

LAX
PROJECT ID:
WITH: NA

5220-04-74

COUNTY:

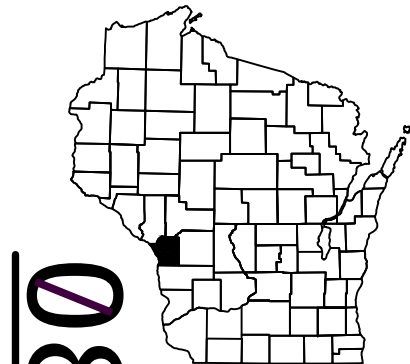
LA CROSSE

MAY 2021

ORDER OF SHEETS

| | | |
|-------------|---|------------------------------|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| Section No. | 3 | Estimate of Quantities |
| Section No. | 3 | Miscellaneous Quantities |
| Section No. | 4 | Right of Way Plat |
| Section No. | 5 | Plan and Profile |
| Section No. | 6 | Standard Detail Drawings |
| Section No. | 7 | Sign Plates |
| Section No. | 8 | Structure Plans |
| Section No. | 9 | Computer Earthwork Data |
| Section No. | 9 | Gross Sections |

TOTAL SHEETS = 82



08

DESIGN DESIGNATION

| | | | |
|--------------|------|---|-----------|
| A.A.D.T. | 2021 | = | 23,470 |
| A.A.D.T. | 2031 | = | 25,920 |
| D.H.V. | | = | 2,877 |
| D.D. | | = | 59/41 |
| T. | | = | 4% |
| DESIGN SPEED | | = | 30 MPH |
| ESALS | | = | 1,590,000 |

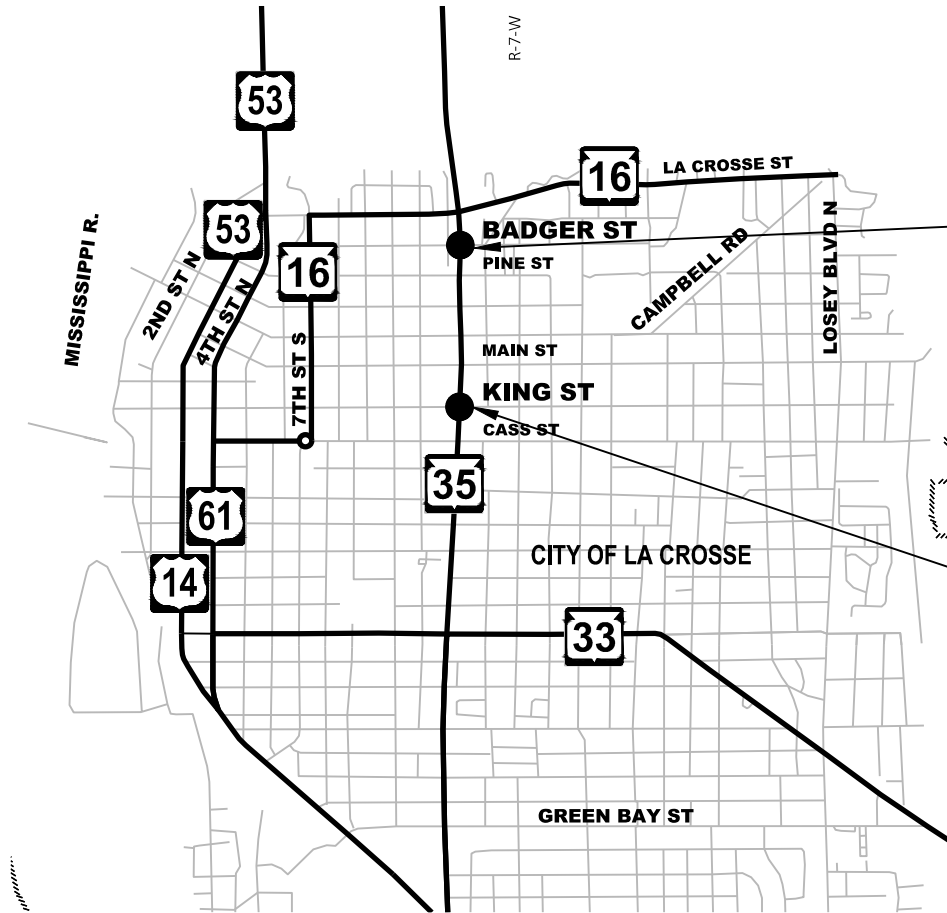
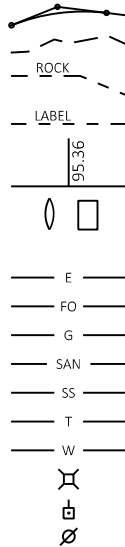
CONVENTIONAL SYMBOLS

PLAN

| | |
|--------------------------------|--|
| CORPORATE LIMITS | |
| PROPERTY LINE | |
| LOT LINE | |
| LIMITED HIGHWAY EASEMENT | |
| EXISTING RIGHT OF WAY | |
| PROPOSED OR NEW R/W LINE | |
| SLOPE INTERCEPT | |
| REFERENCE LINE | |
| EXISTING CULVERT | |
| PROPOSED CULVERT (Box or Pipe) | |
| COMBUSTIBLE FLUIDS | |
| MARSH AREA | |
| WOODED OR SHRUB AREA | |

PROFILE

| | |
|---|--|
| GRADE LINE | |
| ORIGINAL GROUND | |
| MARSH OR ROCK PROFILE (To be noted as such) | |
| SPECIAL DITCH | |
| GRADE ELEVATION | |
| CULVERT (Profile View) | |
| UTILITIES | |
| ELECTRIC | |
| FIBER OPTIC | |
| GAS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE | |
| WATER | |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |



LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.123 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), LA CROSSE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

MISSISSIPPI R.

53
53
16
61
14

2ND ST N
4TH ST N
7TH ST S

R-7-W
BADGER ST
PINE ST
MAIN ST
KING ST
CASS ST

16

LA CROSSE ST
CAMPBELL RD

LOSEY BLVD N

CITY OF LA CROSSE

GREEN BAY ST

BEGIN CONSTRUCTION
STA. 401+68

END CONSTRUCTION
STA. 402+65

T-16-N

T-15-N

BEGIN CONSTRUCTION
STA. 302+00

END CONSTRUCTION
STA. 307+55

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 5220-04-74 | WISC 2021303 | 1 |
| | | |
| | | |
| | | |

ACCEPTED FOR
CITY LA CROSSE

RANDY TURTERNAUD
(Printed Name)
10-19-20
(Date)

(Signature)

CITY ENGINEER
(Title of Official)

ORIGINAL PLANS PREPARED BY
raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

WISCONSIN
JOHN P. BRUGGEMAN
E-39737
BAYSIDE, WI
PROFESSIONAL ENGINEER
10/20/20
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor
Designer
Project Manager
Regional Examiner
Regional Supervisor

rasmith
rasmith
CRAIG ROYER
SWANSON
OSCAR WINGER

APPROVED FOR THE DEPARTMENT
DATE 10/15/2020

(Signature)

E

DESIGN CONSULTANT

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GENERAL NOTES

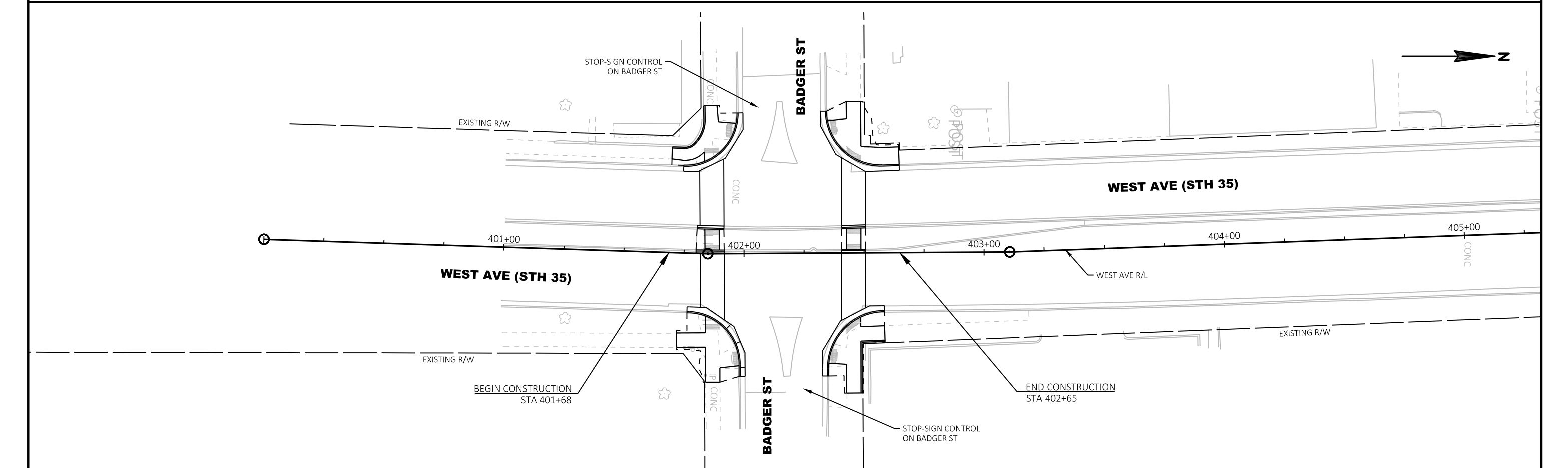
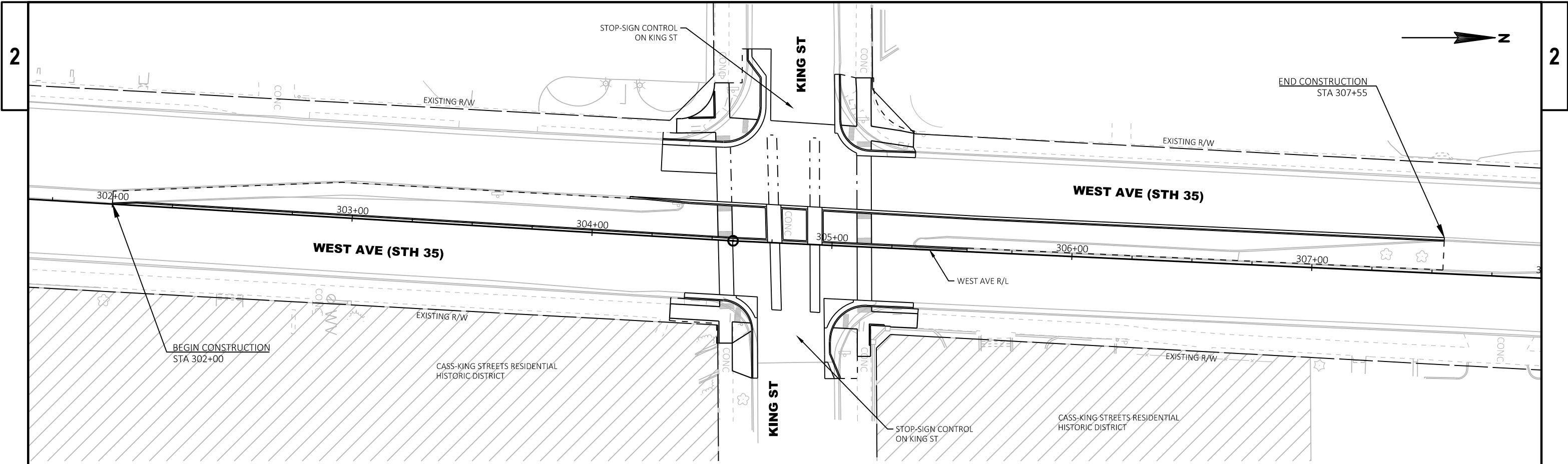
- 1
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
- 2
- ALL OPENINGS BELOW SUBGRADE, RESULTING FROM REMOVALS OR ABANDONMENTS, SHALL BE BACKFILLED IN ACCORDANCE WITH SECTION 204 OF THE STANDARD SPECS. GRANULAR BACKFILL SHALL BE INCIDENTAL TO CONSTRUCTION.
- 3
- NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- 4
- CURB AND GUTTER GRADES ARE MEASURED AT THE FLANGE LINE UNLESS OTHERWISE NOTED. CURB AND GUTTER STATIONS, OFFSETS, AND RADII ARE MEASURED AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 5
- EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S "ECIP" AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.
- 6
- THE LIMITS OF SIDEWALK AND CURB & GUTTER REMOVALS ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- 7
- REMOVAL OF EXISTING SIGNS AND INSTALLATION OF PERMANENT SIGNS TO BE COMPLETED BY THE CITY OF LA CROSSE. CONTACT STEPHANIE SWARD AT LEAST 14 CALENDAR DAYS PRIOR TO THE ANTICIPATED PROJECT START DATE AND COMPLETION DATE TO COORDINATE EXISTING SIGN REMOVAL AND PERMANENT SIGN INSTALLATION, RESPECTIVELY.

ORDER OF SECTION 2 SHEETS

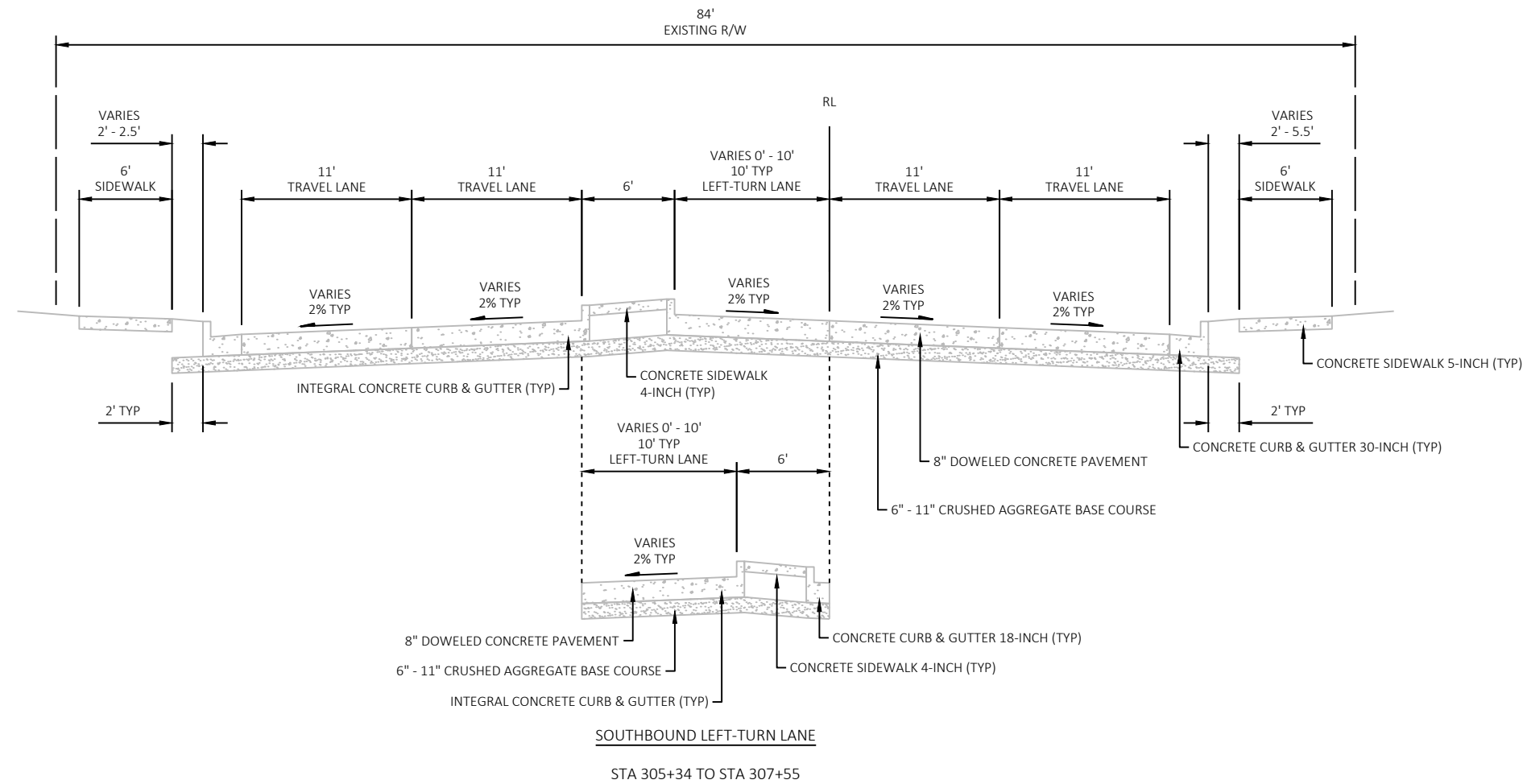
- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- PAVEMENT DETAILS
- CURB RAMP DETAILS
- UTILITY DETAILS
- FLASHING BEACON PLAN
- TRAFFIC CONTROL



Dial **811** or (800) 242-8511
www.DiggersHotline.com



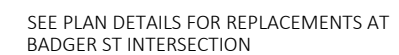
| | | | | | |
|------------------------|-------------|-------------------|------------------|-------|---|
| PROJECT NO: 5220-04-74 | HWY: STH 35 | COUNTY: LA CROSSE | PROJECT OVERVIEW | SHEET | E |
|------------------------|-------------|-------------------|------------------|-------|---|

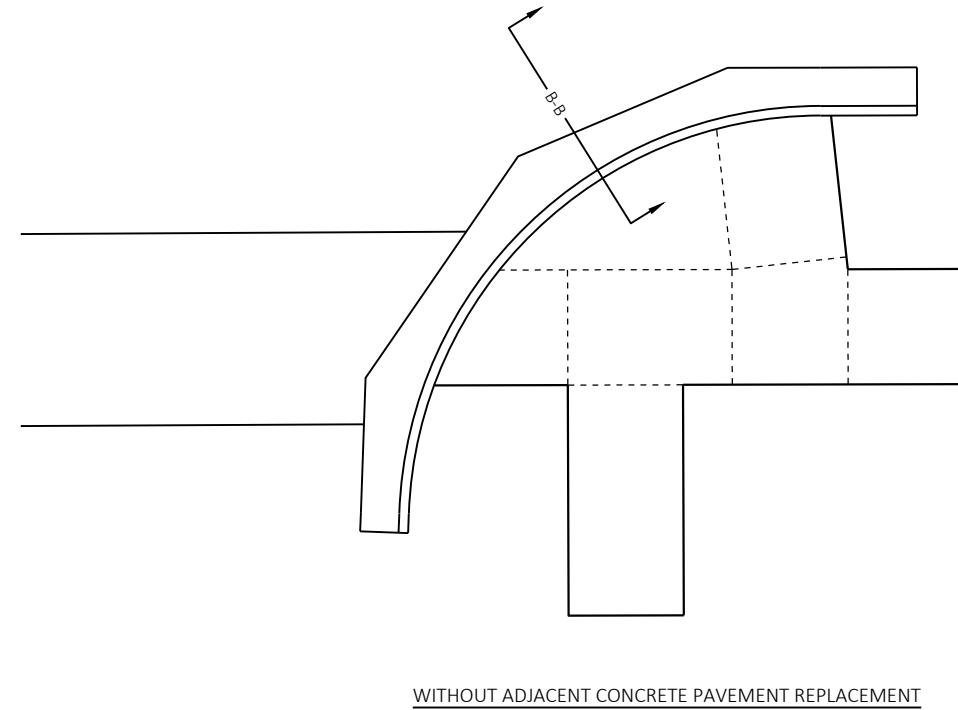
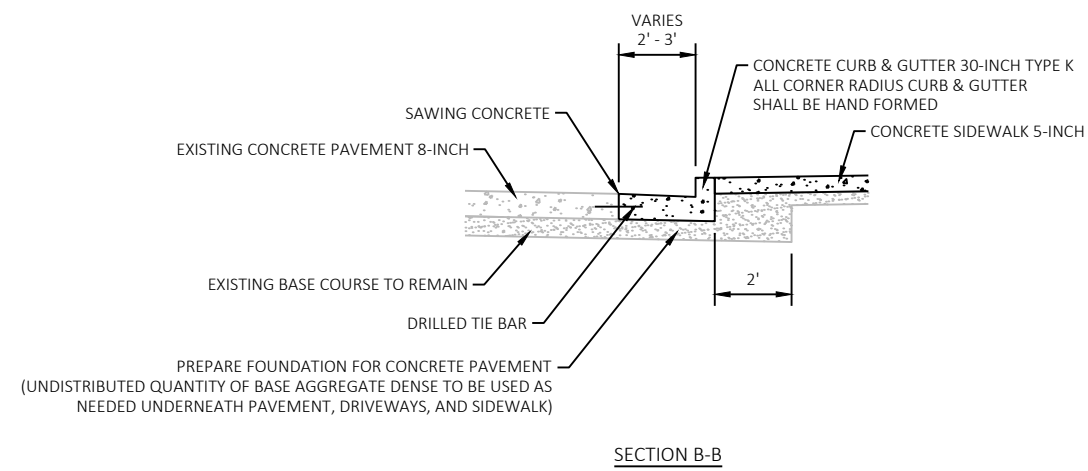
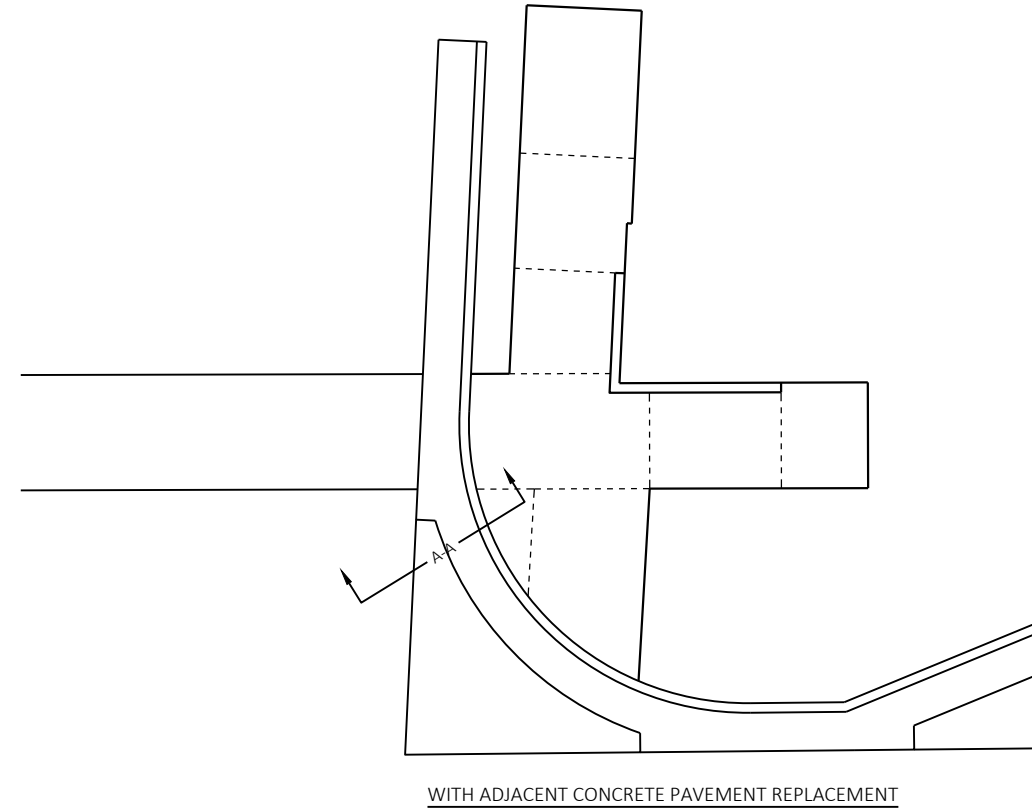
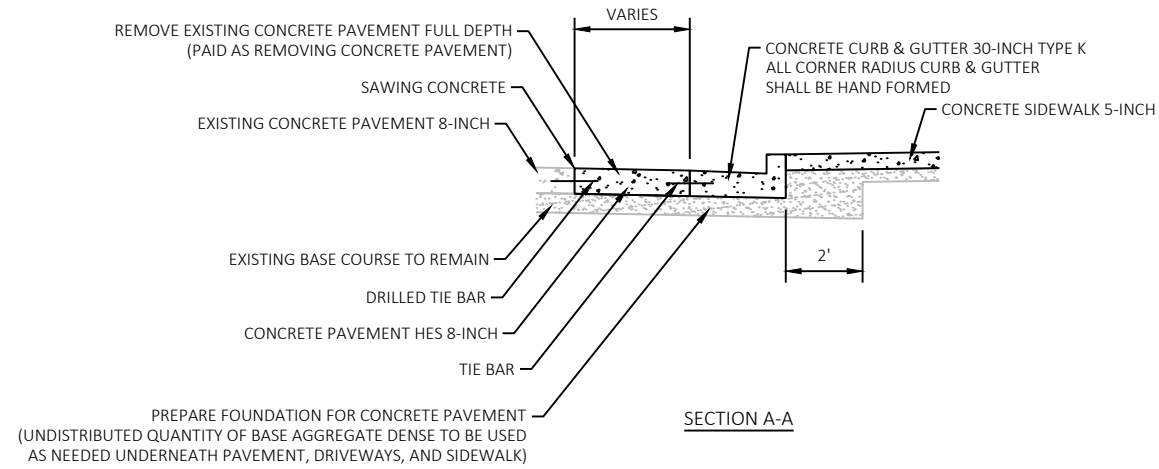


TYPICAL EXISTING SECTION
WEST AVE
AT KING ST*

STA 302+00 TO STA 307+55

*TYPICAL SECTION FOR WEST AVE AT BADGER ST NOT PROVIDED AS
THERE ARE NO PROPOSED GEOMETRIC CHANGES TO THE ROADWAY





CURB & GUTTER REPLACEMENT DETAIL

PROJECT NO: 5220-04-74

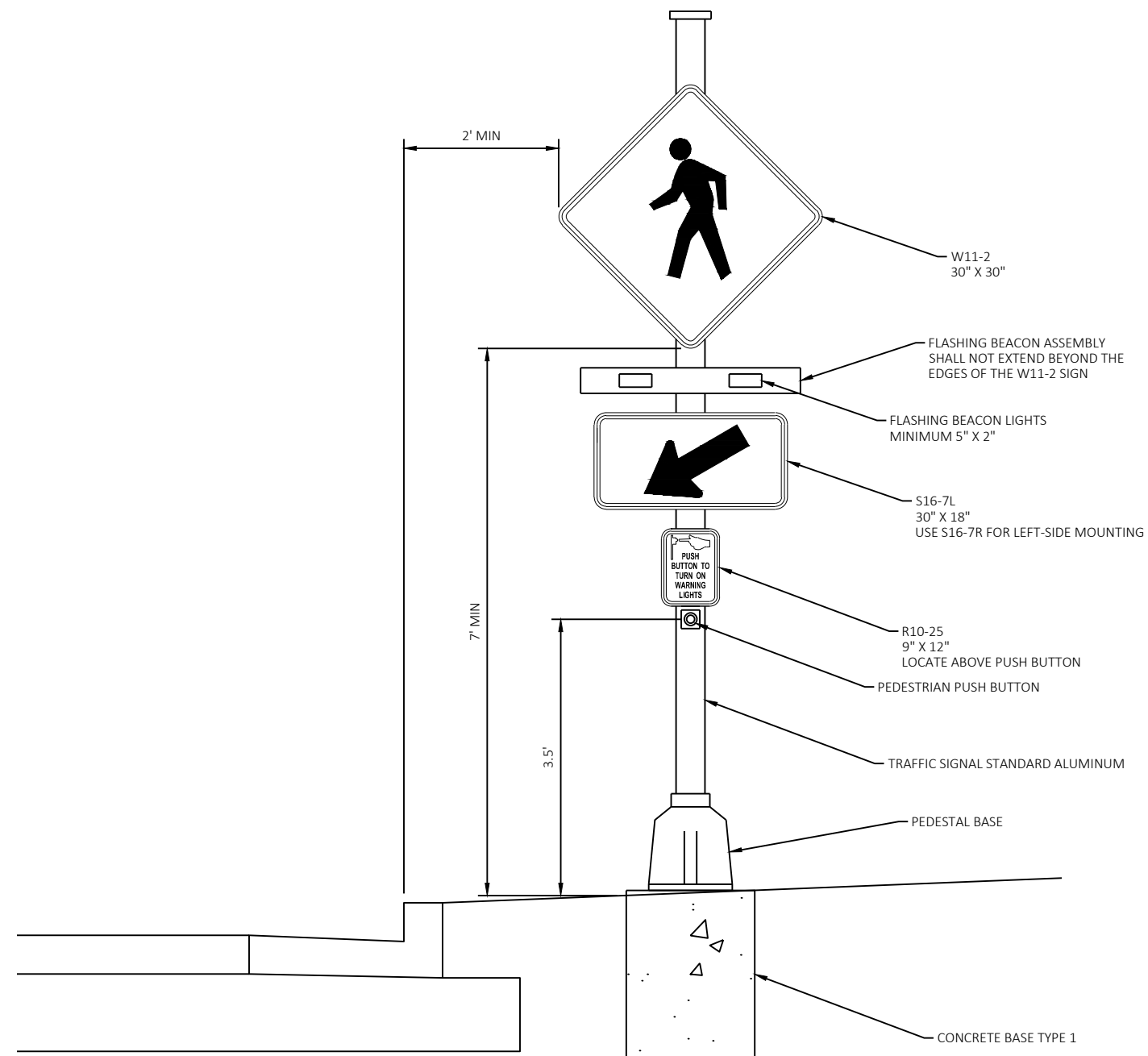
HWY: STH 35

COUNTY: LA CROSSE

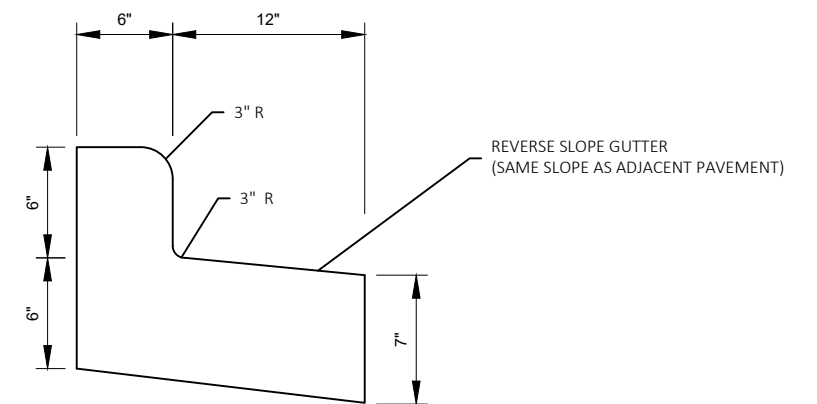
CONSTRUCTION DETAILS

SHEET

E



RECTANGULAR RAPID FLASHING BEACON DETAIL



DETAIL FOR CONCRETE CURB & GUTTER 18-INCH TYPE K
SEE PLAN FOR LOCATIONS

RUNOFF COEFFICIENT TABLE

| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|-------------------------|-----------------------|-----|----------|-----------------------|-----|-----------|-----------------------|-----|----------|-----------------------|-----|----------|
| | A | | | B | | | C | | | D | | |
| | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | |
| LAND USE: | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER |
| ROW CROPS | .08 | .16 | .22 | .12 | .20 | .27 | .15 | .24 | .33 | .19 | .28 | .38 |
| | .22 | .30 | .38 | .26 | .34 | .44 | .30 | .37 | .50 | .34 | .41 | .56 |
| MEDIAN STRIP-TURF | .19 | .20 | .24 | .19 | .22 | .26 | .20 | .23 | .30 | .20 | .25 | .30 |
| | .24 | .26 | .30 | .25 | .28 | .33 | .26 | .30 | .37 | .27 | .32 | .40 |
| SIDE SLOPE: TURF | | | .25 | | | .27 | | | .28 | | | .30 |
| | | | .32 | | | .34 | | | .36 | | | .38 |
| PAVEMENT: | | | | | | | | | | | | |
| ASPHALT | | | | | | .70 - .95 | | | | | | |
| CONCRETE | | | | | | .80 - .95 | | | | | | |
| BRICK | | | | | | .70 - .80 | | | | | | |
| DRIVES, WALKS | | | | | | .75 - .85 | | | | | | |
| ROOFS | | | | | | .75 - .95 | | | | | | |
| GRAVEL ROADS, SHOULDERS | | | | | | .40 - .60 | | | | | | |

TOTAL PROJECT AREA = 0.55 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.42 ACRES

LEGEND

- CP8 CONCRETE PAVEMENT HES 8-INCH, DOWELED
- CP8R CONCRETE PAVEMENT HES 8-INCH WISDOT RED, DOWELED
- CP8G CONCRETE PAVEMENT HES 8-INCH GREEN, DOWELED
- CG18 CONCRETE CURB & GUTTER 18-INCH TYPE K (REVERSE SLOPE GUTTER)
- CG30 CONCRETE CURB & GUTTER 30-INCH TYPE K
- CCJ CONCRETE CURB TYPE J
- PED CONCRETE CURB PEDESTRIAN
- SW5 CONCRETE SIDEWALK 5-INCH
- DW6 CONCRETE DRIVEWAY 6-INCH
- SOD TOPSOIL, FERTILIZER, & SOD LAWN
- XXXX SAWING CONCRETE
- INLET PROTECTION TYPE C

SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION
ALL CORNER RADIUS CURB & GUTTER SHALL BE HAND FORMED

ANY BRICK PAVERS DISTURBED DURING CONSTRUCTION SHALL BE SALVAGED AND REPLACED (INCIDENTAL TO CONCRETE SIDEWALK AND CONCRETE CURB PEDESTRIAN ITEMS)

200 WEST AVE
KISH PROPERTIES

148 WEST AVE
YMCA

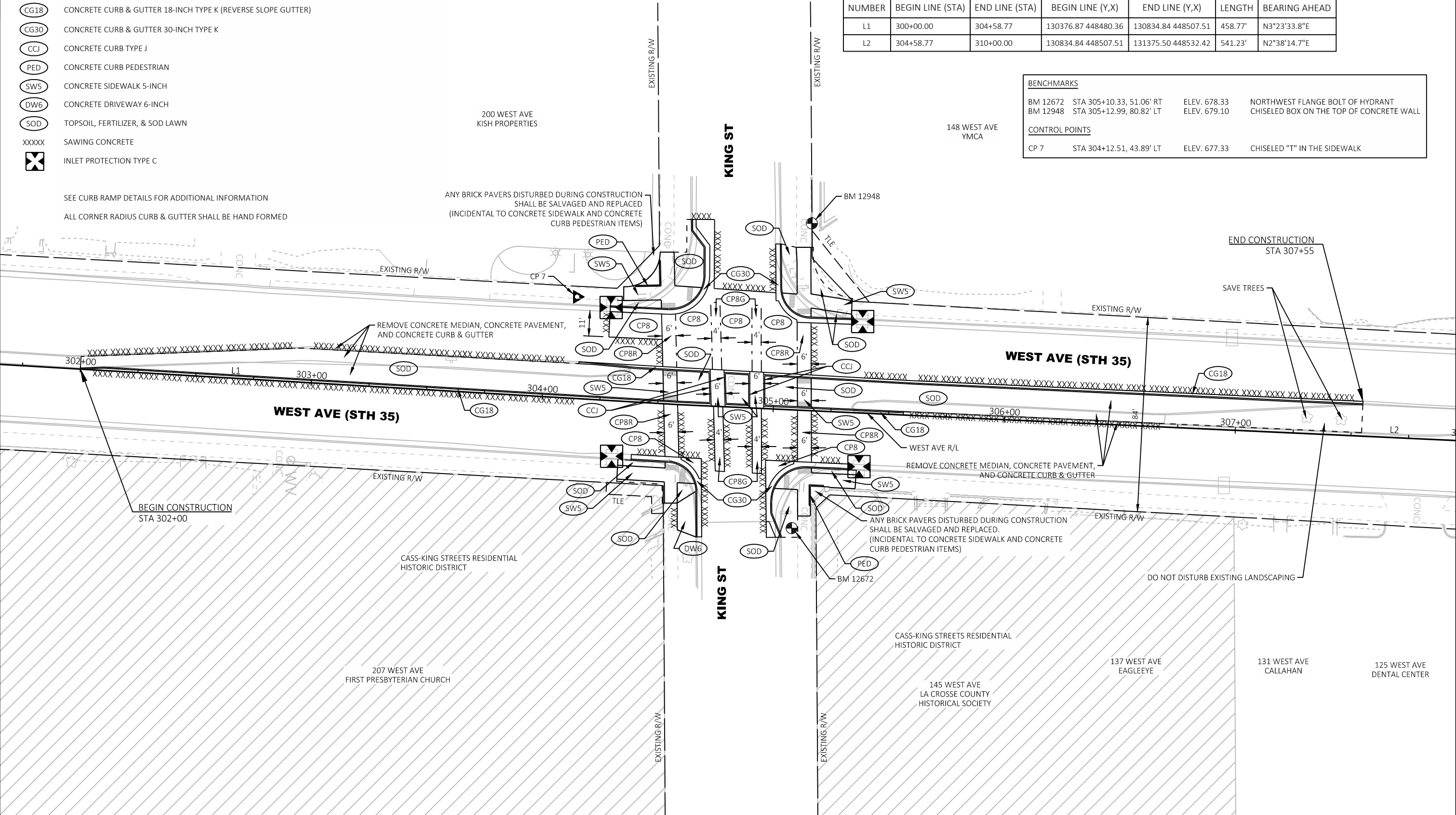
| West-King | | | | | | |
|-----------|------------------|----------------|---------------------|---------------------|---------|---------------|
| NUMBER | BEGIN LINE (STA) | END LINE (STA) | BEGIN LINE (Y,X) | END LINE (Y,X) | LENGTH | BEARING AHEAD |
| L1 | 300+00.00 | 304+58.77 | 130376.87 448480.36 | 130834.84 448507.51 | 458.77' | N3°23'33.8"E |
| L2 | 304+58.77 | 310+00.00 | 130834.84 448507.51 | 131375.50 448532.42 | 541.23' | N2°38'14.7"E |

BENCHMARKS

BM 12672 STA 305+10.33, 51.06' RT ELEV. 678.33 NORTHWEST FLANGE BOLT OF HYDRANT
BM 12948 STA 305+12.99, 80.82' LT ELEV. 679.10 CHISELED BOX ON THE TOP OF CONCRETE WALL

CONTROL POINTS

CP 7 STA 304+12.51, 43.89' LT ELEV. 677.33 CHISELED "T" IN THE SIDEWALK



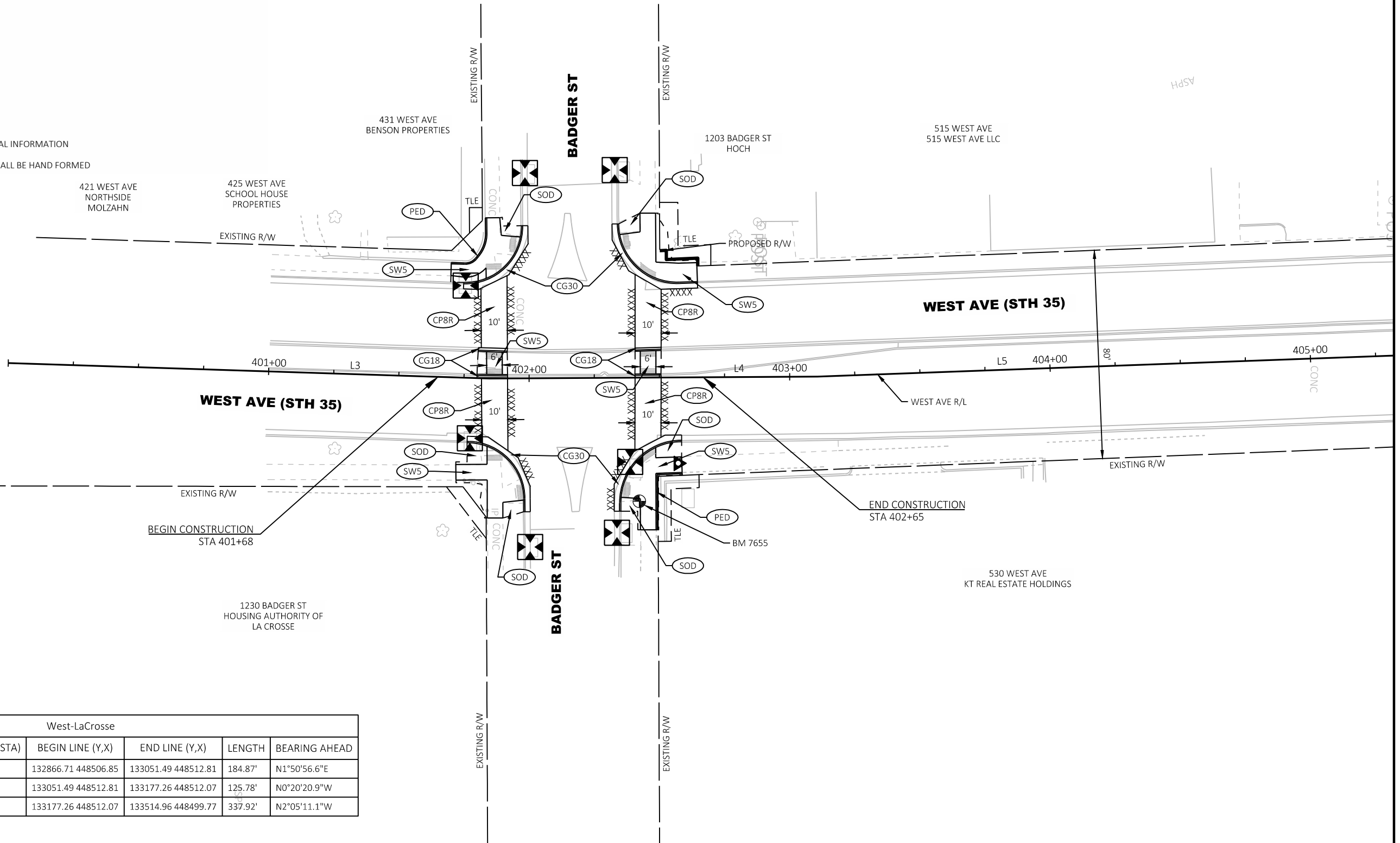
LEGEND

- CP8 CONCRETE PAVEMENT HES 8-INCH, DOWELED
- CP8R CONCRETE PAVEMENT HES 8-INCH WISDOT RED, DOWELED
- CP8G CONCRETE PAVEMENT HES 8-INCH GREEN, DOWELED
- CG18 CONCRETE CURB & GUTTER 18-INCH TYPE K (REVERSE SLOPE GUTTER)
- CG30 CONCRETE CURB & GUTTER 30-INCH TYPE K
- CCJ CONCRETE CURB TYPE J
- PED CONCRETE CURB PEDESTRIAN
- SW5 CONCRETE SIDEWALK 5-INCH
- DW6 CONCRETE DRIVEWAY 6-INCH
- SOD TOPSOIL, FERTILIZER, & SOD LAWN
- XXXX SAWING CONCRETE
- X INLET PROTECTION TYPE C

SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION
ALL CORNER RADIUS CURB & GUTTER SHALL BE HAND FORMED

BENCHMARKS

BM 7655 STA 402+41.95, 47.44' RT ELEV. 675.20 NORTHWEST FLANGE BOLT OF HYDRANT



| West-LaCrosse | | | | | | |
|---------------|------------------|----------------|---------------------|---------------------|---------|---------------|
| NUMBER | BEGIN LINE (STA) | END LINE (STA) | BEGIN LINE (Y,X) | END LINE (Y,X) | LENGTH | BEARING AHEAD |
| L3 | 400+00.00 | 401+84.87 | 132866.71 448506.85 | 133051.49 448512.81 | 184.87' | N1°50'56.6"E |
| L4 | 401+84.87 | 403+10.65 | 133051.49 448512.81 | 133177.26 448512.07 | 125.78' | N0°20'20.9"W |
| L5 | 403+10.65 | 406+48.58 | 133177.26 448512.07 | 133514.96 448499.77 | 337.92' | N2°05'11.1"W |

PROJECT NO: 5220-04-74

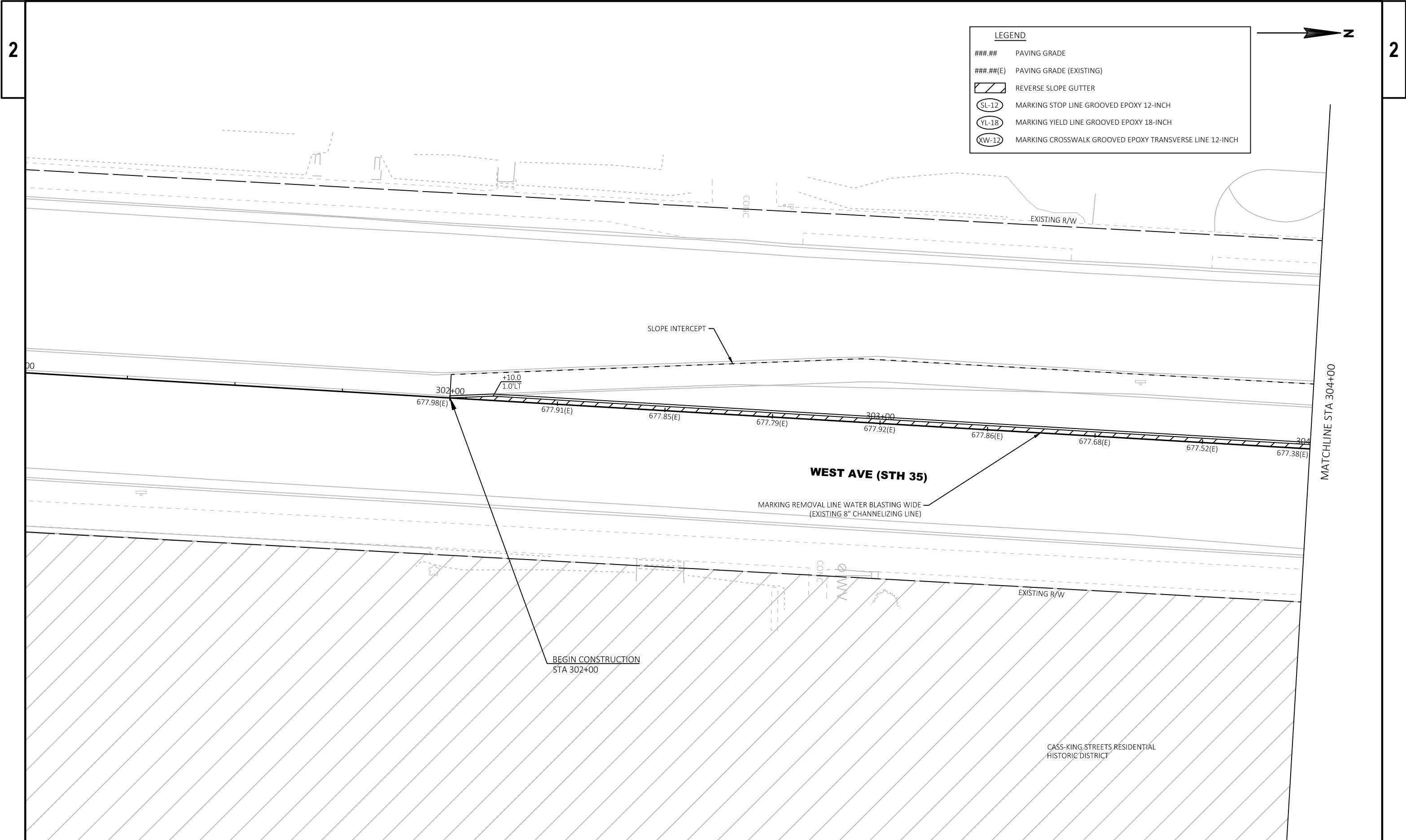
HWY: STH 35

COUNTY: LA CROSSE

PLAN DETAILS - BADGER ST

SHEET

E





LEGEND

###.## PAVING GRADE

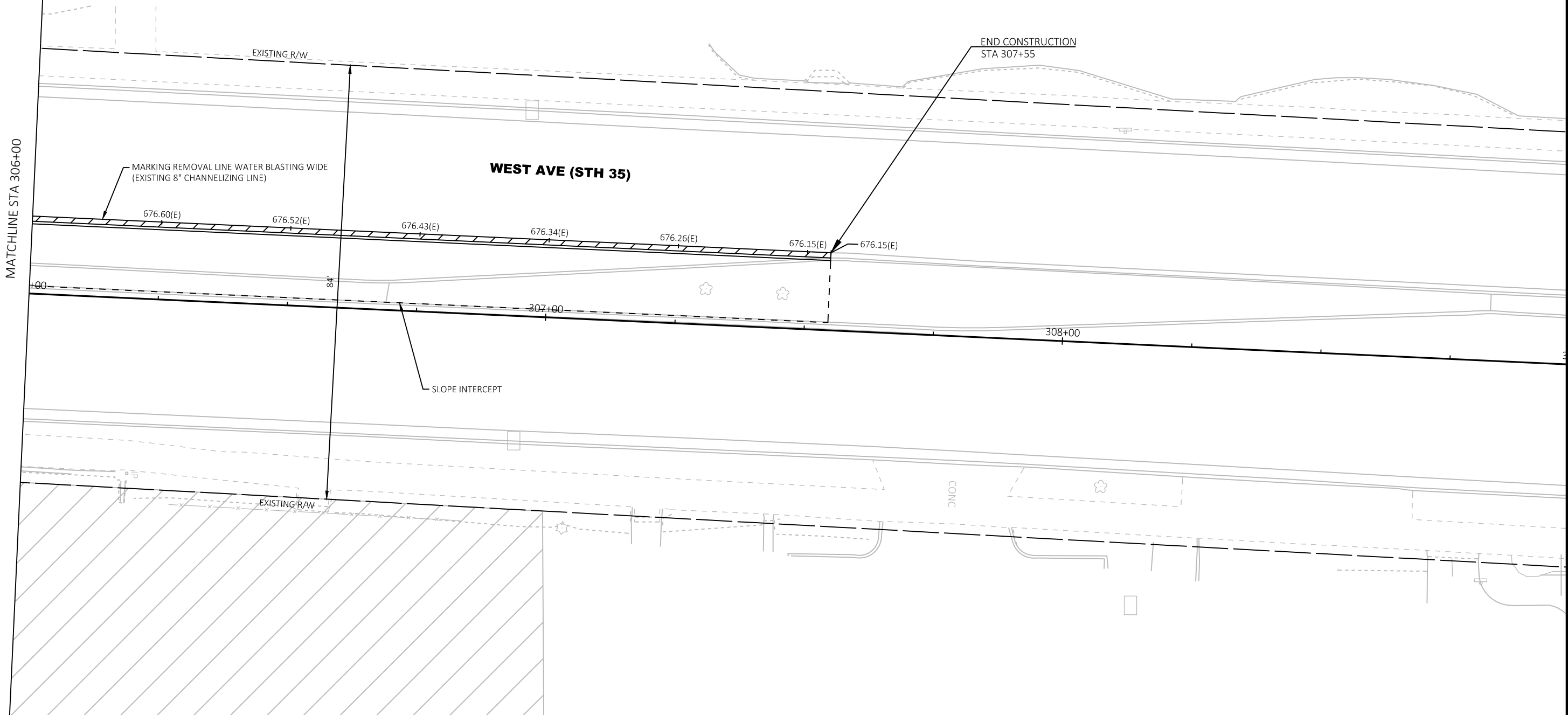
###.##(E) PAVING GRADE (EXISTING)

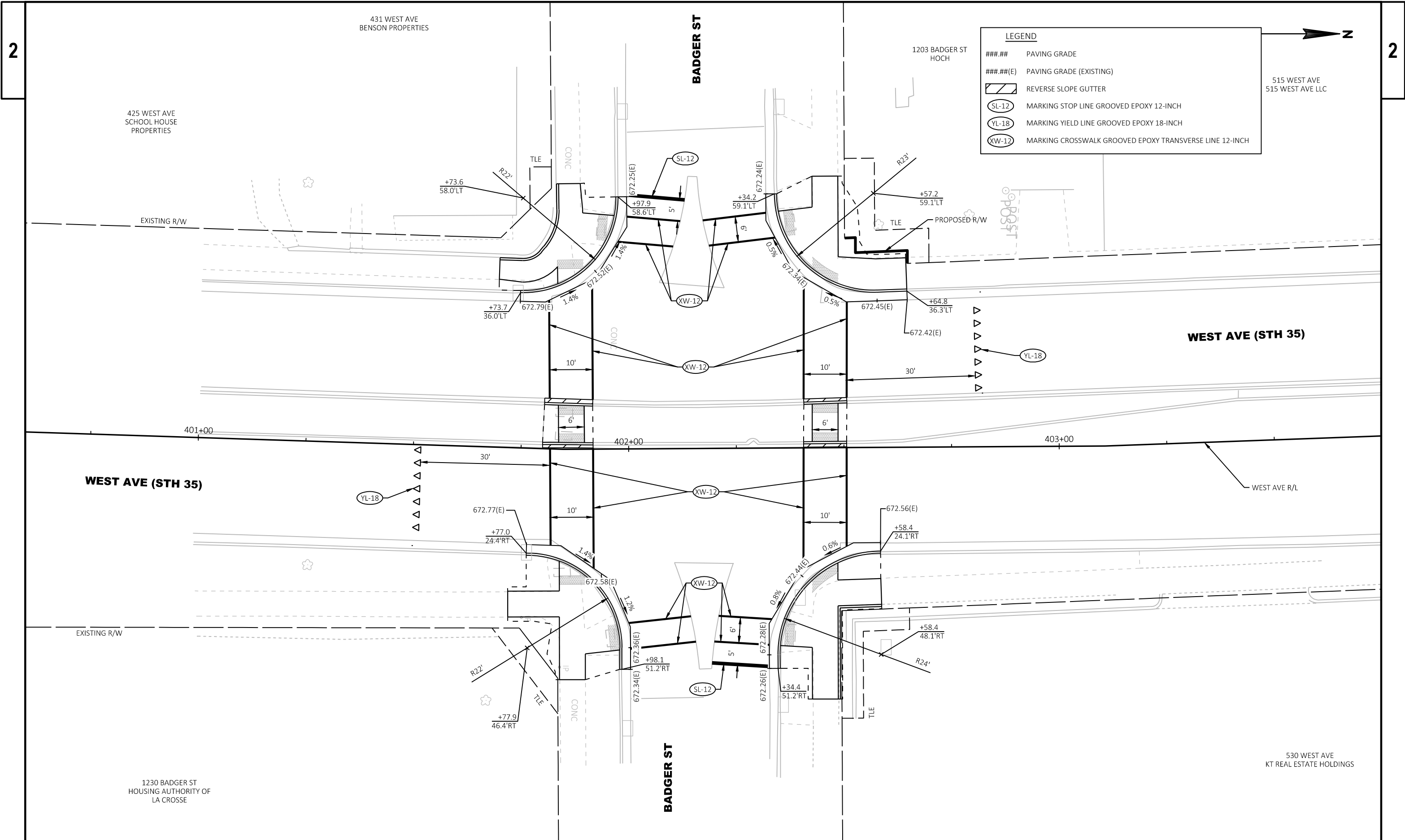
REVERSE SLOPE GUTTER

SL-12 MARKING STOP LINE GROOVED EPOXY 12-INCH

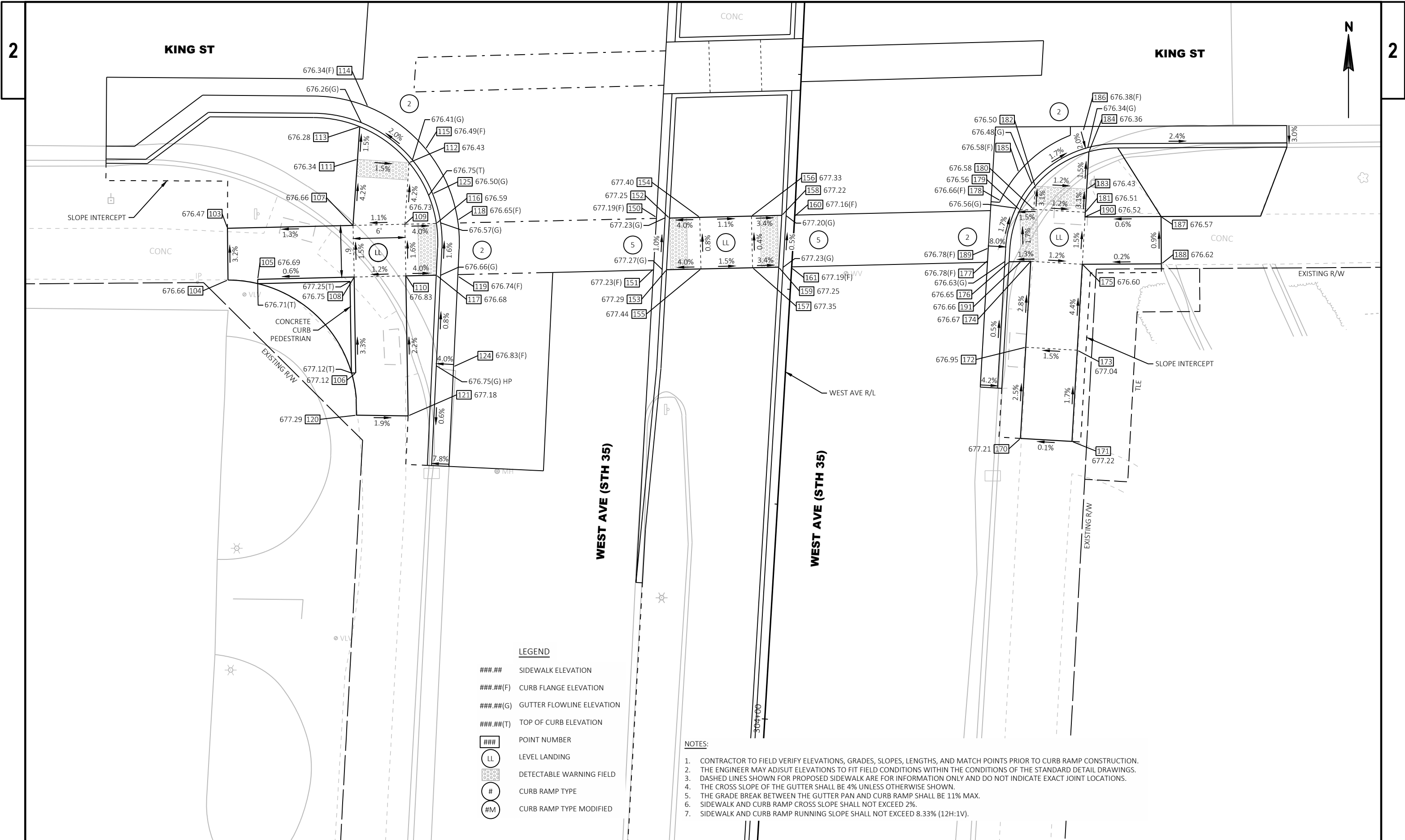
YL-18 MARKING YIELD LINE GROOVED EPOXY 18-INCH

XW-12 MARKING CROSSWALK GROOVED EPOXY TRANSVERSE LINE 12-INCH





| | | | | | |
|------------------------|-------------|-------------------|------------------------------|-------|---|
| PROJECT NO: 5220-04-74 | HWY: STH 35 | COUNTY: LA CROSSE | PAVEMENT DETAILS - BADGER ST | SHEET | E |
|------------------------|-------------|-------------------|------------------------------|-------|---|



| King Street SW - Point Table | | | | |
|------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 103 | 304+53.21 | 65.67' LT | 130833.18 | 448441.62 |
| 104 | 304+47.23 | 65.26' LT | 130827.18 | 448441.68 |
| 105 | 304+47.51 | 61.82' LT | 130827.26 | 448445.13 |
| 106 | 304+37.32 | 49.80' LT | 130816.37 | 448456.52 |
| 107 | 304+54.42 | 51.14' LT | 130833.52 | 448456.20 |
| 108 | 304+48.44 | 50.64' LT | 130827.52 | 448456.34 |
| 109 | 304+54.91 | 45.13' LT | 130833.66 | 448462.23 |
| 110 | 304+48.93 | 44.66' LT | 130827.66 | 448462.34 |
| 111 | 304+62.79 | 51.03' LT | 130841.20 | 448456.72 |
| 112 | 304+62.66 | 45.03' LT | 130840.80 | 448462.71 |
| 113 | 304+66.59 | 50.94' LT | 130844.99 | 448456.98 |
| 114 | 304+68.95 | 50.11' LT | 130847.31 | 448457.92 |
| 115 | 304+64.34 | 43.18' LT | 130842.39 | 448464.64 |
| 116 | 304+55.21 | 41.50' LT | 130833.74 | 448465.87 |
| 117 | 304+49.22 | 41.14' LT | 130827.74 | 448465.88 |
| 118 | 304+55.74 | 39.06' LT | 130834.12 | 448468.34 |
| 119 | 304+49.25 | 38.64' LT | 130827.63 | 448468.37 |
| 120 | 304+32.44 | 49.44' LT | 130811.48 | 448456.60 |
| 121 | 304+32.70 | 43.44' LT | 130811.38 | 448462.60 |
| 124 | 304+38.72 | 38.51' LT | 130817.11 | 448467.88 |
| 125 | 304+59.17 | 42.13' LT | 130837.18 | 448465.44 |

| King Street South Median - Point Table | | | | |
|--|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 150 | 304+57.44 | 16.01' LT | 130834.46 | 448491.45 |
| 151 | 304+51.42 | 15.99' LT | 130828.45 | 448491.11 |
| 152 | 304+57.44 | 14.51' LT | 130834.37 | 448492.95 |
| 153 | 304+51.42 | 14.49' LT | 130828.36 | 448492.61 |
| 154 | 304+57.73 | 10.99' LT | 130834.46 | 448496.47 |
| 155 | 304+51.75 | 10.50' LT | 130828.46 | 448496.61 |
| 156 | 304+58.23 | 5.02' LT | 130834.60 | 448502.47 |
| 157 | 304+52.25 | 4.52' LT | 130828.60 | 448502.61 |
| 158 | 304+58.52 | 1.50' LT | 130834.68 | 448506.00 |
| 159 | 304+52.50 | 1.50' LT | 130828.67 | 448505.64 |
| 160 | 304+58.52 | 0.00' | 130834.59 | 448507.50 |
| 161 | 304+52.50 | 0.00' | 130828.58 | 448507.14 |

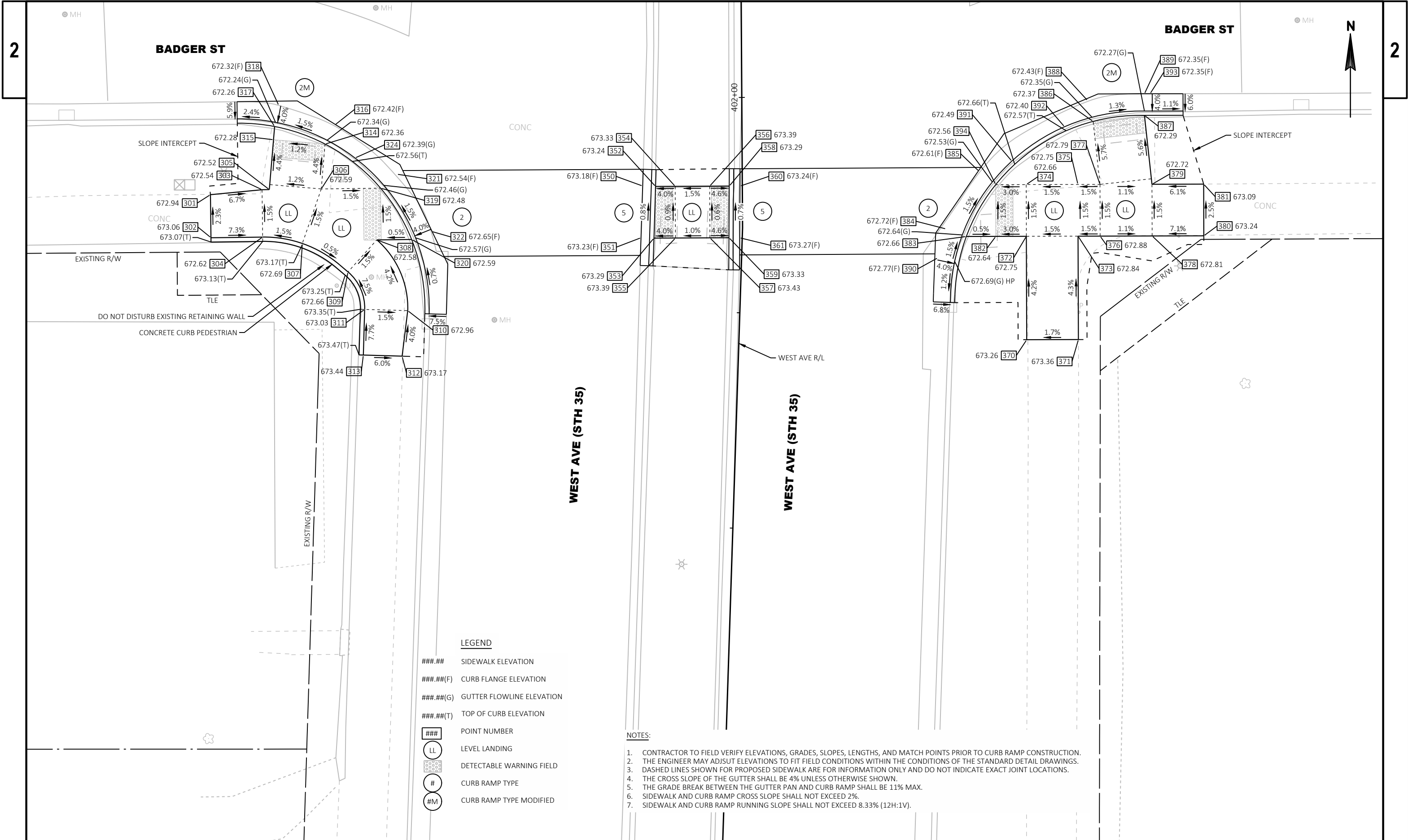
| King Street SE - Point Table | | | | |
|------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 170 | 304+34.30 | 27.71' RT | 130808.77 | 448533.72 |
| 171 | 304+34.31 | 33.71' RT | 130808.43 | 448539.71 |
| 172 | 304+44.91 | 27.69' RT | 130819.36 | 448534.34 |
| 173 | 304+44.92 | 33.69' RT | 130819.02 | 448540.33 |
| 174 | 304+54.91 | 27.68' RT | 130829.35 | 448534.92 |
| 175 | 304+54.92 | 33.68' RT | 130829.00 | 448540.91 |
| 176 | 304+54.70 | 25.18' RT | 130829.29 | 448532.41 |
| 177 | 304+54.70 | 22.68' RT | 130829.43 | 448529.91 |
| 178 | 304+61.41 | 23.78' RT | 130836.38 | 448531.39 |
| 179 | 304+60.45 | 26.09' RT | 130835.32 | 448533.65 |
| 180 | 304+60.60 | 27.70' RT | 130835.39 | 448535.27 |
| 181 | 304+60.52 | 33.70' RT | 130835.04 | 448541.26 |
| 182 | 304+63.30 | 27.73' RT | 130838.09 | 448535.42 |
| 183 | 304+63.23 | 33.73' RT | 130837.74 | 448541.41 |
| 184 | 304+67.57 | 33.79' RT | 130842.07 | 448541.67 |
| 185 | 304+64.82 | 25.75' RT | 130839.70 | 448533.51 |
| 186 | 304+69.95 | 33.01' RT | 130844.49 | 448541.00 |
| 187 | 304+60.43 | 42.51' RT | 130834.55 | 448550.06 |
| 188 | 304+55.51 | 42.84' RT | 130829.05 | 448550.08 |
| 189 | 304+56.16 | 22.68' RT | 130830.89 | 448530.00 |
| 190 | 304+59.98 | 33.70' RT | 130834.50 | 448541.23 |
| 191 | 304+54.82 | 26.56' RT | 130829.32 | 448533.79 |



| King St NW - Point Table | | | | |
|--------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 201 | 305+13.14 | 70.49' LT | 130892.39 | 448439.59 |
| 202 | 305+06.72 | 70.18' LT | 130885.97 | 448439.61 |
| 203 | 305+13.34 | 64.50' LT | 130892.32 | 448445.59 |
| 204 | 305+07.35 | 64.20' LT | 130886.32 | 448445.61 |
| 205 | 305+13.74 | 56.33' LT | 130892.34 | 448453.76 |
| 206 | 305+07.75 | 56.04' LT | 130886.34 | 448453.78 |
| 207 | 305+14.03 | 50.34' LT | 130892.36 | 448459.76 |
| 208 | 305+08.04 | 50.05' LT | 130886.36 | 448459.78 |
| 209 | 305+14.32 | 44.33' LT | 130892.37 | 448465.78 |
| 210 | 305+08.33 | 44.04' LT | 130886.37 | 448465.80 |
| 211 | 305+14.44 | 41.91' LT | 130892.38 | 448468.20 |
| 212 | 305+08.45 | 41.62' LT | 130886.38 | 448468.22 |
| 213 | 305+14.51 | 40.44' LT | 130892.38 | 448469.68 |
| 214 | 305+07.38 | 39.36' LT | 130885.21 | 448470.43 |
| 215 | 305+14.53 | 37.94' LT | 130892.29 | 448472.18 |
| 216 | 304+99.14 | 49.64' LT | 130877.45 | 448459.78 |
| 217 | 305+03.14 | 42.35' LT | 130881.11 | 448467.24 |
| 218 | 305+01.58 | 50.19' LT | 130879.91 | 448459.34 |
| 219 | 305+05.04 | 50.11' LT | 130883.37 | 448459.58 |
| 220 | 305+04.91 | 44.12' LT | 130882.96 | 448465.56 |
| 221 | 305+26.62 | 49.06' LT | 130904.87 | 448461.62 |
| 222 | 305+25.99 | 43.10' LT | 130903.97 | 448467.55 |
| 223 | 305+31.90 | 48.24' LT | 130910.11 | 448462.69 |
| 224 | 305+31.95 | 42.47' LT | 130909.90 | 448468.46 |
| 225 | 304+98.07 | 66.07' LT | 130877.14 | 448443.32 |
| 226 | 305+21.05 | 37.99' LT | 130898.80 | 448472.42 |
| 227 | 305+28.05 | 38.05' LT | 130905.80 | 448472.69 |

| King St North Median - Point Table | | | | |
|------------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 250 | 305+15.82 | 15.44' LT | 130892.54 | 448494.71 |
| 251 | 305+09.81 | 15.50' LT | 130886.54 | 448494.38 |
| 252 | 305+15.80 | 13.94' LT | 130892.45 | 448496.21 |
| 253 | 305+09.79 | 14.00' LT | 130886.45 | 448495.87 |
| 254 | 305+15.95 | 10.89' LT | 130892.46 | 448499.26 |
| 255 | 305+09.96 | 10.60' LT | 130886.46 | 448499.28 |
| 256 | 305+16.24 | 4.90' LT | 130892.48 | 448505.26 |
| 257 | 305+10.25 | 4.60' LT | 130886.48 | 448505.28 |
| 258 | 305+16.41 | 1.50' LT | 130892.49 | 448508.66 |
| 259 | 305+10.40 | 1.50' LT | 130886.49 | 448508.39 |
| 260 | 305+16.41 | 0.00' | 130892.42 | 448510.16 |
| 261 | 305+10.40 | 0.00' | 130886.42 | 448509.89 |

| King St NE - Point Table | | | | |
|--------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 270 | 305+37.00 | 26.77' RT | 130911.75 | 448537.85 |
| 271 | 305+36.99 | 32.77' RT | 130911.47 | 448543.84 |
| 272 | 305+29.29 | 26.76' RT | 130904.06 | 448537.49 |
| 273 | 305+29.29 | 32.76' RT | 130903.78 | 448543.48 |
| 274 | 305+23.29 | 26.76' RT | 130898.06 | 448537.21 |
| 275 | 305+23.29 | 32.01' RT | 130897.82 | 448542.45 |
| 276 | 305+17.79 | 26.75' RT | 130892.56 | 448536.95 |
| 277 | 305+18.04 | 32.00' RT | 130892.58 | 448542.21 |
| 278 | 305+11.86 | 28.32' RT | 130886.57 | 448538.24 |
| 279 | 305+17.14 | 34.08' RT | 130891.58 | 448544.24 |
| 280 | 305+12.15 | 34.32' RT | 130886.58 | 448544.25 |
| 281 | 305+17.48 | 40.93' RT | 130891.60 | 448551.10 |
| 282 | 305+12.48 | 41.17' RT | 130886.60 | 448551.11 |
| 283 | 305+18.20 | 45.42' RT | 130892.11 | 448555.61 |
| 284 | 305+12.70 | 45.68' RT | 130886.61 | 448555.63 |
| 285 | 305+06.26 | 28.25' RT | 130880.98 | 448537.92 |
| 286 | 305+06.18 | 34.25' RT | 130880.63 | 448543.91 |
| 287 | 305+02.11 | 34.20' RT | 130876.56 | 448543.67 |
| 288 | 305+04.63 | 26.35' RT | 130879.44 | 448535.95 |
| 289 | 304+99.77 | 33.33' RT | 130874.26 | 448542.69 |
| 290 | 305+17.69 | 24.75' RT | 130892.56 | 448534.95 |
| 291 | 305+11.71 | 25.31' RT | 130886.56 | 448535.23 |
| 292 | 305+17.69 | 22.25' RT | 130892.67 | 448532.45 |
| 293 | 305+11.02 | 22.91' RT | 130885.98 | 448532.80 |
| 294 | 305+21.84 | 22.25' RT | 130896.82 | 448532.64 |
| 295 | 305+00.46 | 48.64' RT | 130874.25 | 448558.01 |
| 296 | 305+17.04 | 32.00' RT | 130891.58 | 448542.16 |



| Badger St SW - Point Table | | | | |
|----------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 301 | 401+89.08 | 61.74' LT | 133055.33 | 448451.05 |
| 302 | 401+81.73 | 61.63' LT | 133050.33 | 448451.11 |
| 303 | 401+89.62 | 55.75' LT | 133055.90 | 448457.04 |
| 304 | 401+82.00 | 55.64' LT | 133050.40 | 448457.11 |
| 305 | 401+89.63 | 54.90' LT | 133055.91 | 448457.89 |
| 306 | 401+89.67 | 48.87' LT | 133055.99 | 448463.92 |
| 307 | 401+81.40 | 51.01' LT | 133049.66 | 448461.72 |
| 308 | 401+82.10 | 42.39' LT | 133050.08 | 448470.36 |
| 309 | 401+78.27 | 45.61' LT | 133046.36 | 448467.01 |
| 310 | 401+74.01 | 38.54' LT | 133041.87 | 448473.95 |
| 311 | 401+73.99 | 43.54' LT | 133042.01 | 448468.95 |
| 312 | 401+68.70 | 39.02' LT | 133036.58 | 448473.30 |
| 313 | 401+68.69 | 43.52' LT | 133036.71 | 448468.80 |
| 314 | 401+94.88 | 48.40' LT | 133061.20 | 448464.35 |
| 315 | 401+95.41 | 54.38' LT | 133061.70 | 448458.38 |
| 316 | 401+97.09 | 47.24' LT | 133063.42 | 448465.51 |
| 317 | 401+96.94 | 54.24' LT | 133063.23 | 448458.50 |
| 318 | 401+99.40 | 53.75' LT | 133065.69 | 448458.98 |
| 319 | 401+89.72 | 41.99' LT | 133056.08 | 448470.79 |
| 320 | 401+82.28 | 38.35' LT | 133050.13 | 448474.40 |
| 321 | 401+91.33 | 40.08' LT | 133057.71 | 448472.70 |
| 322 | 401+83.28 | 36.06' LT | 133051.06 | 448476.72 |
| 324 | 401+93.24 | 44.94' LT | 133059.58 | 448467.82 |

| Badger St South Median - Point Table | | | | |
|--------------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 350 | 401+89.79 | 11.57' LT | 133056.33 | 448501.22 |
| 351 | 401+83.34 | 11.74' LT | 133050.33 | 448501.03 |
| 352 | 401+89.73 | 10.07' LT | 133056.28 | 448502.72 |
| 353 | 401+83.34 | 10.24' LT | 133050.28 | 448502.53 |
| 354 | 401+89.73 | 7.79' LT | 133056.30 | 448505.00 |
| 355 | 401+83.43 | 7.74' LT | 133050.30 | 448505.03 |
| 356 | 401+89.73 | 3.79' LT | 133056.32 | 448509.00 |
| 357 | 401+83.58 | 3.75' LT | 133050.32 | 448509.03 |
| 358 | 401+89.73 | 1.51' LT | 133056.33 | 448511.27 |
| 359 | 401+83.67 | 1.54' LT | 133050.33 | 448511.24 |
| 360 | 401+89.71 | 0.26' LT | 133056.32 | 448512.52 |
| 361 | 401+83.70 | 0.29' LT | 133050.32 | 448512.49 |

| Badger St SE - Point Table | | | | |
|----------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 370 | 401+72.95 | 33.39' RT | 133038.49 | 448545.80 |
| 371 | 401+73.17 | 39.38' RT | 133038.51 | 448551.80 |
| 372 | 401+84.87 | 32.96' RT | 133050.50 | 448545.76 |
| 373 | 401+84.87 | 38.95' RT | 133050.51 | 448551.76 |
| 374 | 401+89.69 | 32.96' RT | 133056.50 | 448545.74 |
| 375 | 401+89.67 | 38.96' RT | 133056.51 | 448551.74 |
| 376 | 401+84.87 | 41.52' RT | 133050.52 | 448554.32 |
| 377 | 401+89.66 | 41.52' RT | 133056.52 | 448554.30 |
| 378 | 401+84.87 | 47.55' RT | 133050.53 | 448560.35 |
| 379 | 401+89.64 | 47.55' RT | 133056.53 | 448560.34 |
| 380 | 401+84.87 | 53.55' RT | 133050.55 | 448566.35 |
| 381 | 401+89.62 | 53.55' RT | 133056.55 | 448566.34 |
| 382 | 401+84.83 | 29.41' RT | 133050.49 | 448542.21 |
| 383 | 401+84.71 | 26.00' RT | 133050.48 | 448538.80 |
| 384 | 401+84.87 | 23.64' RT | 133051.35 | 448536.45 |
| 385 | 401+91.28 | 27.47' RT | 133058.05 | 448540.25 |
| 386 | 401+96.97 | 40.76' RT | 133063.82 | 448553.50 |
| 387 | 401+97.64 | 46.72' RT | 133064.53 | 448559.46 |
| 388 | 401+99.39 | 40.14' RT | 133066.24 | 448552.87 |
| 389 | 402+00.14 | 46.73' RT | 133067.03 | 448559.46 |
| 390 | 401+82.12 | 22.77' RT | 133047.99 | 448535.48 |
| 391 | 401+92.43 | 31.30' RT | 133059.22 | 448544.07 |
| 392 | 401+96.37 | 37.44' RT | 133063.20 | 448550.19 |
| 393 | 402+00.14 | 47.39' RT | 133067.03 | 448560.12 |
| 394 | 401+89.70 | 29.42' RT | 133056.49 | 448542.20 |

LEGEND

| | |
|-----------|---------------------------|
| ###.## | SIDEWALK ELEVATION |
| ###.##(F) | CURB FLANGE ELEVATION |
| ###.##(G) | GUTTER FLOWLINE ELEVATION |
| ###.##(T) | TOP OF CURB ELEVATION |
| ### | POINT NUMBER |
| LL | LEVEL LANDING |
| | DETECTABLE WARNING FIELD |
| # | CURB RAMP TYPE |
| #M | CURB RAMP TYPE MODIFIED |

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE CROSS SLOPE OF THE GUTTER SHALL BE 4% UNLESS OTHERWISE SHOWN.
5. THE GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11% MAX.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
7. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).



WEST AVE (STH 35)

WEST AVE (STH 35)

MH

RADIAL WARNING FIELD INFORMATION

BACK OF CURB RADIUS = 22.5'
LANDING LENGTH 'XR' = 6.20'
RADIAL WARNING FIELD AREA = 14.2 SF
RADIAL LONG CHORD = 6.96'

RADIAL WARNING FIELD INFORMATION

BACK OF CURB RADIUS = 23.5'
LANDING LENGTH 'XR' = 6.90'
RADIAL WARNING FIELD AREA = 14.9 SF
RADIAL LONG CHORD = 7.24'

BADGER ST

BADGER ST

PROJECT NO: 5220-04-74

HWY: STH 35

COUNTY: LA CROSSE

CURB RAMP DETAILS - BADGER ST

SHEET

E

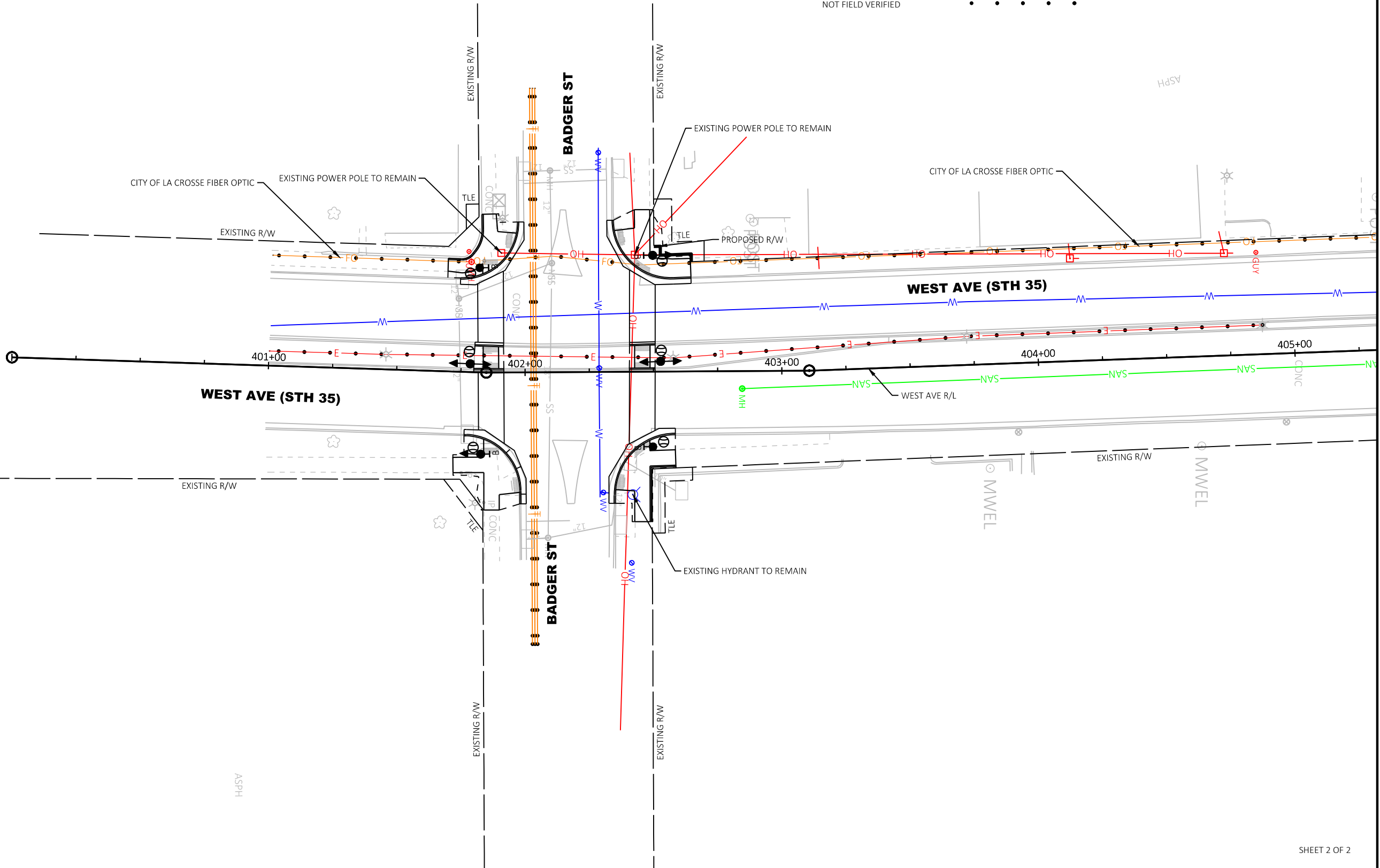
| Badger St NW - Point Table | | | | |
|----------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 401 | 402+48.92 | 63.10' LT | 133115.16 | 448449.33 |
| 402 | 402+42.92 | 63.11' LT | 133109.16 | 448449.37 |
| 403 | 402+48.92 | 55.91' LT | 133115.20 | 448456.53 |
| 404 | 402+42.92 | 55.91' LT | 133109.20 | 448456.56 |
| 405 | 402+48.92 | 49.87' LT | 133115.23 | 448462.57 |
| 406 | 402+42.92 | 49.87' LT | 133109.23 | 448462.60 |
| 407 | 402+48.91 | 44.32' LT | 133115.26 | 448468.11 |
| 408 | 402+42.91 | 44.33' LT | 133109.26 | 448468.14 |
| 409 | 402+36.27 | 55.15' LT | 133102.55 | 448457.36 |
| 410 | 402+36.95 | 49.19' LT | 133103.27 | 448463.32 |
| 411 | 402+35.04 | 55.01' LT | 133101.32 | 448457.51 |
| 412 | 402+34.70 | 48.09' LT | 133101.03 | 448464.43 |
| 413 | 402+32.58 | 54.56' LT | 133098.87 | 448457.97 |
| 414 | 402+48.91 | 38.13' LT | 133115.29 | 448474.31 |
| 415 | 402+42.91 | 41.65' LT | 133109.27 | 448470.82 |
| 416 | 402+47.99 | 35.80' LT | 133114.39 | 448476.64 |
| 417 | 402+41.33 | 39.72' LT | 133107.70 | 448472.76 |
| 418 | 402+57.61 | 43.81' LT | 133123.96 | 448468.57 |
| 419 | 402+57.82 | 36.57' LT | 133124.21 | 448475.82 |
| 420 | 402+64.61 | 44.01' LT | 133130.95 | 448468.33 |
| 421 | 402+64.81 | 36.77' LT | 133131.20 | 448475.58 |
| 422 | 402+38.18 | 46.08' LT | 133104.52 | 448466.42 |
| 423 | 402+40.49 | 43.22' LT | 133106.85 | 448469.27 |

| Badger St North Median - Point Table | | | | |
|--------------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 450 | 402+48.67 | 11.59' LT | 133115.21 | 448500.85 |
| 451 | 402+42.67 | 11.43' LT | 133109.21 | 448501.04 |
| 452 | 402+48.70 | 10.34' LT | 133115.25 | 448502.10 |
| 453 | 402+42.70 | 10.18' LT | 133109.25 | 448502.29 |
| 454 | 402+48.69 | 7.79' LT | 133115.25 | 448504.64 |
| 455 | 402+42.69 | 7.83' LT | 133109.25 | 448504.64 |
| 456 | 402+48.66 | 3.79' LT | 133115.25 | 448508.64 |
| 457 | 402+42.66 | 3.83' LT | 133109.25 | 448508.64 |
| 458 | 402+48.64 | 1.45' LT | 133115.24 | 448510.99 |
| 459 | 402+42.64 | 1.42' LT | 133109.24 | 448511.05 |
| 460 | 402+48.65 | 0.20' LT | 133115.26 | 448512.24 |
| 461 | 402+42.65 | 0.17' LT | 133109.26 | 448512.30 |

| Badger St NE - Point Table | | | | |
|----------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | Y | X |
| 470 | 402+58.37 | 30.47' RT | 133125.16 | 448542.84 |
| 471 | 402+58.54 | 36.46' RT | 133125.37 | 448548.84 |
| 472 | 402+48.43 | 30.75' RT | 133115.22 | 448543.19 |
| 473 | 402+48.41 | 36.75' RT | 133115.24 | 448549.19 |
| 474 | 402+42.43 | 30.86' RT | 133109.22 | 448543.34 |
| 475 | 402+42.41 | 36.74' RT | 133109.24 | 448549.21 |
| 476 | 402+48.41 | 40.38' RT | 133115.25 | 448552.82 |
| 477 | 402+42.41 | 40.37' RT | 133109.25 | 448552.84 |
| 478 | 402+48.39 | 46.39' RT | 133115.28 | 448558.83 |
| 479 | 402+42.39 | 46.38' RT | 133109.28 | 448558.85 |
| 480 | 402+48.36 | 58.39' RT | 133115.32 | 448570.83 |
| 481 | 402+42.36 | 58.38' RT | 133109.32 | 448570.85 |
| 482 | 402+48.44 | 26.82' RT | 133115.20 | 448539.26 |
| 483 | 402+47.38 | 24.56' RT | 133114.13 | 448537.00 |
| 484 | 402+40.73 | 29.03' RT | 133107.51 | 448541.51 |
| 485 | 402+36.34 | 39.97' RT | 133103.19 | 448552.48 |
| 486 | 402+35.95 | 45.95' RT | 133102.83 | 448558.47 |
| 487 | 402+34.99 | 45.89' RT | 133101.87 | 448558.41 |
| 488 | 402+34.00 | 39.10' RT | 133100.84 | 448551.62 |
| 489 | 402+32.50 | 45.65' RT | 133099.38 | 448558.19 |
| 491 | 402+39.95 | 32.75' RT | 133106.75 | 448545.24 |
| 492 | 402+37.35 | 36.56' RT | 133104.18 | 448549.06 |
| 493 | 402+32.39 | 48.88' RT | 133099.28 | 448561.42 |

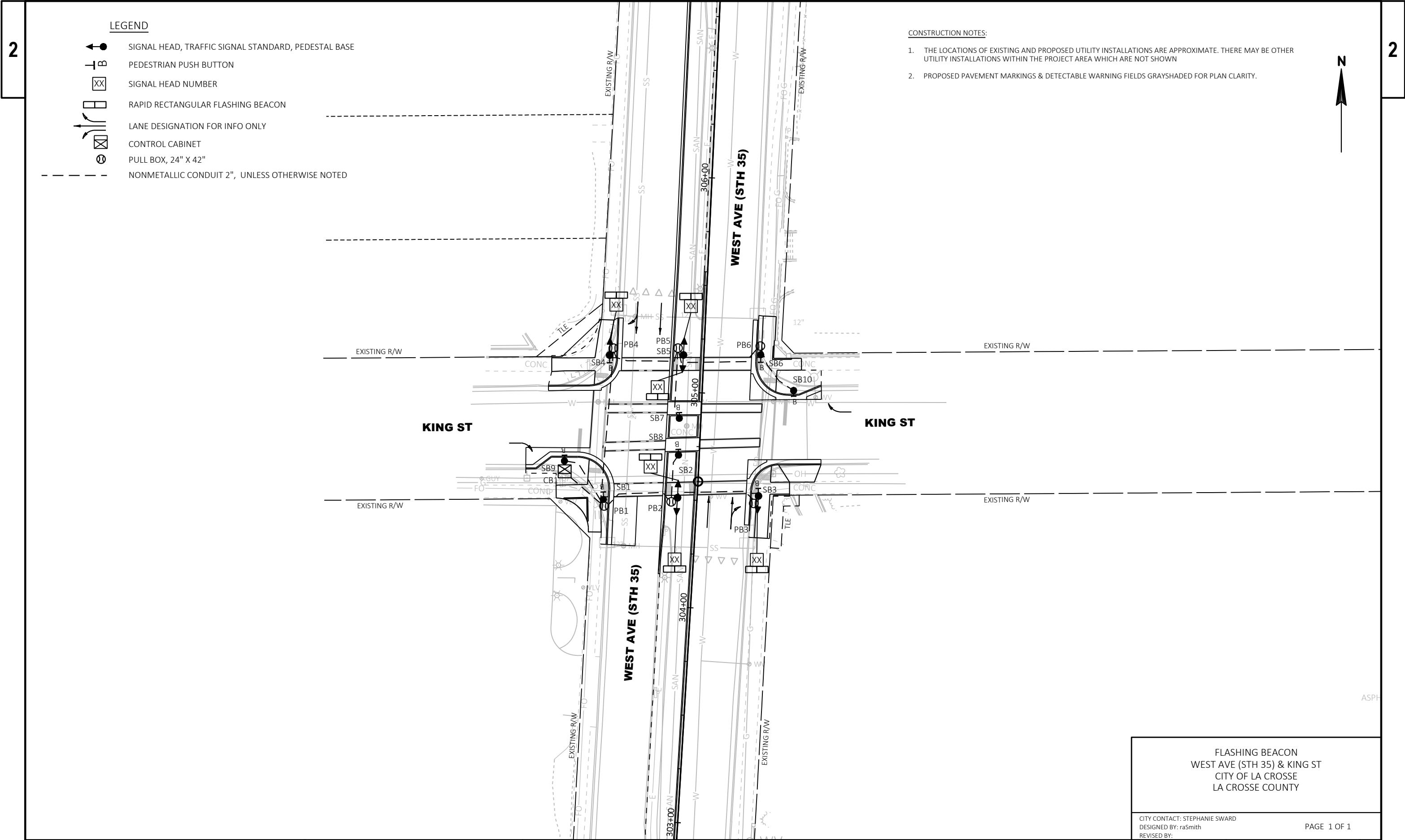


| UTILITY (FACILITY) | SYMBOL/COLOR CODE |
|-------------------------------|-------------------|
| CENTURY LINK - COMMUNICATIONS | T |
| XCEL ENERGY - GAS | G |
| XCEL ENERGY - OH ELECTRIC | OH |
| CITY OF LA CROSSE - WATER | W |
| CITY OF LA CROSSE - SANITARY | SAN |
| CITY OF LA CROSSE - ELECTRIC | E |
| WINDSTREAM - COMMUNICATIONS | FO |
| NOT FIELD VERIFIED | . |



SHEET 2 OF 2

| | | | | | |
|------------------------|-------------|-------------------|-----------------|-------|---|
| PROJECT NO: 5220-04-74 | HWY: STH 35 | COUNTY: LA CROSSE | UTILITY DETAILS | SHEET | E |
|------------------------|-------------|-------------------|-----------------|-------|---|

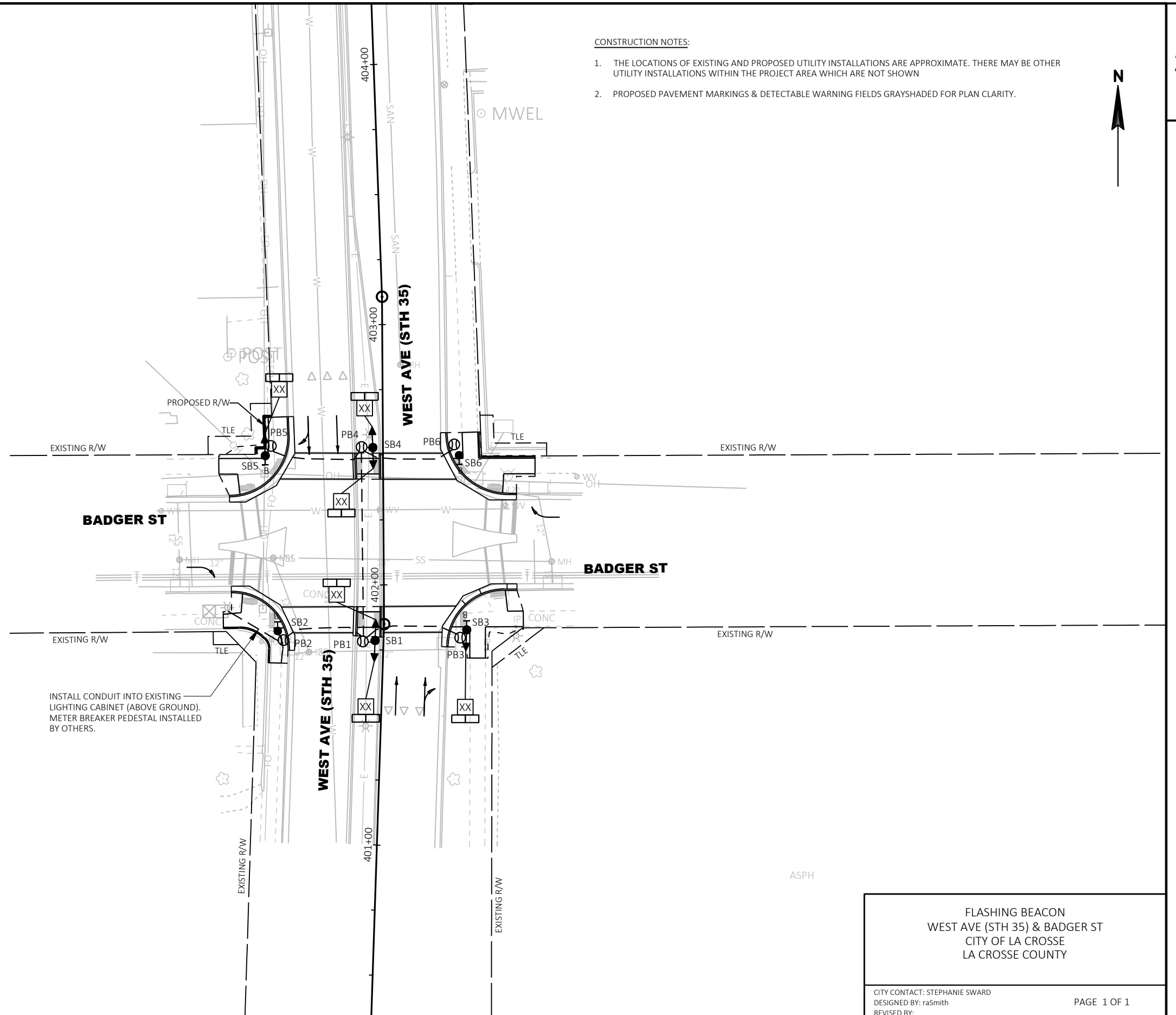


LEGEND

- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
B PEDESTRIAN PUSH BUTTON
XX SIGNAL HEAD NUMBER
RAPID RECTANGULAR FLASHING BEACON
LANE DESIGNATION FOR INFO ONLY
PULL BOX, 24" X 42"
NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

CONSTRUCTION NOTES:

- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN
- PROPOSED PAVEMENT MARKINGS & DETECTABLE WARNING FIELDS GRAYSHADED FOR PLAN CLARITY.



PROJECT NO: 5220-04-74

HWY: STH 35

COUNTY: LA CROSSE

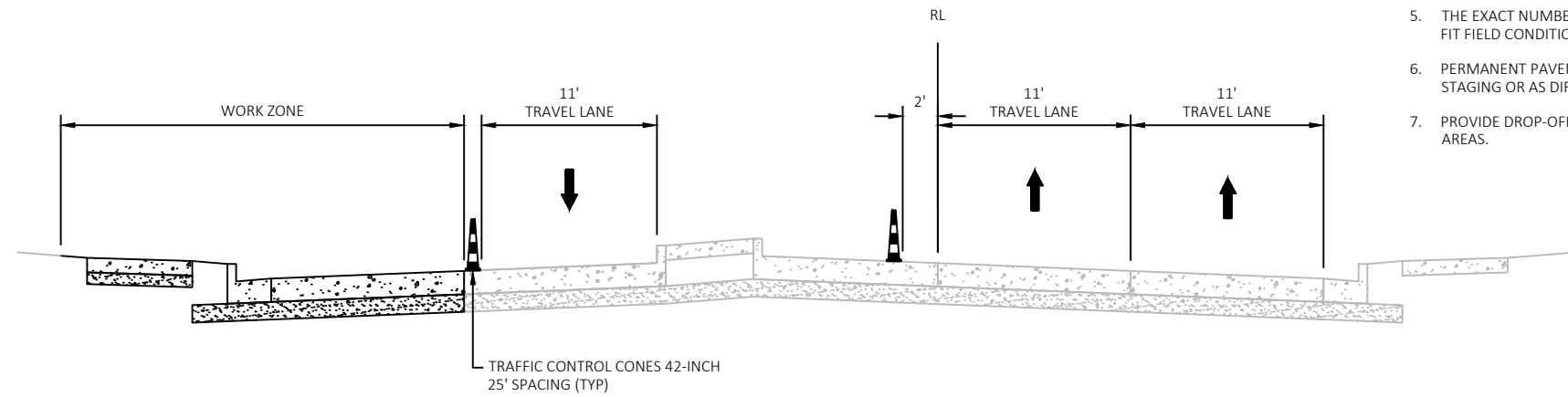
FLASHING BEACON PLAN

SHEET

E

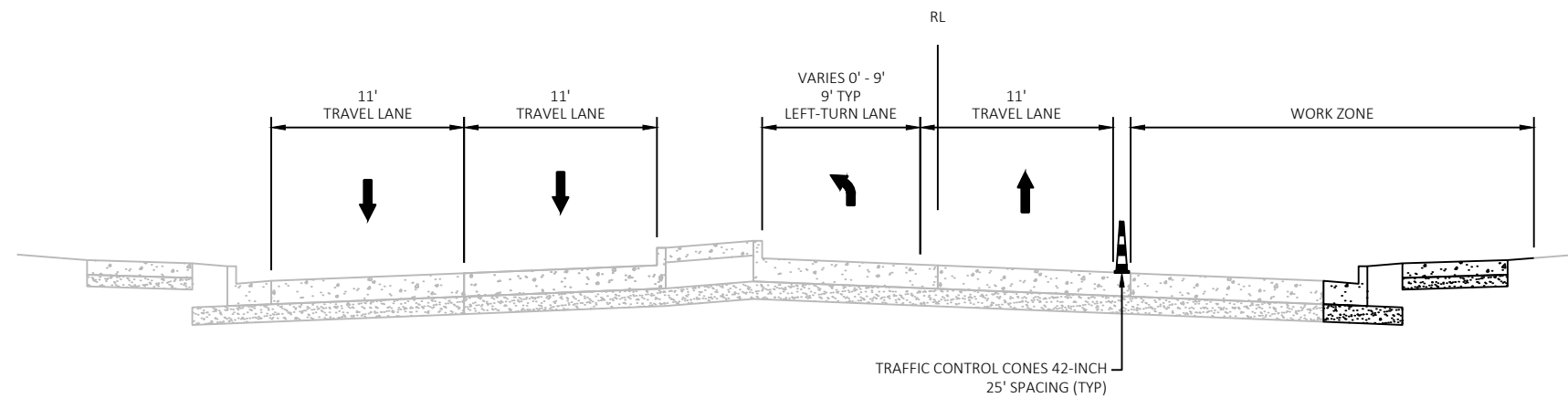
TRAFFIC CONTROL NOTES:

1. MAINTAIN MINIMUM ONE 11' LANE IN EACH DIRECTION.
2. MAINTAIN ACCESS TO ALL DRIVEWAYS EXCEPT WHEN WORKING IMMEDIATELY IN FRONT OF DRIVEWAY.
3. USE SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY.
BUFFER SPACE = 55'
LANE CLOSURE TAPER = 125'
4. ALL SIGNS SHALL BE 48" X 48" UNLESS NOTED OTHERWISE.
5. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
6. PERMANENT PAVEMENT MARKING SHALL BE INSTALLED WHEN APPROPRIATE DURING CONSTRUCTION STAGING OR AS DIRECTED BY THE ENGINEER.
7. PROVIDE DROP-OFF PROTECTION AS REQUIRED PER THE STANDARD SPECS FOR PAVEMENT REMOVAL AREAS.



TRAFFIC CONTROL - STAGE 1A
WEST AVE

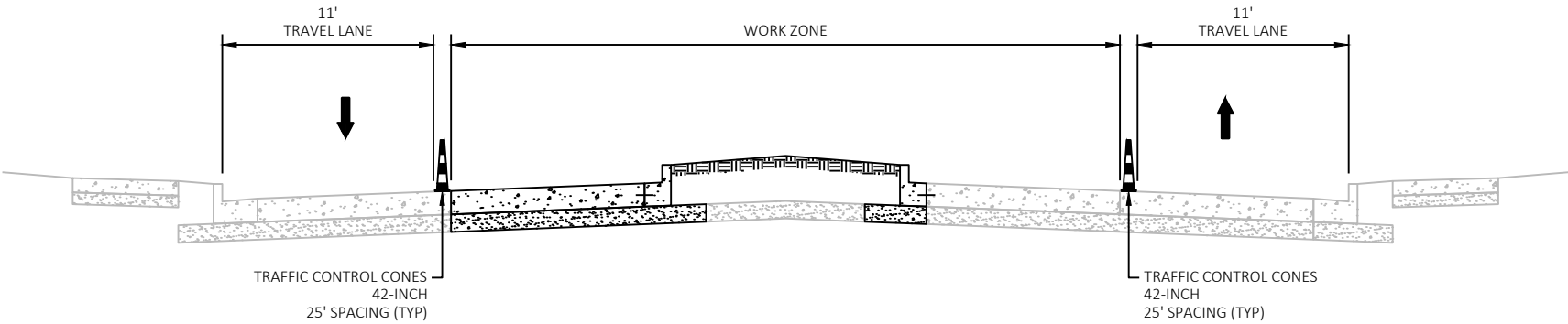
NORTHBOUND LEFT-TURN LANE CLOSED AT KING ST
SOUTHBOUND LEFT-TURN LANE OPEN AT KING ST



TRAFFIC CONTROL - STAGE 1B
WEST AVE

NORTHBOUND LEFT-TURN LANE OPEN AT KING ST
SOUTHBOUND LEFT-TURN LANE CLOSED AT KING ST

- TRAFFIC CONTROL NOTES:
- 1. MAINTAIN MINIMUM ONE 11' LANE IN EACH DIRECTION.
 - 2. MAINTAIN ACCESS TO ALL DRIVEWAYS EXCEPT WHEN WORKING IMMEDIATELY IN FRONT OF DRIVEWAY.
 - 3. USE SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY.
BUFFER SPACE = 55'
LANE CLOSURE TAPER = 125'
 - 4. ALL SIGNS SHALL BE 48" X 48" UNLESS NOTED OTHERWISE.
 - 5. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
 - 6. PERMANENT PAVEMENT MARKING SHALL BE INSTALLED WHEN APPROPRIATE DURING CONSTRUCTION STAGING OR AS DIRECTED BY THE ENGINEER.
 - 7. PROVIDE DROP-OFF PROTECTION AS REQUIRED PER THE STANDARD SPECS FOR PAVEMENT REMOVAL AREAS.



TRAFFIC CONTROL - STAGE 2
WEST AVE



TYPE III BARRICADE WITH TWO WARNING LIGHTS TYPE A

TYPE III BARRICADE WITH TWO WARNING LIGHTS TYPE A AND ATTACHED SIGN

TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT

WORK ZONE

TRAFFIC FLOW

ARROW BOARD

TRAFFIC CONTROL CONES 42-INCH (25' SPACING TYP)

TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS TYPE C (25' SPACING TYP)

PEDESTRIAN DETOUR ROUTE (WEST AVE)

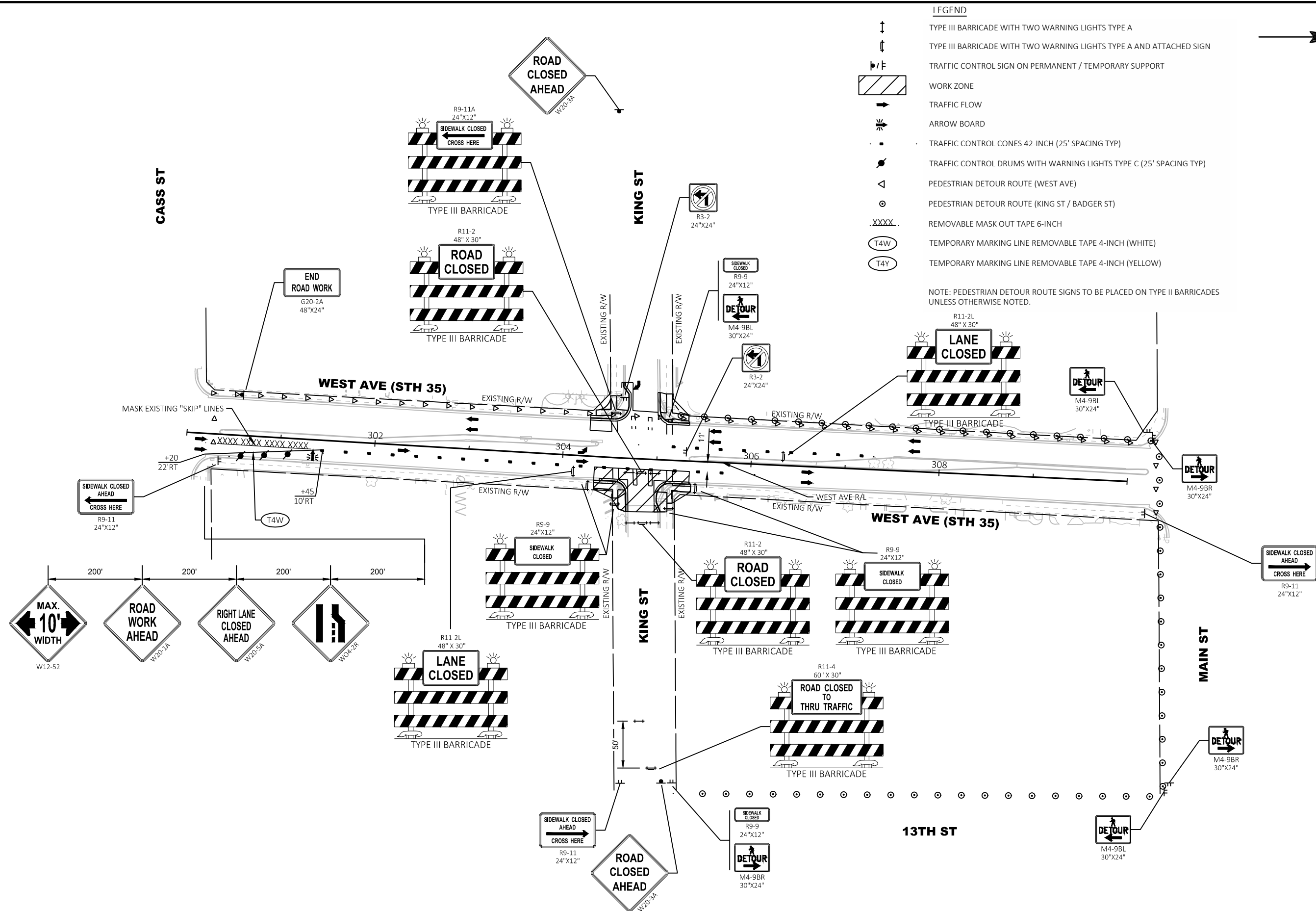
PEDESTRIAN DETOUR ROUTE (KING ST / BADGER ST)

REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

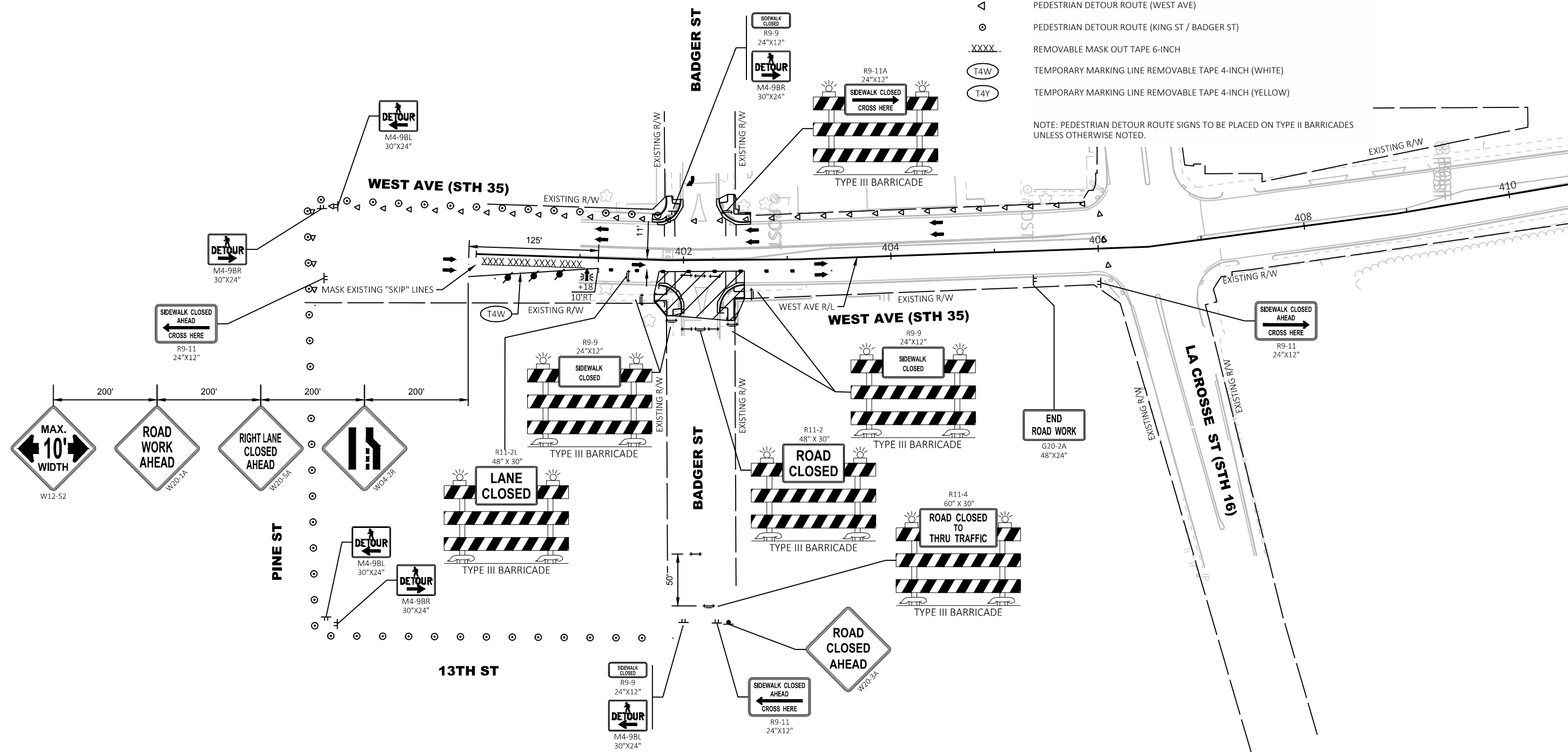
NOTE: PEDESTRIAN DETOUR ROUTE SIGNS TO BE PLACED ON TYPE II BARRICADES UNLESS OTHERWISE NOTED.

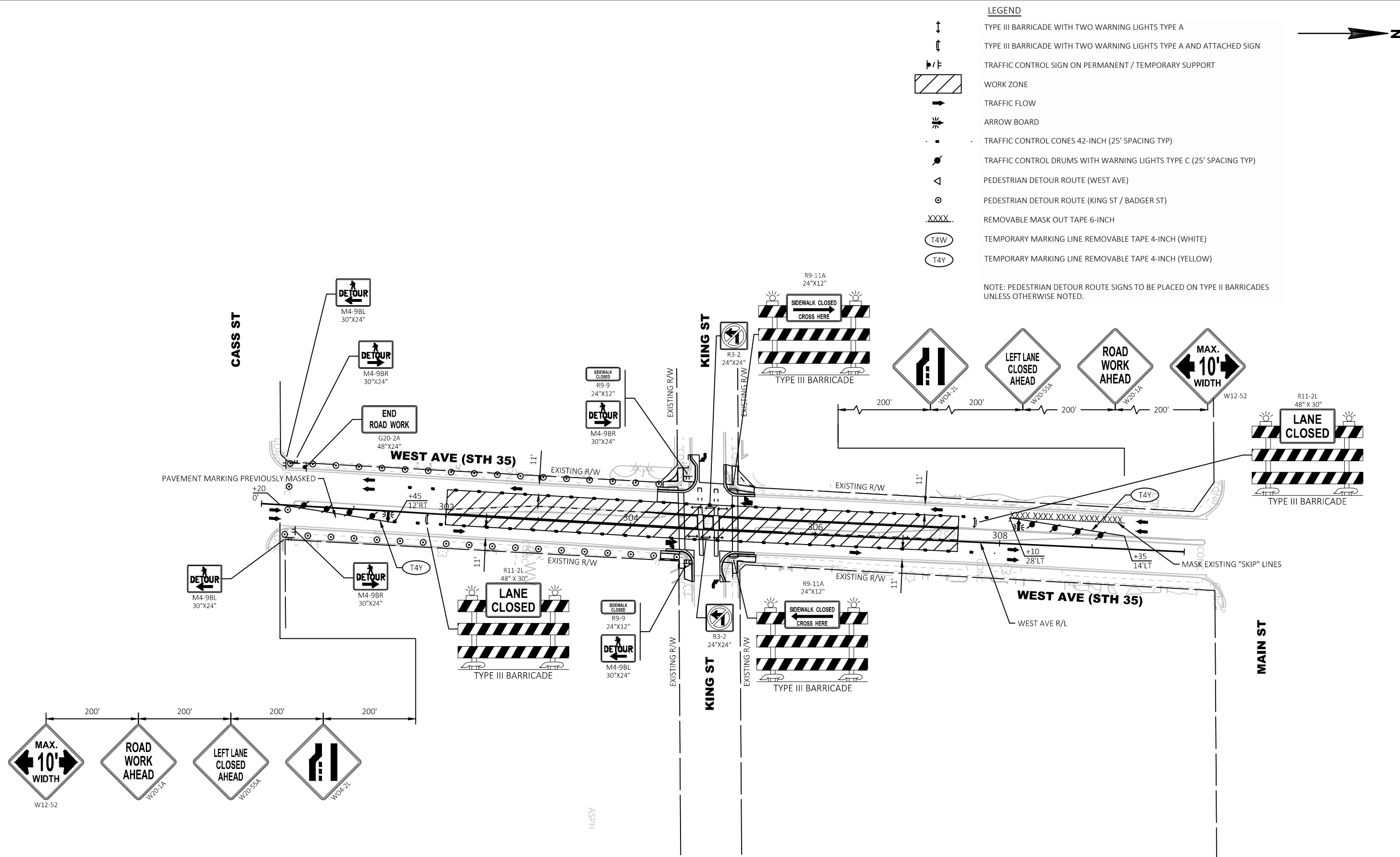


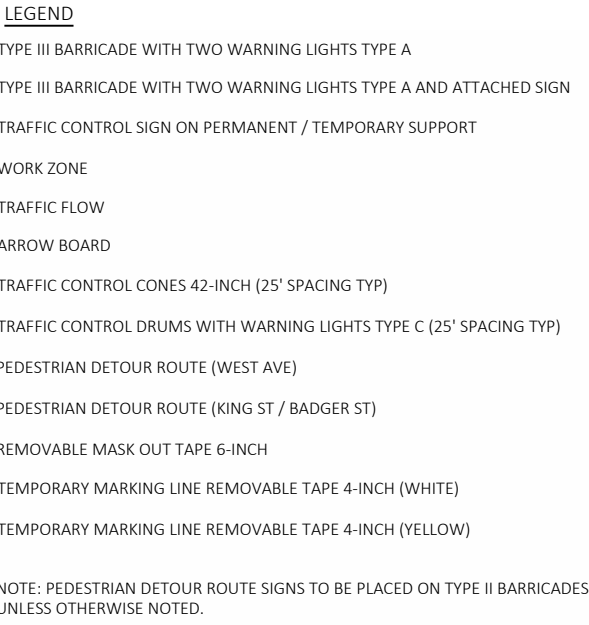
LEGEND

- TYPE III BARRICADE WITH TWO WARNING LIGHTS TYPE A
TYPE III BARRICADE WITH TWO WARNING LIGHTS TYPE A AND ATTACHED SIGN
TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
WORK ZONE
TRAFFIC FLOW
ARROW BOARD
TRAFFIC CONTROL CONES 42-INCH (25' SPACING TYP)
TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS TYPE C (25' SPACING TYP)
PEDESTRIAN DETOUR ROUTE (WEST AVE)
PEDESTRIAN DETOUR ROUTE (KING ST / BADGER ST)
REMOVABLE MASK OUT TAPE 6-INCH
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

NOTE: PEDESTRIAN DETOUR ROUTE SIGNS TO BE PLACED ON TYPE II BARRICADES UNLESS OTHERWISE NOTED.







Estimate Of Quantities

5220-04-74

| Line | Item | Item Description | Unit | Total | Qty |
|------|----------|--|------|-----------|-----------|
| 0002 | 204.0100 | Removing Concrete Pavement | SY | 1,215.000 | 1,215.000 |
| 0004 | 204.0150 | Removing Curb & Gutter | LF | 112.000 | 112.000 |
| 0006 | 204.0155 | Removing Concrete Sidewalk | SY | 443.000 | 443.000 |
| 0008 | 211.0200 | Prepare Foundation for Concrete Pavement (project) 01. 5220-04-74 | LS | 1.000 | 1.000 |
| 0010 | 213.0100 | Finishing Roadway (project) 01. 5220-04-74 | EACH | 1.000 | 1.000 |
| 0012 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 135.000 | 135.000 |
| 0014 | 405.0100 | Coloring Concrete WisDOT Red | CY | 39.000 | 39.000 |
| 0016 | 405.0200 | Coloring Concrete Custom | CY | 12.000 | 12.000 |
| 0018 | 415.0210 | Concrete Pavement Gaps | EACH | 5.000 | 5.000 |
| 0020 | 415.1080 | Concrete Pavement HES 8-Inch | SY | 437.000 | 437.000 |
| 0022 | 416.0160 | Concrete Driveway 6-Inch | SY | 14.000 | 14.000 |
| 0024 | 416.0610 | Drilled Tie Bars | EACH | 416.000 | 416.000 |
| 0026 | 416.0620 | Drilled Dowel Bars | EACH | 322.000 | 322.000 |
| 0028 | 601.0120 | Concrete Curb Type J | LF | 56.000 | 56.000 |
| 0030 | 601.0417 | Concrete Curb & Gutter 30-Inch Type K | LF | 412.000 | 412.000 |
| 0032 | 601.0600 | Concrete Curb Pedestrian | LF | 111.000 | 111.000 |
| 0034 | 602.0410 | Concrete Sidewalk 5-Inch | SF | 2,890.000 | 2,890.000 |
| 0036 | 602.0505 | Curb Ramp Detectable Warning Field Yellow | SF | 264.000 | 264.000 |
| 0038 | 602.0605 | Curb Ramp Detectable Warning Field Radial Yellow | SF | 29.000 | 29.000 |
| 0040 | 611.8110 | Adjusting Manhole Covers | EACH | 1.000 | 1.000 |
| 0042 | 611.8115 | Adjusting Inlet Covers | EACH | 7.000 | 7.000 |
| 0044 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0046 | 624.0100 | Water | MGAL | 2.000 | 2.000 |
| 0048 | 625.0100 | Topsoil | SY | 932.000 | 932.000 |
| 0050 | 628.1905 | Mobilizations Erosion Control | EACH | 8.000 | 8.000 |
| 0052 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 4.000 | 4.000 |
| 0054 | 628.7015 | Inlet Protection Type C | EACH | 11.000 | 11.000 |
| 0056 | 629.0210 | Fertilizer Type B | CWT | 0.670 | 0.670 |
| 0058 | 631.0300 | Sod Water | MGAL | 28.000 | 28.000 |
| 0060 | 631.1000 | Sod Lawn | SY | 932.000 | 932.000 |
| 0062 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0064 | 643.0300 | Traffic Control Drums | DAY | 756.000 | 756.000 |
| 0066 | 643.0410 | Traffic Control Barricades Type II | DAY | 990.000 | 990.000 |
| 0068 | 643.0420 | Traffic Control Barricades Type III | DAY | 1,514.000 | 1,514.000 |
| 0070 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 3,027.000 | 3,027.000 |
| 0072 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 756.000 | 756.000 |
| 0074 | 643.0800 | Traffic Control Arrow Boards | DAY | 176.000 | 176.000 |
| 0076 | 643.0900 | Traffic Control Signs | DAY | 3,200.000 | 3,200.000 |
| 0078 | 643.1050 | Traffic Control Signs PCMS | DAY | 14.000 | 14.000 |

Estimate Of Quantities

5220-04-74

| Line | Item | Item Description | Unit | Total | Qty |
|------|------------|--|------|-----------|-----------|
| 0080 | 643.1070 | Traffic Control Cones 42-Inch | DAY | 2,878.000 | 2,878.000 |
| 0082 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0084 | 646.9110 | Marking Removal Line Water Blasting 8-Inch | LF | 275.000 | 275.000 |
| 0086 | 649.0150 | Temporary Marking Line Removable Tape 4-Inch | LF | 1,008.000 | 1,008.000 |
| 0088 | 649.0960 | Temporary Marking Removable Mask Out Tape 6-Inch | LF | 180.000 | 180.000 |
| 0090 | 650.7000 | Construction Staking Concrete Pavement | LF | 152.000 | 152.000 |
| 0092 | 650.8500 | Construction Staking Electrical Installations (project) 01. 5220-04-74 | LS | 1.000 | 1.000 |
| 0094 | 650.9000 | Construction Staking Curb Ramps | EACH | 24.000 | 24.000 |
| 0096 | 650.9910 | Construction Staking Supplemental Control (project) 01. 5220-04-74 | LS | 1.000 | 1.000 |
| 0098 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 644.000 | 644.000 |
| 0100 | 652.0700.S | Install Conduit into Existing Item | EACH | 1.000 | 1.000 |
| 0102 | 653.0140 | Pull Boxes Steel 24x42-Inch | EACH | 12.000 | 12.000 |
| 0104 | 654.0101 | Concrete Bases Type 1 | EACH | 16.000 | 16.000 |
| 0106 | 654.0217 | Concrete Control Cabinet Bases Type 9 Special | EACH | 1.000 | 1.000 |
| 0108 | 656.0200 | Electrical Service Meter Breaker Pedestal (location) 01. West Ave & King St | LS | 1.000 | 1.000 |
| 0110 | 690.0250 | Sawing Concrete | LF | 1,766.000 | 1,766.000 |
| 0112 | 715.0415 | Incentive Strength Concrete Pavement | DOL | 500.000 | 500.000 |
| 0114 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR | HRS | 1,200.000 | 1,200.000 |
| 0116 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR | HRS | 600.000 | 600.000 |
| 0118 | SPV.0060 | Special 01. Adjusting Sanitary Manhole Covers | EACH | 2.000 | 2.000 |
| 0120 | SPV.0060 | Special 02. Adjusting Water Valves | EACH | 3.000 | 3.000 |
| 0122 | SPV.0060 | Special 03. Marking Yield Line Grooved Epoxy 18-Inch | EACH | 44.000 | 44.000 |
| 0124 | SPV.0090 | Special 01. Concrete Curb & Gutter 18-Inch Type K | LF | 719.000 | 719.000 |
| 0126 | SPV.0090 | Special 02. Marking Stop Line Grooved Epoxy 12-Inch | LF | 50.000 | 50.000 |
| 0128 | SPV.0090 | Special 03. Marking Crosswalk Grooved Epoxy Transverse Line 12-Inch | LF | 858.000 | 858.000 |
| 0130 | SPV.0105 | Special 01. Rectangular Rapid Flashing Beacon System West Ave & King St | LS | 1.000 | 1.000 |
| 0132 | SPV.0105 | Special 02. Rectangular Rapid Flashing Beacon System West Ave & Badger St | LS | 1.000 | 1.000 |

| REMOVAL ITEMS | | | | | | | |
|----------------|----------|---------|------------|----------|----------|----------|--|
| FUNDING | | | | 204.0100 | 204.0150 | 204.0155 | |
| | | | | REMOVING | REMOVING | REMOVING | |
| | | | | CONCRETE | CURB & | CONCRETE | |
| | | | | PAVEMENT | GUTTER | SIDEWALK | |
| LOCATION | CATEGORY | STATION | TO STATION | SY | LF | SY | |
| KING ST | 0010 | 302+00 | - 307+55 | 1,082 | -- | 305 | |
| BADGER ST | 0020 | 401+70 | - 402+65 | 133 | 112 | 138 | |
| PROJECT TOTALS | | | | 1,215 | 112 | 443 | |

| CONCRETE PAVEMENT ITEMS | | | | | | | | |
|-------------------------|----------|---------|------------|------------|----------|------------|----------|----------|
| FUNDING | | | | 405.0100 | 405.0200 | 415.1080 | 415.0210 | 416.0160 |
| | | | | COLORING | COLORING | CONCRETE | CONCRETE | CONCRETE |
| | | | | CONCRETE | CONCRETE | PAVEMENT | PAVEMENT | DRIVEWAY |
| | | | | WISDOT RED | CUSTOM | HES 8-INCH | GAPS | 6-INCH |
| LOCATION | CATEGORY | STATION | TO STATION | CY | CY | SY | EACH | SY |
| KING ST | 0010 | 302+00 | - 307+55 | 14 | 12 | 323 | 5 | 14 |
| BADGER ST | 0020 | 401+70 | - 402+65 | 25 | -- | 114 | -- | -- |
| PROJECT TOTALS | | | | 39 | 12 | 437 | 5 | 14 |

| CONCRETE MISCELLANEOUS ITEMS | | | | | | | | |
|------------------------------|----------|---------|------------|----------|------------------------|----------------|------------|----------|
| FUNDING | | | | 601.0120 | 601.0417 | SPV.0090.01 | 601.0600 | 602.0410 |
| | | | | CONCRETE | CONCRETE CURB & GUTTER | | CONCRETE | CONCRETE |
| | | | | CURB | CONCRETE | CURB & GUTTER | CURB | SIDEWALK |
| | | | | TYPE J | 30-INCH TYPE K | 18-INCH TYPE K | PEDESTRIAN | 5-INCH |
| LOCATION | CATEGORY | STATION | TO STATION | LF | LF | LF | LF | SF |
| KING ST | 0010 | 302+00 | - 307+55 | 56 | 251 | 675 | 51 | 1,590 |
| BADGER ST | 0020 | 401+70 | - 402+65 | -- | 161 | 44 | 60 | 1,300 |
| PROJECT TOTALS | | | | 56 | 412 | 719 | 111 | 2,890 |

| BASE AGGREGATE ITEMS | | | |
|---|----------|------------|----------|
| FUNDING | | 305.0120 | 624.0100 |
| | | BASE | |
| | | AGGREGATE | |
| | | DENSE | |
| | | 1 1/4-INCH | WATER |
| LOCATION | CATEGORY | TON | MGAL |
| KING ST | 0010 | 95 | 1.4 |
| BADGER ST | 0020 | 40 | 0.6 |
| PROJECT TOTALS | | 135 | 2.0 |
| QUANTITIES ARE UNDISTRIBUTED AND INCLUDED FOR ADDING MATERIAL UNDERNEATH REMOVED PAVEMENT, CURB & GUTTER, OR SIDEWALK | | | |

| DRILLED BARS | | | | | | |
|----------------|----------|---------|------------|----------|------------|--|
| FUNDING | | | | 416.0610 | 416.0620 | |
| | | | | DRILLED | DRILLED | |
| | | | | TIE BARS | DOWEL BARS | |
| LOCATION | CATEGORY | STATION | TO STATION | EACH | EACH | |
| KING ST | 0010 | 302+00 | - 307+55 | 328 | 170 | |
| BADGER ST | 0020 | 401+70 | - 402+65 | 88 | 152 | |
| PROJECT TOTALS | | | | 416 | 322 | |

| DETECTABLE WARNING FIELDS | | | | | |
|---------------------------|----------|---------|------------|---------------|---------------|
| FUNDING | | | | 602.0505 | 602.0605 |
| | | | | CURB RAMP | DETECTABLE |
| | | | | WARNING FIELD | |
| | | | | YELLOW | RADIAL YELLOW |
| LOCATION | CATEGORY | STATION | TO STATION | SF | SF |
| KING ST | 0010 | 302+00 | - 307+55 | 144 | -- |
| BADGER ST | 0020 | 401+70 | - 402+65 | 120 | 29 |
| PROJECT TOTALS | | | | 264 | 29 |

| <u>RESTORATION ITEMS</u> | | | | | | | | |
|--------------------------|----------|---------------------|------------|----------|------------|----------|----------|--|
| | | | | 625.0100 | 629.0210 | 631.0300 | 631.1000 | |
| | | | | | FERTILIZER | SOD | SOD | |
| FUNDING | | | | TOPSOIL | TYPE B | WATER | LAWN | |
| LOCATION | CATEGORY | STATION | TO STATION | SY | CWT | MGAL | SY | |
| KING ST | 0010 | 302+00 | - 307+55 | 797 | 0.55 | 20 | 797 | |
| | | UNDISTRIBUTED | | 80 | 0.06 | 2 | 80 | |
| | | CATEGORY 0010 TOTAL | | 877 | 0.61 | 22 | 877 | |
| BADGER ST | 0020 | 401+70 | - 402+65 | 50 | 0.05 | 5 | 50 | |
| | | UNDISTRIBUTED | | 5 | 0.01 | 1 | 5 | |
| | | CATEGORY 0020 TOTAL | | 55 | 0.06 | 6 | 55 | |
| PROJECT TOTALS | | | | 932 | 0.67 | 28 | 932 | |

| EROSION CONTROL ITEMS | | | | | | |
|-----------------------|---------|---------------------|---------------|-----------|------------|------|
| | | | 628.1905 | 628.1910 | 628.7015 | |
| | | | MOBILIZATIONS | | | |
| | | | MOBILIZATIONS | EMERGENCY | INLET | |
| | | | EROSION | EROSION | PROTECTION | |
| | | | CONTROL | CONTROL | TYPE C | |
| LOCATION | FUNDING | STATION | TO STATION | EACH | EACH | EACH |
| KING ST | 0010 | 302+00 | - 307+55 | 3 | 1 | 4 |
| | | UNDISTRIBUTED | | 1 | 1 | -- |
| | | CATEGORY 0010 TOTAL | | 4 | 2 | 4 |
| BADGER ST | 0020 | 401+70 | - 402+65 | 3 | 1 | 7 |
| | | UNDISTRIBUTED | | 1 | 1 | -- |
| | | CATEGORY 0020 TOTAL | | 4 | 2 | 7 |
| PROJECT TOTALS | | | | 8 | 4 | 11 |

| TRAFFIC CONTROL ITEMS | | | | | | | | | | | | | | | | | | | |
|-----------------------|----------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|------|-----|------|-----|------|-------|------|
| | | | 643.0300 | 643.0410 | 643.0420 | 643.1070 | 643.0705 | 643.0715 | 643.0800 | 643.0900 | 643.1050 | | | | | | | | |
| | | | TRAFFIC | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | TRAFFIC CONTROL | | | | | | | | |
| | | | CONTROL | BARRICADES | BARRICADES | CONES | WARNING LIGHTS | WARNING LIGHTS | WARNING LIGHTS | WARNING LIGHTS | WARNING LIGHTS | | | | | | | | |
| | | | DRUMS | TYPE II | TYPE III | 42-IN | TYPE A | TYPE C | ARROW BOARDS | SIGNS | SIGNS PCMS | | | | | | | | |
| FUNDING | DURATION | | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* | DAY | QTY* |
| LOCATION | CATEGORY | DAYS | | | | | | | | | | | | | | | | | |
| KING ST | 0010 | | | | | | | | | | | | | | | | | | |
| STAGE 1A | | 18 | 6 | 108 | 9 | 162 | 15 | 270 | 24 | 432 | 30 | 540 | 6 | 108 | 1 | 18 | 30 | 540 | -- |
| STAGE 1B | | 19 | 6 | 114 | 9 | 171 | 15 | 285 | 26 | 494 | 30 | 570 | 6 | 114 | 1 | 19 | 30 | 570 | -- |
| STAGE 2 | | 23 | 6 | 138 | 6 | 138 | 10 | 230 | 52 | 1196 | 20 | 460 | 6 | 138 | 2 | 46 | 23 | 529 | -- |
| UNDISTRIBUTED | | | | 18 | | 24 | | 40 | | 107 | | 79 | | 18 | | 5 | | 82 | 7 |
| SUBTOTALS | | | | 378 | | 495 | | 825 | | 2,229 | | 1,649 | | 378 | | 88 | | 1,721 | 7 |
| BADGER ST | 0020 | | | | | | | | | | | | | | | | | | |
| STAGE 1A | | 18 | 6 | 108 | 9 | 162 | 14 | 252 | 8 | 144 | 28 | 504 | 6 | 108 | 1 | 18 | 25 | 450 | -- |
| STAGE 1B | | 19 | 6 | 114 | 9 | 171 | 14 | 266 | 8 | 152 | 28 | 532 | 6 | 114 | 1 | 19 | 25 | 475 | -- |
| STAGE 2 | | 23 | 6 | 138 | 6 | 138 | 6 | 138 | 14 | 322 | 12 | 276 | 6 | 138 | 2 | 46 | 21 | 483 | -- |
| UNDISTRIBUTED | | | | 18 | | 24 | | 33 | | 31 | | 66 | | 18 | | 5 | | 71 | 7 |
| SUBTOTALS | | | | 378 | | 495 | | 689 | | 649 | | 1,378 | | 378 | | 88 | | 1,479 | 7 |
| PROJECT TOTALS | | | | 756 | | 990 | | 1,514 | | 2,878 | | 3,027 | | 756 | | 176 | | 3,200 | 14 |

| PROJECT WIDE ITEMS | | | | | | |
|--------------------|-------------|----------------|----------------|--------------|----------------|----------|
| | | 211.0200 | 213.0100 | 619.1000 | 643.5000 | 642.5001 |
| | | PREPARE | | | | |
| | | FOUNDATION | | | | |
| | | FOR CONCRETE | FINISHING | | TRAFFIC | FIELD |
| | | PAVEMENT | ROADWAY | | CONTROL | OFFICE |
| | FUNDING | 01. 5220-04-74 | 01. 5220-04-74 | MOBILIZATION | 01. 5220-04-74 | TYPE B |
| LOCATION | CATEGORY | LS | EACH | EACH | EACH | EACH |
| PROJECT 5220-04-74 | 0010 & 0020 | 1 | 1 | 1 | 1 | 1 |
| PROJECT TOTALS | | 1 | 1 | 1 | 1 | 1 |

| ADJUSTING COVERS | | | | | | | | | |
|------------------|---------|----------|---------|-----------|-----------|-------------|-------------|------|--|
| | | | | 611.8110 | 611.8115 | SPV.0060.01 | SPV.0060.02 | | |
| | | | | ADJUSTING | | | | | |
| | | | | ADJUSTING | ADJUSTING | SANITARY | ADJUSTING | | |
| | | | | MANHOLE | INLET | MANHOLE | WATER | | |
| | | | | COVERS | COVERS | COVERS | VALVES | | |
| LOCATION | FUNDING | CATEGORY | STATION | OFFSET | EACH | EACH | EACH | EACH | NOTES |
| KING ST | 0030 | | 302+69 | 5' LT | -- | -- | 1 | -- | -- |
| | | | 304+84 | 6' LT | -- | -- | 1 | -- | REPLACE EXISTING ADJUSTING RINGS. APPROXIMATELY 10" OF EXCAVATION REQUIRED. |
| | | | 304+94 | 48' LT | -- | -- | -- | 1 | -- |
| | | | 304+98 | 33' RT | -- | -- | -- | 1 | -- |
| | | | 305+00 | 53' RT | -- | -- | -- | 1 | -- |
| | 0010 | | 304+27 | 33' LT | 1 | -- | -- | -- | -- |
| | | | 304+27 | 40' LT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| | | | 304+29 | 25' RT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| | | | 305+34 | 40' LT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| | | | 305+36 | 24' RT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| BADGER ST | 0020 | | 401+72 | 36' LT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| | | | 401+76 | 24' RT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| | | | 402+38 | 35' RT | -- | 1 | -- | -- | REPLACE HEADER BOLTS |
| PROJECT TOTALS | | | | | 1 | 7 | 2 | 3 | |

| PAVEMENT MARKING | | | | | | | | |
|--|----------|---------|----|---------|----------------|---------------|---------------|-------------------|
| * | | | | | | | | |
| | | | | | 646.9110 | SPV.0060.03 | SPV.0090.02 | SPV.0090.03 |
| | | | | | MARKING | MARKING | MARKING | MARKING |
| | | | | | REMOVAL LINE | YIELD LINE | STOP LINE | CROSSWALK GROOVED |
| | | | | | WATER BLASTING | GROOVED EPOXY | GROOVED EPOXY | EPOXY TRANSVERSE |
| FUNDING | | | | | 8-INCH | 18-INCH | 12-INCH | LINE 12-INCH |
| LOCATION | CATEGORY | STATION | TO | STATION | LF | EACH | LF | LF |
| KING ST | 0010 | 302+00 | - | 307+55 | 275 | 22 | 23 | 543 |
| BADGER ST | 0020 | 401+70 | - | 402+65 | -- | 22 | 27 | 315 |
| PROJECT TOTALS | | | | | 275 | 44 | 50 | 858 |
| * EXISTING WEST AVE LEFT TURN LANE CHANNELIZING LINES AT KING ST | | | | | | | | |

| TEMPORARY PAVEMENT MARKING | | | | | | |
|----------------------------|----------|---------|------------|------------------------|--------------------|-------------|
| | | | | 649.0150 | 649.0960 | |
| | | | | TEMPORARY MARKING LINE | | |
| | | | | REMOVABLE TAPE 4-INCH | REMOVABLE MASK OUT | |
| FUNDING | | | | (YELLOW) | (WHITE) | TAPE 6-INCH |
| LOCATION | CATEGORY | STATION | TO STATION | LF | LF | LF |
| KING ST | 0010 | 302+00 | - 307+55 | 252 | 252 | 90 |
| BADGER ST | 0020 | 401+75 | - 402+50 | 252 | 252 | 90 |
| SUBTOTALS | | | | 504 | 504 | -- |
| PROJECT TOTALS | | | | 1,008 | 180 | |

| CONSTRUCTION STAKING ITEMS | | | | | | | | |
|----------------------------|----------|--------------------|-----|----|----------------------|---------------|--------------|---------------|
| | | | | | 650.7000 | 650.8500 | 650.9000 | 650.9910 |
| | | | | | CONSTRUCTION STAKING | | | |
| | | | | | ELECTRICAL | | SUPPLEMENTAL | |
| | | | | | CONCRETE | INSTALLATIONS | CURB | CONTROL |
| | | | | | PAVEMENT | 01.5220-04-74 | RAMPS | 01.5220-04-74 |
| LOCATION | CATEGORY | STATION TO STATION | LF | LS | | | | |
| KING ST | 0010 | 302+00 - 307+55 | 152 | -- | | 12 | -- | |
| BADGER ST | 0020 | 401+70 - 402+65 | -- | -- | | 12 | -- | |
| PROJECT TOTALS | | | 152 | 1 | | 24 | 1 | |

3

| CONDUIT ITEMS | | | | | | | | |
|---------------------|---------|---------------------|------|-----|---------------|-----|----|--|
| | | 652.0225 | | | 652.0700.S | | | |
| | | CONDUIT RIGID | | | INSTALL | | | |
| | | NONMETALLIC | | | CONDUIT | | | |
| | | SCHEDULE 40 | | | INTO | | | |
| | | 2-INCH | | | EXISTING ITEM | | | |
| LOCATION | FUNDING | FROM | TO | LF. | EACH | | | |
| KING ST | 0010 | CB1 | PB1 | 25 | -- | | | |
| | | PB1 | SB9 | 3 | -- | | | |
| | | PB1 | PB2 | 35 | -- | | | |
| | | PB2 | SB2 | 3 | -- | | | |
| | | PB2 | SB8 | 22 | -- | | | |
| | | PB2 | PB3 | 43 | -- | | | |
| | | PB3 | SB3 | 4 | -- | | | |
| | | PB1 | PB4 | 74 | -- | | | |
| | | PB4 | SB4 | 4 | -- | | | |
| | | PB4 | PB5 | 38 | -- | | | |
| | | PB5 | SB5 | 4 | -- | | | |
| | | PB5 | SB7 | 33 | -- | | | |
| | | PB5 | PB6 | 47 | -- | | | |
| | | PB6 | SB6 | 4 | -- | | | |
| | | PB6 | SB10 | 27 | -- | | | |
| | | CATEGORY 0010 TOTAL | | | | 366 | -- | |
| | | BADGER ST | 0020 | PB1 | SB1 | 5 | -- | |
| PB1 | CB1 | | | 25 | 1 | | | |
| PB1 | PB2 | | | 34 | -- | | | |
| PB2 | SB2 | | | 4 | -- | | | |
| PB1 | PB3 | | | 41 | -- | | | |
| PB3 | SB3 | | | 4 | -- | | | |
| PB1 | PB4 | | | 75 | -- | | | |
| PB4 | SB4 | | | 4 | -- | | | |
| PB4 | PB5 | | | 38 | -- | | | |
| PB5 | SB5 | | | 4 | -- | | | |
| PB4 | PB6 | | | 39 | -- | | | |
| PB6 | SB6 | | | 5 | -- | | | |
| CATEGORY 0020 TOTAL | | | | 278 | 1 | | | |
| PROJECT TOTALS | | | | 644 | 1 | | | |

| CONCRETE BASES | | | | | | | |
|---------------------|---------|--------|-----------|---------|---------|----------|-----------------|
| | | | | | | 654.0101 | 654.0217 |
| | | | | | | CONCRETE | CONCRETE |
| | | | | | | BASES | CONTROL CABINET |
| | | | | | | TYPE 1 | BASE TYPE 9 |
| LOCATION | FUNDING | SIGNAL | ALIGNMENT | STATION | OFFSET | EACH | SPECIAL |
| CATEGORY | BASE | NO. | | | | EACH | EACH |
| KING ST | 0010 | CB1 | STH 35 | 304+62 | 62' LT | -- | 1 |
| | | SB1 | STH 35 | 304+48 | 43' LT | 1 | -- |
| | | SB2 | STH 35 | 304+51 | 9.0' LT | 1 | -- |
| | | SB3 | STH 35 | 304+54 | 28' RT | 1 | -- |
| | | SB4 | STH 35 | 305+16 | 44' LT | 1 | -- |
| | | SB5 | STH 35 | 305+17 | 9.0' LT | 1 | -- |
| | | SB6 | STH 35 | 305+19 | 26' RT | 1 | -- |
| | | SB7 | STH 35 | 304+88 | 10' LT | 1 | -- |
| | | SB8 | STH 35 | 304+71 | 10' LT | 1 | -- |
| | | SB9 | STH 35 | 304+65 | 62' LT | 1 | -- |
| | | SB10 | STH 35 | 305+03 | 42' RT | 1 | -- |
| CATEGORY 0010 TOTAL | | | | | | 10 | 1 |
| BADGER ST | 0020 | SB1 | STH 35 | 401+79 | 3.0' LT | 1 | -- |
| | | SB2 | STH 35 | 401+81 | 41' LT | 1 | -- |
| | | SB3 | STH 35 | 401+84 | 32' RT | 1 | -- |
| | | SB4 | STH 35 | 402+53 | 4.0' LT | 1 | -- |
| | | SB5 | STH 35 | 402+50 | 45' LT | 1 | -- |
| | | SB6 | STH 35 | 402+49 | 29' RT | 1 | -- |
| CATEGORY 0020 TOTAL | | | | | | 6 | -- |
| PROJECT TOTALS | | | | | | 16 | 1 |

| ELECTRICAL SERVICE METER BREAKER PEDESTAL | | |
|---|---------|------------------|
| | | 656.0200.01 |
| | | ELECTRICAL |
| | | SERVICE METER |
| | | BREAKER PEDESTAL |
| | | (KING STREET) |
| LOCATION | FUNDING | LS |
| CATEGORY | | |
| KING ST & STH 35 | 0010 | 1 |
| PROJECT TOTALS | | 1 |

| RRFB FLASHING BEACON ASSEMBLY | | | |
|-------------------------------|---------|-----------------|-----------------|
| | | SPV.0105.01 | SPV.0105.02 |
| | | RRFB | RRFB |
| | | FLASHING | FLASHING |
| | | BEACON ASSEMBLY | BEACON ASSEMBLY |
| | | (KING STREET) | (BADGER STREET) |
| LOCATION | FUNDING | LS | LS |
| CATEGORY | | | |
| KING ST & STH 35 | 0010 | 1 | -- |
| BADGER ST & STH 35 | 0020 | -- | 1 |
| PROJECT TOTALS | | 1 | 1 |

| <u>PULL BOXES</u> | | | | | | |
|---------------------|----------|------|-----------|---------|---------|------------|
| | | | | | | 653.0140 |
| | | | | | | PULL BOXES |
| | | | | | | STEEL |
| | | | | | | 24" x 42" |
| LOCATION | FUNDING | PULL | ALIGNMENT | STATION | OFFSET | EACH |
| CATEGORY | CATEGORY | BOX | | | | |
| KING ST | 0010 | PB1 | STH 35 | 304+45 | 48' LT | 1 |
| | | PB2 | STH 35 | 304+49 | 12' LT | 1 |
| | | PB3 | STH 35 | 304+50 | 26' RT | 1 |
| | | PB4 | STH 35 | 305+19 | 42' LT | 1 |
| | | PB5 | STH 35 | 305+20 | 12' LT | 1 |
| | | PB6 | STH 35 | 305+23 | 26' RT | 1 |
| CATEGORY 0010 TOTAL | | | | | | 6 |
| BADGER ST | 0020 | PB1 | STH 35 | 401+78 | 8.0' LT | 1 |
| | | PB2 | STH 35 | 401+77 | 38' LT | 1 |
| | | PB3 | STH 35 | 401+81 | 29' RT | 1 |
| | | PB4 | STH 35 | 402+53 | 8.0' LT | 1 |
| | | PB5 | STH 35 | 402+54 | 43' LT | 1 |
| | | PB6 | STH 35 | 402+54 | 27' RT | 1 |
| CATEGORY 0020 TOTAL | | | | | | 6 |
| PROJECT TOTALS | | | | | | 12 |

| SAWING CONCRETE | | | | |
|-----------------|---------|---------|------------|----------|
| | | | | 690.0250 |
| | | | | LF |
| LOCATION | FUNDING | STATION | TO STATION | |
| CATEGORY | | | | |
| KING ST | 0010 | 302+00 | - 307+55 | 1,324 |
| BADGER ST | 0020 | 401+70 | - 402+65 | 442 |
| PROJECT TOTALS | | | | 1,766 |

| CONVENTIONAL SYMBOLS | | | |
|--|--|--|--------------------------|
| SECTION LINE | | PARCEL NUMBER | UTILITY NUMBER |
| QUARTER LINE | | | |
| SIXTEENTH LINE | | | |
| NEW REFERENCE LINE | | SECTION CORNER | R/W MONUMENT |
| NEW R/W LINE | | | NON-MONUMENTED R/W POINT |
| EXISTING R/W LINE | | | FOUND 3/4" IRON ROD |
| PROPERTY LINE | | | FOUND 1" IRON PIPE |
| LOT, TIE, AND OTHER MINOR LINES | | NOTATION FOR COMBUSTIBLE FLUIDS | VALVE (GAS, WATER, ETC.) |
| SLOPE INTERCEPT | | | SIGN |
| CORPORATE LIMITS | | NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES | OFF-PREMISE SIGN |
| UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) | | | |
| FEE ACQUISITION AREA (HATCHING VARIES BY OWNER) | | | |

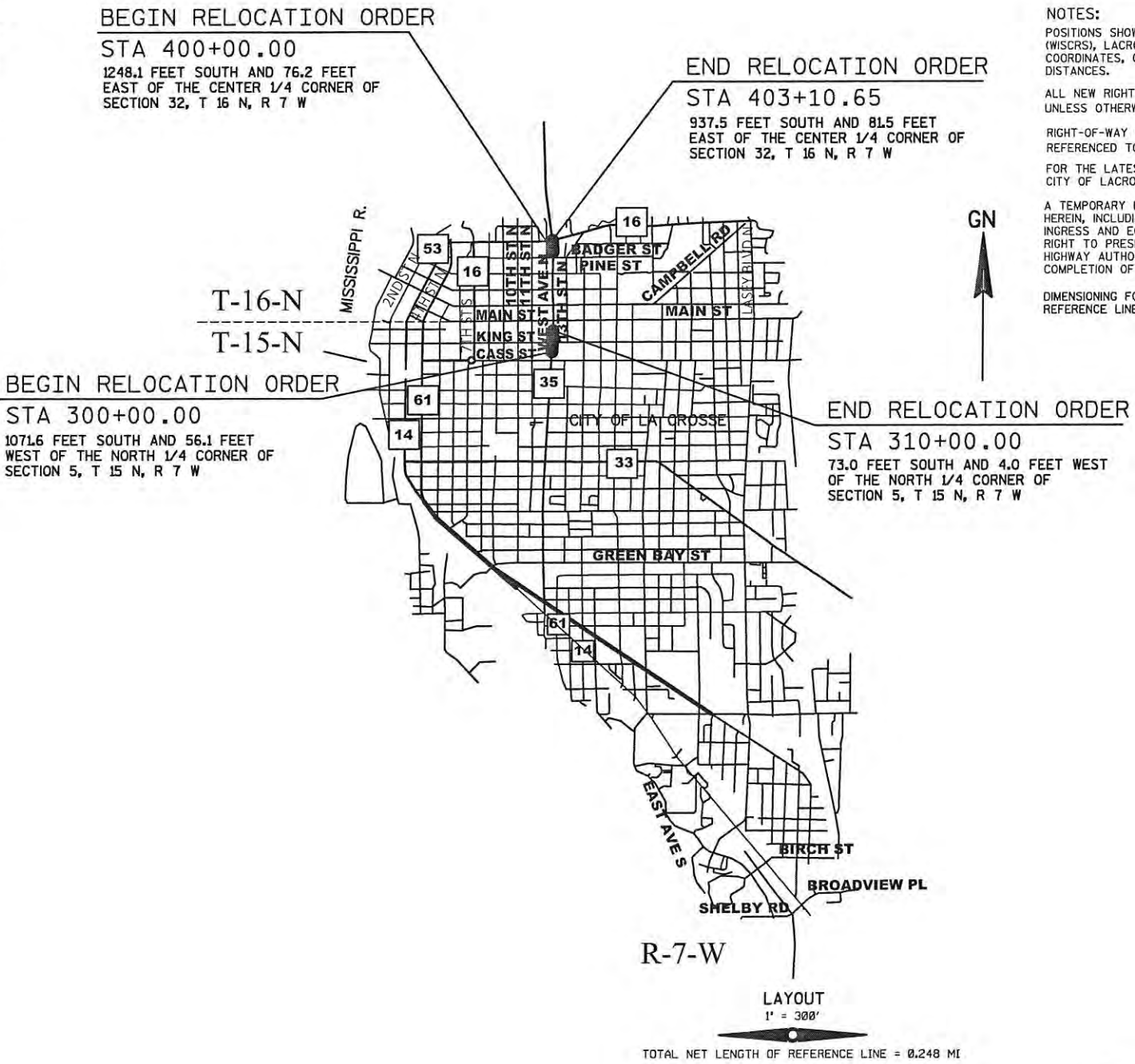
| | | | |
|---|--|--|--|
| TEMP. LIMITED EASEMENT AREA | | ACCESS CONTROLLED BY ACQUISITION | |
| EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT) | | NO ACCESS (BY STATUTORY AUTHORITY) | |
| TRANSMISSION STRUCTURES | | ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL) | |
| BUILDING | | NO ACCESS (NEW HIGHWAY) | |
| BUILDING (TO BE REMOVED) | | NATIONAL GEODETIC SURVEY MONUMENT | |
| BRIDGE | | SIXTEENTH CORNER MONUMENT | |
| | | PARALLEL OFFSETS | |

| CONVENTIONAL UTILITY SYMBOLS | |
|------------------------------|--|
| WATER | |
| GAS | |
| TELEPHONE | |
| OVERHEAD TRANSMISSION LINES | |
| ELECTRIC | |
| CABLE TELEVISION | |
| FIBER OPTIC | |
| SANITARY SEWER | |
| STORM SEWER | |
| ELECTRIC TOWER | |

| | | |
|--------------------|--|-----------------|
| POWER POLE | | NON-COMPENSABLE |
| TELEPHONE POLE | | COMPENSABLE |
| TELEPHONE PEDESTAL | | |

| CURVE DATA ABBREVIATIONS | | | |
|--------------------------|---------|--|--|
| LONG CHORD | LCH | | |
| LONG CHORD BEARING | LCB | | |
| RADIUS | R | | |
| DEGREE OF CURVE | D | | |
| CENTRAL ANGLE | Δ/DELTA | | |
| LENGTH OF CURVE | L | | |
| TANGENT | T | | |
| DIRECTION AHEAD | DA | | |
| DIRECTION BACK | DB | | |

| CONVENTIONAL ABBREVIATIONS | | | |
|----------------------------|-------|----------------------------------|--------|
| ACCESS RIGHTS | AR | OUTLOT | OL |
| ACRES | AC | PAGE | P |
| AHEAD | AH | POINT OF TANGENCY | PT |
| ALUMINUM | ALUM | PROPERTY LINE | PL |
| AND OTHERS | ET AL | RECORDED AS | (100') |
| BACK | BK | REEL / IMAGE | R/I |
| BLOCK | BLK | REFERENCE LINE | R/L |
| CENTERLINE | C/L | PERMANENT LIMITED EASEMENT | PLE |
| CERTIFIED SURVEY MAP | CSM | POINT OF BEGINNING | POB |
| CONCRETE | CONC | POINT OF CURVATURE | PC |
| COUNTY | CO | POINT OF COMPOUND CURVE | PCC |
| COUNTY TRUNK HIGHWAY | CTH | POINT OF INTERSECTION | PI |
| DISTANCE | DIST | REMAINING | REM |
| CORNER | COR | RESTRICTIVE DEVELOPMENT EASEMENT | RDE |
| DOCUMENT NUMBER | DOC | RIGHT | RT |
| EASEMENT | EASE | RIGHT OF WAY | R/W |
| EXISTING | EX | SECTION | SEC |
| GAS VALVE | GV | SEPTIC VENT | SEPV |
| GRID NORTH | GN | SQUARE FEET | SF |
| HIGHWAY EASEMENT | HE | STATE TRUNK HIGHWAY | STH |
| IDENTIFICATION | ID | STATION | STA |
| LAND CONTRACT | LC | TELEPHONE PEDESTAL | TP |
| LEFT | LT | TEMPORARY LIMITED EASEMENT | TLE |
| MONUMENT | MON | TRANSPORTATION PROJECT PLAT | TPP |
| NATIONAL GEODETIC SURVEY | NGS | UNITED STATES HIGHWAY | USH |
| NUMBER | NO | VOLUME | V |



NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), LACROSSE COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE CITY OF LACROSSE.
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THE PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

ORIGINAL PLAT PREPARED BY

raSmith
CREATIVITY BEYOND ENGINEERING

16745 W. Blomound Road, Brookfield, WI 53005
262.781.1000 Fax 262.781.5468
www.ra-smith.com

WISCONSIN
MICHAEL J. RATZBURG
S-2236
WAUKESHA
WI
LAND SURVEYOR

DATE: 08/10/20 *Michael J. Ratzburg*
LAND SURVEYOR

| | |
|-----------------------------------|--|
| REVISION DATE | CITY OF LACROSSE |
| APPROVED FOR THE CITY OF LACROSSE | DATE: 8/20/2020 <i>Scott M. Dan</i> (Signature) |

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE CITY OF LACROSSE.

| PARCEL NUMBER | SHEET NUMBER | OWNER(S) | INTEREST REQUIRED | TOTAL ACRES | R/W REQUIRED ACRES | | | TOTAL REMAINING ACRES | T.L.E. ACRES | P.L.E. ACRES | PARCEL NUMBER |
|---------------|--------------|---|-------------------|-------------|--------------------|----------|-------|-----------------------|--------------|--------------|---------------|
| | | | | | NEW | EXISTING | TOTAL | | | | |
| 1 | 4.04 | FIRST PRESBYTERIAN CHURCH OF LACROSSE WISCONSIN | TLE | 0.57 | - | - | - | 0.57 | 0.004 | - | 1 |
| 2 | 4.04 | DELETED | - | - | - | - | - | - | - | - | 2 |
| 3 | 4.04 | LACROSSE AREA FAMILY YMCA BD OF TRUSTEES, INC | TLE | 3.56 | - | - | - | 3.56 | 0.005 | - | 3 |
| 4 | 4.05 | THE HOUSING AUTHORITY OF LACROSSE | TLE | 1.66 | - | - | - | 1.66 | 0.002 | - | 4 |
| 5 | 4.05 | BENSON PROPERTIES I, LLC. | TLE | 0.13 | - | - | - | 0.13 | 0.001 | - | 5 |
| 6 | 4.05 | BERTHA H. HOCH | FEE, TLE | 0.13 | 0.001 | - | 0.001 | 0.13 | 0.005 | - | 6 |
| 7 | 4.05 | KT REAL ESTATE HOLDINGS, LLC. | TLE | 0.82 | - | - | - | 0.82 | 0.004 | - | 7 |
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GN

T-16-N
R-7-W
T-15-N
R-7-W

CITY OF LACROSSE

CITY OF LACROSSE

CITY OF LACROSSE

BEGIN
RELOCATION
ORDER
STA 300+00.00
Y = 130376.87
X = 448480.36

BEGIN RELOCATION
ORDER
STA 400+00.00
Y = 132866.71
X = 448506.85

END
RELOCATION
ORDER
STA 310+00.00
Y = 131375.50
X = 448532.42

END
RELOCATION
ORDER
STA 403+10.65
Y = 133177.26
X = 448512.07

SE-SW

NE-SW

NW-SE

SW-SE

SE-NW

NE-NW

SW-NE

NW-NE

SE-SW

NE-SW

SW-SE

NW-SE

WEST AVE S

205

STH 35

210

JOHNSON STREET

JACKSON STREET STH 33

MISSISSIPPI STREET

WEST AVE S

305

STH 35

KING ST

MAIN ST

32

WEST AVE N
STH 35

BADGER ST

5

6

7

4

LACROSSE ST

405

410

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|----------------|------------------|--------------------------|------------------|---|------------------|---|
| REVISION DATE: | DATE: 08-10-2020 | SCALE, FEET 0 N/A N/A | HWY: WEST AVENUE | STATE R/W PROJECT NUMBER: 5220-04-24 | PLAT SHEET: 4.03 | E |
| | GRID FACTOR: N/A | | COUNTY: LACROSSE | CONSTRUCTION PROJECT NUMBER: 5220-04-74 | PS&E SHEET: | |

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), LACROSSE COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
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FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE CITY OF LACROSSE.




| PI | Y | X |
|-----------|-----------|-----------|
| 304+58.77 | 130834.84 | 448507.51 |

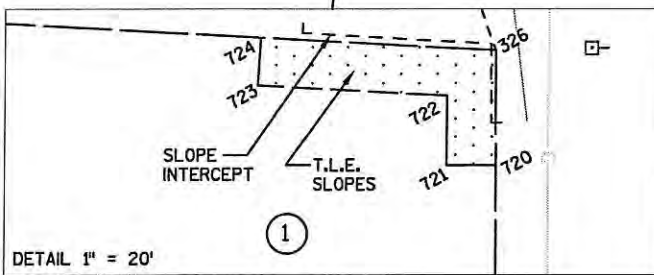
ON MANHOLE COVER
COMPUTED BY TIES
Y = 129047.30
X = 448404.88



ON MANHOLE COVER
COMPUTED BY TIES
Y = 131448.46
X = 448536.44



| COURSE TABLE | | |
|--------------|-------------|----------|
| LINE | BEARING | DISTANCE |
| 323-322 | S46°18'59"W | 25.59 |
| 322-718 | S89°35'54"W | 12.00 |
| 718-719 | N51°17'54"E | 39.58 |
| 719-323 | S03°08'09"W | 7.00 |
| 326-720 | N89°38'14"E | 12.00 |
| 720-721 | S00°21'46"E | 5.00 |
| 721-722 | S89°38'14"W | 7.30 |
| 722-723 | S03°08'09"W | 19.77 |
| 723-724 | N86°36'26"W | 5.00 |
| 724-326 | N03°08'09"E | 24.46 |



| HWY | BASIS OF EXISTING R/W | R/W WIDTH |
|-------------|----------------------------|-----------|
| WEST AVENUE | OVERBAUGH & BURNS ADDITION | 84' |
| WEST AVENUE | PAGES ADDITION | 84' |
| WEST AVENUE | 2ND PLAT OF MONS ANDERSON | 84' |
| KING STREET | OVERBAUGH & BURNS ADDITION | 66' |
| KING STREET | PAGES ADDITION | 66' |
| KING STREET | 2ND PLAT OF MONS ANDERSON | 66' |

| TLE STATION & OFFSET TABLE | | | |
|----------------------------|-----------|-------|----|
| 718 | 305+13.25 | 77.70 | LT |
| 719 | 305+39.39 | 47.99 | LT |
| 720 | 304+55.24 | 47.31 | RT |
| 721 | 304+50.25 | 47.64 | RT |
| 722 | 304+49.77 | 40.36 | RT |
| 723 | 304+30.00 | 40.44 | RT |
| 724 | 304+30.00 | 35.44 | RT |

| R/W STATION & OFFSET TABLE | | | |
|----------------------------|-----------|-------|----|
| 407 | 304+29.56 | 48.56 | LT |
| 322 | 305+13.88 | 65.72 | LT |
| 323 | 305+32.39 | 48.05 | LT |
| 326 | 304+54.46 | 35.33 | RT |

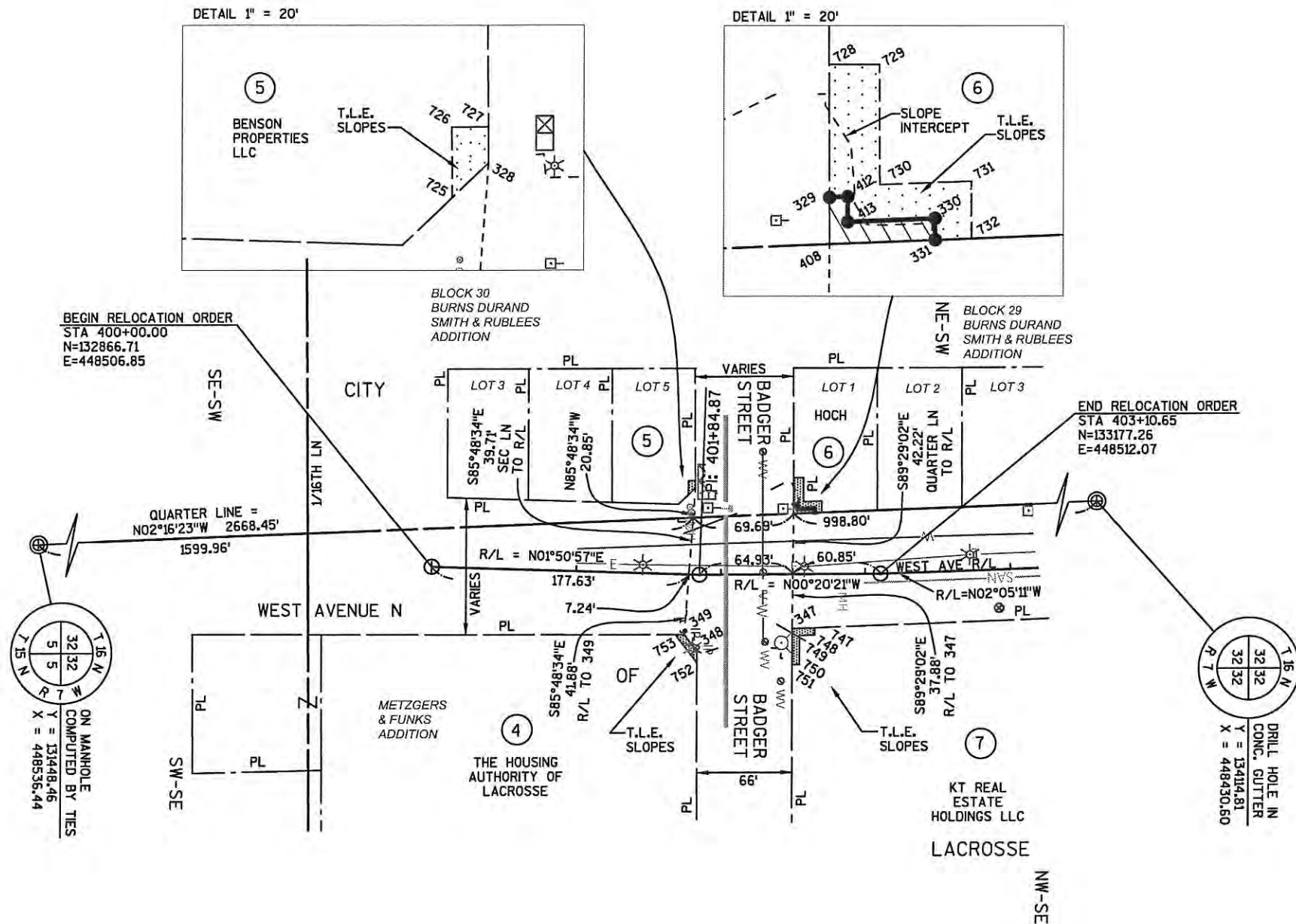
| | | | | | |
|----------------|------------------|-------------------------|------------------|---|------------------|
| REVISION DATE: | DATE: 08-10-2020 | SCALE, FEET 0 50 100 | HWY: WEST AVENUE | STATE R/W PROJECT NUMBER: 5220-04-24 | PLAT SHEET: 4.04 |
| | GRID FACTOR: N/A | | COUNTY: LACROSSE | CONSTRUCTION PROJECT NUMBER: 5220-04-74 | PS&E SHEET: E |

NOTES:

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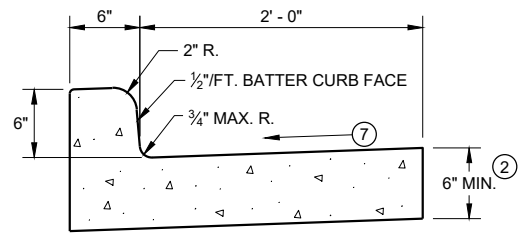
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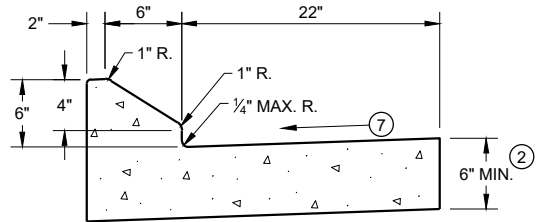


Standard Detail Drawing List

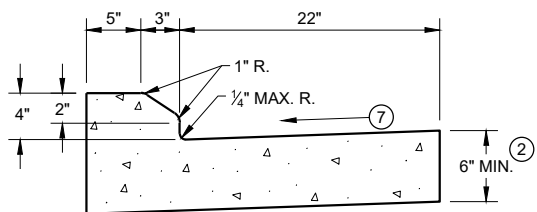
| | |
|-----------|---|
| 08D01-21A | CONCRETE CURB & GUTTER |
| 08D01-21B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D05-20A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-20B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-20C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-20D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-20E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D05-20F | CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS |
| 08D05-20G | CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES |
| 08D19-02 | DRIVEWAY AND SIDEWALK RAMPS TYPE Z |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 09B02-10 | CONDUIT |
| 09B04-11 | PULL BOX |
| 09C02-09 | CONCRETE BASES, TYPES 1, 2, 5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09D02-03 | SIGNAL CONTROL CABINET |
| 09E01-15G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E06-05 | TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT. |
| 09E07-06 | TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS |
| 13C01-19 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C13-09 | URBAN DOWELED CONCRETE PAVEMENT |
| 13C18-07A | CONCRETE PAVEMENT JOINTING |
| 13C18-07D | CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES |
| 15C02-08F | ADVANCED WIDTH RESTRICTION SIGNING |
| 15C03-05 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C11-08B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C33-04 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D20-05A | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D30-06A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-06B | TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION |
| 15D30-06C | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D38-02A | TEMPORARY TRAFFIC CONTROL SIGN MOUNTING |
| 15D38-02B | ATTACHMENT OF SIGNS TO POSTS |



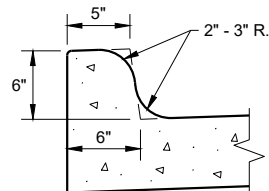
TYPES A^① & D



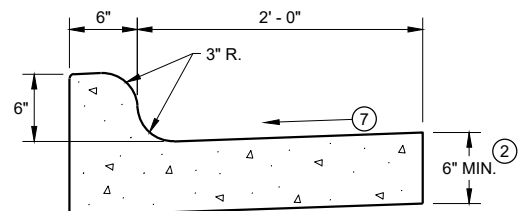
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

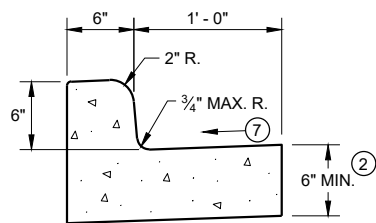


TYPES K^① & L
(OPTIONAL CURB SHAPE)



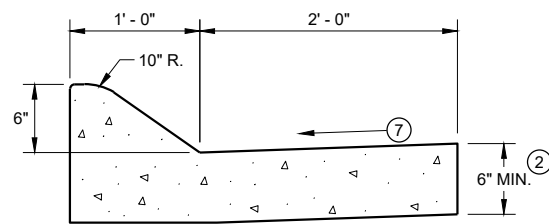
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

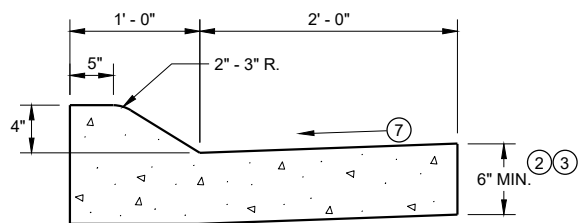


TYPES A^① & D

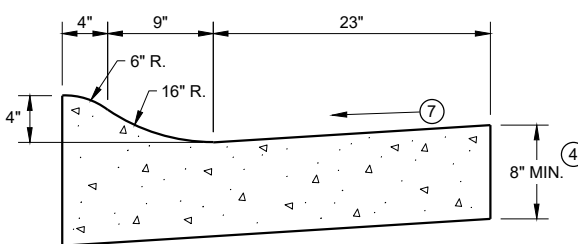
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A^① & D



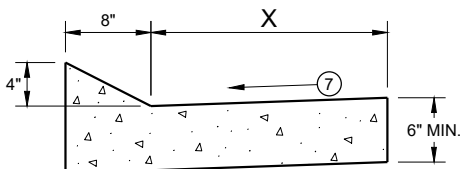
4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

CONCRETE CURB AND GUTTER 36"

| TBT & TBTT | X |
|------------|-----|
| 30" | 22" |
| 36" | 28" |

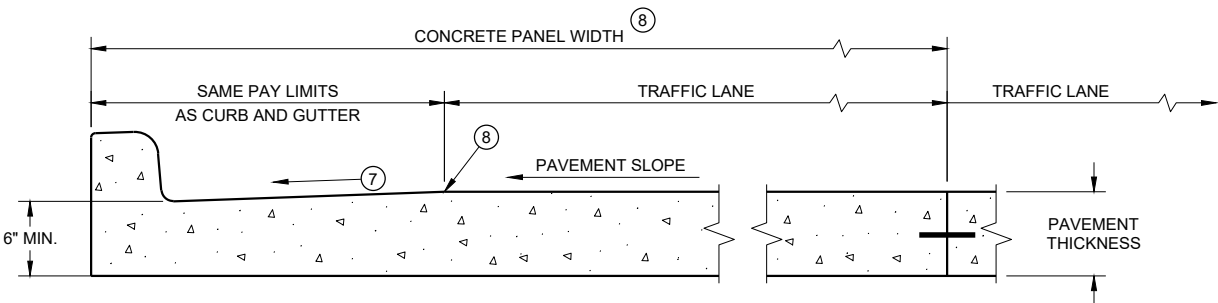


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

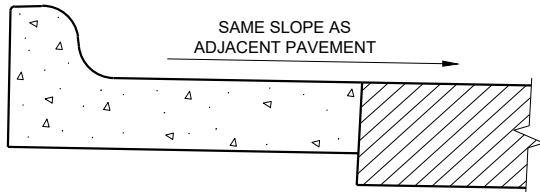
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

| PAVEMENT THICKNESS | MAXIMUM PANEL WIDTH |
|--------------------|---------------------|
| LESS THAN 10" | 12' |
| 10" & ABOVE | 15' |



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

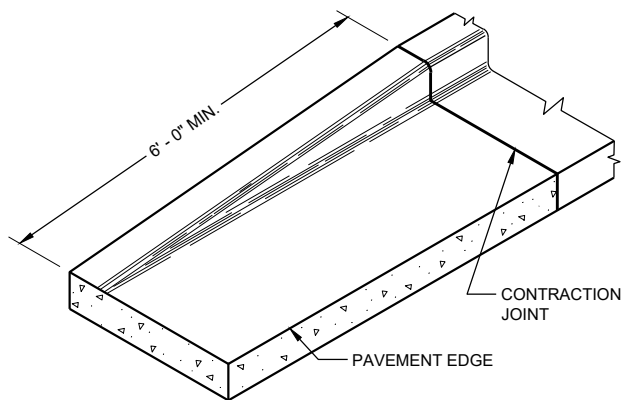
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

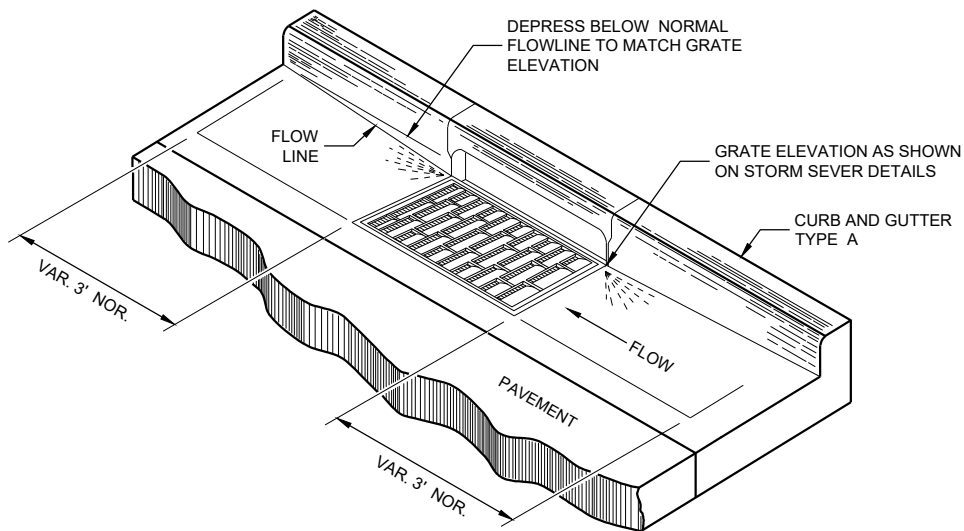
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

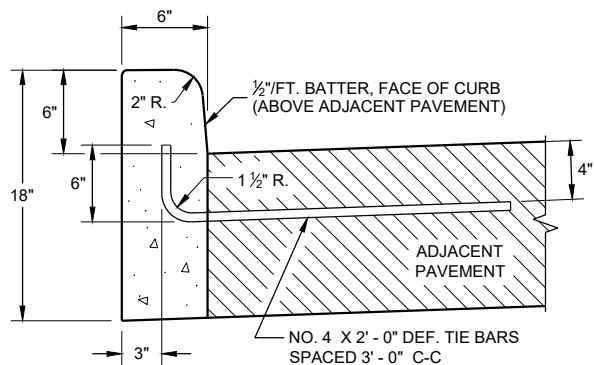
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.



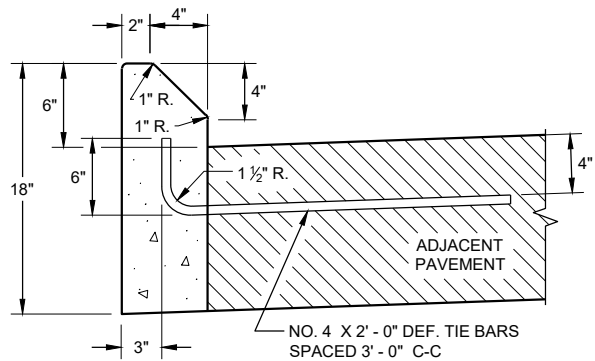
END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

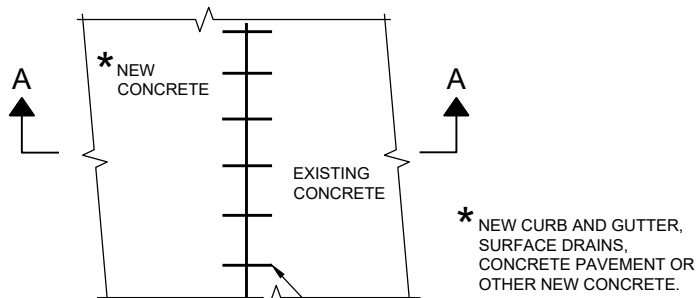


TYPES A^① & D

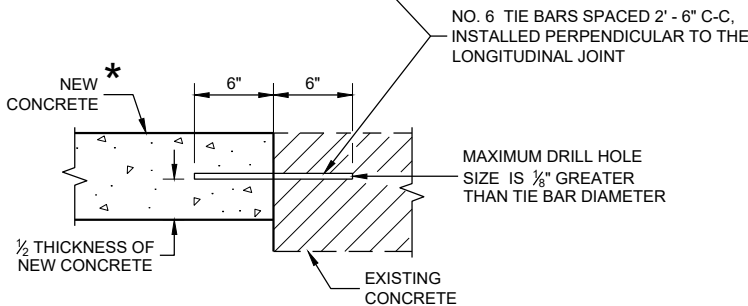


TYPES G^① & J

CONCRETE CURB



PLAN VIEW



SECTION A - A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

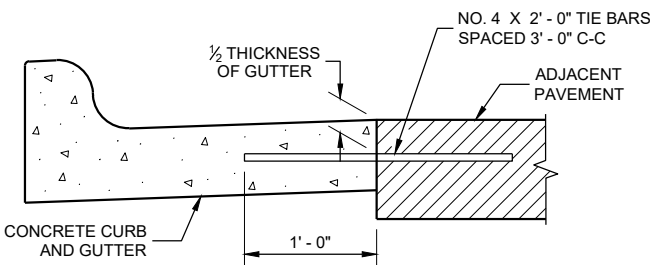
GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

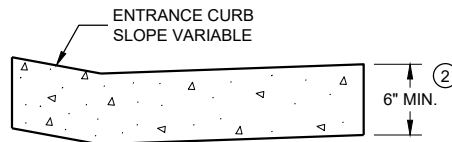
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION^①



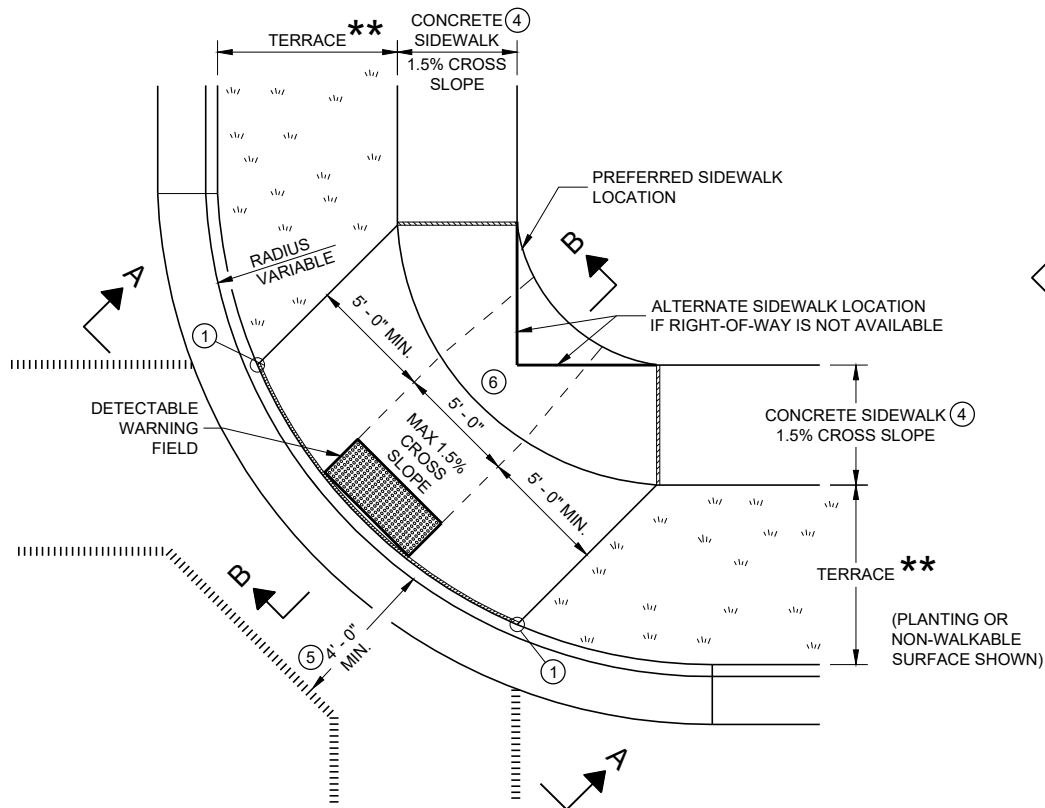
DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

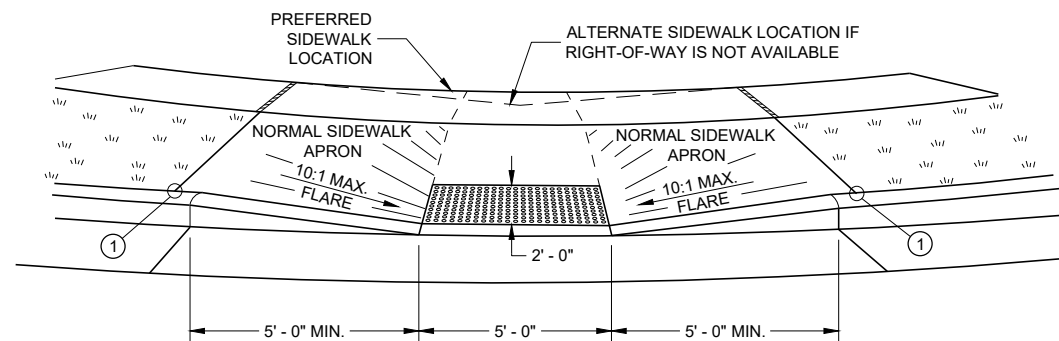
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

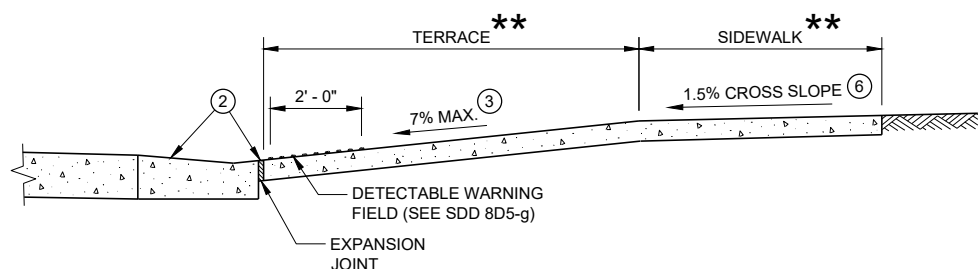


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

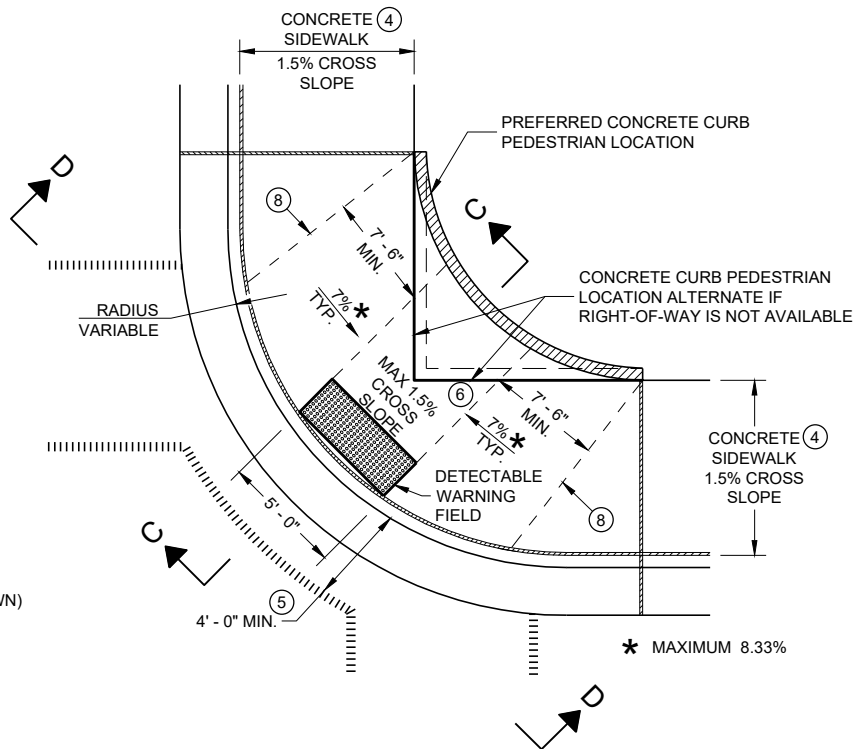


VIEW A - A FOR TYPE 1

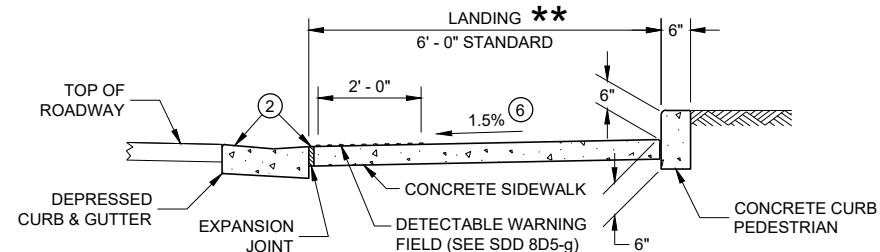
**** WIDTH SHOWN ELSEWHERE
IN THE PLANS**



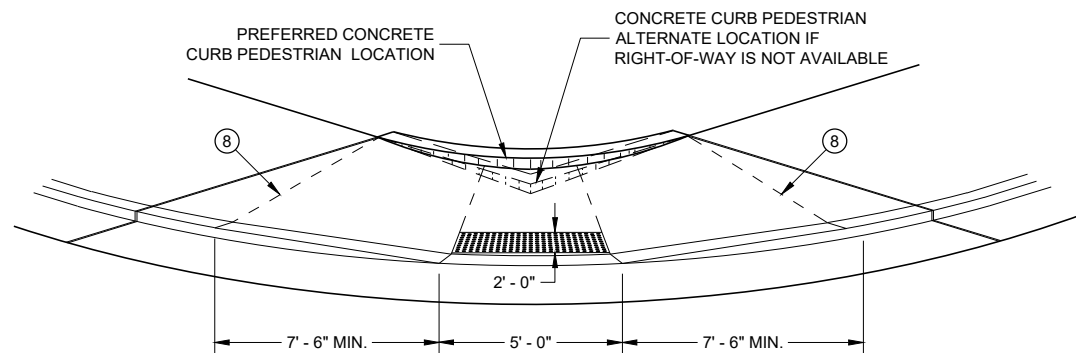
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

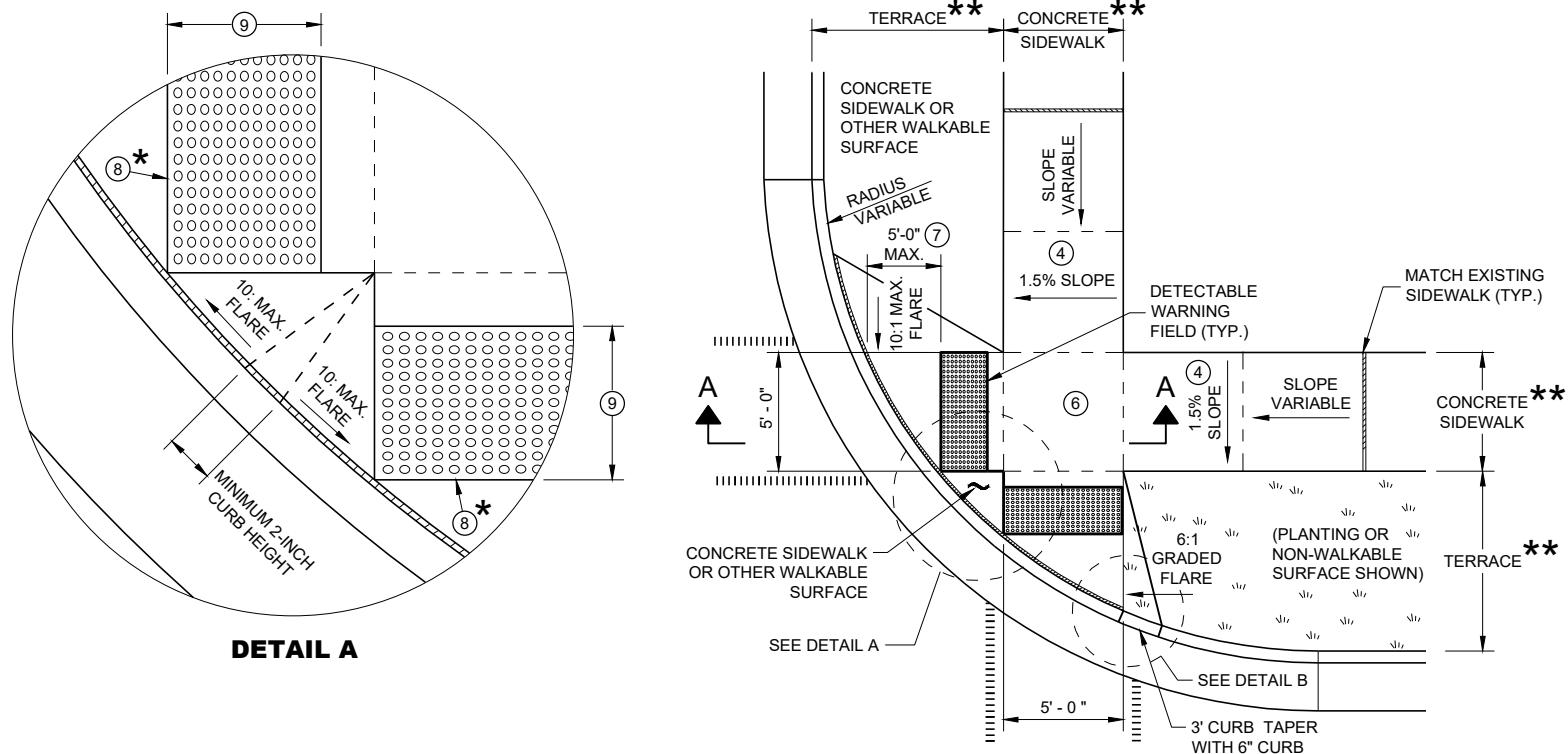
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 5 PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

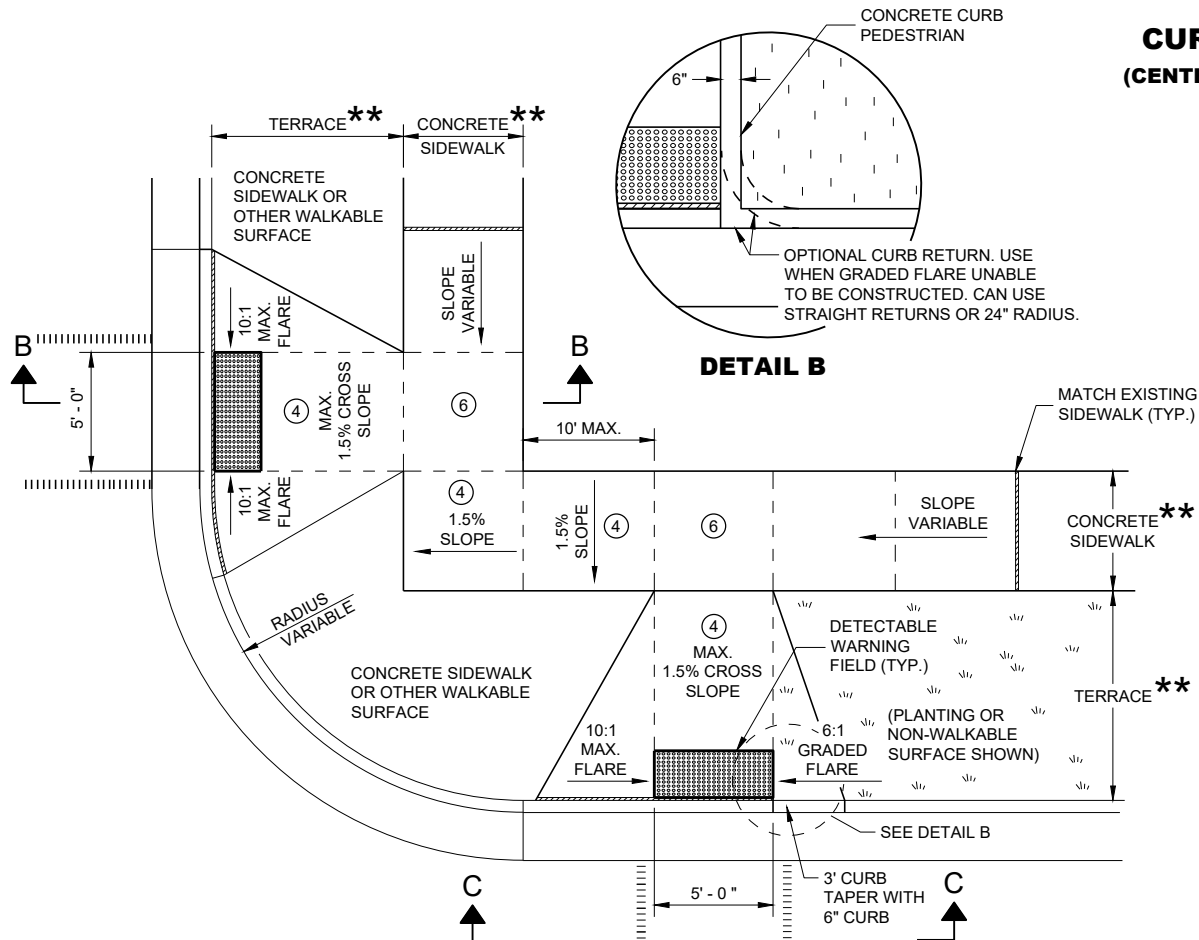
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



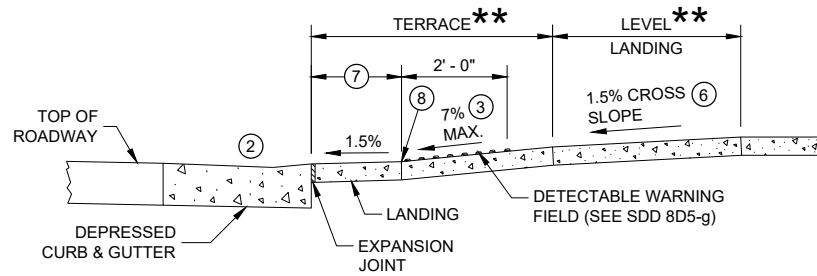
**PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)**



**PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)**

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/2 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
 - ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



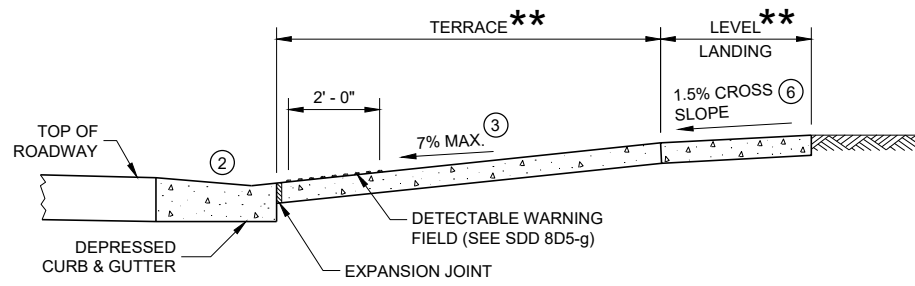
SECTION A - A FOR TYPE 2

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

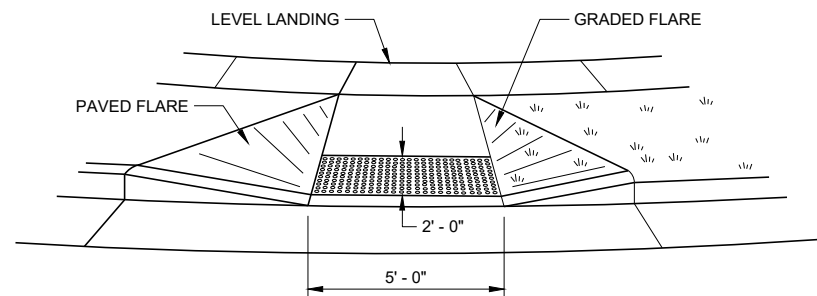
** WIDTH SHOWN ELSEWHERE IN THE PLANS

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



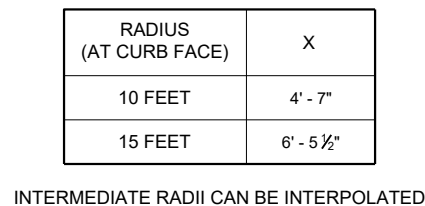
SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

**CURB RAMPS
TYPE 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



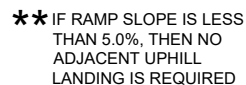
INTERMEDIATE RADII CAN BE INTERPOLATED



6



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



SECTION B - B FOR TYPE 4A AND TYPE 4A1



GENERAL NOTES




AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

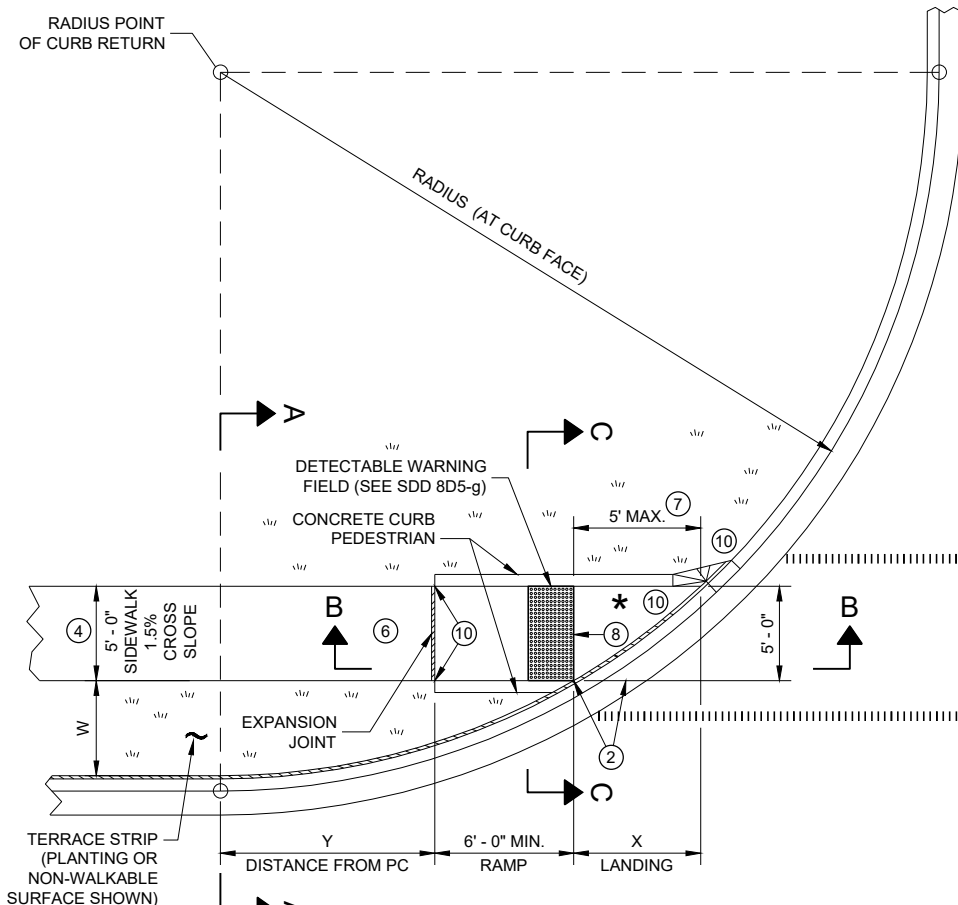
LEGEND

- | | |
|---|------------------------------------|
|  | 1/2" EXPANSION JOINT SIDEWALK |
|  | CONTRACTION JOINT SIDEWALK |
|  | PAVEMENT MARKING CROSSWALK (WHITE) |

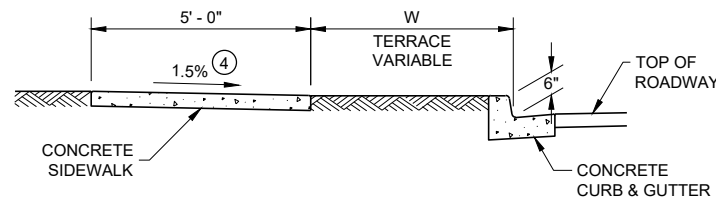


CURB RAMPS TYPE 4A AND 4A1

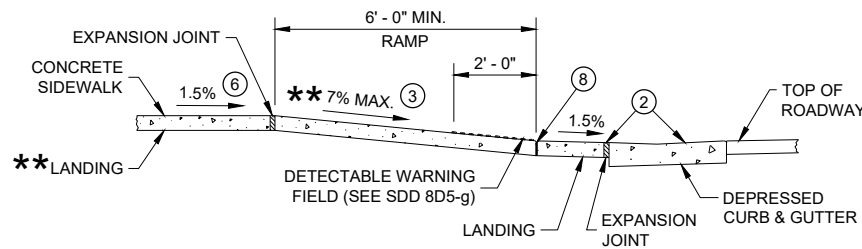
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B



SECTION A - A FOR TYPE 4B



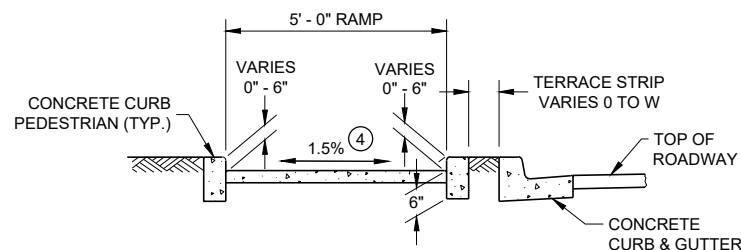
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B - B FOR
TYPE 4B AND TYPE 4B1

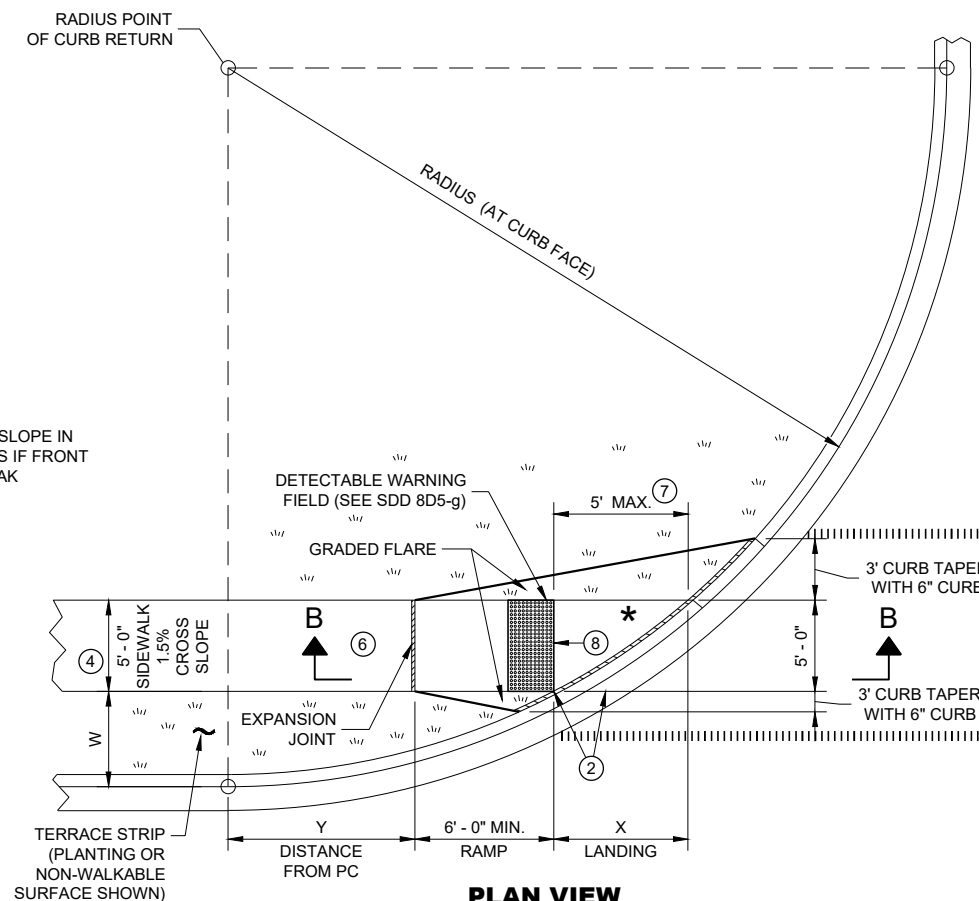
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

| RADIUS (AT CURB FACE) | W = 3' - 0" | | W = 4' - 0" | | W = 5' - 0" | | W = 6' - 0" | | W = 7' - 0" | | W = 8' - 0" | | W = 9' - 0" | | W = 10' - 0" | |
|--------------------------|--------------|-------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|
| | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y |
| 10 FEET | 2' - 10 1/4" | 0' - 5" | 2' - 1" | 1' - 4 1/2" | 1' - 5" | 2' - 1" | 0' - 10" | 2' - 7 1/2" | 0' - 3 3/4" | 3' - 0 1/4" | | | | | | |
| 15 FEET | 4' - 6 3/4" | 2' - 1 3/4" | 3' - 9" | 3' - 5 3/4" | 3' - 1 1/4" | 4' - 6" | 2' - 6 3/4" | 5' - 4 1/2" | 2' - 1" | 6' - 1" | 1' - 8" | 6' - 8 1/2" | 1' - 3 1/4" | 7' - 2 1/2" | 0' - 10 3/4" | 7' - 7 1/4" |
| 20 FEET | 5' - 9 3/4" | 3' - 6 1/2" | 4' - 11 1/2" | 5' - 1 3/4" | 4' - 3 1/4" | 6' - 5 1/2" | 3' - 8 3/4" | 7' - 7" | 3' - 3" | 8' - 6 1/2" | 2' - 10" | 9' - 4 1/2" | 2' - 5 1/2" | 10' - 1 1/4" | 2' - 1 1/4" | 10' - 9" |
| 30 FEET | | | 6' - 9 1/4" | 7' - 11 1/4" | 6' - 0 1/4" | 9' - 8" | 5' - 5" | 11' - 1 1/4" | 4' - 10 3/4" | 12' - 5 3/4" | 4' - 5 1/2" | 13' - 7 3/4" | 4' - 0 3/4" | 14' - 8 1/2" | 3' - 8 1/2" | 15' - 8 1/4" |
| 40 FEET | | | | | | | | | 6' - 1 3/4" | 15' - 8 1/2" | 5' - 8" | 17' - 2" | 5' - 3" | 18' - 5 3/4" | 4' - 10 3/4" | 19' - 8 1/4" |
| 50 FEET | | | | | | | | | | | | | | | 5' - 10 1/4" | 23' - 2" |

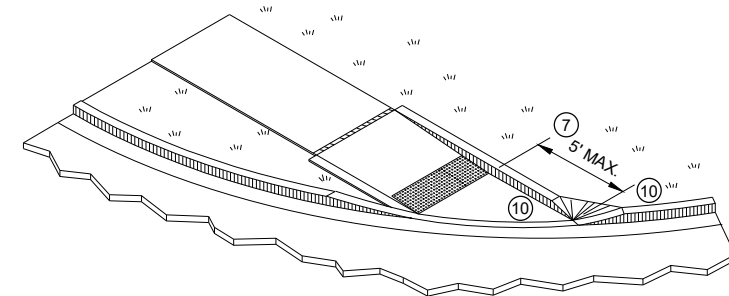
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



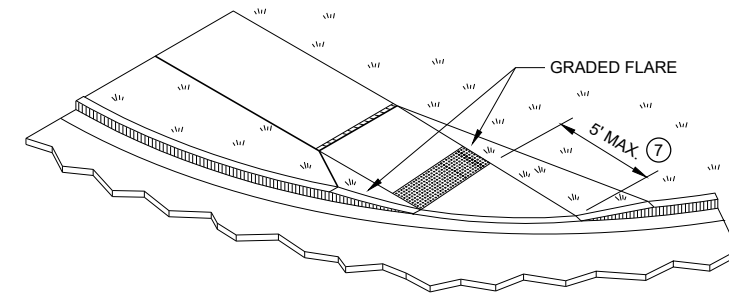
SECTION C - C FOR TYPE 4B



PLAN VIEW
CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

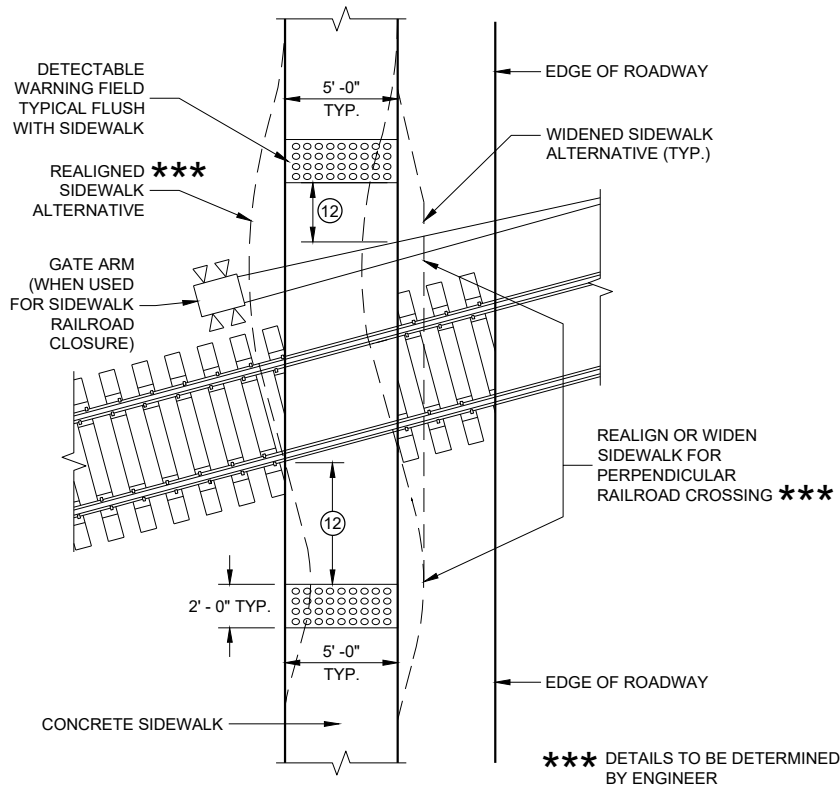
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

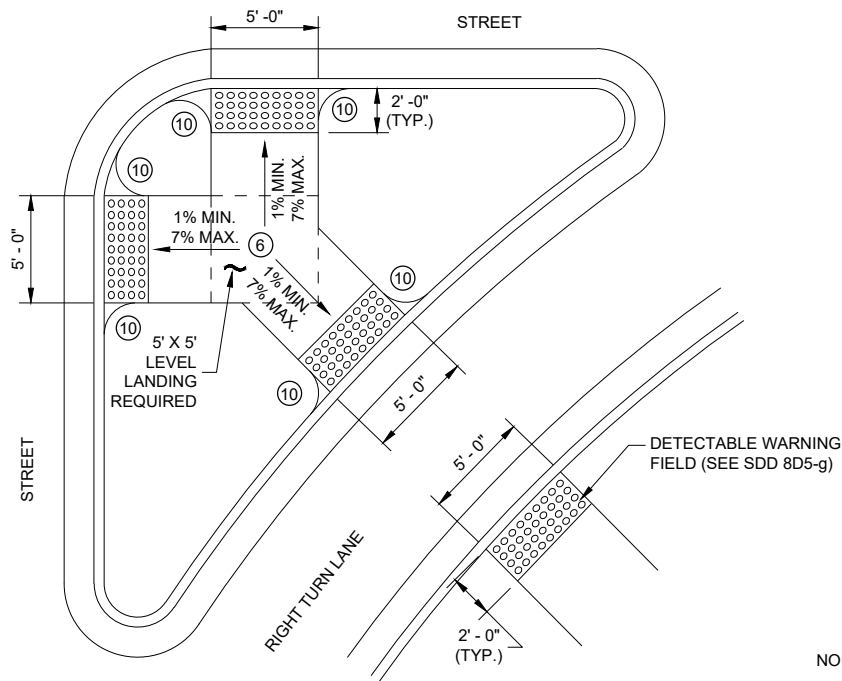
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

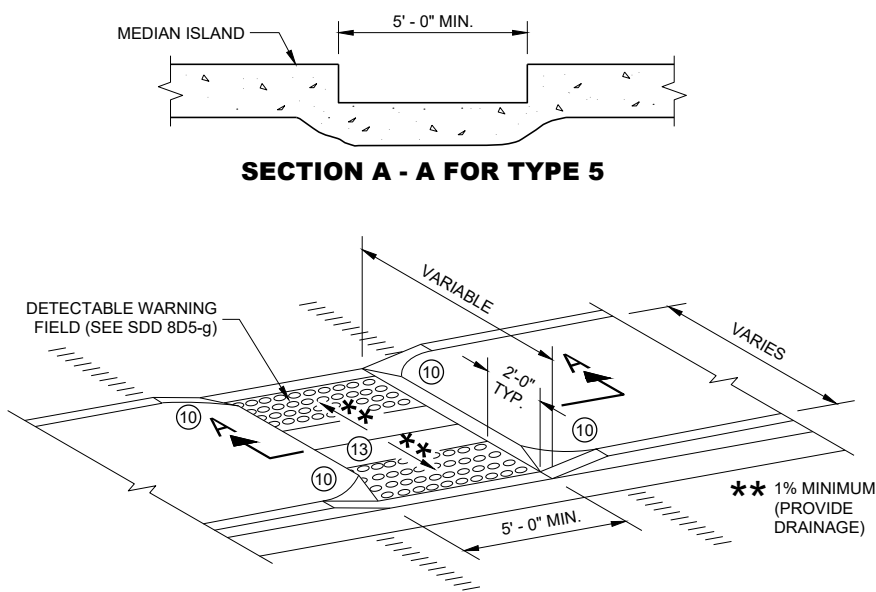
**DETECTABLE WARNINGS
AT RAILROAD CROSSING**



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

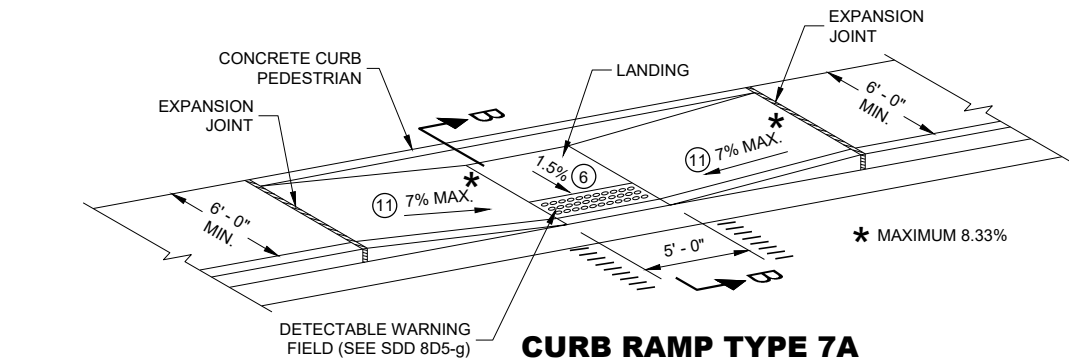
REFER TO GENERAL NOTES (2) AND (3)
FOR ALL ISLAND CURB RAMPS



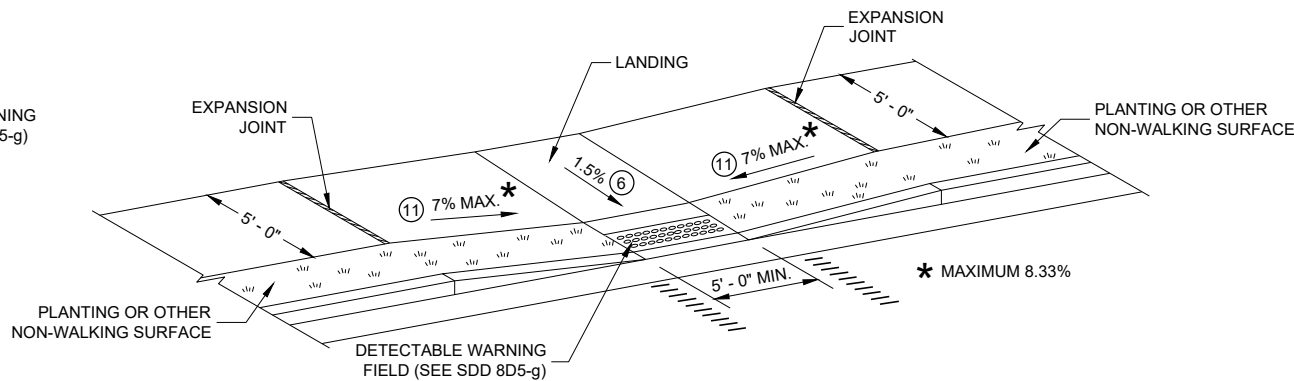
SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



**CURB RAMP TYPE 7A
MID BLOCK CROSSING**



**CURB RAMP TYPE 7B
MID BLOCK CROSSING**

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

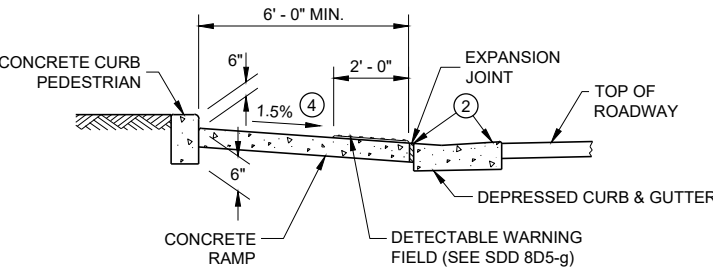
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

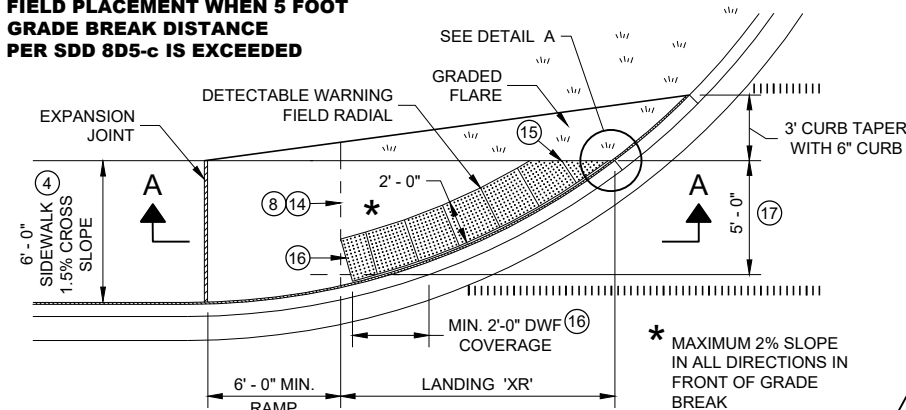


SECTION B - B FOR TYPE 7A

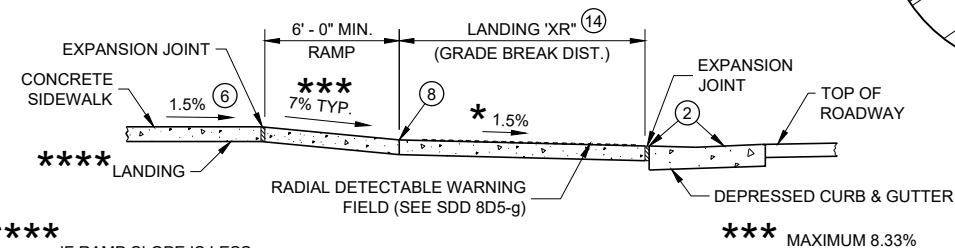
**CURB RAMPS
TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED**

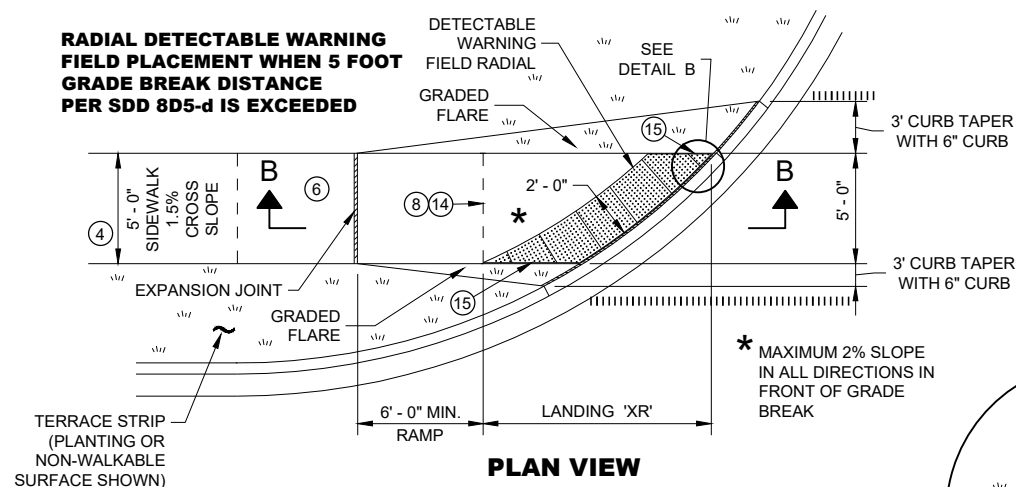


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

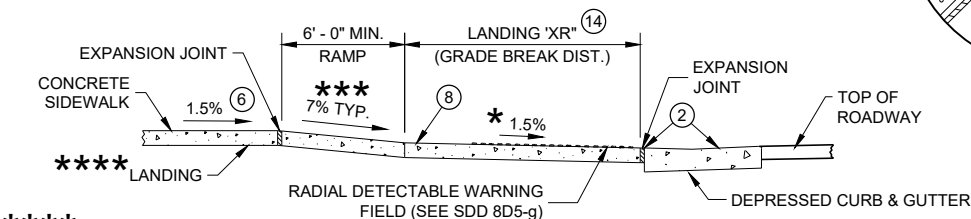


SECTION A - A FOR TYPE 4A1

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-d IS EXCEEDED**



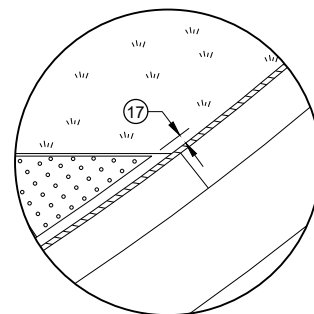
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



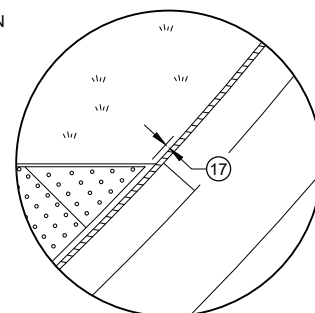
SECTION B - B FOR TYPE 4B1

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



DETAIL A



DETAIL B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

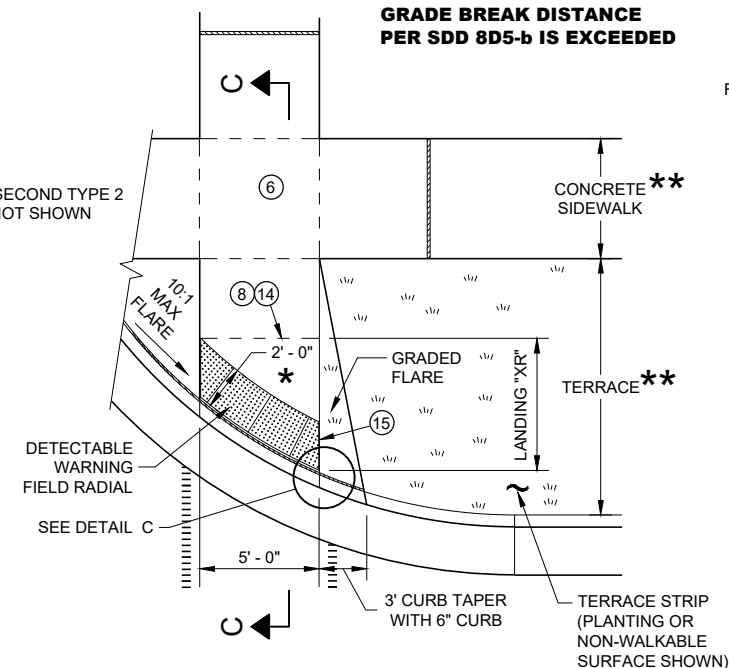
FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

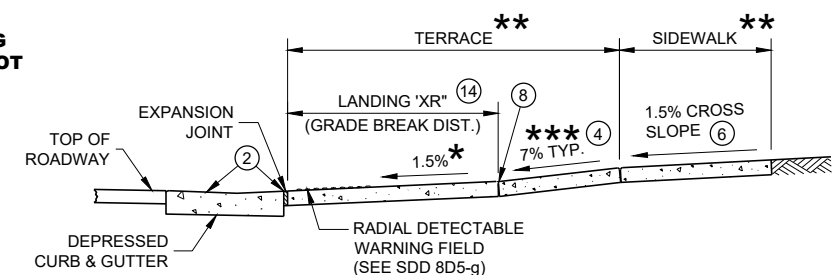
- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- (8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- (14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- (15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- (16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- (17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**

NOTE: SECOND TYPE 2 RAMP NOT SHOWN

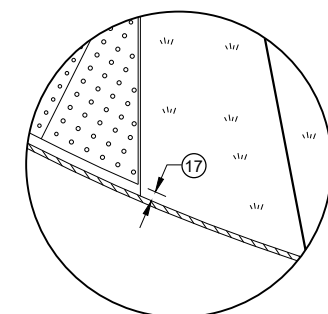


**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2

- * MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS
- *** MAXIMUM 8.33%



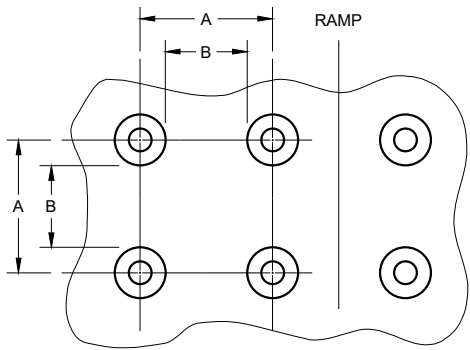
DETAIL C

**CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS**

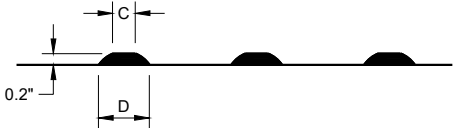
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

| | MIN. | MAX. |
|---|-------|------|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

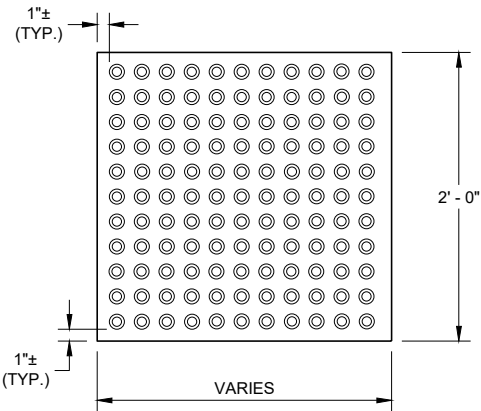


PLAN VIEW

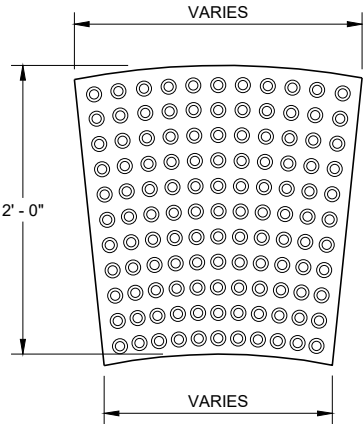


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

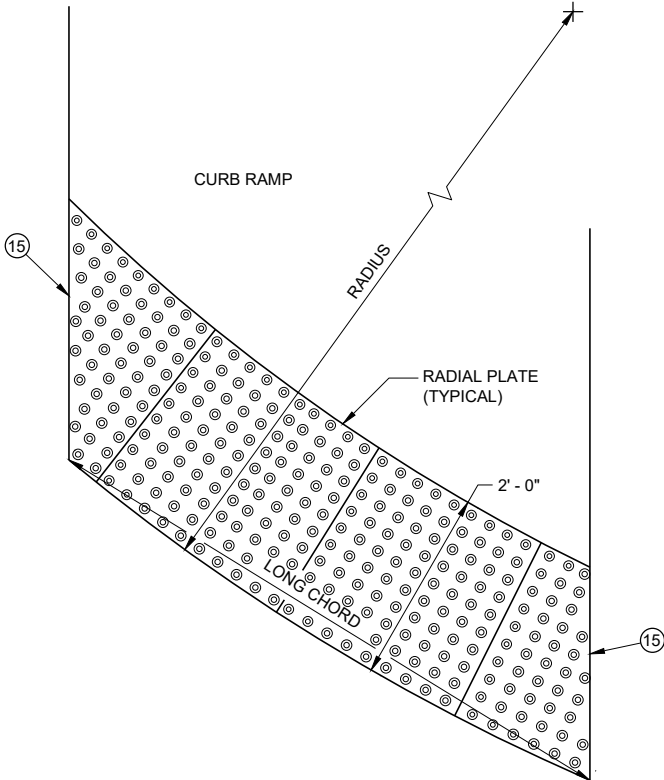


RECTANGULAR
PLATES



RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

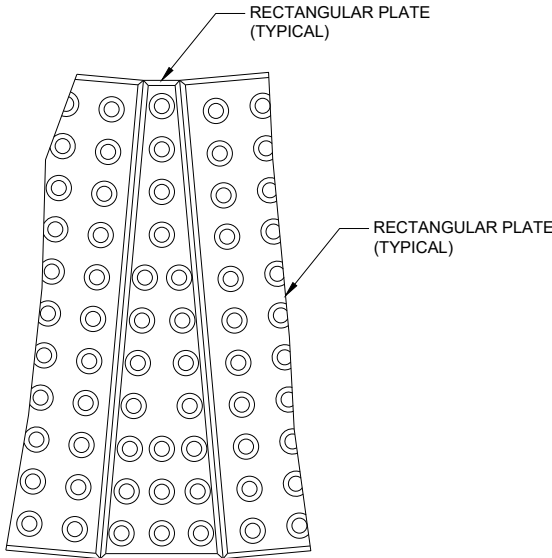
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

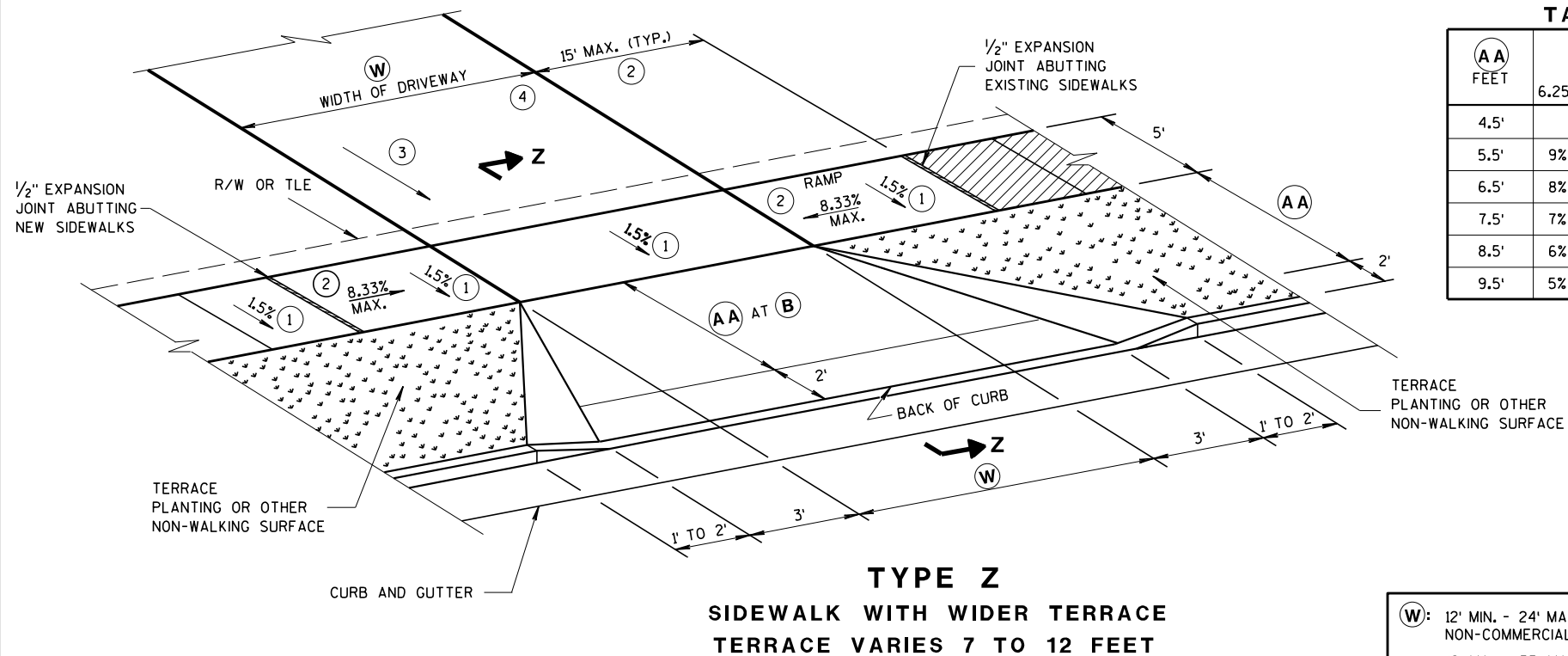


TABLE Z

| (A) FEET | (B) % 6.25% GUTTER | (B) % 4% GUTTER |
|----------|-----------------------|--------------------|
| 4.5' | 11.5% | 9% TO 11.5% |
| 5.5' | 9% TO 11.5% | 8% TO 11.5% |
| 6.5' | 8% TO 11.5% | 6% TO 11.5% |
| 7.5' | 7% TO 11.5% | 6% TO 11.5% |
| 8.5' | 6% TO 11.5% | 5% TO 11.5% |
| 9.5' | 5% TO 11.5% | 4% TO 11.5% |

GENERAL NOTES

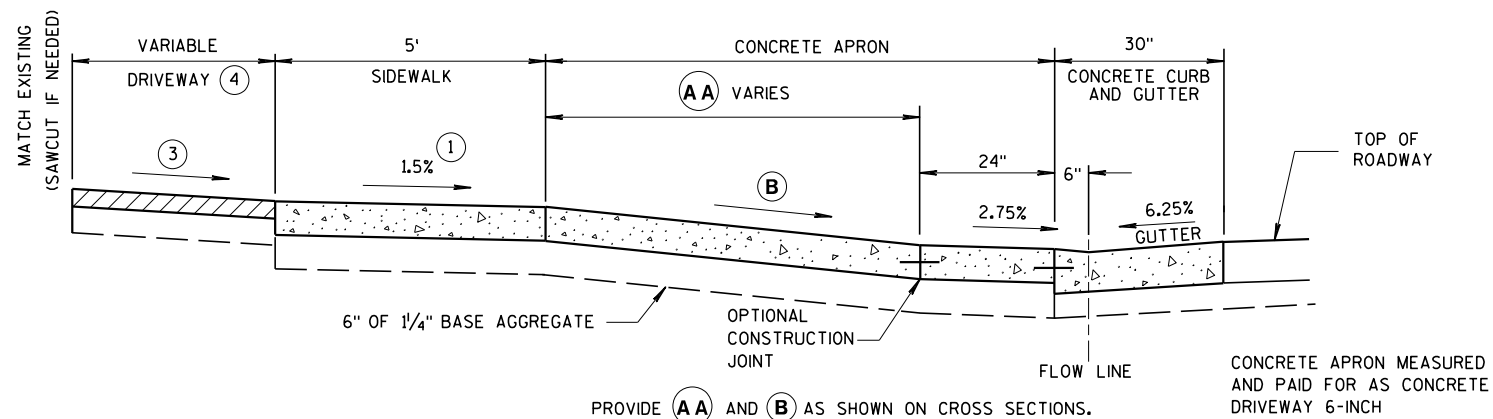
PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

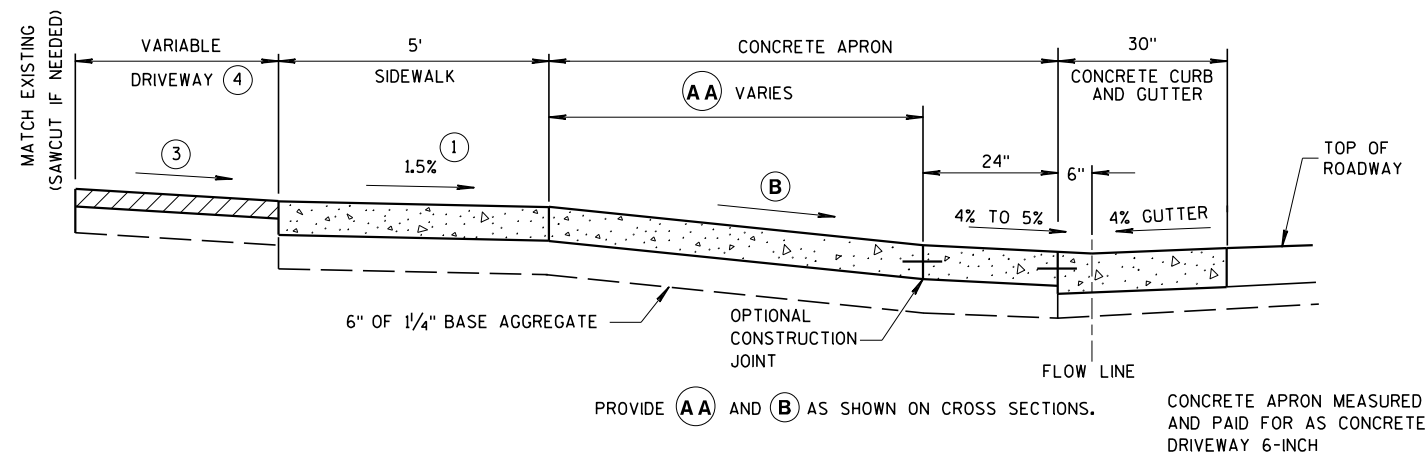
- CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- DRIVEWAY SLOPES: DESIRABLE MAXIMUM**
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- DRIVEWAY TYPES**
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR B VALUES NOT SHOWN IN TABLE Z.
SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.
SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z-Z
DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

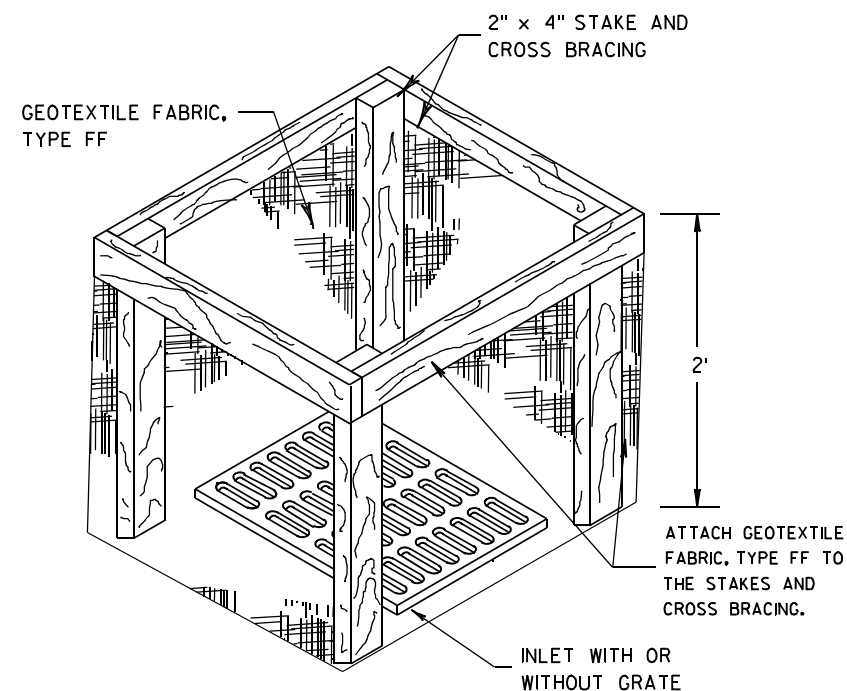
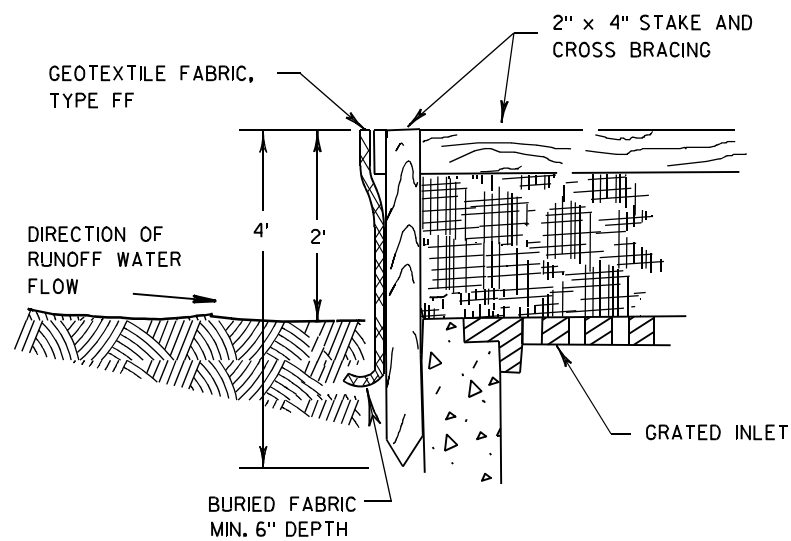


DRIVEWAY AND SIDEWALK RAMP
TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

NOT TO SCALE



INLET PROTECTION, TYPE A

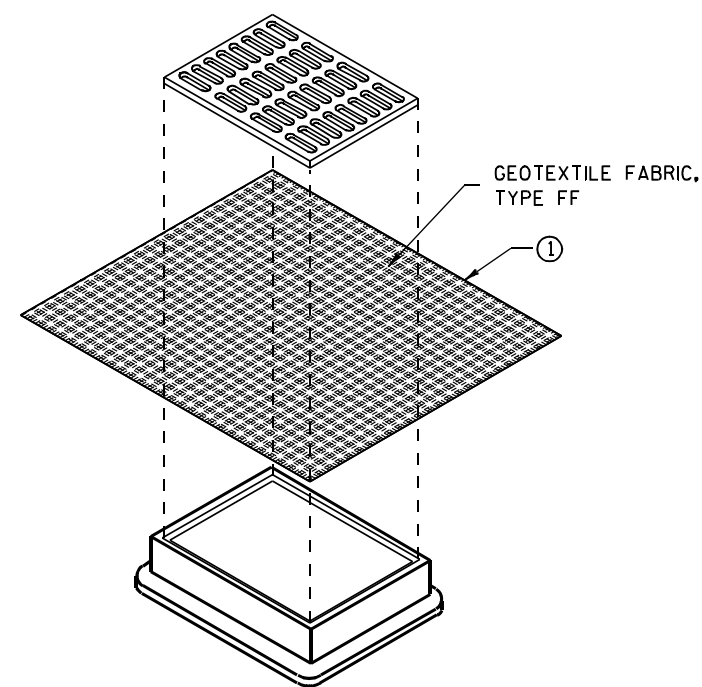
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

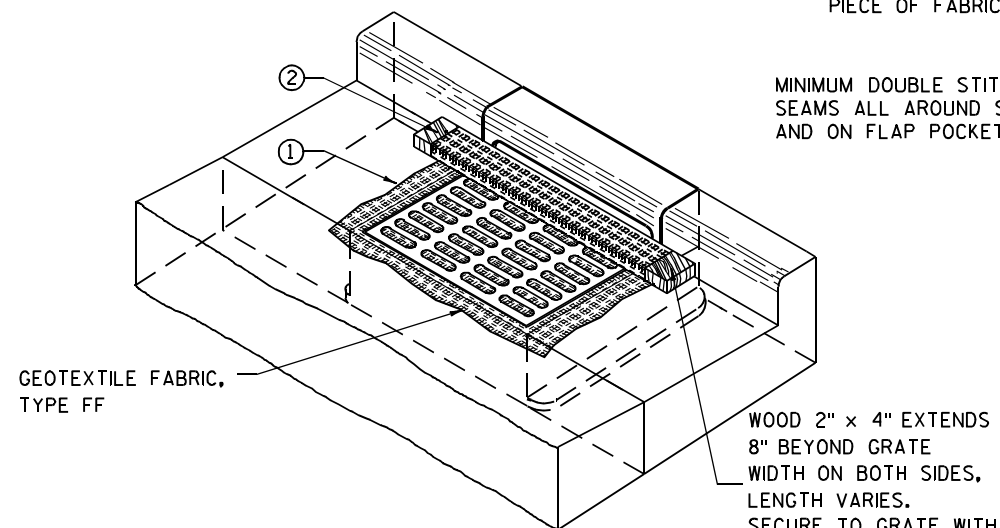
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

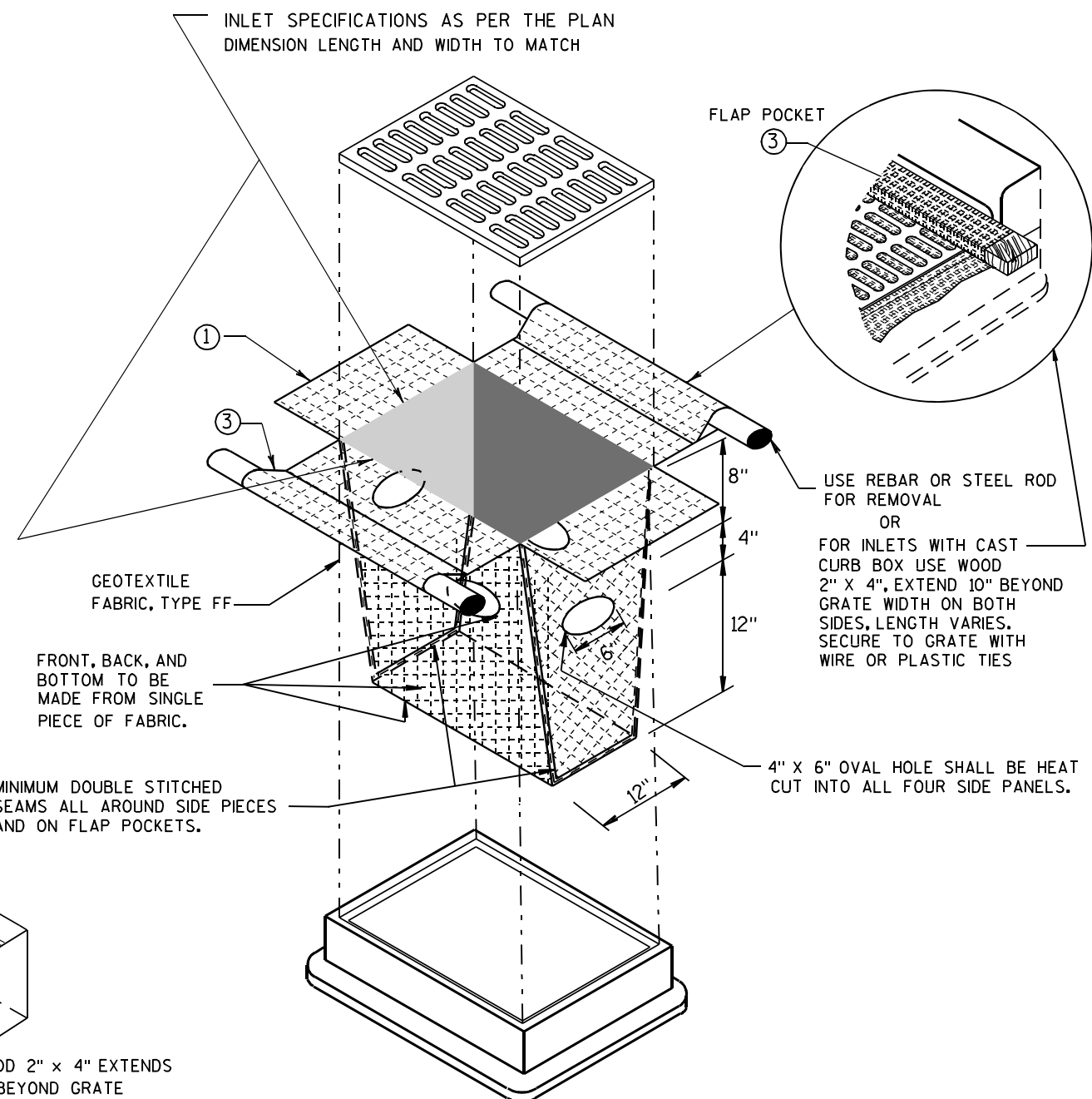
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLower THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



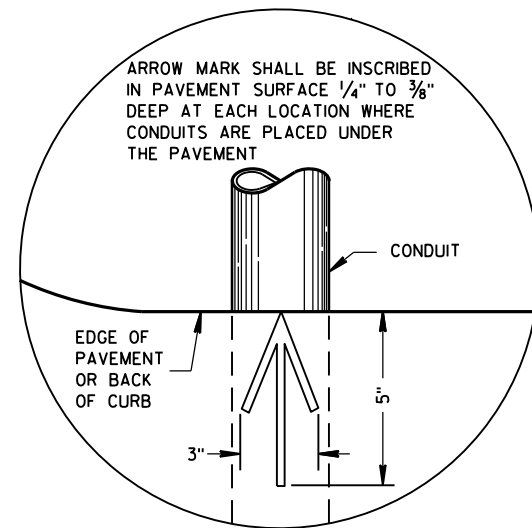
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

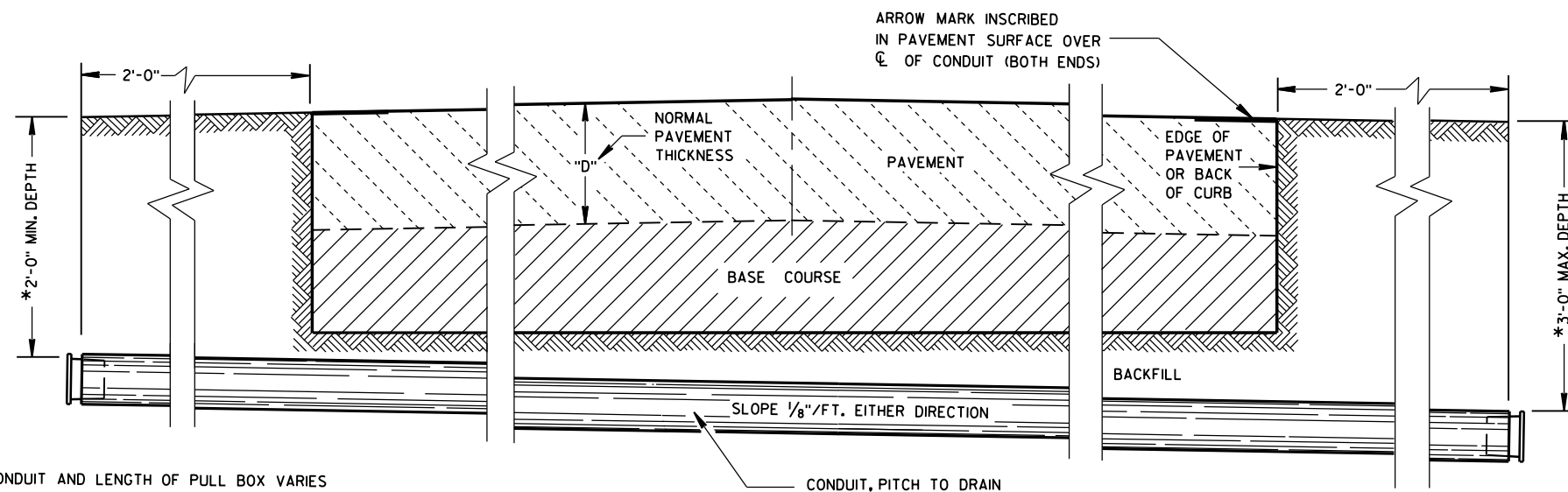
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
ARROW MARK



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES
WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

| DIMENSION IN INCHES | | CORRUGATED STEEL PIPE | | | | | | | | |
|---------------------------|---|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| COVER | D | 10 1/4 | 10 1/4 | 10 1/4 | 16 1/4 | 16 1/4 | 16 1/4 | 22 1/4 | 22 1/4 | 22 1/4 |
| FRAME | E | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 | 26 1/2 | 26 1/2 | 26 1/2 |
| FRAME | F | 8 1/2 | 8 1/2 | 8 1/2 | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 |
| FRAME | G | 11 1/2 | 11 1/2 | 11 1/2 | 17 1/2 | 17 1/2 | 17 1/2 | 23 1/2 | 23 1/2 | 23 1/2 |
| WEIGHT IN POUNDS * | | | | | | | | | | |
| FRAME AND COVER | | 60 | 60 | 60 | 110 | 110 | 110 | 155 | 155 | 155 |

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

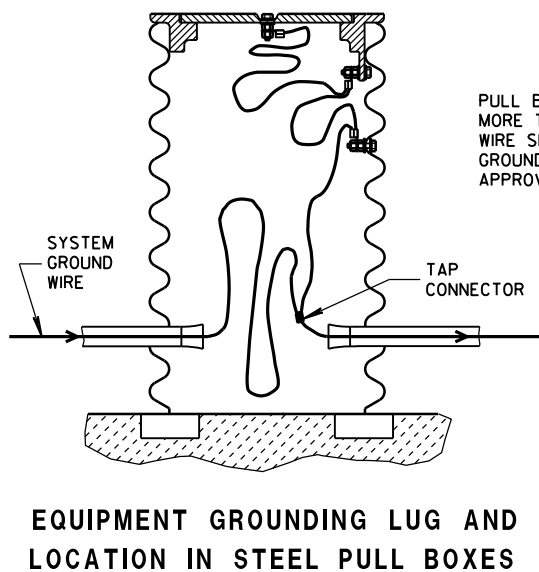
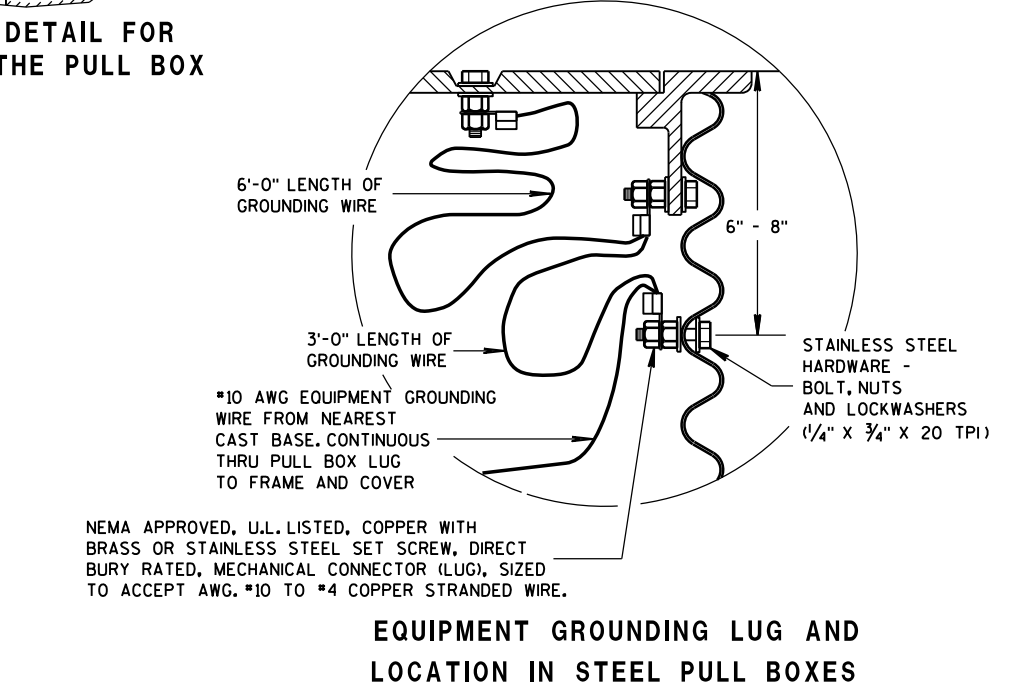
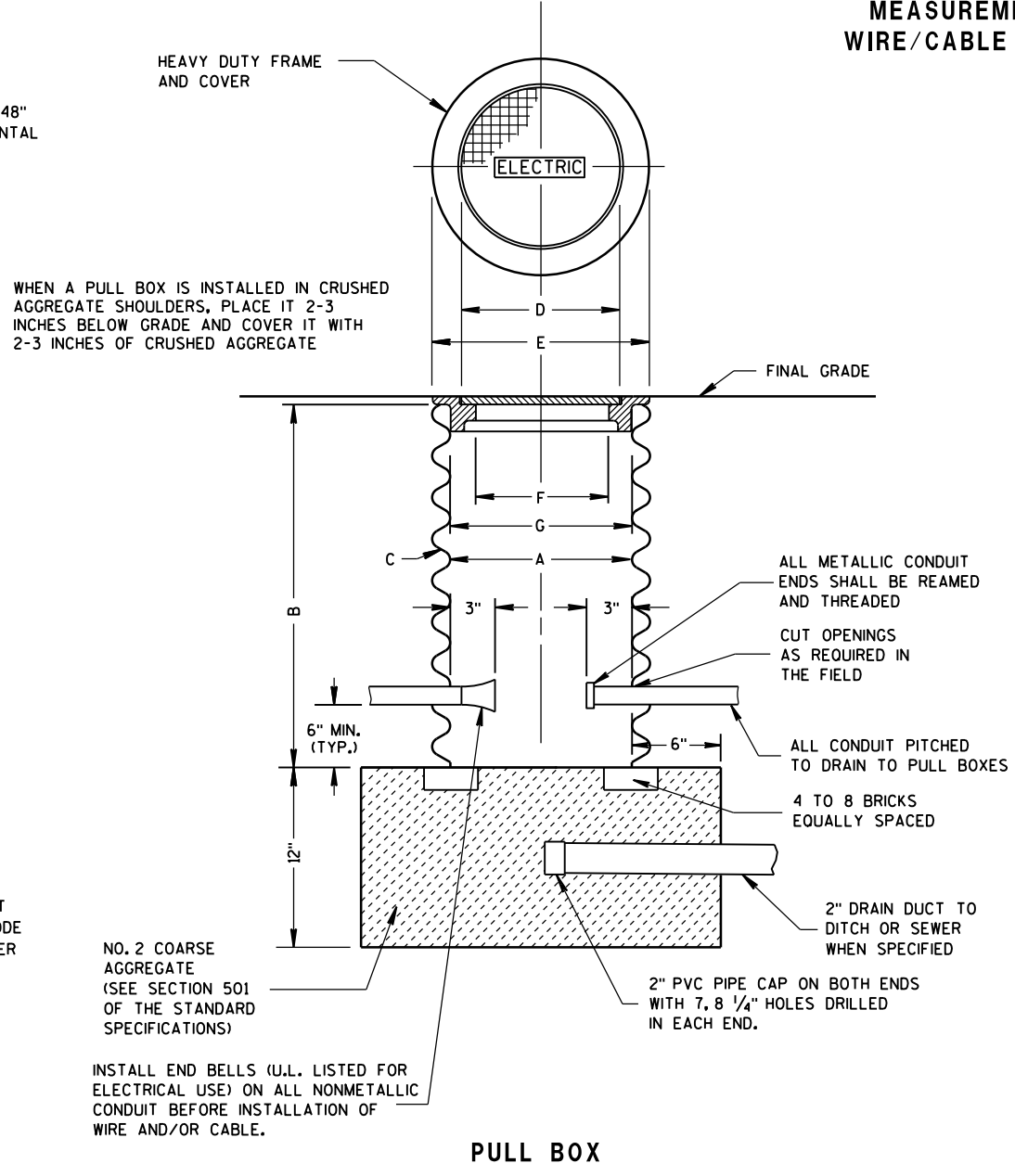
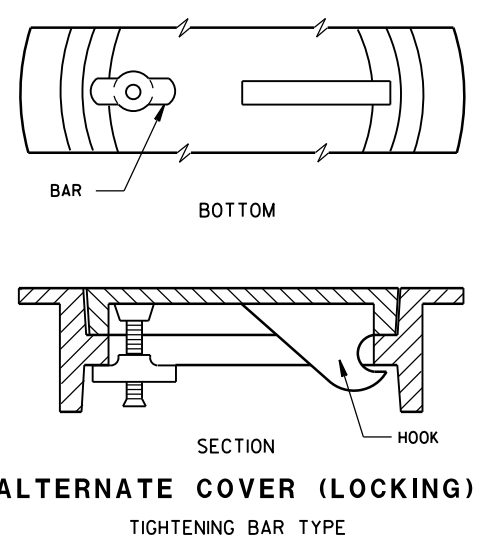
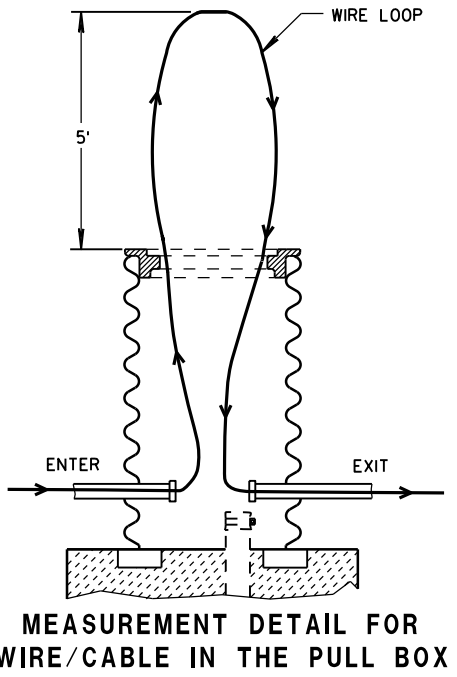
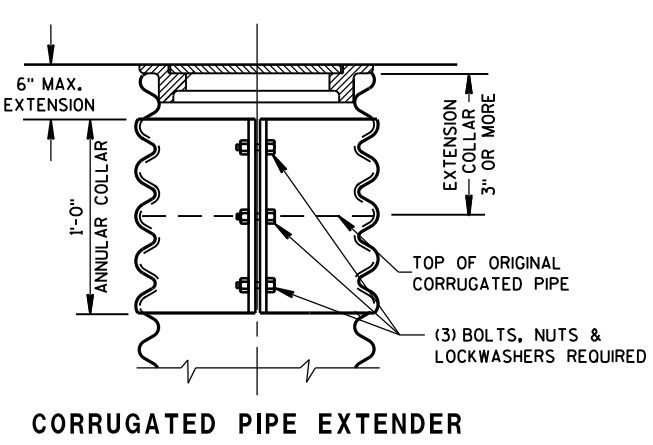
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

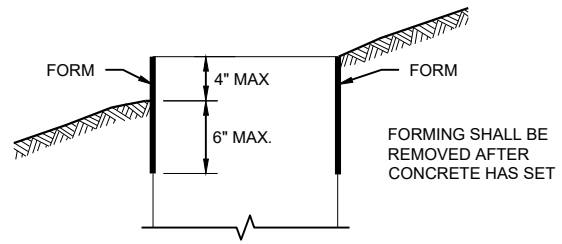
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



| | |
|--|--|
| PULL BOX | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED Sept. 2014 DATE | /S/ Ahmet Demirelek STATE ELECTRICAL ENGINEER |
| FHWA | |

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

| QUANTITY REQUIREMENTS | CONCRETE BASE TYPE | | |
|---------------------------------|--------------------|------|-------|
| | 1 | 2 | 5 & 6 |
| APPROX. CUBIC YARDS OF CONCRETE | 0.40 | 0.57 | 0.40 |
| LBS. OF HOOP BAR STEEL | NONE | 23 | 16 |
| LBS. OF VERTICAL BAR STEEL | NONE | 60 | 18 |

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

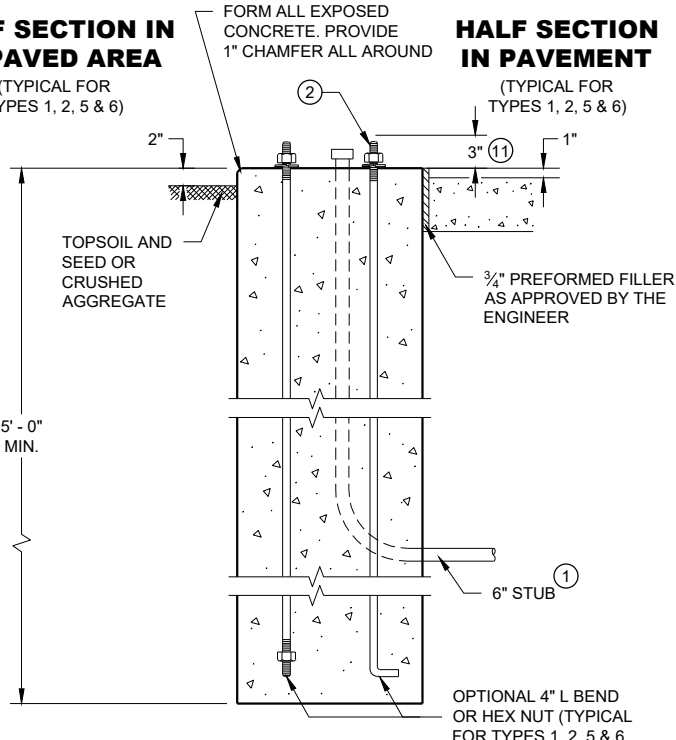
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

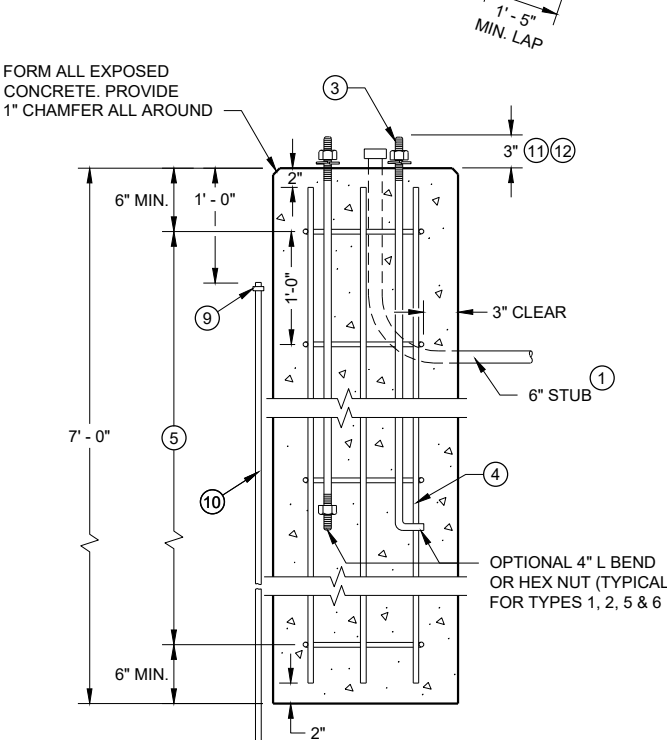
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.
- 2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.
- 4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.
- 5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.
- 8 (5) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 9 EXOTHERMIC CONNECTION TO EQUIPMENT GROUNDING CONDUCTOR
- 10 5/8" DIA. X 8' - 0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED
- 11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/2" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 12 FOR NON - BREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA



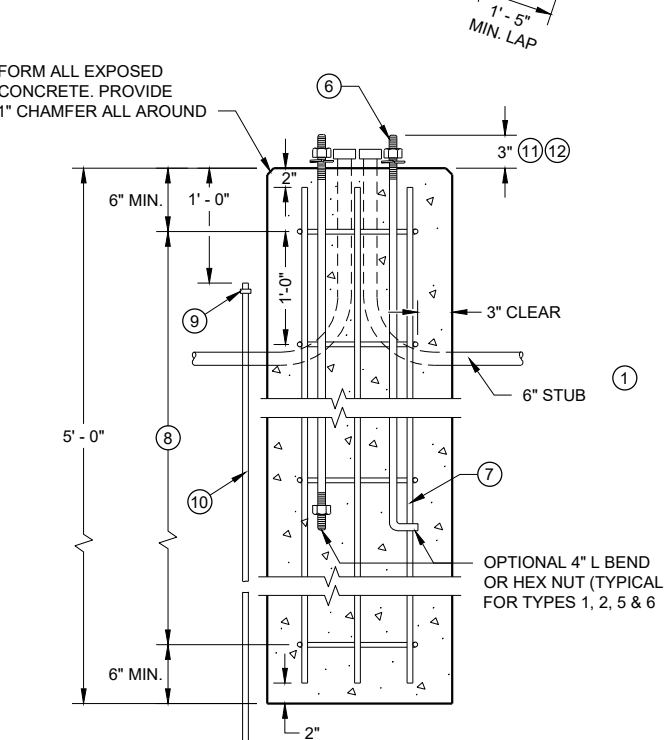
TYPE 1

HALF SECTION IN PAVEMENT



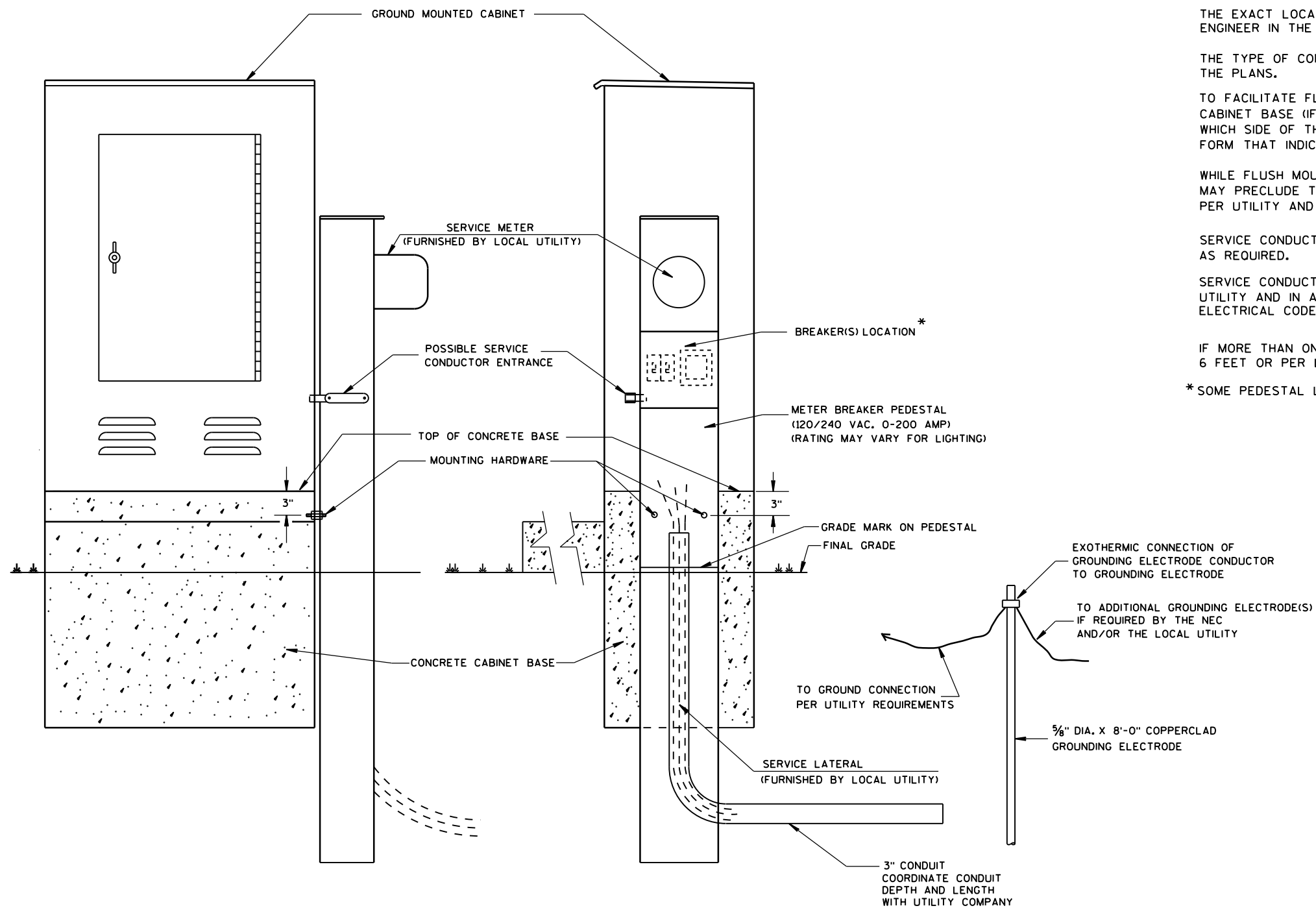
TYPE 2

CONCRETE BASES



TYPE 5 & 6

6



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH, THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

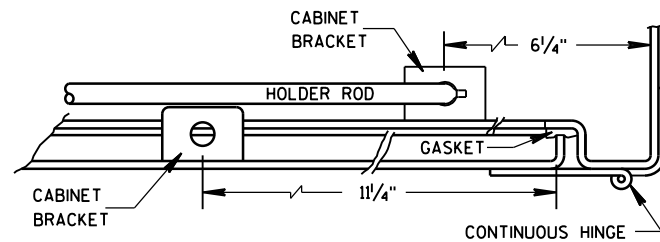
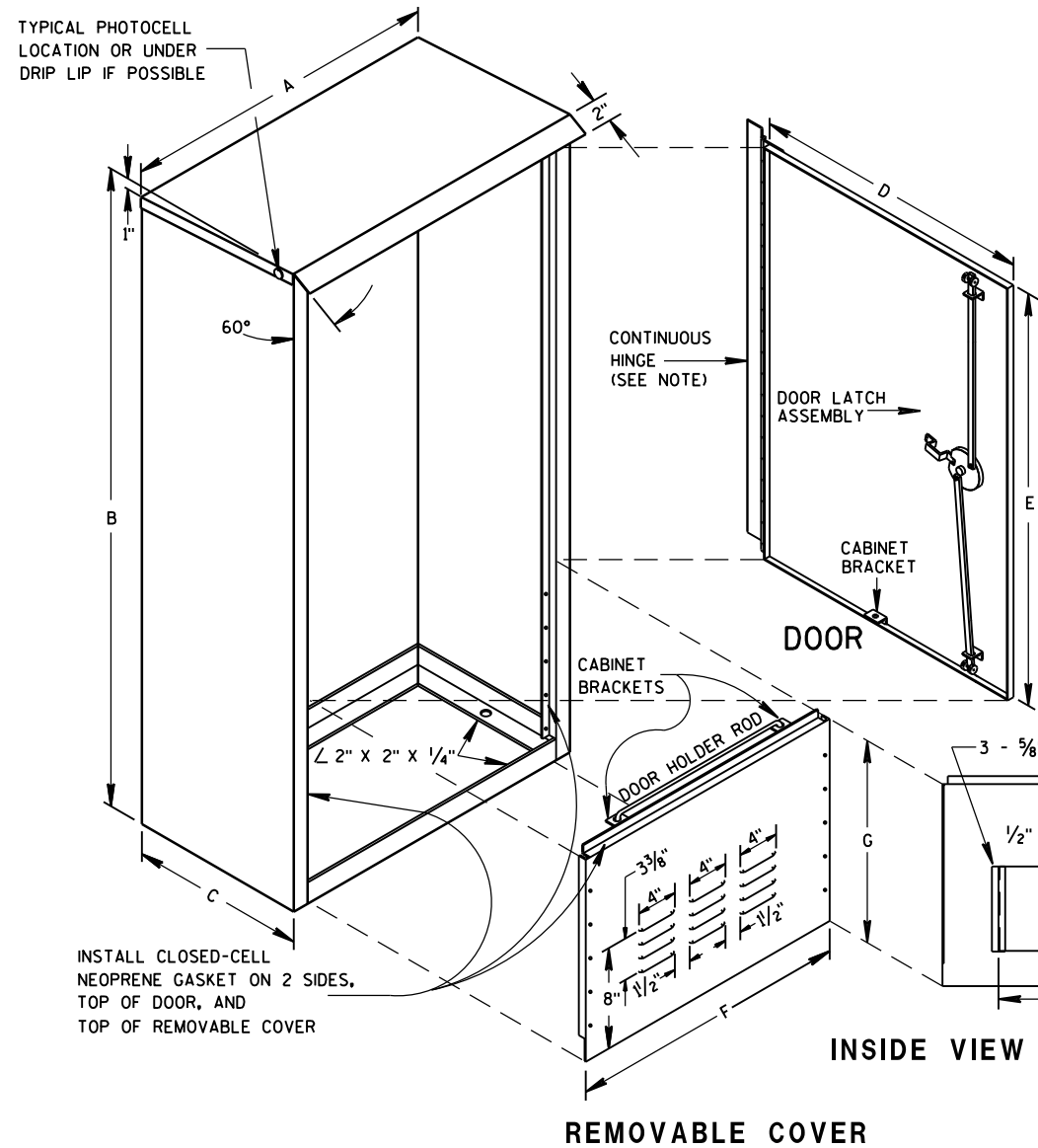
Sept. 2014

DATE

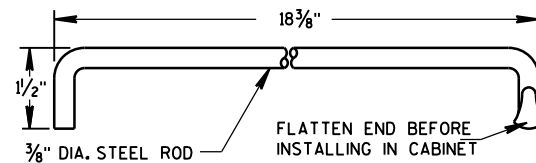
FHWA

/S/ Ahmet Demirbilek

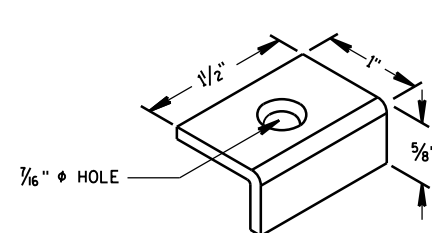
STATE ELECTRICAL ENGINEER



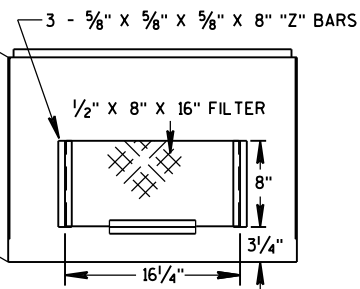
HINGE & DOOR HOLDER



HOLDER ROD



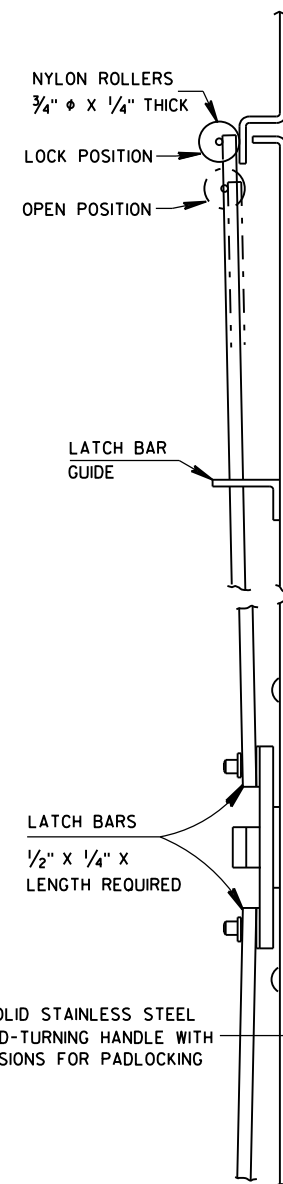
CABINET BRACKET



INSIDE VIEW SHOWING FILTER

TABLE OF DIMENSIONS (INCHES)

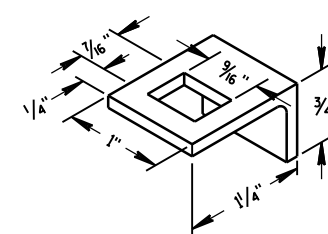
| MARK | CABINET TYPE | | |
|------|--------------|--------|--------|
| | 3060 | 3860 | 3866 |
| A | 30 | 38 | 38 |
| B | 60 | 60 | 66 |
| C | 16 1/2 | 16 1/2 | 24 |
| D | 26 1/2 | 34 3/4 | 33 3/4 |
| E | 38 3/4 | 38 3/4 | 38 3/4 |
| F | 26 1/2 | 34 3/4 | 33 3/4 |
| G | 19 | 19 | 25 |
| H | 16 1/2 | 16 1/2 | 24 |
| H/2 | 8 1/4 | 8 1/4 | 12 |
| J | 30 | 38 | 38 |
| J/2 | 15 | 19 | 19 |
| K | 13 3/4 | 13 3/4 | 21 1/4 |
| L | 27 1/2 | 35 1/2 | 35 1/2 |



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

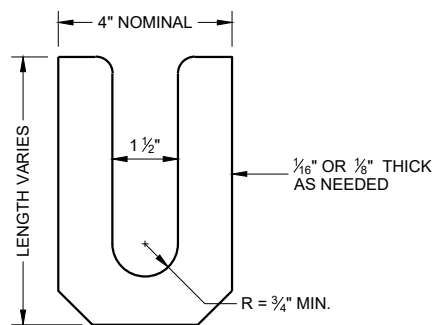
ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

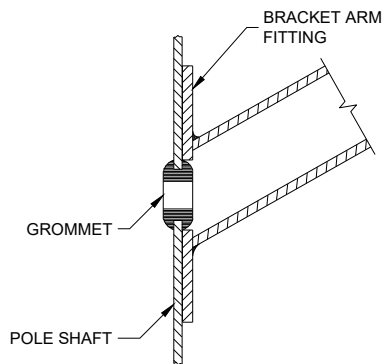
A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

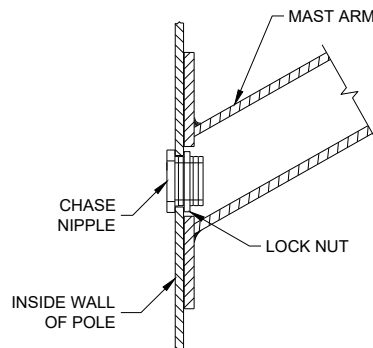
| | |
|--|---|
| SIGNAL CONTROL CABINET | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED Sept. 2014 DATE | /S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER |
| FHWA | |



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



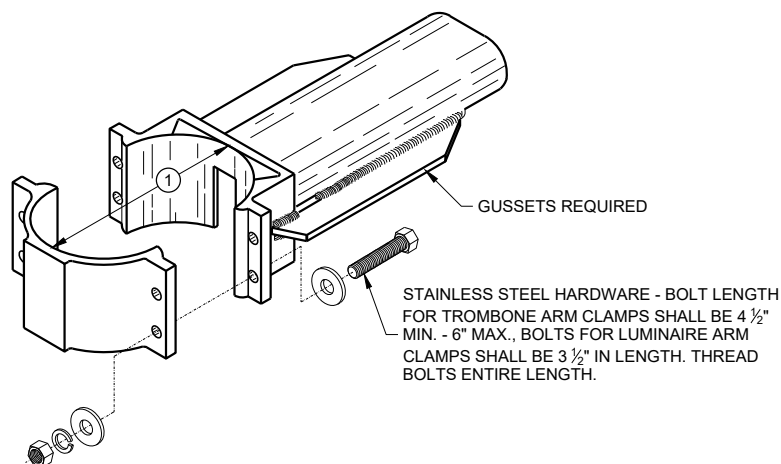
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

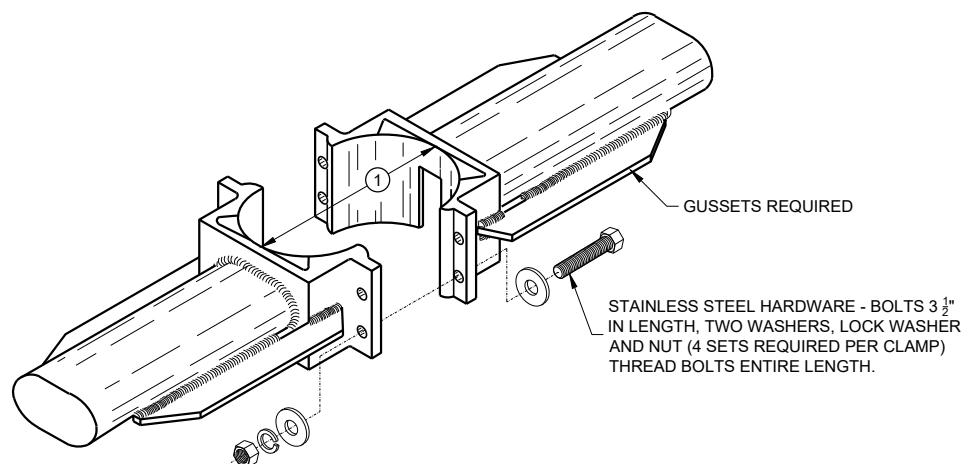
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- ① 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- ② INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- ③ BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- ④ LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

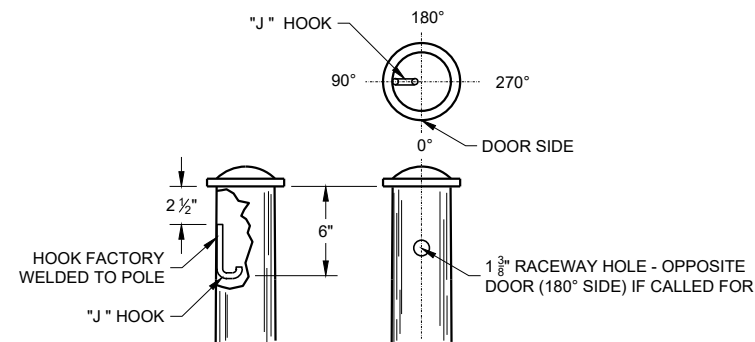
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



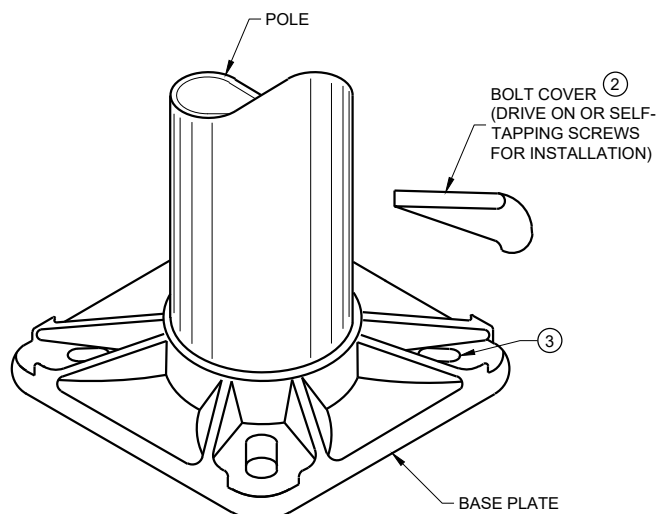
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



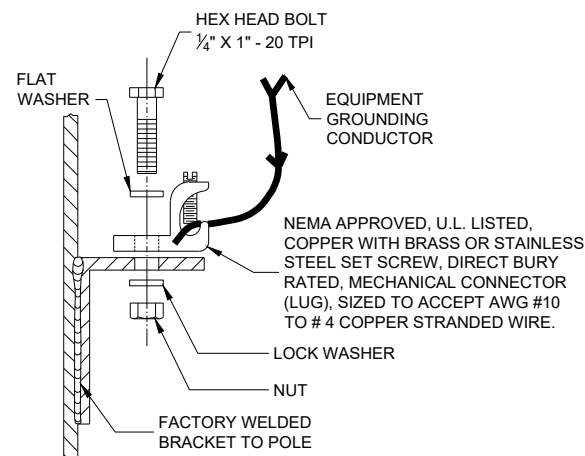
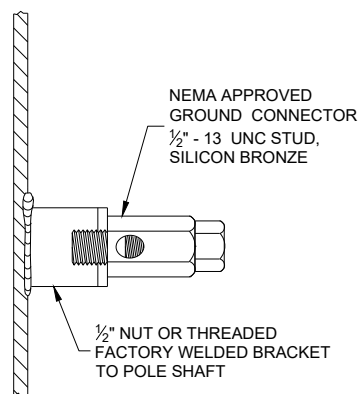
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



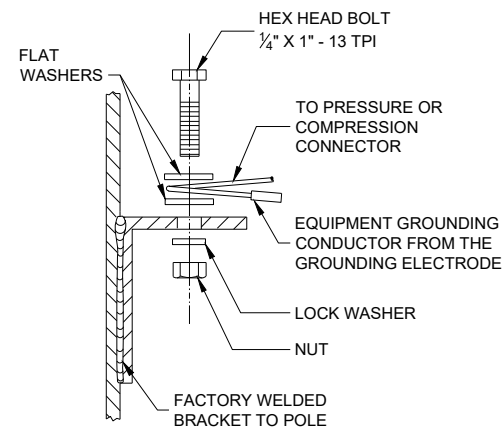
TYPICAL "J" HOOK LOCATION



BASE PLATE



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

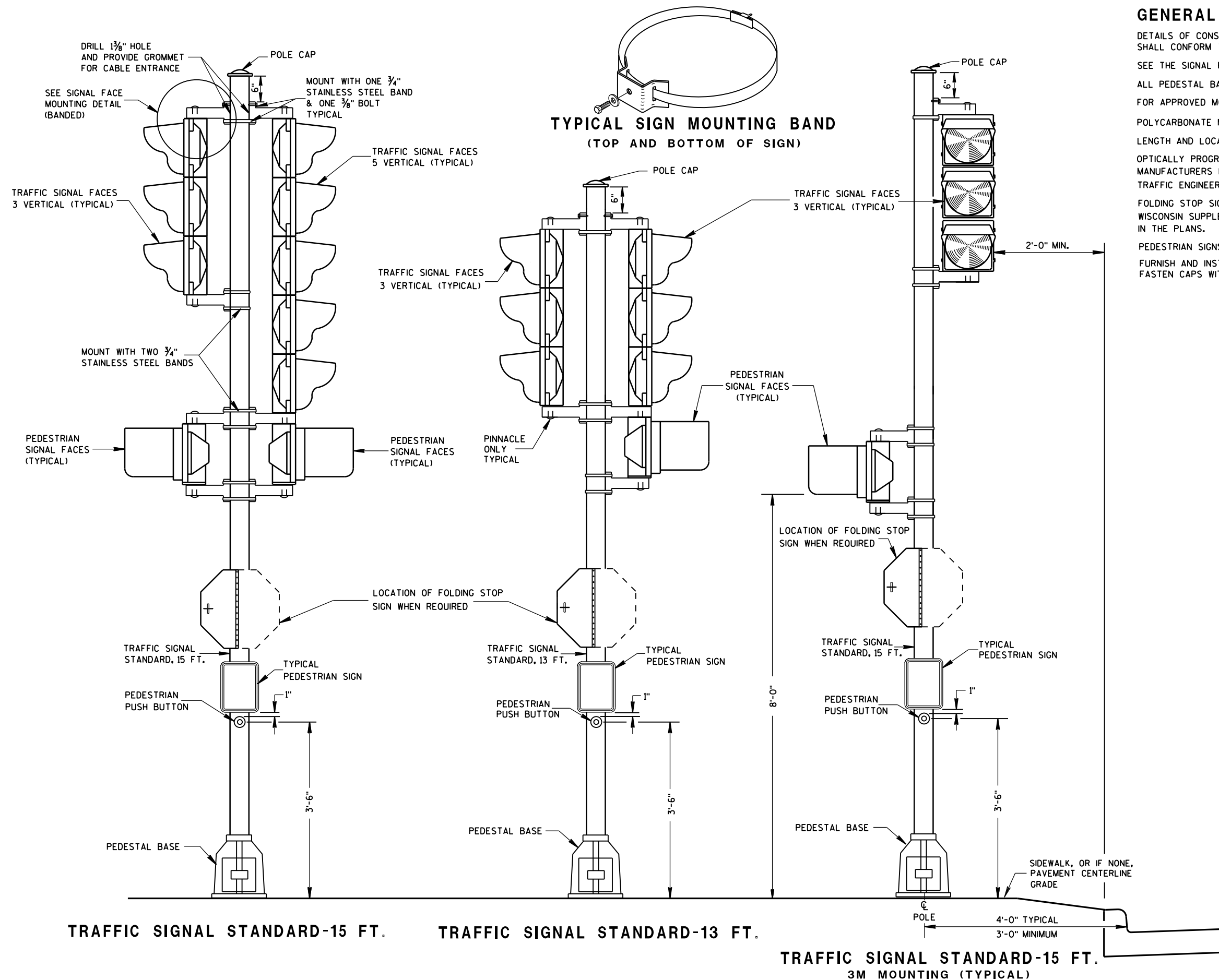


HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER

FHWA



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

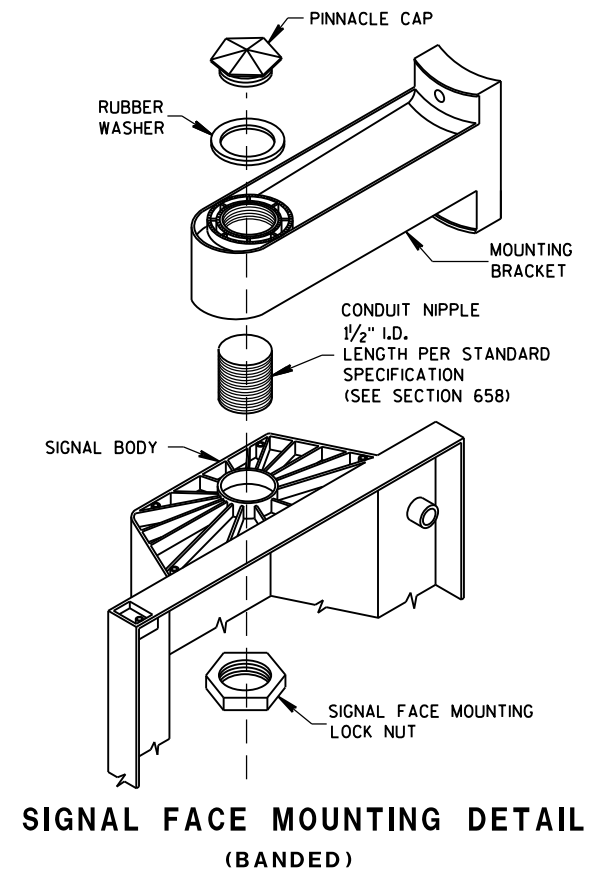
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) $\frac{1}{4}$ " X $\frac{3}{4}$ " - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



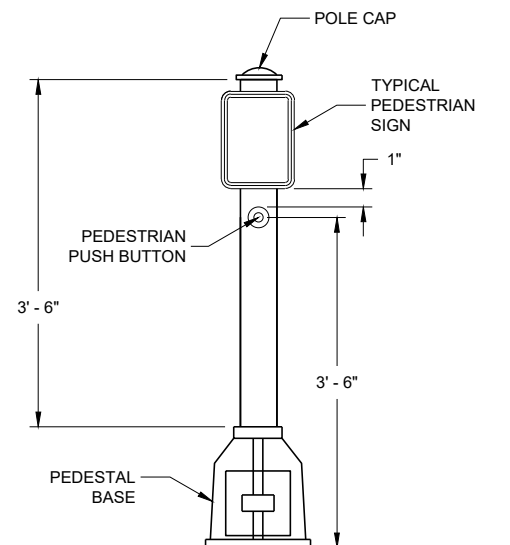
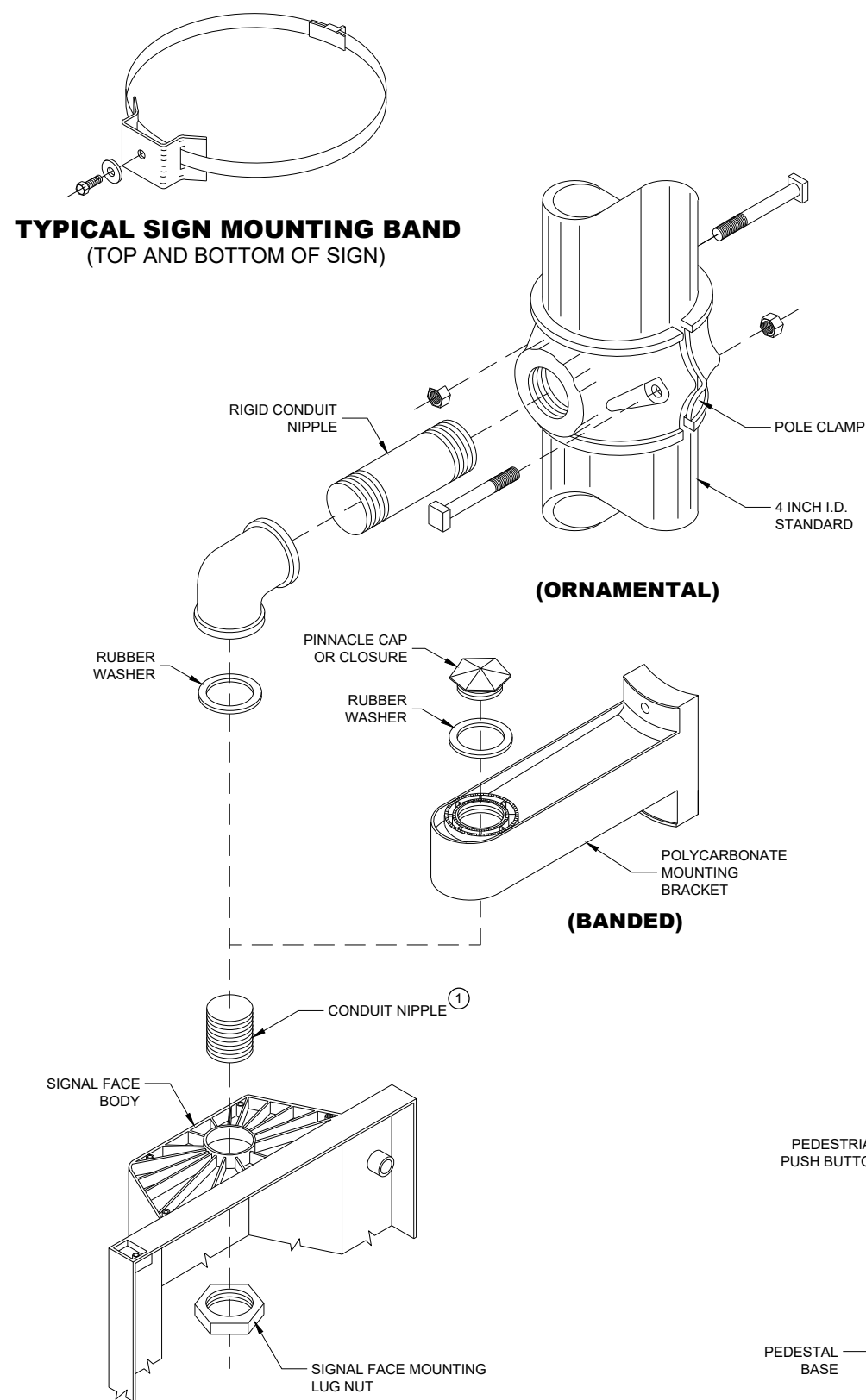
**TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

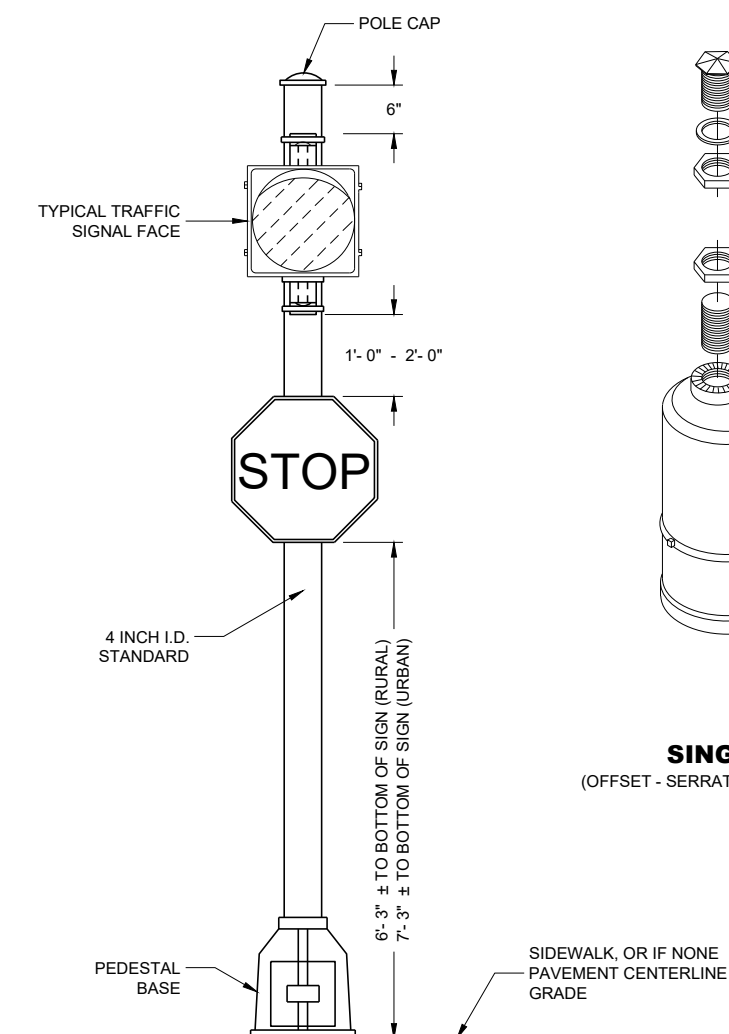
APPROVED
2/28/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA



**PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTING**



STANDARD FLASHER

10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

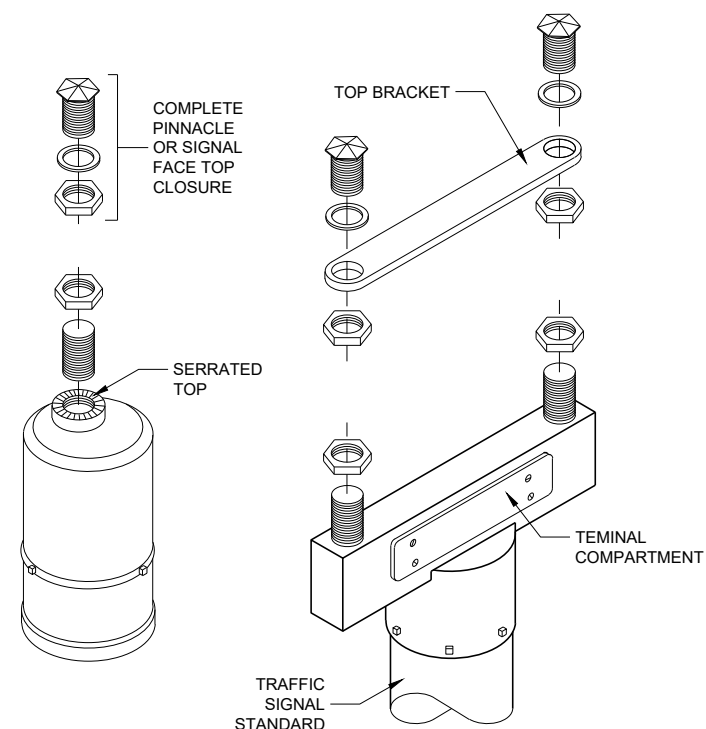
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/2" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

- ① USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.



SINGLE
(OFFSET - SERRATED MOUNTING)

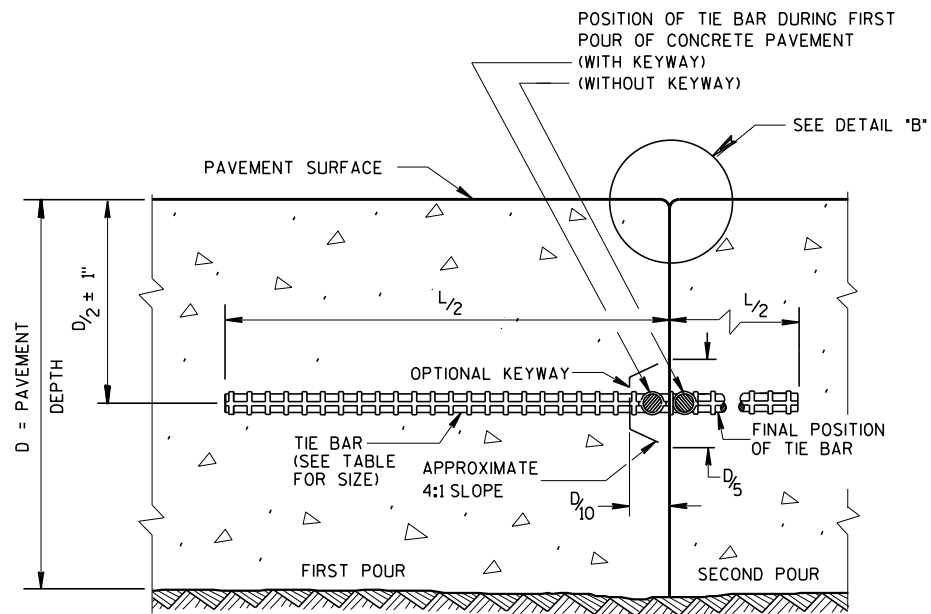
DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

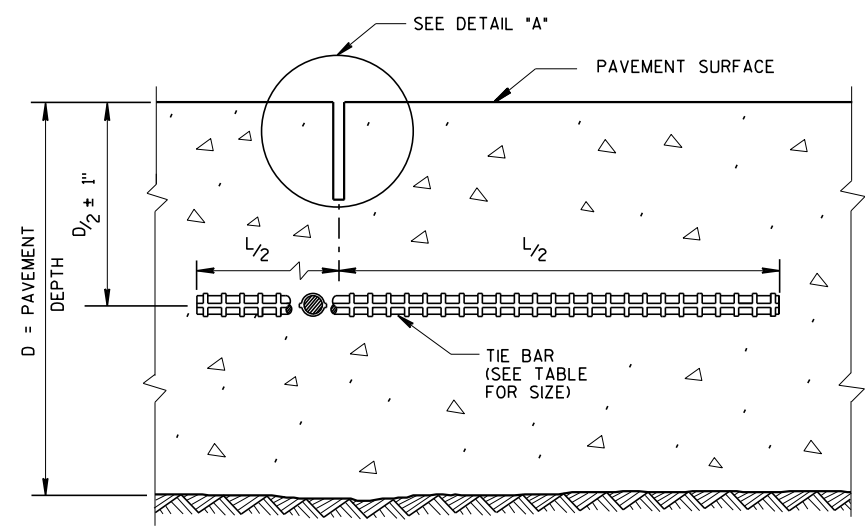
**TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA



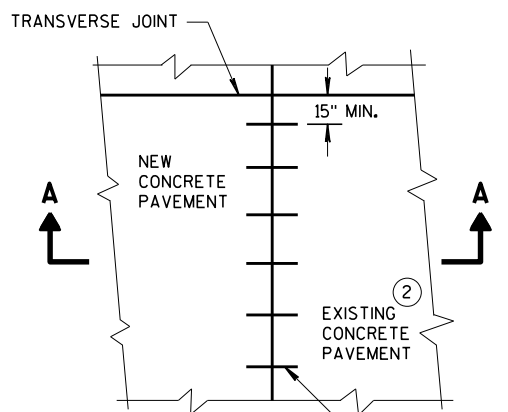
CONSTRUCTION JOINT



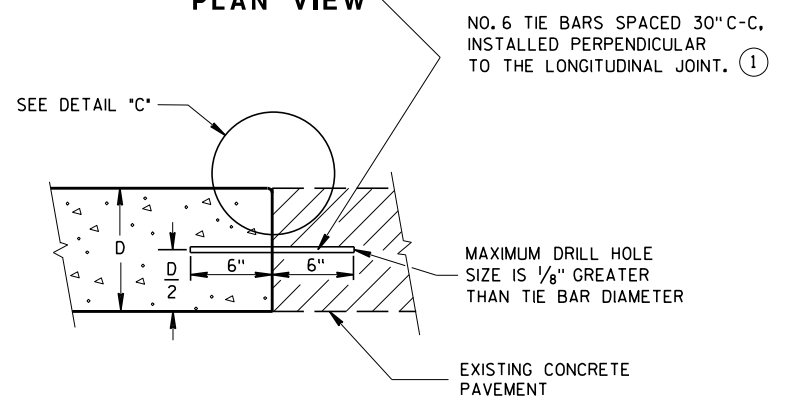
SAWED JOINT

GENERAL NOTES

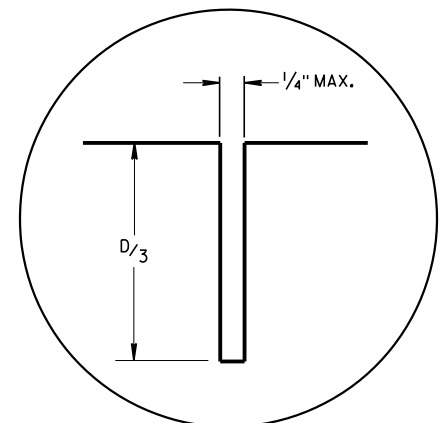
- CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



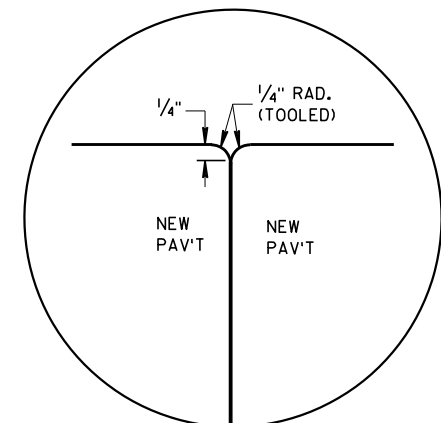
PLAN VIEW



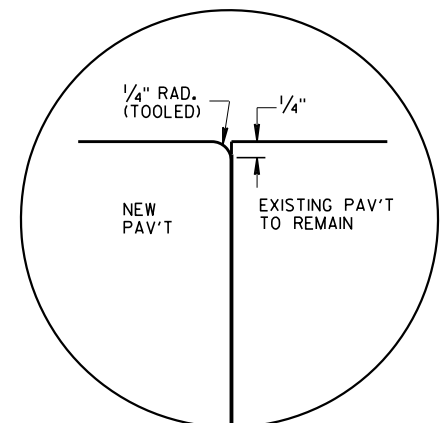
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



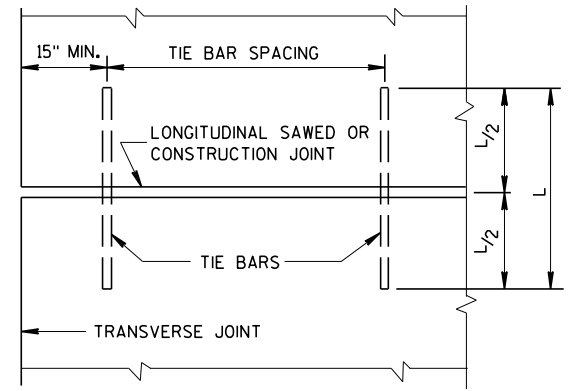
DETAIL "C"

TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|--------------------|--------------|--------------------|----------------------|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

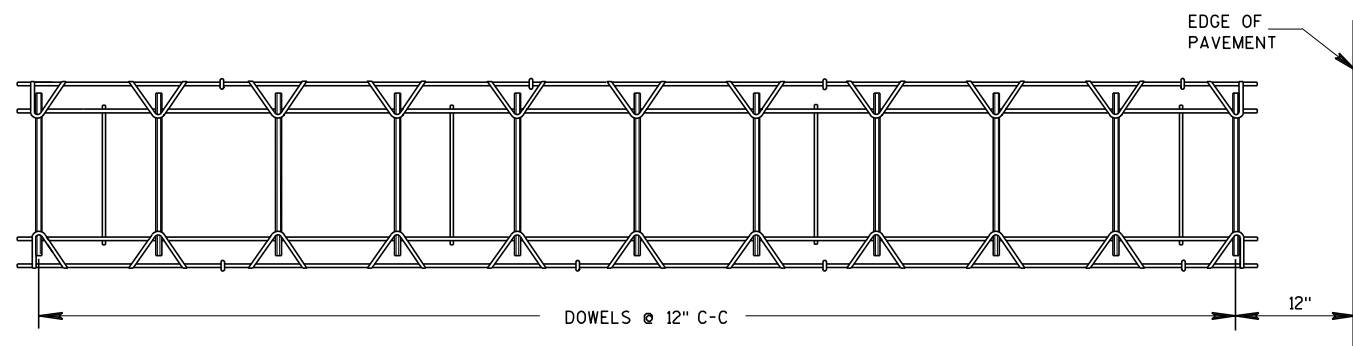


PLAN VIEW
SHOWING LOCATION OF TIE BARS

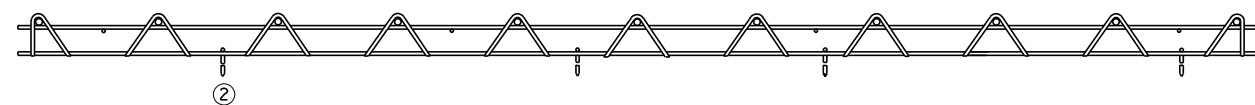
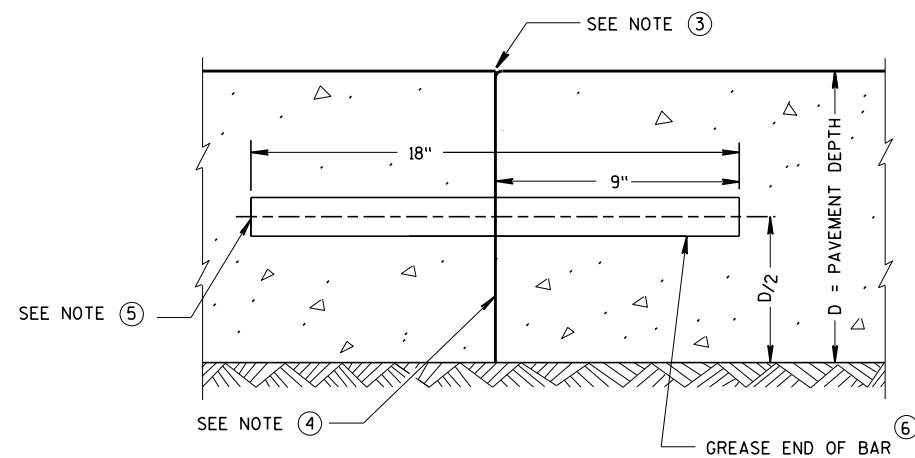
CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

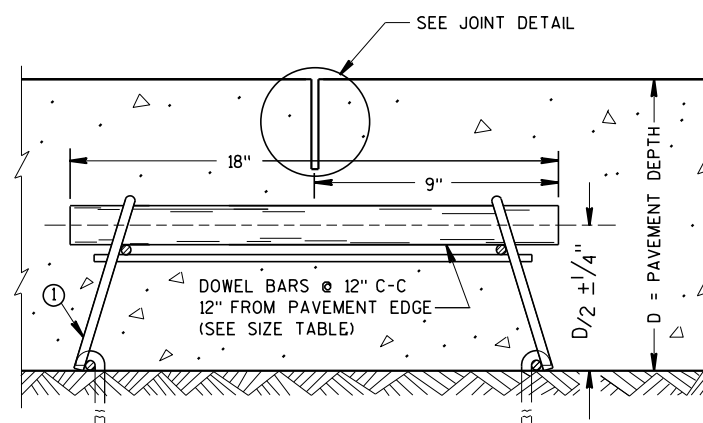
APPROVED
March 2018 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR
FHWA



PLAN VIEW

SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY (1)

TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|--------------------|--------------------|---------------------------|
| 5 1/2", 6", 6 1/2" | NONE | 12' |
| 7", 7 1/2" | 1" | 14' |
| 8", 8 1/2" | 1 1/4" | 15' |
| 9", 9 1/2" | 1 1/4" | 15' |
| 10" & ABOVE | 1 1/2" | 15' |

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

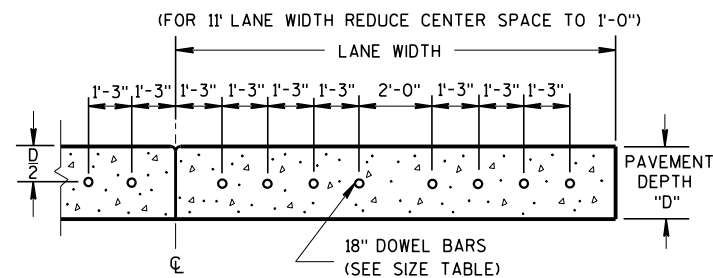
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

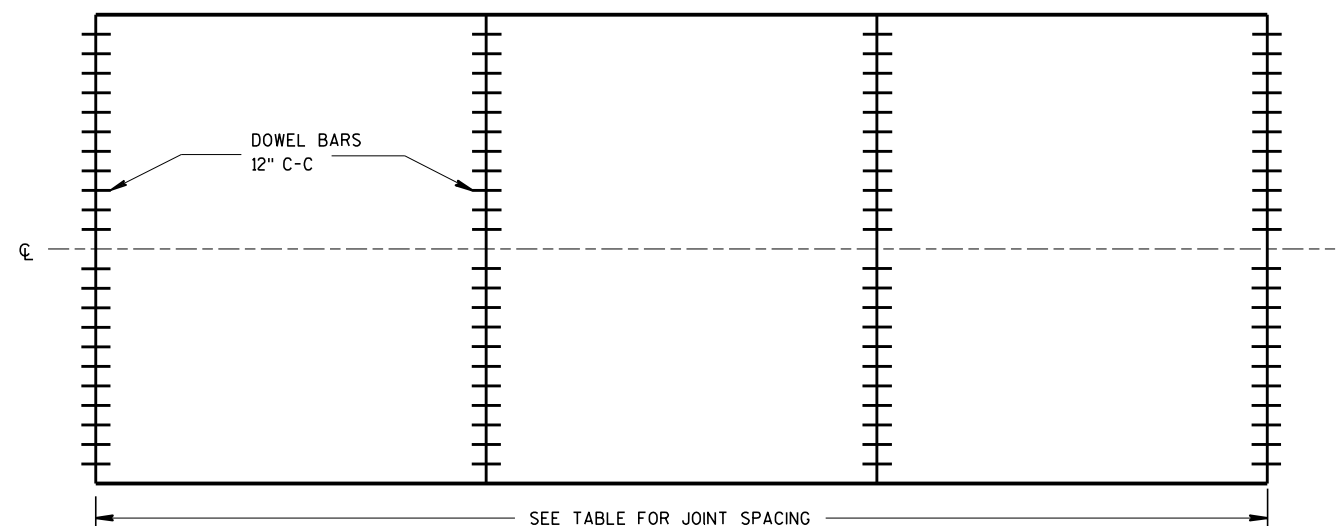
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

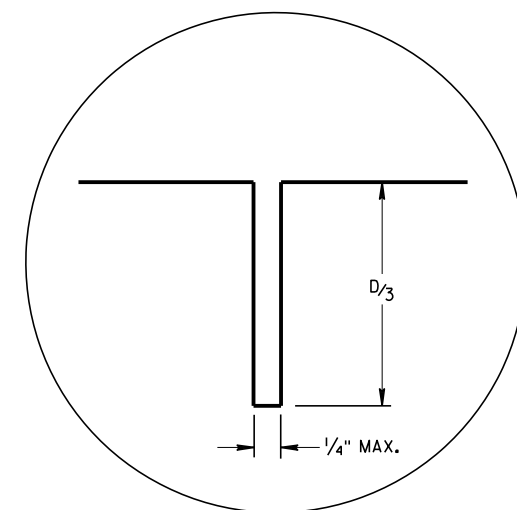
- (1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- (2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- (3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- (4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- (5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
- (6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- (7) ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



CONTRACTION JOINT LOCATIONS

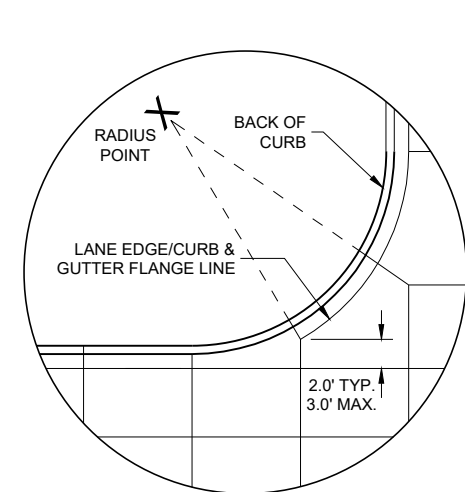


JOINT DETAIL

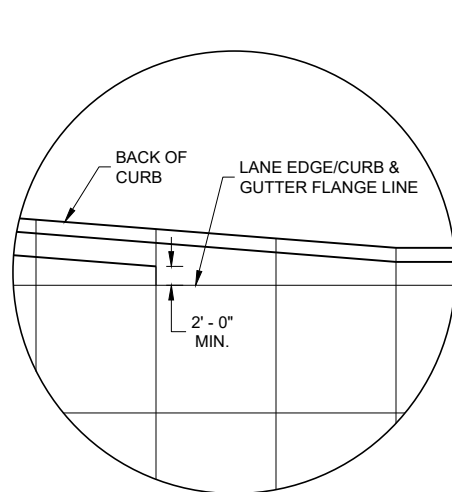
URBAN DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

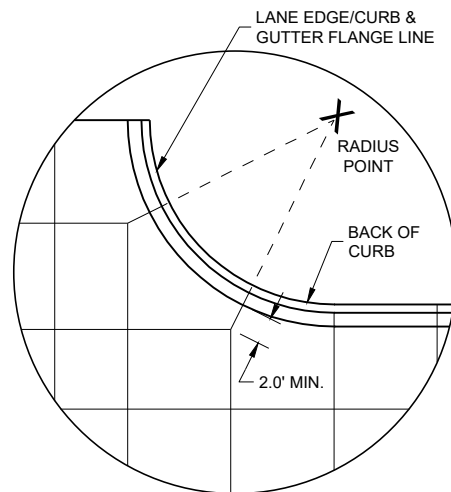
APPROVED
March 2018 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR
FHWA



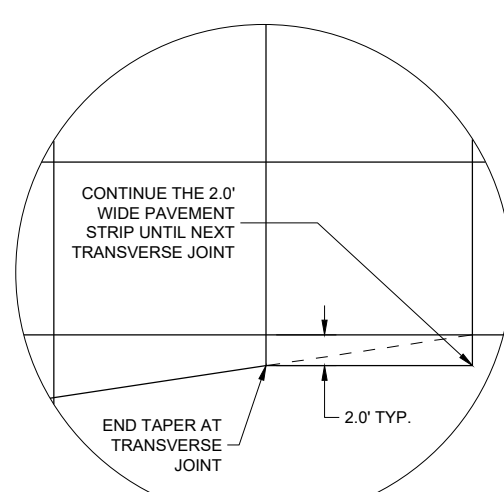
DETAIL "A"



DETAIL "B"



DETAIL "C"

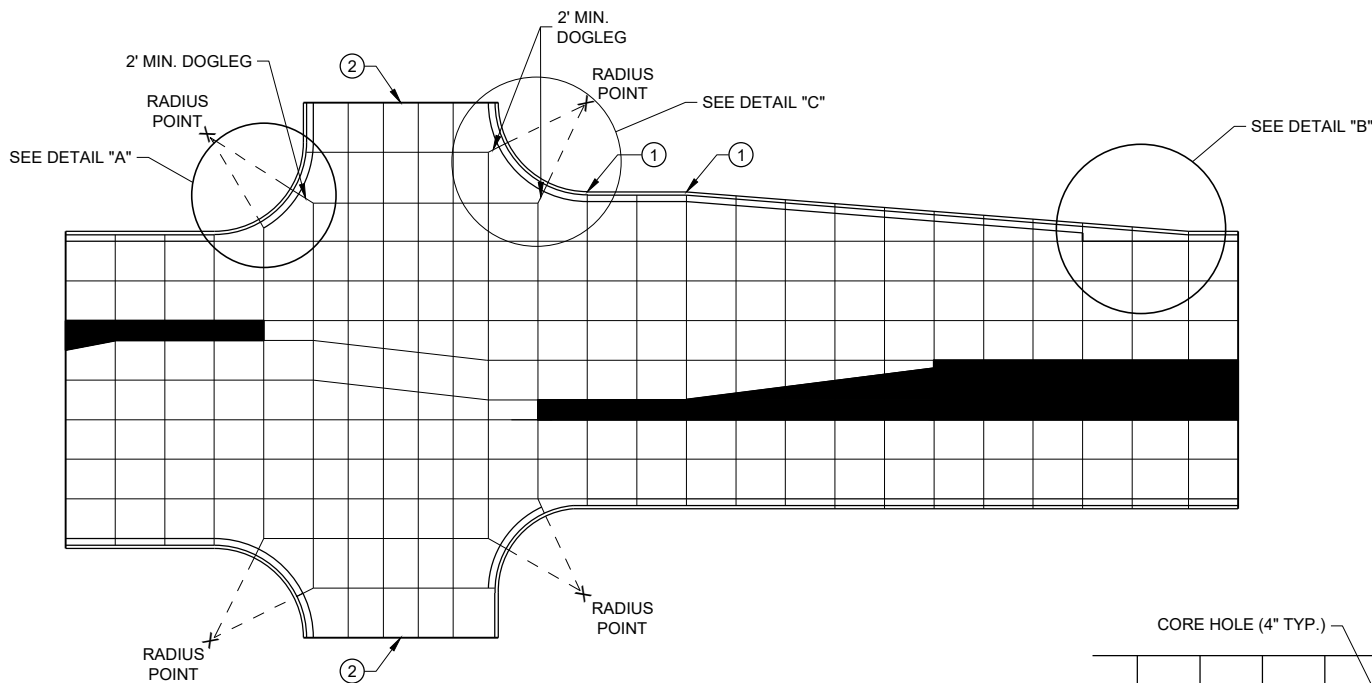


DETAIL "D"

GENERAL NOTES

- THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.
- ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.
- CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.
- ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.
- AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.
- SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.
- AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

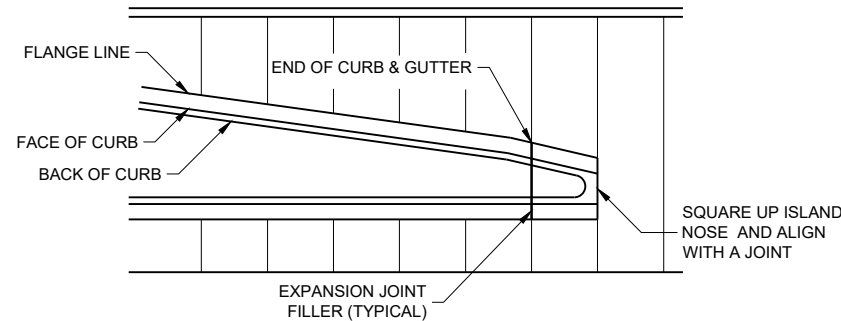
- ① PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
- ② CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
- ③ THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



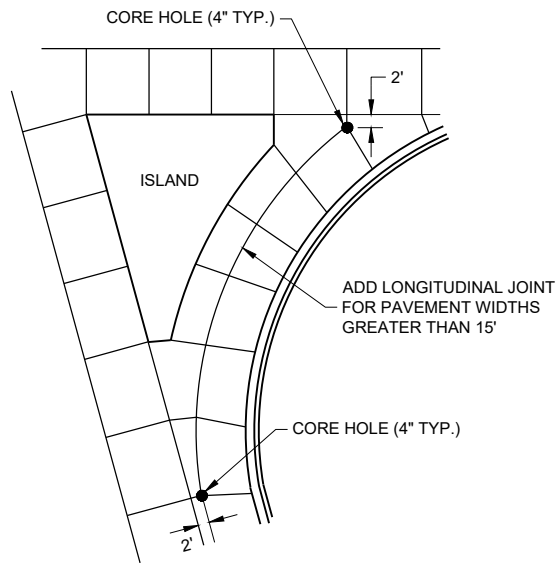
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

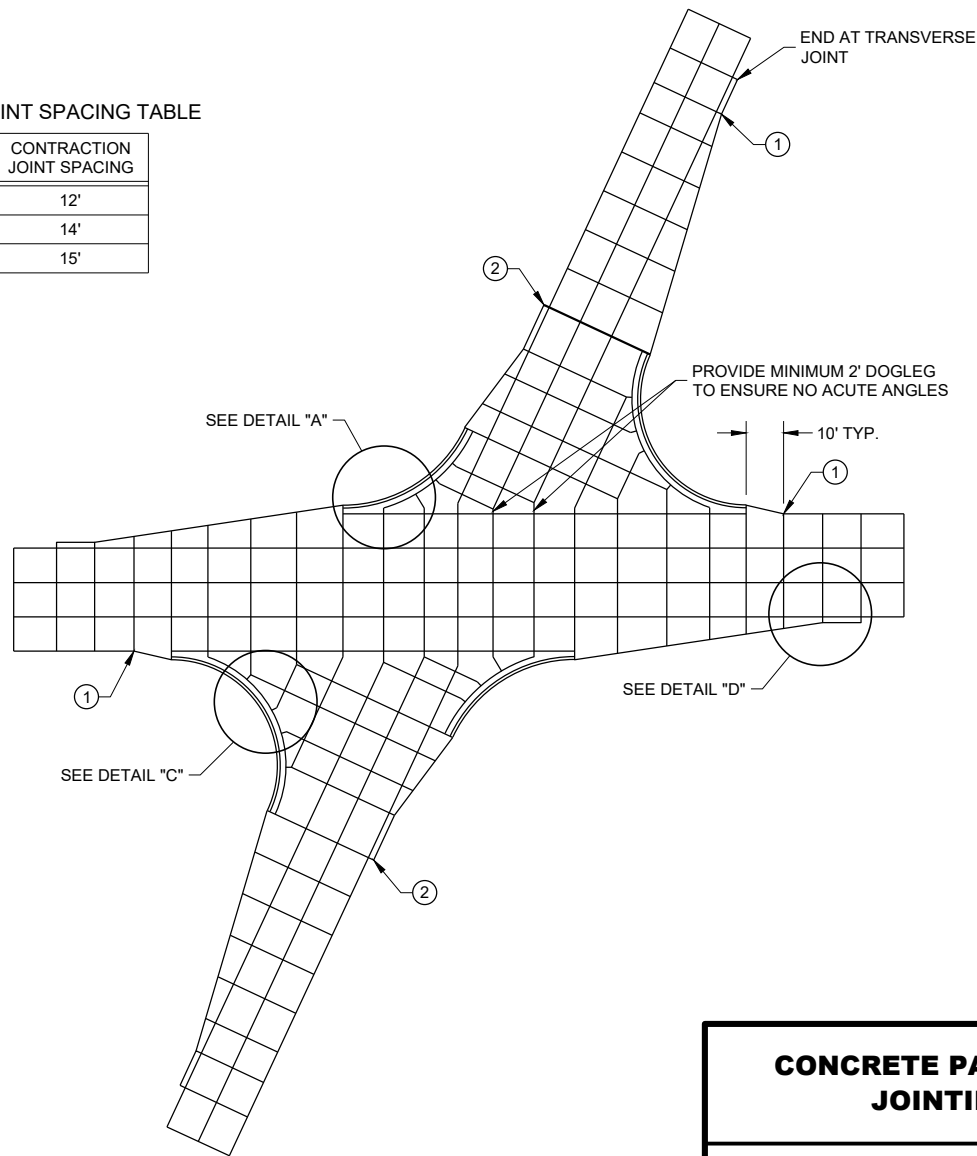
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|--------------------|---------------------------|
| 6", 6 1/2" | 12' |
| 7", 7 1/2" | 14' |
| 8" & ABOVE | 15' |



APPROACH TO MEDIAN



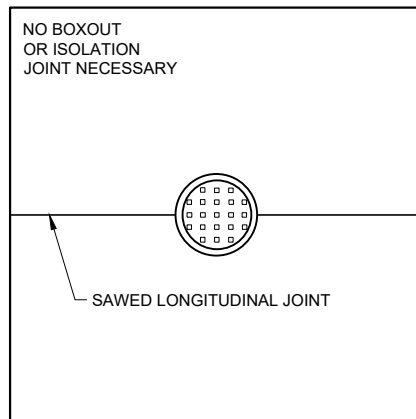
LARGE RIGHT TURN



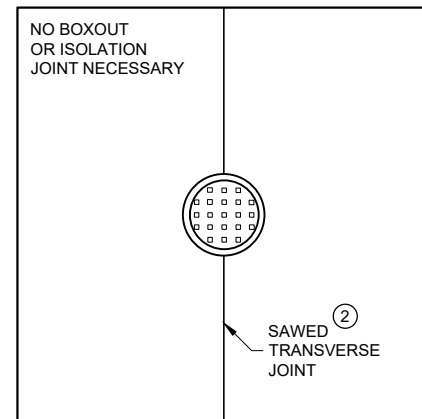
SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

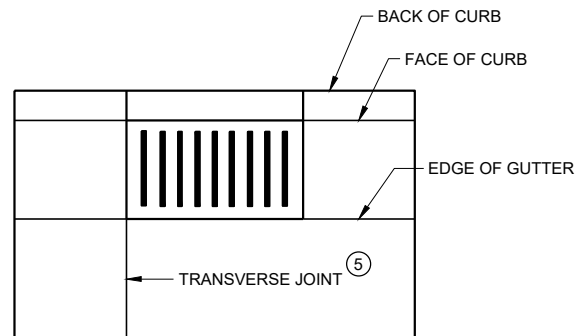
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**MANHOLE WITH
LONGITUDINAL JOINT**



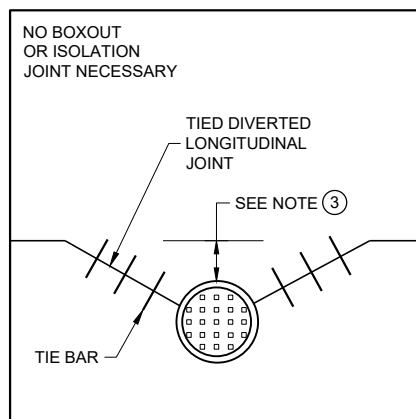
**MANHOLE WITH
TRANSVERSE JOINT**



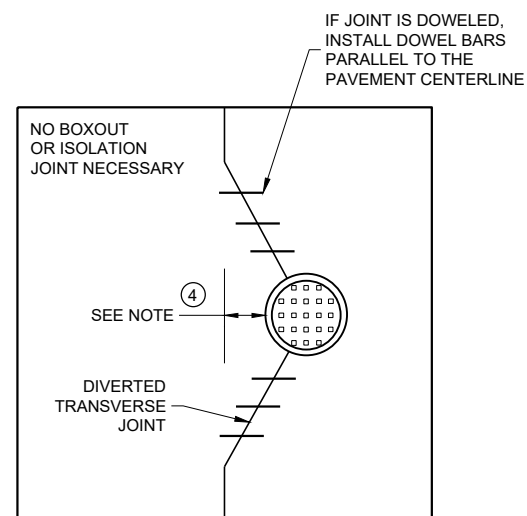
**INLET WITH
TRANSVERSE JOINT**

GENERAL NOTES

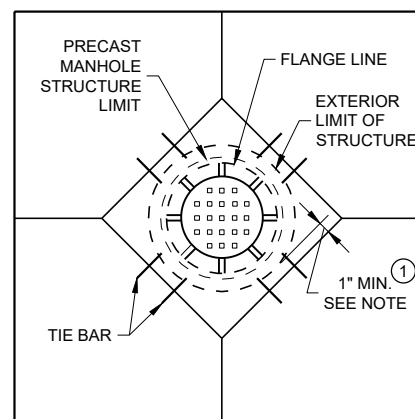
- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
- ④ IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**

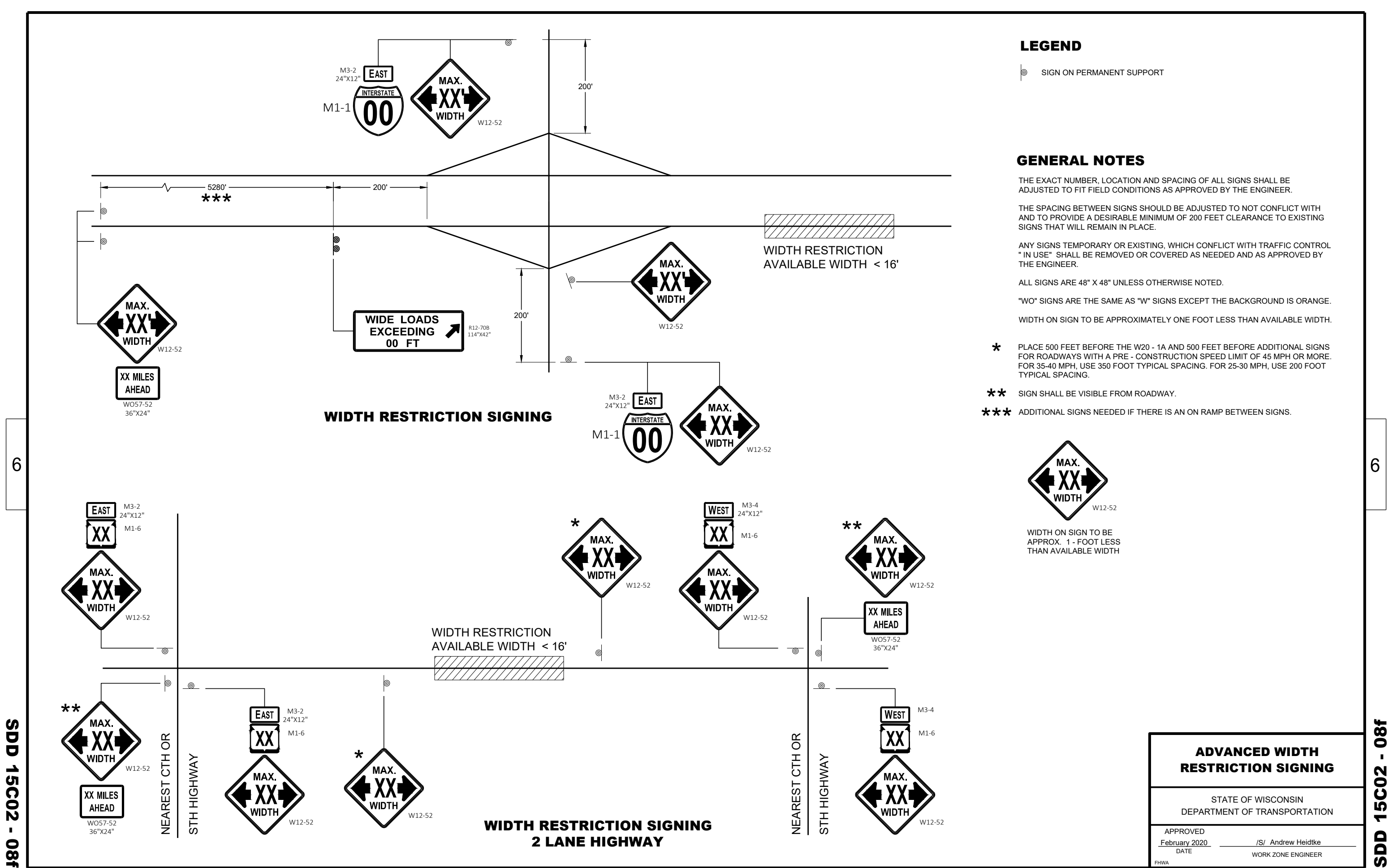


**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**

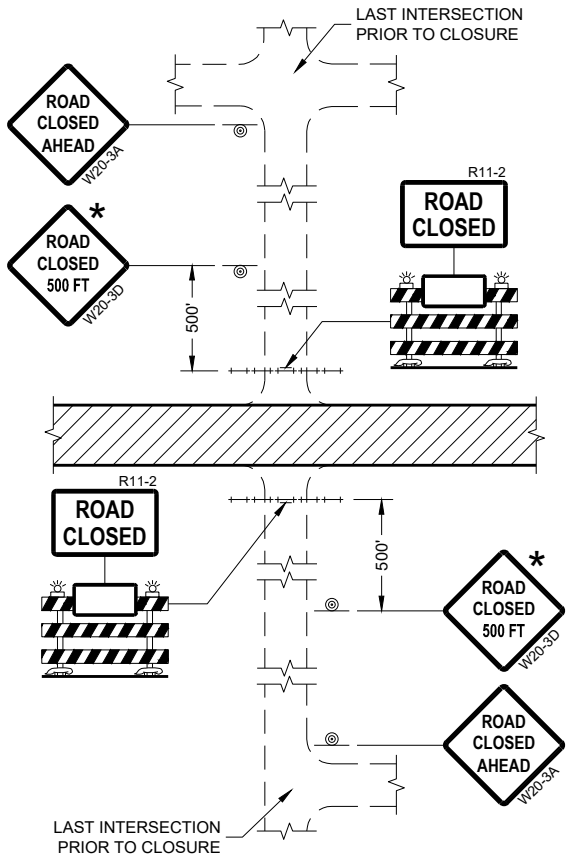
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

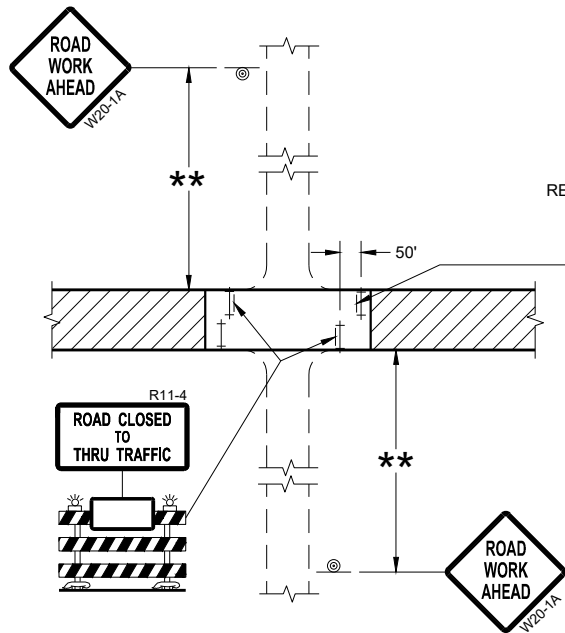
APPROVED
November 2018 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR
FHWA



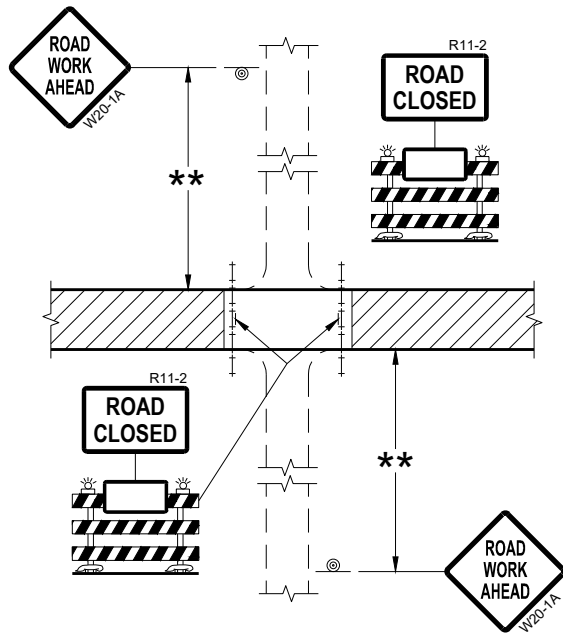
| ADVANCED WIDTH RESTRICTION SIGNING | |
|--|--|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED February 2020 DATE | /S/ Andrew Heidtke WORK ZONE ENGINEER |
| FHWA | |



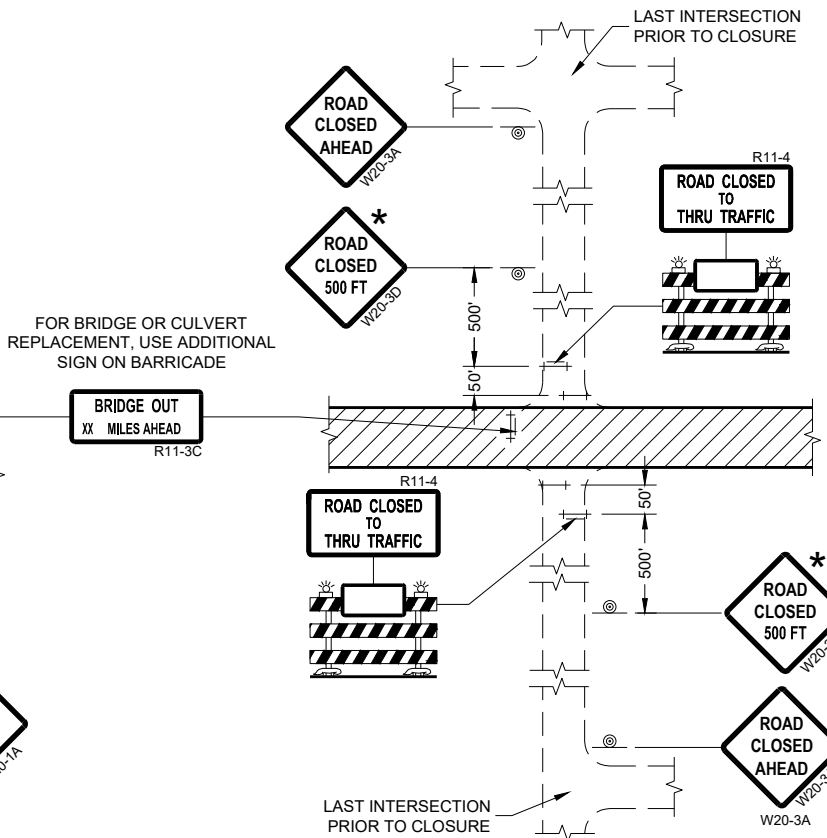
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

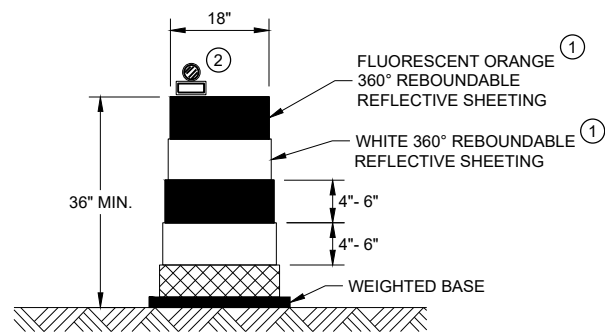
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

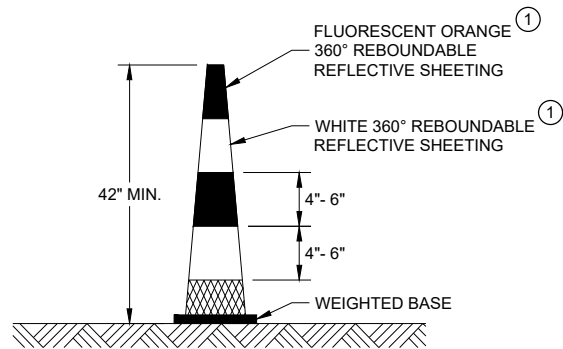
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

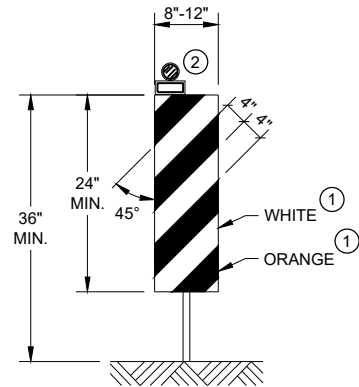


DRUM



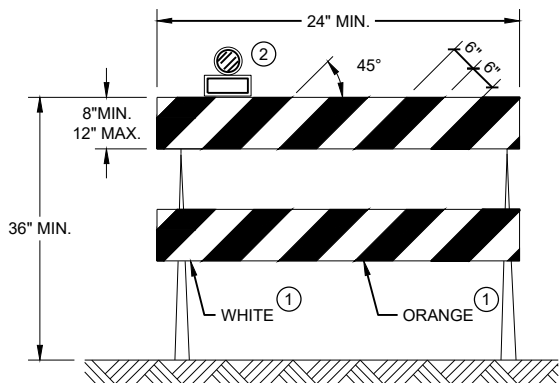
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



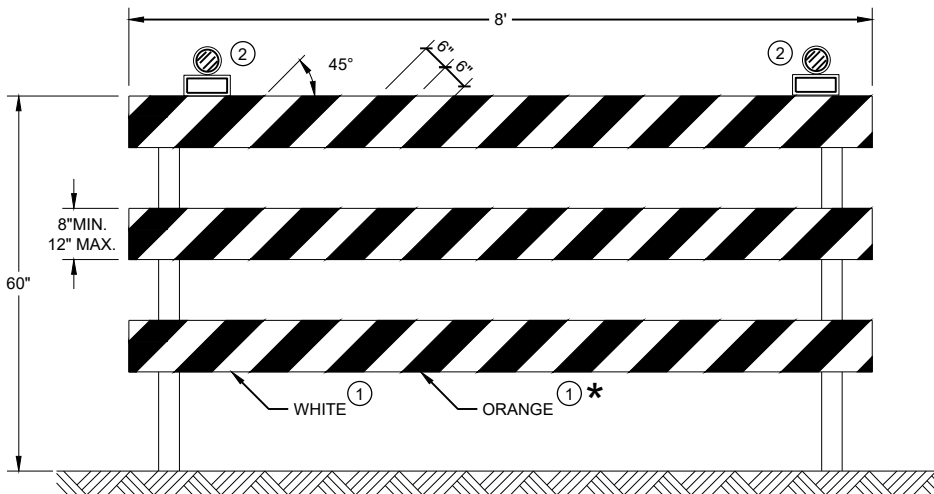
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

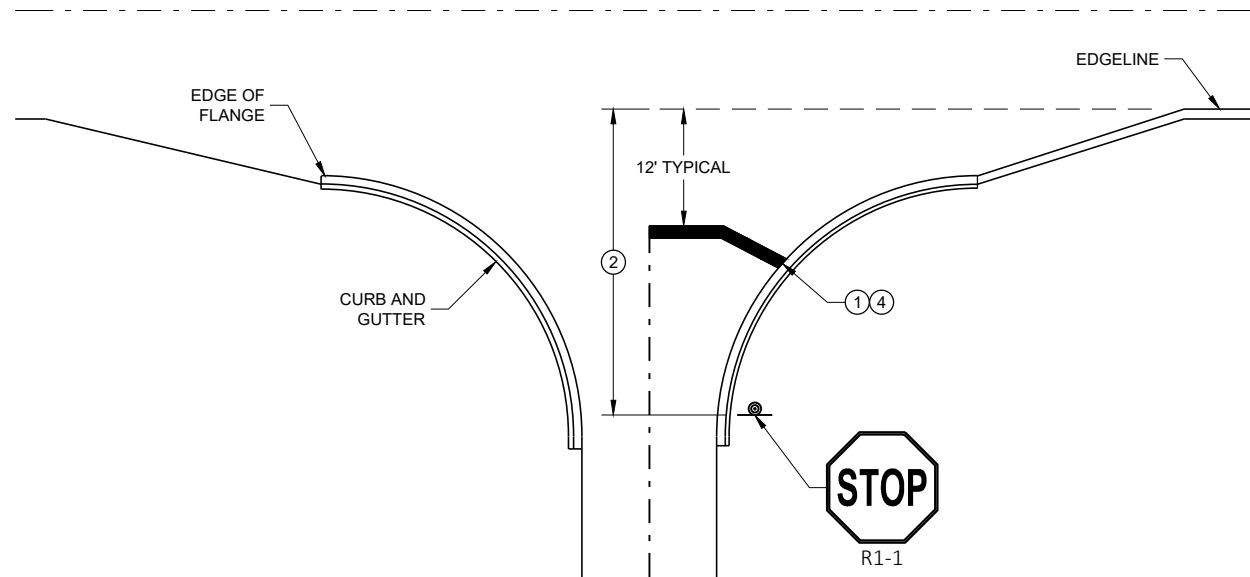
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

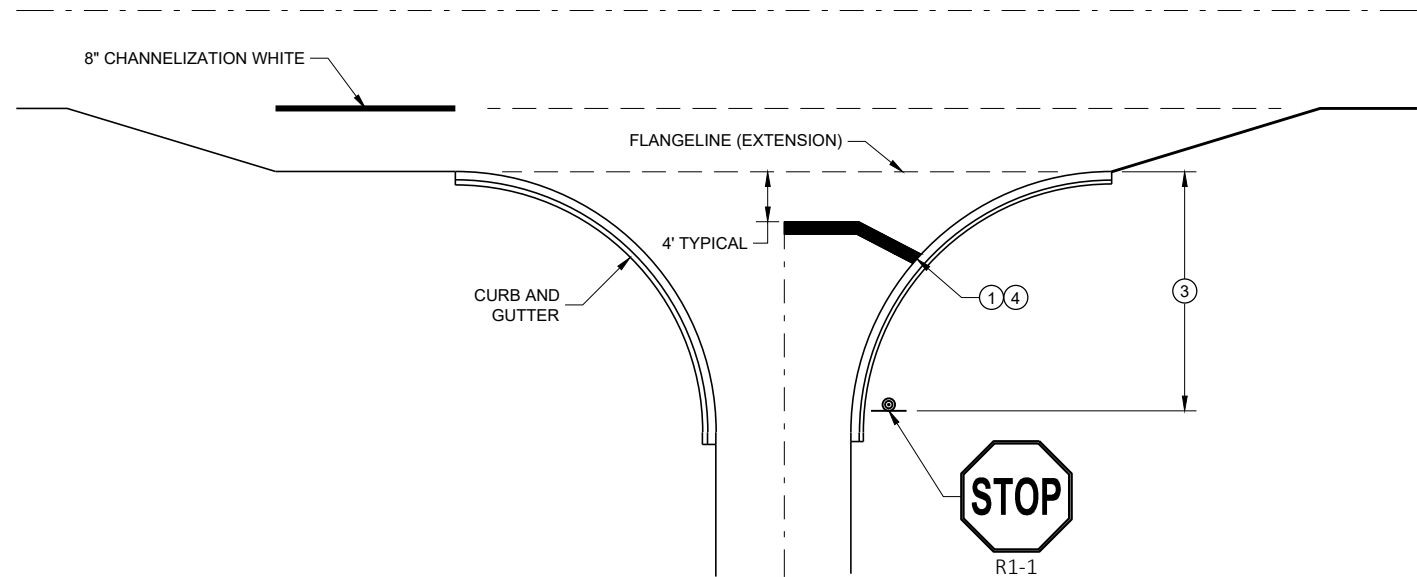
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November 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

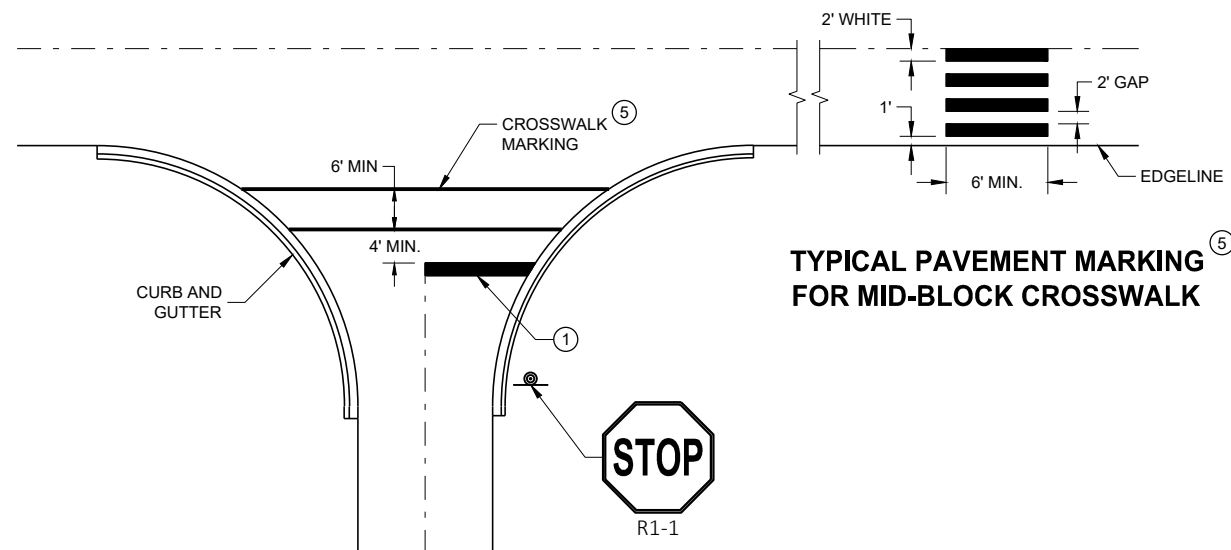
FHWA



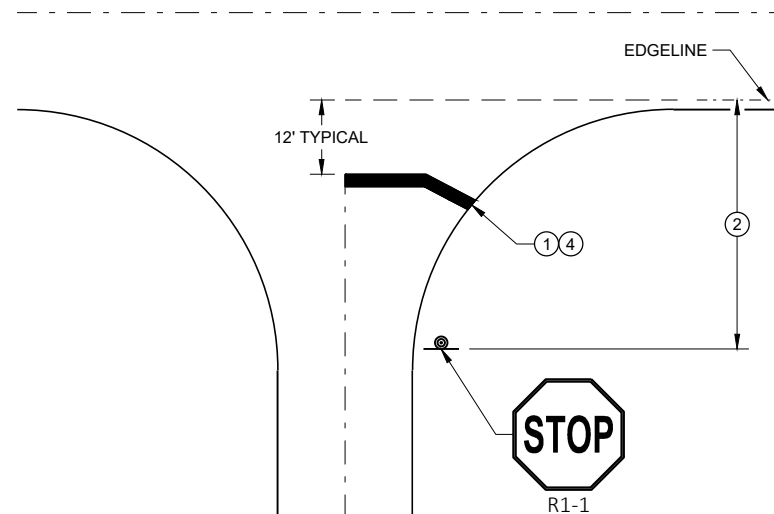
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.










- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE.
- 3 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- 4 MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- 5 LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  FLASHING ARROW BOARD
-  DIRECTION OF TRAFFIC
-  REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
-  WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

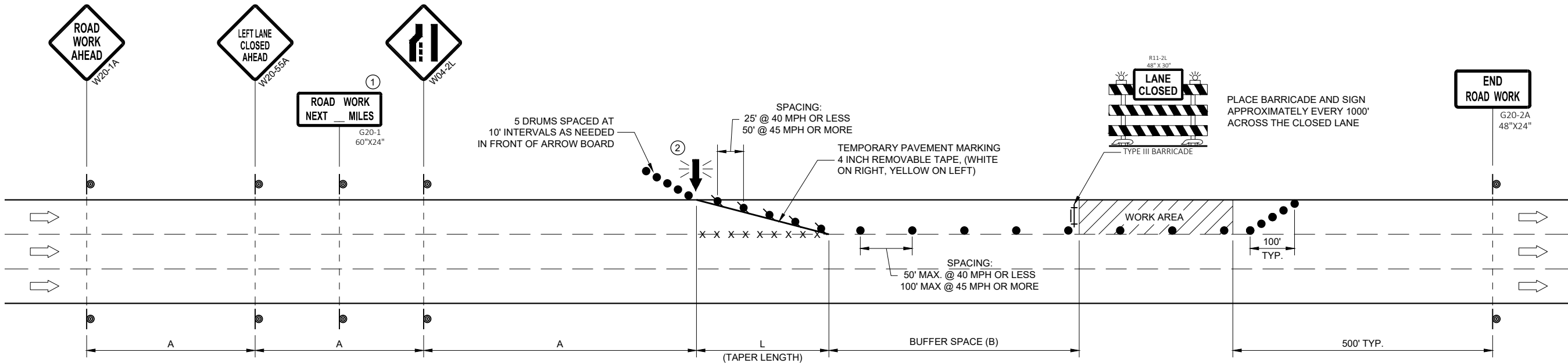
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



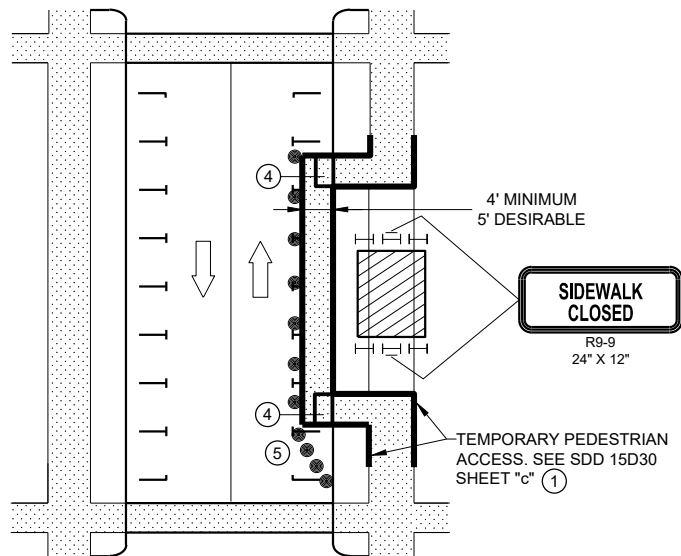
| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | TAPER LENGTH (12 FT. LANE) (L) FEET | BUFFER SPACE (B) FEET |
|---|---|---|-----------------------------|
| 25 | 200' | 125' | 55' |
| 30 | 200' | 180' | 85' |
| 35 | 350' | 245' | 120' |
| 40 | 350' | 320' | 170' |
| 45 | 500' | 540' | 220' |

TRAFFIC CONTROL, SINGLE
LANE CLOSURE, DIVIDED
NON-FREEWAY/EXPRESSWAY

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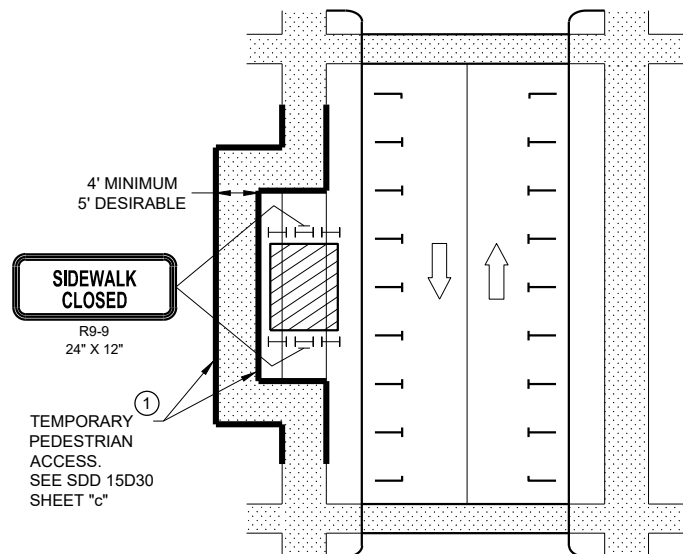
APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

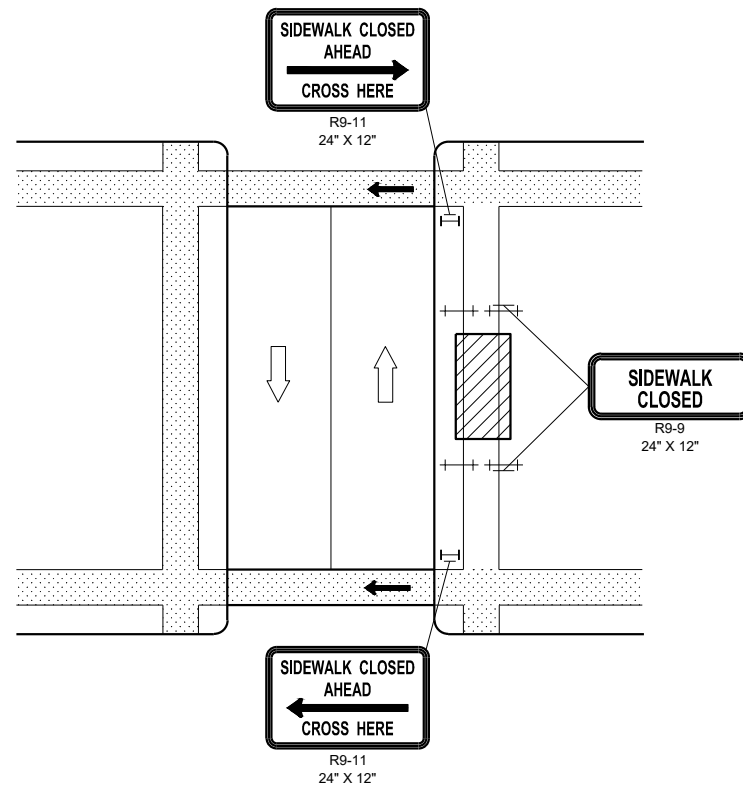


MID-BLOCK SIDEWALK CLOSURE
IN PARKING LANE

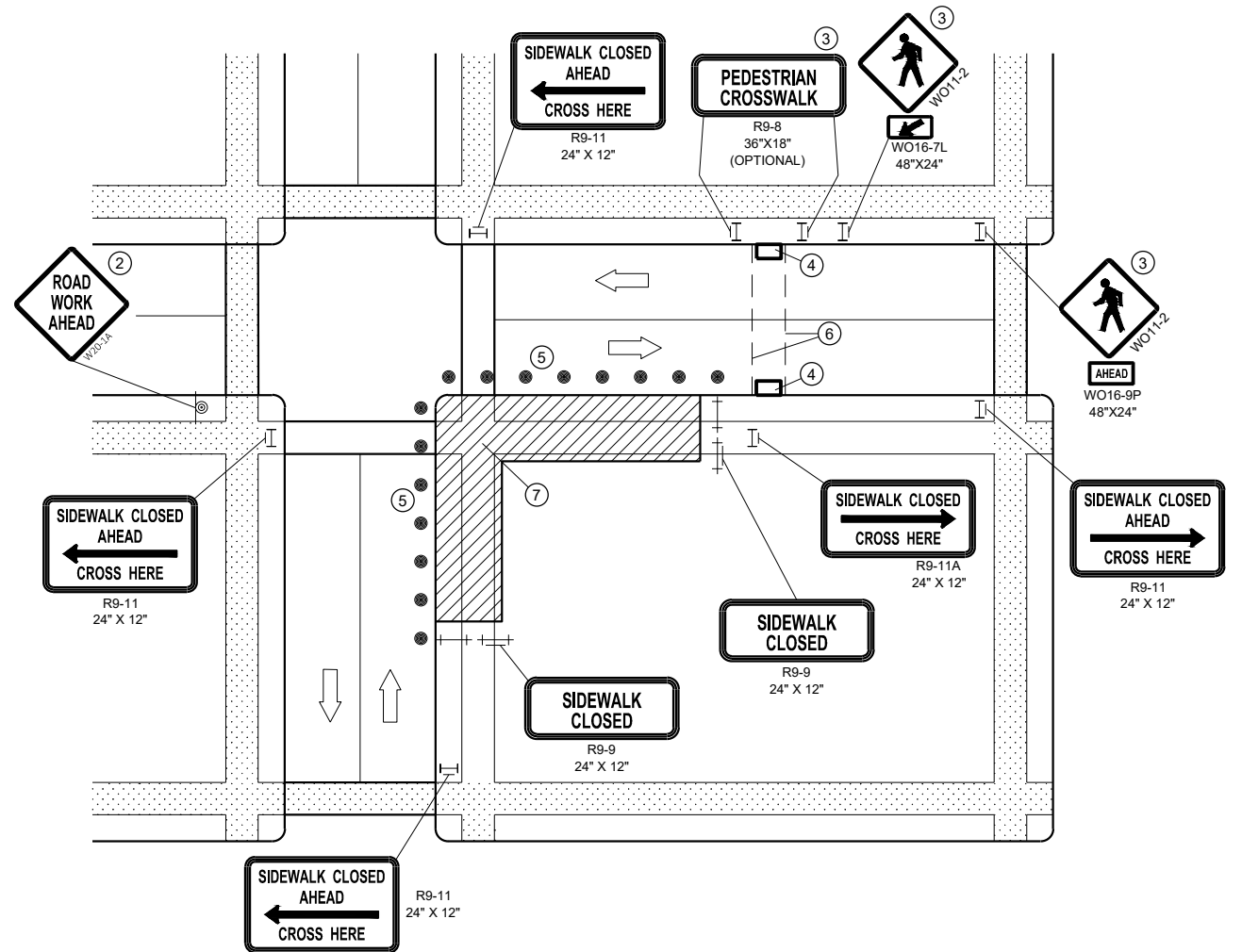
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK
CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN, EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

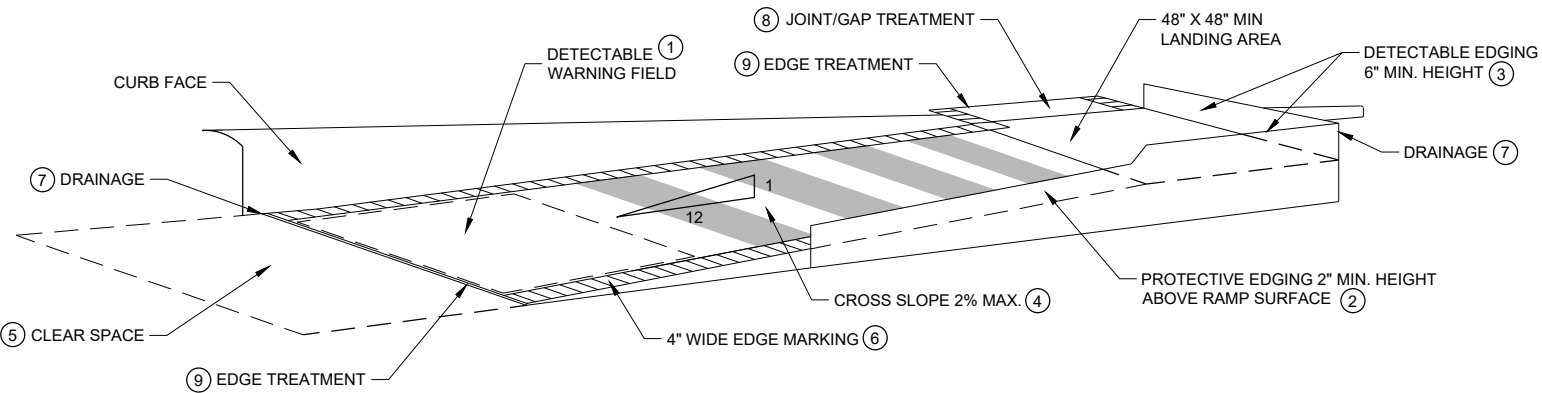
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

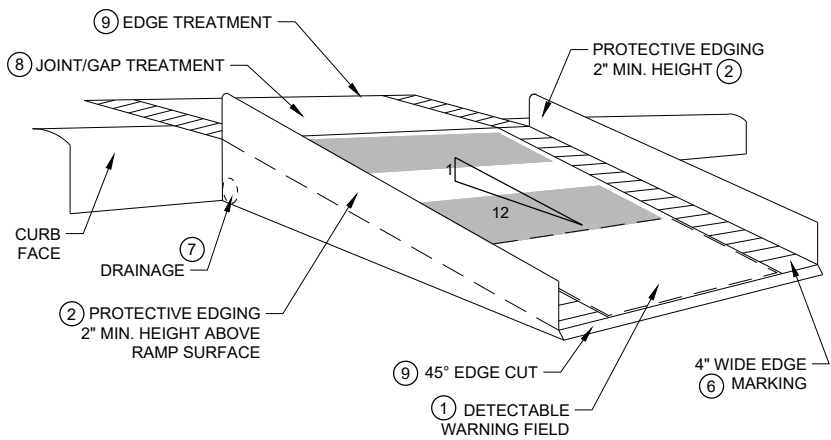
| | |
|--|---|
| | SIGN ON PERMANENT SUPPORT |
| | TRAFFIC CONTROL DRUM |
| | TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING) |
| | TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING) |
| | UNDER PEDESTRIAN TRAFFIC |
| | WORK AREA |
| | PEDESTRIAN CHANNELIZATION DEVICE |
| | DIRECTION OF TRAFFIC |

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

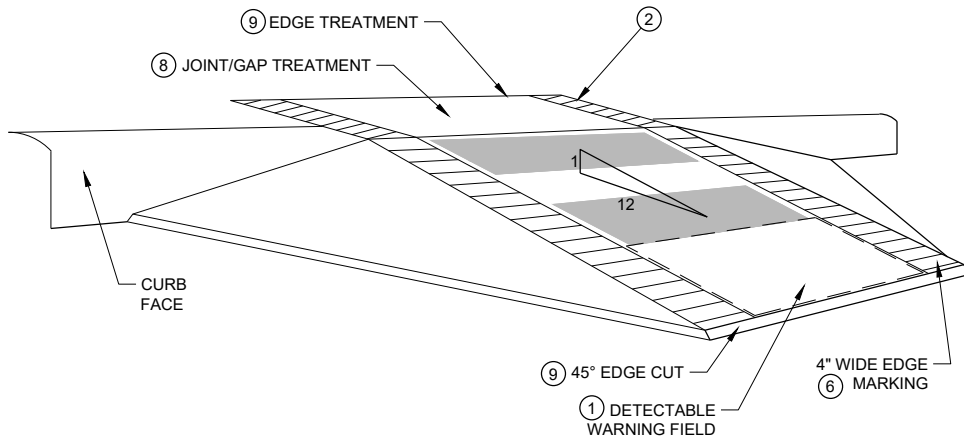
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TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE

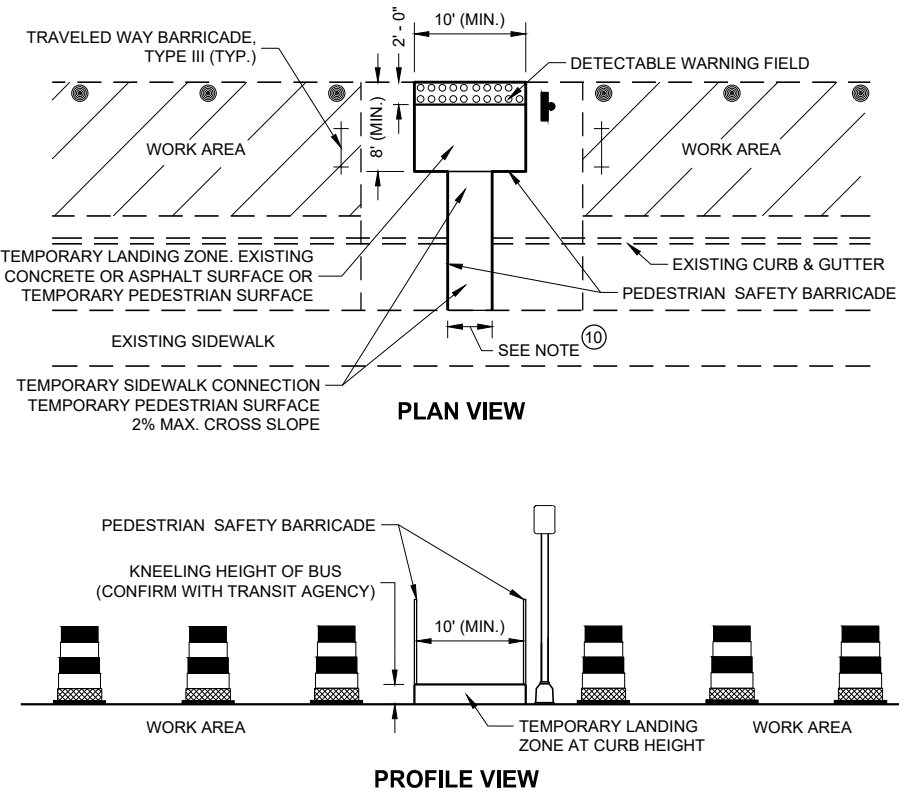


WITH SIDE APRON

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
- ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.
- 1 CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
 - 2 PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
 - 3 DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
 - 4 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
 - 5 CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
 - 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
 - 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
 - 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
 - 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
 - 10 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.

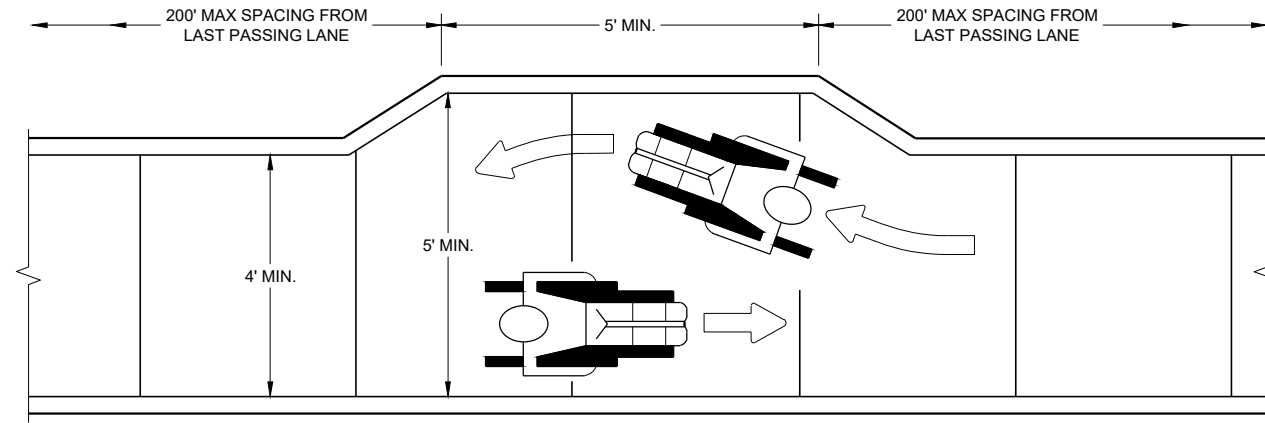


TEMPORARY BUS STOP PAD

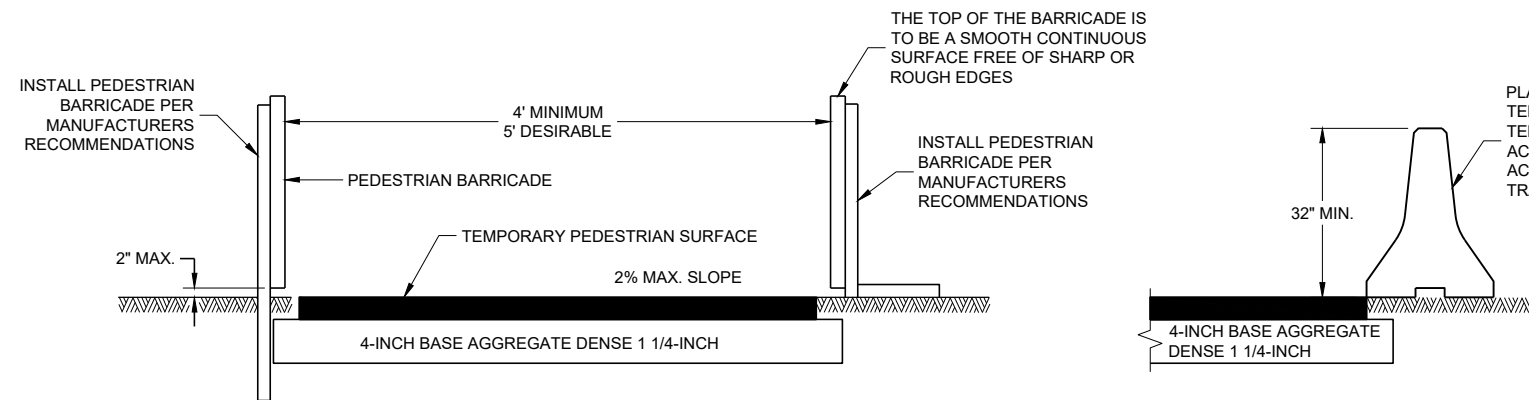
- LEGEND
- TRAFFIC CONTROL DRUM
 - † TYPE III BARRICADE
 - ▨ WORK AREA

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

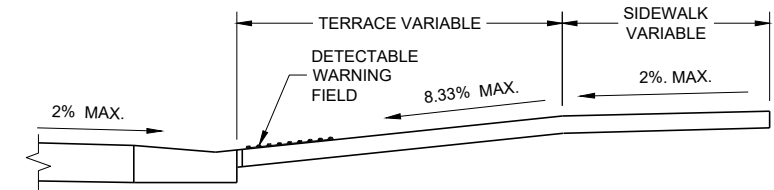
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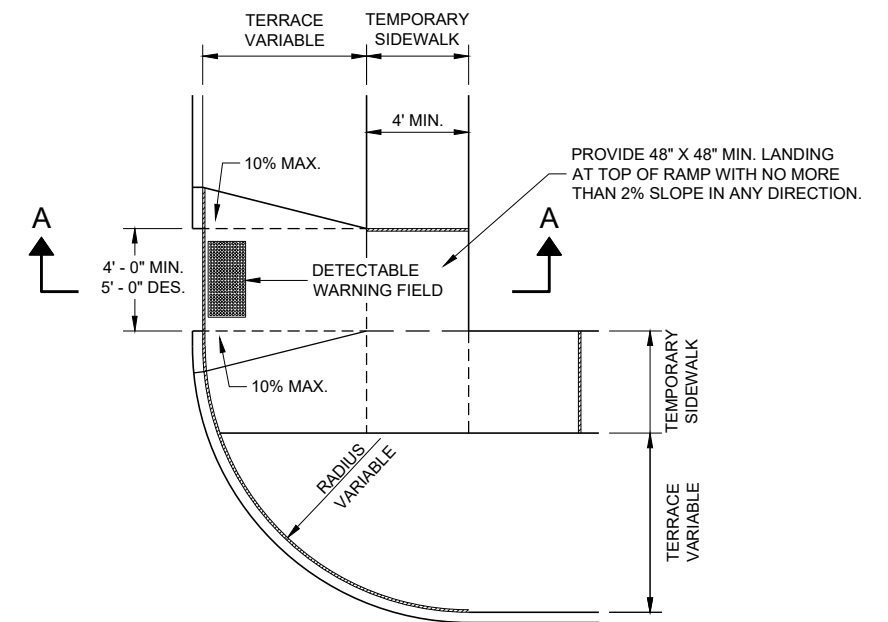
NARROW SIDEWALK PASSING DETAIL



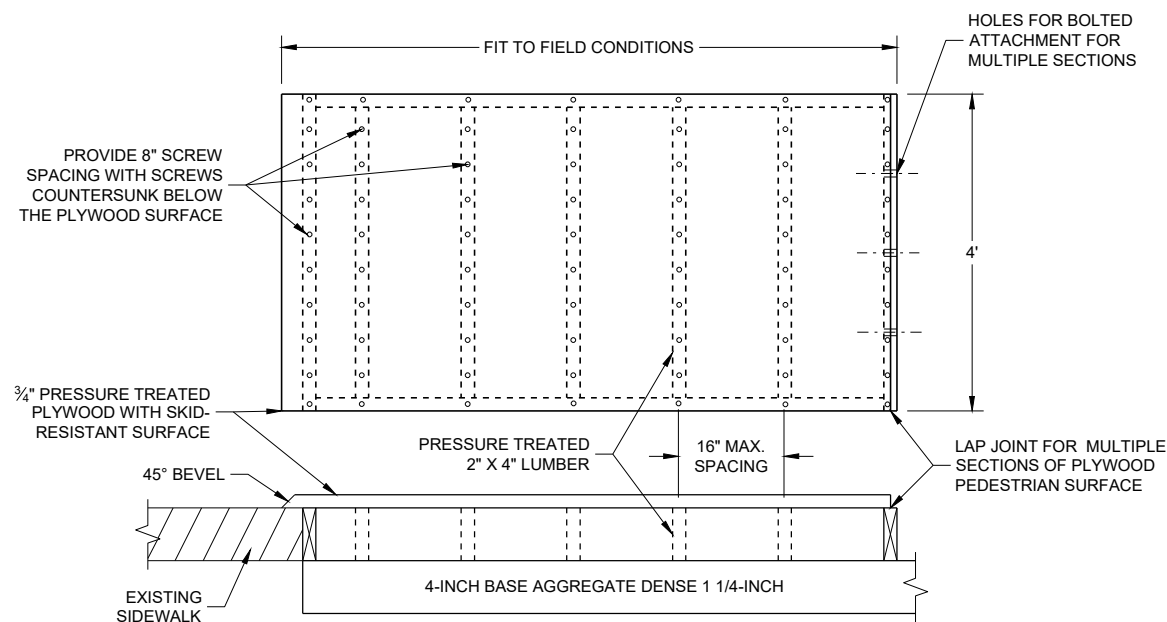
TEMPORARY PEDESTRIAN ACCESS



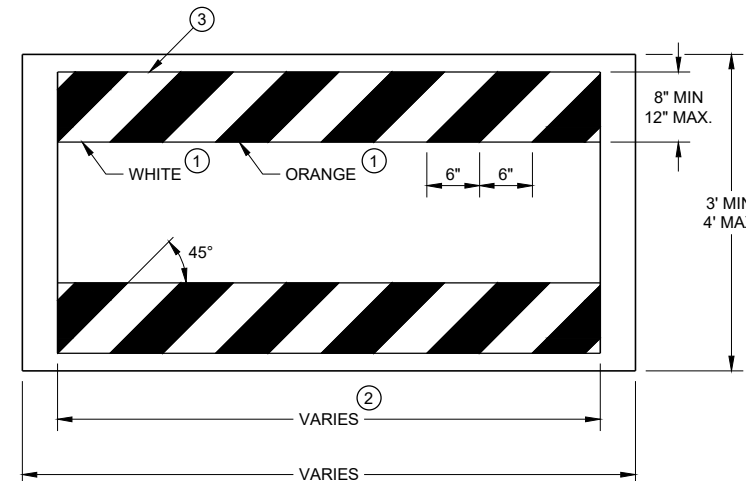
SECTION A - A



**PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)**



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

- BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- * USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
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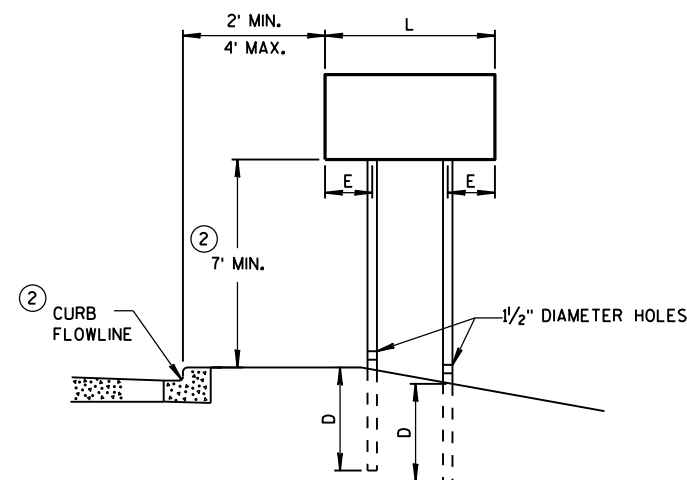
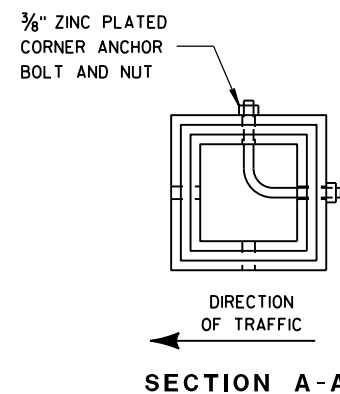
APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



TUBULAR STEEL POSTS

| AREA OF SIGN INSTALLATION (SQ. FT.) | NUMBER OF REQUIRED TUBULAR STEEL POSTS |
|--|--|
| 9 OR LESS | 1 |
| GREATER THAN 9 LESS THAN OR EQUAL TO 18 | 2 |
| GREATER THAN 18 LESS THAN OR EQUAL TO 27 | 3 |

SIGNS LARGER THAN 27 SQ.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

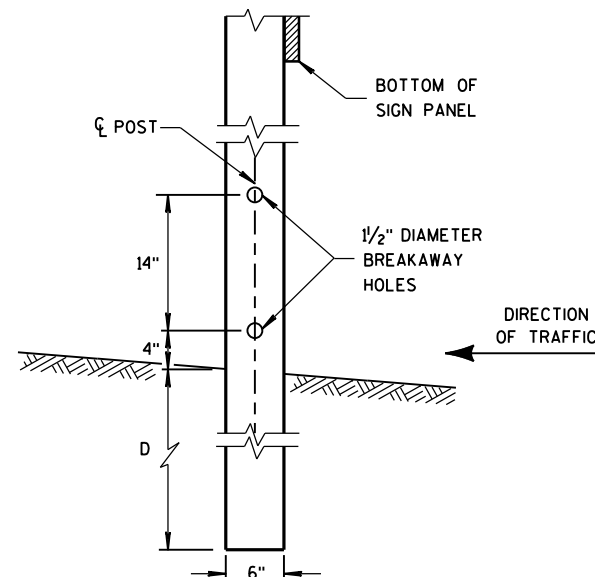


URBAN AREA

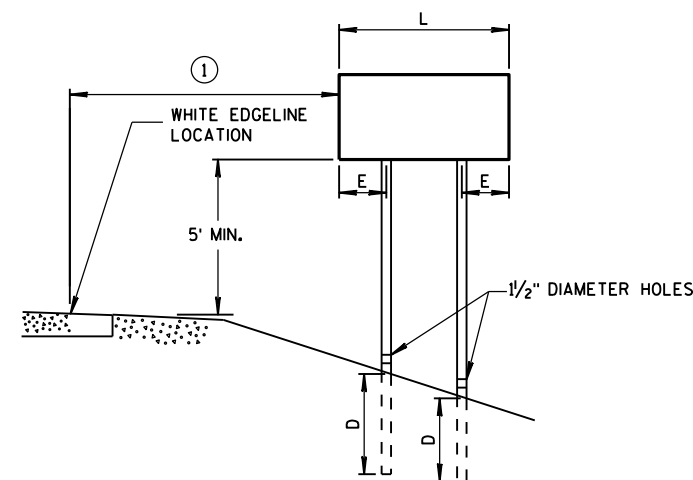
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

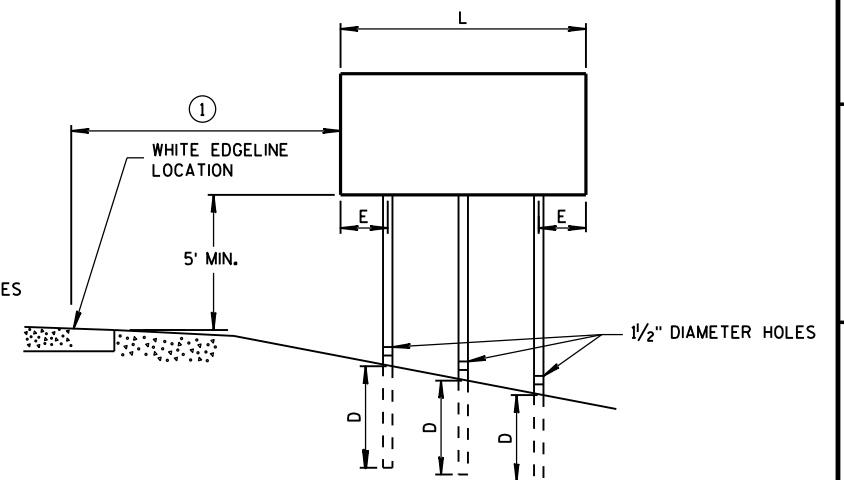
| | |
|---|------------|
| AREA OF SIGN INSTALLATION (SQ. FT.) | D (MIN) |
| 20 OR LESS | 4' |
| GREATER THAN 20 | 5' |



4"x6" WOOD POST MODIFICATION



RURAL AREA



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

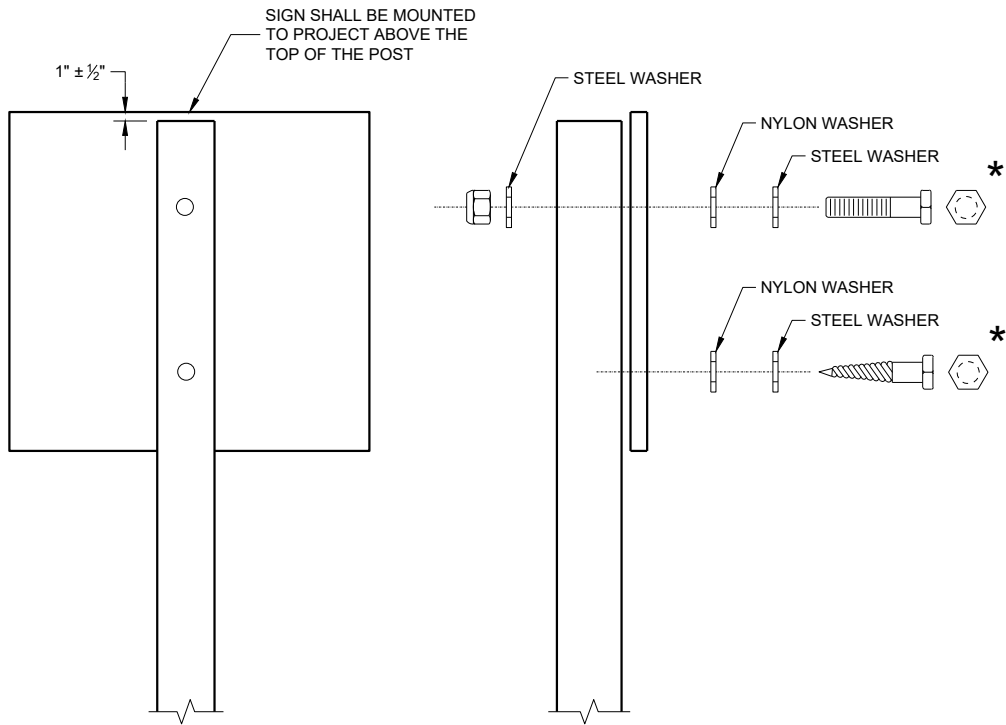
4" X 6" WOOD POST

| POST SPACING REQUIREMENTS | | NUMBER OF WOOD POSTS REQUIRED |
|---|-----|-------------------------------------|
| L | E | |
| 48" OR LESS AND LESS THAN 20 SQ. FT. | - | 1 |
| LESS THAN 60" | 12" | 2 |
| 60" TO 120" | L/5 | 2 |
| GREATER THAN 120" LESS THAN 168" | 12" | 3 |
| 168" AND GREATER | 12" | 4 |

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

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NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS
SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM
DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM
DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH
SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED
COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - 3/8" x 3"
MACHINE BOLTS - 5/16" x 6 1/2" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1 1/4" O.D. x 3/8" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION
PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM
SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH
THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER
THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>