | White/White |




Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 270 | 24.6 | 2.3 | 1.3 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

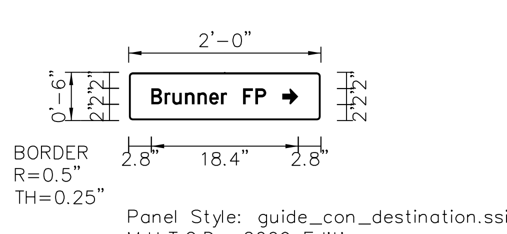
LETTER POSITIONS (X)

| L | o | n | g | m | e | a | d | o | w | | T | r | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | D 2000 |
| 1.7 | 3.1 | 4.7 | 6.2 | 7.8 | 10 | 11.4 | 12.8 | 14.4 | 15.7 | 18 | 20 | 21.5 | 20.5 | 2/1.5 |

## SIGN DETAIL

1:20

| SIGN NUMBER | D1-1 (1 Dest – Arrow L or R) | |
|---|---|---|
| WIDTH x HGHT. | 2'-0" x 0'-6" | |
| BORDER WIDTH | 0.25" | |
| CORNER RADIUS | 0.5" | |
| MOUNTING | Telescoping Steel | |
| BACKGROUND | TYPE: | Reflective |
| | COLOR: | Green |
| LEGEND/BORDER | TYPE: | Reflective |
| | COLOR: | White/White |




Panel Style: guide_con_destination.ssi
M.U.T.C.D.: 2009 Edition

| SYMBOL | ROT | X | Y | WID | HT |
|---|---|---|---|---|---|
| AR_Type D | 270 | 19.2 | 2 | 2 | 2 |

Panel Style: guide_con_destination.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

| B | r | u | n | n | e | r | | F | P | LENGTH | SERIES/SIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | D 2000 |
| 2.8 | 4.5 | 5.4 | 7 | 8.6 | 10.1 | 11.5 | 12.3 | 14.3 | 15.8 | 14.4 | 2/1.5 |

CMT

License No. 184-000613 Copyright CMT, Inc.

| USER NAME = Jeff Sedig | DESIGNED - PML | REVISED - |
|---|---|---|
| | DRAWN - PML | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**SIGN PLAN DETAILS**

SCALE: 1:20 | SHEET 20 OF 20 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 217 |

CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT

## Telescoping Sign Post

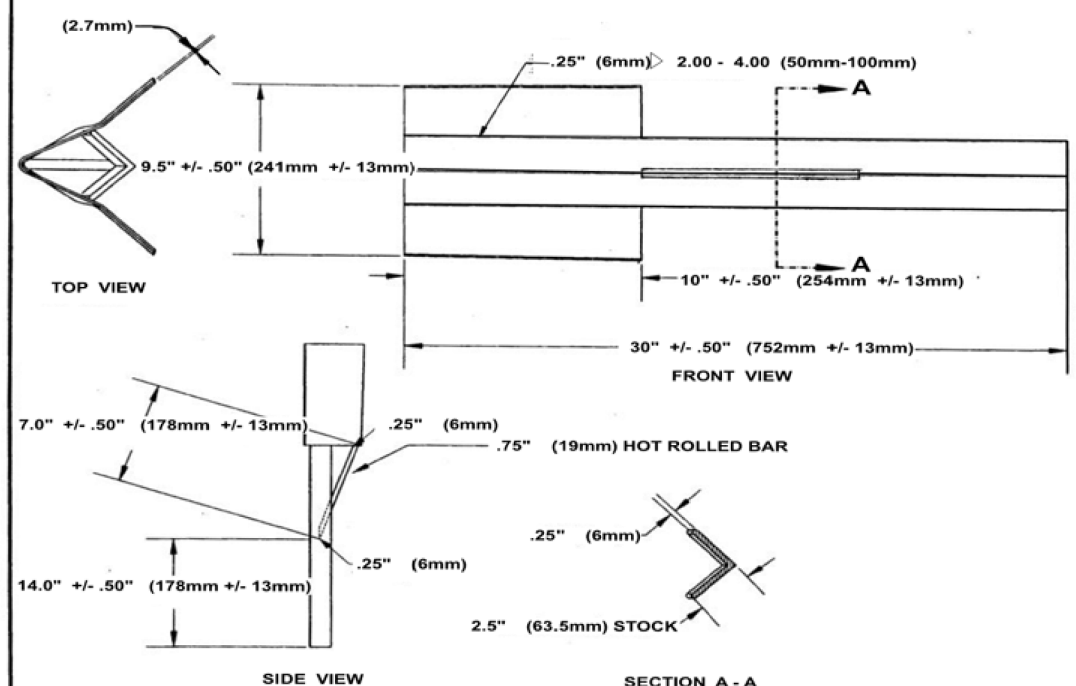
The post shall be a square tube formed of 12 gauge steel according to the standard specification for cold rolled carbon steel sheets commercial quality ASTM A 1008 (A 1008M). The post shall be formed to size and, if necessary, shall be welded in such a manner that weld or flash shall not interfere with telescoping. Holes 7/16 ± 1/64 in. (11 ± 0.4 mm) will be spaced on 1 in. (25 mm) centers on at least two opposite sides. The holes shall align to accept a 3/8 in. (10 mm) bolt through the post at any location. The post shall have a smooth galvanized finish applied either before or after forming. For all other regulations refer to Section 1093 of the latest version of Illinois Standard Specifications for Bridge and Road Construction.

## Sign Bases

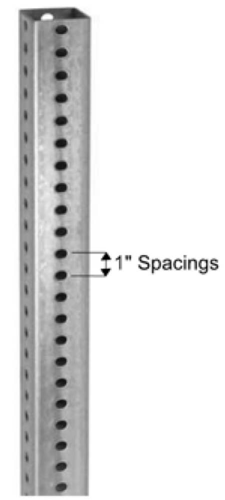
30" bases for breakaway telescoping sign supports shall be model V-Loc, #200-VS3, for use in soft soil and shall be manufactured by TAPCO (Traffic & Parking Control Co., Inc.)

## Sign Base Wedge

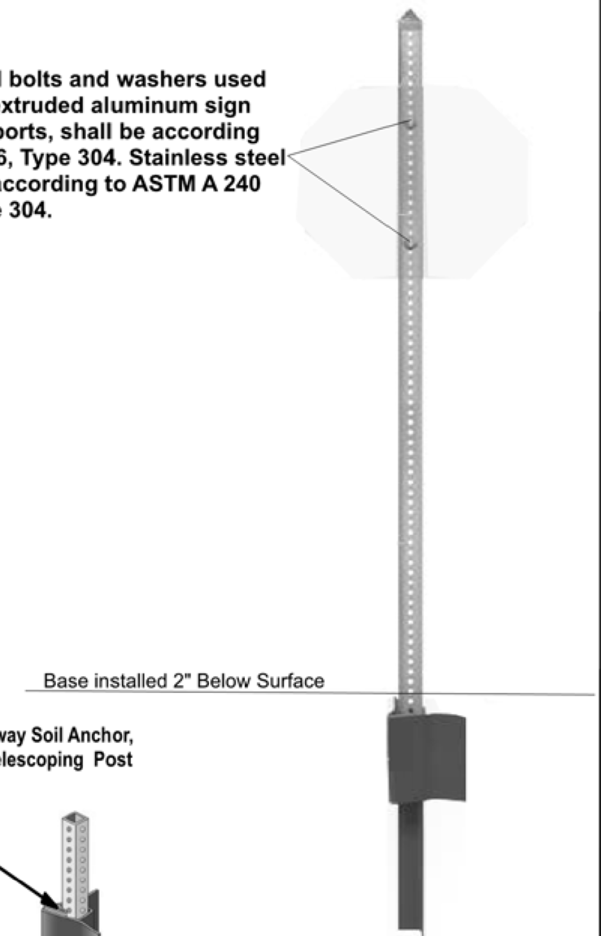
**Galvanized Steel Wedge SWI for V-Loc® post bases**



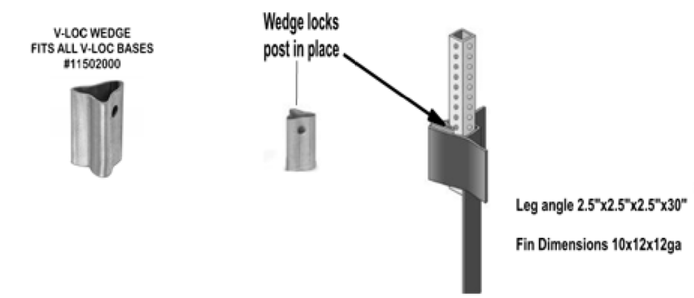

**12 Gauge Telescoping Galvanized Square Post, 2"W x 2"D x min. 10'**




Stainless steel bolts and washers used for fastening extruded aluminum sign panels to supports, shall be according to ASTM A 276, Type 304. Stainless steel nuts shall be according to ASTM A 240 (A 240M), Type 304.




**Tapco #200-VS3 Traffic Post Breakaway Soil Anchor, for use with 2"x 2" Square Telescoping Post**




| Date | Revisions |
| --- | --- |
| 07/17 | Sign Post Base Hardware |
| | |
| | |
| | |
| | |
| | |

**Specifications Telescoping Sign Post & Soil Bases**

Kane County Division of Transportation

**Specifications Telescoping Sign Post & Soil Bases**

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section02-sht-signing-detail-01_cmt.dgn

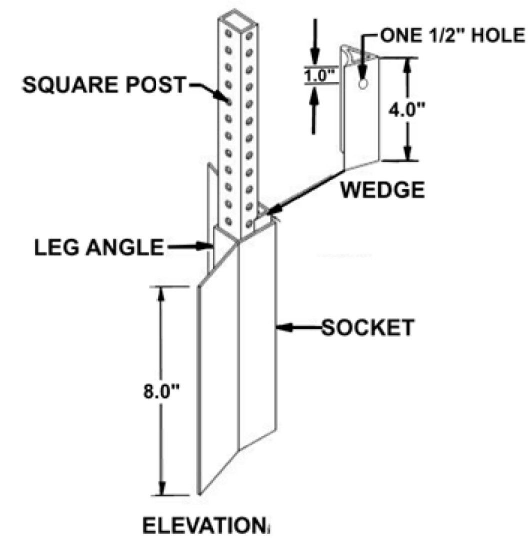
LOCAL COORDINATE SYSTEM

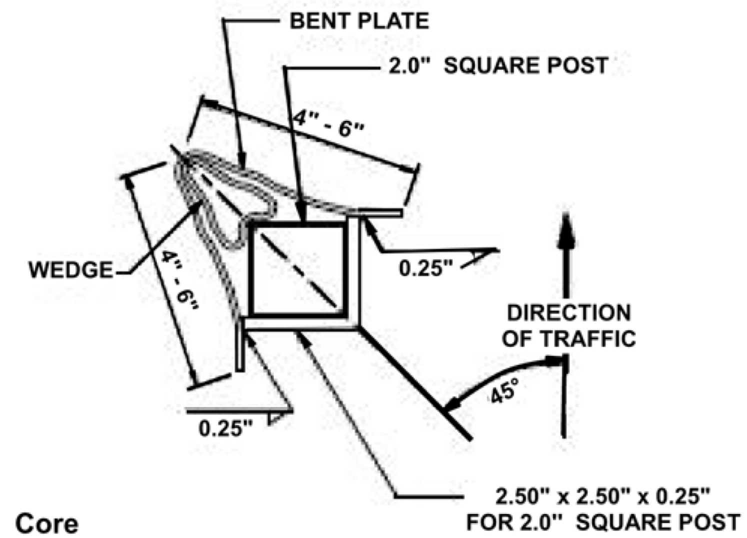
| | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| CMT License No. 184-000613 Copyright CMT, Inc. | USER NAME = Jeff Sedig | DESIGNED - JMS | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SIGNING PLAN TELESCOPING STEEL SIGN SUPPORT (SPECIAL) DETAIL | |
| | | DRAWN - JPZ | REVISED - | | | |
| | PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - | | | |
| | PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: - | SHEET 1 OF 2 SHEETS STA. - TO STA. - |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| --- | --- | --- | --- | --- |
| 2298 | 18-00215-21-BR | KANE | 415 | 218 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

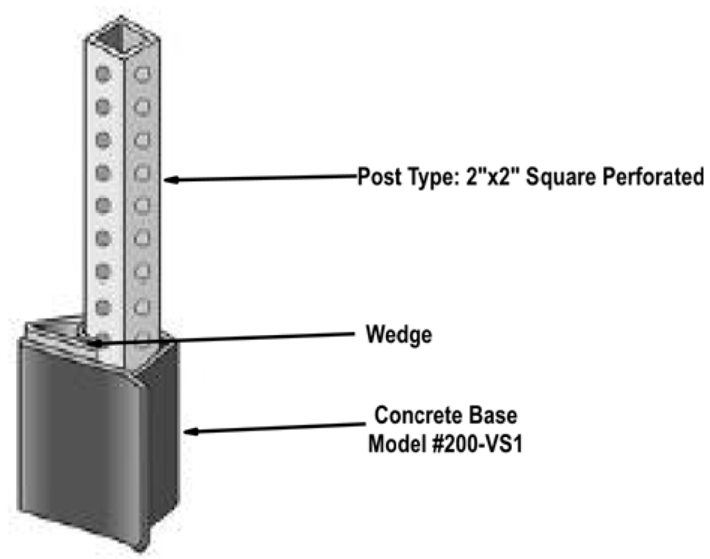
## Sign Bases for Concrete & Asphalt Installation

**Sign Bases for Concrete & Asphalt Installation, reusable breakaway anchors allow you to replace posts in a matter of a few minutes. The V-LocÂ® anchor socket can be installed into concrete, asphalt or dirt safely by one person, by either hand or power driver. Once the anchor is installed, simply insert the post, and drive in the patented wedge, which will lock the post into place without the need for any additional hardware. The V-LocÂ® requires no concrete in the soil. 200-VS1 Model, for 2" x 2" square posts going into Concrete, includes the wedge, post and anchor.**

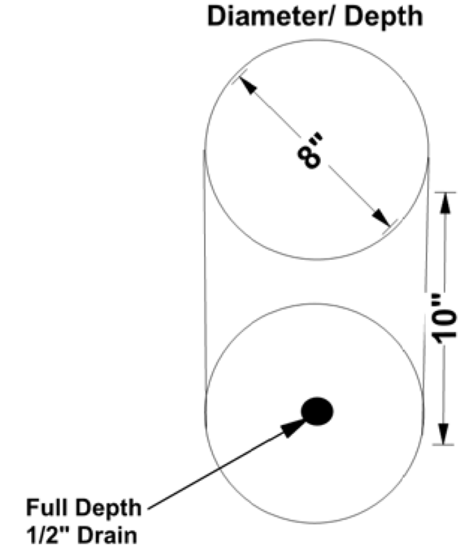



### Concrete Base Assembly




### Core Diameter/ Depth




| Kane County Division of Transportation |
|---|
| Specifications Concrete & Asphalt Bases |

| Date | Revisions |
|---|---|
| 07/17 | Sign Bases Concrete & Asphalt |
| | |
| | |
| | |
| | |
| | |

**Specifications Concrete & Asphalt Bases**

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section\C2-sht-signing-detail-02_cmt.dgn

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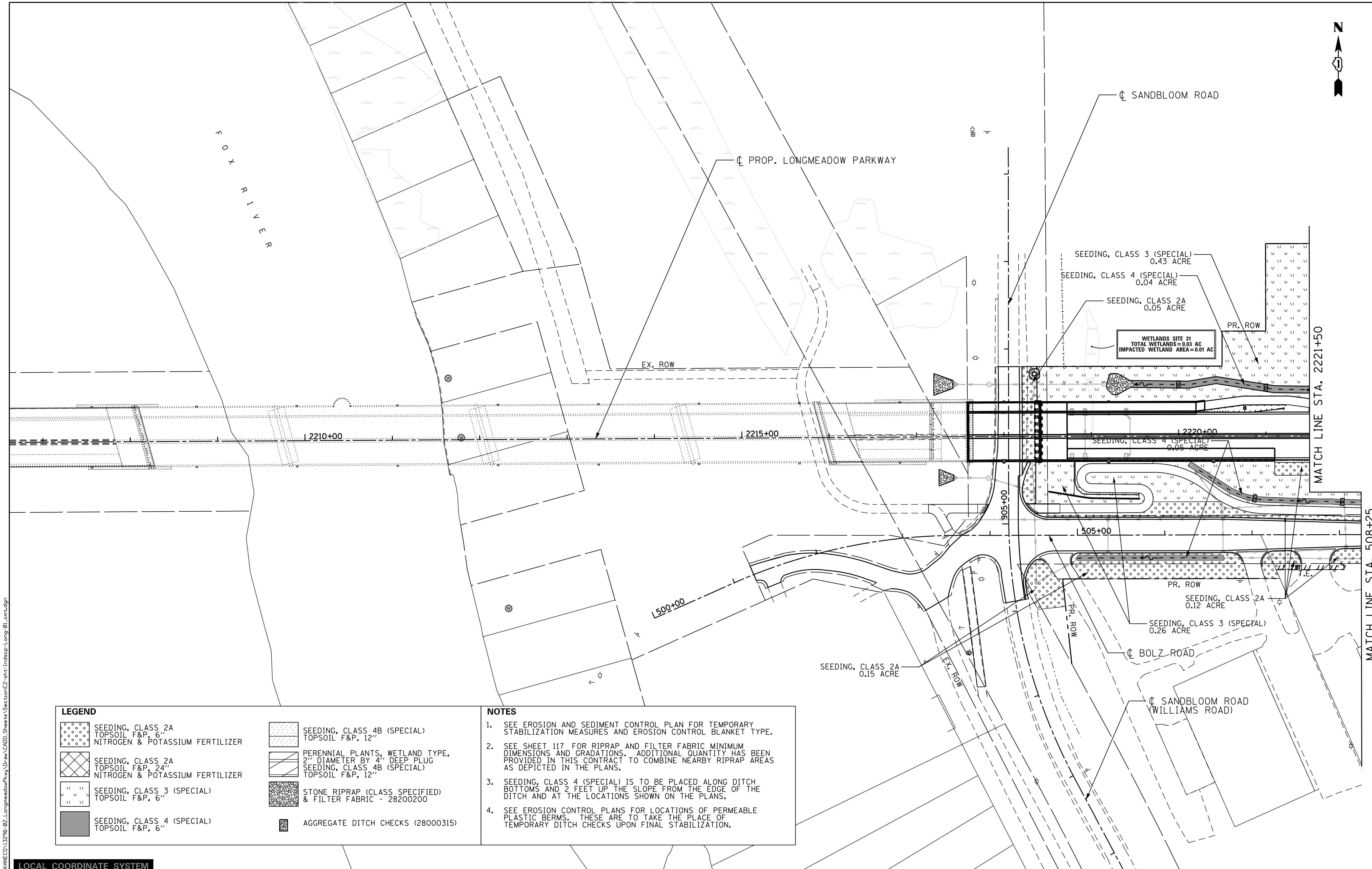
| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - JMS | REVISED - |
| | DRAWN - JPZ | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN**
**TELESCOPING STEEL SIGN SUPPORT (SPECIAL) DETAIL**

SCALE: - | SHEET 2 OF 2 SHEETS | STA. - TO STA. -

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 219 |
| | | CONTRACT NO. 61G02 | | |
| | ILLINOIS | FED. AID PROJECT | | |




**LEGEND**

- SEEDING, CLASS 2A; TOPSOIL F&P, 6"; NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 2A; TOPSOIL F&P, 24"; NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 3 (SPECIAL); TOPSOIL F&P, 6"
- SEEDING, CLASS 4 (SPECIAL); TOPSOIL F&P, 6"
- SEEDING, CLASS 4B (SPECIAL); TOPSOIL F&P, 12"
- PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG; SEEDING, CLASS 4B (SPECIAL); TOPSOIL F&P, 12"
- STONE RIPRAP (CLASS SPECIFIED) & FILTER FABRIC - 28200200
- AGGREGATE DITCH CHECKS (28000315)

**NOTES**

1. SEE EROSION AND SEDIMENT CONTROL PLAN FOR TEMPORARY STABILIZATION MEASURES AND EROSION CONTROL BLANKET TYPE.
2. SEE SHEET 117 FOR RIPRAP AND FILTER FABRIC MINIMUM DIMENSIONS AND GRADATIONS. ADDITIONAL QUANTITY HAS BEEN PROVIDED IN THIS CONTRACT TO COMBINE NEARBY RIPRAP AREAS AS DEPICTED IN THE PLANS.
3. SEEDING, CLASS 4 (SPECIAL) IS TO BE PLACED ALONG DITCH BOTTOMS AND 2 FEET UP THE SLOPE FROM THE EDGE OF THE DITCH AND AT THE LOCATIONS SHOWN ON THE PLANS.
4. SEE EROSION CONTROL PLANS FOR LOCATIONS OF PERMEABLE PLASTIC BERMS. THESE ARE TO TAKE THE PLACE OF TEMPORARY DITCH CHECKS UPON FINAL STABILIZATION.

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC2-sht-lndscp-Long-01_cmt.dgn

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| | | |
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| USER NAME = Jeff Sedig | DESIGNED - JMS | REVISED - |
| | DRAWN - JMS | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=50' | SHEET 1 OF 5 SHEETS | STA. 2207+50 TO STA. 2221+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 220 |

CONTRACT NO. 61G02

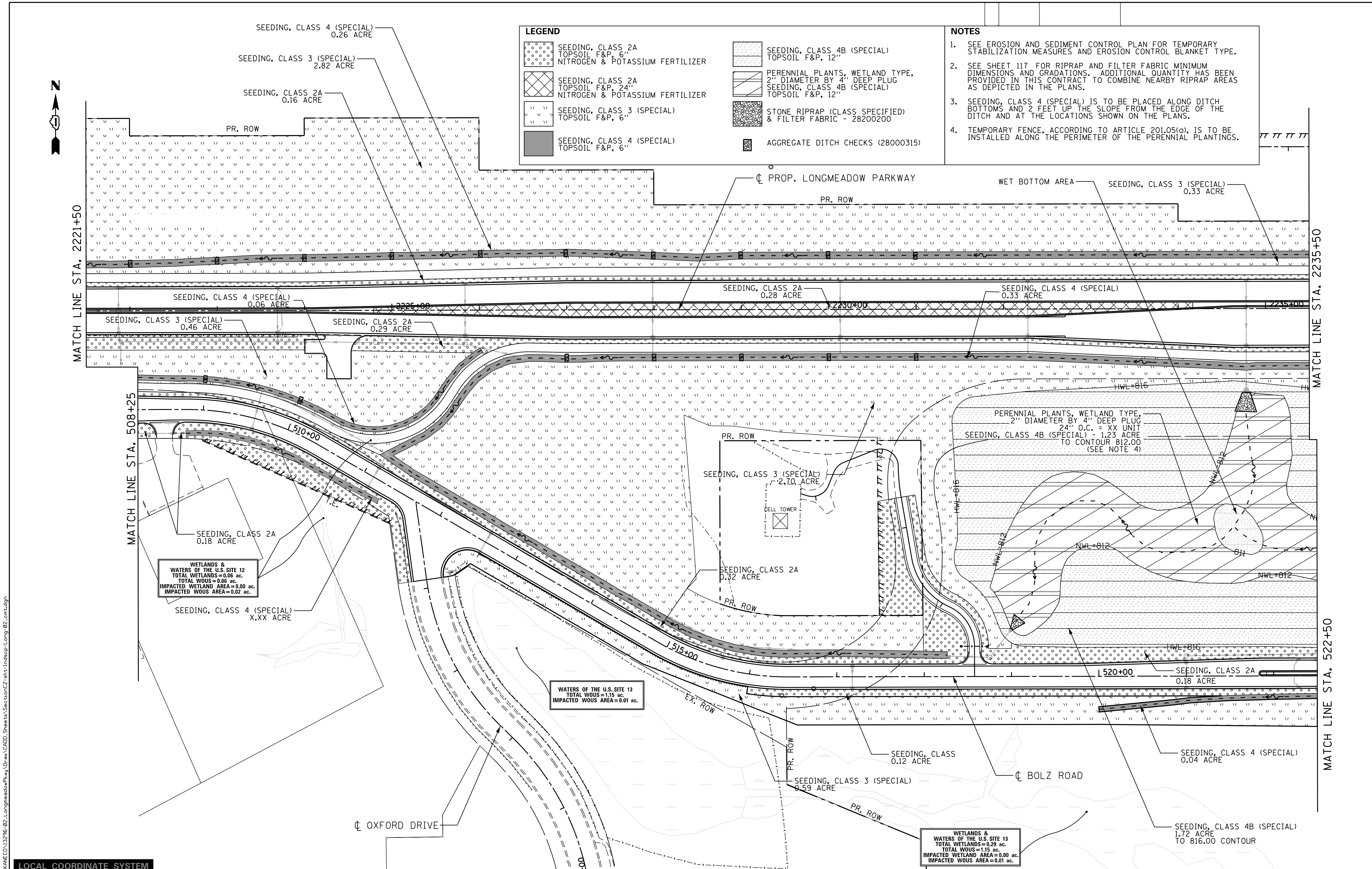
ILLINOIS FED. AID PROJECT

## LEGEND

- SEEDING, CLASS 2A, TOPSOIL F&P, 6", NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 2A, TOPSOIL F&P, 24", NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 3 (SPECIAL), TOPSOIL F&P, 6"
- SEEDING, CLASS 4 (SPECIAL), TOPSOIL F&P, 6"
- SEEDING, CLASS 4B (SPECIAL), TOPSOIL F&P, 12"
- PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG, SEEDING, CLASS 4B (SPECIAL), TOPSOIL F&P, 12"
- STONE RIPRAP (CLASS SPECIFIED) & FILTER FABRIC - 28200200
- AGGREGATE DITCH CHECKS (28000315)

## NOTES

1. SEE EROSION AND SEDIMENT CONTROL PLAN FOR TEMPORARY STABILIZATION MEASURES AND EROSION CONTROL BLANKET TYPE.
2. SEE SHEET 117 FOR RIPRAP AND FILTER FABRIC MINIMUM DIMENSIONS AND GRADATIONS. ADDITIONAL QUANTITY HAS BEEN PROVIDED IN THIS CONTRACT TO COMBINE NEARBY RIPRAP AREAS AS DEPICTED IN THE PLANS.
3. SEEDING, CLASS 4 (SPECIAL) IS TO BE PLACED ALONG DITCH BOTTOMS AND 2 FEET UP THE SLOPE FROM THE EDGE OF THE DITCH AND AT THE LOCATIONS SHOWN ON THE PLANS.
4. TEMPORARY FENCE, ACCORDING TO ARTICLE 201.05(a), IS TO BE INSTALLED ALONG THE PERIMETER OF THE PERENNIAL PLANTINGS.

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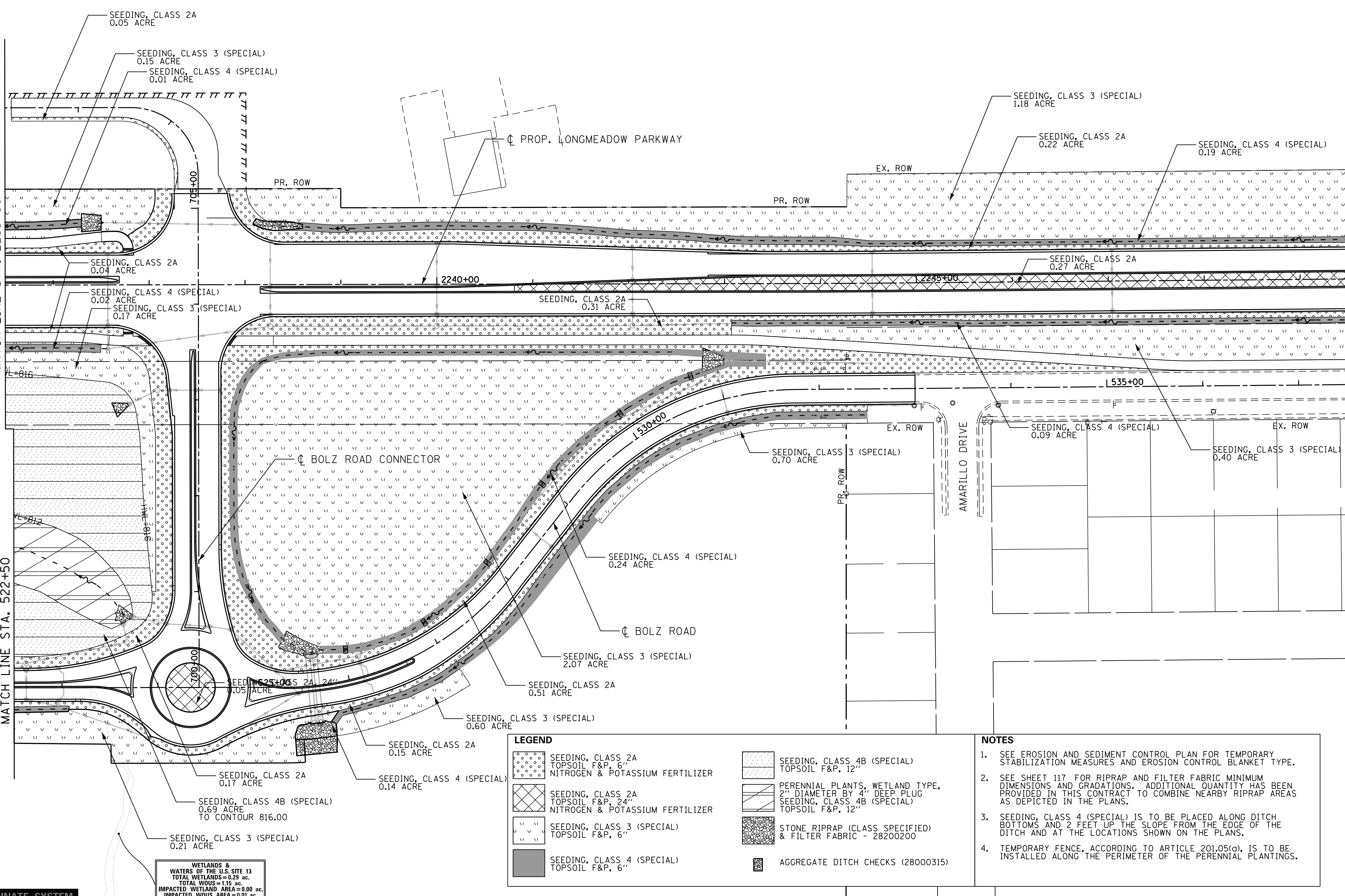
| CMT | USER NAME = Jeff Sedig | DESIGNED - JMS | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | LANDSCAPING PLAN LONGMEADOW PARKWAY |
|---|---|---|---|---|---|
| | | DRAWN - JMS | REVISED - | | |
| | PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - | | |
| License No. 184-000613 | PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: 1"=50' SHEET 2 OF 5 SHEETS STA. 2221+50 TO STA. 2235+50 |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 221 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |




## LEGEND

- SEEDING, CLASS 2A, TOPSOIL F&P, 6", NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 2A, TOPSOIL F&P, 24", NITROGEN & POTASSIUM FERTILIZER
- SEEDING, CLASS 3 (SPECIAL), TOPSOIL F&P, 6"
- SEEDING, CLASS 4 (SPECIAL), TOPSOIL F&P, 6"
- SEEDING, CLASS 4B (SPECIAL), TOPSOIL F&P, 12"
- PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG, SEEDING, CLASS 4B (SPECIAL), TOPSOIL F&P, 12"
- STONE RIPRAP (CLASS SPECIFIED) & FILTER FABRIC - 28200200
- AGGREGATE DITCH CHECKS (28000315)

## NOTES

1. SEE EROSION AND SEDIMENT CONTROL PLAN FOR TEMPORARY STABILIZATION MEASURES AND EROSION CONTROL BLANKET TYPE.
2. SEE SHEET 117 FOR RIPRAP AND FILTER FABRIC MINIMUM DIMENSIONS AND GRADATIONS. ADDITIONAL QUANTITY HAS BEEN PROVIDED IN THIS CONTRACT TO COMBINE NEARBY RIPRAP AREAS AS DEPICTED IN THE PLANS.
3. SEEDING, CLASS 4 (SPECIAL) IS TO BE PLACED ALONG DITCH BOTTOMS AND 2 FEET UP THE SLOPE FROM THE EDGE OF THE DITCH AND AT THE LOCATIONS SHOWN ON THE PLANS.
4. TEMPORARY FENCE, ACCORDING TO ARTICLE 201.05(a), IS TO BE INSTALLED ALONG THE PERIMETER OF THE PERENNIAL PLANTINGS.

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section C2-sht-lndscp-Long-03.cmt.dgn

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|---|---|---|---|
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| | DRAWN - JMS | REVISED - | |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - | |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=50' | SHEET 3 OF 5 SHEETS | STA. 2235+50 TO STA. 2249+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 222 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

## LEGEND

| | |
|---|---|
| SEEDING, CLASS 2A<br>TOPSOIL F&P, 6"<br>NITROGEN & POTASSIUM FERTILIZER | SEEDING, CLASS 4B (SPECIAL)<br>TOPSOIL F&P, 12" |
| SEEDING, CLASS 2A<br>TOPSOIL F&P, 24"<br>NITROGEN & POTASSIUM FERTILIZER | PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG<br>SEEDING, CLASS 4B (SPECIAL)<br>TOPSOIL F&P, 12" |
| SEEDING, CLASS 3 (SPECIAL)<br>TOPSOIL F&P, 6" | STONE RIPRAP (CLASS SPECIFIED)<br>& FILTER FABRIC - 28200200 |
| SEEDING, CLASS 4 (SPECIAL)<br>TOPSOIL F&P, 6" | AGGREGATE DITCH CHECKS (28000315) |

## NOTES

1. SEE EROSION AND SEDIMENT CONTROL PLAN FOR TEMPORARY STABILIZATION MEASURES AND EROSION CONTROL BLANKET TYPE.
2. SEE SHEET 117 FOR RIPRAP AND FILTER FABRIC MINIMUM DIMENSIONS AND GRADATIONS. ADDITIONAL QUANTITY HAS BEEN PROVIDED IN THIS CONTRACT TO COMBINE NEARBY RIPRAP AREAS AS DEPICTED IN THE PLANS.
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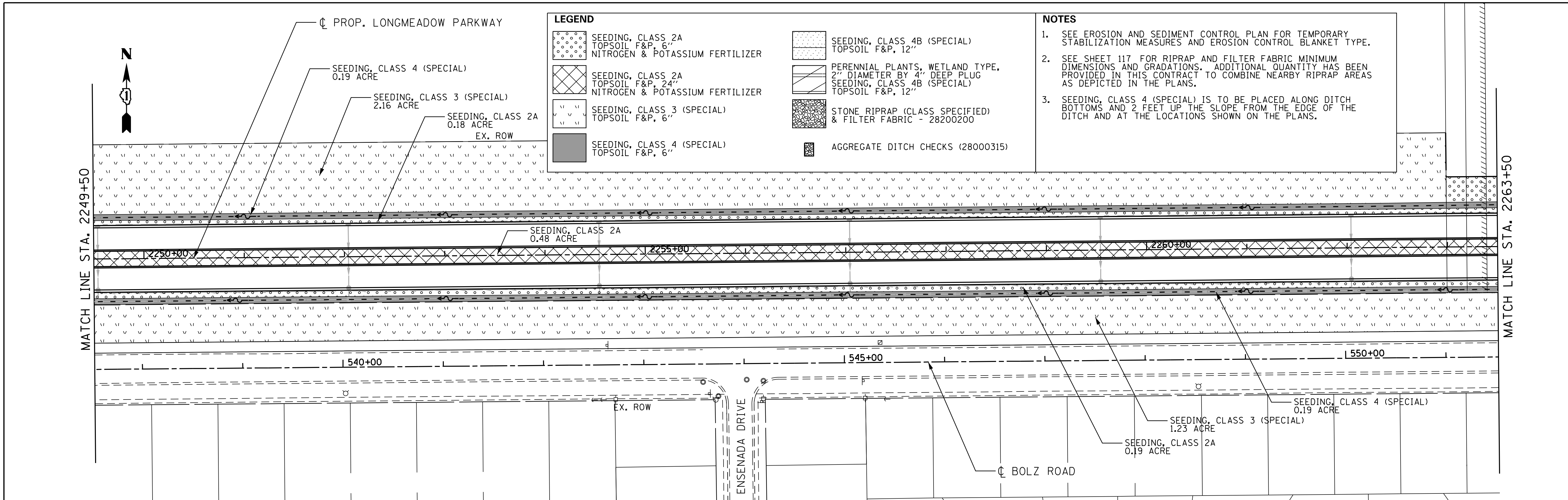


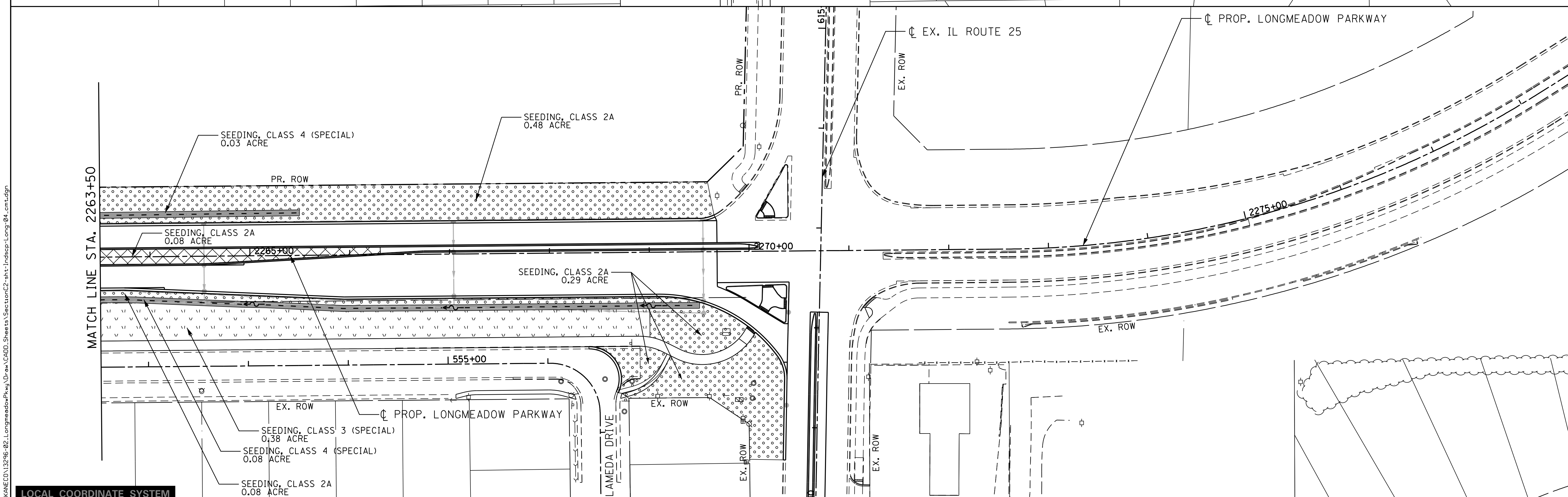


LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC2-sht-lndscp-Long-04_cmt.dgn

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|---|---|---|
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| | DRAWN - JMS | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN**
**LONGMEADOW PARKWAY**

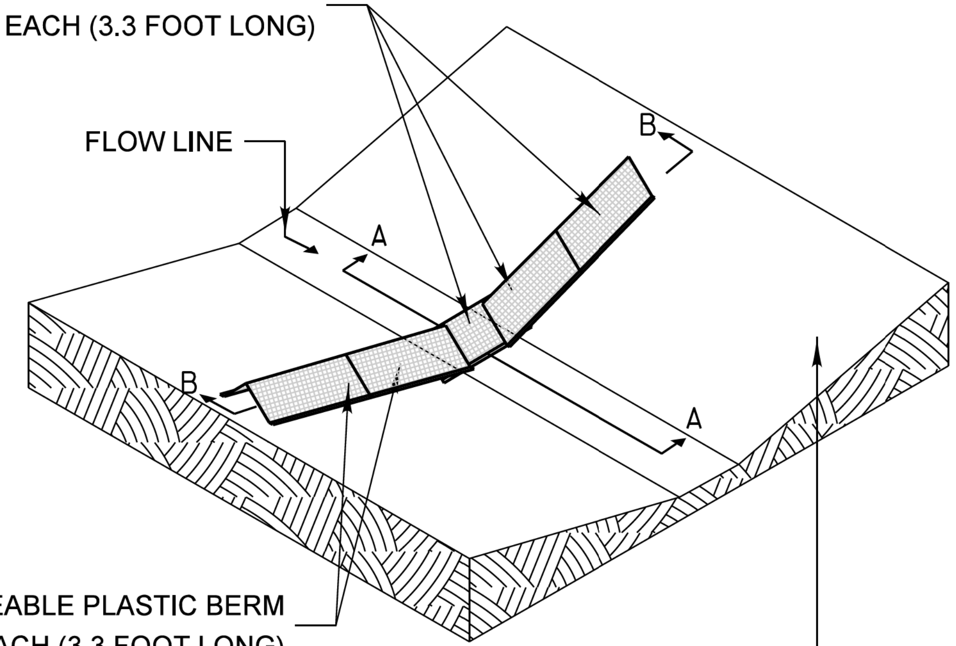
SCALE: 1"=50' | SHEET 4 OF 5 SHEETS | STA. 2249+50 TO STA. 2277+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 223 |

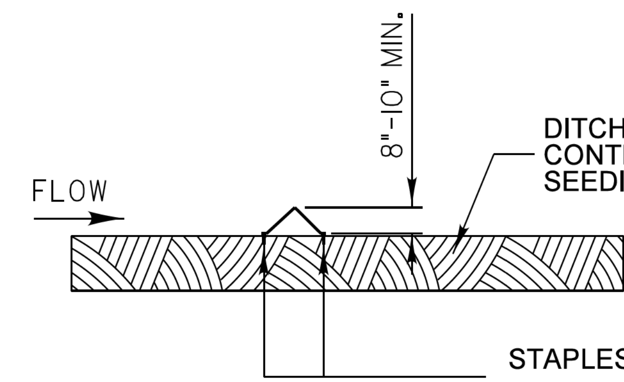
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

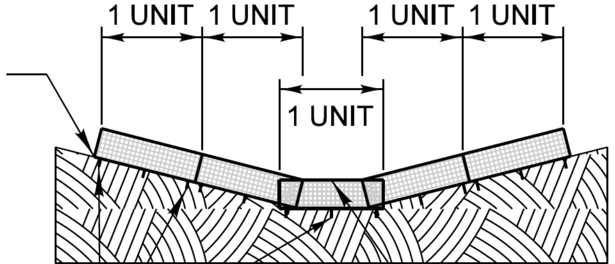
# FOR USE WHILE ESTABLISHING FINAL LANDSCAPING




**PERMEABLE PLASTIC BERM**
**ISOMETRIC**




**SECTION A-A**




**SECTION B-B**

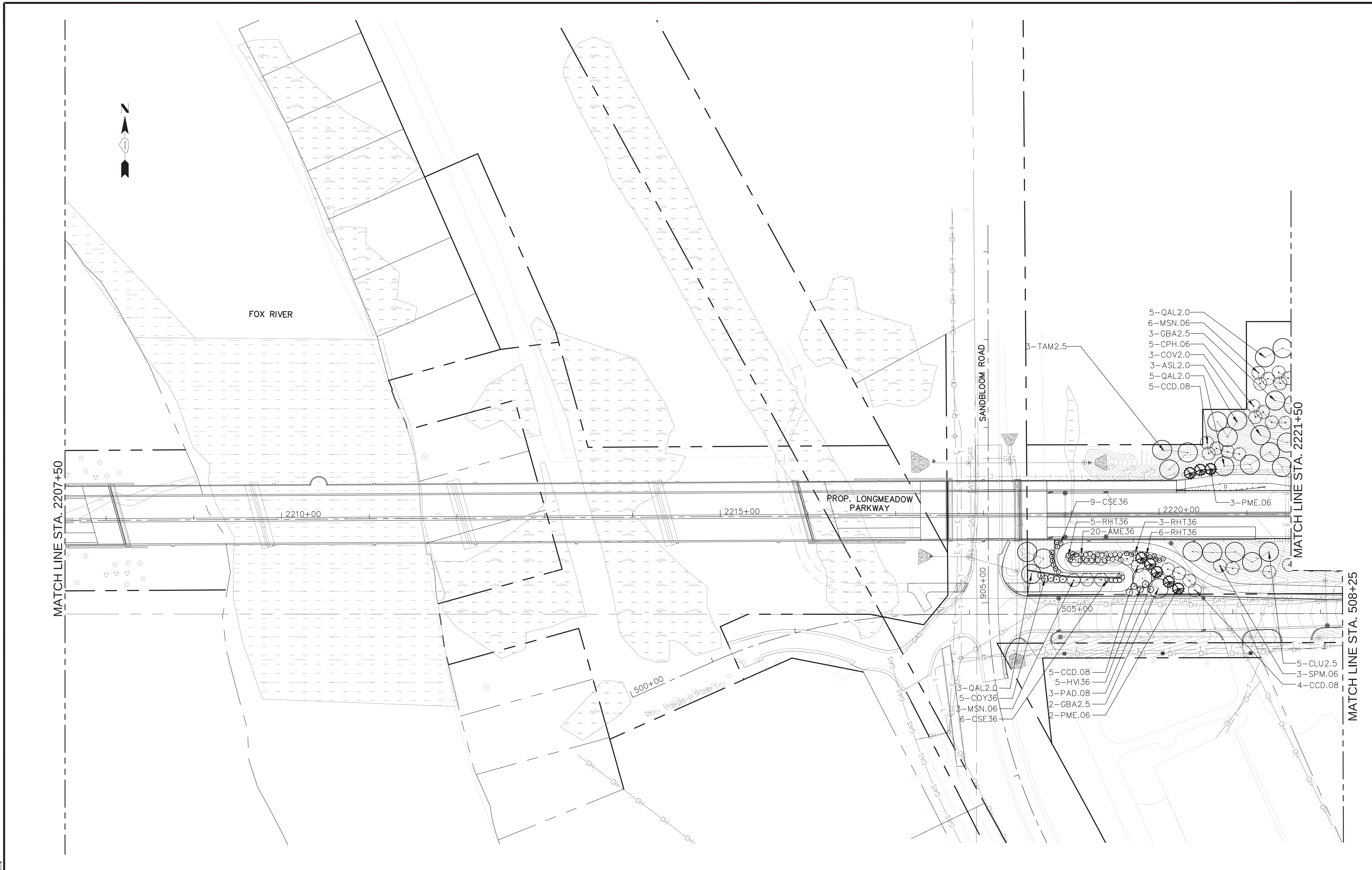
NOTES:

THE PERMEABLE PLASTIC BERM SHALL REPLACE THE TEMPORARY DITCH CHECK AFTER THE INSTALLATION OF EROSION CONTROL BLANKET AND SEEDING.

EACH PERMEABLE PLASTIC BERM IS 3.3 FEET IN LENGTH. THE MINIMUM INSTALLATION IN A DITCH SHALL BE THREE UNITS. THE INSTALLATION SHOWN WILL BE MEASURED AND PAID FOR AS A PERMEABLE PLASTIC BERM 16.5 FEET IN LENGTH (5 UNITS).

STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

POINT 1 MUST BE HIGHER THAN POINT 2 TO INSURE THAT WATER FLOWS THROUGH OR OVER THE BERM AND NOT AROUND THE ENDS.




HITCHCOCK DESIGN GROUP
creating better places

| | | |
|---|---|---|
| USER NAME = | DESIGNED — XS/MPW | REVISED - |
| | DRAWN — XS/MPW | REVISED - |
| PLOT SCALE= 1:1 | CHECKED — TCK | REVISED - |
| PLOT DATE = 2/11/20 | DATE — 2/11/20 | REVISED - |

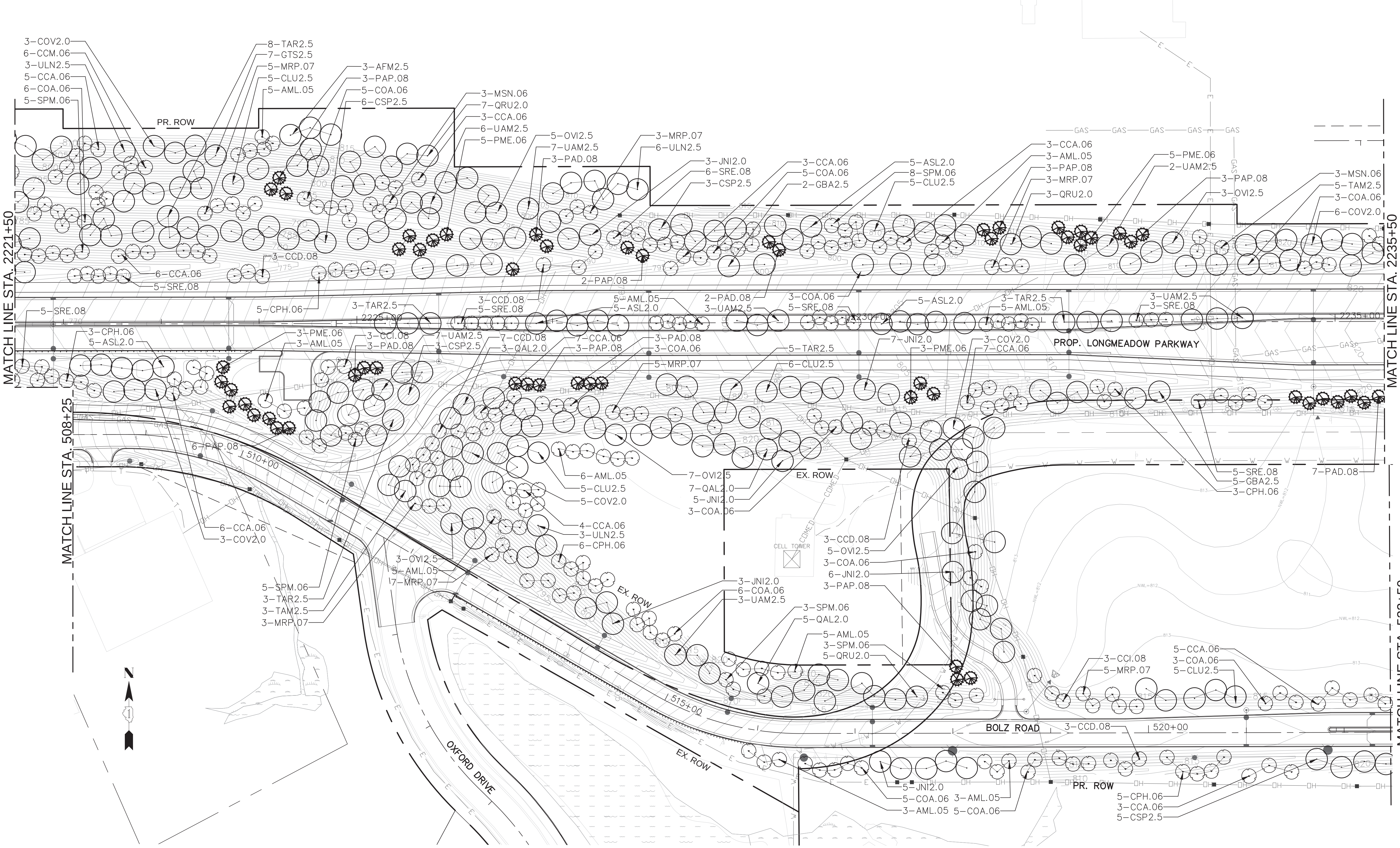
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**C-2**
**PLANTING PLAN**

SCALE: 1"=50' | SHEET 1 OF 5 SHEETS | STA. 2207+50 TO STA. 2221+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-20-BR | KANE | 415 | 225 |
| | | CONTRACT NO. 63955 | | |
| | ILLINOIS | FED. AID PROJECT DPC-M-0019(008) | | |

FILE NAME = $FILEL$




FILE NAME = $FILE$

HITCHCOCK DESIGN GROUP
creatingbetterplaces

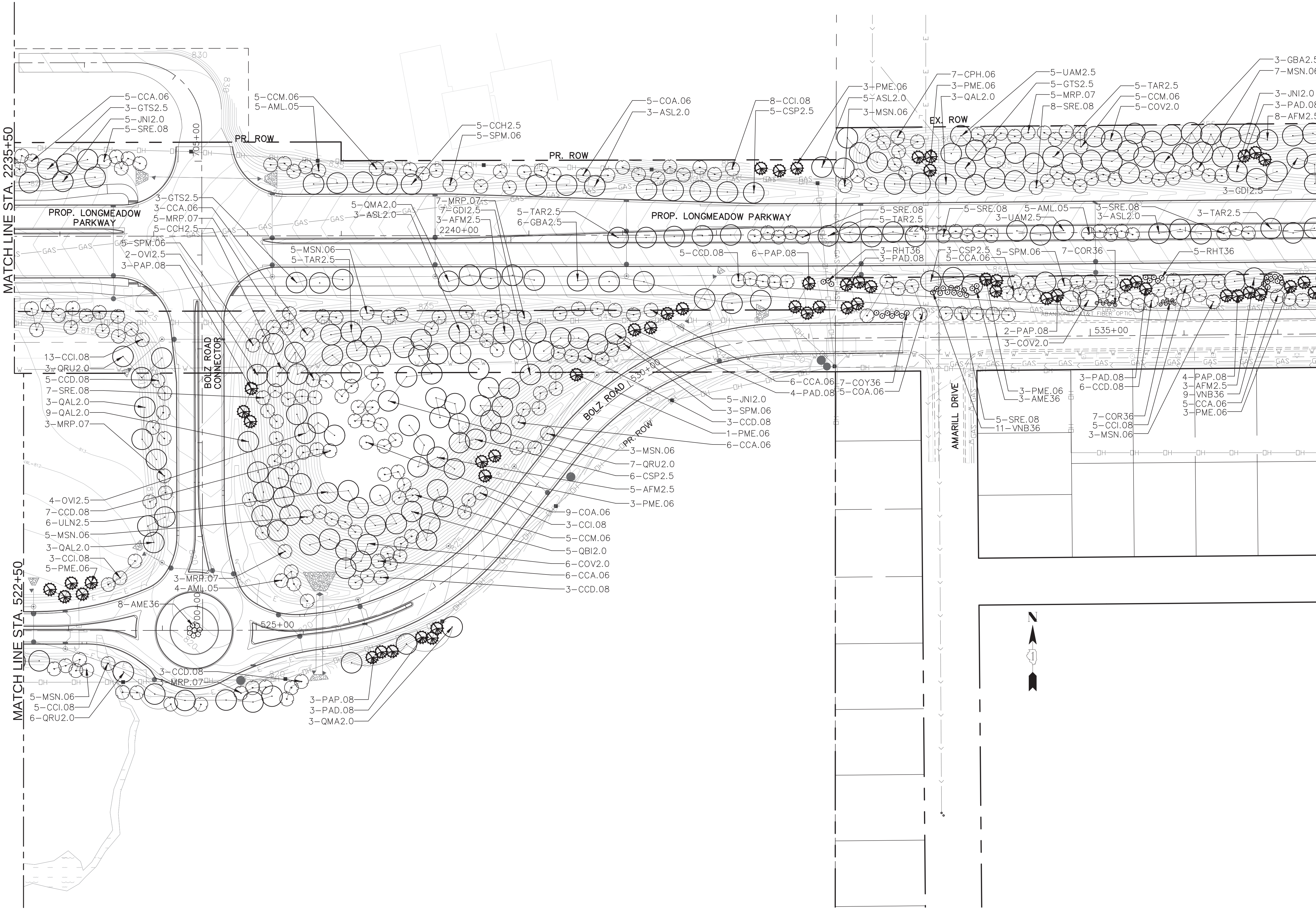
| | | | |
|---|---|---|---|
| USER NAME = | DESIGNED — XS/MPW | REVISED - | |
| | DRAWN — XS/MPW | REVISED - | |
| PLOT SCALE= 1:1 | CHECKED — TCK | REVISED - | |
| PLOT DATE = 2/11/20 | DATE — 2/11/20 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**C-2**
**PLANTING PLAN**

SCALE: 1"=50' | SHEET 2 OF 5 SHEETS | STA. 2221+50 TO STA. 2235+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-20-BR | KANE | 415 | 226 |
| | | CONTRACT NO. 63955 | | |
| | ILLINOIS | FED. AID PROJECT DPC-M-0019(008) | | |




| HITCHCOCK DESIGN GROUP creatingbetterplaces | USER NAME = | DESIGNED – XS/MPW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | C-2 PLANTING PLAN |
|---|---|---|---|---|---|
| | | DRAWN – XS/MPW | REVISED - | | |
| | PLOT SCALE= 1:1 | CHECKED – TCK | REVISED - | | |
| | PLOT DATE = 2/11/20 | DATE – 2/11/20 | REVISED - | | SCALE: 1"=50' SHEET 3 OF 5 SHEETS STA. 2235+50 TO STA. 2249+50 |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-20-BR | KANE | 415 | 227 |
| | | CONTRACT NO. 63955 | | |
| | | ILLINOIS FED. AID PROJECT DPC-M-0019(008) | | |

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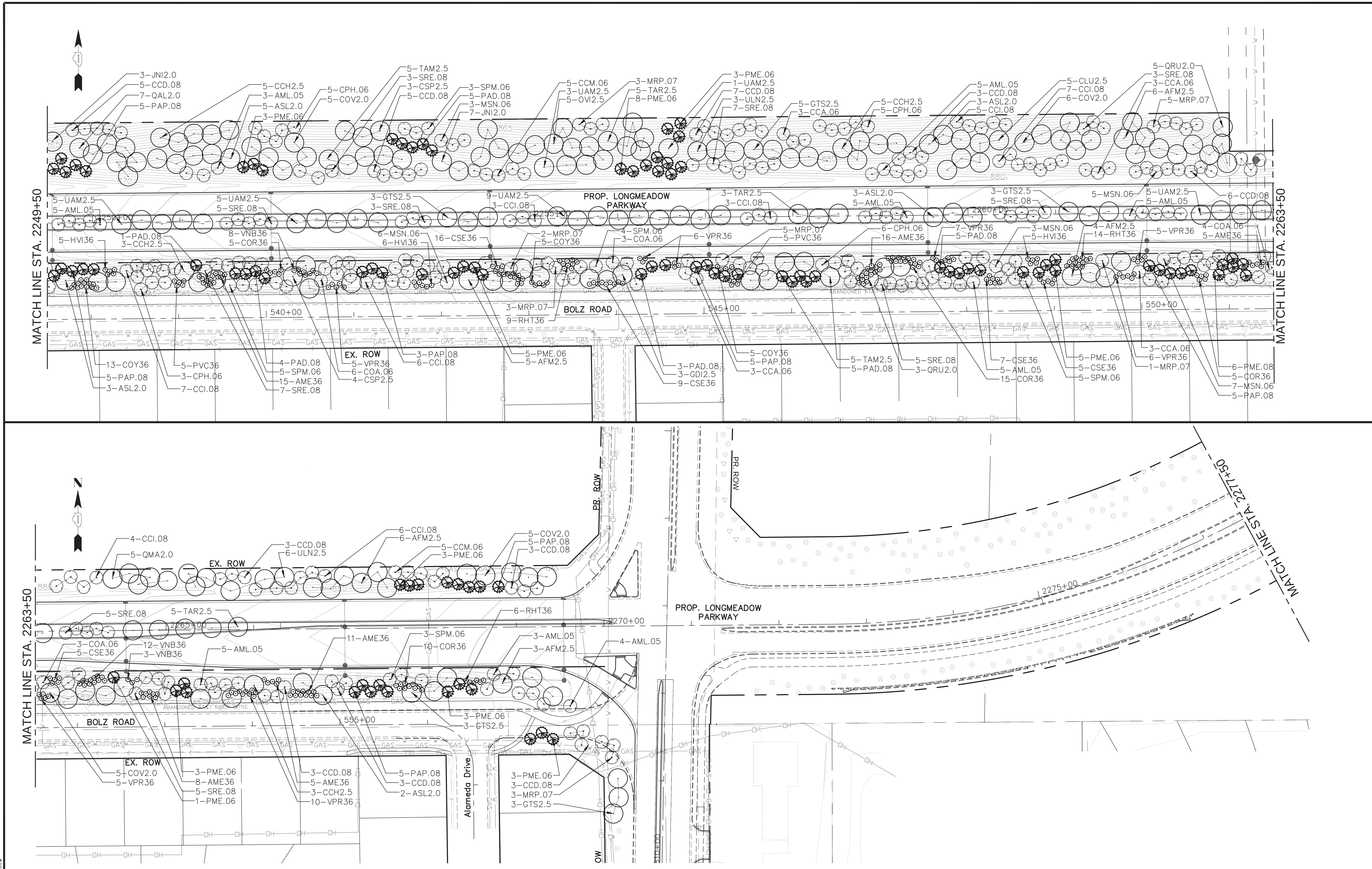



HITCHCOCK DESIGN GROUP
creating better places

| | | | |
|---|---|---|---|
| USER NAME = | DESIGNED — XS/MPW | REVISED - | |
| | DRAWN — XS/MPW | REVISED - | |
| PLOT SCALE= 1:1 | CHECKED — TCK | REVISED - | |
| PLOT DATE = 2/11/20 | DATE — 2/11/20 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**C-2**
**PLANTING PLAN**

SCALE: 1"=50' | SHEET 4 OF 5 SHEETS | STA. 2249+50 TO STA. 2277+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-20-BR | KANE | 415 | 228 |
| | | CONTRACT NO. 63955 | | |
| | ILLINOIS | FED. AID PROJECT DPC-M-0019(008) | | |

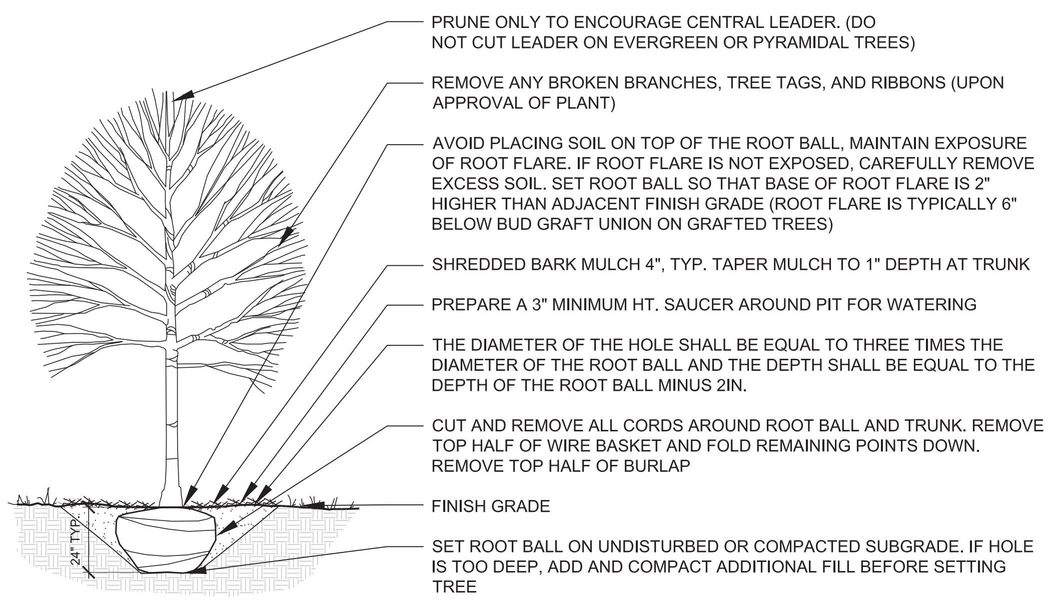
FILE NAME = $FILEL$

# PLANTING NOTES

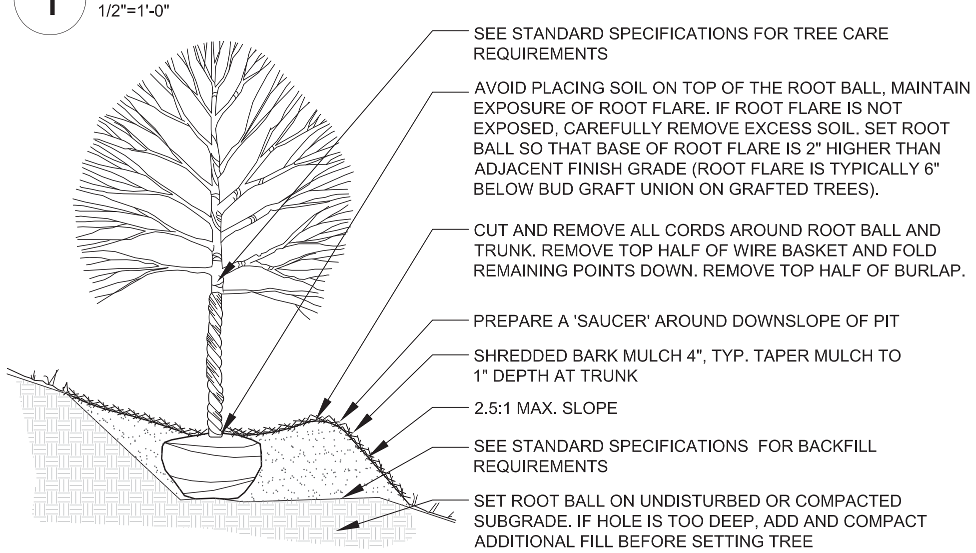
1. THE CONTRACTOR SHALL COORDINATE THE PLANTING, LANDSCAPING AND RESTORATION WORK WITH WORK BY THE GRADING CONTRACTOR AND OTHE UTILITY CONTRACTORS. THE RESTORATION AND PLANTING WORK SHALL BE COMPLETED AS DIRECTED BY THE ENGINEER, NOT WITH STANDING THE PLANTING RESTRICTIONS AS DESCRIBED IN THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.
2. ALL PLANT MATERIAL NOT PLANTED ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL WILL RESULT IN THE REJECTION OF THE PLANT MATERIAL AND THE REPLACEMENT SHALL BE AT NO ADDITIONAL COST TO THE CONTRACT.
3. ALL WORK SHALL BE IN ACCORDANCE WITH SECTIONS 253 AND 254 OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS AND THE DETAILS SHOWN ON THE PLANS. THE CONTRACTOR SHALL FURNISH THE INITIAL WATERING AND ALL ADDITIONAL WATERING DURING THE PERIOD OF ESTABLISHMENT.
4. THE INTENT OF THE PLANTING PLAN IS TO LOOK NATURAL AND PLEASANT. THE CONTRACTOR SHALL GROUP THE TREES AND SCRUBS TO LOOK NATURAL IN A SOMEWHAT RANDOM ORDER.
5. THE CONTRACTOR SHALL BE CAREFUL WHEN PLANTING TREES AND SCRUBS NEAR AN INTERSECTION TO AVOID THE NECESSARY SIGHT TRIANGLE OF APPROACHING TRAFFIC. IF IN DOUBT, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER REGARDING CLEAR DISTANCE OF THE SIGHT TRIANGLE.
6. PLACE TREES NO CLOSER THAN 5' TO THE BACK OF CURB, TREE LOCATIONS TO BE REVIEWED BY ENGINEER PRIOR TO PLANTING.
7. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTH OF ANY UNDERGROUND UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.
8. THE CONTRACTOR SHALL FOLLOW THE PLANTING PLANS AND MAY ADJUST LOCATIONS TO FIT FIELD CONDITIONS BUT SHALL NOT INSTALL TREES DIRECTLY ABOVE ANY MAJOR DRAINAGE CULVERTS.
9. THE CONTRACTOR SHALL SCHEDULE PLANT MATERIAL TO KEEP UP WITH THE PLANTING OPERATION. IF PLANTINGS ARE NOT PLANTED IMMEDIATELY AFTER DELIVERY TO THE JOB SITE, THE CONTRACTOR SHALL HARBOR THE PLANTINGS AS DESCRIBED IN ARTICLE 253.06 OF THE STANDARD SPECIFICATIONS FOR TEMPORARY STORAGE.

# PLANTING SCHEDULE

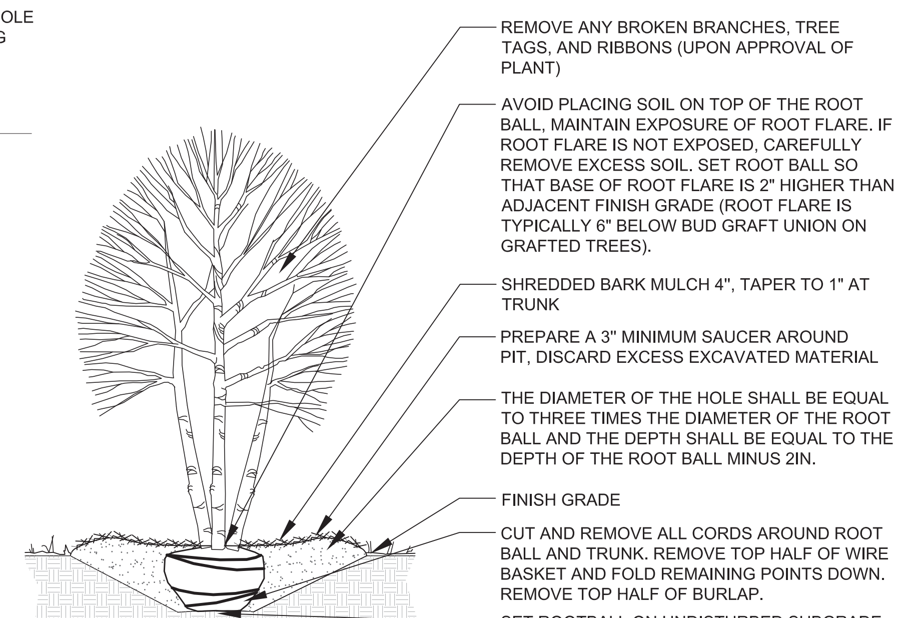
| ITEM NUMBER | CODE | ITEM NAME | SIZE | UNIT | QTY |
|---|---|---|---|---|---|
| SHADE TREE | | | | | |
| A2001916 | ASL2.0 | TREE, ACER SACCHARUM LEGACY ( LEGACY SUGAR MAPLE), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 53 |
| A2000220 | AFM2.5 | TREE, ACER X FREEMANII MARMO (MARMO FREEMAN MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 46 |
| A2002616 | COV2.0 | TREE, CARYA CORDIFORMIS (BITTERNUT HICKORY), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 58 |
| A2002820 | CSP2.5 | TREE, CATALPA SPECIOSA (NORTHERN CATALPA), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 38 |
| A2002920 | CCH2.5 | TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 26 |
| B2010120 | CLU2.5 | TREE, CLADRASTIS LUTEA (AMERICAN YELLOWWOOD), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 36 |
| A2004514 | GBA2.5 | TREE, GINKGO BILOBA AUTUMN GOLD (AUTUMN GOLD GINKGO), 2-1/2" CALIPER BALLED AND BURLAPPED | 2 1/2" C | EACH | 21 |
| A2004720 | GTS2.5 | TREE, GLEDITSIA TRIACANTHOS INERMIS SHADEMASTER (SHADEMASTER THORNLESS COMMON HONEYLOCUST), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 35 |
| A2005020 | GDI2.5 | TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 13 |
| A2005116 | JNI2.0 | TREE, JUGLANS NIGRA (BLACK WALNUT), 2" CALIPER, BALLED AND BURLAPPED | 2 " C | EACH | 52 |
| A2005620 | OVI2.5 | TREE, OSTRYA VIRGINIANA (AMERICAN HOPHORNBEAM), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 34 |
| A2006416 | QAL2.0 | TREE, QUERCUS ALBA (WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 53 |
| A2006516 | QBI2.0 | TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 5 |
| A2006716 | QMA2.0 | TREE, QUERCUS MACROCARPA (BUR OAK), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 13 |
| A2007116 | QRU2.0 | TREE, QUERCUS RUBRA (RED OAK), 2" CALIPER, BALLED AND BURLAPPED | 2" C | EACH | 39 |
| A2007820 | TAM2.5 | TREE, TILIA AMERICANA (AMERICAN LINDEN/ BASSWOOD), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 21 |
| A2007920 | TAR2.5 | TREE, TILIA AMERICANA REDMOND (REDMOND AMERICAN LINDEN), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 58 |
| A2008519 | UAM2.5 | TREE, ULMUS MORTON GLOSSY (TRIUMPH ELM), 2-1/2" CALIPER, BALLED AND BURLAPPED | 2 1/2" C | EACH | 67 |
| A2008470 | ULN2.5 | TREE, ULMUS AMERICANA PRINCETON (PRINCETON AMERICAN ELM), 2-1/2" CALIPER , BALLED AND BURLAPPED | 2 1/2" C | EACH | 27 |
| | | | | | |
| INTERMEDIATE TREES | | | | | |
| B2000964 | AML.05 | TREE, AMELANCHIER LAEVIS (ALLEGHENY SERVICEBERRY), 5' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 5' HT | EACH | 97 |
| A2002566 | CCA.06 | TREE, CARPINUS CAROLINIANA (AMERICAN HORNBEAM), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED | 6' HT | EACH | 100 |
| B2001167 | CCD.08 | TREE, CERCIS CANADENSIS (EASTERN REDBUD), 8' HEIGHT, BALLED AND BURLAPPED | 8' HT | EACH | 106 |
| B2001266 | COA.06 | TREE, CORNUS ALTERNIFOLIA (PAGODA DOG WOOD), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 6' HT | EACH | 85 |
| B2001770 | CCI.08 | TREE, CRATAEGUS CRUSGALLI VAR. INERMIS (THORNLESS COCKSPUR HAWTHORN), 8' HEIGHT, BALLED AND BURLAPPED, MULTI-HEADS | 8' HT | EACH | 84 |
| B2001866 | CCM.06 | TREE, CRATAEGUS MOLLIS (DOWNY HAWTHORN), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 6' HT | EACH | 31 |
| B2001966 | CPH.06 | TREE, CRATAEGUS PHAENOPYRUM (WASHINGTON HAWTHORN), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 6' HT | EACH | 53 |
| B2004586 | MRP.07 | TREE, MALUS RED PEACOCK (RED PEACOCK CRABAPPLE), 7' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 7' HT | EACH | 79 |
| B2005066 | MSN.06 | TREE, MALUS SNOWDRIFT (SNOWDRIFT CRABAPPLE), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 6' HT | EACH | 70 |
| B2006166 | SPM.06 | TREE, SYRINGA PEKINENSIS MORTON (CHINA SNOW PEKING LILAC), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 6' HT | EACH | 65 |
| B2006370 | SRE.08 | TREE, SYRINGA RETICULATA IVORY SILK (IVORY SILK JAPANESE TREE LILAC), 8' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | 8' HT | EACH | 120 |
| | | | | | |
| EVERGREEN TREE | | | | | |
| D2001988 | PAD.08 | EVERGREEN, PICEA GLAUCA DENSATA (BLACK HILLS SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED | 8' HT | EACH | 60 |
| D2002188 | PAP.08 | EVERGREEN, PICEA PUNGENS (COLORADO SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED | 8' HT | EACH | 74 |
| D2003172 | PME.06 | EVERGREEN, PSUEDOTSUGA MENZIESII (DOUGLAS FIR), 6' HEIGHT, BALLED AND BURLAPPED | 6' HT | EACH | 85 |
| | | | | | |
| DECIDUOUS SHRUBS | | | | | |
| C2000536 | AME36 | SHRUB, ARONIA MELANOCARPA (BLACK CHOKE BERRY), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 91 |
| C2001536 | COR36 | SHRUB, CORNUS RACEMOSA (GREY DOGWOOD), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 49 |
| C2001636 | CSE36 | SHRUB, CORNUS SERICEA (REDOSIER DOGWOOD), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 57 |
| C2002036 | COY36 | SHRUB, CORYLUS AMERICANA (AMERICAN FILBERT), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 35 |
| C2003336 | HVI36 | SHRUB, HAMAMELIS VIRGINIANA (COMMON WITCHHAZEL), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 21 |
| C2C05225 | PVC36 | SHRUB, PRUNUS VIRGINIANA (COMMON CHOKE CHERRY), 3' HEIGHT, CONTAINER | 3' HT | EACH | 10 |
| C2C06036 | RHT36 | SHRUB, RHUS TYPHINA (STAGHORN SUMAC). 3' HEIGHT, CONTAINER | 3' HT | EACH | 51 |
| C2012436 | VNB36 | SHRUB, VIBURNUM LENTAGO (NANNYBERRY VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 43 |
| C2012736 | VPR36 | SHRUB, VIBURNUM PRUNIFOLIUM (BLACKHAW VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED | 3' HT | EACH | 44 |



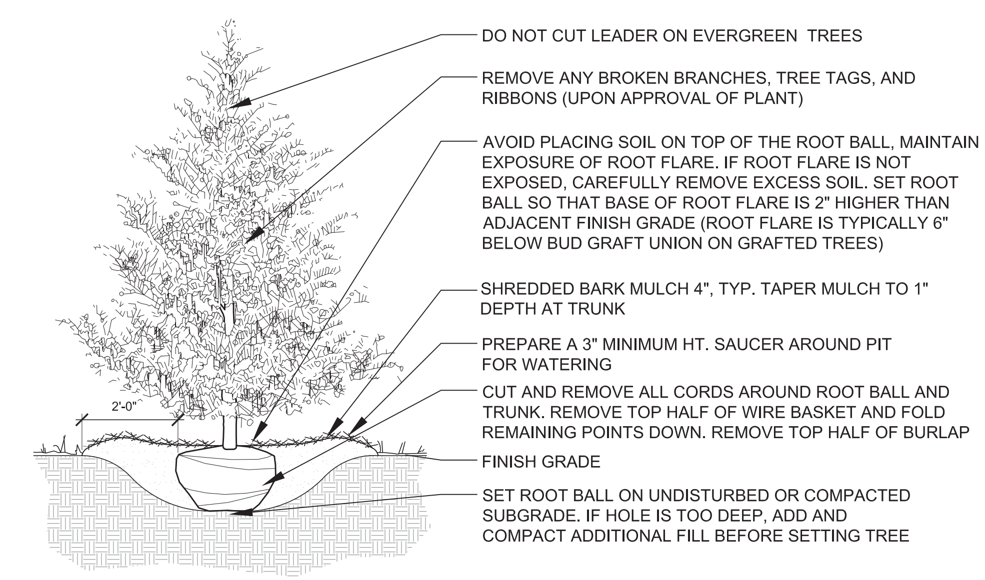

1 SHADE TREE PLANTING
1/2"=1'-0"




2 TREE PLANTING DETAIL - SLOPE
1/2"=1'-0"




3 ORNAMENTAL TREE PLANTING
1/2"=1'-0"




4 EVERGREEN TREE PLANTING
1/2"=1'-0"

FILE NAME = $FILEL$

| | | | | | |
|---|---|---|---|---|---|
| HITCHCOCK DESIGN GROUP creatingbetterplaces | USER NAME = | DESIGNED — XS/MPW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | C-2 PLANTING DETAILS |
| | | DRAWN — XS/MPW | REVISED - | | |
| | PLOT SCALE= 1:1 | CHECKED — TCK | REVISED - | | |
| | PLOT DATE = 2/11/20 | DATE — 2/11/20 | REVISED - | | SCALE: 1/2"=1'-0" SHEET 5 OF 5 SHEETS STA. TO STA. |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-20-BR | KANE | 415 | 229 |
| | | CONTRACT NO. 63955 | | |
| | | ILLINOIS | FED. AID PROJECT DPC-M-0019(008) | |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 230 |
| | | ILLINOIS | CONTRACT NO. 61G02 | |

FOR PROFESSIONAL SEALS AND SIGNATURES, SEE SHEET NO. 2

FOR INDEX OF SHEETS, SEE SHEET NO. 3

# STATE OF ILLINOIS
# DEPARTMENT OF TRANSPORTATION

## VOLUME 2
# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

## FAU 2298 (LONGMEADOW PARKWAY)
## ROADWAY CORRIDOR CONSTRUCTION
## WEST OF SANDBLOOM RD TO IL RTE. 25
## SECTION 18–00215–21–BR
## PROJECT NUMBER XGDF(875)
## KANE COUNTY

C–91–190–18

**DESIGN DESIGNATION**

LONGMEADOW PKWY: 30,000 (40) MINOR ARTERIAL 5.36 (PCC–20)
BOLZ RD: 13,000 (40) MAJOR COLLECTOR 1.93 (FD–20)
BOLZ RD CONNECTOR: 13,000 (40) MAJOR COLLECTOR 1.93 (FD–20)
IL RTE 25: 34,000 (40) OTHER PRINCIPAL ARTERIAL 10.05 (PCC–20)

**TRAFFIC DATA**

LONGMEADOW PARKWAY:

ADT:
30,000 (2040)

SPEED LIMIT:
POSTED – 45 MPH
DESIGN – 50 MPH

COMPOSITION:
P.V. – 97.0%
S.U. – 2.0%
M.U. – 1.0%

BOLZ ROAD

ADT:
2,390 (2010)
11,000 (2040)

SPEED LIMIT:
POSTED – 30 MPH
DESIGN – 30 MPH

COMPOSITION:
P.V. – 96.0%
S.U. – 2.0%
M.U. – 2.0%

**TRAFFIC DATA**

IL ROUTE 25

ADT:
20,000 (2010)
34,000 (2040)

SPEED LIMIT:
POSTED – 45 MPH
DESIGN – 50 MPH

COMPOSITION:
P.V. – 96.2%
S.U. – 2.2%
M.U. – 1.6%

PROJECT IS LOCATED IN THE VILLAGE OF CARPENTERSVILLE & DUNDEE TOWNSHIP

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

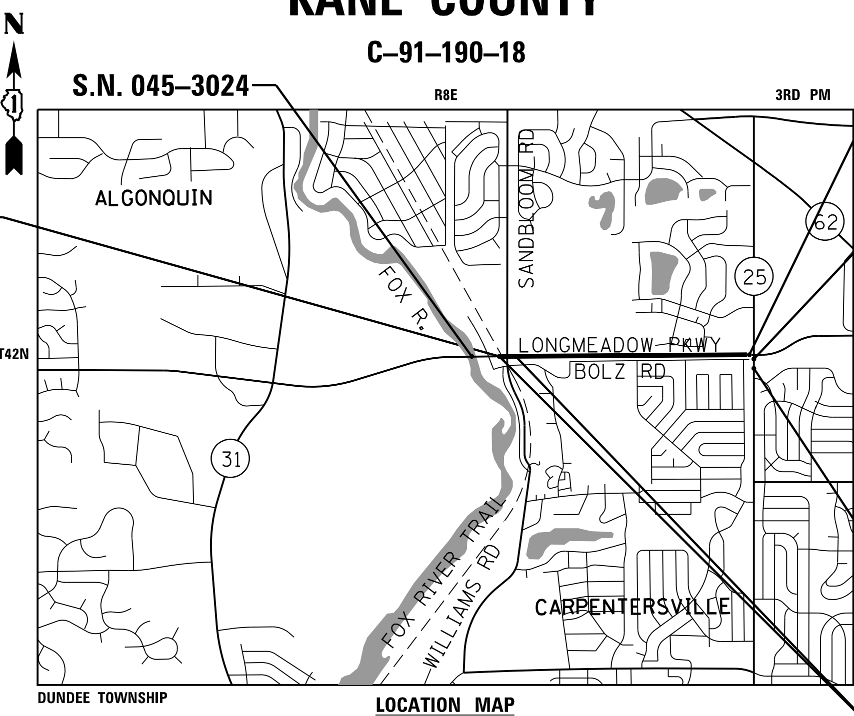
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 61G02

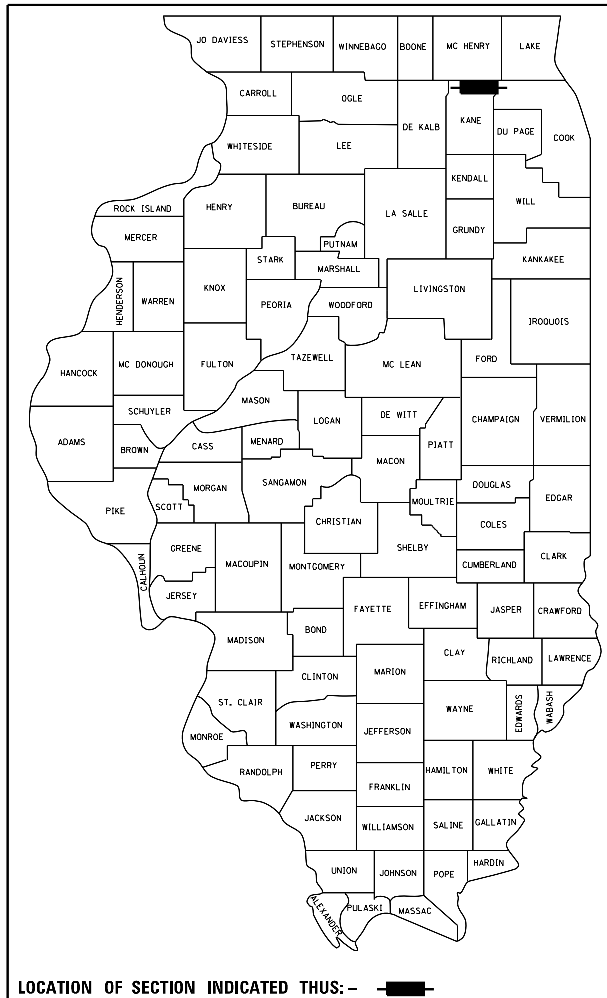
FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E., SCHAUMBURG, IL

CMT
Crawford, Murphy & Tilly
550 N Commons Drive, Suite 116
Aurora, Illinois 60504
P: 630.820.1022 | F: 630.820.0350
www.cmtengr.com | Centered in Value
License No. 184-000613


LOCATION MAP
N.T.S.

| ROAD | FROM STATION | TO STATION | LENGTH (FEET) | LENGTH (MILES) |
|---|---|---|---|---|
| LONGMEADOW PKWY | 2217 + 65.00 | 2270 + 39.80 | 5,274.80 | 1.00 |
| SANDBLOOM BRIDGE | 2217 + 58.21 | 2218 + 40.85 | 82.64 | 0.01 |
| BOLZ ROAD | 504 + 32.79 | 532 + 50.00 | 2,817.21 | 0.53 |
| BOLZ ROAD CONNECTOR | 699 + 89.80 | 705 + 05.16 | 515.36 | 0.10 |
| ILLINOIS ROUTE 25 | 608 + 75.88 | 612 + 15.82 | 339.94 | 0.06 |
| NET AND GROSS LENGTH OF IMPROVEMENT | | | 8,947.31 | 1.69 |




PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PLOT DRIVER = $PLTDRV$
PEN TABLE = $PENTBL$

## INDEX OF SHEETS (VOLUME 1)



## INDEX OF SHEETS (VOLUME 2)



COMMITMENTS

1. FORESTED AREAS CAN BE CLEARED ONLY BETWEEN OCTOBER 15TH AND MARCH 14TH TO AVOID THE ACTIVE SEASON FOR THE RUSTY PATCHED BUMBLE BEE.

2. GRASSED AREAS WITHIN THE PROJECT CONSTRUCTION LIMITS SHALL BE MOWED WEEKLY FROM MARCH 15TH TO OCTOBER 14TH OF THE YEAR OF CONSTRUCTION. THE CONTRACTOR SHALL BEGIN WITH MOWING OPERATIONS IMMEDIATLEY FOLLWING NOTICE TO PROCEED IF WITHIN THESE DATES.

## HIGHWAY STANDARDS

| | |
|---|---|
| 000001-07 | STANDARD SYMBOLS AND ABBREVIATIONS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 420001-09 | PAVEMENT JOINTS |
| 420111-04 | PCC PAVEMENT ROUNDOUTS |
| 420401-13 | PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB |
| 420701-03 | PAVEMENT WELDED WIRE REINFORCEMENT |
| 424001-11 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 424031-02 | MEDIAN PEDESTRIAN CROSSINGS |
| 442201-03 | CLASS C AND D PATCHES |
| 515001-03 | NAME PLATES FOR BRIDGES |
| 542301-03 | PRECAST REINFORCED CONCRETE FLARED END SECTION |
| 542306-03 | PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION |
| 542546-01 | FLUSH INLET BOX FOR MEDIAN |
| 601001-05 | PIPE UNDERDRAINS |
| 602001-02 | CATCH BASIN TYPE A |
| 602301-04 | INLET - TYPE A |
| 602401-06 | PRECAST MANHOLE TYPE A 4' DIAMETER |
| 602402-02 | PRECAST MANHOLE TYPE A 5' DIAMETER |
| 602406-10 | PRECAST MANHOLE TYPE A 6' DIAMETER |
| 602601-06 | PRECAST REINFORCED CONCRETE FLAT SLAB TOP |
| 602701-02 | MANHOLE STEPS |
| 604001-04 | FRAMES AND LIDS TYPE 1 |
| 604036-03 | GRATE TYPE 8 |
| 604051-04 | FRAME AND GRATE TYPE 11 |
| 604091-03 | FRAME AND GRATE TYPE 24 |
| 606001-07 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 606006-04 | OUTLETS FOR CONCRETE CURB AND GUTTER TYPE B-6.24 |
| 606301-04 | PC CONCRETE ISLANDS AND MEDIANS |
| 630001-12 | STEEL PLATE BEAM GUARDRAIL |
| 630201-07 | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL |
| 630301-09 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 631011-10 | TRAFFIC BARRIER TERMINAL, TYPE 2 |
| 631031-15 | TRAFFIC BARRIER TERMINAL, TYPE 6 |
| 701006-05 | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701011-04 | OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY |
| 701101-05 | OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE |
| 701106-02 | OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY |
| 701426-09 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS $\geq$45 MPH |
| 701501-06 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED |
| 701601-09 | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 701602-10 | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 704001-08 | TEMPORARY CONCRETE BARRIER |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720006-04 | SIGN PANEL ERECTION DETAILS |
| 720011-01 | METAL POSTS FOR SIGNS, MARKERS & DELINEATORS |
| 720016-04 | MAST ARM MOUNTED STREET NAME SIGNS |
| 725001-01 | OBJECT AND TERMINAL MARKERS |
| 729001-01 | APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS) |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 782006-01 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |
| 814001-03 | HANDHOLES |
| 814006-02 | DOUBLE HANDHOLES |
| 838001-01 | BREAKAWAY DEVICES |
| 878001-10 | CONCRETE FOUNDATION DETAILS |

## DISTRICT ONE STANDARDS

| | |
|---|---|
| BD-01 | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND CURB OR EDGE GREATER THAN OR EQUAL TO 15' (4.5M) |
| BD-03 | OUTLET FOR CONCRETE CURB AND GUTTER |
| BD-12 | MANHOLE WITH RESTRICTOR PLATE |
| BD-22 | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT |
| BD-48 | PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER |
| BD-51 | BENCHING DETAIL FOR EMBANKMENT WIDENING |
| BE-215 | LIGHTING CONTROLLER SINGLE DOOR |
| BE-300 | LIGHT POLE FOUNDATION 30' TO 35' M.H. 11.5" BOLT CIRCLE |
| BE-702 | MISCELLANEOUS ELECTRICAL DETAILS SHEET A |
| TC-10 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| TC-11 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) |
| TC-13 | DISTRICT ONE TYPICAL PAVEMENT MARKING |
| TC-14 | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) |
| TC-16 | SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS |
| TC-22 | ARTERIAL ROAD INFORMATION SIGN |
| TC-26 | DRIVEWAY ENTRANCE SIGNING |
| TS-05 | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS |

USER NAME = Ed Davis
DIRECTORY = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC2-sht-index-commitments2_cmt.dgn

CMT
License No. 184-000613 © Copyright CMT, Inc.

| | | |
|---|---|---|
| USER NAME = Ed Davis | DESIGNED - JMS | REVISED - |
| MODEL NAME = | DRAWN - JMS | REVISED - |
| PLOT SCALE = 2.0000 ' / in. | CHECKED - KDF | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

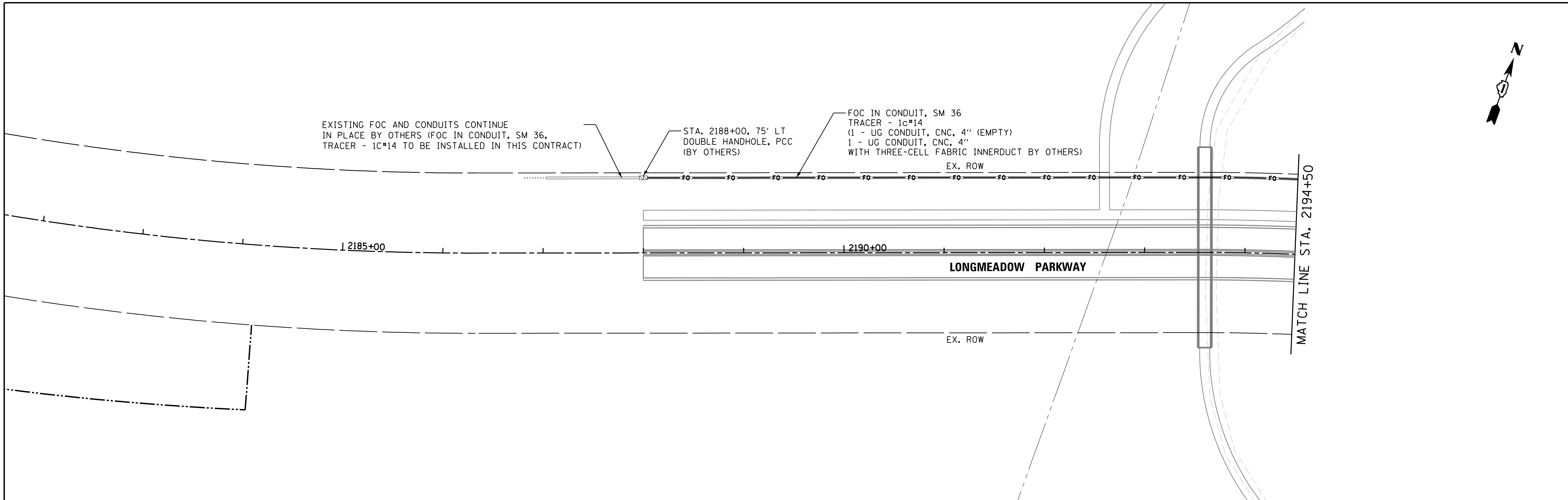
**LONGMEADOW PARKWAY**
**INDEX OF SHEETS, HIGHWAY STANDARDS, AND COMMITMENTS**

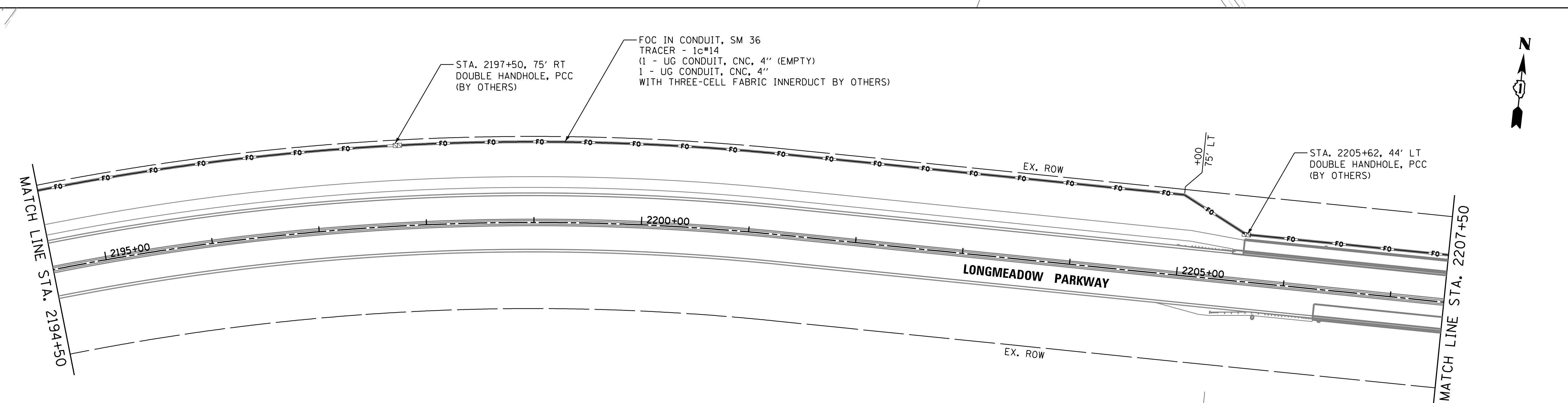
SCALE: NA | SHEET 1 OF 1 SHEETS | STA. - TO STA. -

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 231 |

CONTRACT NO. 61G02

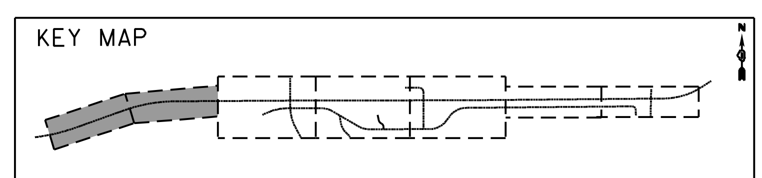
ILLINOIS FED. AID PROJECT




RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

KEY MAP



**LOCAL COORDINATE SYSTEM**

FILE NAME = SectionC2-sht-tsint-Long-01.bmd.dgn


BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM


| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 1200.0000 '/ ft. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

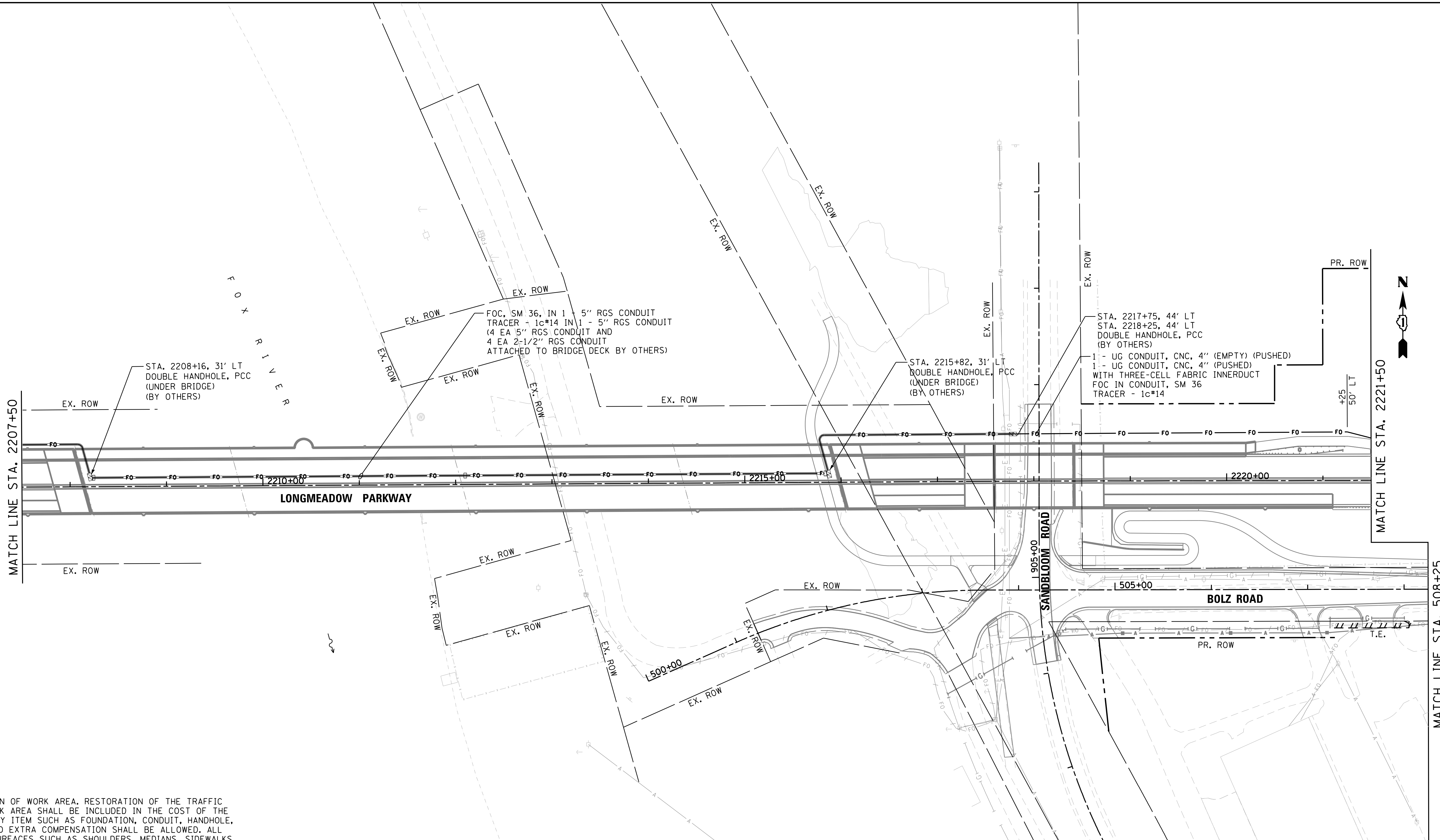
**FIBER-OPTIC CABLE INTERCONNECT PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=50' | SHEET 1 OF 4 SHEETS | STA. 2188+00 TO STA. 2207+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 232 |

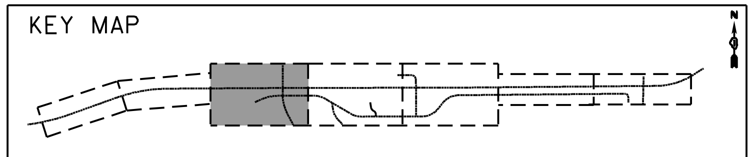
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

KEY MAP



LOCAL COORDINATE SYSTEM

FILE NAME = SectionC2-sht-tsint-Long-02.bmd.dgn


BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

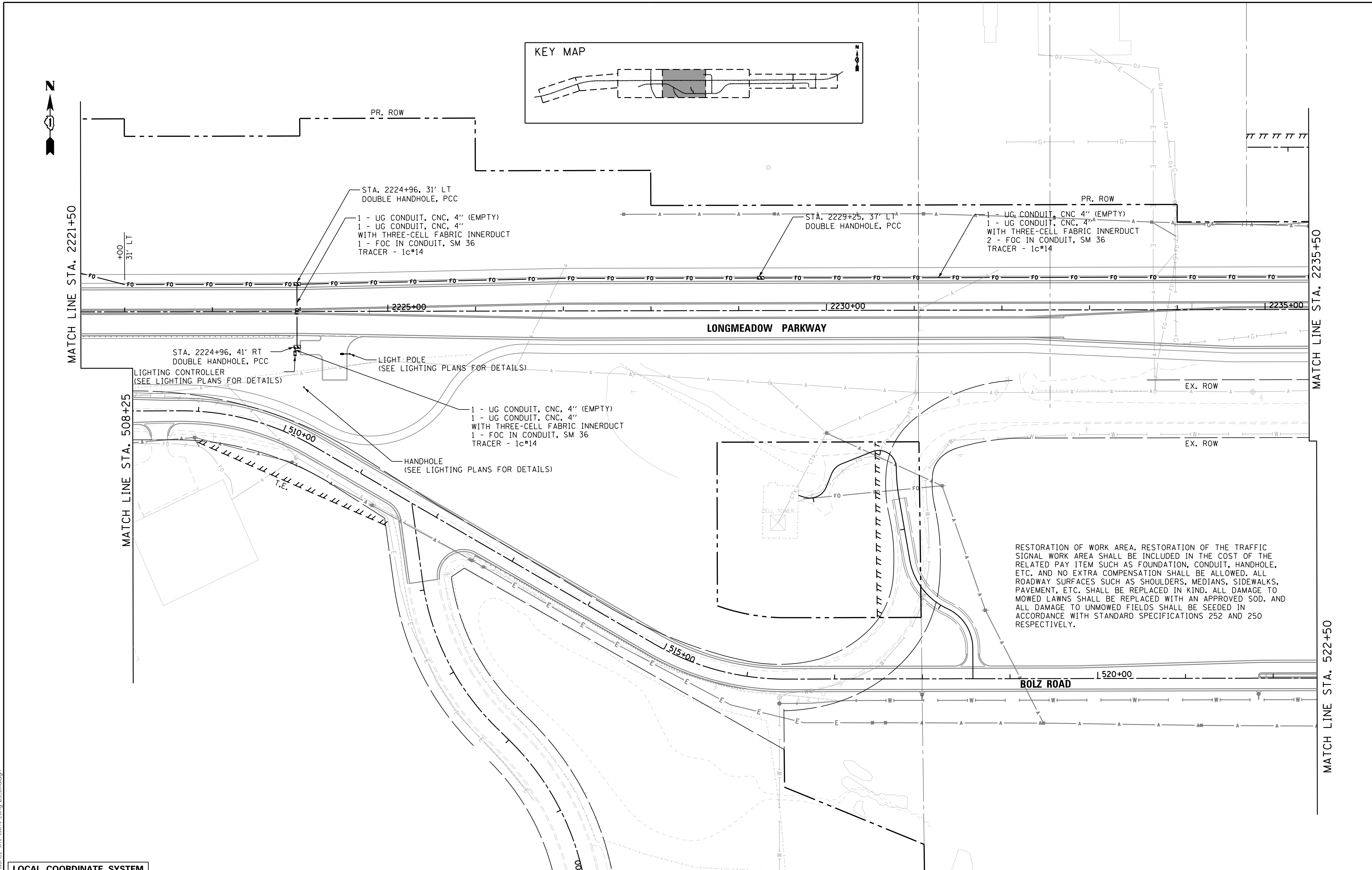

| | | | |
|---|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - | |
| | DRAWN - RGJ | REVISED - | |
| PLOT SCALE = 1200.0000 ' / ft. | CHECKED - MAP | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER-OPTIC CABLE INTERCONNECT PLAN
LONGMEADOW PARKWAY

SCALE: 1"=50' | SHEET 2 OF 4 SHEETS | STA. 2207+50 TO STA. 2221+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 233 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |




RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = SectionC2-sht-tsint-Long-03.bmd.dgn

| | | | |
|---|---|---|---|
| BURNS McDONNELL<br>200 W. ADAMS STREET / SUITE 1600<br>CHICAGO, IL 60606<br>P: (312)-223-0920 / F: (312)-223-9664<br>WEB: WWW.BURNSMCD.COM | USER NAME = rjiang<br>PLOT SCALE = 1200.0000 ' / ft.<br>PLOT DATE = 2/27/2020 | DESIGNED - MAP<br>DRAWN - RGJ<br>CHECKED - MAP<br>DATE - 2/28/2020 | REVISED -<br>REVISED -<br>REVISED -<br>REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

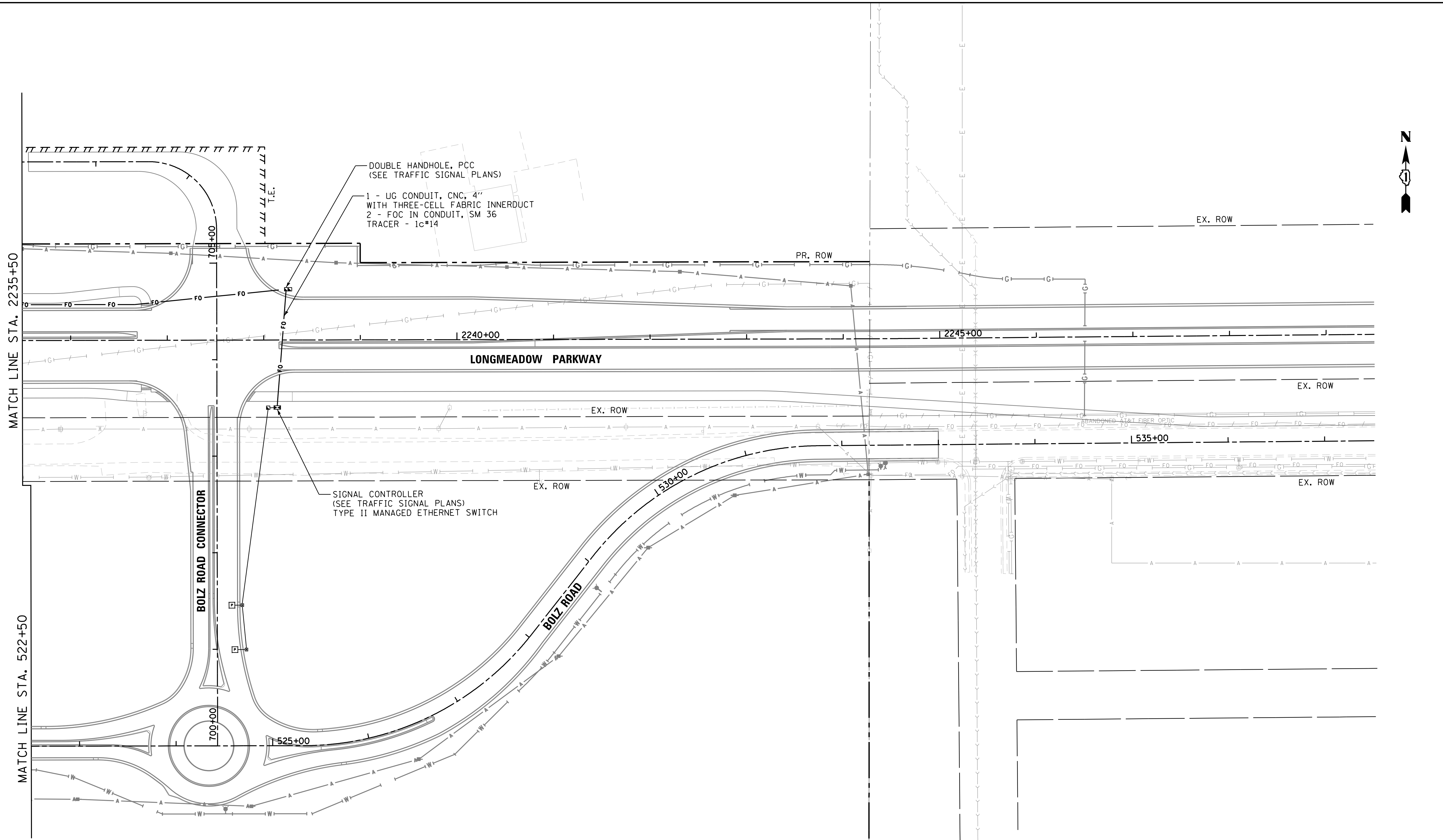
**FIBER-OPTIC CABLE INTERCONNECT PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=50' | SHEET 3 OF 4 SHEETS | STA. 2221+50 TO STA. 2235+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 234 |

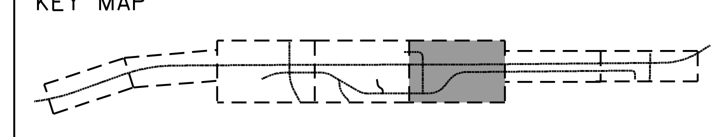
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

KEY MAP



LOCAL COORDINATE SYSTEM

FILE NAME = SectionC2-sht-tsint-Long-04.bmd.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

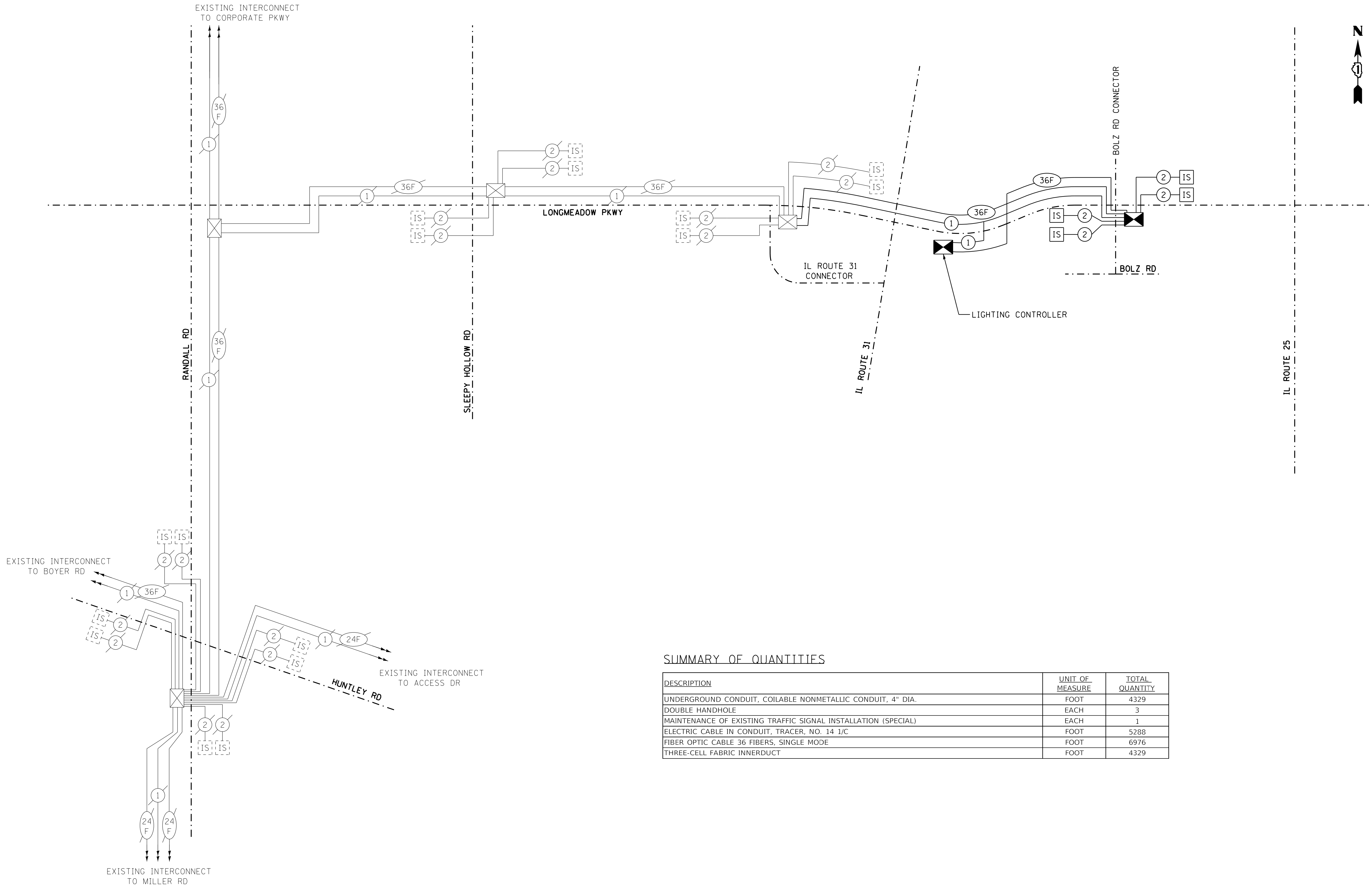
| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 1200.0000 ' / ft. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER-OPTIC CABLE INTERCONNECT PLAN
LONGMEADOW PARKWAY

SCALE: 1"=50' | SHEET 4 OF 4 SHEETS | STA. 2235+50 TO STA. 2249+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 235 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |




## SUMMARY OF QUANTITIES

| DESCRIPTION | UNIT OF MEASURE | TOTAL QUANTITY |
|---|---|---|
| UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 4" DIA. | FOOT | 4329 |
| DOUBLE HANDHOLE | EACH | 3 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION (SPECIAL) | EACH | 1 |
| ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C | FOOT | 5288 |
| FIBER OPTIC CABLE 36 FIBERS, SINGLE MODE | FOOT | 6976 |
| THREE-CELL FABRIC INNERDUCT | FOOT | 4329 |

**LOCAL COORDINATE SYSTEM**

FILE NAME = SectionC2-sht-tsint-det03_bmd.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 100.0000 '/ in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

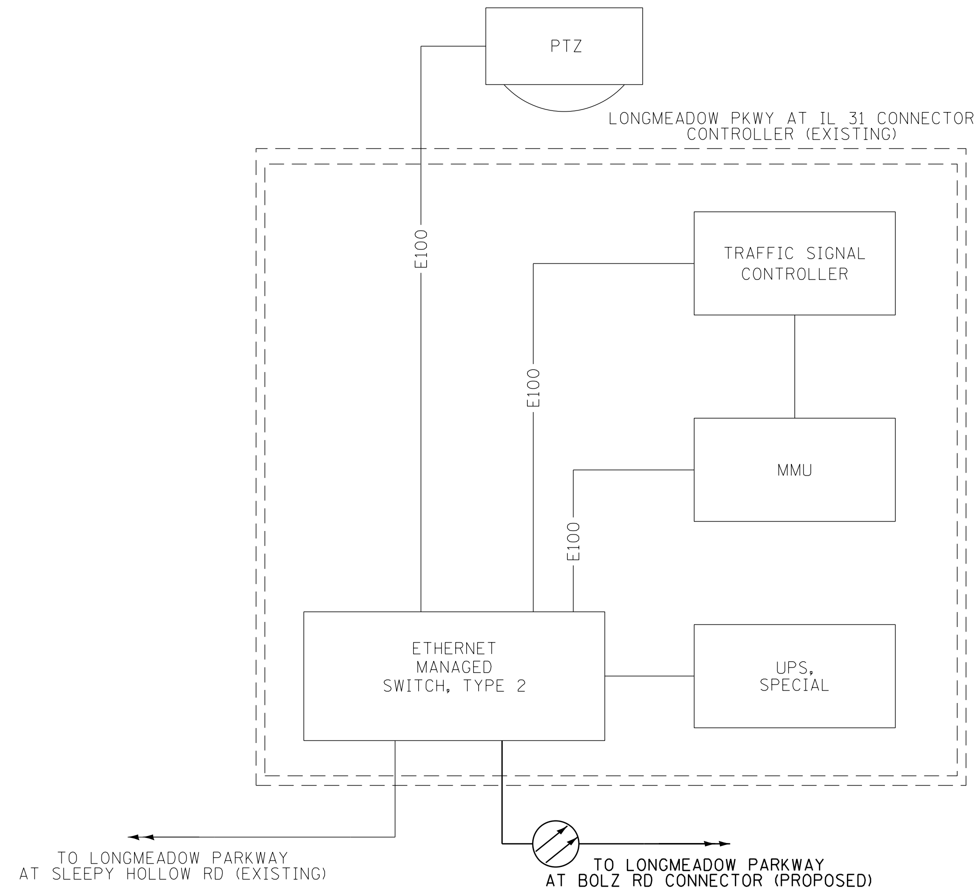
**PROPOSED INTERCONNECT SCHEMATIC**

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 236 |

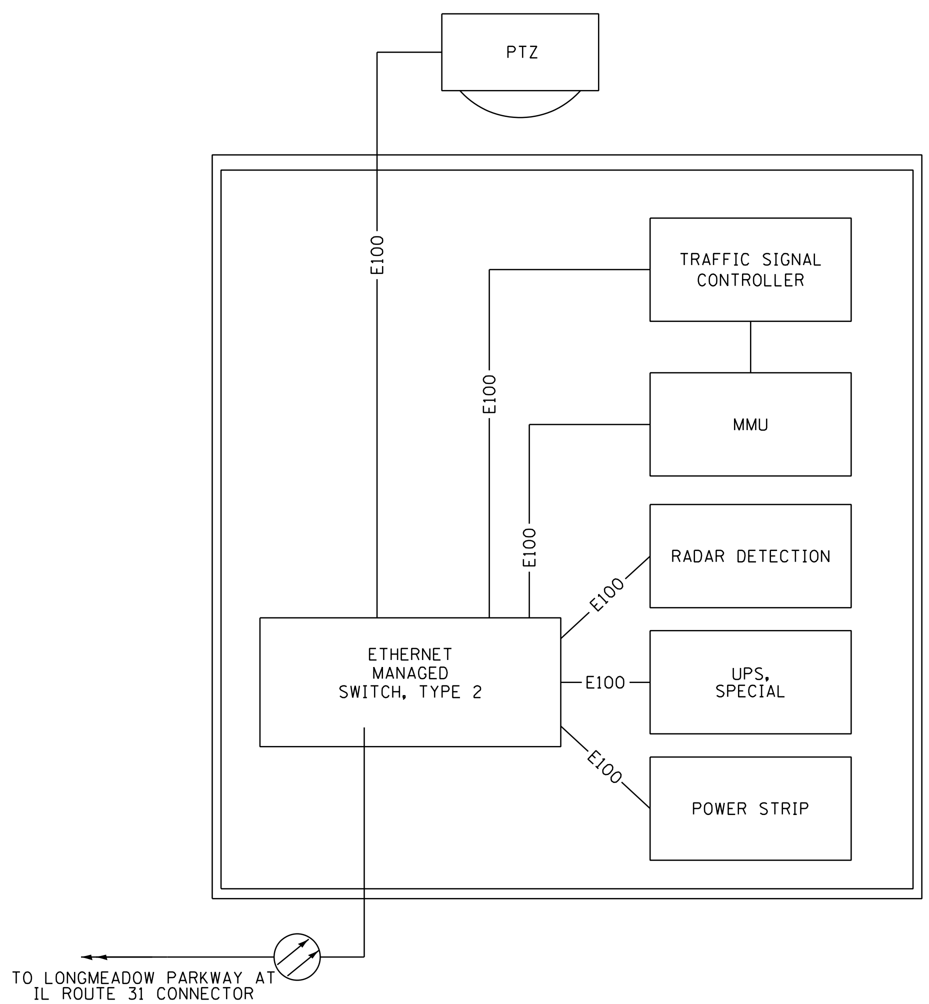
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

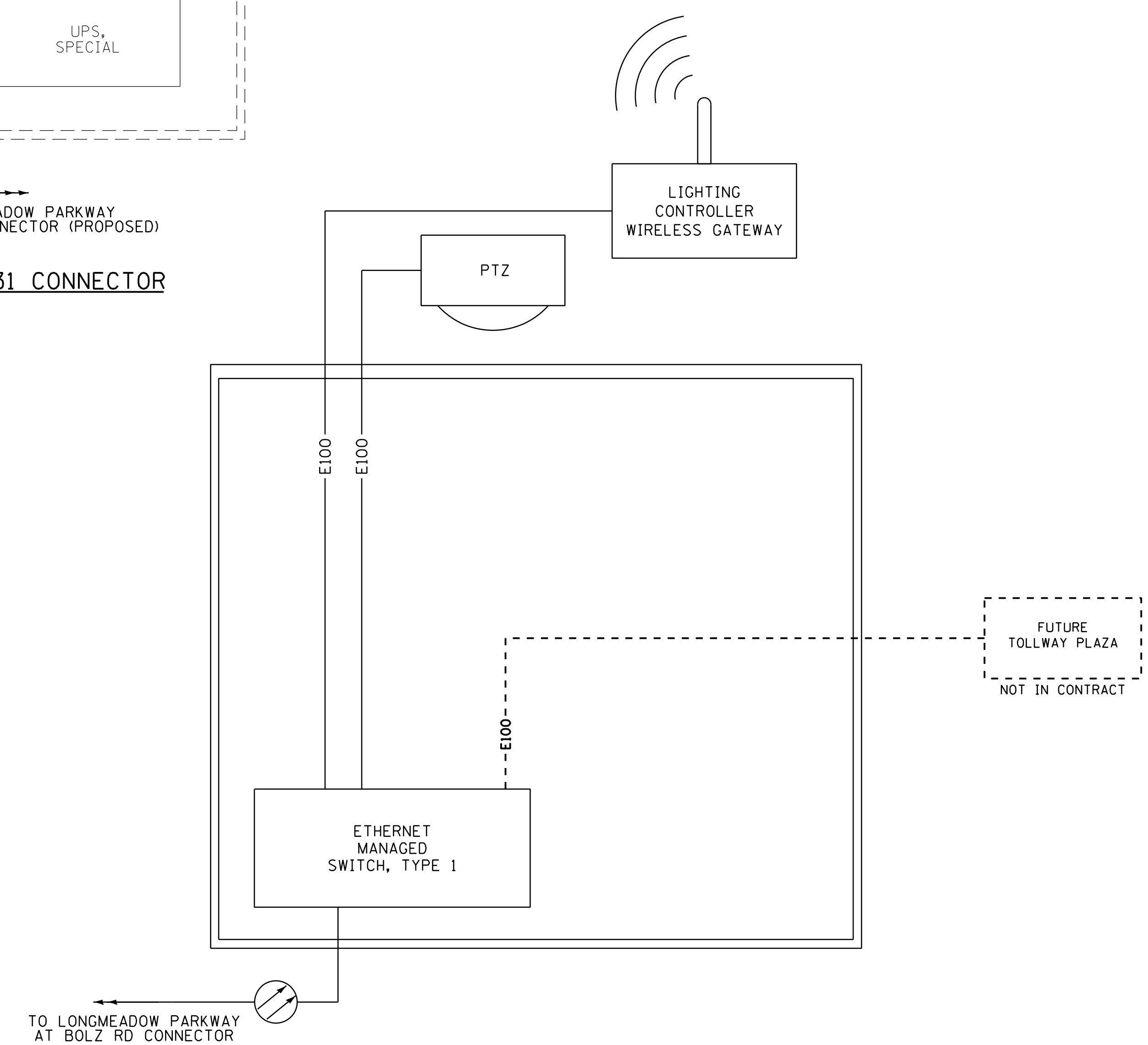



LONGMEADOW PARKWAY AT IL ROUTE 31 CONNECTOR

NOTE:
LONGMEADOW PARKWAY AT IL ROUTE 31 CONNECTOR IS AN EXISTING CONTROLLER. THE ONLY WORK IN THIS CONTRACT IS INSTALLATION OF THE FIBER OPTIC TERMINATION FROM THE BOLZ RD CONNECTOR. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TRAFFIC SIGNAL EQUIPMENT WHILE INSTALLING THE FIBER OPTIC CAPBLE AND TERMINATIONS. THIS WORK IS INCLUDED IN THE CONTRACT AS "MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION."




LONGMEADOW PARKWAY AT BOLZ RD CONNECTOR




LIGHTING CONTROLLER AT FUTURE TOLLWAY PLAZA

**LOCAL COORDINATE SYSTEM**

FILE NAME = SectionC2-sht-tsint-det01_bmd.dgn

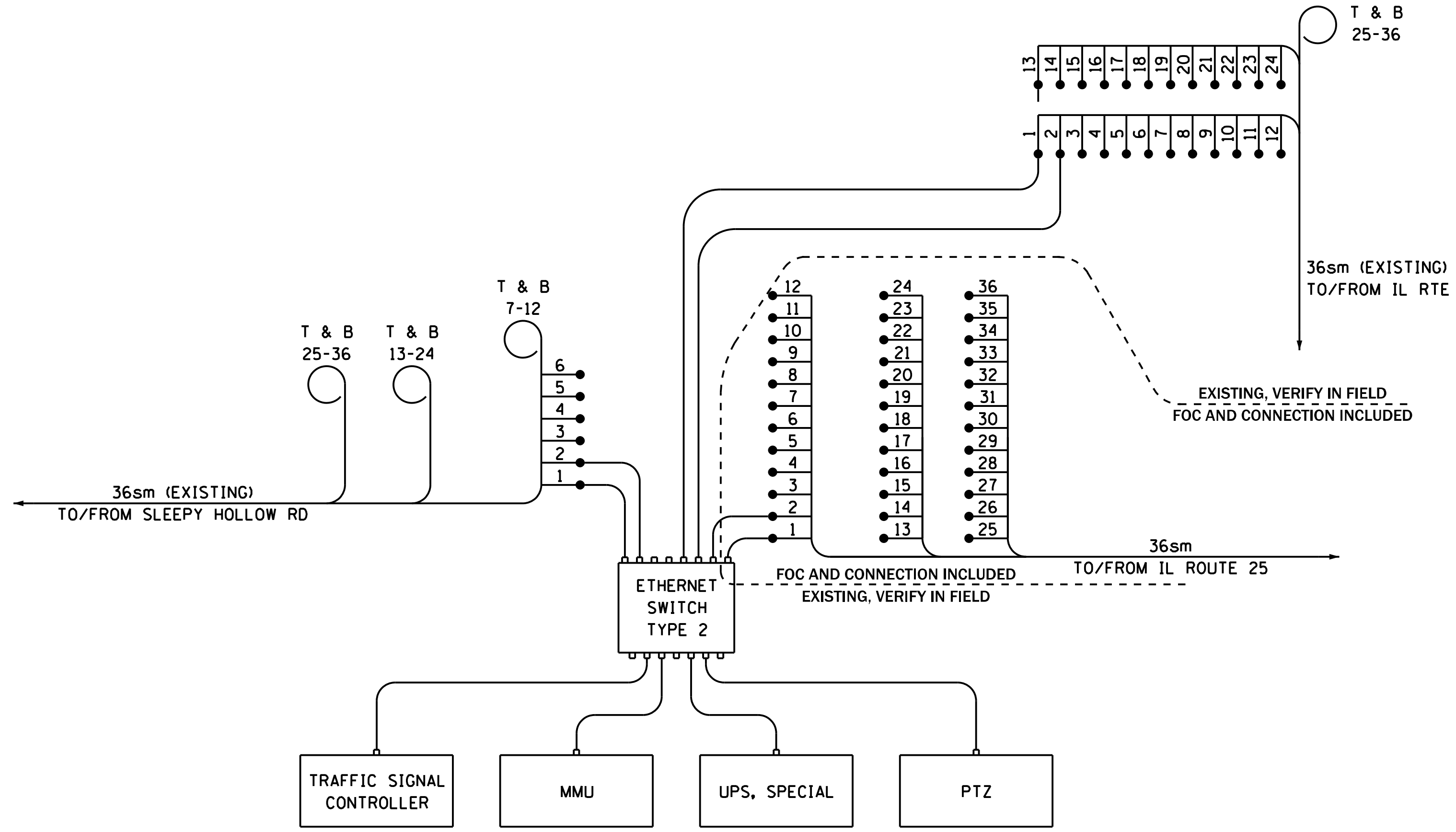
| | | | |
|---|---|---|---|
| BURNS McDONNELL 200 W. ADAMS STREET / SUITE 1600 CHICAGO, IL 60606 P: (312)-223-0920 / F: (312)-223-9664 WEB: WWW.BURNSMCD.COM | USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | | DRAWN - RGJ | REVISED - |
| | PLOT SCALE = 100.0000 '/ in. | CHECKED - MAP | REVISED - |
| | PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CABINET DETAILS**
**LONGMEADOW PARKWAY AT IL ROUTE 25**
**LONGMEADOW PARKWAY AT BOLZ ROAD CONNECTOR**

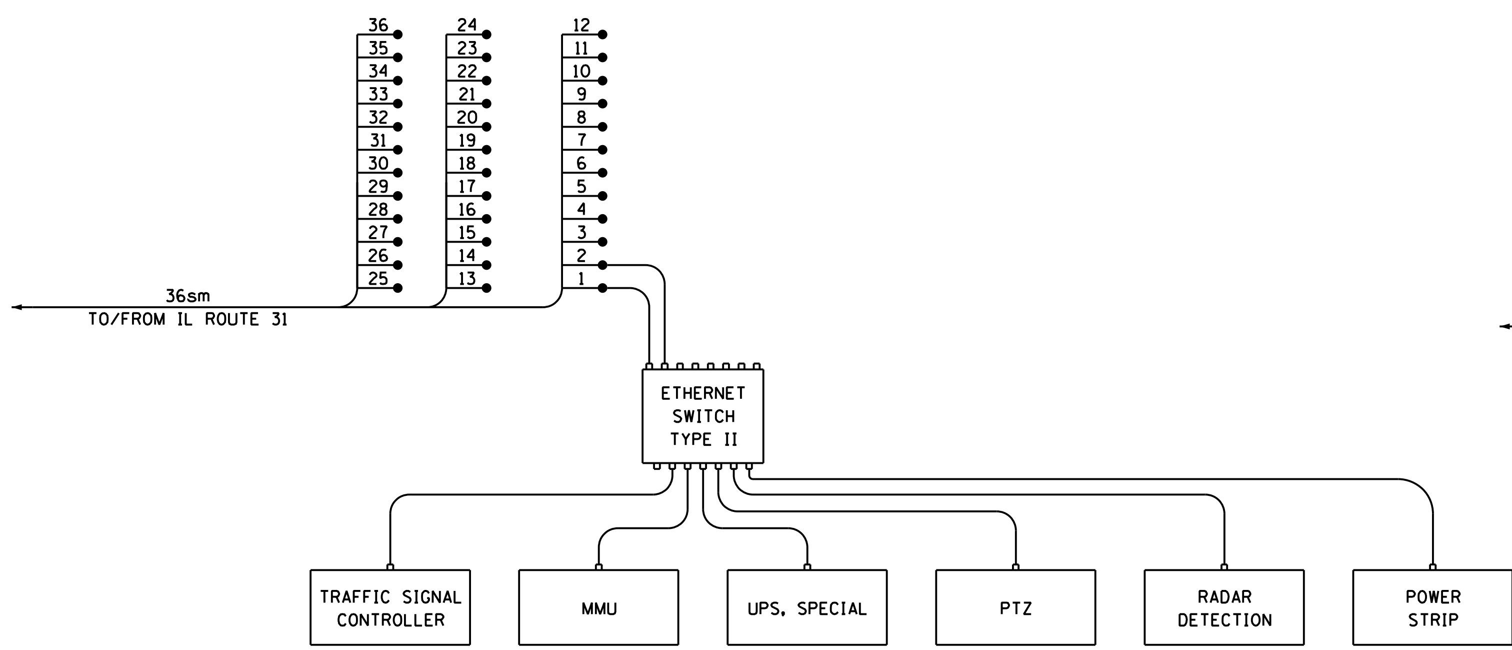
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 237 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

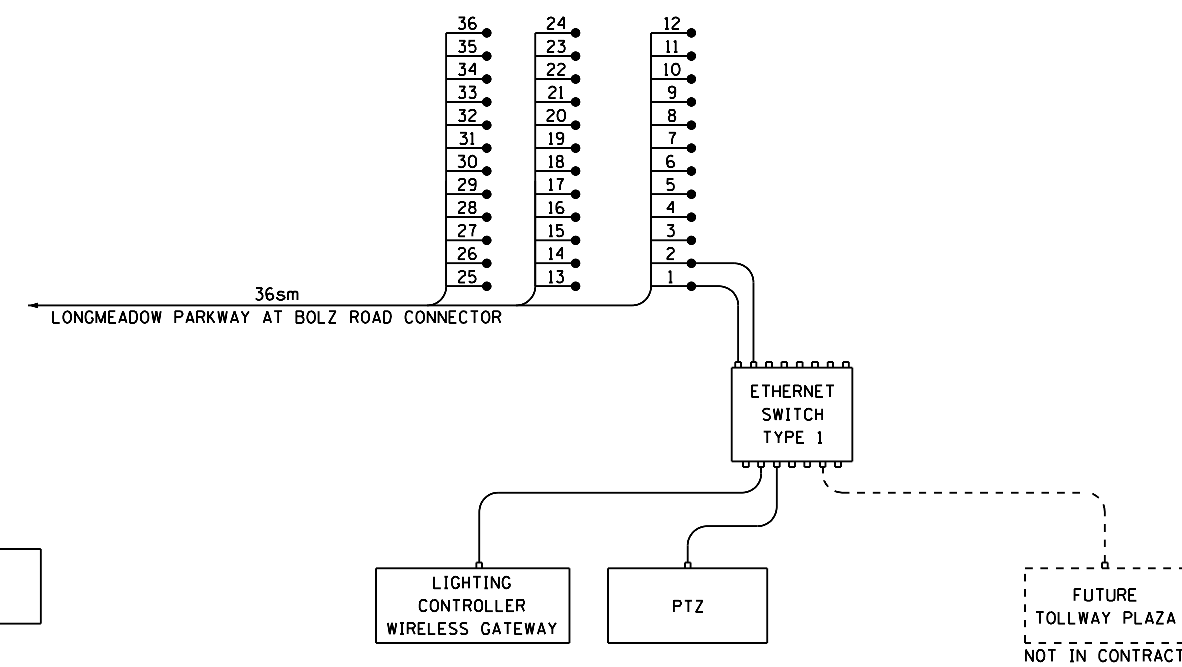



## EXISTING LONGMEADOW PARKWAY AT IL ROUTE 31 CONNECTOR

(SHOWN FOR REFERENCE ONLY)




## LONGMEADOW PARKWAY AT BOLZ ROAD CONNECTOR




## LIGHTING CONTROLLER AT FUTURE TOLLWAY PLAZA

LOCAL COORDINATE SYSTEM

FILE NAME = SectionC2-sht-tsint-det02_bmd.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 100.0000 '/ in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER SPLICING DETAILS**
**LONGMEADOW PARKWAY**

SCALE: 1"=50' | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 238 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

## ITS NOTES

1. ALL UNDERGROUND CONDUITS USED FOR FIBER SHALL BE COILABLE NONMETALLIC HDPE CONDUIT, SCHEDULE 80 AND SHALL BE BLACK IN COLOR, UNLESS NOTED OTHERWISE.

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
   a. STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION IN ILLINOIS. AS PREPARED BY IDOT.
   b. THE NATIONAL ELECTRICAL CODE
   c. MUNICIPAL CODES & STANDARDS
   d. ILLINOIS MUNICIPAL SIGNAL ASSOCIATION (IMSA) STANDARDS.

3. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

4. THE ELECTRICAL CONTRACTOR SHALL FURNISH ONE SET OF RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE ELECTRICAL AND ITS IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATION OF ALL EQUIPMENT, UNDERGROUND WIRING & CONTROLLER CABINETS.

5. ALL FIBER OPTIC CABLE SPLICES SHALL BE LOCATED AT TRAFFIC SIGNAL CONTROLLER CABINETS OR LIGHTING CABINETS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND THE ADJEACENT CONTRACTS TO ELIMINATE SPLICES AT THE CONTRACT LIMITS.

6. THE COST OF CONNECTIONS BETWEEN CONDUITS AND HANDHOLES, AND BETWEEN CONDUITS OF DIFFERENT MATERIALS SHALL BE INCLUDED IN THE COST OF THE CONDUIT INSTALLATION. CONNECTIONS BETWEEN DIFFERENT MATERIALS SHALL BE APPROVED BY THE ENGINEER.

7. ALL INTERCONNECTED DEVICES SHALL BE CONFIGURED AND ASSIGNED RESPECTIVE IP ADDRESSES AS OUTLINED BY KANE COUNTY'S IP NAMING CONVENTION SCHEME AND ASSIGNED LOCATION ID AS INSTRUCTED BY KANE COUNTY TRAFFIC (630-208-3139). THIS WORK ALONG WITH ALL REQUIRED COMUNICATION WILL BE PAID FOR AS PART OF NETWORK CONFIGURATION.

8. ALL COSTS ASSOCIATED WITH THE COORDINATION OF FIBER OPTIC CABLE TERMINATION POINTS SHALL BE INCLUDED IN THE PRICE OF THE FIBER OPTIC CABLE BEING PLACED. IF THE CONTRACTOR IS REQUESTED BY THE ENGINEER TO RUN FIBER OPTIC CABLE BEYOND THE CONTRACT LIMITS IN ORDER TO TERMINATE AT THE CLOSEST TRAFFIC SIGNAL CABINET. THE COST ASSOCIATED WITH THIS ADDITIONAL WORK SHALL BE AT THE AGREED UPON UNIT PRICE FOR THE FIBER OPTIC CABLE BEING INSTALLED AND THE ASSOCIATED COST FOR FIBER OPTIC CABLE TERMINATIONS (IF ALSO REQUESTED BY THE ENGINEER).

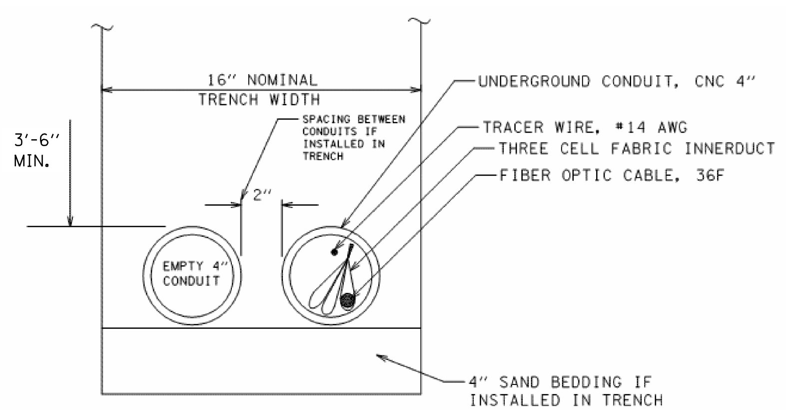
## ITS LEGEND

HANDHOLE

HEAVY DUTY HANDHOLE

DOUBLE HANDHOLE

FIBER-OPTIC CABLE IN CONDUIT —FO— —FO—




ITS FIBER-OPTIC CABLE / INTERCONNECT TRENCH DETAIL

LOCAL COORDINATE SYSTEM

FILE NAME = SectionC2-sht-tsint-det04_bmd.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LONGMEADOW PARKWAY FIBER-OPTIC CABLE INTERCONNECT
ITS NOTES

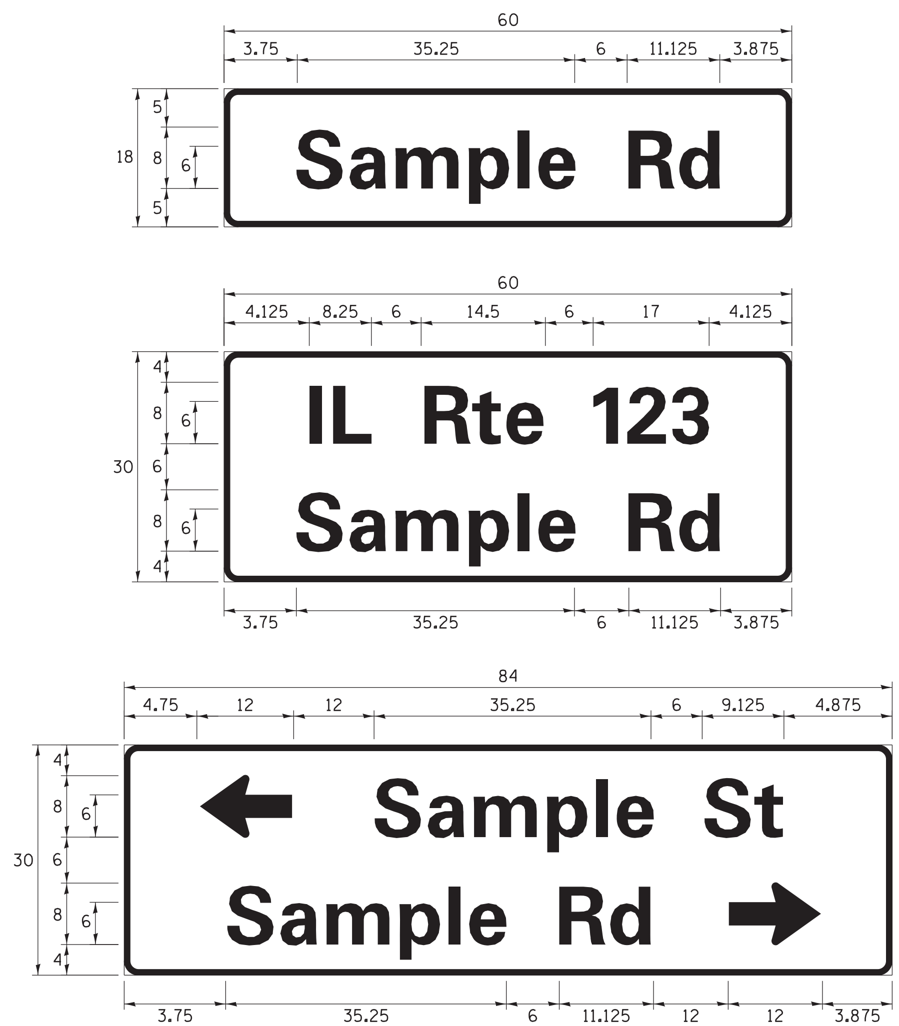
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 239 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

## SIGN PANEL – TYPE 1 OR TYPE 2




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D OR C | - | 1 OR 2 | ZZ | - |

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

## COMMON STREET NAME ABBREVIATIONS AND WIDTHS

| NAME | ABBREVATION | WIDTH (INCH) | |
|---|---|---|---|
| | | SERIES "C" | SERIES "D" |
| AVENUE | Ave | 15.000 | 18.250 |
| BOULEVARD | Blvd | 17.125 | 20.000 |
| CIRCLE | Cir | 11.125 | 13.000 |
| COURT | Ct | 8.250 | 9.625 |
| DRIVE | Dr | 8.625 | 10.125 |
| HIGHWAY | Hwy | 18.375 | 22.000 |
| ILLINOIS | IL | 7.000 | 8.250 |
| LANE | Ln | 9.125 | 10.750 |
| PARKWAY | Pkwy | 23.375 | 27.375 |
| PLACE | Pl | 7.125 | 7.750 |
| ROAD | Rd | 9.625 | 11.125 |
| ROUTE | Rte | 12.625 | 14.500 |
| STREET | St | 8.000 | 9.125 |
| TERRACE | Ter | 12.625 | 14.625 |
| TRAIL | Tr | 7.750 | 9.125 |
| UNITED STATES | US | 10.375 | 12.250 |

## GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.

2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)

3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.

4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.

5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

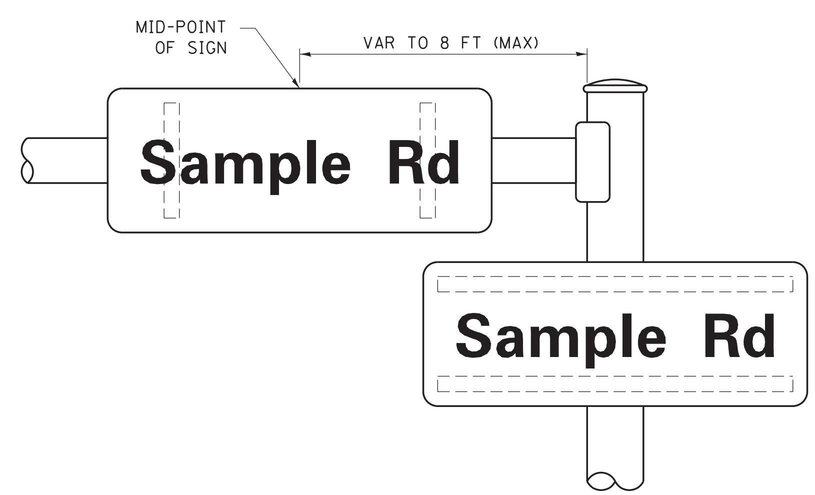
6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

| LOCAL SUPPLIERS: | PARTS LISTING: | |
|---|---|---|
| - J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA | SIGN CHANNEL | PART #HPN053 (MED. CHANNEL) |
| | SIGN SCREWS | 1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER |
| - WESTERN REMAC, INC. WOODRIDGE, IL | BRACKETS | PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING |

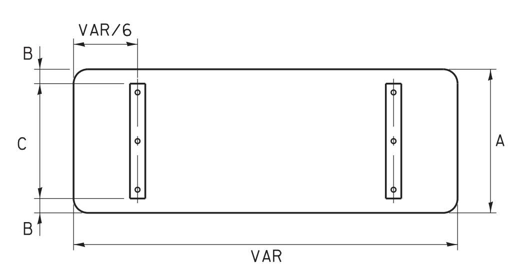
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

## MOUNTING LOCATION

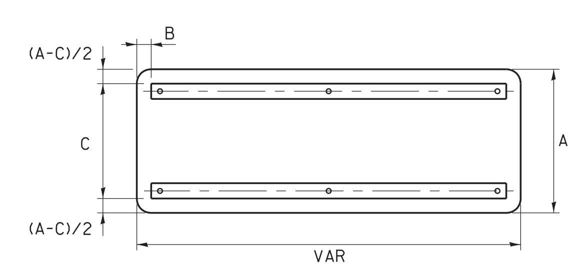
ARM OR POLE MOUNTED




## SUPPORTING CHANNELS




| A | B | C |
|---|---|---|
| 18" | 2" | 14" |
| 30" | 2" | 24" |




| A | B | C |
|---|---|---|
| 18" | 2" | 12" |
| 30" | 2" | 22" |

## STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

| FHWA SERIES "C" | | | | FHWA SERIES "D" | | | |
|---|---|---|---|---|---|---|---|
| CHARACTER | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) | CHARACTER | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) |
| A | 0.240 | 5.122 | 0.240 | A | 0.240 | 6.804 | 0.240 |
| B | 0.880 | 4.482 | 0.480 | B | 0.960 | 5.446 | 0.400 |
| C | 0.720 | 4.482 | 0.720 | C | 0.800 | 5.446 | 0.800 |
| D | 0.880 | 4.482 | 0.720 | D | 0.960 | 5.446 | 0.800 |
| E | 0.880 | 4.082 | 0.480 | E | 0.960 | 4.962 | 0.400 |
| F | 0.880 | 4.082 | 0.240 | F | 0.960 | 4.962 | 0.240 |
| G | 0.720 | 4.482 | 0.720 | G | 0.800 | 5.446 | 0.800 |
| H | 0.880 | 4.482 | 0.880 | H | 0.960 | 5.446 | 0.960 |
| I | 0.880 | 1.120 | 0.880 | I | 0.960 | 1.280 | 0.960 |
| J | 0.240 | 4.082 | 0.880 | J | 0.240 | 5.122 | 0.960 |
| K | 0.880 | 4.482 | 0.480 | K | 0.960 | 5.604 | 0.400 |
| L | 0.880 | 4.082 | 0.240 | L | 0.960 | 4.962 | 0.240 |
| M | 0.880 | 5.284 | 0.880 | M | 0.960 | 6.244 | 0.960 |
| N | 0.880 | 4.482 | 0.880 | N | 0.960 | 5.446 | 0.960 |
| O | 0.720 | 4.722 | 0.720 | O | 0.800 | 5.684 | 0.800 |
| P | 0.880 | 4.482 | 0.720 | P | 0.960 | 5.446 | 0.240 |
| Q | 0.720 | 4.722 | 0.720 | Q | 0.800 | 5.684 | 0.800 |
| R | 0.880 | 4.482 | 0.480 | R | 0.960 | 5.446 | 0.400 |
| S | 0.480 | 4.482 | 0.480 | S | 0.400 | 5.446 | 0.400 |
| T | 0.240 | 4.082 | 0.240 | T | 0.240 | 4.962 | 0.240 |
| U | 0.880 | 4.482 | 0.880 | U | 0.960 | 5.446 | 0.960 |
| V | 0.240 | 4.962 | 0.240 | V | 0.240 | 6.084 | 0.240 |
| W | 0.240 | 6.084 | 0.240 | W | 0.240 | 7.124 | 0.240 |
| X | 0.240 | 4.722 | 0.240 | X | 0.400 | 5.446 | 0.400 |
| Y | 0.240 | 5.122 | 0.240 | Y | 0.240 | 6.884 | 0.240 |
| Z | 0.480 | 4.482 | 0.480 | Z | 0.400 | 5.446 | 0.400 |
| a | 0.320 | 3.842 | 0.640 | a | 0.400 | 4.562 | 0.720 |
| b | 0.720 | 4.082 | 0.480 | b | 0.800 | 4.802 | 0.480 |
| c | 0.480 | 4.002 | 0.240 | c | 0.480 | 4.722 | 0.240 |
| d | 0.480 | 4.082 | 0.720 | d | 0.480 | 4.802 | 0.800 |
| e | 0.480 | 4.082 | 0.320 | e | 0.480 | 4.722 | 0.320 |
| f | 0.320 | 2.480 | 0.160 | f | 0.320 | 2.882 | 0.160 |
| g | 0.480 | 4.082 | 0.720 | g | 0.480 | 4.802 | 0.800 |
| h | 0.720 | 4.082 | 0.640 | h | 0.800 | 4.722 | 0.720 |
| i | 0.720 | 1.120 | 0.720 | i | 0.800 | 1.280 | 0.800 |
| j | 0.000 | 2.320 | 0.720 | j | 0.000 | 2.642 | 0.800 |
| k | 0.720 | 4.322 | 0.160 | k | 0.800 | 5.122 | 0.160 |
| l | 0.720 | 1.120 | 0.720 | l | 0.800 | 1.280 | 0.800 |
| m | 0.720 | 6.724 | 0.640 | m | 0.800 | 7.926 | 0.720 |
| n | 0.720 | 4.082 | 0.640 | n | 0.800 | 4.722 | 0.720 |
| o | 0.480 | 4.082 | 0.480 | o | 0.480 | 4.882 | 0.480 |
| p | 0.720 | 4.082 | 0.480 | p | 0.800 | 4.802 | 0.480 |
| q | 0.480 | 4.082 | 0.720 | q | 0.480 | 4.802 | 0.800 |
| r | 0.720 | 2.642 | 0.160 | r | 0.800 | 3.042 | 0.160 |
| s | 0.320 | 3.362 | 0.240 | s | 0.320 | 3.762 | 0.240 |
| t | 0.080 | 2.882 | 0.080 | t | 0.080 | 3.202 | 0.080 |
| u | 0.640 | 4.082 | 0.720 | u | 0.720 | 4.722 | 0.800 |
| v | 0.160 | 4.722 | 0.160 | v | 0.160 | 5.684 | 0.160 |
| w | 0.160 | 7.524 | 0.160 | w | 0.160 | 9.046 | 0.160 |
| x | 0.000 | 5.202 | 0.000 | x | 0.000 | 6.244 | 0.000 |
| y | 0.160 | 4.962 | 0.160 | y | 0.160 | 6.004 | 0.160 |
| z | 0.240 | 3.362 | 0.240 | z | 0.240 | 4.002 | 0.240 |
| 1 | 0.720 | 1.680 | 0.880 | 1 | 0.800 | 2.000 | 0.960 |
| 2 | 0.480 | 4.482 | 0.480 | 2 | 0.800 | 5.446 | 0.800 |
| 3 | 0.480 | 4.482 | 0.480 | 3 | 1.440 | 5.446 | 0.800 |
| 4 | 0.240 | 4.962 | 0.720 | 4 | 0.160 | 6.004 | 0.960 |
| 5 | 0.480 | 4.482 | 0.480 | 5 | 0.800 | 5.446 | 0.800 |
| 6 | 0.720 | 4.482 | 0.720 | 6 | 0.800 | 5.446 | 0.800 |
| 7 | 0.240 | 4.482 | 0.720 | 7 | 0.560 | 5.446 | 0.560 |
| 8 | 0.480 | 4.482 | 0.480 | 8 | 0.800 | 5.446 | 0.800 |
| 9 | 0.480 | 4.482 | 0.480 | 9 | 0.800 | 5.446 | 0.800 |
| 0 | 0.720 | 4.722 | 0.720 | 0 | 0.800 | 5.684 | 0.800 |
| - | 0.240 | 2.802 | 0.240 | - | 0.240 | 2.802 | 0.240 |
| | | | | | | | |

| FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStdRd\CADData\CADsheets\ts02.dgn | USER NAME = drivakosgn | DESIGNED - LP/IP | REVISED - LP 07/01/2015 |
|---|---|---|---|
| | | DRAWN - LP | REVISED - |
| | PLOT SCALE = 50.0000 '/ in. | CHECKED - IP | REVISED - |
| Default | PLOT DATE = 7/31/2015 | DATE - 10/01/2014 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**
**MAST ARM MOUNTED STREET NAME SIGNS**

SCALE: | SHEET OF SHEETS | STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 240 |
| | TS-02 | CONTRACT NO. 61G02 | | |
| | ILLINOIS FED. AID PROJECT | | | |

ts02.dgn 7/31/2015 11:37:05 AM User=drivakosgn

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| CONTROLLER CABINET | | |
| COMMUNICATION CABINET | ECC | CC |
| MASTER CONTROLLER | EMC | MC |
| MASTER MASTER CONTROLLER | EMMC | MMC |
| UNINTERRUPTABLE POWER SUPPLY | | |
| SERVICE INSTALLATION<br>-(P) POLE MOUNTED | P | P |
| SERVICE INSTALLATION<br>-(G) GROUND MOUNTED<br>-(GM) GROUND MOUNTED METERED | G GM | G GM |
| TELEPHONE CONNECTION | ET | T |
| STEEL MAST ARM ASSEMBLY AND POLE | | |
| ALUMINUM MAST ARM ASSEMBLY AND POLE | | |
| STEEL COMBINATION MAST ARM<br>ASSEMBLY AND POLE WITH LUMINAIRE | | |
| SIGNAL POST<br>-(BM) BARREL MOUNTED - TEMPORARY | | BM |
| WOOD POLE | | |
| GUY WIRE | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | P P | P P |
| FLASHER INSTALLATION<br>-(FS) SOLAR POWERED | F FS<br>F FS | F FS<br>F FS |
| PEDESTRIAN SIGNAL HEAD | | |
| PEDESTRIAN PUSH BUTTON<br>-(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON | APS | APS |
| RADAR DETECTION SENSOR | R | R |
| VIDEO DETECTION CAMERA | V | V |
| RADAR/VIDEO DETECTION ZONE | | |
| PAN, TILT, ZOOM (PTZ) CAMERA | PTZ | PTZ |
| EMERGENCY VEHICLE LIGHT DETECTOR | | |
| CONFIMATION BEACON | | |
| WIRELESS INTERCONNECT | | |
| WIRELESS INTERCONNECT RADIO REPEATER | ERR | RR |

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| HANDHOLE<br>-SQUARE<br>-ROUND | | |
| HEAVY DUTY HANDHOLE<br>-SQUARE<br>-ROUND | H H | H H |
| DOUBLE HANDHOLE | | |
| JUNCTION BOX | | |
| RAILROAD CANTILEVER MAST ARM | | |
| RAILROAD FLASHING SIGNAL | | |
| RAILROAD CROSSING GATE | | |
| RAILROAD CROSSBUCK | | |
| RAILROAD CONTROLLER CABINET | | |
| UNDERGROUND CONDUIT (UC),<br>GALVANIZED STEEL | | |
| TEMPORARY SPAN WIRE,<br>TETHER WIRE, AND CABLE | | |
| SYSTEM ITEM | S | SP |
| INTERSECTION ITEM | I | IP |
| REMOVE ITEM | | R |
| RELOCATE ITEM | | RL |
| ABANDON ITEM | | A |
| CONTROLLER CABINET AND<br>FOUNDATION TO BE REMOVED | | RCF |
| MAST ARM POLE AND<br>FOUNDATION TO BE REMOVED | | RMF |
| SIGNAL POST AND<br>FOUNDATION TO BE REMOVED | | RPF |
| DETECTOR LOOP, TYPE I | | |
| PREFORMED DETECTOR LOOP | P P | P P |
| SAMPLING (SYSTEM) DETECTOR | S S | S S |
| INTERSECTION AND SAMPLING<br>(SYSTEM) DETECTOR | IS IS | IS IS |
| QUEUE AND SAMPLING<br>(SYSTEM) DETECTOR | QS QS | QS QS |
| WIRELESS DETECTOR SENSOR | W | W |
| WIRELESS ACCESS POINT | | |

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| SIGNAL HEAD<br>-(P) PROGRAMMABLE SIGNAL HEAD | R Y G ◄Y ◄G   R Y G ◄Y ◄G P | R Y G ◄Y ◄G   R Y G ◄Y ◄G P |
| SIGNAL HEAD WITH BACKPLATE<br>-(P) PROGRAMMABLE SIGNAL HEAD<br>-(RB) RETROREFLECTIVE BACKPLATE | P RB | P RB |
| PEDESTRIAN SIGNAL HEAD<br>AT RAILROAD INTERSECTIONS | | |
| PEDESTRIAN SIGNAL HEAD<br>WITH COUNTDOWN TIMER | C D | C D |
| ILLUMINATED SIGN<br>"NO LEFT TURN"/"NO RIGHT TURN" | | |
| NUMBER OF CONDUCTORS, ELECTRIC<br>CABLE NO. 14, UNLESS NOTED OTHERWISE.<br>ALL DETECTOR LOOP CABLE TO BE SHIELDED | 5 | 5 |
| GROUND CABLE IN CONDUIT,<br>NO. 6 SOLID COPPER (GREEN) | 1#6 | 1#6 |
| ELECTRIC CABLE IN CONDUIT, TRACER<br>NO. 14 1/C | 1 | 1 |
| COAXIAL CABLE | C | C |
| VENDOR CABLE | V | V |
| COPPER INTERCONNECT CABLE,<br>NO. 18, 3 PAIR TWISTED, SHIELDED | 6#18 | 6#18 |
| FIBER OPTIC CABLE<br>-NO. 62.5/125, MM12F<br>-NO. 62.5/125, MM12F SM12F<br>-NO. 62.5/125, MM12F SM24F | 12F<br>24F<br>36F | 12F<br>24F<br>36F |
| GROUND ROD<br>-(C) CONTROLLER<br>-(M) MAST ARM<br>-(P) POST<br>-(S) SERVICE | C M P S | C M P S |

| FILE NAME = ts05.dgn | USER NAME = leysa | DESIGNED - IP | REVISED - | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION | DISTRICT ONE<br>STANDARD TRAFFIC SIGNAL DESIGN DETAILS | F.A.U. RTE. 2298 | SECTION 18-00215-21-BR | COUNTY KANE | TOTAL SHEETS 415 | SHEET NO. 241 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | DRAWN - IP | REVISED - | | | TS-05 | | CONTRACT NO. 61G02 | | |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - LP | REVISED - | | SCALE: NONE   SHEET 1 OF 7 SHEETS STA. TO STA. | | ILLINOIS FED. AID PROJECT | | | |
| Default | PLOT DATE = 9/29/2016 | DATE - 9/29/2016 | REVISED - | | | | | | | |

## LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

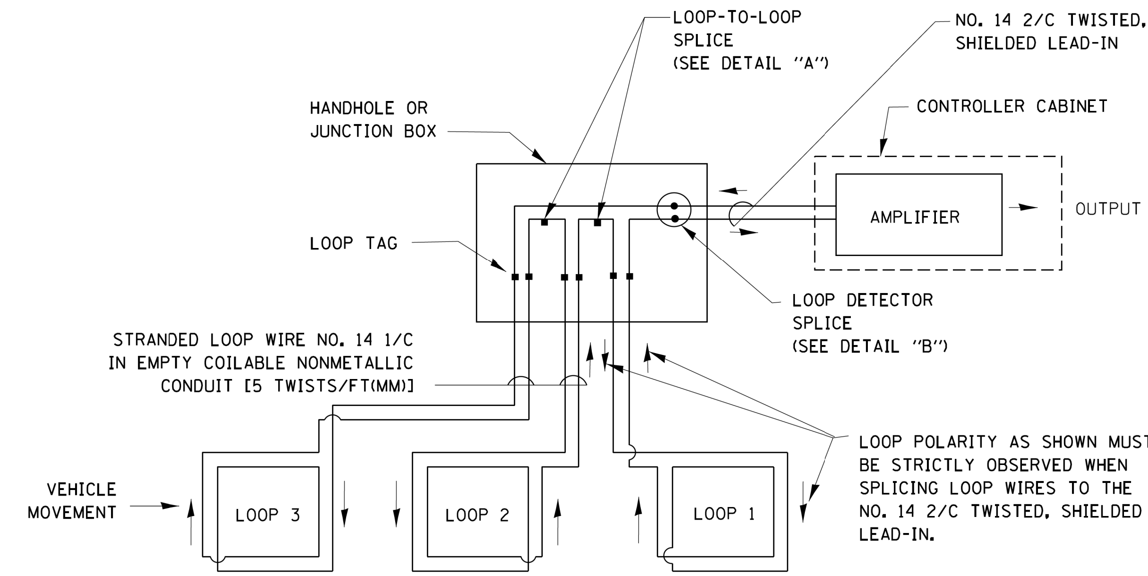
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

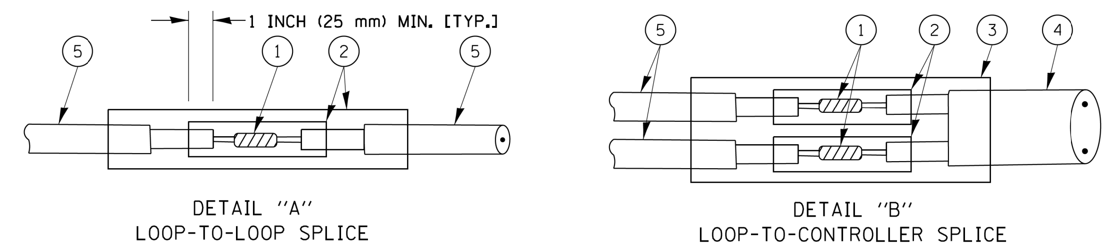
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



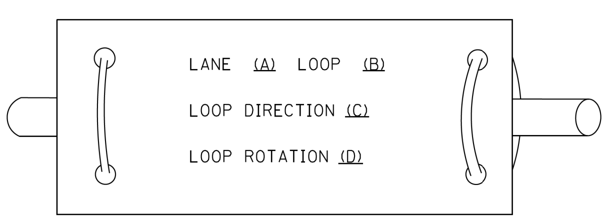

## DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.




## TYPE I LOOP

## LOOP LEAD-IN CABLE TAG

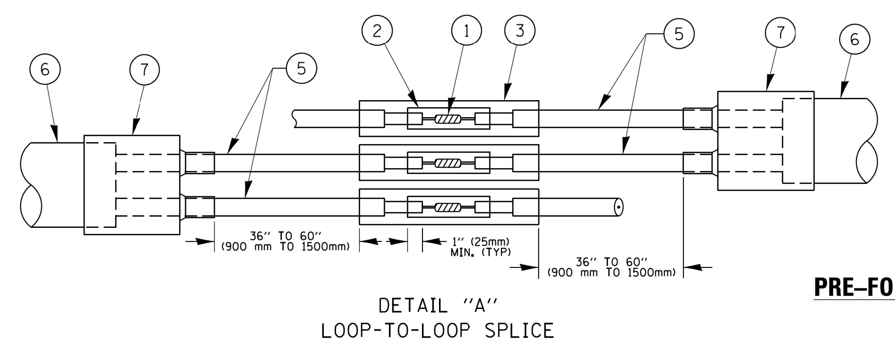



A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

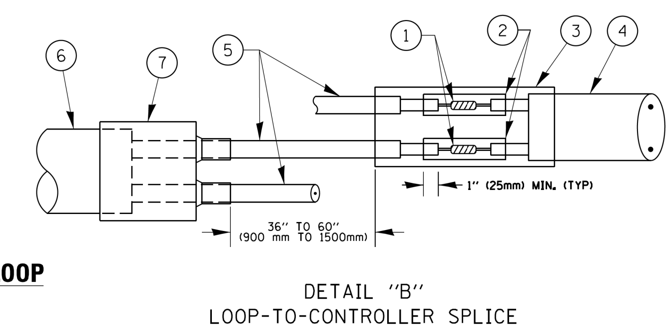
B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.




## PRE-FORMED LOOP




## LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

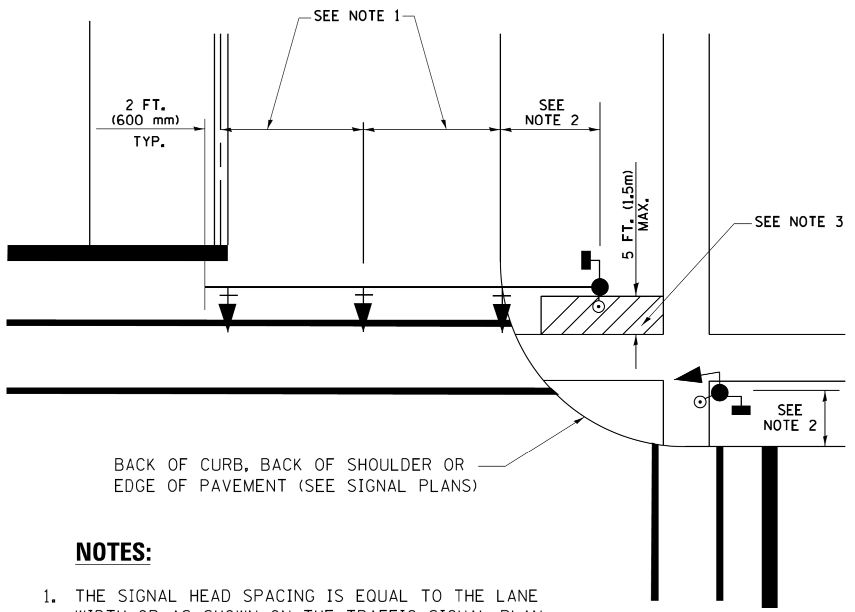
(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\footemj\d0108315\ts05.dgn | USER NAME = footemj | DESIGNED - DAD | REVISED - DAG 1-1-14 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | F.A.U. RTE. 2298 | SECTION 18-00215-21-BR | COUNTY KANE | TOTAL SHEETS 415 / SHEET NO. 242 |
| | | DRAWN - BCK | REVISED - | | | TS-05 | | CONTRACT NO. 61G02 | |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - | | SCALE: NONE / SHEET NO. 2 OF 7 SHEETS / STA. TO STA. | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - | | | | | | |

## TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

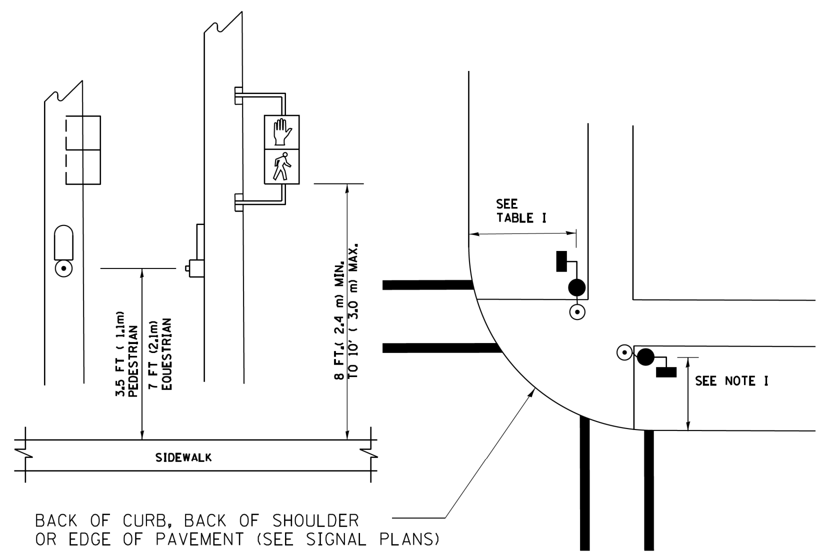
**MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**




### NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

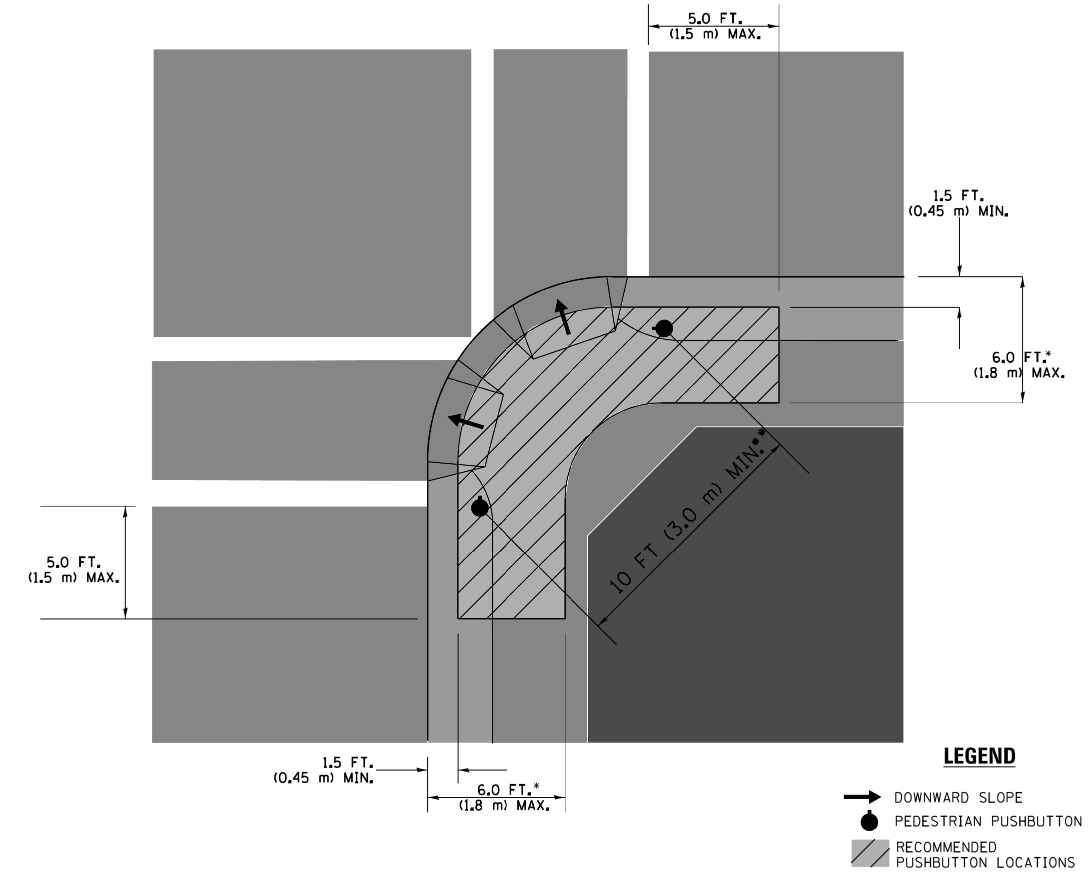
## PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST




### NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

## RECOMMENDED PUSHBUTTON LOCATIONS




- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

## NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

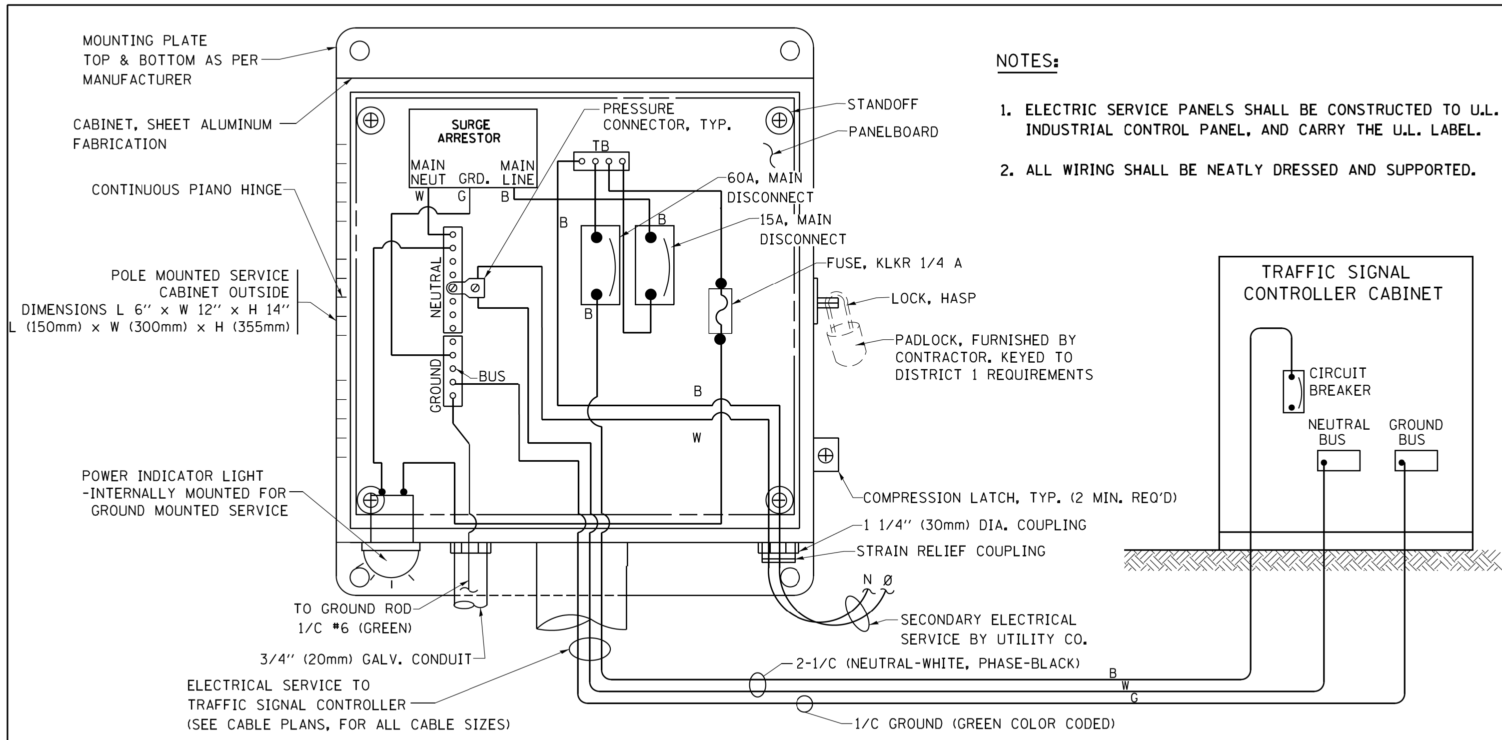
| TRAFFIC SIGNAL EQUIPMENT | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION) |
|---|---|---|
| TRAFFIC SIGNAL MAST ARM POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| TRAFFIC SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN PUSHBUTTON POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| TEMPORARY WOOD POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| CONTROLLER CABINET | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2 | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3. |
| SERVICE INSTALLATION, GROUND MOUNT | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2 | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3. |

### NOTES:

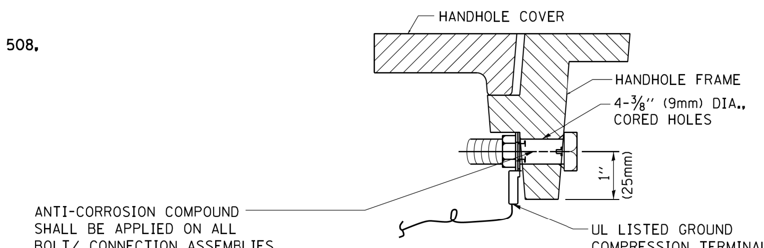
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

NOTES:

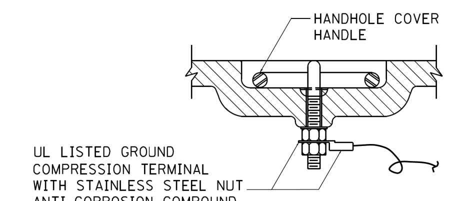
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



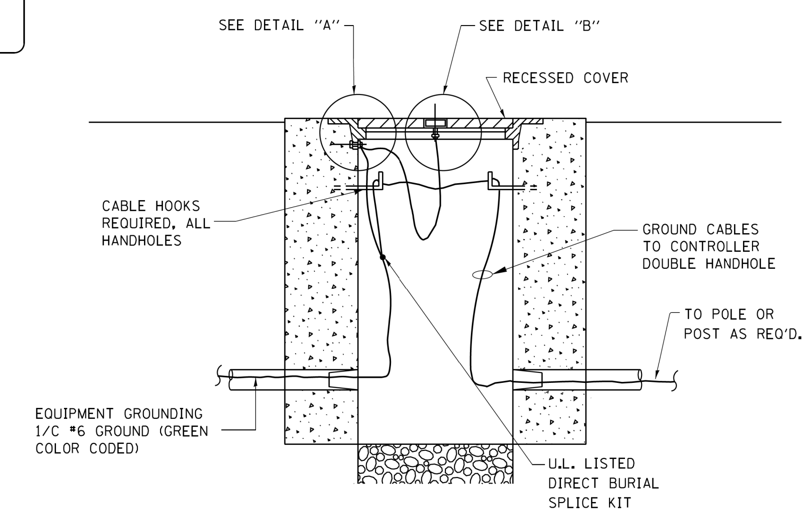

**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**
(NOT TO SCALE)




**DETAIL "A"**



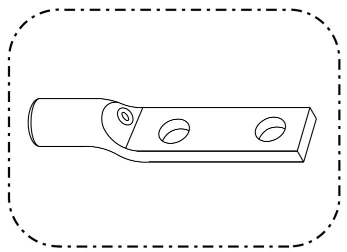

**DETAIL "B"**



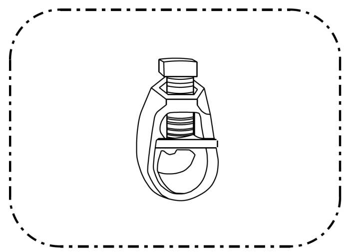

**HANDHOLE COVER & FRAME – GROUNDING DETAIL**
(NOT TO SCALE)

## NOTES:
### GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



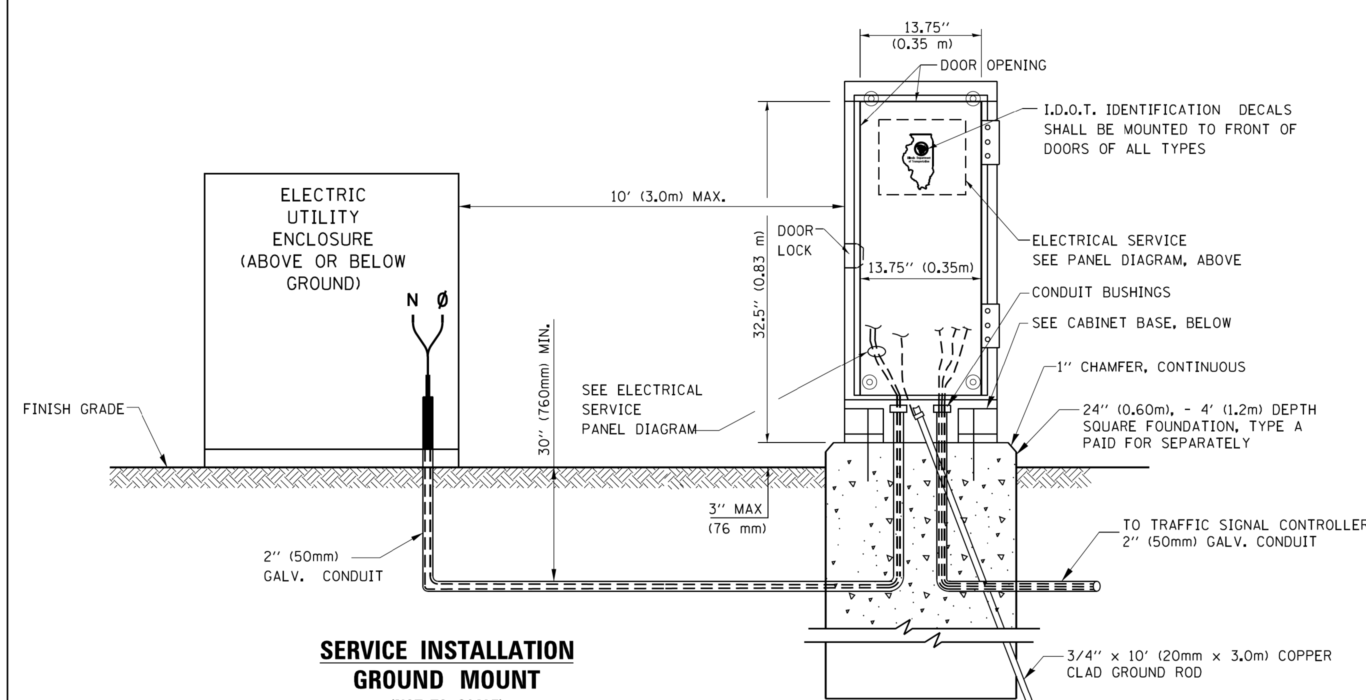
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



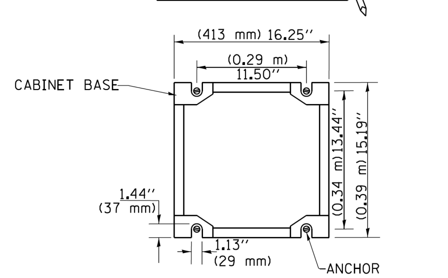
3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

## NOTES:

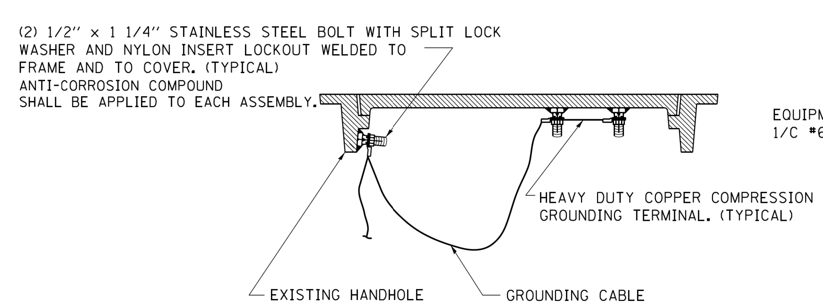
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



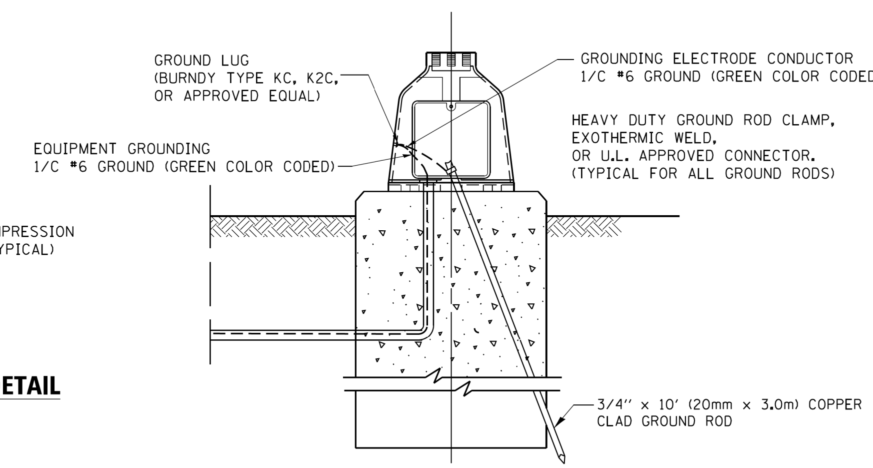

**SERVICE INSTALLATION GROUND MOUNT**
(NOT TO SCALE)




**CABINET – BASE BOLT PATTERN**
(NOT TO SCALE)




**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL**
(NOT TO SCALE)




**MAST ARM POLE / POST–GROUNDING DETAIL**
(NOT TO SCALE)

| | | | |
|---|---|---|---|
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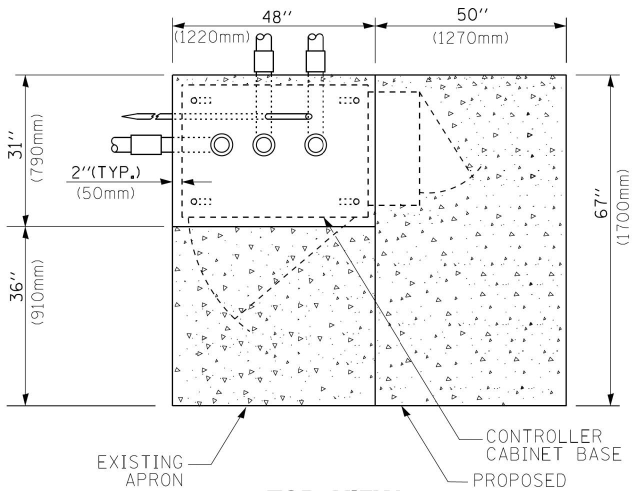
| | | DRAWN - BCK | REVISED - |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

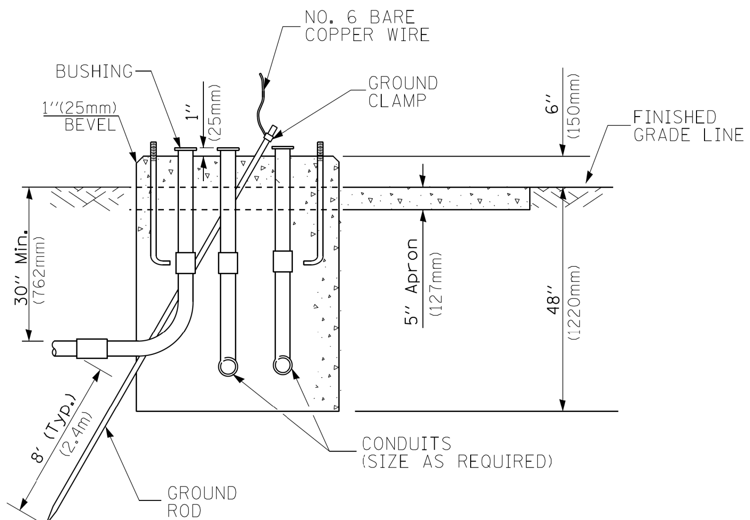
**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 4 OF 7 SHEETS | STA. TO STA.

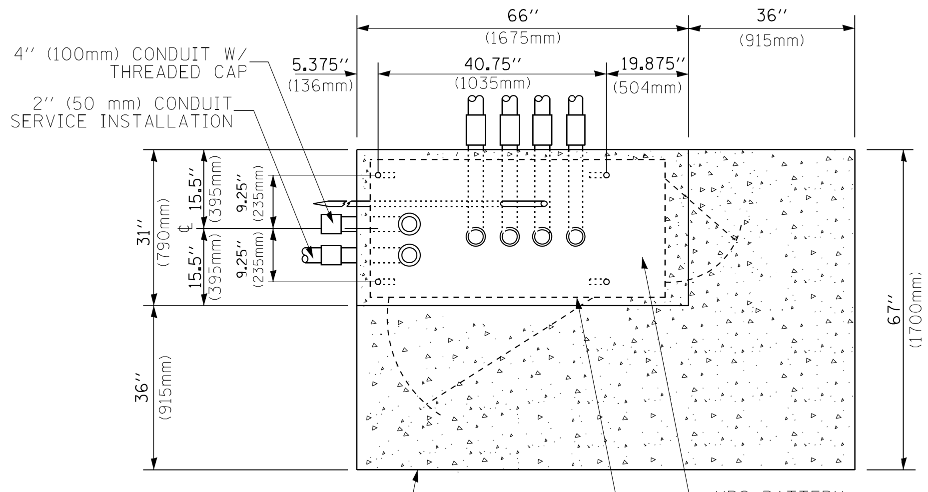
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 244 |
| | TS-05 | CONTRACT NO. 61G02 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |




**TOP VIEW**



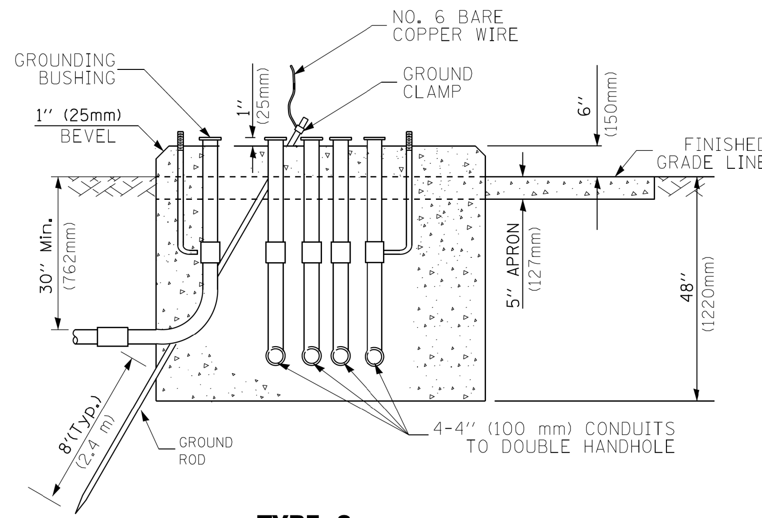

**TYPE D**
**FOR GROUND MOUNTED**
**CONTROLLER CABINET**
**AND UPS BATTERY CABINET**



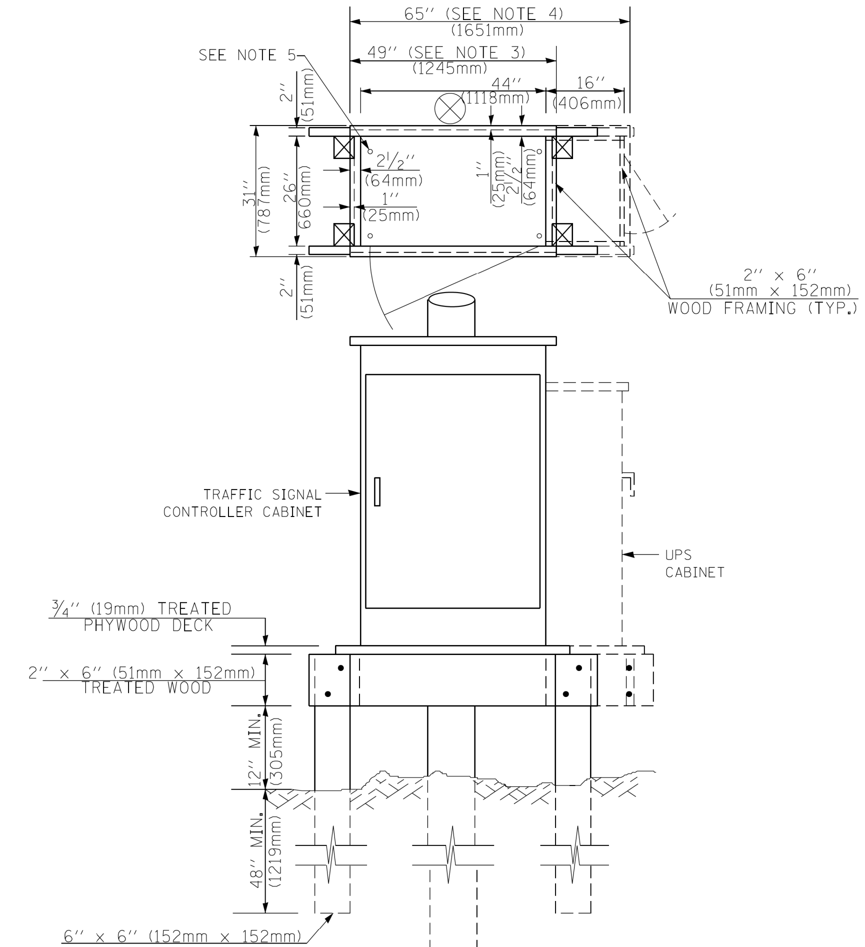

**NOTE:**

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

**TOP VIEW**




**TYPE C**
**FOR GROUND MOUNTED**
**SUPER P (TYPE IV) AND SUPER R (TYPE V)**
**CONTROLLER CABINETS**




**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26″ x 44″ (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16″ x 25″ (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER**
**WOOD SUPPORT PLATFORM**

| CABLE SLACK LENGTH | FEET | METER |
|---|---|---|
| HANDHOLE | 6.5 | 2.0 |
| DOUBLE HANDHOLE | 13.0 | 4.0 |
| SIGNAL POST | 2.0 | 0.6 |
| MAST ARM | 2.0 | 0.6 |
| CONTROLLER CABINET | 1.5 | 0.5 |
| FIBER OPTIC AT CABINET | 13.0 | 4.0 |
| ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION) | 1.5 | 0.5 |
| GROUND CABLE (SIGNAL POST, MAST ARM, CABINET) | 1.5 | 0.5 |
| GROUND CABLE (BETWEEN FRAME AND COVER) | 5.0 | 1.6 |

**CABLE SLACK**

| VERTICAL CABLE LENGTH | FEET | METER |
|---|---|---|
| MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM) | 20.0+L | 6.0+L |
| BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE) | 13.0 | 4.0 |
| PEDESTRIAN PUSH BUTTON | 6.0 | 2.0 |
| SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP | 13.5 | 4.1 |
| SERVICE INSTALLATION POLE MOUNT TO GROUND | 13.5 | 4.1 |
| SERVICE INSTALLATION GROUND MOUNT | 6.0 | 2.0 |
| FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT) | 3.0 | 1.0 |

**VERTICAL CABLE LENGTH**

| FOUNDATION | DEPTH |
|---|---|
| TYPE A - Signal Post | 4′-0″ (1.2m) |
| TYPE C - CONTROLLER W/ UPS | 4′-0″ (1.2m) |
| TYPE D - CONTROLLER | 4′-0″ (1.2m) |
| SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE | 4′-0″ (1.2m) |

**DEPTH OF FOUNDATION**

| Mast Arm Length | ① Foundation Depth | Foundation Diameter | Spiral Diameter | Quantity of Rebars | Size of Rebars |
|---|---|---|---|---|---|
| Less than 30′ (9.1 m) | 10′-0″ (3.0 m) | 30″ (750mm) | 24″ (600mm) | 8 | 6(19) |
| Greater than or equal to 30′ (9.1 m) and less than 40′ (12.2 m) | 13′-6″ (4.1 m) | 30″ (750mm) | 24″ (600mm) | 8 | 6(19) |
| | 11′-0″ (3.4 m) | 36″ (900mm) | 30″ (750mm) | 12 | 7(22) |
| Greater than or equal to 40′ (12.2 m) and less than 50′ (15.2 m) | 13′-0″ (4.0 m) | 36″ (900mm) | 30″ (750mm) | 12 | 7(22) |
| Greater than or equal to 50′ (15.2 m) and up to 55′ (16.8 m) | 15′-0″ (4.6 m) | 36″ (900mm) | 30″ (750mm) | 12 | 7(22) |
| Greater than or equal to 56′ (16.8 m) and less than 65′ (19.8 m) | 21′-0″ (6.4 m) | 42″ (1060mm) | 36″ (900mm) | 16 | 8(25) |
| Greater than or equal to 65′ (19.8 m) and up to 75′ (22.9 m) | 25′-0″ (7.6 m) | 42″ (1060mm) | 36″ (900mm) | 16 | 8(25) |

**NOTES:**

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36″ (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42″ (1060 mm) diameter foundations
4. For mast arm assemblies with dual arms refer to state standard 878001..

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

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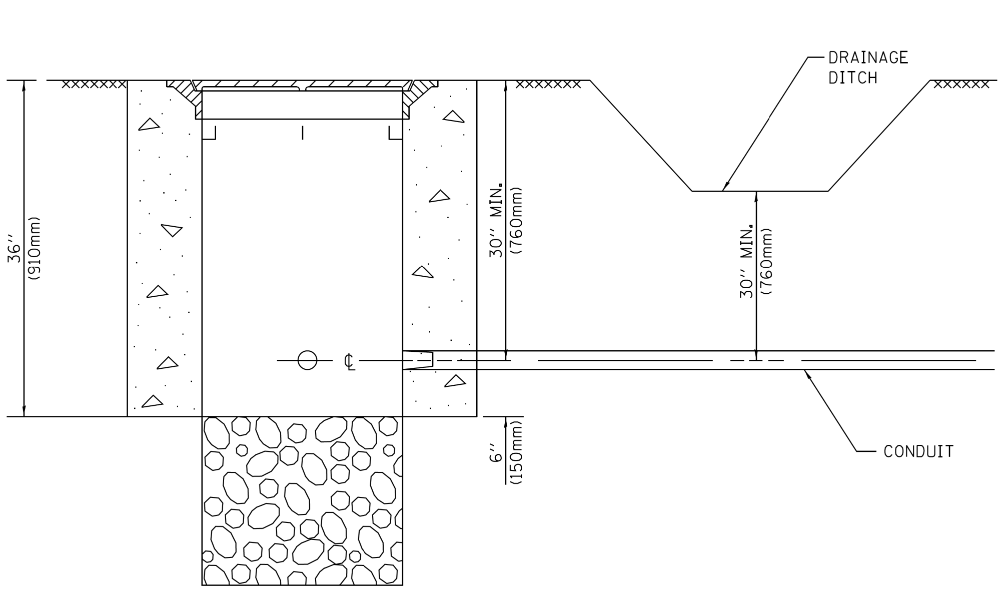
|---|---|---|---|---|---|---|---|---|---|---|
| | | DRAWN - BCK | REVISED - | | | TS-05 | | CONTRACT NO. 61G02 | | |
| | PLOT SCALE = 50.0000 ′ / in. | CHECKED - DAD | REVISED - | | SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - | | | | | | | |

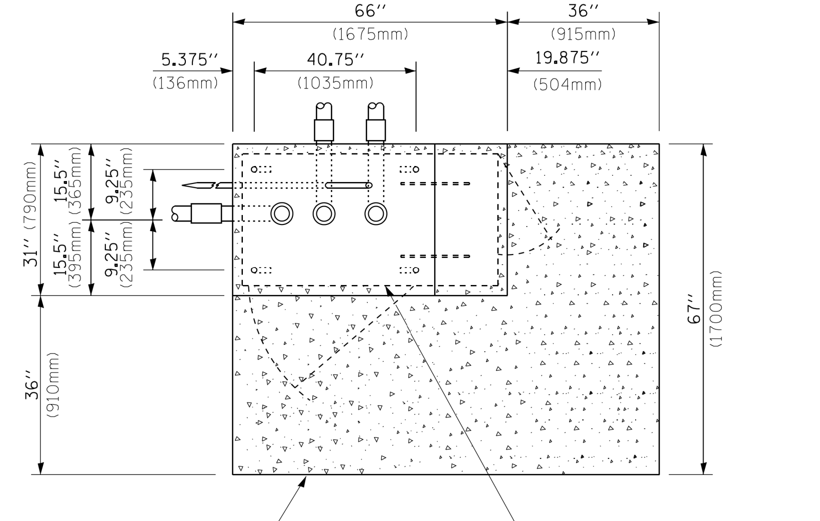



## NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

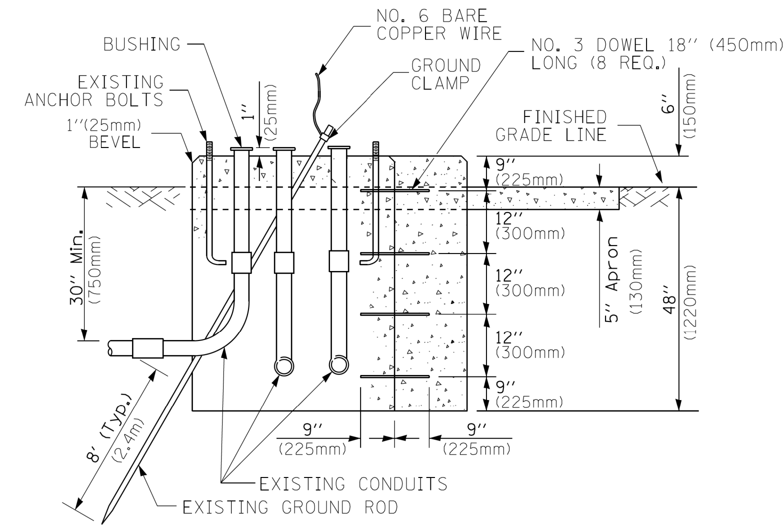
## HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



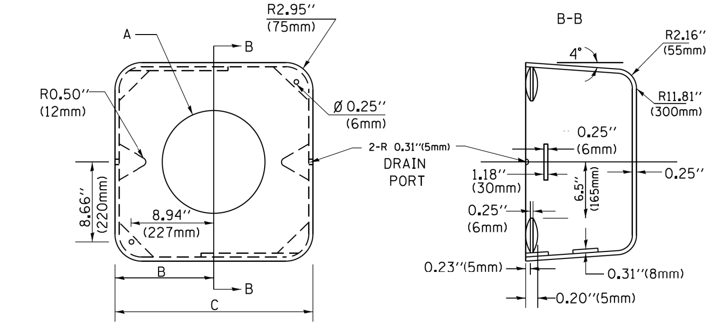

## TOP VIEW

(NOT TO SCALE)




## MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)




**MATERIAL:**

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

| A | B | C | HEIGHT | WEIGHT |
|---|---|---|---|---|
| VARIES | 9.5" (241mm) | 19" (483mm) | 7" (178mm) - 12" (300mm) | 53 lbs (24kg) |
| VARIES | 10.75" (273mm) | 21.5" (546mm) | 7" (178mm) - 12" (300mm) | 68 lbs (31 kg) |
| VARIES | 13.0" (330mm) | 26" (660mm) | 7" (178mm) - 12" (300mm) | 81 lbs (37 kg) |
| VARIES | 18.5" (470mm) | 37" (940mm) | 7" (178mm) - 12" (300mm) | 126 lbs (57 kg) |

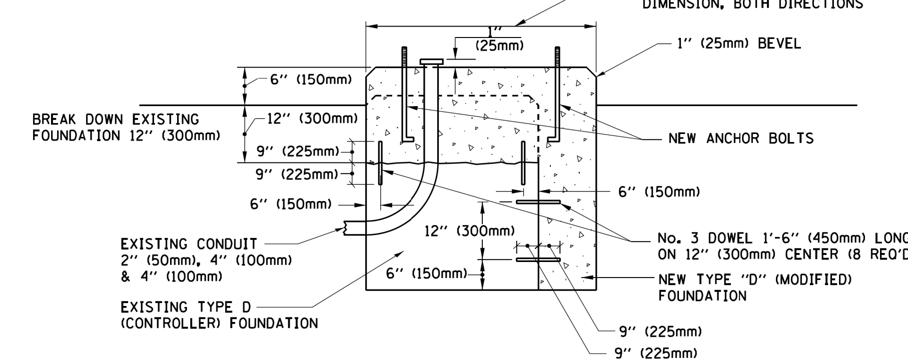
## SHROUD

## NOTES:

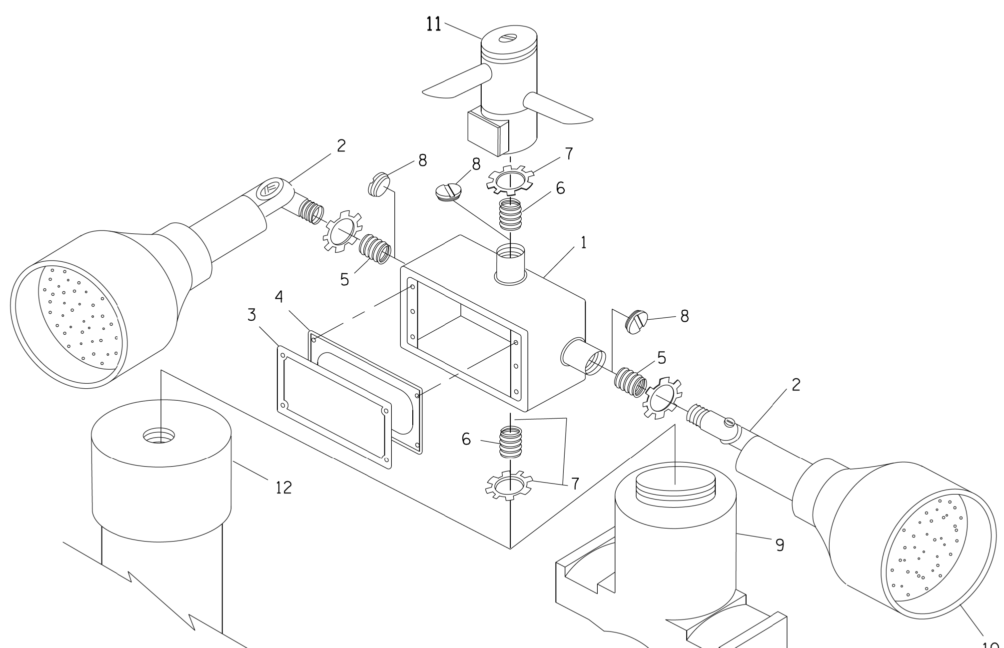
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.




## MODIFY EXISTING TYPE "D" FOUNDATION



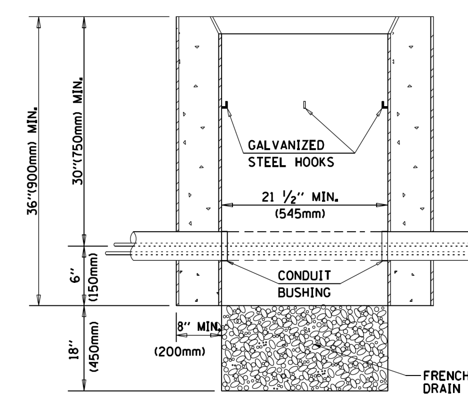

**POST CAP MOUNT** **MAST ARM MOUNT**

## EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

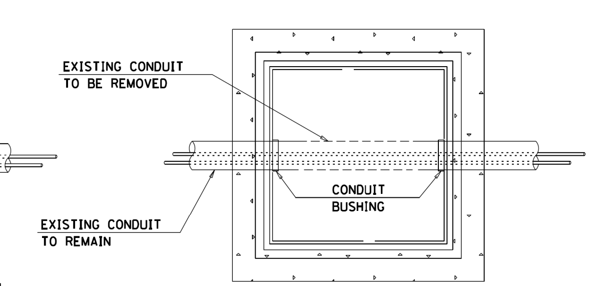
| ITEM NO. | IDENTIFICATION |
|---|---|
| 1 | OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) |
| 2 | LAMP HOLDER AND COVER |
| 3 | OUTLET BOX COVER |
| 4 | RUBBER COVER GASKET |
| 5 | REDUCING BUSHING |
| 6 | ¾"(19 mm) CLOSE NIPPLE |
| 7 | ¾"(19 mm) LOCKNUT |
| 8 | ¾"(19 mm) HOLE PLUG |
| 9 | SADDLE BRACKET - GALV. |
| 10 | 6 WATT PAR 38 LED FLOOD LAMP |
| 11 | DETECTOR UNIT |
| 12 | POST CAP [18 FT. (5.4 m) POST MIN.] |

## NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.




ELEVATION




PLAN

## NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

## HANDHOLE TO INTERCEPT EXISTING CONDUIT

| | | | |
|---|---|---|---|
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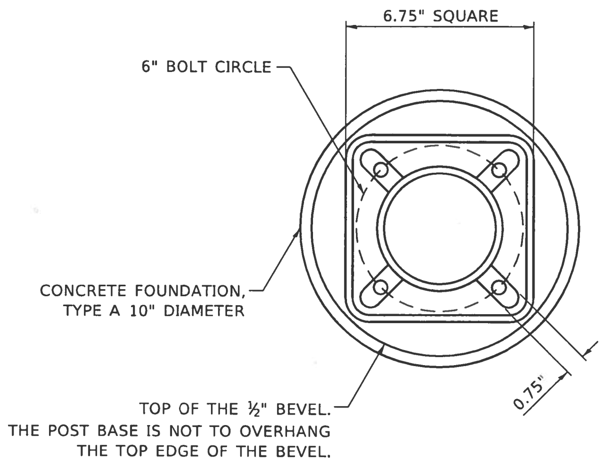
| | | DRAWN - BCK | REVISED - |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - DAD | REVISED - |
| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE | SHEET NO. 6 OF 7 SHEETS | STA. TO STA.

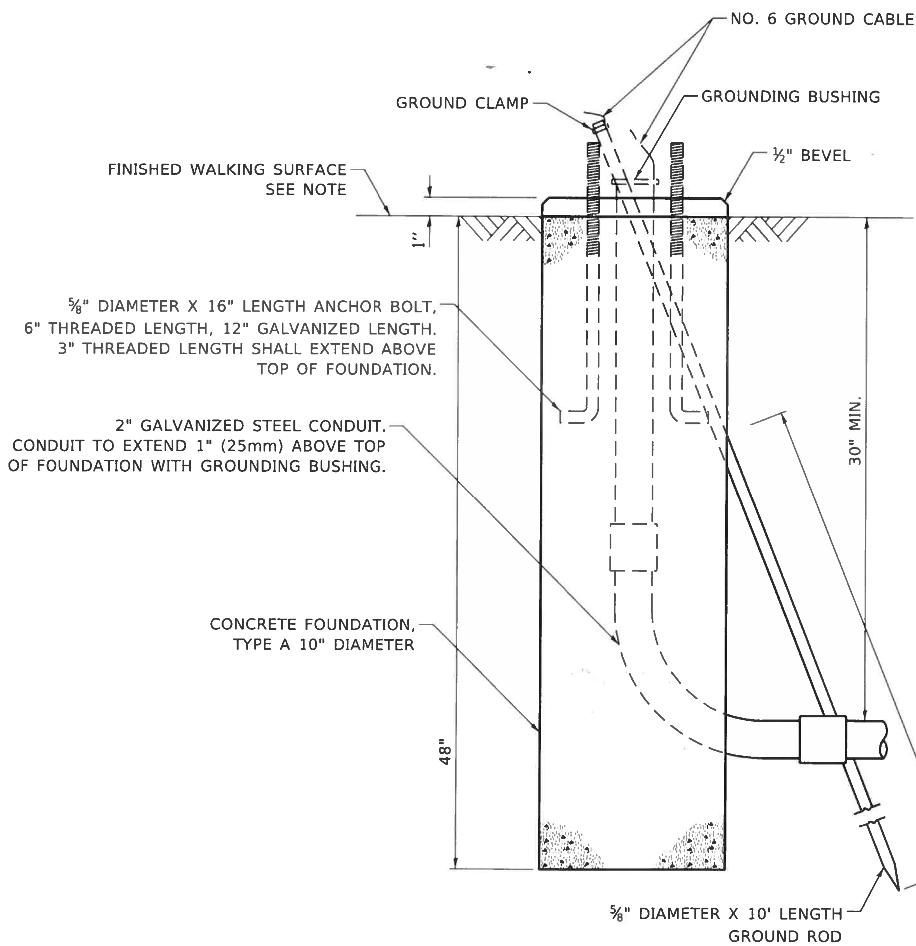
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 246 |
| | TS-05 | CONTRACT NO. 61G02 | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |



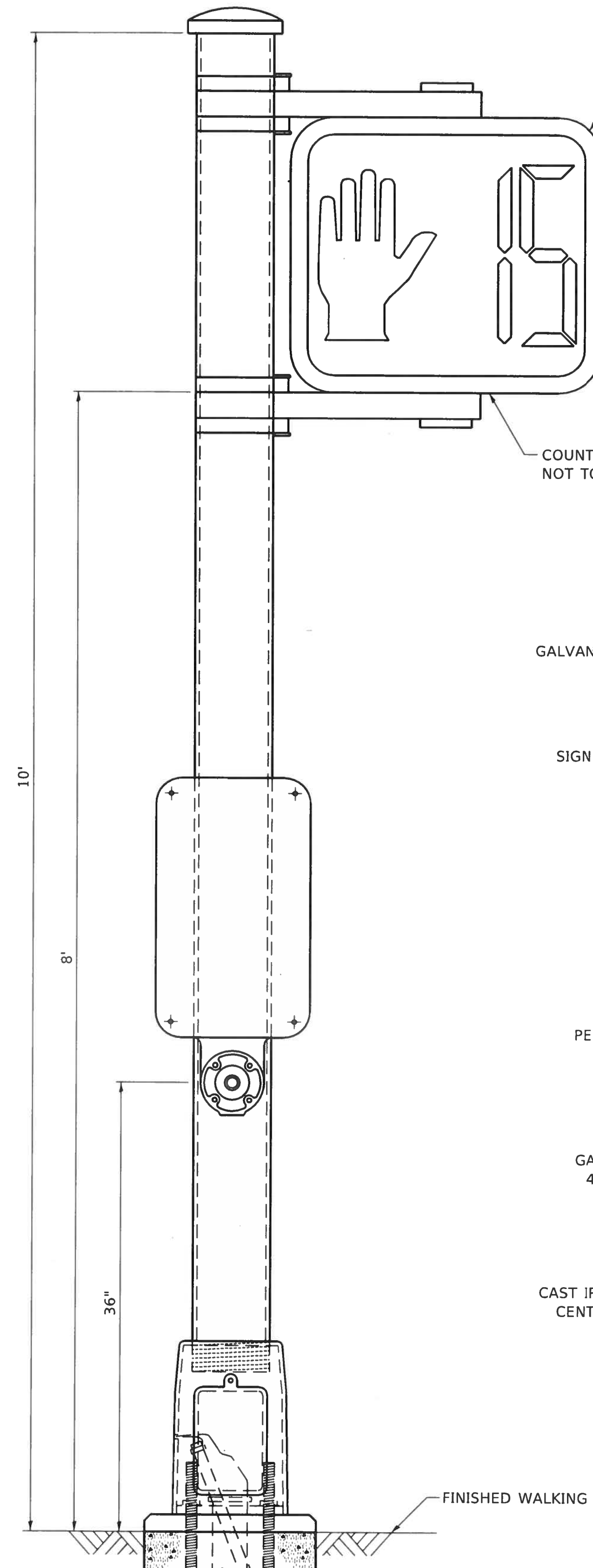

## BOLT PATTERN

NOTE:

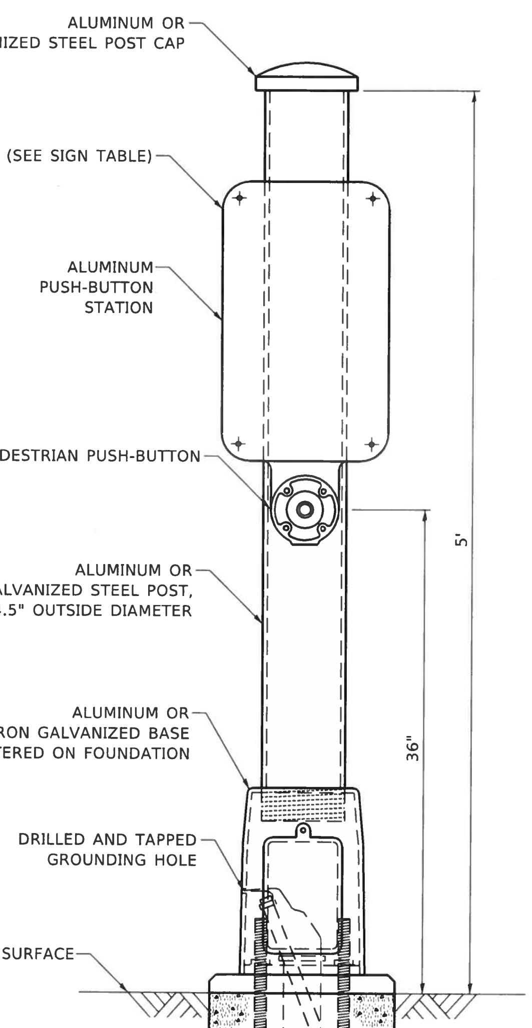
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



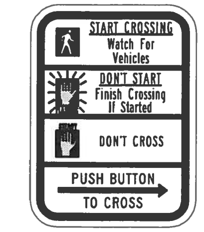

## CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER




## PEDESTRIAN SIGNAL POST, 10 FT.

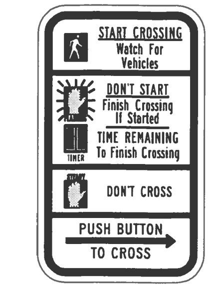



## PEDESTRIAN SIGNAL POST, 5 FT.




R10-3b


R10-3d




R10-3e

## SIGN TABLE

| SIGN | DIMENSIONS |
|---|---|
| R10-3b (RAILROAD ONLY) | 9" X 12" |
| R10-3d (RAILROAD ONLY) | 9" X 12" |
| R10-3e | 9" X 15" |

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: Default
FILE NAME: S:\WP\Design\lovan\11_Other\Pedestrian\Post\PedestrianSignalPost.dgn

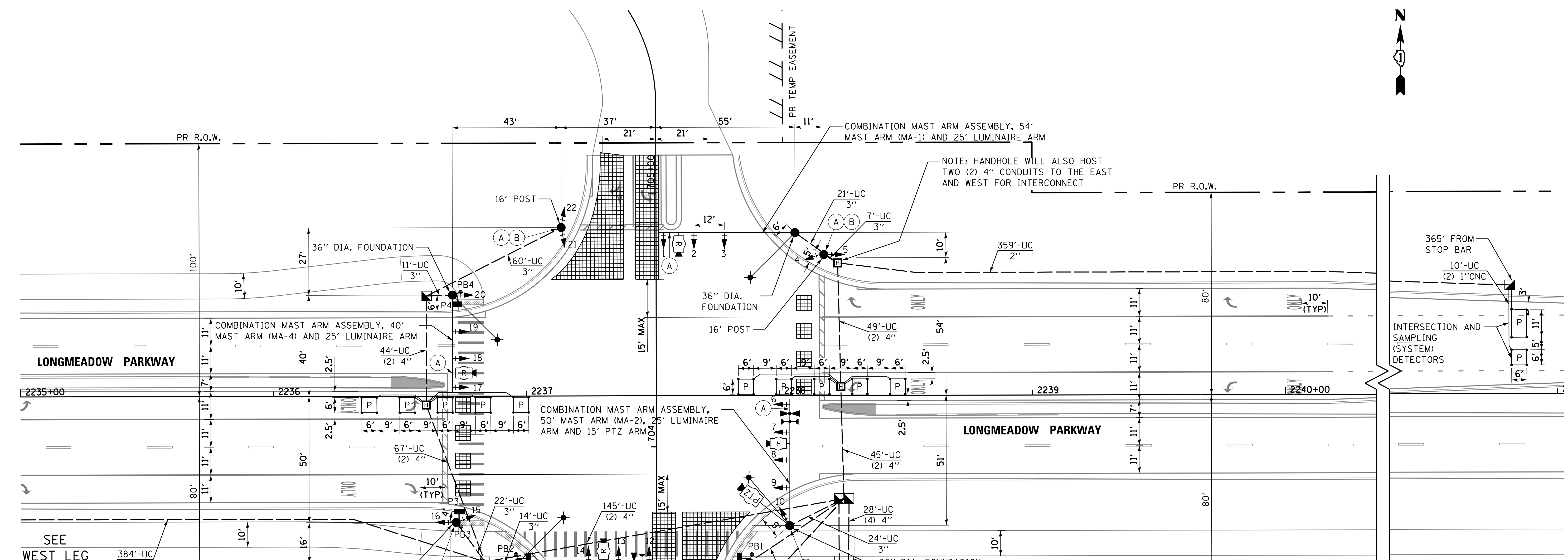
| | | |
|---|---|---|
| USER NAME = plascenciai | DESIGNED - IP | REVISED - |
| | DRAWN - IP | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - LP | REVISED - |
| PLOT DATE = 4/10/2019 | DATE - 10/15/2018 | REVISED - |

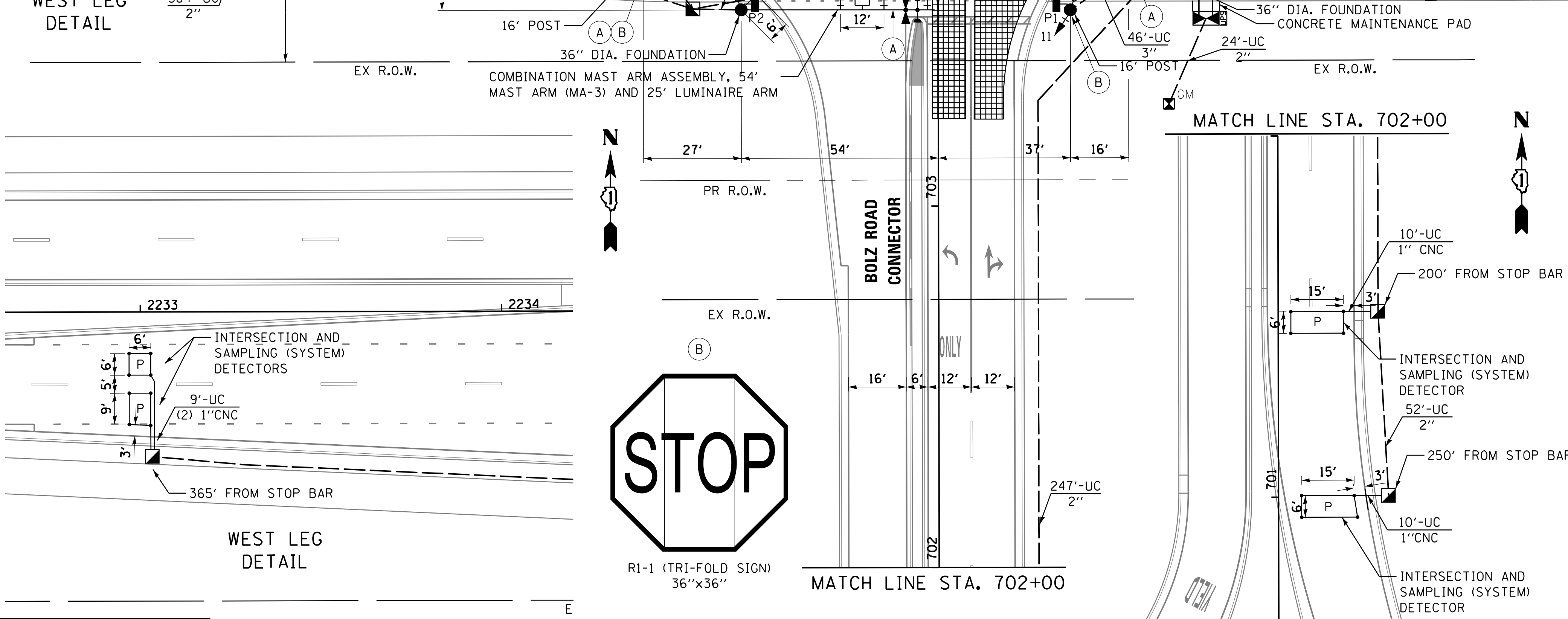
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NTS | SHEET NO. 7 OF 7 SHEETS | STA. TO STA.

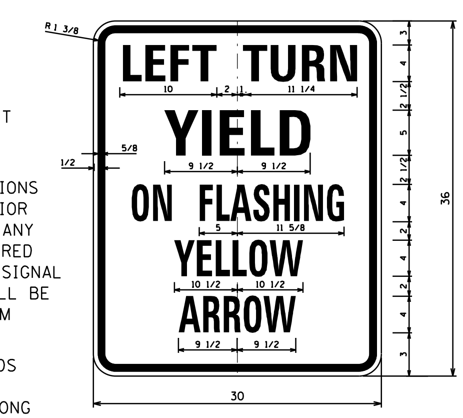
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 13-00215-30-PV | KANE | 415 | 247 |
| | TS-05 | CONTRACT NO. 61D16 | | |
| | | ILLINOIS | FED. AID PROJECT | |




GENERAL NOTES:

1. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE.
2. CONTRACTOR SHALL RESTORE WORK AREA AND REMOVE EXCESS MATERIAL AS PART OF THE WORK.
3. ALL STATION AND OFFSETS ON THIS SHEET REFERENCE THE LONGMEADOW PARKWAY BASELINE.
4. CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND PRESENCE OF UTILITY CONFLICTS PRIOR TO ORDERING OF MAST ARM ASSEMBLIES. ANY INCREASE IN MAST ARM LENGTH AS REQUIRED TO ACHIEVE THE DESIRED PLACEMENT OF SIGNAL EQUIPMENT AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE PRICE OF THE MAST ARM ASSEMBLY BEING INSTALLED.
5. MAST ARM MOUNTED TRAFFIC SIGNAL HEADS SHALL BE MOUNTED SUCH THAT THE RED CIRCULAR INDICATION OR RED ARROWS ALONG THE SAME ARM SHALL BE IN LINE BUT ALSO MEET THE VERTICAL CLEARANCE STATED IN THE IDOT HIGHWAY STANDARDS.
6. RADAR VEHICLE DETECTION UNITS ARE SHOWN ON THIS PLAN AT SAMPLE MOUNTING LOCATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER/VENDOR OF THE EQUIPMENT TO DETERMINE THE OPTIMAL MOUNTING LOCATIONS.
7. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.




SIGNAGE NOTES:

1. COLOR:
   BACKGROUND: WHITE
   MESSAGE: BLACK
2. LINE 1 IS SERIES C
   LINE 2, 4 AND 5 ARE SERIES D
   LINE 3 IS SERIES B
3. ALL DIMENSIONS SHOWN ARE IN INCHES

FILE NAME = SectionC2-sht-tsplan-Bolz_bmd.dgn

| | | | |
|---|---|---|---|
| BURNS MCDONNELL 200 W. ADAMS STREET / SUITE 1600 CHICAGO, IL 60606 P: (312)-223-0920 / F: (312)-223-9664 WEB: WWW.BURNSMCD.COM | USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | | DRAWN - HTS | REVISED - |
| | PLOT SCALE = 40.0000 ' / in. | CHECKED - MAP | REVISED - |
| | PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

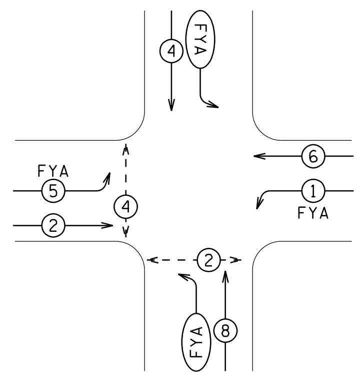
TRAFFIC SIGNAL INSTALLATION PLAN
LONGMEADOW PARKWAY AT BOLZ ROAD CONNECTOR

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. TO STA.

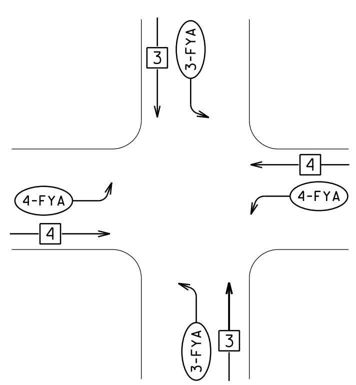
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 248 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




PHASE DESIGNATION DIAGRAM

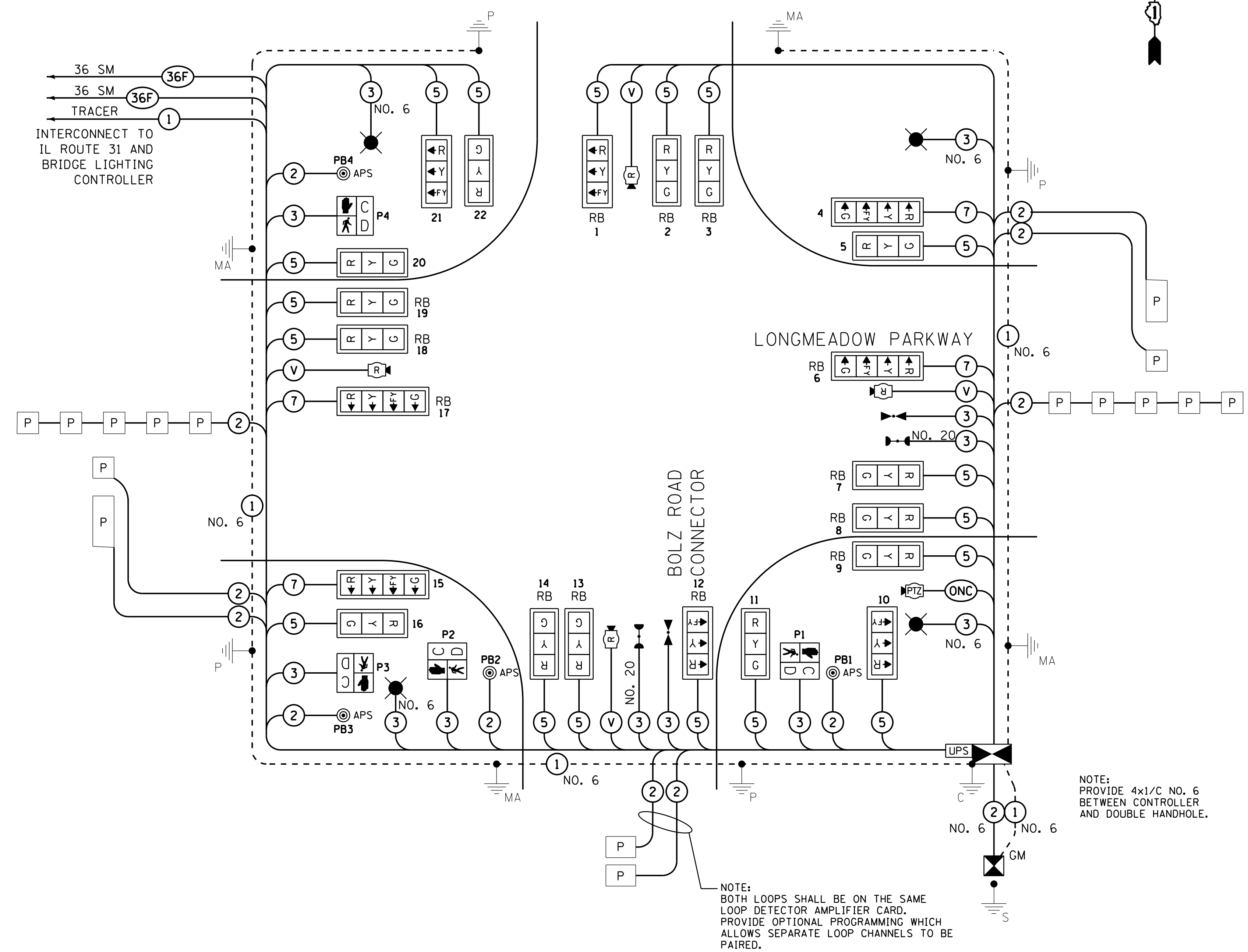



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

## LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- (FYA) FLASHING YELLOW ARROW OVERLAP (BUT NO GREEN ARROW PHASE)
- FYA FLASHING YELLOW ARROW OVERLAP (WITH GREEN ARROW PHASE)

| PROPOSED EMERGENCY VEHICLE PREEMPTORS | | |
|---|---|---|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
| MOVEMENT | | |




CABLE PLAN

NOTES:

RETROREFLECTIVE BACKPLATES "RB" SHALL CONSIST OF A 1" WIDE YELLOW RETROREFLECTIVE STRIP AROUND THE OUTSIDE PERIMETER OF BACKPLATE WITH LOUVERS.

TRAFFIC SIGNAL WILL BE MAINTAINED BY THE KANE COUNTY DIVISION OF TRANSPORTATION (KDOT) AFTER ACCEPTANCE.

## TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

| TYPE | NO. LAMPS | LED WATTAGE | % OPERATION | TOTAL WATTAGE |
|---|---|---|---|---|
| SIGNAL (RED) | 14 | 11 | 50 | 77.0 |
| SIGNAL (YELLOW) | 14 | 20 | 5 | 14.0 |
| SIGNAL (GREEN) | 14 | 12 | 45 | 75.6 |
| ARROW | 20 | 10 | 10 | 20.0 |
| PERMISSIVE ARROW | 8 | 12 | 30 | 28.8 |
| PED SIGNAL | 4 | 20 | 100 | 80.0 |
| CONTROLLER | 1 | 100 | 100 | 100.0 |
| UPS | 1 | 25 | 100 | 25.0 |
| BLANK-OUT SIGN | - | 25 | 5 | 0.0 |
| FLASHER | - | - | 50 | 0.0 |
| STREET NAME SIGN | - | 120 | 50 | 0.0 |
| LUMINAIRE | 4 | 190 | 50 | 380.0 |
| PTZ CAMERA | 1 | 60 | 100 | 60.0 |
| | | | TOTAL | 860.4 |

ENERGY COSTS TO
KANE COUNTY DIVISION OF TRANSPORTATION
41W011 BURLINGTON ROAD
ST CHARLES, IL 60175

ENERGY SUPPLY CONTACT : KATHY KOPCZICK
PHONE : 630-985-4074
COMPANY : COM ED

LOCAL COORDINATE SYSTEM

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | | |
|---|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - | |
| | DRAWN - HTS | REVISED - | |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - MAP | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
LONGMEADOW PARKWAY AT BOLZ ROAD CONNECTOR

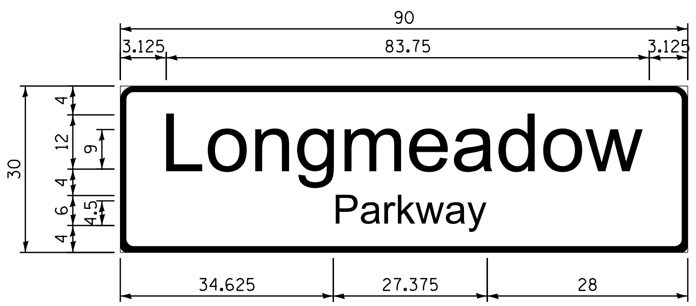
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 249 |
| | | CONTRACT NO. 61G02 | | |

ILLINOIS FED. AID PROJECT

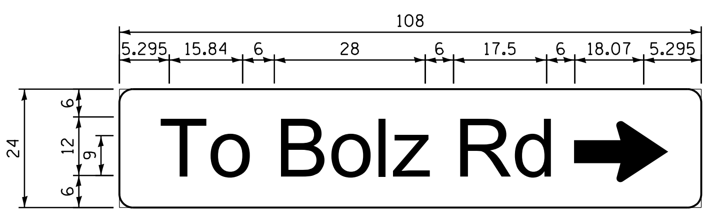
FILE NAME = SectionC2-sht-tscab-Bolz.bmd.dgn

## SIGN PANELS - TYPE 1 OR TYPE 2

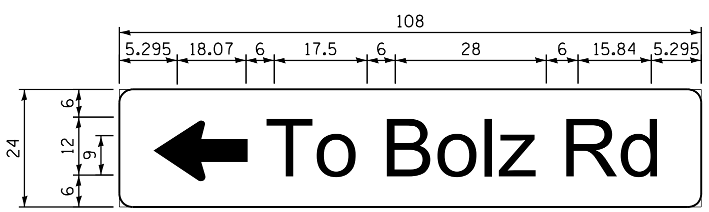



| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| C | 18.75 | 2 | ZZ | 2 |

STYLE (e) PER IDOT STD 720016-04




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 18 | 2 | ZZ | 1 |




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 18 | 2 | ZZ | 1 |

NOTE: SUPPORTING CHANNELS SHALL BE INSTALLED ON ALL STREET NAME SIGNS AND "LEFT TURN YIELD ON FLASHING YELLOW ARROW" SIGNS.

## SUMMARY OF QUANTITIES

| CODED PAY ITEM NUMBER | DESCRIPTION | UNIT OF MEASURE | TOTAL QUANTITY |
|---|---|---|---|
| 72000100 | SIGN PANEL - TYPE 1 | SQ FT | 60 |
| 72000200 | SIGN PANEL - TYPE 2 | SQ FT | 74 |
| 80400200 | ELECTRIC UTILITY SERVICE CONNECTION | EACH | 1 |
| 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 1066 |
| 81028220 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 205 |
| 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 812 |
| 81400100 | HANDHOLE | EACH | 6 |
| 81400200 | HEAVY-DUTY HANDHOLE | EACH | 3 |
| 81400300 | DOUBLE HANDHOLE | EACH | 1 |
| 85700200 | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET | EACH | 1 |
| 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 886 |
| 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 1326 |
| 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 3736 |
| 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 938 |
| 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 3905 |
| 87301805 | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C | FOOT | 30 |
| 87301815 | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3C | FOOT | 754 |
| 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6, 1C | FOOT | 1488 |
| 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 4 |
| 87702930 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. | EACH | 1 |
| 87702980 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT. | EACH | 1 |
| 87702990 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT. | EACH | 2 |
| 87800100 | CONCRETE FOUNDATION, TYPE A | FOOT | 16 |
| 87800150 | CONCRETE FOUNDATION, TYPE C | FOOT | 4 |
| 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 58 |
| 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 11 |
| 88030050 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 2 |
| 88030070 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED | EACH | 7 |
| 88030080 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 2 |
| 88102710 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED | EACH | 4 |
| 88200510 | TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE | EACH | 13 |
| 88500100 | INDUCTIVE LOOP DETECTOR | EACH | 16 |
| 88600700 | PREFORMED DETECTOR LOOP | FOOT | 436 |
| 88700090 | CONFIRMATION BEACON | EACH | 4 |
| 88700200 | LIGHT DETECTOR | EACH | 4 |
| 88700300 | LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| 88800100 | PEDESTRIAN PUSH BUTTON | EACH | 4 |
| X0324085 | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 413 |
| X0325476 | RADAR VEHICLE DETECTION SYSTEM | EACH | 1 |
| X1400101 | NETWORK CONFIGURATION | L SUM | 1 |
| X1400150 | SERVICE INSTALLATION GROUND MOUNTED METERED | EACH | 1 |
| X7200105 | SIGN PANEL - TYPE 1 (SPECIAL) | SQ FT | 36 |
| X8620200 | UNINTERRUPTABLE POWER SUPPLY, SPECIAL | EACH | 1 |
| XX007251 | INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA | EACH | 1 |
| XX008454 | ETHERNET MANAGED SWITCH, TYPE II | EACH | 1 |
| XX008392 | OUTDOOR RATED NETWORK CABLE | FOOT | 107 |
| XX009297 | LUMINAIRE, LED, HORIZONTAL MOUNT, SPECIAL | EACH | 4 |
| Z0033046 | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH | 1 |

FILE NAME = SectionC2-sht-tssoq-Bolz_bmd.dgn

LOCAL COORDINATE SYSTEM

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - HTS | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION
SUMMARY OF QUANTITIES
LONGMEADOW PARKWAY AT BOLZ ROAD CONNECTOR

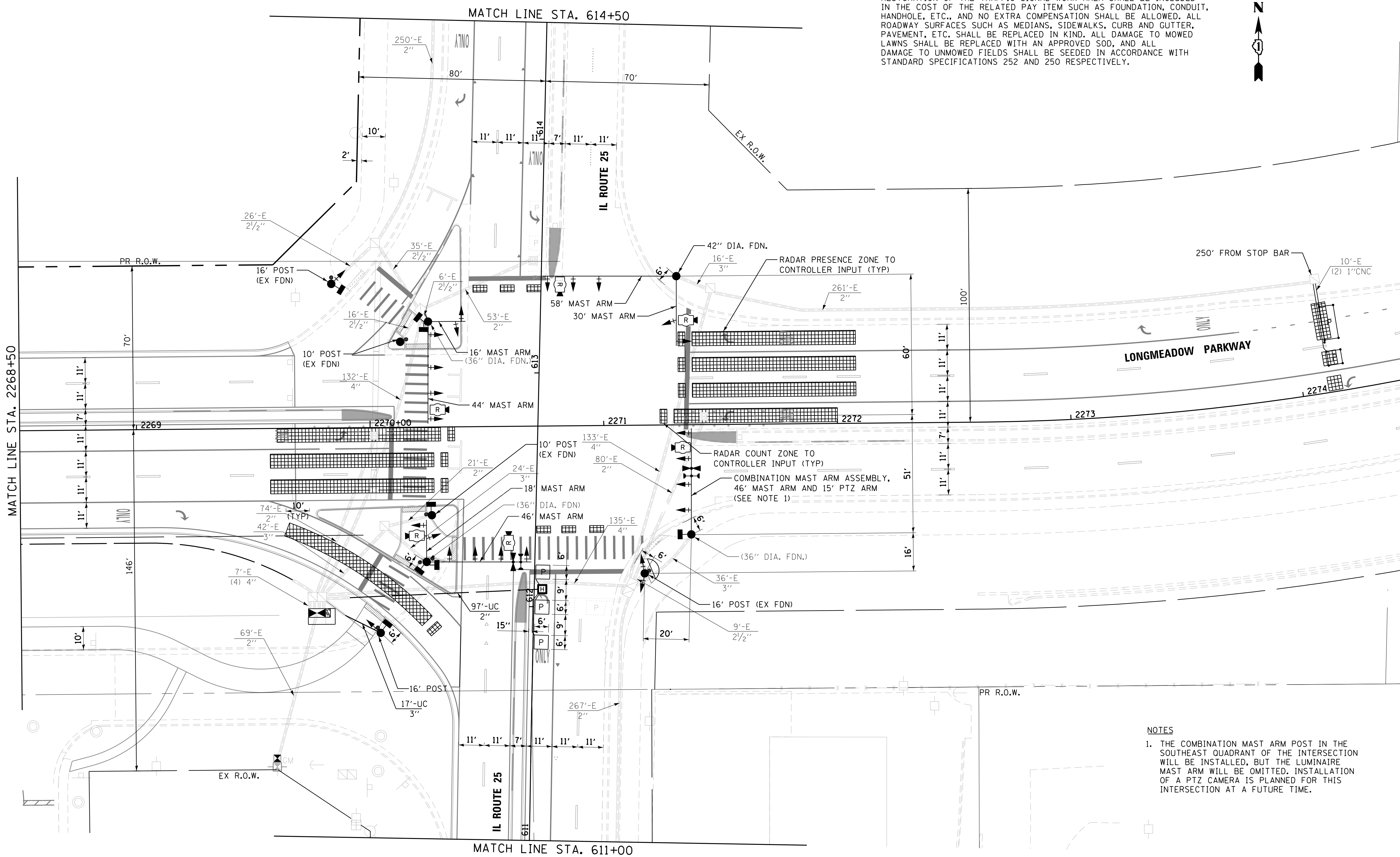
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 250 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS MEDIANS, SIDEWALKS, CURB AND GUTTER, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.




NOTES
1. THE COMBINATION MAST ARM POST IN THE SOUTHEAST QUADRANT OF THE INTERSECTION WILL BE INSTALLED, BUT THE LUMINAIRE MAST ARM WILL BE OMITTED. INSTALLATION OF A PTZ CAMERA IS PLANNED FOR THIS INTERSECTION AT A FUTURE TIME.

LOCAL COORDINATE SYSTEM


BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM


| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - HTS | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 25 AT LONGMEADOW PARKWAY

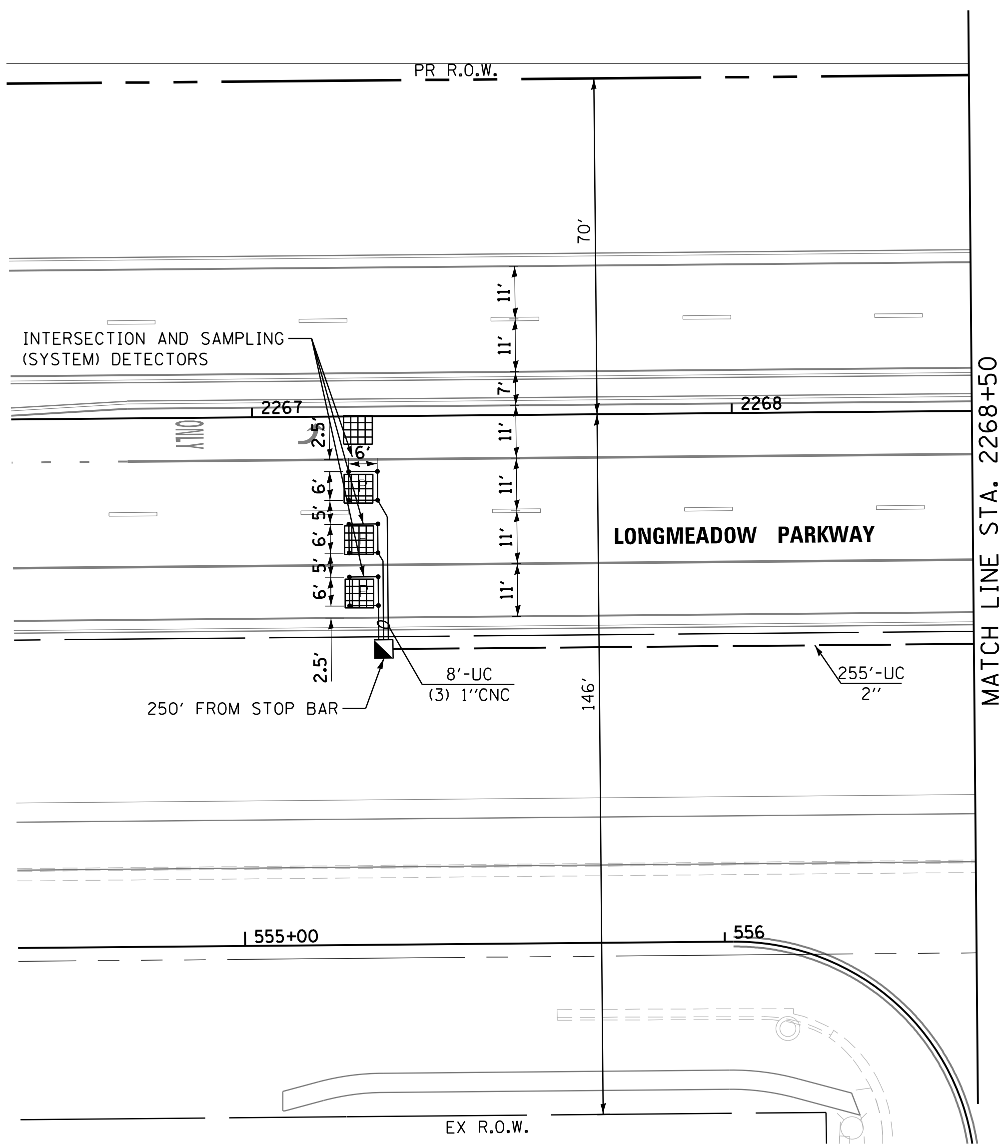
SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

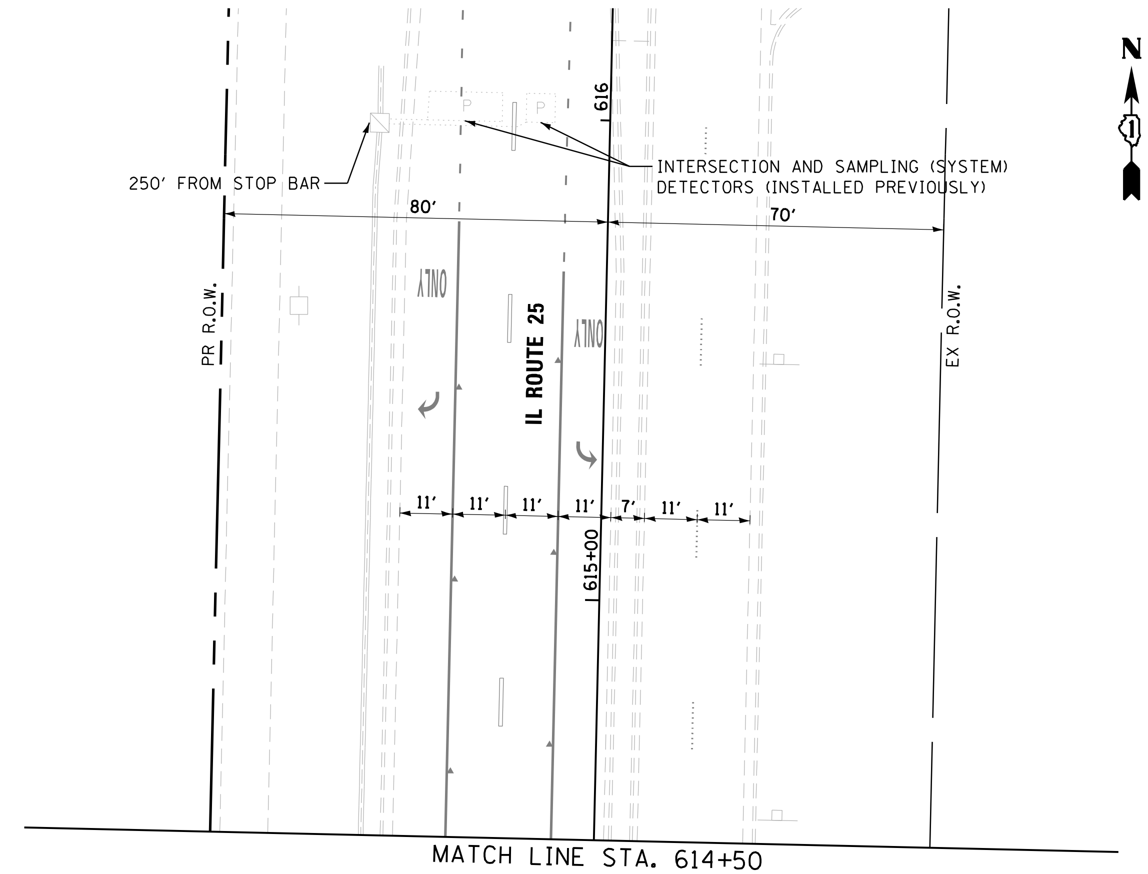
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 251 |

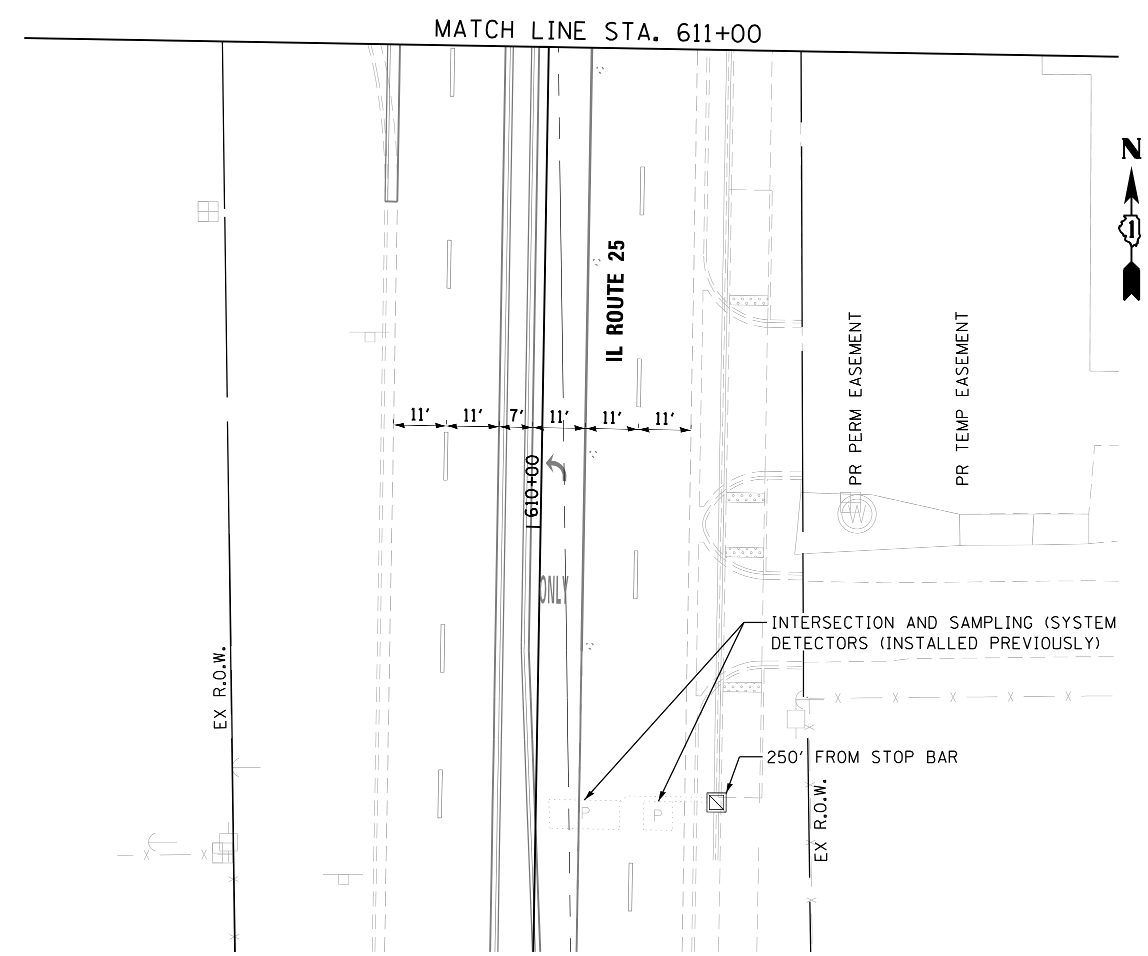
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

FILE NAME = SectionC2-sht-tsplan1L25_bmd.dgn




RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS MEDIANS, SIDEWALKS, CURB AND GUTTER, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

∗ CONDUIT SEGMENTS SO MARKED SHALL BE CAPPED FOR FUTURE EXTENSION.

**LOCAL COORDINATE SYSTEM**

FILE NAME = SectionC2-sht-tsplanIL25-pg2.bmd.dgn

| BURNS McDONNELL<br>200 W. ADAMS STREET / SUITE 1600<br>CHICAGO, IL 60606<br>P: (312)-223-0920 / F: (312)-223-9664<br>WEB: WWW.BURNSMCD.COM | USER NAME = rjiang | DESIGNED - MAP | REVISED - |
|---|---|---|---|
| | | DRAWN - HTS | REVISED - |
| | PLOT SCALE = 40.0000 '/ in. | CHECKED - MAP | REVISED - |
| | PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

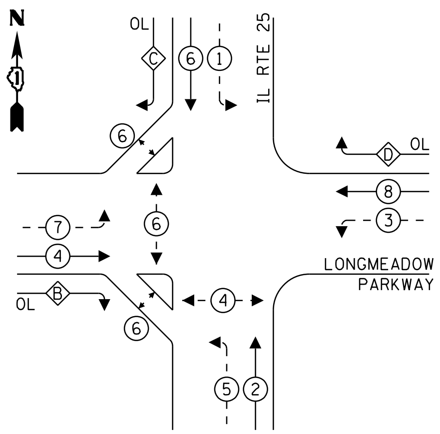
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN**
**IL ROUTE 25 AT LONGMEADOW PARKWAY**

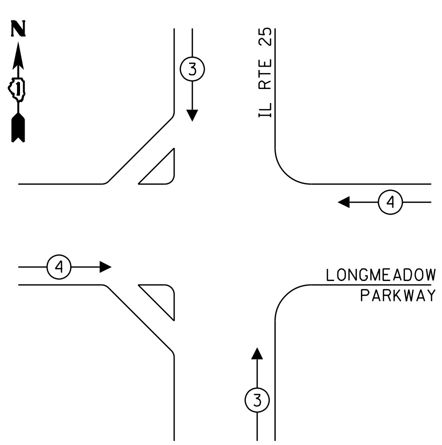
SCALE: 1"=20' | SHEET 2 OF 2 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 252 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |

## PROPOSED CONTROLLER SEQUENCE




## PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

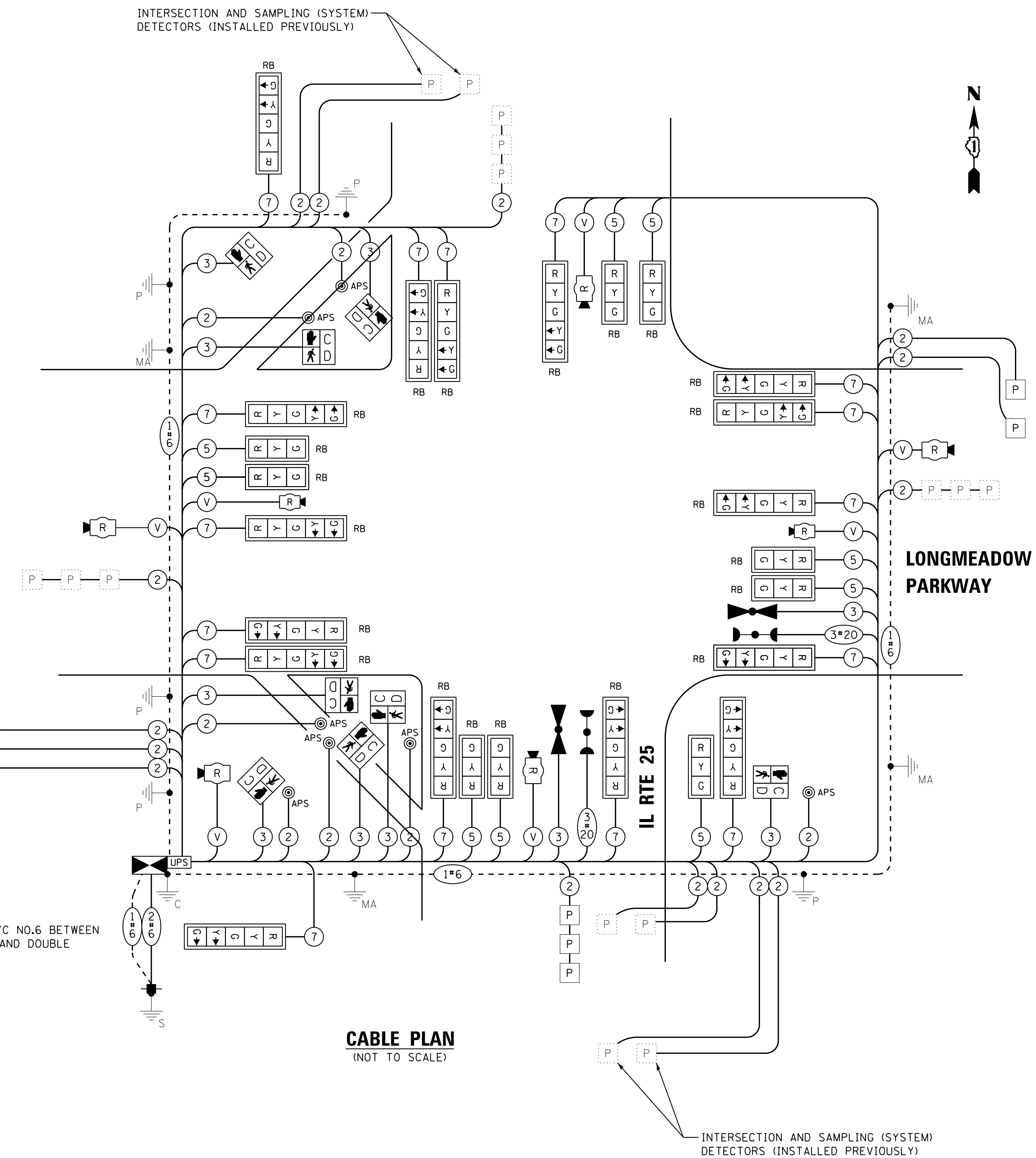



## LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP
- FF FREE FLOW

## RIGHT TURN OVERLAP PHASE DESIGNATION:

| OVERLAP LETTER | | PERMISSIVE PHASE | | PROTECTED PHASE |
|---|---|---|---|---|
| B | = | 4 | + | 5 |
| C | = | 6 | + | 7 |
| D | = | 8 | + | 1 |




NOTE:
PROVIDE 4x1/C NO.6 BETWEEN CONTROLLER AND DOUBLE HANDHOLE

## CABLE PLAN
(NOT TO SCALE)

### TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

| TYPE | NO. OF LAMPS | LED WATTAGE | % OPERATION | TOTAL WATTAGE |
|---|---|---|---|---|
| SIGNAL (RED) | 25 | 11 | 50 | 137.5 |
| (YELLOW) | 25 | 20 | 5 | 25.0 |
| (GREEN) | 25 | 12 | 45 | 135.0 |
| ARROW | 32 | 10 | 30 | 96.0 |
| PED. SIGNAL | 8 | 20 | 100 | 160.0 |
| CONTROLLER | 1 | 100 | 100 | 100.0 |
| UPS | 1 | 25 | 100 | 25.0 |
| VIDEO SYSTEM | 1 | 150 | 100 | 150.0 |
| BLANK-OUT SIGN | - | 25 | 5 | - |
| FLASHER | - | - | 50 | - |
| STREET NAME SIGN | - | 120 | 50 | - |
| LUMINAIRE | - | 190 | 50 | - |
| PTZ CAMERA | - | 100 | 100 | - |
| | | | TOTAL = | 828.5 |

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: 866-639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

FILE NAME = SectionC2-sht-tscabIL25_bmd.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
|---|---|---|
| | DRAWN - HTS | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 3/26/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 25 AT LONGMEADOW PARKWAY

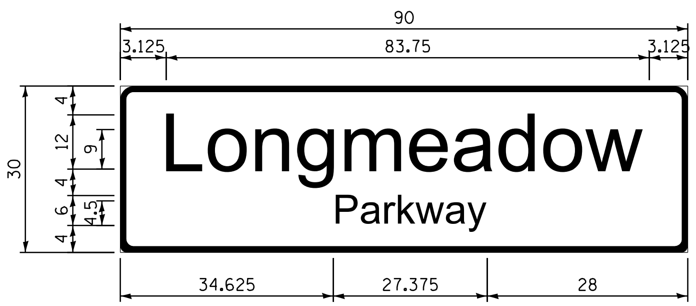
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 253 |

CONTRACT NO. 61G02

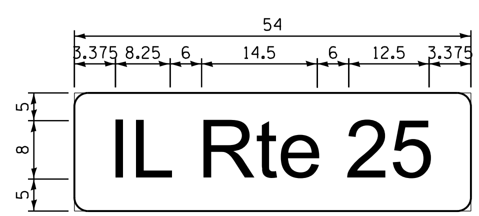
ILLINOIS FED. AID PROJECT

## SIGN PANELS - TYPE 1 OR TYPE 2




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| C | 18.75 | 2 | ZZ | 2 |

STYLE (e) PER IDOT STD 720016-04




| DESIGN SERIES | AREA (SQ FT) | SIGN PANEL TYPE | SHEETING TYPE | QTY. REQUIRED |
|---|---|---|---|---|
| D | 15.0 | 1 | ZZ | 2 |

NOTE: SUPPORTING CHANNELS SHALL BE INSTALLED ON ALL STREET NAME SIGNS.

## SUMMARY OF QUANTITIES

| CODED PAY ITEM NUMBER | DESCRIPTION | UNIT OF MEASURE | TOTAL QUANTITY |
|---|---|---|---|
| 72000100 | SIGN PANEL - TYPE 1 | SQ FT | 30 |
| 72000200 | SIGN PANEL - TYPE 2 | SQ FT | 38 |
| 80400200 | ELECTRIC UTILITY SERVICE CONNECTION | EACH | 1 |
| 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 326 |
| 81028220 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 17 |
| 81400100 | HANDHOLE | EACH | 1 |
| 81400200 | HEAVY-DUTY HANDHOLE | EACH | 1 |
| 85000205 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION (SPECIAL) | EACH | 1 |
| 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1160 |
| 87301225 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | 1618 |
| 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 2156 |
| 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 3507 |
| 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 5815 |
| 87301805 | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C | FOOT | 77 |
| 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6, 1C | FOOT | 1543 |
| 87502440 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT. | EACH | 2 |
| 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 3 |
| 87702765 | STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 58 FT. AND 30 FT. | EACH | 1 |
| 87702960 | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 46 FT. | EACH | 1 |
| 87702197 | STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 16 FT. AND 44 FT. | EACH | 1 |
| 87702203 | STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 18 FT. AND 46 FT. | EACH | 1 |
| 87800100 | CONCRETE FOUNDATION, TYPE A | FOOT | 4 |
| 87800420 | CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER | FOOT | 22 |
| 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 8 |
| 88030050 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 1 |
| 88030100 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 3 |
| 88030110 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 13 |
| 88102710 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED | EACH | 8 |
| 88200510 | TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE | EACH | 21 |
| 88500100 | INDUCTIVE LOOP DETECTOR | EACH | 12 |
| 88600700 | PREFORMED DETECTOR LOOP | FOOT | 340 |
| 88700200 | LIGHT DETECTOR | EACH | 4 |
| 88700300 | LIGHT DETECTOR AMPLIFIER | EACH | 1 |
| 88800100 | PEDESTRIAN PUSH BUTTON | EACH | 7 |
| X0324085 | EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 404 |
| X0325476 | RADAR VEHICLE DETECTION SYSTEM | EACH | 1 |
| X1400101 | NETWORK CONFIGURATION | L SUM | 1 |
| X1400107 | FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET | EACH | 1 |
| X1400150 | SERVICE INSTALLATION, GROUND MOUNTED, METERED | EACH | 1 |
| X8620200 | UNINTERRUPTABLE POWER SUPPLY, SPECIAL | EACH | 1 |
| Z0033040 | ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL | EACH | 1 |

FILE NAME = SectionC2-sht-tssoq-IL25.bmd.dgn

LOCAL COORDINATE SYSTEM


BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM


| | | |
|---|---|---|
| USER NAME = rjiang | DESIGNED - MAP | REVISED - |
| | DRAWN - HTS | REVISED - |
| PLOT SCALE = 100.0000 ' / in. | CHECKED - MAP | REVISED - |
| PLOT DATE = 3/26/2020 | DATE - 2/28/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

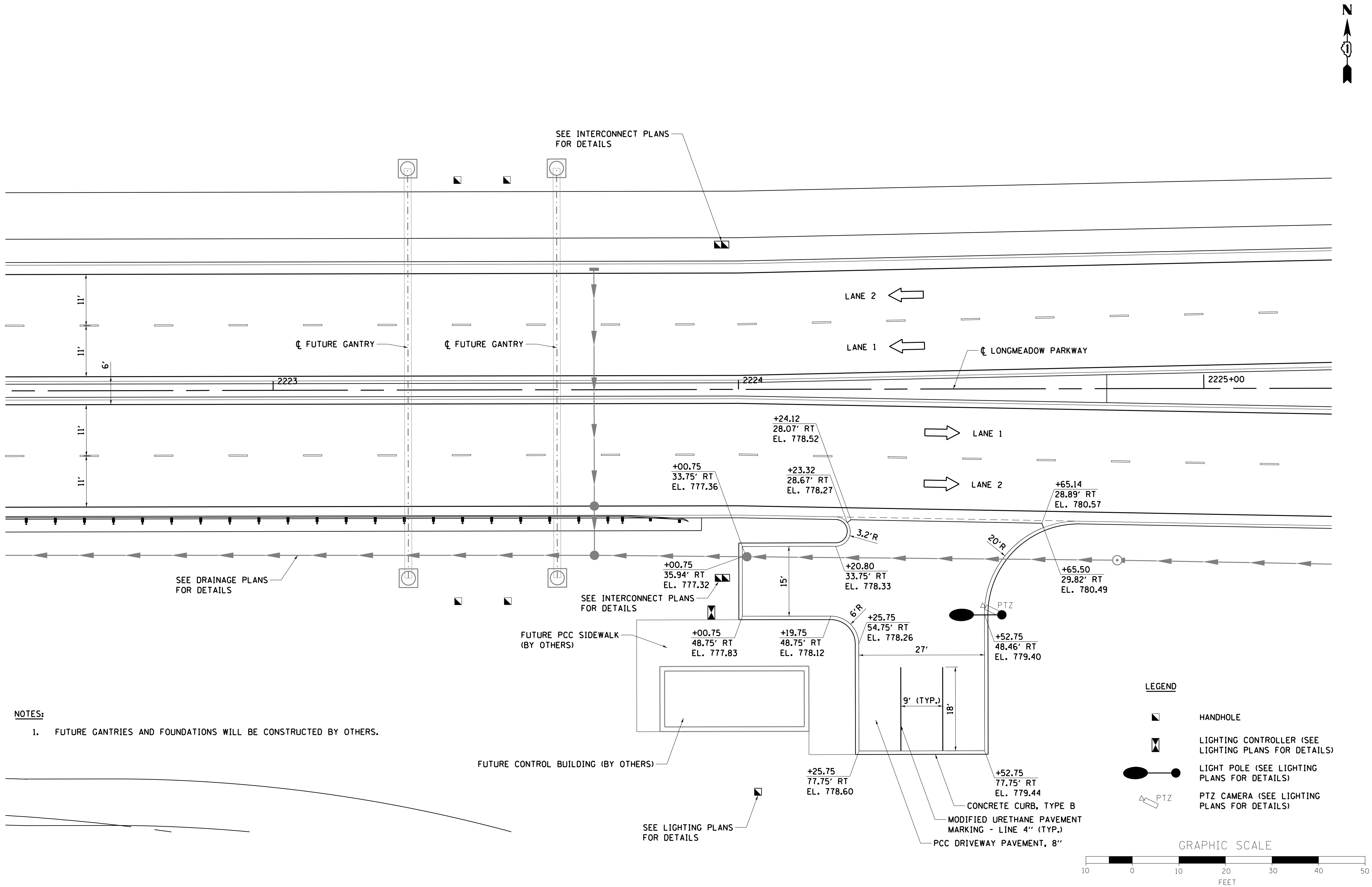
TRAFFIC SIGNAL INSTALLATION
SUMMARY OF QUANTITIES
IL ROUTE 25 AT LONGMEADOW PARKWAY

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

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 254 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




NOTES:

1. FUTURE GANTRIES AND FOUNDATIONS WILL BE CONSTRUCTED BY OTHERS.

FILE NAME = SectionC2-sht-tollplaza_civil.dgn

**BURNS McDONNELL**
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| | | | |
|---|---|---|---|
| USER NAME = rjiang | DESIGNED - RGJ | REVISED - | |
| | DRAWN - RGJ | REVISED - | |
| PLOT SCALE = 20.0000 ' / in. | CHECKED - RMG | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

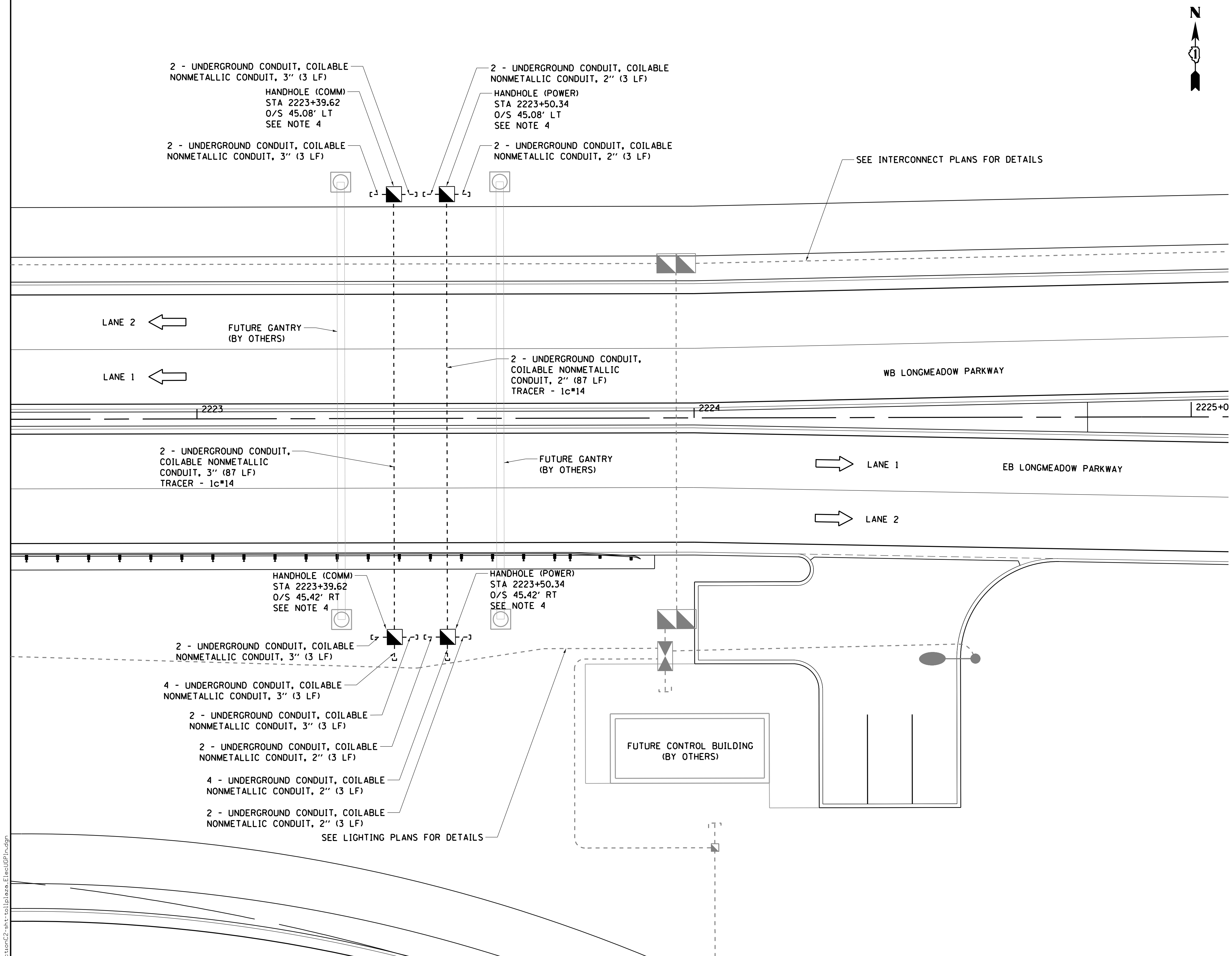
**TOLL PLAZA**
**CIVIL SITE PLAN**

SCALE: 1" = 10' | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 255 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




**NOTES:**

1. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL ROPE.
2. CAP ALL CONDUIT STUBS FOR FUTURE USE.
3. FINAL LOCATION OF ALL HANDHOLES SHALL BE APPROVED BY THE ENGINEER.
4. ALL TOLL PLAZA HANDHOLE COVERS SHALL BE FABRICATED WITH THE LETTERS "TOLL PLAZA" CAST INTO THE COVER.

GRAPHIC SCALE

10 0 10 20 30 40 50

FEET

FILE NAME = SectionC2-sht-tollplaza_ElecUGPln.dgn

BURNS McDONNELL
200 W. ADAMS STREET / SUITE 1600
CHICAGO, IL 60606
P: (312)-223-0920 / F: (312)-223-9664
WEB: WWW.BURNSMCD.COM

| USER NAME = rjiang | DESIGNED - EE | REVISED - |
|---|---|---|
| | DRAWN - RGJ | REVISED - |
| PLOT SCALE = 20.0000 ' / in. | CHECKED - RMG | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 2/28/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**TOLL PLAZA**
**ELECTRICAL UNDERGROUND PLAN**

SCALE: 1" = 10' | SHEET 1 OF 1 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 256 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

## LIGHTING NOTES

1. PRIOR TO THE INSTALLATION OF THE NEW CABLES, UNDERGROUND CONDUITS, UNIT DUCTS, HANDHOLES, JUNCTION BOXES, LIGHT POLE FOUNDATIONS, CONTROLLER FOUNDATIONS, AND APPURTENANCES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLES, AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. TO AID IN THIS TASK.
2. CONTRACTOR SHALL VERIFY ALL OF THE DATA SHOWN ON THE CONTRACT PLANS AND REFERENCE DRAWINGS, WHICH WOULD AFFECT THEIR WORK UNDER THIS CONTRACT.
3. NEW CABLES, CONDUITS, HANDHOLES, JUNCTION BOXES, AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. PROPOSED ROUTING OF THE UNDERGROUND CONDUITS, AS SHOWN IN THE PLANS, IS FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY THE ACTUAL ROUTING LOCATION IN THE FIELD WITH THE APPROVAL OF THE ENGINEER.
4. ALL SPLICES SHALL BE HEAT SHRINK AND WATERPROOF AND INSTALLED INSIDE LIGHT POLE BASES, HANDHOLES, OR JUNCTION BOXES. NO DIRECT BURIED SPLICES SHALL BE ALLOWED.
5. CONDUIT AND UNIT DUCT SHALL BE INSTALLED 42" BELOW FINAL GRADE PER CONDUIT IN TRENCH DETAIL ON LIGHTING SHEET 8.
6. LUMINARIES MUST BE INSTALLED ON LIGHT STANDARDS WITHIN A MAXIMUM OF 48 HOURS AFTER LIGHT STANDARD IS ERECTED.
7. THE ELECTRICAL MATERIAL SHALL BE NEW AND OF THE TYPE AND KINDS APPROVED BY THE FOLLOWING ORGANIZATIONS:

   NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
   INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
   ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA
   AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
   U.S. DEPARTMENT OF TRANSPORTATION
   UNDERWRITERS LABORATORIES
   AMERICAN STANDARD INSTITUTE
   INSULATED POWER CABLE ENGINEERS ASSOCIATION

8. UNDERGROUND CONDUITS AND CABLE DUCTS SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICTS WITH UNDERDRAINS AND OTHER UTILITIES. UNDERGROUND CONDUITS SHALL BE MINIMUM 3-FOOT AWAY FROM OTHER UTILITIES.
9. WHERE MULTIPLE CABLE DUCTS OR UNDERGROUND CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL SHALL BE CONTINUOUS BETWEEN EACH CABLE DUCT OR UNDERGROUND CONDUIT FOR THE LENGTH OF THE COMMON TRENCH.
10. PROPOSED UTILITY POLES SHALL BE INSTALLED BY COMMONWEALTH EDISON (COMED). CONTRACTOR SHALL INSTALL UNDERGROUND CONDUITS, GROUNDING, METER CABINET, AND SECONDARY CONDUCTORS. WORK AND MATERIALS SHALL BE INCLUDED IN PAY ITEM "80400100-ELECTRIC SERVICE INSTALLATION". COORDINATE ALL WORK WITH COMED.
11. THE CONTRACTOR SHALL PREPARE A SCHEDULE WHEN THE PROJECT COMMENCES, WHICH ESTABLISHES THE DATE WHEN ELECTRICAL SERVICES ARE REQUIRED. THIS SCHEDULE SHALL BE FORWARDED IN WRITING TO COMED. SUBSEQUENT UPDATING TO THE SCHEDULE SHALL ALSO BE FORWARDED TO COMED. AS CHANGES OCCUR A MINIMUM OF FIVE (5) DAYS BEFORE ELECTRICAL SERVICES ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY COMED BY PHONE AND IN WRITING TO CONFIRM THE REQUIREMENT.
12. FORTY-EIGHT (48) HOURS PRIOR TO EXCAVATION FOR PROPOSED ROADWAY LIGHTING FOUNDATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND KANE COUNTY AFTER FIELD STAKING HAS OCCURRED TO VERIFY AND APPROVE ALL FOUNDATION LOCATIONS.
13. LIGHTING UNITS ON THE BRIDGE SHALL BE CONTROLLED WITH A ROAM WIRELESS SYSTEM. REFER TO LIGHTING SHEET 12 FOR LIGHTING CONTROLLER DETAIL. CONTRACTOR SHALL HAVE THE ROAM MANUFACTURER COME TO THE SITE FOR A ONE-DAY STARTUP AND TRAINING, WHICH SHALL BE INCLUDED IN PAY ITEM "X8250505-LIGHTING CONTROLLER, SPECIAL".
14. 2½" UNDERGROUND GALVANIZED STEEL CONDUIT SHALL BE PVC COATED PER STANDARD IDOT SPECIFICATIONS.

## LIGHTING BILL OF MATERIALS

| | PAY ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
|---|---|---|---|---|
| | 80400100 | ELECTRIC SERVICE INSTALLATION | EACH | 2 |
| (NOTE 14) | 81028210 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA. | FOOT | 95 |
| | 81028340 | UNDERGROUND CONDUIT, PVC, 1½" DIA., SCHEDULE 80 | FOOT | 125 |
| | 81028380 | UNDERGROUND CONDUIT, PVC, 3½" DIA., SCHEDULE 80 | FOOT | 290 |
| | 81028740 | UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA. | FOOT | 760 |
| | 81200230 | CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC SCHEDULE 40 | FOOT | 610 |
| | 81300550 | JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"x12"x6" | EACH | 2 |
| | 81400100 | HANDHOLE | EACH | 2 |
| | 81603010 | UNIT DUCT, 600V, 2-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), ¾" DIA. POLYETHYLENE | FOOT | 720 |
| | 81603096 | UNIT DUCT, 600V, 4-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 1¼" DIA. POLYETHYLENE | FOOT | 965 |
| | 81702100 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 12 | FOOT | 625 |
| | 81702101 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 14 | FOOT | 40 |
| | 81702110 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10 | FOOT | 1,250 |
| | 81702130 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6 | FOOT | 18,520 |
| | 82500350 | LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP | EACH | 1 |
| | 83600200 | LIGHT POLE FOUNDATION, 24" DIAMETER | FOOT | 81 |
| | 83800505 | BREAKAWAY DEVICE, COUPLING WITH ALUMINUM SKIRT | EACH | 36 |
| | X0323906 | CAMERA POLE, 45 FT | EACH | 1 |
| | X0326810 | WIRELESS COMMUNICATION DEVICE | EACH | 2 |
| | X1400238 | LUMINAIRE, LED, SPECIAL | EACH | 9 |
| | X8211000 | UNDERPASS LUMINAIRE (SPECIAL) | EACH | 2 |
| | X8250505 | LIGHTING CONTROLLER, SPECIAL | EACH | 1 |
| | X8300001 | LIGHT POLE, SPECIAL | EACH | 25 |
| | X8304515 | LIGHT POLE, ALUMINUM, 30 FT. M.H., 6 FT. MAST ARM (SPECIAL) | EACH | 9 |
| | X8360103 | LIGHT POLE FOUNDATION, INTEGRAL WITH BARRIER WALL | EACH | 5 |
| | X8360367 | LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 10' | EACH | 1 |
| | XX008392 | OUTDOOR RATED NETWORK CABLE | LF | 250 |
| | XX008453 | ETHERNET SWITCH, TYPE 1 | EACH | 1 |

## CABLE/CONDUIT NOMENCLATURE

- A — 2-1/C NO. 6 & 1-1/C NO. 6 GROUND, (600V, XLP-TYPE USE-2) & PULL STRING IN EXISTING 2" PVC CONDUIT SCHEDULE 40, EMBEDDED IN STRUCTURE
- B — 4-1/C NO. 6 & 1-1/C NO. 6 GROUND, (600V, XLP-TYPE USE-2) & PULL STRING IN EXISTING 2" PVC CONDUIT SCHEDULE 40, EMBEDDED IN STRUCTURE
- C — 4-1/C NO. 6 & 1-1/C NO. 6 GROUND, (600V, XLP-TYPE USE-2) & PULL STRING IN 2" PVC CONDUIT SCHEDULE 40, EMBEDDED IN STRUCTURE
- D — 4-1/C NO. 6 & 1-1/C NO. 6 GROUND, (600V, XLP-TYPE USE-2) & PULL STRING IN 1½" CNC CONDUIT, IN TRENCH
- E — 2-1/C NO. 10 & 1-1/C NO. 10 GROUND, (600V, XLP-TYPE USE-2), IN EXISTING CONDUIT
- F — ¾" UNIT DUCT, 2-1/C NO. 10 & 1-1/C NO. 10 GROUND, (600V, XLP-TYPE USE-2), IN TRENCH
- G — 2-1/C NO. 10 & 1-1/C NO. 10 GROUND [POWER], 2-1/C NO. 14 [DIM CONTROL] (600V, XLP-TYPE USE-2), IN EXISTING 1" CONDUIT
- H — 2-1/C NO. 10 & 1-1/C NO. 10 GROUND [POWER], 2-1/C NO. 10 [DIM CONTROL] (600V, XLP-TYPE USE-2), IN EXISTING 1" CONDUIT
- I — 4-1/C NO. 12 & 1-1/C NO. 12 GROUND (600V, XLP-TYPE USE-2) [ROAM GATEWAY & CAMERA POWER] AND 2-1/C NO. 10 & 1-1/C NO. 10 GROUND [CAMERA POLE LUMINIARE POWER] IN 1½" PVC CONDUIT SCHEDULE 80, IN TRENCH
- J — 2-CATEGORY 6 ETHERNET CABLES (OUTDOOR RATED) [ROAM GATEWAY & CAMERA COMMUNICATION TO NETWORK SWITCH] IN 1½" PVC CONDUIT SCHEDULE 80, IN TRENCH
- K — 2½" GALVANIZED STEEL CONDUIT WITH PULL STRING, IN TRENCH, (NOTE 14)
- L — 2-2" PVC SCHEDULE 40 CONDUIT WITH PULL STRING, IN TRENCH
- M — 2½" PVC COATED GALVANIZED STEEL CONDUIT, WITH 3-1/C NO. 2 & 1-1/C NO. 6 GROUND, (600V, XLP-TYPE USE-2), IN TRENCH, (INCLUDE IN PAY ITEM 80400100 "ELECTRIC SERVICE INSTALLATION")
- N — 1¼" UNIT DUCT, 4-1/C NO. 8 & 1-1/C NO. 8 GROUND, (600V, XLP-TYPE USE-2), IN TRENCH

## LIGHTING LEGEND

- DECORATIVE ROADWAY LIGHTING UNIT LED, 17' MOUNTING HEIGHT, MOUNTED ON BRIDGE
- 30' ROUND TAPERED ALUMINUM POLE WITH 6' MAST ARM, LED LUMINAIRE, 24" CONCRETE FOUNDATION
- UNDERPASS LIGHTING UNIT, LED
- BASE MOUNTED LIGHTING CONTROLLER
- HANDHOLE, PORTLAND CEMENT CONCRETE
- JUNCTION BOX
- ELECTRIC SERVICE UTILITY POLE
- E — ELECTRIC CABLE/CONDUIT
- L — LIGHTING CABLE/CONDUIT
- CONDUIT SLEEVE, PVC SCHEDULE 80
- STUB AND CAP CONDUIT

## CABLE LEGEND

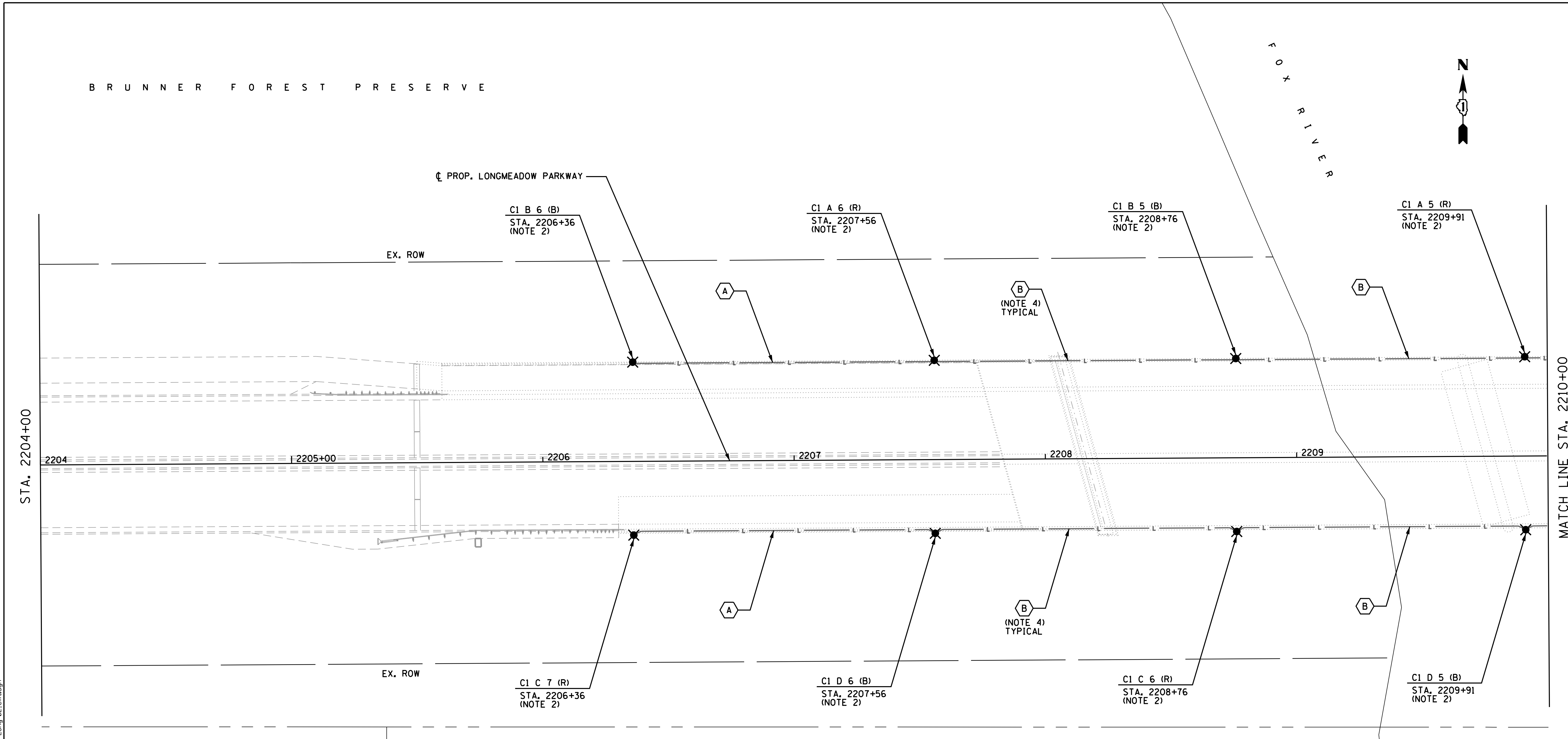
CONTROL CABINET
CIRCUITRY
POLE NUMBER
CABLE COLOR CODE

X A 12 (R)
X B 12 (B)

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC2-sht-lighting-Long-01_cmt.dgn

| CMT | USER NAME = Jeff Sedig | DESIGNED - CPT | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | LIGHTING PLAN GENERAL NOTES, LEGEND, AND SUMMARY OF QUANTITIES | F.A.U. RTE. 2298 | SECTION 18-00215-21-BR | COUNTY KANE | TOTAL SHEETS 415 | SHEET NO. 257 |
|---|---|---|---|---|---|---|---|---|---|---|
| License No. 184-000613 | | DRAWN - CPT | REVISED - | | | CONTRACT NO. 61G02 | | | | |
| Copyright CMT, Inc. | PLOT SCALE = 2.0000 ' / in. | CHECKED - AB | REVISED - | | SCALE: - SHEET 1 OF 17 SHEETS STA.- TO STA.- | ILLINOIS FED. AID PROJECT | | | | |
| | PLOT DATE = 3/26/2020 | DATE - 01/13/2020 | REVISED - | | | | | | | |




**NOTES**

1. REFER TO LIGHTING SHEET 7 FOR THE BRIDGE MOUNTED LIGHT POLES, LUMINAIRE SCHEDULE AND ONE-LINE DIAGRAM.
2. LIGHT POLE FOUNDATION AND ANCHOR BOLTS HAVE ALREADY BEEN INSTALLED BY OTHERS. CONTRACTOR SHALL INSTALL LIGHT POLE, BASE PLATE AND HARDWARE. WORK SHALL BE PAID FOR IN THE COST OF THE PAY ITEM "X8300001-LIGHT POLE, SPECIAL". REFER TO LIGHTING SHEET 9 FOR BRIDGE LIGHT POLE INSTALLATION DETAILS.
3. EACH BRIDGE LIGHTING UNIT IS INSTALLED WITH A ROAM WIRELESS NODE WHICH COMMUNICATES IN A WIRELESS MESH NETWORK WITH THE OTHER LIGHT POLES AND TO A WIRELESS GATEWAY CONNECTED TO THE COUNTY NETWORK TO CONTROL ON/OFF TIMES AND DIMMING. REFER TO LIGHTING SHEET 5 FOR LIGHTING CONTROLLER AND WIRELESS GATEWAY LOCATION.
4. PULL NEW CONDUCTORS IN EXISTING CONDUIT AND TERMINATE AT BRIDGE MOUNTED LIGHTS.

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section\C2-sht-lighting-Long-02_cmt.dgn

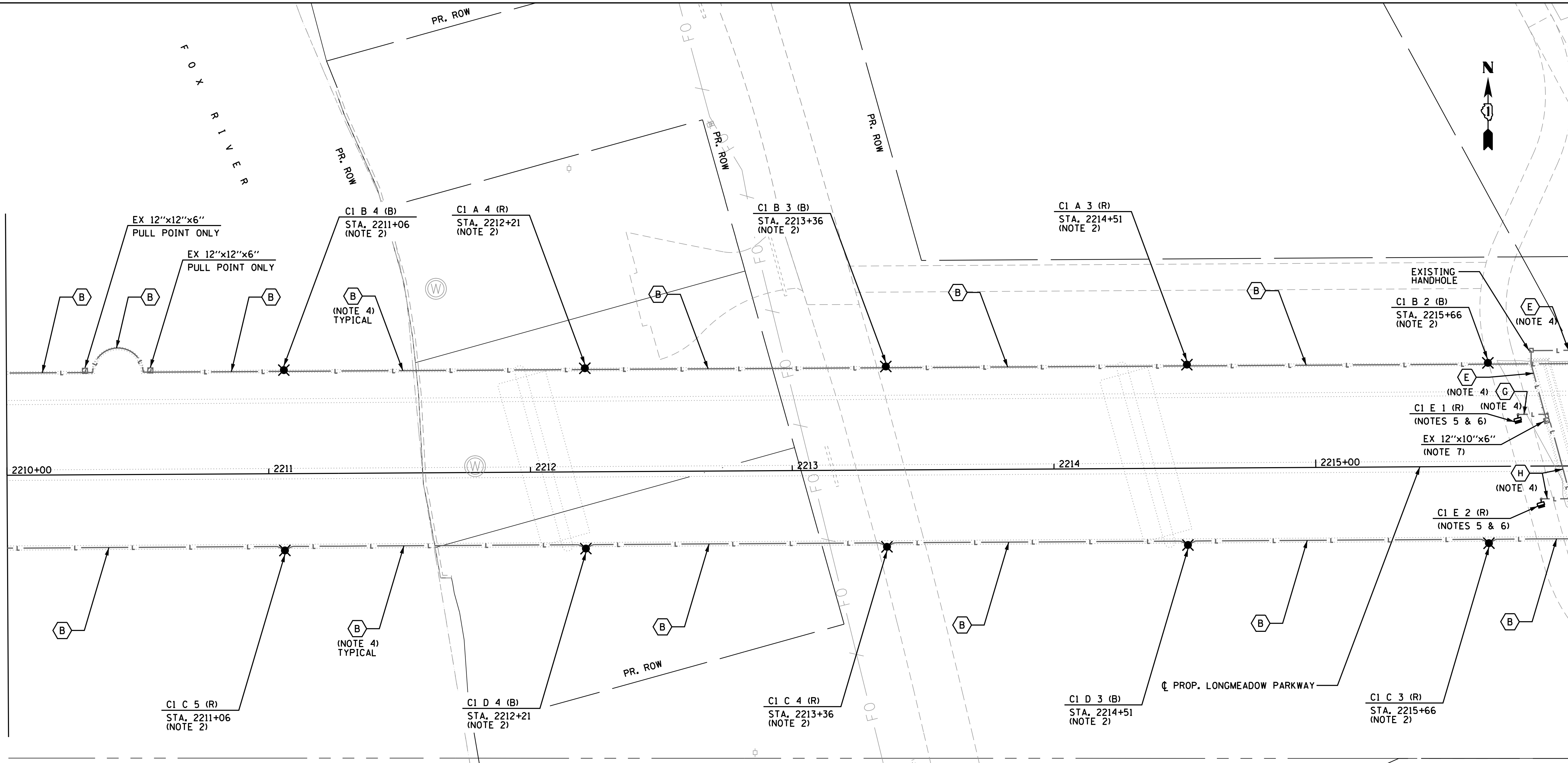
| | | | |
|---|---|---|---|
| CMT | USER NAME = Jeff Sedig | DESIGNED - CPT | REVISED - |
| | | DRAWN - CPT | REVISED - |
| | PLOT SCALE = 40.0000 ' / in. | CHECKED - AB | REVISED - |
| License No. 184-000613 | PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=20' | SHEET 2 OF 17 SHEETS | STA. 2204+00 TO STA. 2210+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 258 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |




**NOTES**

1. REFER TO LIGHTING SHEET 7 FOR THE BRIDGE MOUNTED LIGHT POLES AND UNDERPASS LUMINAIRES, LUMINAIRE SCHEDULE AND ONE-LINE DIAGRAM.
2. LIGHT POLE FOUNDATION AND ANCHOR BOLTS HAVE ALREADY BEEN INSTALLED BY OTHERS. CONTRACTOR SHALL INSTALL LIGHT POLE, BASE PLATE AND HARDWARE. WORK SHALL BE PAID FOR IN THE COST OF THE PAY ITEM "X8300001-LIGHT POLE, SPECIAL". REFER TO LIGHTING SHEET 9 FOR BRIDGE LIGHT POLE INSTALLATION DETAILS.
3. EACH BRIDGE LIGHTING UNIT IS INSTALLED WITH A ROAM WIRELESS NODE WHICH COMMUNICATES IN A WIRELESS MESH NETWORK WITH THE OTHER LIGHT POLES AND TO A WIRELESS GATEWAY CONNECTED TO THE COUNTY NETWORK TO CONTROL ON/OFF TIMES AND DIMMING. REFER TO LIGHTING SHEET 5 FOR LIGHTING CONTROLLER AND WIRELESS GATEWAY LOCATION.
4. PULL NEW CONDUCTORS IN EXISTING CONDUIT AND TERMINATE AT BRIDGE MOUNTED OR UNDERPASS LIGHTS.
5. FLARE LOOP INSERTS HAVE ALREADY BEEN INSTALLED (BY OTHERS) IN THE EXISTING BRIDGE DECK TO HANG THE NEW UNDERPASS LUMINAIRE. CONTRACTOR SHALL INSTALL THE LUMINAIRE HANGER ASSEMBLY AND UNDERPASS LUMINAIRE. UNDERPASS LUMINAIRE SHALL BE MOUNTED TO A MOUNTING PLATE AND NOT DIRECTLY TO THE HANGER ASSEMBLY. REFER TO LIGHTING SHEET 8 FOR MOUNTING PLATE DETAILS AND SHEET 11 FOR UNDERPASS LIGHTING INSTALLATION DETAILS.
6. CONTRACTOR SHALL INSTALL CONDUIT FROM AN EXISTING 6"X6"X4" JUNCTION BOX ATTACHED TO THE BRIDGE DECK TO THE UNDERPASS LUMINAIRE. THIS WORK SHALL BE PAID FOR IN THE COST OF THE LUMINAIRE, PAY ITEM "X8211000 - UNDERPASS LUMINAIRE (SPECIAL)".
7. CONTRACTOR SHALL INSTALL (1) ONE ROAM WIRELESS NODE WITH RECEPTACLE KIT ON EXISTING JUNCTION BOX UNDER THE BRIDGE. THIS WORK SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "X0326810 - WIRELESS COMMUNICATION DEVICE". THE WIRELESS NODE SHALL BE ENERGIZED FROM THE SAME CIRCUIT AS THE UNDERPASS LUMINAIRES. INSTALL CONTROL CABLES THE IN SAME CONDUIT AS THE LUMINAIRE POWER CABLES FROM THE ROAM NODE TO EACH UNDERPASS LUMINAIRE TO CONTROL ON/OFF TIMES AND DIMMING. REFER TO SHEET 11 FOR UNDERPASS LIGHTING INSTALLATION DETAILS.

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\SectionC2-sht-lighting-Long-03_cmt.dgn

CMT



| | | |
|---|---|---|
| USER NAME = Jeff Sedig | DESIGNED - CPT | REVISED - |
| | DRAWN - CPT | REVISED - |
| PLOT SCALE = 40.0000 ' / in. | CHECKED - AB | REVISED - |
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

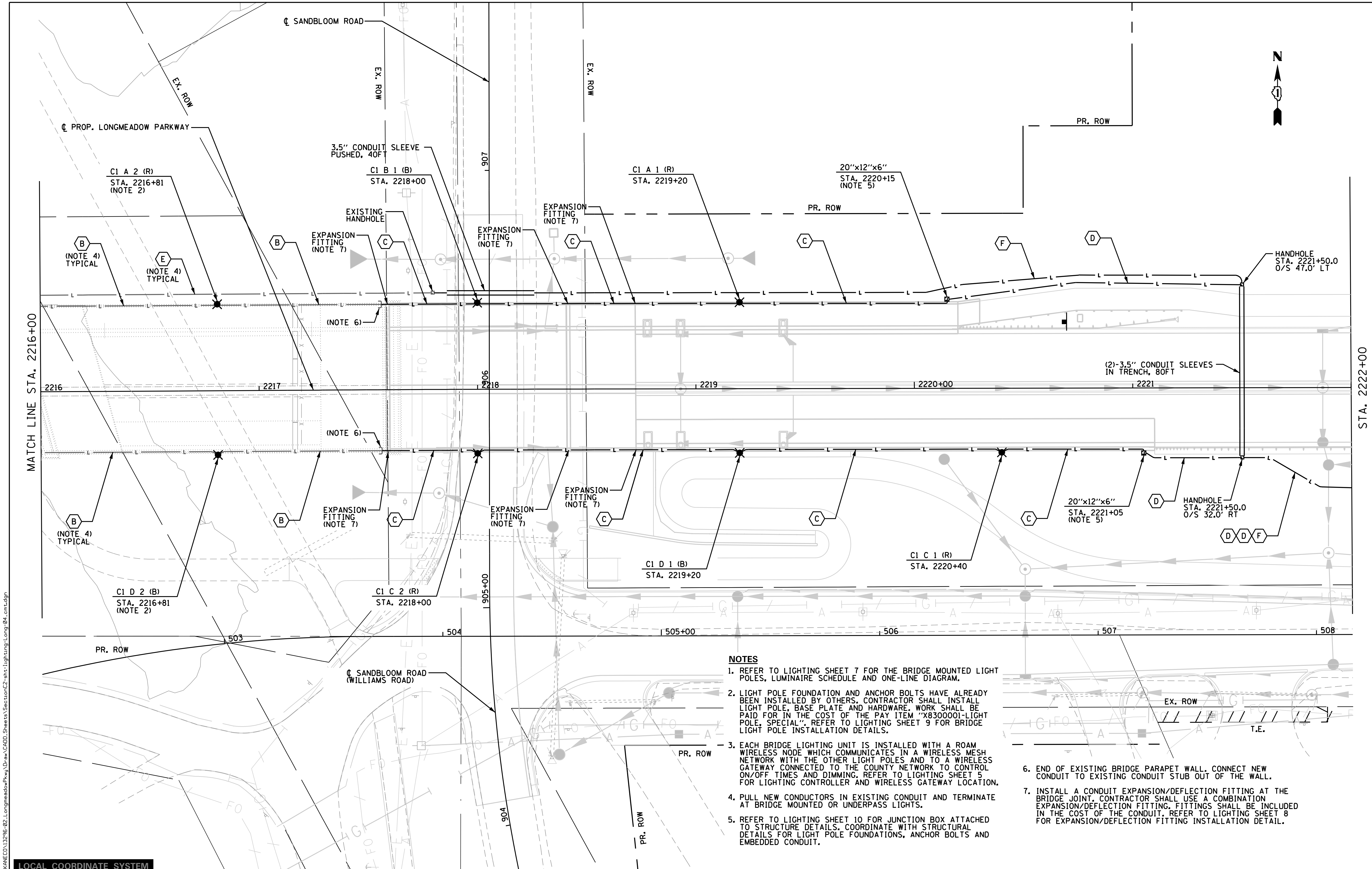
**LIGHTING PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=20' | SHEET 3 OF 17 SHEETS | STA. 2210+00 TO STA. 2216+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 259 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




## NOTES

1. REFER TO LIGHTING SHEET 7 FOR THE BRIDGE MOUNTED LIGHT POLES, LUMINAIRE SCHEDULE AND ONE-LINE DIAGRAM.
2. LIGHT POLE FOUNDATION AND ANCHOR BOLTS HAVE ALREADY BEEN INSTALLED BY OTHERS. CONTRACTOR SHALL INSTALL LIGHT POLE, BASE PLATE AND HARDWARE. WORK SHALL BE PAID FOR IN THE COST OF THE PAY ITEM "X8300001-LIGHT POLE, SPECIAL". REFER TO LIGHTING SHEET 9 FOR BRIDGE LIGHT POLE INSTALLATION DETAILS.
3. EACH BRIDGE LIGHTING UNIT IS INSTALLED WITH A ROAM WIRELESS NODE WHICH COMMUNICATES IN A WIRELESS MESH NETWORK WITH THE OTHER LIGHT POLES AND TO A WIRELESS GATEWAY CONNECTED TO THE COUNTY NETWORK TO CONTROL ON/OFF TIMES AND DIMMING. REFER TO LIGHTING SHEET 5 FOR LIGHTING CONTROLLER AND WIRELESS GATEWAY LOCATION.
4. PULL NEW CONDUCTORS IN EXISTING CONDUIT AND TERMINATE AT BRIDGE MOUNTED OR UNDERPASS LIGHTS.
5. REFER TO LIGHTING SHEET 10 FOR JUNCTION BOX ATTACHED TO STRUCTURE DETAILS. COORDINATE WITH STRUCTURAL DETAILS FOR LIGHT POLE FOUNDATIONS, ANCHOR BOLTS AND EMBEDDED CONDUIT.
6. END OF EXISTING BRIDGE PARAPET WALL. CONNECT NEW CONDUIT TO EXISTING CONDUIT STUB OUT OF THE WALL.
7. INSTALL A CONDUIT EXPANSION/DEFLECTION FITTING AT THE BRIDGE JOINT. CONTRACTOR SHALL USE A COMBINATION EXPANSION/DEFLECTION FITTING. FITTINGS SHALL BE INCLUDED IN THE COST OF THE CONDUIT. REFER TO LIGHTING SHEET 8 FOR EXPANSION/DEFLECTION FITTING INSTALLATION DETAIL.

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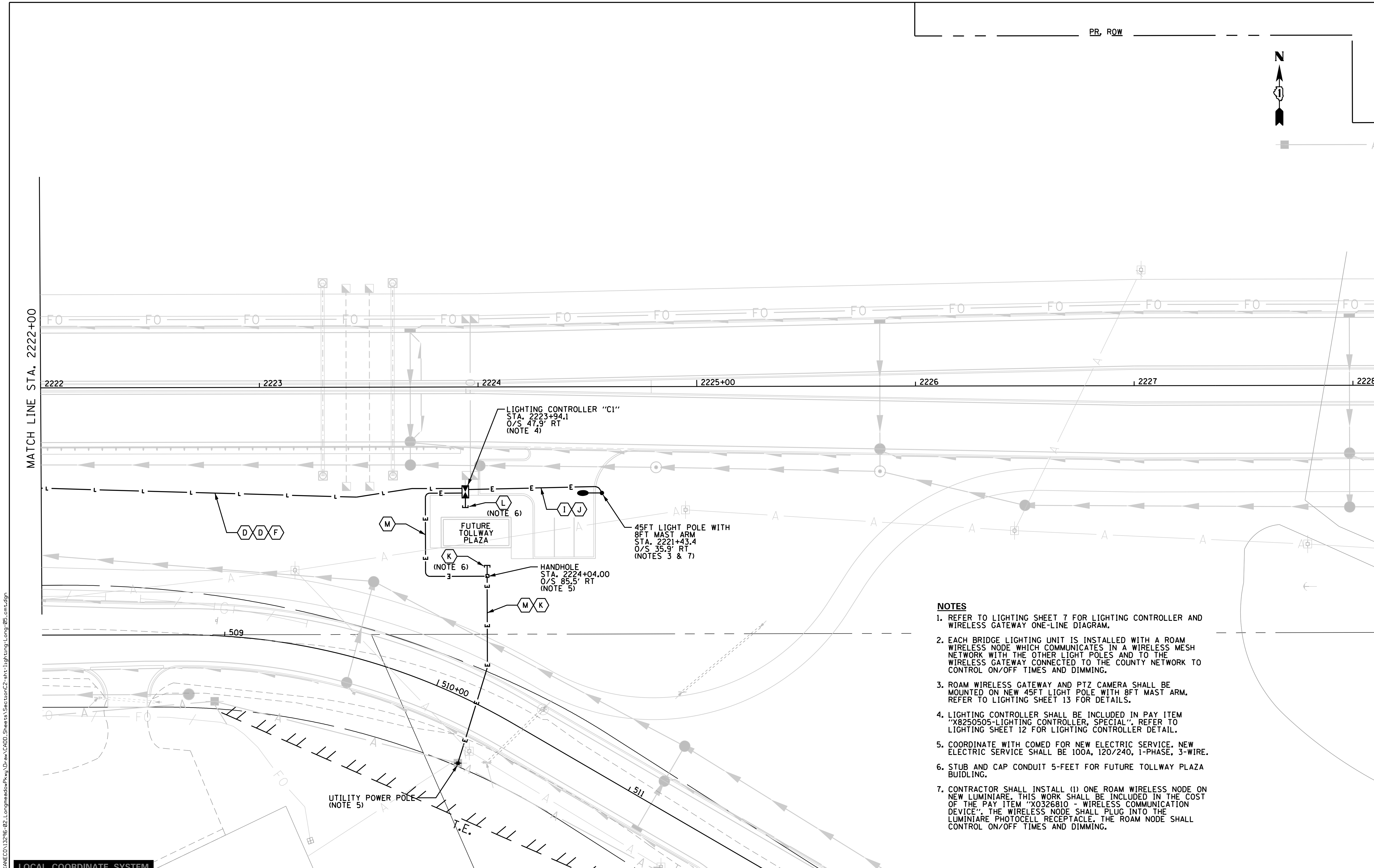
| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN**
**LONGMEADOW PARKWAY**

SCALE: 1"=20' | SHEET 4 OF 17 SHEETS | STA. 2216+00 TO STA. 2222+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 260 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |




## NOTES

1. REFER TO LIGHTING SHEET 7 FOR LIGHTING CONTROLLER AND WIRELESS GATEWAY ONE-LINE DIAGRAM.
2. EACH BRIDGE LIGHTING UNIT IS INSTALLED WITH A ROAM WIRELESS NODE WHICH COMMUNICATES IN A WIRELESS MESH NETWORK WITH THE OTHER LIGHT POLES AND TO THE WIRELESS GATEWAY CONNECTED TO THE COUNTY NETWORK TO CONTROL ON/OFF TIMES AND DIMMING.
3. ROAM WIRELESS GATEWAY AND PTZ CAMERA SHALL BE MOUNTED ON NEW 45FT LIGHT POLE WITH 8FT MAST ARM. REFER TO LIGHTING SHEET 13 FOR DETAILS.
4. LIGHTING CONTROLLER SHALL BE INCLUDED IN PAY ITEM "X8250505-LIGHTING CONTROLLER, SPECIAL". REFER TO LIGHTING SHEET 12 FOR LIGHTING CONTROLLER DETAIL.
5. COORDINATE WITH COMED FOR NEW ELECTRIC SERVICE. NEW ELECTRIC SERVICE SHALL BE 100A, 120/240, 1-PHASE, 3-WIRE.
6. STUB AND CAP CONDUIT 5-FEET FOR FUTURE TOLLWAY PLAZA BUIDLING.
7. CONTRACTOR SHALL INSTALL (1) ONE ROAM WIRELESS NODE ON NEW LUMINAIRE. THIS WORK SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "X0326810 - WIRELESS COMMUNICATION DEVICE". THE WIRELESS NODE SHALL PLUG INTO THE LUMINAIRE PHOTOCELL RECEPTACLE. THE ROAM NODE SHALL CONTROL ON/OFF TIMES AND DIMMING.

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| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

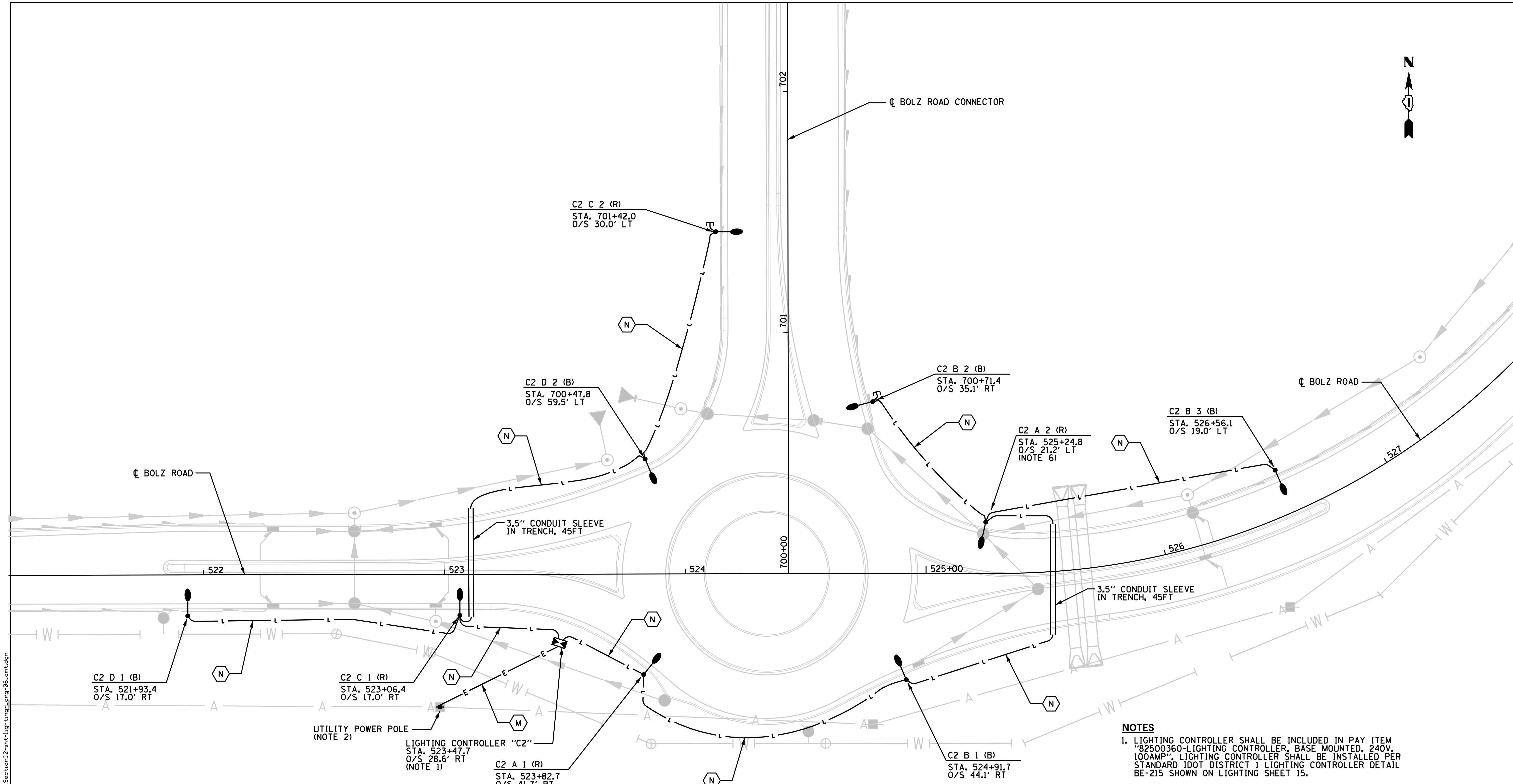
LIGHTING PLAN
LONGMEADOW PARKWAY

SCALE: 1"=20' | SHEET 5 OF 17 SHEETS | STA. 2216+00 TO STA. 2222+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 261 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




## NOTES

1. LIGHTING CONTROLLER SHALL BE INCLUDED IN PAY ITEM "82500360-LIGHTING CONTROLLER, BASE MOUNTED, 240V, 100AMP". LIGHTING CONTROLLER SHALL BE INSTALLED PER STANDARD IDOT DISTRICT 1 LIGHTING CONTROLLER DETAIL BE-215 SHOWN ON LIGHTING SHEET 15.
2. COORDINATE WITH COMED FOR NEW ELECTRIC SERVICE. NEW ELECTRIC SERVICE SHALL BE 100A, 240/480, 1-PHASE, 3-WIRE.
3. LIGHT POLES SHALL BE INSTALLED PER LIGHTING POLE DETAIL ON LIGHTING SHEET 14. REFER TO LIGHTING SHEET 7 FOR LUMINAIRE SCHEDULE AND ONE-LINE DIAGRAM.
4. LIGHT POLE FOUNDATIONS SHALL BE A CONCRETE FOUNDATION, 24" IN DIAMETER WITH A 9'-0" SHAFT DEPTH AND INSTALLED PER THE STANDARD IDOT DISTRICT 1 FOUNDATION DETAIL BE-300 SHOWN ON LIGHTING SHEET 16. BOLT CIRCLE SHALL BE SIZED PER DETAIL B ON THE LIGHT POLE INSTALLATION DETAIL ON LIGHTING SHEET 14.
5. LIGHT POLE FOUNDATIONS SHALL BE SETBACK 3-FEET FROM EDGE OF CURB TO CENTER OF LIGHT POLE FOUNDATION.
6. LIGHT POLE FOUNDATION SHALL BE 3-FEET FROM EDGE OF STORM SEWER STRUCTURE TO CENTER OF LIGHT POLE FOUNDATION.

LOCAL COORDINATE SYSTEM

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| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | |

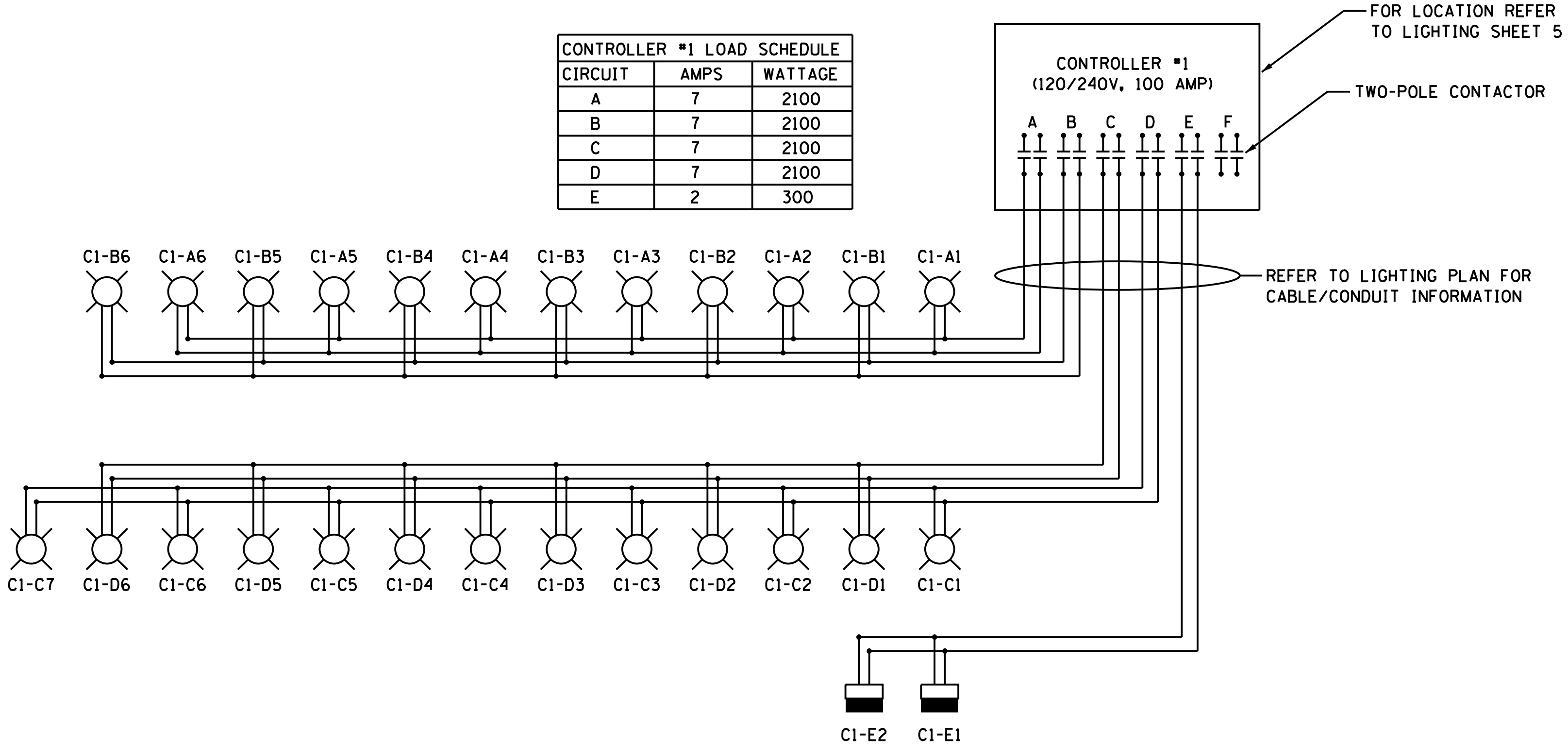
LIGHTING PLAN
LONGMEADOW PARKWAY

SCALE: 1"=20' | SHEET 6 OF 17 SHEETS | STA. 2234+00 TO STA. 2242+50

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 262 |

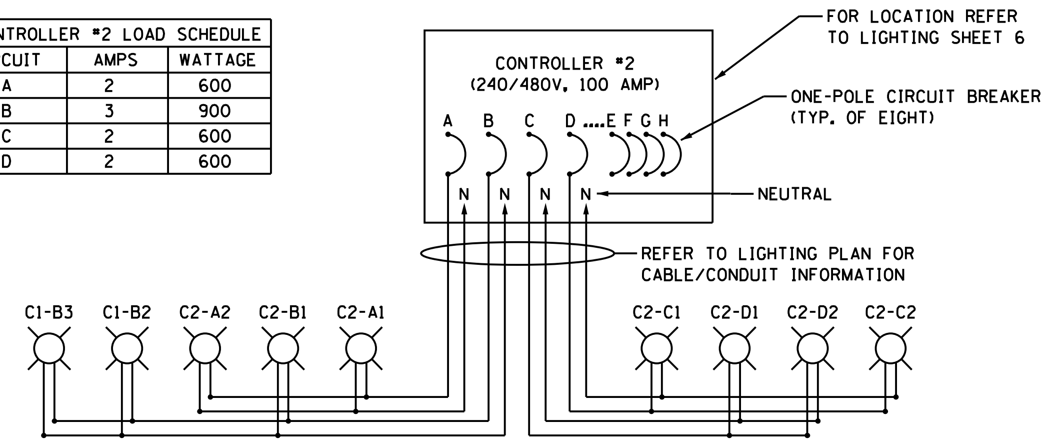
CONTRACT NO. 61G02
ILLINOIS FED. AID PROJECT

| CONTROLLER #1 LOAD SCHEDULE | | |
|---|---|---|
| CIRCUIT | AMPS | WATTAGE |
| A | 7 | 2100 |
| B | 7 | 2100 |
| C | 7 | 2100 |
| D | 7 | 2100 |
| E | 2 | 300 |

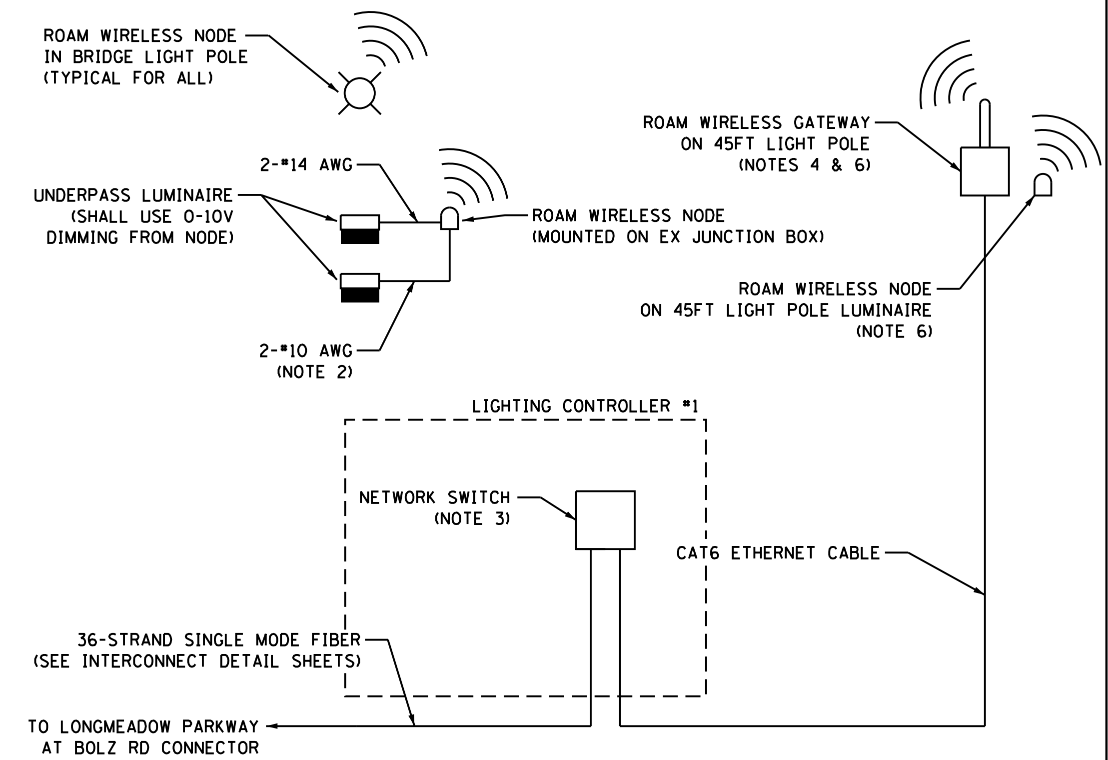



## LIGHTING CONTROLLER #1 ONE–LINE DIAGRAM

| CONTROLLER #2 LOAD SCHEDULE | | |
|---|---|---|
| CIRCUIT | AMPS | WATTAGE |
| A | 2 | 600 |
| B | 3 | 900 |
| C | 2 | 600 |
| D | 2 | 600 |




## LIGHTING CONTROLLER #2 ONE–LINE DIAGRAM

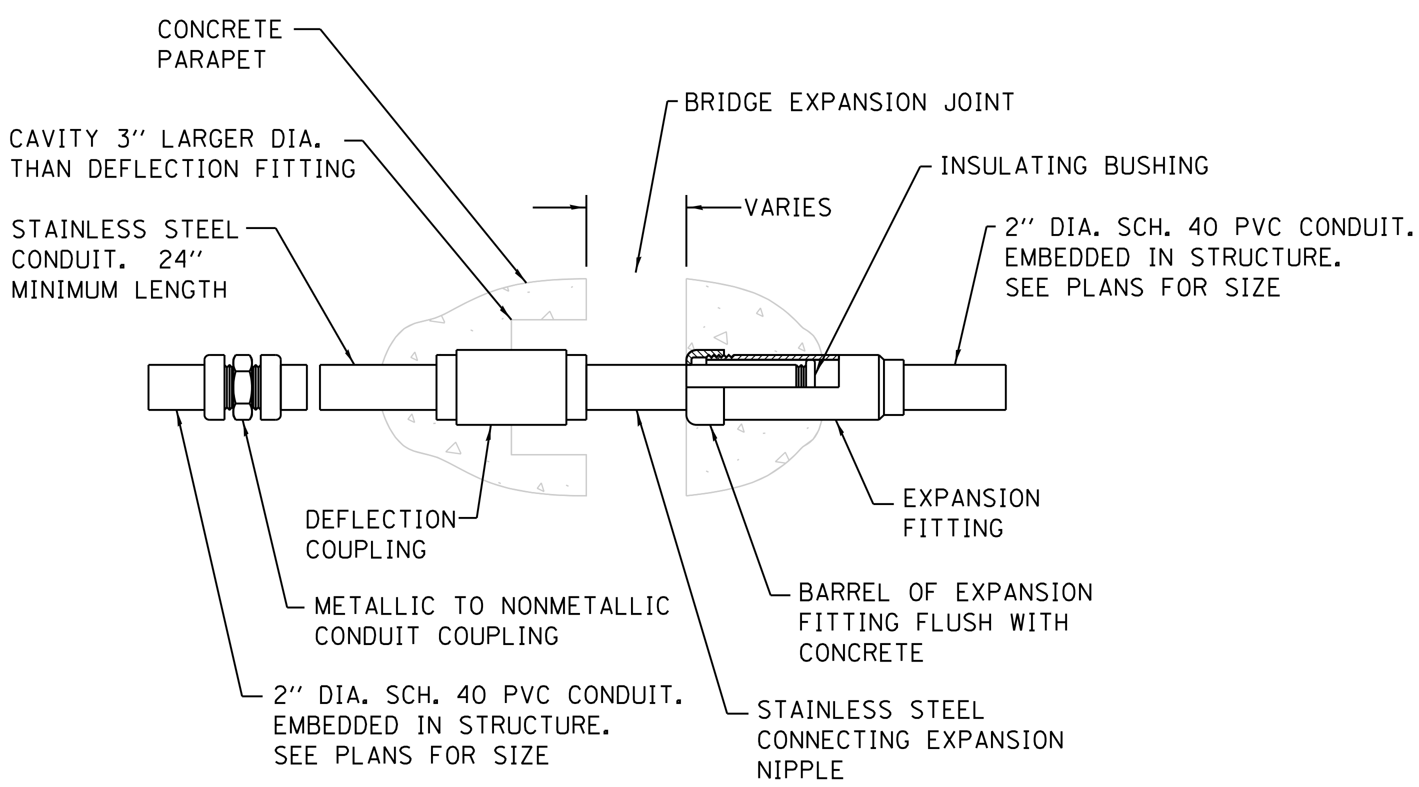



## ROAM WIRELESS ONE–LINE DIAGRAM

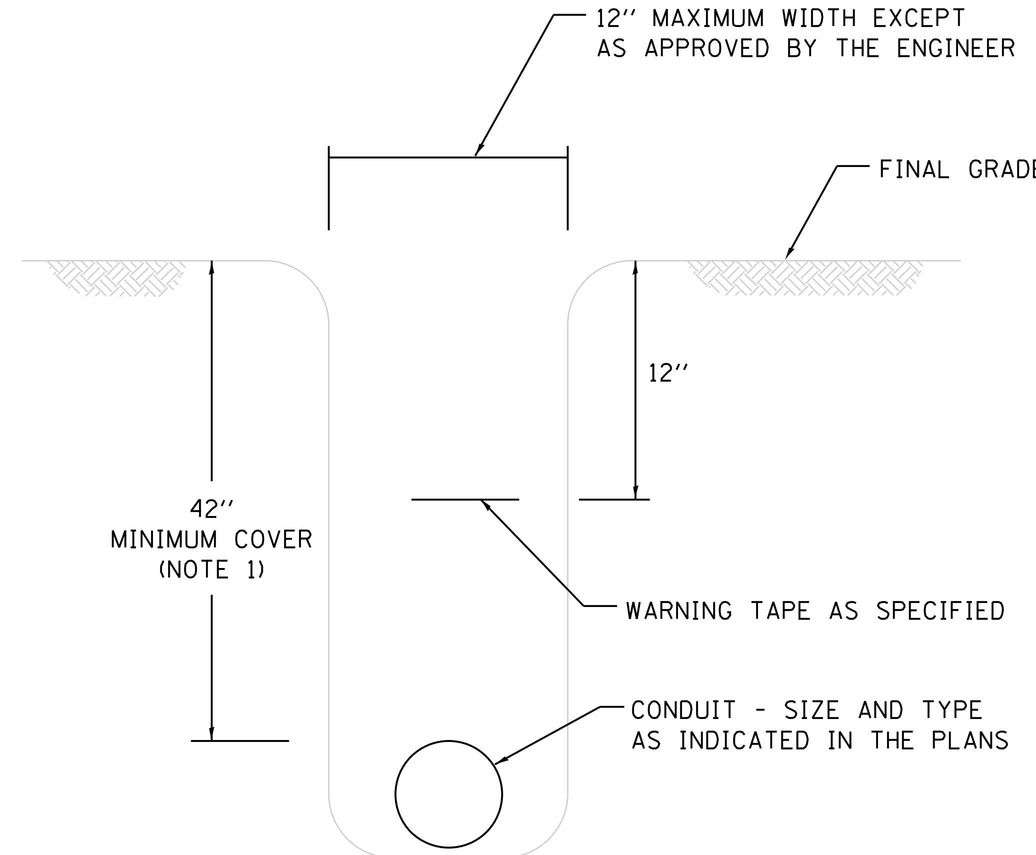
NOTE

1. ROAMVIEW NODES SHALL COMMUNICATE WITH THE CLOSEST NODE OR THE WIRELESS GATEWAY FOR CONTROL.
2. USE #10 CABLE FOR THE LONGER RUN SO DIMMING VOLTAGE DROP IS THE SAME AT BOTH FIXTURES.
3. NETWORK SWITCH SHALL BE TYPE 1 AND CONNECTED TO THE KDOT NETWORK WITH FIBER OPTIC CABLE. REFER TO FIBER INTERCONNECT PLANS FOR DETAILS.
4. ROAM WIRELSS GATEWAY SHALL BE CONNECTED TO THE KDOT NETWORK FOR THE COUNTY TO CONTROL ON/OFF TIMES AND DIMMING. THE DEFAULT TO CONTROL THE LIGHTS WILL BE A PHOTOCELL WHICH IS INSTALLED IN EACH NODE IF THE GATEWAY IS OFFLINE.
5. ROAM SYSTEM WILL REQUIRE AN ANNUAL SERVICE FEE TO KEEP THE ROAM SYSTEM ONLINE. CONTRACTOR SHALL PAY FOR THE FIRST YEAR SERVICE FEE DURING THE INITAL SETUP AND TRANSFER TO SERVICE TO THE COUNTY. SERVICE FEE SHALL BE INCLUDED IN THE LIGHTING CONTROLLER, SPECIAL PAY ITEM.
6. REFER TO LIGHTING SHEET 13 FOR MOUNTING OF THE ROAM GATEWAY AND WIRELESS NODE TO 45FT CAMERA LIGHT POLE. GATEWAY MOUNTING AND HARDWARE SHALL BE INCIDENTAL TO THE CAMERA POLE PAY ITEM.

| LUMINAIRE SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| LOCATION | MANUFACTUER | DESCRIPTION | VOLTAGE/WATTAGE | LAMPS | CAT. NO. (MFR.) | COMMENTS |
| BRIDGE | STERNBERG LIGHTING | ACRYLIC ACORN LED LUMIAINRE WITH IES TYPE 3R DISTRIBUTION, MOUNTED ON 12'-0" FLUTED ALUMINUM POLE. | 240V / 96W | LED (3000K) | PT-A880SRLED-5P-TBD-TBD-A/5211'-8.5"FP5/STD | SHALL INCLUDE ROAM NODE, REFER TO LIGHTING SHEET 9 FOR DETAIL |
| ROUNDABOUT | PHILLIPS | DOMUS 55 SERIES LUMINAIRE AND POLE WITH BANNER HANGERS | 240V / 70W | LED (3000K) | POLE (RTA927), MOUNTING (VR6), LUMINIARE (DMS55-SMB) | REFER TO LIGHTING SHEET 14 FOR DETAIL |
| UNDERPASS | HOLOPHANE | TUNNELPASS LED WITH DIMMING CONTROL, SUSPENED FROM BRIDGE DECK | 240V / 84W | LED (3000K) | TUNNELPASS-3-3K-7 -AS-CLN-DBKA-S-DM | REFER TO LIGHTING SHEET 8 FOR MOUNTING PLATE DETAIL |



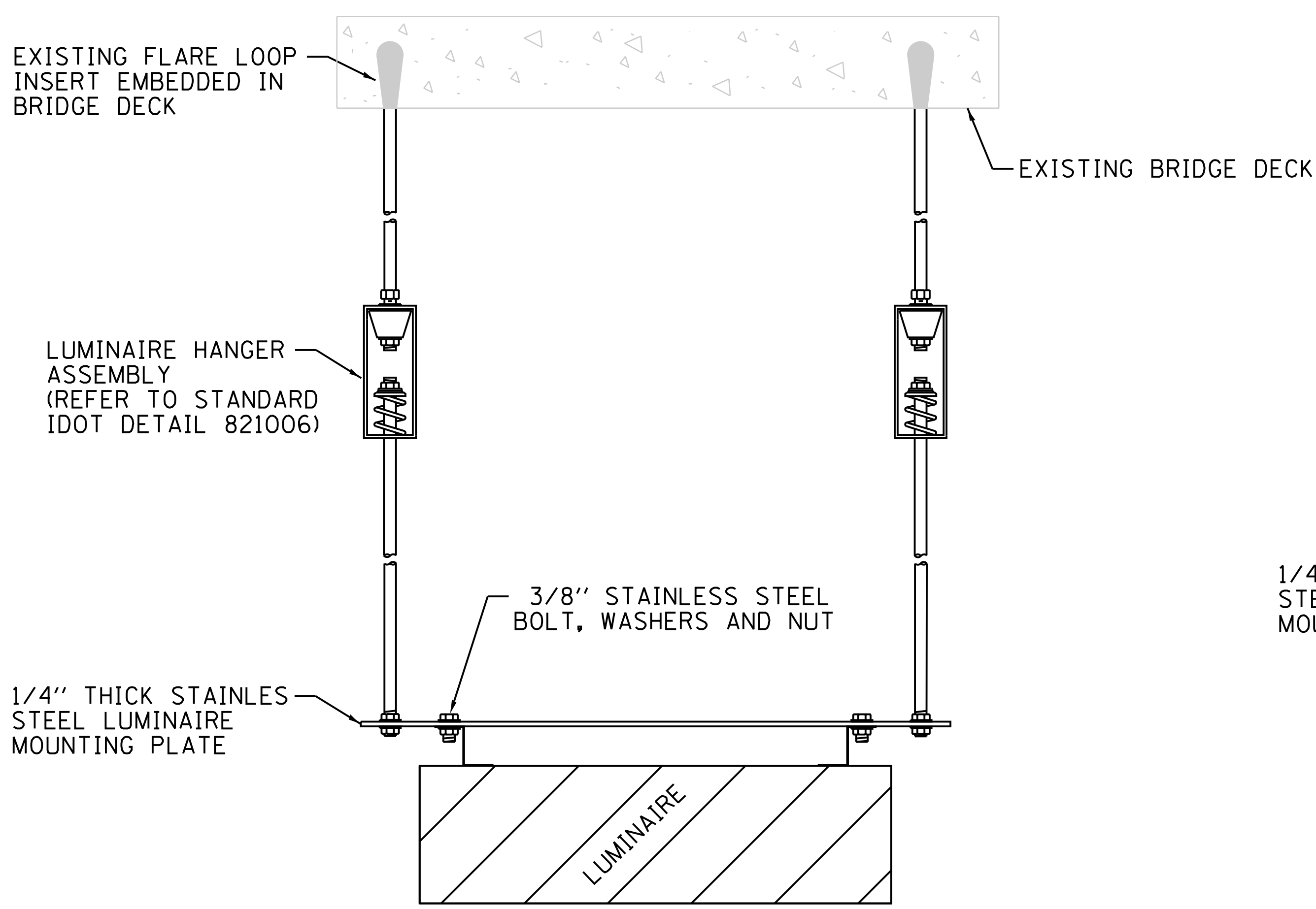

## COMBINATION EXPANSION/DEFLECTION FITTING



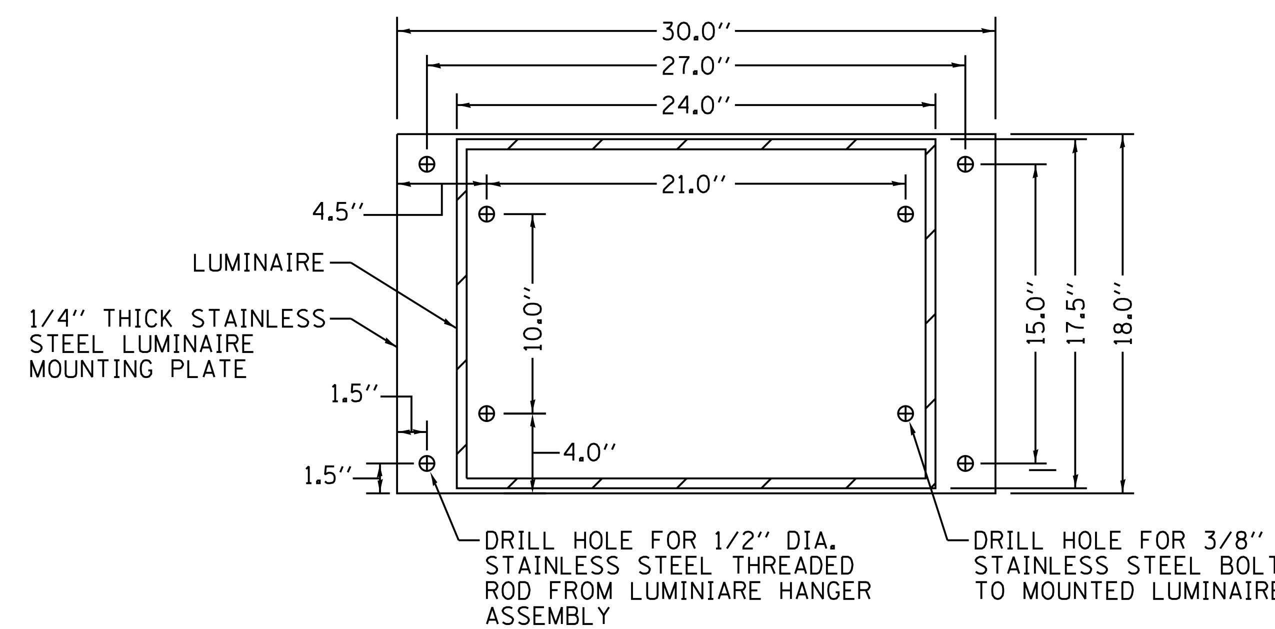

## CONDUIT IN TRENCH

NOTE

1. CONDUIT OR UNIT DUCT SHALL BE BURIED 42'' MINIMUM TO AVOID WATER FREEZING IN CONDUIT.




## UNDERPASS LUMINAIRE MOUNTING PLATE DETAIL




## UNDERPASS LUMINAIRE MOUNTING PLATE DETAIL

LOCAL COORDINATE SYSTEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

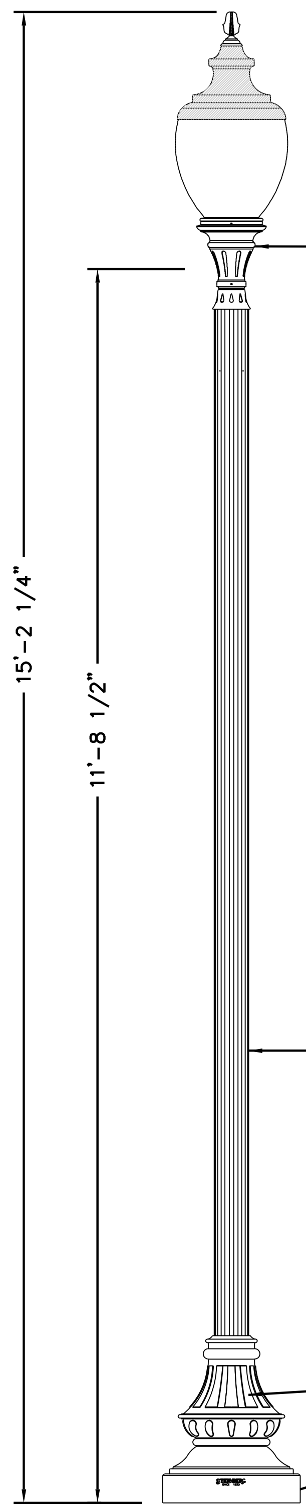
LIGHTING DETAILS
CONDUIT IN TRENCH AND
EXPANSION JOINT DETAIL

SCALE: - | SHEET 8 OF 17 SHEETS | STA. - TO STA. -

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 264 |

CONTRACT NO. 61G02

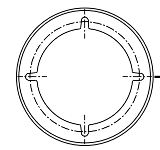
ILLINOIS FED. AID PROJECT




LED LIGHT SOURCE: 6ARC45T3R-MDL03

ACRYLIC ACORN: A880SRLED

DRIVER COMPARTMENT, (NOTE 1)
(SHALL INCLUDE ROAM WIRELESS NODE)



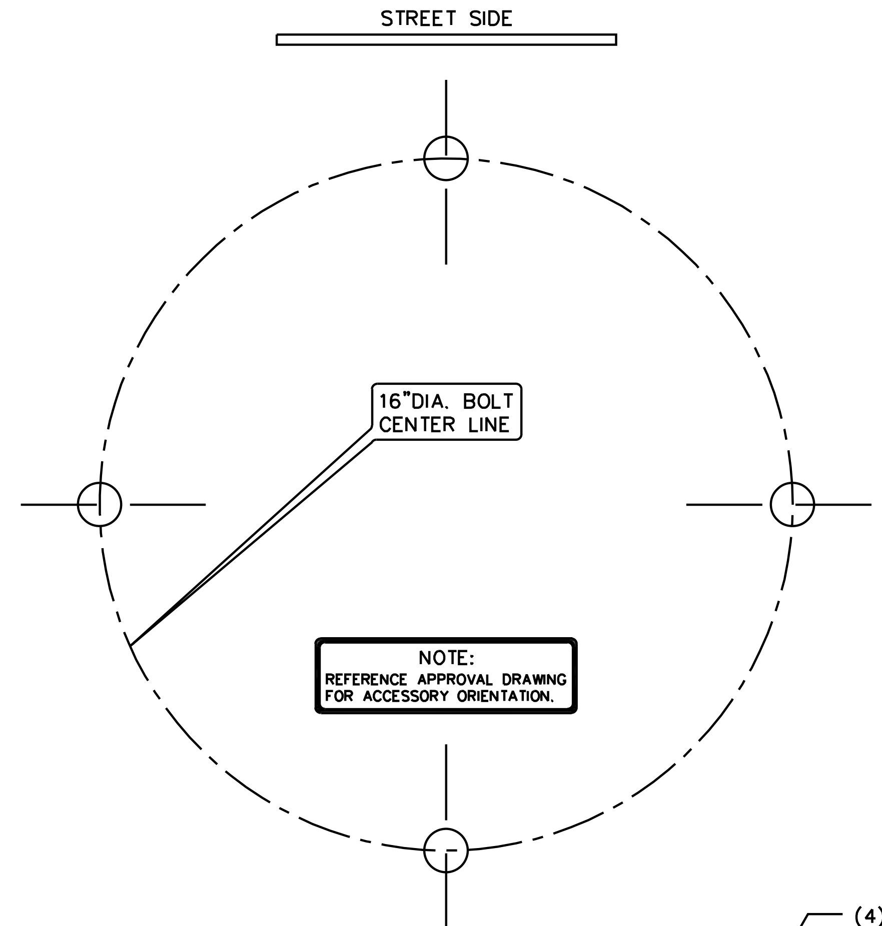

16" DIAMERTER BOLT CIRCLE
(4) 3/4" X 18" ANCHOR BOLTS

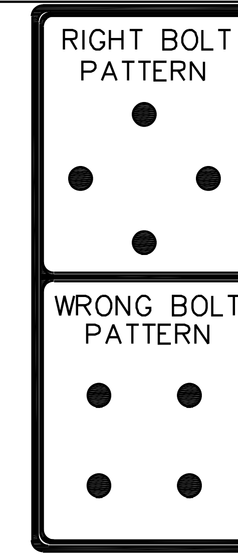
5" DIA. FLUTED POLE
.188 WALL THICKNESS
6061-T6 STRUCTURAL
GRADE ALUMINUM

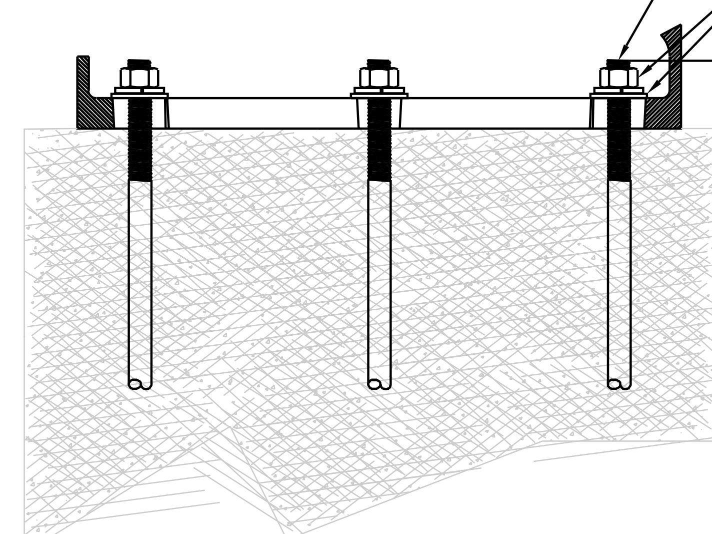
POLE WELDED FOR SINGLE
UNIT CONSTRUCTION

ACCESS DOOR, (NOTE 2)

20" DIA. BASE,
1" FLOOR THICKNESS




NOTE

1. ROAM WIRELESS NODE SHALL BE INSTALLED AT THE FACTORY PER MANUFACTURES RECOMMENDATION.

2. ON INSIDE OF ACCESS DOOR, LABEL THE CIRCUIT AND POLE NUMBER. USE TYPICAL IDOT STANDARD DECALS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

NOTE:
"STERNBERG DOES NOT RECOMMEND THE USE OF LEVELING NUTS FOR AESTHETIC REASONS".

TYPICAL HARDWARE REQUIRED PER BASE
4 ANCHOR BOLTS
8 NUTS
8 WASHERS
4 LOCK WASHERS

LIGHT POLE PART NUMBER:
PT-A880SRLED-5P-TBD-TBD-A/5211'-8.5"FP5/STD
16BC-3.5BP INSTALLATION TEMPLATE FOR 16" DIA. BOLT CIRLCE WITH 3 1/2" ABOVE GRADE BOLT PROJECTION. N.T.S.

SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED

LOCAL COORDINATE SYSTEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

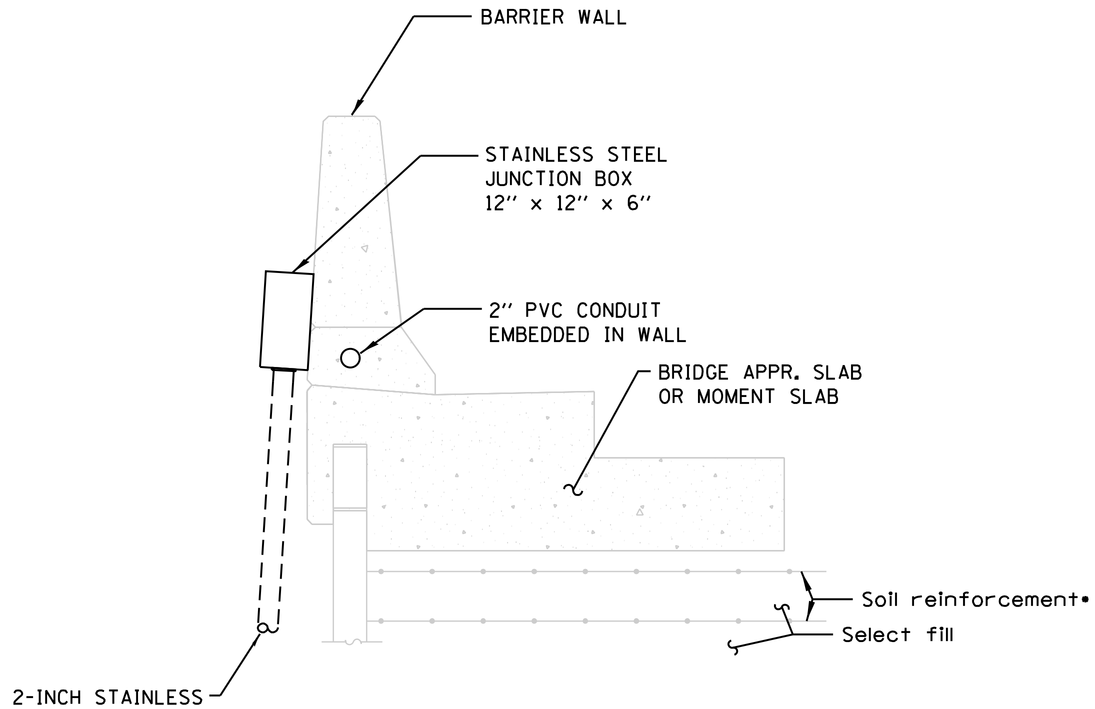
LIGHTING DETAILS
DECORATIVE LIGHT POLE
MOUNTING HEIGHT 17'-0"

SCALE: - | SHEET 9 OF 17 SHEETS | STA. - | TO STA. -

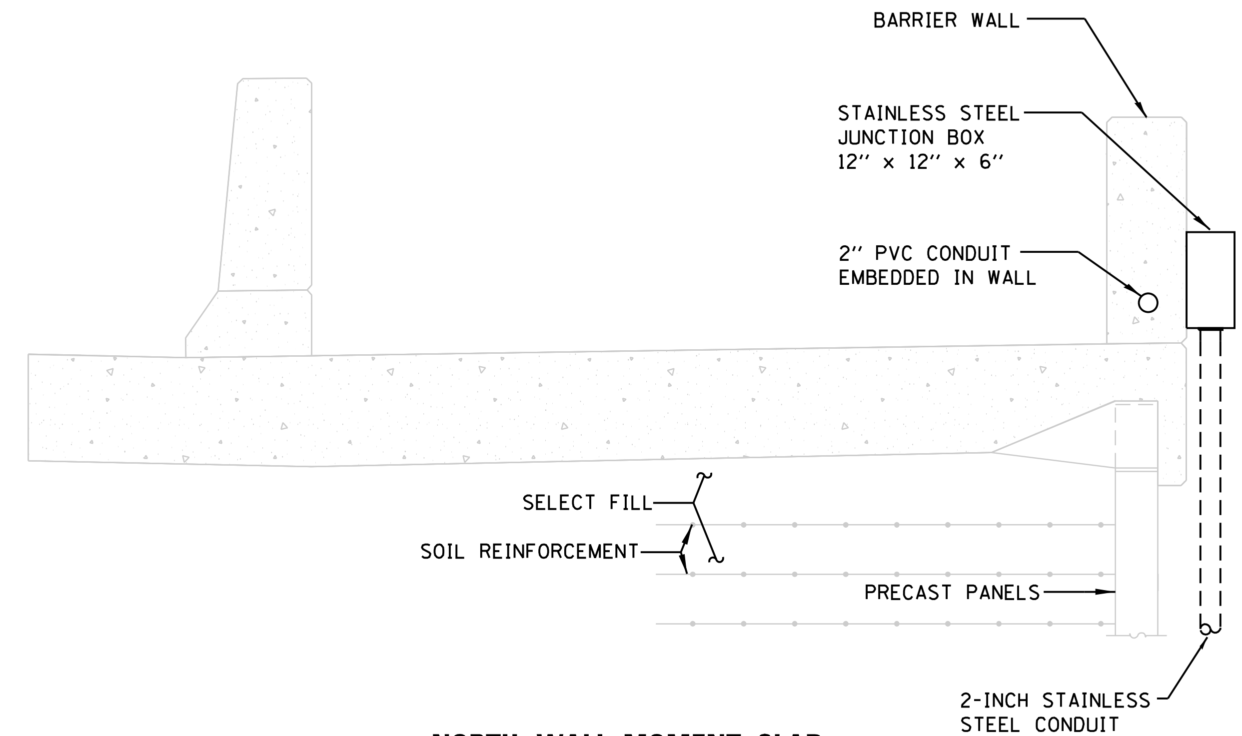
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 265 |

CONTRACT NO. 61G02

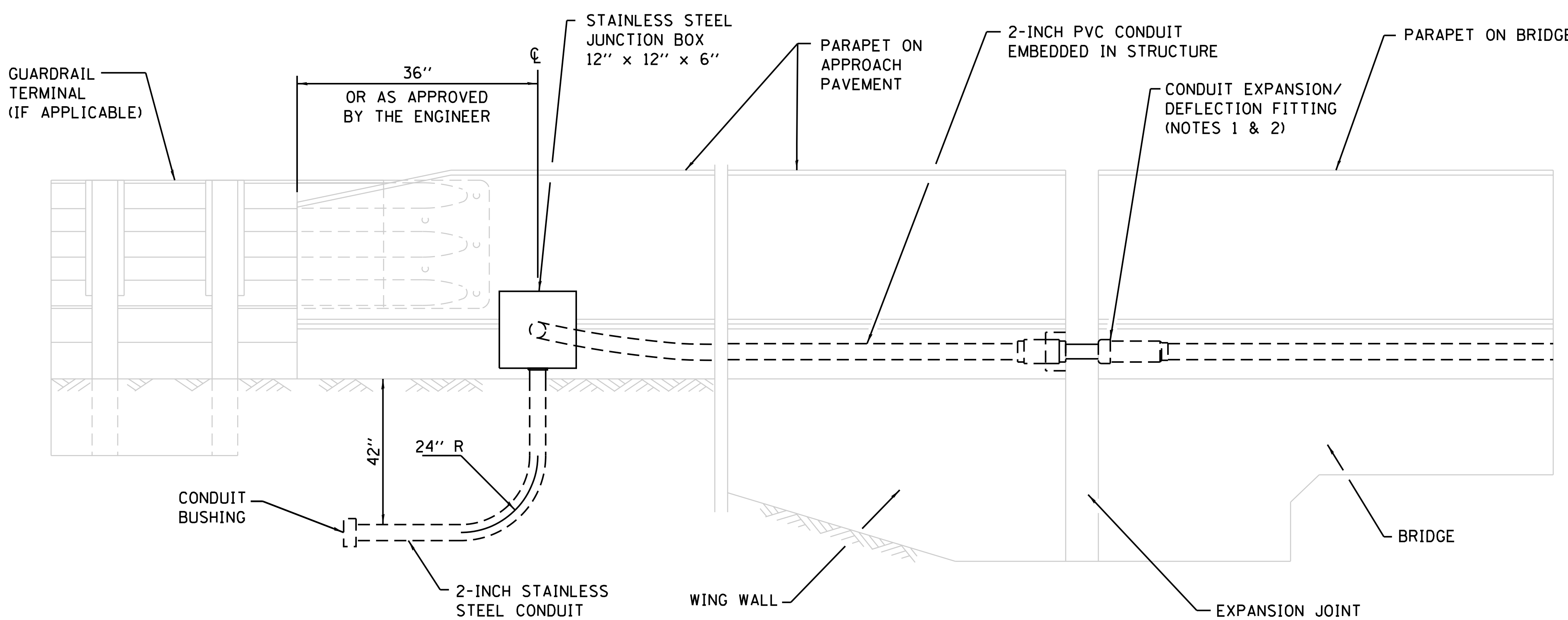
ILLINOIS FED. AID PROJECT




**SOUTH WALL MOMENT SLAB**




**NORTH WALL MOMENT SLAB**




**JOINTED ABUTMENT WITH PARAPET ON APPROACH PAVEMENT**

## NOTES

1. THE CONTRACTOR SHALL INSTALL COMBINATION EXPANSION DEFLECTION FITTINGS AT ALL BRIDGE EXPANSION JOINTS. REFER TO LIGHTING PLAN FOR LOCATIONS AND LIGHTING PLAN SHEET 8 FOR EXPANSION JOINT DETAIL.

2. THE BARREL IN THE EXPANSION FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE ON ONE SIDE OF THE EXPANSION JOINT. ONE HALF THE LENGTH OF THE DEFLECTION FITTING SHALL BE EMBEDDED IN THE CONCRETE ON THE OTHER SIDE OF THE EXPANSION JOINT. REFER TO LIGHTING PLAN SHEET 8 FOR COMBINATION EXPANSION/ DEFLECTION FITTING DETAIL.

3. ALL DIMENSIONS ARE IN INCHES.

LOCAL COORDINATE SYSTEM

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| PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

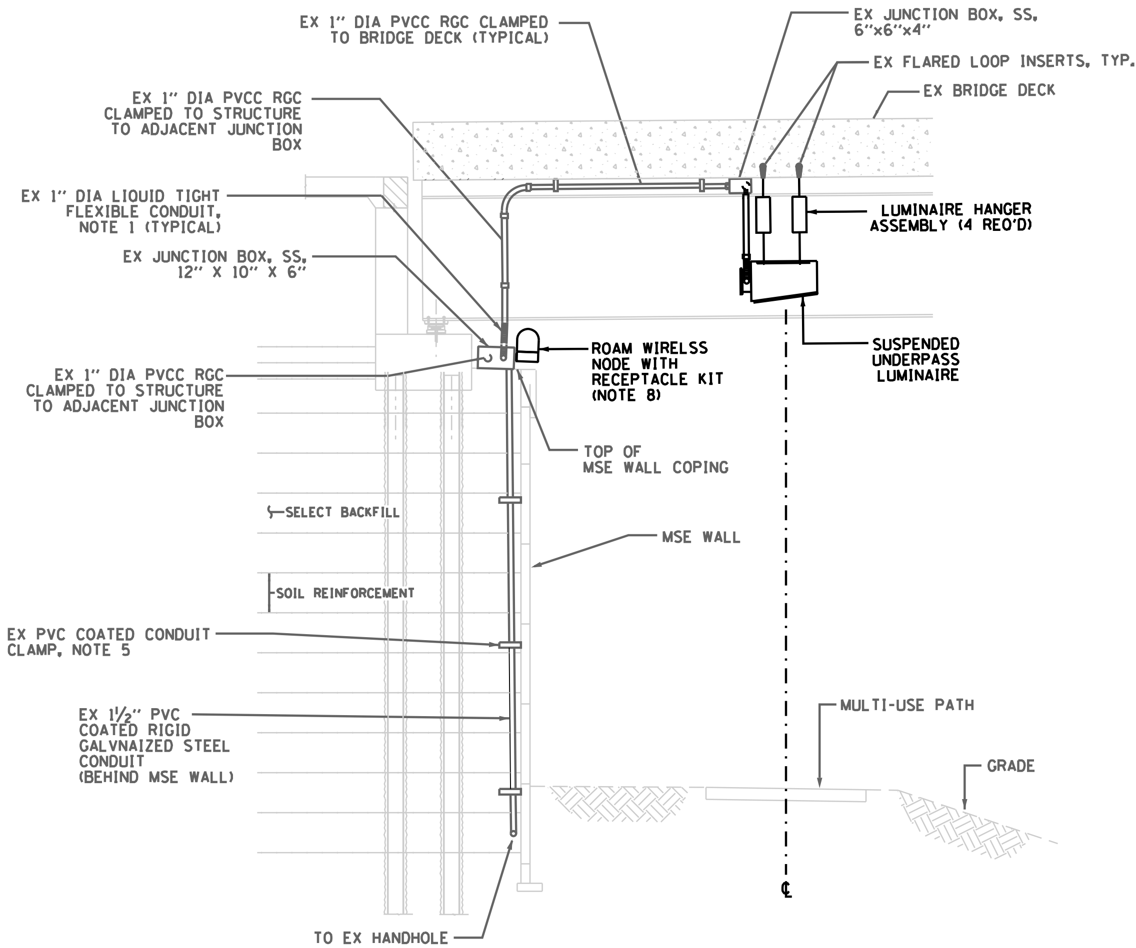
LIGHTING DETAILS
JUNCTION BOX
ATTACHED TO STRCTURE

SCALE: - | SHEET 10 OF 17 SHEETS | STA. - | TO STA. -

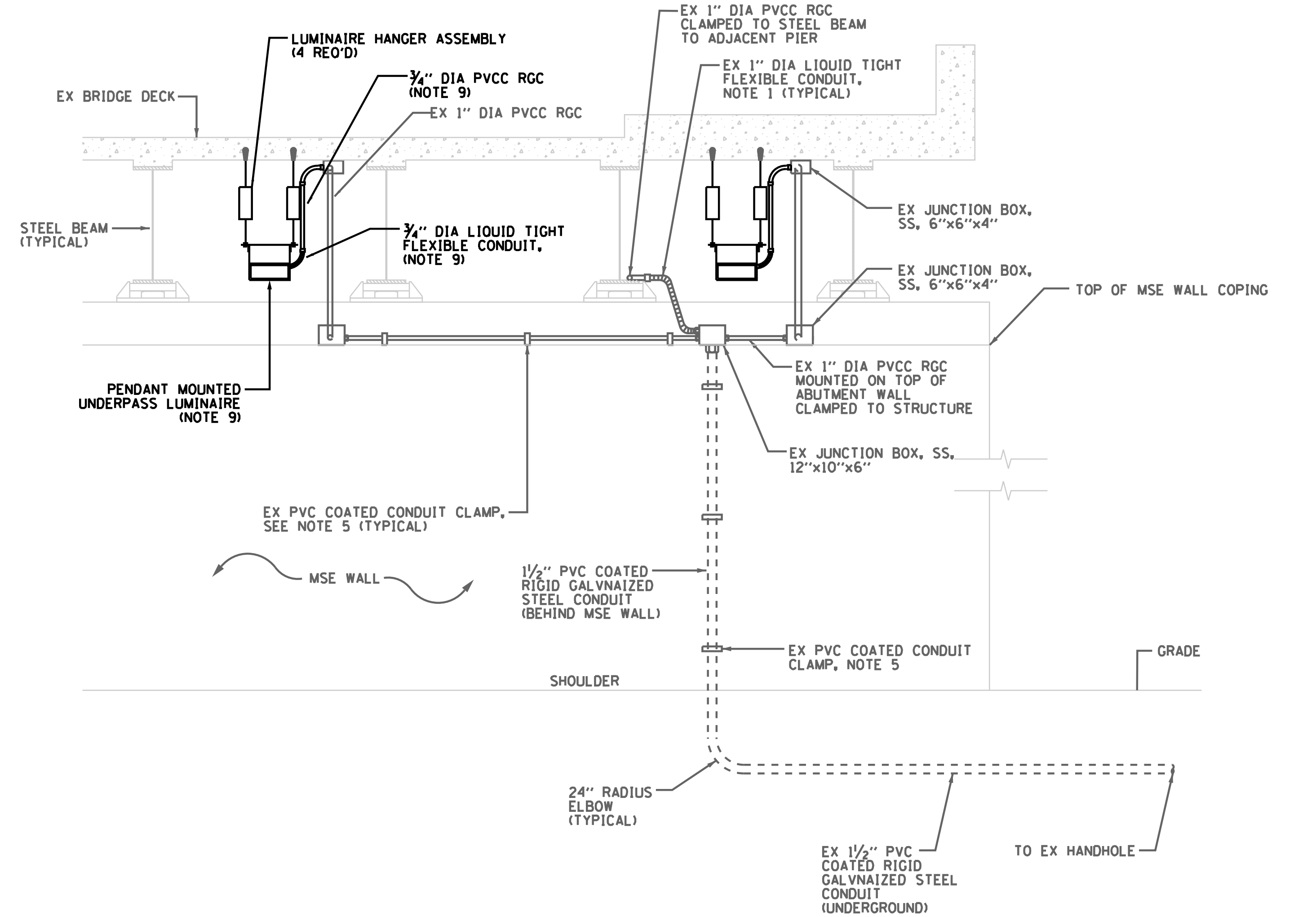
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 266 |

CONTRACT NO. 61G02

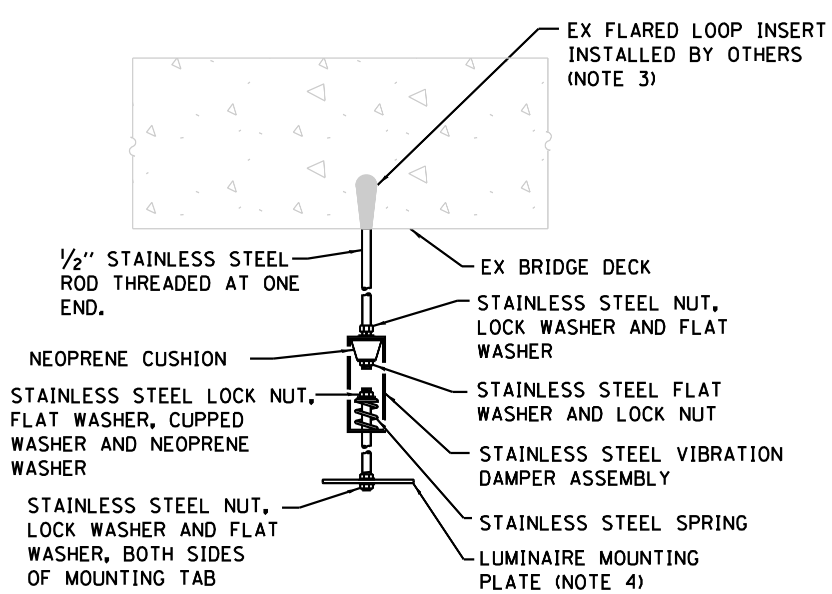
ILLINOIS FED. AID PROJECT




## ELEVATION VIEW




## SECTION VIEW




## LUMINAIRE HANGER ASSEMBLY DETAIL

PVC COATED CONDUIT BEAM CLAMP
NOT TO SCALE

PVC COATED CONDUIT CLAMP
NOT TO SCALE

## CONDUIT CLAP DETAILS

## NOTES:

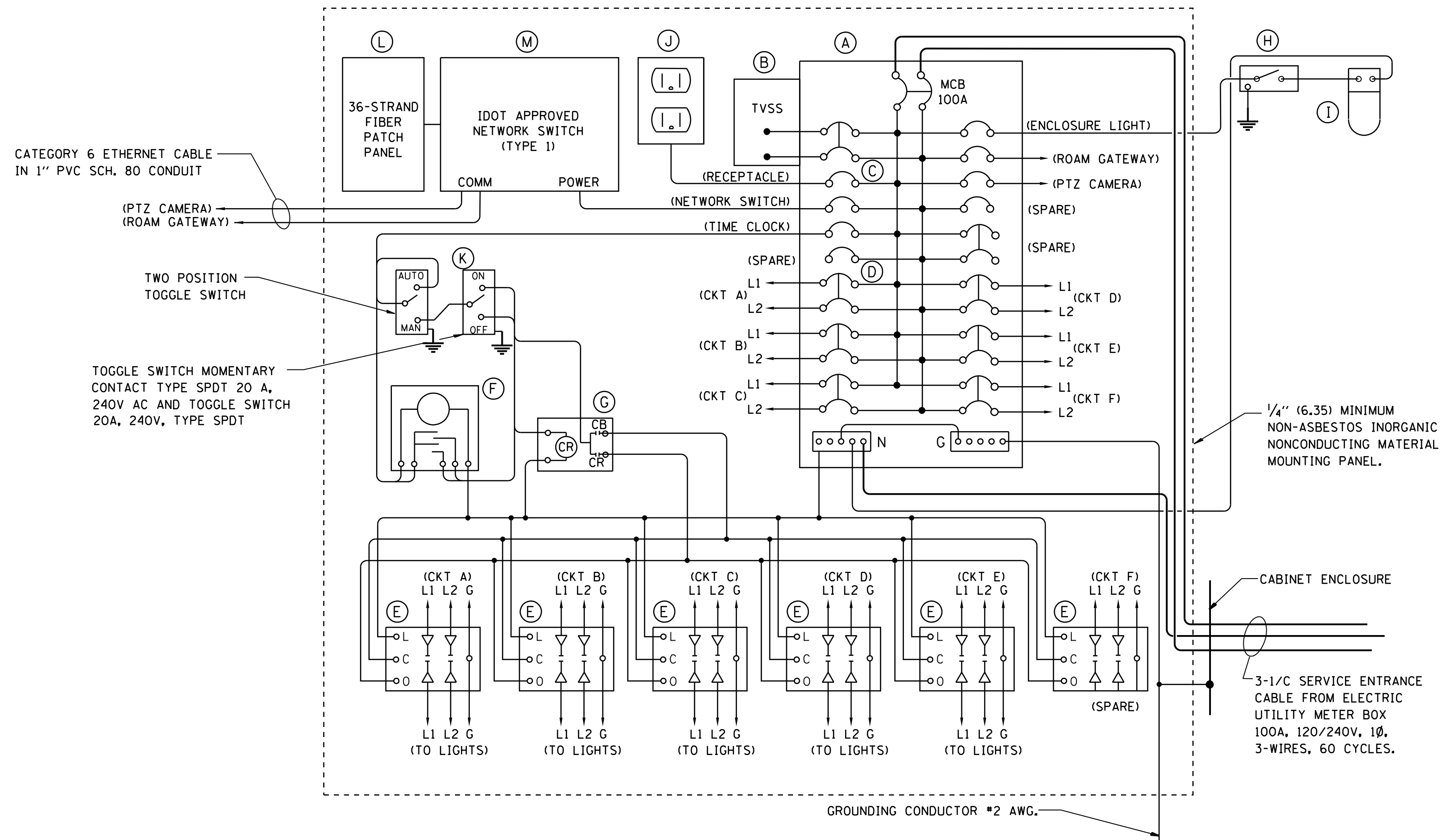
1. LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED OT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT ¾" DIA. CONDUIT AND ¾" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
2. SEE LIGHTING PLAN FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
3. THE CONTRACTOR SHALL USE EXISTING FLARED LOOP INSERTS TO SUSPENDED THE UNDERPASS LUMINAIRES FROM THE EXISTING BRIDGE DECK. THE 1/2" STAINLESS STEEL THREADED ROD, PART OF THE LUMINAIRE HANGER ASSEMBLY, SHALL BE SCREWED INTO THE EXISTING FLARED LOOP INSERT EMBEDDED INTO THE EXISTING BRIDGE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE FLARED LOOP INSERTS AND MOUNTING THE UNDERPASS LUMINAIRES AS SHOWN ON THE PLANS AND THIS DETAIL.
4. REFER TO LIGHTING SHEET 7 FOR UNDERPASS LUMINAIRE MOUNTING PLATE DETAILS. UNDERPASS LUMINAIRE MOUNTING PLATE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE INSTALLATION.
5. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
6. UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS LUMINAIRE.
7. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC).
8. THE WIRELESS NODE SHALL BE ENERGIZED ON THE SAME CIRCUIT AS THE LIGHTING UNITS. THE 0-10V DIMMING SIGNAL FROM THE WIRELESS NODE SHALL BE CONNECTED TO EACH LIGHT FOR CONTROL. CONTRACTOR SHALL VERIFY SIGNAL STRENGTH WITH MANUFACTURER BEFORE THE FINAL INSTALLATION OF THE ROAM NODE TO THE JUNCTION BOX. CONTRACTOR SHALL USE ROAM RETROFIT RECEPTACLE KIT TO INSTALLED ROAM NODE TO THE JUNCTION BOX. RECEPTACLE KIT SHALL BE INCIDENTAL TO THE ROAM NODE.
9. CONDUIT INSTALLED FROM THE EXISTING 6"X6"X4" JUNCTION BOX ATTACHED TO THE BRIDGE DECK TO THE UNDERPASS LUMINAIRE SHALL BE PAID FOR IN THE COST OF THE PAY ITEM "X8211000 - UNDERPASS LUMINAIRE (SPECIAL)".

LOCAL COORDINATE SYSTEM

FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section02-sht-lighting-details5_cmt.dgn

| | | | | | |
|---|---|---|---|---|---|
| CMT | USER NAME = Jeff Sedig | DESIGNED - CPT | REVISED - | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION | LIGHTING DETAILS<br>UNDERPASS LIGHTING DETAIL |
| | | DRAWN - CPT | REVISED - | | |
| | PLOT SCALE = 2.0000 ' / in. | CHECKED - AB | REVISED - | | |
| License No. 184-000613 | PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: - SHEET 11 OF 17 SHEETS STA.- TO STA.- |

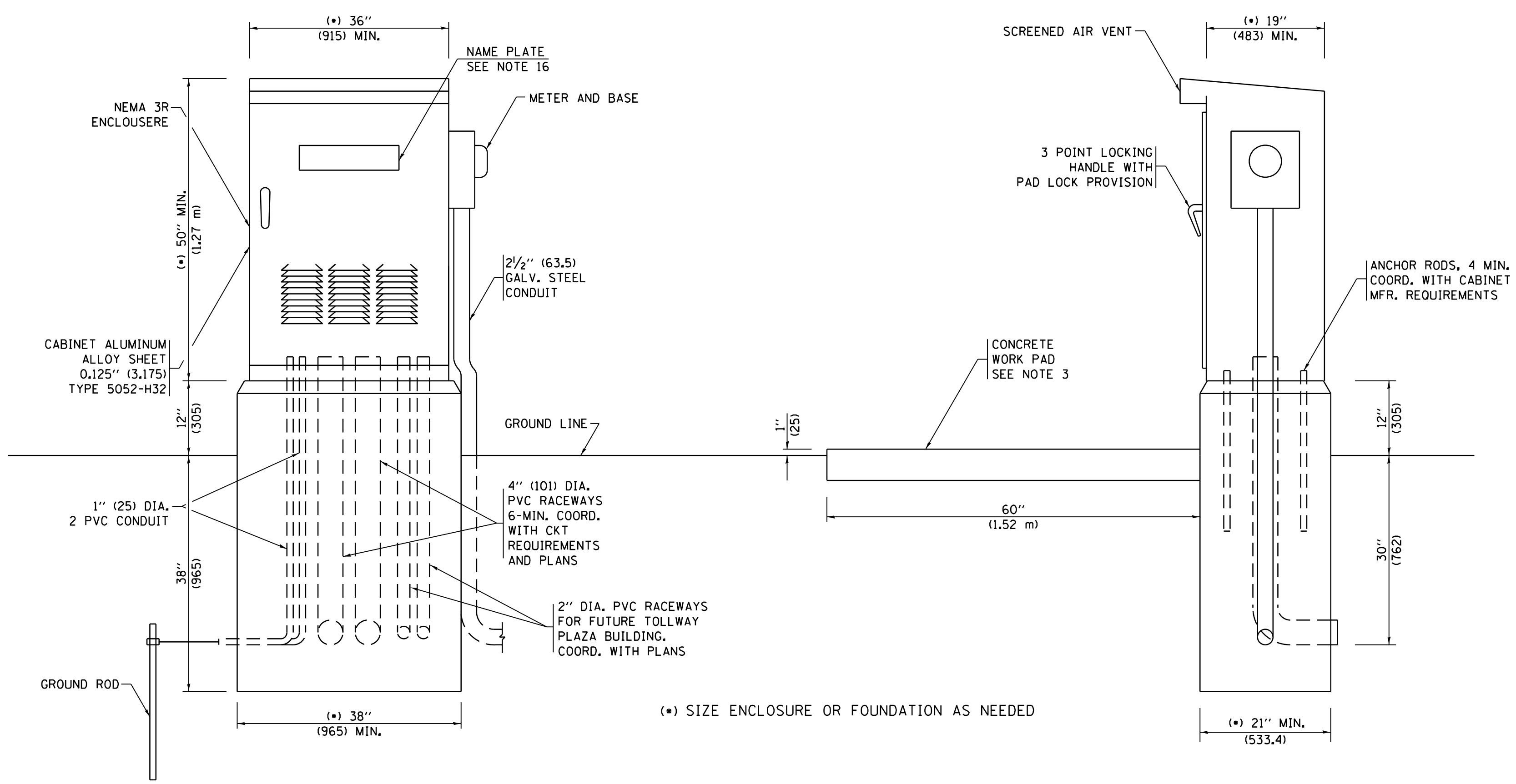
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 267 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |




PANEL WIRING DIAGRAM

## PANEL EQUIPMENT

| BILL OF MATERIAL | | |
|---|---|---|
| ITEM | QUANTITY | DESCRIPTION |
| A | 1 | POWER PANEL, 125A, 120/240V, 1PH, 3W, 24-SPACE WITH 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP MAIN CIRCUIT BREAKER. |
| B | 1 | TVSS, 120/240VAC, 1-PH, 10kA, L-G, L-L, L-N, N-G |
| C | 8 | CIRCUIT BREAKERS, 1 POLE, 20AMP. FRAME, 20 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240V. |
| D | 7 | CIRCUIT BREAKERS, 2 POLE, 20AMP. FRAME, 20 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240V. |
| E | 6 | CONTACTOR, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 20A, 240V, CONTROL CIRCUIT 120V. (NOTE 17) |
| F | 1 | ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH]. |
| G | 1 | AUXILIARY CONTROL RELAY |
| H | 1 | SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN. |
| I | 1 | LED LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT EQUIVALENT, 120V. LAMP. |
| J | 1 | 20 A., 120 V., DUPLEX RECEPTACLE, GFCI. |
| K | 1 | TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX. |
| L | 1 | FIBER PATCH PANEL FOR 36-STRAND FIBER CABLE |
| M | 1 | IDOT APPROVED NETWORK SWITCH, TYPE 1 |




## NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18.288 m) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
    R = RED    BL = BLUE    W = WHITE
    B = BLACK    Y = YELLOW    G = GREEN
13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "KANE COUNTY LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
17. CONTACTOR SHALL REMAIN CLOSED DURING OPERATION OF THE ROAM SYSTEM WITH THE TIMECLOCK BYPASSED.

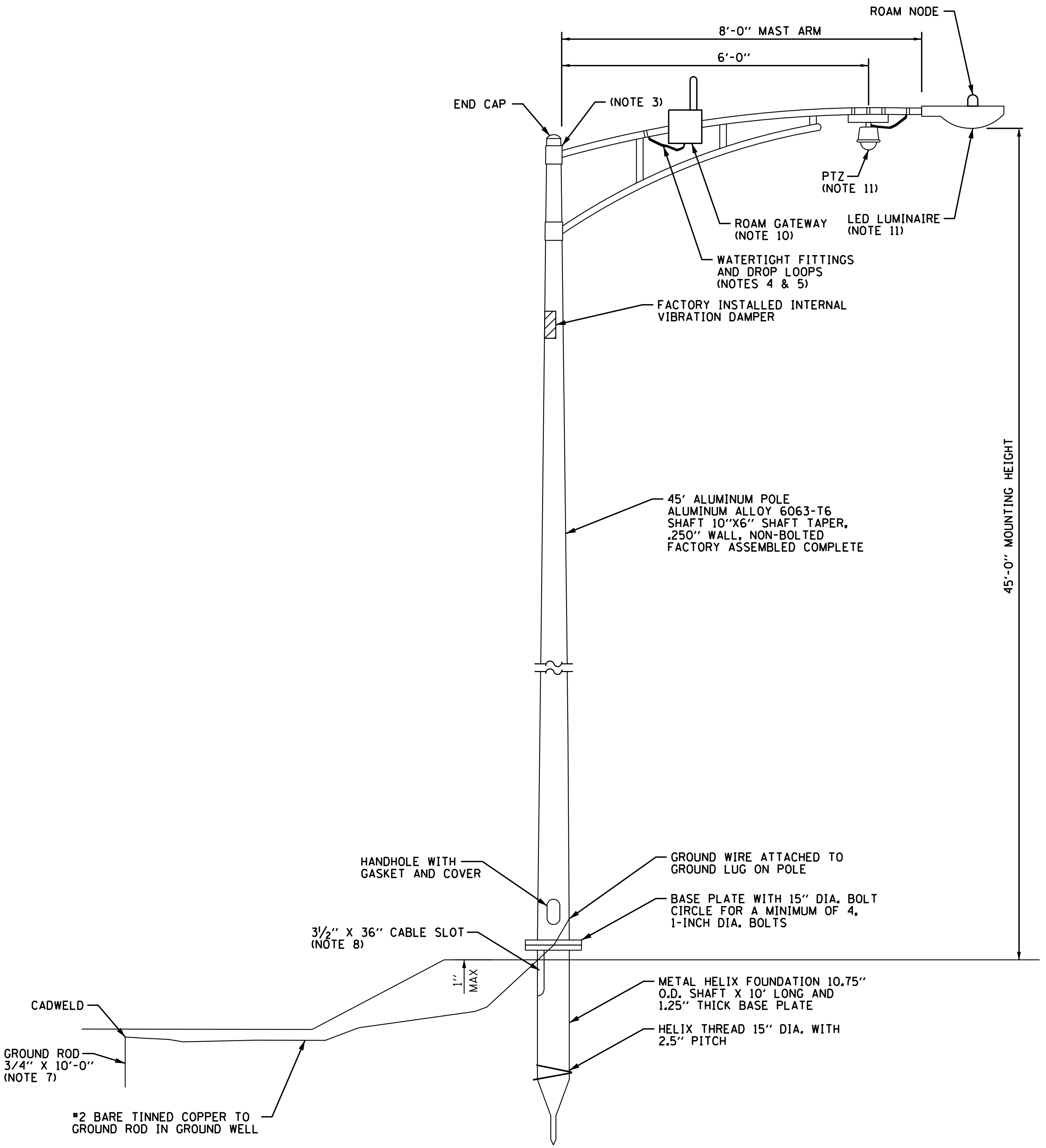
LOCAL COORDINATE SYSTEM

## GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT KANE COUNTY TRAFFIC PRIOR TO INSTALLING THE POLE, ROAM GATEWAY, PTZ CAMERA, AND ASSOCIATED CONDUIT/CABLES TO RECEIVE FINAL APPROVAL ON THE ORIENTATION AND LOCATION.
2. CAMERA POLE SHALL BE SET BACK 4'-0" FROM BACK OF CURB.
3. CONTRACTOR TO SEAL ENTRY WITH STEEL WOOL TO PREVENT RODENTS ENTERING.
4. DRILL AND TAP POLE TO INSTALL CABLES TO THE ROAM GATEWAY AND PTZ CAMERA. CABLES SLACK SHALL BE PULLED AND FASTENED WITHIN THE TOP OF THE POLE AND MEET IDOT REQUIREMENTS. PROPER CABLE STRAIN RELIEF SHALL BE INSTALLED AND APPROVED BY THE ENGINEER. ALL CABLE RUN INSIDE THE POLE SHALL NOT HANG BELOW THE TOP OF THE HANDHOLE COVER ON THE POLE.
5. RUBBER GROMITS SHALL BE INSTALLED IN ALL HOLES/OPENINGS USED TO RUN, ROAM GATEWAY AND PTZ EQUIPMENT CABLE.
6. CONTRACTOR TO PROVIDE ALL POWER, COMMUNICATION AND GROUND WIRING REQUIRED FOR SYSTEM OPERATION. ALL CABLING SHALL BE OUTDOOR RATED, UNLESS OTHERWISE RECOMMENDED BY THE EQUIPMENT MANUFACTURER AND APPROVED BY THE ENGINEER.
7. A GROUND ROD SHALL BE PLACED A MINIMUM OF 10-FEET FROM THE FOUNDATION. A GROUND WELL SHALL BE INCLUDED TO PERMIT ACCESS TO THE GROUND ROD CONNECTION. CONNECTION TO THE GROUND ROD SHALL BE CADWELD. GROUNDING INSTALLATION AND MATERIALS SHALL BE INCIDENTAL TO THE INSTALLATION OF THE CAMERA POLE.
8. A FLAT MESH PANEL ALONG WITH A COMMERCIALLY AVAILABLE HYDROPHOBIC LOW DENSITY COMPOSITE BACKFILL MATERIAL (KNOWN AS O-SET 250) SHALL BE INSTALLED BETWEEN THE ANCHOR BASE AND THE POLE TO PREVENT THE ENTRY OF RODENTS INTO THE POLE.
9. THE J-HOOK SHALL BE WELDED IN PLACE TO THE SIDE OF THE POLE, NEAR THE TOP OF THE POLE. THE CONTRACTOR SHALL PROVIDE A CUSTOM FLAT TOP POLE CAP THAT WILL FIT THE POLE TOP WITH THE J-HOOK WELDED TO THE SIDE. THE POLE CAP SHALL BE SECURED TO THE POLE BY DRILLING AND INSERTING SET SCREWS.
10. ROAM GATEWAY, INSTALLATION AND MOUNTING HARDWARE SHALL BE INCLUDED IN PAY ITEM "X8250505 - LIGHTING CONTROLLER, SPECIAL".
11. PTZ CAMERA AND LED LUMINAIRE MATERIAL AND INSTALLATION SHALL BE INCLUDED IN PAY ITEM "X0323906 - CAMERA POLE, 45 FT".

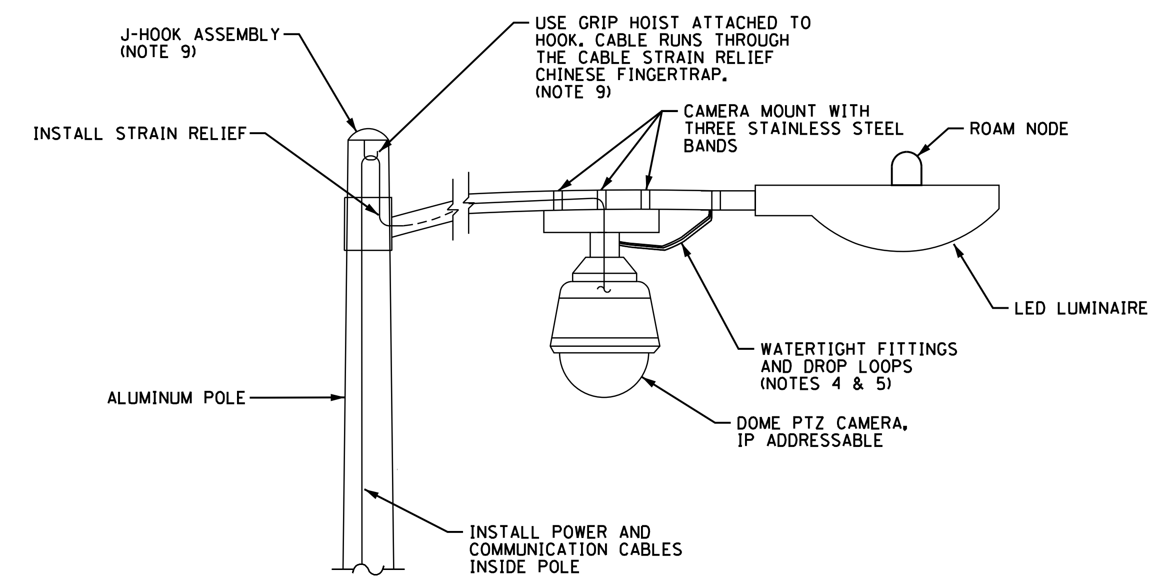
## PTZ CAMERA NOTES

1. PTZ CAMERA SHALL BE IP (INTERNET PROTOCOL) ADDRESSABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH KDOT TRAFFIC IN REQUESTING AND PROGRAMMING THE IP ADDRESS DESIRED BY KDOT TRAFFIC INTO THE PTZ EQUIPMENT. ANY VIDEO SOFTWARE, ENCODING, OR DECODING HARDWARE/SOFTWARE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE COST OF THE PTZ CAMERA.
2. CAMERA SHALL HAVE A MINIMUM THIRTY (30X) OPTICAL ZOOM AND MINIMUM TWELVE (12X) DIGITAL ZOOM. VIDEO QUALITY SHALL BE HIGH DEFINITION TV QUALITY (1080P MINIMUM).
3. SEAL THE CAMERA HOUSING PER THE MANUFACTURES RECOMMENDATION USING RECTORSEAL DUCT SEAL. SEE SPECIFIC MANUFACTURER INSTRUCTION FOR MORE DETAILS. CONTRACTOR TO SECURE, WITH A TIE-WRAP, A ULINE S-3902 DESICCANT PACK INSIDE THE CAMERA HOUSING TO ABSORB MOISTURE.




**ROAM GATWAY & PTZ CAMERA POLE ASSEMBLY**

NOT TO SCALE



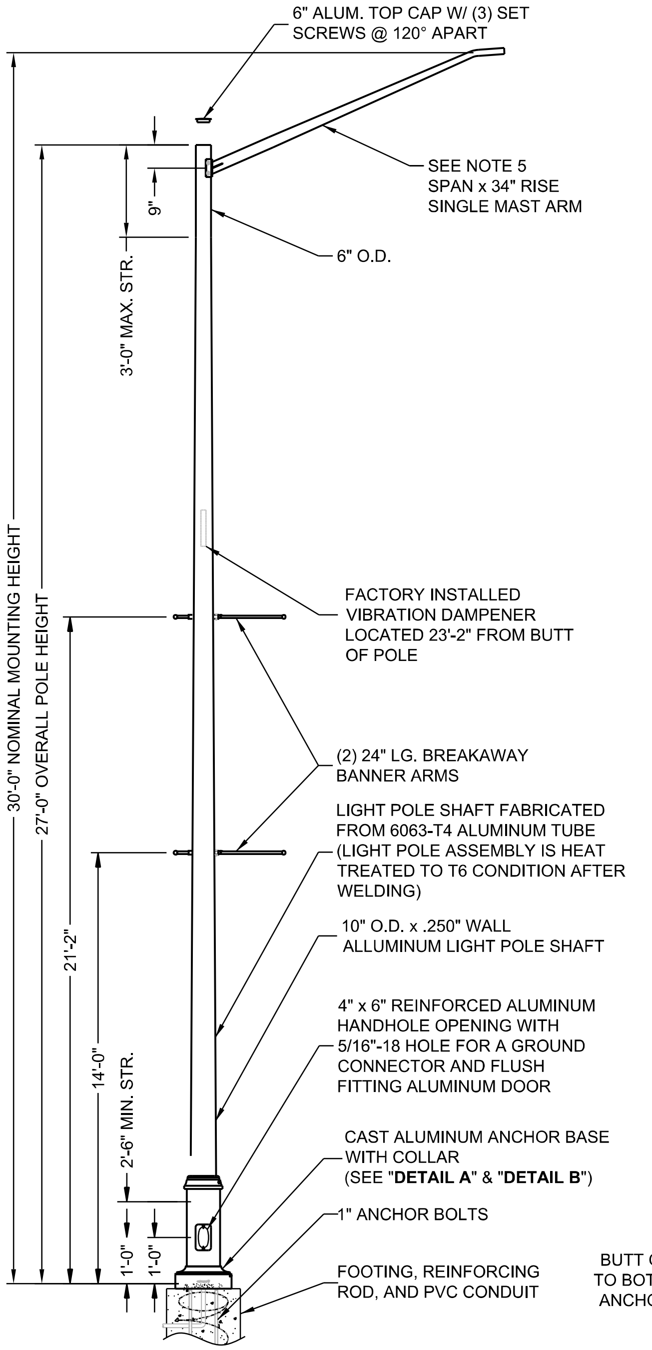

**POLE TOP DETAIL**

NOT TO SCALE

LOCAL COORDINATE SYSTEM

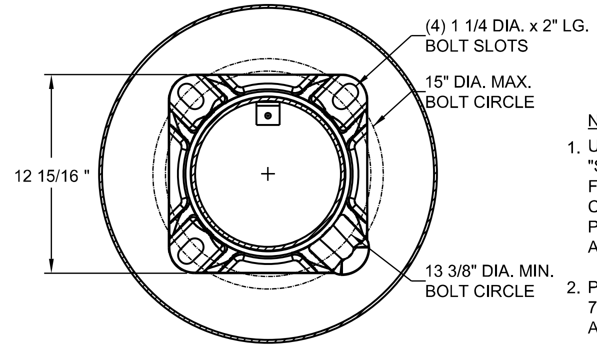
FILE NAME = L:\KANECO\13296-02_LongmeadowPkwy\Draw\CADD_Sheets\Section C2-sht-lighting-details7_cmt.dgn

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CMT | USER NAME = Jeff Sedig | DESIGNED - CPT | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | LIGHTING DETAILS POLE MOUNTED WIRELESS GATEWAY AND CAMERA ASSEMBLY | F.A.U. RTE. 2298 | SECTION 18-00215-21-BR | COUNTY KANE | TOTAL SHEETS 415 / SHEET NO. 269 |
| | | DRAWN - CPT | REVISED - | | | | | CONTRACT NO. 61G02 | |
| | PLOT SCALE = 2.0000 ' / in. | CHECKED - AB | REVISED - | | SCALE: - / SHEET 13 OF 17 SHEETS / STA. - TO STA. - | | | | |
| License No. 184-000613 Copyright CMT, Inc. | PLOT DATE = 3/2/2020 | DATE - 01/13/2020 | REVISED - | | | ILLINOIS FED. AID PROJECT | | | |

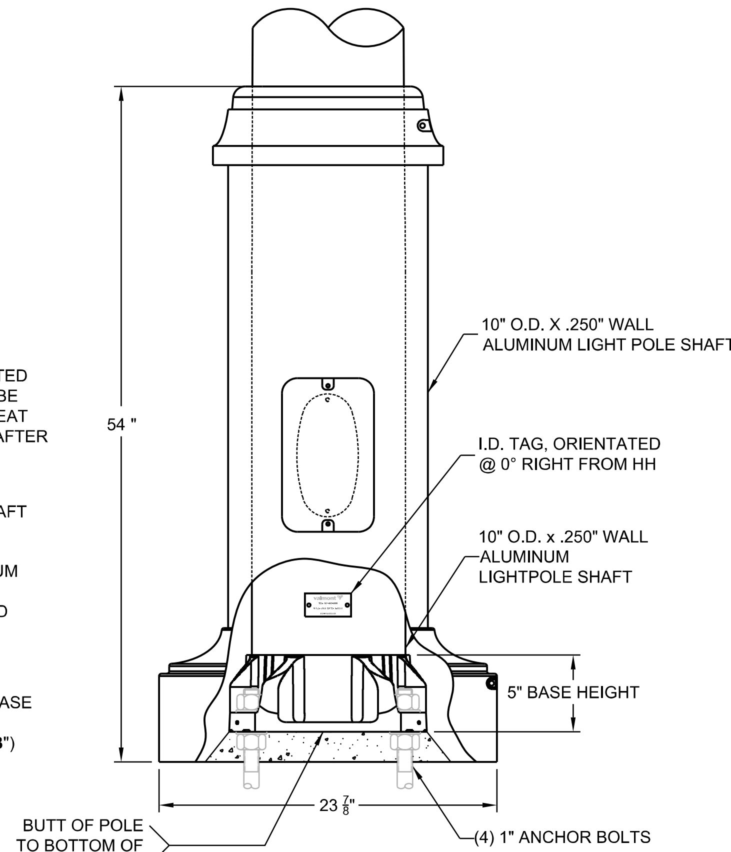



LIGHT POLE DETAIL

NOT TO SCALE



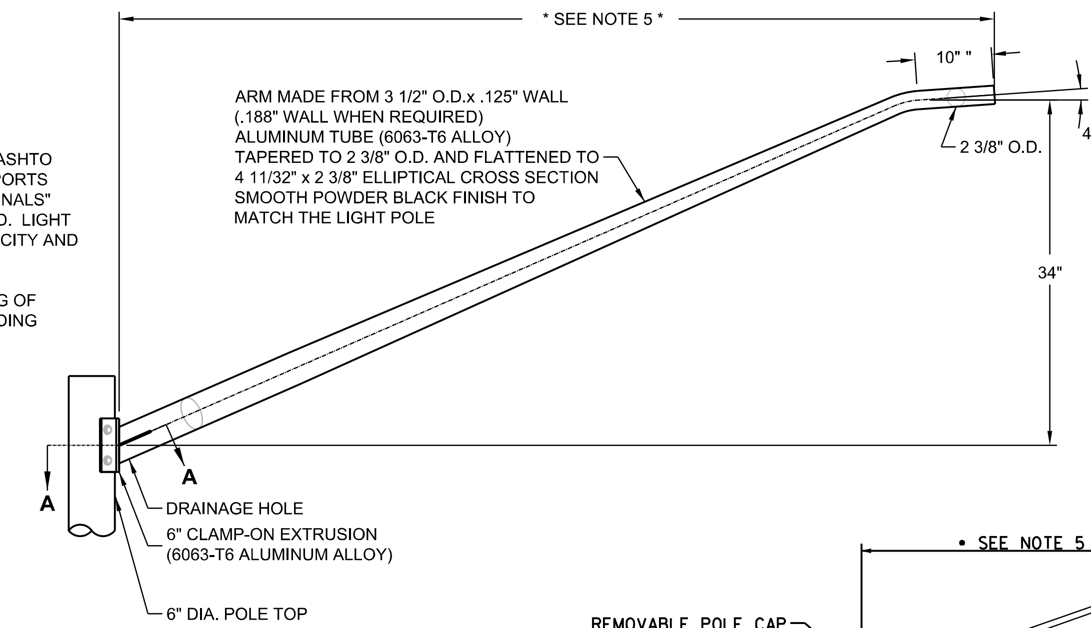

DETAIL B

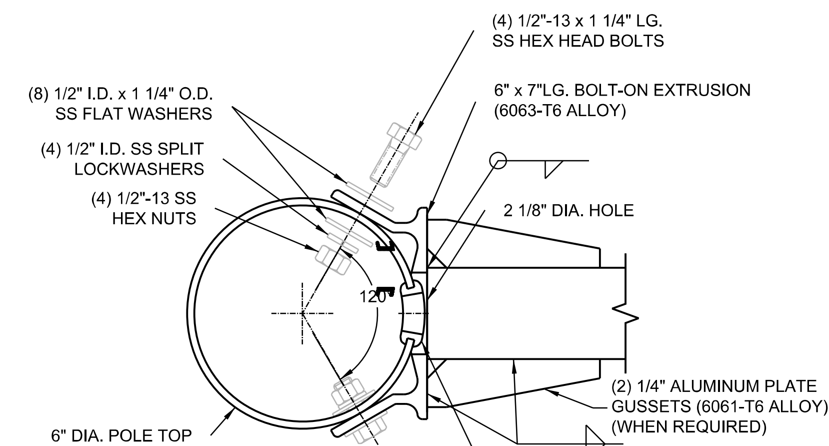



DETAIL A

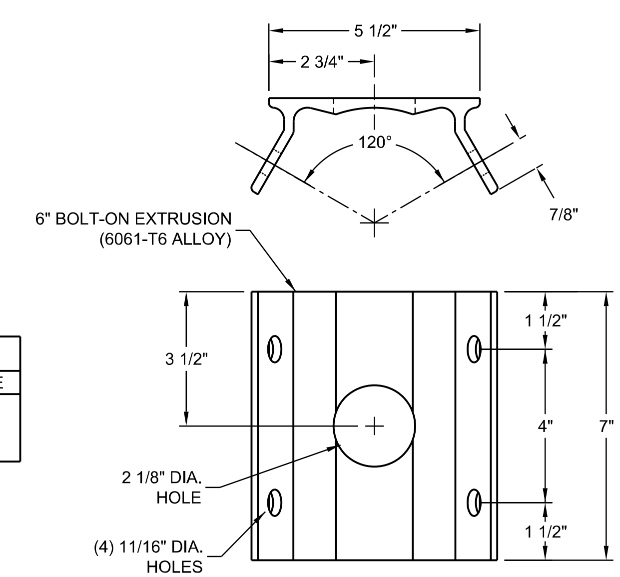
NOTES:

1. UNITS SHALL BE MANUFACTURED ACCORDING TO AASHTO "STANDARD SPECIFICATIOS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" CURRENT AT THE TIME THE PROJECT IS ADVERTISED. LIGHT POLES SHALL BE DESIGNED FOR 90 MPH WIND VELOCITY AND A MINIMUM DESIGN LIFE OF 50 YEARS.
2. POLES SHALL BE DESIGNED TO WITHSTAND LOADING OF 75 LB. LUMINAIRE WITH AN EPA OF 1.6 SQ. FT. INCLUDING ALL ATTACHMENTS.

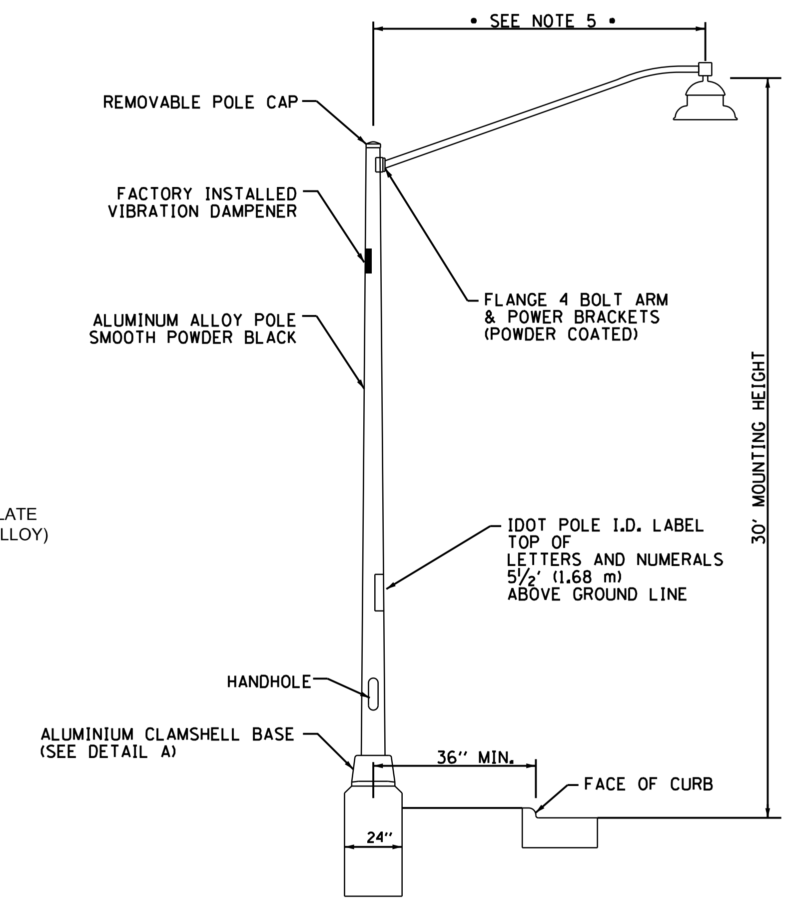



SECTION A-A




EXTRUSION DETAIL




LIGHT POLE DETAIL

NOT TO SCALE

LIGHT POLE, ALUMINUM, 30FT. M.H, 6FT. MAST ARM (SPECIAL) SCHEDULE

| TYPE | DESCRIPTION | MANUFACTURER | POLE | LAMP | VOLTAGE |
|---|---|---|---|---|---|
| ROADWAY ROUNDABOUT | DOMUS 55 SERIES, TYPE III CUTOFF CATALOG DMS55-SMB-RTA927-VR6 | LUMEC | POLE (RTA927) 30 FT M.H., 6 FT M.A. (VR6) WITH BANNER HANGERS AND CLAMSHELL BASE ON 24" CONCRETE FOUNDATION | LED (3000K) (70W64LED3K-R-LE3F) | 240 V |

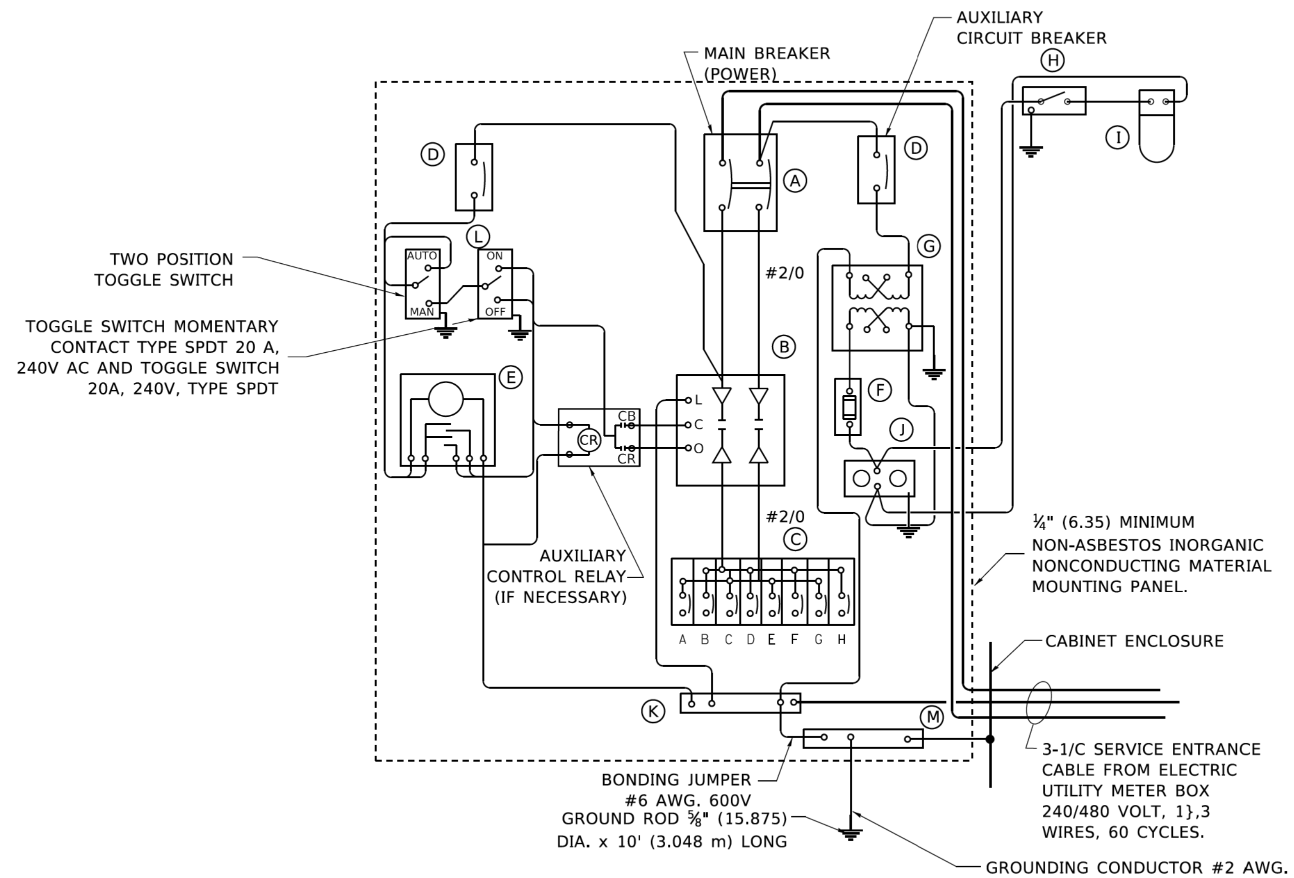
NOTE:

1. WELDING WIRE (ER4043).
2. MAST ARM HEAT TREATED AFTER FABRICATION TO T6 CONDITION.
3. ALL HARDWARE IS 300 SERIES STAINLESS STEEL, COATED WITH ANTI-SEIZE COMPOUND.

NOTES:

1. REFER TO ROADWAY LIGHTING DETAIL FOR LIGHT POLE FOUNDATION DETAIL (BE-301).
2. REFER TO ROADWAY LIGHTING DETAIL POLE WIRING DETAIL (BE-702)
3. REFER TO ROADWAY LIGHTING DETAIL CONDUIT TRENCH - PHOTOCELL MOUNTING
4. REFER TO DETAIL A ON THIS SHEET.
5. MAST ARM SHALL BE 6-FOOT.

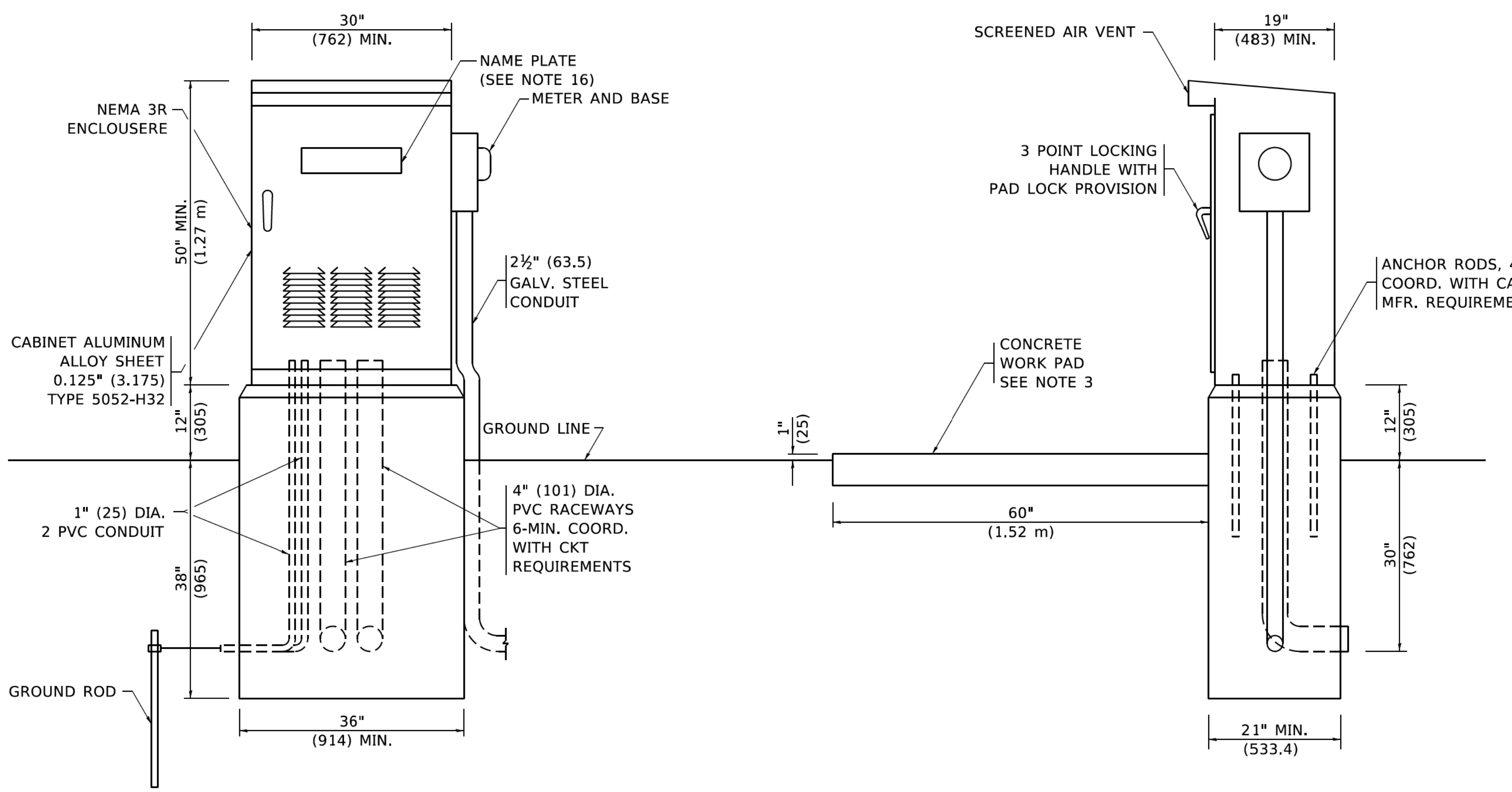
LOCAL COORDINATE SYSTEM




**PANEL WIRING DIAGRAM**

## PANEL EQUIPMENT

| BILL OF MATERIAL | | |
|---|---|---|
| ITEM | QUANTITY | DESCRIPTION |
| A | 1 | MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT. |
| B | 1 | REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT. |
| C | 8 | CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V. |
| D | 2 | CONTROL CIRCUIT-CIRCUIT BREAKER. 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V. |
| E | 1 | ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER (TIME SWITCH). |
| F | 1 | 20 AMP, 120 VOLT FUSE. |
| G | 1 | 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz. |
| H | 1 | SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN, |
| I | 1 | INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP. |
| J | 1 | 20 AMP, 120 VOLT, DUPLEX RECEPTACLE, GFCI. |
| K | 1 | COPPER GROUND BUS 1#4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS |
| L | 1 | TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX. |
| M | 1 | COPPER GROUND BUS 1#4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS. |

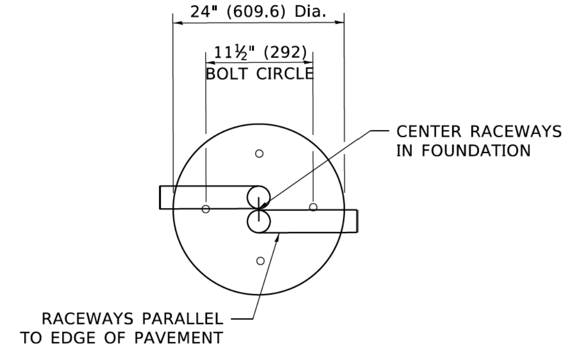



## NOTES

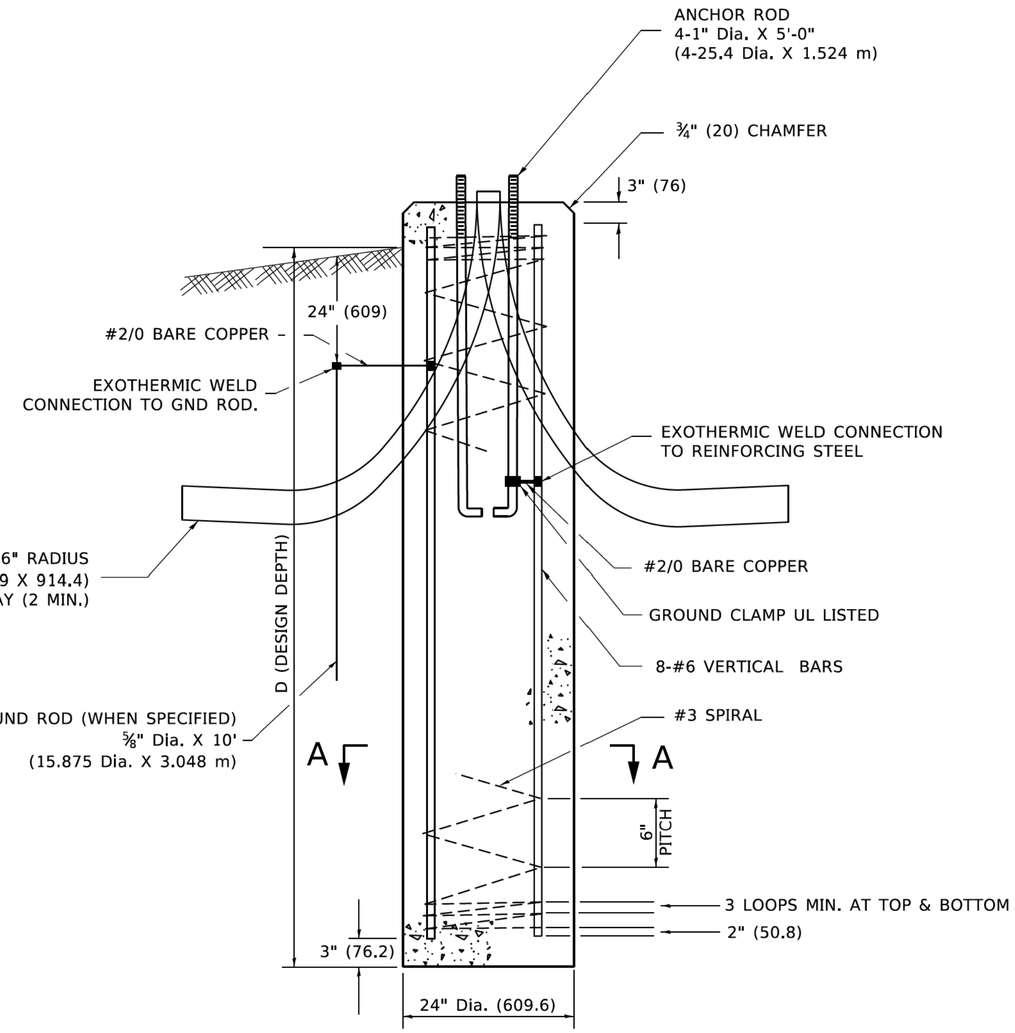
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2'' (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36'' (914.4 mm) x 60" (18.288 m) x 4'' (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1#4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
    R = RED BL = BLUEW = WHITE
    B = BLACK Y = YELLOW G = GREEN
13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

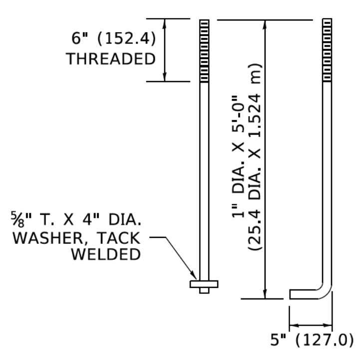
| SOIL CONDITIONS | DESIGN DEPTH "D" OF FOUNDATION | |
|---|---|---|
| | SINGLE ARM POLE | TWIN ARM POLE |
| SOFT CLAY<br>Qu = 0.375 TON/SQ. FT. | 11'-0"<br>(3.35 m) | 12'-8"<br>(3.85 m) |
| MEDIUM CLAY<br>Qu = 0.75 TON/SQ.FT | 9'-0"<br>(2.74 m) | 14'-10"<br>(4.52 m) |
| STIFF CLAY<br>Qu = 1.50 TON/SQ. FT. | 7'-6"<br>(2.29 m) | 8'-7"<br>(2.61 m) |
| LOOSE SAND<br>∅ = 34° | 9'-6"<br>(2.90 m) | 10'-7"<br>(3.22 m) |
| MEDIUM SAND<br>∅ = 37.5° | 9'-0"<br>(2.74 m) | 9'-10"<br>(2.99 m) |
| DENSE SAND<br>∅ = 40° | 8'-3"<br>(2.51 m) | 9'-7"<br>(2.91 m) |



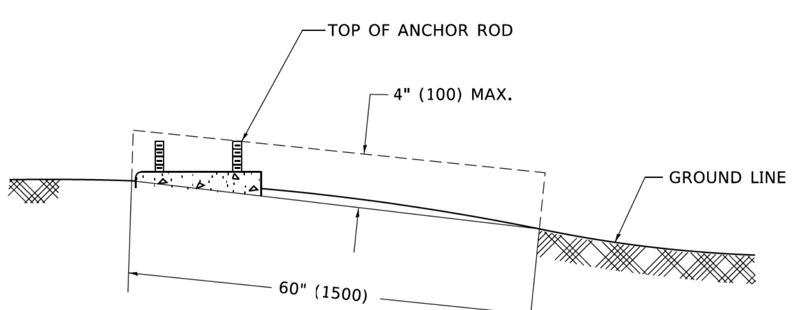

**TOP VIEW**



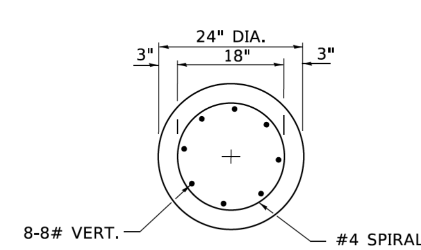

**FOUNDATION DETAIL**




**ANCHOR BOLT DETAIL**




**FOUNDATION EXTENSION DETAIL**




**SECTION A–A**

**NOTES**

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) 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.
4. 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.
5. 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).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. 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.
8. 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 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
9. 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.
10. ANCHOR RODS SHALL PROJECT 23#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.
11. 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.
12. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.

13 THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

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| USER NAME = | DESIGNED = | REVISED = |
|---|---|---|
| MODEL NAME = Default | DRAWN = | REVISED = |
| PLOT SCALE = 2.0000 ' / in. | CHECKED = | REVISED = |
| PLOT DATE = 3/2/2020 | DATE = 01/13/2020 | REVISED = |

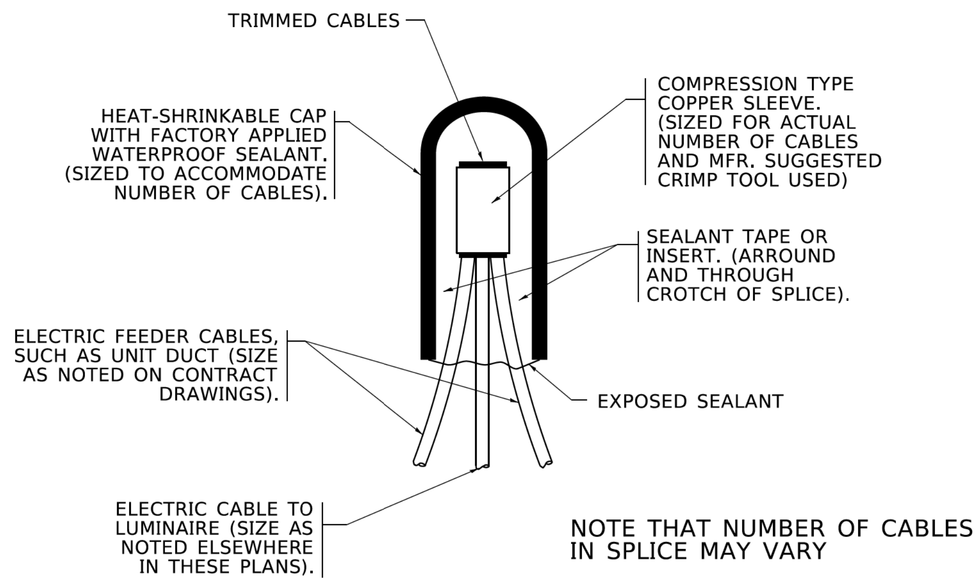
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION**
**30' (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE**

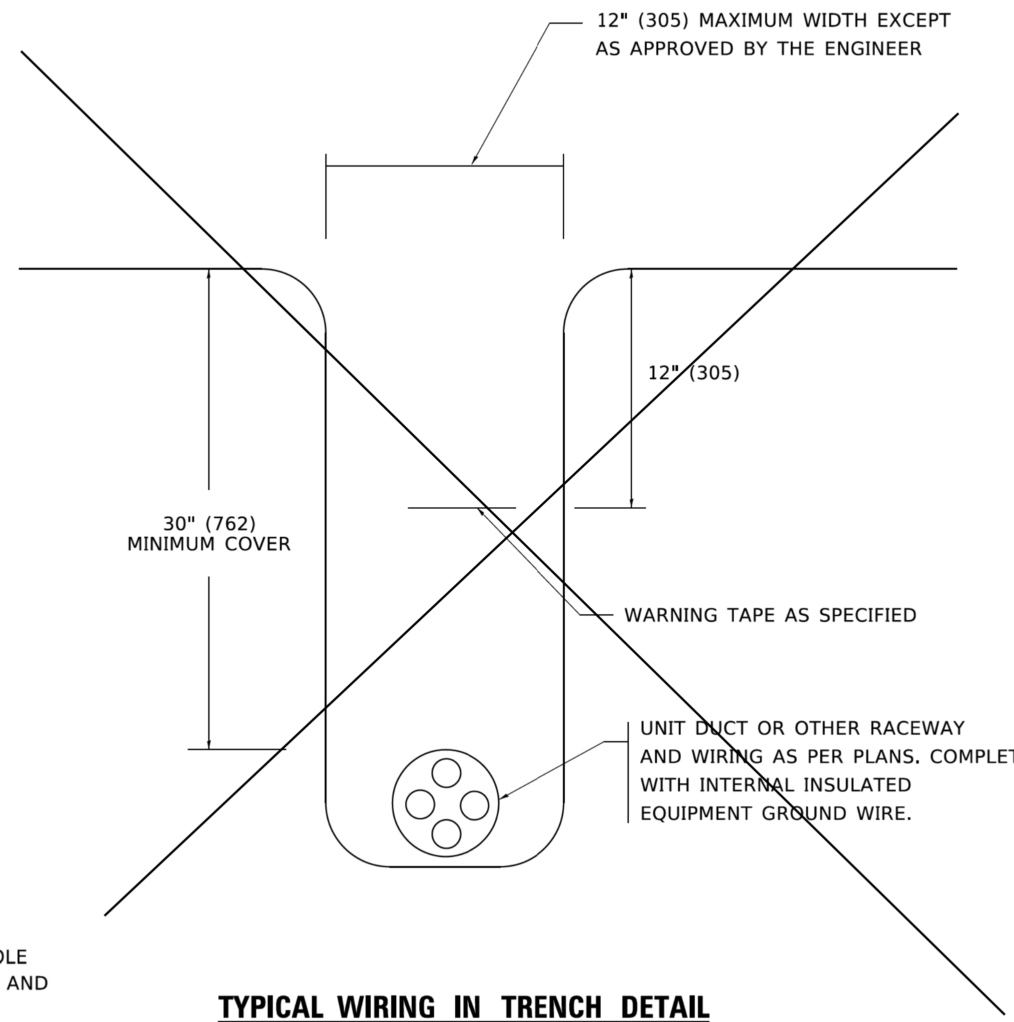
SCALE: NONE SHEET 16 OF 17 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 272 |
| BE-300 | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |

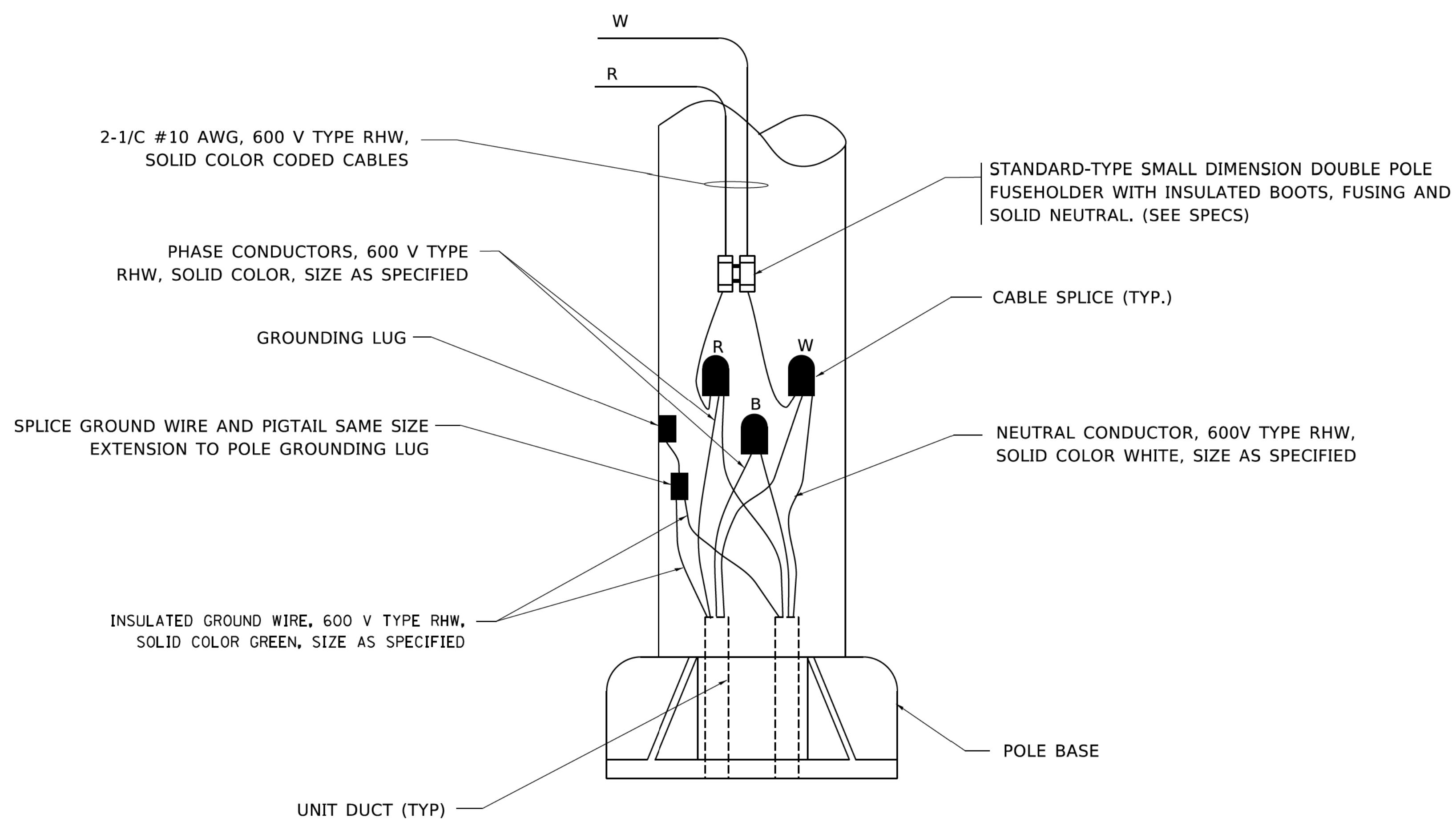
PLOT DRIVER = $PLTDRV$$ PEN TABLE = $PENTBL$$ PLOT SCALE = PLOT DATE = USER NAME = DIRECTORY = FILE NAME =




**TYPICAL SPLICE DETAIL**
**N.T.S.**




**TYPICAL WIRING IN TRENCH DETAIL**
**N.T.S.**




**POLE WIRING DETAIL**
**N.T.S.**

| | | | | |
|---|---|---|---|---|
| CMT | USER NAME = | DESIGNED = | REVISED = 08-08-03 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION |
| | MODEL NAME = Default | DRAWN = | REVISED = | |
| | PLOT SCALE = | CHECKED = | REVISED = | |
| | PLOT DATE = 3/2/2020 | DATE = 01/13/2020 | REVISED = | |

MISC. ELECTRICAL DETAILS
SHEET A

SCALE: NONE | SHEET 17 OF 17 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 273 |
| BE-702 | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |

## BENCHMARK

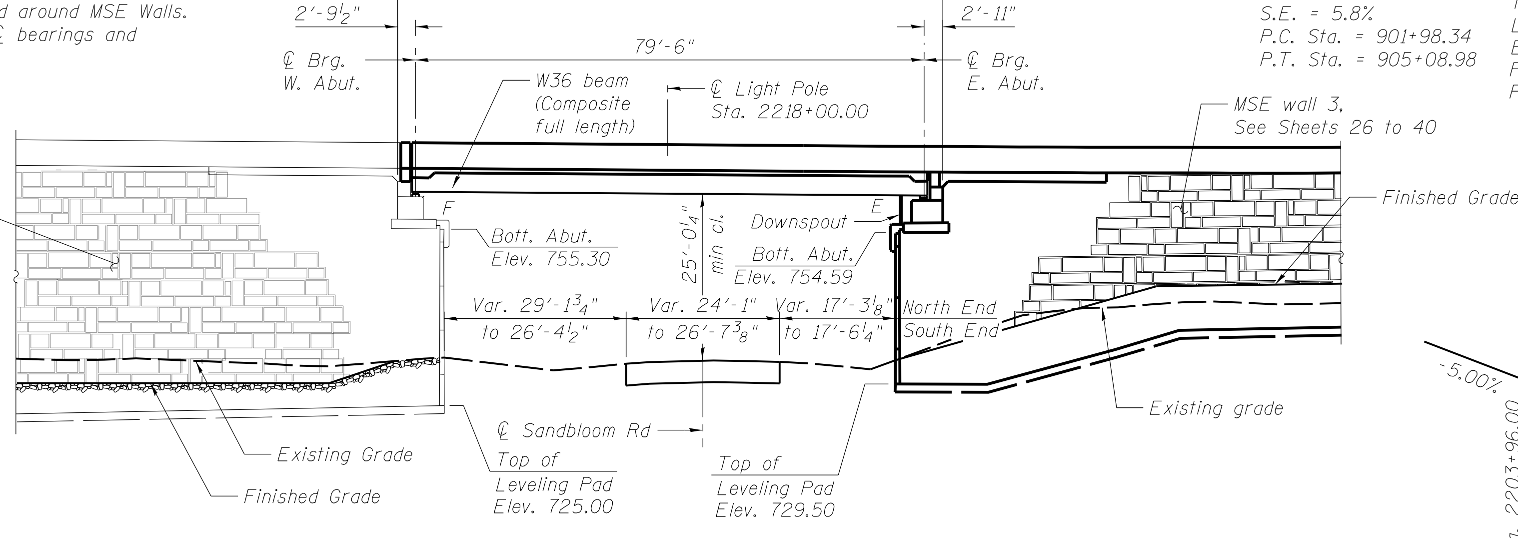
Chiseled "□" S.E. corner of concrete slab.
The Intersection of ILL-31 and Miller Rd. Go N. 0.9 MI ± to Mark.
Elev. 806.34

## PROPOSED STRUCTURE

Bridge SN 045-3077 will be a single span W36 beam structures on footing supported stub abutments with wrapped around MSE Walls. The bridge is 79'-6" ℄ to ℄ bearings and 68'-2" out to out deck.

## EXISTING STRUCTURE

The west abutment and west approach slab were constructed in a previous Contract (C-1) and are shown for information only. The work for this Contract (C-2) shall consist of constructing the remainder of the bridge and MSE Wall 3.




## ELEVATION

## CURVE DATA

(Sandbloom Road)
D = 27° 57' 28.44"
R = 636.62
T = 158.48
L = 310.64
E = 19.43'
S.E. = 5.8%
P.C. Sta. = 901+98.34
P.T. Sta. = 905+08.98

## CURVE DATA

(Longmeadow Parkway)
Prop. Curve PRLONG-11
PI Sta. = 2217+92.12
Δ = 0° 13' 46" (RT)
D = 0° 30' 00"
R = 11,459.16'
T = 22.94'
L = 45.88'
E = 0.02'
P.C. Sta. = 2217+69.18
P.T. Sta. = 2218+15.06

## LOADING HL-93

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

## DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications
7th Edition with 2015 Interims

## SEISMIC DATA

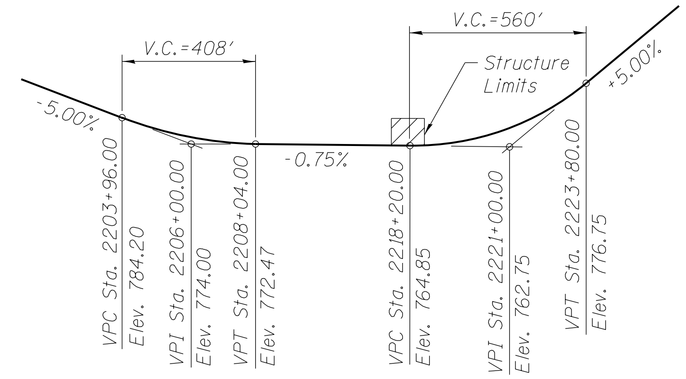
Seismic Performance Zone (SPZ)=1
Design Spectral Acceleration at 1.0 sec. ($S_{D1}$)=0.082
Design Spectral Acceleration at 0.2 sec. ($S_{DS}$)=0.144
Soil Site Class = D

## DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

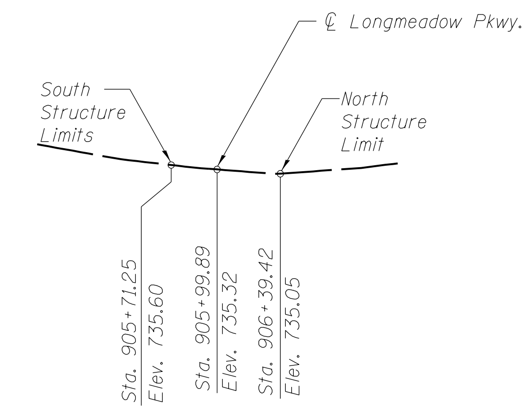
## LOAD RATING

(HL-93)
Inventory Rating: 1.38
Operating Rating: 1.79



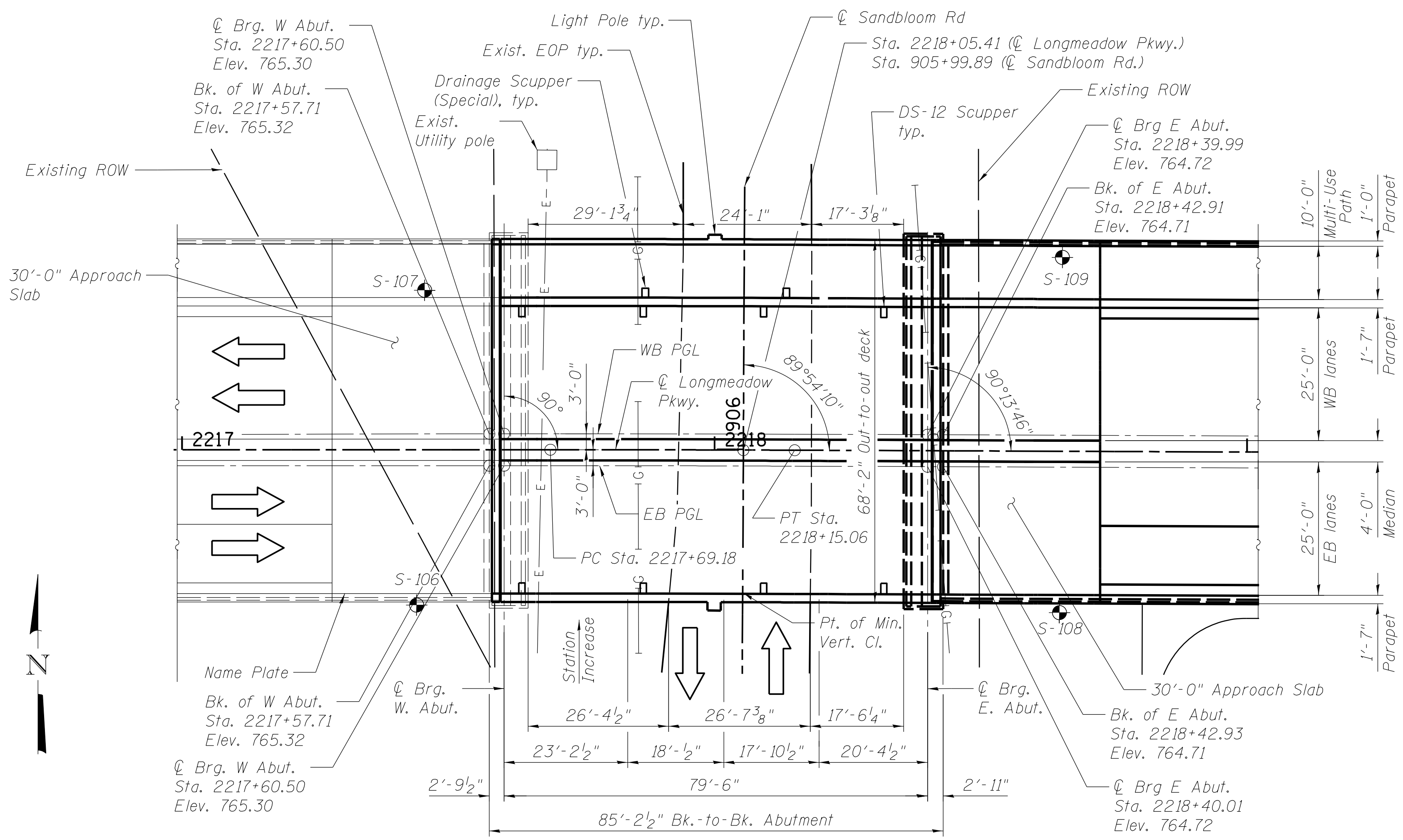

## WB & EB PROFILE GRADE

(Along Longmeadow Parkway)




## PROFILE GRADE (EXISTING)

(Along Sandbloom Road)




## PLAN

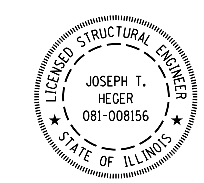
BUILT 20__ BY
KANE COUNTY
SEC. 13-00215-20-BR
F.A.U. RT. 2298 STA. 2218+05.41
STR. NO. 045-3077 LOADING HL-93

## NAME PLATE

See Std. 515001
Name Plate fabricated in previous Contract C1 and will be installed in this Contract. Cost shall be included in Concrete Superstructure.

## SOIL BORINGS

| BORING | LOCATION |
|---|---|
| S-106 | 2217+44.06, 29.19' Rt. |
| S-107 | 2217+45.58, 29.94' Lt. |
| S-108 | 2218+64.88, 30.31' Rt. |
| S-109 | 2218+65.17, 36.42' Lt. |



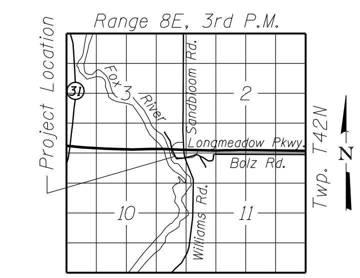

J.T. H 2/29/20

Exp. Date: 11/30/2020

"I certify that to the best of my knowledge, information and belief, this design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with the requirements of the current Design Specifications listed."

## LEGEND

—G— Existing Underground Gas Line
—E— Existing Buried Electric
Soil Boring




## LOCATION SKETCH

## GENERAL PLAN AND ELEVATION
## LONGMEADOW PARKWAY OVER
## SANDBLOOM RD
## FAU ROUTE 2298 - SEC 18-00215-21-BR
## KANE COUNTY
## STATION 2218+05.41
## SN 045-3077

LOCAL COORDINATE SYSTEM

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\Kane\CO\13296-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-01-str-045-3077 General Plan & Elevation.cmt

CMT
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| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - PA | REVISED - | |
| | DRAWN - CPB | REVISED - | |
| PLOT SCALE = 30.0000 '/' in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 045-3077

SCALE: | SHEET 1 OF 40 SHEETS | STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 274 |

CONTRACT NO. 61G02
ILLINOIS FED. AID PROJECT

## INDEX OF SHEETS



## GENERAL NOTES

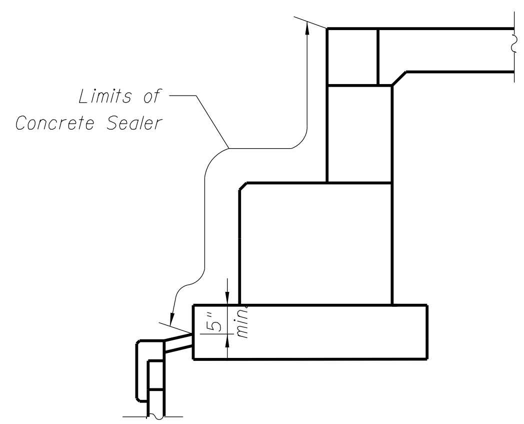
1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel = 188,630 lbs.
3. All structural steel shall be AASHTO M 270 Grade 50W (except expansion joints and bearings which shall be AASHTO M 270 Grade 50).
4. All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.
5. No field welding is permitted except as specified in the contract documents.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Concrete Sealer shall be applied to the designated areas of the abutments, including exposed surfaces of backwalls, bridge seats, and footings.

## TOTAL BILL OF MATERIAL

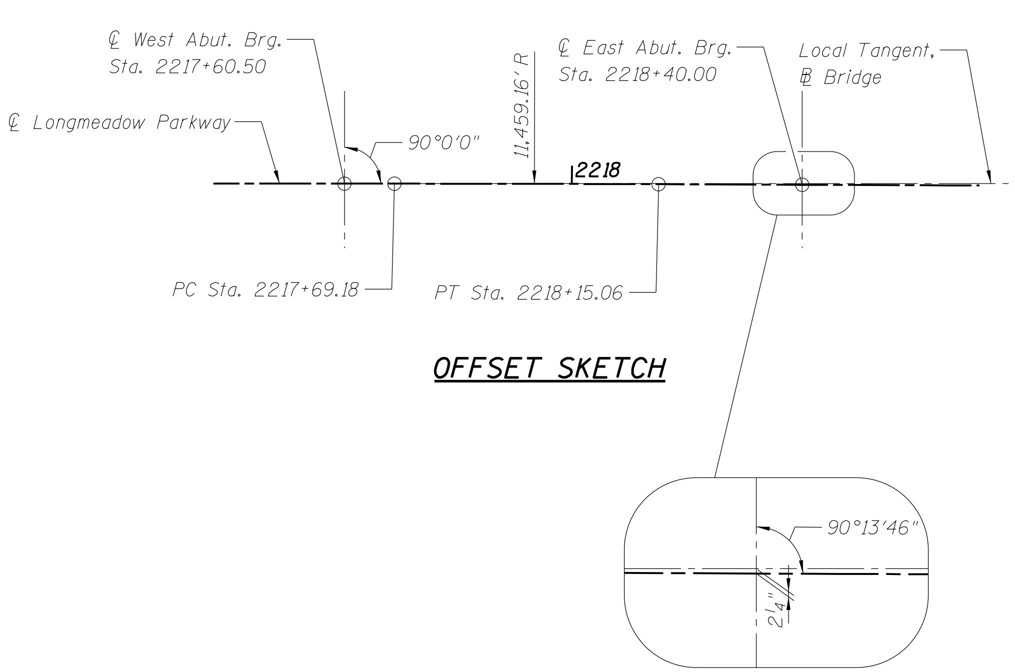
| | ITEM | UNIT | SUPER | SUB | MSE WALL 3 | TOTAL |
|---|---|---|---|---|---|---|
| | Porous Granular Embankment | Cu Yd | | 2 | | 2 |
| | Structure Excavation | Cu Yd | | | 1,760 | 1,760 |
| | Removal and Disposal of Unsuitable Material for Structures | Cu Yd | | | 640 | 640 |
| | Concrete Structures | Cu Yd | | 116.3 | | 116.3 |
| | Concrete Superstructure | Cu Yd | 225.1 | | 337.0 | 562.1 |
| | Protective Coat | Sq Yd | 442 | | 849 | 1,291 |
| | Concrete Superstructure (Approach Slab) | Cu Yd | 94.7 | | | 94.7 |
| | Furnishing and Erecting Structural Steel | L Sum | 1 | | | 1 |
| | Stud Shear Connectors | Each | 3,399 | | | 3,399 |
| | Reinforcement Bars, Epoxy Coated | Pound | 89,460 | 9,380 | 48,260 | 147,100 |
| | Bar Splicers | Each | | 69 | | 69 |
| | Pedestrian Railing | Foot | 144 | | 148 | 292 |
| | Parapet Railing | Foot | 144 | | 146 | 290 |
| | Preformed Joint Strip Seal | Foot | 138 | | | 138 |
| | Elastometric Bearing Assembly, Type I | Each | | 11 | | 11 |
| | Anchor Bolts, $\frac{3}{4}$" | Each | | 44 | | 44 |
| | Concrete Sealer | Sq Ft | | 1,686 | | 1,686 |
| * | Anti-Graffiti Coating | Sq Ft | | 60 | 7,914 | 7,974 |
| * | Form Liner Textured Surface, Special | Sq Ft | | 60 | | 60 |
| * | Staining Concrete Structures | Sq Ft | | 60 | 7,914 | 7,974 |
| * | Name Plates (Special) | Each | | 1 | | 1 |
| ** | Bridge Deck Thin Polymer Overlay $\frac{3}{8}$" | Sq Yd | 800 | | | 800 |
| * | Drainage Scuppers (Special) | Each | 2 | | | 2 |
| | Drainage Scuppers, DS-12 | Each | 8 | | | 8 |
| ** | Drainage System | L Sum | 1 | | | 1 |
| * | Mechanically Stabilized Earth Retaining Wall, Special | Sq Ft | | | 11,205 | 11,205 |
| ** | Pipe Underdrains for Structures 6" | Foot | | | 530 | 530 |

* Special Provision

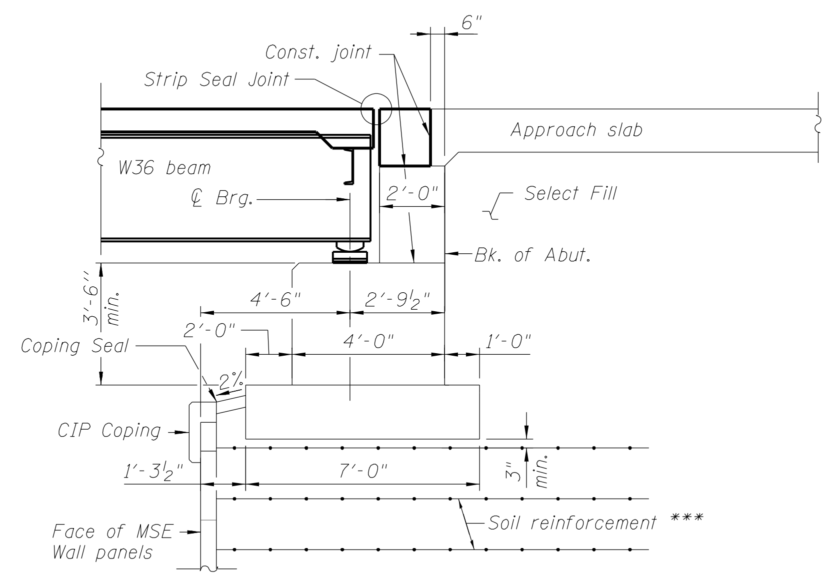
** Guide Bridge Special Provision




LIMITS OF CONCRETE SEALER AT ABUTMENTS



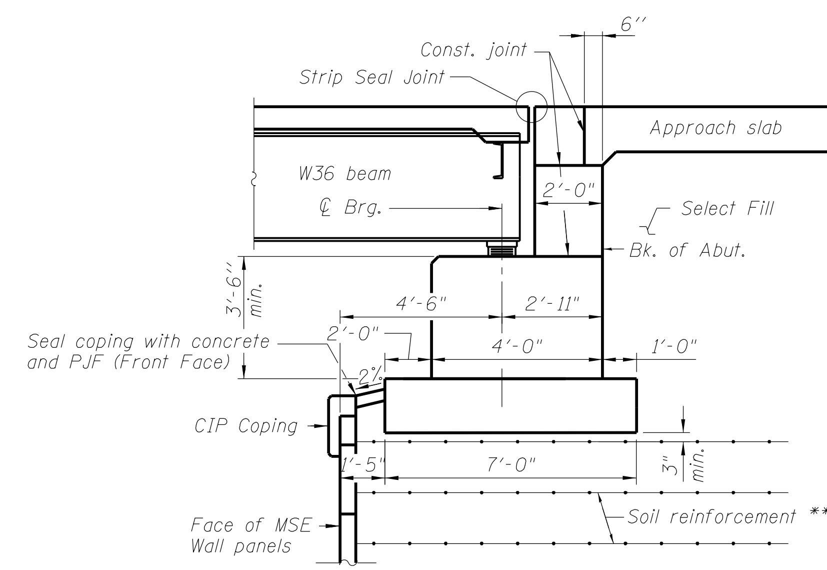

OFFSET SKETCH




SECTION THRU WEST ABUTMENT

(Looking South)

(For information only, abutment and MSE wall constructed under previous contract)




SECTION THRU EAST ABUTMENT

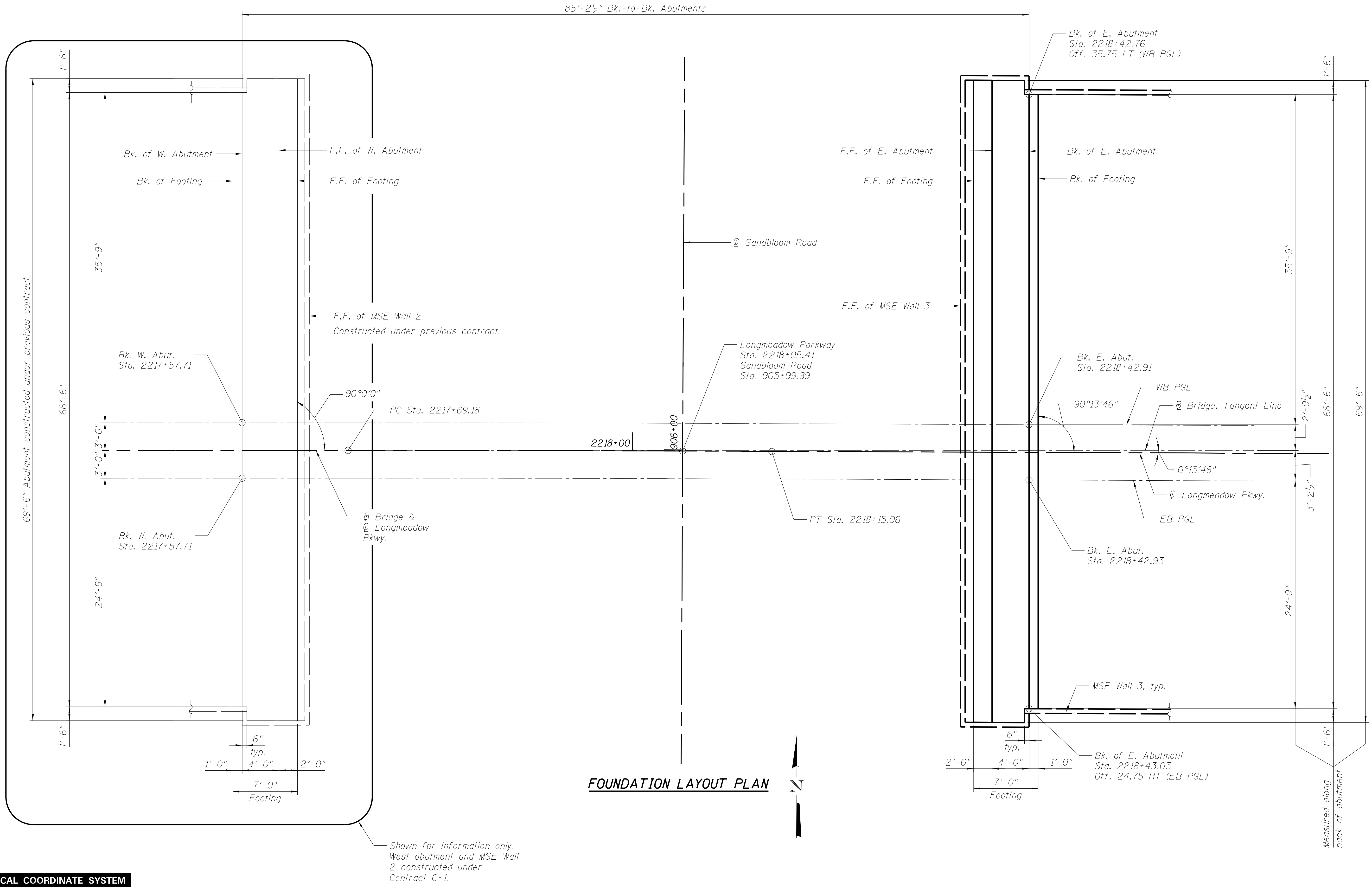
(Looking North)

*** The MSE wall supplier's internal stability design shall account for the footing's bearing pressure surcharge of 4 ksf and horizontal sliding force of 0.58 kips/ft. of abutment (east).

**LOCAL COORDINATE SYSTEM**

| | | | | | |
|---|---|---|---|---|---|
| CMT | USER NAME = Denise Herrera | DESIGNED - PA | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | GENERAL NOTES AND BILL OF MATERIAL STRUCTURE NO. 045-3077 |
| | | DRAWN - DH | REVISED - | | |
| | PLOT SCALE = 2.0001 ' / in. | CHECKED - JTH | REVISED - | | |
| License No. 184-000613 © Copyright CMT, Inc. | PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: SHEET 2 OF 40 SHEETS STA. TO STA. |

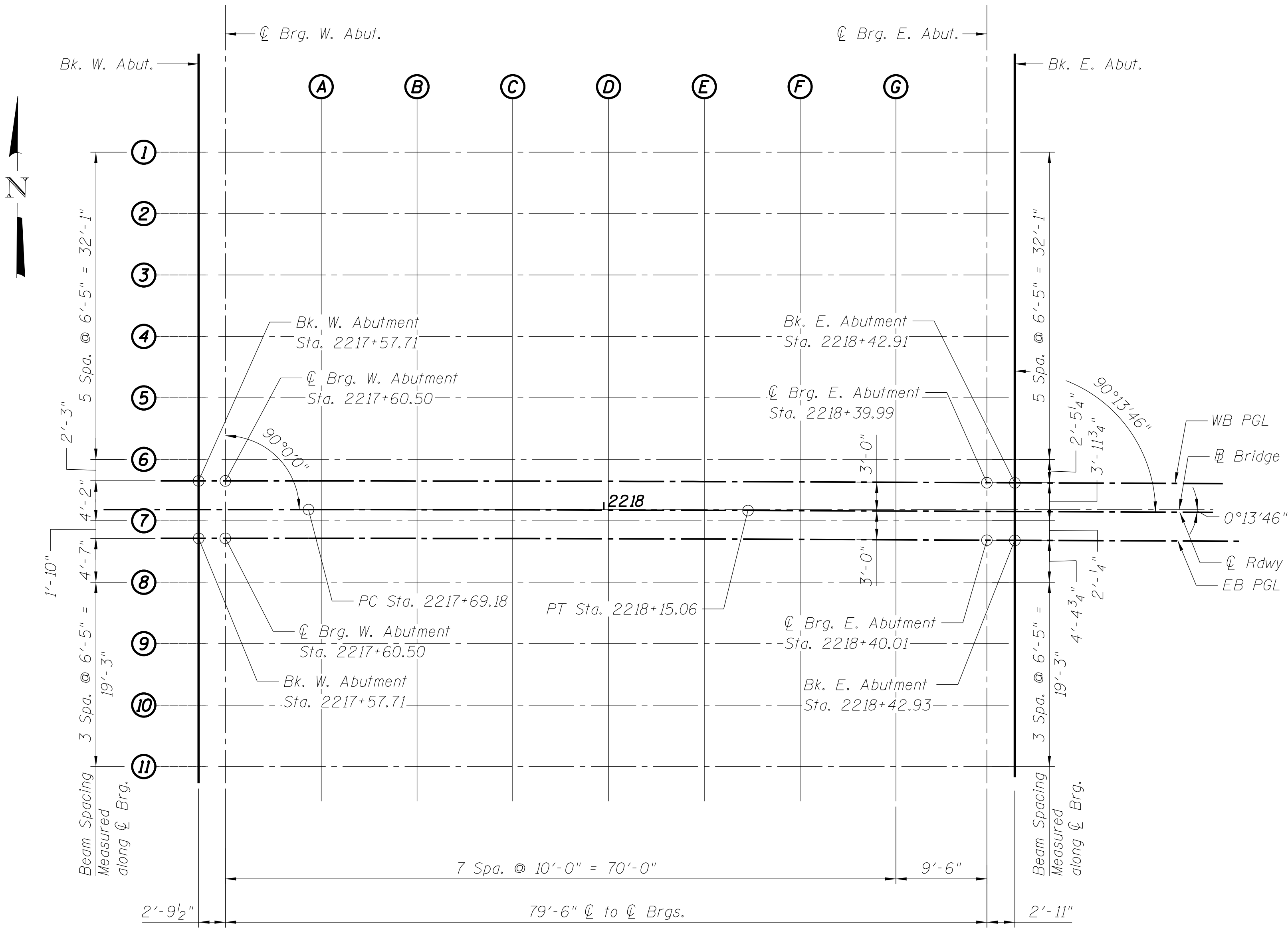
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 275 |
| | | CONTRACT NO. 61G02 | | |
| | ILLINOIS | FED. AID PROJECT | | |



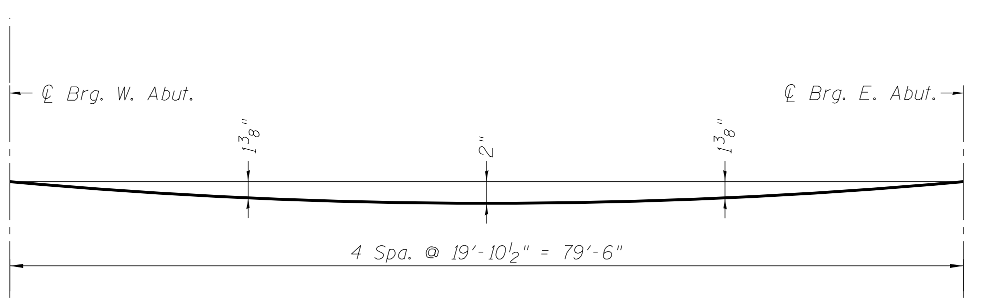

LOCAL COORDINATE SYSTEM

| | | | | | |
|---|---|---|---|---|---|
| CMT | USER NAME = Denise Herrera | DESIGNED - JDJ | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUBSTRUCTURE LAYOUT STRUCTURE NO. 045-3077 |
| | | DRAWN - AJK | REVISED - | | |
| | PLOT SCALE = 10.0055 ':' / in. | CHECKED - JTH | REVISED - | | |
| License No. 184-000613 | PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: SHEET 3 OF 40 SHEETS STA. TO STA. |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 276 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |




## PLAN




## 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 this sheet and on Sheet 5 of 40.

## BEAM 1

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -34.33 | 764.97 | 764.97 |
| CL Brg. W. Abut. | 2217+60.50 | -34.33 | 764.95 | 764.95 |
| A | 2217+70.50 | -34.33 | 764.88 | 764.94 |
| B | 2217+80.46 | -34.34 | 764.80 | 764.91 |
| C | 2217+90.43 | -34.35 | 764.73 | 764.87 |
| D | 2218+00.40 | -34.38 | 764.65 | 764.80 |
| E | 2218+10.37 | -34.41 | 764.58 | 764.72 |
| F | 2218+20.35 | -34.45 | 764.51 | 764.62 |
| G | 2218+30.35 | -34.49 | 764.44 | 764.50 |
| CL Brg. E. Abut. | 2218+39.85 | -34.52 | 764.38 | 764.38 |
| Bk. E. Abut. | 2218+42.77 | -34.54 | 764.37 | 764.37 |

Offsets are from WB PGL

## BEAM 2

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -27.92 | 764.88 | 764.88 |
| CL Brg. W. Abut. | 2217+60.50 | -27.92 | 764.86 | 764.86 |
| A | 2217+70.50 | -27.92 | 764.78 | 764.84 |
| B | 2217+80.47 | -27.92 | 764.71 | 764.82 |
| C | 2217+90.44 | -27.94 | 764.63 | 764.77 |
| D | 2218+00.42 | -27.96 | 764.56 | 764.72 |
| E | 2218+10.39 | -27.99 | 764.48 | 764.62 |
| F | 2218+20.38 | -28.03 | 764.41 | 764.52 |
| G | 2218+30.38 | -28.07 | 764.34 | 764.40 |
| CL Brg. E. Abut. | 2218+39.88 | -28.11 | 764.28 | 764.28 |
| Bk. E. Abut. | 2218+42.79 | -28.12 | 764.27 | 764.27 |

Offsets are from WB PGL

## BEAM 3

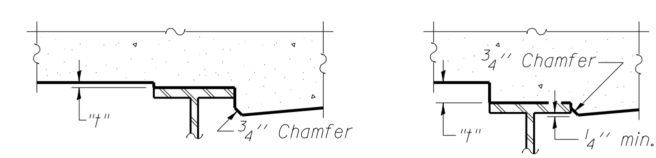
| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -21.50 | 764.87 | 764.87 |
| CL Brg. W. Abut. | 2217+60.50 | -21.50 | 764.85 | 764.85 |
| A | 2217+70.50 | -21.50 | 764.78 | 764.85 |
| B | 2217+80.48 | -21.51 | 764.70 | 764.81 |
| C | 2217+90.45 | -21.52 | 764.63 | 764.78 |
| D | 2218+00.43 | -21.54 | 764.55 | 764.71 |
| E | 2218+10.41 | -21.57 | 764.47 | 764.62 |
| F | 2218+20.40 | -21.61 | 764.40 | 764.51 |
| G | 2218+30.40 | -21.65 | 764.33 | 764.39 |
| CL Brg. E. Abut. | 2218+39.90 | -21.69 | 764.27 | 764.27 |
| Bk. E. Abut. | 2218+42.82 | -21.70 | 764.26 | 764.26 |

Offsets are from WB PGL

## BEAM 4

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -15.08 | 765.00 | 765.00 |
| CL Brg. W. Abut. | 2217+60.50 | -15.08 | 764.98 | 764.98 |
| A | 2217+70.50 | -15.08 | 764.91 | 764.98 |
| B | 2217+80.48 | -15.09 | 764.83 | 764.95 |
| C | 2217+90.47 | -15.10 | 764.76 | 764.91 |
| D | 2218+00.45 | -15.13 | 764.68 | 764.84 |
| E | 2218+10.43 | -15.16 | 764.61 | 764.76 |
| F | 2218+20.43 | -15.20 | 764.53 | 764.64 |
| G | 2218+30.43 | -15.24 | 764.46 | 764.52 |
| CL Brg. E. Abut. | 2218+39.93 | -15.27 | 764.40 | 764.40 |
| Bk. E. Abut. | 2218+42.84 | -15.29 | 764.39 | 764.39 |

Offsets are from WB PGL




At Minimum Fillet

At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown above and on Sheet 5 of 40, minus slab thickness, equals the fillet heights "t" above top flange of beams.

## FILLET HEIGHTS

### NOTE:

Top of deck elevations shown on this sheet and on Sheet 5 of 40 do not include adjustments for the ⅜" polymer overlay.

LOCAL COORDINATE SYSTEM

## BEAM 5

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -8.67 | 765.14 | 765.14 |
| CL Brg. W. Abut. | 2217+60.50 | -8.67 | 765.12 | 765.12 |
| A | 2217+70.50 | -8.67 | 765.04 | 765.11 |
| B | 2217+80.49 | -8.67 | 764.97 | 765.09 |
| C | 2217+90.48 | -8.69 | 764.89 | 765.04 |
| D | 2218+00.47 | -8.71 | 764.82 | 764.98 |
| E | 2218+10.46 | -8.74 | 764.74 | 764.89 |
| F | 2218+20.45 | -8.78 | 764.67 | 764.79 |
| G | 2218+30.45 | -8.82 | 764.60 | 764.66 |
| CL Brg. E. Abut. | 2218+39.95 | -8.86 | 764.54 | 764.54 |
| Bk. E. Abut. | 2218+42.87 | -8.87 | 764.52 | 764.52 |

Offsets are from WB PGL

## BEAM 6

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -2.25 | 765.27 | 765.27 |
| CL Brg. W. Abut. | 2217+60.50 | -2.25 | 765.25 | 765.25 |
| A | 2217+70.50 | -2.25 | 765.18 | 765.25 |
| B | 2217+80.49 | -2.26 | 765.10 | 765.22 |
| C | 2217+90.49 | -2.27 | 765.03 | 765.18 |
| D | 2218+00.49 | -2.29 | 764.95 | 765.11 |
| E | 2218+10.48 | -2.32 | 764.87 | 765.02 |
| F | 2218+20.48 | -2.36 | 764.80 | 764.92 |
| G | 2218+30.48 | -2.40 | 764.73 | 764.79 |
| CL Brg. E. Abut. | 2218+39.98 | -2.44 | 764.67 | 764.67 |
| Bk. E. Abut. | 2218+42.90 | -2.45 | 764.66 | 764.66 |

Offsets are from WB PGL

## WB PGL

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 0.00 | 765.32 | 765.32 |
| CL Brg. W. Abut. | 2217+60.50 | 0.00 | 765.30 | 765.30 |
| A | 2217+70.50 | 0.00 | 765.22 | 765.29 |
| B | 2217+80.50 | 0.00 | 765.15 | 765.27 |
| C | 2217+90.49 | 0.00 | 765.07 | 765.22 |
| D | 2218+00.49 | 0.00 | 765.00 | 765.16 |
| E | 2218+10.49 | 0.00 | 764.92 | 765.07 |
| F | 2218+20.49 | 0.00 | 764.85 | 764.97 |
| G | 2218+30.49 | 0.00 | 764.78 | 764.84 |
| CL Brg. E. Abut. | 2218+39.99 | 0.00 | 764.72 | 764.72 |
| Bk. E. Abut. | 2218+42.91 | 0.00 | 764.71 | 764.71 |

Offsets are from WB PGL

## BEAM 7

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | -1.83 | 765.36 | 765.36 |
| CL Brg. W. Abut. | 2217+60.50 | -1.83 | 765.34 | 765.34 |
| A | 2217+70.50 | -1.83 | 765.26 | 765.33 |
| B | 2217+80.50 | -1.84 | 765.19 | 765.31 |
| C | 2217+90.50 | -1.85 | 765.11 | 765.26 |
| D | 2218+00.50 | -1.88 | 765.04 | 765.20 |
| E | 2218+10.50 | -1.91 | 764.96 | 765.11 |
| F | 2218+20.50 | -1.95 | 764.89 | 765.01 |
| G | 2218+30.50 | -1.99 | 764.82 | 764.88 |
| CL Brg. E. Abut. | 2218+40.00 | -2.02 | 764.76 | 764.76 |
| Bk. E. Abut. | 2218+42.92 | -2.04 | 764.75 | 764.75 |

Offsets are from EB PGL

## EB PGL

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 0.00 | 765.32 | 765.32 |
| CL Brg. W. Abut. | 2217+60.50 | 0.00 | 765.30 | 765.30 |
| A | 2217+70.50 | 0.00 | 765.22 | 765.29 |
| B | 2217+80.50 | 0.00 | 765.15 | 765.27 |
| C | 2217+90.51 | 0.00 | 765.07 | 765.22 |
| D | 2218+00.51 | 0.00 | 765.00 | 765.16 |
| E | 2218+10.51 | 0.00 | 764.92 | 765.07 |
| F | 2218+20.51 | 0.00 | 764.85 | 764.97 |
| G | 2218+30.51 | 0.00 | 764.78 | 764.84 |
| CL Brg. E. Abut. | 2218+40.01 | 0.00 | 764.72 | 764.72 |
| Bk. E. Abut. | 2218+42.93 | 0.00 | 764.71 | 764.71 |

Offsets are from EB PGL

## BEAM 8

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 4.58 | 765.22 | 765.22 |
| CL Brg. W. Abut. | 2217+60.50 | 4.58 | 765.20 | 765.20 |
| A | 2217+70.50 | 4.58 | 765.13 | 765.20 |
| B | 2217+80.51 | 4.58 | 765.05 | 765.17 |
| C | 2217+90.51 | 4.56 | 764.98 | 765.13 |
| D | 2218+00.52 | 4.54 | 764.90 | 765.06 |
| E | 2218+10.53 | 4.51 | 764.83 | 764.98 |
| F | 2218+20.53 | 4.47 | 764.75 | 764.86 |
| G | 2218+30.53 | 4.43 | 764.69 | 764.75 |
| CL Brg. E. Abut. | 2218+40.03 | 4.39 | 764.63 | 764.63 |
| Bk. E. Abut. | 2218+42.95 | 4.38 | 764.62 | 764.62 |

Offsets are from EB PGL

## BEAM 9

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 11.00 | 765.09 | 765.09 |
| CL Brg. W. Abut. | 2217+60.50 | 11.00 | 765.07 | 765.07 |
| A | 2217+70.50 | 11.00 | 764.99 | 765.06 |
| B | 2217+80.51 | 10.99 | 764.92 | 765.03 |
| C | 2217+90.53 | 10.98 | 764.84 | 764.99 |
| D | 2218+00.54 | 10.96 | 764.77 | 764.93 |
| E | 2218+10.55 | 10.93 | 764.69 | 764.84 |
| F | 2218+20.56 | 10.89 | 764.62 | 764.73 |
| G | 2218+30.56 | 10.85 | 764.55 | 764.61 |
| CL Brg. E. Abut. | 2218+40.06 | 10.81 | 764.50 | 764.50 |
| Bk. E. Abut. | 2218+42.97 | 10.80 | 764.48 | 764.48 |

Offsets are from EB PGL

## BEAM 10

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 17.42 | 764.96 | 764.96 |
| CL Brg. W. Abut. | 2217+60.50 | 17.42 | 764.94 | 764.94 |
| A | 2217+70.50 | 17.42 | 764.86 | 764.92 |
| B | 2217+80.52 | 17.41 | 764.79 | 764.90 |
| C | 2217+90.54 | 17.40 | 764.71 | 764.85 |
| D | 2218+00.56 | 17.37 | 764.64 | 764.79 |
| E | 2218+10.57 | 17.34 | 764.56 | 764.70 |
| F | 2218+20.58 | 17.30 | 764.49 | 764.60 |
| G | 2218+30.58 | 17.26 | 764.42 | 764.48 |
| CL Brg. E. Abut. | 2218+40.08 | 17.22 | 764.36 | 764.36 |
| Bk. E. Abut. | 2218+43.00 | 17.21 | 764.35 | 764.35 |

Offsets are from EB PGL

## BEAM 11

| Location | Station | Offset (ft) | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted for DL Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 2217+57.71 | 23.83 | 764.82 | 764.82 |
| CL Brg. W. Abut. | 2217+60.50 | 23.83 | 764.80 | 764.80 |
| A | 2217+70.50 | 23.83 | 764.73 | 764.79 |
| B | 2217+80.53 | 23.83 | 764.65 | 764.75 |
| C | 2217+90.55 | 23.82 | 764.58 | 764.71 |
| D | 2218+00.57 | 23.79 | 764.50 | 764.64 |
| E | 2218+10.60 | 23.76 | 764.43 | 764.56 |
| F | 2218+20.61 | 23.72 | 764.35 | 764.45 |
| G | 2218+30.61 | 23.68 | 764.28 | 764.34 |
| CL Brg. E. Abut. | 2218+40.11 | 23.64 | 764.23 | 764.23 |
| Bk. E. Abut. | 2218+43.02 | 23.63 | 764.21 | 764.21 |

Offsets are from EB PGL

**LOCAL COORDINATE SYSTEM**

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD_Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-05-str-045-3077_Deck Elevations - II_cmt.dgn

CMT
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| | | |
|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - PA | REVISED - |
| | DRAWN - PA | REVISED - |
| PLOT SCALE = 16.0007 ' / in. | CHECKED - JTH | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

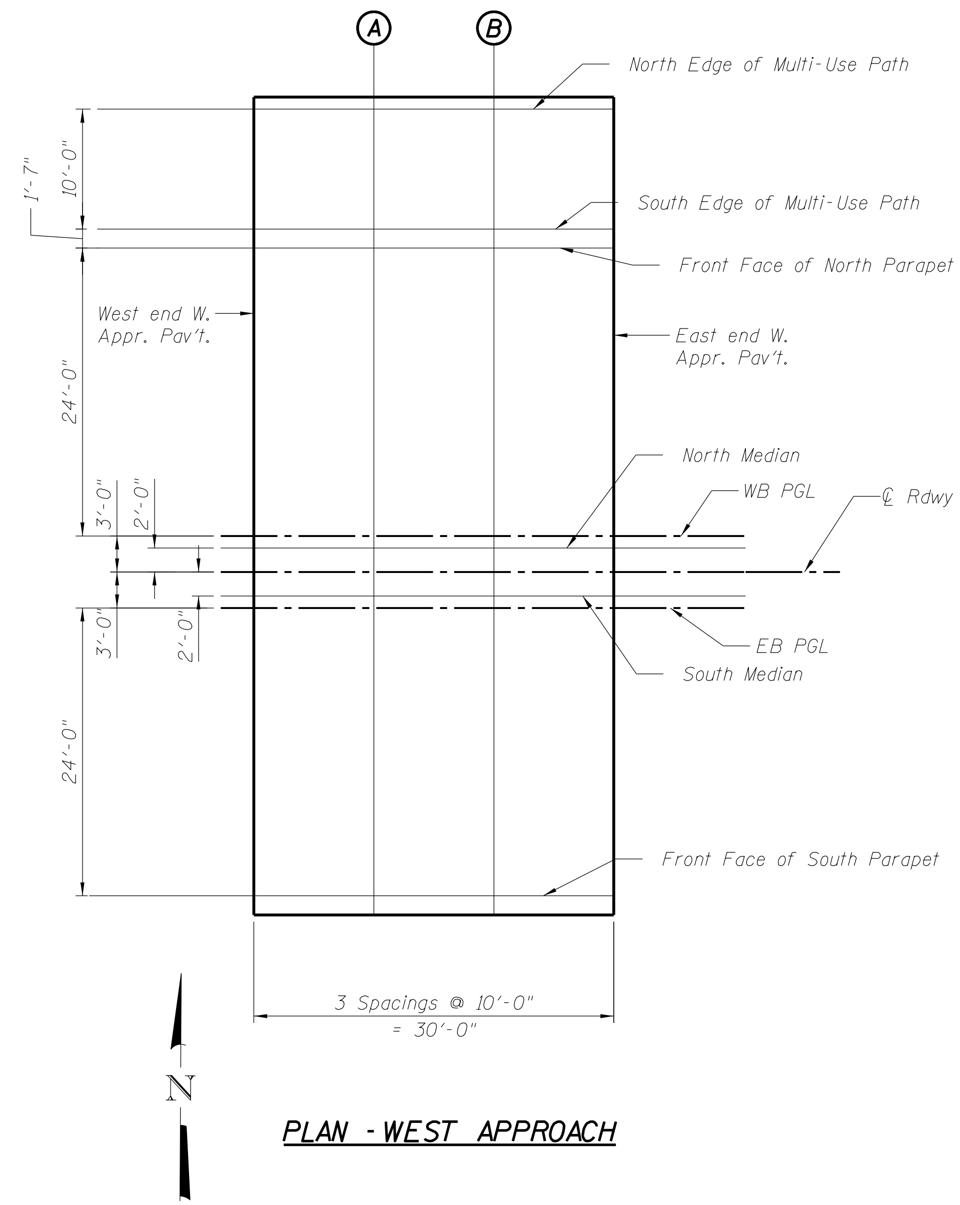
DECK ELEVATIONS – II
STRUCTURE NO. 045–3077

SCALE: | SHEET 5 OF 40 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 278 |

CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT




PLAN - WEST APPROACH

## NORTH EDGE OF MULTI-USE PATH

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | -35.58 | 765.22 |
| A | 2217+38.21 | -35.58 | 765.14 |
| B | 2217+48.21 | -35.58 | 765.06 |
| East end W. Appr. Pav't. | 2217+58.21 | -35.58 | 764.99 |

Offsets are from WB PGL

## NORTH MEDIAN

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | 1.00 | 765.56 |
| A | 2217+38.21 | 1.00 | 765.49 |
| B | 2217+48.21 | 1.00 | 765.41 |
| East end W. Appr. Pav't. | 2217+58.21 | 1.00 | 765.34 |

Offsets are from WB PGL

## SOUTH EDGE OF MULTI-USE PATH

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | -25.58 | 765.06 |
| A | 2217+38.21 | -25.58 | 764.99 |
| B | 2217+48.21 | -25.58 | 764.91 |
| East end W. Appr. Pav't. | 2217+58.21 | -25.58 | 764.84 |

Offsets are from WB PGL

## SOUTH MEDIAN

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | -1.00 | 765.56 |
| A | 2217+38.21 | -1.00 | 765.49 |
| B | 2217+48.21 | -1.00 | 765.41 |
| East end W. Appr. Pav't. | 2217+58.21 | -1.00 | 765.34 |

Offsets are from EB PGL

## FRONT FACE OF NORTH PARAPET

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | -24.00 | 765.04 |
| A | 2217+38.21 | -24.00 | 764.97 |
| B | 2217+48.21 | -24.00 | 764.89 |
| East end W. Appr. Pav't. | 2217+58.21 | -24.00 | 764.82 |

Offsets are from WB PGL

## EB PGL

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | 0.00 | 765.54 |
| A | 2217+38.21 | 0.00 | 765.46 |
| B | 2217+48.21 | 0.00 | 765.39 |
| East end W. Appr. Pav't. | 2217+58.21 | 0.00 | 765.31 |

Offsets are from EB PGL

## WB PGL

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | 0.00 | 765.54 |
| A | 2217+38.21 | 0.00 | 765.47 |
| B | 2217+48.21 | 0.00 | 765.39 |
| East end W. Appr. Pav't. | 2217+58.21 | 0.00 | 765.31 |

Offsets are from WB PGL

## FRONT FACE OF SOUTH PARAPET

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end W. Appr. Pav't. | 2217+28.21 | 24.00 | 765.04 |
| A | 2217+38.21 | 24.00 | 764.97 |
| B | 2217+48.21 | 24.00 | 764.89 |
| East end W. Appr. Pav't. | 2217+58.21 | 24.00 | 764.82 |

Offsets are from EB PGL

## NOTES:

1. Sheet shown for information only. W. approach constructed under previous Contract C-1.
2. Approach Slab elevations shown on this sheet do not include adjustments for the ⅜" polymer overlay.

LOCAL COORDINATE SYSTEM

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD_Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-06-str-045-3077_W_Approach Slab Elevations_cmt.dgn

CMT



| | | |
|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - PA | REVISED - |
| | DRAWN - DH | REVISED - |
| PLOT SCALE = 16.0007 ' / in. | CHECKED - JTH | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

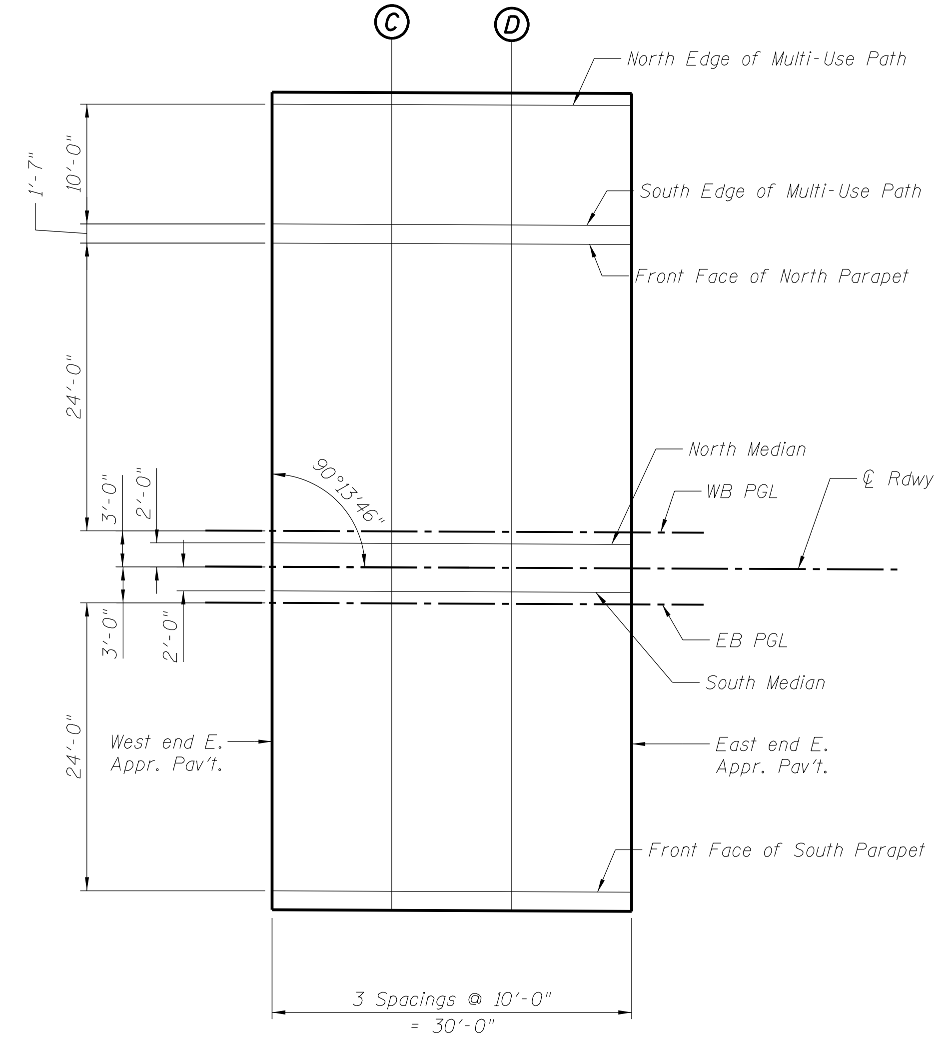
W. APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-3077

SCALE: | SHEET 6 OF 40 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 279 |

CONTRACT NO. 61G02

ILLINOIS | FED. AID PROJECT




N

PLAN - EAST APPROACH

## NORTH EDGE OF MULTI-USE PATH

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.26 | -35.58 | 764.38 |
| C | 2218+52.26 | -35.58 | 764.34 |
| D | 2218+62.26 | -35.58 | 764.30 |
| East end E. Appr. Pav't. | 2218+72.26 | -35.58 | 764.27 |

Offsets are from WB PGL

## NORTH MEDIAN

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.41 | 1.00 | 764.73 |
| C | 2218+52.41 | 1.00 | 764.68 |
| D | 2218+62.41 | 1.00 | 764.65 |
| East end E. Appr. Pav't. | 2218+72.41 | 1.00 | 764.62 |

Offsets are from WB PGL

## SOUTH EDGE OF MULTI-USE PATH

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.30 | -25.58 | 764.23 |
| C | 2218+52.30 | -25.58 | 764.19 |
| D | 2218+62.30 | -25.58 | 764.15 |
| East end E. Appr. Pav't. | 2218+72.30 | -25.58 | 764.12 |

Offsets are from WB PGL

## SOUTH MEDIAN

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.43 | -1.00 | 764.73 |
| C | 2218+52.43 | -1.00 | 764.68 |
| D | 2218+62.43 | -1.00 | 764.65 |
| East end E. Appr. Pav't. | 2218+72.43 | -1.00 | 764.62 |

Offsets are from EB PGL

## FRONT FACE OF NORTH PARAPET

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.31 | -24.00 | 764.21 |
| C | 2218+52.31 | -24.00 | 764.16 |
| D | 2218+62.31 | -24.00 | 764.13 |
| East end E. Appr. Pav't. | 2218+72.31 | -24.00 | 764.10 |

Offsets are from WB PGL

## EB PGL

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.43 | 0.00 | 764.71 |
| C | 2218+52.43 | 0.00 | 764.66 |
| D | 2218+62.43 | 0.00 | 764.63 |
| East end E. Appr. Pav't. | 2218+72.43 | 0.00 | 764.60 |

Offsets are from EB PGL

## WB PGL

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.40 | 0.00 | 764.71 |
| C | 2218+52.41 | 0.00 | 764.66 |
| D | 2218+62.41 | 0.00 | 764.63 |
| East end E. Appr. Pav't. | 2218+72.41 | 0.00 | 764.60 |

Offsets are from WB PGL

## FRONT FACE OF SOUTH PARAPET

| LOCATION | STATION | OFFSET (FT) | THEORETICAL GRADE ELEVATIONS |
|---|---|---|---|
| West end E. Appr. Pav't. | 2218+42.53 | 24.00 | 764.21 |
| C | 2218+52.53 | 24.00 | 764.16 |
| D | 2218+62.53 | 24.00 | 764.13 |
| East end E. Appr. Pav't. | 2218+72.53 | 24.00 | 764.10 |

Offsets are from EB PGL

**NOTE:**

Approach Slab elevations shown on this sheet do not include adjustments for the 3/8" polymer overlay.

LOCAL COORDINATE SYSTEM

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD_Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-07-str-045-3077_E_Approach Slab Elevations_cmt.dgn

CMT



| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - PA | REVISED - | |
| | DRAWN - DH | REVISED - | |
| PLOT SCALE = 16.0007 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

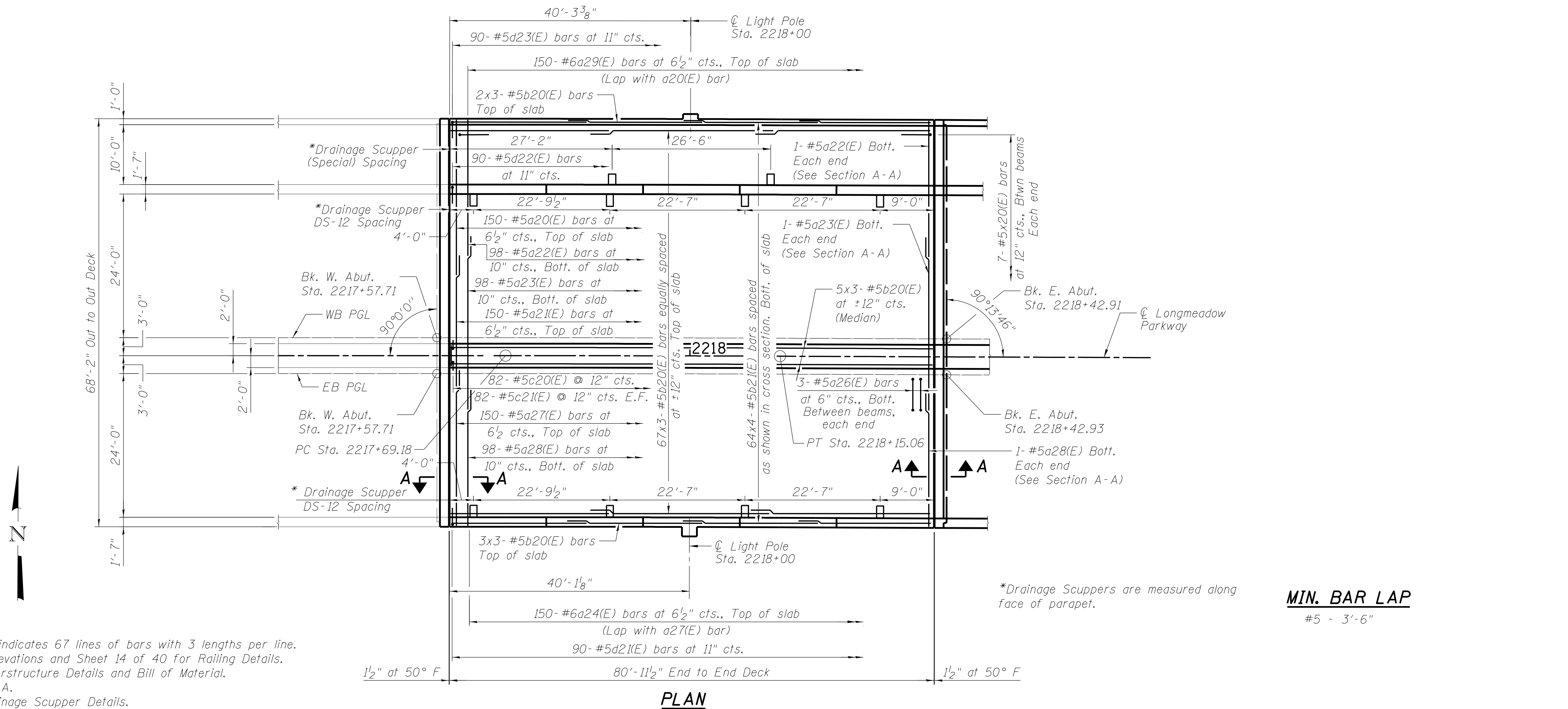
E. APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-3077

SCALE: SHEET 7 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 280 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




## PLAN

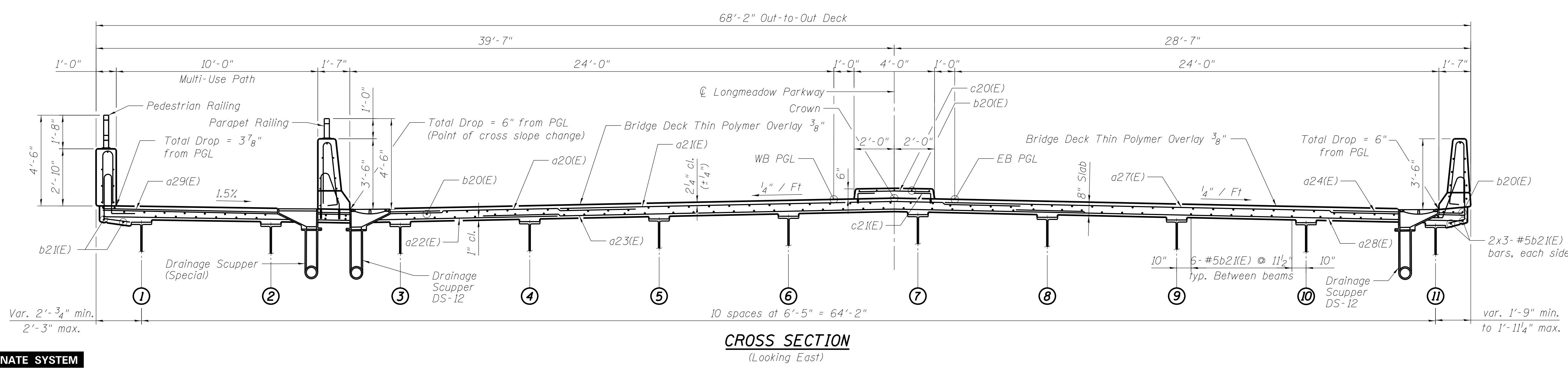
*Drainage Scuppers are measured along face of parapet.

## MIN. BAR LAP

#5 - 3'-6"

## NOTES:

1. Bars indicated thus 67x3-#5 etc. indicates 67 lines of bars with 3 lengths per line.
2. See Sheet 11 of 40 for Parapet Elevations and Sheet 14 of 40 for Railing Details.
3. See Sheets 9 & 10 of 40 for Superstructure Details and Bill of Material.
4. See Sheet 10 of 40 for section A-A.
5. See Sheets 16 & 17 of 40 for Drainage Scupper Details.
6. Limits of Bridge Deck Thin Polymer Overlay ⅜" shall be from curb to curb of roadway excluding median.




## CROSS SECTION

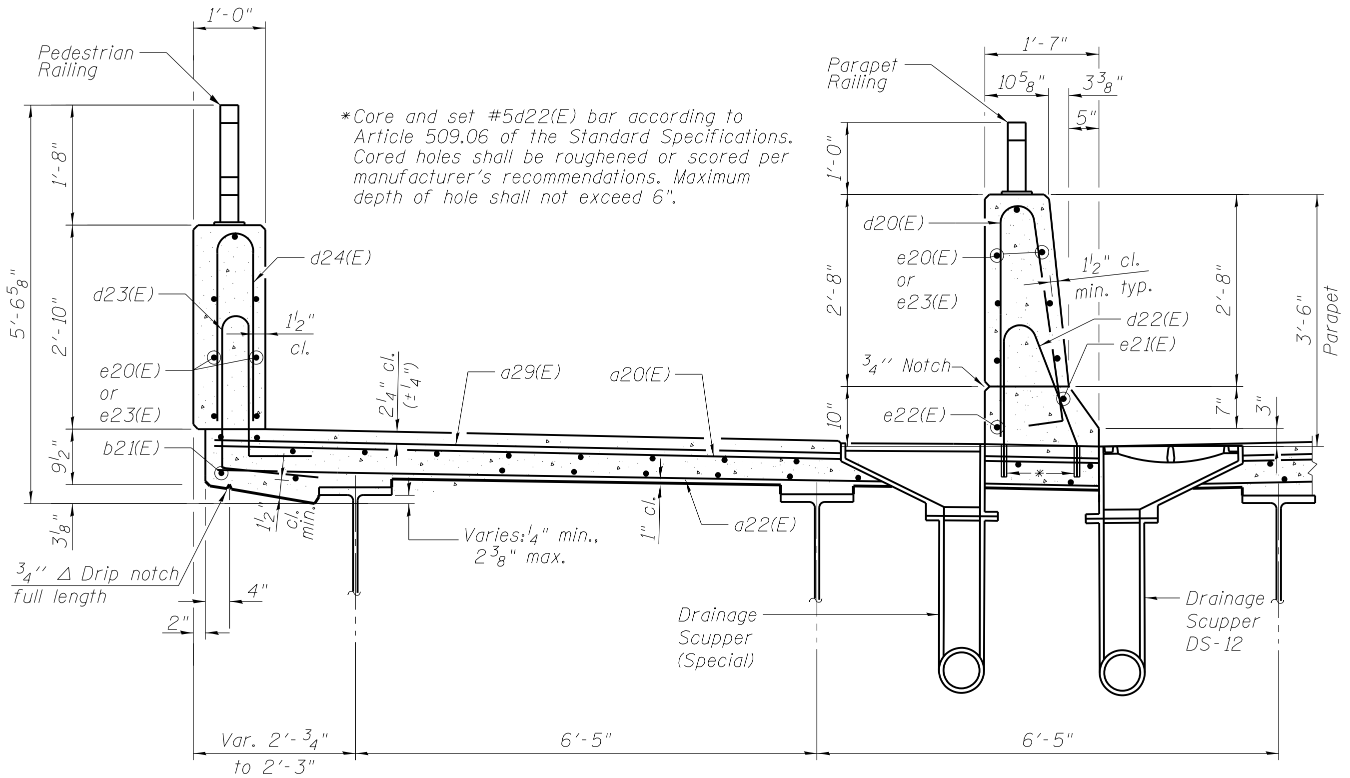
(Looking East)

LOCAL COORDINATE SYSTEM

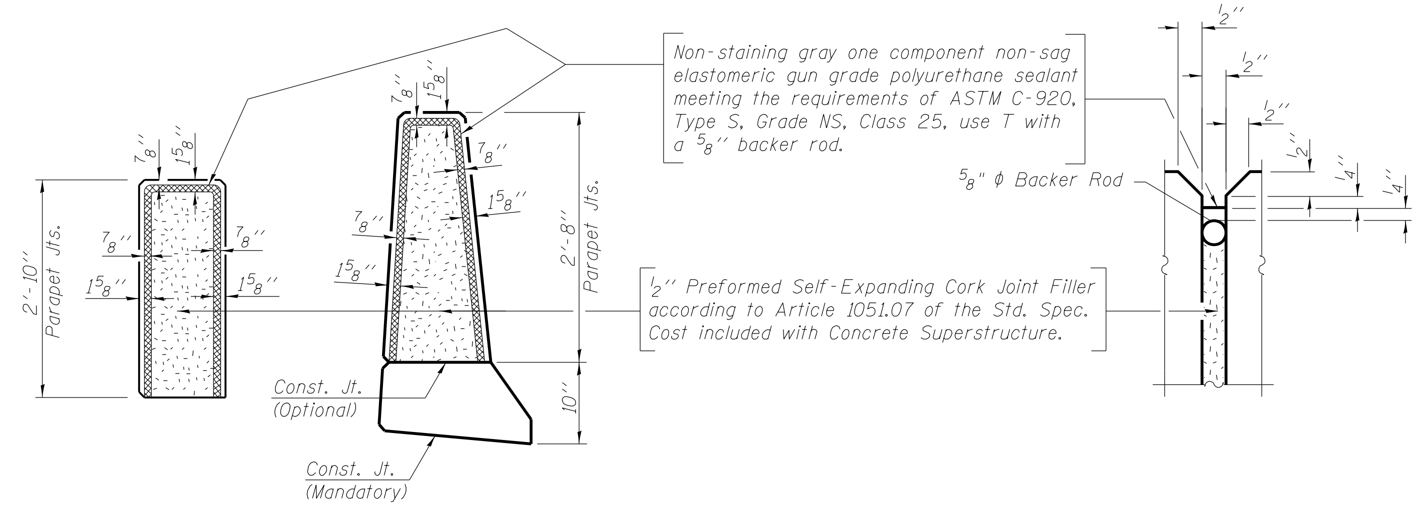
FILE NAME = pw\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-08-str-045-3077_Deck Plan and X-Section_cmt.dgn

| CMT | USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DECK PLAN AND CROSS SECTION STRUCTURE NO. 045-3077 |
|---|---|---|---|---|---|
| | | DRAWN - CPB | REVISED - | | |
| | PLOT SCALE = 20.0009 ' / in. | CHECKED - JTH | REVISED - | | |
| License No. 184-000613 | PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: SHEET 8 OF 40 SHEETS STA. TO STA. |

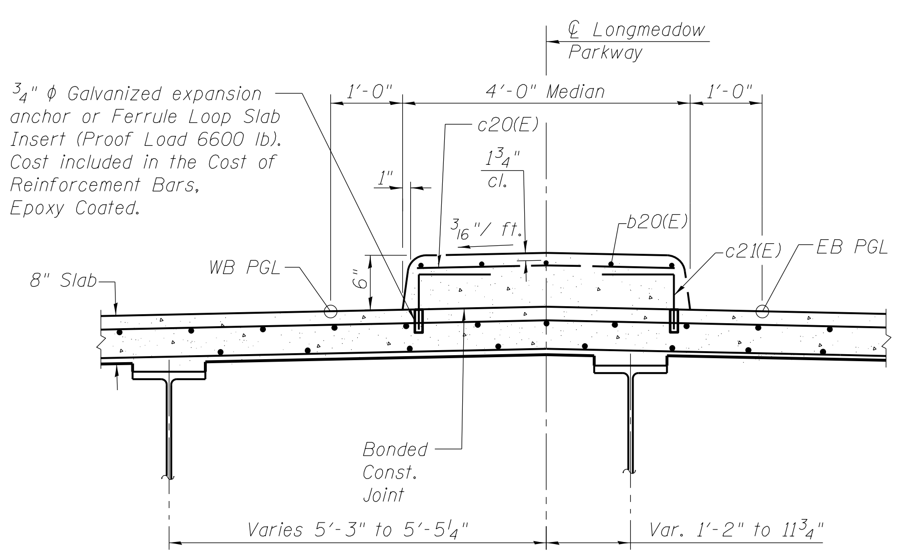
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 281 |
| | | CONTRACT NO. 61G02 | | |
| | | ILLINOIS FED. AID PROJECT | | |



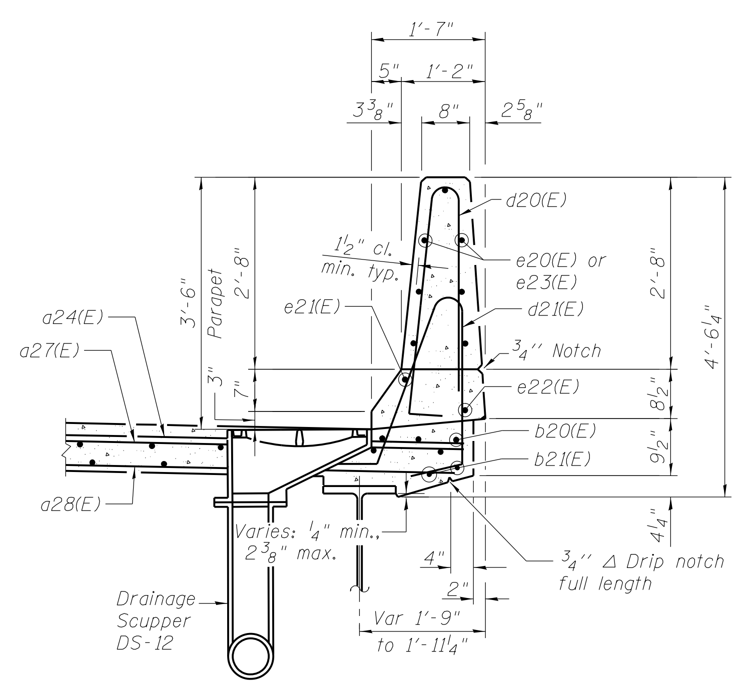

SECTION THRU PARAPETS AT MULTI-USE PATH



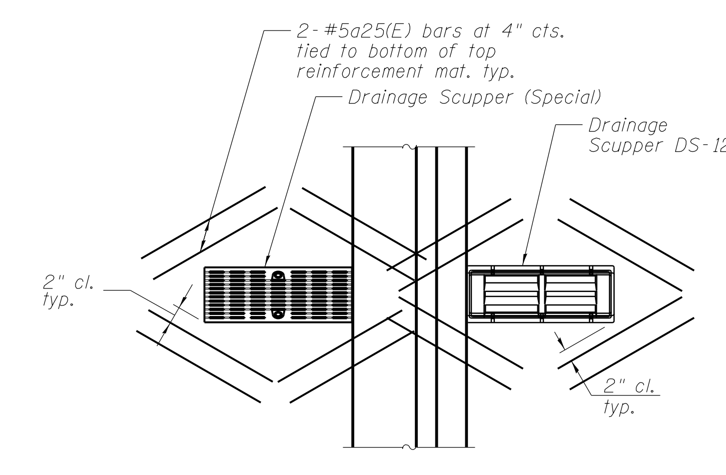

PARAPET JOINT DETAILS




SECTION THRU MEDIAN



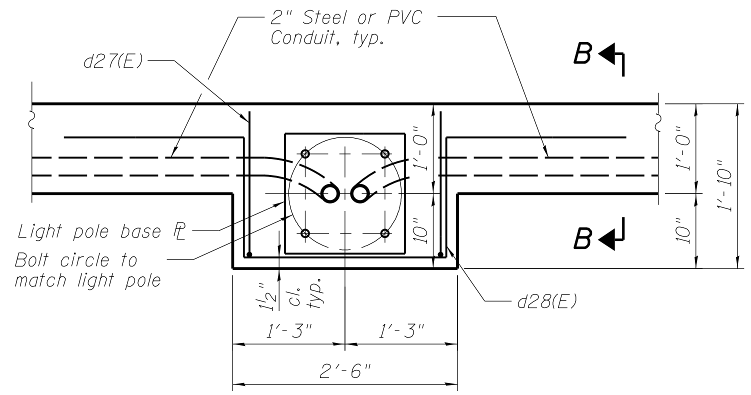

SECTION THRU SOUTH PARAPET




PLAN VIEW INTERIOR PARAPET

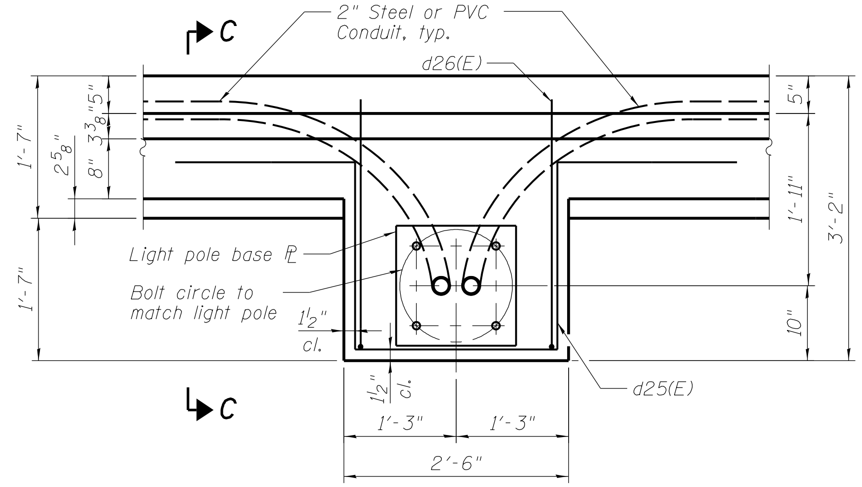
(Showing add'l. reinforcement at scuppers)
(South parapet scupper similar)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CMT | USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUPERSTRUCTURE DETAILS - I STRUCTURE NO. 045-3077 | F.A.U. RTE. 2298 | SECTION 18-00215-21-BR | COUNTY KANE | TOTAL SHEETS 415 / SHEET NO. 282 |
| | | DRAWN - CPB | REVISED - | | | | | CONTRACT NO. 61G02 | |
| | PLOT SCALE = 4.0002 '/ in. | CHECKED - JTH | REVISED - | | | | | | |
| License No. 184-000613 | PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | | SCALE: SHEET 9 OF 40 SHEETS STA. TO STA. | | ILLINOIS FED. AID PROJECT | | |

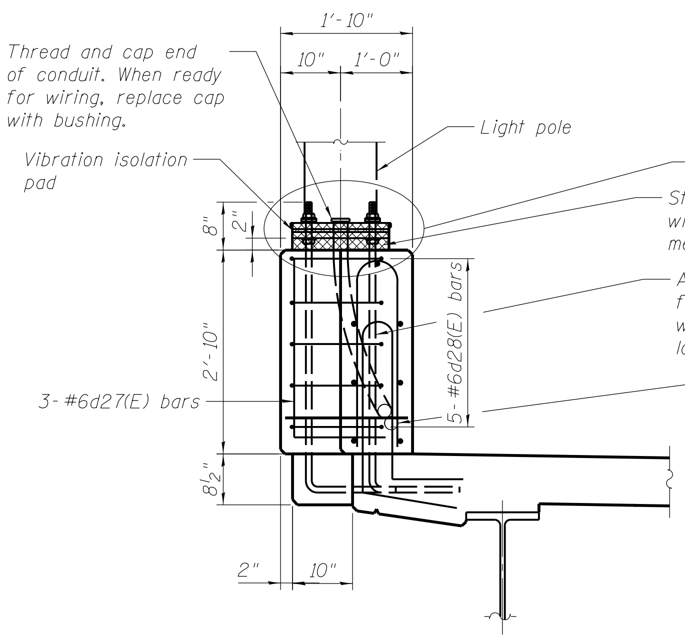



## PLAN
(For Multi-Use Path Parapet)

Note:
Cost of anchor rods is included with Concrete Superstructure.




## PLAN
(For South F-Shape Parapet)



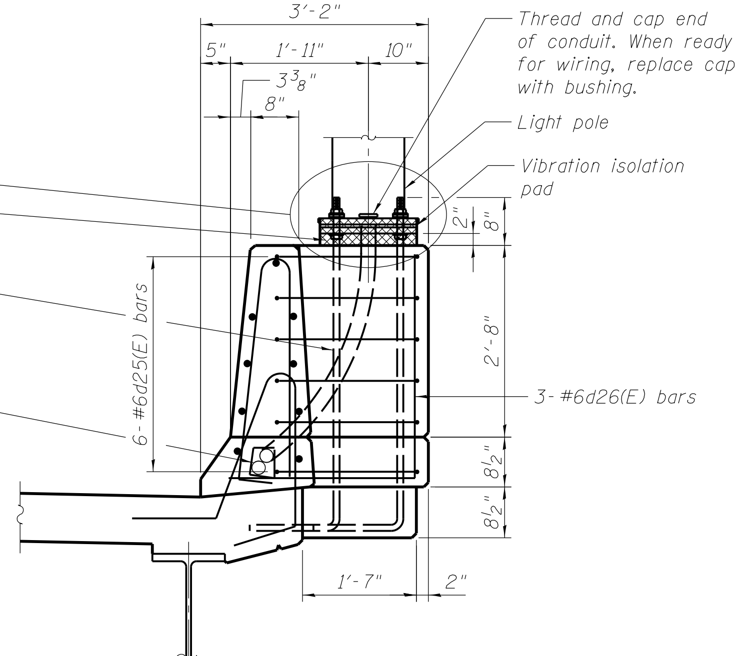

See electrical details

Stainless steel standard grade wire cloth-Type 304, 4 x 4 mesh 0.047" wire diameter.

Anchor rods (Dia. as specified for light pole) Provide 3 flat washers, 1 regular nut & 1 locknut for each rod.

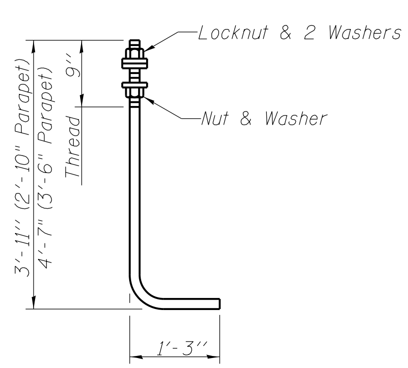
2" Steel or PVC conduit

## SECTION B-B

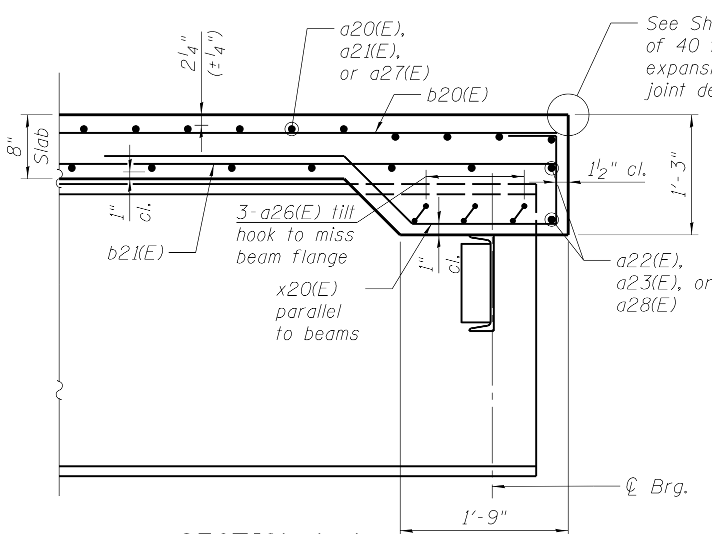



## SECTION C-C

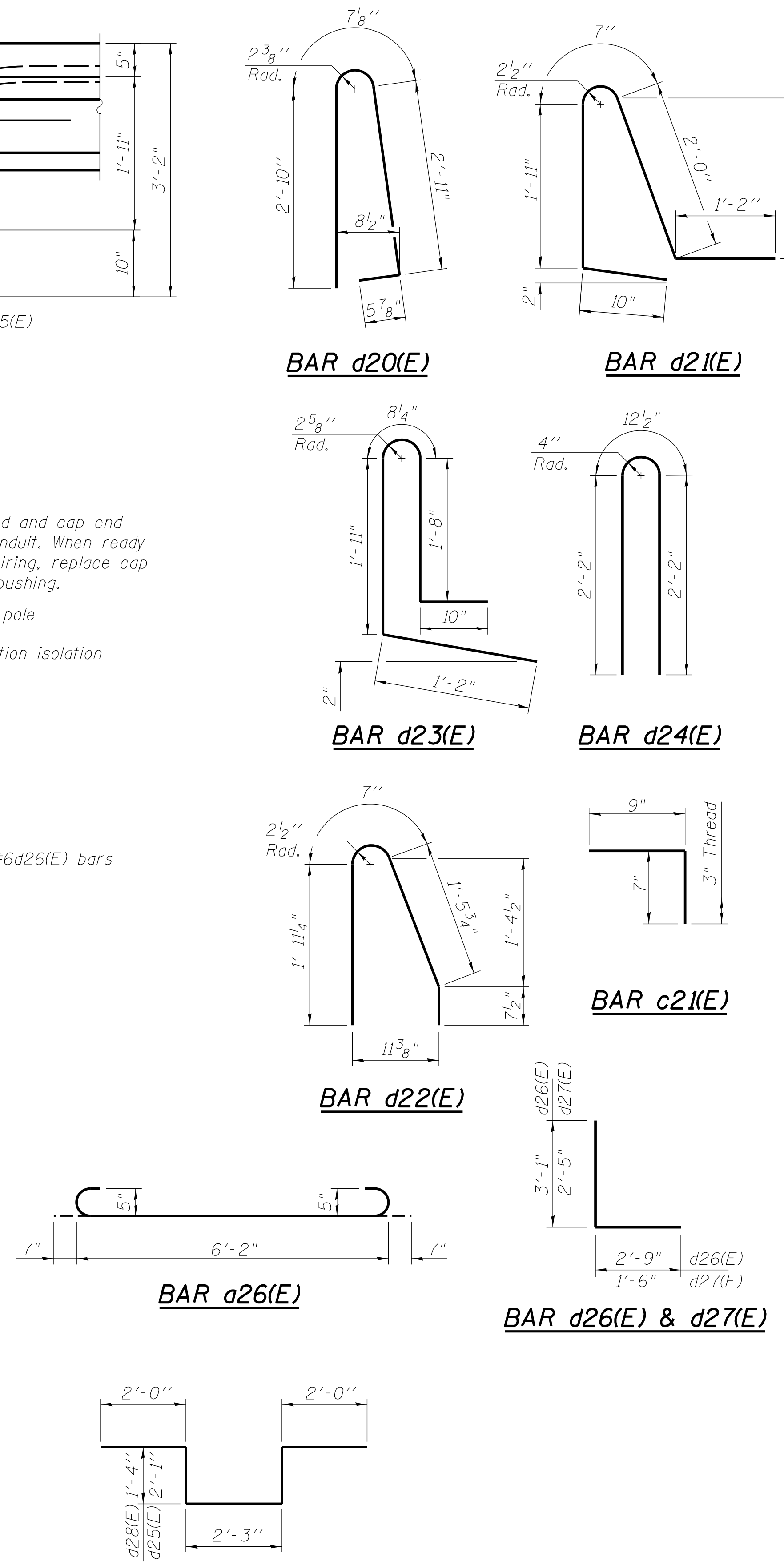
## LIGHT POLE DETAILS




## ANCHOR ROD
Diameter as specified for light poles (ASTM F 1554 Grade 105). Full length hot dipped galvanized.




## SECTION A-A
(See Sheet 8 of 40 for location)



BAR d20(E)

BAR d21(E)

BAR d23(E)

BAR d24(E)

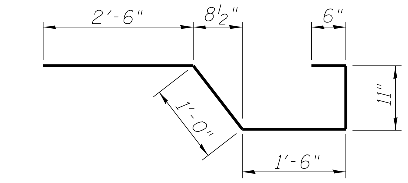
BAR d22(E)

BAR c21(E)

BAR a26(E)

BAR d26(E) & d27(E)

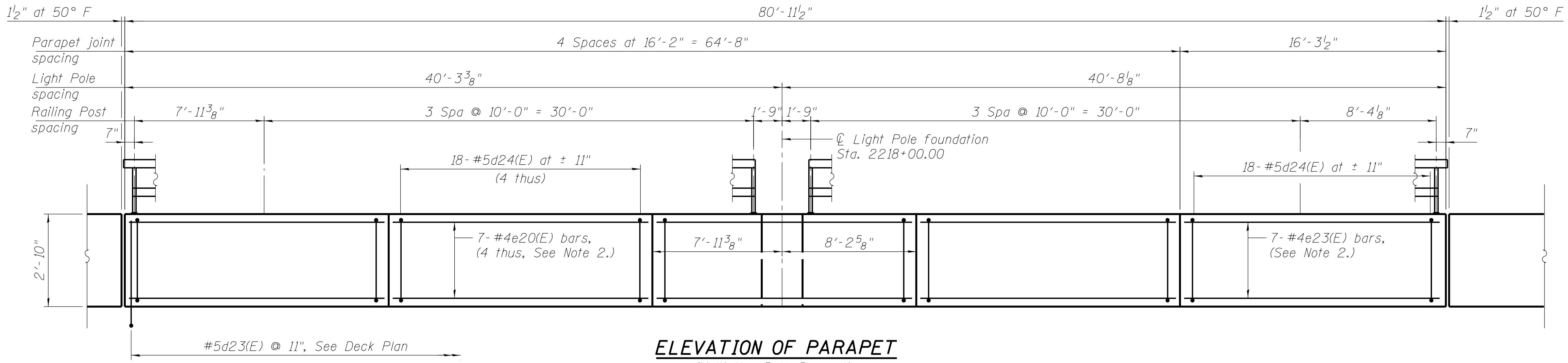
BAR d25(E) & d28(E)



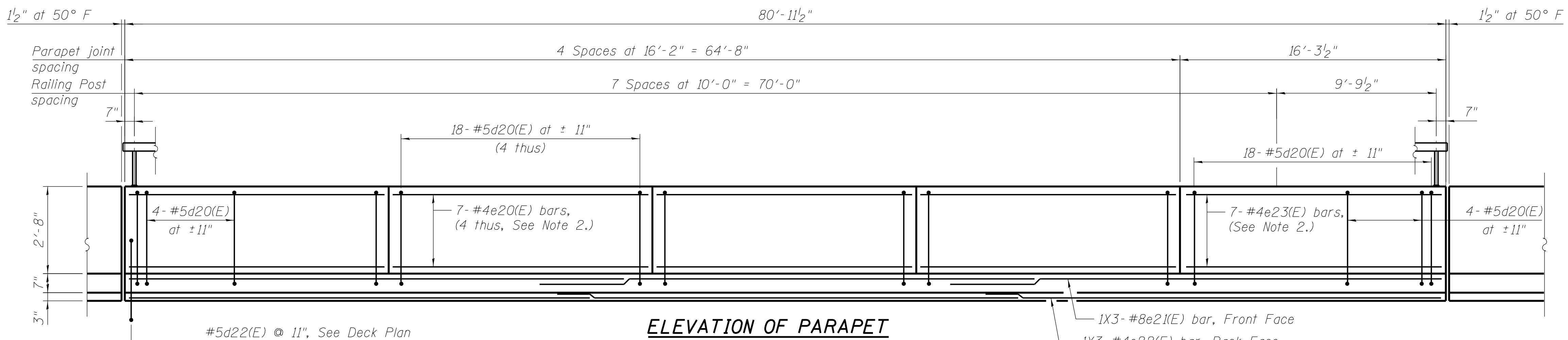

BAR x20(E)

## SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a20(E) | 150 | #5 | 26'-2" | |
| a21(E) | 150 | #5 | 22'-10" | |
| a22(E) | 100 | #5 | 22'-11" | |
| a23(E) | 100 | #5 | 29'-3" | |
| a24(E) | 150 | #6 | 6'-6" | |
| a25(E) | 80 | #5 | 2'-0" | |
| a26(E) | 60 | #5 | 7'-4" | |
| a27(E) | 150 | #5 | 25'-10" | |
| a28(E) | 100 | #5 | 22'-8" | |
| a29(E) | 150 | #6 | 17'-0" | |
| | | | | |
| b20(E) | 231 | #5 | 29'-3" | |
| b21(E) | 256 | #5 | 22'-10" | |
| | | | | |
| c20(E) | 82 | #5 | 3'-6" | |
| c21(E) | 164 | #5 | 1'-4" | |
| | | | | |
| d20(E) | 196 | #5 | 6'-10" | |
| d21(E) | 90 | #5 | 6'-6" | |
| d22(E) | 90 | #5 | 4'-8" | |
| d23(E) | 90 | #5 | 6'-4" | |
| d24(E) | 90 | #5 | 5'-5" | |
| d25(E) | 6 | #6 | 10'-5" | |
| d26(E) | 3 | #6 | 5'-10" | |
| d27(E) | 3 | #6 | 3'-11" | |
| d28(E) | 5 | #6 | 8'-11" | |
| | | | | |
| e20(E) | 84 | #4 | 15'-10" | |
| e21(E) | 6 | #8 | 30'-10" | |
| e22(E) | 6 | #4 | 28'-8" | |
| e23(E) | 21 | #4 | 15'-11" | |
| | | | | |
| x20(E) | 140 | #5 | 6'-5" | |
| Concrete Superstructure | | Cu. Yd. | 198.9 | |
| Protective Coat | | Sq. Yd. | 277 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 45,510 | |
| Bridge Deck Thin Polymer Overlay ⅜" | | Sq. Yd. | 450 | |



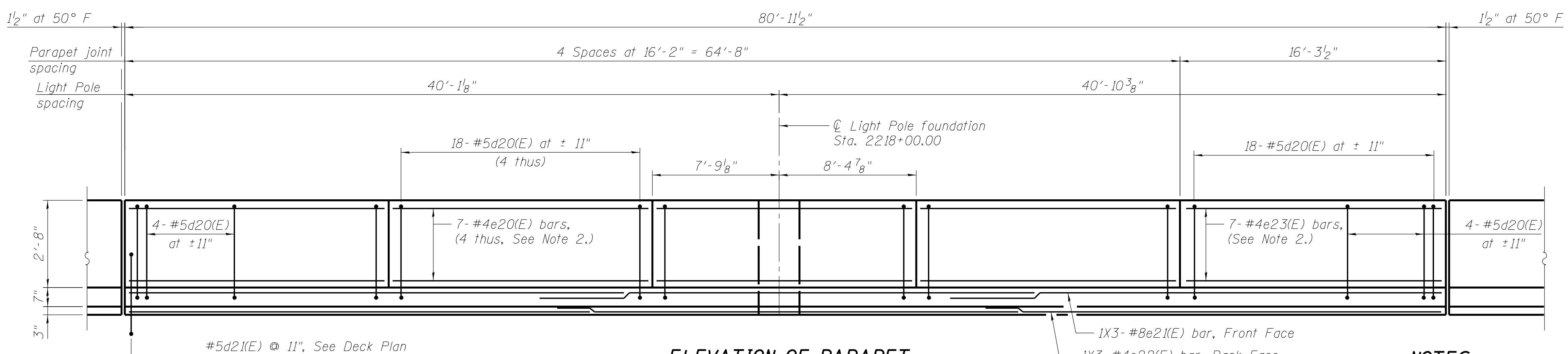

## ELEVATION OF PARAPET
(Multi-Use Path Parapet)
(Looking North)




## ELEVATION OF PARAPET
(North F-Shape Parapet)
(Looking North)

**MIN. BAR LAP**

#4 - 2'-8"
#8 - 5'-11"




## ELEVATION OF PARAPET
(South F-Shape Parapet)
(Looking North)

**NOTES:**

1. Bars indicated thus 1x3-#4 etc. indicates 1 line of bars with 3 lengths per line.
2. For Section Thru Parapets, see Sheet 9 of 40.
3. For Light Pole Details see Sheet 10 of 40.



CMT

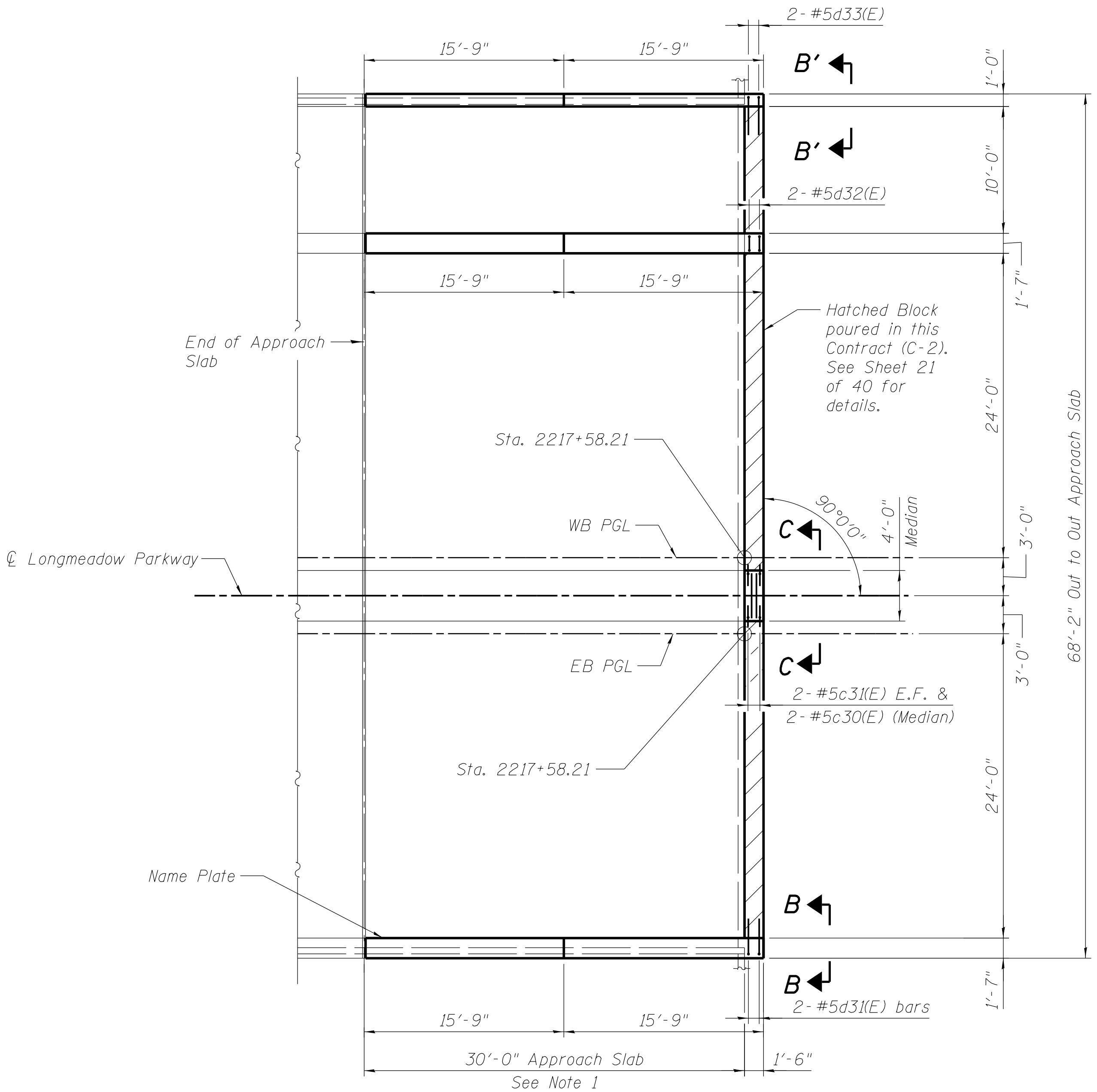

| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CPB | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION |
| | DRAWN - CPB | REVISED - | |
| PLOT SCALE = 8.0004 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

**PARAPET ELEVATION**
**STRUCTURE NO. 045-3077**

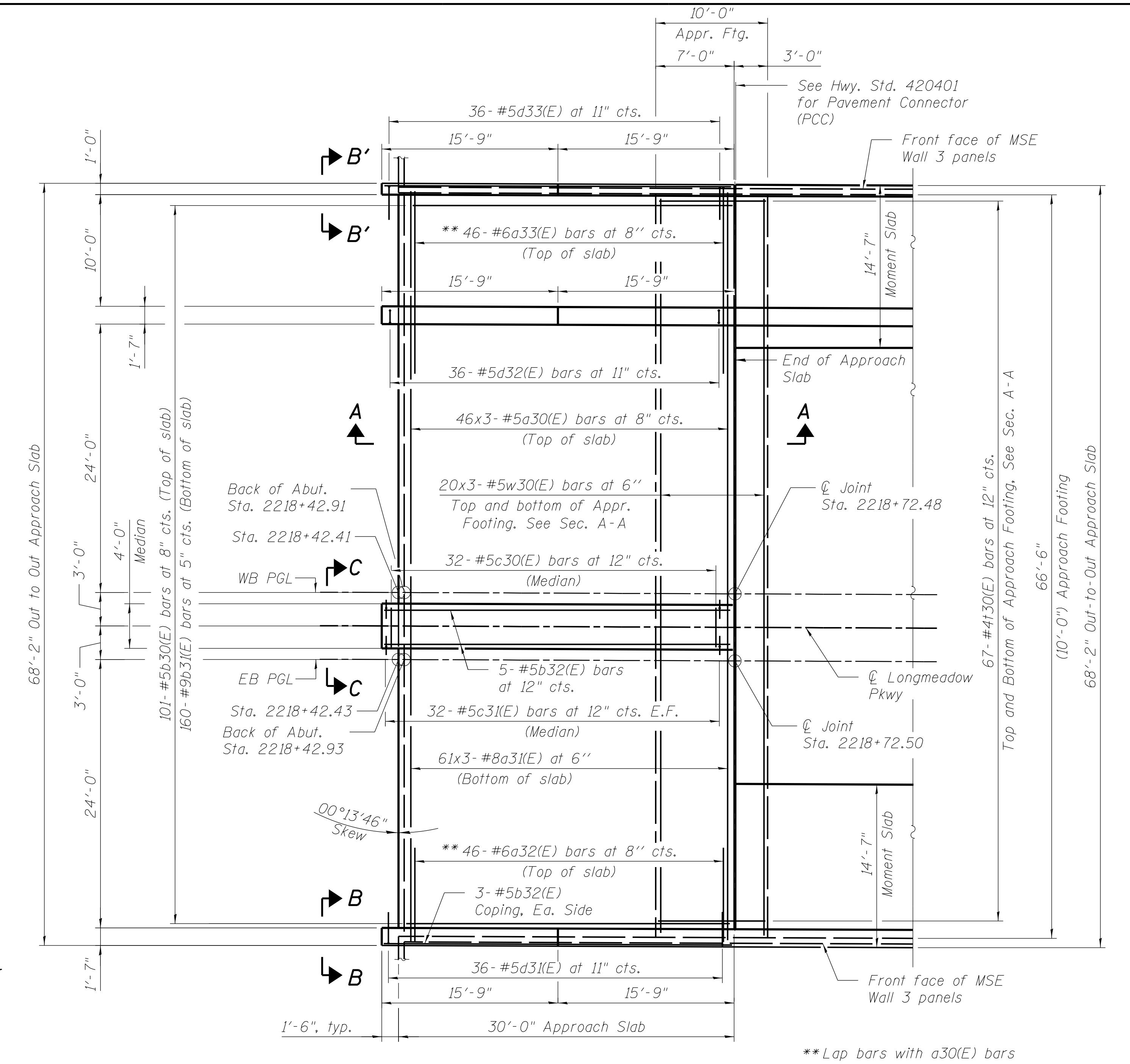
SCALE: | SHEET 11 OF 40 SHEETS | STA. | TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 284 |

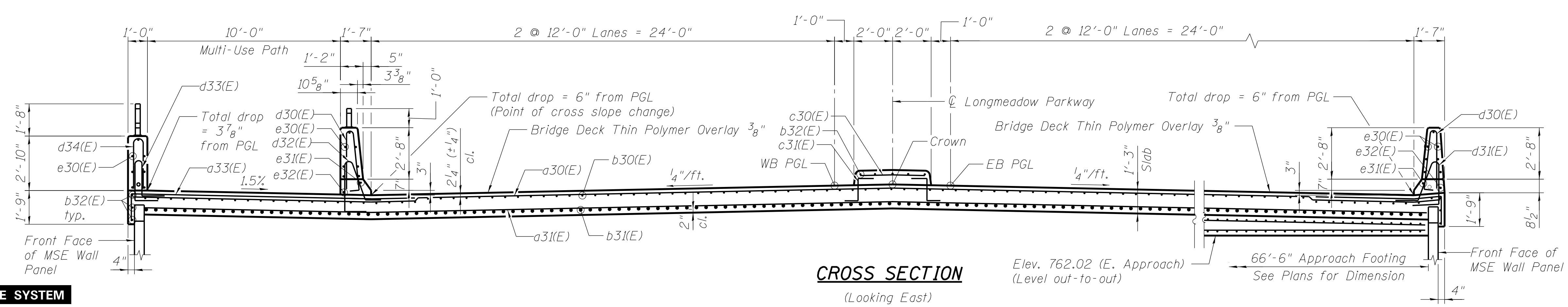
CONTRACT NO. 61G02
ILLINOIS | FED. AID PROJECT




WEST APPROACH PLAN




EAST APPROACH PLAN




CROSS SECTION

(Looking East)

MIN. BAR LAP

#5 - 3'-4"
#8 - 4'-9"

NOTES:

1. West Approach Slab built in previous Contract (C-1). West Approach Parapets shall be built in this Contract (C-2).

2. Limits of Bridge Deck Thin Polymer Overlay 3/8" shall be from curb to curb of roadway excluding median.

LOCAL COORDINATE SYSTEM

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\Kane\CO\13296-02\Draw\Bridge\CADD_Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-12-str-045-3077_Appr Slab Plan_cmt.dgn

CMT
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| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - DH | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION |
| | DRAWN - DH | REVISED - | |
| PLOT SCALE = 13.0006 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

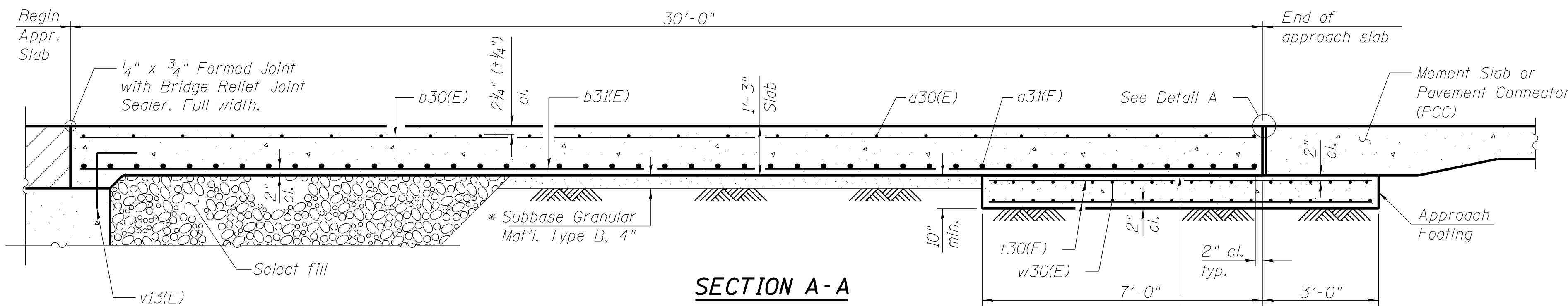
APPROACH SLAB PLAN
STRUCTURE NO. 045-3077

SCALE: | SHEET 12 OF 40 SHEETS | STA. | TO STA.

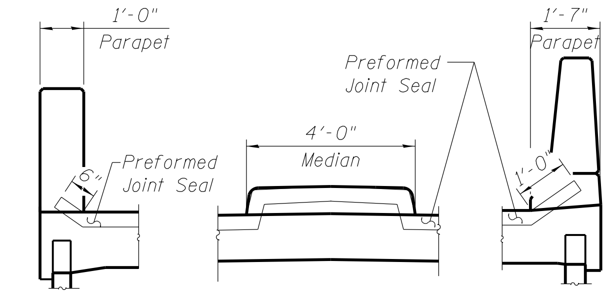
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 285 |

CONTRACT NO. 61G02

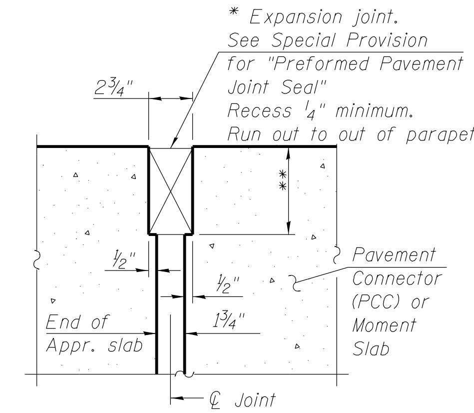
ILLINOIS FED. AID PROJECT




SECTION A-A

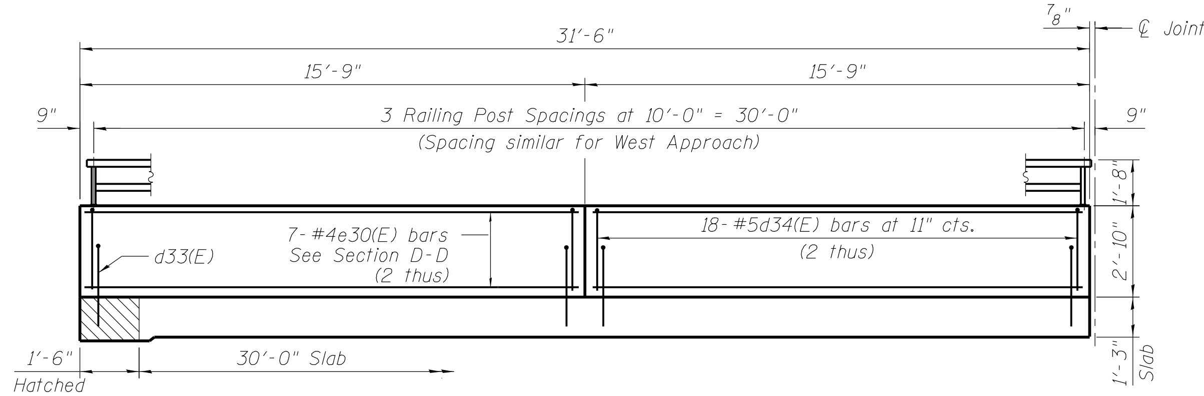



VIEW B'-B'    VIEW C-C    VIEW B-B



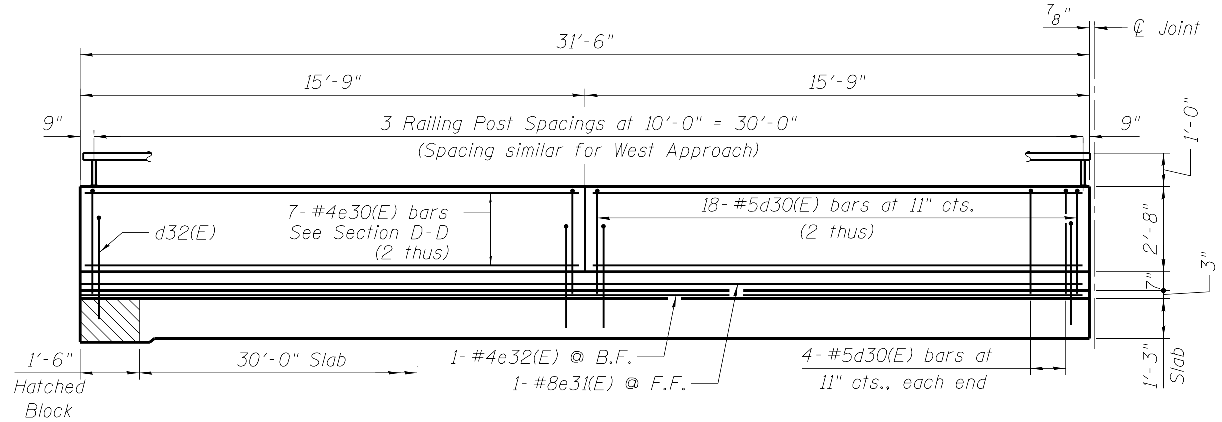

DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations



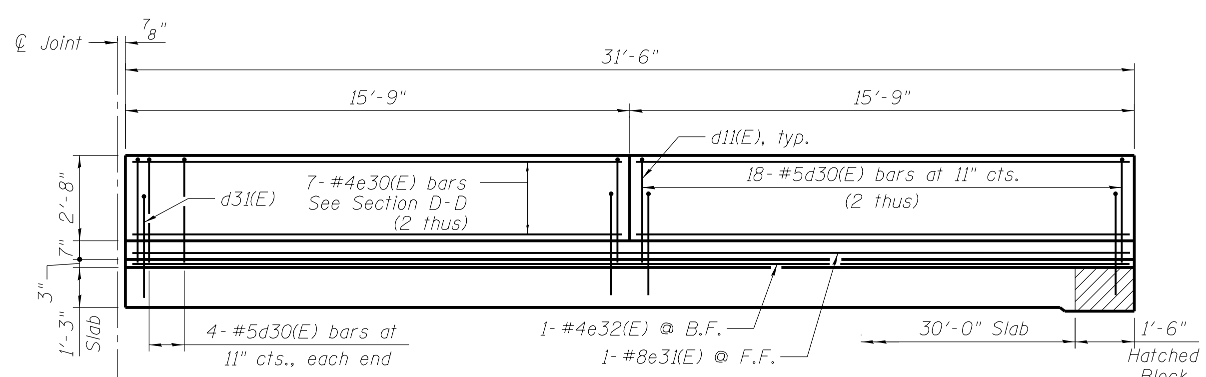

INSIDE ELEVATION OF MULTI-USE PARAPET

(East Approach shown West Approach similar)



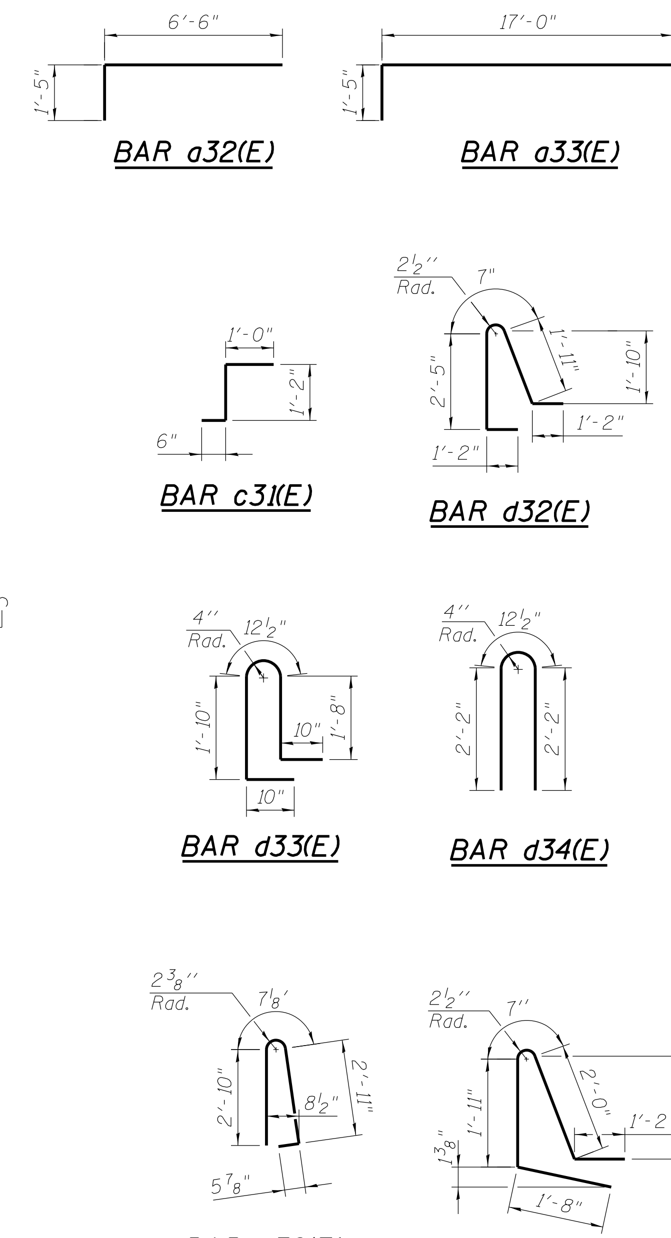

INSIDE ELEVATION OF NORTH PARAPET

(East Approach shown West Approach similar)




INSIDE ELEVATION OF SOUTH PARAPET

(East Approach shown West Approach similar)




## BILL OF MATERIAL WEST APPROACH SLAB

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| c30(E) | 2 | #5 | 3'-6" | — |
| c31(E) | 4 | #5 | 2'-8" | ⌐ |
| | | | | |
| d30(E) | 4 | #5 | 6'-10" | |
| d31(E) | 2 | #5 | 7'-4" | |
| d32(E) | 2 | #5 | 7'-3" | |
| d33(E) | 2 | #5 | 6'-3" | |
| d34(E) | 2 | #5 | 5'-5" | ∩ |
| | | | | |
| Concrete Superstructure | | Cu. Yd. | 12.0 | |
| Protective Coat | | Sq. Yd. | 57 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 100 | |
| Bridge Deck Thin Polymer Overlay 3/8" | | Sq. Yd. | 175 | |

## BILL OF MATERIAL EAST APPROACH SLAB

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a30(E) | 138 | #5 | 24'-10" | — |
| a31(E) | 183 | #8 | 25'-4" | — |
| a32(E) | 46 | #6 | 7'-11" | |
| a33(E) | 46 | #6 | 18'-5" | |
| | | | | |
| b30(E) | 101 | #5 | 29'-8" | — |
| b31(E) | 160 | #9 | 29'-8" | — |
| b32(E) | 11 | #5 | 31'-2" | — |
| | | | | |
| c30(E) | 32 | #5 | 3'-6" | — |
| c31(E) | 64 | #5 | 2'-8" | ⌐ |
| | | | | |
| d30(E) | 88 | #5 | 6'-10" | |
| d31(E) | 36 | #5 | 7'-4" | |
| d32(E) | 36 | #5 | 7'-3" | |
| d33(E) | 36 | #5 | 6'-3" | |
| d34(E) | 36 | #5 | 5'-5" | ∩ |
| | | | | |
| e30(E) | 42 | #4 | 15'-5" | — |
| e31(E) | 2 | #8 | 31'-2" | — |
| e32(E) | 2 | #4 | 31'-2" | — |
| | | | | |
| t30(E) | 134 | #4 | 9'-8" | — |
| | | | | |
| w30(E) | 120 | #5 | 24'-4" | — |
| | | | | |
| Concrete Structures | | Cu. Yd. | 27.4 | |
| Concrete Superstructure | | Cu. Yd. | 14.2 | |
| Protective Coat | | Sq. Yd. | 108 | |
| Concrete Superstructure (Approach Slab) | | Cu. Yd. | 94.7 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 43,850 | |
| Bridge Deck Thin Polymer Overlay 3/8" | | Sq. Yd. | 175 | |

## NOTES:

1. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
2. Approach footing concrete shall be paid for as Concrete Structures.
3. Parapet Concrete shall be paid for as Concrete Superstructure.
4. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
5. Cost of excavation for approach footing included with Concrete Structures.
6. West approach slab constructed under previous Contract (C-1). Hatched block in west abutment and parapet above the hatched block constructed under this Contract (C-2).
7. Pedestrian and Parapet Railings in west approach shall be placed and fabricated in this Contract (C-2).



CMT



| | | |
|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - DH | REVISED - |
| | DRAWN - DH | REVISED - |
| PLOT SCALE = 16.0007 ' / in. | CHECKED - JTH | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

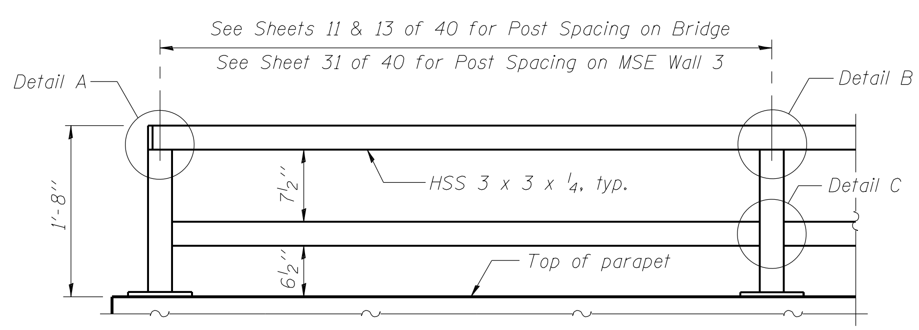
APPROACH SLAB DETAILS
STRUCTURE NO. 045-3077

SCALE: SHEET 13 OF 40 SHEETS STA. TO STA.

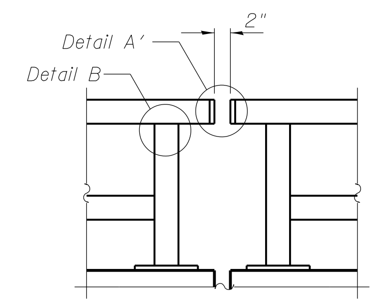
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 286 |

CONTRACT NO. 61G02

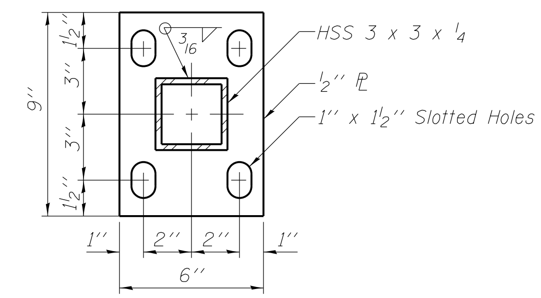
ILLINOIS FED. AID PROJECT



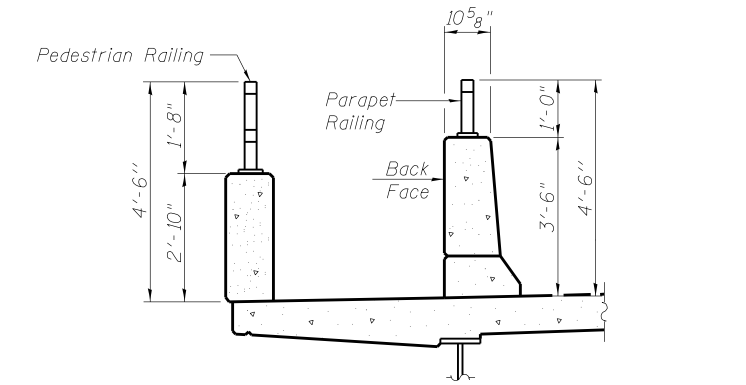

PEDESTRIAN RAILING ELEVATION
(At Multi-Use Path Parapet)



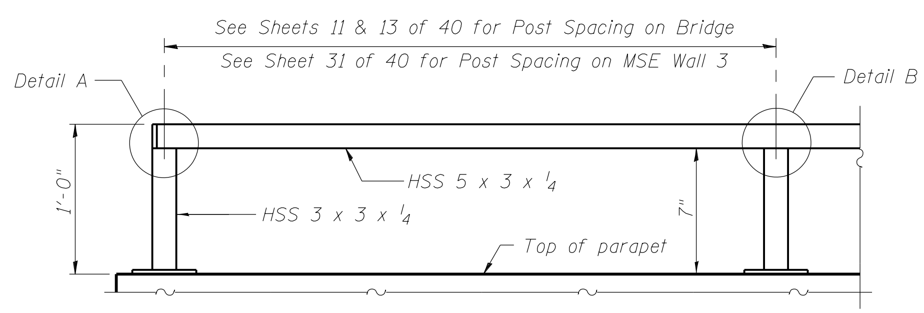

PARAPET RAILING ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - One Element Rail Similar)



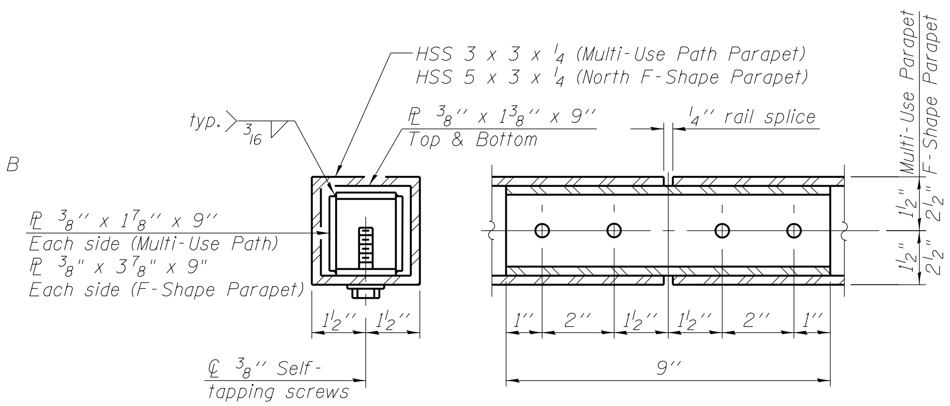

BASE PL



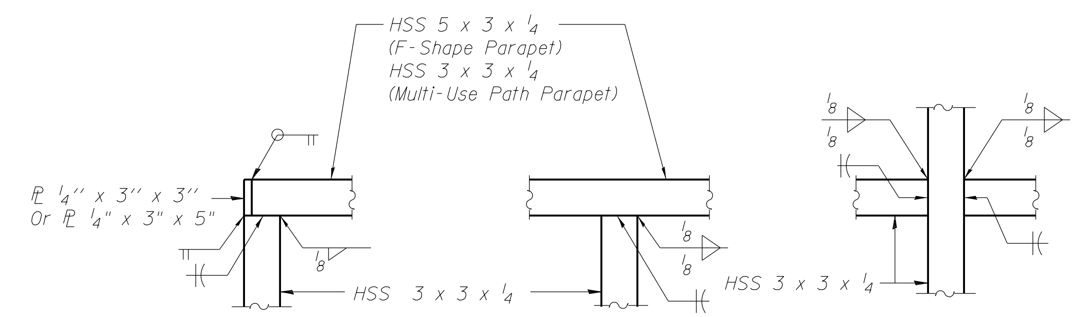

SECTION THRU MULTI-USE PATH
(Section on Bridge shown, section on MSE Wall 3 similar)




PARAPET RAILING ELEVATION
(At North F-Shape Parapet)



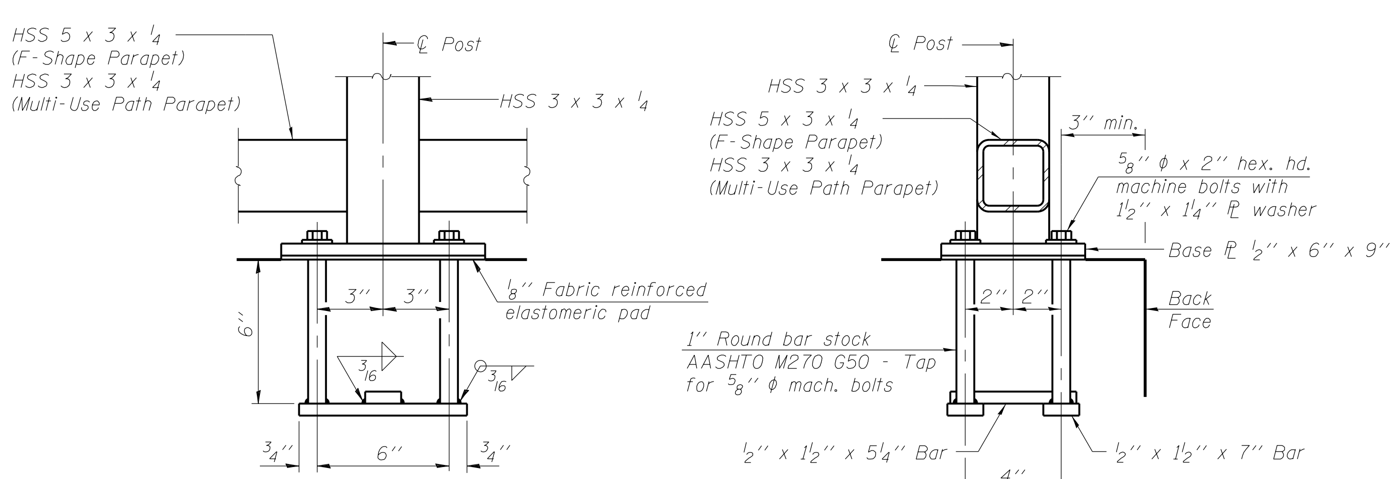

RAIL SPLICE




DETAIL A
(Detail A' similar)

DETAIL B

DETAIL C




ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

## NOTES:

1. All post, railing, splices, anchor devices, bent plates, etc. shall be painted using the Organic Zinc Rich Primer / Epoxy / Urethane Paint Sytem. The entire system shall be shop applied. The color of the final finish coat shall be Dark Bronze. The color shall be submitted by the Contractor for approval by the Kane County Division of Transportation.
2. All structural steel tubing, post, and railing for parapet and pedestrian railings shall be CVN tested according to 1006.34(b) of the Standard Specifications.

## BILL OF MATERIAL

### BRIDGE

| Item | Unit | Quantity |
|---|---|---|
| Parapet Railing | Foot | 144 |
| Pedestrian Railing | Foot | 144 |

### MSE Wall 3

| Item | Unit | Quantity |
|---|---|---|
| Parapet Railing | Foot | 146 |
| Pedestrian Railing | Foot | 148 |



CMT



| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | |
| | DRAWN - CPB | REVISED - | |
| PLOT SCALE = 4.0002 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

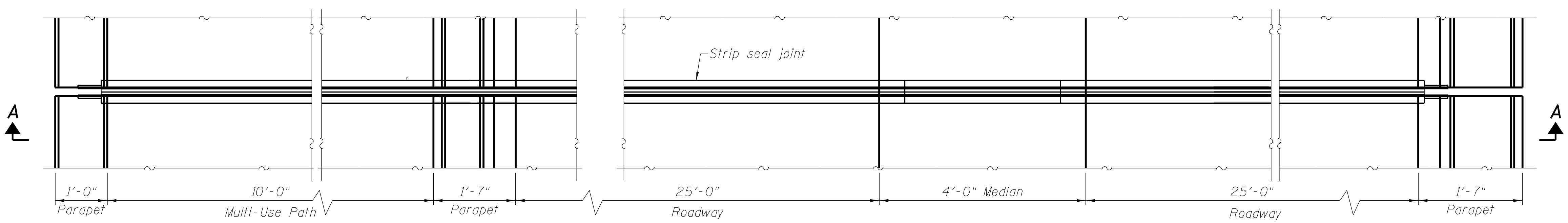
RAILING DETAILS
STRUCTURE NO. 045-3077

SCALE: SHEET 14 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 287 |

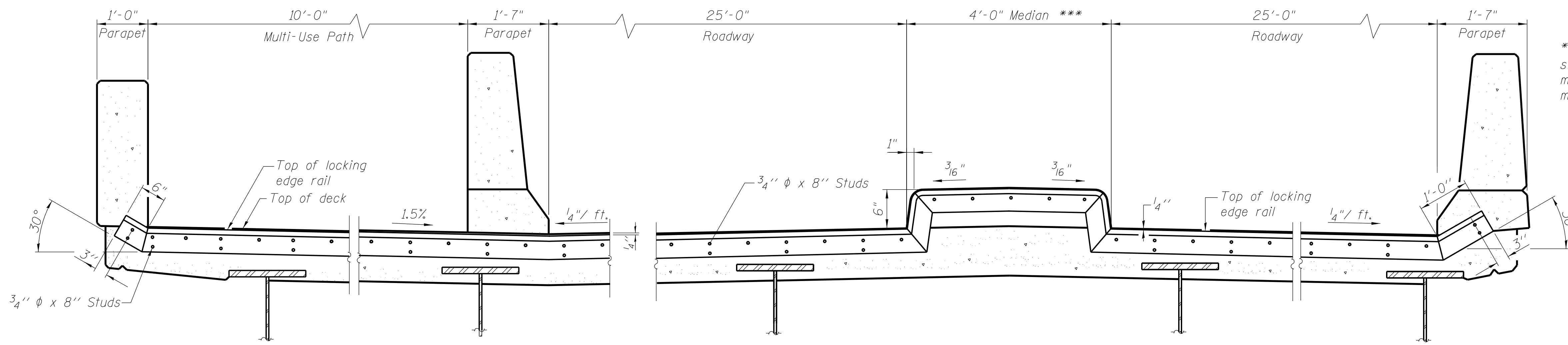
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT



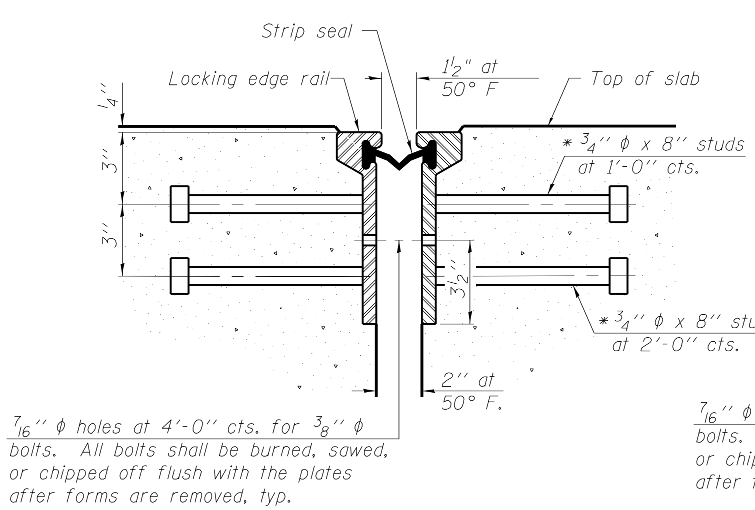

## PLAN

(West side shown, east side similar)

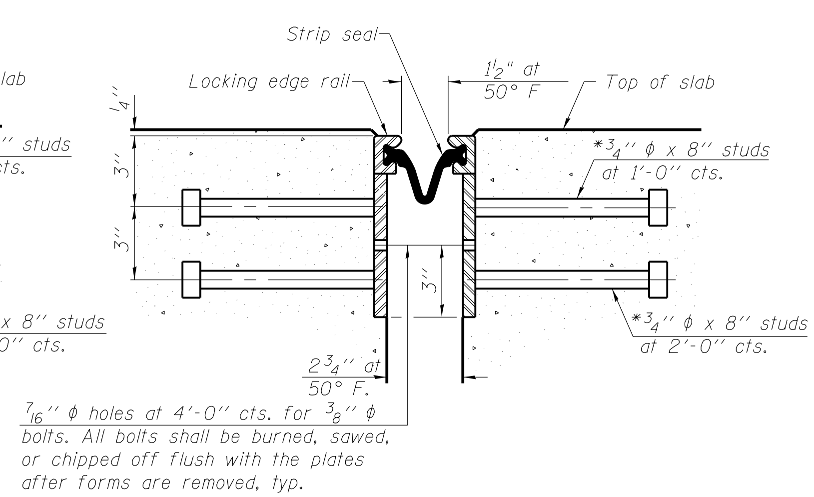



** Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

## SECTION A-A

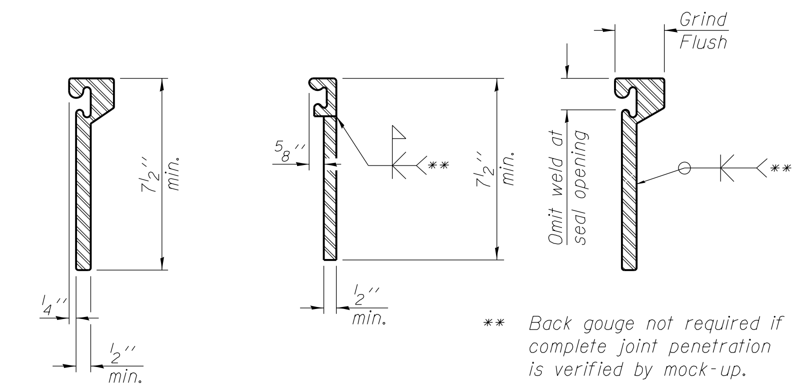



## SECTION THRU ROLLED RAIL JOINT




## SECTION THRU WELDED RAIL JOINT

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




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

## ROLLED EXTRUDED RAIL

## WELDED RAIL

## LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

## 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 a 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.

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 ft. of curbs shall be welded.

## BILL OF MATERIAL

| Item | Unit | Total |
|---|---|---|
| Preformed Joint Strip Seal | Foot | 138 |

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\Kane\CO\13296-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-16-str-045-3077_Strip Seal_cmt.dgn

CMT



| | | |
|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - |
| | DRAWN - CJW | REVISED - |
| PLOT SCALE = 2.0001 ' / in. | CHECKED - JTH | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

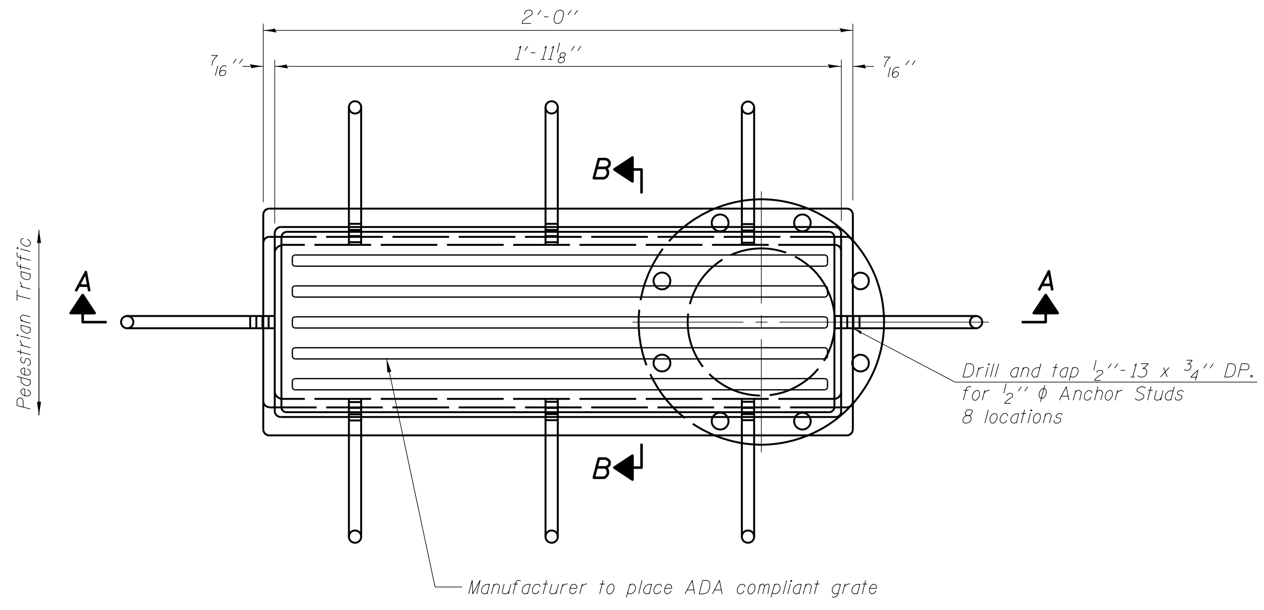
**STRIP SEAL JOINT DETAILS**
**STRUCTURE NO. 045-3077**

SCALE: SHEET 15 OF 40 SHEETS STA. TO STA.

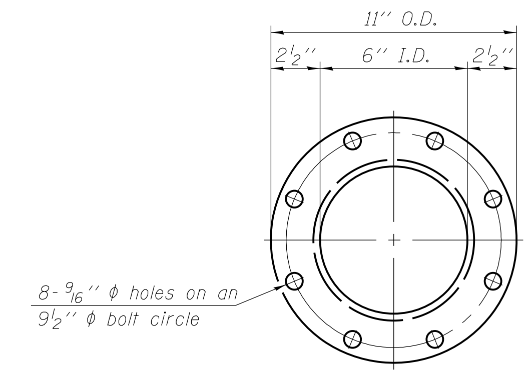
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 288 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT




PLAN




## 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.

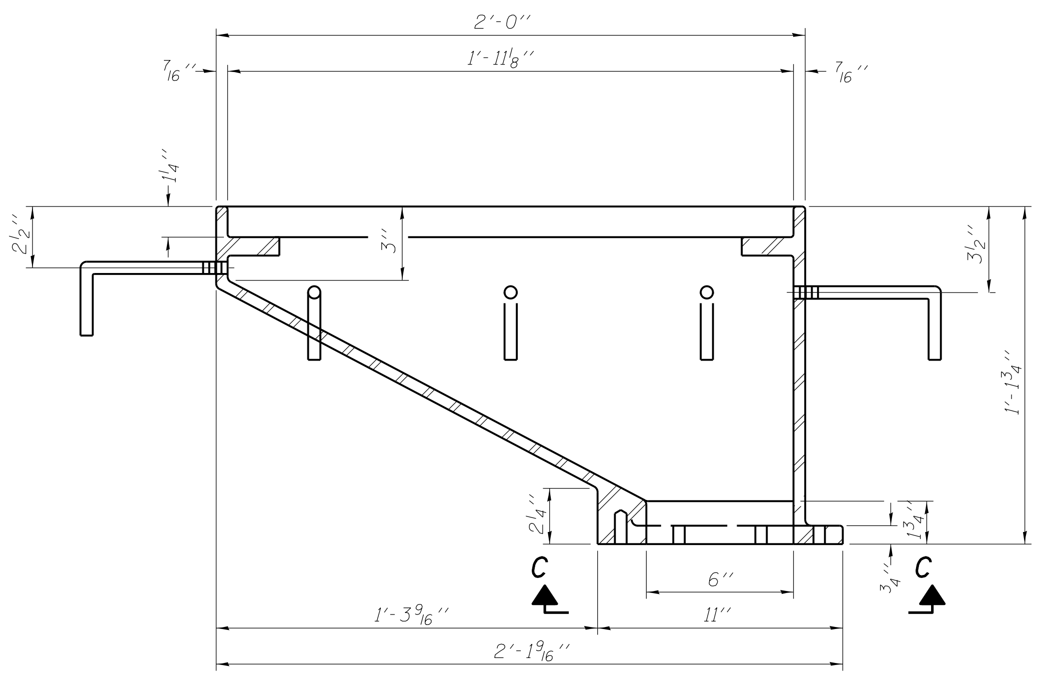
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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.

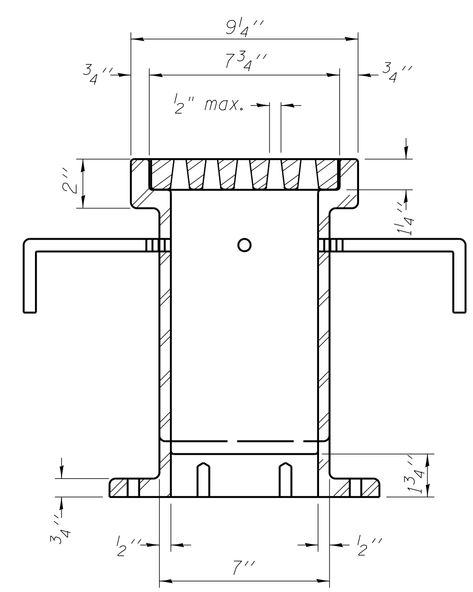
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, (Special).

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.

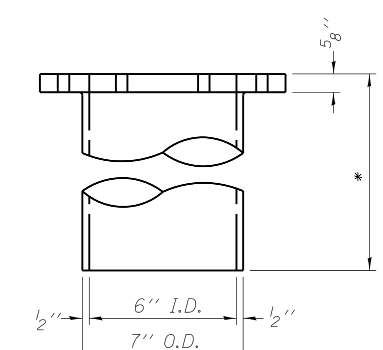



SECTION A-A

See Sheet 8 of 40 for scupper location relative to parapet.

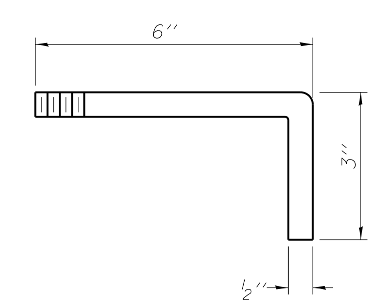



SECTION B-B

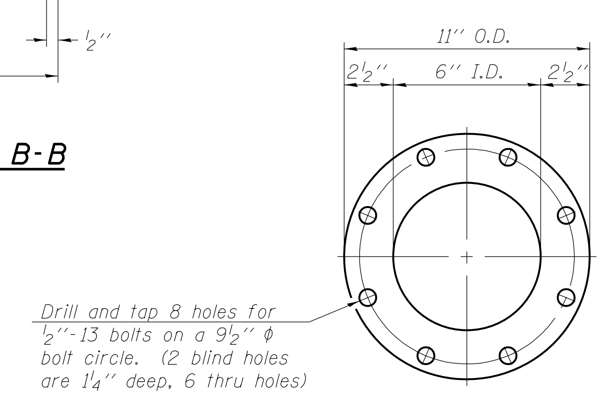



DOWNSPOUT

*Contractor to verify need for downspout. Coordinate with drainage system.




ANCHOR STUD DETAIL




VIEW C-C

## BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|---|---|---|
| Drainage Scuppers, (Special) | Each | 2 |

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD_Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-17-str-045-3077-DS-11 Scupper Details.cmt.dgn

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| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION |
| | DRAWN - CJW | REVISED - | |
| PLOT SCALE = 2.0001 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

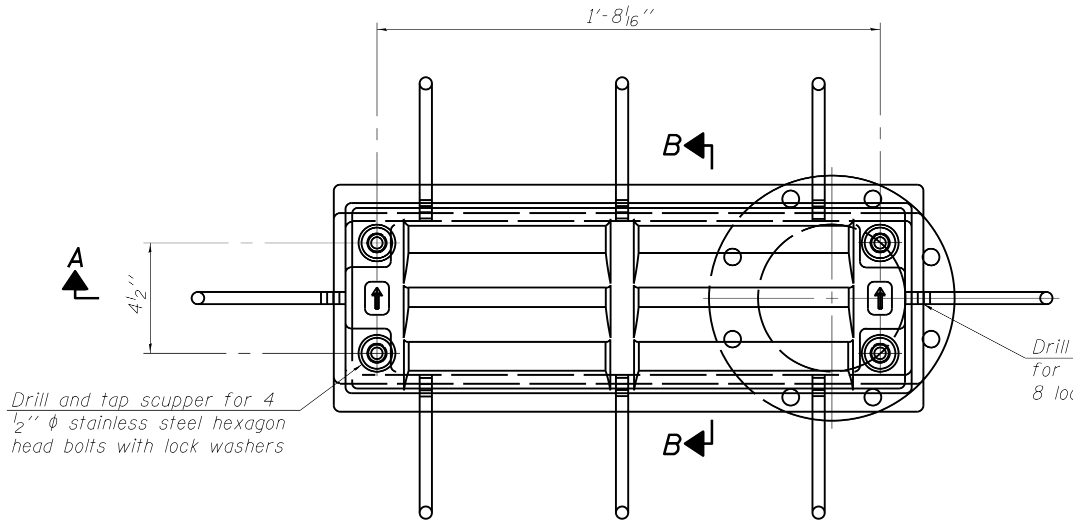
DRAINAGE SCUPPER (SPECIAL)
STRUCTURE NO. 045-3077

SCALE: SHEET 16 OF 40 SHEETS STA. TO STA.

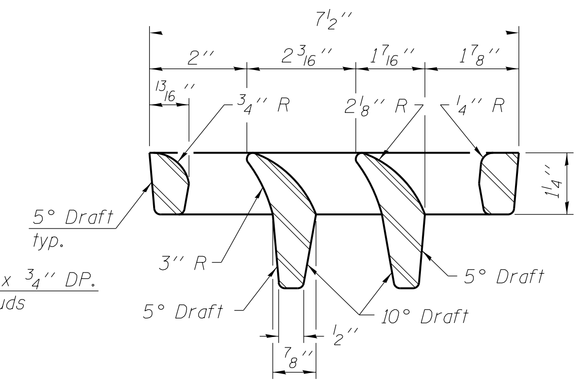
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 289 |

CONTRACT NO. 61G02

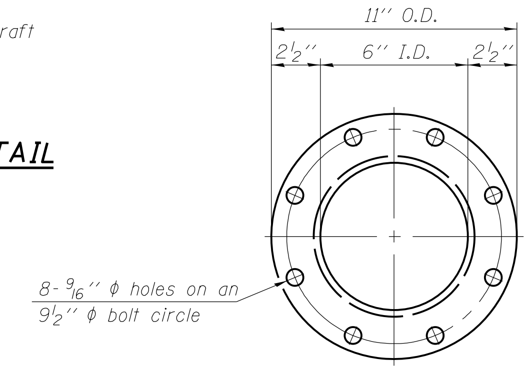
ILLINOIS FED. AID PROJECT




PLAN




VANE GRATE DETAIL




# 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.

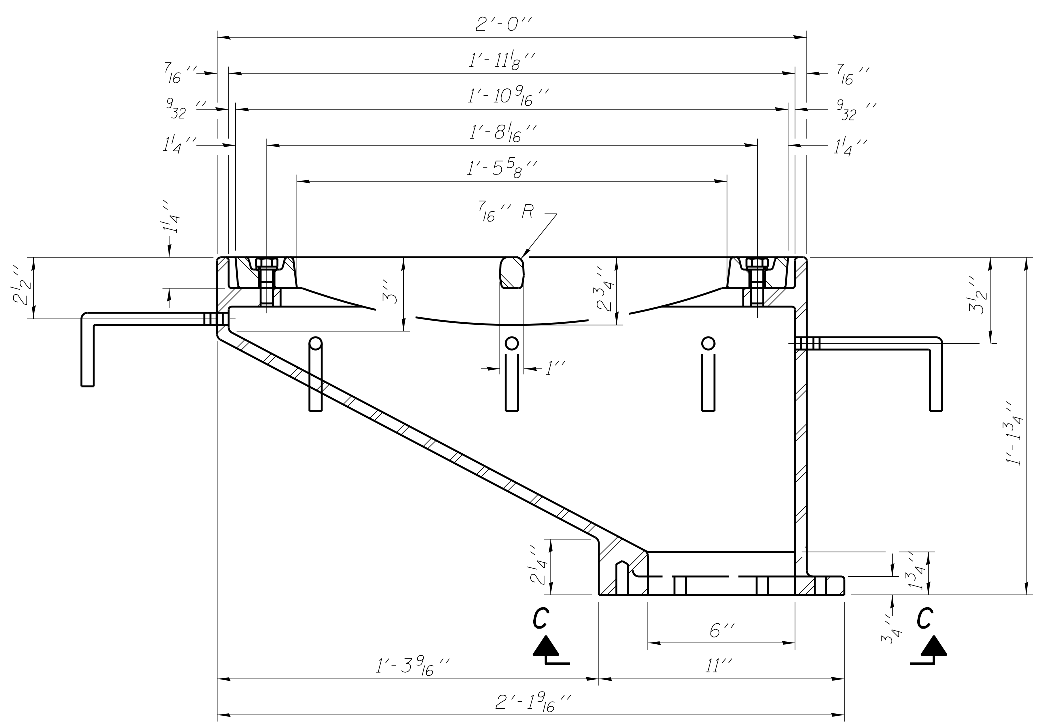
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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.

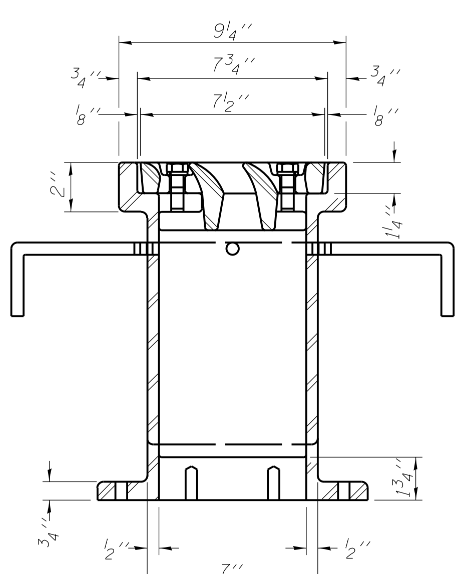
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

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.

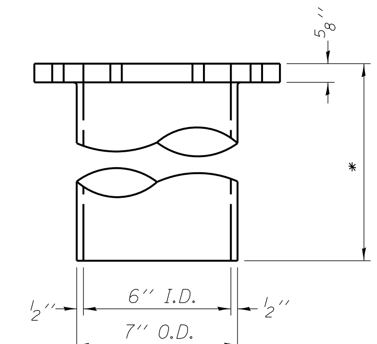



SECTION A-A

See Sheet 8 of 40 for scupper location relative to parapet.

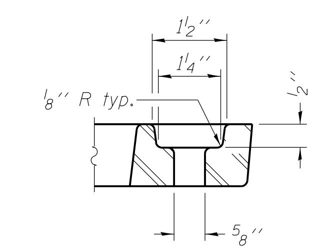



SECTION B-B

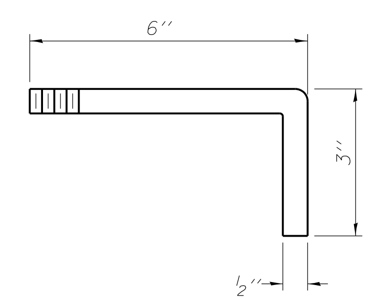



DOWNSPOUT

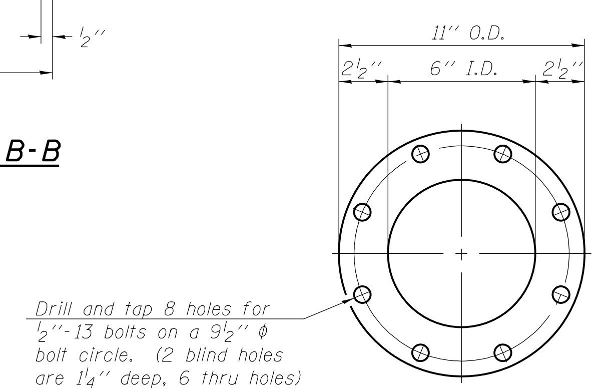
*Contractor to verify need for downspout. Coordinate with drainage system.




BOLT HOLE DETAIL




ANCHOR STUD DETAIL




VIEW C-C

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|---|---|---|
| Drainage Scupper, DS-12 | Each | 8 |

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13246-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-18-str-045-3077 DS-12 Scupper Details.cms.dgn

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| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | |
| | DRAWN - CJW | REVISED - | |
| PLOT SCALE = 2.0001 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

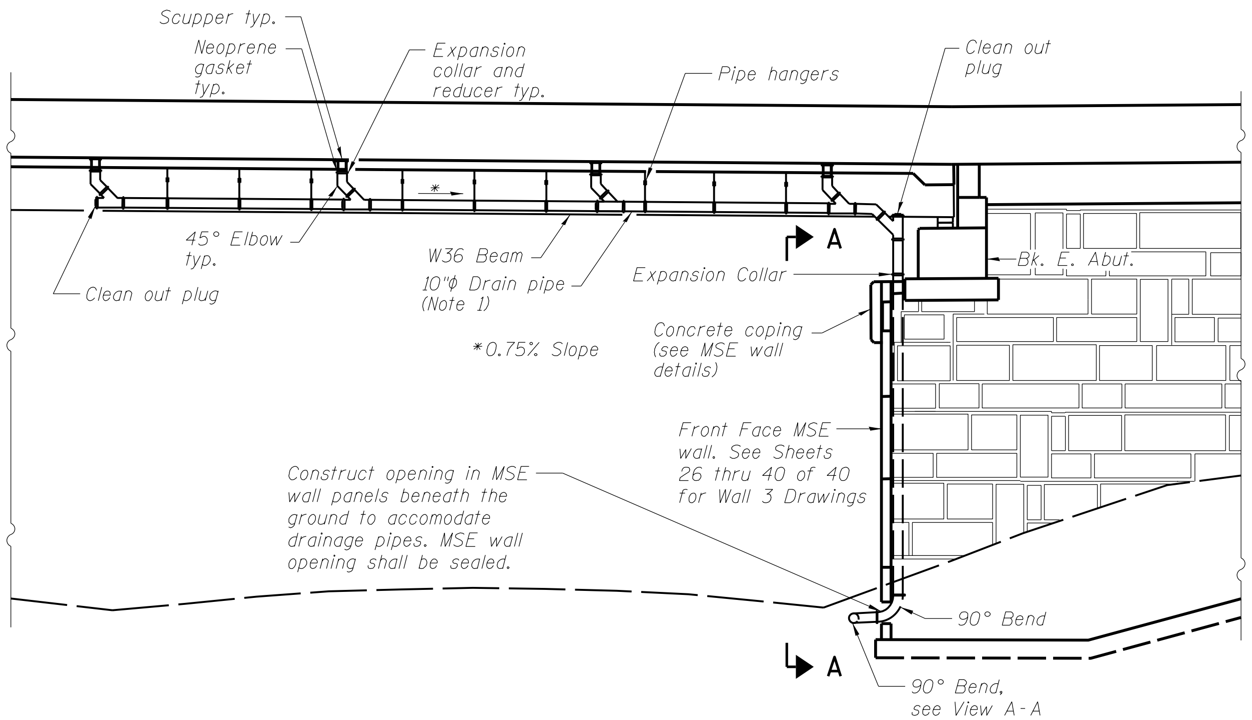
DRAINAGE SCUPPER DS-12
STRUCTURE NO. 045-3077

SCALE: SHEET 17 OF 40 SHEETS STA. TO STA.

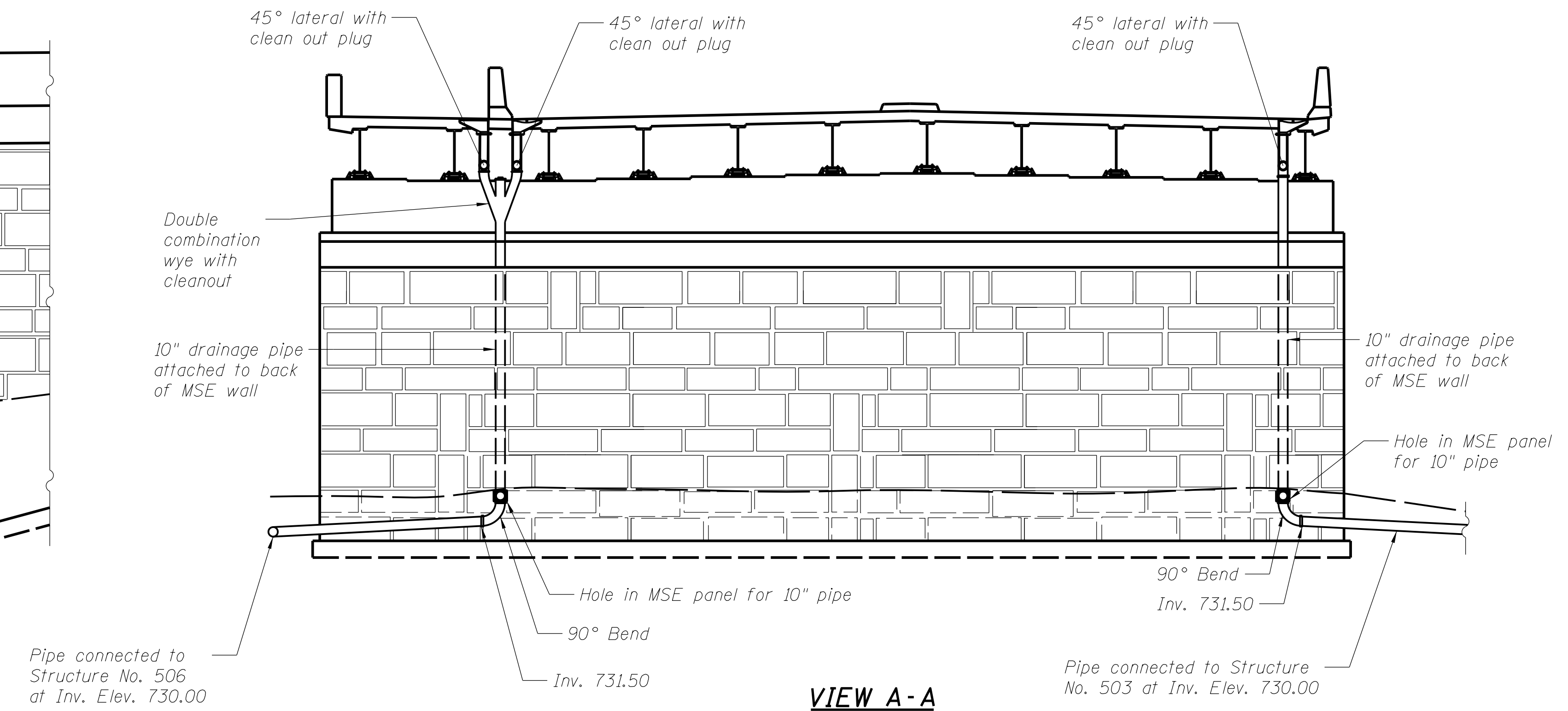
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 290 |

CONTRACT NO. 61G02

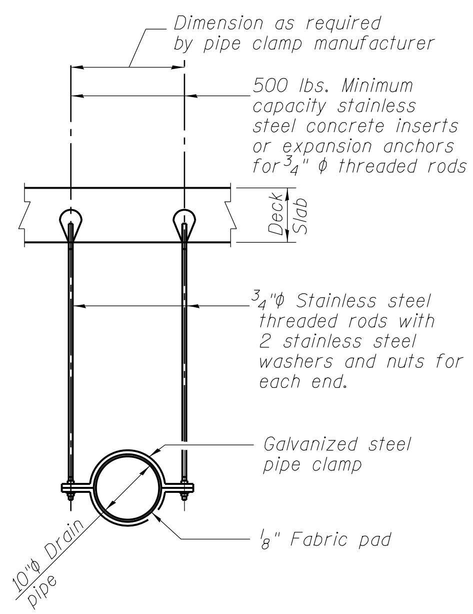
ILLINOIS FED. AID PROJECT



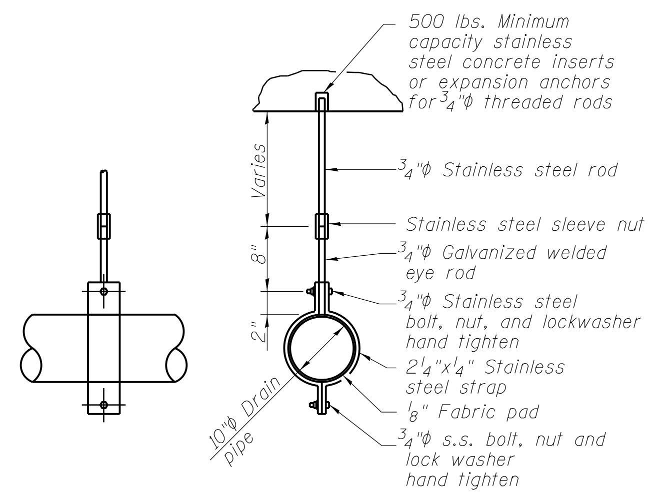

## ELEVATION
(Viewing North)




## VIEW A-A

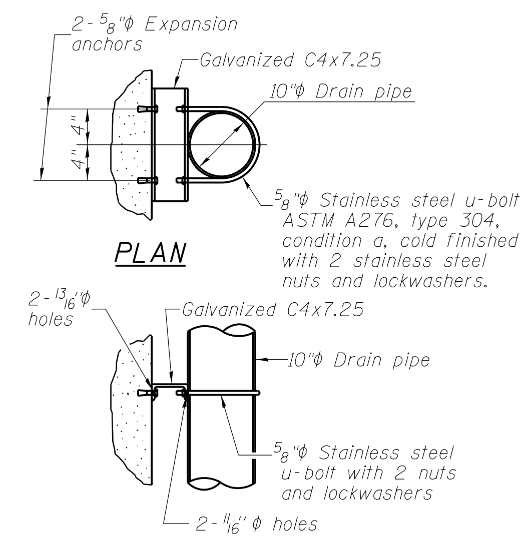



## PIPE HANGER DETAILS



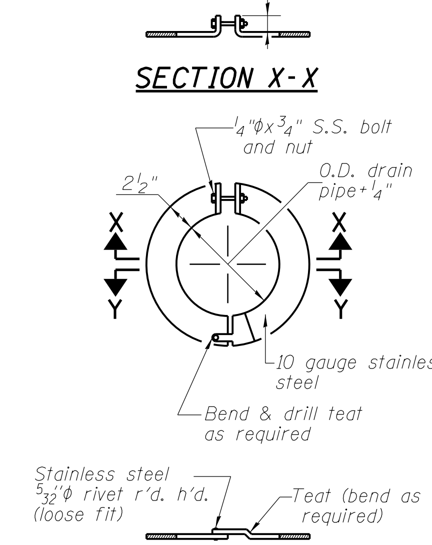

ELEVATION TYPICAL SECTION

## ALTERNATE PIPE HANGER DETAIL




ELEVATION

## PIPE SUPPORT DETAIL




## DETAIL OF EXPANSION COLLAR

## NOTES:

1. Maintain 10"φ drain pipe above bottom flange of beams.
2. Bolt pattern and size in drain pipe flange to match scupper flange.
3. Approximate lengths from scupper to abutment or between downspouts shown on plans. Contractor to determine actual quantities of pipe and fittings required. Paid for as Drainage System.
4. DS-12 Scuppers drainage system shown, Drainage Scuppers, (Special) similar.
5. See Drainage Sheets for drainage structure and pipe details.

## BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|---|---|---|
| Drainage System | L. Sum | 1 |

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| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - | |
| | DRAWN - GLD | REVISED - | |
| PLOT SCALE = 60.0027 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

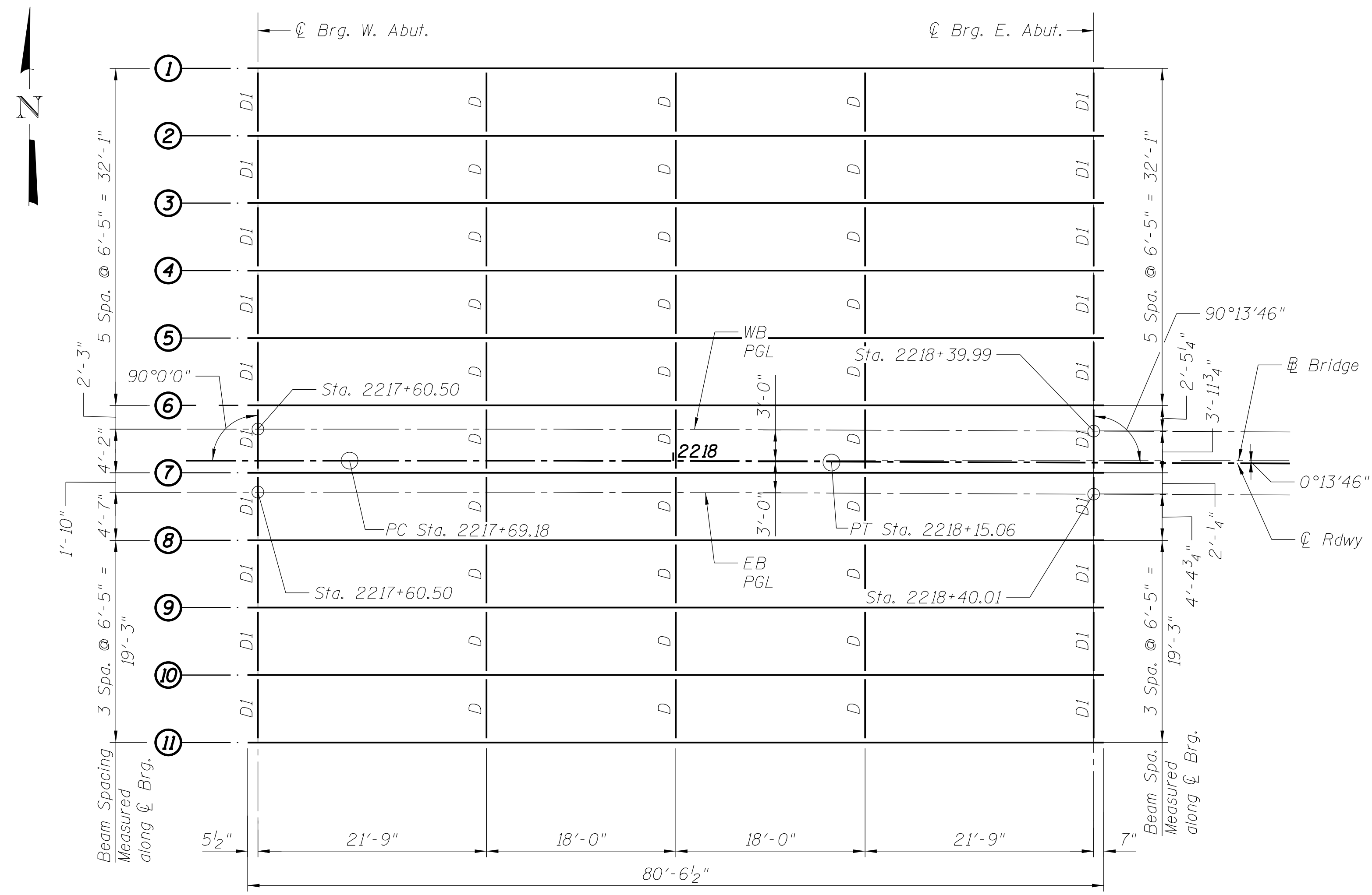
**DECK DRAINAGE DETAILS**
**STRUCTURE NO. 045-3077**

SCALE: SHEET 18 OF 40 SHEETS STA. TO STA.

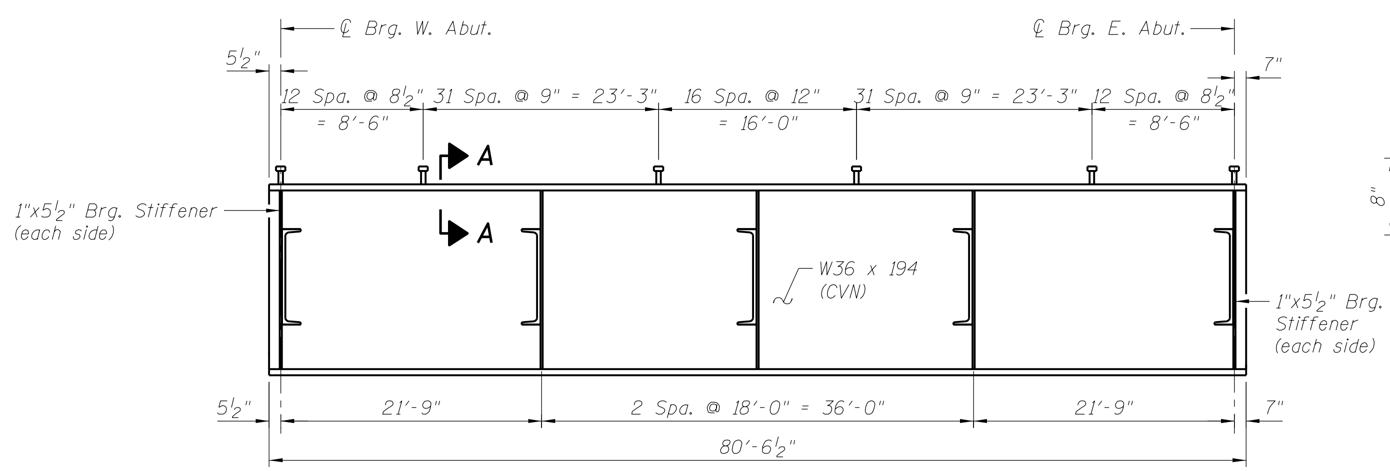
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 291 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

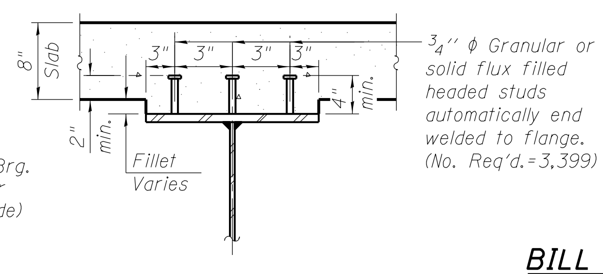



## PLAN




## BEAM ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.




## SECTION A-A

| INTERIOR BEAM MOMENT TABLE | | |
|---|---|---|
| | | 0.5 Span |
| $I_s$ | $(in^4)$ | 12,100 |
| $I_c(n)$ | $(in^4)$ | 30,661 |
| $I_c(3n)$ | $(in^4)$ | 22,186 |
| $I_c(cr)$ | $(in^4)$ | - |
| $S_s$ | $(in^3)$ | 663 |
| $S_c(n)$ | $(in^3)$ | 960 |
| $S_c(3n)$ | $(in^3)$ | 862 |
| $S_c(cr)$ | $(in^3)$ | - |
| DC1 | (k/') | 0.87 |
| $M_{DC1}$ | ('k) | 693 |
| DC2 | (k/') | 0.20 |
| $M_{DC2}$ | ('k) | 159 |
| DW | (k/') | 0.23 |
| $M_{DW}$ | ('k) | 179 |
| LLDF | | 0.562 |
| $M_{LL+IM}$ | ('k) | 1,003 |
| $M_u$ (Strength I) | ('k) | 3,089 |
| $\phi_f M_n$ | ('k) | 4,749 |
| $f_s$ DC1 | (ksi) | 12.5 |
| $f_s$ DC2 | (ksi) | 2.2 |
| $f_s$ DW | (ksi) | 2.5 |
| $f_s$ (LL+IM) | (ksi) | 12.5 |
| $f_s$ (Service II) | (ksi) | 33.5 |
| $0.95R_hF_{yf}$ | (ksi) | 47.5 |
| $f_s$ (Total)(Strength I) | (ksi) | 44.1 |
| $\phi_f F_n$ | (ksi) | 50.0 |
| $V_f$ | (k) | 35.5 |

| BEAM REACTION TABLE | | | |
|---|---|---|---|
| | | Abutment | |
| | | Interior | Exterior |
| LLDF | | 0.701 | 0.508 |
| OCF | | - | 1.00 |
| $R_{DC1}$ | (k) | 35.6 | 32.1 |
| $R_{DC2}$ | (k) | 8.0 | 8.0 |
| $R_{DW}$ | (k) | 9.0 | 8.9 |
| $R_{LL}$ | (k) | 55.2 | 49.6 |
| $R_{IM}$ | (k) | 13.3 | 11.4 |
| $R_{Total}$ | (k) | 121.2 | 110.0 |

$I_s$, $S_s$: Non-composite moment of inertia and section modulus of the steel section used for computing $f_s$ (Total-Strength I, and Service II) due to non-composite dead loads (in.$^4$ and in.$^3$).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing $f_s$ (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.$^4$ and in.$^3$).

$I_c(3n)$, $S_c(3n)$: 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-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.$^4$ and in.$^3$).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing $f_s$ (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.$^4$ and in.$^3$).

DC1: Un-factored non-composite dead load (kips/ft.).

$M_{DC1}$: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

$M_{DC2}$: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

$M_{DW}$: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

LLDF: Live Load Distribution Factor

$M_{LL+IM}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

$M_u$ (Strength I): Factored design moment (kip-ft.).
$1.25\,(M_{DC1} + M_{DC2}) + 1.5\,M_{DW} + 1.75\,M_{LL+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

$f_s$ DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
$M_{DC1} / S_{nc}$

$f_s$ DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

$f_s$ DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

$f_s$ (LL+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{LL+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

$f_s$ (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\,f_s(_{LL+IM})$

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\,(f_{sDC1} + f_{sDC2}) + 1.5\,f_{sDW} + 1.75\,f_s(_{LL+IM})$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

$V_f$: Maximum factored shear range in span computed according to Article 6.10.10.

OCF: Obtuse Correction Factor

Note:
$M_{LL}$ and $R_{LL}$ include the effects of centrifugal force and superelevation.

## BILL OF MATERIAL

| Item | Unit | Total |
|---|---|---|
| Stud Shear Connectors | Each | 3,399 |

## TOP OF BEAM ELEVATIONS

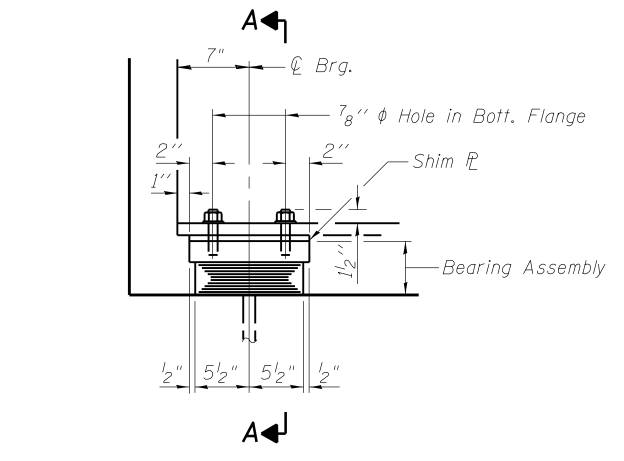
(For Fabrication Only)

| Location | Beam 1 | Beam 2 | Beam 3 | Beam 4 | Beam 5 | Beam 6 | Beam 7 | Beam 8 | Beam 9 | Beam 10 | Beam 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ℄ Brg. W. Abut. | 764.22 | 764.13 | 764.12 | 764.25 | 764.39 | 764.52 | 764.61 | 764.47 | 764.34 | 764.21 | 764.07 |
| ℄ Brg. E. Abut. | 763.65 | 763.55 | 763.54 | 763.67 | 763.81 | 763.94 | 764.03 | 763.90 | 763.77 | 763.63 | 763.50 |

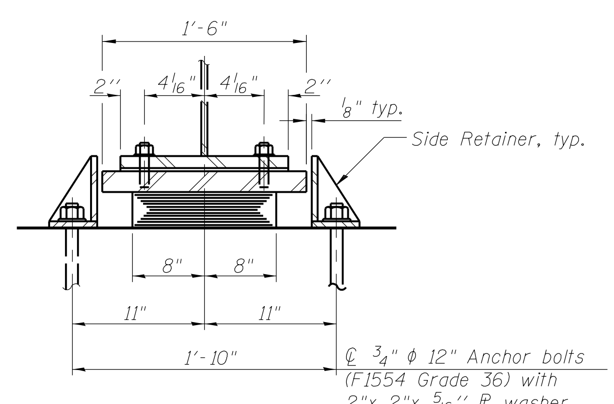
## NOTES:

1. All structural steel shall be AASHTO M270 Grade 50W.
2. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. Top of beam elevations shown on this sheet do not include adjustments for the ⅜" polymer overlay.

LOCAL COORDINATE SYSTEM

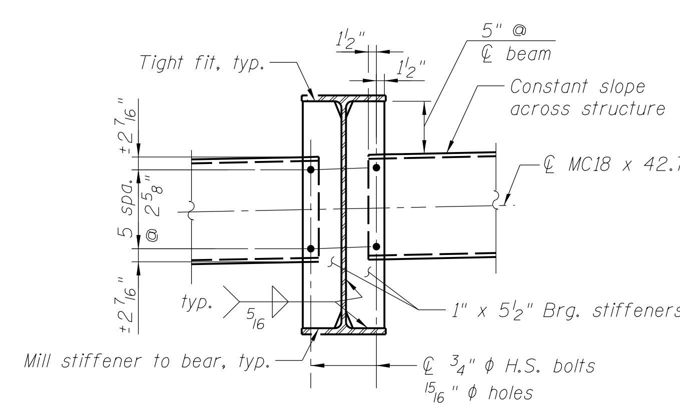



ELEVATION

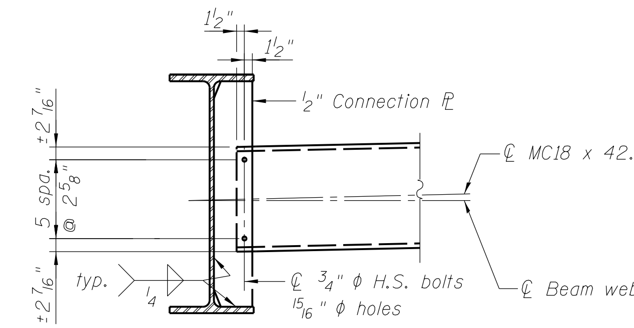



SECTION A-A

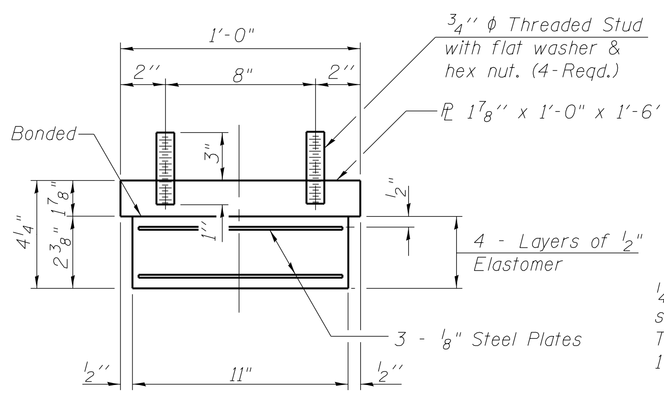
TYPE I ELASTOMERIC EXP. BRG. AT EAST ABUT.



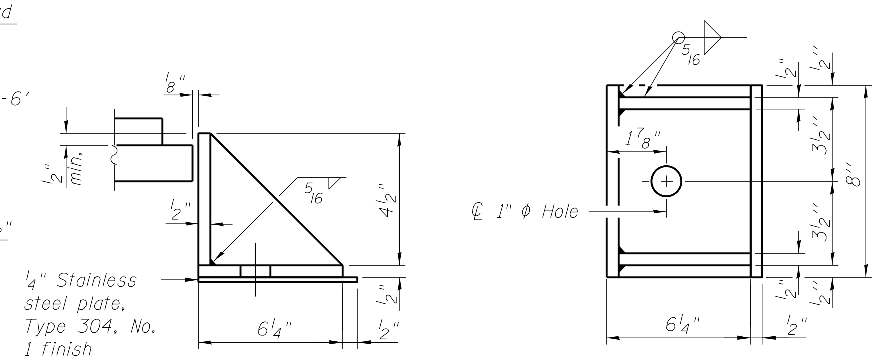

END DIAPHRAGM "D1"




INTERIOR DIAPHRAGM "D"

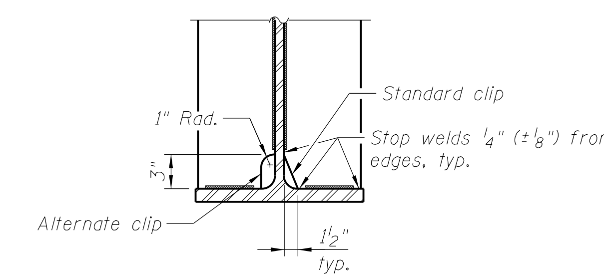



BEARING ASSEMBLY



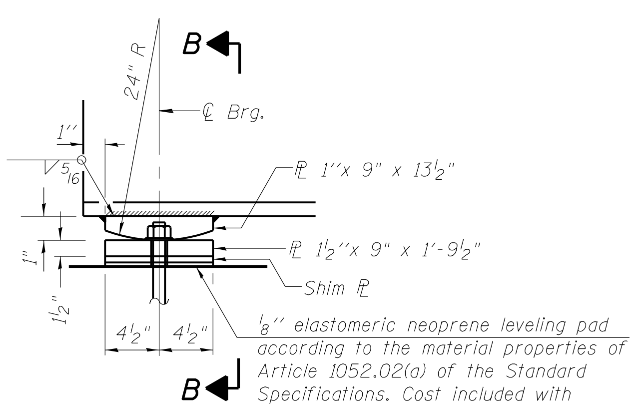

SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

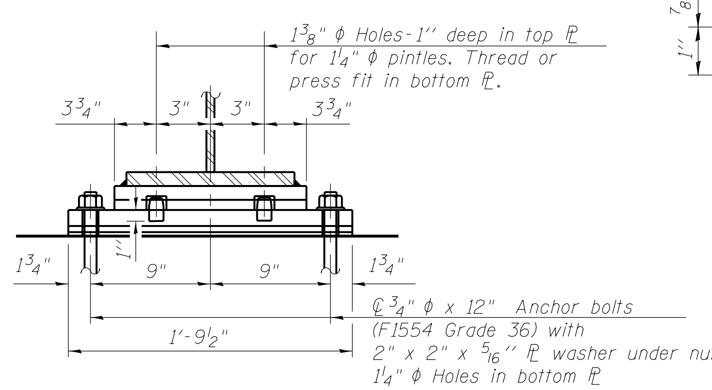



WELD LIMITS AND CLIP DETAILS

Note:
Shim plates shall not be placed under Bearing Assembly.

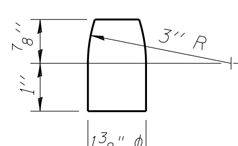



ELEVATION




SECTION B-B

FIXED BEARING AT WEST ABUT.




PINTLE

## NOTES:

1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
2. Anchor bolts at fixed bearings shall be installed in holes drilled after the supported member is in place.
3. Anchor bolts for side retainers may be cast in place or installed in holes drilled after members are in place.
4. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
5. Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
6. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
7. Two hardened washers required for each set of oversized holes at diaphragms.
8. Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost.

## BILL OF MATERIAL

| Item | Unit | Total |
|---|---|---|
| Elastomeric Bearing Assembly Type I | Each | 11 |
| Anchor Bolts 3/4" | Each | 44 |



| | | | |
|---|---|---|---|
| CMT | USER NAME = Denise Herrera | DESIGNED - PA | REVISED - |
| License No. 184-000613 | | DRAWN - PA | REVISED - |
| | PLOT SCALE = 3.0001 ' / in. | CHECKED - JTH | REVISED - |
| | PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

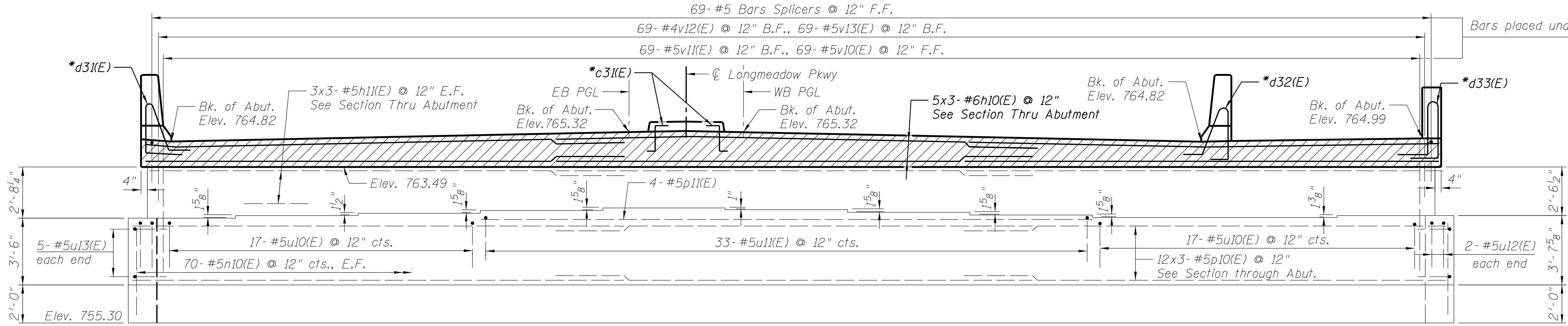
FRAMING AND BEARING DETAILS
STRUCTURE NO. 045-3077

SCALE: SHEET 20 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 293 |

CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT

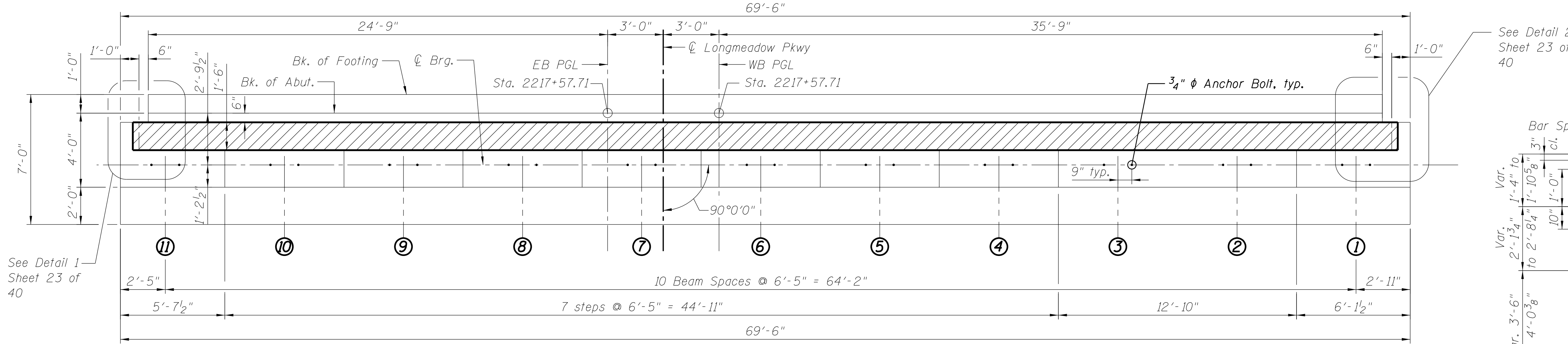



ELEVATION
(Looking West)

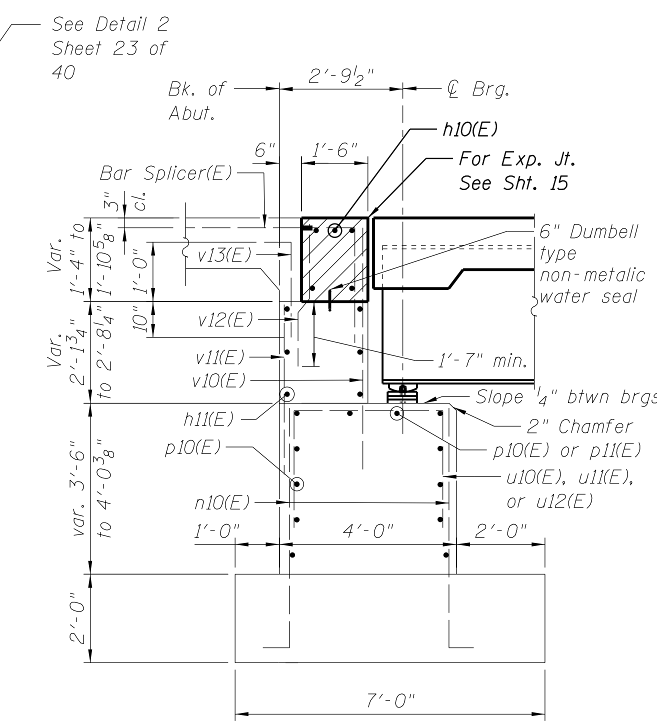
* See Sheets 12 & 13 of 40 for billing and details

## ABUTMENT SEAT ELEVATION

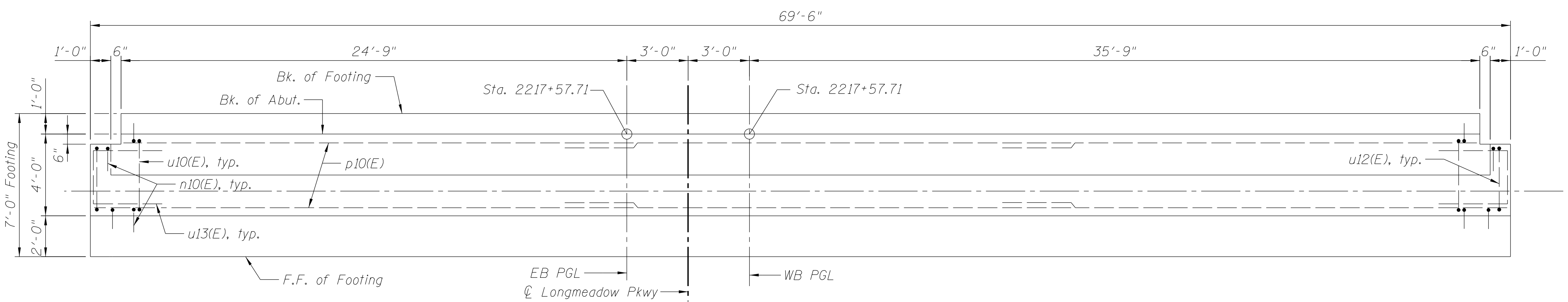
| Beam | Elevation |
|---|---|
| 1 | 760.95 |
| 2 | 760.84 |
| 3 | 760.84 |
| 4 | 760.98 |
| 5 | 761.11 |
| 6 | 761.25 |
| 7 | 761.33 |
| 8 | 761.20 |
| 9 | 761.06 |
| 10 | 760.94 |
| 11 | 760.80 |




TOP VIEW




SECTION THROUGH ABUTMENT




FOOTING & ABUTMENT SEAT PLAN

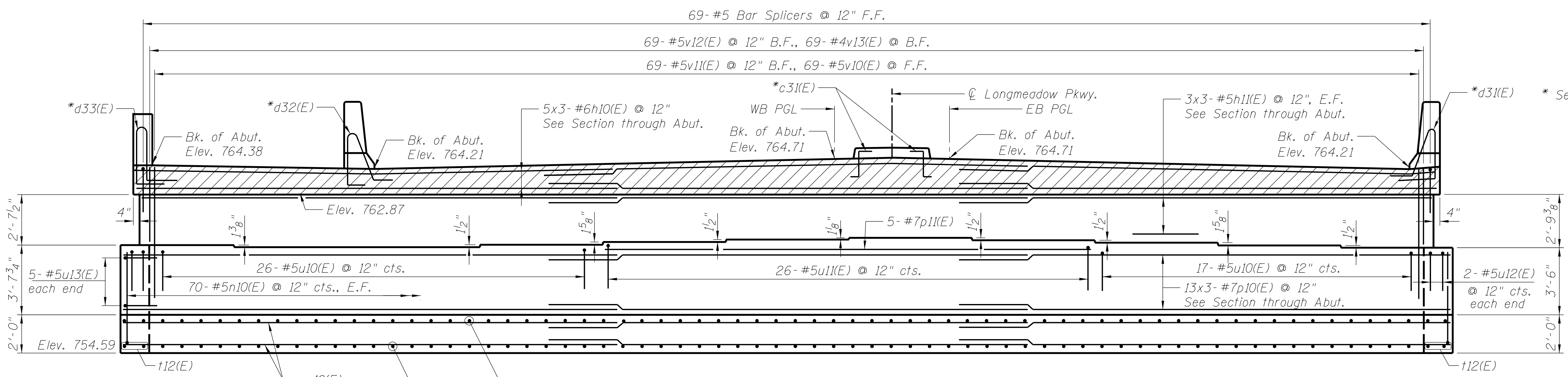
## MIN. BAR LAP

#5 - 3'-7"
#6 - 4'-4"

## NOTES:

1. Abutment cap, footing, and backwall constructed under Contract (C-1). Concrete linework, reinforcement, dimensions, and elevations for these elements are shown for information only.
2. Hatched block section to be constructed under this Contract (C-2). Area to be poured after superstructure falsework is removed. Quantity of concrete included with Concrete Superstructure.
3. Reinforcement and anchor bolts to be billed under this Contract (C-2) are called out in bolded text. All other reinforcement callouts are for information only.
4. Anchor bolts shall be drilled and set in place according to Section 521.06 of the Standard Specifications.

LOCAL COORDINATE SYSTEM




## ELEVATION
(Looking East)

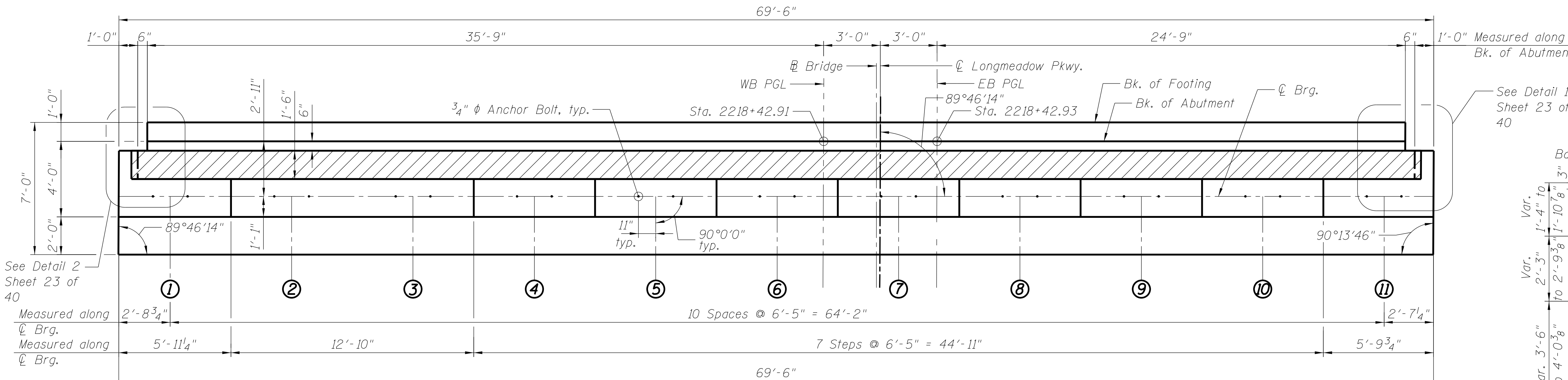
* See Sheets 12 & 13 of 40 for billing and details

**ABUTMENT SEAT ELEVATION**

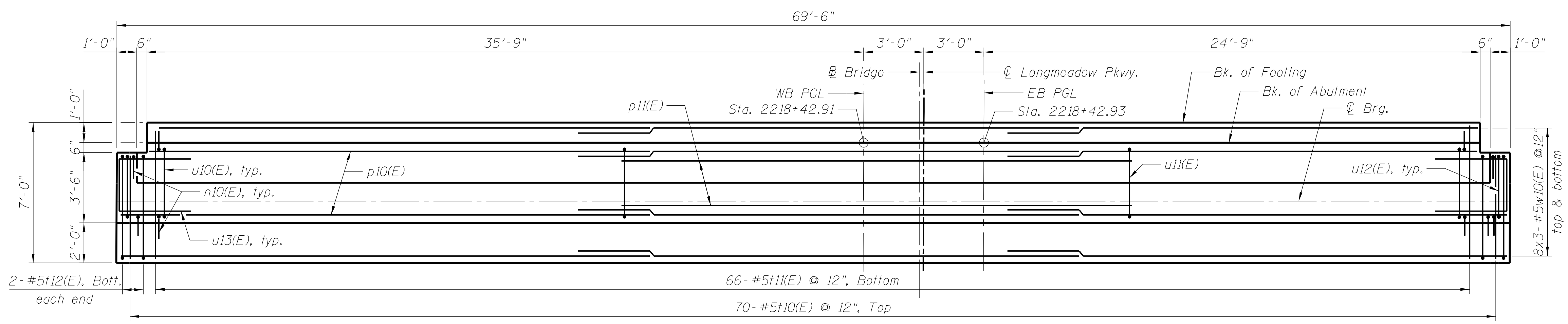
| Beam | Elevation |
|---|---|
| 1 | 760.24 |
| 2 | 760.13 |
| 3 | 760.13 |
| 4 | 760.26 |
| 5 | 760.40 |
| 6 | 760.53 |
| 7 | 760.62 |
| 8 | 760.49 |
| 9 | 760.36 |
| 10 | 760.22 |
| 11 | 760.09 |

**MIN. BAR LAP**

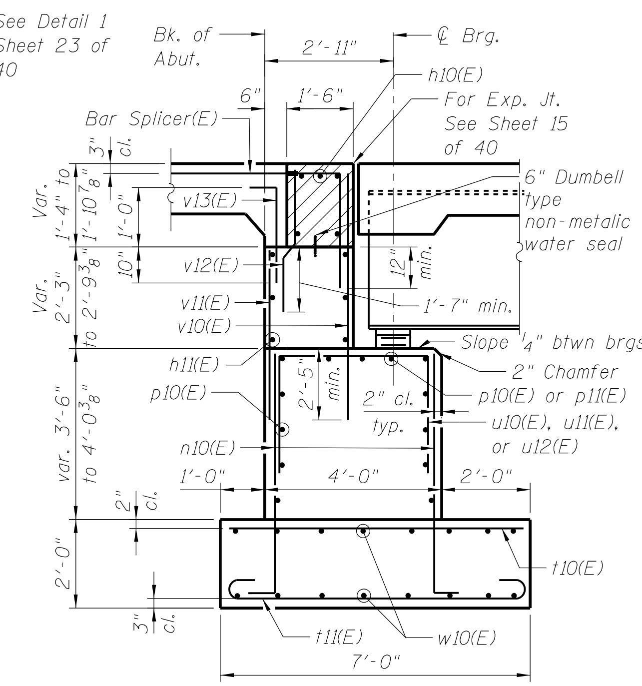
#5 - 3'-7"
#6 - 4'-4"
#7 - 5'-0"




## TOP VIEW




## FOOTING & ABUTMENT SEAT PLAN




## SECTION THROUGH ABUTMENT

## NOTES:

1. Hatched area to be poured after superstructure falsework is removed. Quantity of concrete included with Concrete Superstructure.
2. Space reinforcement to miss anchor bolts.
3. Pour steps monolithically with cap.

LOCAL COORDINATE SYSTEM

| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CPB | REVISED - | |
| | DRAWN - CPB | REVISED - | |
| PLOT SCALE = 6.5003 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

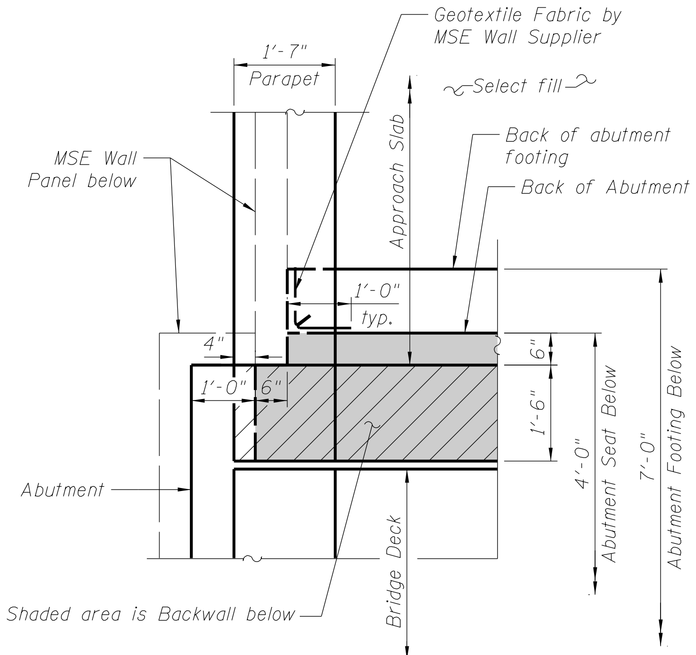
**EAST ABUTMENT**
**STRUCTURE NO. 045-3077**

SCALE: SHEET 22 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 295 |

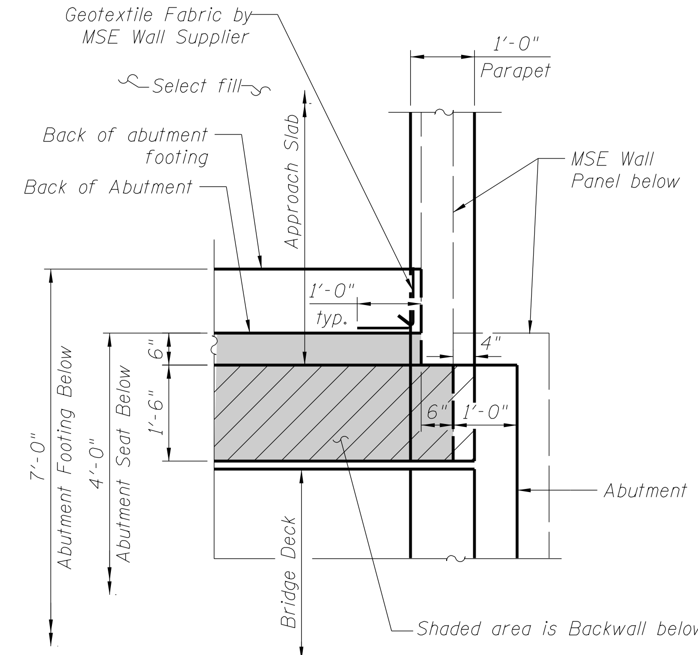
CONTRACT NO. 61G02

ILLINOIS FED. AID PROJECT



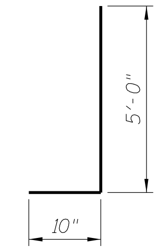

## DETAIL 1

(West abutment shown, east abument similar)

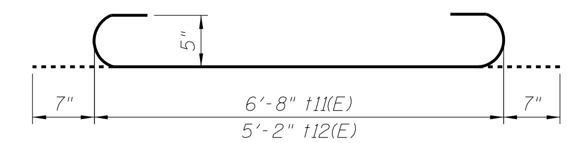



## DETAIL 2

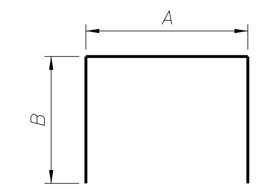
(West abutment shown, east abument similar)




## BAR n10(E)

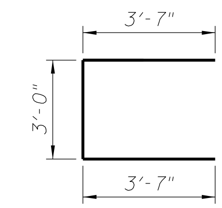



## BARS t11(E) & t12(E)

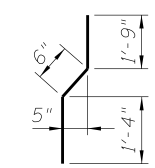



| Bar | A | B |
|---|---|---|
| u10(E) | 3'-8" | 2'-5" |
| u11(E) | 3'-8" | 2'-9" |
| u12(E) | 3'-2" | 2'-5" |

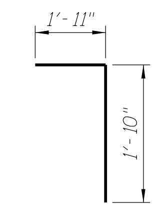
## BARS u10(E), u11(E), & u12(E)




## BAR u13(E)




## BAR v12(E)



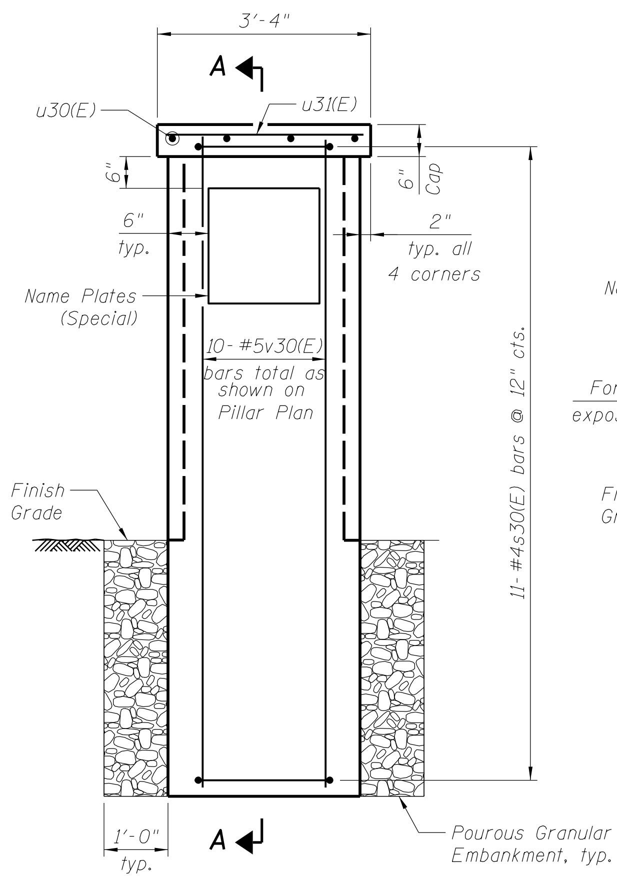

## BAR v13(E)

## EAST ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h10(E) | 15 | #6 | 25'-6" | |
| h11(E) | 18 | #5 | 24'-10" | |
| | | | | |
| n10(E) | 140 | #5 | 5'-10" | |
| | | | | |
| p10(E) | 39 | #7 | 26'-5" | |
| p11(E) | 5 | #7 | 25'-4" | |
| | | | | |
| t10(E) | 70 | #5 | 6'-8" | |
| t11(E) | 66 | #5 | 7'-10" | |
| t12(E) | 4 | #5 | 6'-4" | |
| | | | | |
| u10(E) | 43 | #5 | 8'-6" | |
| u11(E) | 26 | #5 | 9'-2" | |
| u12(E) | 4 | #5 | 8'-0" | |
| u13(E) | 10 | #5 | 10'-2" | |
| | | | | |
| v10(E) | 69 | #5 | 7'-0" | |
| v11(E) | 69 | #5 | 5'-3" | |
| v12(E) | 69 | #4 | 3'-7" | |
| v13(E) | 69 | #5 | 3'-9" | |
| | | | | |
| w10(E) | 48 | #5 | 25'-6" | |
| Concrete Structures | | Cu. Yd. | 86.6 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 8,670 | |
| Concrete Sealer | | Sq. Ft. | 846 | |

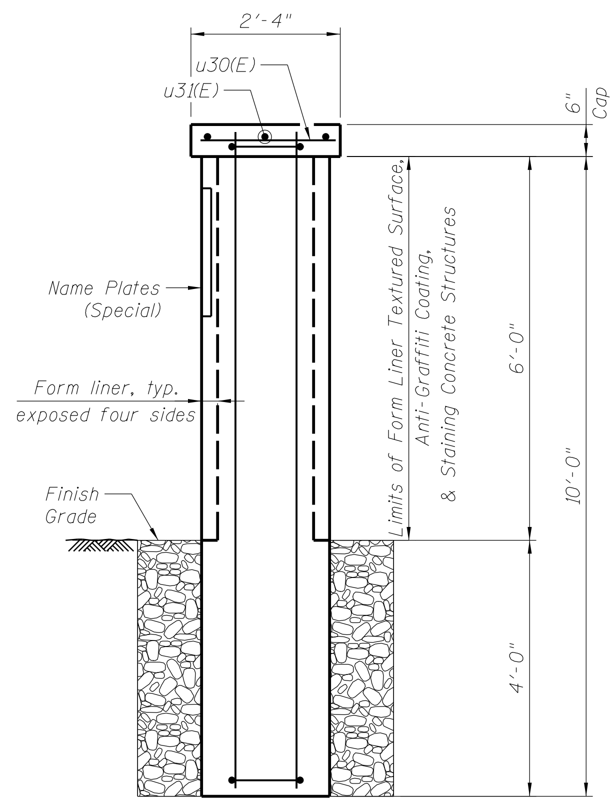
## WEST ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h10(E) | 15 | #6 | 25'-6" | |
| | | | | |
| Reinforcement Bars, Epoxy Coated | | Pound | 580 | |
| Concrete Sealer | | Sq. Ft. | 840 | |

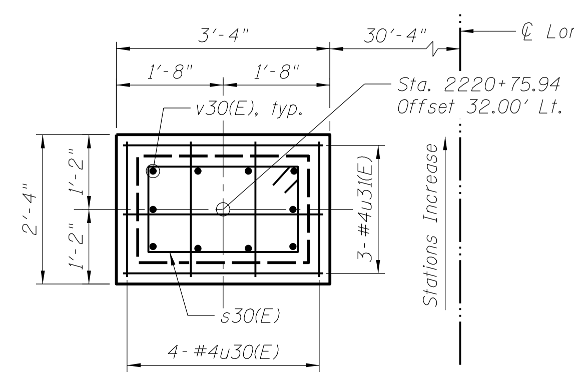



## PILLAR ELEVATION

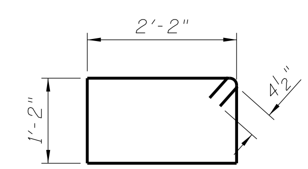
(Looking west)



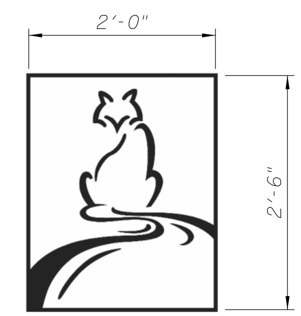

## SECTION A-A




## PILLAR PLAN




## s30(E)




## NAME PLATE (SPECIAL)

(Plate to be mounted on pillar. Design can be obtained from Kane County.)

## PILLAR BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| s30(E) | 11 | #4 | 7'-5" | |
| | | | | |
| u30(E) | 4 | #4 | 2'-0" | |
| u31(E) | 3 | #4 | 3'-0" | |
| | | | | |
| v30(E) | 10 | #4 | 10'-1" | |
| | | | | |
| Porous Granular Embankment | | Cu. Yd. | 2 | |
| Concrete Structures | | Cu. Yd. | 2.3 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 130 | |
| Anti-Graffiti Coating | | Sq. Ft. | 60 | |
| Form Liner Textured Surface, Special | | Sq. Ft. | 60 | |
| Staining Concrete Structures | | Sq. Ft. | 60 | |
| Name Plates (Special) | | Each | 1 | |

FILE NAME = pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\Kane\CO\13296-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-24-str-045-3077_Abutment Details.cmt.dgn

CMT



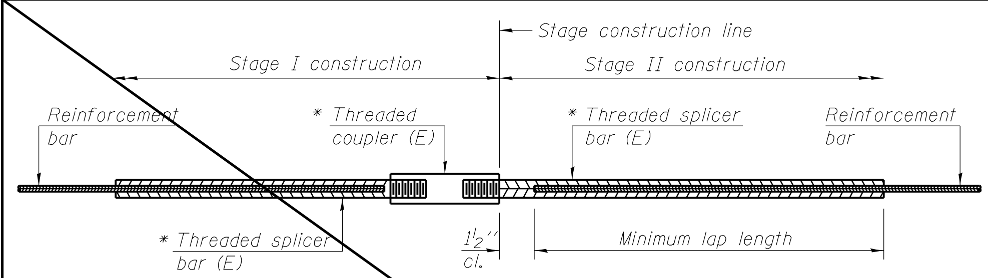
| | | | |
|---|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CPB | REVISED - | |
| | DRAWN - CPB | REVISED - | |
| PLOT SCALE = 3.0001 ' / in. | CHECKED - JTH | REVISED - | |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - | |

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS AND PILLAR DETAILS STRUCTURE NO. 045-3077**

SCALE: SHEET 23 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 296 |
| CONTRACT NO. 61G02 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |




## STANDARD BAR SPLICER ASSEMBLY

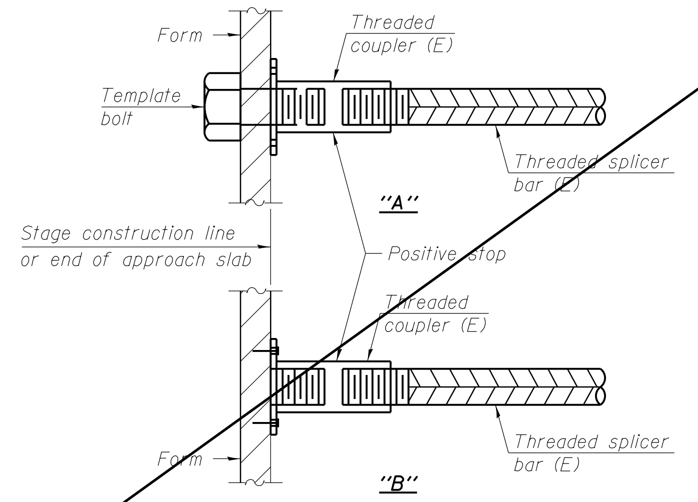
| Minimum Lap Lengths | | | | | | |
|---|---|---|---|---|---|---|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4 | 1'-5'' | 1'-11'' | 2'-1'' | 2'-4'' | 2'-7'' | 2'-11'' |
| 5 | 1'-9'' | 2'-5'' | 2'-7'' | 2'-11'' | 3'-3'' | 3'-8'' |
| 6 | 2'-1'' | 2'-11'' | 3'-1'' | 3'-6'' | 3'-10'' | 4'-5'' |
| 7 | 2'-9'' | 3'-10'' | 4'-2'' | 4'-8'' | 5'-2'' | 5'-10'' |
| 8 | 3'-8'' | 5'-1'' | 5'-5'' | 6'-2'' | 6'-9'' | 7'-8'' |
| 9 | 4'-7'' | 6'-5'' | 6'-10'' | 7'-9'' | 8'-7'' | 9'-8'' |

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$'' + thread length

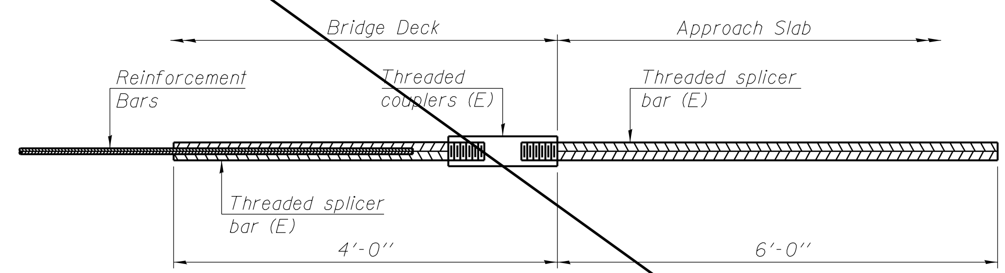
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



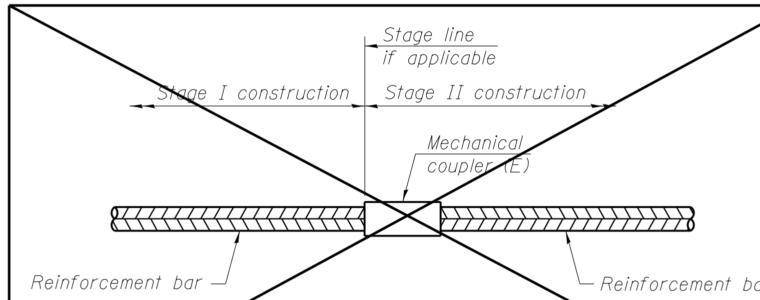

## INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

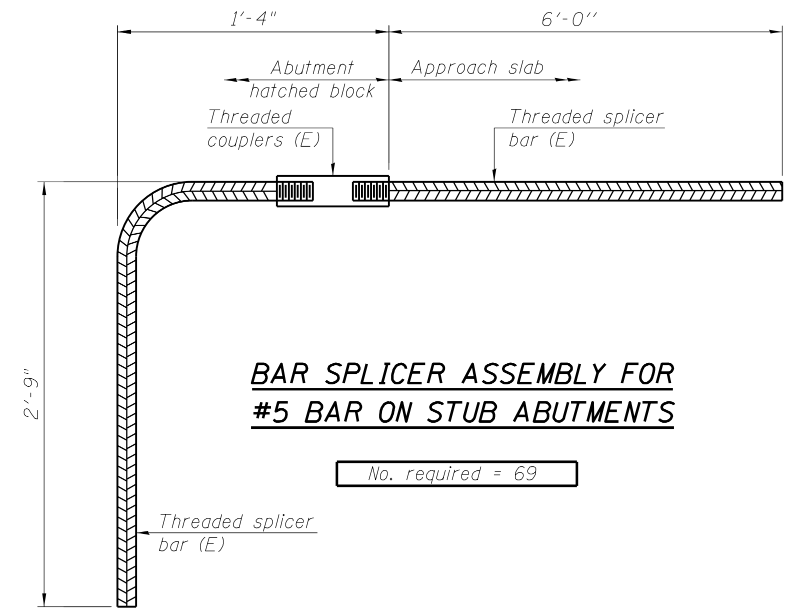



## BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =




## STANDARD MECHANICAL SPLICER




## BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 69

## NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

# BORING LOG S-106

Page 1 of 1

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 731.32 ft
North: 1993523.14 ft
East: 999417.36 ft
Station: 2217+44.06
Offset: 29.19R

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 731.0 | 4-inch thick, black SILTY LOAM --TOPSOIL-- |
| | Medium dense, brown and black SILTY LOAM --FILL-- |
| 728.3 | Very stiff, dark brown SILTY CLAY LOAM with cinders and brick --FILL-- |
| 725.8 | Stiff, brown and gray SILTY CLAY with sand interbeds |
| 723.3 | Dense to very dense, brown GRAVELLY SAND, with cobbles |
| 713.3 | Medium dense, brown SAND |
| 710.8 | Medium dense to very dense, brown and gray GRAVELLY SAND |
| 703.3 | Stiff to hard, gray CLAY LOAM |
| 681.3 | Boring terminated at 50.00 ft |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 1 | 6, 5, 5 | NP | 11 |
| 2 | 5, 7, 6 | 3.50 P | 19 |
| 3 | 6, 8, 9 | 1.64 B | 16 |
| 4 | 8, 23, 29 | NP | 8 |
| 5 | 27, 27, 31 | NP | 10 |
| 6 | 28, 26, 34 | NP | 8 |
| 7 | 14, 16, 20 | NP | 16 |
| 8 | 6, 9, 12 | NP | 20 |
| 9 | 26, 49, 25 | NP | 9 |
| 10 | 32, 17, 15 | NP | 11 |
| 11 | 21, 12, 8 | NP | 11 |
| 12 | 6, 7, 12 | 2.79 B | 14 |
| 13 | 6, 8, 12 | 4.67 B | 13 |
| 14 | 6, 9, 14 | 2.30 B | 15 |
| 15 | 5, 6, 12 | 1.97 B | 13 |
| 16 | 8, 10, 14 | 3.20 B | 14 |

**GENERAL NOTES**

Begin Drilling 07-07-2005 Complete Drilling 07-07-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller K&J Logger J. Kasnick Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 10.50 ft
At Completion of Drilling 9.00 ft
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

# BORING LOG S-108

Page 1 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 741.75 ft
North: 1993522.46 ft
East: 999538.07 ft
Station: 2218+64.88
Offset: 30.31R

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 741.2 | 6-inch, black LOAM --TOPSOIL-- |
| | Looose to medium dense, brown GRAVELLY SAND --FILL-- |
| 736.2 | Stiff, brown SILTY CLAY LOAM --FILL-- |
| 733.7 | Medium dense, brown and black LOAM --FILL-- |
| 731.2 | Dense to very dense, brown GRAVELLY SAND |
| 720.2 | Stiff to very stiff, brown and gray SILTY CLAY |
| 712.5 | Stiff to very stiff, gray CLAY LOAM |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 1 | 13, 5, 4 | NP | 4 |
| 2 | 12, 5, 5 | NP | 5 |
| 3 | 7, 5, 5 | 1.25 P | 18 |
| 4 | 9, 6, 22 | NP | 15 |
| 5 | 1, 10, 21 | NP | 5 |
| 6 | 19, 26, 31 | NP | 5 |
| 7 | 50, 50, 26 | NP | 5 |
| 8 | 50/3" | NP | 3 |
| 9 | 64, 10, 10 | 1.75 P | 13 |
| 10 | 11, 8, 17 | 3.00 P | 19 |
| 11 | 6, 18, 50/5" | 1.25 P | 20 |
| 12 | 12, 16, 20 | -- | |
| 13 | 7, 7, 11 | 3.00 P | 15 |
| 14 | 9, 11, 14 | 2.50 P | 13 |
| 15 | 8, 11, 10 | 1.50 P | 15 |
| 16 | 11, 10, 14 | 2.25 P | 10 |

**GENERAL NOTES**

Begin Drilling 07-11-2005 Complete Drilling 07-11-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller J&L Logger K. Anderson Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 25.50 ft
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

# BORING LOG S-109

Page 1 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 742.29 ft
North: 1993589.19 ft
East: 999538.22 ft
Station: 2218+65.17
Offset: 36.42L

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 741.8 | 6-inch thick brown SANDY LOAM --TOPSOIL-- |
| | Loose, brown and black SILTY LOAM --FILL-- |
| 739.3 | Very stiff, brown SILTY CLAY --FILL-- |
| 736.8 | Medium dense, gray SANDY LOAM --FILL-- |
| 734.3 | Stiff to very stiff, brown and black CLAY LOAM --FILL-- |
| 726.8 | Medium dense to dense, brown and gray GRAVELLY SAND |
| 710.3 | Stiff to hard, gray CLAY LOAM |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 1 | 6, 3, 2 | NP | 8 |
| 2 | 3, 3, 4 | 3.75 P | 17 |
| 3 | 3, 5, 6 | NP | 17 |
| 4 | 4, 7, 7 | 1.07 S | 17 |
| 5 | 3, 5, 8 | 2.62 B | 22 |
| 6 | 3, 3, 3 | 1.07 B | 20 |
| 7 | 9, 11, 20 | NP | 10 |
| 8 | 8, 13, 25 | NP | 5 |
| 9 | 16, 19, 25 | NP | 12 |
| 10 | 4, 6, 13 | NP | 11 |
| 11 | 5, 11, 12 | NP | 13 |
| 12 | 10, 13, 19 | NP | 9 |
| 13 | 15, 11, 14 | 1.80 B | 14 |
| 14 | 3, 8, 11 | 3.03 B | 14 |
| 15 | 6, 10, 14 | 4.76 B | 14 |
| 16 | 8, 10, 14 | 2.71 B | 14 |

**GENERAL NOTES**

Begin Drilling 07-08-2005 Complete Drilling 07-11-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller K&J Logger K. Anderson Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 20.50 ft
At Completion of Drilling 24.00 ft
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

# BORING LOG S-107

Page 1 of 1

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 729.66 ft
North: 1993582.29 ft
East: 999418.53 ft
Station: 2217+45.58
Offset: 29.94L

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 729.2 | 6-inch gray SILTY CLAY LOAM --TOPSOIL-- |
| | Medium stiff to hard, black, brown and gray SILTY CLAY to SILTY CLAY LOAM --FILL-- |
| 724.2 | Medium stiff, brown and gray SILTY CLAY LOAM with sand interbeds |
| 720.7 | Dense, brown GRAVELLY SAND |
| 710.7 | Medium dense to very dense, gray, fine SAND |
| 706.7 | Dense, gray SANDY GRAVEL |
| 704.2 | Stiff to hard, gray CLAY LOAM |
| 679.7 | Boring terminated at 50.00 ft |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 1 | 7, 6, 5 | >4.50 P | 13 |
| 2 | 5, 5, 6 | 2.50 P | 14 |
| 3 | 4, 5, 6 | 0.66 B | 21 |
| 4 | 17, 22, 14 | NP | 64 |
| 5 | 11, 25, 24 | NP | 9 |
| 6 | 7, 15, 19 | NP | 8 |
| 7 | 13, 24, 25 | NP | 8 |
| 8 | 12, 14, 13 | NP | 9 |
| 9 | 12, 15, 50/5" | NP | 19 |
| 10 | 4, 21, 28 | NP | 10 |
| 11 | 5, 8, 12 | 2.30 B | 14 |
| 12 | 6, 8, 11 | 2.87 B | 14 |
| 13 | 5, 10, 15 | 1.39 B | 14 |
| 14 | 3, 5, 10 | 1.97 B | 14 |
| 15 | 5, 9, 15 | 4.26 B | 14 |
| 16 | 2, 7, 14 | 2.71 B | 14 |

**GENERAL NOTES**

Begin Drilling 07-08-2005 Complete Drilling 07-08-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller K&J Logger K. Anderson Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 11.25 ft
At Completion of Drilling 9.00 ft
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

# BORING LOG S-108

Page 2 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 741.75 ft
North: 1993522.46 ft
East: 999538.07 ft
Station: 2218+64.88
Offset: 30.31R

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 684.7 | Dense, gray SILTY LOAM |
| 679.7 | Very stiff, gray CLAY LOAM |
| 676.7 | Boring terminated at 65.00 ft |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 17 | 7, 11, 18 | 2.75 P | 13 |
| 18 | 15, 22, 20 | NP | 19 |
| 19 | 10, 11, 17 | 3.53 B | 13 |

**GENERAL NOTES**

Begin Drilling 07-11-2005 Complete Drilling 07-11-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller J&L Logger K. Anderson Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 25.50 ft
At Completion of Drilling DRY
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

# BORING LOG S-109

Page 2 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-23-01
Client: McDonough Associates Inc.
Project: Longmeadow Parkway over Fox River
Location: Kane County, Illinois

Datum: NGVD
Elevation: 742.29 ft
North: 1993589.19 ft
East: 999538.22 ft
Station: 2218+65.17
Offset: 36.42L

| Elevation (ft) | SOIL AND ROCK DESCRIPTION |
|---|---|
| 672.3 | Boring terminated at 70.00 ft |

| Sample No. | SPT Values (blw/6 in) | Qu (tsf) | Moisture Content (%) |
|---|---|---|---|
| 17 | 6, 9, 11 | 2.62 B | 14 |
| 18 | 6, 7, 13 | 2.71 B | 13 |
| 19 | 8, 13, 17 | 1.25 P | 17 |
| 20 | 12, 22, 18 | 1.75 P | 16 |

**GENERAL NOTES**

Begin Drilling 07-08-2005 Complete Drilling 07-11-2005
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV
Driller K&J Logger K. Anderson Checked by B. Fugiel
Drilling Method 3.25-inch HSA

**WATER LEVEL DATA**

While Drilling 20.50 ft
At Completion of Drilling 24.00 ft
Time After Drilling NA
Depth to Water NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2012301.GPJ WANGENG.GDT 3/29/11

CMT


| | | |
|---|---|---|
| USER NAME = Denise Herrera | DESIGNED - CJW | REVISED - |
| | DRAWN - CJW | REVISED - |
| PLOT SCALE = 2.0001 ' / in. | CHECKED - JTH | REVISED - |
| PLOT DATE = 2/27/2020 | DATE - 01/13/2020 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 045-3077

SCALE: SHEET 25 OF 40 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 2298 | 18-00215-21-BR | KANE | 415 | 298 |

CONTRACT NO. 61G02
ILLINOIS FED. AID PROJECT

FILE NAME : pw:\\cmtengr-pw.bentley.com:cmt-projects\Documents\Projects\KaneCO\13296-02\Draw\Bridge\CADD\Sheets\045-3077 Sandbloom Rd Bridge\SectionC-sht S-26-str-045-3077-Boring Logs.cmt.dgn

## BENCHMARK

Chiseled "□" S.E. corner of concrete slab.
The Intersection of ILL-31 and Miller Rd. Go N. 0.9 MI ± to Mark. Elev. 806.34

## EXISTING STRUCTURE

None

## SOIL BORINGS

| BORING | LOCATION |
|---|---|
| S-108 | 2218+64.88, 30.31' Rt. |
| S-109 | 2218+65.17, 36.42' Lt. |
| S-110 | 2219+84.19, 30.73' Rt. |
| S-111 | 2219+82.04, 28.31' Lt. |
| S-112 | 2221+03.98, 31.63' Rt. |
| S-113 | 2221+10.47, 29.11' Lt. |

## NOTES:

1. Wall Stations and Offsets are given to the Front Face of the wall and are measured from centerline of Longmeadow Pkwy.
2. Wall is built in conjunction with new bridge S.N. 045-3077.
3. Horizontal dimensions measured along front face of precast panels.
4. See roadway plans for embankment and Rock Fill-Foundation quantities.
5. Stations and elevations on Elevation view are to Top of Coping.
6. Attachment to concrete parapet shall have no plates or bolts protrude through the back face. See Sheet 2 of Standard 631031-16.

## WALL 3 BILL OF MATERIALS

| | ITEM | UNIT | TOTAL |
|---|---|---|---|
| | Structure Excavation | Cu. Yd. | 1,760 |
| | Removal and Disposal of Unsuitable Material for Structures | Cu. Yd. | 640 |
| | Concrete Superstructure | Cu. Yd. | 337.0 |
| | Protective Coat | Sq. Yd. | 849 |
| | Reinforcement Bars, Epoxy Coated | Pound | 48,260 |
| | Pedestrian Railing | Foot | 148 |
| | Parapet Railing | Foot | 146 |
| * | Anti-Graffiti Coating | Sq. Ft. | 7,914 |
| * | Staining Concrete Structures | Sq. Ft. | 7,914 |
| * | Mechanically Stabilized Earth Retaining Wall, Special | Sq. Ft. | 11,205 |
| ** | Pipe Underdrains for Structures 6" | Foot | 530 |

* Special Provision
** Guide Bridge Special Provision

Note: Quantities shown in this Bill of Material are included in the Total Bill of Materials on Sheet 2 of 40.

## DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications
7th Edition with 2015 Interims

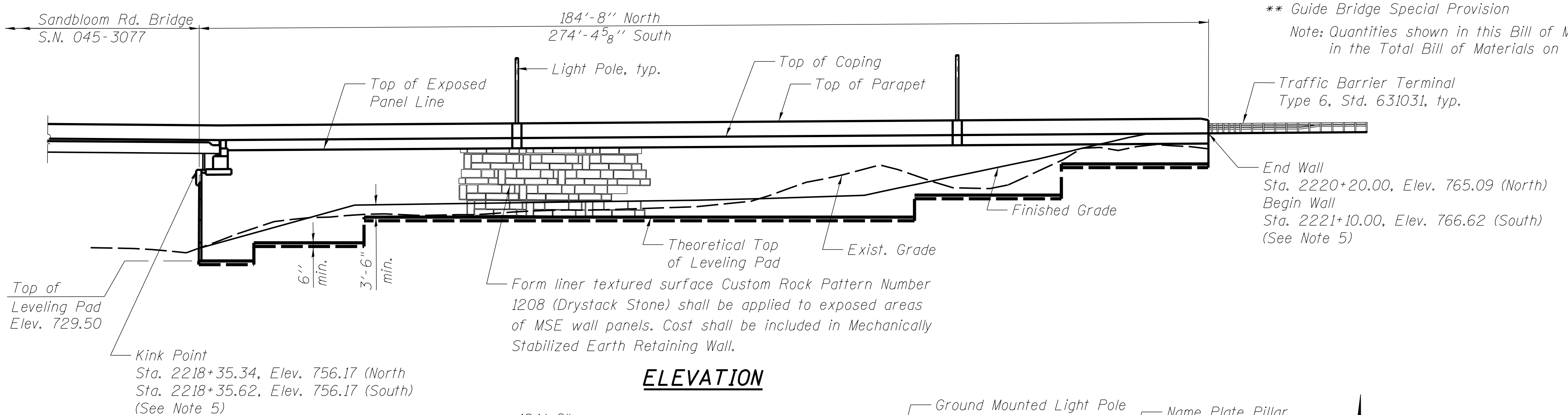
## DESIGN STRESSES

**FIELD UNITS**

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

**PRECAST UNITS**

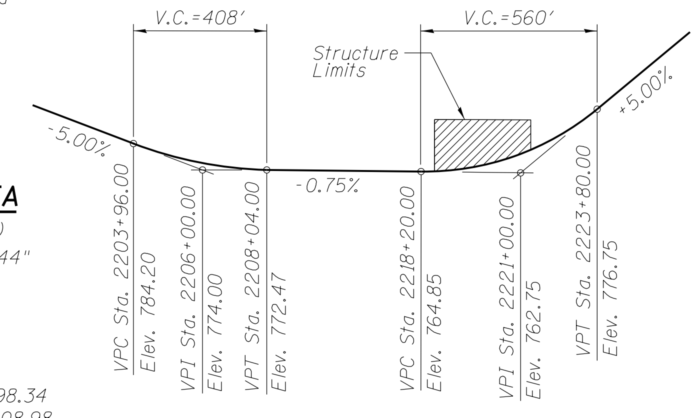
f'c = 4,500 psi (Precast Panels)
fy = 60,000 psi (Reinforcement)
fy = 65,000 psi (Welded Wire Reinforcement)




## ELEVATION

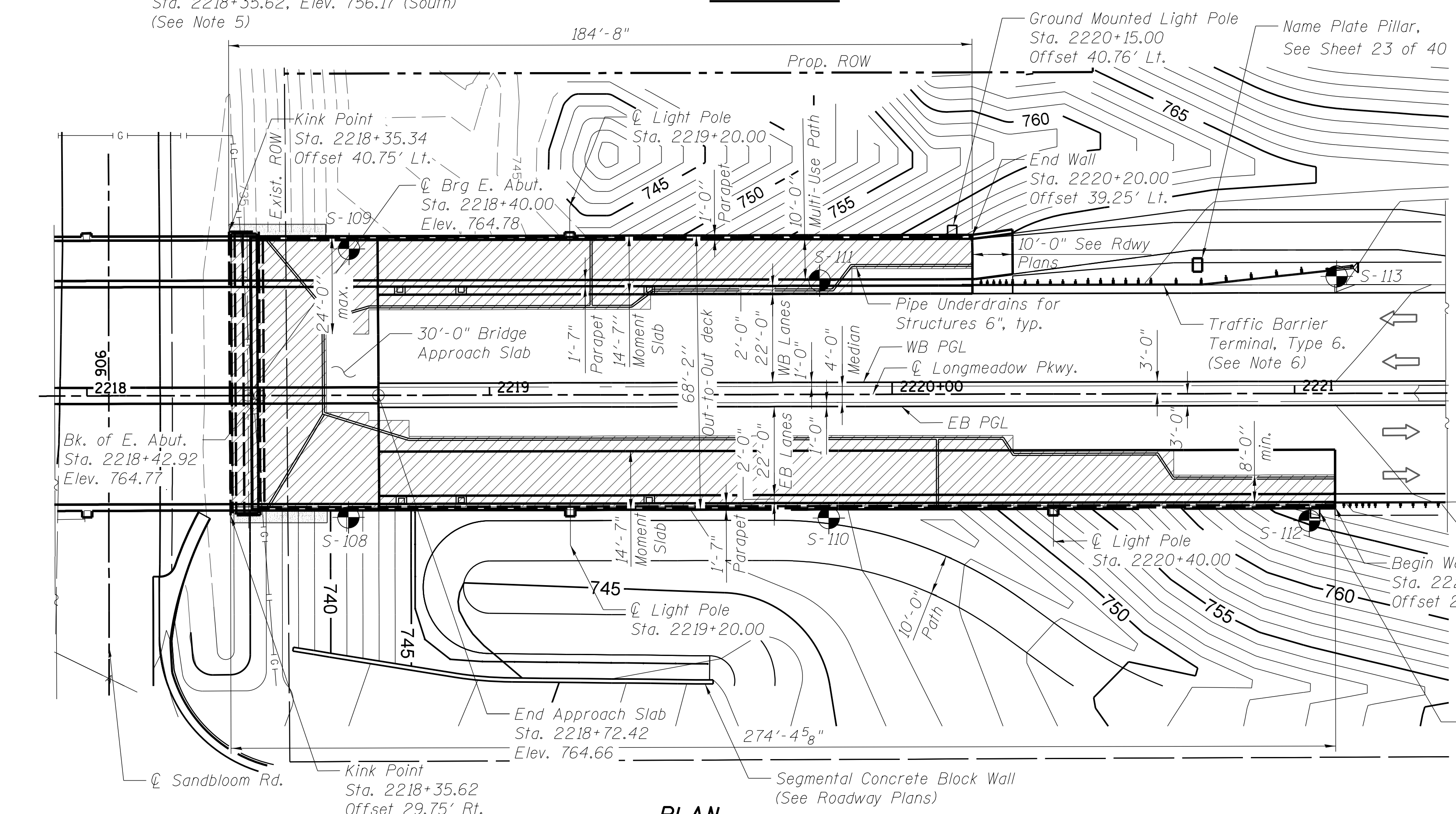
## CURVE DATA

(Sandbloom Road)
D = 27° 57' 28.44"
R = 636.62
T = 158.48
L = 310.64
E = 19.43'
S.E. = 5.8%
P.C. Sta. = 901+98.34
P.T. Sta. = 905+08.98




## PROFILE GRADE

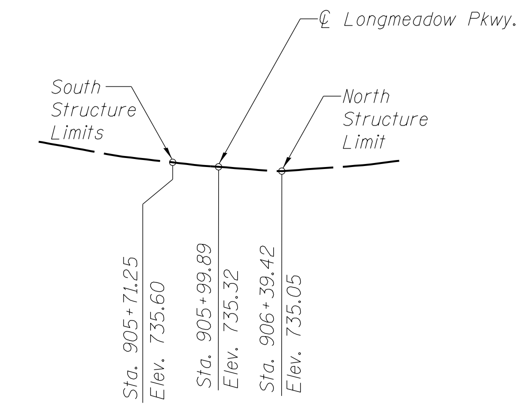
(Along Longmeadow Parkway)
(3'-0" offset from ℄ Longmeadow Parkway)




## PLAN

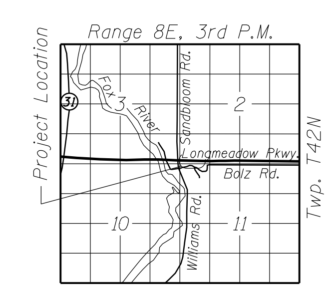
## LEGEND

Approximate Limits of Reinforced Soil Mass of MSE Retaining Wall
Soil Boring
Approximate Limits of Unsuitable Removal Material
Proposed Drainge Structure
Existing Gas Line to be relocated by others




## PROFILE GRADE (EXISTING)

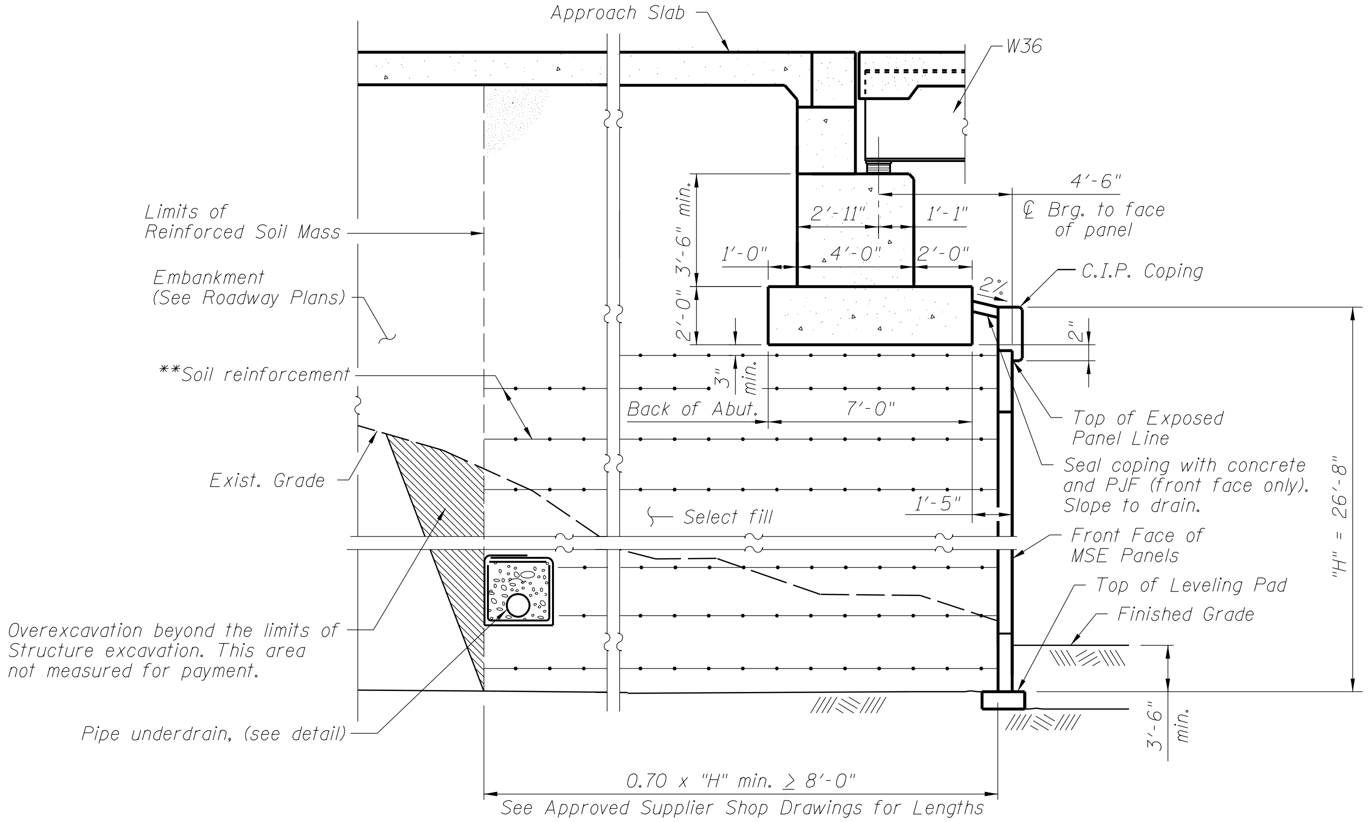
(Along Sandbloom Road)



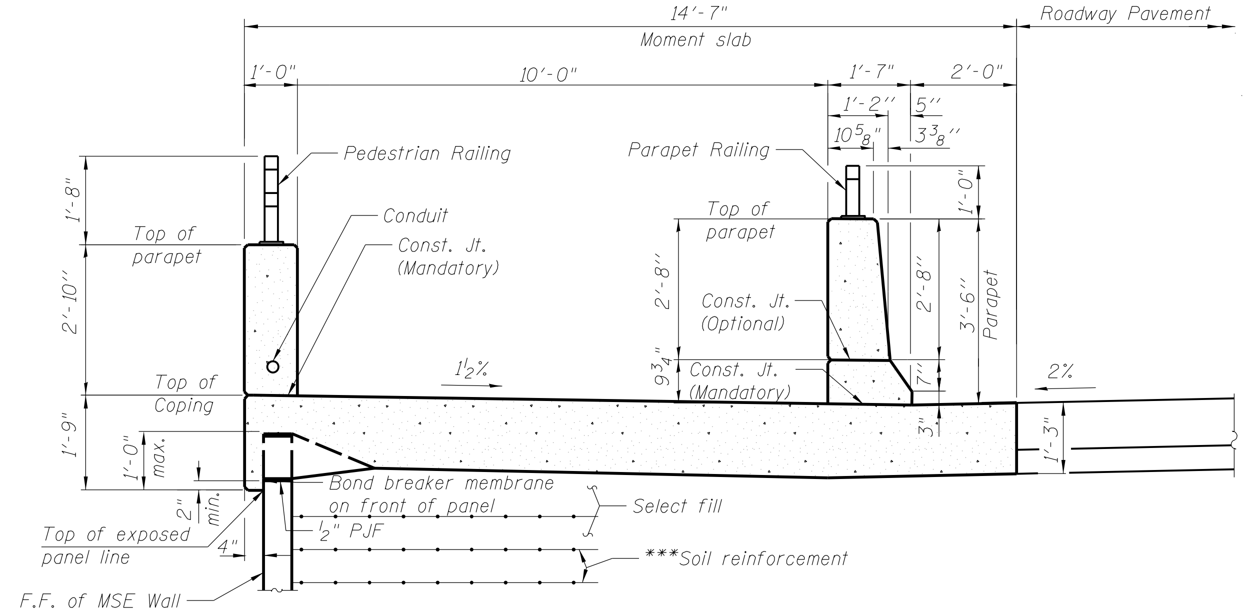

## LOCATION SKETCH

## GENERAL PLAN AND ELEVATION
## LONGMEADOW PARKWAY OVER SANDBLOOM RD
## FAU ROUTE 2298, SEC 18-00215-21-BR
## KANE COUNTY
## EAST ABUTMENT MSE WALL 3
## STATION 2220+20.00 TO 2221+10.00

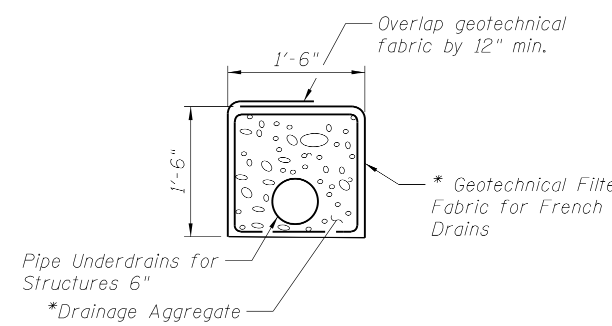
LOCAL COORDINATE SYSTEM




TYPICAL SECTION THRU SANDBLOOM BRIDGE ABUTMENT



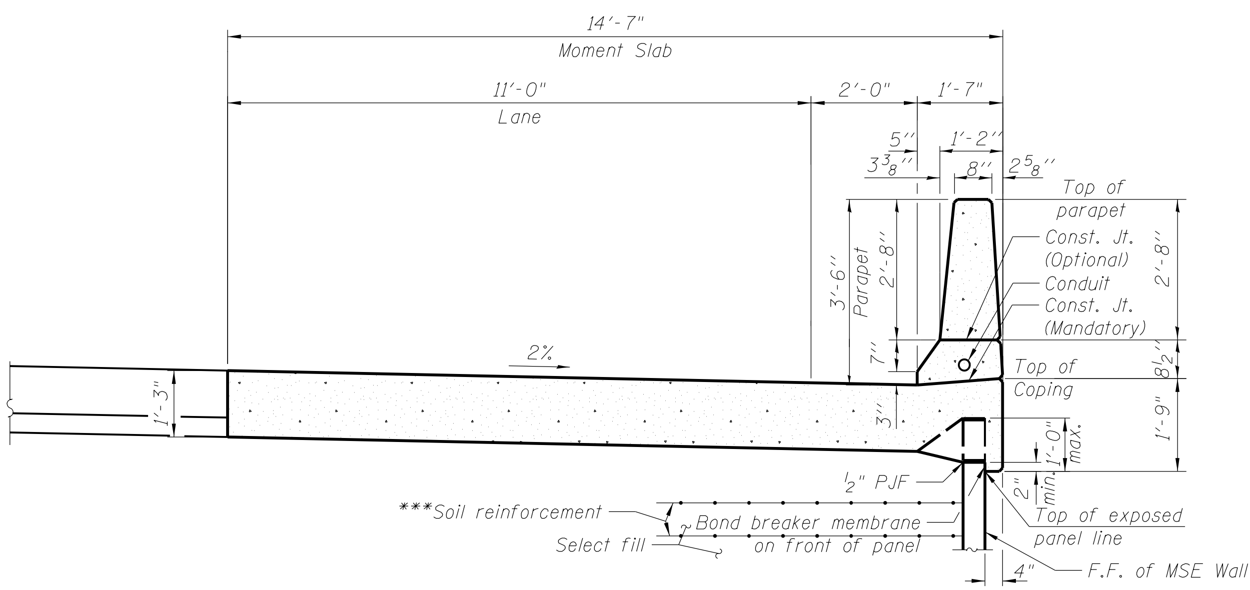

NORTH WALL MOMENT SLAB




PIPE UNDERDRAIN DETAIL

## INDEX OF SHEETS






SOUTH WALL MOMENT SLAB

* Included in cost for Pipe Underdrains for Structures 6"

** The MSE wall supplier's internal stability design shall account for the footing's bearing pressure surcharge of 4 ksf and horizontal sliding force of 0.58 kips/ft. of abutment.

*** The MSE wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.