EAU

APRIL 2021

PROJECT ID: 1530-03-76

WITH: 1540-01-72

COUNTY: PIERCE

15

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 (Includes Erosion Control Plans) |
| 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 | Cross Sections |


TOTAL SHEETS = 228

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

**PLAN OF PROPOSED IMPROVEMENT**

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1530-03-76 | WISC 2021267 | 1 |
| 1540-01-72 | ——— | — |
| | | |
| | | |

# V ELLSWORTH, MAIN STREET

**STH 65 TO NORTH BEULAH STREET**

## USH 10
## PIERCE COUNTY

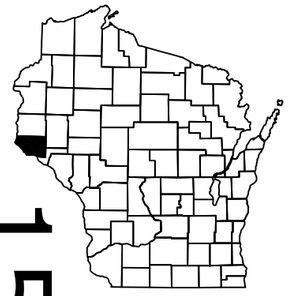
STATE PROJECT NUMBER
**1530-03-76**

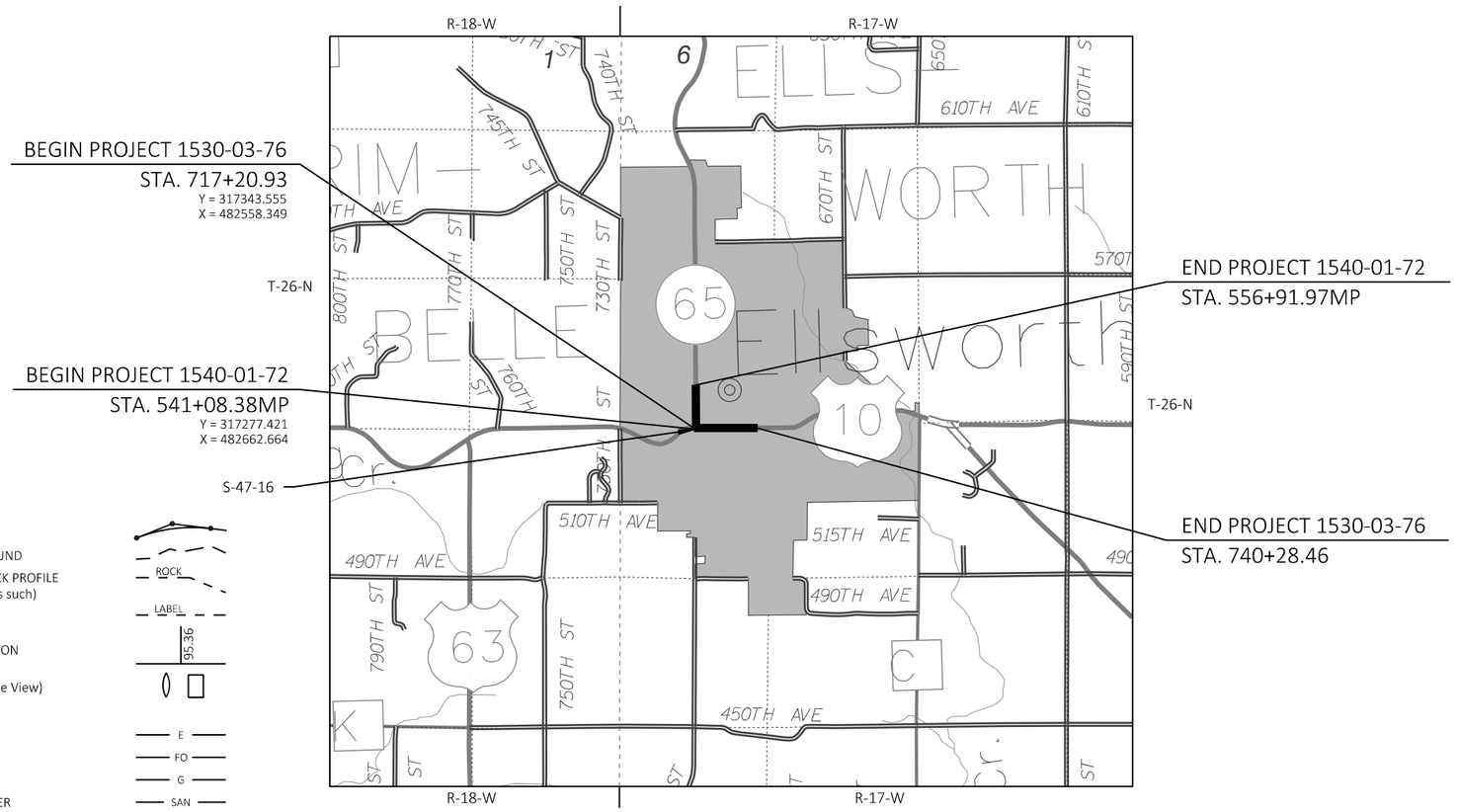
# V ELLSWORTH, MAPLE STREET

**USH 10 TO MIDWAY AVENUE**

## STH 65
## PIERCE COUNTY

STATE PROJECT NUMBER
**1540-01-72**






N

| | USH 10 | STH 65 |
|---|---|---|
| DESIGN DESIGNATION | 1530-03-76 | 1540-01-72 |
| A.A.D.T. 2021 | = 9,270 | = 8,190 |
| A.A.D.T. 2041 | = 9,270 | = 9,420 |
| D.H.V. | = 560 | = 565 |
| D.D. | = 60/40 | = 60/40 |
| T. | = 13.8% | = 5.5% |
| DESIGN SPEED | = 25 MPH | = 30MPH |
| ESALS | = 3,140,000 | = 860,000 |

USH 10 TOTAL NET LENGTH OF CENTERLINE = 0.437 MI
STH 65 TOTAL NET LENGTH OF CENTERLINE = 0.300 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WCCS), PIERCE 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 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

## CONVENTIONAL SYMBOLS

| PLAN | | PROFILE | |
|---|---|---|---|
| CORPORATE LIMITS | | GRADE LINE | |
| PROPERTY LINE | | ORIGINAL GROUND | |
| LOT LINE | | MARSH OR ROCK PROFILE (To be noted as such) | ROCK |
| LIMITED HIGHWAY EASEMENT | | SPECIAL DITCH | LABEL |
| EXISTING RIGHT OF WAY | | GRADE ELEVATION | 95.36 |
| PROPOSED OR NEW R/W LINE | | CULVERT (Profile View) | |
| SLOPE INTERCEPT | | **UTILITIES** | |
| REFERENCE LINE | 300'EB' | ELECTRIC | E |
| EXISTING CULVERT | | FIBER OPTIC | FO |
| PROPOSED CULVERT (Box or Pipe) | | GAS | G |
| COMBUSTIBLE FLUIDS | CAUTION | SANITARY SEWER | SAN |
| MARSH AREA | | STORM SEWER | SS |
| WOODED OR SHRUB AREA | | TELEPHONE | T |
| | | WATER | W |
| | | UTILITY PEDESTAL | |
| | | POWER POLE | |
| | | TELEPHONE POLE | |

ORIGINAL PLANS PREPARED BY

KL Engineering [A] Better Experience

WISCONSIN PROFESSIONAL ENGINEER
BRIAN J. ST. VINCENT
44329-6
FITCHBURG, WI

OCTOBER 30 , 2020 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | WisDOT / KL ENGINEERING, INC. |
| Designer | KL ENGINEERING, INC. |
| Project Manager | BRETT HOLLISTER, P.E. |
| Regional Examiner | TOU YANG, P.E. |
| Regional Supervisor | JIM KOENIG, P.E. |

APPROVED FOR THE DEPARTMENT

DATE: 10/30/2020 (Signature)

E

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/30/2020 10:55 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME :

2

## ABBREVIATIONS

| | |
|---|---|
| BAD | BASE AGGREGATE DENSE |
| BM | BENCH MARK |
| BLDG. | BUILDING |
| CBTP | CONCRETE BARRIER TEMPORARY PRECAST |
| CTR | CENTER |
| C/L | CENTERLINE |
| C.E. | COMMERCIAL ENTRANCE |
| CONC. | CONCRETE |
| CSW | CONCRETE SIDEWALK |
| CMCP | CORRUGATED METAL CULVERT PIPE |
| CP | CULVERT PIPE |
| CPCS | CULVERT PIPE CORRUGATED STEEL |
| CPRC | CULVERT PIPE REINFORCED CONCRETE |
| CPRCHE | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL |
| CPT | CONSTRUCTION PERMIT |
| DMS | DYNAMIC MESSAGE SIGN |
| EAT | ENERGY ABSORBING TERMINAL |
| EB | EASTBOUND |
| ELEC | ELECTRIC |
| IE | INVERT ELEVATION |
| EX. OR EXIST | EXISTING |
| FO | FIBER OPTIC |
| F.E. | FIELD ENTRANCE |
| GAS | GAS |
| HMA | HOT MIX ASPHALT |
| HSE. | HOUSE |
| LHF | LEFT HAND FORWARD |
| MH | MANHOLE |
| MAX. | MAXIMUM |
| MIN. | MINIMUM |
| NB | NORTHBOUND |
| NOR. | NORMAL |
| NTS | NOT TO SCALE |
| PLE | PERMANENT LIMITED EASEMENT |
| P.E. | PRIVATE ENTRANCE |
| P.L. | PROPERTY LINE |
| PRW | PROPOSED RIGHT-OF-WAY |
| RAD OR R | RADIUS |
| R/L | REFERENCE LINE |
| REQ'D. | REQUIRED |
| RHF | RIGHT HAND FORWARD |
| RW | RIGHT-OF-WAY LINE |
| SAN | SANITARY SEWER |
| SB | SOUTHBOUND |
| SHLD | SHOULDER |
| SW | SIDEWALK |
| SF | SQUARE FEET |
| SY | SQUARE YARD |
| S.D.D. | STANDARD DETAIL DRAWING |
| STA | STATION |
| SS | STORM SEWER |
| TEL | TELEPHONE |
| TLE | TEMPORARY LIMITED EASEMENT |
| TYP | TYPICAL |
| WAT | WATER |
| WB | WESTBOUND |

## UTILITY CONTACTS

COMMUNICATIONS

RICK PODOLAK
AT&T WISCONSIN
1104 ERVIN RD
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RP4514@ATT.COM

COMMUNICATIONS

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LUKE.EBELING@MIDCO.COM

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(715) 213-4327 (MOBILE)
STEVEN.CHAVERS@WE-ENERGIES.COM
(800) 261-5325 - EMERGENCY 24/7 PHONE

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130 N CHESTNUT ST
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(715) 821-1888 (MOBILE)
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XCEL ENERGY
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HUDSON, WI 54016
(715) 377-1810
(715) 577-5828 (MOBILE)
BRIAN.M.MELLO@XCELENERGY.COM

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

## DESIGN CONTACT

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(608) 663-1218
BSTVINCENT@KLENGINEERING.COM

## WISDOT DESIGN CONTACT

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AYRES ASSOCIATES INC
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
(715) 834-3161
HOLLISTERB@AYRESASSOCIATES.COM

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AMY LESIK
DEPARTMENT OF NATURAL RESOURCES
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EAU CLAIRE, WI 54701
(715) 836-6571
AMY.LESIK@WISCONSIN.GOV

## SIGNALS & LIGHTING

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WISDOT NW REGION
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EAU CLAIRE, WI 54701
(715) 836-2800
DAVID.FENSKE@DOT.WI.GOV

## ORDER OF DETAIL SHEETS


PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
STORM SEWER PLAN
PERMANENT SIGNING/PAVEMENT MARKING PLAN
LIGHTING PLAN
TRAFFIC SIGNAL PLAN
TRAFFIC CONTROL PLAN
CONTROL POINT DETAIL


2

## GENERAL NOTES

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN IN THE PLAN, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTACT DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO START OF WORK.

UTILITY LOCATION MARKERS ON THE CROSS SECTIONS ARE FOR APPROXIMATE HORIZONTAL REFERENCE ONLY.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

NO TREES AND/OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

THE CONTRACTOR'S HMA PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

THE HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS:

| LOCATION | TOTAL DEPTH | LAYERS | GRADATION | TRAFFIC | BINDER | DESIGNATION | NOTE |
|---|---|---|---|---|---|---|---|
| USH 10<br>STH 65 | 2.75-INCH | 1.25" LOWER<br>1.50" UPPER | 5<br>5 | MT<br>MT | 58-34<br>58-34 | V<br>V | OVERLAYING CONCRETE PAVEMENT |
| STH 65 | 3.5-INCH | 1.75" LOWER<br>1.75" UPPER | 4<br>4 | MT<br>MT | 58-34<br>58-34 | V<br>V | ASPHALT PAVEMENT |
| STH 65 | ASPHALTIC SURFACE | | | | | | PATH PAVEMENT |
| USH 10 | 6-INCH | 2.25" LOWER<br>2.25" LOWER<br>1.50" UPPER | 5<br>5<br>5 | MT<br>MT<br>MT | 58-34<br>58-34<br>58-34 | V<br>V<br>V | OVERHEAD SIGN SUPPORT PAVEMENT REPLACEMENT |

2

END PROJECT 1540-01-72
STA 556+91.97MP

MIDWAY AVE

555+00MP

RAY ST

550+00MP

STH 65 / MAPLE ST

GROVE ST

STH 65 R/L 'MP'

545+00MP

KINNE ST

BEGIN PROJECT 1530-03-76
STA 717+20.93

OAK ST

720+00

USH 10 / MAIN ST

725+00

PLUM ST

CHESTNUT ST

730+00

GRANT ST

USH 10 R/L

BAY ST

735+00

PIETY ST

BEULAH ST

740+00

END PROJECT 1530-03-76
STA 740+28.46

S-47-16
OVERHEAD SIGN
SUPPORT

S-47-520-01
MONOTUBE

S-47-520-02
MONOTUBE

BEGIN PROJECT 1540-01-72
STA 541+08.38MP

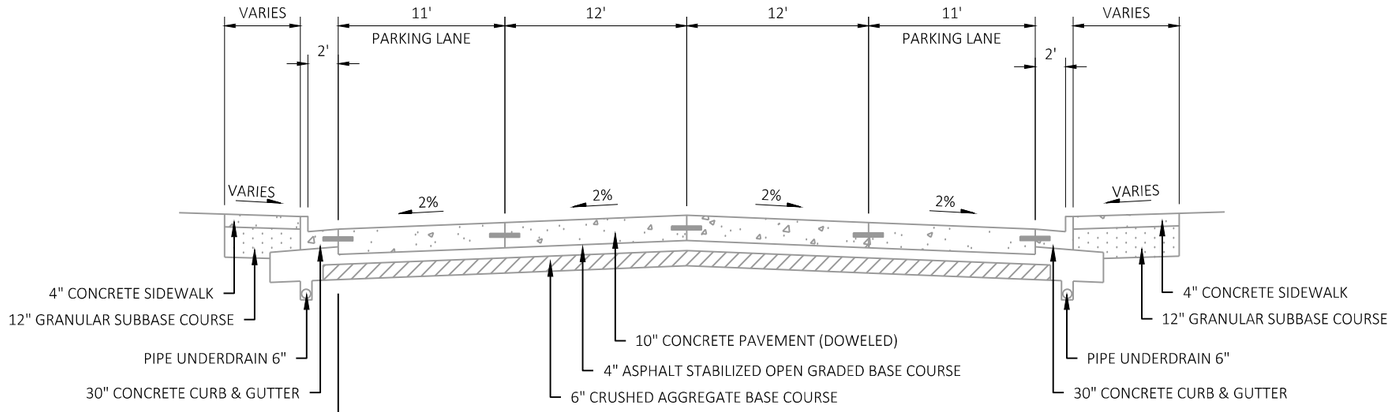
N

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

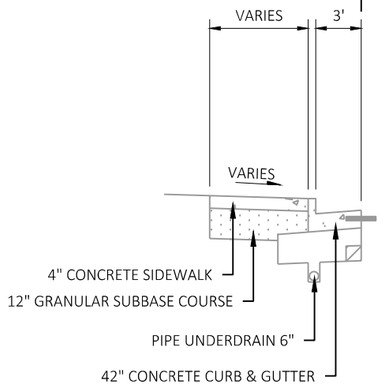
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LAYOUT NAME - Plan 1 IN 200 FT

PLOT DATE : 10/29/2020 3:28 PM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:200 FT

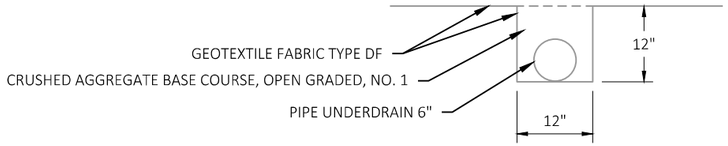
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TYPICAL EXISTING SECTION - USH 10
STA 717+46 TO 740+03



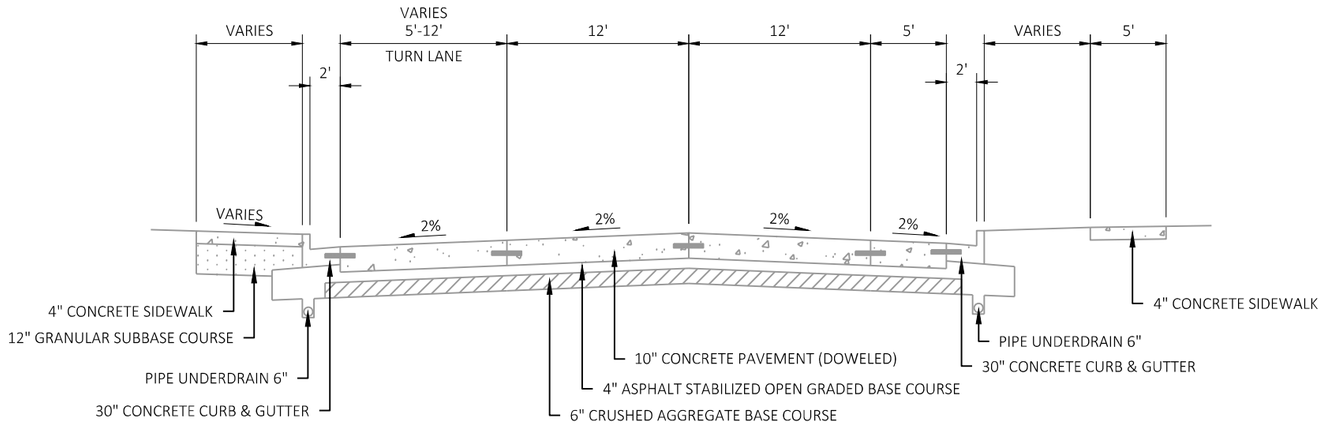

PARTIAL EXISTING SECTION - USH 10
STA 719+12 TO 720+56



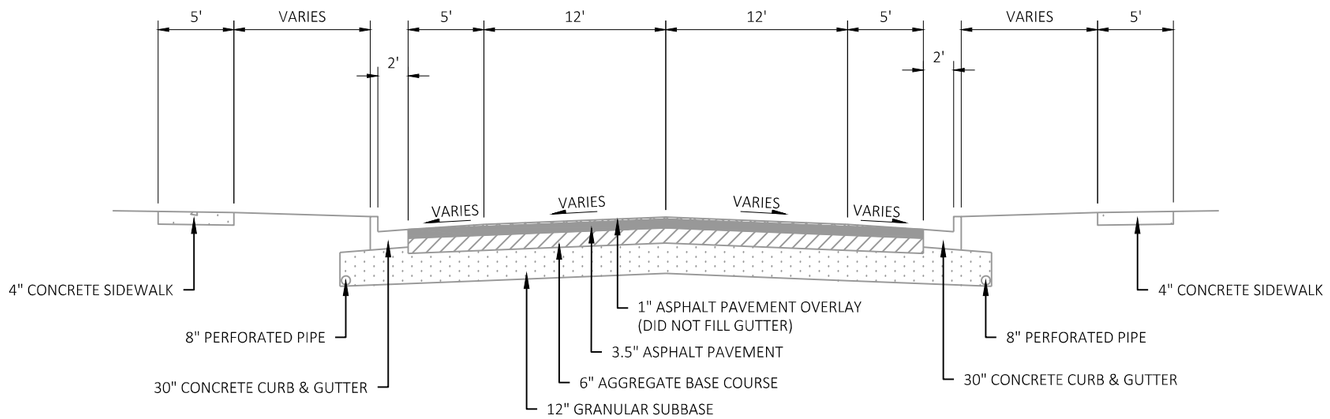

EXISTING UNDERDRAIN DETAIL

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TYPICAL SECTIONS | SHEET 4 | E |
|---|---|---|---|---|---|

2



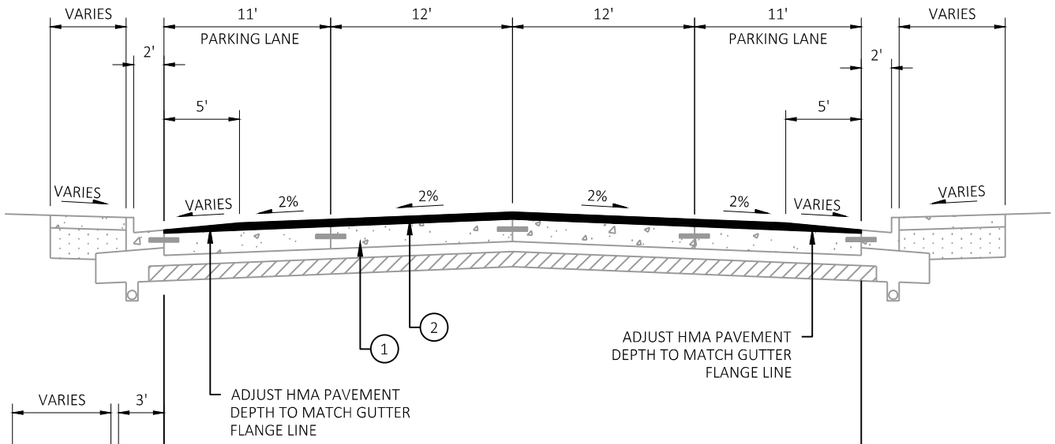

TYPICAL EXISTING SECTION - STH 65
STA 541+34MP TO 544+61MP



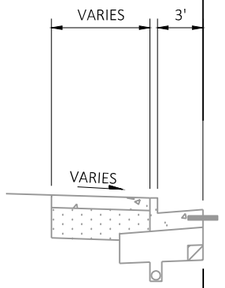

TYPICAL EXISTING SECTION - STH 65
STA 544+61MP TO 556+90MP

## LEGEND

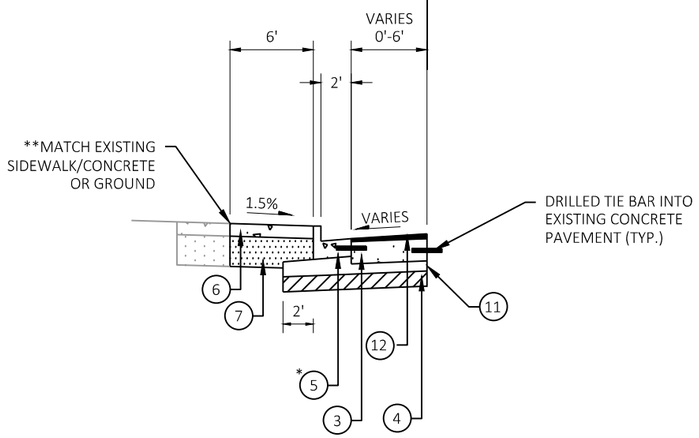
| | |
|---|---|
| 1 | EXISTING 10" CONCRETE PAVEMENT |
| 2 | REMOVING CONCRETE SURFACE PARTIAL DEPTH, 1.25-INCH OVERLAY WITH HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH |
| 3 | CONCRETE BASE, 9-INCH |
| 4 | BASE AGGREGATE DENSE 1 1/4-INCH, 6-INCH |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| 6 | CONCRETE SIDEWALK 5-INCH |
| 7 | BASE AGGREGATE DENSE 3/4-INCH, 12-INCH |
| 10 | PIPE UNDERDRAIN 6-INCH |
| 11 | BASE AGGREGATE OPEN GRADED, 4-INCH |
| 12 | OVERLAY WITH HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH |



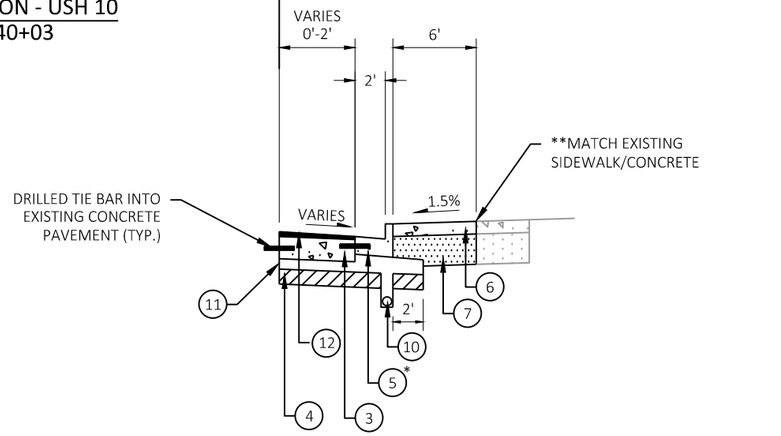

TYPICAL FINISHED SECTION - USH 10
STA 717+46 TO 740+03



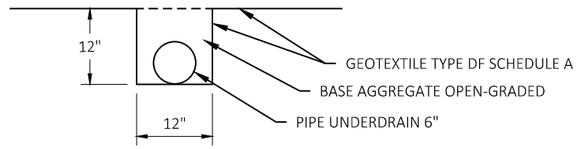

PARTIAL FINISHED SECTION - USH 10
STA 719+12 TO 720+56




PARTIAL FINISHED SECTION - USH 10
STA 717+16 TO 718+00




PARTIAL FINISHED SECTION - USH 10
STA 718+44 TO 719+26



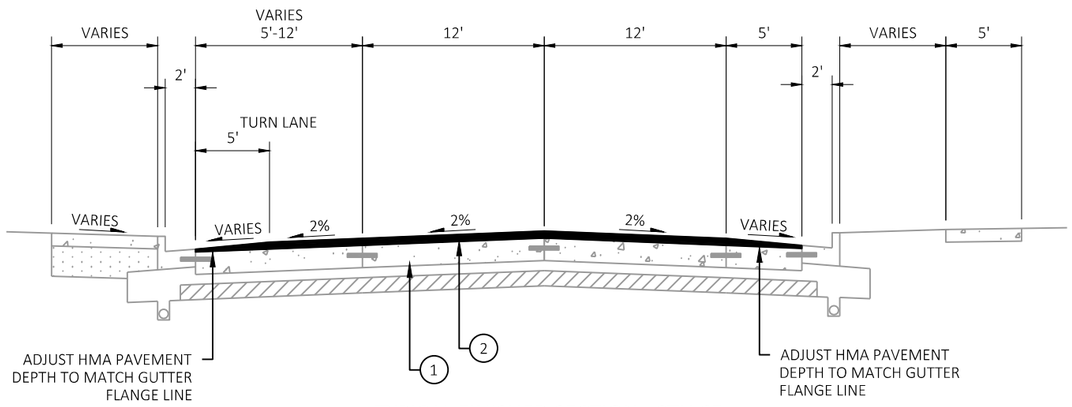

UNDERDRAIN DETAIL

NOTE: PLACE SALVAGED TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE A, AND MULCH OVER ALL DISTURBED TOPSOIL UNLESS OTHERWISE NOTED

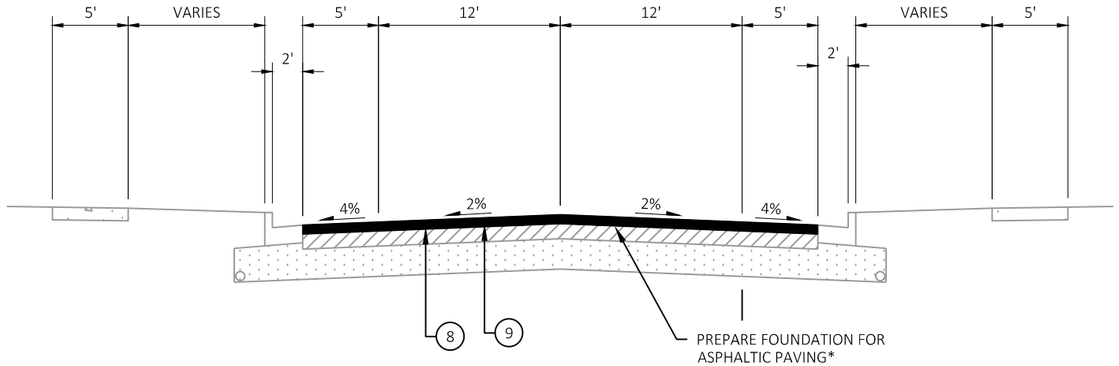
*VARY CURB HEIGHT TO MATCH 1.5% SIDEWALK SLOPE WHERE NECESSARY
** PEDESTRIAN CURB REQUIRED AT CURB RAMPS, SEE PLAN DETAILS FOR LOCATIONS

## LEGEND

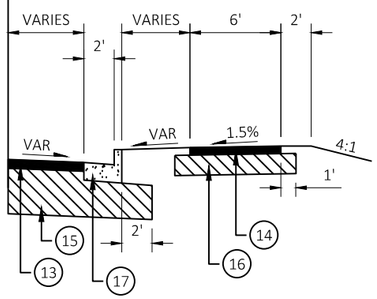
| | |
|---|---|
| 1 | EXISTING 10" CONCRETE PAVEMENT |
| 2 | REMOVING CONCRETE SURFACE PARTIAL DEPTH, 1.25-INCH OVERLAY WITH HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH |
| 8 | EXISTING 4.5" ASPHALT PAVEMENT |
| 9 | REMOVING ASPHALTIC SURFACE MILLING, 4.5-INCH* OVERLAY WITH HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH |
| 13 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH |
| 14 | ASPHALTIC SURFACE, 3-INCH |
| 15 | BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH |
| 16 | BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH |
| 17 | CONCRETE CURB & GUTTER 30-INCH TYPE D |




TYPICAL FINISHED SECTION - STH 65
STA 541+34MP TO 544+61MP




TYPICAL FINISHED SECTION - STH 65
STA 544+61MP TO 556+92MP




TYPICAL FINISHED SECTION - STH 65
STA 556+71 TO 556+92

NOTE: PLACE SALVAGED TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE A, AND MULCH OVER ALL DISTURBED TOPSOIL UNLESS OTHERWISE NOTED

*MAY NEED TO VARY MILLING DEPTH 3.5"-4.5" TO MAINTAIN 2% CROSS SLOPE FOR DRAINAGE

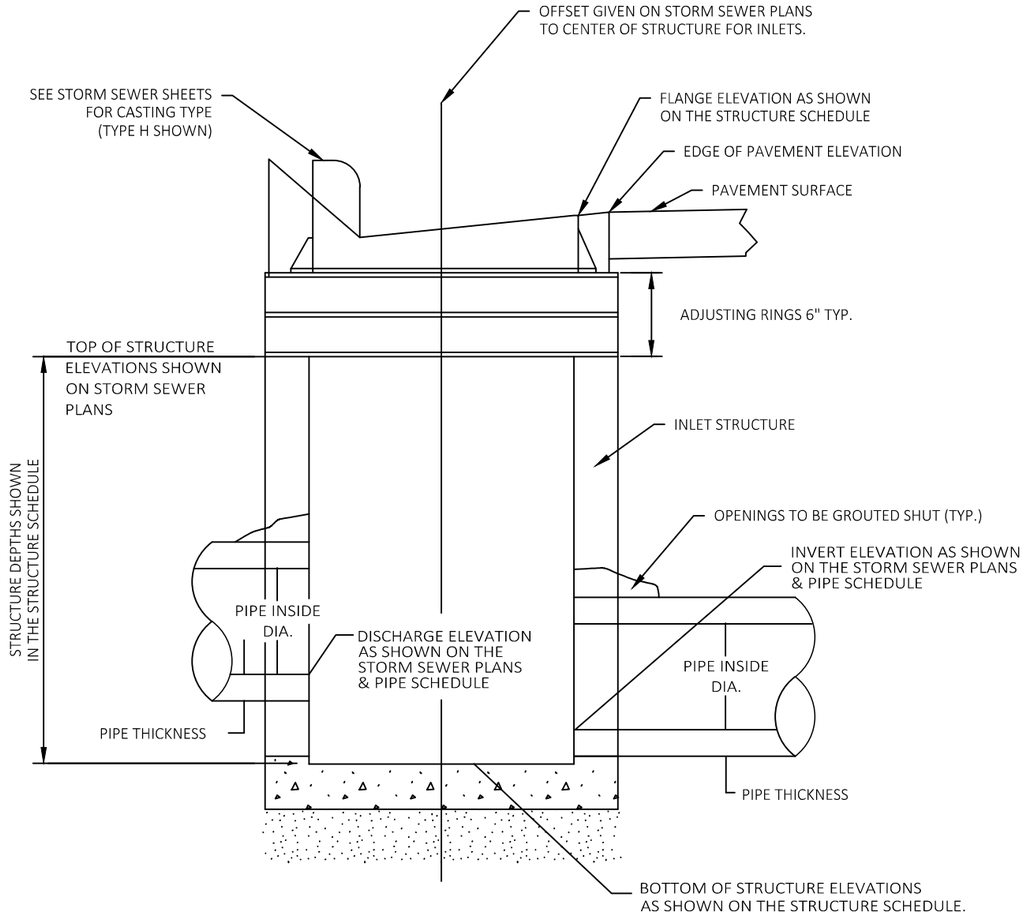
2

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET
(INCIDENTAL TO CONSTRUCTION OF INLET)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS 3-FT & 4-FT DIAMETER, 2x2-FT, 2x2.5-FT, 2x3-FT, CATCH BASINS 2x2-FT, 2x2.5-FT, & 2x3-FT, AND PIPE UNDERDRAIN DETAIL.

CONNECT PIPE UNDERDRAIN TO INLETS. SEE S.D.D. "EDGEDRAIN OUTLET & OUTFALL MARKERS" FOR DETAILS.

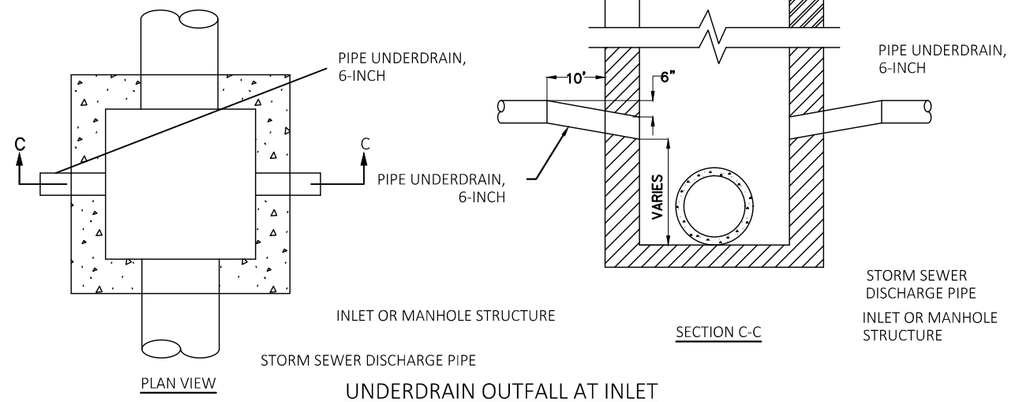



DETAIL OF INLET W/CASTING

(SEE STORM SEWER PLANS FOR LOCATIONS)

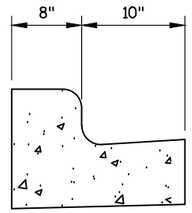
**NOTES**

1. CONNECTIONS TO INLETS OR MANHOLES IN CURB & GUTTER SHALL USE PIPE UNDERDRAIN 6-INCH.
2. PROVIDE TWO 6" DIA. OPENINGS FOR PIPE UNDERDRAIN.
3. SEE TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES FOR PIPE UNDERDRAIN LOCATIONS.




UNDERDRAIN OUTFALL AT INLET

(SEE STORM SEWER PLANS FOR LOCATIONS)

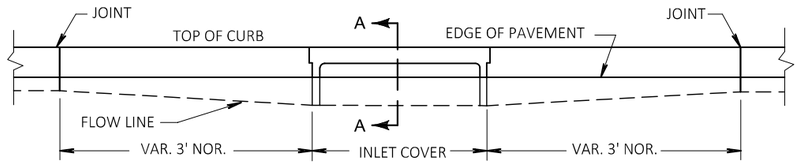



CONCRETE CURB & GUTTER 18-INCH SPECIAL

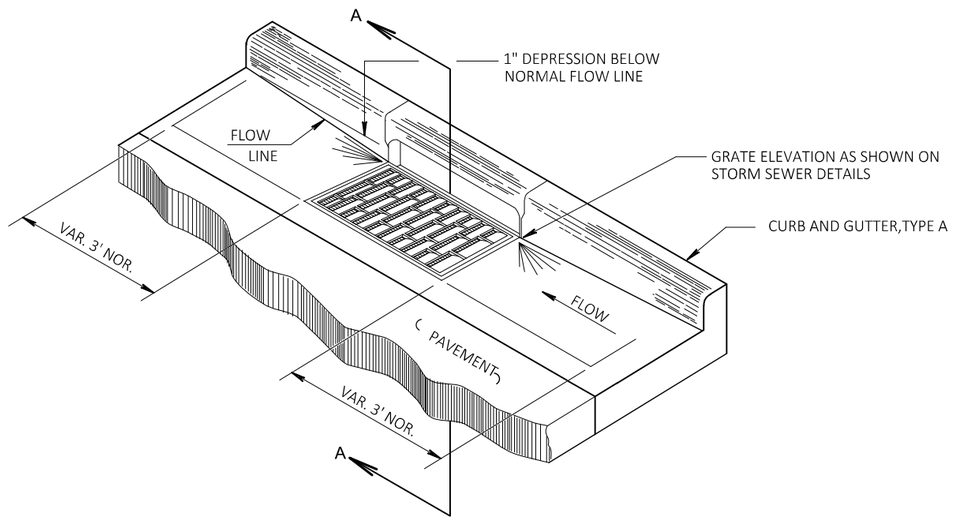
(SEE PLAN DETAILS FOR LOCATIONS)

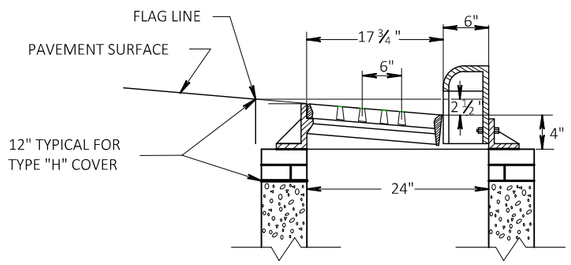
NOTE:

SEE S.D.D. "CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES" FOR DETAILS NOT SHOWN.




ELEVATION

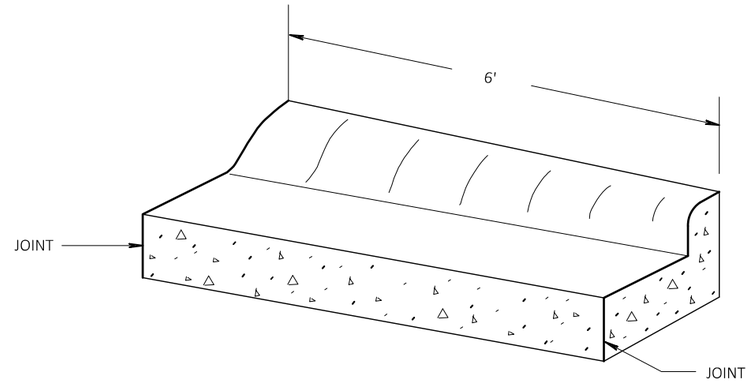



SECTION A-A

## DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)



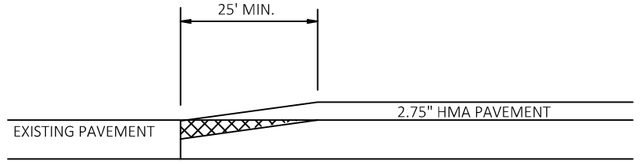

## TRANSITION DETAIL

36" TYPE "A" CURB & GUTTER TO 30" TYPE "A" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)

## 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<br>.22 | .16<br>.30 | .22<br>.38 | .12<br>.26 | .20<br>.34 | .27<br>.44 | .15<br>.30 | .24<br>.37 | .33<br>.50 | .19<br>.34 | .28<br>.41 | .38<br>.56 |
| MEDIAN STRIP-<br>TURF | .19<br>.24 | .20<br>.26 | .24<br>.30 | .19<br>.25 | .22<br>.28 | .26<br>.33 | .20<br>.26 | .23<br>.30 | .30<br>.37 | .20<br>.27 | .25<br>.32 | .30<br>.40 |
| SIDE SLOPE-<br>TURF | | | .25<br>.32 | | | .27<br>.34 | | | .28<br>.36 | | | .30<br>.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 = 6.99 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.49 ACRES



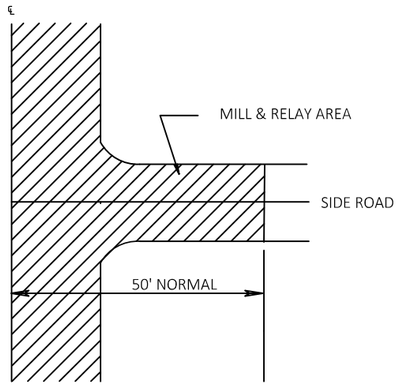

BUTT JOINT

PAID FOR AS REMOVING ASPHALTIC SURFACE BUTT JOINTS

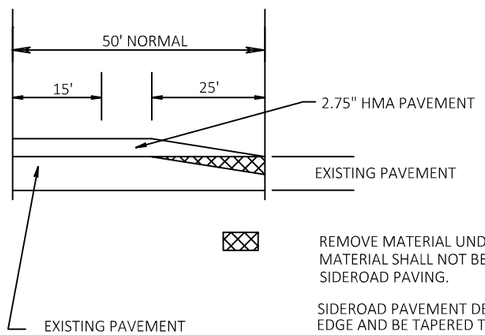
REQUIRED AT BEGIN AND END PAVING LOCATIONS

NOTE: ANY SAWCUT USED IN THIS OPERATION CONSIDERED INCIDENTAL TO THIS ITEM

## SIDE ROAD DETAIL - NO CURB & GUTTER




NOT TO SCALE



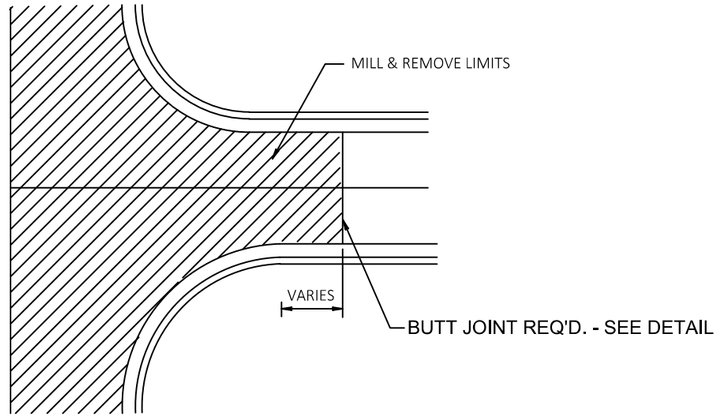

REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALT SURFACE , BUTT JOINTS' MATERIAL SHALL NOT BE REMOVED UNDER THIS ITEM UNTIL 24 HOURS BEFORE SIDEROAD PAVING.

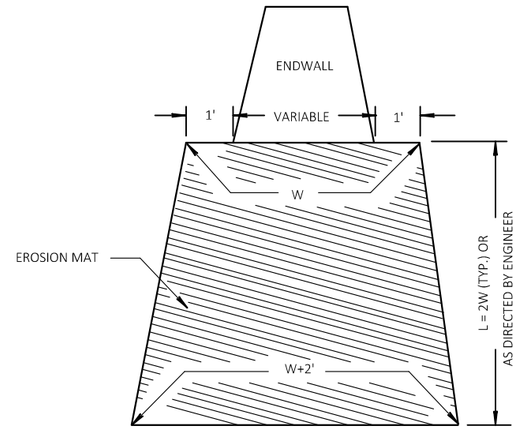
SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT EDGE AND BE TAPERED TO 2.75" MINIMUM AT JOINT

NOTE: ANY SAWCUT USED WILL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING ASPHALTIC SURFACE, BUTT JOINTS."

## SIDEROAD DETAIL - CURB & GUTTER TO REMAIN

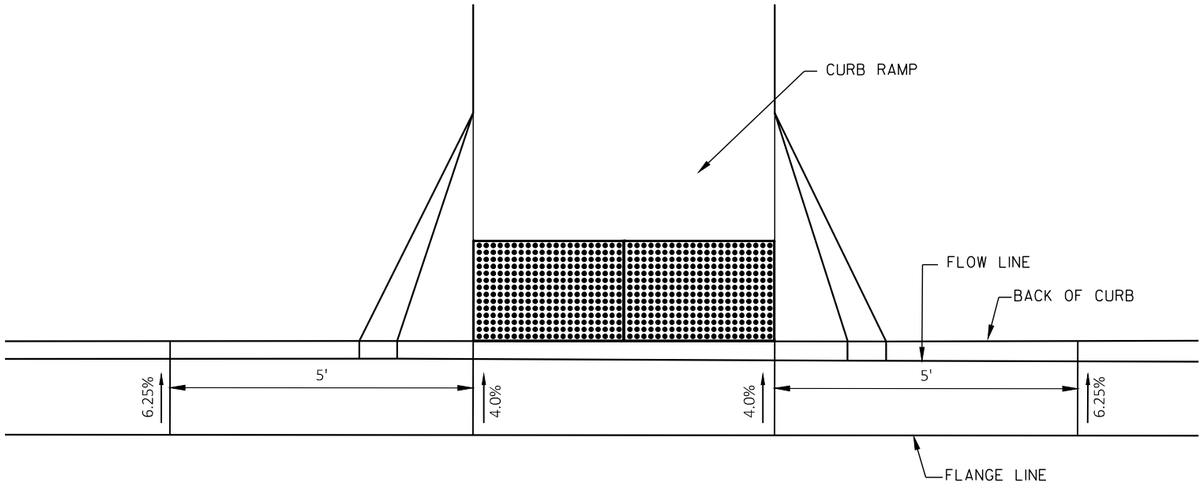
NOT TO SCALE



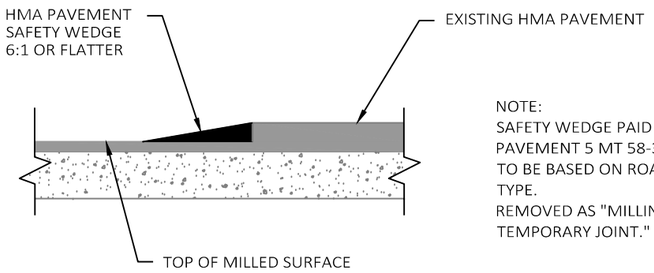

EROSION MAT TREATMENT AT CULVERTS

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN: CONSTRUCTION DETAILS | SHEET 10 | E |
|---|---|---|---|---|---|




GUTTER PAN TRANSITION AT CURB RAMPS

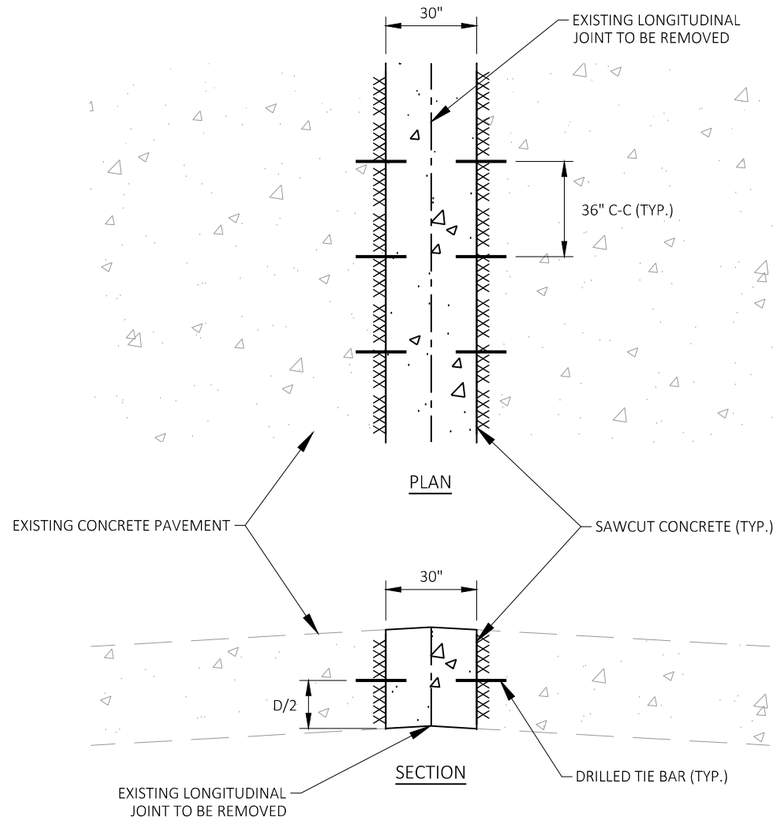
(6.25% TO 4.00%)
(SEE PLAN DETAILS FOR LOCATIONS)




NOTE:
SAFETY WEDGE PAID FOR AS HMA PAVEMENT 5 MT 58-34 V OR 4 MT 58-34 V, TO BE BASED ON ROADWAY PAVEMENT TYPE.
REMOVED AS "MILLING AND REMOVING TEMPORARY JOINT."

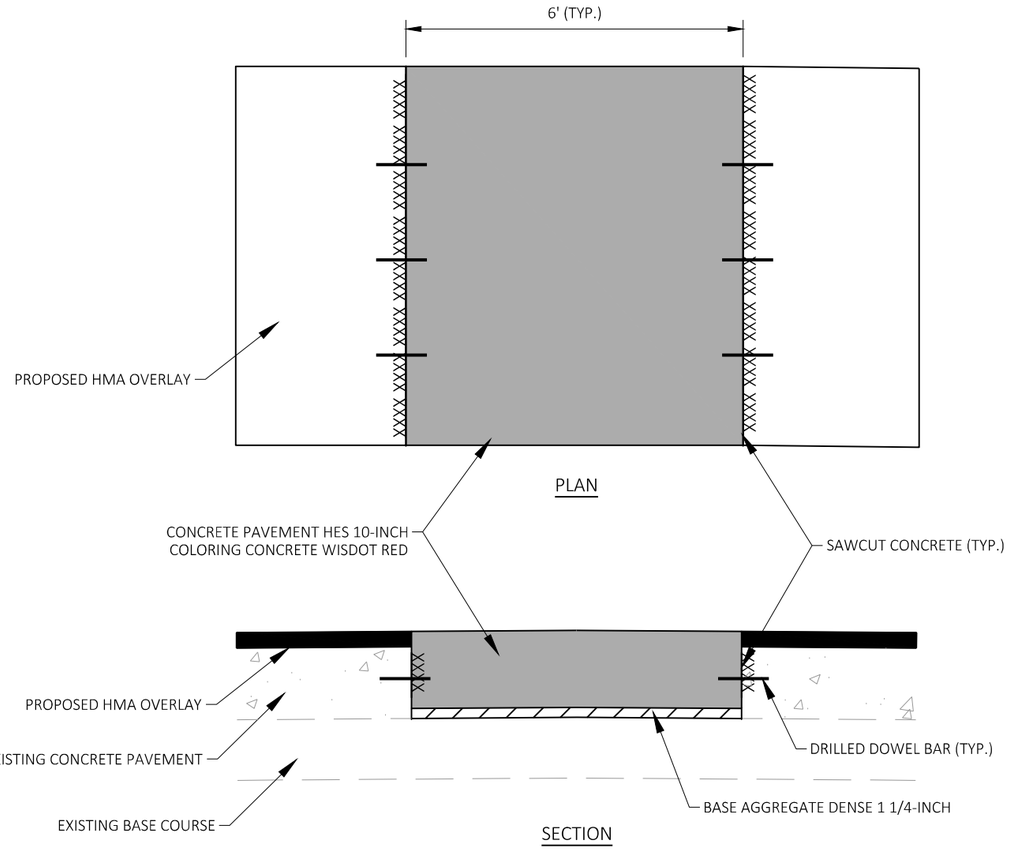
HMA PAVEMENT SAFETY WEDGE

NOTE:
HMA PAVEMENT SAFETY WEDGE TO BE PLACED WHEN UNABLE TO MILL EXISTING PAVEMENT AND PAVE LOWER LAYER OF HMA PAVEMENT ON THE SAME DAY AND DROP OFF BETWEEN LAYERS EXCEEDS 2".



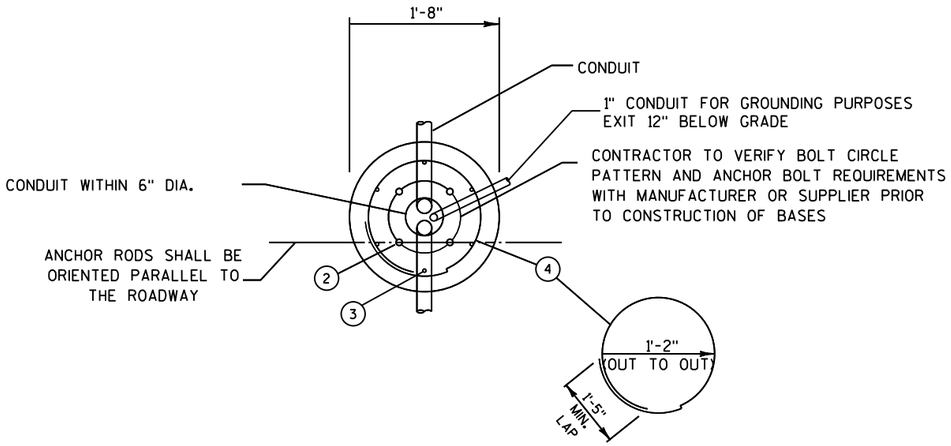

30" CONCRETE CENTERLINE REPAIR DETAIL

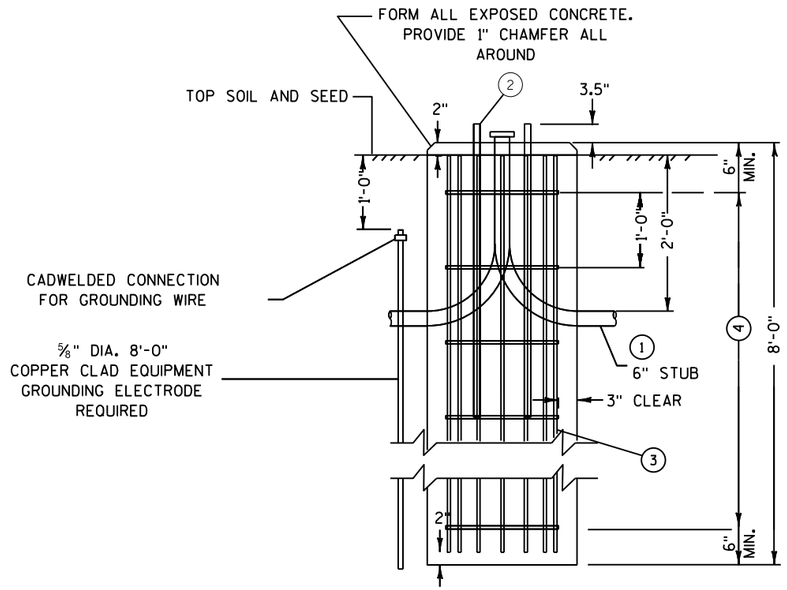
2




## COLORED CONCRETE CROSSWALK

SEE LAYOUT DETAILS FOR LOCATIONS




CONCRETE BASE TYPE 5 MODIFIED

NO SCALE

GENERAL NOTES

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OF CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

WHEN REQUIRED TO CONNECT NONMETALLIC 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 DIRE 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. 6 AWG STRANDED COPPER GROUNDING WIRE SHALL BE CADWELDED TO THE GROUND ROD.

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

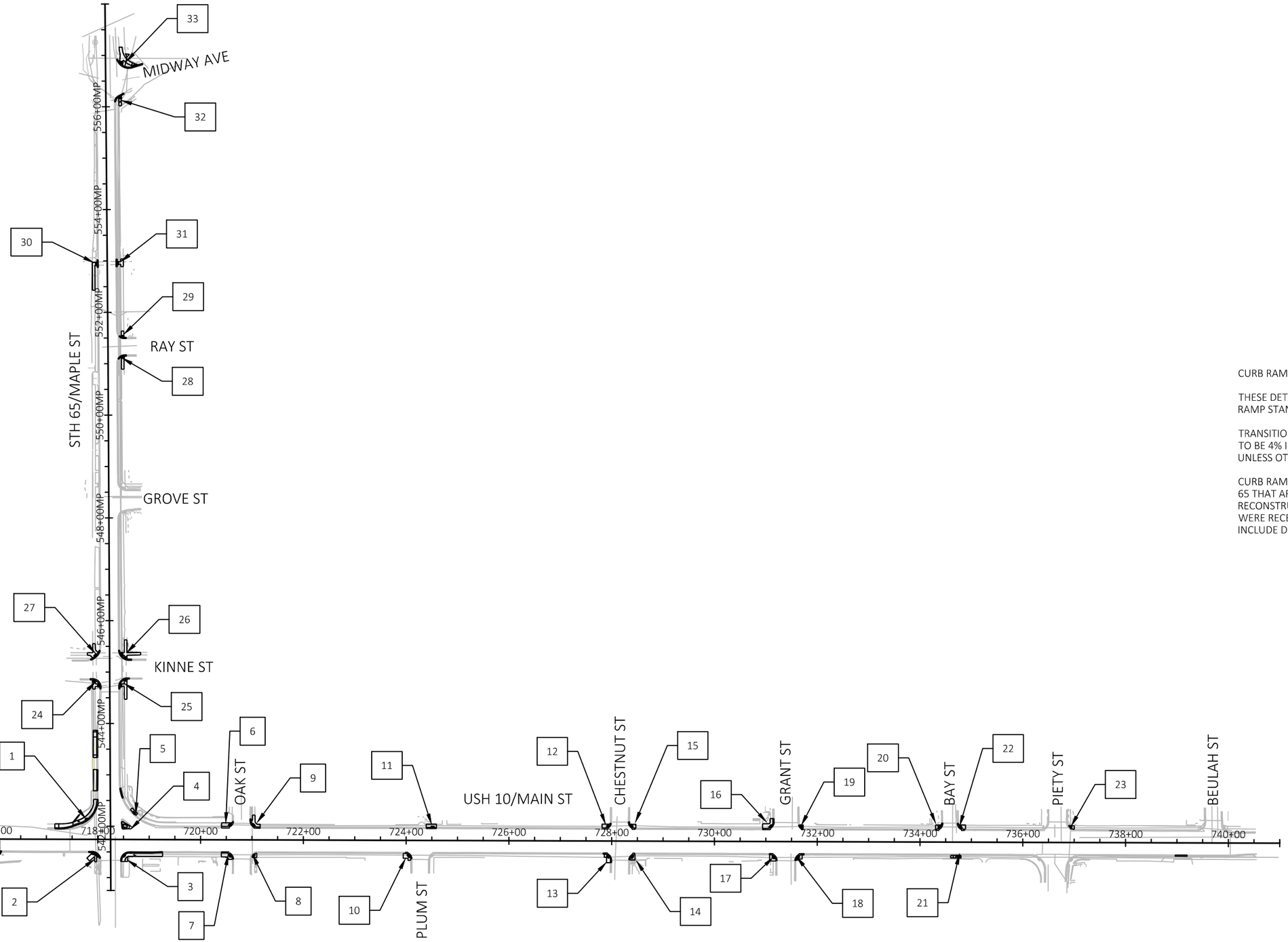
WHEN ANCHOR BOLTS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR BOLT BAR LENGTH.

(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 BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR BOLTS.

(3) (6) NO. 4 X 7'-8" BAR STEEL REINFORCEMENT.

(4) (8) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.




N

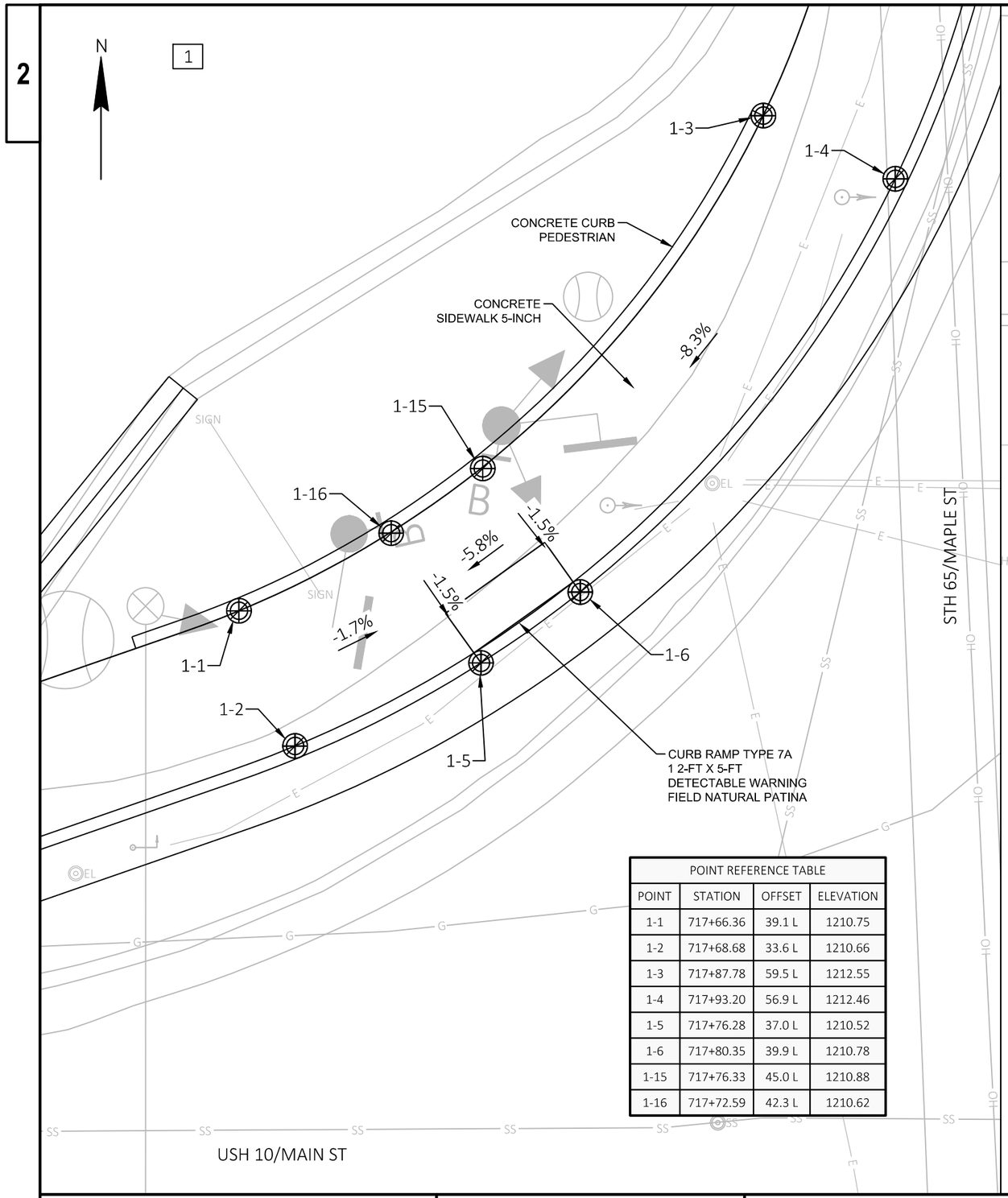
CURB RAMP NOTES:

THESE DETAILS SUPPLEMENT CURB RAMP STANDARD DETAIL DRAWINGS

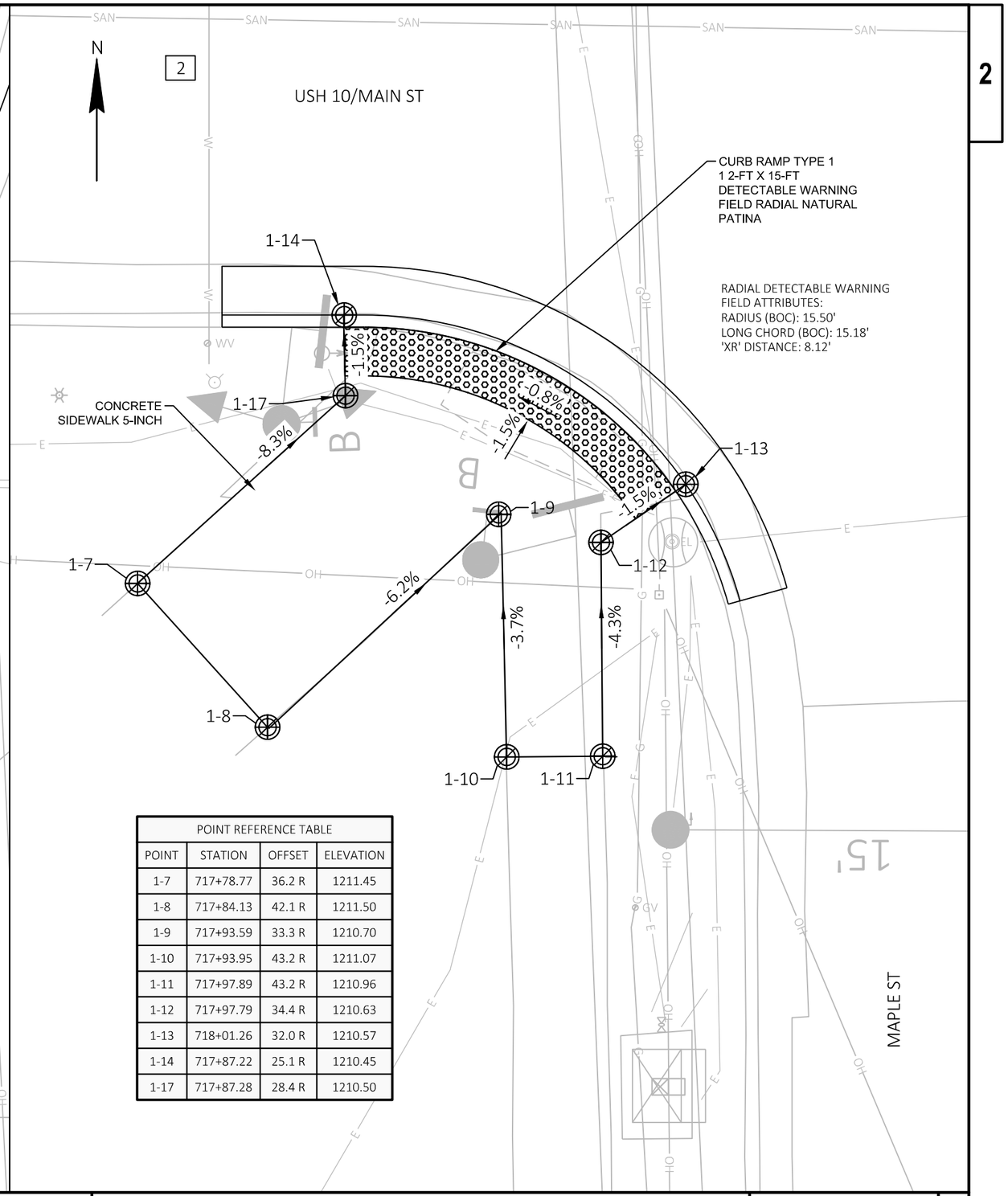
TRANSITION ALL GUTTER CROSS SLOPES TO BE 4% IN FRONT OF CURB RAMPS UNLESS OTHERWISE NOTED

CURB RAMPS ALONG USH 10 AND STH 65 THAT ARE NOT BEING RECONSTRUCTED WITH THIS PROJECT WERE RECENTLY RECONSTRUCTED AND INCLUDE DETECTABLE WARNING FIELDS

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS - OVERVIEW | SHEET 14 | E |
|---|---|---|---|---|---|




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 1-1 | 717+66.36 | 39.1 L | 1210.75 |
| 1-2 | 717+68.68 | 33.6 L | 1210.66 |
| 1-3 | 717+87.78 | 59.5 L | 1212.55 |
| 1-4 | 717+93.20 | 56.9 L | 1212.46 |
| 1-5 | 717+76.28 | 37.0 L | 1210.52 |
| 1-6 | 717+80.35 | 39.9 L | 1210.78 |
| 1-15 | 717+76.33 | 45.0 L | 1210.88 |
| 1-16 | 717+72.59 | 42.3 L | 1210.62 |




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 1-7 | 717+78.77 | 36.2 R | 1211.45 |
| 1-8 | 717+84.13 | 42.1 R | 1211.50 |
| 1-9 | 717+93.59 | 33.3 R | 1210.70 |
| 1-10 | 717+93.95 | 43.2 R | 1211.07 |
| 1-11 | 717+97.89 | 43.2 R | 1210.96 |
| 1-12 | 717+97.79 | 34.4 R | 1210.63 |
| 1-13 | 718+01.26 | 32.0 R | 1210.57 |
| 1-14 | 717+87.22 | 25.1 R | 1210.45 |
| 1-17 | 717+87.28 | 28.4 R | 1210.50 |

2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 15 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 1
PLOT DATE : 10/29/2020 3:30 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

3

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 2-1 | 718+46.90 | 42.9 R | 1211.22 |
| 2-2 | 718+46.89 | 40.5 R | 1211.71 |
| 2-3 | 718+49.10 | 32.5 R | 1211.42 |
| 2-4 | 718+52.61 | 29.0 R | 1211.55 |
| 2-5 | 718+61.47 | 26.7 R | 1211.90 |
| 2-6 | 718+69.87 | 26.7 R | 1212.61 |
| 2-7 | 718+69.89 | 32.7 R | 1212.70 |
| 2-8 | 718+61.38 | 32.7 R | 1211.99 |
| 2-9 | 718+57.35 | 33.7 R | 1211.64 |
| 2-21 | 718+53.82 | 37.3 R | 1211.52 |
| 2-22 | 718+52.89 | 40.8 R | 1211.84 |
| 2-23 | 718+52.90 | 42.7 R | 1211.80 |

USH 10/MAIN ST

35'

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

2-4
2-5
2-6
2-7
2-3
2-9
2-8
2-21
2-2
2-22
2-1
2-23

-5.2%
-8.3%
-2.7%
-1.4%
-1.5%
-5.5%

CONCRETE
SIDEWALK 5-INCH

CONCRETE CURB
PEDESTRIAN

MAPLE ST

4

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 2-10 | 718+47.90 | 29.4 L | 1212.09 |
| 2-11 | 718+52.32 | 28.8 L | 1212.15 |
| 2-12 | 718+54.14 | 31.6 L | 1212.11 |
| 2-13 | 718+45.98 | 29.7 L | 1212.08 |
| 2-14 | 718+46.64 | 24.6 L | 1212.01 |
| 2-15 | 718+58.47 | 29.1 L | 1212.09 |
| 2-16 | 718+56.59 | 26.2 L | 1212.15 |
| 2-17 | 718+56.15 | 20.8 L | 1212.09 |
| 2-18 | 718+51.20 | 21.7 L | 1212.10 |
| 2-19 | 718+51.10 | 20.3 L | 1212.06 |
| 2-20 | 718+51.38 | 23.9 L | 1212.08 |

STH 65/MAPLE ST

20'

CURB RAMP TYPE 6
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

2-12
2-11
2-10
2-13
2-15

-0.5%
-1.4%
-1.2%
-0.3%
-1.5%
-0.2%
-1.5%

CONCRETE CURB
PEDESTRIAN

2-20
2-16
2-18
2-14

-1.4%
-0.8%
-1.1%
-0.5%
-0.6%

CURB RAMP TYPE 6
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

2-19
2-17

CONCRETE
SIDEWALK 5-INCH

CURB RAMP TYPE 6
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

USH 10/MAIN ST

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 16 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 2
PLOT DATE : 10/29/2020 3:31 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

N

5

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 3-1 | 718+66.98 | 61.6 L | 1212.45 |
| 3-2 | 718+63.20 | 58.3 L | 1212.47 |
| 3-3 | 718+77.50 | 50.9 L | 1212.23 |
| 3-4 | 718+74.17 | 47.1 L | 1212.07 |
| 3-5 | 718+71.45 | 49.7 L | 1211.70 |
| 3-6 | 718+67.90 | 53.2 L | 1211.77 |
| 3-7 | 718+74.95 | 53.2 L | 1212.20 |
| 3-8 | 718+71.40 | 56.7 L | 1212.23 |

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. MATCH EXISTING GRADES.

STH 65/MAPLE ST

3-1
3-2
3-8
-5.06%
3-7
3-3
-9.17%
-1.32%
-1.08%
3-6
3-5
3-4

CONCRETE SIDEWALK 5-INCH

CURB RAMP TYPE 7A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

USH 10/MAIN ST

N

6

OAK ST

CONCRETE SIDEWALK 5-INCH

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

3-9
3-14
3-10
3-11
-2.4%
-1.5%
-1.4%
-1.4%
-1.4%
3-12
3-13

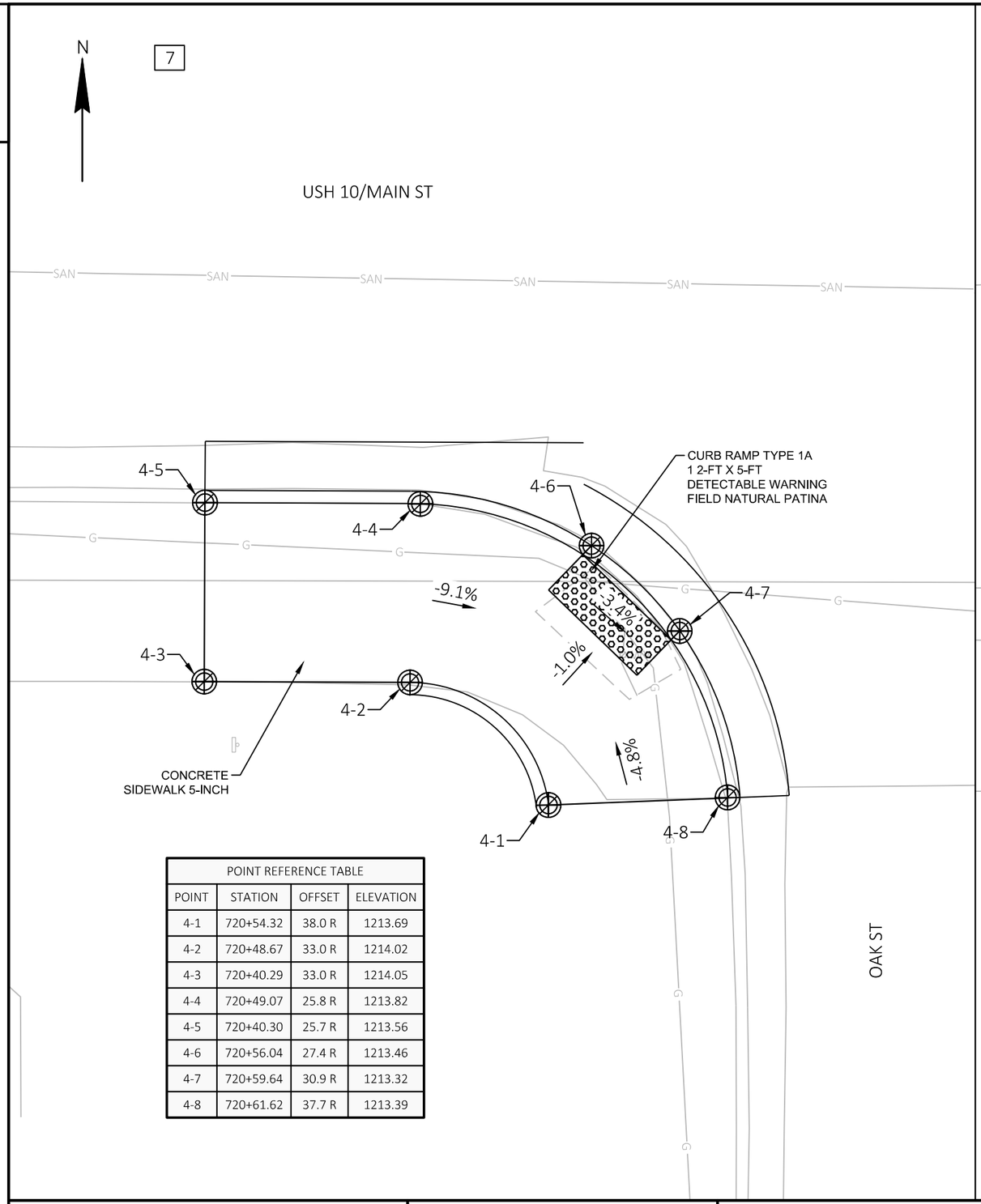
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 3-9 | 720+40.71 | 33.1 L | 1214.17 |
| 3-10 | 720+60.52 | 33.1 L | 1214.07 |
| 3-11 | 720+59.79 | 30.8 L | 1214.02 |
| 3-12 | 720+56.08 | 27.5 L | 1213.91 |
| 3-13 | 720+40.68 | 26.4 L | 1214.05 |
| 3-14 | 720+52.47 | 33.1 L | 1214.00 |

USH 10/MAIN ST

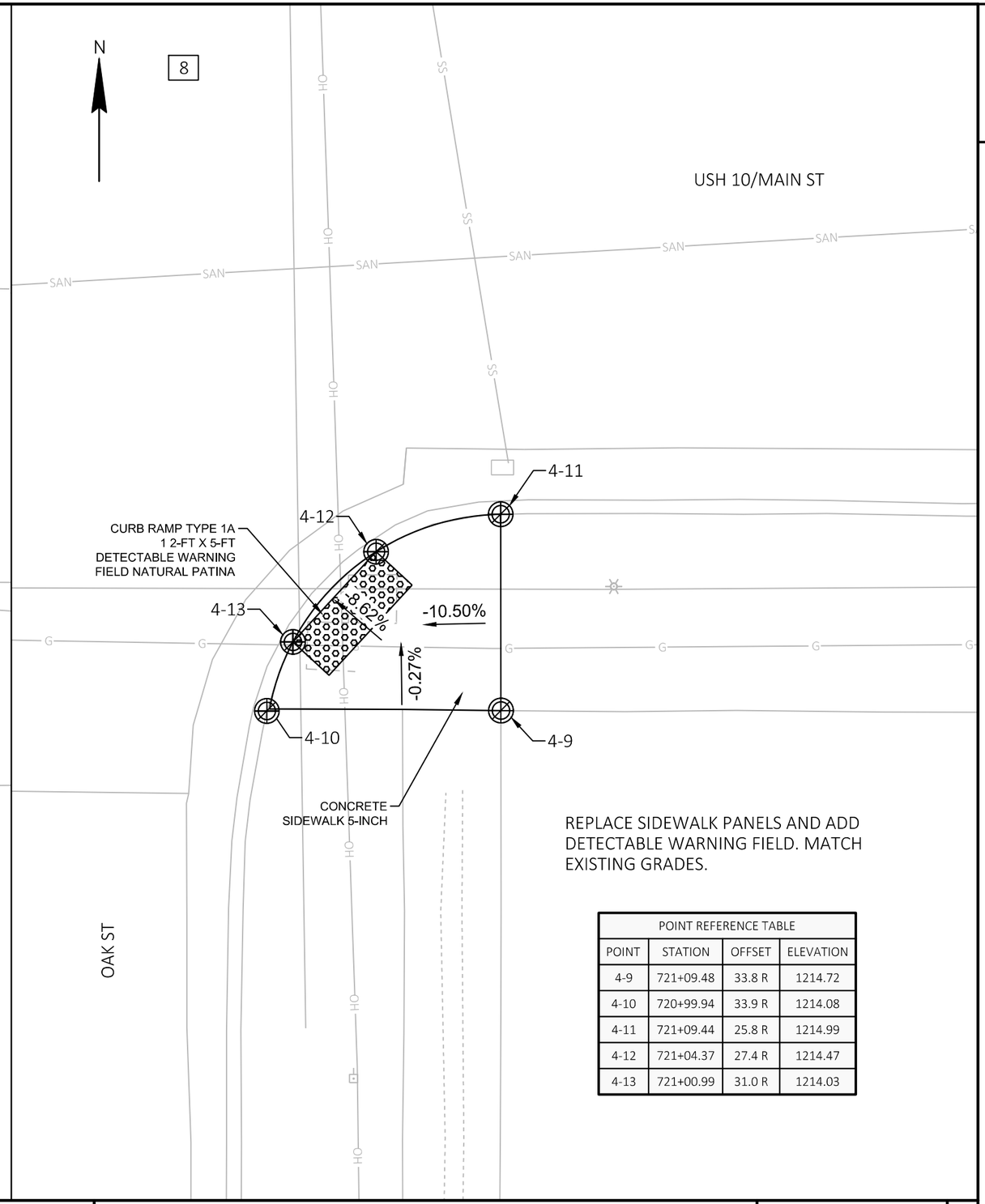
2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 17 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 3
PLOT DATE : 10/29/2020 3:31 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 4-1 | 720+54.32 | 38.0 R | 1213.69 |
| 4-2 | 720+48.67 | 33.0 R | 1214.02 |
| 4-3 | 720+40.29 | 33.0 R | 1214.05 |
| 4-4 | 720+49.07 | 25.8 R | 1213.82 |
| 4-5 | 720+40.30 | 25.7 R | 1213.56 |
| 4-6 | 720+56.04 | 27.4 R | 1213.46 |
| 4-7 | 720+59.64 | 30.9 R | 1213.32 |
| 4-8 | 720+61.62 | 37.7 R | 1213.39 |




REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 4-9 | 721+09.48 | 33.8 R | 1214.72 |
| 4-10 | 720+99.94 | 33.9 R | 1214.08 |
| 4-11 | 721+09.44 | 25.8 R | 1214.99 |
| 4-12 | 721+04.37 | 27.4 R | 1214.47 |
| 4-13 | 721+00.99 | 31.0 R | 1214.03 |

N

9

OAK ST

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 5-1 | 721+15.97 | 30.4 L | 1215.34 |
| 5-2 | 721+15.98 | 25.4 L | 1215.32 |
| 5-3 | 721+11.45 | 30.4 L | 1215.03 |
| 5-4 | 721+09.30 | 25.4 L | 1215.12 |
| 5-5 | 721+05.97 | 36.4 L | 1214.70 |
| 5-6 | 720+98.49 | 36.0 L | 1214.88 |
| 5-7 | 721+00.95 | 38.5 L | 1214.94 |
| 5-8 | 721+00.02 | 30.4 L | 1214.58 |
| 5-9 | 721+03.57 | 26.9 L | 1214.65 |
| 5-10 | 721+05.84 | 48.5 L | 1215.39 |
| 5-11 | 721+00.84 | 48.4 L | 1215.27 |

5-11
5-10
CONCRETE SIDEWALK 5-INCH
5-7
-5.5%
5-6
5-5
-1.5%
5-3
5-1
5-8
-1.5%
-8.4%
5-9
5-4
5-2
CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

USH 10/MAIN ST

N

10

USH 10/MAIN ST

5-19
5-20
5-21
5-18
CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA
-1.63%
5-17
CONCRETE SIDEWALK 5-INCH
-3.35%
-11.37%
5-12
5-13
-3.79%
5-16
5-14
5-15

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 5-12 | 723+94.29 | 34.8 R | 1220.75 |
| 5-13 | 724+03.74 | 34.8 R | 1220.45 |
| 5-14 | 724+03.74 | 38.7 R | 1220.65 |
| 5-15 | 724+08.81 | 38.8 R | 1220.17 |
| 5-16 | 724+08.79 | 35.9 R | 1220.05 |
| 5-17 | 724+07.78 | 30.5 R | 1219.74 |
| 5-18 | 724+04.33 | 26.8 R | 1219.80 |
| 5-19 | 723+98.28 | 25.5 R | 1220.28 |
| 5-20 | 723+97.50 | 25.4 R | 1220.29 |
| 5-21 | 723+94.29 | 25.5 R | 1220.34 |

PLUM ST

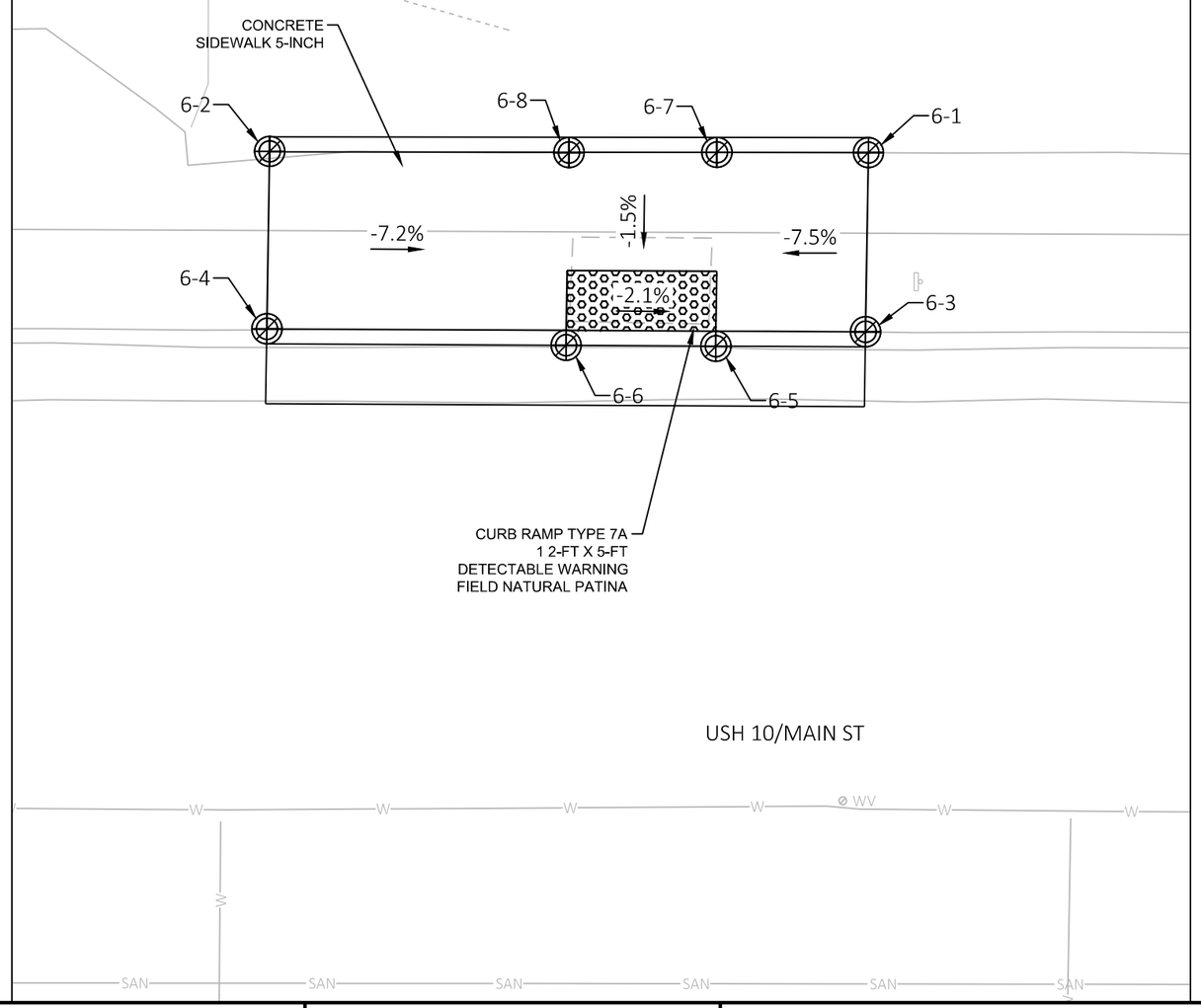
REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

2

N

11

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 6-1 | 724+59.01 | 31.6 L | 1219.21 |
| 6-2 | 724+39.01 | 31.6 L | 1219.55 |
| 6-3 | 724+58.94 | 25.6 L | 1218.90 |
| 6-4 | 724+38.94 | 25.7 L | 1219.45 |
| 6-5 | 724+53.94 | 25.1 L | 1218.63 |
| 6-6 | 724+48.94 | 25.1 L | 1218.74 |
| 6-7 | 724+53.95 | 31.6 L | 1218.73 |
| 6-8 | 724+49.01 | 31.6 L | 1218.83 |




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 20 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 6

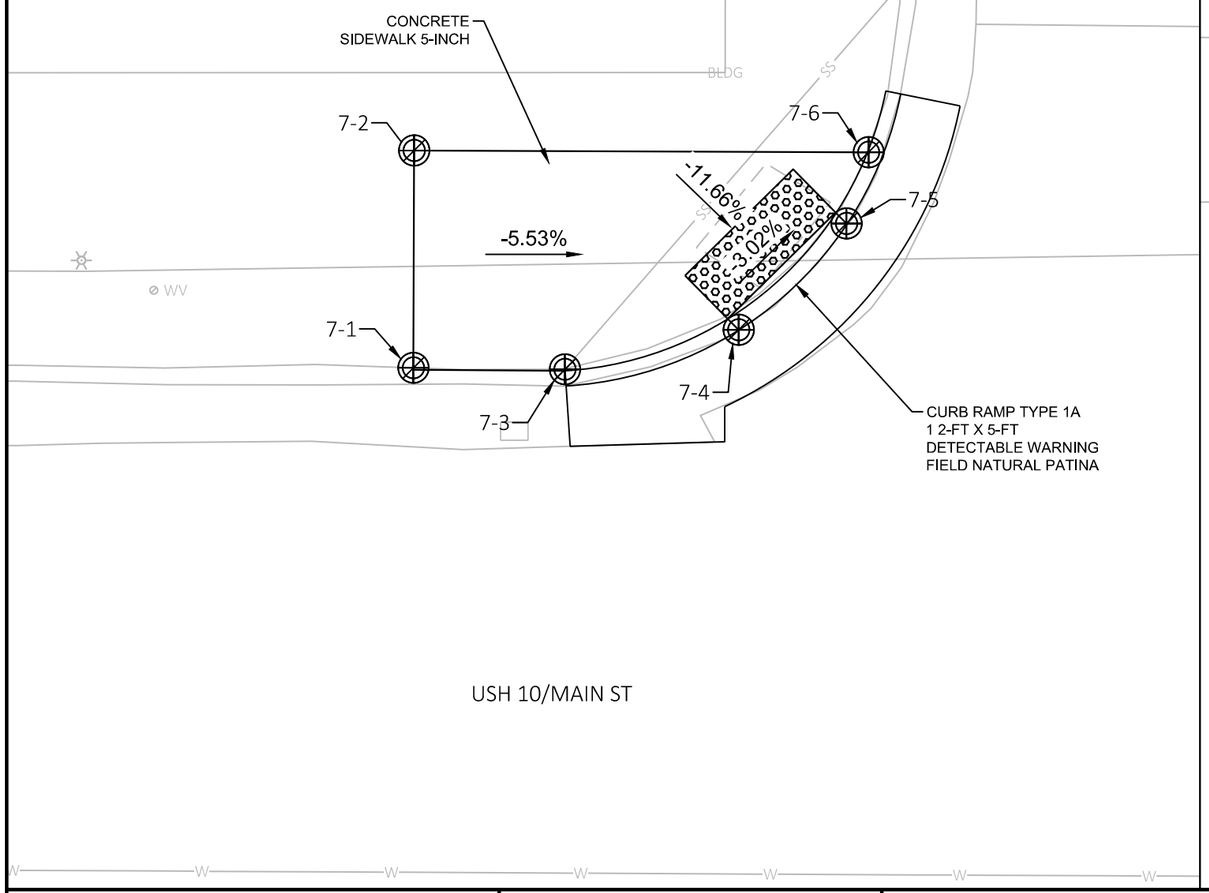
PLOT DATE : 10/29/2020 3:31 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:5 FT

N

12

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 7-1 | 727+81.04 | 25.7 L | 1207.22 |
| 7-2 | 727+81.05 | 32.9 L | 1207.63 |
| 7-3 | 727+86.04 | 25.7 L | 1207.10 |
| 7-4 | 727+91.77 | 27.0 L | 1206.43 |
| 7-5 | 727+95.32 | 30.5 L | 1206.34 |
| 7-6 | 727+96.04 | 32.9 L | 1206.66 |

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

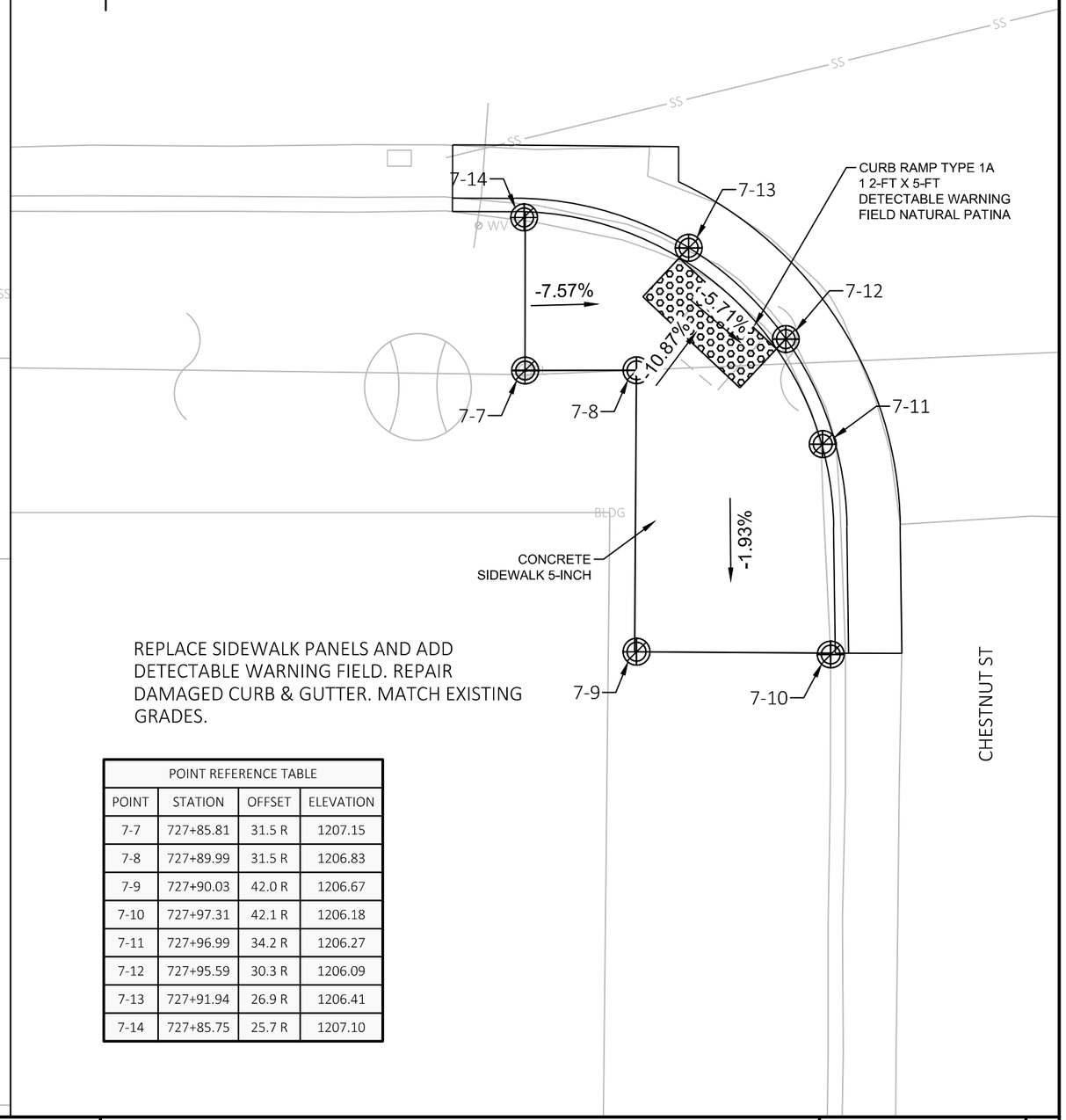



USH 10/MAIN ST

N

13

USH 10/MAIN ST




REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 7-7 | 727+85.81 | 31.5 R | 1207.15 |
| 7-8 | 727+89.99 | 31.5 R | 1206.83 |
| 7-9 | 727+90.03 | 42.0 R | 1206.67 |
| 7-10 | 727+97.31 | 42.1 R | 1206.18 |
| 7-11 | 727+96.99 | 34.2 R | 1206.27 |
| 7-12 | 727+95.59 | 30.3 R | 1206.09 |
| 7-13 | 727+91.94 | 26.9 R | 1206.41 |
| 7-14 | 727+85.75 | 25.7 R | 1207.10 |

2

N

14

USH 10/MAIN ST

CHESTNUT ST

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

8-5

8-4

8-3

8-2

8-1

-3.71%

-3.38%

-1.76%

-5.01%

CONCRETE
SIDEWALK 5-INCH

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 8-1 | 728+45.27 | 36.5 R | 1204.51 |
| 8-2 | 728+35.41 | 36.5 R | 1204.60 |
| 8-3 | 728+37.12 | 31.2 R | 1204.20 |
| 8-4 | 728+40.63 | 27.6 R | 1203.96 |
| 8-5 | 728+45.28 | 26.1 R | 1204.12 |

N

15

CHESTNUT ST

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 8-6 | 728+46.79 | 25.5 L | 1203.95 |
| 8-7 | 728+46.80 | 32.8 L | 1204.61 |
| 8-8 | 728+35.73 | 32.8 L | 1204.82 |
| 8-9 | 728+35.94 | 30.9 L | 1204.45 |
| 8-10 | 728+39.33 | 27.2 L | 1204.09 |

8-8

8-7

8-9

8-10

8-6

-11.69%

-4.60%

-3.47%

CONCRETE
SIDEWALK 5-INCH

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

USH 10/MAIN ST

2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 22 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 8

PLOT DATE : 10/29/2020 3:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:5 FT

2

N

16

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 9-1 | 730+93.35 | 34.5 L | 1187.94 |
| 9-2 | 730+93.38 | 25.6 L | 1187.90 |
| 9-3 | 731+04.47 | 34.5 L | 1186.41 |
| 9-4 | 731+08.21 | 27.5 L | 1186.47 |
| 9-5 | 731+02.23 | 25.8 L | 1187.03 |
| 9-6 | 731+08.43 | 38.5 L | 1186.24 |
| 9-7 | 731+08.37 | 44.8 L | 1186.39 |
| 9-8 | 731+13.32 | 44.9 L | 1186.19 |
| 9-9 | 731+13.39 | 37.3 L | 1186.07 |
| 9-10 | 731+11.71 | 31.0 L | 1186.15 |

BLDG

BLDG

HO

HO

9-7

9-8

9-6

9-9

-1.8%

CONCRETE
SIDEWALK 5-INCH

9-1

9-3

-1.5%

9-10

-12.5%

-6.7%

9-2

9-4

9-5

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

GRANT ST

USH 10/MAIN ST

SS

HO

N

17

USH 10/MAIN ST

9-14

9-15

CURB RAMP TYPE 1A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

-4.18%

9-11

-11.78%

-9.78%

CONCRETE
SIDEWALK 5-INCH

-1.64%

9-12

9-13

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 9-11 | 731+17.91 | 30.8 R | 1186.05 |
| 9-12 | 731+07.33 | 37.5 R | 1187.47 |
| 9-13 | 731+19.41 | 37.6 R | 1186.33 |
| 9-14 | 731+07.25 | 25.6 R | 1187.12 |
| 9-15 | 731+14.38 | 27.2 R | 1186.31 |

HO

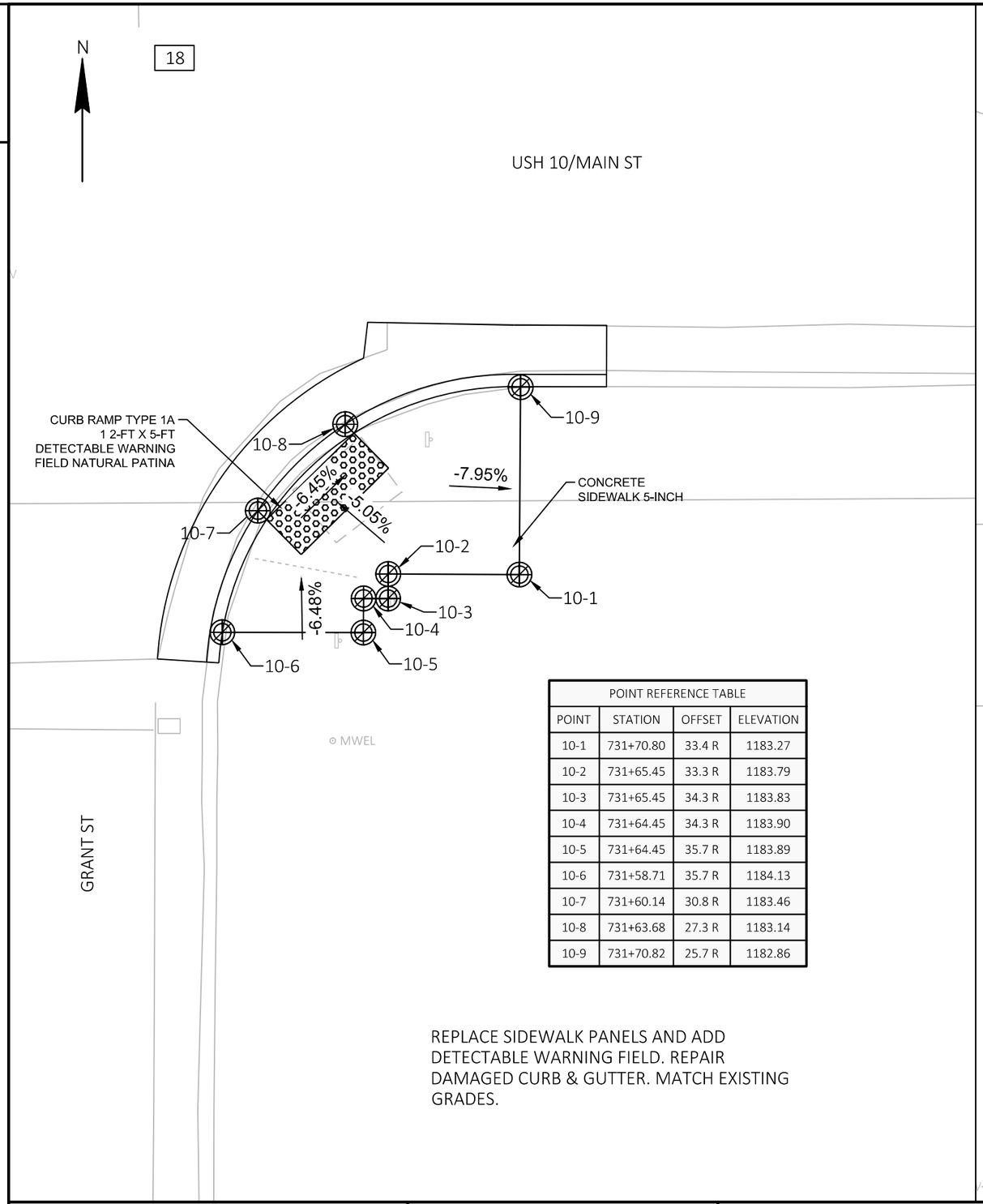
G

SS

GRANT ST

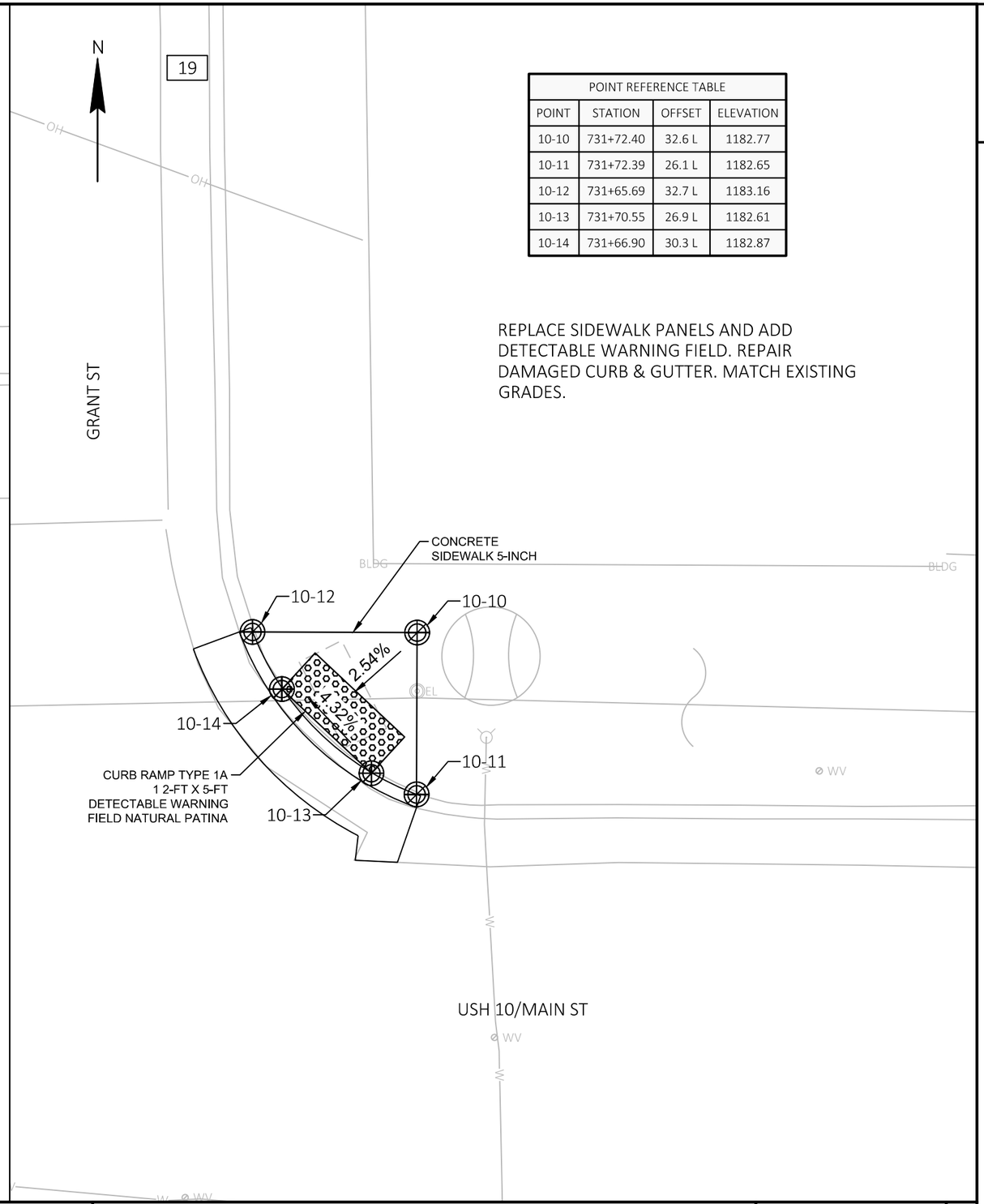
2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 23 | E |
|---|---|---|---|---|---|




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 10-1 | 731+70.80 | 33.4 R | 1183.27 |
| 10-2 | 731+65.45 | 33.3 R | 1183.79 |
| 10-3 | 731+65.45 | 34.3 R | 1183.83 |
| 10-4 | 731+64.45 | 34.3 R | 1183.90 |
| 10-5 | 731+64.45 | 35.7 R | 1183.89 |
| 10-6 | 731+58.71 | 35.7 R | 1184.13 |
| 10-7 | 731+60.14 | 30.8 R | 1183.46 |
| 10-8 | 731+63.68 | 27.3 R | 1183.14 |
| 10-9 | 731+70.82 | 25.7 R | 1182.86 |

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 10-10 | 731+72.40 | 32.6 L | 1182.77 |
| 10-11 | 731+72.39 | 26.1 L | 1182.65 |
| 10-12 | 731+65.69 | 32.7 L | 1183.16 |
| 10-13 | 731+70.55 | 26.9 L | 1182.61 |
| 10-14 | 731+66.90 | 30.3 L | 1182.87 |

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. REPAIR DAMAGED CURB & GUTTER. MATCH EXISTING GRADES.

N

20

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 11-1 | 734+31.47 | 25.5 L | 1165.39 |
| 11-2 | 734+30.11 | 33.0 L | 1165.48 |
| 11-3 | 734+30.09 | 25.4 L | 1165.60 |
| 11-4 | 734+37.42 | 33.1 L | 1164.47 |
| 11-5 | 734+41.49 | 33.1 L | 1164.18 |
| 11-6 | 734+38.22 | 28.1 L | 1164.54 |

BAY ST

CURB RAMP TYPE 4A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

11-2
11-4
11-5
11-3
11-1
11-6

CONCRETE
SIDEWALK 5-INCH

-13.1%
-6.1%
-3.6%

USH 10/MAIN ST

N

21

USH 10/MAIN ST

CURB RAMP TYPE 7A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

11-7
11-9
11-11
11-14
11-15
11-16
11-8
11-10
11-12
11-13
11-17

CONCRETE
SIDEWALK 5-INCH

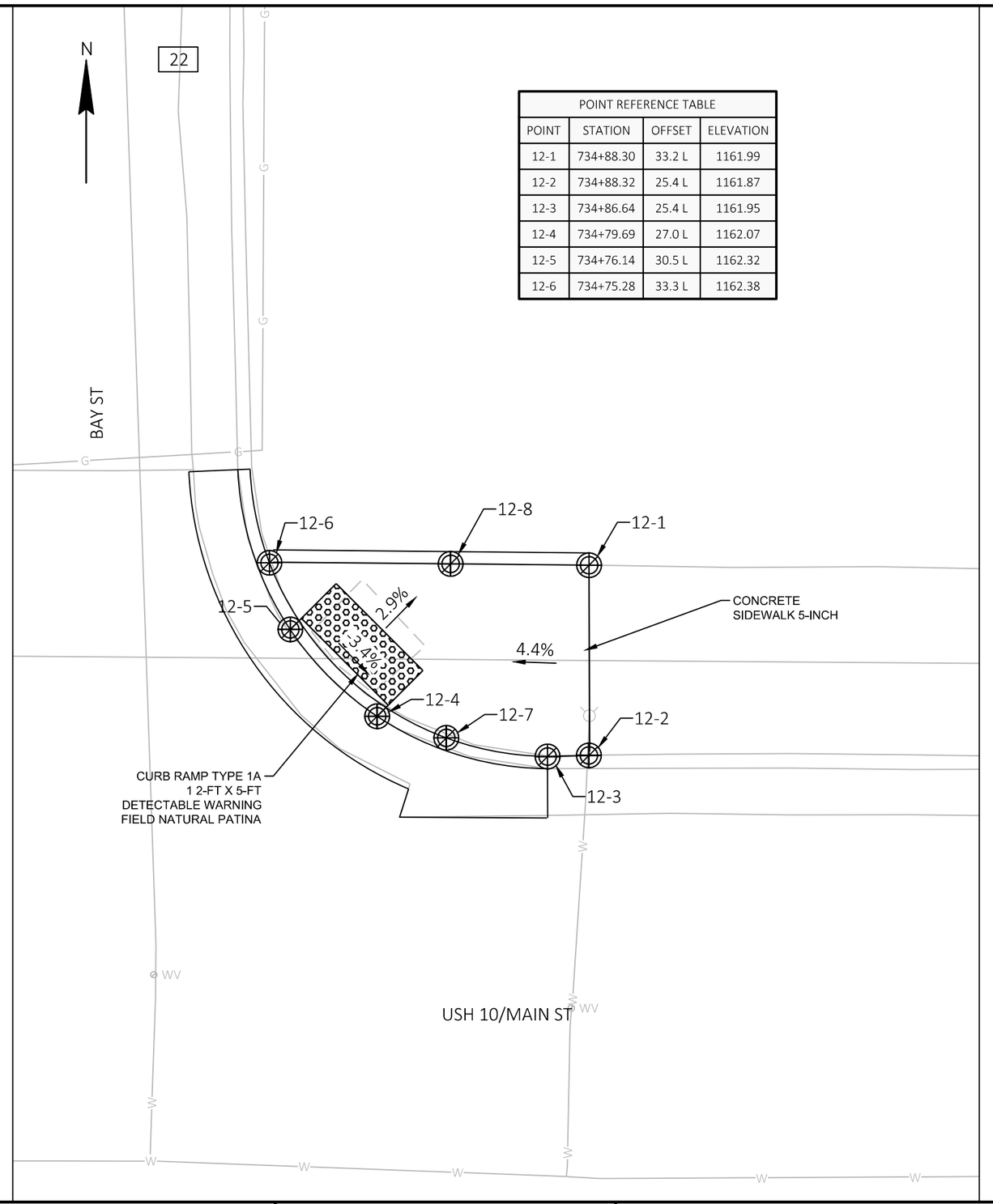
-5.63%
-6.49%
-6.72%
-8.62%
-4.82%

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. MATCH EXISTING GRADES.

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 11-7 | 734+59.80 | 25.6 R | 1163.69 |
| 11-8 | 734+59.79 | 30.6 R | 1163.78 |
| 11-9 | 734+64.80 | 25.6 R | 1163.41 |
| 11-10 | 734+64.82 | 30.6 R | 1163.52 |
| 11-11 | 734+69.80 | 25.6 R | 1163.09 |
| 11-12 | 734+69.79 | 30.6 R | 1163.24 |
| 11-13 | 734+74.79 | 30.7 R | 1162.89 |
| 11-14 | 734+72.30 | 25.7 R | 1162.66 |
| 11-15 | 734+77.30 | 25.7 R | 1162.41 |
| 11-16 | 734+79.80 | 25.7 R | 1162.45 |
| 11-17 | 734+79.79 | 30.7 R | 1162.58 |

2

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 12-1 | 734+88.30 | 33.2 L | 1161.99 |
| 12-2 | 734+88.32 | 25.4 L | 1161.87 |
| 12-3 | 734+86.64 | 25.4 L | 1161.95 |
| 12-4 | 734+79.69 | 27.0 L | 1162.07 |
| 12-5 | 734+76.14 | 30.5 L | 1162.32 |
| 12-6 | 734+75.28 | 33.3 L | 1162.38 |




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 26 | E |
|---|---|---|---|---|---|

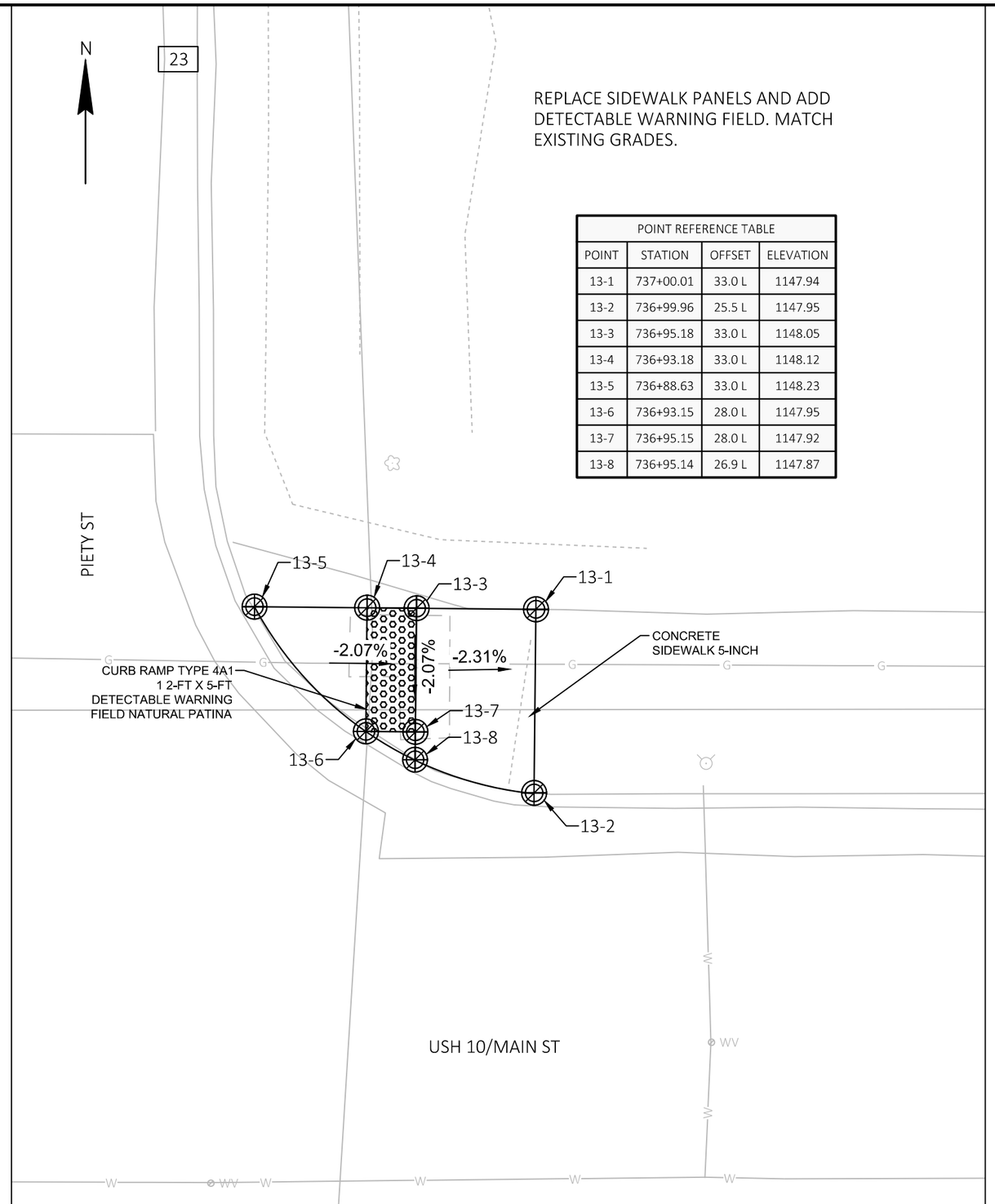
2

N

23

REPLACE SIDEWALK PANELS AND ADD DETECTABLE WARNING FIELD. MATCH EXISTING GRADES.

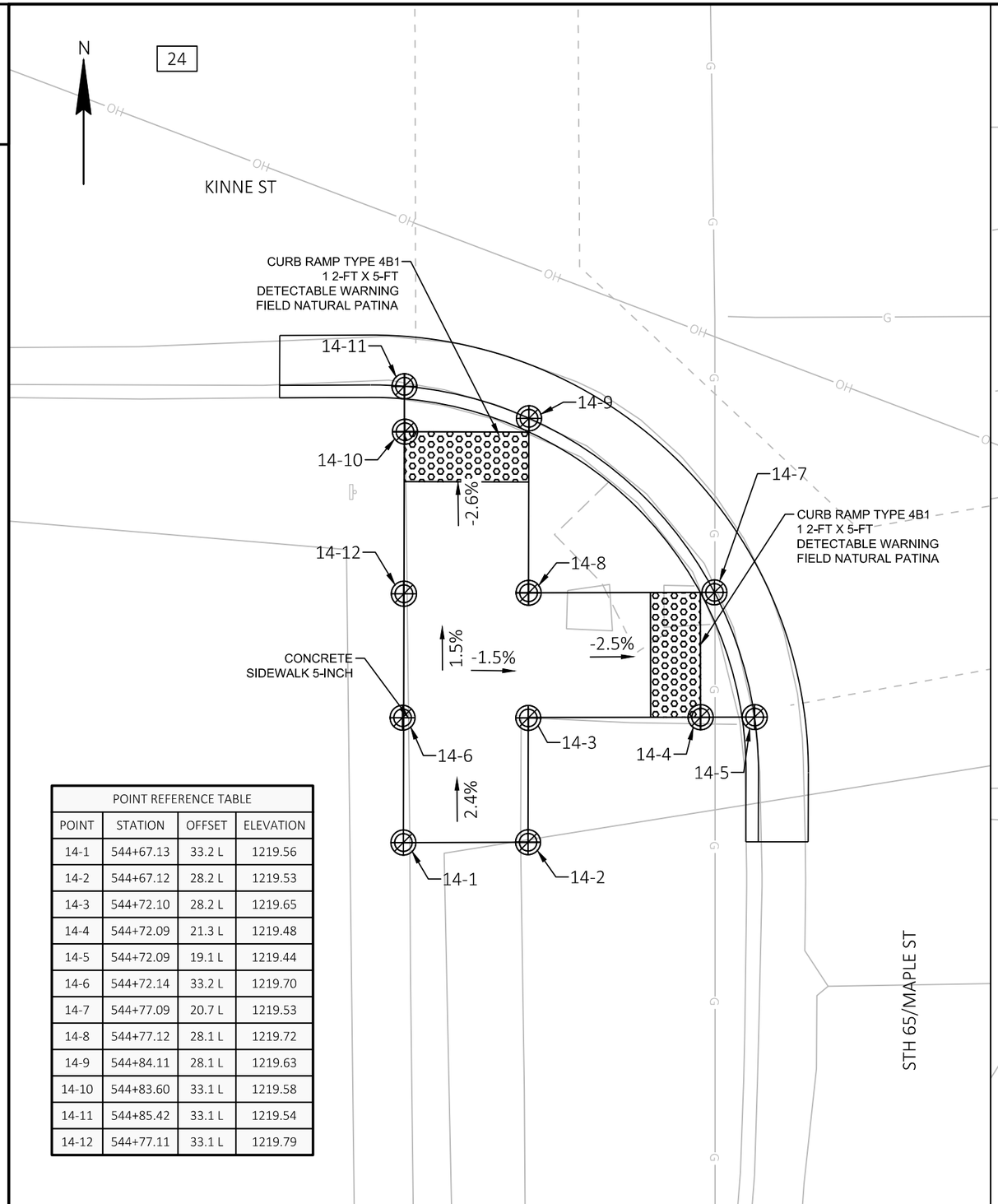
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 13-1 | 737+00.01 | 33.0 L | 1147.94 |
| 13-2 | 736+99.96 | 25.5 L | 1147.95 |
| 13-3 | 736+95.18 | 33.0 L | 1148.05 |
| 13-4 | 736+93.18 | 33.0 L | 1148.12 |
| 13-5 | 736+88.63 | 33.0 L | 1148.23 |
| 13-6 | 736+93.15 | 28.0 L | 1147.95 |
| 13-7 | 736+95.15 | 28.0 L | 1147.92 |
| 13-8 | 736+95.14 | 26.9 L | 1147.87 |



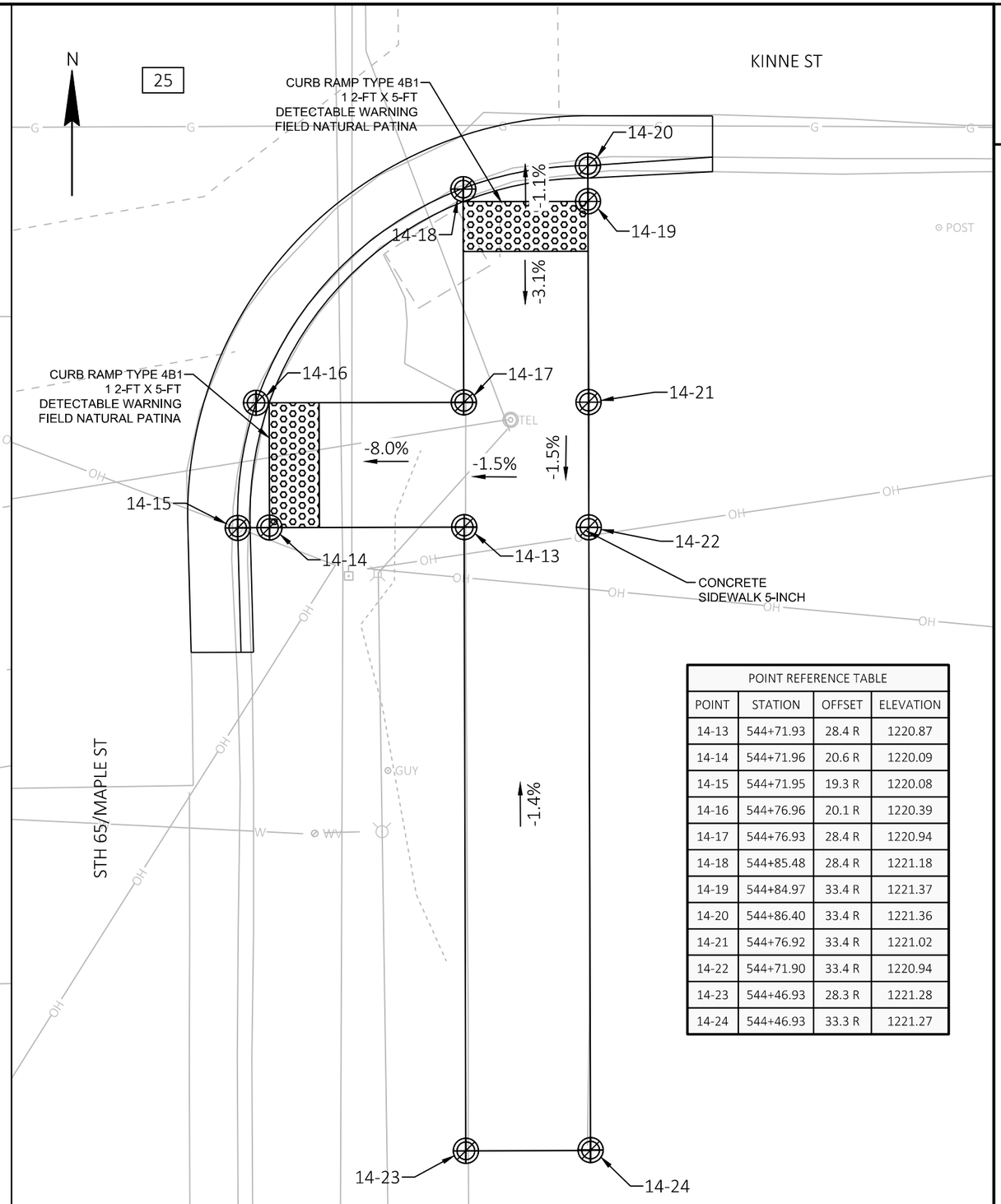

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 27 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 13

PLOT DATE : 10/29/2020 3:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:5 FT




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 14-1 | 544+67.13 | 33.2 L | 1219.56 |
| 14-2 | 544+67.12 | 28.2 L | 1219.53 |
| 14-3 | 544+72.10 | 28.2 L | 1219.65 |
| 14-4 | 544+72.09 | 21.3 L | 1219.48 |
| 14-5 | 544+72.09 | 19.1 L | 1219.44 |
| 14-6 | 544+72.14 | 33.2 L | 1219.70 |
| 14-7 | 544+77.09 | 20.7 L | 1219.53 |
| 14-8 | 544+77.12 | 28.1 L | 1219.72 |
| 14-9 | 544+84.11 | 28.1 L | 1219.63 |
| 14-10 | 544+83.60 | 33.1 L | 1219.58 |
| 14-11 | 544+85.42 | 33.1 L | 1219.54 |
| 14-12 | 544+77.11 | 33.1 L | 1219.79 |




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 14-13 | 544+71.93 | 28.4 R | 1220.87 |
| 14-14 | 544+71.96 | 20.6 R | 1220.09 |
| 14-15 | 544+71.95 | 19.3 R | 1220.08 |
| 14-16 | 544+76.96 | 20.1 R | 1220.39 |
| 14-17 | 544+76.93 | 28.4 R | 1220.94 |
| 14-18 | 544+85.48 | 28.4 R | 1221.18 |
| 14-19 | 544+84.97 | 33.4 R | 1221.37 |
| 14-20 | 544+86.40 | 33.4 R | 1221.36 |
| 14-21 | 544+76.92 | 33.4 R | 1221.02 |
| 14-22 | 544+71.90 | 33.4 R | 1220.94 |
| 14-23 | 544+46.93 | 28.3 R | 1221.28 |
| 14-24 | 544+46.93 | 33.3 R | 1221.27 |

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 28 | E |
|---|---|---|---|---|---|

N

26

27

STH 65/MAPLE ST

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 15-1 | 545+37.65 | 33.6 R | 1221.77 |
| 15-2 | 545+37.66 | 28.6 R | 1221.70 |
| 15-3 | 545+37.68 | 23.2 R | 1221.16 |
| 15-4 | 545+37.69 | 20.1 R | 1221.11 |
| 15-5 | 545+32.68 | 22.6 R | 1221.24 |
| 15-6 | 545+32.65 | 28.6 R | 1221.62 |
| 15-7 | 545+27.14 | 28.6 R | 1221.56 |
| 15-8 | 545+25.10 | 33.6 R | 1221.82 |
| 15-9 | 545+27.71 | 33.6 R | 1221.86 |
| 15-10 | 545+32.65 | 33.6 R | 1221.70 |
| 15-22 | 545+32.88 | 60.3 R | 1223.92 |
| 15-23 | 545+37.86 | 60.3 R | 1224.00 |
| 15-24 | 545+62.66 | 28.9 R | 1223.37 |
| 15-25 | 545+62.65 | 33.9 R | 1223.48 |

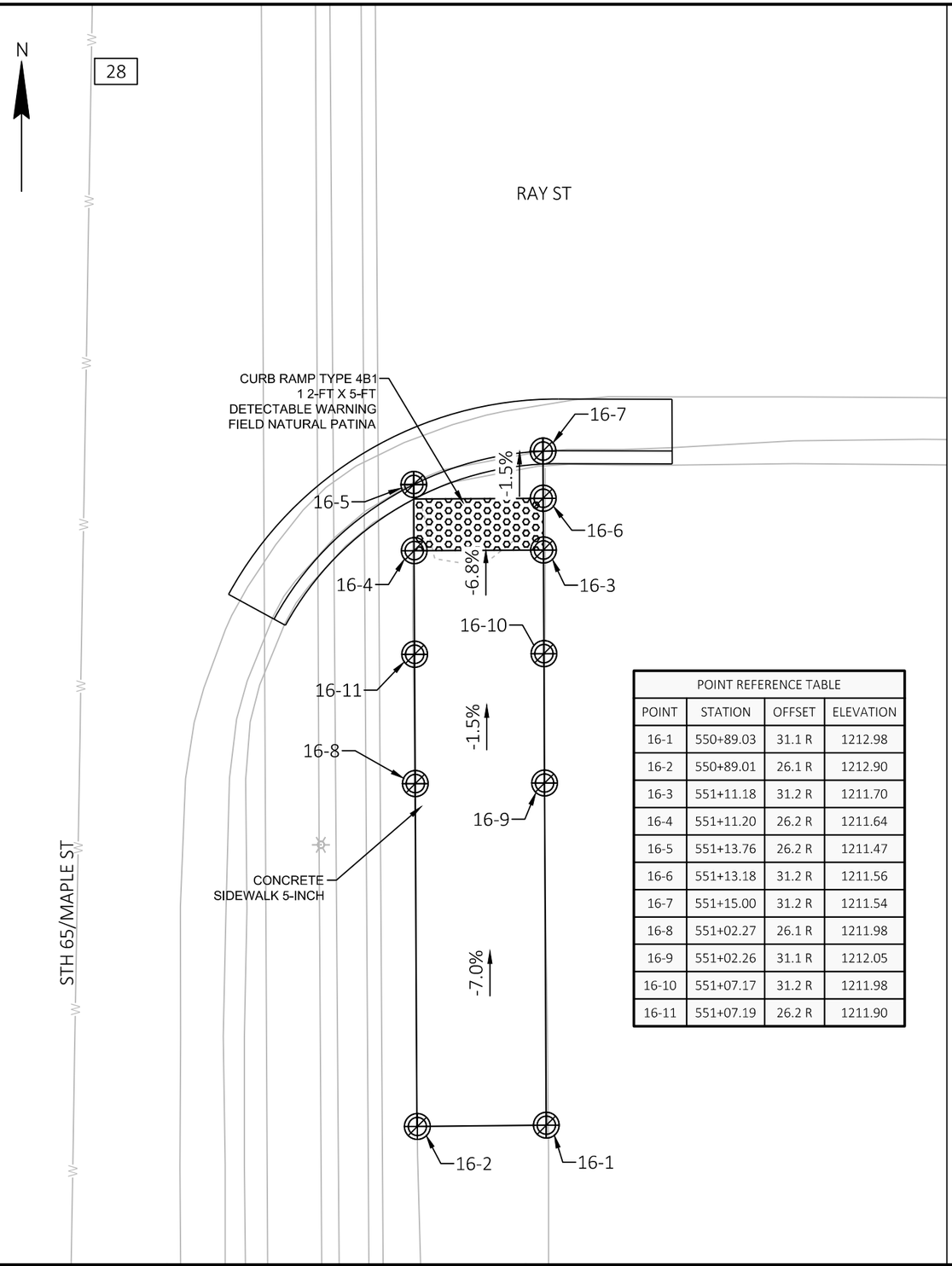
15-24
15-25
-6.8%
CONCRETE SIDEWALK 5-INCH
15-4
15-3
15-2
15-1
-8.6%
-1.5%
-1.5%
-8.3%
15-23
15-22
15-10
CURB RAMP TYPE 4B1
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA
15-5
15-6
15-7
-0.6%
15-9
-0.9%
15-8
CURB RAMP TYPE 4B1
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA
STH 65/MAPLE ST
KINNE ST
15-21
15-26
15-18
15-17
15-16
CURB RAMP TYPE 1
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA
-1.5%
15-15
-1.5%
-8.3%
15-14
15-20
15-27
15-19
-8.3%
15-28
15-11
1.0%
15-13
15-12
CONCRETE SIDEWALK 5-INCH
KINNE ST

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 15-11 | 545+37.90 | 43.3 L | 1221.12 |
| 15-12 | 545+32.90 | 43.3 L | 1221.04 |
| 15-13 | 545+32.88 | 38.3 L | 1221.07 |
| 15-14 | 545+27.52 | 33.0 L | 1220.94 |
| 15-15 | 545+30.05 | 28.5 L | 1220.53 |
| 15-16 | 545+33.58 | 24.9 L | 1220.62 |
| 15-17 | 545+38.12 | 22.4 L | 1221.14 |
| 15-18 | 545+43.48 | 27.7 L | 1221.07 |
| 15-19 | 545+37.86 | 32.7 L | 1220.68 |
| 15-20 | 545+55.49 | 32.7 L | 1221.63 |
| 15-21 | 545+55.46 | 27.8 L | 1221.56 |
| 15-26 | 545+48.03 | 27.7 L | 1221.45 |
| 15-27 | 545+48.06 | 32.6 L | 1221.52 |
| 15-28 | 545+37.88 | 38.5 L | 1221.16 |

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 29 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 15
PLOT DATE : 10/29/2020 3:32 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 16-1 | 550+89.03 | 31.1 R | 1212.98 |
| 16-2 | 550+89.01 | 26.1 R | 1212.90 |
| 16-3 | 551+11.18 | 31.2 R | 1211.70 |
| 16-4 | 551+11.20 | 26.2 R | 1211.64 |
| 16-5 | 551+13.76 | 26.2 R | 1211.47 |
| 16-6 | 551+13.18 | 31.2 R | 1211.56 |
| 16-7 | 551+15.00 | 31.2 R | 1211.54 |
| 16-8 | 551+02.27 | 26.1 R | 1211.98 |
| 16-9 | 551+02.26 | 31.1 R | 1212.05 |
| 16-10 | 551+07.17 | 31.2 R | 1211.98 |
| 16-11 | 551+07.19 | 26.2 R | 1211.90 |

2

STH 65/MAPLE ST

29

N

POST

RAY ST

CONCRETE
SIDEWALK 5-INCH

17-7
17-4
17-5
17-1
17-2
17-3
17-6
17-8
17-9

-2.5%
-0.9%
0.5%

CURB RAMP TYPE 4B1
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 17-1 | 551+63.32 | 26.4 R | 1210.60 |
| 17-2 | 551+63.33 | 31.3 R | 1210.72 |
| 17-3 | 551+54.31 | 31.3 R | 1210.68 |
| 17-4 | 551+54.32 | 26.3 R | 1210.54 |
| 17-5 | 551+51.77 | 26.3 R | 1210.46 |
| 17-6 | 551+52.31 | 31.3 R | 1210.65 |
| 17-7 | 551+58.32 | 26.3 R | 1210.67 |
| 17-8 | 551+58.30 | 31.3 R | 1210.75 |
| 17-9 | 551+50.65 | 31.3 R | 1210.64 |

30

N

CONCRETE
SIDEWALK 5-INCH

17-12
17-20
17-19
17-13
17-15
17-14
17-11
17-17
17-18
17-16
17-10
17-21

-7.0%
-1.5%
-7.5%
-1.5%
-1.4%
-5.0%

CURB RAMP TYPE 7A
1 2-FT X 5-FT
DETECTABLE WARNING
FIELD NATURAL PATINA

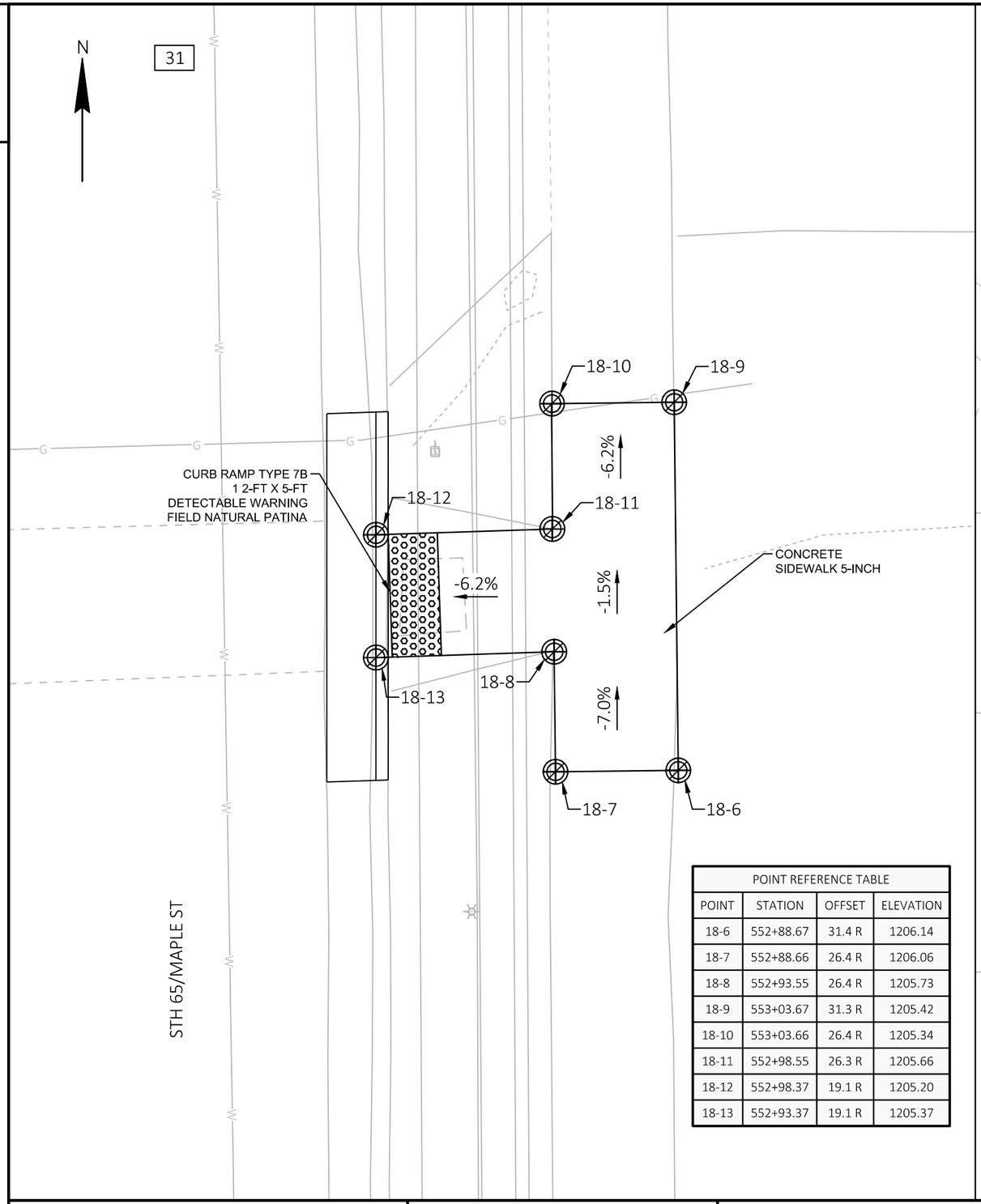
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 17-10 | 552+97.43 | 19.3 L | 1204.80 |
| 17-11 | 552+43.20 | 24.1 L | 1208.46 |
| 17-12 | 552+43.24 | 29.1 L | 1208.53 |
| 17-13 | 552+92.24 | 28.8 L | 1205.26 |
| 17-14 | 552+97.33 | 23.8 L | 1205.11 |
| 17-15 | 552+97.20 | 28.8 L | 1205.19 |
| 17-16 | 552+92.32 | 23.8 L | 1205.18 |
| 17-17 | 552+65.20 | 24.0 L | 1206.92 |
| 17-18 | 552+70.20 | 24.0 L | 1206.84 |
| 17-19 | 552+70.24 | 28.9 L | 1206.91 |
| 17-20 | 552+65.24 | 28.9 L | 1206.99 |
| 17-21 | 552+92.43 | 19.2 L | 1205.05 |

STH 65/MAPLE ST

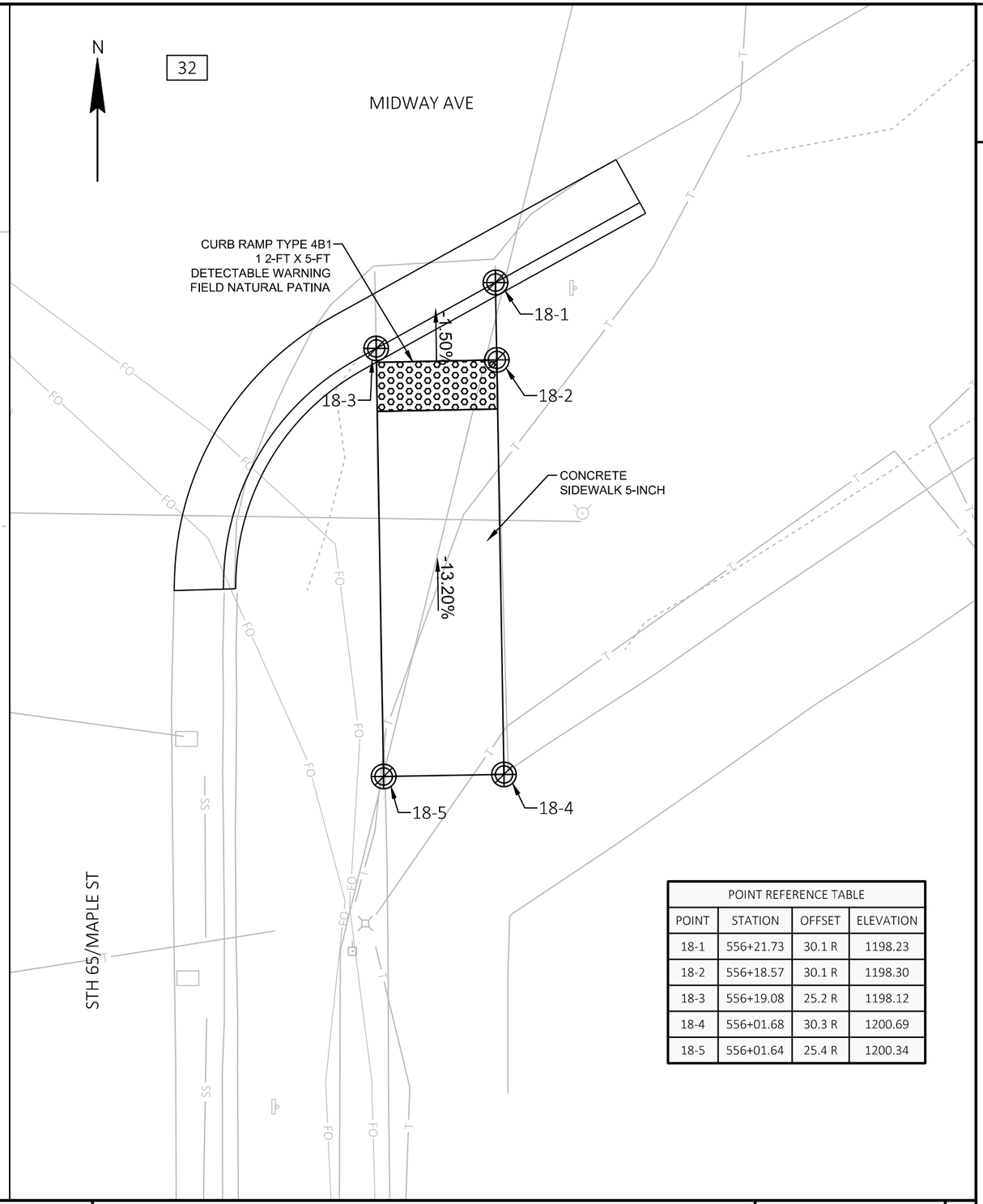
2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 31 | E |
|---|---|---|---|---|---|

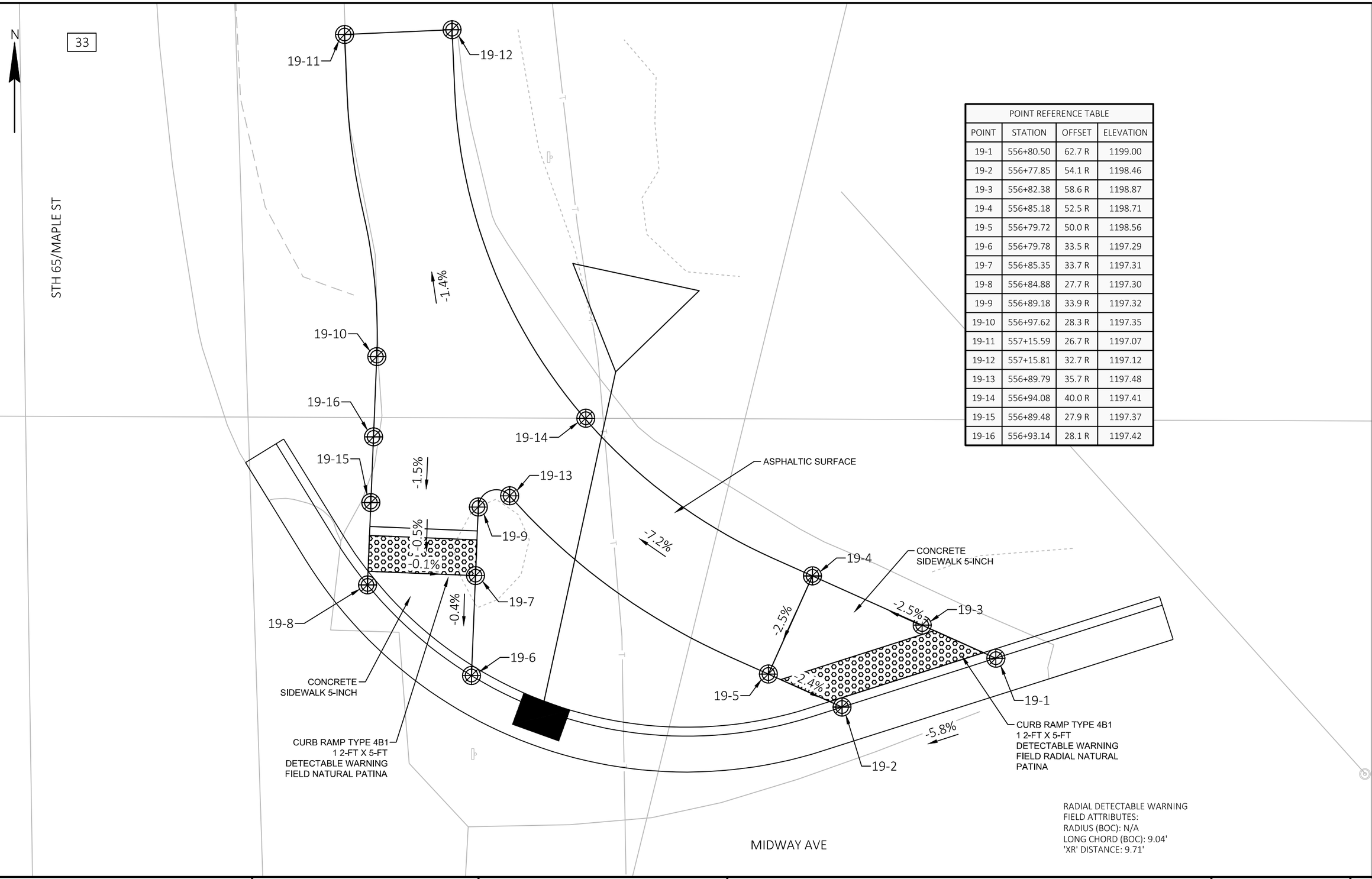
FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021002_CD_CURB RAMPS.DWG
LAYOUT NAME - 17
PLOT DATE : 10/29/2020 3:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 18-6 | 552+88.67 | 31.4 R | 1206.14 |
| 18-7 | 552+88.66 | 26.4 R | 1206.06 |
| 18-8 | 552+93.55 | 26.4 R | 1205.73 |
| 18-9 | 553+03.67 | 31.3 R | 1205.42 |
| 18-10 | 553+03.66 | 26.4 R | 1205.34 |
| 18-11 | 552+98.55 | 26.3 R | 1205.66 |
| 18-12 | 552+98.37 | 19.1 R | 1205.20 |
| 18-13 | 552+93.37 | 19.1 R | 1205.37 |



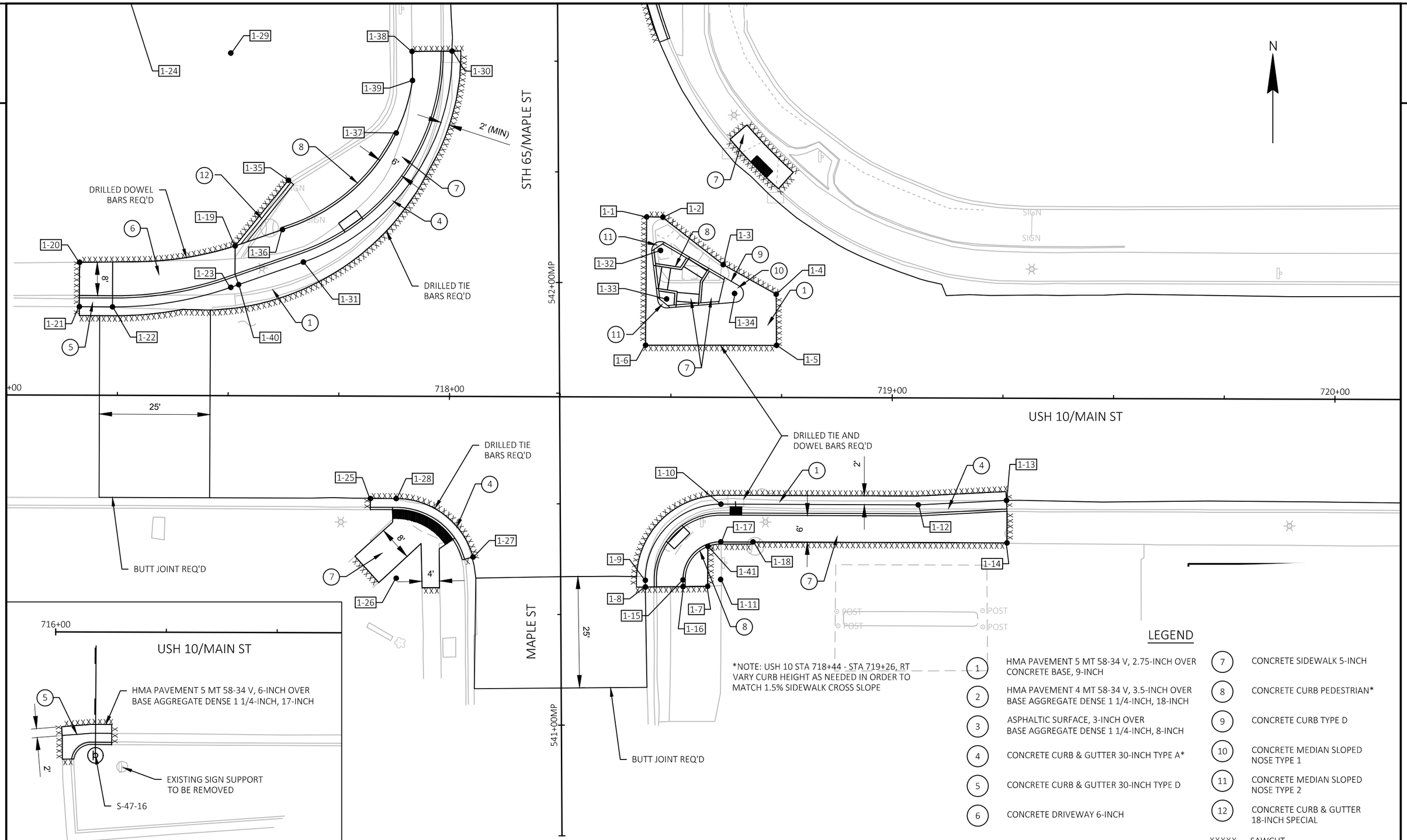

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 18-1 | 556+21.73 | 30.1 R | 1198.23 |
| 18-2 | 556+18.57 | 30.1 R | 1198.30 |
| 18-3 | 556+19.08 | 25.2 R | 1198.12 |
| 18-4 | 556+01.68 | 30.3 R | 1200.69 |
| 18-5 | 556+01.64 | 25.4 R | 1200.34 |




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | ELEVATION |
| 19-1 | 556+80.50 | 62.7 R | 1199.00 |
| 19-2 | 556+77.85 | 54.1 R | 1198.46 |
| 19-3 | 556+82.38 | 58.6 R | 1198.87 |
| 19-4 | 556+85.18 | 52.5 R | 1198.71 |
| 19-5 | 556+79.72 | 50.0 R | 1198.56 |
| 19-6 | 556+79.78 | 33.5 R | 1197.29 |
| 19-7 | 556+85.35 | 33.7 R | 1197.31 |
| 19-8 | 556+84.88 | 27.7 R | 1197.30 |
| 19-9 | 556+89.18 | 33.9 R | 1197.32 |
| 19-10 | 556+97.62 | 28.3 R | 1197.35 |
| 19-11 | 557+15.59 | 26.7 R | 1197.07 |
| 19-12 | 557+15.81 | 32.7 R | 1197.12 |
| 19-13 | 556+89.79 | 35.7 R | 1197.48 |
| 19-14 | 556+94.08 | 40.0 R | 1197.41 |
| 19-15 | 556+89.48 | 27.9 R | 1197.37 |
| 19-16 | 556+93.14 | 28.1 R | 1197.42 |

RADIAL DETECTABLE WARNING
FIELD ATTRIBUTES:
RADIUS (BOC): N/A
LONG CHORD (BOC): 9.04'
'XR' DISTANCE: 9.71'

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS: CURB RAMP DETAILS | SHEET 33 | E |
|---|---|---|---|---|---|




*NOTE: USH 10 STA 718+44 - STA 719+26, RT VARY CURB HEIGHT AS NEEDED IN ORDER TO MATCH 1.5% SIDEWALK CROSS SLOPE

## LEGEND

| | |
|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A* |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D |
| 6 | CONCRETE DRIVEWAY 6-INCH |
| 7 | CONCRETE SIDEWALK 5-INCH |
| 8 | CONCRETE CURB PEDESTRIAN* |
| 9 | CONCRETE CURB TYPE D |
| 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 12 | CONCRETE CURB & GUTTER 18-INCH SPECIAL |
| XXXXX | SAWCUT |

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | LAYOUT DETAILS | SHEET 34 | E |
|---|---|---|---|---|---|

2

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 1-1 | 718+44.41 | 40.7 L | --- |
| 1-2 | 718+48.07 | 40.7 L | --- |
| 1-3 | 718+61.72 | 30.0 L | --- |
| 1-4 | 718+73.71 | 23.3 L | --- |
| 1-5 | 718+73.82 | 11.8 L | --- |
| 1-6 | 718+44.26 | 11.7 L | --- |
| 1-7 | 718+58.45 | 42.7 R | --- |
| 1-8 | 718+44.40 | 42.9 R | BEGIN C&G |
| 1-9 | 718+44.38 | 41.4 R | BEGIN ARC |
| 1-10 | 718+61.38 | 24.2 R | END ARC |
| 1-11 | 718+61.38 | 41.2 R | CENTER 17' RADIUS |
| 1-12 | 719+05.95 | 24.2 R | DEFLECTION |
| 1-13 | 719+25.89 | 23.1 R | END C&G |
| 1-14 | 719+26.03 | 32.7 R | --- |
| 1-15 | 718+52.88 | 41.3 R | BEGIN ARC |
| 1-16 | 718+52.90 | 42.8 R | BEGIN PED CURB |
| 1-17 | 718+61.38 | 32.7 R | END ARC |
| 1-18 | 718+68.66 | 32.7 R | END PED CURB |
| 1-19 | 717+51.47 | 33.8 L | BEGIN C&G |
| 1-20 | 717+16.35 | 30.0 L | --- |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 1-21 | 717+16.32 | 20.0 L | BEGIN C&G |
| 1-22 | 717+23.81 | 20.0 L | BEGIN ARC |
| 1-23 | 717+50.52 | 24.5 L | END ARC |
| 1-24 | 717+24.04 | 100.0 L | CENTER 80' RADIUS |
| 1-25 | 717+82.20 | 23.1 R | BEGIN C&G |
| 1-26 | 717+88.09 | 41.1 R | CENTER 18' RADIUS |
| 1-27 | 718+05.43 | 36.3 R | END ARC |
| 1-28 | 717+88.03 | 23.1 R | BEGIN ARC |
| 1-29 | 717+50.35 | 77.4 L | CENTER 50' RADIUS |
| 1-30 | 718+00.35 | 78.0 L | END ARC |
| 1-31 | 717+66.90 | 30.2 L | BEGIN ARC |
| 1-32 | 718+47.57 | 33.1 L | CENTER 2' RADIUS |
| 1-33 | 718+48.96 | 22.2 L | CENTER 2' RADIUS |
| 1-34 | 718+64.31 | 23.5 L | CENTER 2' RADIUS |
| 1-35 | 717+63.46 | 48.7 L | END C&G |
| 1-36 | 717+62.14 | 37.6 L | BEGIN PED CURB |
| 1-37 | 717+87.78 | 59.5 L | END PED CURB |
| 1-38 | 717+91.30 | 77.9 L | --- |
| 1-39 | 717+91.41 | 71.3 L | --- |
| 1-40 | 717+52.29 | 25.1 L | BEGIN DRIVEWAY |

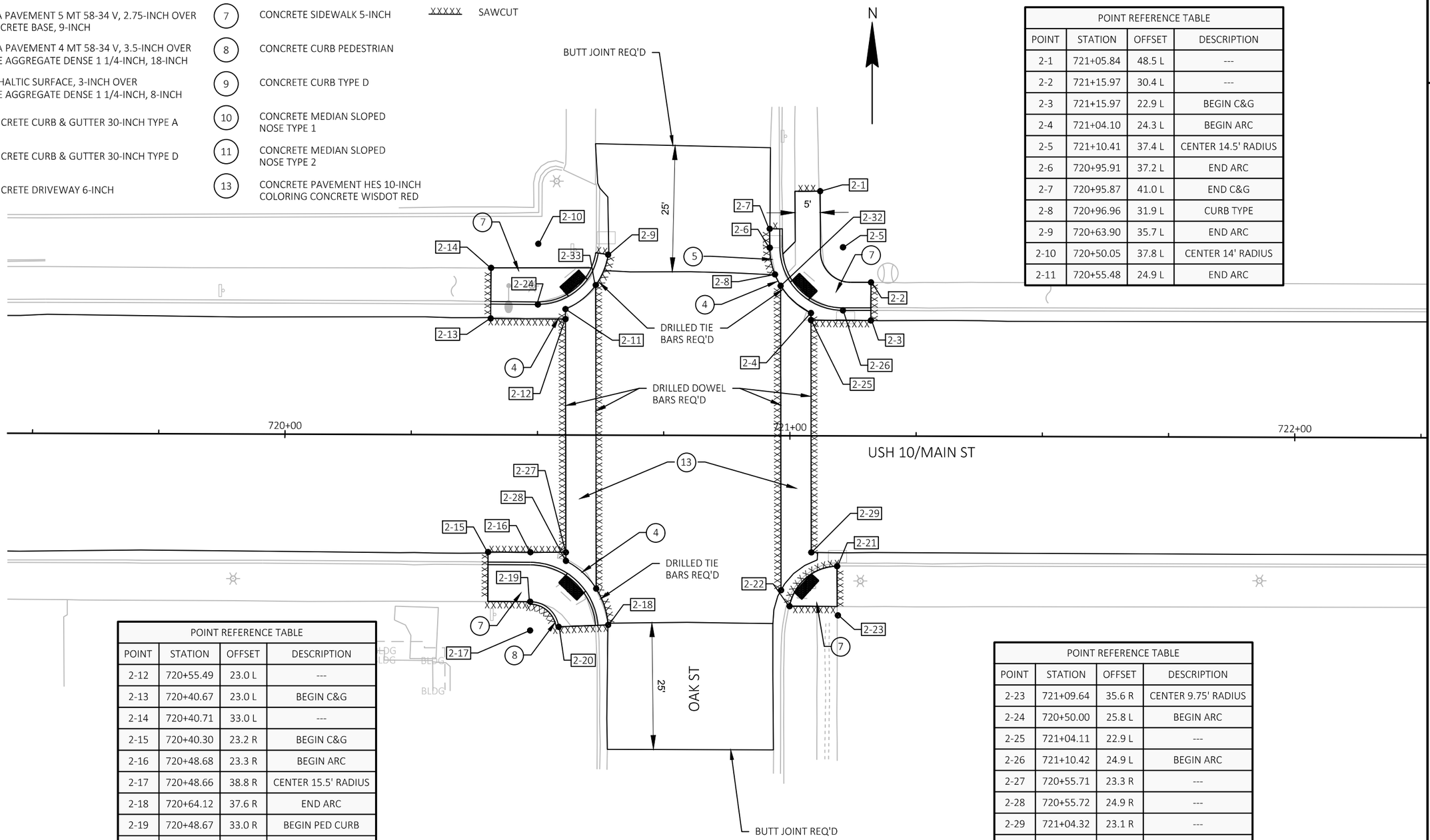
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 1-41 | 718+58.48 | 33.7 R | --- |

2

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | 13 | CONCRETE PAVEMENT HES 10-INCH COLORING CONCRETE WISDOT RED |

XXXXX SAWCUT




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 2-1 | 721+05.84 | 48.5 L | --- |
| 2-2 | 721+15.97 | 30.4 L | --- |
| 2-3 | 721+15.97 | 22.9 L | BEGIN C&G |
| 2-4 | 721+04.10 | 24.3 L | BEGIN ARC |
| 2-5 | 721+10.41 | 37.4 L | CENTER 14.5' RADIUS |
| 2-6 | 720+95.91 | 37.2 L | END ARC |
| 2-7 | 720+95.87 | 41.0 L | END C&G |
| 2-8 | 720+96.96 | 31.9 L | CURB TYPE |
| 2-9 | 720+63.90 | 35.7 L | END ARC |
| 2-10 | 720+50.05 | 37.8 L | CENTER 14' RADIUS |
| 2-11 | 720+55.48 | 24.9 L | END ARC |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 2-12 | 720+55.49 | 23.0 L | --- |
| 2-13 | 720+40.67 | 23.0 L | BEGIN C&G |
| 2-14 | 720+40.71 | 33.0 L | --- |
| 2-15 | 720+40.30 | 23.2 R | BEGIN C&G |
| 2-16 | 720+48.68 | 23.3 R | BEGIN ARC |
| 2-17 | 720+48.66 | 38.8 R | CENTER 15.5' RADIUS |
| 2-18 | 720+64.12 | 37.6 R | END ARC |
| 2-19 | 720+48.67 | 33.0 R | BEGIN PED CURB |
| 2-20 | 720+54.32 | 38.0 R | END PED CURB |
| 2-21 | 721+09.44 | 25.8 R | END ARC |
| 2-22 | 721+00.05 | 33.8 R | BEGIN ARC |

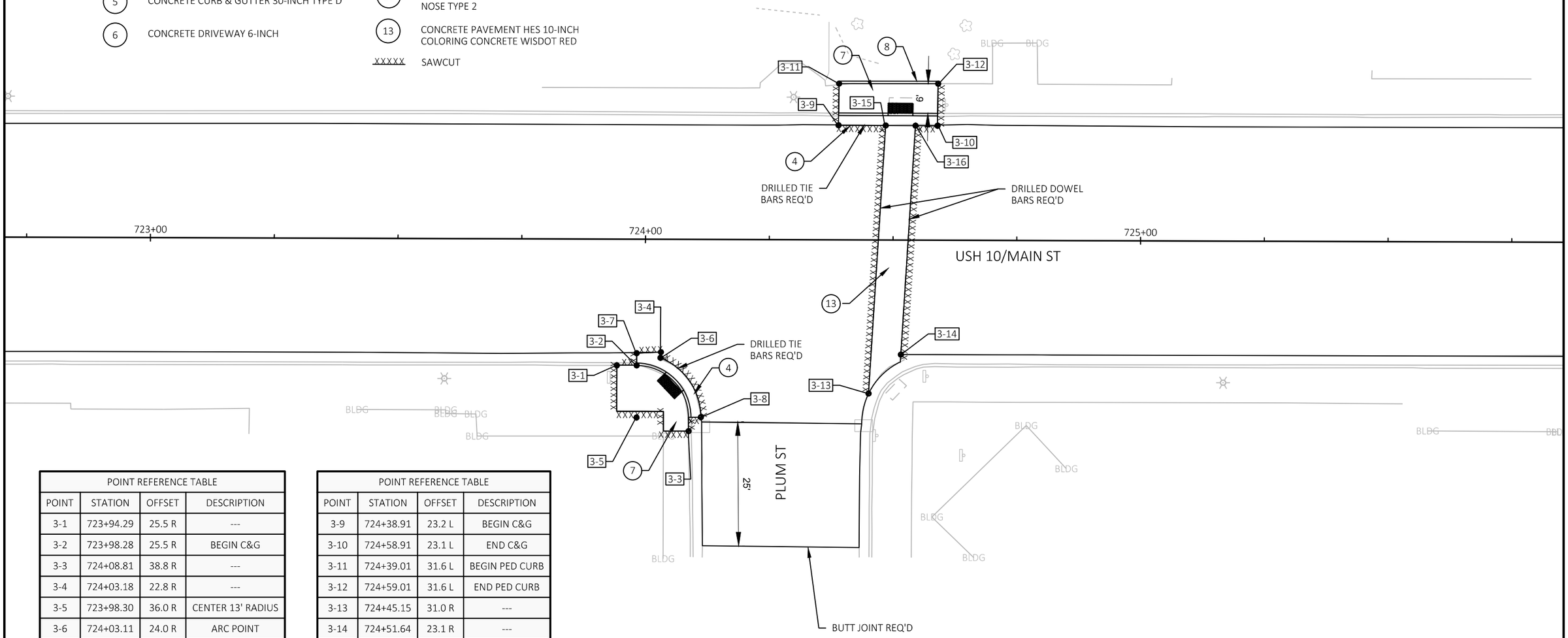
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 2-23 | 721+09.64 | 35.6 R | CENTER 9.75' RADIUS |
| 2-24 | 720+50.00 | 25.8 L | BEGIN ARC |
| 2-25 | 721+04.11 | 22.9 L | --- |
| 2-26 | 721+10.42 | 24.9 L | BEGIN ARC |
| 2-27 | 720+55.71 | 23.3 R | --- |
| 2-28 | 720+55.72 | 24.9 R | --- |
| 2-29 | 721+04.32 | 23.1 R | --- |
| 2-30 | 720+98.36 | 30.6 R | --- |
| 2-31 | 720+61.74 | 30.4 R | --- |
| 2-32 | 720+98.07 | 29.7 L | --- |
| 2-33 | 720+61.46 | 29.7 L | --- |

2

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | 13 | CONCRETE PAVEMENT HES 10-INCH COLORING CONCRETE WISDOT RED |
| | | XXXXX | SAWCUT |

N



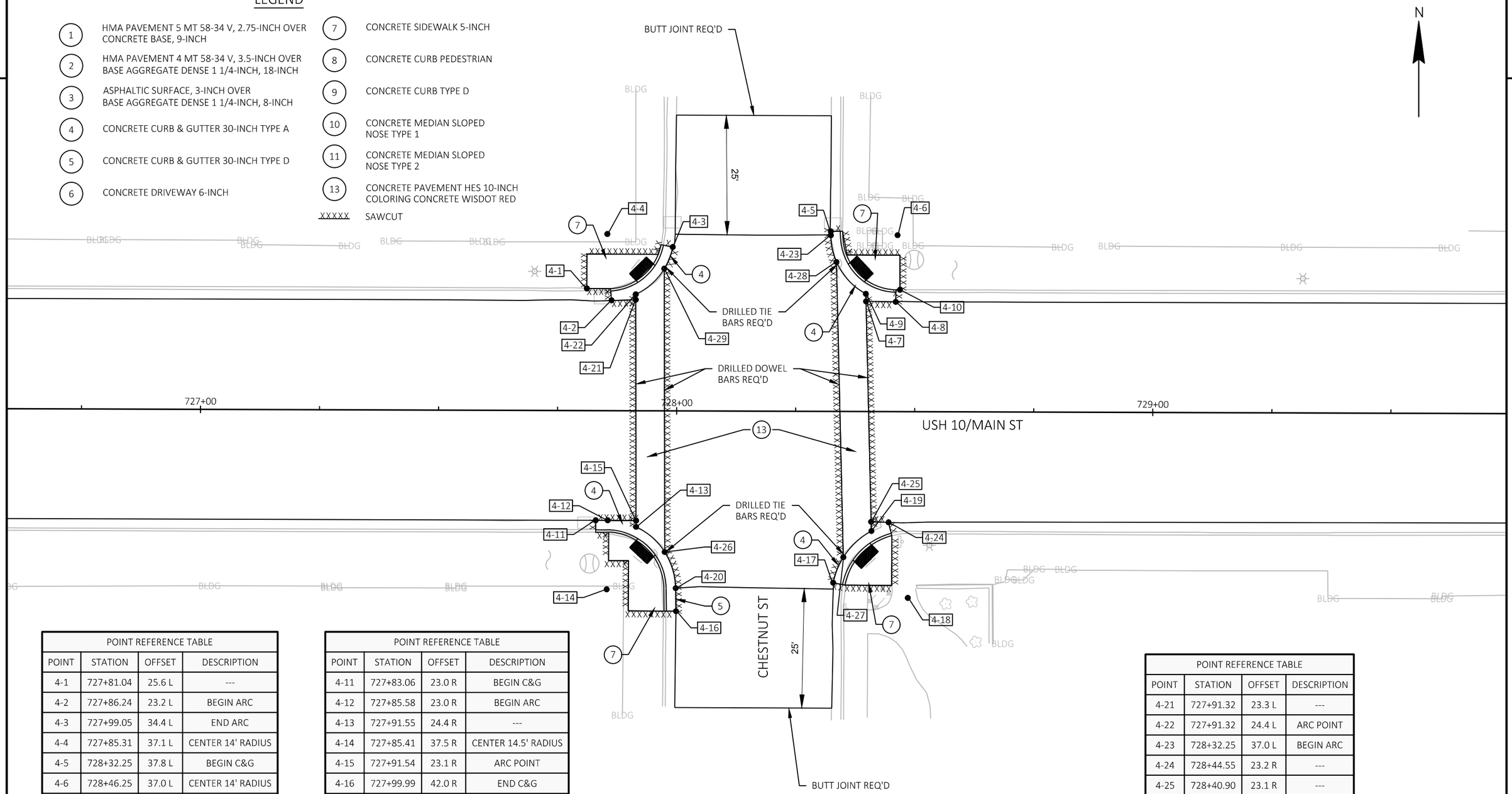

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 3-1 | 723+94.29 | 25.5 R | --- |
| 3-2 | 723+98.28 | 25.5 R | BEGIN C&G |
| 3-3 | 724+08.81 | 38.8 R | --- |
| 3-4 | 724+03.18 | 22.8 R | --- |
| 3-5 | 723+98.30 | 36.0 R | CENTER 13' RADIUS |
| 3-6 | 724+03.11 | 24.0 R | ARC POINT |
| 3-7 | 723+98.28 | 23.0 R | BEGIN ARC |
| 3-8 | 724+11.29 | 35.9 R | END C&G |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 3-9 | 724+38.91 | 23.2 L | BEGIN C&G |
| 3-10 | 724+58.91 | 23.1 L | END C&G |
| 3-11 | 724+39.01 | 31.6 L | BEGIN PED CURB |
| 3-12 | 724+59.01 | 31.6 L | END PED CURB |
| 3-13 | 724+45.15 | 31.0 R | --- |
| 3-14 | 724+51.64 | 23.1 R | --- |
| 3-15 | 724+48.45 | 23.1 L | --- |
| 3-16 | 724+54.46 | 23.1 L | --- |

2

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | 13 | CONCRETE PAVEMENT HES 10-INCH COLORING CONCRETE WISDOT RED |
| | | XXXXX | SAWCUT |

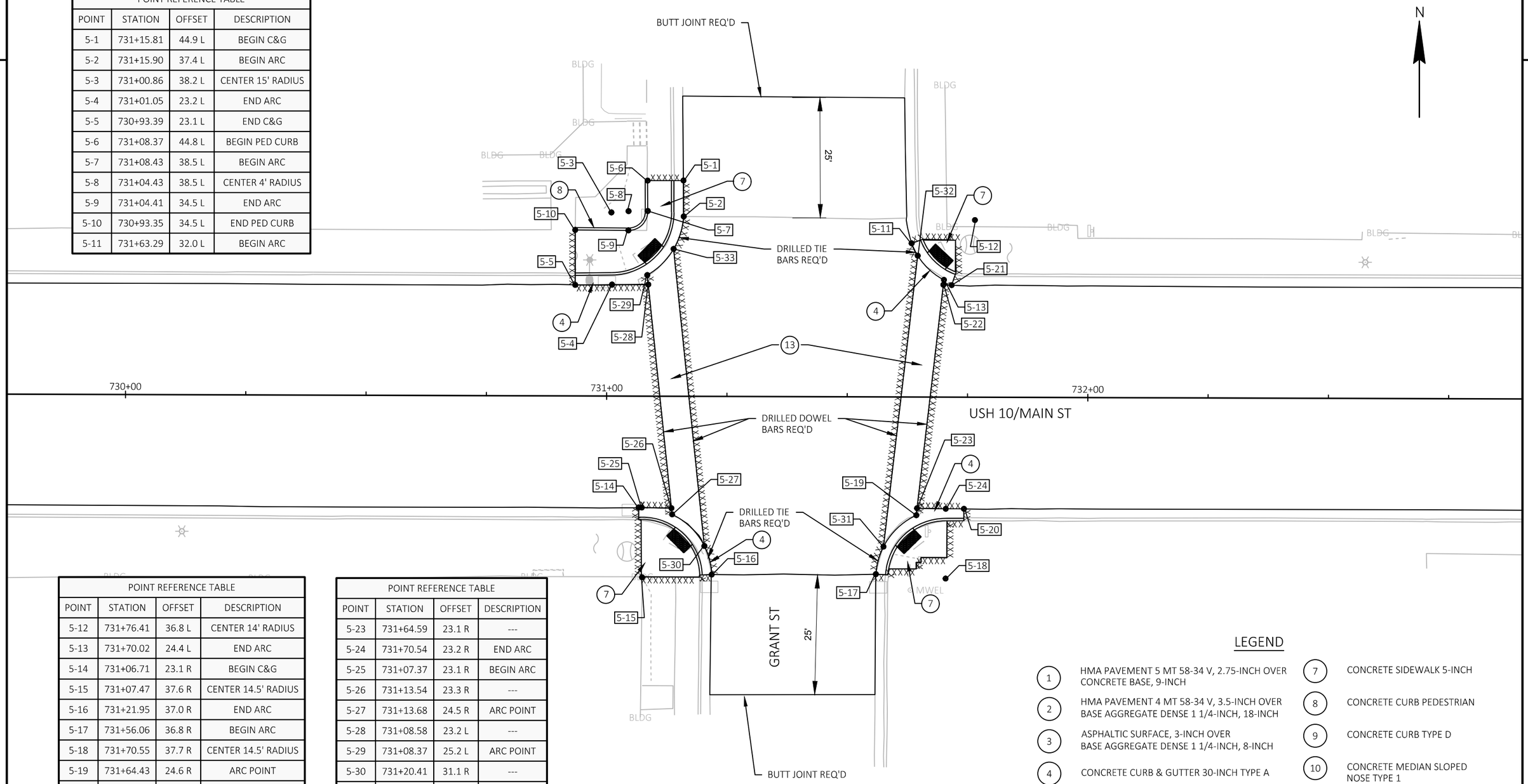



| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 4-1 | 727+81.04 | 25.6 L | --- |
| 4-2 | 727+86.24 | 23.2 L | BEGIN ARC |
| 4-3 | 727+99.05 | 34.4 L | END ARC |
| 4-4 | 727+85.31 | 37.1 L | CENTER 14' RADIUS |
| 4-5 | 728+32.25 | 37.8 L | BEGIN C&G |
| 4-6 | 728+46.25 | 37.0 L | CENTER 14' RADIUS |
| 4-7 | 728+39.68 | 23.1 L | --- |
| 4-8 | 728+45.92 | 23.0 L | END ARC |
| 4-9 | 728+39.64 | 24.7 L | ARC POINT |
| 4-10 | 728+46.79 | 25.6 L | --- |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 4-11 | 727+83.06 | 23.0 R | BEGIN C&G |
| 4-12 | 727+85.58 | 23.0 R | BEGIN ARC |
| 4-13 | 727+91.55 | 24.4 R | --- |
| 4-14 | 727+85.41 | 37.5 R | CENTER 14.5' RADIUS |
| 4-15 | 727+91.54 | 23.1 R | ARC POINT |
| 4-16 | 727+99.99 | 42.0 R | END C&G |
| 4-17 | 728+32.96 | 36.0 R | BEGIN ARC |
| 4-18 | 728+48.65 | 39.1 R | CENTER 16' RADIUS |
| 4-19 | 728+40.95 | 25.1 R | END ARC |
| 4-20 | 727+99.91 | 37.2 R | CURB TYPE |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 4-21 | 727+91.32 | 23.3 L | --- |
| 4-22 | 727+91.32 | 24.4 L | ARC POINT |
| 4-23 | 728+32.25 | 37.0 L | BEGIN ARC |
| 4-24 | 728+44.55 | 23.2 R | --- |
| 4-25 | 728+40.90 | 23.1 R | --- |
| 4-26 | 727+97.56 | 29.6 R | --- |
| 4-27 | 728+35.09 | 30.6 R | --- |
| 4-28 | 728+33.45 | 31.3 L | --- |
| 4-29 | 727+97.28 | 29.9 L | --- |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 5-1 | 731+15.81 | 44.9 L | BEGIN C&G |
| 5-2 | 731+15.90 | 37.4 L | BEGIN ARC |
| 5-3 | 731+00.86 | 38.2 L | CENTER 15' RADIUS |
| 5-4 | 731+01.05 | 23.2 L | END ARC |
| 5-5 | 730+93.39 | 23.1 L | END C&G |
| 5-6 | 731+08.37 | 44.8 L | BEGIN PED CURB |
| 5-7 | 731+08.43 | 38.5 L | BEGIN ARC |
| 5-8 | 731+04.43 | 38.5 L | CENTER 4' RADIUS |
| 5-9 | 731+04.41 | 34.5 L | END ARC |
| 5-10 | 730+93.35 | 34.5 L | END PED CURB |
| 5-11 | 731+63.29 | 32.0 L | BEGIN ARC |




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 5-12 | 731+76.41 | 36.8 L | CENTER 14' RADIUS |
| 5-13 | 731+70.02 | 24.4 L | END ARC |
| 5-14 | 731+06.71 | 23.1 R | BEGIN C&G |
| 5-15 | 731+07.47 | 37.6 R | CENTER 14.5' RADIUS |
| 5-16 | 731+21.95 | 37.0 R | END ARC |
| 5-17 | 731+56.06 | 36.8 R | BEGIN ARC |
| 5-18 | 731+70.55 | 37.7 R | CENTER 14.5' RADIUS |
| 5-19 | 731+64.43 | 24.6 R | ARC POINT |
| 5-20 | 731+74.32 | 23.2 R | END C&G |
| 5-21 | 731+71.63 | 23.3 L | --- |
| 5-22 | 731+69.91 | 23.4 L | --- |

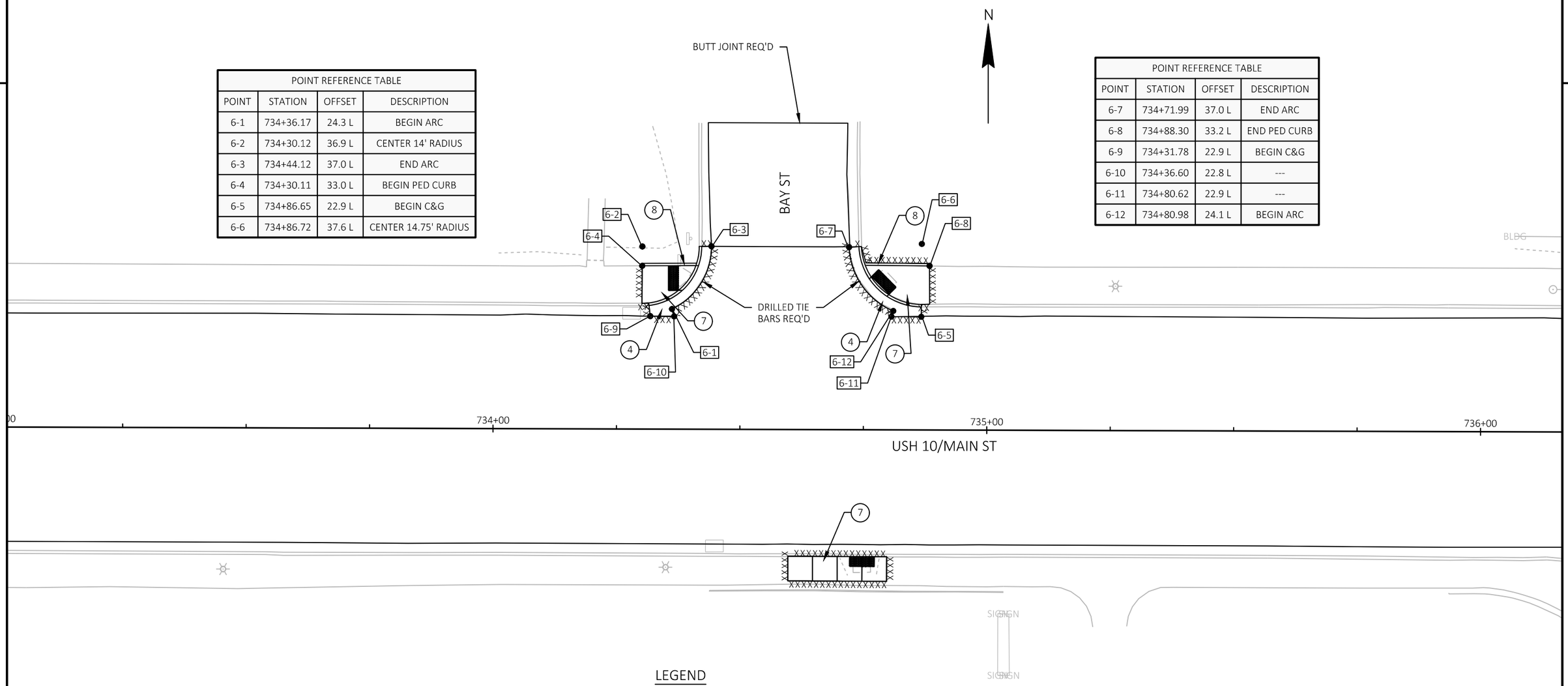
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 5-23 | 731+64.59 | 23.1 R | --- |
| 5-24 | 731+70.54 | 23.2 R | END ARC |
| 5-25 | 731+07.37 | 23.1 R | BEGIN ARC |
| 5-26 | 731+13.54 | 23.3 R | --- |
| 5-27 | 731+13.68 | 24.5 R | ARC POINT |
| 5-28 | 731+08.58 | 23.2 L | --- |
| 5-29 | 731+08.37 | 25.2 L | ARC POINT |
| 5-30 | 731+20.41 | 31.1 R | --- |
| 5-31 | 731+57.63 | 31.1 R | --- |
| 5-32 | 731+64.56 | 29.4 L | --- |
| 5-33 | 731+13.82 | 30.6 L | --- |

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | 13 | CONCRETE PAVEMENT HES 10-INCH COLORING CONCRETE WISDOT RED |
| | | XXXXX | SAWCUT |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 6-1 | 734+36.17 | 24.3 L | BEGIN ARC |
| 6-2 | 734+30.12 | 36.9 L | CENTER 14' RADIUS |
| 6-3 | 734+44.12 | 37.0 L | END ARC |
| 6-4 | 734+30.11 | 33.0 L | BEGIN PED CURB |
| 6-5 | 734+86.65 | 22.9 L | BEGIN C&G |
| 6-6 | 734+86.72 | 37.6 L | CENTER 14.75' RADIUS |

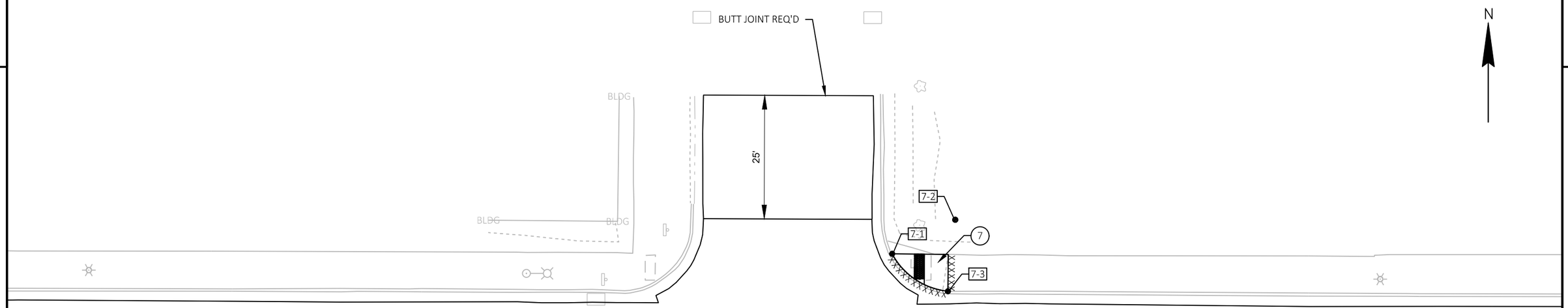
| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 6-7 | 734+71.99 | 37.0 L | END ARC |
| 6-8 | 734+88.30 | 33.2 L | END PED CURB |
| 6-9 | 734+31.78 | 22.9 L | BEGIN C&G |
| 6-10 | 734+36.60 | 22.8 L | --- |
| 6-11 | 734+80.62 | 22.9 L | --- |
| 6-12 | 734+80.98 | 24.1 L | BEGIN ARC |

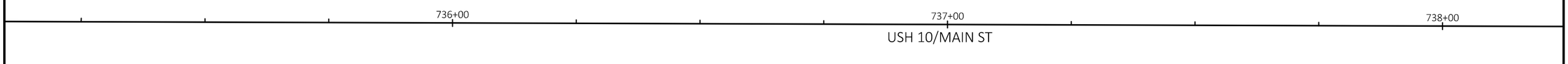


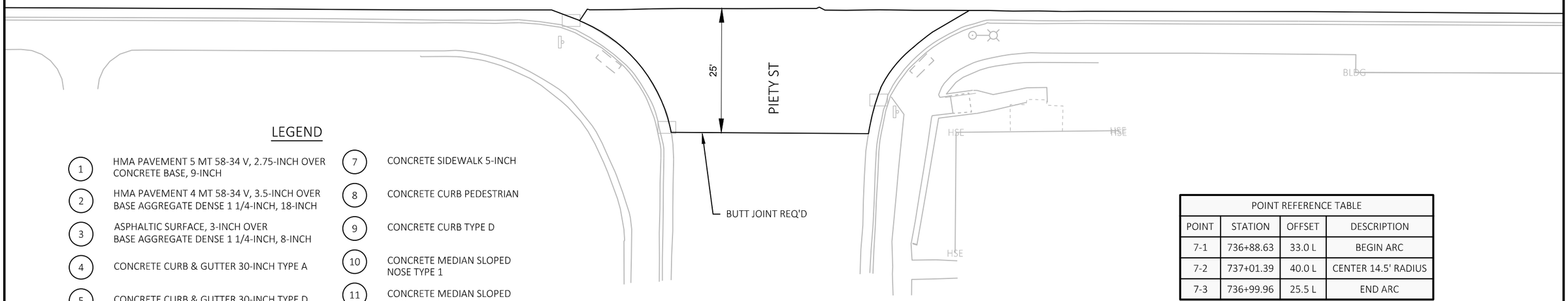

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | XXXXX | SAWCUT |

2



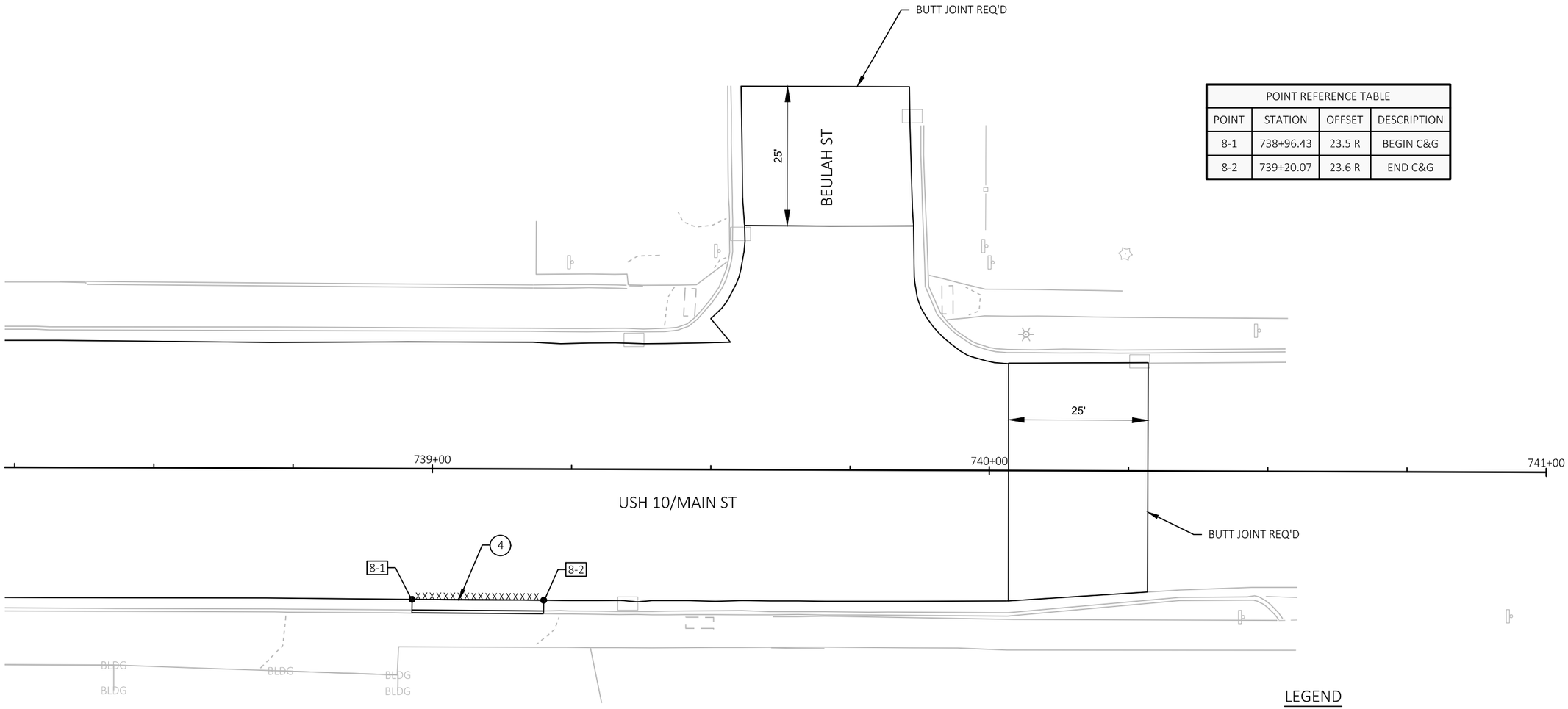

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | XXXXX | SAWCUT |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 7-1 | 736+88.63 | 33.0 L | BEGIN ARC |
| 7-2 | 737+01.39 | 40.0 L | CENTER 14.5' RADIUS |
| 7-3 | 736+99.96 | 25.5 L | END ARC |

2

N




| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 8-1 | 738+96.43 | 23.5 R | BEGIN C&G |
| 8-2 | 739+20.07 | 23.6 R | END C&G |

## LEGEND

1. HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH
2. HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH
3. ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH
4. CONCRETE CURB & GUTTER 30-INCH TYPE A
5. CONCRETE CURB & GUTTER 30-INCH TYPE D
6. CONCRETE DRIVEWAY 6-INCH
7. CONCRETE SIDEWALK 5-INCH
8. CONCRETE CURB PEDESTRIAN
9. CONCRETE CURB TYPE D
10. CONCRETE MEDIAN SLOPED NOSE TYPE 1
11. CONCRETE MEDIAN SLOPED NOSE TYPE 2

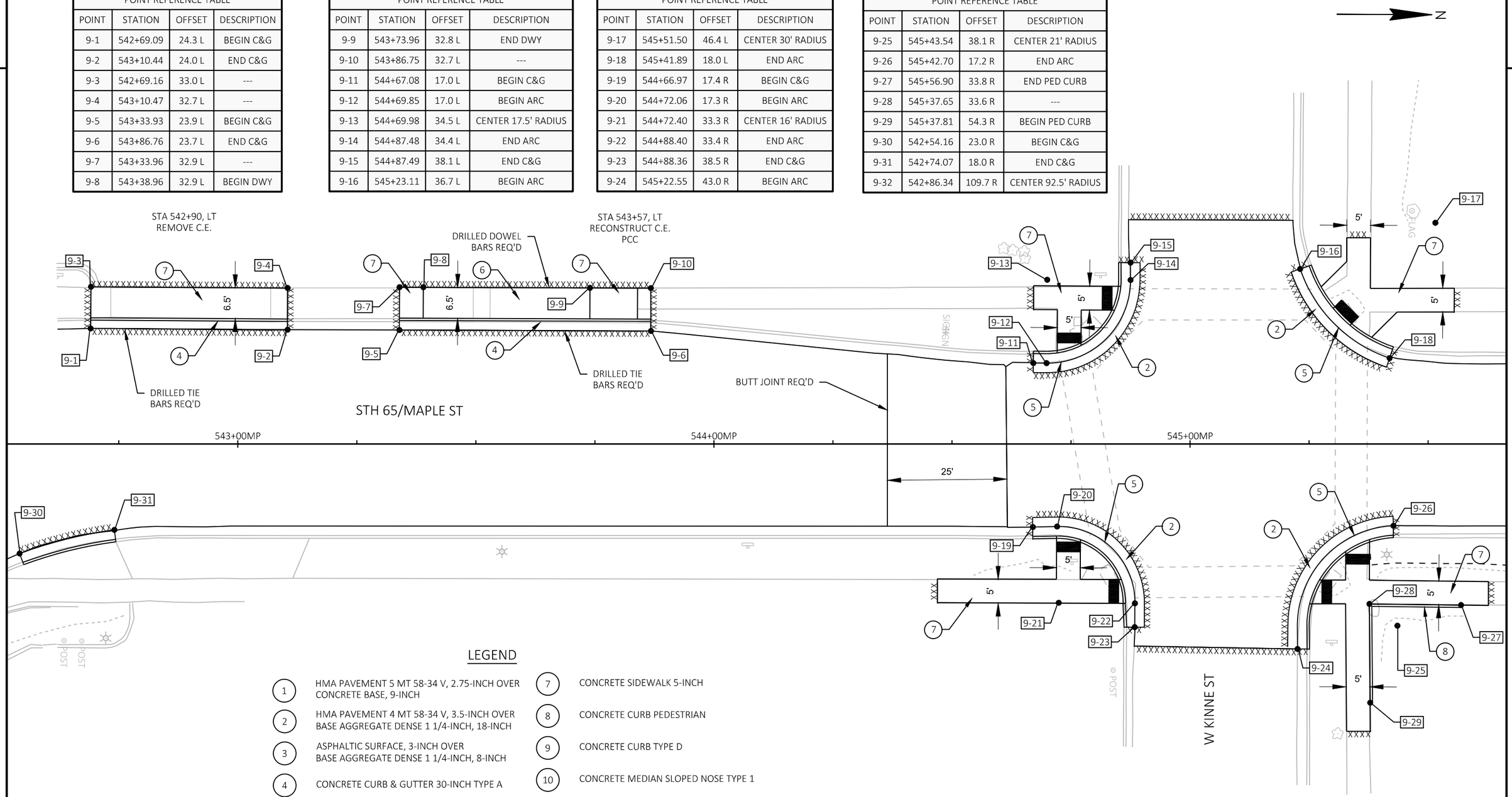
XXXXX SAWCUT

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 9-1 | 542+69.09 | 24.3 L | BEGIN C&G |
| 9-2 | 543+10.44 | 24.0 L | END C&G |
| 9-3 | 542+69.16 | 33.0 L | --- |
| 9-4 | 543+10.47 | 32.7 L | --- |
| 9-5 | 543+33.93 | 23.9 L | BEGIN C&G |
| 9-6 | 543+86.76 | 23.7 L | END C&G |
| 9-7 | 543+33.96 | 32.9 L | --- |
| 9-8 | 543+38.96 | 32.9 L | BEGIN DWY |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 9-9 | 543+73.96 | 32.8 L | END DWY |
| 9-10 | 543+86.75 | 32.7 L | --- |
| 9-11 | 544+67.08 | 17.0 L | BEGIN C&G |
| 9-12 | 544+69.85 | 17.0 L | BEGIN ARC |
| 9-13 | 544+69.98 | 34.5 L | CENTER 17.5' RADIUS |
| 9-14 | 544+87.48 | 34.4 L | END ARC |
| 9-15 | 544+87.49 | 38.1 L | END C&G |
| 9-16 | 545+23.11 | 36.7 L | BEGIN ARC |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 9-17 | 545+51.50 | 46.4 L | CENTER 30' RADIUS |
| 9-18 | 545+41.89 | 18.0 L | END ARC |
| 9-19 | 544+66.97 | 17.4 R | BEGIN C&G |
| 9-20 | 544+72.06 | 17.3 R | BEGIN ARC |
| 9-21 | 544+72.40 | 33.3 R | CENTER 16' RADIUS |
| 9-22 | 544+88.40 | 33.4 R | END ARC |
| 9-23 | 544+88.36 | 38.5 R | END C&G |
| 9-24 | 545+22.55 | 43.0 R | BEGIN ARC |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 9-25 | 545+43.54 | 38.1 R | CENTER 21' RADIUS |
| 9-26 | 545+42.70 | 17.2 R | END ARC |
| 9-27 | 545+56.90 | 33.8 R | END PED CURB |
| 9-28 | 545+37.65 | 33.6 R | --- |
| 9-29 | 545+37.81 | 54.3 R | BEGIN PED CURB |
| 9-30 | 542+54.16 | 23.0 R | BEGIN C&G |
| 9-31 | 542+74.07 | 18.0 R | END C&G |
| 9-32 | 542+86.34 | 109.7 R | CENTER 92.5' RADIUS |



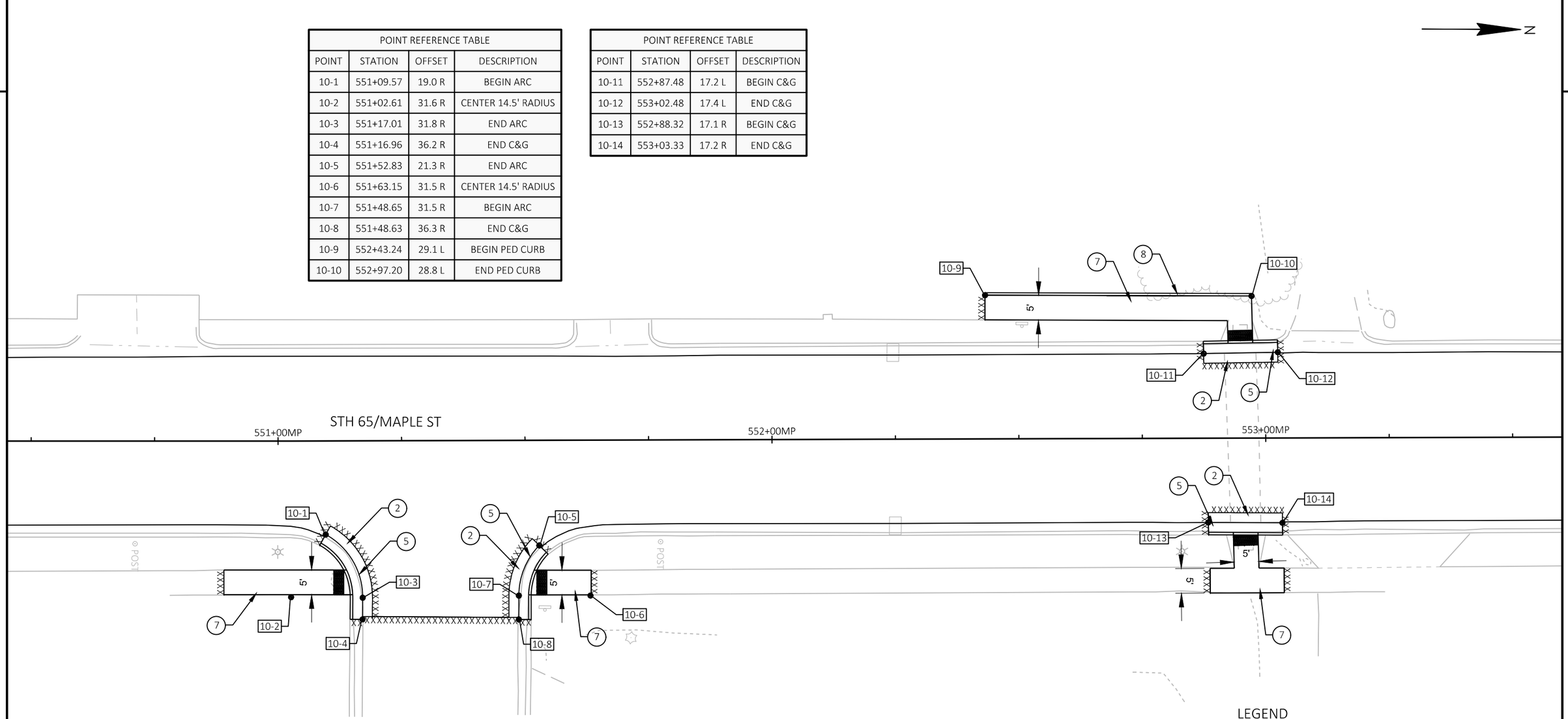

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | XXXXX | SAWCUT |

| PROJECT NO: 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | LAYOUT DETAILS | SHEET 43 | E |
|---|---|---|---|---|---|

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 10-1 | 551+09.57 | 19.0 R | BEGIN ARC |
| 10-2 | 551+02.61 | 31.6 R | CENTER 14.5' RADIUS |
| 10-3 | 551+17.01 | 31.8 R | END ARC |
| 10-4 | 551+16.96 | 36.2 R | END C&G |
| 10-5 | 551+52.83 | 21.3 R | END ARC |
| 10-6 | 551+63.15 | 31.5 R | CENTER 14.5' RADIUS |
| 10-7 | 551+48.65 | 31.5 R | BEGIN ARC |
| 10-8 | 551+48.63 | 36.3 R | END C&G |
| 10-9 | 552+43.24 | 29.1 L | BEGIN PED CURB |
| 10-10 | 552+97.20 | 28.8 L | END PED CURB |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 10-11 | 552+87.48 | 17.2 L | BEGIN C&G |
| 10-12 | 553+02.48 | 17.4 L | END C&G |
| 10-13 | 552+88.32 | 17.1 R | BEGIN C&G |
| 10-14 | 553+03.33 | 17.2 R | END C&G |



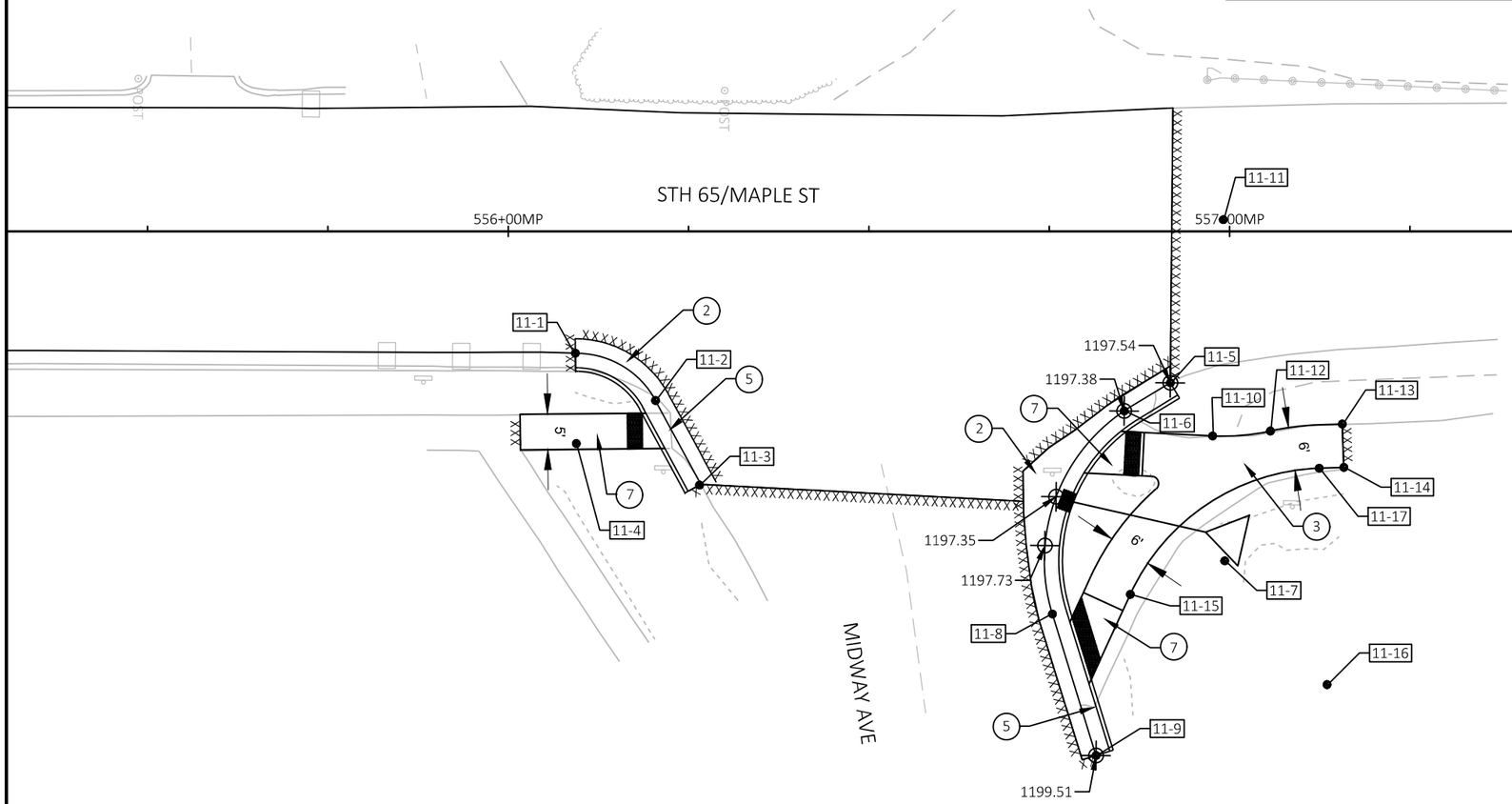

## LEGEND

| | | | |
|---|---|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH | 7 | CONCRETE SIDEWALK 5-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH | 8 | CONCRETE CURB PEDESTRIAN |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH | 9 | CONCRETE CURB TYPE D |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A | 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D | 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| 6 | CONCRETE DRIVEWAY 6-INCH | XXXXX | SAWCUT |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 11-1 | 556+09.29 | 16.9 R | BEGIN ARC |
| 11-2 | 556+20.40 | 23.4 R | END ARC |
| 11-3 | 556+26.51 | 35.1 R | END C&G |
| 11-4 | 556+09.41 | 29.4 R | CENTER 12.5' RADIUS |
| 11-5 | 556+91.77 | 21.0 R | BEGIN C&G |
| 11-6 | 556+85.36 | 24.9 R | BEGIN ARC |
| 11-7 | 556+99.30 | 45.6 R | CENTER 25' RADIUS |
| 11-8 | 556+75.41 | 53.0 R | END ARC |
| 11-9 | 556+81.47 | 72.6 R | END C&G |
| 11-10 | 556+97.62 | 28.3 R | BEGIN ARC |

| POINT REFERENCE TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | DESCRIPTION |
| 11-11 | 556+99.10 | 1.6 L | CENTER 30' RADIUS |
| 11-12 | 557+05.63 | 27.7 R | END ARC |
| 11-13 | 557+15.59 | 26.7 R | MATCH |
| 11-14 | 557+15.81 | 32.7 R | MATCH |
| 11-15 | 556+86.21 | 50.3 R | BEGIN ARC |
| 11-16 | 557+13.48 | 62.8 R | CENTER 30' RADIUS |
| 11-17 | 557+12.39 | 32.8 R | END ARC |

N




## LEGEND

| | |
|---|---|
| 1 | HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH |
| 2 | HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH |
| 3 | ASPHALTIC SURFACE, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH |
| 4 | CONCRETE CURB & GUTTER 30-INCH TYPE A |
| 5 | CONCRETE CURB & GUTTER 30-INCH TYPE D |
| 6 | CONCRETE DRIVEWAY 6-INCH |
| 7 | CONCRETE SIDEWALK 5-INCH |
| 8 | CONCRETE CURB PEDESTRIAN |
| 9 | CONCRETE CURB TYPE D |
| 10 | CONCRETE MEDIAN SLOPED NOSE TYPE 1 |
| 11 | CONCRETE MEDIAN SLOPED NOSE TYPE 2 |
| XXXXX | SAWCUT |

2

2

N

P.L.

TLE

PRW

R/W

BP: 716+00.00

STH 65

TLE

R/W

TLE

720

USH 10

1.0 STA 718+65, 23.6' RT
CONCRETE COLLAR
REMOVE EXISTING INLET

TLE

R/W

TLE

TLE

PRW

TLE

PIPE UNDERDRAIN 6-INCH REQ'D
CONNECT TO EXSITING UNDERDRAIN

PIPE UNDERDRAIN 6-INCH REQ'D
CONNECT TO INLET 1.1

1.1 STA 718+65, 25.7' RT
INLETS 2x2-FT - TYPE A

PRW

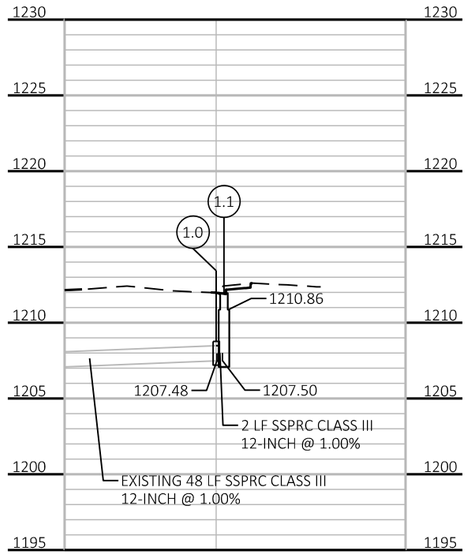
MAPLE ST

P.L.

OAK ST

P.L.

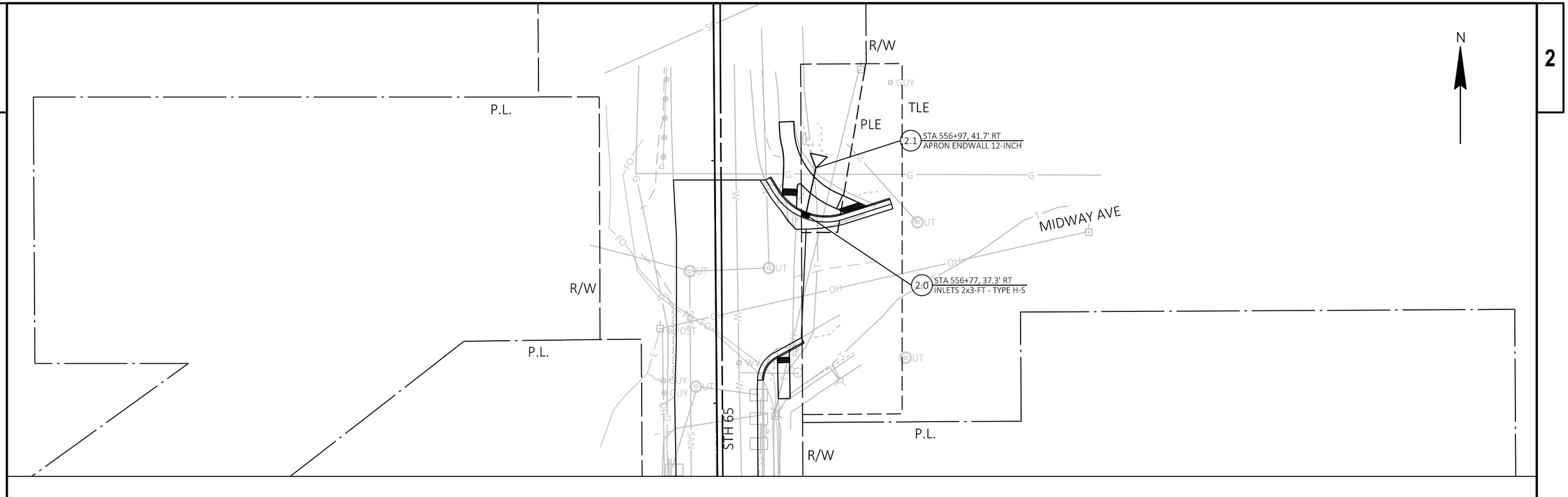
1.0 - 1.1



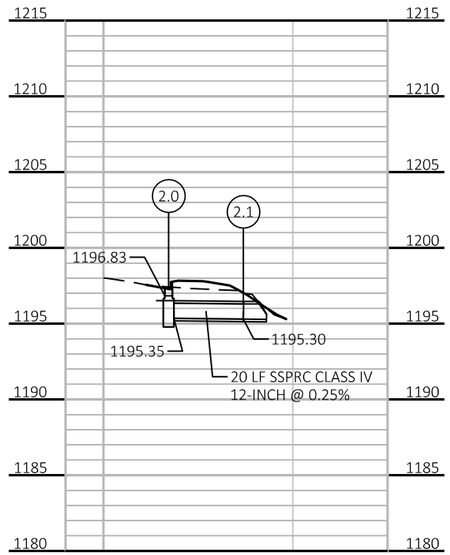

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | STORM SEWER | SHEET 46 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - SS 1 IN 40 FT

PLOT DATE : 10/15/2020 4:43 PM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT




2.0 - 2.1




| PROJECT NO: 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | STORM SEWER | SHEET 47 | E |
|---|---|---|---|---|---|

2

LEGEND

- REMOVE/ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- REMOVE LIGHTING UNIT
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- REMOVE PULL BOX
- EXISTING PULL BOX TO REMAIN

N

STH 65 / MAPLE ST

USH 10 / MAIN ST

S OAK ST

544+00MP

543+00MP

542+00MP

541+00MP

717+00

718+00

719+00

720+00

721+00

722+00

EXSL100

EXPB100

EXSL102

EXSL103

EXPB103

EXSL105

EXSL107

EXPB104

EXCB100

EXSL101

EXPB101

EXPB102

EXSL104

EXSL106

EXSL108

EXSL109

MATCH LINE STA. 722+50

| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN - REMOVALS | SHEET 48 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023401_LR.DWG
LAYOUT NAME - USH 10 - MAPLE ST

PLOT DATE : 12/23/2020 1:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

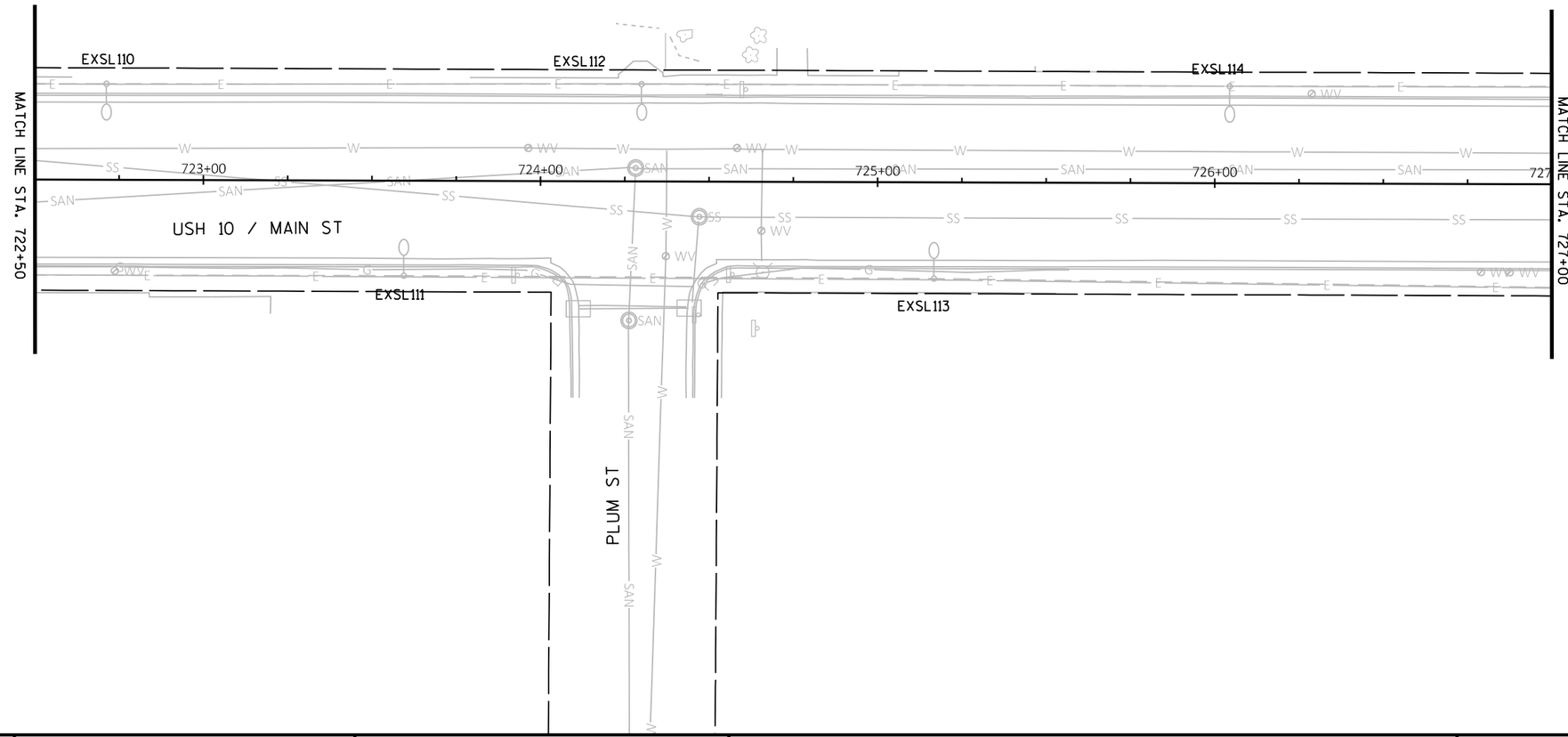
2

2

LEGEND

- REMOVE/ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- REMOVE LIGHTING UNIT
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- REMOVE PULL BOX
- EXISTING PULL BOX TO REMAIN

N




| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN - REMOVALS | SHEET 49 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023401_LR.DWG
LAYOUT NAME - USH 10 - MAPLE ST (2)

PLOT DATE : 12/23/2020 1:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- REMOVE/ABANDON CONDUIT
- EXISTING CONDUIT TO REMAIN
- REMOVE LIGHTING UNIT
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- REMOVE PULL BOX
- EXISTING PULL BOX TO REMAIN

N

2

MATCH LINE STA. 727+00

CHESTNUT ST

GRANT ST

USH 10 / MAIN ST

EXSL115 EXPB106 EXSL117 EXSL119 EXPB108 EXSL120

EXSL116 EXSL118 EXPB105 EXPB107

728+00 729+00 730+00 731+00 732+00 733+00

| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN - REMOVALS | SHEET 50 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023401_LR.DWG
LAYOUT NAME - USH 10 - MAPLE ST (3)

PLOT DATE : 12/23/2020 1:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- SALVAGED LIGHTING UNIT
- EXISTING LIGHTING UNIT
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- PULL BOX STEEL (24"X42")
- EXISTING PULL BOX
- CONNECT TO EXISTING CONDUIT
- NONMETALLIC CONDUIT 2-INCH, UNLESS OTHERWISE NOTED

N

STH 65 / MAPLE ST

544+00MP

543+00MP

542+00MP

541+00MP

USH 10 / MAIN ST

S OAK ST

717+00

718+00

719+00

720+00

721+00

722+00

MATCH LINE STA. 722+50

R/W (TYP.)

STA 717+59 - 37.9' LT
PB100

EXCB100

EXSL101

EXSL102

EXSL103

EXPB103

EXSL105

STA 720+44 - 29.5' LT
SL107

EXSL106

STA 718+63 - 34.2' RT
PB102

BP: 540+75.00MP

EXSL107

STA 721+19 - 32.2' LT
PB104

EXSL108

EXSL109

CONSTRUCTION NOTES:

1. REINSTALL SALVAGED LIGHTING UNIT ON NEW CONCRETE BASE.
2. INSTALL NEW CONDUCTORS. QUANTITY, SIZE AND COLOR TO MATCH EXISTING.
3. SPLICE TO EXISTING CONDUCTORS WITHIN EXISTING STREET LIGHT BASE
4. INSTALL CONDUIT VIA HORIZONTAL BORE IF PAVEMENT WILL NOT BE REPLACED.

| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023601_LP.DWG
LAYOUT NAME - USH 10 - MAPLE ST

PLOT DATE : 12/23/2020 12:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

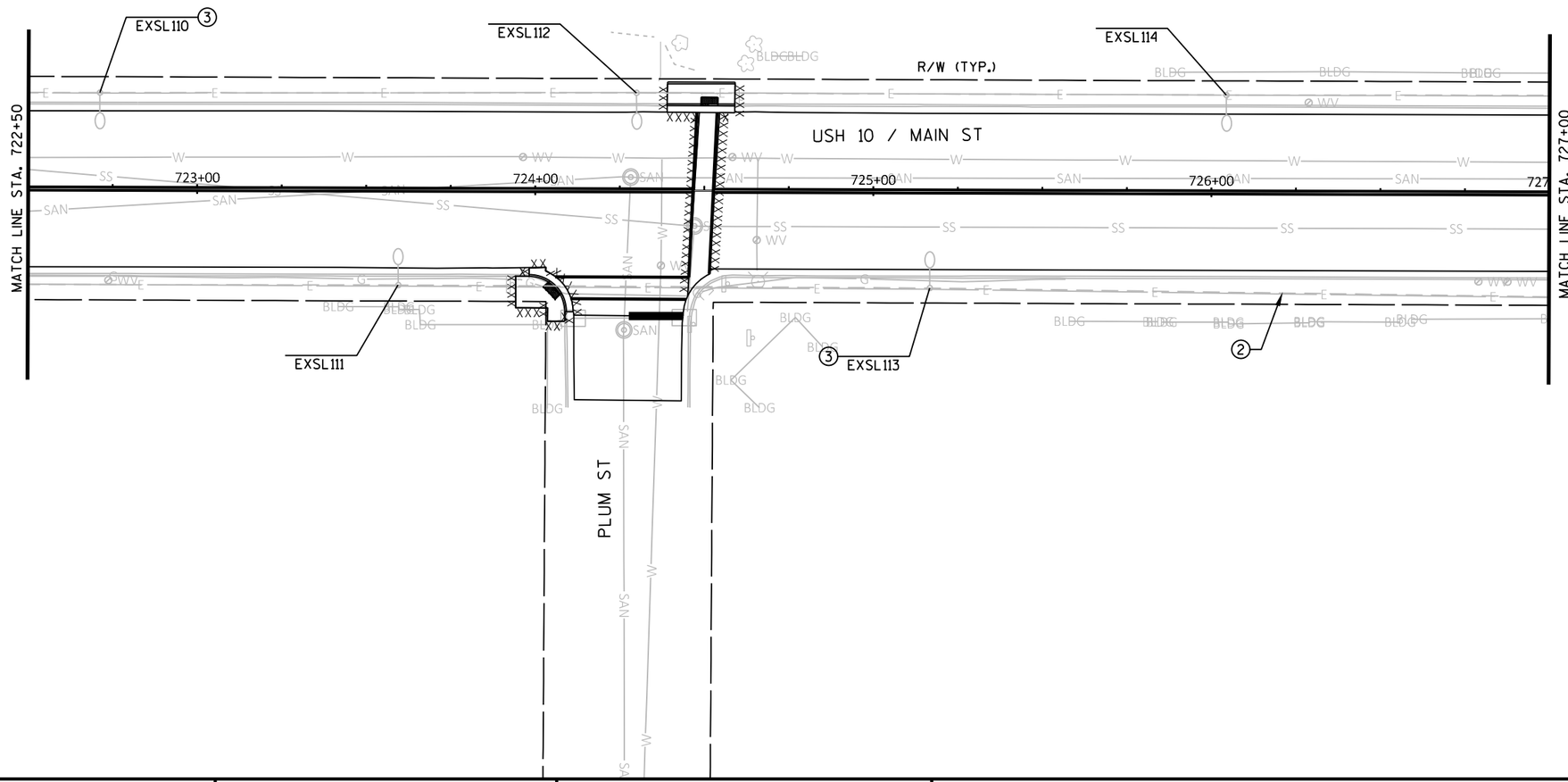
LEGEND

- SALVAGED LIGHTING UNIT
- EXISTING LIGHTING UNIT
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- PULL BOX STEEL (24"X42")
- EXISTING PULL BOX
- CONNECT TO EXISTING CONDUIT
- NONMETALLIC CONDUIT 2-INCH, UNLESS OTHERWISE NOTED

CONSTRUCTION NOTES:

1. REINSTALL SALVAGED LIGHTING UNIT ON NEW CONCRETE BASE.
2. INSTALL NEW CONDUCTORS. QUANTITY, SIZE AND COLOR TO MATCH EXISTING.
3. SPLICE TO EXISTING CONDUCTORS WITHIN EXISTING STREET LIGHT BASE
4. INSTALL CONDUIT VIA HORIZONTAL BORE IF PAVEMENT WILL NOT BE REPLACED.

N




| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN | SHEET 52 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023601_LP.DWG
LAYOUT NAME - USH 10 - MAPLE ST (2)

PLOT DATE : 12/23/2020 12:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

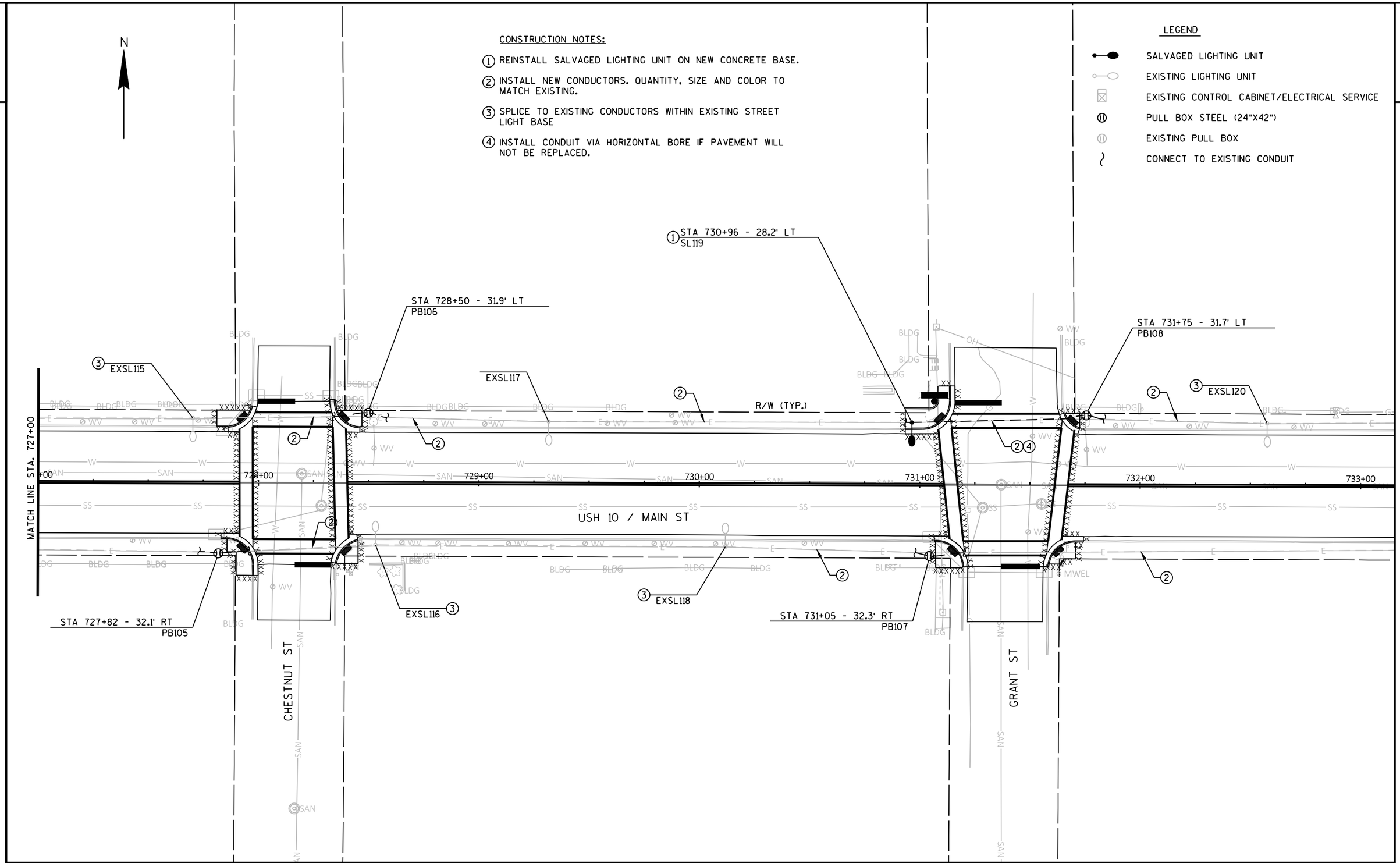
N

CONSTRUCTION NOTES:

1. REINSTALL SALVAGED LIGHTING UNIT ON NEW CONCRETE BASE.
2. INSTALL NEW CONDUCTORS. QUANTITY, SIZE AND COLOR TO MATCH EXISTING.
3. SPLICE TO EXISTING CONDUCTORS WITHIN EXISTING STREET LIGHT BASE
4. INSTALL CONDUIT VIA HORIZONTAL BORE IF PAVEMENT WILL NOT BE REPLACED.

LEGEND

- SALVAGED LIGHTING UNIT
- EXISTING LIGHTING UNIT
- EXISTING CONTROL CABINET/ELECTRICAL SERVICE
- PULL BOX STEEL (24"X42")
- EXISTING PULL BOX
- CONNECT TO EXISTING CONDUIT




| PROJECT NO: 1530-03-76,1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | LIGHTING PLAN | SHEET 53 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\023601_LP.DWG
LAYOUT NAME - USH 10 - MAPLE ST (3)

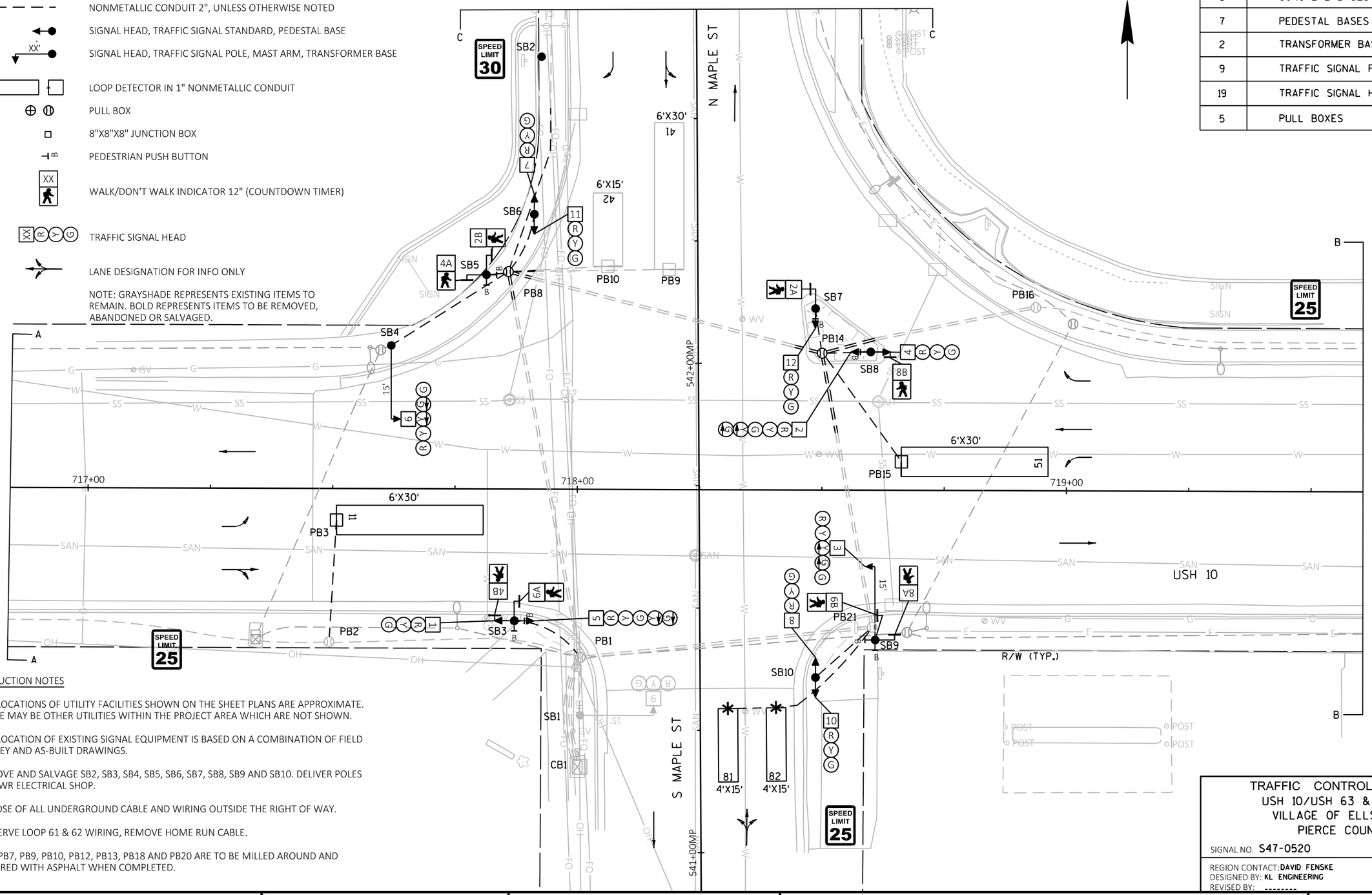
PLOT DATE : 12/23/2020 12:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- XX' SIGNAL HEAD, TRAFFIC SIGNAL POLE, MAST ARM, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX
- 8"X8"X8" JUNCTION BOX
- B PEDESTRIAN PUSH BUTTON
- XX WALK/DON'T WALK INDICATOR 12" (COUNTDOWN TIMER)
- XX R Y G TRAFFIC SIGNAL HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTE: GRAYSHADE REPRESENTS EXISTING ITEMS TO REMAIN. BOLD REPRESENTS ITEMS TO BE REMOVED, ABANDONED OR SALVAGED.

| TRAFFIC SIGNAL REMOVAL MAJOR ITEMS SUMMARY | |
|---|---|
| 9 | CONCRETE BASES |
| 7 | PEDESTAL BASES |
| 2 | TRANSFORMER BASES |
| 9 | TRAFFIC SIGNAL POLES |
| 19 | TRAFFIC SIGNAL HEADS |
| 5 | PULL BOXES |




CONSTRUCTION NOTES

1) THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF EXISTING SIGNAL EQUIPMENT IS BASED ON A COMBINATION OF FIELD SURVEY AND AS-BUILT DRAWINGS.
3) REMOVE AND SALVAGE SB2, SB3, SB4, SB5, SB6, SB7, SB8, SB9 AND SB10. DELIVER POLES TO NWR ELECTRICAL SHOP.
4) DISPOSE OF ALL UNDERGROUND CABLE AND WIRING OUTSIDE THE RIGHT OF WAY.
5) PRESERVE LOOP 61 & 62 WIRING, REMOVE HOME RUN CABLE.
6) PB5, PB7, PB9, PB10, PB12, PB13, PB18 AND PB20 ARE TO BE MILLED AROUND AND COVERED WITH ASPHALT WHEN COMPLETED.

TRAFFIC CONTROL SIGNAL
USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

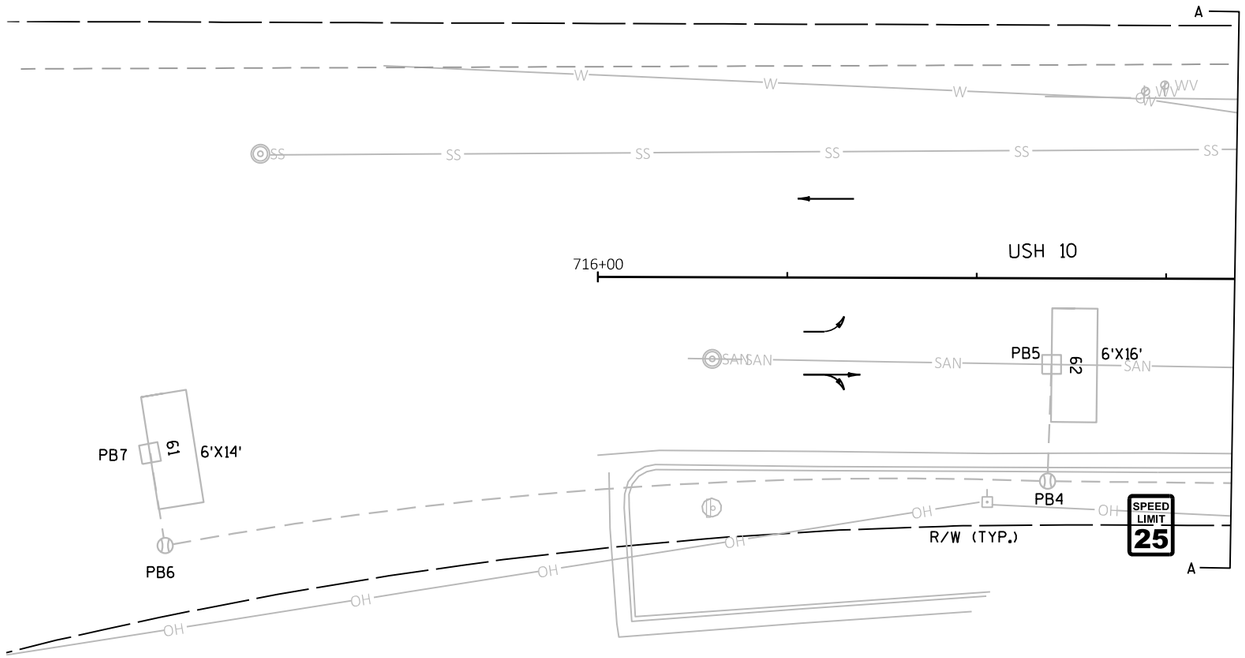
REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

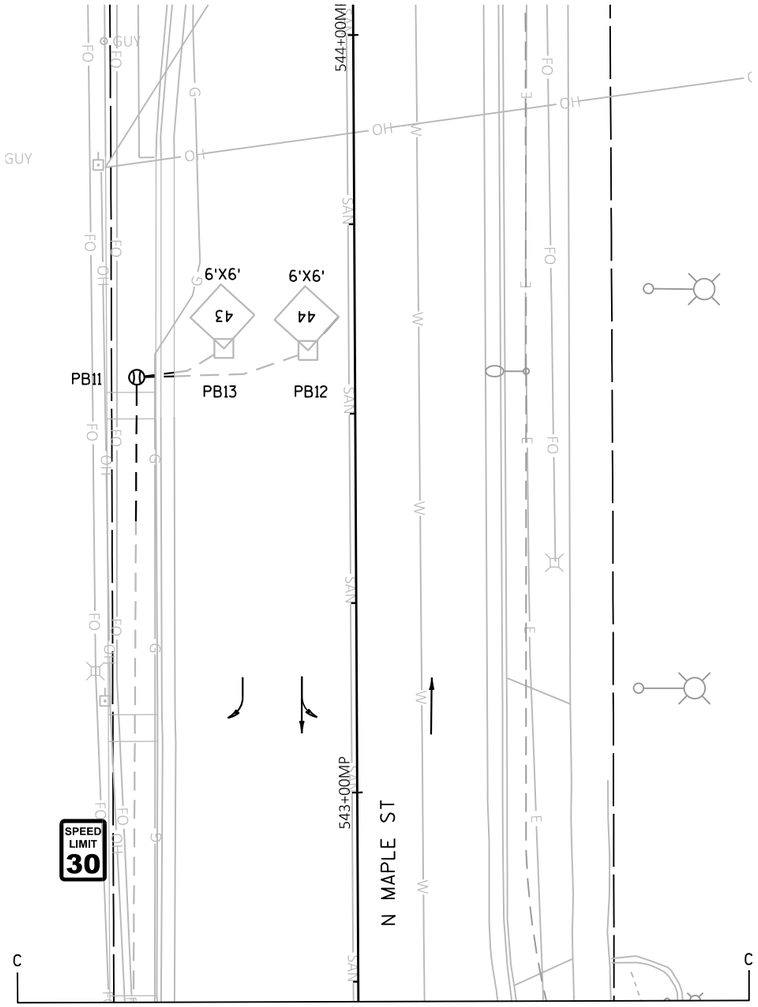
PAGE 1 OF 2

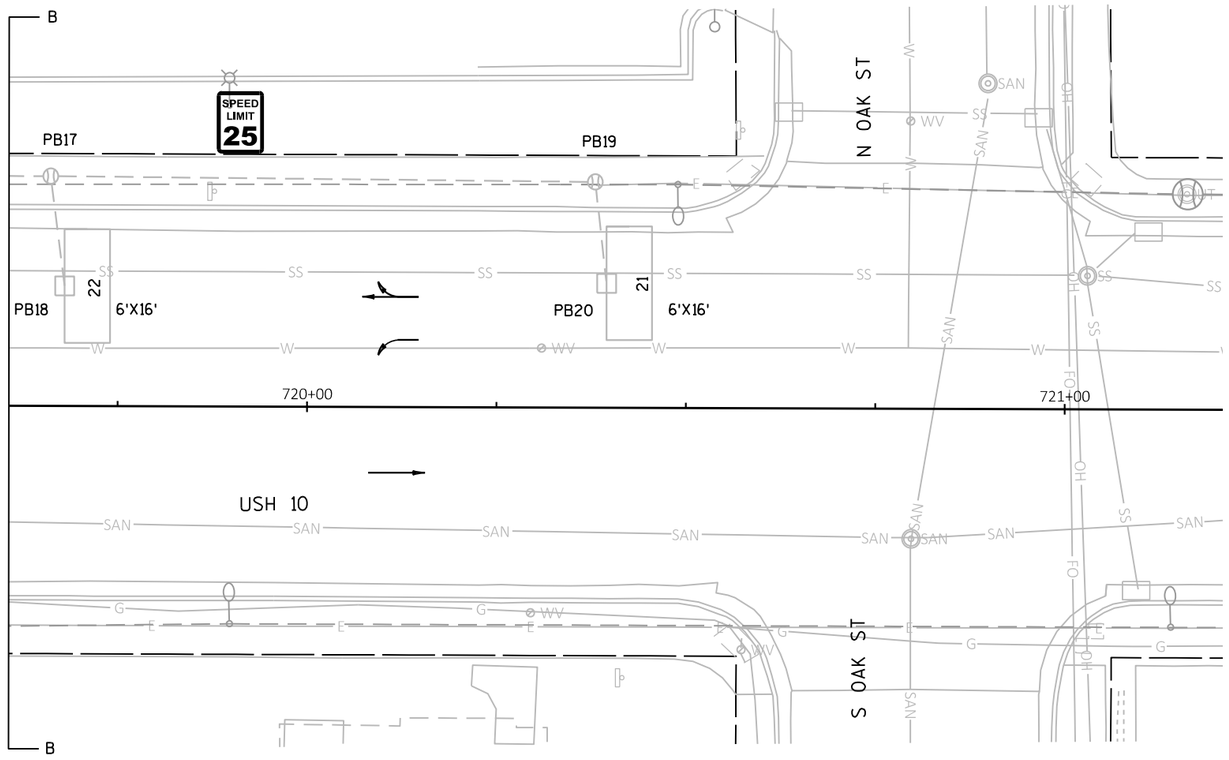
| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 54 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024001_SR.DWG
LAYOUT NAME - USH 10 - MAPLE ST (20 SCALE)
PLOT DATE : 12/23/2020 1:49 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42




TRAFFIC CONTROL SIGNAL
USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 2 OF 2

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL REMOVAL PLAN | SHEET 55 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024001_SR.DWG
LAYOUT NAME - USH 10 - MAPLE ST (20 SCALE) tails

PLOT DATE : 12/23/2020 1:49 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

CABLING INSTRUCTIONS (NW & SW QUADS)

1) INSTALL NEW PB7, PB30, SB4, SB5, SB6 AND ASSOCIATED CONDUITS.

2) REMOVE MAIN NORTH RING CONDUITS (CURRENTLY EMPTY) FROM EXISTING PB8. RE-WORK AND ATTACH CONDUITS TO NEW PB7.

3) PULL TEMPORARY 21 CONDUCTOR SIGNAL CABLE TO FEED SIGNALS ON NW QUAD. FROM CB1 THROUGH SOUTH RING CONDUIT, EAST RING CONDUIT, NORTH RING CONDUIT, TO NEW SB4. PROVIDE INDIVIDUAL TEMPORARY SIGNAL CABLES TO SB5 (5 CONDUCTOR), AND SB6 (5 CONDUCTOR). SPLICES WILL BE MADE IN SB4.

4) INSTALL NEW SB2 AND SB3 AND PULL NEW PERMANENT SIGNAL CABLES FROM CB1.

5) COORDINATE ENERGIZING OF NEW SIGNAL HEADS 1, 7, 8, 9, 10, 11, 15, 2B, 4A, 4B, 6A, AND PUSH BUTTONS W/ WISDOT.

6) REMOVE ANY UNUSED CABLE THAT WAS USED TO FEED EXISTING SIGNAL HEADS, LOOPS, ETC.

7) REMOVE MAIN WEST RING CONDUITS FROM EXISTING PB8. RE-WORK AND ATTACH TO NEW PB7.

8) PULL PERMANENT SIGNAL CABLE TO SB4, SB5, AND SB6.

9) COORDINATE WITH WISDOT TO REMOVE TEMPORARY SIGNAL CABLE AND REWIRE WITH PERMANENT SIGNAL CABLES.

10) REMOVE UNUSED SIGNAL BASES AND PULL BOXES ON NW AND SW QUADS.

CABLING INSTRUCTIONS (NE & SE QUADS)

1) INSTALL NEW PB10, SB7, SB8, AND ASSOCIATED CONDUITS.

2) REMOVE MAIN NORTH RING CONDUITS FROM EXISTING PB14. RE-WORK AND ATTACH CONDUITS TO NEW PB10.

3) PULL PERMANENT SIGNAL CABLE TO FEED SIGNAL HEADS 4, 6, 16, 2A, 8B AND PUSH BUTTONS. PULL CABLES FROM CB1 THROUGH WEST RING CONDUIT AND NORTH RING CONDUIT.

4) INSTALL SB9 AND SB10 AND PULL NEW PERMANENT SIGNAL CABLES FROM CB1.

5) COORDINATE ENERGIZING OF NEW SIGNAL HEADS 2, 3, 4, 5, 6, 12, 14, 16, 2A, 6B, 8A, 8B, AND PUSH BUTTONS.

6) REMOVE ANY UNUSED CABLE THAT WAS USED TO FEED EXISTING SIGNAL HEADS, LOOPS, ETC.

7) REMOVE MAIN EAST RING CONDUITS FROM EXISTING PB14. RE-WORK AND ATTACH CONDUITS TO NEW PB10.

8) REMOVE CONDUITS FROM EXISTING PB14 THAT FEED PB11. RE-WORK AND ATTACH TO NEW PB10.

9) REMOVE UNUSED SIGNAL BASES AND PULL BOXES ON NE AND SE QUADS.

CONSTRUCTION NOTES

1) EXISTING SIGNAL INDICATIONS SHALL BE KEPT OPERATIONAL UNTIL THE NEW SIGNAL INDICATIONS ARE READY TO BE ACTIVATED.

2) NOTIFY THE DEPARTMENT'S ELECTRICAL FIELD UNIT AT (715)577-5399 AT LEAST 3 WEEKS PRIOR TO BEGINNING THE PROJECT SO THAT THE EXISTING TRAFFIC SIGNAL OPERATION CAN BE MODIFIED.

3) THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

4) THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH UTILITY FACILITIES.

5) THE FINAL LOCATION AND ORIENTATION OF PEDESTRIAN BUTTONS MUST ADHERE TO THE LATEST STANDARDS OF THE AMERICANS WITH DISABILITIES ACT.

6) SEE LIGHTING PLANS FOR ADDITIONAL DETAILS ON LIGHTING WORK ALONG USH 10.

7) CONNECT TO EXISTING CONDUIT AS SHOWN ON THE PLANS. MATCH PROPOSED CONDUIT SIZE AND QUANTITY TO EXISTING CONDUIT AS VERIFIED IN THE FIELD.

8) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT AT (715) 577-5399.

9) CONTRACTOR TO INSTALL STATE FURNISHED CAT 5E CABLE TO SB9. DEPARTMENT TO INSTALL VIDEO DETECTION.

10) CONTRACTOR SHALL MILL AROUND ANY EXISTING LOOP DETECTOR JUNCTION BOXES INDICATED TO REMAIN. JUNCTION BOXES MAY THE BE COVERED WITH ASPHALT.

11) LOOPS 81 & 82 INSTALLED VIA SAW SLOT CONTINUOUS SIDE PULL.

TRAFFIC CONTROL SIGNAL
USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 1 OF 5

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL PLAN - CONSTRUCTION AND CABLING NOTES | SHEET 56 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - CONST. NOTES

PLOT DATE : 1/12/2021 8:51 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

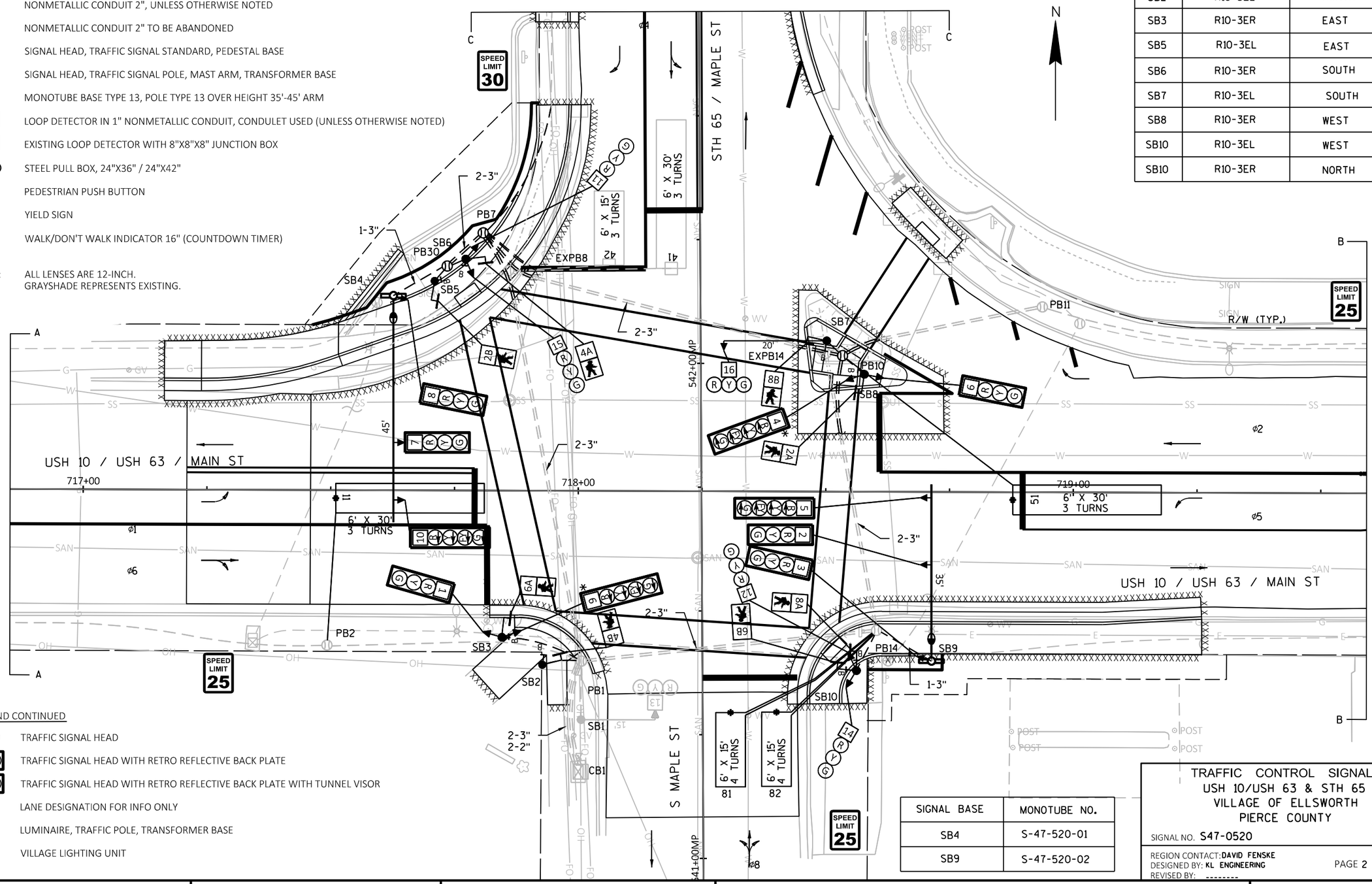
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC CONDUIT 2" TO BE ABANDONED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, MAST ARM, TRANSFORMER BASE
- MONOTUBE BASE TYPE 13, POLE TYPE 13 OVER HEIGHT 35'-45' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT, CONDULET USED (UNLESS OTHERWISE NOTED)
- EXISTING LOOP DETECTOR WITH 8"X8"X8" JUNCTION BOX
- STEEL PULL BOX, 24"X36" / 24"X42"
- PEDESTRIAN PUSH BUTTON
- YIELD SIGN
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTES: ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING.

| PEDESTRIAN/BICYCLIST CROSSING SIGN SUMMARY | | |
|---|---|---|
| BASE | SIGN CODE | SIGN TO FACE |
| SB2 | R10-3EL | NORTH |
| SB3 | R10-3ER | EAST |
| SB5 | R10-3EL | EAST |
| SB6 | R10-3ER | SOUTH |
| SB7 | R10-3EL | SOUTH |
| SB8 | R10-3ER | WEST |
| SB10 | R10-3EL | WEST |
| SB10 | R10-3ER | NORTH |




LEGEND CONTINUED

- TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL HEAD WITH RETRO REFLECTIVE BACK PLATE
- TRAFFIC SIGNAL HEAD WITH RETRO REFLECTIVE BACK PLATE WITH TUNNEL VISOR
- LANE DESIGNATION FOR INFO ONLY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VILLAGE LIGHTING UNIT

| SIGNAL BASE | MONOTUBE NO. |
|---|---|
| SB4 | S-47-520-01 |
| SB9 | S-47-520-02 |

# TRAFFIC CONTROL SIGNAL
# USH 10/USH 63 & STH 65
# VILLAGE OF ELLSWORTH
# PIERCE COUNTY

SIGNAL NO. S47-0520

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

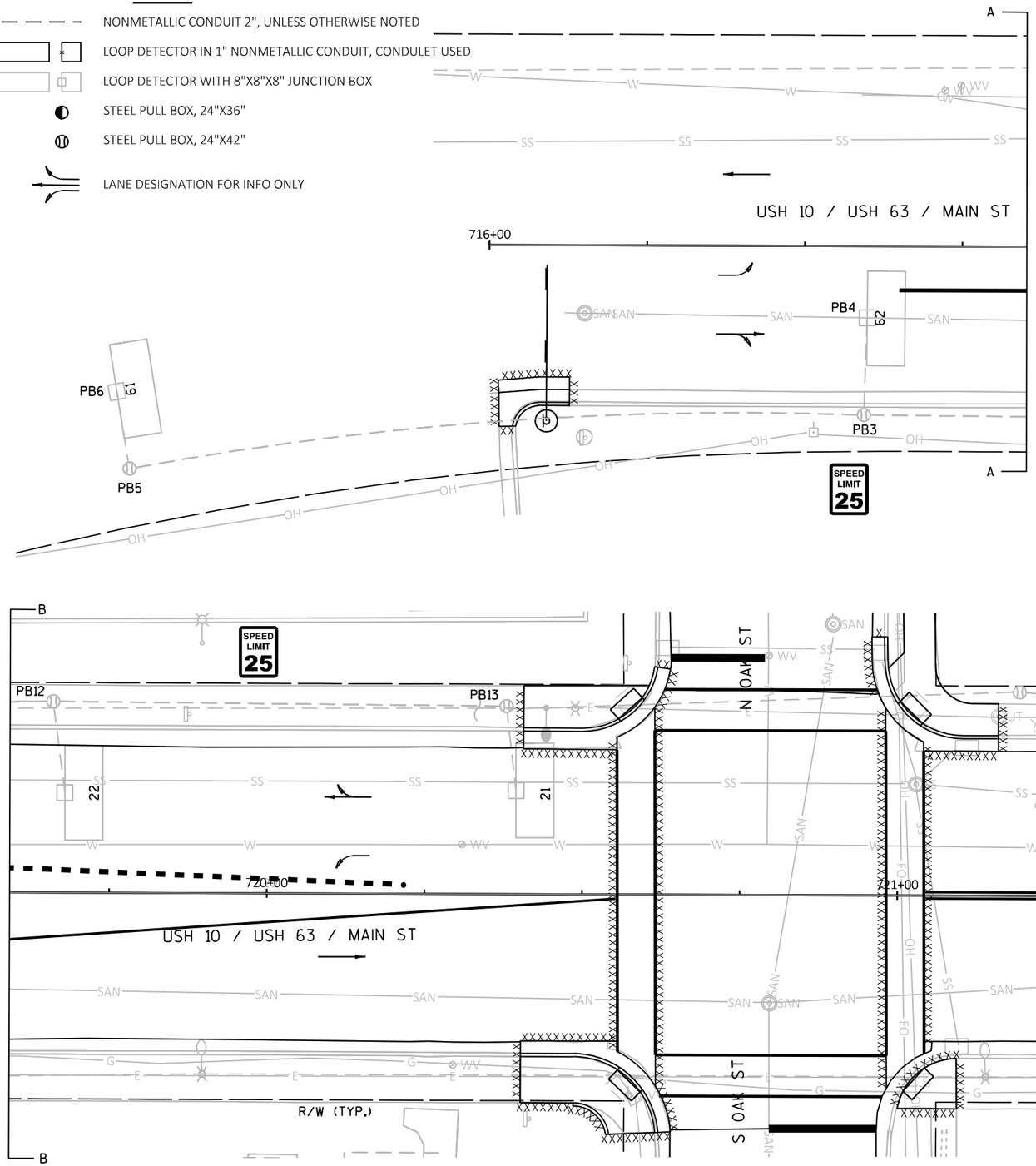


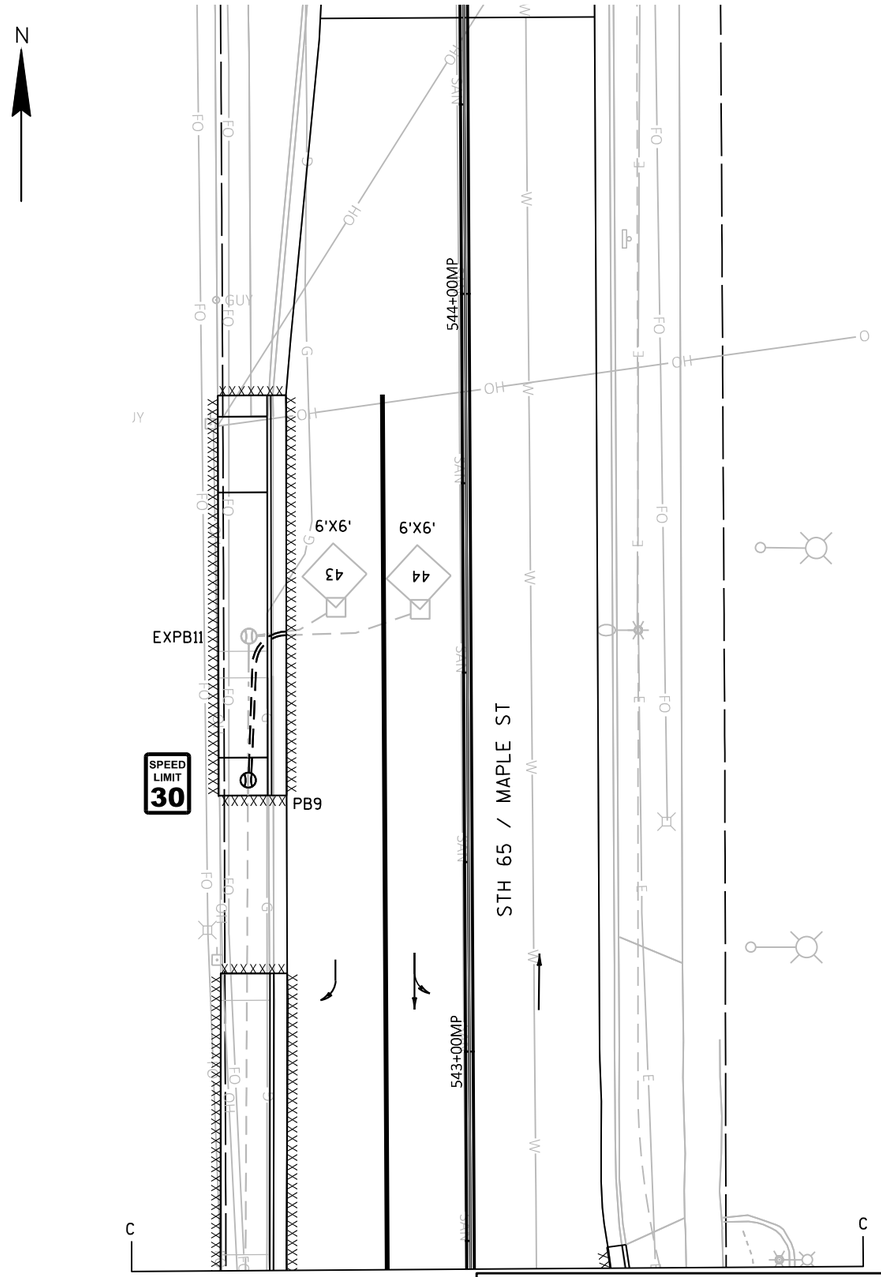
| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL PLAN | SHEET 57 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - USH 10 - MAPLE ST (20 SCALE)
PLOT DATE : 1/12/2021 8:51 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT, CONDULET USED
- LOOP DETECTOR WITH 8"X8"X8" JUNCTION BOX
- STEEL PULL BOX, 24"X36"
- STEEL PULL BOX, 24"X42"
- LANE DESIGNATION FOR INFO ONLY




TRAFFIC CONTROL SIGNAL
USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 3 OF 5

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL PLAN | SHEET 58 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024201_SP.DWG
LAYOUT NAME - USH 10 - MAPLE ST (20 SCALE) Tails

PLOT DATE : 1/12/2021 8:51 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

## SEQUENCE OF OPERATION

| | | | 01 | | | | | | 02 | | | | | | 03 | | | | | | 04 | | | | | | FLASH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CLEAR TO | | | | | | CLEAR TO | | | | | | CLEAR TO | | | | | | CLEAR TO | | | | | | |
| | | HEAD NUMBERS | R/W | ** | | | | | R/W | ** | | | | | R/W | ** | | | | | R/W | ** | | | | | |
| | 01 | 4, 5 | G | - | - | | | | - | - | - | | | | | | | | | | - | - | - | | | | - |
| | 02 | 6, 7, 8 | R | R | R | | | | G | Y | R | | | | | | | | | | R | R | R | | | | R |
| | 03 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 04 | 11, 12, 13 | R | R | R | | | | R | R | R | | | | | | | | | | G | Y | R | | | | R |
| RING 1 | 05 | 9, 10 | - | - | - | | | | - | - | - | | | | | | | | | | - | - | - | | | | - |
| | 06 | 1, 2, 3 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | | R |
| | 07 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 08 | 14, 15, 16 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | | R |
| | 0LA | 4, 5 | - | FY | R | | | | FY | Y | R | | | | | | | | | | R | R | R | | | | R |
| | 0LB | 9, 10 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | | R |
| | 02P | 2A, 2B | D | D | D | | | | * | D | D | | | | | | | | | | D | D | D | | | | |
| | 04P | 4A, 4B | D | D | D | | | | D | D | D | | | | | | | | | | * | D | D | | | | |
| | 06P | 6A, 6B | D | D | D | | | | D | D | D | | | | | | | | | | D | D | D | | | | |
| | 08P | 8A, 8B | D | D | D | | | | D | D | D | | | | | | | | | | D | D | D | | | | |

| | | | 05 | | | | | | 06 | | | | | | 07 | | | | | | 08 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CLEAR TO | | | | | | CLEAR TO | | | | | | CLEAR TO | | | | | | CLEAR TO | | | | | |
| | | HEAD NUMBERS | R/W | ** | | | | | R/W | ** | | | | | R/W | ** | | | | | R/W | ** | | | | |
| | 01 | 4, 5 | - | - | - | | | | - | - | - | | | | | | | | | | - | - | - | | | |
| | 02 | 6, 7, 8 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | |
| | 03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 04 | 11, 12, 13 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | |
| RING 2 | 05 | 9, 10 | G | - | - | | | | - | - | - | | | | | | | | | | R | R | R | | | |
| | 06 | 1, 2, 3 | R | R | R | | | | G | Y | R | | | | | | | | | | R | R | R | | | |
| | 07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 08 | 14, 15, 16 | R | R | R | | | | R | R | R | | | | | | | | | | G | Y | R | | | |
| | 0LA | 4, 5 | R | R | R | | | | R | R | R | | | | | | | | | | R | R | R | | | |
| | 0LB | 9, 10 | - | Y | R | | | | FY | Y | R | | | | | | | | | | R | R | R | | | |
| | 02P | 2A, 2B | D | D | D | | | | D | D | D | | | | | | | | | | D | D | D | | | |
| | 04P | 4A, 4B | D | D | D | | | | D | D | D | | | | | | | | | | D | D | D | | | |
| | 06P | 6A, 6B | D | D | D | | | | * | D | D | | | | | | | | | | D | D | D | | | |
| | 08P | 8A, 8B | D | D | D | | | | D | D | D | | | | | | | | | | * | D | D | | | |

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 )

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

FY = FLASHING YELLOW ARROW

N

## DETECTOR LOGIC

| DETECTOR NUMBER | DETECTOR INPUT | DETECTOR OPERATION: CALLS AND EXTENDS | DETECTOR OPERATION: CALLS ONLY | DETECTOR OPERATION: EXTENDS ONLY | PHASE CALLED | PHASE EXTENDED | DETECTOR DISCONNECT PHASE | CALLING DELAY | EXTENSION STRETCH | SIZE | NUMBER OF TURNS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 1 | X | | | 1 | 1 | | 2 | | 6X30 | 3 |
| 21 | 2 | X | | | 2 | 2 | | | | 6X15 | 3 |
| 22 | 2 | X | | | 2 | 2 | | | | 6X15 | 3 |
| 41 | 3 | X | | | 4 | 4 | | 2 | 2.5 | 6X30 | 3 |
| 42 | 4 | X | | | 4 | 4 | | | | 6X15 | 3 |
| 43 | 5 | X | | | 4 | 4 | | | | 6X6 | 3 |
| 44 | 5 | X | | | 4 | 4 | | | | 6X6 | 3 |
| 51 | 6 | X | | | 5 | 5 | | 2 | | 6X30 | 3 |
| 61 | 7 | X | | | 6 | 6 | | | | 6X15 | 3 |
| 62 | 7 | X | | | 6 | 6 | | | | 6X15 | 3 |
| 81 | 8 | X | | | 8 | 8 | | | | 6X20 | 3 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | X |
| RAILROAD | |
| EMERGENCY VEHICLE | |
| 3M | |
| TOMAR | |
| HARDWIRE | |
| OTHER (GPS) | |
| LIFT BRIDGE | |
| QUEUE DETECTOR | |

| TYPE OF INTERCONNECT COMMUNICATION | |
|---|---|
| NONE | X |
| TBC | |
| CLOSED LOOP TWISTED PAIR* | |
| CLOSED LOOP FIBER OPTIC* | |
| RADIO | |
| *LOCATION OF MASTER CONTROLLER NO: | |
| SIGNAL SYSTEM #: | |

| TYPE OF LIGHTING | |
|---|---|
| BY OTHER AGENCY | X |
| IN TRAFFIC SIGNAL CABINET | - |
| IN SEPARATE DOT LIGHTING CABINET | |

## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / O | PHASE RECALL | PHASE ACTIVE |
|---|---|---|---|---|
| 1 | | 6 | | X |
| 2 | X | 6 | MIN. | X |
| 3 | | | | |
| 4 | | 8 | | X |
| 5 | | 2 | | |
| 6 | X | 2 | MIN. | X |
| 7 | | | | |
| 8 | | 4 | | X |

## SPECIAL OVERLAPS

| | PROTECTED | PERMISSIVE |
|---|---|---|
| O.L. "A" = | 1 | 2 |
| O.L. "B" = | 5 | 6 |
| O.L. "C" = | - | - |
| O.L. "D" = | - | - |

## CHART 1

| PHASE ON | NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY | PHASES IN CONFLICT WITH PHASE ON |
|---|---|---|
| 1 | 5, 6 | 2, 4, 8 |
| 2 | 5, 6 | 1, 4, 8 |
| 3 | | |
| 4 | 8 | 1, 2, 5, 6 |
| 5 | 1, 2 | 4, 6, 8 |
| 6 | 1, 2 | 4, 5, 8 |
| 7 | | |
| 8 | 4 | 1, 2, 5, 6 |

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

CONTROLLER TYPE:

DATE 1/29/2020 PAGE NO. 4 OF 5

| PROJECT NO: | 1530-03-76 |
|---|---|
| INTERSECTION: | USH 10/USH 63 & STH 65 |

| SIGNAL WIRE COLOR CODING | BLK-BLACK | RED-RED | GRN-GREEN |
|---|---|---|---|
| | WHT-WHITE | BLU-BLUE | ORG-ORANGE |

| DATE: | Oct-20 |
|---|---|

| CB1 TO | AWG 14 | HEAD NO. | PHASE | SIGNAL INDICATION WIRE COLOR | | | | | | | | | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RED | YELLOW | GREEN | <RED> | <YELLOW> | <FLASH YEL> | <GREEN> | DWALK | WALK | |
| SB2 | 9 | 4B | 4 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB3 | 12 | 1 | 6 | RED | ORG | GRN | | | | | | | |
| | | 9 | 5/O.L.B | | | | RED/BLK | ORG/BLK | BLK/WHT | GRN/BLK | | | |
| | | 6A | 6 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB4 | 12 | 7 | 2 | RED | ORG | GRN | | | | | | | |
| | | 8 | 2 | RED | ORG | GRN | | | | | | | |
| | | 10 | 5/O.L.B | | | | RED/BLK | ORG/BLK | BLK/WHT | GRN/BLK | | | |
| | | | | | | | | | | | | | |
| SB5 | 9 | 2B | 2 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB6 | 12 | 11 | 4 | RED | ORG | GRN | | | | | BLK | BLU | |
| | | 15 | 8 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | |
| | | 4A | 4 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB7 | 9 | 16 | 8 | RED | ORG | GRN | | | | | | | |
| | | 8B | 8 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB8 | 12 | 4 | 1/O.L.A | | | | RED/BLK | ORG/BLK | BLK/WHT | GRN/BLK | | | |
| | | 6 | 2 | RED | ORG | GRN | | | | | | | |
| | | 2A | 2 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |
| SB9 | 12 | 2 | 6 | RED | ORG | GRN | | | | | | | |
| | | 3 | 6 | RED | ORG | GRN | | | | | | | |
| | | 5 | 1/O.L.A | | | | RED/BLK | ORG/BLK | BLK/WHT | GRN/BLK | | | |
| | | | | | | | | | | | | | |
| SB10 | 12 | 12 | 4 | RED | ORG | GRN | | | | | | | |
| | | 14 | 8 | RED/BLK | ORG/BLK | GRN/BLK | | | | | | | |
| | | 6B | 6 | | | | | | | | BLK | BLU | |
| | | 8A | 8 | | | | | | | | BLK | BLU | |
| | | | | | | | | | | | | | |

| EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP | |
|---|---|
| FROM | TO |
| CB1 | SB1 |
| SB1 | SB2 |
| SB2 | SB3 |
| SB3 | SB4 |
| SB4 | SB5 |
| SB5 | SB7 |
| SB7 | SB6 |
| SB6 | SB8 |
| SB8 | SB9 |
| SB9 | SB10 |
| SB10 | CB1 |

| LOOP DETECTOR LEAD-IN CABLE | |
|---|---|
| FROM | TO |
| CB1 | SB2 |
| CB1 | SB3 |
| CB1 | SB5 |
| CB1 | SB6 |
| CB1 | SB7 |
| CB1 | SB8 |
| CB1 | SB10 |
| CB1 | SB10 |

| CAT-5E CABLE | |
|---|---|
| FROM | TO |
| CB1 | PB1 |
| PB1 | PB14 |
| PB14 | SB9 |

| LIGHTING UF 12 AWG WITH GROUND | |
|---|---|
| FROM | TO |
| CB1 | SB4 |
| CB1 | SB9 |

USH 10/USH 63 & STH 65
VILLAGE OF ELLSWORTH
PIERCE COUNTY

SIGNAL NO. S47-0520

CONTROLLER TYPE:

DATE 1/29/2020 PAGE NO. 5 OF 5

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC SIGNAL PLAN | SHEET 60 | E |
|---|---|---|---|---|---|

2

N

SIGNING LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGNAL OR LIGHTING POLE

PROPOSED SIGN MOUNTED ON POST(S)

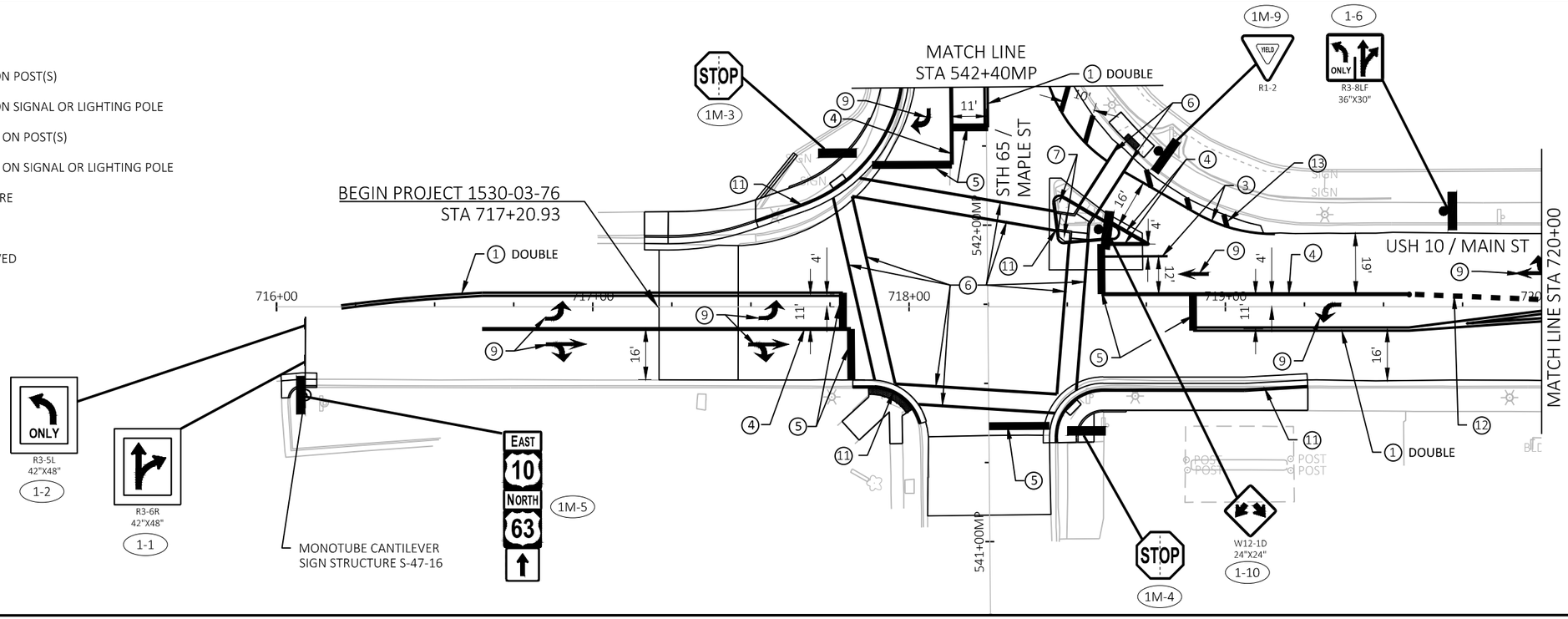
PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHTING POLE

CANTILEVER SIGN STRUCTURE

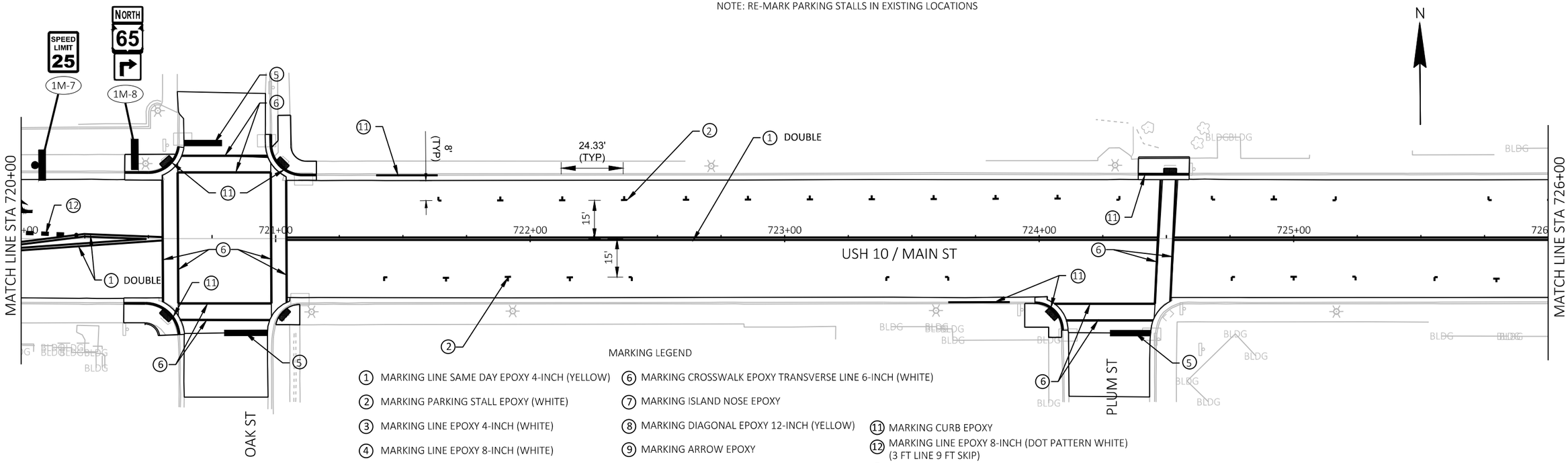
X-X DENOTES SIGN NUMBER

XM-X INDICATES SIGN TO BE MOVED

(X) INDICATES SIGN SIZE



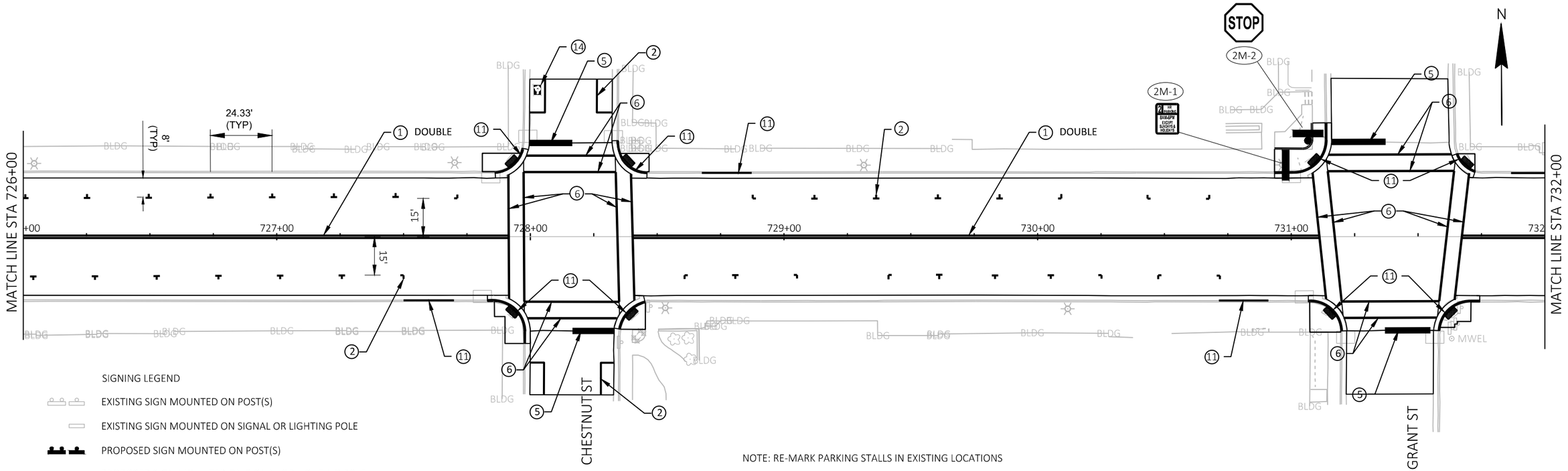

NOTE: RE-MARK PARKING STALLS IN EXISTING LOCATIONS

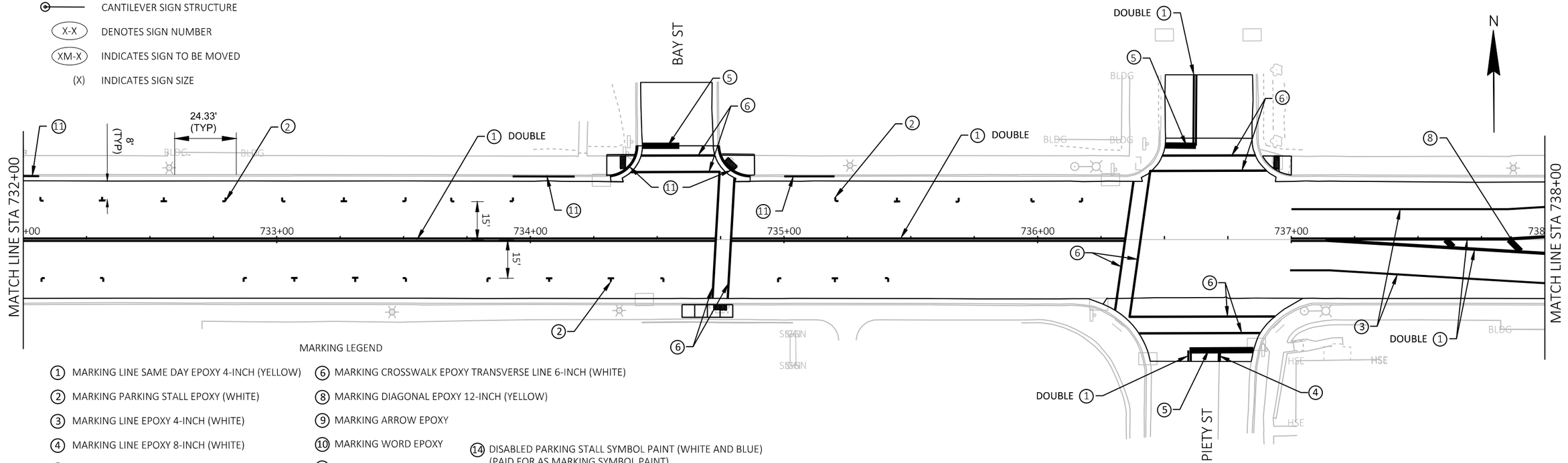



MARKING LEGEND

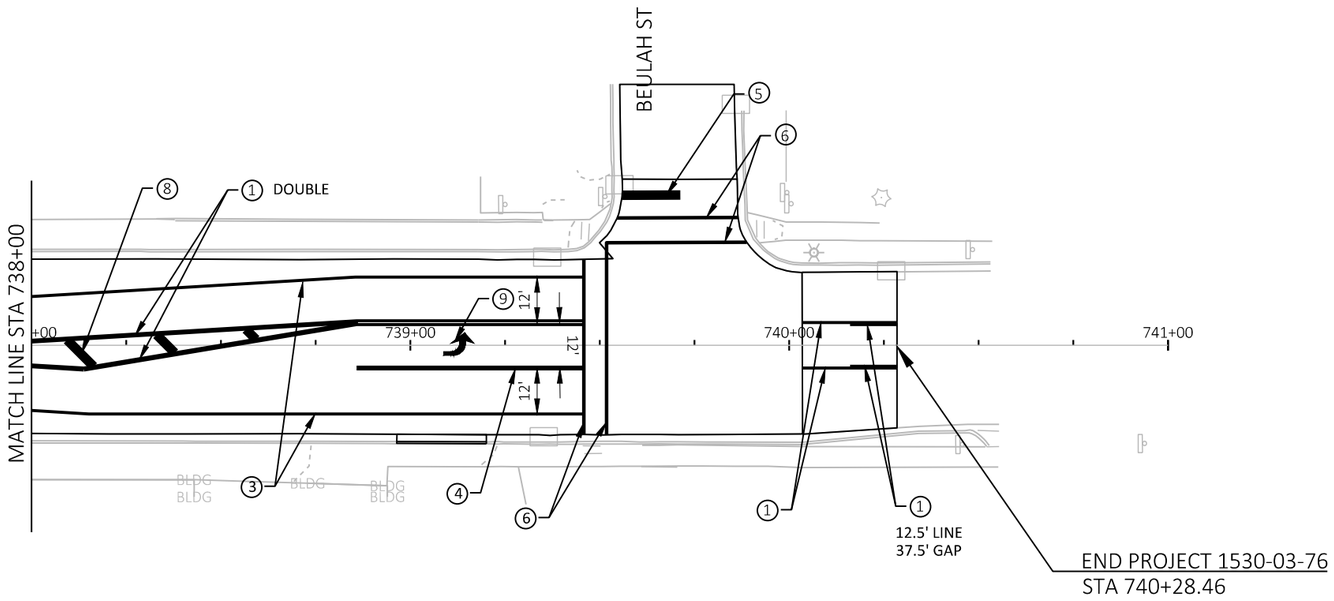
1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW)
2. MARKING PARKING STALL EPOXY (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE)
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING STOP LINE EPOXY 18-INCH (WHITE)
6. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
7. MARKING ISLAND NOSE EPOXY
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING CURB EPOXY
12. MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PERMANENT SIGNING AND PAVEMENT MARKING | SHEET 61 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PERMANENT SIGNING AND PAVEMENT MARKING | SHEET 62 | E |
|---|---|---|---|---|---|







2

MARKING LEGEND

1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW)
2. MARKING PARKING STALL EPOXY (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE)
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING STOP LINE EPOXY 18-INCH (WHITE)
6. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING CURB EPOXY

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- CANTILEVER SIGN STRUCTURE
- X-X DENOTES SIGN NUMBER
- XM-X INDICATES SIGN TO BE MOVED
- (X) INDICATES SIGN SIZE

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | PERMANENT SIGNING AND PAVEMENT MARKING | SHEET 63 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - US10-(3)
PLOT DATE : 1/25/2021 3:52 PM
PLOT BY : BRIAN ST. VINCENT
PLOT NAME : _____
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

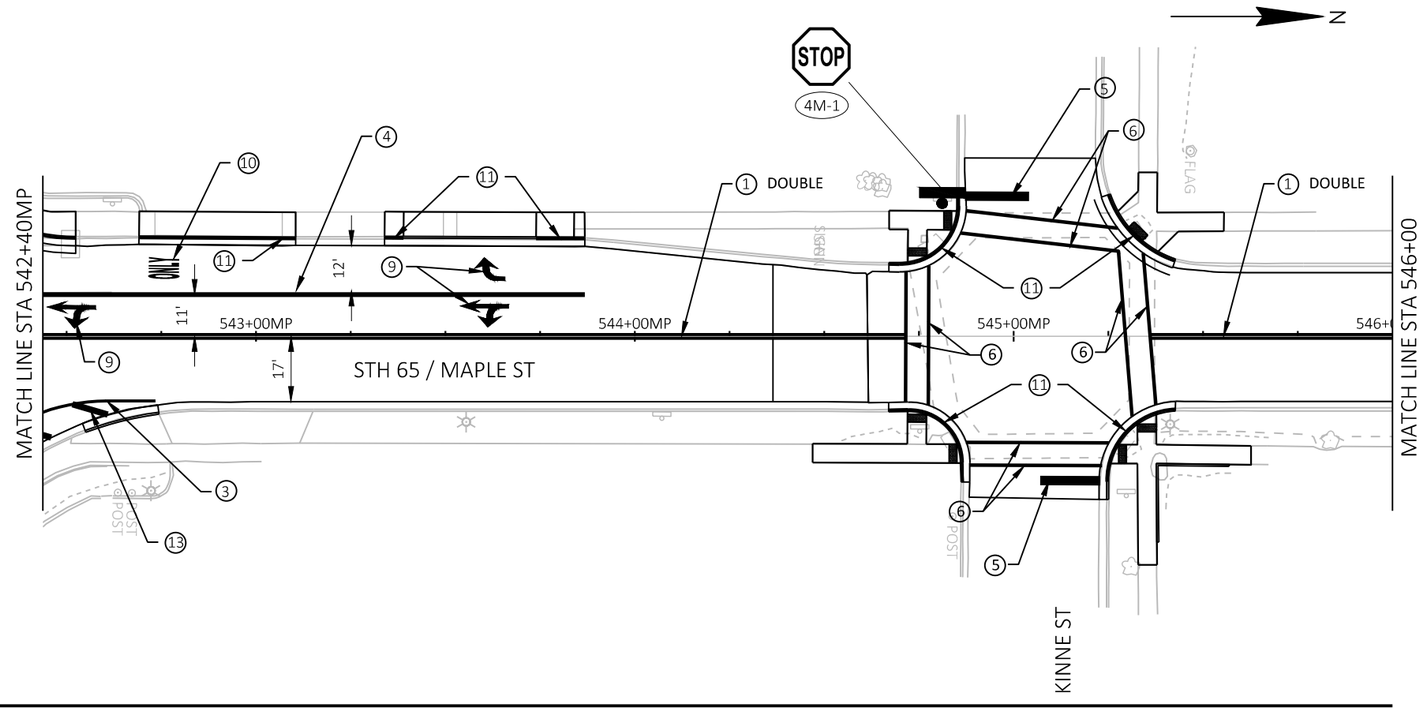
2

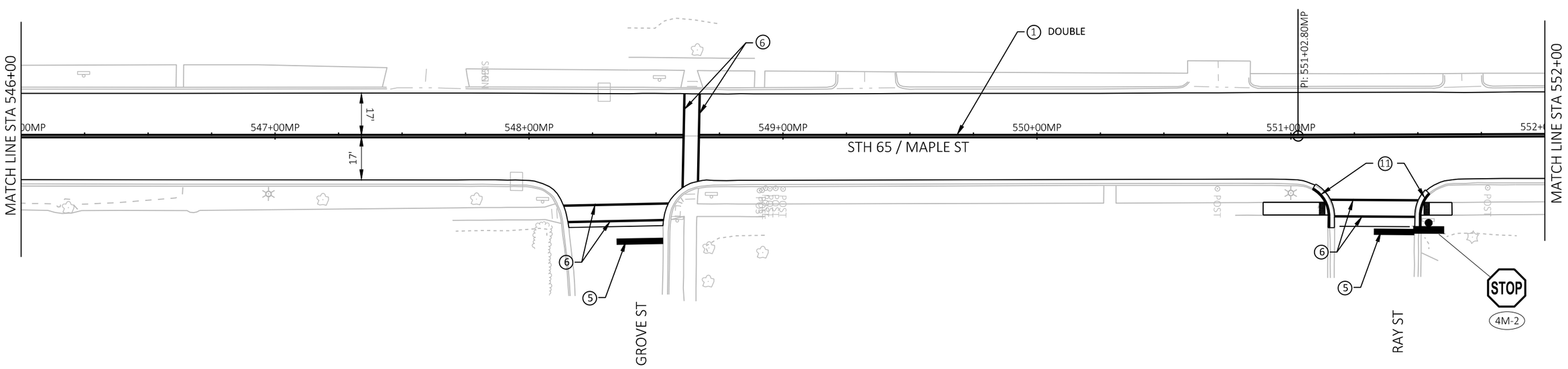
SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- CANTILEVER SIGN STRUCTURE
- (X-X) DENOTES SIGN NUMBER
- (XM-X) INDICATES SIGN TO BE MOVED
- (X) INDICATES SIGN SIZE

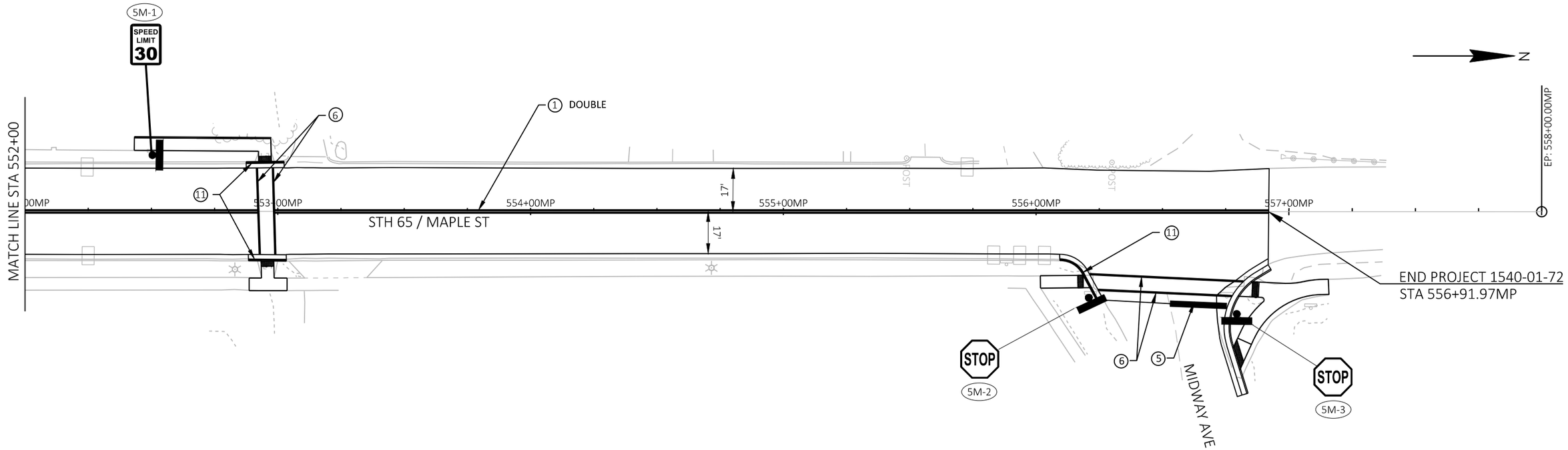
MARKING LEGEND

1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW)
2. MARKING PARKING STALL EPOXY (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE)
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING STOP LINE EPOXY 18-INCH (WHITE)
6. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING CURB EPOXY
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | PERMANENT SIGNING AND PAVEMENT MARKING | SHEET 64 | E |
|---|---|---|---|---|---|



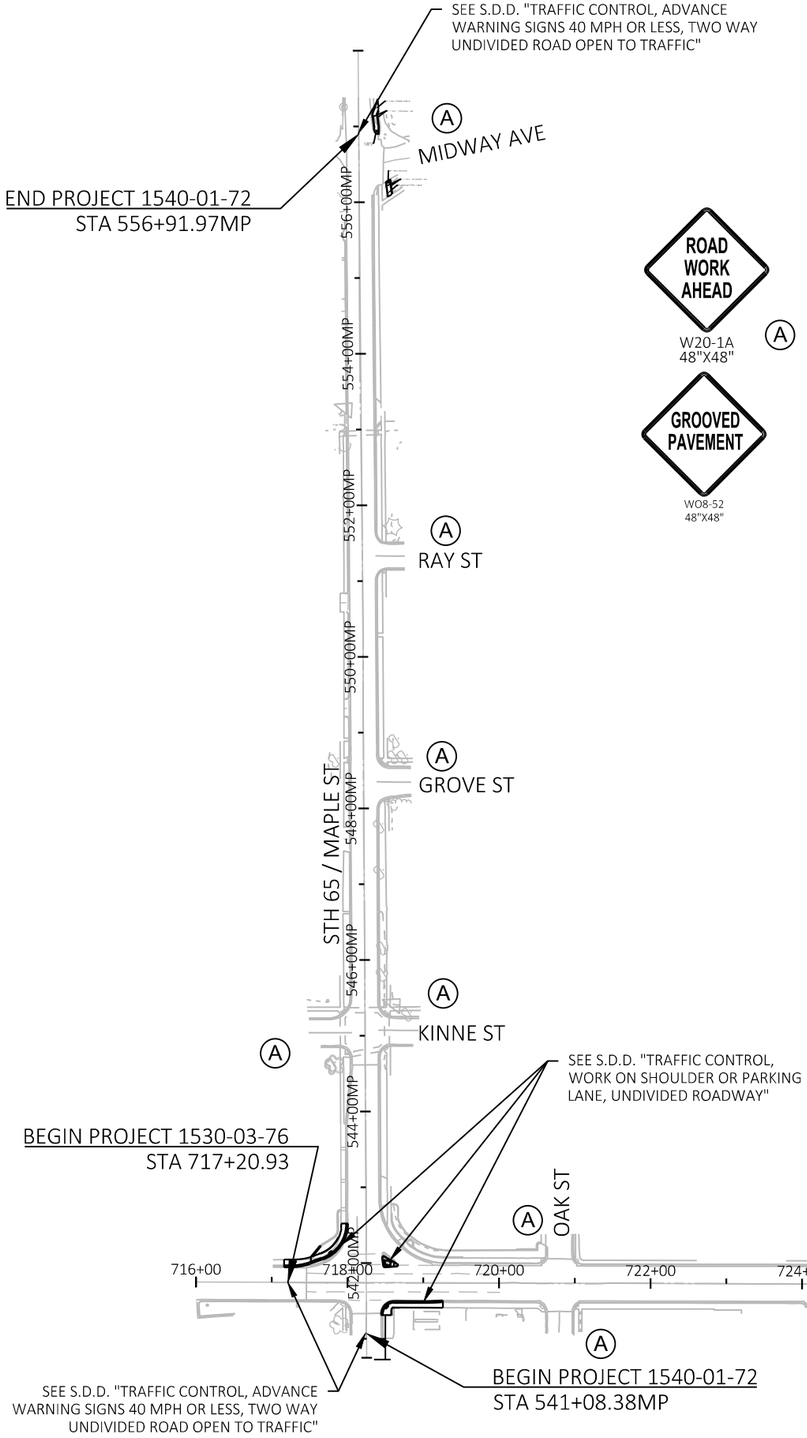

MARKING LEGEND

| | |
|---|---|
| (1) MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) | (6) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) |
| (2) MARKING PARKING STALL EPOXY (WHITE) | (8) MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| (3) MARKING LINE EPOXY 4-INCH (WHITE) | (9) MARKING ARROW EPOXY |
| (4) MARKING LINE EPOXY 8-INCH (WHITE) | (10) MARKING WORD EPOXY |
| (5) MARKING STOP LINE EPOXY 18-INCH (WHITE) | (11) MARKING CURB EPOXY |

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHTING POLE
- CANTILEVER SIGN STRUCTURE
- (X-X) DENOTES SIGN NUMBER
- (XM-X) INDICATES SIGN TO BE MOVED
- (X) INDICATES SIGN SIZE

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | PERMANENT SIGNING AND PAVEMENT MARKING | SHEET 65 | E |
|---|---|---|---|---|---|




MAINTENANCE OF TRAFFIC:

USH 10

- USH 10 SHALL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES EXCEPT FOR FLAGGING OPERATIONS AND SHOULDER CLOSURES AS NOTED IN THE CONTRACT SPECIAL PROVISIONS

STH 65

- STH 65 SHALL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES EXCEPT FOR FLAGGING OPERATIONS AND SHOULDER CLOSURES AS NOTED IN THE CONTRACT SPECIAL PROVISIONS

INTERSECTION STAGING

- USH 10 & STH 65 INTERSECTION SHALL BE UNDER EXISTING SIGNAL CONTROL UNTIL NEW SIGNALS ARE ACTIVATED

LOCAL ROADS AND DRIVEWAYS

- MAINTAIN LOCAL ACCESS AT ALL TIMES

SIDEWALKS

- MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:

USH 10

- MILL & OVERLAY AND CONCRETE PAVEMENT REPAIRS
- CONSTRUCT PROPOSED PAVEMENT AND ISLAND AT USH 10 & STH 65 INTERSECTION
- CURB RAMP IMPROVEMENTS
- INSTALL TRAFFIC SIGNALS, LIGHTING, AND OVERHEAD SIGN SUPPORT

STH 65

- MILL & OVERLAY AND CONCRETE PAVEMENT REPAIRS
- CURB RAMP IMPROVEMENTS

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
- SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
- SEE S.D.D. "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES"
- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

TRAFFIC CONTROL GENERAL NOTES:

- 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. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS, ARROW BOARDS, AND SIGN MESSAGE BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE SIGNS, ARROW BOARDS, AND SIGN MESSAGE BOARDS.
- IF SIGNS ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS
- ALL TRAFFIC CONTROL SIGNING SHALL CONFORM TO: PART VI OF THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE WISCONSIN SUPPLEMENT TO THE MUTCD, TRAFFIC ENGINEERING, OPERATIONS AND SAFETY MANUAL, AND OTHER CONTRACT DOCUMENTS.
- MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION.
- CONTRACTORS EQUIPMENT AND MATERIAL STOCKPILES MAY NOT BE STORED WITHIN THE CONSTRUCTION CLEAR ZONE WHILE THE CONTRACTOR IS NOT WORKING, UNLESS THEY ARE PROTECTED BY CONCRETE BARRIER TEMPORARY PRECAST.
- STAGE CONSTRUCTION OF CURB RAMPS AND SIDEWALK TO ALLOW CONTINUED PEDESTRIAN ACCESS TO EACH CITY BLOCK FROM AT LEAST ONE DIRECTION.
- CONCRETE PAVEMENT REPAIR ITEMS AND SIGNAL LOOP REMOVAL & INSTALLATION IN TRAFFIC LANES SHALL BE PERFORMED UNDER FLAGGING OPERATIONS

N

2

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - OVERVIEW | SHEET 66 | E |
|---|---|---|---|---|---|

2

STAGE 1

MAINTENANCE OF TRAFFIC:

- USH 10 WILL REMAIN OPEN TO ALL EXISTING LANES EXCEPT FOR TURN LANE CONFIGURATIONS DURING SHOULDER CLOSURES AS NOTED BELOW.
  - USH 10 EB AT STH 65 INTERSECTION WILL BE RECONFIGURED TO HAVE A RIGHT TURN ONLY LANE AND A COMBINED THROUGH/LEFT TURN LANE.
- STH 65 WILL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES

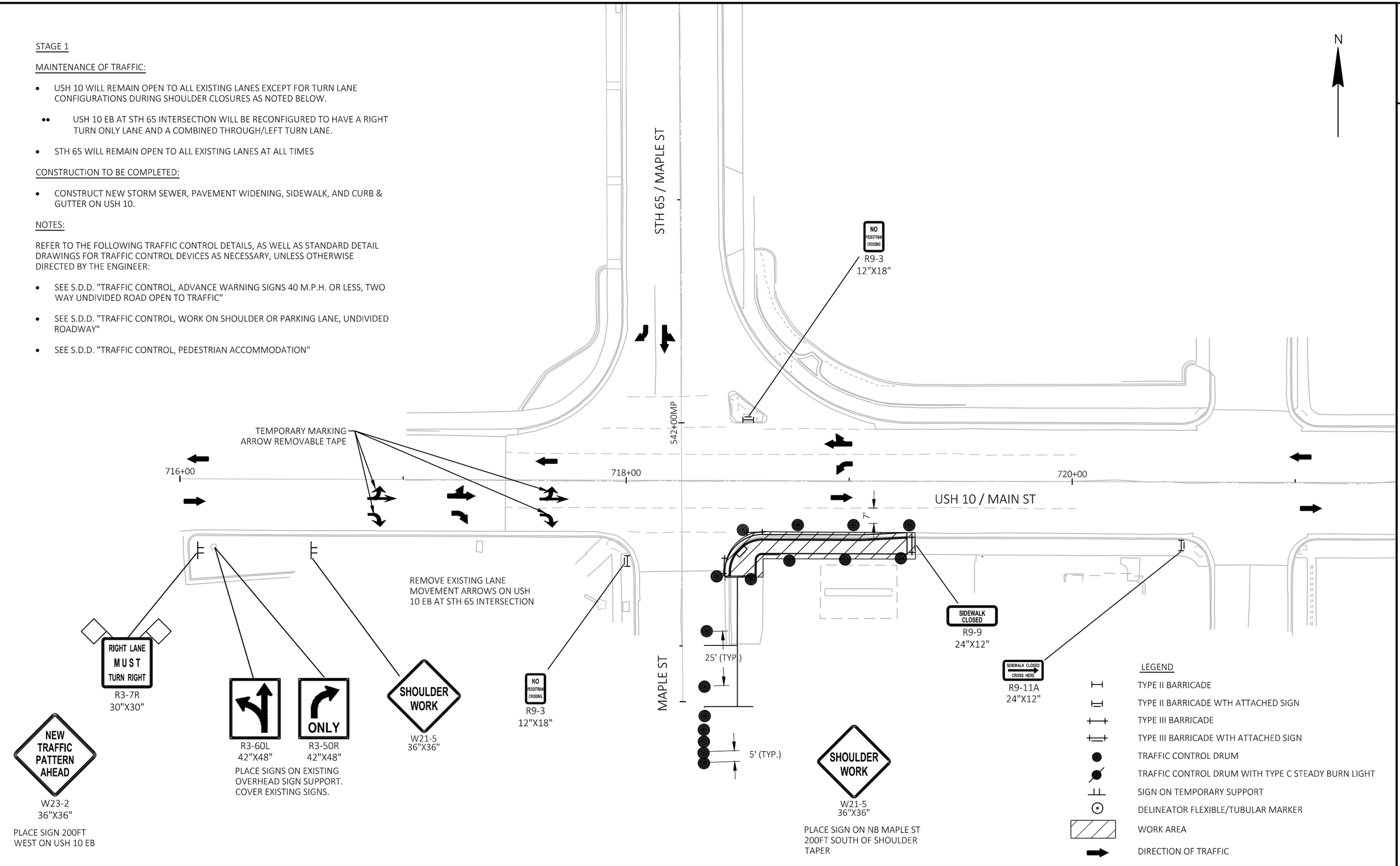
CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT NEW STORM SEWER, PAVEMENT WIDENING, SIDEWALK, AND CURB & GUTTER ON USH 10.

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - USH 10 & STH 65 INTERSECTION STAGE 1 | SHEET 67 | E |
|---|---|---|---|---|---|

2

STAGE 2

MAINTENANCE OF TRAFFIC:

- USH 10 WILL REMAIN OPEN TO ALL EXISTING LANES EXCEPT FOR TURN LANE CONFIGURATIONS DURING SHOULDER CLOSURES AS NOTED BELOW.
  - USH 10 WB AT STH 65 INTERSECTION WILL BE RECONFIGURED TO HAVE A RIGHT TURN ONLY LANE AND A COMBINED THROUGH/LEFT TURN LANE.
- STH 65 WILL REMAIN OPEN TO ALL EXISTING LANES EXCEPT FOR TURN LANE CONFIGURATIONS DURING SHOULDER CLOSURES AS NOTED BELOW.
  - STH 65 SB AT USH 10 INTERSECTION WILL BE RECONFIGURED TO HAVE A SINGLE COMBINED LEFT/THROUGH/RIGHT TURN LANE.

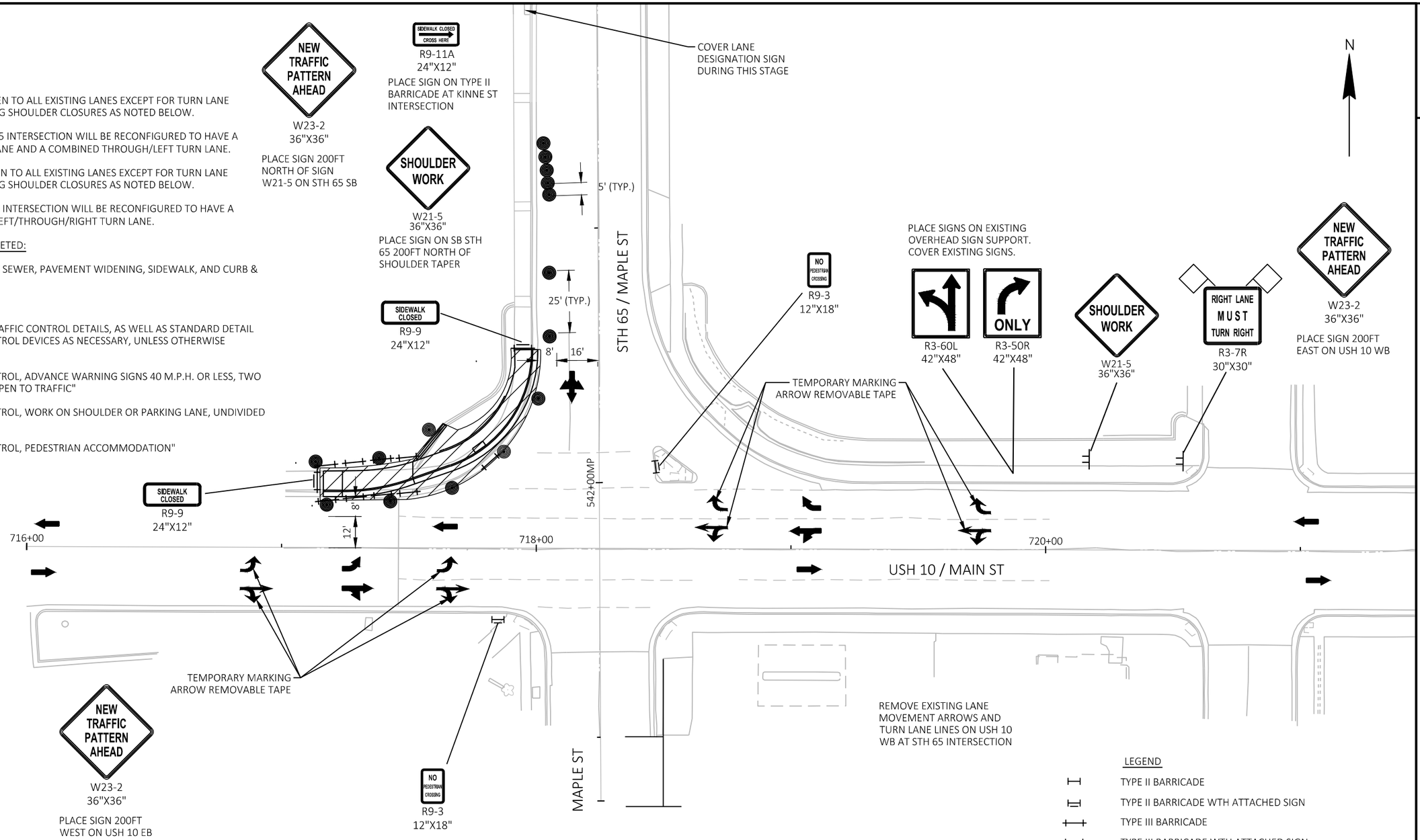
CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT NEW STORM SEWER, PAVEMENT WIDENING, SIDEWALK, AND CURB & GUTTER ON USH 10.

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"




| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - USH 10 & STH 65 INTERSECTION STAGE 2 | SHEET 68 | E |
|---|---|---|---|---|---|


FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - Stage 2
PLOT DATE : 1/5/2021 10:04 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

STAGE 3

MAINTENANCE OF TRAFFIC:

- USH 10 WILL REMAIN OPEN TO ALL EXISTING LANES EXCEPT FOR TURN LANE CONFIGURATIONS DURING SHOULDER CLOSURES AS NOTED BELOW.
  - USH 10 EB AT STH 65 INTERSECTION WILL BE RECONFIGURED TO HAVE A SINGLE COMBINED RIGHT TURN/THROUGH/LEFT TURN LANE SHIFTED TO THE SOUTH.
  - USH 10 WB AT STH 65 INTERSECTION WILL BE RECONFIGURED TO HAVE A RIGHT TURN ONLY LANE AND A COMBINED THROUGH/LEFT TURN LANE SHIFTED TO THE SOUTH.
- STH 65 WILL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES.

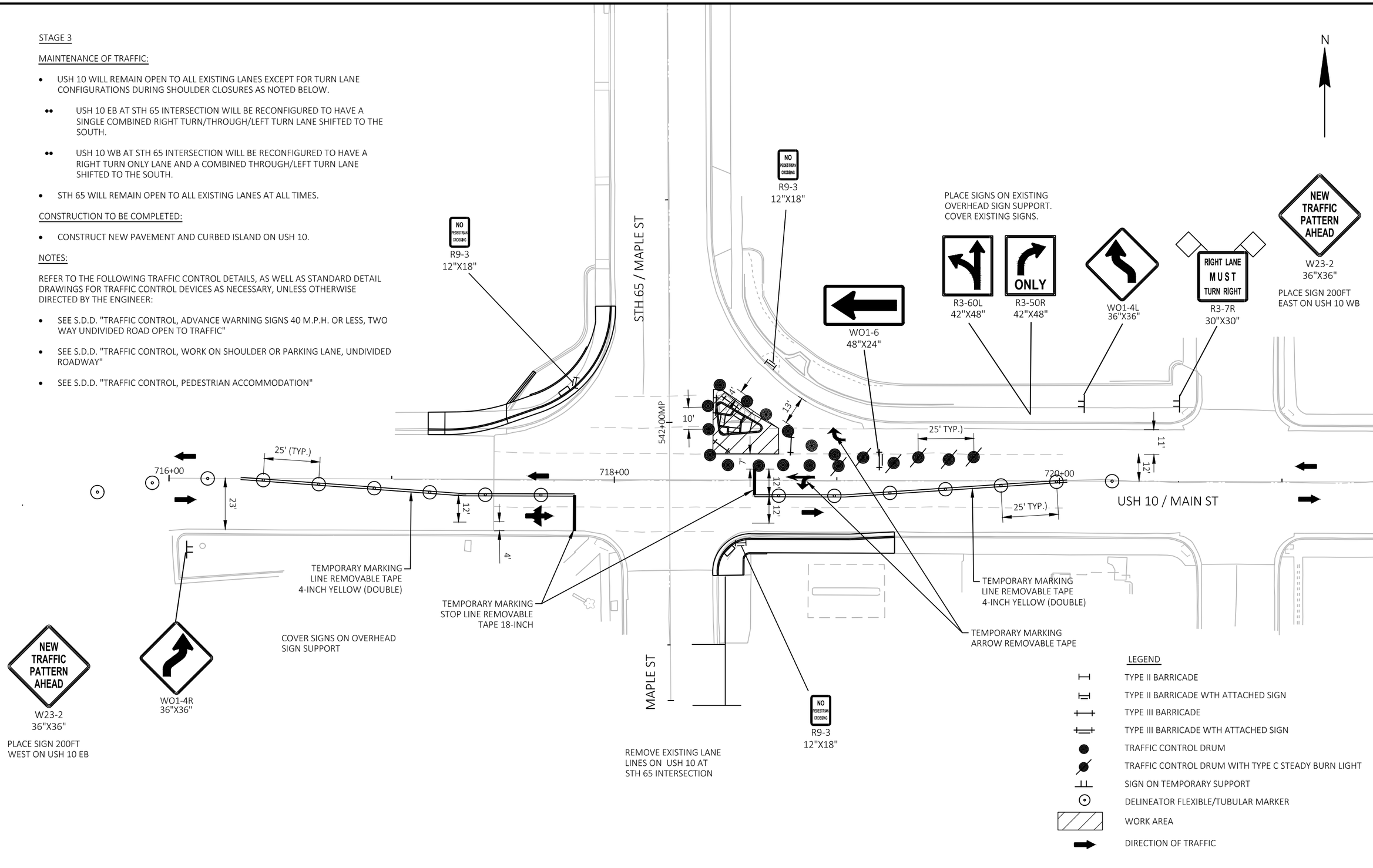
CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT NEW PAVEMENT AND CURBED ISLAND ON USH 10.

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"




LEGEND

- TYPE II BARRICADE
- TYPE II BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - USH 10 & STH 65 INTERSECTION STAGE 3 | SHEET 69 | E |
|---|---|---|---|---|---|

2

PEDESTRIAN ACCOMMODATION

MAINTENANCE OF TRAFFIC:

- STAGE CONSTRUCTION OF CURB RAMPS AND SIDEWALK TO ALLOW CONTINUED PEDESTRIAN ACCESS TO EACH CITY BLOCK FROM AT LEAST ONE DIRECTION
- LIMIT CURB RAMP WORK TO ONE QUADRANT PER INTERSECTION AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION
- MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES

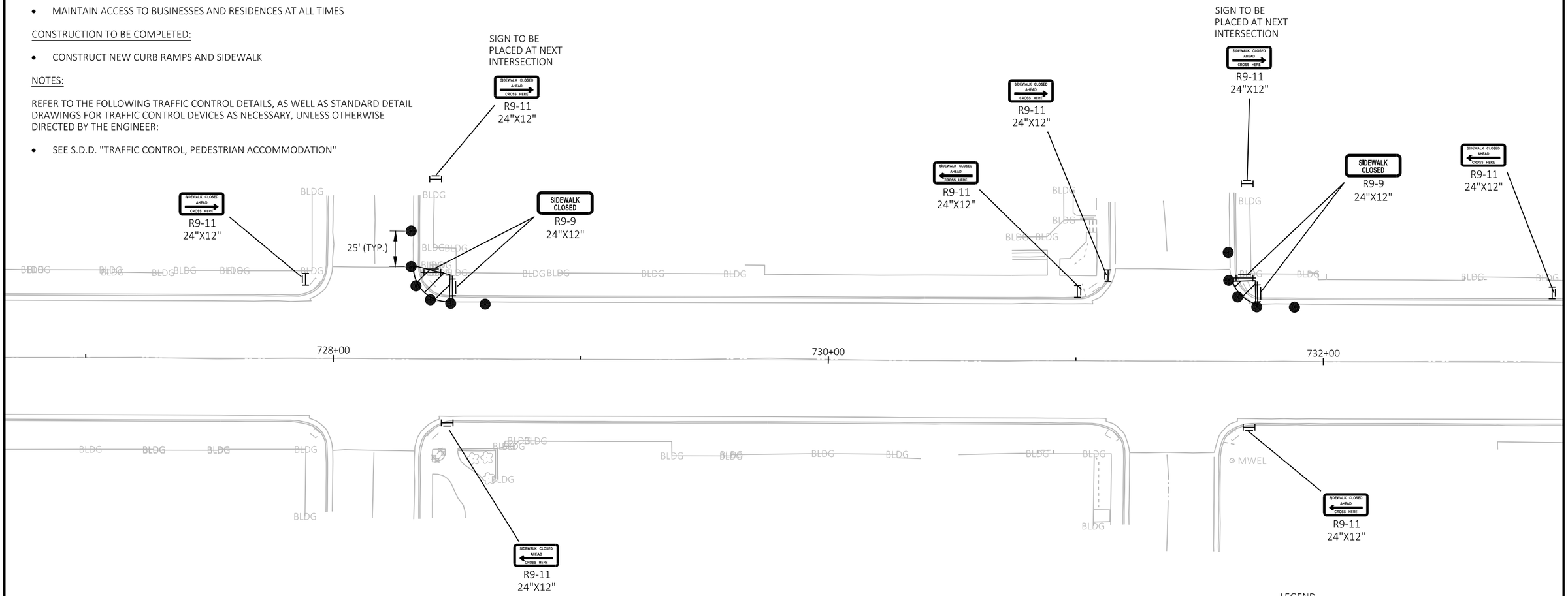
CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT NEW CURB RAMPS AND SIDEWALK

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"




LEGEND

- TYPE II BARRICADE
- TYPE II BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - TYPICAL PEDESTRIAN ACCOMMODATION | SHEET 70 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - Pedestrian

PLOT DATE : 1/5/2021 10:04 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

PEDESTRIAN ACCOMMODATION

MAINTENANCE OF TRAFFIC:

- STAGE CONSTRUCTION OF CURB RAMPS AND SIDEWALK TO ALLOW CONTINUED PEDESTRIAN ACCESS TO EACH CITY BLOCK FROM AT LEAST ONE DIRECTION
- LIMIT CURB RAMP WORK TO ONE QUADRANT PER INTERSECTION AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION
- MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES

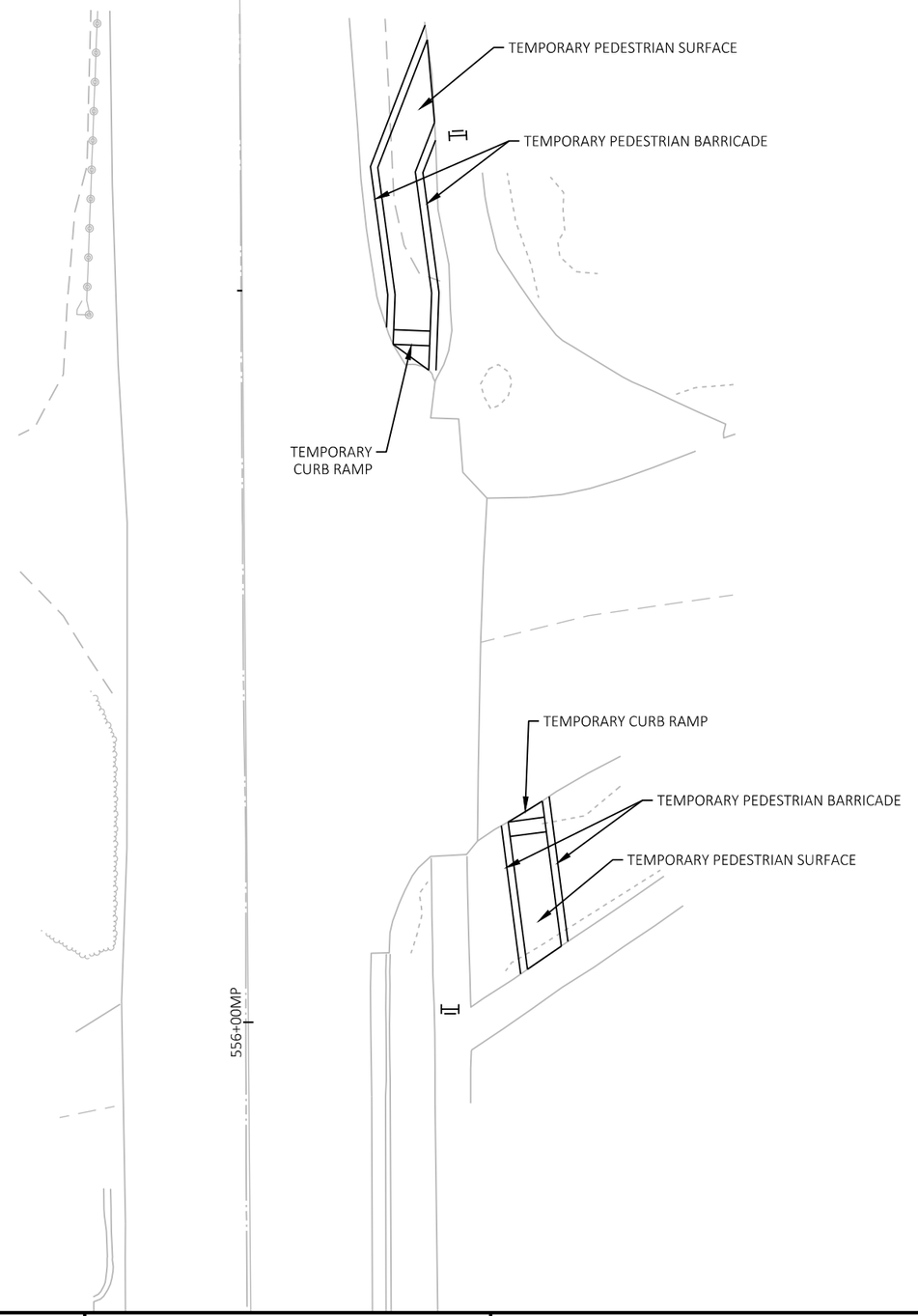
CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT NEW CURB RAMPS AND SIDEWALK

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

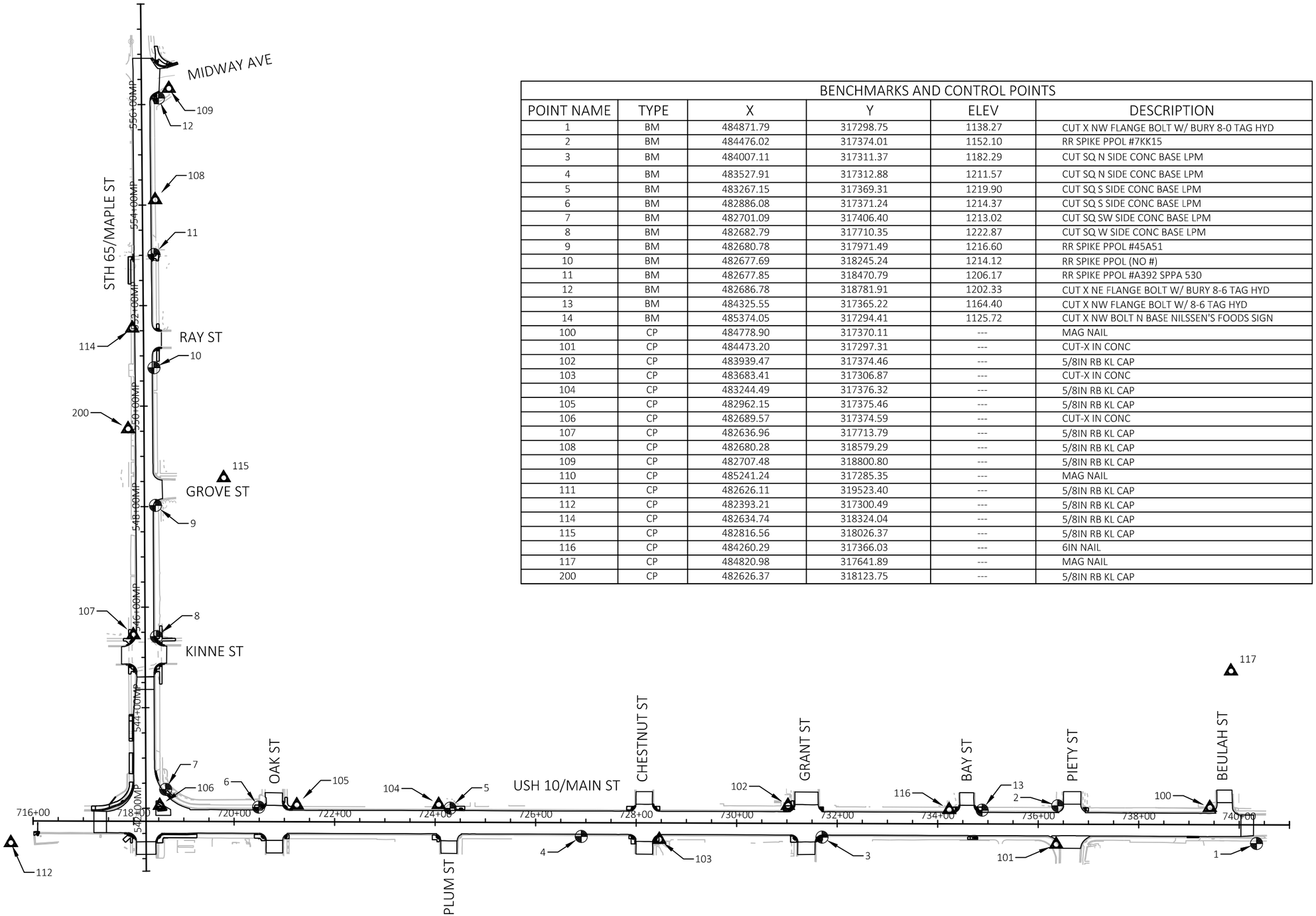



LEGEND

- TYPE II BARRICADE
- TYPE II BARRICADE WTH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION MIDWAY AVE | SHEET 71 | E |
|---|---|---|---|---|---|

2




| BENCHMARKS AND CONTROL POINTS | | | | | |
|---|---|---|---|---|---|
| POINT NAME | TYPE | X | Y | ELEV | DESCRIPTION |
| 1 | BM | 484871.79 | 317298.75 | 1138.27 | CUT X NW FLANGE BOLT W/ BURY 8-0 TAG HYD |
| 2 | BM | 484476.02 | 317374.01 | 1152.10 | RR SPIKE PPOL #7KK15 |
| 3 | BM | 484007.11 | 317311.37 | 1182.29 | CUT SQ N SIDE CONC BASE LPM |
| 4 | BM | 483527.91 | 317312.88 | 1211.57 | CUT SQ N SIDE CONC BASE LPM |
| 5 | BM | 483267.15 | 317369.31 | 1219.90 | CUT SQ S SIDE CONC BASE LPM |
| 6 | BM | 482886.08 | 317371.24 | 1214.37 | CUT SQ S SIDE CONC BASE LPM |
| 7 | BM | 482701.09 | 317406.40 | 1213.02 | CUT SQ SW SIDE CONC BASE LPM |
| 8 | BM | 482682.79 | 317710.35 | 1222.87 | CUT SQ W SIDE CONC BASE LPM |
| 9 | BM | 482680.78 | 317971.49 | 1216.60 | RR SPIKE PPOL #45A51 |
| 10 | BM | 482677.69 | 318245.24 | 1214.12 | RR SPIKE PPOL (NO #) |
| 11 | BM | 482677.85 | 318470.79 | 1206.17 | RR SPIKE PPOL #A392 SPPA 530 |
| 12 | BM | 482686.78 | 318781.91 | 1202.33 | CUT X NE FLANGE BOLT W/ BURY 8-6 TAG HYD |
| 13 | BM | 484325.55 | 317365.22 | 1164.40 | CUT X NW FLANGE BOLT W/ 8-6 TAG HYD |
| 14 | BM | 485374.05 | 317294.41 | 1125.72 | CUT X NW BOLT N BASE NILSSEN'S FOODS SIGN |
| 100 | CP | 484778.90 | 317370.11 | --- | MAG NAIL |
| 101 | CP | 484473.20 | 317297.31 | --- | CUT-X IN CONC |
| 102 | CP | 483939.47 | 317374.46 | --- | 5/8IN RB KL CAP |
| 103 | CP | 483683.41 | 317306.87 | --- | CUT-X IN CONC |
| 104 | CP | 483244.49 | 317376.32 | --- | 5/8IN RB KL CAP |
| 105 | CP | 482962.15 | 317375.46 | --- | 5/8IN RB KL CAP |
| 106 | CP | 482689.57 | 317374.59 | --- | CUT-X IN CONC |
| 107 | CP | 482636.96 | 317713.79 | --- | 5/8IN RB KL CAP |
| 108 | CP | 482680.28 | 318579.29 | --- | 5/8IN RB KL CAP |
| 109 | CP | 482707.48 | 318800.80 | --- | 5/8IN RB KL CAP |
| 110 | CP | 485241.24 | 317285.35 | --- | MAG NAIL |
| 111 | CP | 482626.11 | 319523.40 | --- | 5/8IN RB KL CAP |
| 112 | CP | 482393.21 | 317300.49 | --- | 5/8IN RB KL CAP |
| 114 | CP | 482634.74 | 318324.04 | --- | 5/8IN RB KL CAP |
| 115 | CP | 482816.56 | 318026.37 | --- | 5/8IN RB KL CAP |
| 116 | CP | 484260.29 | 317366.03 | --- | 6IN NAIL |
| 117 | CP | 484820.98 | 317641.89 | --- | MAG NAIL |
| 200 | CP | 482626.37 | 318123.75 | --- | 5/8IN RB KL CAP |

| PROJECT NO: 1530-03-76, 1540-01-72 | HWY: USH 10 | COUNTY: PIERCE | BENCHMARKS AND CONTROL POINTS | SHEET 72 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\021003_CP.DWG
LAYOUT NAME - 01
PLOT DATE : 10/1/2020 9:40 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

| | | | | | 1530-03-76 | 1540-01-72 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0002 | 204.0100 | Removing Concrete Pavement | SY | 325.000 | 325.000 | |
| 0004 | 204.0109.S | Removing Concrete Surface Partial Depth | SF | 120,740.000 | 111,771.000 | 8,969.000 |
| 0006 | 204.0110 | Removing Asphaltic Surface | SY | 5.000 | 5.000 | |
| 0008 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 1,529.000 | 1,431.000 | 98.000 |
| 0010 | 204.0120 | Removing Asphaltic Surface Milling | SY | 5,198.000 | | 5,198.000 |
| 0012 | 204.0150 | Removing Curb & Gutter | LF | 1,632.000 | 1,061.000 | 571.000 |
| 0014 | 204.0155 | Removing Concrete Sidewalk | SY | 690.000 | 434.000 | 256.000 |
| 0016 | 204.0195 | Removing Concrete Bases | EACH | 13.000 | 13.000 | |
| 0018 | 204.0220 | Removing Inlets | EACH | 1.000 | 1.000 | |
| 0020 | 204.9090.S | Removing (item description) 01. Removing Electrical Conductors from Existing Conduit | LF | 1,825.000 | 1,825.000 | |
| 0022 | 204.9090.S | Removing (item description) 02. Removing or Abandoning Conduit | LF | 470.000 | 470.000 | |
| 0024 | 205.0100 | Excavation Common | CY | 710.000 | 437.000 | 273.000 |
| 0026 | 208.0100 | Borrow | CY | 15.000 | 10.000 | 5.000 |
| 0028 | 211.0100 | Prepare Foundation for Asphaltic Paving (project) 01. 1530-03-76 | LS | 1.000 | 1.000 | |
| 0030 | 211.0100 | Prepare Foundation for Asphaltic Paving (project) 02. 1540-01-72 | LS | 1.000 | | 1.000 |
| 0032 | 213.0100 | Finishing Roadway (project) 01. 1530-03-76 | EACH | 1.000 | 1.000 | |
| 0034 | 213.0100 | Finishing Roadway (project) 02. 1540-01-72 | EACH | 1.000 | | 1.000 |
| 0036 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 415.000 | 295.000 | 120.000 |
| 0038 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 365.000 | 180.000 | 185.000 |
| 0040 | 310.0110 | Base Aggregate Open-Graded | TON | 185.000 | 155.000 | 30.000 |
| 0042 | 320.0155 | Concrete Base 9-Inch | SY | 110.000 | 110.000 | |
| 0044 | 405.0100 | Coloring Concrete WisDOT Red | CY | 74.000 | 74.000 | |
| 0046 | 415.1100 | Concrete Pavement HES 10-Inch | SY | 254.000 | 254.000 | |
| 0048 | 416.0160 | Concrete Driveway 6-Inch | SY | 53.000 | 28.000 | 25.000 |
| 0050 | 416.0610 | Drilled Tie Bars | EACH | 695.000 | 620.000 | 75.000 |
| 0052 | 416.0620 | Drilled Dowel Bars | EACH | 1,665.000 | 1,555.000 | 110.000 |
| 0054 | 455.0605 | Tack Coat | GAL | 2,730.000 | 1,975.000 | 755.000 |
| 0056 | 460.2000 | Incentive Density HMA Pavement | DOL | 2,230.000 | 1,420.000 | 810.000 |
| 0058 | 460.6644 | HMA Pavement 4 MT 58-34 V | TON | 1,030.000 | | 1,030.000 |
| 0060 | 460.6645 | HMA Pavement 5 MT 58-34 V | TON | 2,330.000 | 2,170.000 | 160.000 |
| 0062 | 465.0105 | Asphaltic Surface | TON | 10.000 | | 10.000 |
| 0064 | 465.0110 | Asphaltic Surface Patching | TON | 60.000 | | 60.000 |
| 0066 | 520.8000 | Concrete Collars for Pipe | EACH | 1.000 | 1.000 | |
| 0068 | 522.1012 | Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | EACH | 1.000 | | 1.000 |
| 0070 | 531.2042 | Drilling Shaft 42-Inch | LF | 18.000 | 18.000 | |
| 0072 | 531.5130 | Foundation Single-Shaft Type MC-III (structure) 01. S- | EACH | 1.000 | 1.000 | |

| Line | Item | Item Description | Unit | Total | 1530-03-76 Qty | 1540-01-72 Qty |
|---|---|---|---|---|---|---|
| | | 47-16 | | | | |
| 0074 | 532.5130 | Monotube Cantilever Type III (structure) 01. S-47-16 | EACH | 1.000 | 1.000 | |
| 0076 | 601.0110 | Concrete Curb Type D | LF | 60.000 | 60.000 | |
| 0078 | 601.0409 | Concrete Curb & Gutter 30-Inch Type A | LF | 1,175.000 | 1,035.000 | 140.000 |
| 0080 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 565.000 | 30.000 | 535.000 |
| 0082 | 601.0600 | Concrete Curb Pedestrian | LF | 260.000 | 165.000 | 95.000 |
| 0084 | 602.0410 | Concrete Sidewalk 5-Inch | SF | 5,245.000 | 3,165.000 | 2,080.000 |
| 0086 | 602.0515 | Curb Ramp Detectable Warning Field Natural Patina | SF | 370.000 | 240.000 | 130.000 |
| 0088 | 602.0615 | Curb Ramp Detectable Warning Field Radial Natural Patina | SF | 48.000 | 30.000 | 18.000 |
| 0090 | 608.0312 | Storm Sewer Pipe Reinforced Concrete Class III 12-Inch | LF | 2.000 | 2.000 | |
| 0092 | 608.0412 | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF | 20.000 | | 20.000 |
| 0094 | 611.0600 | Inlet Covers Type A | EACH | 1.000 | 1.000 | |
| 0096 | 611.0639 | Inlet Covers Type H-S | EACH | 1.000 | | 1.000 |
| 0098 | 611.3220 | Inlets 2x2-FT | EACH | 1.000 | 1.000 | |
| 0100 | 611.3230 | Inlets 2x3-FT | EACH | 1.000 | | 1.000 |
| 0102 | 611.8110 | Adjusting Manhole Covers | EACH | 42.000 | 30.000 | 12.000 |
| 0104 | 611.8115 | Adjusting Inlet Covers | EACH | 5.000 | 5.000 | |
| 0106 | 611.8120.S | Cover Plates Temporary | EACH | 42.000 | 30.000 | 12.000 |
| 0108 | 612.0106 | Pipe Underdrain 6-Inch | LF | 61.000 | 61.000 | |
| 0110 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 1530-03-76 | EACH | 1.000 | 1.000 | |
| 0112 | 618.0100 | Maintenance And Repair of Haul Roads (project) 02. 1540-01-72 | EACH | 1.000 | | 1.000 |
| 0114 | 619.1000 | Mobilization | EACH | 1.000 | 0.750 | 0.250 |
| 0116 | 620.0300 | Concrete Median Sloped Nose | SF | 28.000 | 28.000 | |
| 0118 | 624.0100 | Water | MGAL | 34.000 | 22.000 | 12.000 |
| 0120 | 625.0500 | Salvaged Topsoil | SY | 320.000 | 40.000 | 280.000 |
| 0122 | 627.0200 | Mulching | SY | 320.000 | 40.000 | 280.000 |
| 0124 | 628.1905 | Mobilizations Erosion Control | EACH | 4.000 | 2.000 | 2.000 |
| 0126 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 2.000 | 1.000 | 1.000 |
| 0128 | 628.2004 | Erosion Mat Class I Type B | SY | 10.000 | | 10.000 |
| 0130 | 628.7005 | Inlet Protection Type A | EACH | 5.000 | 3.000 | 2.000 |
| 0132 | 628.7015 | Inlet Protection Type C | EACH | 29.000 | 24.000 | 5.000 |
| 0134 | 628.7560 | Tracking Pads | EACH | 6.000 | 3.000 | 3.000 |
| 0136 | 629.0205 | Fertilizer Type A | CWT | 22.500 | 2.500 | 20.000 |
| 0138 | 630.0140 | Seeding Mixture No. 40 | LB | 6.000 | 1.000 | 5.000 |
| 0140 | 630.0500 | Seed Water | MGAL | 11.000 | 4.000 | 7.000 |
| 0142 | 633.5200 | Markers Culvert End | EACH | 1.000 | | 1.000 |

| | | | | | 1530-03-76 | 1540-01-72 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0144 | 634.0809 | Posts Tubular Steel 2x2-Inch X 9.5-FT | EACH | 1.000 | 1.000 | |
| 0146 | 634.0814 | Posts Tubular Steel 2x2-Inch X 14-FT | EACH | 3.000 | 3.000 | |
| 0148 | 637.2210 | Signs Type II Reflective H | SF | 35.500 | 35.500 | |
| 0150 | 637.2230 | Signs Type II Reflective F | SF | 4.000 | 4.000 | |
| 0152 | 638.2102 | Moving Signs Type II | EACH | 13.000 | 8.000 | 5.000 |
| 0154 | 638.3150 | Removing Overhead Sign Supports Cantilever (structure) 01. S-47-8 | EACH | 1.000 | 1.000 | |
| 0156 | 638.3150 | Removing Overhead Sign Supports Cantilever (structure) 02. S-47-1 | EACH | 1.000 | 1.000 | |
| 0158 | 638.4000 | Moving Small Sign Supports | EACH | 6.000 | 1.000 | 5.000 |
| 0160 | 642.5001 | Field Office Type B | EACH | 1.000 | 0.750 | 0.250 |
| 0162 | 643.0300 | Traffic Control Drums | DAY | 6,340.000 | 3,490.000 | 2,850.000 |
| 0164 | 643.0410 | Traffic Control Barricades Type II | DAY | 2,495.000 | 1,305.000 | 1,190.000 |
| 0166 | 643.0420 | Traffic Control Barricades Type III | DAY | 1,190.000 | 715.000 | 475.000 |
| 0168 | 643.0500 | Traffic Control Flexible Tubular Marker Posts | EACH | 20.000 | 20.000 | |
| 0170 | 643.0600 | Traffic Control Flexible Tubular Marker Bases | EACH | 20.000 | 20.000 | |
| 0172 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 3,125.000 | 2,175.000 | 950.000 |
| 0174 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 475.000 | 475.000 | |
| 0176 | 643.0900 | Traffic Control Signs | DAY | 14,460.000 | 8,170.000 | 6,290.000 |
| 0178 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 17.000 | 15.000 | 2.000 |
| 0180 | 643.5000 | Traffic Control | EACH | 1.000 | 0.750 | 0.250 |
| 0182 | 644.1420 | Temporary Pedestrian Surface Plywood | SF | 700.000 | 350.000 | 350.000 |
| 0184 | 644.1601 | Temporary Pedestrian Curb Ramp | DAY | 30.000 | 15.000 | 15.000 |
| 0186 | 644.1810 | Temporary Pedestrian Barricade | LF | 500.000 | 250.000 | 250.000 |
| 0188 | 645.0111 | Geotextile Type DF Schedule A | SY | 41.000 | 41.000 | |
| 0190 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 633.000 | 633.000 | |
| 0192 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 496.000 | 346.000 | 150.000 |
| 0194 | 646.4520 | Marking Line Same Day Epoxy 4-Inch | LF | 7,525.000 | 4,775.000 | 2,750.000 |
| 0196 | 646.5020 | Marking Arrow Epoxy | EACH | 12.000 | 9.000 | 3.000 |
| 0198 | 646.5120 | Marking Word Epoxy | EACH | 1.000 | | 1.000 |
| 0200 | 646.5220 | Marking Symbol Epoxy | EACH | 1.000 | 1.000 | |
| 0202 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 372.000 | 282.000 | 90.000 |
| 0204 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 80.000 | 80.000 | |
| 0206 | 646.7420 | Marking Crosswalk Epoxy Transverse Line 6-Inch | LF | 3,060.000 | 2,350.000 | 710.000 |
| 0208 | 646.8120 | Marking Curb Epoxy | LF | 1,813.000 | 1,218.000 | 595.000 |
| 0210 | 646.8220 | Marking Island Nose Epoxy | EACH | 2.000 | 2.000 | |
| 0212 | 646.8320 | Marking Parking Stall Epoxy | LF | 426.000 | 426.000 | |
| 0214 | 646.9000 | Marking Removal Line 4-Inch | LF | 990.000 | 990.000 | |
| 0216 | 646.9100 | Marking Removal Line 8-Inch | LF | 360.000 | 360.000 | |
| 0218 | 646.9200 | Marking Removal Line Wide | LF | 60.000 | 60.000 | |

| | | | | | 1530-03-76 | 1540-01-72 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0220 | 646.9300 | Marking Removal Special Marking | EACH | 15.000 | 15.000 | |
| 0222 | 649.0105 | Temporary Marking Line Paint 4-Inch | LF | 6,870.000 | 4,610.000 | 2,260.000 |
| 0224 | 649.0550 | Temporary Marking Arrow Removable Tape | EACH | 16.000 | 16.000 | |
| 0226 | 649.0850 | Temporary Marking Stop Line Removable Tape 18-Inch | LF | 170.000 | 170.000 | |
| 0228 | 650.4000 | Construction Staking Storm Sewer | EACH | 3.000 | 1.000 | 2.000 |
| 0230 | 650.4500 | Construction Staking Subgrade | LF | 225.000 | 170.000 | 55.000 |
| 0232 | 650.5000 | Construction Staking Base | LF | 225.000 | 170.000 | 55.000 |
| 0234 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 2,040.000 | 1,276.000 | 764.000 |
| 0236 | 650.6500 | Construction Staking Structure Layout (structure) 01. S-47-16 | LS | 1.000 | 1.000 | |
| 0238 | 650.8000 | Construction Staking Resurfacing Reference | LF | 3,815.000 | 2,257.000 | 1,558.000 |
| 0240 | 650.8500 | Construction Staking Electrical Installations (project) 01. 1530-03-76 | LS | 1.000 | 1.000 | |
| 0242 | 650.9000 | Construction Staking Curb Ramps | EACH | 39.000 | 25.000 | 14.000 |
| 0244 | 650.9910 | Construction Staking Supplemental Control (project) 01. 1530-03-76 | LS | 1.000 | 1.000 | |
| 0246 | 650.9910 | Construction Staking Supplemental Control (project) 02. 1540-01-72 | LS | 1.000 | | 1.000 |
| 0248 | 650.9920 | Construction Staking Slope Stakes | LF | 225.000 | 170.000 | 55.000 |
| 0250 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 535.000 | 535.000 | |
| 0252 | 652.0235 | Conduit Rigid Nonmetallic Schedule 40 3-Inch | LF | 180.000 | 180.000 | |
| 0254 | 652.0605 | Conduit Special 2-Inch | LF | 255.000 | 255.000 | |
| 0256 | 652.0700.S | Install Conduit into Existing Item | EACH | 4.000 | 4.000 | |
| 0258 | 652.0800 | Conduit Loop Detector | LF | 500.000 | 500.000 | |
| 0260 | 652.0900 | Loop Detector Slots | LF | 348.000 | 348.000 | |
| 0262 | 653.0135 | Pull Boxes Steel 24x36-Inch | EACH | 1.000 | 1.000 | |
| 0264 | 653.0140 | Pull Boxes Steel 24x42-Inch | EACH | 10.000 | 10.000 | |
| 0266 | 653.0905 | Removing Pull Boxes | EACH | 12.000 | 12.000 | |
| 0268 | 654.0101 | Concrete Bases Type 1 | EACH | 6.000 | 6.000 | |
| 0270 | 654.0102 | Concrete Bases Type 2 | EACH | 1.000 | 1.000 | |
| 0272 | 654.0113 | Concrete Bases Type 13 | EACH | 2.000 | 2.000 | |
| 0274 | 655.0230 | Cable Traffic Signal 5-14 AWG | LF | 689.000 | 689.000 | |
| 0276 | 655.0240 | Cable Traffic Signal 7-14 AWG | LF | 163.000 | 163.000 | |
| 0278 | 655.0250 | Cable Traffic Signal 9-14 AWG | LF | 454.000 | 454.000 | |
| 0280 | 655.0260 | Cable Traffic Signal 12-14 AWG | LF | 923.000 | 923.000 | |
| 0282 | 655.0290 | Cable Traffic Signal 21-14 AWG | LF | 328.000 | 328.000 | |
| 0284 | 655.0305 | Cable Type UF 2-12 AWG Grounded | LF | 336.000 | 336.000 | |
| 0286 | 655.0515 | Electrical Wire Traffic Signals 10 AWG | LF | 1,568.000 | 1,568.000 | |
| 0288 | 655.0610 | Electrical Wire Lighting 12 AWG | LF | 558.000 | 558.000 | |
| 0290 | 655.0700 | Loop Detector Lead In Cable | LF | 3,004.000 | 3,004.000 | |
| 0292 | 655.0800 | Loop Detector Wire | LF | 1,294.000 | 1,294.000 | |

| | | | | | 1530-03-76 | 1540-01-72 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| 0294 | 657.0100 | Pedestal Bases | EACH | 6.000 | 6.000 | |
| 0296 | 657.0255 | Transformer Bases Breakaway 11 1/2-Inch Bolt Circle | EACH | 1.000 | 1.000 | |
| 0298 | 657.0305 | Poles Type 2 | EACH | 1.000 | 1.000 | |
| 0300 | 657.0361 | Poles Type 13-Over Height | EACH | 2.000 | 2.000 | |
| 0302 | 657.0425 | Traffic Signal Standards Aluminum 15-FT | EACH | 4.000 | 4.000 | |
| 0304 | 657.0430 | Traffic Signal Standards Aluminum 10-FT | EACH | 2.000 | 2.000 | |
| 0306 | 657.0535 | Monotube Arms 35-FT | EACH | 1.000 | 1.000 | |
| 0308 | 657.0545 | Monotube Arms 45-FT | EACH | 1.000 | 1.000 | |
| 0310 | 657.0590 | Trombone Arms 20-FT | EACH | 1.000 | 1.000 | |
| 0312 | 657.0810 | Luminaire Arms Steel 10-FT | EACH | 2.000 | 2.000 | |
| 0314 | 658.0173 | Traffic Signal Face 3S 12-Inch | EACH | 11.000 | 11.000 | |
| 0316 | 658.0174 | Traffic Signal Face 4S 12-Inch | EACH | 4.000 | 4.000 | |
| 0318 | 658.0416 | Pedestrian Signal Face 16-Inch | EACH | 8.000 | 8.000 | |
| 0320 | 658.0500 | Pedestrian Push Buttons | EACH | 8.000 | 8.000 | |
| 0322 | 658.5069 | Signal Mounting Hardware (location) 01. USH 10/USH 63 & STH 65 | LS | 1.000 | 1.000 | |
| 0324 | 659.1125 | Luminaires Utility LED C | EACH | 2.000 | 2.000 | |
| 0326 | 690.0150 | Sawing Asphalt | LF | 510.000 | 130.000 | 380.000 |
| 0328 | 690.0250 | Sawing Concrete | LF | 2,475.000 | 2,205.000 | 270.000 |
| 0330 | 715.0415 | Incentive Strength Concrete Pavement | DOL | 160.000 | 160.000 | |
| 0332 | 740.0440 | Incentive IRI Ride | DOL | 2,920.000 | 1,740.000 | 1,180.000 |
| 0334 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 800.000 | 800.000 | |
| 0336 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 660.000 | 660.000 | |
| 0338 | SPV.0060 | Special 01. Remove and Salvage Street Light Assembly | EACH | 4.000 | 4.000 | |
| 0340 | SPV.0060 | Special 02. Reinstall Salvaged Street Light Assembly | EACH | 2.000 | 2.000 | |
| 0342 | SPV.0060 | Special 03. Adjusting Water Valve Box | EACH | 40.000 | 30.000 | 10.000 |
| 0344 | SPV.0060 | Special 04. Adjusting Hydrant | EACH | 3.000 | 1.000 | 2.000 |
| 0346 | SPV.0060 | Special 05. Concrete Base Type 5 Modified | EACH | 2.000 | 2.000 | |
| 0348 | SPV.0060 | Special 06. Replace Curb Stop and Box | EACH | 1.000 | 1.000 | |
| 0350 | SPV.0090 | Special 01. Concrete Curb & Gutter 18-Inch Special | LF | 20.000 | 20.000 | |
| 0352 | SPV.0090 | Special 02. Furnish and Install Equivalent Lighting Conductors | LF | 2,355.000 | 2,355.000 | |
| 0354 | SPV.0090 | Special 03. Install Department Furnished Cat-5e Cable | LF | 95.000 | 95.000 | |
| 0356 | SPV.0090 | Special 04. Concrete Curb & Gutter Cure and Seal Treatment | LF | 1,820.000 | 1,145.000 | 675.000 |
| 0358 | SPV.0105 | Special 01. Milling and Removing Temporary Joint 1530-03-76 | LS | 1.000 | 1.000 | |
| 0360 | SPV.0105 | Special 02. Material Transfer Vehicle 1530-03-76 | LS | 1.000 | 1.000 | |
| 0362 | SPV.0105 | Special 03. Remove Traffic Signals (USH 10/USH 63 & STH 65) | LS | 1.000 | 1.000 | |
| 0364 | SPV.0105 | Special 04. Milling and Removing Temporary Joint | LS | 1.000 | | 1.000 |

| | | | | | 1530-03-76 | 1540-01-72 |
|---|---|---|---|---|---|---|
| **Line** | **Item** | **Item Description** | **Unit** | **Total** | **Qty** | **Qty** |
| | | 1540-01-72 | | | | |
| 0366 | SPV.0105 | Special 05. Material Transfer Vehicle 1540-01-72 | LS | 1.000 | | 1.000 |
| 0368 | SPV.0165 | Special 01. Concrete Sidewalk Cure and Seal Treatment | SF | 5,245.000 | 3,165.000 | 2,080.000 |
| 0370 | SPV.0180 | Special 01. Concrete Pavement Repair Doweled | SY | 360.000 | 340.000 | 20.000 |
| 0372 | SPV.0180 | Special 02. Concrete Pavement Replacement Doweled | SY | 240.000 | 220.000 | 20.000 |
| 0374 | SPV.0180 | Special 03. Concrete Centerline Repair, 30-Inch | SY | 80.000 | 70.000 | 10.000 |

## REMOVING PAVEMENT

| LOCATION | STATION | - STATION | 204.0100 REMOVING CONCRETE PAVEMENT (SY) | 204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH (SF) | 204.0110 REMOVING ASPAHLTIC SURFACE (SY) | 204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY) | 204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 20,927 | -- | 277 | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 19,739 | -- | 354 | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | -- | 23,509 | -- | 481 | -- |
| **CATEGORY 0010 TOTALS** | | | **--** | **64,175** | **--** | **1,112** | **0** |
| **CATEGORY 0020** | | | | | | | |
| MAPLE ST - OAK ST | 717+16 | 720+80 | 71 | 19,630 | 5 | 319 | -- |
| **CATEGORY 0020 TOTALS** | | | **71** | **19,630** | **5** | **319** | **0** |
| **CATEGORY 0030** | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 13,698 | -- | -- | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 11,030 | -- | -- | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | -- | 3,238 | -- | -- | -- |
| **CATEGORY 0030 TOTALS** | | | **0** | **27,966** | **0** | **0** | **0** |
| **CATEGORY 0050** | | | | | | | |
| MAPLE ST - OAK ST | 717+16 | 720+80 | 37 | -- | -- | -- | -- |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 107 | -- | -- | -- | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 110 | -- | -- | -- | -- |
| **CATEGORY 0050 TOTALS** | | | **254** | **0** | **0** | **0** | **0** |
| **1530-03-76 PROJECT TOTALS** | | | **325** | **111,771** | **5** | **1,431** | **--** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | -- | 8,969 | -- | 98 | -- |
| KINNE ST - GROVE ST | 544+61 | 548+35 | -- | -- | -- | -- | 1,720 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | -- | -- | -- | -- | 1,210 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | -- | -- | -- | -- | 2,268 |
| **1540-01-72 PROJECT TOTALS** | | | **0** | **8,969** | **--** | **98** | **5,198** |
| **PROJECT TOTALS** | | | **325** | **120,740** | **5** | **1,529** | **5,198** |

## REMOVING CURB & GUTTER

| LOCATION | STATION | - STATION | O/S | 204.0150 REMOVING CURB&GUTTER (LF) |
|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | |
| **CATEGORY 0010** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | 56 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | 27 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | RT | 44 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | LT | 71 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | RT | 59 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | LT | 83 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | LT | 19 |
| UNDISTRIBUTED 10% OF PROJECT | | | | 465 |
| **CATEGORY 0010 TOTALS** | | | | **824** |
| **CATEGORY 0020** | | | | |
| MAPLE ST - OAK ST | 717+16 | 720+80 | LT | 135 |
| MAPLE ST - OAK ST | 716+01 | 720+80 | RT | 102 |
| **CATEGORY 0020 TOTALS** | | | | **237** |
| **1530-03-76 PROJECT TOTALS** | | | | **1,061** |
| **PROJECT 1540-01-72** | | | | |
| **CATEGORY 0010** | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | LT | 94 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | RT | 67 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | LT | 57 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | RT | 18 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | RT | 30 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | LT | 15 |
| UNDISTRIBUTED 10% OF PROJECT | | | | 290 |
| **1540-01-72 PROJECT TOTALS** | | | | **571** |
| **PROJECT TOTALS** | | | | **1,632** |

## REMOVING CONCRETE SIDEWALK

| LOCATION | STATION | - STATION | O/S | 204.0155 REMOVING CONCRETE SIDEWALK (SY) |
|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | |
| **CATEGORY 0010** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | 39 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | 22 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | RT | 37 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | LT | 45 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | RT | 38 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | LT | 47 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | RT | 20 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | LT | 18 |
| **CATEGORY 0010 TOTALS** | | | | **266** |
| **CATEGORY 0020** | | | | |
| MAPLE ST - OAK ST | 717+16 | 718+07 | LT | 82 |
| MAPLE ST - OAK ST | 717+16 | 720+80 | RT | 72 |
| MAPLE ST - OAK ST | 717+16 | 720+80 | LT | 14 |
| **CATEGORY 0020 TOTALS** | | | | **168** |
| **1530-03-76 PROJECT TOTALS** | | | | **434** |
| **PROJECT 1540-01-72** | | | | |
| **CATEGORY 0010** | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | LT | 69 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | RT | 65 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | LT | 41 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | RT | 15 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | RT | 32 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | LT | 34 |
| **1540-01-72 PROJECT TOTALS** | | | | **256** |
| **PROJECT TOTALS** | | | | **690** |

## REMOVING INLETS

| LOCATION | STATION | O/S | 204.0220 REMOVING INLETS (EACH) |
|---|---|---|---|
| **PROJECT 1530-03-76** | | | |
| **CATEGORY 0020** | | | |
| MAPLE ST - OAK ST | 718+65 | RT | 1 |
| **1530-03-76 PROJECT TOTALS** | | | **1** |
| **PROJECT TOTALS** | | | **1** |

## EXCAVATION SUMMARY

| 1530-03-76 CATEGORY 0010 | FROM / TO STATION | DIVISION | LOCATION | CONSTRUCTION STAGE | 205.0100 EXCAVATION COMMON (CY) | SALVAGED/ UNUSABLE PAVEMENT MATERIAL | AVAILABLE MATERIAL (2) | UNEXPANDED FILL (6) | EXPANDED FILL (3) FACTOR 1.30 | MASS ORDINATE +/- (4) | WASTE (5) | 208.0100 BORROW (7) (CY) | COMMENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIV. 1 | CURB RAMPS | 1-1 | USH 10 | STAGE 1 | 252 | 42 | 210 | 0 | 0 | 210 | 0 | 5 | Undistributed Borrow added |
| | | | DIV 1 SUBTOTAL | | 252 | 42 | 210 | 0 | 0 | 210 | 0 | 5 | |
| **CATEGORY 0020** | | | | | | | | | | | | | |
| | 718+44 - 719+26 | 2-1 | USH 10 | STAGE 1 | 59 | 21 | 38 | 0 | 0 | 38 | 0 | 2 | Undistributed Borrow added |
| DIV. 2 | 717+16 - 718+00 | 2-2 | USH 10 | STAGE 2 | 82 | 22 | 60 | 0 | 0 | 60 | 0 | 2 | Undistributed Borrow added |
| | 718+44 - 718+74 | 2-3 | USH 10 | STAGE 3 | 44 | 15 | 29 | 0 | 0 | 29 | 0 | 1 | Undistributed Borrow added |
| | | | DIV 2 SUBTOTAL | | 185 | 57 | 127 | 0 | 0 | 127 | 0 | 5 | |
| **1540-01-72 CATEGORY 0010** | | | | | | | | | | | | | |
| DIV. 3 | CURB RAMPS | 3-1 | STH 65 | STAGE 1 | 273 | 46 | 227 | 0 | 0 | 227 | 0 | 5 | Undistributed Borrow added |
| | | | DIV 2 SUBTOTAL | | 273 | 46 | 227 | 0 | 0 | 227 | 0 | 5 | |
| | | | **PROJECT TOTALS** | | **710** | | | | | | | **15** | |

Note 1) Salvaged/Unusable Pavement Material is included in Excavation Common.
Note 2) Available Material = Excavation Common - Salvaged/Unusable Pavement Material
Note 3) Expanded Fill Factor = 1.30
Note 4) The Mass Ordinate + or - Qty calculated for the Division.
Positive quantity indicates an excess of material within the Division.
Negative indicates a shortage of material within the Division.
Mass Ordinate = Available Material - Expanded Fill
Note 5) Waste = Positive Division Mass Ordinate
Note 6) Unexpanded Fill = Unexpanded Fill from individual Earthwork tables
Note 7) It was assumed that any excess material used as Fill between Divisions would be counted as Borrow.

## BASE AGGREGATE AND CONCRETE BASE

| LOCATION | STATION - STATION | | 305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON) | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON) | 310.0110* BASE AGGREGATE DENSE OPEN-GRADED (TON) | 320.0155 CONCRETE BASE 9-INCH (SY) |
|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | |
| **CATEGORY 0010** | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 49 | 15 | 15 | – |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 65 | 18 | 18 | – |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 57 | 25 | 25 | – |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 24 | 7 | 7 | – |
| **CATEGORY 0010 TOTALS** | | | **195** | **65** | **65** | **0** |
| **CATEGORY 0020** | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 100 | 94 | 85 | 110 |
| **CATEGORY 0020 TOTALS** | | | **100** | **94** | **85** | **110** |
| **CATEGORY 0050** | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | -- | 3 | -- | – |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 9 | -- | – |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 9 | -- | – |
| **CATEGORY 0050 TOTALS** | | | **0** | **21** | **0** | **0** |
| **1530-03-76 PROJECT TOTALS** | | | **295** | **180** | **150** | **110** |
| **PROJECT 1540-01-72** | | | | | | |
| **CATEGORY 0010** | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | 35 | 28 | 30 | – |
| KINNE ST - GROVE ST | 544+61 | 548+35 | 31 | 63 | -- | – |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | 4 | 8 | -- | – |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 50 | 86 | -- | – |
| **1540-01-72 PROJECT TOTALS** | | | **120** | **185** | **30** | **0** |
| **PROJECT TOTALS** | | | **415** | **365** | **180** | **110** |

*ADDITIONAL QUANTITY FOUND IN "UNDERDRAIN" TABLE

## HMA PAVEMENT

| LOCATION | STATION - STATION | | 455.0605 TACK COAT (GAL) | 460.6644 HMA PAVEMENT 4 MT 58-34 V (TON) | 460.6645 HMA PAVEMENT 5 MT 58-34 V (TON) | 465.0105 ASPAHLTIC SURFACE (TON) | 465.0110 ASPAHLTIC SURFACE PATCHING (TON) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 360 | -- | 393 | – | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 352 | -- | 384 | – | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 438 | -- | 478 | – | -- |
| WEDGING | | | – | -- | 10 | – | -- |
| **CATEGORY 0010 TOTALS** | | | **1,150** | **0** | **1,265** | **0** | **0** |
| **CATEGORY 0020** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 370 | -- | 403 | – | -- |
| WEDGING | | | – | -- | 2 | – | -- |
| **CATEGORY 0020 TOTALS** | | | **370** | **0** | **405** | **0** | **0** |
| **CATEGORY 0030** | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 223 | -- | 245 | – | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 180 | -- | 199 | – | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 52 | -- | 56 | – | -- |
| **CATEGORY 0030 TOTALS** | | | **455** | **0** | **500** | **0** | **0** |
| **1530-03-76 PROJECT TOTALS** | | | **1,975** | **0** | **2,170** | **0** | **0** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | 140 | -- | 158 | – | -- |
| KINNE ST - GROVE ST | 544+61 | 548+35 | 125 | 337 | -- | – | -- |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | 170 | 238 | -- | – | -- |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 320 | 449 | -- | 10 | -- |
| UNDISTRIBUTED 5% OF PAVEMENT AREA | | | – | -- | -- | – | 60 |
| WEDGING | | | – | 6 | 2 | – | -- |
| **1540-01-72 PROJECT TOTALS** | | | **755** | **1,030** | **160** | **10** | **60** |
| **PROJECT TOTALS** | | | **2,730** | **1,030** | **2,330** | **10** | **60** |

3

## DRILLED BARS

| LOCATION | STATION - STATION | | 416.0610* DRILLED TIE BARS (EACH) | 416.0620* DRILLED DOWEL BARS (EACH) |
|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | |
| **CATEGORY 0010** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 27 | -- |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 30 | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 42 | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 13 | -- |
| UNDISTRIBUTED | | | 8 | -- |
| **CATEGORY 0010 TOTALS** | | | **120** | **0** |
| **CATEGORY 0020** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 82 | 35 |
| UNDISTRIBUTED | | | 8 | 5 |
| **CATEGORY 0020 TOTALS** | | | **90** | **40** |
| **CATEGORY 0050** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | -- | 87 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 253 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 265 |
| **CATEGORY 0050 TOTALS** | | | **--** | **605** |
| **1530-03-76 PROJECT TOTALS** | | | **210** | **645** |
| **PROJECT 1540-01-72** | | | | |
| **CATEGORY 0010** | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | 33 | 27 |
| UNDISTRIBUTED | | | 2 | 3 |
| **1540-01-72 PROJECT TOTALS** | | | **35** | **30** |
| **PROJECT TOTALS** | | | **245** | **675** |

*ADDITIONAL QUANTITY FOUND IN "CONCRETE PAVEMENT REPAIR" TABLE

## CONCRETE DRIVEWAY 6-INCH

| LOCATION | STATION | O/S | 416.0160 CONCRETE DRIVEWAY 6-INCH (SY) |
|---|---|---|---|
| **PROJECT 1530-03-76** | | | |
| **CATEGORY 0020** | | | |
| MAPLE ST - OAK ST | 717+33 | LT | 28 |
| **1530-03-76 PROJECT TOTALS** | | | **28** |
| **PROJECT 1540-01-72** | | | |
| **CATEGORY 0010** | | | |
| MAIN ST - KINNE ST | 543+57 | LT | 25 |
| **1540-01-72 PROJECT TOTALS** | | | **25** |
| **PROJECT TOTALS** | | | **53** |

## CONCRETE CROSSWALKS

| LOCATION | STA-STA | 405.0100 COLORING CONCRETE WISDOT RED (CY) | 415.1100 CONCRETE PAVEMENT HES 10-INCH (SY) |
|---|---|---|---|
| **PROJECT 1530-03-76** | | | |
| **CATEGORY 0050** | | | |
| MAPLE ST - OAK ST | 720+55 - 720+62 | 11 | 37 |
| OAK ST - CHESTNUT ST | 720+98 - 721+06 | 11 | 37 |
| OAK ST - CHESTNUT ST | 724+45 - 724+55 | 10 | 34 |
| OAK ST - CHESTNUT ST | 727+91 - 727+98 | 10 | 36 |
| CHESTNUT ST - BAY ST | 728+33 - 728+41 | 11 | 37 |
| CHESTNUT ST - BAY ST | 731+08 - 731+20 | 11 | 37 |
| CHESTNUT ST - BAY ST | 731+58 - 731+70 | 10 | 36 |
| **1530-03-76 PROJECT TOTALS** | | **74** | **254** |
| **PROJECT TOTALS** | | **74** | **254** |

## CONCRETE CURB & GUTTER

| LOCATION | STATION - STATION | | O/S | 601.0110 CONCRETE CURB TYPE D (LF) | 601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A (LF) | 601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (LF) | 601.0600 CONCRETE CURB PEDESTRIAN (LF) | SPV.0090.01 CONCRETE CURB & GUTTER 18-INCH SPECIAL (LF) | SPV.0090.04 CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT (LF) |
|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | – | 56 | -- | 8 | – | 56 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | – | 27 | -- | – | – | 27 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | RT | – | 44 | -- | – | – | 44 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | LT | – | 50 | 16 | 20 | – | 66 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | RT | – | 59 | -- | – | – | 59 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | LT | – | 76 | 8 | 39 | – | 84 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | LT | – | 44 | -- | 13 | – | 44 |
| UNDISTRIBUTED 10% OF PROJECT | | | | – | 469 | -- | – | – | 469 |
| **CATEGORY 0010 TOTALS** | | | | **0** | **825** | **24** | **80** | **0** | **849** |
| **CATEGORY 0020** | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | – | 99 | 2 | 22 | – | 101 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | 60 | 111 | 4 | 63 | 20 | 195 |
| **CATEGORY 0020 TOTALS** | | | | **60** | **210** | **6** | **85** | **20** | **296** |
| **1530-03-76 PROJECT TOTALS** | | | | **60** | **1,035** | **30** | **165** | **20** | **1,145** |
| **PROJECT 1540-01-72** | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | LT | – | 114 | -- | – | – | 114 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | RT | – | -- | 67 | 40 | – | 67 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | LT | – | -- | 57 | – | – | 57 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | RT | – | -- | 18 | – | – | 18 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | RT | – | -- | 113 | – | – | 113 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | LT | – | -- | 15 | 55 | – | 15 |
| UNDISTRIBUTED 10% OF PROJECT | | | | – | 26 | 265 | – | – | 291 |
| **1540-01-72 PROJECT TOTALS** | | | | **0** | **140** | **535** | **95** | **0** | **675** |
| **PROJECT TOTALS** | | | | **60** | **1,175** | **565** | **260** | **20** | **1,820** |

## CONCRETE SIDEWALK

| LOCATION | STATION - STATION | | O/S | 602.0410 CONCRETE SIDEWALK 5-INCH (SF) | 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SF) | 602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA (SF) | SPV.0165.01 CONCRETE SIDEWALK CURE AND SEAL TREATMENT (SF) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | 339 | 10 | 30 | 339 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | 191 | 20 | -- | 191 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | RT | 301 | 30 | -- | 301 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | LT | 380 | 30 | -- | 380 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | RT | 264 | 30 | -- | 264 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | LT | 347 | 40 | -- | 347 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | RT | 100 | 10 | -- | 100 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | LT | 133 | 20 | -- | 133 |
| **CATEGORY 0010 TOTALS** | | | | **2,055** | **190** | **30** | **2,055** |
| **CATEGORY 0020** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | RT | 556 | 10 | -- | 556 |
| MAPLE ST - OAK ST | 717+21 | 720+80 | LT | 554 | 40 | -- | 554 |
| **CATEGORY 0020 TOTALS** | | | | **1,110** | **50** | **0** | **1,110** |
| **1530-03-76 PROJECT TOTALS** | | | | **3,165** | **240** | **30** | **3,165** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | LT | 385 | – | -- | 385 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | RT | 607 | 40 | -- | 607 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | LT | 359 | 30 | -- | 359 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | RT | 126 | 10 | -- | 126 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | RT | 312 | 40 | 18 | 312 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | LT | 291 | 10 | -- | 291 |
| **1540-01-72 PROJECT TOTALS** | | | | **2,080** | **130** | **18** | **2,080** |
| **PROJECT TOTALS** | | | | **5,245** | **370** | **48** | **5,245** |

## STORM SEWER PIPE

| FROM STRUCT. | TO STRUCT. | INLET ELEV | OUTLET ELEV | SLOPE % | 520.8000 CONCRETE COLLARS FOR PIPE (EACH) | 608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF) | 608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH (LF) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0020** | | | | | | | |
| 1.1 | 1.0 | 1207.50 | 1207.48 | 1.00% | 1 | 2 | - |
| **1530-03-76 PROJECT TOTALS** | | | | | **1** | **2** | **0** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| 2.0 | 2.1 | 1195.35 | 1195.30 | 0.25% | - | - | 20 |
| **1540-01-72 PROJECT TOTALS** | | | | | **0** | **0** | **20** |
| **PROJECT TOTALS** | | | | | **1** | **2** | **20** |

## STORM SEWER ENDWALLS

| STRUCT. NO. | STA | ALI | OFFSET | 522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH (EACH) | 633.5200 MARKERS CULVERT END (EACH) |
|---|---|---|---|---|---|
| **PROJECT 1540-01-72** | | | | | |
| **CATEGORY 0010** | | | | | |
| 2.1 | 556+97 | MP | 41.7' RT | 1 | 1 |
| **1540-01-72 PROJECT TOTALS** | | | | **1** | **1** |
| **PROJECT TOTALS** | | | | **1** | **1** |

## STORM SEWER STRUCTURES

| STRUCT. NO. | STA | ALI | OFFSET | TOP STRUCT. ELEV | LOW STRUC. INV. | FLANGE ELEV | BOTTOM STRUCT. ELEV | DEPTH (FT) | ADJUST. RING HEIGHT (INCHES) | 611.3220 INLETS 2X2-FT (EACH) | 611.3230 INLETS 2X3-FT (EACH) | 611.0600 INLET COVERS TYPE A (EACH) | 611.0639 INLET COVERS TYPE H-S (EACH) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | | | | | |
| **CATEGORY 0020** | | | | | | | | | | | | | |
| 1.1 | 718+65 | USH 10 | 25.7' RT | 1210.86 | 1207.50 | 1211.96 | 1207.33 | 3.53 | 6 | 1 | - | 1 | - |
| **1530-03-76 PROJECT TOTALS** | | | | | | | | | | **1** | **0** | **1** | **0** |
| **PROJECT 1540-01-72** | | | | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | | | | |
| 2.0 | 556+77 | STH 65 | 37.3' RT | 1196.83 | 1195.35 | 1197.33 | 1195.18 | 1.65 | 0 | - | 1 | - | 1 |
| **1540-01-72 PROJECT TOTALS** | | | | | | | | | | **0** | **1** | **0** | **1** |
| **PROJECT TOTALS** | | | | | | | | | | **1** | **1** | **1** | **1** |

3

## ADJUSTING ITEMS

| LOCATION | STATION - STATION | | 611.8120.S COVER PLATES TEMPORARY (EACH) | 611.8110 ADJUSTING MANHOLE COVERS (EACH) | 611.8115 ADJUSTING INLET COVERS (EACH) | SPV.0060.04 HYDRANT (EACH) | SPV.0060.03 WATER VALVE BOX (EACH) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 3 | 3 | 2 | – | – |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 4 | 4 | 1 | – | – |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 2 | 2 | – | – | – |
| UNDISTRIBUTED | | | 2 | 2 | 1 | – | – |
| **CATEGORY 0010 TOTALS** | | | **11** | **11** | **4** | **0** | **0** |
| **CATEGORY 0020** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 2 | 2 | 1 | – | – |
| UNDISTRIBUTED | | | 1 | 1 | – | – | – |
| **CATEGORY 0020 TOTALS** | | | **3** | **3** | **1** | **0** | **0** |
| **CATEGORY 0040** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 1 | 1 | – | – | 4 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 4 | 4 | – | – | 9 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 2 | 2 | – | – | 5 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 6 | 6 | – | 1 | 6 |
| UNDISTRIBUTED | | | 3 | 3 | – | – | 6 |
| **CATEGORY 0040 TOTALS** | | | **16** | **16** | **0** | **1** | **30** |
| **1530-03-76 PROJECT TOTALS** | | | **30** | **30** | **5** | **1** | **30** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 2 | 2 | – | – | – |
| UNDISTRIBUTED | | | 1 | 1 | – | – | – |
| **CATEGORY 0010 TOTALS** | | | **3** | **3** | **0** | **0** | **0** |
| **CATEGORY 0020** | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | 1 | 1 | – | 1 | 1 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | 1 | 1 | – | – | 3 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | 2 | 2 | – | – | 1 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 3 | 3 | – | 1 | 3 |
| UNDISTRIBUTED | | | 2 | 2 | – | – | 2 |
| **CATEGORY 0020 TOTALS** | | | **9** | **9** | **0** | **2** | **10** |
| **1540-01-72 PROJECT TOTALS** | | | **12** | **12** | **0** | **2** | **10** |
| **PROJECT TOTALS** | | | **42** | **42** | **5** | **3** | **40** |

## UNDERDRAIN

| LOCATION | STATION - STATION | O/S | 310.0110* BASE AGGREGATE OPEN-GRADED (TON) | 612.0106 PIPE UNDERDRAIN 6-INCH (LF) | 645.0111 GEOTEXTILE TYPE DF SCHEDULE A (SY) |
|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | |
| **CATEGORY 0020** | | | | | |
| MAPLE ST - OAK ST | 718+65 - 719+26 | RT | 5 | 61 | 41 |
| **1530-03-76 PROJECT TOTALS** | | | **5** | **61** | **41** |
| **PROJECT TOTALS** | | | **5** | **61** | **41** |

*ADDITIONAL QUANTITY FOUND IN "BASE AGGRGEATE AND CONCRETE BASE" TABLE

## MOBILIZATIONS EROSION CONTROL

| LOCATION | 628.1905 MOBILIZATIONS EROSION CONTROL (EACH) | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH) |
|---|---|---|
| **PROJECT 1530-03-76** | | |
| **CATEGORY 0010** | | |
| PROJECT | 2 | 1 |
| **1530-03-76 PROJECT TOTALS** | **2** | **1** |
| **PROJECT 1540-01-72** | | |
| **CATEGORY 0010** | | |
| PROJECT | 2 | 1 |
| **1540-01-72 PROJECT TOTALS** | **2** | **1** |
| **PROJECT TOTALS** | **4** | **2** |

## WATER

| TASK | 624.0100 WATER (MGAL) |
|---|---|
| **PROJECT 1530-03-76** | |
| **CATEGORY 0010** | |
| DUST CONTROL | 6 |
| COMPACTION | 6 |
| **CATEGORY 0010 TOTALS** | **12** |
| **CATEGORY 0020** | |
| DUST CONTROL | 5 |
| COMPACTION | 5 |
| **CATEGORY 0020 TOTALS** | **10** |
| **1530-03-76 PROJECT TOTALS** | **22** |
| **PROJECT 1540-01-72** | |
| **CATEGORY 0010** | |
| DUST CONTROL | 6 |
| COMPACTION | 6 |
| **1540-01-72 PROJECT TOTALS** | **12** |
| **PROJECT TOTALS** | **34** |

## REPLACE CURB STOP AND BOX

| LOCATION | STATION | OFFSET | SPV.0060.06 REPLACE CURB STOP AND BOX (EACH) |
|---|---|---|---|
| **PROJECT 1530-03-76** | | | |
| **CATEGORY 0040** | | | |
| MAPLE ST - OAK ST | 718+83.22 | 27.9' RT | 1 |
| **1530-03-76 PROJECT TOTALS** | | | **1** |
| **PROJECT TOTALS** | | | **1** |

## CONCRETE MEDIAN NOSE

| LOCATION | STATION | O/S | 620.0300 CONCRETE MEDIAN SLOPED NOSE (SF) |
|---|---|---|---|
| **PROJECT 1530-03-76** | | | |
| **CATEGORY 0020** | | | |
| MAPLE ST - OAK ST | 718+47 | LT | 3 |
| MAPLE ST - OAK ST | 718+49 | LT | 3 |
| MAPLE ST - OAK ST | 718+64 | LT | 22 |
| **1530-03-76 PROJECT TOTALS** | | | **28** |
| **PROJECT TOTALS** | | | **28** |

## LANDSCAPING

| LOCATION | STATION - STATION | | 625.0500 SALVAGED TOPSOIL (SY) | 627.0200 MULCHING (SY) | 629.0205 FERTILIZER TYPE A (CWT) | 630.0140 SEEDING MIXTURE NO. 40 (LB) | 630.0500 SEED WATER (MGAL) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 18 | 18 | 1.1 | 0.3 | 1 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 8 | 8 | 0.5 | 0.1 | 1 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 4 | 4 | 0.2 | 0.1 | 1 |
| UNDISTRIBUTED | | | 10 | 10 | 0.7 | 0.5 | 1 |
| **1530-03-76 PROJECT TOTALS** | | | **40** | **40** | **2.5** | **1.0** | **4.0** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| KINNE ST - GROVE ST | 544+61 | 548+35 | 87 | 87 | 5.4 | 1.6 | 2 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | 12 | 12 | 0.8 | 0.2 | 1 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 124 | 124 | 7.8 | 2.2 | 3 |
| UNDISTRIBUTED | | | 57 | 57 | 6.0 | 1.0 | 1 |
| **1540-01-72 PROJECT TOTALS** | | | **280** | **280** | **20.0** | **5.0** | **7.0** |
| **PROJECT TOTALS** | | | **320** | **320** | **22.5** | **6.0** | **11.0** |

## EROSION CONTROL

| LOCATION | STATION | O/S | 628.2004 EROSION MAT CLASS I TYPE B (SY) | 628.7005 INLET PROTECTION TYPE A (EACH) | 628.7015 INLET PROTECTION TYPE C (EACH) | NOTE |
|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | |
| **CATEGORY 0010** | | | | | | |
| MAPLE ST - OAK ST | 720+64 | LT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 720+97 | LT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 721+11 | LT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 721+10 | RT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 724+11 | RT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 727+81 | RT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 727+84 | LT | -- | -- | 1 | EXISTING INLET |
| OAK ST - CHESTNUT ST | 728+00 | LT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 728+34 | LT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 731+00 | LT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 731+05 | RT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 731+21 | RT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 731+56 | RT | -- | -- | 1 | EXISTING INLET |
| CHESTNUT ST - BAY ST | 734+28 | LT | -- | -- | 1 | EXISTING INLET |
| UNDISTRIBUTED | | | -- | -- | 5 | |
| **CATEGORY 0010 TOTALS** | | | **0** | **--** | **19** | |
| **CATEGORY 0020** | | | | | | |
| MAPLE ST - OAK ST | 718+00 | LT | -- | 1 | 1 | EXISTING INLET |
| MAPLE ST - OAK ST | 718+63 | LT | -- | -- | 1 | EXISTING INLET |
| MAPLE ST - OAK ST | 718+74 | LT | -- | -- | 1 | EXISTING INLET |
| MAPLE ST - OAK ST | 718+65 | RT | -- | 1 | 1 | PROPOSED INLET |
| UNDISTRIBUTED | | | -- | 1 | 1 | |
| **CATEGORY 0020 TOTALS** | | | **0** | **3** | **5** | |
| **1530-03-76 PROJECT TOTALS** | | | **0** | **3** | **24** | |
| **PROJECT 1540-01-72** | | | | | | |
| **CATEGORY 0010** | | | | | | |
| MAIN ST - KINNE ST | 555+83 | RT | -- | -- | 1 | EXISTING INLET |
| MAIN ST - KINNE ST | 555+93 | RT | -- | -- | 1 | EXISTING INLET |
| MAIN ST - KINNE ST | 556+03 | RT | -- | -- | 1 | EXISTING INLET |
| MAIN ST - KINNE ST | 556+77 | RT | -- | 1 | 1 | PROPOSED INLET |
| MAIN ST - KINNE ST | 556+97 | RT | 3 | -- | -- | PROPOSED ENDWALL |
| UNDISTRIBUTED | | | 7 | 1 | 1 | |
| **1540-01-72 PROJECT TOTALS** | | | **10** | **2** | **5** | |
| **PROJECT TOTALS** | | | **10** | **5** | **29** | |

## TRAFFIC CONTROL

| LOCATION | # OF DAYS | 643.0300 TRAFFIC CONTROL DRUMS (DAYS) | 643.0410 BARRICADES TYPE II (DAYS) | 643.0420 BARRICADES TYPE III (DAYS) | 643.0500 FLEXIBLE TUBULAR MARKER POSTS (EACH) | 643.0600 FLEXIBLE TUBULAR MARKER BASES (EACH) | 643.0705 WARNING LIGHTS TYPE A (DAYS) | 643.0715 WARNING LIGHTS TYPE C (DAYS) | 643.0900 SIGNS (DAYS) | 644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD (SF) | 644.1601 TEMPORARY CURB RAMP (DAY) | 644.1810 TEMPORARY PEDESTRIAN BARRICADE (LF) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | | | |
| USH 10 | 95 | 2,280 | -- | -- | -- | -- | -- | -- | 5,035 | -- | -- | -- |
| PEDESTRIANS | 95 | -- | 950 | 380 | -- | -- | 1,330 | -- | 1,140 | 250 | 10 | 200 |
| UNDISTRIBUTED | | 570 | 240 | 95 | -- | -- | 330 | -- | 1,545 | 100 | 5 | 50 |
| **CATEGORY 0010 TOTALS** | | **2,850** | **1,190** | **475** | **0** | **0** | **1,660** | **0** | **7,720** | **350** | **15** | **250** |
| **CATEGORY 0020** | | | | | | | | | | | | |
| STAGE 1 | 10 | 160 | 30 | 30 | -- | -- | 90 | 60 | 100 | -- | -- | -- |
| STAGE 2 | 10 | 160 | 30 | 110 | -- | -- | 220 | 220 | 150 | -- | -- | -- |
| STAGE 3 | 10 | 190 | 30 | 50 | 17 | 17 | 100 | 100 | 110 | -- | -- | -- |
| UNDISTRIBUTED | | 130 | 25 | 50 | 3 | 3 | 105 | 95 | 90 | -- | -- | -- |
| **CATEGORY 0020 TOTALS** | | **640** | **115** | **240** | **20** | **20** | **515** | **475** | **450** | **0** | **0** | **0** |
| **1530-03-76 PROJECT TOTALS** | | **3,490** | **1,305** | **715** | **20** | **20** | **2,175** | **475** | **8,170** | **350** | **15** | **250** |
| **PROJECT 1540-01-72** | | | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | | | |
| STH 65 | 95 | 2,280 | -- | -- | -- | -- | -- | -- | 3,895 | -- | -- | -- |
| PEDESTRIANS | 95 | -- | 950 | 380 | -- | -- | 760 | -- | 1,140 | 250 | 10 | 200 |
| UNDISTRIBUTED | | 570 | 240 | 95 | -- | -- | 190 | -- | 1,255 | 100 | 5 | 50 |
| **1540-01-72 PROJECT TOTALS** | | **2,850** | **1,190** | **475** | **0** | **0** | **950** | **0** | **6,290** | **350** | **15** | **250** |
| **PROJECT TOTALS** | | **6,340** | **2,495** | **1,190** | **20** | **20** | **3,125** | **475** | **14,460** | **700** | **30** | **500** |

3

## TRACKING PADS

| LOCATION | 628.7560 TRACKING PADS (EACH) |
|---|---|
| **PROJECT 1530-03-76** | |
| **CATEGORY 0010** | |
| PROJECT | 2 |
| **CATEGORY 0010 TOTALS** | **2** |
| **CATEGORY 0020** | |
| PROJECT | 1 |
| **CATEGORY 0020 TOTALS** | **1** |
| **1530-03-76 PROJECT TOTALS** | **3** |
| **PROJECT 1540-01-72** | |
| **CATEGORY 0010** | |
| PROJECT | 3 |
| **1540-01-72 PROJECT TOTALS** | **3** |
| **PROJECT TOTALS** | **6** |

## TRAFFIC CONTROL - COVERING SIGNS

| LOCATION / STAGE | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II (EA) | NOTES |
|---|---|---|
| **PROJECT 1530-03-76** | | |
| **CATEGORY 0020** | | |
| STAGE 1 | 2 | 1 CYCLE |
| STAGE 2 | 4 | 1 CYCLE |
| STAGE 3 | 4 | 1 CYCLE |
| UNDISTRIBUTED | 5 | |
| **1530-03-76 PROJECT TOTALS** | **15** | |
| **PROJECT 1540-01-72** | | |
| **CATEGORY 0010** | | |
| UNDISTRIBUTED | 2 | |
| **1540-01-72 PROJECT TOTALS** | **2** | |
| **PROJECT TOTALS** | **17** | |

## REMOVING OVERHEAD SIGN SUPPORTS CANTILEVER

| LOCATION | STATION | O/S | 638.3150.01 REMOVING OVERHEAD SIGN SUPPORT CANTILEVER S-47-8 (EACH) | 638.3150.02 REMOVING OVERHEAD SIGN SUPPORT CANTILEVER S-47-1 (EACH) |
|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | |
| **CATEGORY 0010** | | | | |
| MAPLE ST - OAK ST | 716+15 | RT | 1 | -- |
| MAPLE ST - OAK ST | 719+88 | LT | -- | 1 |
| **1530-03-76 PROJECT TOTALS** | | | **1** | **1** |
| **PROJECT TOTALS** | | | **1** | **1** |

3

**PERMANENT SIGNING ITEMS**

| SIGN # | SIGN CODE | SIGN SIZE W IN X H IN | 637.2210 SIGNS TYPE II REFLECTIVE H (SF) | 637.2230 SIGNS TYPE II REFLECTIVE F (SF) | 634.0809 POSTS TUBULAR STEEL 2X2-INCH 9.5-FT (EACH) | 634.0814 POSTS TUBULAR STEEL 2X2-INCH 14-FT (EACH) | 638.2102 MOVING SIGNS TYPE II EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH | SIGN MOUNTED ON SAME POST AS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | |
| 1-1 | R3-6R | 42 X 48 | 14.00 | – | -- | – | -- | -- | S-47-16 | LANE CONTROL SYMBOL W/ BLACK BORDER - AHEAD & RIGHT ARROW |
| 1-2 | R3-5L | 42 X 48 | 14.00 | – | -- | – | -- | -- | S-47-16 | LANE CONTROL SYMBOL W/ BLACK BORDER - LEFT ARROW |
| 1M-3 | R1-1F | - X - | -- | – | -- | – | 1 | -- | SIGNAL POLE | STOP SIGN (FOLDING) |
| 1M-4 | R1-1F | - X - | -- | – | -- | – | 1 | -- | SIGNAL POLE | STOP SIGN (FOLDING) |
| 1M-5 | J4-1 | - X - | -- | – | -- | – | 1 | -- | S-47-16 | REASSURANCE ASSEMBLY |
| 1-6 | R3-8 | 36 X 30 | 7.50 | – | -- | 1 | -- | -- | -- | LANE CONTROL SIGN |
| 1M-7 | R2-1 | - X - | -- | – | -- | 1 | 1 | -- | -- | SPEED LIMIT [__] MPH |
| 1M-8 | J3-1 | - X - | -- | – | -- | – | 1 | -- | LIGHT POLE | DIRECTIONAL ASSEMBLY |
| 1M-9 | R1-2 | - X - | -- | – | -- | 1 | 1 | -- | -- | YIELD |
| 1-10 | W12-1D | 24 X 24 | -- | 4.00 | 1 | – | -- | -- | -- | DOUBLE DOWN ARROW |
| 2M-1 | R7-5D | - X - | -- | – | -- | – | 1 | -- | LIGHT POLE | [__] HOUR PARKING TIME TO TIME (DOUBLE ARROW) |
| 2M-2 | R1-1 | - X - | -- | – | -- | – | 1 | 1 | -- | STOP SIGN |
| **1530-03-76 PROJECT TOTALS** | | | **35.50** | **4.00** | **1** | **3** | **8** | **1** | | |
| **PROJECT 1540-01-72** | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | |
| 4M-1 | R1-1 | - X - | -- | – | -- | – | 1 | 1 | -- | STOP SIGN |
| 4M-2 | R1-1 | - X - | -- | – | -- | – | 1 | 1 | -- | STOP SIGN |
| 5M-1 | R2-1 | - X - | -- | – | -- | – | 1 | 1 | -- | SPEED LIMIT [__] MPH |
| 5M-2 | R1-1 | - X - | -- | – | -- | – | 1 | 1 | -- | STOP SIGN |
| 5M-3 | R1-1 | - X - | -- | – | -- | – | 1 | 1 | -- | STOP SIGN |
| **1540-01-72 PROJECT TOTALS** | | | **0.00** | **0.00** | **0** | **0** | **5** | **5** | | |
| **PROJECT TOTALS** | | | **35.50** | **4.00** | **1** | **3** | **13** | **6** | | |

## PAVEMENT MARKING

| LOCATION | STATION - STATION | | 646.1020 MARKING LINE EPOXY 4-INCH (WHITE) (LF) | 646.4520 MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (LF) | 646.3020 MARKING LINE EPOXY 8-INCH (WHITE) (LF) | 646.5020 MARKING ARROW EPOXY (EACH) | 646.5120 MARKING WORD EPOXY (EACH) | 646.5220 MARKING SYMBOL EPOXY (EACH) | 646.6120 MARKING STOP LINE EPOXY 18-INCH (LF) | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (LF) | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) (LF) | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (LF) | 646.8220 MARKING ISLAND NOSE EPOXY (EACH) | 646.8120 MARKING CURB EPOXY (YELLOW) (LF) | 646.8320 MARKING PARKING STALL EPOXY (WHITE) (LF) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | – | – | – | – | – | -- | – | -- | – | – | -- | 83 | -- |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 1362 | – | – | – | -- | 50 | -- | – | 586 | -- | 110 | -- |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 1152 | – | – | – | -- | 71 | -- | – | 552 | -- | 143 | -- |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 493 | 1436 | 60 | 1 | – | -- | 52 | 35 | – | 627 | -- | 20 | -- |
| UNDISTRIBUTED | | | – | – | – | – | – | -- | – | -- | – | – | -- | 465 | -- |
| **CATEGORY 0010 TOTALS** | | | **493** | **3,950** | **60** | **1** | **0** | **0** | **173** | **35** | **0** | **1,765** | **0** | **821** | **0** |
| | | | | | | | | | | **35** | | | | | |
| **CATEGORY 0020** | | | | | | | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 140 | 825 | 286 | 8 | – | -- | 109 | -- | 45 | 585 | 2 | 225 | -- |
| **CATEGORY 0020 TOTALS** | | | **140** | **825** | **286** | **8** | **0** | **0** | **109** | **0** | **45** | **585** | **2** | **225** | **0** |
| | | | | | | | | | | **45** | | | | | |
| **CATEGORY 0030** | | | | | | | | | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | – | – | – | – | – | 1 | – | -- | – | – | -- | 68 | 209 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | – | – | – | – | – | -- | – | -- | – | – | -- | 84 | 185 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | – | – | – | – | – | -- | – | -- | – | – | -- | 20 | 32 |
| **CATEGORY 0030 TOTALS** | | | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **172** | **426** |
| **1530-03-76 PROJECT TOTALS** | | | **633** | **4,775** | **346** | **9** | **0** | **1** | **282** | **35** | **45** | **2,350** | **2** | **1,218** | **426** |
| | | | | | | | | | | **80** | | | | | |
| **PROJECT 1540-01-72** | | | | | | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | – | 462 | 150 | 3 | 1 | -- | – | -- | – | – | -- | 94 | -- |
| KINNE ST - GROVE ST | 544+61 | 548+35 | – | 650 | – | – | – | -- | 33 | -- | – | 389 | -- | 123 | -- |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | – | 532 | – | – | – | -- | 18 | -- | – | 139 | -- | 18 | -- |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | – | 1106 | – | – | – | -- | 39 | -- | – | 182 | -- | 70 | -- |
| UNDISTRIBUTED | | | – | – | – | – | – | -- | – | -- | – | – | -- | 290 | -- |
| **1540-01-72 PROJECT TOTALS** | | | **0** | **2,750** | **150** | **3** | **1** | **0** | **90** | **0** | **0** | **710** | **0** | **595** | **0** |
| | | | | | | | | | | **0** | | | | | |
| **PROJECT TOTALS** | | | **633** | **7,525** | **496** | **12** | **1** | **1** | **372** | **35** | **45** | **3,060** | **2** | **1,813** | **426** |
| | | | | | | | | | | **80** | | | | | |

## TEMPORARY PAVEMENT MARKING

| LOCATION | STA - STA | | 646.9000 MARKING REMOVAL LINE 4-INCH (LF) | 646.9100 MARKING REMOVAL LINE 8-INCH (LF) | 646.9200 MARKING REMOVAL LINE WIDE (LF) | 646.9300 MARKING REMOVAL SPECIAL MARKING (EACH) | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) (LF) | 649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (LF) | 649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE (EA) | 649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (LF) |
|---|---|---|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | – | -- | – | – | 737 | – | -- | – |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | – | -- | – | – | 642 | – | -- | – |
| BAY ST - BEULAH ST | 734+59 | 740+28 | – | -- | – | – | 544 | – | -- | – |
| UNDISTRIBUTED | | | – | -- | – | – | 487 | 850 | -- | – |
| **CATEGORY 0010 TOTALS** | | | **0** | **0** | **0** | **0** | **2,410** | **850** | **0** | **0** |
| | | | | | | | | **3,260** | | |
| **CATEGORY 0020** | | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 790 | 289 | 46 | 14 | 914 | – | 14 | 135 |
| UNDISTRIBUTED | | | 200 | 71 | 14 | 1 | 226 | 210 | 2 | 35 |
| **CATEGORY 0020 TOTALS** | | | **990** | **360** | **60** | **15** | **1,140** | **210** | **16** | **170** |
| | | | | | | | | **1,350** | | |
| **1530-03-76 PROJECT TOTALS** | | | **990** | **360** | **60** | **15** | **3,550** | **1,060** | **16** | **170** |
| | | | | | | | | **4,610** | | |
| **PROJECT 1540-01-72** | | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | – | -- | – | – | 327 | – | -- | – |
| KINNE ST - GROVE ST | 544+61 | 548+35 | – | -- | – | – | 374 | – | -- | – |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | – | -- | – | – | 298 | – | -- | – |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | – | -- | – | – | 559 | – | -- | – |
| UNDISTRIBUTED | | | – | -- | – | – | 392 | 310 | -- | – |
| **1540-01-72 PROJECT TOTALS** | | | **0** | **0** | **0** | **0** | **1,950** | **310** | **0** | **0** |
| | | | | | | | | **2,260** | | |
| **PROJECT TOTALS** | | | **990** | **360** | **60** | **15** | **5,500** | **1,370** | **16** | **170** |
| | | | | | | | | **6,870** | | |

## SAWING

| LOCATION | STATION - STATION | | 690.0150 SAWING ASPHALT (LF) | 690.0250 SAWING CONCRETE (LF) |
|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | |
| **CATEGORY 0010** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 17 | 194 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | 10 | 274 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | 8 | 322 |
| BAY ST - BEULAH ST | 734+59 | 740+28 | 16 | 133 |
| UNDISTRIBUTED | | | 4 | 47 |
| **CATEGORY 0010 TOTALS** | | | **55** | **970** |
| **CATEGORY 0020** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 72 | 449 |
| UNDISTRIBUTED | | | 3 | 21 |
| **CATEGORY 0020 TOTALS** | | | **75** | **470** |
| **CATEGORY 0050** | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | -- | 110 |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | -- | 320 |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | -- | 335 |
| **CATEGORY 0050 TOTALS** | | | **–** | **765** |
| **1530-03-76 PROJECT TOTALS** | | | **130** | **2,205** |
| **PROJECT 1540-01-72** | | | | |
| **CATEGORY 0010** | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | 94 | 155 |
| KINNE ST - GROVE ST | 544+61 | 548+35 | 69 | 50 |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | 68 | 10 |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 122 | 43 |
| UNDISTRIBUTED | | | 27 | 12 |
| **1540-01-72 PROJECT TOTALS** | | | **380** | **270** |
| **PROJECT TOTALS** | | | **510** | **2,475** |

## CONSTRUCTION STAKING

| LOCATION | STATION - STATION | | 650.4000 STORM SEWER (EACH) | 650.4500 SUBGRADE (LF) | 650.5000 BASE (LF) | 650.5500 CURB GUTTER AND CURB AND GUTTER (LF) | 650.8000 RESURFACING REFERENCE (LF) | 650.9000 CURB RAMPS (EACH) | 650.9920 SLOPE STAKES (LF) |
|---|---|---|---|---|---|---|---|---|---|
| | | | CONSTRUCTION STAKING | | | | | | |
| **PROJECT 1530-03-76** | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | – | – | – | 91 | – | 4 | – |
| OAK ST - CHESTNUT ST | 720+80 | 728+17 | – | – | – | 128 | 737 | 6 | – |
| CHESTNUT ST - BAY ST | 728+17 | 734+59 | – | – | – | 178 | 642 | 7 | – |
| BAY ST - BEULAH ST | 734+59 | 740+28 | – | – | – | 33 | 544 | 3 | – |
| UNDISTRIBUTED | | | – | – | – | 465 | – | – | – |
| **CATEGORY 0010 TOTALS** | | | **0** | **0** | **0** | **895** | **1,923** | **20** | **0** |
| **CATEGORY 0020** | | | | | | | | | |
| MAPLE ST - OAK ST | 717+21 | 720+80 | 1 | 170 | 170 | 381 | 334 | 5 | 170 |
| **CATEGORY 0020 TOTALS** | | | **1** | **170** | **170** | **381** | **334** | **5** | **170** |
| **1530-03-76 PROJECT TOTALS** | | | **1** | **170** | **170** | **1,276** | **2,257** | **25** | **170** |
| **PROJECT 1540-01-72** | | | | | | | | | |
| **CATEGORY 0010** | | | | | | | | | |
| MAIN ST - KINNE ST | 542+41 | 544+61 | – | – | – | 94 | 327 | – | – |
| KINNE ST - GROVE ST | 544+61 | 548+35 | – | – | – | 179 | 374 | 7 | – |
| GROVE ST ST - RAY ST | 548+35 | 551+33 | – | – | – | 18 | 298 | 1 | – |
| RAY ST - MIDWAY AVE | 551+33 | 556+92 | 2 | 55 | 55 | 183 | 559 | 6 | 55 |
| UNDISTRIBUTED | | | – | – | – | 290 | – | – | – |
| **1540-01-72 PROJECT TOTALS** | | | **2** | **55** | **55** | **764** | **1,558** | **14** | **55** |
| **PROJECT TOTALS** | | | **3** | **225** | **225** | **2,040** | **3,815** | **39** | **225** |

## CONCRETE PAVEMENT REPAIR

| LOCATION | STATION - STATION | | 416.0610* DRILLED TIE BARS (EACH) | 416.0620* DRILLED DOWEL BARS (EACH) | SPV.0180.01 CONCRETE PAVEMENT REPAIR DOWELED (SY) | SPV.0180.02 CONCRETE PAVEMENT REPLACEMENT DOWELED (SY) | SPV.0180.03 30" CONCRETE CENTERLINE REPAIR (SY) |
|---|---|---|---|---|---|---|---|
| **PROJECT 1530-03-76** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| OAK ST - CHESTNUT ST | 726+81 | 726+89 | 6 | 22 | 11 | – | – |
| CHESTNUT ST - BAY ST | 731+22 | 731+56 | 20 | 18 | -- | 45 | – |
| BAY ST - BEULAH ST | 734+56 | 734+64 | 6 | 22 | 11 | – | – |
| UNDISTRIBUTED 5% OF PROJECT PAVEMENT AREA INCLUDING 10% OF CENTERLINE LENGTH | | | 234 | 468 | 158 | 75 | 60 |
| **CATEGORY 0010 TOTALS** | | | **265** | **530** | **180** | **120** | **60** |
| **CATEGORY 0020** | | | | | | | |
| UNDISTRIBUTED 5% OF PROJECT PAVEMENT AREA INCLUDING 10% OF CENTERLINE LENGTH | | | 70 | 155 | 60 | 40 | 10 |
| **CATEGORY 0020 TOTALS** | | | **70** | **155** | **60** | **40** | **10** |
| **CATEGORY 0030** | | | | | | | |
| OAK ST - CHESTNUT ST | 726+81 | 726+89 | 6 | 22 | 11 | – | – |
| CHESTNUT ST - BAY ST | 731+22 | 731+56 | 20 | 18 | -- | 45 | – |
| BAY ST - BEULAH ST | 734+56 | 734+64 | 6 | 22 | 11 | – | – |
| UNDISTRIBUTED 5% OF PROJECT PAVEMENT AREA INCLUDING 10% OF CENTERLINE LENGTH | | | 44 | 163 | 78 | 15 | – |
| **CATEGORY 0030 TOTALS** | | | **75** | **225** | **100** | **60** | **--** |
| **1530-03-76 PROJECT TOTALS** | | | **410** | **910** | **340** | **220** | **70** |
| **PROJECT 1540-01-72** | | | | | | | |
| **CATEGORY 0010** | | | | | | | |
| UNDISTRIBUTED 5% OF PROJECT PAVEMENT AREA INCLUDING 10% OF CENTERLINE LENGTH | | | 40 | 80 | 20 | 20 | 10 |
| **1540-01-72 PROJECT TOTALS** | | | **40** | **80** | **20** | **20** | **10** |
| **PROJECT TOTALS** | | | **450** | **990** | **360** | **240** | **80** |

*ADDITIONAL QUANTITY FOUND IN "DRILLED BARS" TABLE

LIGHTING REMOVALS

| Item | | | 204.0195 * REMOVING CONCRETE BASES EACH | 653.0905 * REMOVING PULL BOXES EACH | SPV.0060.01 REMOVE AND SALVAGE STREET LIGHT ASSEMBLY EACH |
|---|---|---|---|---|---|
| CATEGORY 0010 | | | | | |
| | EXSL | 108 | – | -- | -- |
| | EXSL | 109 | – | -- | -- |
| | EXSL | 110 | – | -- | -- |
| | EXSL | 111 | – | -- | -- |
| | EXSL | 112 | – | -- | -- |
| | EXSL | 113 | – | -- | -- |
| | EXSL | 114 | – | -- | -- |
| | EXSL | 115 | – | -- | -- |
| | EXSL | 116 | – | -- | -- |
| | EXSL | 117 | – | -- | -- |
| | EXSL | 118 | – | -- | -- |
| | EXSL | 119 | 1 | -- | 1 |
| | EXSL | 120 | – | -- | -- |
| | EXPB | 104 | – | 1 | -- |
| | EXPB | 105 | – | 1 | -- |
| | EXPB | 106 | – | 1 | -- |
| | EXPB | 107 | – | 1 | -- |
| | EXPB | 108 | – | 1 | -- |
| **CATEGORY 0010 TOTAL** | | | **1** | **5** | **1** |
| CATEGORY 0020 | | | | | |
| | EXSL | 100 | 1 | -- | 1 |
| | EXSL | 101 | – | -- | -- |
| | EXSL | 102 | – | -- | -- |
| | EXSL | 103 | – | -- | -- |
| | EXSL | 104 | 1 | -- | 1 |
| | EXSL | 105 | – | -- | -- |
| | EXSL | 106 | – | -- | -- |
| | EXSL | 107 | 1 | -- | 1 |
| | EXPB | 100 | – | 1 | -- |
| | EXPB | 101 | – | -- | -- |
| | EXPB | 102 | – | 1 | -- |
| | EXPB | 103 | – | -- | -- |
| | EXCB | 100 | – | -- | -- |
| **CATEGORY 0020 TOTAL** | | | **3** | **2** | **3** |
| **PROJECT TOTAL** | | | **4** | **7** | **4** |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE.

**LIGHTING LINEAR REMOVALS**

| FROM | - | TO | 204.9090.S.001 REMOVING ELECTRICAL CONDUCTORS FROM EXISTING CONDUIT LF | 204.9090.S.002 REMOVING OR ABANDONING CONDUIT LF |
|---|---|---|---|---|
| CATEGORY 0010 | | | | |
| EXPB 104 | - | EXSL 110 | 155 | 25 |
| EXSL 113 | - | EXPB 105 | 265 | 15 |
| EXPB 105 | - | EXSL 116 | 70 | 15 |
| EXSL 118 | - | EXPB 107 | 95 | 10 |
| EXPB 107 | - | EXSL 121 | 215 | 15 |
| EXSL 115 | - | EXPB 106 | 75 | 10 |
| EXPB 106 | - | EXSL 117 | 90 | 20 |
| EXSL 117 | - | EXSL 119 | 175 | 20 |
| EXSL 119 | - | EXPB 108 | 80 | 10 |
| EXPB 108 | - | EXSL 120 | 85 | 15 |
| **CATEGORY 0010 TOTAL** | | | **1305** | **155** |
| CATEGORY 0020 | | | | |
| EXSL 101 | - | EXPB 101 | 30 | 30 |
| EXPB 101 | - | EXPB 102 | 70 | 70 |
| EXPB 101 | - | EXPB 103 | 75 | 10 |
| EXPB 103 | - | EXSL 105 | 35 | -- |
| EXPB 102 | - | EXSL 104 | 5 | 5 |
| EXPB 102 | - | EXSL 106 | 125 | 125 |
| EXSL 105 | - | EXSL 107 | 120 | 15 |
| EXSL 107 | - | EXPB 104 | 60 | 60 |
| **CATEGORY 0020 TOTAL** | | | **520** | **315** |
| **PROJECT TOTAL** | | | **1825** | **470** |

## LIGHTING CONDUIT AND WIRE

| FROM | - | TO | 652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0605 CONDUIT SPECIAL 2-INCH LF | SPV.0090.02 FURNISH AND INSTALL EQUIVALENT LIGHITNG CONDUCTORS LF | REMARKS |
|---|---|---|---|---|---|---|
| CATEGORY 0010 | | | | | | |
| PB 104 | - | EXSL 110 | 25 | – | 163 | EXISTING CONDUIT |
| EXSL 113 | - | PB 105 | 25 | – | 278 | EXISTING CONDUIT |
| PB 105 | - | EXSL 116 | 25 | – | 80 | EXISTING CONDUIT |
| EXSL 118 | - | PB 107 | 25 | – | 108 | EXISTING CONDUIT |
| PB 107 | - | EXSL 121 | 25 | – | 245 | EXISTING CONDUIT |
| EXSL 115 | - | PB 106 | 25 | – | 93 | EXISTING CONDUIT |
| PB 106 | - | EXSL 117 | 25 | – | 98 | EXISTING CONDUIT |
| EXSL 117 | - | SL 119 | 25 | – | 180 | EXISTING CONDUIT |
| SL 119 | - | PB 108 | -- | 80 | 93 | -- |
| PB 108 | - | EXSL 120 | 25 | – | 98 | EXISTING CONDUIT |
| **CATEGORY 0010 TOTAL** | | | **225** | **80** | **1436** | |
| EXCB 100 | - | PB 100 | 20 | – | 83 | EXISTING CONDUIT |
| PB 100 | - | EXSL XXX | 50 | – | 233 | EXISTING CONDUIT |
| EXSL 101 | - | PB 102 | -- | 95 | 108 | -- |
| PB 102 | - | EXPB 103 | 20 | – | 96 | EXISTING CONDUIT |
| EXPB 103 | - | EXSL 105 | -- | – | 48 | EXISTING CONDUIT |
| PB 102 | - | SL 106 | 120 | – | 133 | -- |
| EXSL 105 | - | SL 107 | 25 | – | 125 | EXISTING CONDUIT |
| SL 107 | - | PB 104 | -- | 80 | 93 | -- |
| **CATEGORY 0020 TOTAL** | | | **235** | **175** | **919** | |
| **PROJECT TOTAL** | | | **460** | **255** | **2355** | |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

## LIGHTING PULLBOXES

| PULLBOX NUMBER | STATION | OFFSET | R/L | 653.0140 * PULL BOXES STEEL 24X42-INCH EACH |
|---|---|---|---|---|
| CATEGORY 0010 | | | | |
| LPB 104 | 721+19 | 32.2' | LT | 1 |
| LPB 105 | 727+82 | 32.1' | RT | 1 |
| LPB 106 | 728+50 | 31.9' | LT | 1 |
| LPB 107 | 731+05 | 32.3' | RT | 1 |
| LPB 108 | 731+75 | 31.7' | LT | 1 |
| **CATEGORY 0010 TOTAL** | | | | **5** |
| CATEGORY 0020 | | | | |
| LPB 100 | 717+59 | 37.9' | LT | 1 |
| LPB 102 | 718+63 | 34.2' | RT | 1 |
| **CATEGORY 0010 TOTAL** | | | | **2** |
| **PROJECT TOTAL** | | | | **7** |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

## STREET LIGHTS

| LIGHT NUMBER | STATION | OFFSET | R/L | SPV.0060.02 REINSTALL SALVAGED STREET LIGHT ASSEMBLY EACH | SPV.0060.05 CONCRETE BASE TYPE 5 MODIFIED EACH | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF |
|---|---|---|---|---|---|---|
| CATEGORY 0010 | | | | | | |
| SL 108 | EXISTING | | | -- | -- | -- |
| EXSL 109 | EXISTING | | | -- | -- | -- |
| EXSL 110 | EXISTING | | | -- | -- | -- |
| EXSL 111 | EXISTING | | | -- | -- | -- |
| EXSL 112 | EXISTING | | | -- | -- | -- |
| EXSL 113 | EXISTING | | | -- | -- | -- |
| EXSL 114 | EXISTING | | | -- | -- | -- |
| EXSL 115 | EXISTING | | | -- | -- | -- |
| EXSL 116 | EXISTING | | | -- | -- | -- |
| EXSL 117 | EXISTING | | | -- | -- | -- |
| EXSL 118 | EXISTING | | | -- | -- | -- |
| SL 119 | 730+96 | 28.2' | LT | 1 | 1 | 141 |
| **CATEGORY 0010 TOTAL** | | | | **1** | **1** | **141** |
| CATEGORY 0020 | | | | | | |
| EXSL 100 | REMOVED | | | -- | -- | -- |
| EXSL 101 | EXISTING | | | -- | -- | -- |
| EXSL 102 | EXISTING | | | -- | -- | -- |
| EXSL 103 | EXISTING | | | -- | -- | -- |
| SL 104 | REMOVED | | | -- | -- | -- |
| EXSL 105 | EXISTING | | | -- | -- | -- |
| EXSL 106 | EXISTING | | | -- | -- | -- |
| SL 107 | 720+44 | 29.5' | LT | 1 | 1 | 141 |
| **CATEGORY 0020 TOTAL** | | | | **1** | **1** | **141** |
| **PROJECT TOTAL** | | | | **2** | **2** | **282** |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

## TRAFFIC SIGNAL REMOVALS

| LOCATION / ITEM NUMBER | 204.0195* REMOVING CONCRETE BASES EACH | 653.0905* REMOVING PULL BOXES EACH |
|---|---|---|
| CATEGORY 0020 | | |
| USH 10/USH 63 & STH 65 | | |
| SB2 | 1 | -- |
| SB3 | 1 | -- |
| SB4 | 1 | -- |
| SB5 | 1 | -- |
| SB6 | 1 | -- |
| SB7 | 1 | -- |
| SB8 | 1 | -- |
| SB9 | 1 | -- |
| SB10 | 1 | -- |
| PB3 | -- | 1 |
| PB8 | -- | 1 |
| PB11 | -- | 1 |
| PB14 | -- | 1 |
| PB15 | -- | 1 |
| **CATEGORY 0020 TOTAL** | **9** | **5** |
| **INTERSECTION TOTAL** | **9** | **5** |

* ADDITIONAL QUANTITIES FOUND ELSEWERE

## TRAFFIC SIGNAL PULL BOXES

| LOCATION / PULL BOX NUMBER | STATION | OFFSET | L/R | 653.0135 PULL BOXES STEEL 24X36-INCH EACH | 653.0140 * PULL BOXES STEEL 24X42-INCH EACH | 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH |
|---|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | | |
| USH 10/USH 63 & STH 65 | | | | | | |
| PB1 | EXISTING | | | -- | -- | 1 |
| PB2 | EXISTING | | | -- | -- | 1 |
| PB7 | 717+81 | 52.0' | LT | -- | 1 | -- |
| PB9 | 543+36'MP' | 29.0' | LT | 1 | -- | -- |
| PB10 | 718+53 | 27.5' | LT | -- | 1 | -- |
| PB14 | EXISTING | | | -- | -- | 2 |
| PB30 | 717+73 | 45.3' | LT | -- | 1 | -- |
| **CATEGORY 0020 TOTAL** | | | | **1** | **3** | **4** |
| **INTERSECTION TOTAL** | | | | **1** | **3** | **4** |

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

## TRAFFIC SIGNAL CONDUIT

| LOCATION | FROM | - | TO | 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF | 652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF |
|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | |
| USH 10/USH 63 & STH 65 | | | | | |
| | PB1 | - | SB2 | 10 | -- |
| | PB1 | - | SB3 | 20 | -- |
| | PB1 | - | PB7 | -- | 30 |
| | PB7 | - | PB30 | -- | 20 |
| | PB30 | - | SB4 | -- | 15 |
| | PB30 | - | SB5 | 5 | -- |
| | PB30 | - | SB6 | 5 | -- |
| | PB7 | - | PB10 | -- | 50 |
| | PB10 | - | SB7 | 10 | -- |
| | PB10 | - | SB8 | 10 | -- |
| | PB10 | - | PB14 | -- | 40 |
| | PB14 | - | SB9 | -- | 25 |
| | PB14 | - | SB10 | 15 | - |
| **CATEGORY 0020 TOTAL** | | | | **75** | **180** |
| **INTERSECTION TOTAL** | | | | **75** | **180** |
| **PROJECT TOTAL** | | | | **75** | **180** |

* ADDITIONAL QUANTITIES FOUND IN "LIGHTING CONDUIT AND WIRE" TABLE.

## TRAFFIC SIGNAL LOOP DETECTORS

| LOCATION / LOOP NO. | STATION ** | OFFSET | L/R | SIZE FT X FT | NO. OF TURNS | INSTALLATION METHOD | 652.0900 LOOP DETECTOR SLOTS LF | 652.0800 CONDUIT LOOP DETECTOR LF | 655.0800 LOOP DETECTOR WIRE LF | 655.0700* LOOP DETECTOR LEAD IN CABLE LF |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | | | | | | |
| USH 10/USH 63 & STH 65 | | | | | | | | | | |
| 11 | 717+51 | 1.6' | RT | 6 X 30 | 3 | LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT WITH NEW ASPHALTIC OVERLAY | 98 | 98 | 280 | 80 |
| 21 | EXISTING | | | 6 X 15 | -- | REPLACE LEAD IN CABLE | -- | -- | -- | 270 |
| 22 | EXISTING | | | 6 X 15 | -- | REPLACE LEAD IN CABLE | -- | -- | -- | 345 |
| 41 | EXISTING | | | 6 X 30 | -- | REPLACE LEAD IN CABLE | -- | 15 | -- | 150 |
| 42 | EXISTING | | | 6 X 15 | -- | REPLACE LEAD IN CABLE | -- | 15 | -- | 150 |
| 43 | EXISTING | | | 6 X 6 | -- | REPLACE LEAD IN CABLE | -- | 30 | -- | 260 |
| 44 | EXISTING | | | 6 X 6 | -- | REPLACE LEAD IN CABLE | -- | 35 | -- | 260 |
| 51 | 718+88 | 1.6' | RT | 6 X 30 | 3 | LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT WITH NEW ASPHALTIC OVERLAY | 117 | 117 | 318 | 140 |
| 81 | 541+29 'MP' | 5.7' | RT | 4 X 15 | 4 | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) | 70 | 102 | 420 | 85 |
| 82 | 541+29 'MP' | 14.7' | RT | 4 X 15 | 3 | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) | 63 | 88 | 276 | 85 |
| **CATEGORY 0020 TOTAL** | | | | | | | **348** | **500** | **1294** | **1825** |
| **INTERSECTION TOTAL** | | | | | | | **348** | **500** | **1,294** | **1,825** |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
** FRONT CENTER OF LOOP

## TRAFFIC SIGNAL STRUCTURES

| LOCATION / BASE NUMBER | STATION | OFFSET | L/R | 654.0101 CONCRETE BASES TYPE 1 EACH | 654.0102 CONCRETE BASES TYPE 2 EACH | 657.0100 PEDESTAL BASES EACH | 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH | 657.0305 POLES TYPE 2 EACH | 657.0430 AFFIC SIGNAL STANDAR ALUMINUM 10-FT EACH | 657.0425 AFFIC SIGNAL STANDAR ALUMINUM 15-FT EACH | 657.0590 TROMBONE ARMS 20-FT EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | | | | | | | |
| USH 10/USH 63 & STH 65 | | | | | | | | | | | |
| SB2 | 717+93 | 35.2' | RT | 1 | – | 1 | -- | -- | 1 | -- | -- |
| SB3 | 717+85 | 29.7' | RT | 1 | – | 1 | -- | -- | -- | 1 | -- |
| SB5 | 717+71 | 42.3' | LT | 1 | – | 1 | -- | -- | 1 | -- | -- |
| SB6 | 717+77 | 46.7' | LT | 1 | – | 1 | -- | -- | -- | 1 | -- |
| SB7 | 718+50 | 30.4' | LT | – | 1 | -- | 1 | 1 | -- | -- | 1 |
| SB8 | 718+58 | 23.8' | LT | 1 | – | 1 | -- | -- | -- | 1 | -- |
| SB10 | 718+56 | 36.1' | RT | 1 | – | 1 | -- | -- | -- | 1 | -- |
| **CATEGORY 0020 TOTAL** | | | | **6** | **1** | **6** | **1** | **1** | **2** | **4** | **1** |
| **INTERSECTION TOTAL** | | | | **6** | **1** | **6** | **1** | **1** | **2** | **4** | **1** |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL HEADS

| LOCATION | SIGNAL BASE NO. | HEAD NO. | 658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH | 658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH | 658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH |
|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | |
| USH 10/USH 63 & STH 65 | | | | | |
| | SB2 | 4B | -- | -- | 1 |
| | SB3* | 1 | 1 | -- | – |
| | SB3*° | 9 | -- | 1 | – |
| | SB3 | 6A | --- | -- | 1 |
| | SB4* | 7 | 1 | -- | – |
| | SB4* | 8 | 1 | -- | – |
| | SB4* | 10 | -- | 1 | – |
| | SB5 | 2B | -- | -- | 1 |
| | SB6 | 4A | -- | -- | 1 |
| | SB6 | 11 | 1 | -- | – |
| | SB6 | 15 | 1 | -- | – |
| | SB7 | 16 | 1 | -- | – |
| | SB7 | 8B | -- | -- | 1 |
| | SB8*° | 4 | -- | 1 | – |
| | SB8* | 6 | 1 | -- | – |
| | SB8 | 2A | -- | -- | 1 |
| | SB9* | 2 | 1 | -- | – |
| | SB9* | 3 | 1 | -- | – |
| | SB9* | 5 | -- | 1 | – |
| | SB10 | 6B | -- | -- | 1 |
| | SB10 | 12 | 1 | -- | – |
| | SB10 | 14 | 1 | -- | – |
| | SB10 | 8A | -- | -- | 1 |
| **CATEGORY 0020 TOTAL** | | | **11** | **4** | **8** |
| **INTERSECTION TOTAL** | | | **11** | **4** | **8** |

* RETROFLECTIVE BACKPLATE REQUIRED
° TUNNEL VISOR REQUIRED

## TRAFFIC SIGNAL STRUCTURES

| LOCATION / BASE NUMBER | STATION | OFFSET | L/R | 654.0113 CONCRETE BASES TYPE 13 EACH | 657.0361 POLES TYPE 13 - OVERHEIGHT EACH | 657.0535 MONOTUBE ARMS ARMS 35-FT EACH | 657.0545 MONOTUBE ARMS ARMS 45-FT EACH | 657.0810 LUMINAIRE ARMS STEEL 10-FT EACH | 659.1125 LUMINAIRES UTILITY LED C EACH |
|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | | | | | |
| USH 10/USH 63 & STH 65 | | | | | | | | | |
| SB4 | 717+63 | 39.3' | LT | 1 | 1 | -- | 1 | 1 | 1 |
| SB9 | 718+71 | 34.2' | RT | 1 | 1 | 1 | – | 1 | 1 |
| **CATEGORY 0020 TOTAL** | | | | **2** | **2** | **1** | **1** | **2** | **2** |
| **INTERSECTION TOTAL** | | | | **2** | **2** | **1** | **1** | **2** | **2** |

## PEDESTRIAN PUSH BUTTONS

| LOCATION / BASE NUMBER | 658.0500 PEDESTRIAN PUSH BUTTON EACH |
|---|---|
| CATEGORY 0020 | |
| USH 10/USH 63 & STH 65 | |
| SB2 | 1 |
| SB3 | 1 |
| SB5 | 1 |
| SB6 | 1 |
| SB7 | 1 |
| SB8 | 1 |
| SB10 | 2 |
| **CATEGORY 0020 TOTAL** | **8** |
| **INTERSECTION TOTAL** | **8** |

## TRAFFIC SIGNAL MOUNTING HARDWARE

| LOCATION | 658.5069.001 SIGNAL MOUNTING HARDWARE (USH 10/USH 63 & STH 65) LS |
|---|---|
| CATEGORY 0020 | |
| USH 10/USH 63 & STH 65 | 1 |
| **CATEGORY 0020 TOTAL** | **1** |

## TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

| LOCATION | FROM | - | TO | 655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG LF | 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF | 655.0250 CABLE TRAFFIC SIGNAL 9-14 AWG LF | 655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF | 655.0290 CABLE TRAFFIC SIGNAL 21-14 AWG LF | 655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF | 655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF | 655.0700* LOOP DETECTOR LEAD IN CABLE LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | | | | | | | | |
| USH 10/USH 63 & STH 65 | | | | | | | | | | | | |
| | CB1 | - | SB4 | – | -- | -- | – | 328 | -- | 328 | -- | TEMPORARY |
| | SB4 | - | SB5 | 48 | -- | -- | – | -- | -- | 48 | -- | TEMPORARY |
| | SB4 | - | SB6 | 48 | -- | -- | – | -- | -- | 48 | -- | TEMPORARY |
| | SB4 | - | SB7 | – | 163 | -- | – | -- | -- | 163 | -- | TEMPORARY |
| | CB1 | - | SB1 | – | -- | -- | – | -- | -- | 63 | -- | – |
| | CB1 | - | SB2 | – | -- | 63 | – | -- | -- | -- | 63 | – |
| | CB1 | - | SB3 | – | -- | -- | 68 | -- | -- | -- | 68 | – |
| | CB1 | - | SB4 | – | -- | -- | 193 | -- | 193 | -- | -- | – |
| | CB1 | - | SB5 | – | -- | 188 | – | -- | -- | -- | 188 | – |
| | CB1 | - | SB6 | – | -- | -- | 178 | -- | -- | -- | 178 | – |
| | CB1 | - | SB7 | – | -- | 203 | – | -- | -- | -- | 203 | – |
| | CB1 | - | SB8 | – | -- | -- | 203 | -- | -- | -- | 203 | – |
| | CB1 | - | SB9 | – | -- | -- | 143 | -- | 143 | -- | -- | – |
| | CB1 | - | SB10 | – | -- | -- | 138 | -- | -- | 138 | 138 | – |
| | CB1 | - | SB10 | – | -- | -- | – | -- | -- | -- | 138 | – |
| | SB1 | - | SB2 | – | -- | -- | – | -- | -- | 45 | -- | – |
| | SB2 | - | SB3 | – | -- | -- | – | -- | -- | 50 | -- | – |
| | SB3 | - | SB4 | – | -- | -- | – | -- | -- | 185 | -- | – |
| | SB4 | - | SB5 | – | -- | -- | – | -- | -- | 45 | -- | – |
| | SB5 | - | SB6 | – | -- | -- | – | -- | -- | 35 | -- | – |
| | SB6 | - | SB7 | – | -- | -- | – | -- | -- | 155 | -- | – |
| | SB7 | - | SB8 | – | -- | -- | – | -- | -- | 40 | -- | – |
| | SB8 | - | SB9 | – | -- | -- | – | -- | -- | 115 | -- | – |
| | SB9 | - | SB10 | – | -- | -- | – | -- | -- | 50 | -- | – |
| | PB7 | - | SB6 | | -- | -- | – | -- | -- | 25 | -- | – |
| | PB30 | - | SB6 | | -- | -- | – | -- | -- | 20 | -- | – |
| | PB10 | - | SB7 | | -- | -- | – | -- | -- | 15 | -- | – |
| **CATEGORY 0020 TOTAL** | | | | **96** | **163** | **454** | **923** | **328** | **336** | **1568** | **1179** | |
| **INTERSECTION TOTAL** | | | | **96** | **163** | **454** | **923** | **328** | **336** | **1,568** | **1,179** | |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

| LOCATION | FROM SIGNAL BASE | - | TO SIGNAL HEAD | 655.0230* CABLE TRAFFIC SIGNAL 5-14 AWG LF | 655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF |
|---|---|---|---|---|---|
| CATEGORY 0020 | | | | | |
| USH 10/USH 63 & STH 65 | | | | | |
| | SB2 | - | 4B | 15 | – |
| | SB2 | - | BUTTON | -- | – |
| | SB3 | - | 1 | 19 | – |
| | SB3 | - | 9 | 22 | – |
| | SB3 | - | 6A | 15 | – |
| | SB3 | - | BUTTON | -- | – |
| | SB4 | - | 7 | 54 | – |
| | SB4 | - | 8 | 21 | – |
| | SB4 | - | 10 | 66 | – |
| | SB4 | - | LUMINAIRE | -- | 138 |
| | SB5 | - | 2B | 15 | – |
| | SB5 | - | BUTTON | -- | – |
| | SB6 | - | 11 | 19 | – |
| | SB6 | - | 15 | 19 | – |
| | SB6 | - | 4A | 15 | – |
| | SB6 | - | BUTTON | -- | – |
| | SB7 | - | 16 | 41 | – |
| | SB7 | - | 8B | 15 | – |
| | SB7 | - | BUTTON | -- | – |
| | SB8 | - | 4 | 22 | – |
| | SB8 | - | 6 | 19 | – |
| | SB8 | - | 2A | 15 | – |
| | SB8 | - | BUTTON | -- | – |
| | SB9 | - | 2 | 50 | – |
| | SB9 | - | 3 | 21 | – |
| | SB9 | - | 5 | 62 | – |
| | SB9 | - | LUMINAIRE | -- | 138 |
| | SB10 | - | 12 | 19 | – |
| | SB10 | - | 14 | 19 | – |
| | SB10 | - | 6B | 15 | – |
| | SB10 | - | 8A | 15 | – |
| | SB10 | - | BUTTON | -- | – |
| | SB10 | - | BUTTON | -- | – |
| **CATEGORY 0020 TOTAL** | | | | **593** | **276** |
| **INTERSECTION TOTAL** | | | | **593** | **276** |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

## CONSTRUCTION STAKING

| LOCATION | 650.8500.001 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (USH 10/USH 63 & STH 65) LS |
|---|---|
| CATEGORY 0020 | |
| USH 10/USH 63 & STH 65 | 1 |
| **CATEGORY 0020 TOTAL** | **1** |

## REMOVE TRAFFIC SIGNALS

| LOCATION | SPV.0105.03 REMOVE TRAFFIC SIGNALS (USH 10/USH 63 & STH 65) LS |
|---|---|
| CATEGORY 0020 | |
| USH 10/USH 63 & STH 65 | 1 |
| **CATEGORY 0020 TOTAL** | **1** |

## VIDEO DETECTION

| LOCATION | SPV.0090.03 INSTALL DEPARTMENT FURNISHED CAT-5E CABLE LF |
|---|---|
| CATEGORY 0020 | |
| USH 10/USH 63 & STH 65 | 95 |
| **CATEGORY 0020 TOTAL** | **95** |

# TRANSPORTATION PROJECT PLAT NO: 1530-03-26 - 4.01 AMENDMENT NO: 1 - AMENDS PARCELS 1, 4, 6 OF TRANSPORTATION PROJECT PLAT NO: 1530-03-26 - 4.01 RECORDED AS DOCUMENT NUMBER 592999.

THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP RECORDED IN VOLUME 4 OF CERTIFIED SURVEY MAPS , PAGE 150 AS DOCUMENT NUMBER 352202 LOCATED IN THE NE1/4 OF THE NW1/4 AND LOTS 1, 2 AND 3 OF BLOCK 7 AND LOT 1 OF BLOCK 6 OF THE ORIGINAL PLAT VILLAGE OF ELLSWORTH LOCATED IN THE NW 1/4 OF THE NE 1/4 ALL IN SECTION 19 AND THAT PART OF OUTLOT 89 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH AND LOT 9 OF BLOCK B OF MARY A. CHAMBERLAIN'S ADDITION TO THE VILLAGE OF ELLSWORTH LOCATED IN THE SE 1/4 OF THE SW 1/4 AND THAT PART OF OUTLOT 110 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH AND THAT PART OF LOT 4 OF BLOCK 3 OF THE ORIGINAL PLAT VILLAGE OF ELLSWORTH ALL LOCATED IN THE SW 1/4 OF THE SE 1/4 OF SECTION 18, ALL IN T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.

RELOCATION ORDER: USH 10, VILLAGE OF ELLSWORTH, MAIN STREET, STH 65 TO NORTH BEULAH STREET, PIERCE COUNTY.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-03-26 - 4.01
SHEET 1 OF 1
AMENDMENT NO. 1

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NO. 592999 FOR ADDITIONAL INFORMATION.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), PIERCE COUNTY. NAD83(2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

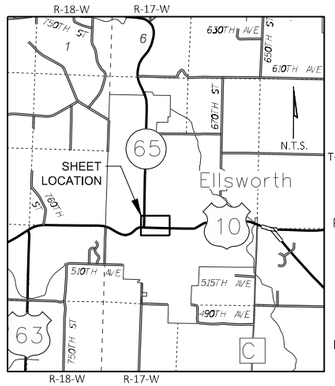
THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE AND THE TIE TO THE PUBLIC LAND SURVEY SYSTEM. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION EAU CLAIRE OFFICE.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

## LOCATION SKETCH




FOUND MK NAIL
POINT # 50000
Y = 322598.906
X = 482634.237

MARY A. CHAMBERLAIN'S ADDITION TO THE VILLAGE OF ELLSWORTH BLOCK B LOT 9

ALIGNMENT DATA

STH 65 / MAPLE STREET
POB STA. = 540+75.00 MP
Y = 317244.038
X = 482662.844
PI STA. = 551+02.80 MP
Y = 318271.819
X = 482657.298
DA = N00°29'07"W
DELTA = 00°10'34" LT
POE STA. = 558+00.00 MP
Y = 318968.994
X = 482651.393

USH 10 / MAIN STREET
POB STA. = 716+00.00
Y = 317343.944
X = 482437.416
POE STA. = 741+00.00
Y = 317335.908
X = 484937.411

SE-SW SEC. 18

| STATION & OFFSET TABLE (STH 65) | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 13057 | 541+74.54 MP | 0.69' |
| 60100 | 541+37.00 MP | -32.74' |
| 60101 | 541+41.86 MP | -37.17' |
| 60105 | 542+28.04 MP | -45.98' |
| 60106 | 542+29.36 MP | -41.16' |
| 60107 | 542+52.80 MP | -33.93' |
| 60108 | 542+52.80 MP | -32.31' |
| 60111 | 541+37.99 MP | 33.27' |
| 70100 | 541+26.00 MP | -32.88' |
| 70101 | 541+30.29 MP | -41.85' |
| 70105 | 542+51.45 MP | -39.31' |
| 70107 | 543+95.00 MP | -39.32' |
| 70108 | 543+95.00 MP | -32.32' |
| 70129 | 542+48.64 MP | -32.31' |
| 70134 | 541+32.94 MP | 38.21' |
| 70135 | 541+27.64 MP | 38.15' |
| 70136 | 541+27.70 MP | 33.15' |
| 90102 | 542+52.80 MP | 0.000' |
| 90103 | 542+52.80 MP | 0.69' |
| 90106 | 541+38.38 MP | 0.27' |
| 90107 | 541+36.61 MP | 0.25' |
| 90108 | 541+36.62 MP | 0.00' |
| 90109 | 541+74.55 MP | 0.00' |
| 90110 | 541+74.18 MP | 0.69' |

| COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 13057 - 90109 | N89° 49' 14"W | 0.69' |
| 90109 - 90101 | N89° 49' 14"W | 78.75' |
| 90101 - 60102 | N00° 10' 46"E | 33.00' |
| 60103 - 60104 | N39° 05' 11"E | 6.49' |
| 60105 - 60106 | N74° 28' 06"E | 5.00' |
| 60107 - 60108 | N89° 41' 11"E | 1.61' |
| 60108 - 90102 | N89° 41' 11"E | 32.31' |
| 90102 - 90103 | N89° 41' 11"E | 0.69' |
| 90103 - 13057 | S00° 18' 49"E | 78.26' |

60106-60107
LCB = N16° 50' 07"E
LCH = 24.53'
L = 24.92'
R = 40.50'

60104-60105
LCB = N56° 23' 06"E
LCH = 20.77'
L = 21.04'
R = 38.00'

60102 - 60103
LCB = N72° 29' 42"E
LCH = 11.52'
L = 11.53'
R = 100.50'

FOUND BERNTSEN MONUMENT
POINT #50001
Y = 317351.976
X = 479982.621

| SECTION LINE COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 50000 - 13057 | S00° 18' 49"E | 5255.41' |
| 50001 - 13057 | S89° 49' 14"E | 2680.39' |
| 13057 - 14085 | S89° 47' 17"E | 2626.20' |
| 50001 - 90101 | S89° 49' 14"E | 2600.95' |
| 90101 - 90100 | S89° 49' 14"E | 41.86' |
| 50000 - 90103 | S00° 18' 49"E | 5177.15' |
| 14085 - 90104 | N89° 47' 17"W | 2578.13' |

NE-NW SEC. 19

DETAIL NOT TO SCALE

FOUND 3/4" REBAR
POINT # 13057
Y = 317343.579
X = 482663.000

OF

SECTION LINE
USH 10 / MAIN STREET

717+00 S89° 48' 57"E 718+00 719+00 S89° 48' 57"E 720+00 721+00

541+74.55 MP

STA 718+24.89 USH 10 / MAIN STREET
STA 541+74.18 MP STH 65 / MAPLE STREET

TLE - GRADING & SLOPES

ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH OUTLOT 89

VILLAGE

LOT 1
LOT 2
LOT 4
LOT 5
LOT 6
LOT 1
LOT 2
LOT 3

5/8 IN
1/2 IN
1-1/2 IN

PL
Z
OH
FO
HO
EXIST. R/W
IP

544+00MP
543+00MP
542+00MP
541+00MP
718+25.58

STH 65 / MAPLE STREET
QUARTER LINE
S. MAPLE ST.

33'
49.5'

BLOCK 3 ORIGINAL PLAT, VILLAGE OF ELLSWORTH

BLOCK 7 ORIGINAL PLAT, VILLAGE OF ELLSWORTH

BLOCK 6 ORIGINAL PLAT, VILLAGE OF ELLSWORTH

OUTLOT 110 ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH

N. OAK STREET
S. OAK STREET

CUT - X
DRILL HOLE
CANOPY
BLDG

LOT 1 CSM V. 4 P. 150 DOC 352202

POB 540+75 MP

R/L STH 65
R/L USH 10
SECTION LINE

GN

SW-SE SEC. 18

NW-NE SEC. 19

SCALE, FEET
0 25 50

| STATION & OFFSET TABLE (USH 10) | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 70109 | 720+35.00 | -33.26' |
| 70110 | 720+35.00 | -38.26' |
| 70111 | 720+56.26 | -38.25' |
| 70112 | 721+05.63 | -53.45' |
| 70113 | 721+10.63 | -53.49' |
| 70114 | 721+10.76 | -38.22' |
| 70115 | 721+20.00 | -38.22' |
| 70116 | 721+20.00 | -33.22' |
| 70130 | 720+56.30 | -33.25' |
| 70131 | 721+05.81 | -33.22' |

| STATION & OFFSET TABLE (USH 10) | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 13057 | 718+25.58 | -0.36' |
| 60100 | 717+92.46 | 37.47' |
| 60101 | 717+88.00 | 32.64' |
| 60102 | 717+46.13 | -33.35' |
| 60103 | 717+57.11 | -36.86' |
| 60104 | 717+61.19 | -41.91' |
| 60109 | 718+73.63 | 32.66' |
| 60110 | 718+73.63 | 35.91' |
| 70101 | 717+83.42 | 44.25' |
| 70102 | 717+73.00 | 32.64' |
| 70103 | 717+44.63 | -33.35' |
| 70104 | 717+59.57 | -51.85' |
| 70125 | 719+31.06 | 32.69' |
| 70126 | 719+31.05 | 37.69' |
| 70127 | 718+78.65 | 37.67' |
| 70128 | 718+78.64 | 40.92' |
| 90099 | 717+88.00 | 0.00' |
| 90100 | 717+88.00 | -0.36' |
| 90101 | 717+46.13 | -0.35' |
| 90104 | 718+73.65 | -0.34' |
| 90105 | 718+73.65 | 0.00' |
| 90110 | 718+25.58 | 0.00' |

| R/W POINT TABLE | | |
|---|---|---|
| POINT | Y | X |
| 60100 | 317305.860 | 482629.762 |
| 60101 | 317310.697 | 482625.314 |
| 60102 | 317376.828 | 482583.658 |
| 60103 | 317380.295 | 482594.651 |
| 60104 | 317385.332 | 482598.742 |
| 60105 | 317396.831 | 482616.040 |
| 60106 | 317398.169 | 482620.854 |
| 60107 | 317421.647 | 482627.958 |
| 60108 | 317421.656 | 482629.572 |
| 60109 | 317310.401 | 482710.946 |
| 60110 | 317307.151 | 482710.934 |
| 60111 | 317307.207 | 482695.772 |
| 90099 | 317343.340 | 482625.416 |
| 90100 | 317343.697 | 482625.417 |
| 90101 | 317343.828 | 482583.555 |
| 90102 | 317421.833 | 482661.885 |
| 90103 | 317421.837 | 482662.572 |
| 90104 | 317343.401 | 482711.068 |
| 90105 | 317343.064 | 482711.067 |
| 90106 | 317307.415 | 482662.773 |
| 90107 | 317305.652 | 482662.762 |
| 90108 | 317305.652 | 482662.512 |
| 90109 | 317343.581 | 482662.307 |
| 90110 | 317343.219 | 482662.998 |

FOUND SPIKE WITH PIERCE COUNTY SURVEY WASHER POINT #14085
Y = 317333.864
X = 485289.180

ELLSWORTH

| STATION & OFFSET TABLE (USH 10) | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 70117 | 721+16.00 | 32.78' |
| 70118 | 721+16.03 | 42.78' |
| 70119 | 721+05.95 | 42.78' |
| 70120 | 720+56.45 | 42.75' |
| 70121 | 720+42.67 | 42.75' |
| 70122 | 720+42.64 | 34.61' |
| 70123 | 720+35.00 | 34.63' |
| 70124 | 720+35.00 | 32.74' |
| 70132 | 721+05.98 | 32.78' |
| 70133 | 720+56.48 | 32.75' |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE DEPARTMENT
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W S.F. REQUIRED NEW | EXISTING | TOTAL | TLE S.F. |
|---|---|---|---|---|---|---|
| 1 | LEHIGH GAS WHOLESALE SERVICES, INC. | FEE/TLE | 346 | ---- | 346 | 1512 |
| 2 | INDIANHEAD OIL CO., LLC | TLE | ---- | ---- | ---- | 107 |
| 3 | FIRST PRESBYTERIAN CHURCH OF ELLSWORTH | FEE/TLE | 11 | ---- | 11 | 174 |
| 4 | BRADLEY S. & NANCY E. MARX, VENDOR VILLAGE DISCOUNT LIQUOR AND MORE, LLC, VENDEES | FEE/TLE | 50 | ---- | 50 | 406 |
| | | | | | | |
| 6 | WOLFGRAM HOLDINGS, LLC, VENDOR JOSHUA L. & MELISSA A. WOLFGRAM, VENDEES | TLE | ---- | ---- | ---- | 152 |
| 7 | PIERCE COUNTY | TLE | ---- | ---- | ---- | 148 |
| 8 | KRUMMER FOUR, LLC | TLE | ---- | ---- | ---- | 101 |
| 9 | DAVID T. FURLONG | TLE | ---- | ---- | ---- | 78 |

| COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 13057 - 90110 | S0° 21' 37"W | 0.36' |
| 90110 - 90107 | S0° 21' 37"W | 37.57' |
| 90107 - 90108 | N89° 38' 23"W | 0.25' |
| 90108 - 60100 | N89° 38' 23"W | 32.75' |
| 60100 - 60101 | N42° 36' 15"W | 6.57' |
| 60101 - 90099 | N0° 10' 46"E | 32.64' |
| 90099 - 90100 | N0° 10' 46"E | 0.36' |
| 90100 - 90109 | S89° 49' 14"E | 36.89' |
| 90109 - 13057 | S89° 49' 14"E | 0.69' |

| COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 13057 - 90104 | S89° 47' 17"E | 48.07' |
| 90104 - 90105 | S00° 12' 43"W | 0.34' |
| 90105 - 60109 | S00° 12' 43"W | 32.66' |
| 60109 - 60110 | S00° 12' 43"W | 3.25' |
| 60110 - 60111 | N89° 47' 17"W | 15.16' |
| 60111 - 90106 | N89° 38' 23"W | 33.00' |
| 90106 - 90110 | N00° 21' 37"E | 35.80' |
| 90110 - 13057 | N00° 21' 37"E | 0.36' |

| HIGHWAY | EXISTING R/W BASIS |
|---|---|
| STH 65 | R/W PROJECT 1538-03-21 & FO28-2(13), ORIGINAL PLAT, VILLAGE OF ELLSWORTH |
| USH 10 | R/W PROJECT 1538-03-21, CSM V4-P150, ORIGINAL PLAT, VILLAGE OF ELLSWORTH |
| S. MAPLE ST. | CSM V4-P150, ORIGINAL PLAT, VILLAGE OF ELLSWORTH |
| OAK STREET | ORIGINAL PLAT, VILLAGE OF ELLSWORTH |

| HIGHWAY | EXISTING ACCESS CONTROL BASIS |
|---|---|
| STH 65 | ESTABLISHED FROM PREVIOUS PROJECT 1538-03-21 AND RECORDED AS DOCUMENT NO. 353798 AT THE PIERCE COUNTY REGISTER OF DEEDS. |
| USH 10 | |

## UTILITY INTERESTS REQUIRED

| EASEMENT TABLE | | |
|---|---|---|
| OWNER | RECORDING INFORMATION | LOCATED IN R/W PARCEL NO. |
| AT&T WISCONSIN | NO EASEMENT OF RECORD FOUND | 1 & 9 |
| XCEL ENERGY | NO EASEMENT OF RECORD FOUND | 1 & 9 |

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 101 | AT&T WISCONSIN | TEMPORARY RELEASE OF RIGHTS |
| 102 | XCEL ENERGY | TEMPORARY RELEASE OF RIGHTS |

KL Engineering
[A] Better Experience

I, JOHN T. MUELLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-03-26-4.01 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JOHN T. MUELLER S-2454 CHIPPEWA FALLS, WI LAND SURVEYOR

OCTOBER 8, 2020
JOHN T. MUELLER DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2454

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

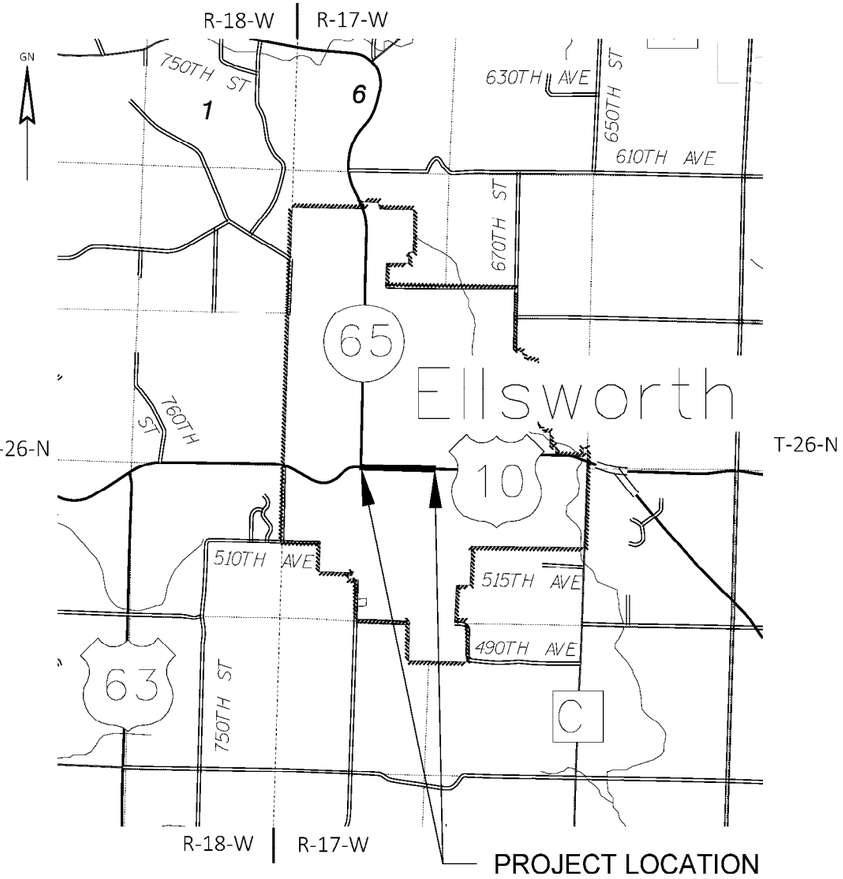
DEBRA B. STENSLAND



FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\RW\040101-RP 4.01 AMEND NO. 1.DWG
APPRAISAL PLAT DATE : OCTOBER 8, 2020
PLOT DATE : 10/8/2020 1:12 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION
# TRANSPORTATION PROJECT PLAT TITLE SHEET
# 1530-03-26
## VILLAGE OF ELLSWORTH, MAIN STREET
### STH 65 TO NORTH BEULAH STREET
## USH 10
## PIERCE COUNTY






LAYOUT
SCALE 0 0.5 MI.

## CONVENTIONAL SYMBOLS

- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W OR HE LINE
- PROPERTY LINE
- LOT, TIE & OTHER MINOR LINES
- SLOPE INTERCEPT
- CORPORATE LIMITS
- UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
- NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
- TEMPORARY LIMITED EASEMENT AREA
- EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
- TRANSMISSION STRUCTURES
- BUILDING
- TO BE REMOVED
- BRIDGE
- SECTION CORNER SYMBOL
- SECTION CORNER MONUMENT
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN
- OFF-PREMISE SIGN
- R/W MONUMENT (TO BE SET)
- NON-MONUMENTED R/W POINT
- FOUND IRON PIN (1-INCH UNLESS NOTED)
- ELECTRIC POLE
- TELEPHONE POLE
- PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)

| | COMPENSABLE | NON-COMPENSABLE |
|---|---|---|
| ELECTRIC POLE | ■ | □ |
| TELEPHONE POLE | ● | ○ |
| PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.) | ◆ | ◇ |

- ACCESS RESTRICTED BY ACQUISITION
- NO ACCESS (BY STATUTORY AUTHORITY)
- ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
- NO ACCESS (NEW HIGHWAY)
- PARCEL NUMBER (25)
- UTILITY NUMBER (40)
- PARALLEL OFFSETS

## CONVENTIONAL ABBREVIATIONS

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

## CURVE DATA

| | |
|---|---|
| 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 UTILITY SYMBOLS

- W — WATER
- G — GAS
- T — TELEPHONE
- OH — OVERHEAD TRANSMISSION LINES
- E — ELECTRIC
- TV — CABLE TELEVISION
- FO — FIBER OPTIC
- SAN — SANITARY SEWER
- SS — STORM SEWER

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1530-03-26.

## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), PIERCE COUNTY, NAD83(2011), IN U.S. 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 ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

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 THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION OFFICE IN EAU CLAIRE.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 1530-03-26-4.01
SHEET 2 OF 2
AMENDMENT NO: 93

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\RW\TITLE SHEET.DWG
LAYOUT NAME: TPP Title 34x22
PLOT DATE :
PLOT BY : KL ENGINEERING
PLOT NAME : _____
APPRAISAL PLAT DATE : MAY 20, 2020
_____
1530-03-26 - 4.01

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

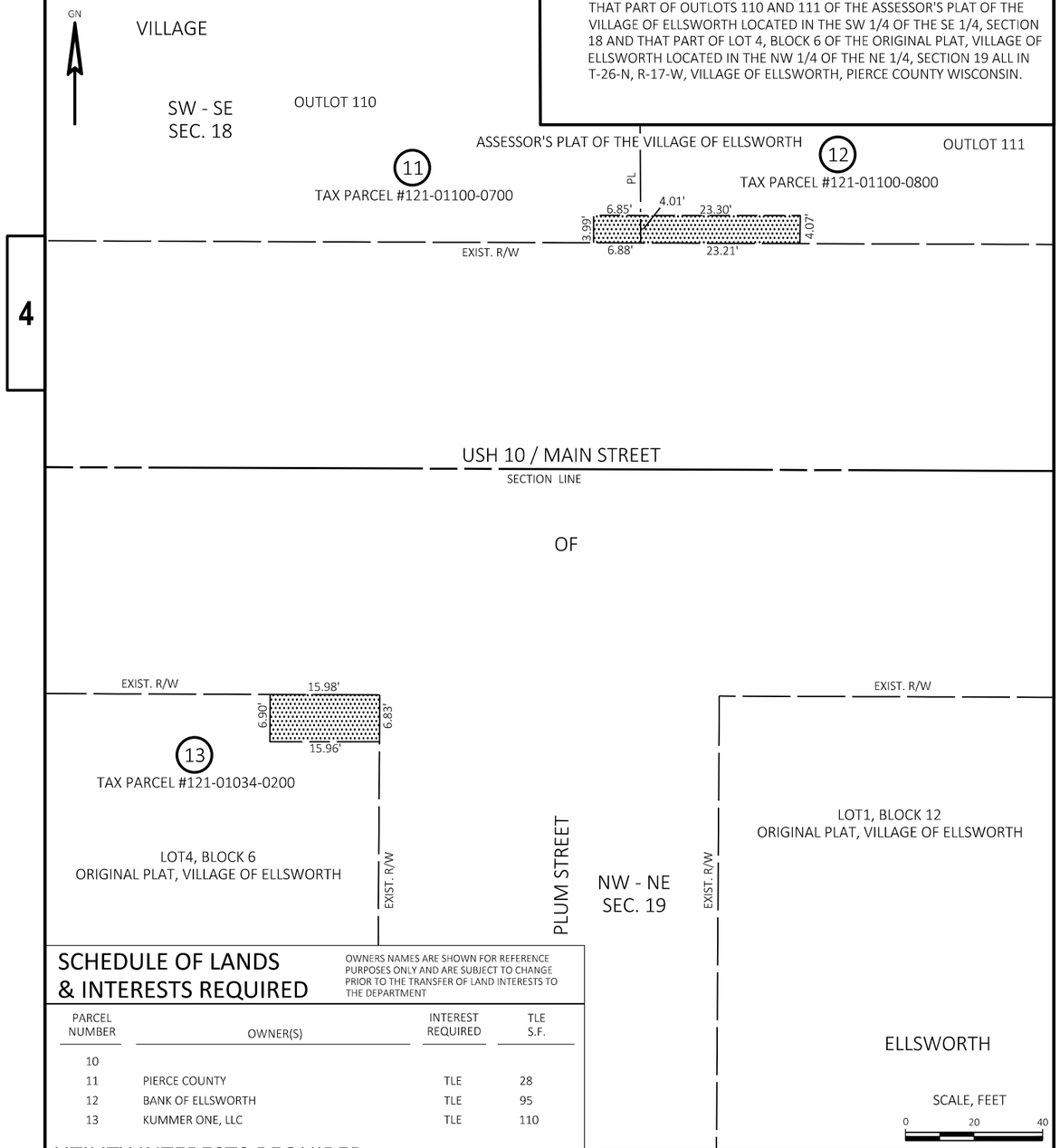
THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1530-03-26 | EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAIN STREET
STH 65 TO NORTH BEULAH STREET

USH 10 — PIERCE COUNTY

THAT PART OF OUTLOTS 110 AND 111 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4, SECTION 18 AND THAT PART OF LOT 4, BLOCK 6 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE NW 1/4 OF THE NE 1/4, SECTION 19 ALL IN T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 10 | | | |
| 11 | PIERCE COUNTY | TLE | 28 |
| 12 | BANK OF ELLSWORTH | TLE | 95 |
| 13 | KUMMER ONE, LLC | TLE | 110 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| N/A | N/A | N/A |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:

FILE NAME : G:\WDOTNW\19004-012 (USH 10 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 9:42 AM R/W PROJECT: 1530-03-26

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

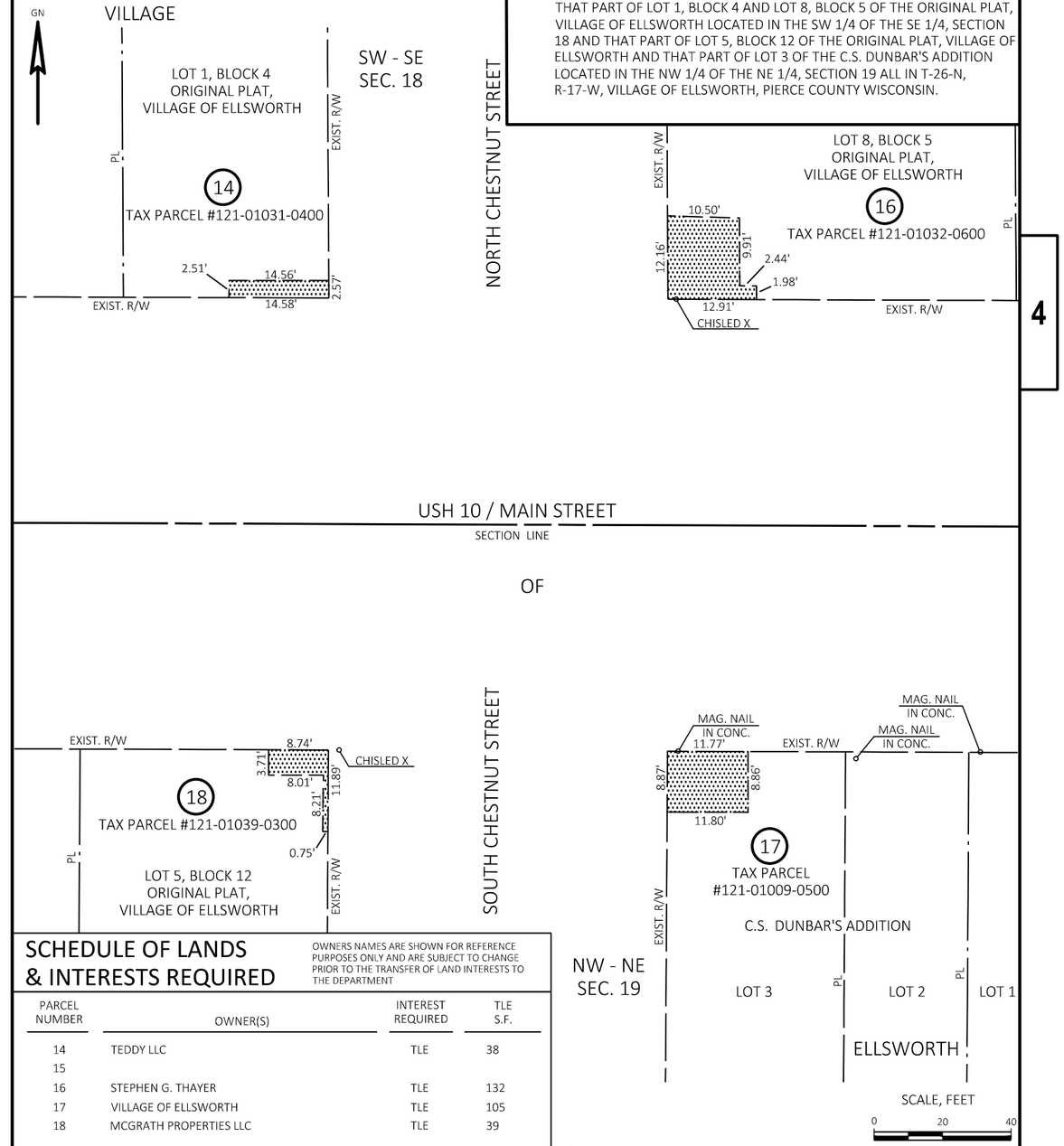
THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1530-03-26 | EXHIBIT NUMBER: 2

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAIN STREET
STH 65 TO NORTH BEULAH STREET

USH 10 — PIERCE COUNTY

THAT PART OF LOT 1, BLOCK 4 AND LOT 8, BLOCK 5 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4, SECTION 18 AND THAT PART OF LOT 5, BLOCK 12 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH AND THAT PART OF LOT 3 OF THE C.S. DUNBAR'S ADDITION LOCATED IN THE NW 1/4 OF THE NE 1/4, SECTION 19 ALL IN T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 14 | TEDDY LLC | TLE | 38 |
| 15 | | | |
| 16 | STEPHEN G. THAYER | TLE | 132 |
| 17 | VILLAGE OF ELLSWORTH | TLE | 105 |
| 18 | MCGRATH PROPERTIES LLC | TLE | 39 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| N/A | N/A | N/A |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE OFFICE

SIGNATURE: _____ DATE: _____

PRINT NAME:



FILE NAME : G:\WDOTNW\19004-012 (USH 10 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 9:42 AM R/W PROJECT: 1530-03-26

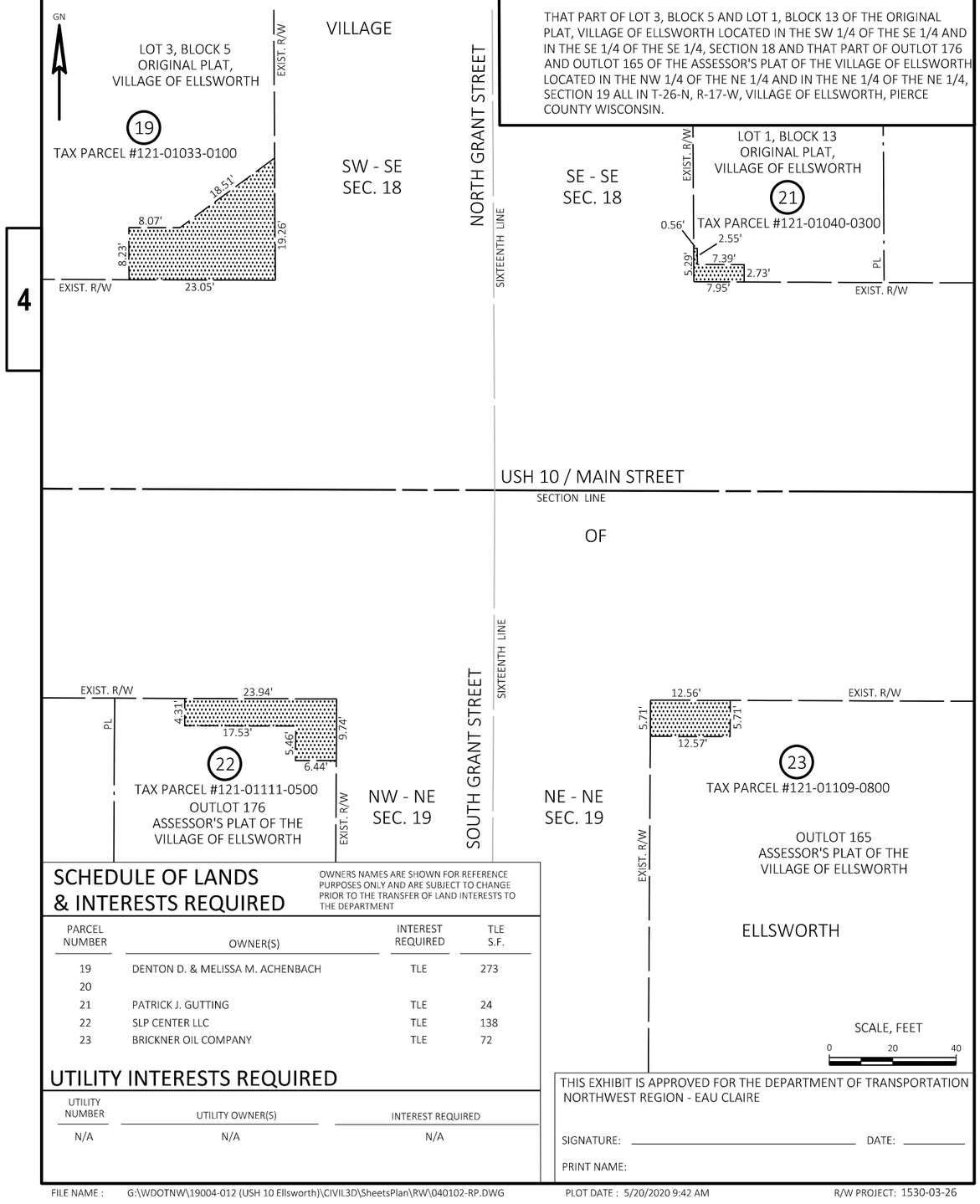
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1530-03-26 | EXHIBIT NUMBER: 3

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAIN STREET
STH 65 TO NORTH BEULAH STREET
USH 10 PIERCE COUNTY

THAT PART OF LOT 3, BLOCK 5 AND LOT 1, BLOCK 13 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4 AND IN THE SE 1/4 OF THE SE 1/4, SECTION 18 AND THAT PART OF OUTLOT 176 AND OUTLOT 165 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE NW 1/4 OF THE NE 1/4 AND IN THE NE 1/4 OF THE NE 1/4, SECTION 19 ALL IN T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 19 | DENTON D. & MELISSA M. ACHENBACH | TLE | 273 |
| 20 | | | |
| 21 | PATRICK J. GUTTING | TLE | 24 |
| 22 | SLP CENTER LLC | TLE | 138 |
| 23 | BRICKNER OIL COMPANY | TLE | 72 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| N/A | N/A | N/A |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:

FILE NAME : G:\WDOTNW\19004-012 (USH 10 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 9:42 AM R/W PROJECT: 1530-03-26

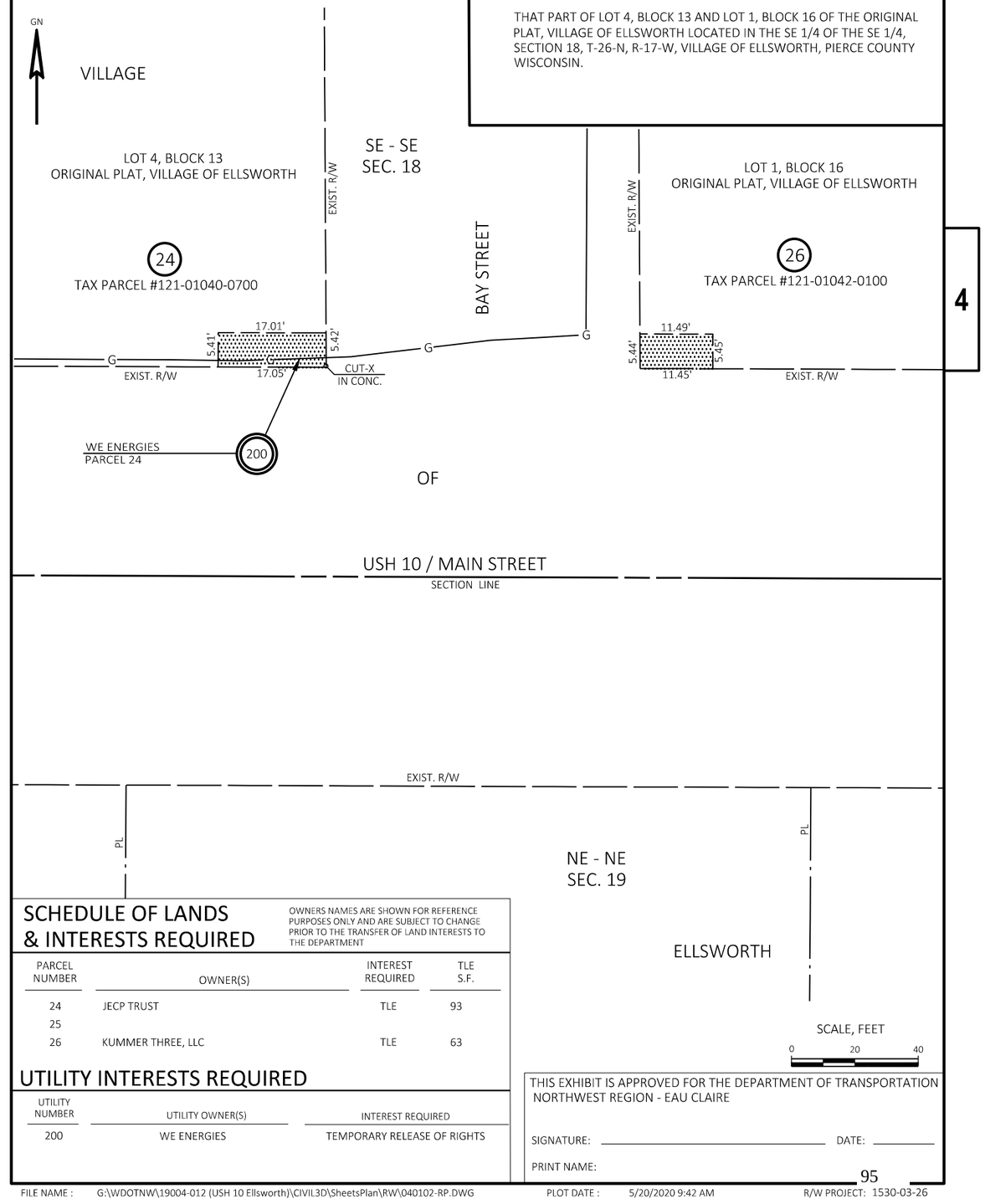
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1530-03-26 | EXHIBIT NUMBER: 4

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAIN STREET
STH 65 TO NORTH BEULAH STREET
USH 10 PIERCE COUNTY

THAT PART OF LOT 4, BLOCK 13 AND LOT 1, BLOCK 16 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE SE 1/4 OF THE SE 1/4, SECTION 18, T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 24 | JECP TRUST | TLE | 93 |
| 25 | | | |
| 26 | KUMMER THREE, LLC | TLE | 63 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 200 | WE ENERGIES | TEMPORARY RELEASE OF RIGHTS |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:



FILE NAME : G:\WDOTNW\19004-012 (USH 10 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 9:42 AM R/W PROJECT: 1530-03-26

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

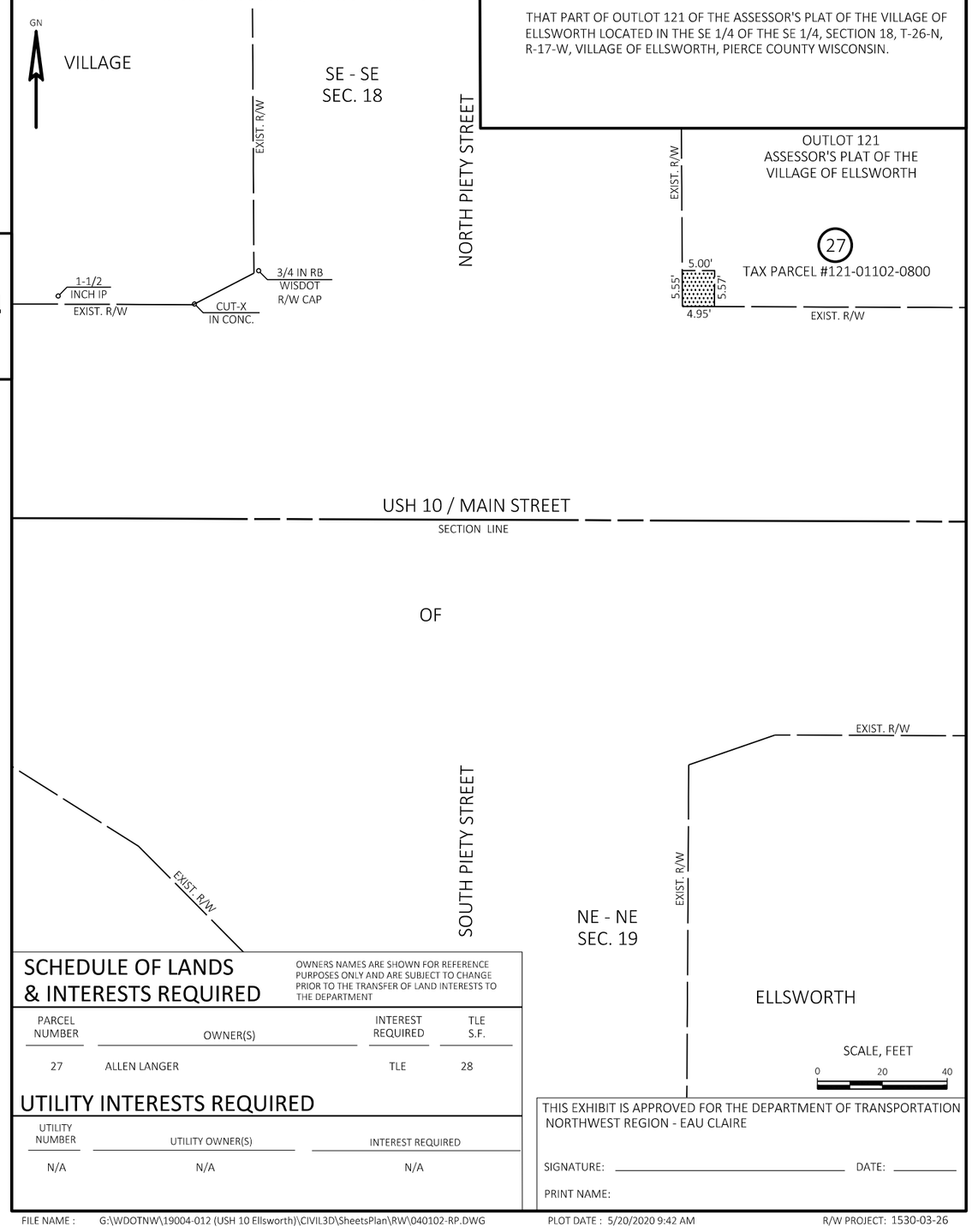
THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

| R/W PROJECT NUMBER: 1530-03-26 | EXHIBIT NUMBER: 5 |
|---|---|

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAIN STREET
STH 65 TO NORTH BEULAH STREET

USH 10 — PIERCE COUNTY

THAT PART OF OUTLOT 121 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE SE 1/4 OF THE SE 1/4, SECTION 18, T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 27 | ALLEN LANGER | TLE | 28 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| N/A | N/A | N/A |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:

# TRANSPORTATION PROJECT PLAT NO: 1540-01-22 - 4.01

THAT PART OF OUTLOTS 104 AND 109 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4 AND OUTLOT 67 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE SE 1/4 OF THE SW 1/4 AND THAT PART OF THE NW 1/4 OF THE SE 1/4 ALL IN SECTION 18, T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.

RELOCATION ORDER: STH 65, VILLAGE OF ELLSWORTH, MAPLE STREET, USH 10 TO MIDWAY AVENUE, PIERCE COUNTY.

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## LOCATION SKETCH




## ALIGNMENT DATA

STH 65 / MAPLE STREET
POB STA. = 540+75.00MP
Y = 317244.038
X = 482652.844
PI STA. = 551+02.80MP
Y = 318271.819
X = 482657.298
DB = N00°18'33"W
DELTA = 00°10'34" LT
POE STA. = 558+00.00MP
Y = 318958.994
X = 482651.393

## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE DEPARTMENT
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W S.F. REQUIRED NEW | EXISTING | TOTAL | TLE S.F. | PLE S.F. |
|---|---|---|---|---|---|---|---|
| 8 | PETER J. & SANDRA K. DEUSTERMAN | TLE | ---- | ---- | ---- | 325 | ---- |
| 9 | J&B RESIDENTIAL LEASING, LLC | TLE | ---- | ---- | ---- | 93 | ---- |
| | | | | | | | |
| 11 | MADDOX INVESTMENTS, LLC | TLE | ---- | ---- | ---- | 57 | ---- |
| 12 | PIERCE COUNTY | PLE/TLE | ---- | ---- | ---- | 4549 | 1458 |

| EASEMENT TABLE | | |
|---|---|---|
| OWNER | RECORDING INFORMATION | LOCATED IN R/W PARCEL NO. |
| WISCONSIN TELEPHONE COMPANY | 10' EASEMENT V131 - P77 & V131 - P89 | 9 & 11 |
| AT&T WISCONSIN | NO EASEMENT OF RECORD FOUND | 12 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 100 | WISCONSIN TELEPHONE COMPANY | TEMPORARY RELEASE OF RIGHTS |
| 101 | AT&T WISCONSIN | RELEASE OF RIGHTS |

| PLE STATION & OFFSET TABLE | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y | X |
| 60000 | 557+39.44 MP | 35.53' | 318908.736 | 482687.434 |
| 60001 | 557+39.35 MP | 62.53' | 318908.884 | 482714.434 |
| 60002 | 556+70.00 MP | 50.32' | 318839.428 | 482702.814 |
| 60003 | 556+70.00 MP | 35.32' | 318839.301 | 482687.814 |
| 90000 | 557+39.53 MP | 2.53' | 318908.556 | 482654.435 |
| 90001 | 556+70.10 MP | 2.32' | 318839.121 | 482654.815 |
| 90002 | 557+39.54 MP | 0.00' | 318908.542 | 482651.905 |

| TLE STATION & OFFSET TABLE | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 70000 | 552+35.00 MP | -31.98' |
| 70001 | 552+35.04 MP | -98.98' |
| 70002 | 553+00.00 MP | -98.78' |
| 70003 | 553+00.00 MP | -31.78' |
| 70004 | 552+80.03 MP | 34.15' |
| 70005 | 552+98.80 MP | 34.21' |
| 70006 | 553+10.00 MP | 34.24' |
| 70007 | 553+10.00 MP | 99.24' |
| 70008 | 552+98.52 MP | 99.15' |
| 70009 | 552+79.98 MP | 99.05' |
| 70010 | 555+95.00 MP | 35.10' |
| 70011 | 555+95.01 MP | 78.31' |
| 70012 | 557+39.31 MP | 77.53' |

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN PIERCE COUNTY AS SHEET 2 OF 2 OF THIS DOCUMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), PIERCE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE AND THE TIE TO THE PUBLIC LAND SURVEY SYSTEM. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION, EAU CLAIRE OFFICE.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBAR) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

KL Engineering
LA Better Experience

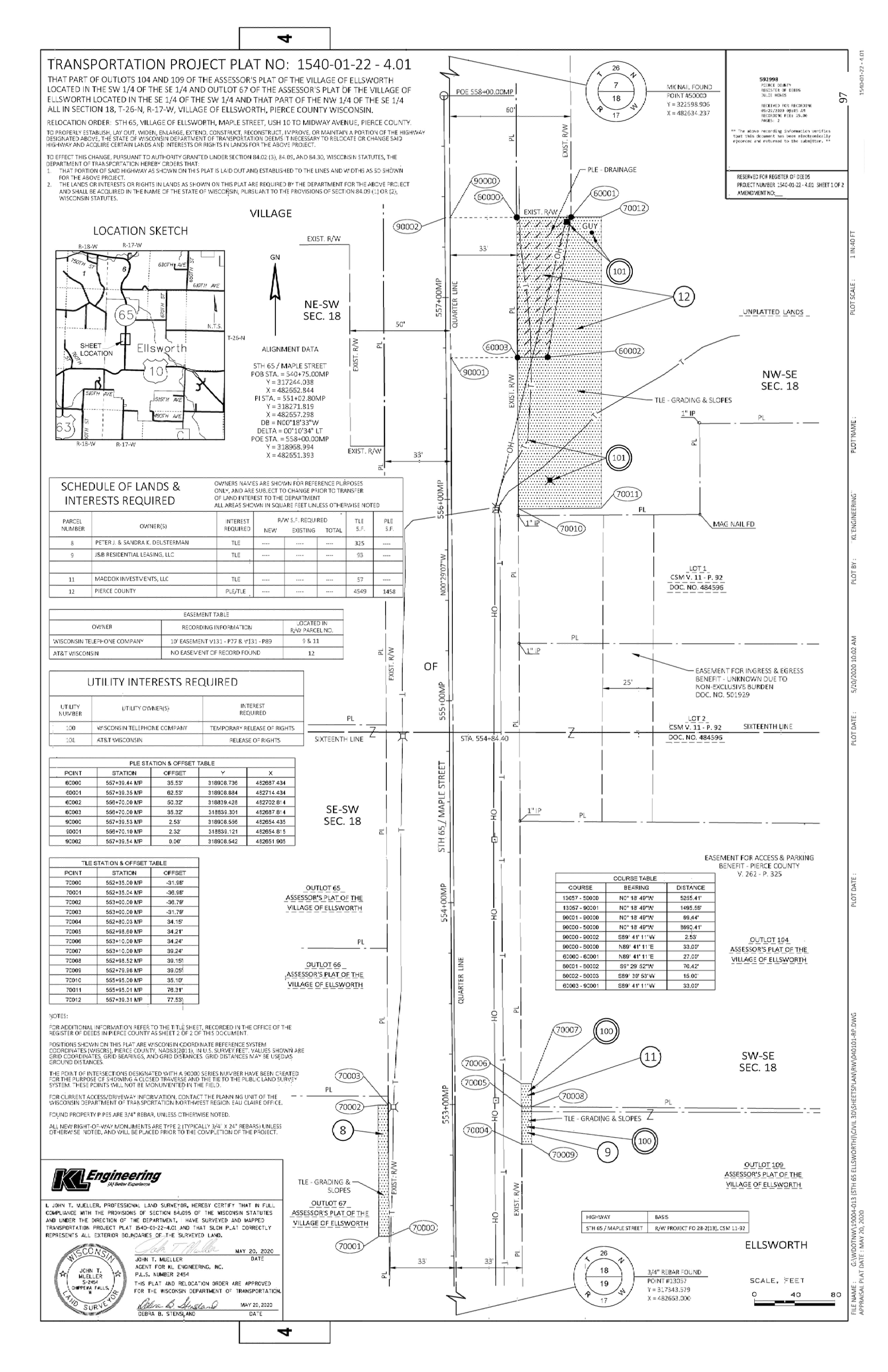
I, JOHN T. MUELLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1540-01-22-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JOHN T. MUELLER S-2454 CHIPPEWA FALLS, WI LAND SURVEYOR

MAY 20, 2020
JOHN T. MUELLER — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2454

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

MAY 20, 2020
DEBRA B. STENSLAND — DATE




| COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 13057 - 50000 | N0° 18' 48"W | 5255.41' |
| 13057 - 90001 | N0° 18' 48"W | 1495.56' |
| 90001 - 90000 | N0° 18' 48"W | 69.44' |
| 90000 - 50000 | N0° 18' 48"W | 3690.41' |
| 90000 - 90002 | S89° 41' 11"W | 2.53' |
| 90000 - 50000 | N89° 41' 11"E | 33.00' |
| 60000 - 60001 | N89° 41' 11"E | 27.00' |
| 60001 - 50002 | S0° 29' 52"W | 70.42' |
| 60002 - 50003 | S89° 30' 53"W | 15.00' |
| 60003 - 90001 | S89° 41' 11"W | 33.00' |

| HIGHWAY | BASIS |
|---|---|
| STH 65 / MAPLE STREET | R/W PROJECT FO 28-2(13), CSM 11-92 |

592998
PIERCE COUNTY
REGISTER OF DEEDS
JEJE HENDS
RECEIVED FOR RECORDING
05/21/2020 08:05 AM
RECORDING FEES 15.00
PAGES: 2
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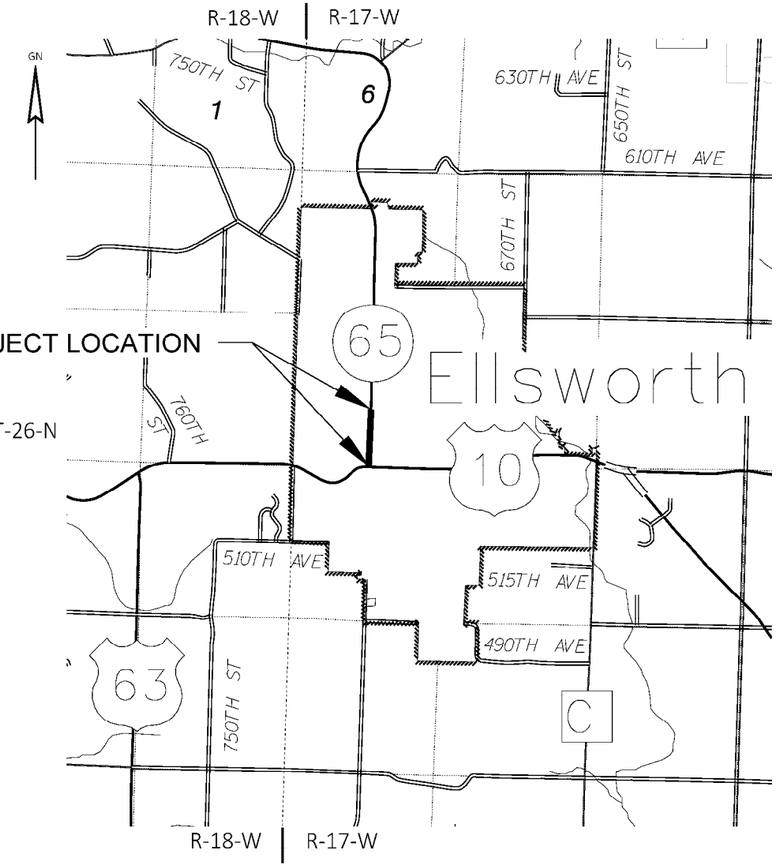
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1540-01-22 - 4.01 SHEET 1 OF 2
AMENDMENT NO:

97

1540-01-22 - 4.01
PLOT SCALE : 1 IN:40 FT
PLOT NAME :
PLOT BY : KL ENGINEERING
PLOT DATE : 5/20/2020 10:02 AM
PLOT DATE :
PLOT DATE :
FILE NAME : G:\WDOT\NW\19004-013 (STH 65 ELLSWORTH)\CIVIL 3D\SHEETS\PLAN\RW\040101-RP.DWG
APPRAISAL PLAT DATE : MAY 20, 2020

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION
# TRANSPORTATION PROJECT PLAT TITLE SHEET
# 1540-01-22
## VILLAGE OF ELLSWORTH, MAPLE STREET
### USH 10 TO MIDWAY AVENUE
## STH 65
## PIERCE COUNTY






LAYOUT
SCALE 0 0.5 MI.

## CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (3/4-INCH UNLESS NOTED)

| | COMPENSABLE | NON-COMPENSABLE |
|---|---|---|
| ELECTRIC POLE | | |
| TELEPHONE POLE | | |
| PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.) | | |

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

## CONVENTIONAL ABBREVIATIONS

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

## CURVE DATA

| | |
|---|---|
| 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 UTILITY SYMBOLS

| | |
|---|---|
| W | WATER |
| G | GAS |
| T | TELEPHONE |
| OH | OVERHEAD TRANSMISSION LINES |
| E | ELECTRIC |
| TV | CABLE TELEVISION |
| FO | FIBER OPTIC |
| SAN | SANITARY SEWER |
| SS | STORM SEWER |

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1540-01-22.

## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), PIERCE COUNTY, NAD83(2011), IN U.S. 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 ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

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 THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND 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, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION OFFICE IN EAU CLAIRE.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 1540-01-22-4.01
SHEET 2 OF 2
AMENDMENT NO: 98

FILE NAME : G:\WDOTNW\19004-013 (STH 65 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\RW\TITLE SHEET.DWG
LAYOUT NAME: TPP Title 34x22
PLOT DATE :
PLOT BY : KL ENGINEERING
PLOT NAME : _____
APPRAISAL PLAT DATE : MAY 20, 2020

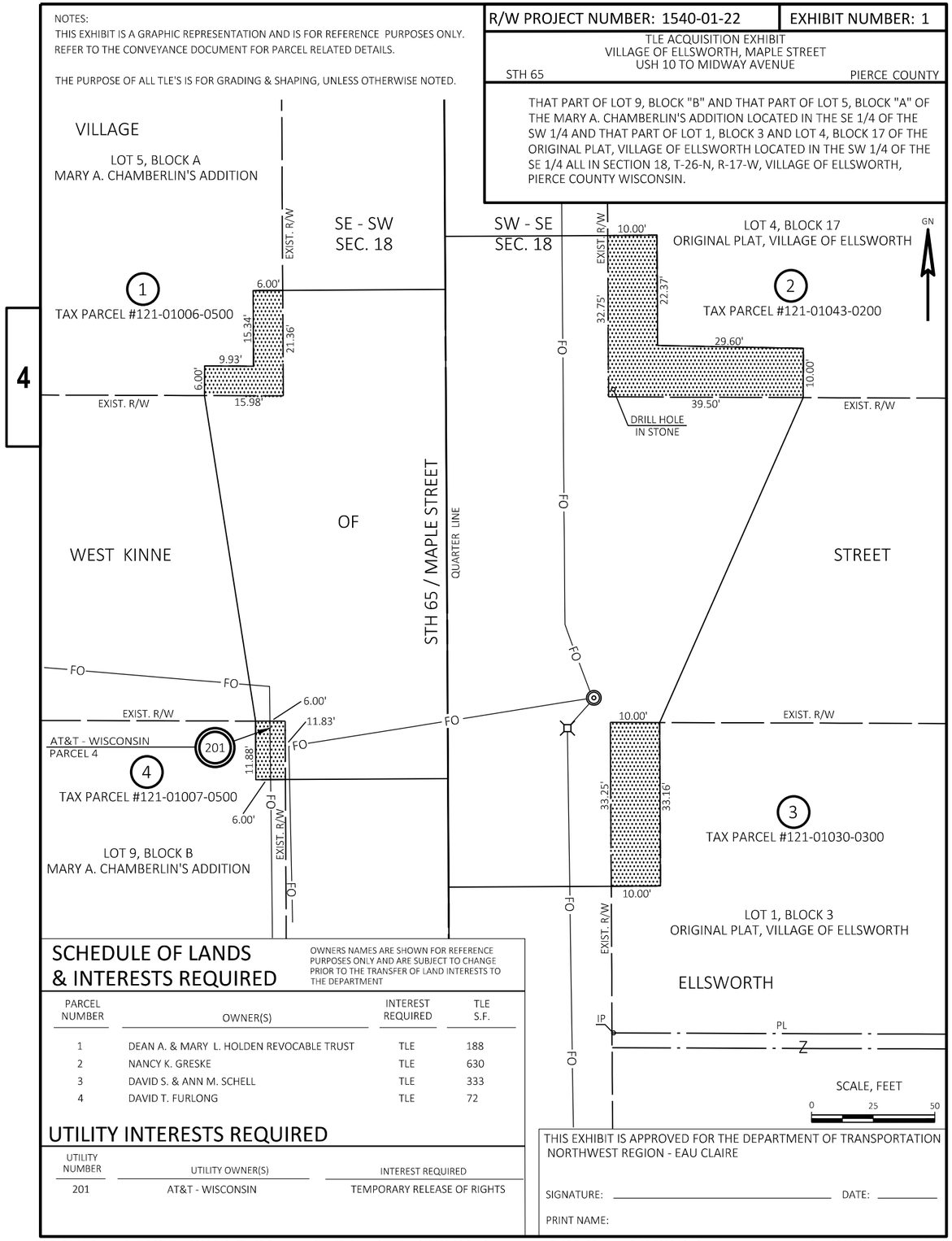
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1540-01-22 | EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAPLE STREET
USH 10 TO MIDWAY AVENUE
STH 65 PIERCE COUNTY

THAT PART OF LOT 9, BLOCK "B" AND THAT PART OF LOT 5, BLOCK "A" OF THE MARY A. CHAMBERLIN'S ADDITION LOCATED IN THE SE 1/4 OF THE SW 1/4 AND THAT PART OF LOT 1, BLOCK 3 AND LOT 4, BLOCK 17 OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4 ALL IN SECTION 18, T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 1 | DEAN A. & MARY L. HOLDEN REVOCABLE TRUST | TLE | 188 |
| 2 | NANCY K. GRESKE | TLE | 630 |
| 3 | DAVID S. & ANN M. SCHELL | TLE | 333 |
| 4 | DAVID T. FURLONG | TLE | 72 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 201 | AT&T - WISCONSIN | TEMPORARY RELEASE OF RIGHTS |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:

FILE NAME : G:\WDOTNW\19004-013 (STH 65 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 10:15 AM R/W PROJECT: 1540-01-22

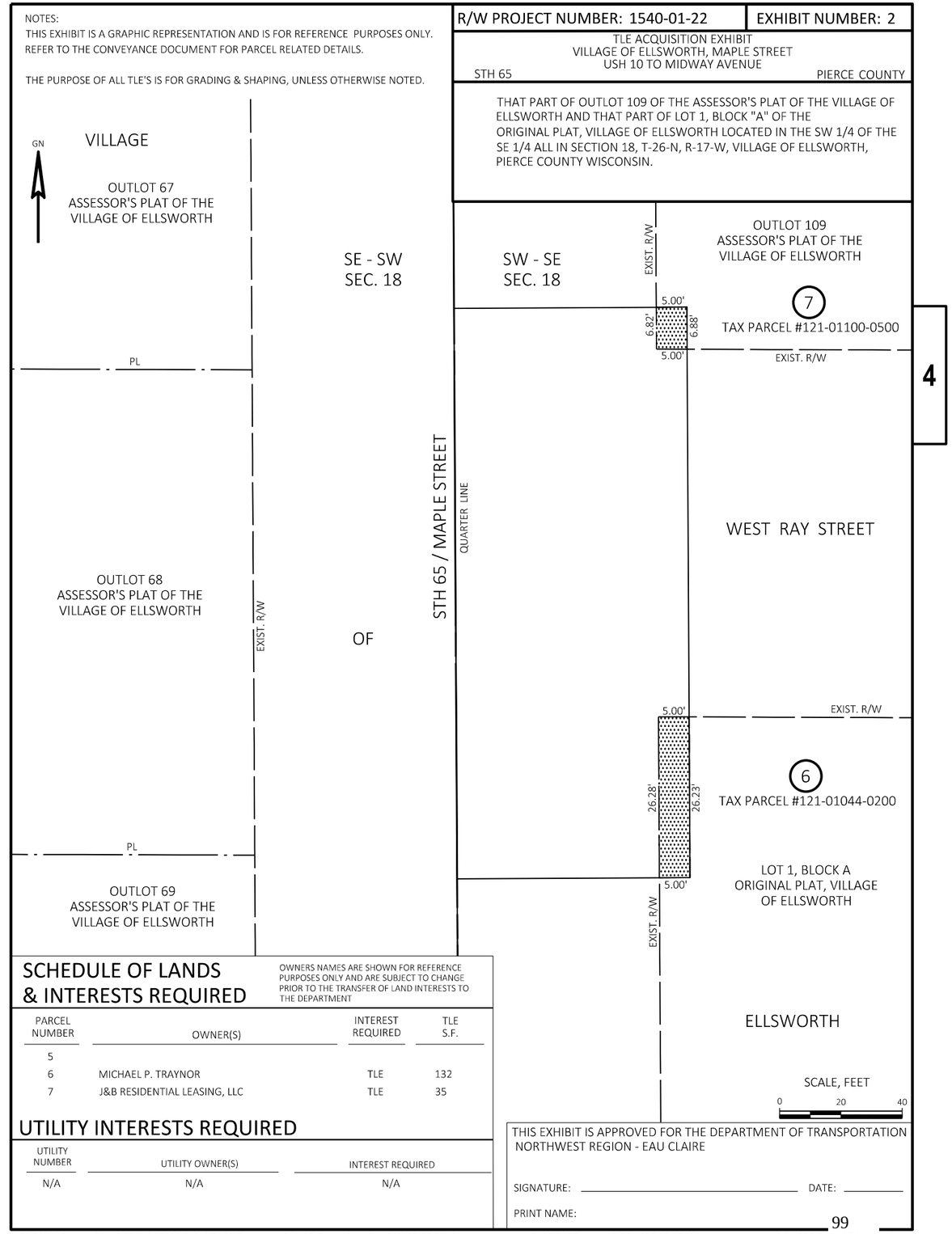
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THE PURPOSE OF ALL TLE'S IS FOR GRADING & SHAPING, UNLESS OTHERWISE NOTED.

R/W PROJECT NUMBER: 1540-01-22 | EXHIBIT NUMBER: 2

TLE ACQUISITION EXHIBIT
VILLAGE OF ELLSWORTH, MAPLE STREET
USH 10 TO MIDWAY AVENUE
STH 65 PIERCE COUNTY

THAT PART OF OUTLOT 109 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH AND THAT PART OF LOT 1, BLOCK "A" OF THE ORIGINAL PLAT, VILLAGE OF ELLSWORTH LOCATED IN THE SW 1/4 OF THE SE 1/4 ALL IN SECTION 18, T-26-N, R-17-W, VILLAGE OF ELLSWORTH, PIERCE COUNTY WISCONSIN.




## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE S.F. |
|---|---|---|---|
| 5 | | | |
| 6 | MICHAEL P. TRAYNOR | TLE | 132 |
| 7 | J&B RESIDENTIAL LEASING, LLC | TLE | 35 |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | UTILITY OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| N/A | N/A | N/A |

THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE

SIGNATURE: _____ DATE: _____

PRINT NAME:



FILE NAME : G:\WDOTNW\19004-013 (STH 65 Ellsworth)\CIVIL3D\SheetsPlan\RW\040102-RP.DWG PLOT DATE : 5/20/2020 10:15 AM R/W PROJECT: 1540-01-22

NOTES:

REMOVING CONCRETE SURFACE PARTIAL DEPTH, 1.25"
2.75" HMA PAVEMENT 5 MT 58-34 V REQ'D

SIDEWALK CONSISTS OF CONCRETE SIDEWALK 5-INCH OVER 4" BASE AGGREGATE DENSE 3/4-INCH

(1) HMA PAVEMENT 5 MT 58-34 V, 2.75-INCH OVER CONCRETE BASE, 9-INCH

INLET PROTECTION

RICKEY J & SALLY J ELLIS

P.L.

R/W

R/L
PI STA=716+00.00
Y=317343.9439
X=482437.4241

BP: 716+00.00

716+00

S89° 48' 56.95"E
2500.01

717+00

STA 717+33, LT
RECONSTRUCT C.E.
PCC

LEHIGH GAS WHOLESALE SERVICES, INC.

A,C

TLE

R/W

CAUTION

WE ENERGIES

AT&T WISCONSIN

VILLAGE OF ELLSWORTH

718+00

STH 65 / MAPLE ST

N0° 18' 33.09"W
1027.80

542+00MP

INDIANHEAD OIL CO LLC

WISCONSIN DOT

C

REMOVE EXISTING OVERHEAD SIGN SUPPORT STA 719+88

N

R/W

719+00

USH 10 / MAIN ST

720

MATCH LINE STA 720+00

STA 718+24.89
STA 541+74.18MP

REPLACE WATER SERVICE CURB STOP AND BOX BEHIND BACK OF CURB

VILLAGE OF ELLSWORTH

XCEL ENERGY

A,C

WE ENERGIES

TLE

R/W

WISCONSIN DOT

CAUTION

541+00MP

VILLAGE DISCOUNT LIQUOR & MORE LLC

P.L.

WOLFGRAM HOLDINGS

BUTT JOINT REQ'D

S-47-16
STA 716+09

REMOVE EXISTING OVERHEAD SIGN SUPPORT STA 716+15

BEGIN PROJECT 1530-03-76
STA 717+20.93
MATCH EXISTING
BUTT JOINT REQ'D

WISCONSIN DOT

R/W

TLE

CAUTION

FIRST PRESBYTERIAN CHURCH

JOAN V SKROCH PROCH

P.L.

5

5

N

INDIANHEAD OIL CO LLC

BUTT JOINT REQ'D

TLE

SLOPE INTERCEPTS (TYP.)

PIERCE COUNTY

R/W

P.L.

BANK OF ELLSWORTH

P.L.

SHAWN BERTSCH

TLE

MATCH LINE STA 720+00

C

VILLAGE OF ELLSWORTH

721+00

S89° 48' 56.95"E
2500.01

722+00

723+00

724+00

725+00

726

MATCH LINE STA 726+00

XCEL ENERGY

USH 10 / MAIN ST

VILLAGE OF ELLSWORTH

WE ENERGIES

C

TLE

TLE

R/W

CAUTION

KUMMER FIVE LLC

KUMMER ONE, LLC

KUMMER ONE, LLC

C

TLE

BUTT JOINT REQ'D

BUTT JOINT REQ'D

WOLFGRAM HOLDINGS

OAK ST

KUMMER FOUR, LLC

P.L.

P.L.

P.L.

PLUM ST

BANK MUTUAL

FOUR PILLARS, INC.

P.L.

P.L.

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS - USH 10 | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - US10-(1)

PLOT DATE : 1/12/2021 8:12 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

INLET PROTECTION

MARGARET M FEUERHELM
SHAWN BERTSCH
BRIAN R BJORKMAN
BALAZI LLC
CALVIN L BUTTS
TEDDY LLC
STEPHEN G THAYER
HUPPERT & ASSOCIATES INC
BERNARD REAL ESTATE HOLDINGS LLC
WD LLC
GREGORY J & TAMARA DESLAURIERS
VILLAGE OF ELLSWORTH
DENTON D & MELISSA M ACHENBACH
PATRICK J GUTTING
WE ENERGIES
XCEL ENERGY
AT&T WISCONSIN

K & H PROPERTIES, LLC
BRENT J LANGER
ROBERT L & SPRING A LOBERG REV TRUST
ROBERT L & SPRING A LOBERG REV TRUST
JEREMY M BECKLER
MCGRATH PROPERTIES LLC
JANICE M MOST
LEISURE ENTERTAINMENT RW LLC
LEISURE ENTERTAINMENT RW LLC
WILLIAM J HUBER
WILLIAM J HUBER
LM PARTNERS LLC
WILLIAM P FOLEY
SLP CENTER LLC
BRICKNER OIL COMPANY

KUMMER THREE, LLC
KUMMER THREE, LLC
JULEE T AGREY
JECP TRUST
JECP TRUST
AMY A MILLER
ML HOLST LLC
ALLEN LANGER
REALTY INCOME PROPERTIES 3, LLC
KUMMER TWO, LLC
KUMMER TWO, LLC
ENGLISH LUTHERAN CHURCH OF ELLSWORTH
ENGLISH LUTHERAN CHURCH OF ELLSWORTH
JECP TRUST
JD WALTER LLC
BRICKNER OIL COMPANY

P.L.
R/W
TLE
BLDG
WV
SAN
SS
OH
GUY
HSE

MATCH LINE STA 726+00
MATCH LINE STA 732+00
MATCH LINE STA 732+00
MATCH LINE STA 738+00

727+00
728+00
729+00
730+00
731+00
733+00
734+00
735+00
736+00
737+00
S89° 48' 56.95"E
2500.01

USH 10 / MAIN ST
USH 10 / MAIN ST

CHESTNUT ST
BAY ST
GRANT ST
PIETY ST

CONCRETE PAVEMENT REPAIR DOWELED
CONCRETE PAVEMENT REPLACEMENT DOWELED
CONCRETE PAVEMENT REPLACEMENT DOWELED
BUTT JOINT REQ'D
SLOPE INTERCEPTS (TYP.)
MIDCO
C
CAUTION

NOTES:

REMOVING CONCRETE SURFACE PARTIAL DEPTH, 1.25"
2.75" HMA PAVEMENT 5 MT 58-34 V REQ'D

SIDEWALK CONSISTS OF CONCRETE SIDEWALK 5-INCH OVER 4" BASE AGGREGATE DENSE 3/4-INCH

N

5

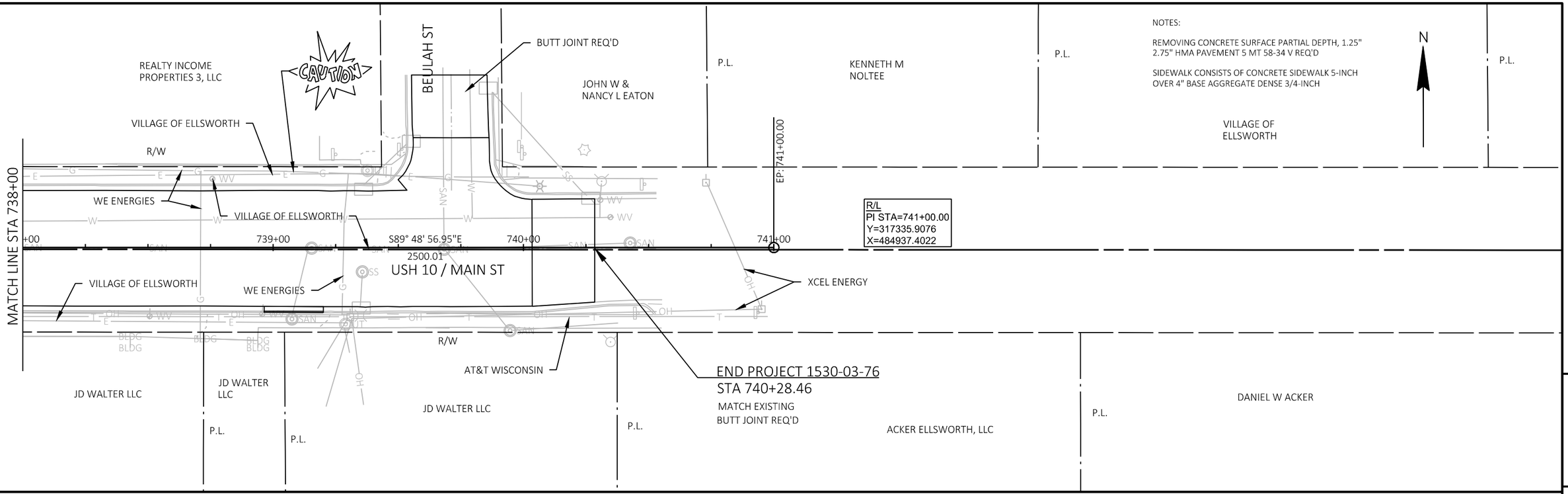
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| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS - USH 10 | SHEET 101 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - US10-(2)

PLOT DATE : 1/12/2021 8:12 AM
PLOT BY : BRIAN ST. VINCENT
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | PLAN DETAILS - USH 10 | SHEET 102 | E |
|---|---|---|---|---|---|

NOTES:

REMOVING CONCRETE SURFACE PARTIAL DEPTH, 1.25"
2.75" HMA PAVEMENT 5 MT 58-34 V REQ'D

SIDEWALK CONSISTS OF CONCRETE SIDEWALK 5-INCH OVER 4" BASE AGGREGATE DENSE 3/4-INCH

R/L MP
PI STA=540+75.00
Y=317244.0376
X=482662.8444

BP: 540+75.00MP

BEGIN PROJECT 1540-01-72
STA 541+08.38MP
MATCH EXISTING
BUTT JOINT REQ'D

541+00MP

718+00

719+00

STA 718+24.89
STA 541+74.18MP

542+00MP

N0° 18' 33.09"W
1027.80

543+00MP

35'

544+00MP

545+00MP

546+

MATCH LINE STA 546+00

STH 65 / MAPLE ST

USH 10 / MAIN ST

KINNE ST

XCEL ENERGY

WISCONSIN DOT

WE ENERGIES

AT&T WISCONSIN

VILLAGE OF ELLSWORTH

BUTT JOINT REQ'D

STA 542+90, LT
REMOVE C.E.

STA 543+57, LT
RECONSTRUCT C.E.
PCC

REMOVING CONCRETE

REMOVING ASPHALT

STA 544+61.45

TREE TO REMAIN

SLOPE INTERCEPTS (TYP.)

CAUTION

TLE

R/W

P.L.

LEHIGH GAS WHOLESALE SERVICES, INC.

DAVID T FURLONG

DEAN A & MARY L HOLDEN REV TRUST

INDIANHEAD OIL CO LLC

DAVID S SCHELL

NANCY K GRESKE

5

NOTES:

MILL EXISTING ASPHALT PAVEMENT 4.5"
3.5" HMA PAVEMENT 4 MT 58-34 V REQ'D

SIDEWALK CONSISTS OF CONCRETE SIDEWALK 5-INCH OVER 4" BASE AGGREGATE DENSE 3/4-INCH

DEAN A & MARY L HOLDEN REV TRUST

KRISTIN D NELSON

GWEN FRANCINE VANHANDEL

SCOTT J MYERS

CHAD H MOSS

DAVID FURLONG

WILLIAM R ODELL

TERRY & VIRGINIA BISHOP

PETER J & SANDRA K DUESTERMAN

MATCH LINE STA 546+00

MATCH LINE STA 552+00

547+00MP

548+00MP

549+00MP

550+00MP

N0° 18' 33.09"W
1027.80

551+00MP

PI: 551+02.80MP

N0° 29' 07.08"W
697.20

552+

STH 65 / MAPLE ST

GROVE ST

RAY ST

NANCY K GRESKE

MARK A MAGNAN

MARK A MAGNAN

MICHAEL P TRAYNOR

MICHAEL P TRAYNOR

J&B RESIDENTIAL LEASING

R/L MP
PI STA=551+02.80
Y=318271.8180
X=482657.2980

| PROJECT NO: 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | PLAN DETAILS - STH 65 | SHEET 103 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - STH65-(1)

PLOT DATE : 1/12/2021 8:12 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

EROSION MAT CLASS I, TYPE B

INLET PROTECTION

NOTES:

MILL EXISTING ASPHALT PAVEMENT 4.5"
3.5" HMA PAVEMENT 4 MT 58-34 V REQ'D

SIDEWALK CONSISTS OF CONCRETE SIDEWALK 5-INCH OVER 4" BASE AGGREGATE DENSE 3/4-INCH

PETER J & SANDRA K DEUSTERMAN

JASON L MEYER

MLB PROPERTIES LLC

CLIFFORD MASLOW

VILLAGE OF ELLSWORTH

DOUGLAS J CUDD

J&B RESIDENTIAL LEASING

MADDOX INVESTMENTS LLC

MAPLE SUITES LLC

JOSEPH L WALKER

PIERCE COUNTY FAIR GROUNDS

P.L.

R/W

TLE

PLE

SLOPE INTERCEPTS (TYP.)

AT&T WISCONSIN

WE ENERGIES

XCEL ENERGY

CAUTION

MATCH LINE STA 552+00

553+00MP

554+00MP

555+00MP

556+00MP

557+00MP

N0° 29' 07.08"W
697.20

STH 65 / MAPLE ST

EP: 558+00.00MP

R/L MP
PI STA=558+00.00
Y=318968.9944
X=482651.3927

END PROJECT 1540-01-72
STA 556+91.97MP
MATCH EXISTING

MIDWAY AVE

A,C

C

2 HMA PAVEMENT 4 MT 58-34 V, 3.5-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 18-INCH

3 HMA PAVEMENT 4 MT 58-34 V, 3-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH

5

5

| PROJECT NO: 1540-01-72 | HWY: STH 65 | COUNTY: PIERCE | PLAN DETAILS - STH 65 | SHEET 104 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - STH65-(2)

PLOT DATE : 1/12/2021 8:12 AM PLOT BY : BRIAN ST. VINCENT PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

| | |
|---|---|
| 08A05-19A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08C07-02 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT |
| 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 |
| 08D15-05A | EDGEDRAIN OUTLET AND OUTFALL MARKERS |
| 08D18-02 | DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y |
| 08D19-02 | DRIVEWAY AND SIDEWALK RAMPS TYPE Z |
| 08D20-01 | DRIVEWAYS WITH CURB & GUTTER RETURNS |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E14-01 | TRACKING PAD |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F04-07 | JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL |
| 09B02-10 | CONDUIT |
| 09B04-11 | PULL BOX |
| 09C02-09 | CONCRETE BASES, TYPES 1, 2, 5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09C12-09A | CONCRETE BASE TYPE 13 |
| 09C12-09B | CONCRETE BASE TYPE 13 |
| 09E01-15A | POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2 |
| 09E01-15G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E03-06 | NON-FREEWAY LIGHTING UNIT POLE WIRING |
| 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 |
| 09E12-01D | OVER HEIGHT TYPE 13 POLE 35'-55' MONOTBE ARM |
| 09E12-01E | GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS |
| 09F11-04 | LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT WITH NEW ASPHALTIC OVERLAY |
| 09F15-04B | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A04-03 | STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS |
| 13C01-19 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C04-17 | URBAN NON-DOWELED CONCRETE PAVEMENT |
| 13C09-15A | CONCRETE PAVEMENT REPAIR AND REPLACEMENT |
| 13C09-15B | CONCRETE PAVEMENT REPAIR AND REPLACEMENT |
| 13C09-15C | CONCRETE PAVEMENT REPAIR AND REPLACEMENT |
| 13C15-06A | CONCRETE BASE |
| 13C15-06B | CONCRETE BASE |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS |
| 15C07-15A | PAVEMENT MARKING SYMBOLS |
| 15C07-15B | PAVEMENT MARKING WORDS |
| 15C07-15C | PAVEMENT MARKING ARROWS |
| 15C08-20A | LONGITUDINAL MARKING (MAINLINE) |
| 15C08-20B | PAVEMENT MARKING (TURN LANES) |
| 15C08-20C | PAVEMENT MARKING (TURN LANES) |
| 15C11-07A | CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST |
| 15C11-07B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C12-07 | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C18-04 | MEDIAN ISLAND MARKING |
| 15C27-03A | DOUBLE ARROW WARNING SIGN PLACEMENT |
| 15C27-03B | PAVEMENT MARKING (ISLANDS) |
| 15C33-04 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15C35-04A | PAVEMENT MARKING (INTERSECTIONS) |
| 15C36-01 | PARKING STALL MARKING |
| 15D28-04 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY |
| 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 |

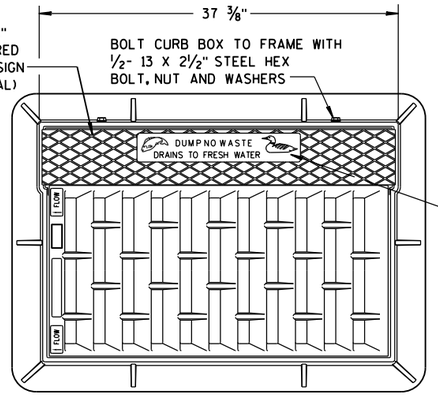
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# Standard Detail Drawing List

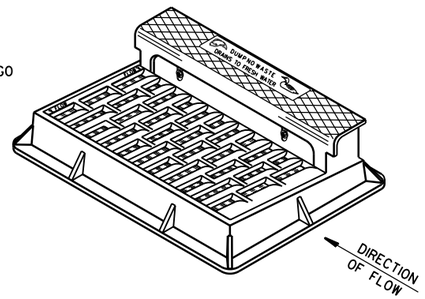
| | |
|---|---|
| 15D38-02B | ATTACHMENT OF SIGNS TO POSTS |
| 15D39-02 | TRAFFIC CONTROL, DROP-OFF SIGNING |
| 15D44-02 | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES |



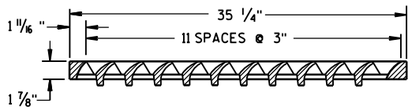
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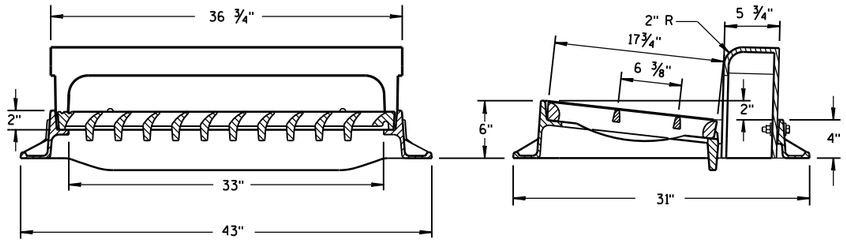


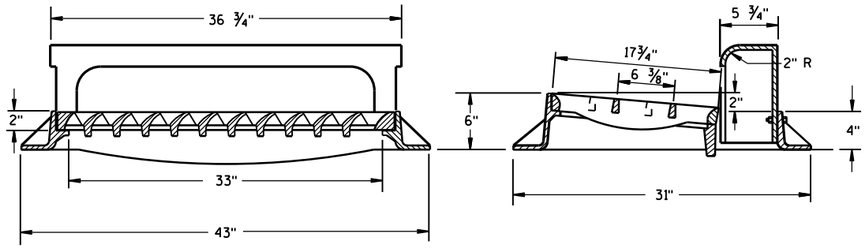

**NOTE:**
**GRATE IS REVERSIBLE.**




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

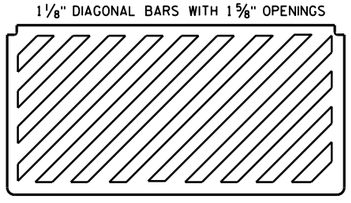



## TYPE "H"

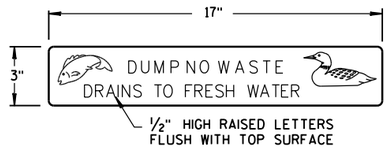
**NOTE: EITHER CASTING IS ACCEPTABLE**



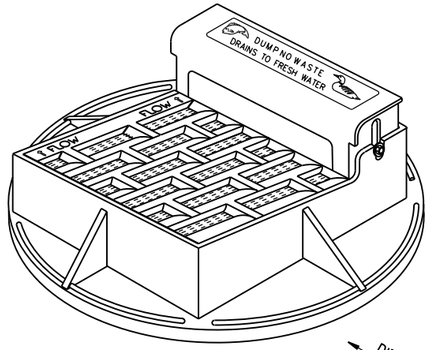

**SPECIAL GRATE FOR TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)




**LOGO DETAIL**




NOTE: CURB BOX ADJUSTABLE 4" TO 9"

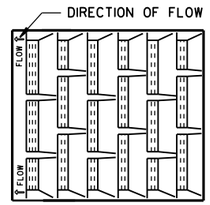
**NOTE:**
**GRATE IS REVERSIBLE.**

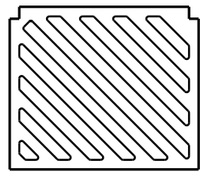
## GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

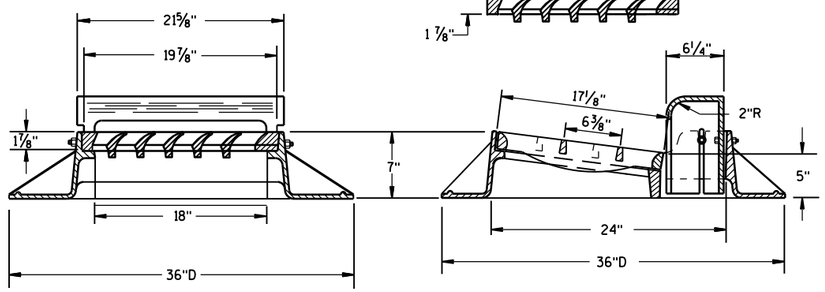


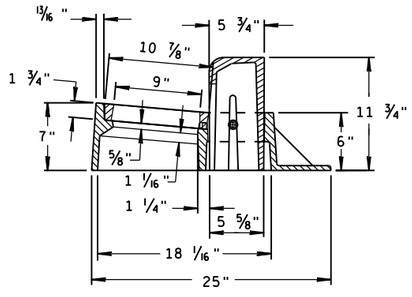

**SPECIAL GRATE FOR TYPE "A" COVER**

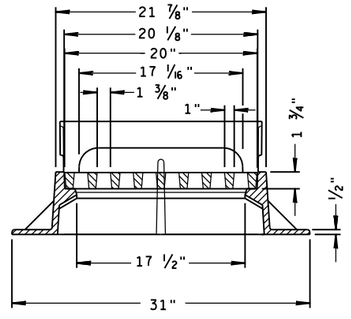
(MEASURES 19 3/4" X 17" X 1 7/8")

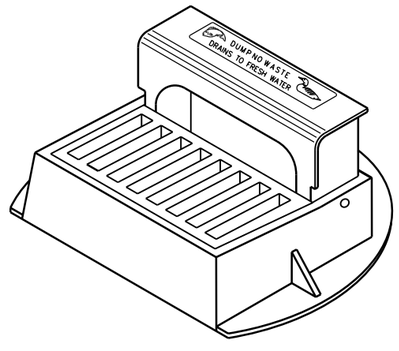
(NOTED AS TYPE A-S ON DRAINAGE TABLE)




## TYPE "A"




## TYPE "Z"

**INLET COVERS**
**TYPE A, H, A-S, H-S & Z**

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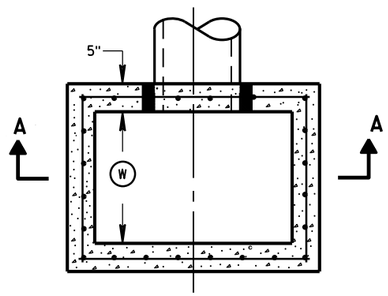
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA



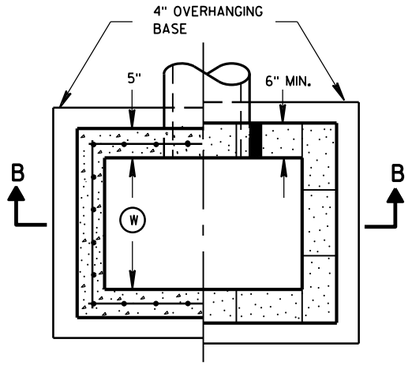


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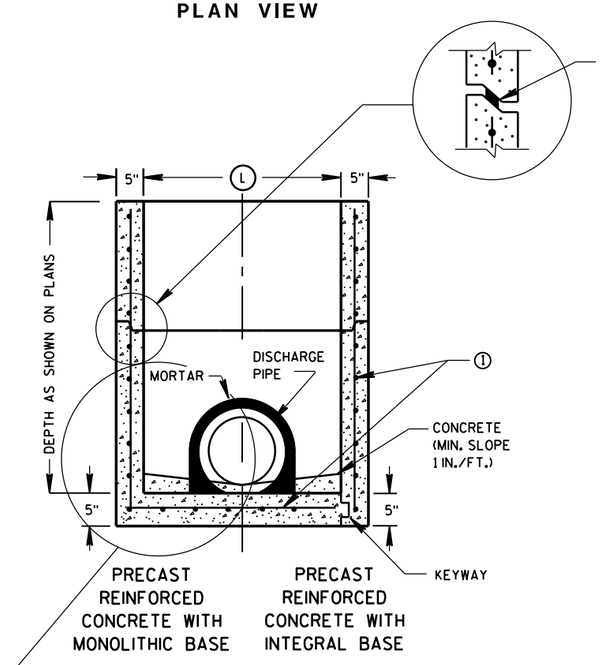
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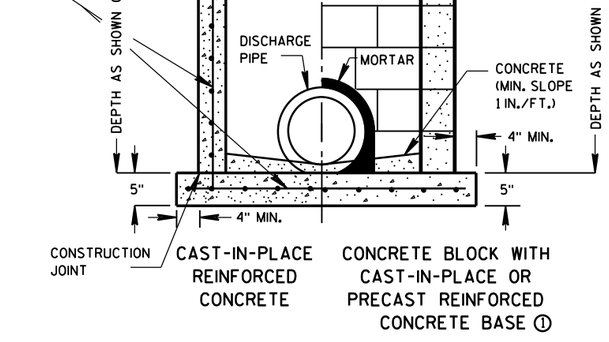

PLAN VIEW



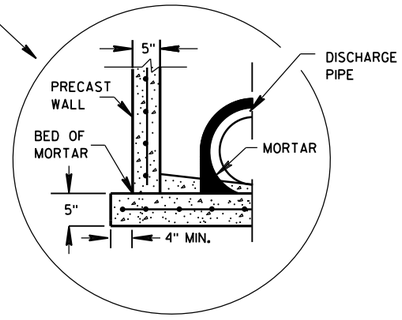

PLAN VIEW




SECTION A-A




SECTION B-B




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

## GENERAL NOTES

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

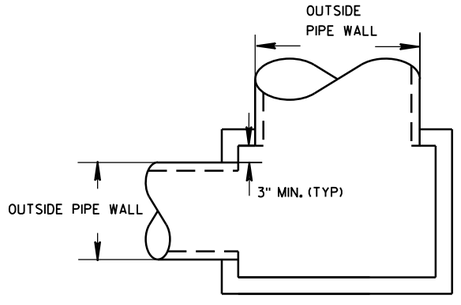
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## INLET COVER MATRIX

| INLET SIZE | | INLET COVER TYPE | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH (W) (FT) | LENGTH (L) (FT) | | | | | | | | | |
| 2X2-FT | 2 | 2 | X | X | | | | X | | X | |
| 2X2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X |
| 2X3-FT | 2 | 3 | | | | | X | | | | |
| 2.5X3-FT | 2.5 | 3 | | | | X | | | | | |

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2X2-FT | 12 | 12 |
| 2X2.5-FT | 12 | 18 |
| 2X3-FT | 12 | 24 |
| 2.5X3-FT | 18 | 24 |




DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

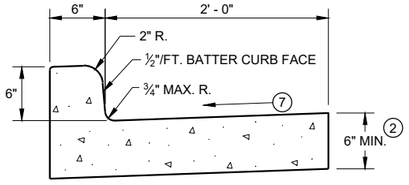
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DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

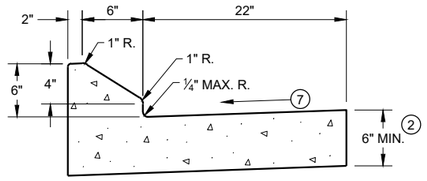




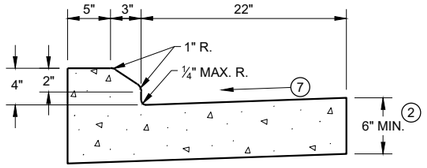
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S.D.D. 8 C 7-2



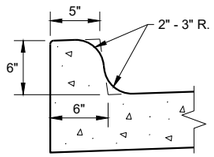

**TYPES A[1] & D**



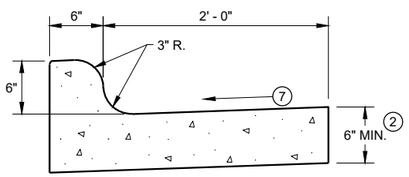

**6" SLOPED CURB TYPES G[1] & J**




**4" SLOPED CURB TYPES G[1] & J**

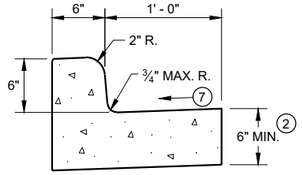



**TYPES K[1] & L**
(OPTIONAL CURB SHAPE)



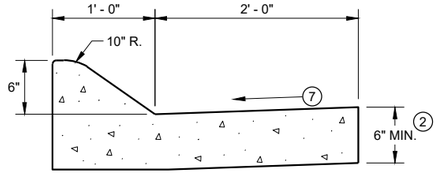

**TYPES K[1] & L**

**CONCRETE CURB AND GUTTER 30"**

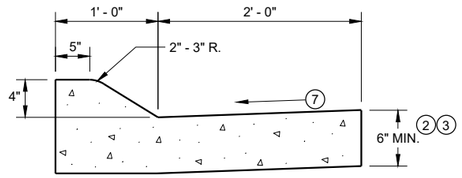



**TYPES A[1] & D**

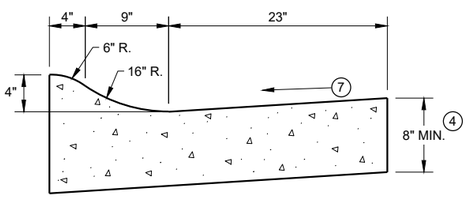
**CONCRETE CURB AND GUTTER 18"**




**6" SLOPED CURB TYPES A[1] & D**



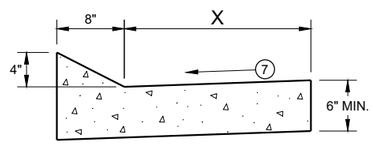

**4" SLOPED CURB TYPES A[1] & D**




**4" SLOPED CURB TYPES R[1] & T[5]**

**CONCRETE CURB AND GUTTER 36"**

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

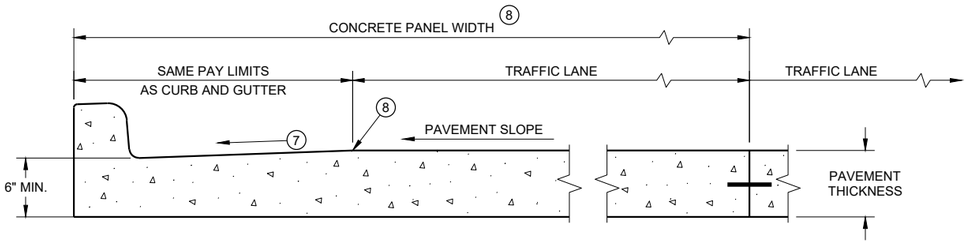



**TYPES TBT & TBTT[1]**

**CONCRETE CURB AND GUTTER**

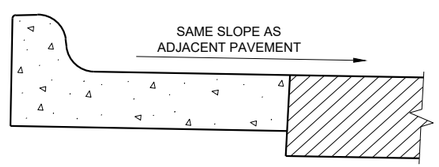
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

| 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)

## 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.

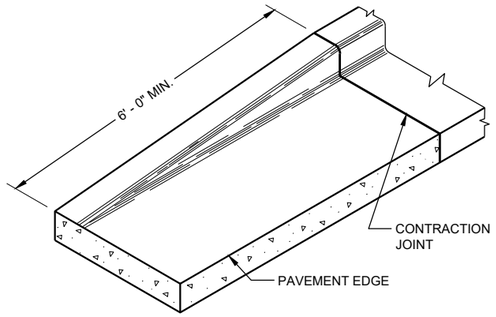
**CONCRETE CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

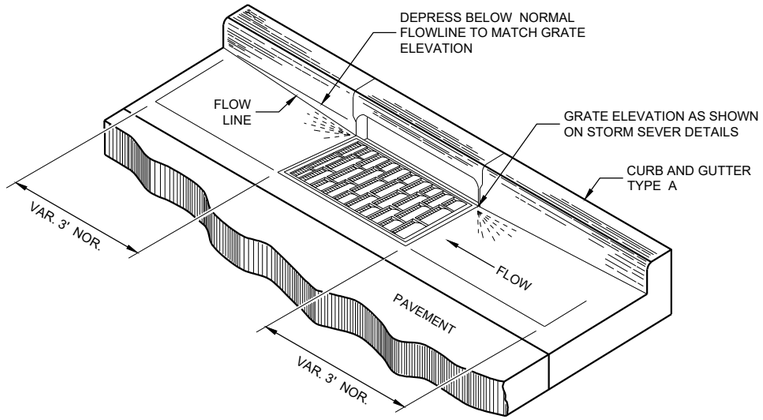



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SDD 08D01 - 21a




**END SECTIONCURB AND GUTTER**




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

## GENERAL NOTES

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

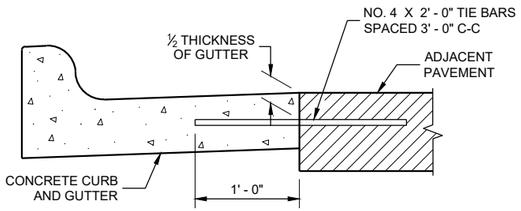
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

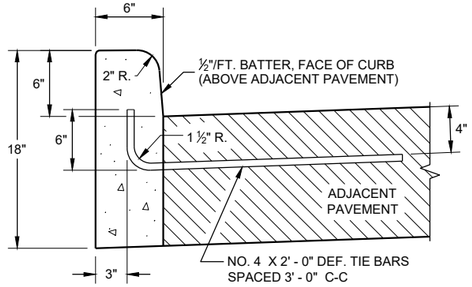
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

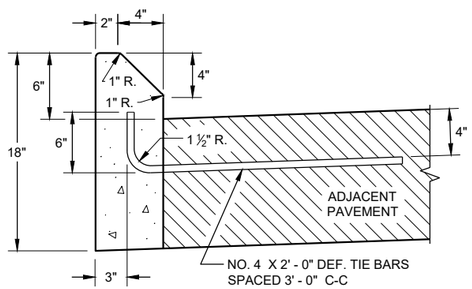
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.




**TYPICAL TIE BAR LOCATION (1)**

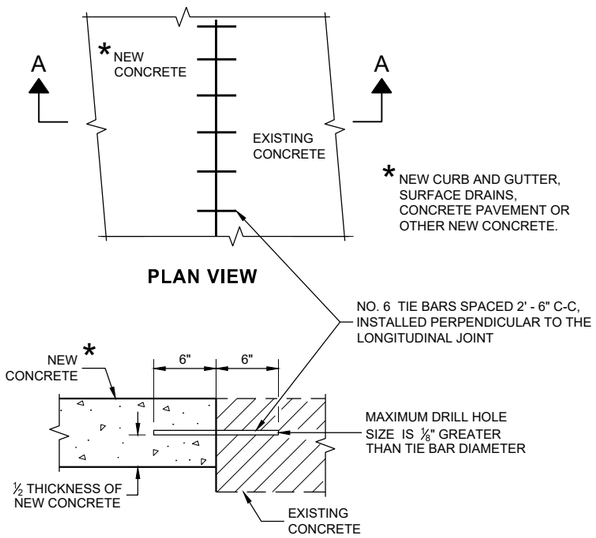



**TYPES A (1) & D**




**TYPES G (1) & J**

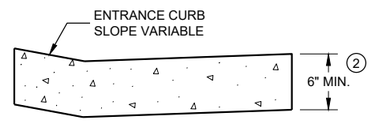
**CONCRETE CURB**




**PLAN VIEW**

**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**




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

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

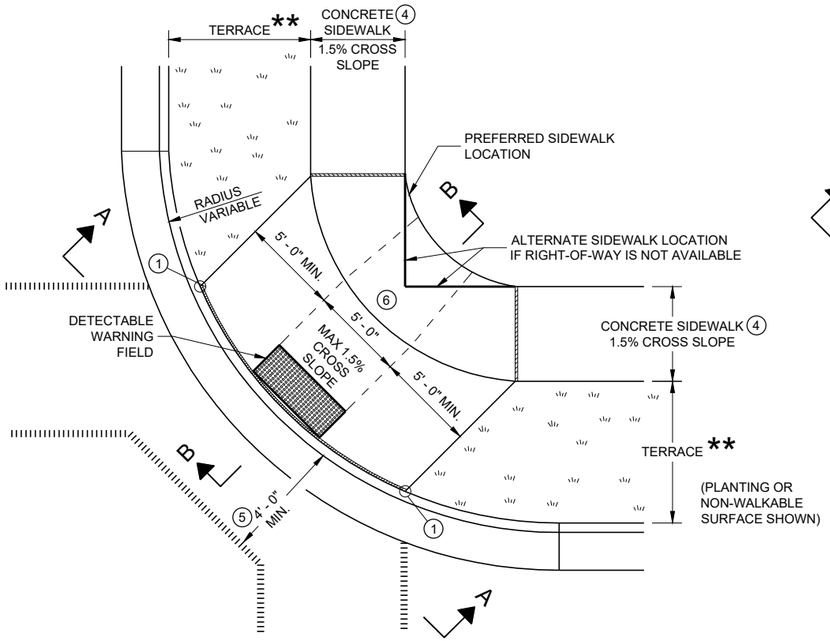
APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA



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SDD08D01 - 21b

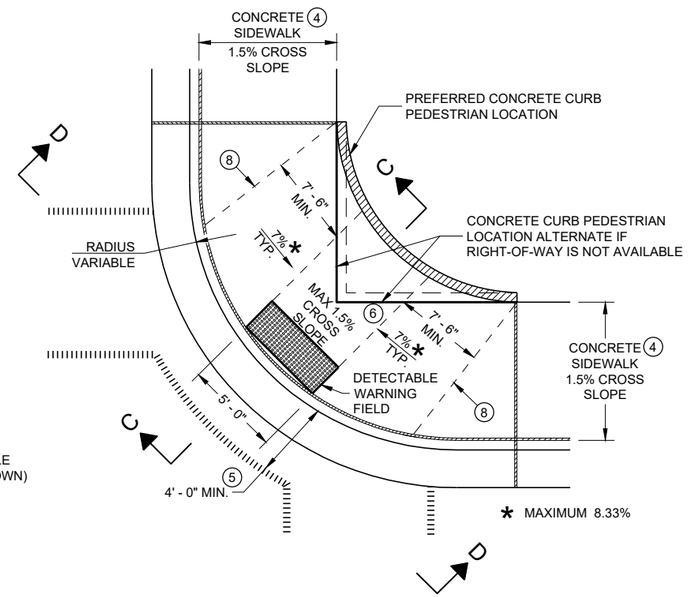
SDD08D01 - 21b




**PLAN VIEW**

## CURB RAMP TYPE 1

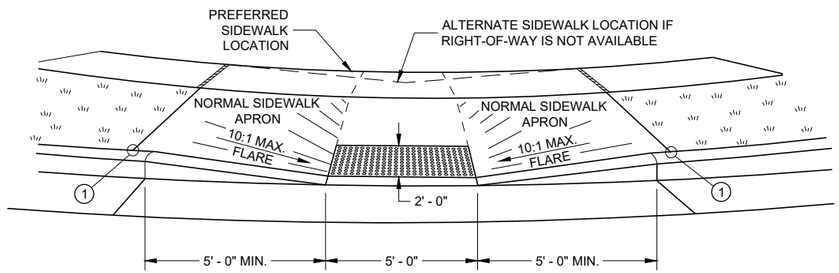
**(CENTER OF CORNER RADIUS)**



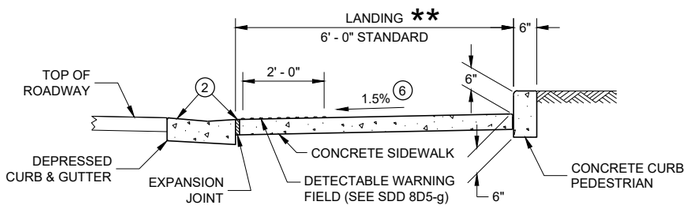

**PLAN VIEW**

## CURB RAMP TYPE 1 - A

**(NO TERRACE)**

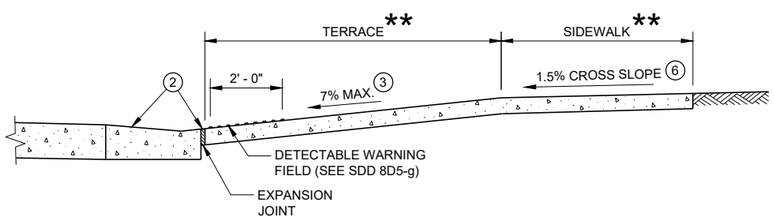



**VIEW A - A FOR TYPE 1**

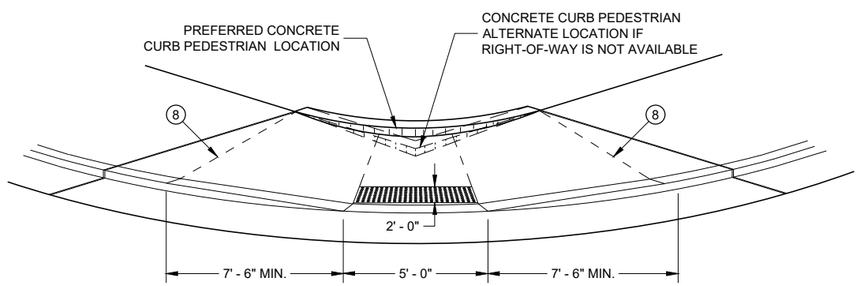



**SECTION C - C FOR TYPE 1 - A**

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**SECTION B - B FOR TYPE 1**




**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 FILED 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 ¼ - 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

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

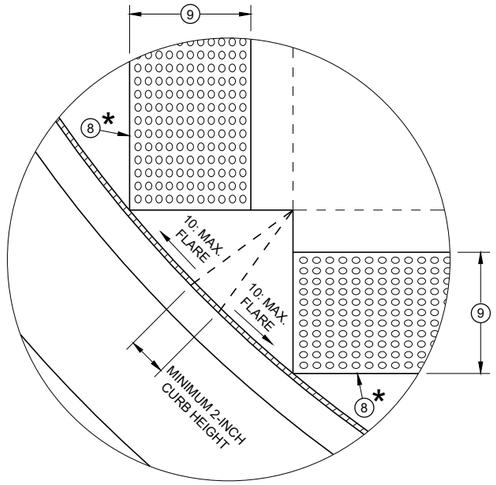
**CURB RAMPS**
**TYPE 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

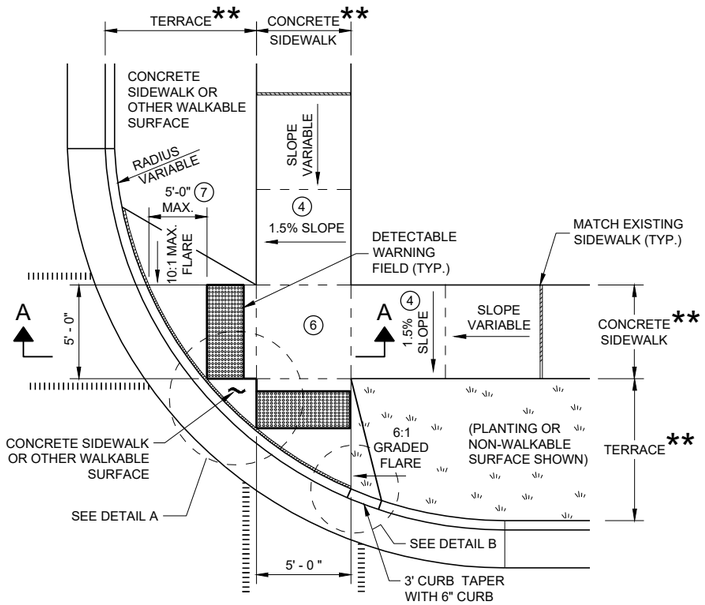



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SDD 08D05 - 20a




**DETAIL A**




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

## 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 ¼ - 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.

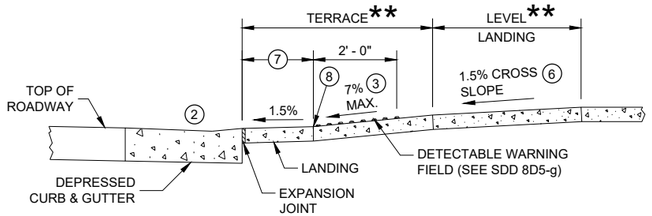
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

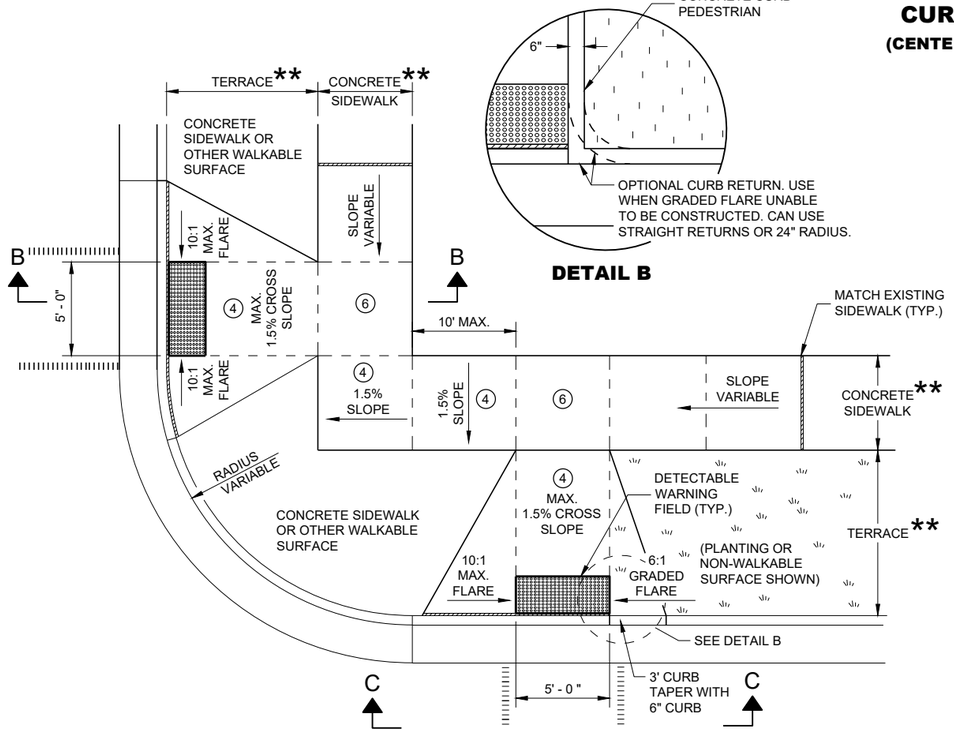
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.




**SECTION A - A FOR TYPE 2**

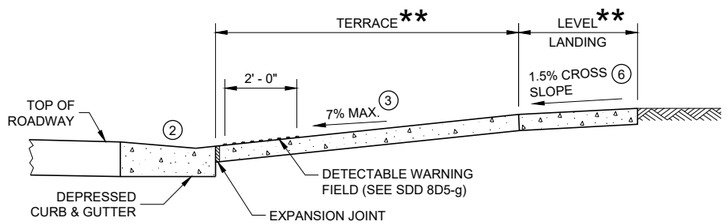
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**DETAIL B**

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



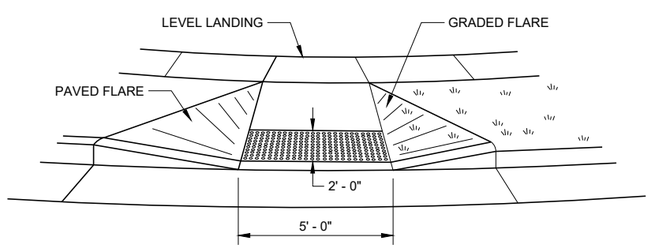

**SECTION B - B FOR TYPE 3**

## LEGEND

½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)




**VIEW C - C FOR TYPE 3**

**CURB RAMPS TYPE 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

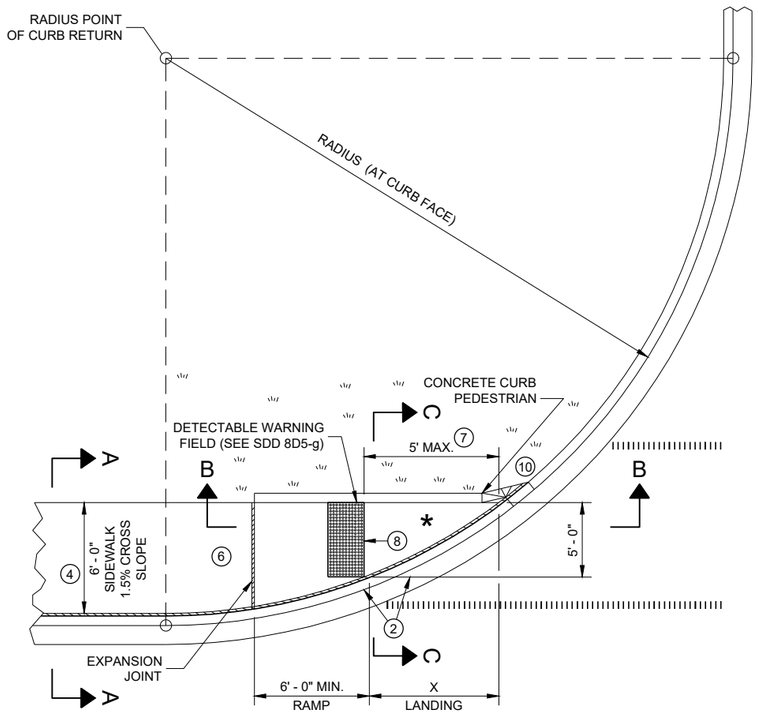




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SDD 08D05 - 20b

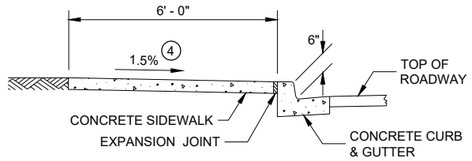



**PLAN VIEW**

**CURB RAMP TYPE 4A**

| RADIUS (AT CURB FACE) | X |
|---|---|
| 10 FEET | 4' - 7" |
| 15 FEET | 6' - 5½" |

INTERMEDIATE RADII CAN BE INTERPOLATED




**SECTION A - A FOR TYPE 4A**

## 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 ¼ - 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.

(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.

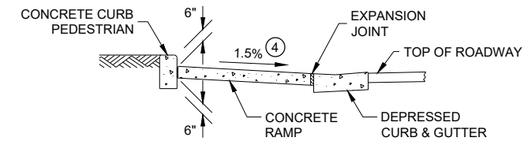
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

## LEGEND

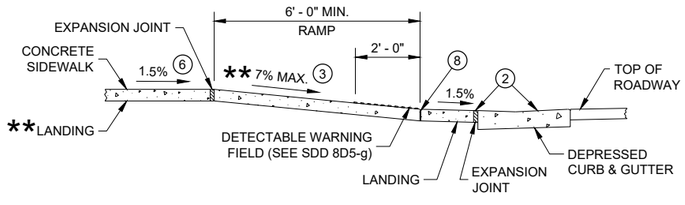
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

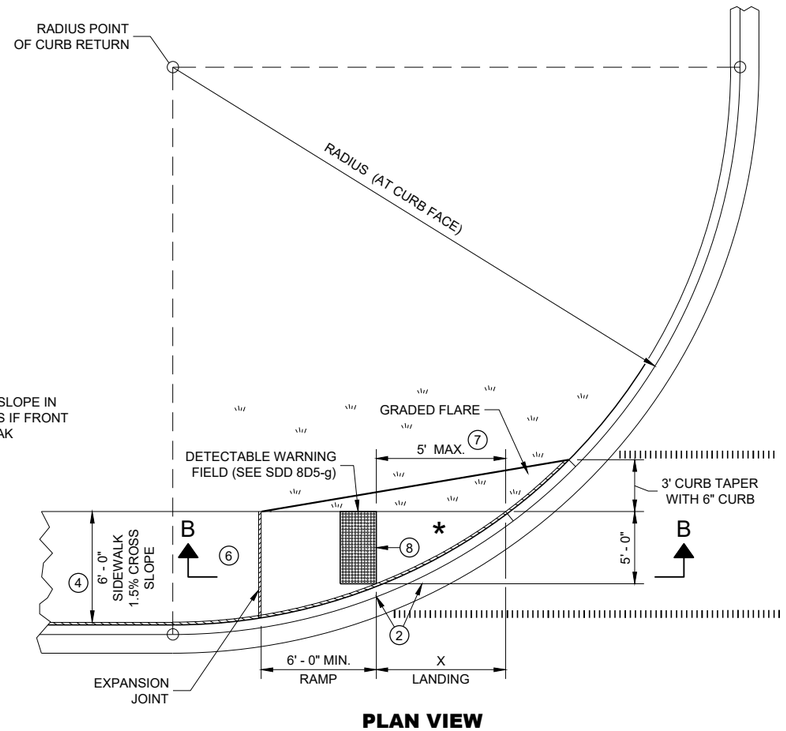



**SECTION C - C FOR TYPE 4A**




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

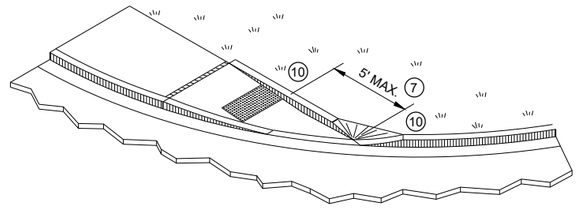
**SECTION B - B FOR TYPE 4A AND TYPE 4A1**



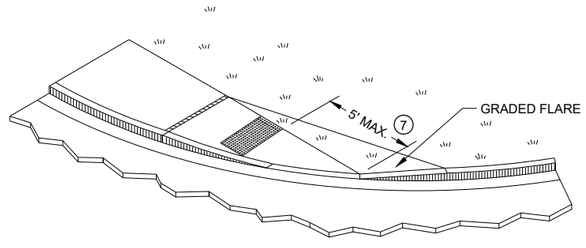

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

**PLAN VIEW**

**CURB RAMP TYPE 4A1**




**ISOMETRIC VIEW FOR TYPE 4A**




**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS**
**TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

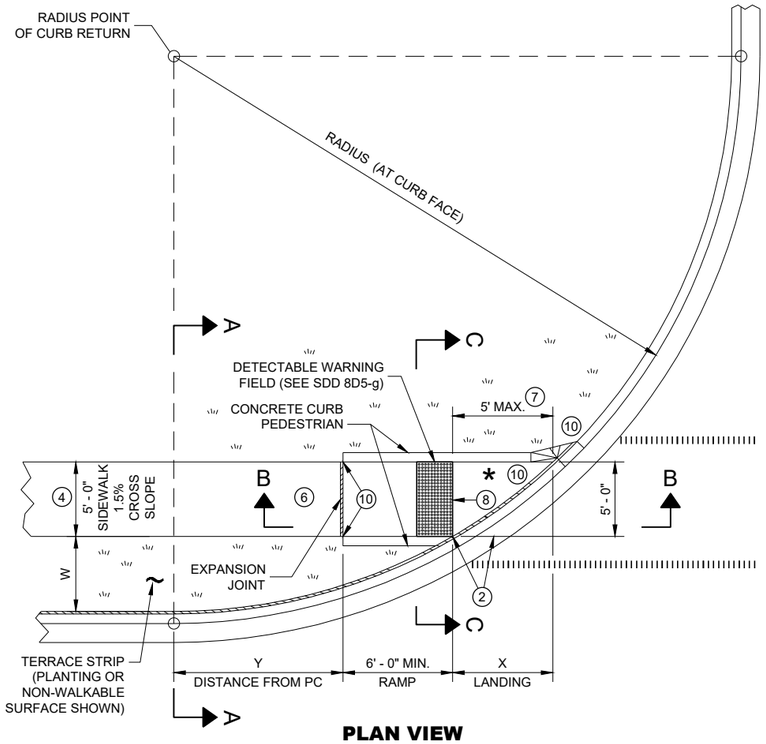




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SDD 08D05 - 20c

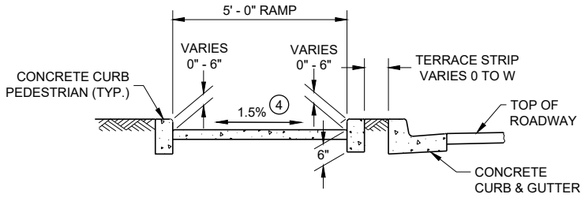



**PLAN VIEW**

**CURB RAMP TYPE 4B**

| 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 ¼" | 0' - 5" | 2' - 1" | 1' - 4 ½" | 1' - 5" | 2' - 1" | 0' - 10" | 2' - 7 ½" | 0' - 3 ¼" | 3' - 0 ¼" | | | | | | |
| 15 FEET | 4' - 6 ¾" | 2' - 1 ¾" | 3' - 9" | 3' - 5 ¾" | 3' - 1 ¼" | 4' - 6" | 2' - 6 ¾" | 5' - 4 ½" | 2' - 1" | 6' - 1" | 1' - 8" | 6' - 8 ½" | 1' - 3 ¼" | 7' - 2 ½" | 0' - 10 ¾" | 7' - 7 ¼" |
| 20 FEET | 5' - 9 ¾" | 3' - 6 ½" | 4' - 11 ½" | 5' - 1 ¾" | 4' - 3 ¼" | 6' - 5 ½" | 3' - 8 ¾" | 7' - 7" | 3' - 3" | 8' - 6 ½" | 2' - 10" | 9' - 4 ½" | 2' - 5 ½" | 10' - 1 ¼" | 2' - 1 ¼" | 10' - 9" |
| 30 FEET | | | 6' - 9 ¼" | 7' - 11 ¼" | 6' - 0 ¼" | 9' - 8" | 5' - 5" | 11' - 1 ¾" | 4' - 10 ¾" | 12' - 5 ¾" | 4' - 5 ½" | 13' - 7 ¾" | 4' - 0 ¾" | 14' - 8 ½" | 3' - 8 ½" | 15' - 8 ¼" |
| 40 FEET | | | | | | | | | 6' - 1 ¾" | 15' - 8 ½" | 5' - 8" | 17' - 2" | 5' - 3" | 18' - 5 ¾" | 4' - 10 ¾" | 19' - 8 ¼" |
| 50 FEET | | | | | | | | | | | | | | | 5' - 10 ¼" | 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**

## LEGEND

½" 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.

(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 ¼ - 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.

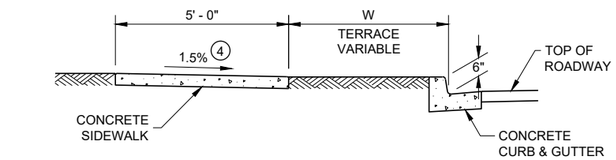
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

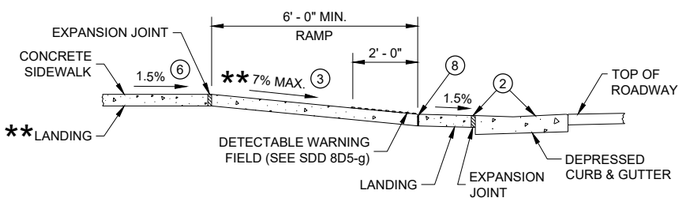
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



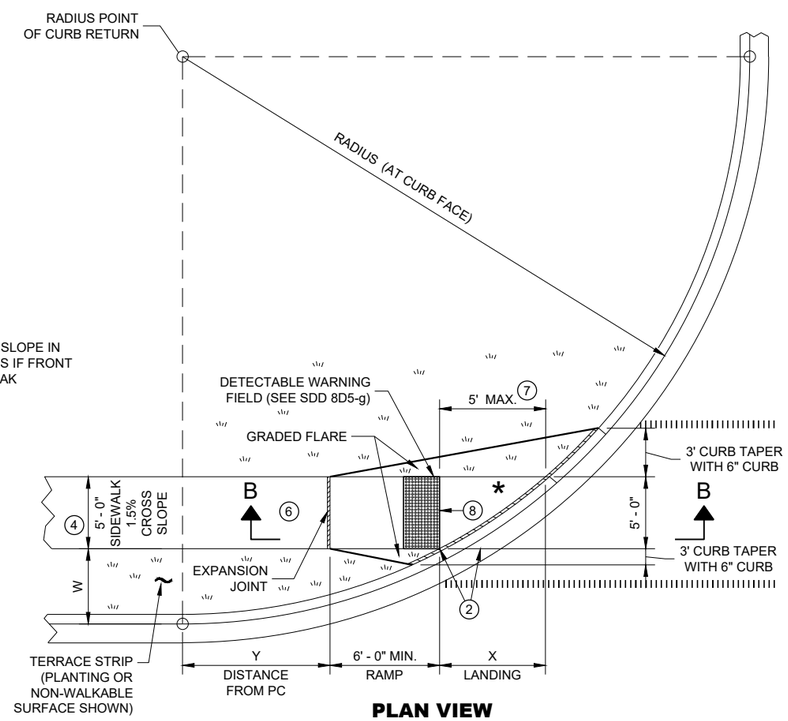

**SECTION A - A FOR TYPE 4B**




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

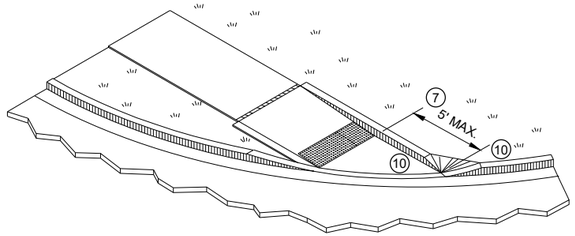
**SECTION B - B FOR TYPE 4B AND TYPE 4B1**

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

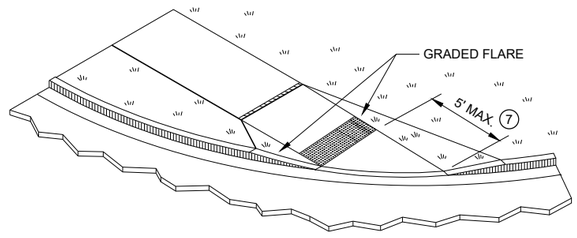



**PLAN VIEW**

**CURB RAMP TYPE 4B1**




**ISOMETRIC VIEW FOR TYPE 4B**




**ISOMETRIC VIEW FOR TYPE 4B1**

**CURB RAMPS**
**TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

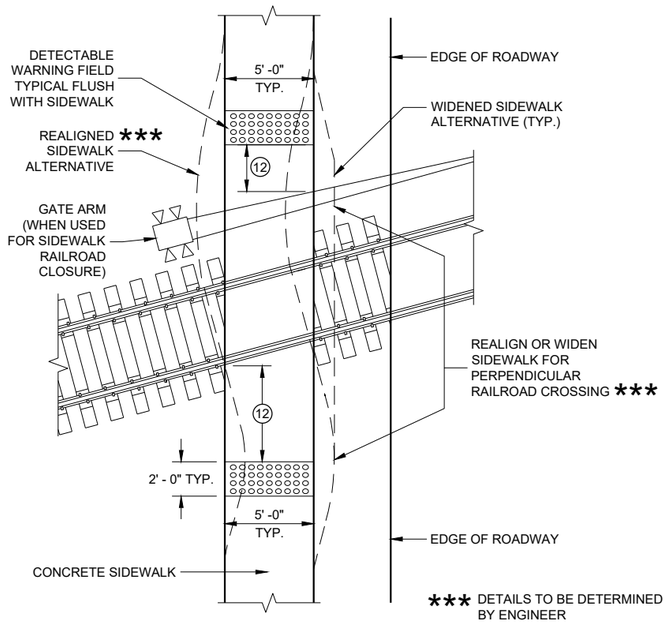




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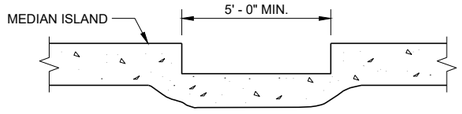


SDD 08D05 - 20d

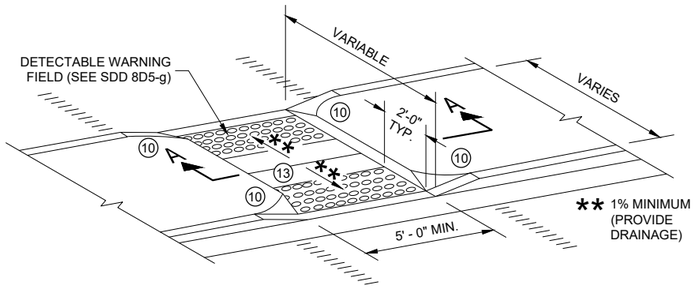



## CURB RAMP TYPE 8

### DETECTABLE WARNINGS AT RAILROAD CROSSING




### SECTION A - A FOR TYPE 5




## CURB RAMP TYPE 5

### MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

## 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 ½ - 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.

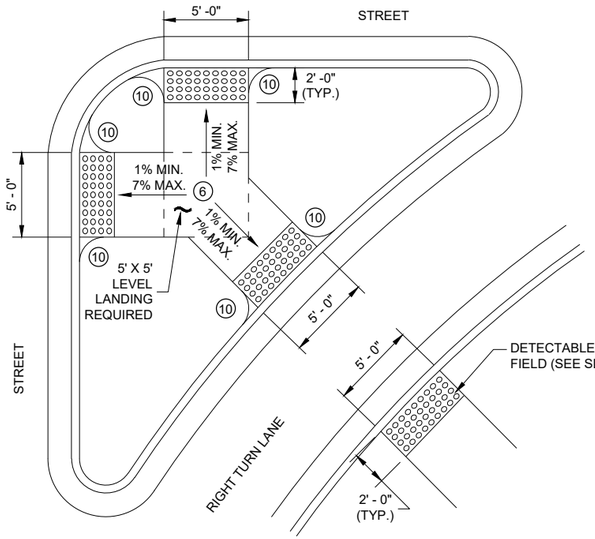
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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

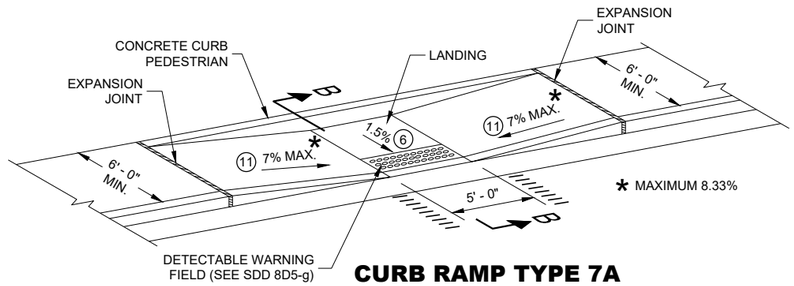
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)




## CURB RAMP TYPE 6

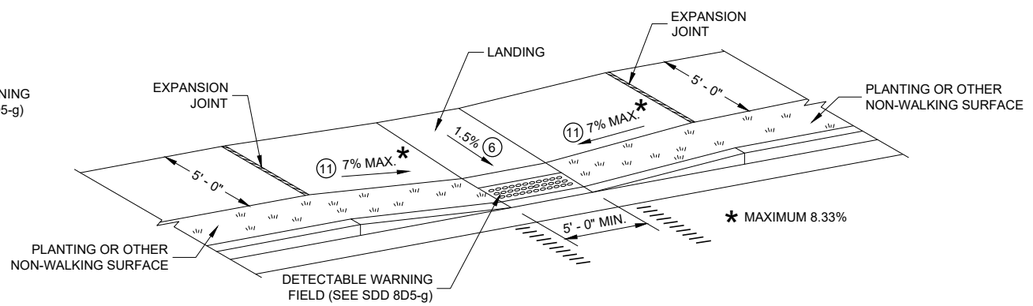
### DETECTABLE WARNING AT ISLANDS

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




## CURB RAMP TYPE 7A

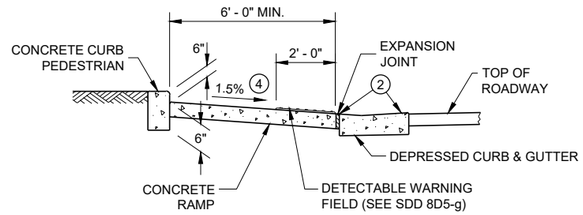
### MID BLOCK CROSSING




## CURB RAMP TYPE 7B

### MID BLOCK CROSSING

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




### SECTION B - B FOR TYPE 7A

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

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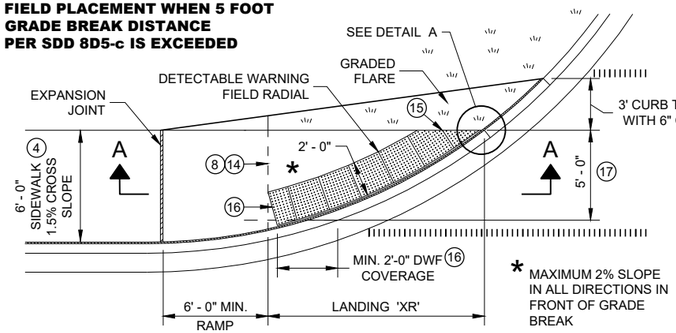
6

SDD 08D05 - 20e

6

SDD 08D05 - 20e

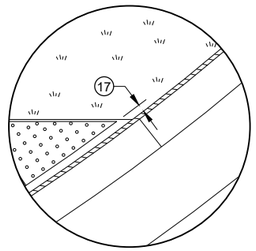
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**



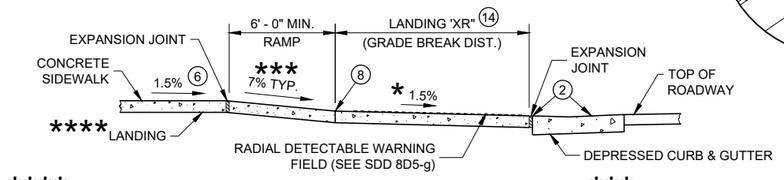

**PLAN VIEW**

## CURB RAMP TYPE 4A1

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**DETAIL A**




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

*** MAXIMUM 8.33%

## SECTION A - A FOR TYPE 4A1

## LEGEND

- ½" 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.

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 FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD 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 ¼ - 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.

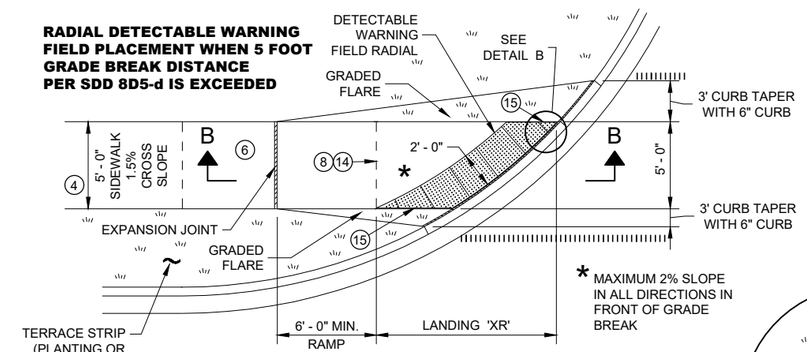
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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 ⅛" 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.

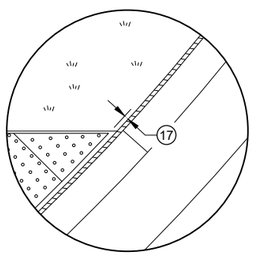
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**



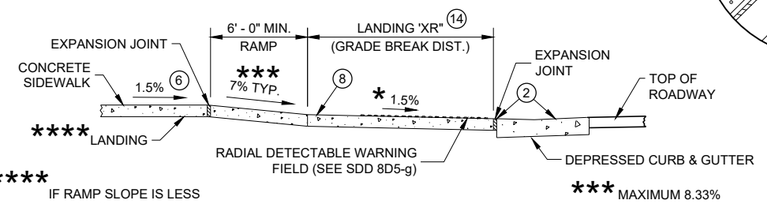

**PLAN VIEW**

## CURB RAMP TYPE 4B1

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**DETAIL B**

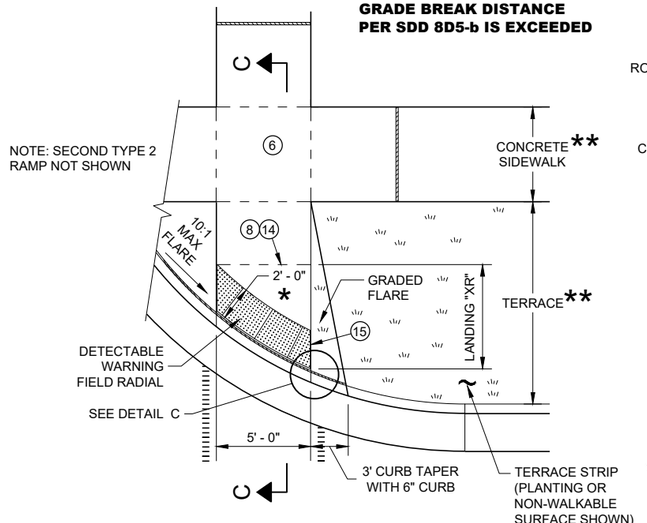



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

## SECTION B - B FOR TYPE 4B1

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

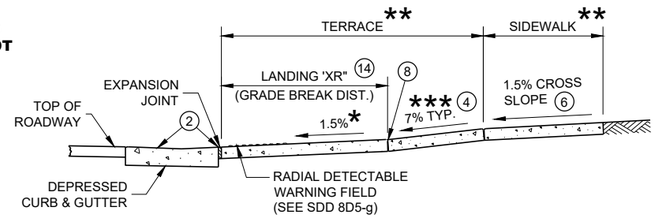



**PLAN VIEW**

## CURB RAMP TYPE 2

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

**(ON LINE WITH SIDEWALK)**

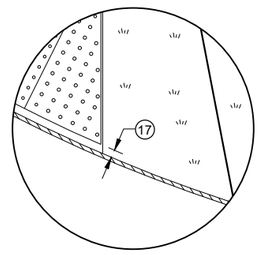



## SECTION C - C FOR TYPE 2

* 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

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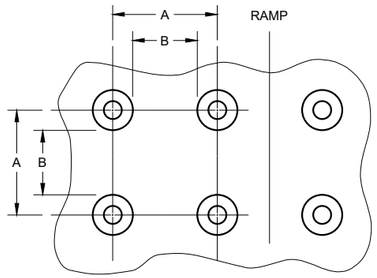


SDD 08D05 - 20f

SDD 08D05 - 20f

| | 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.

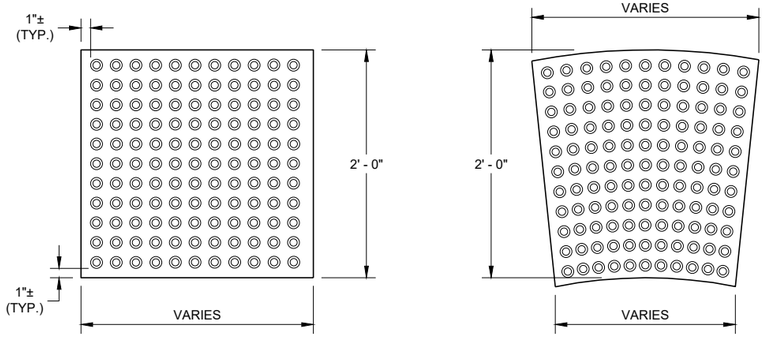



**PLAN VIEW**




**ELEVATION VIEW**

## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL




**RECTANGULAR PLATES**

**RADIAL PLATES**

**PLAN VIEW**
**DETECTABLE WARNING FIELDS (TYPICAL)**

## 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.

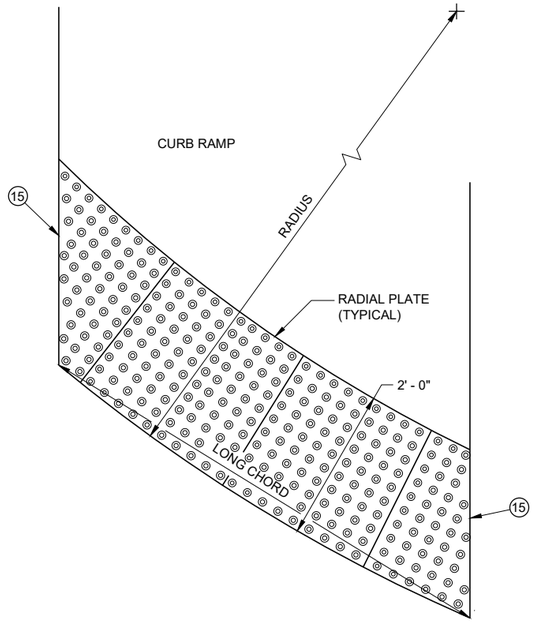
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

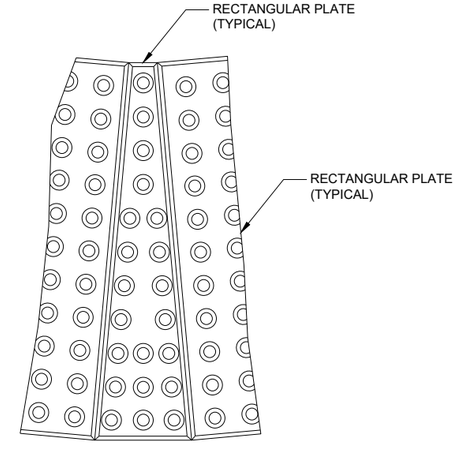
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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 ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.




**PLAN VIEW**
**RADIAL DETECTABLE WARNING FIELD ATTRIBUTES**




**PLAN VIEW**
**RADIAL WEDGE PLATE CONNECTION DETAIL**

**CURB RAMPS**
**RECTANGULAR AND RADIAL**
**DETECTABLE WARNING PLATES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA




6


SDD 08D05 - 20g

# GENERAL NOTES

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.

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

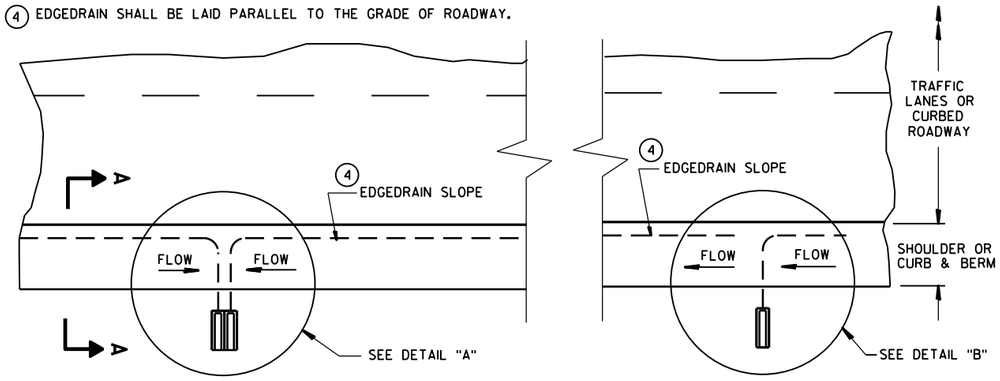
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

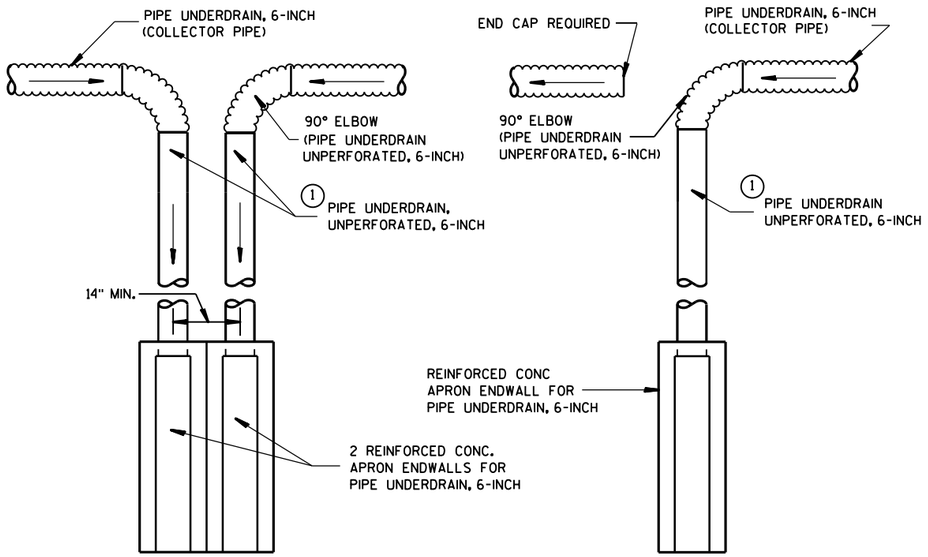
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.




PLAN VIEW

## ROADWAY WITH SHOULDERS OR CURBS

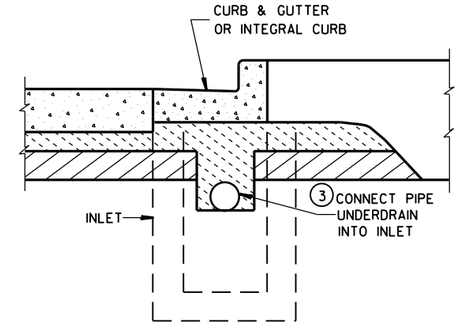
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)




DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

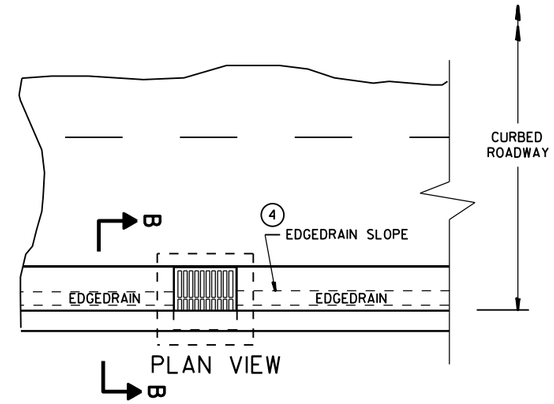
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

## TYPICAL DRAIN OUT DETAILS




SECTION B-B

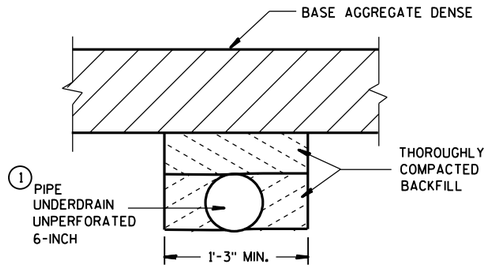
## URBAN CROSS SECTION




PLAN VIEW

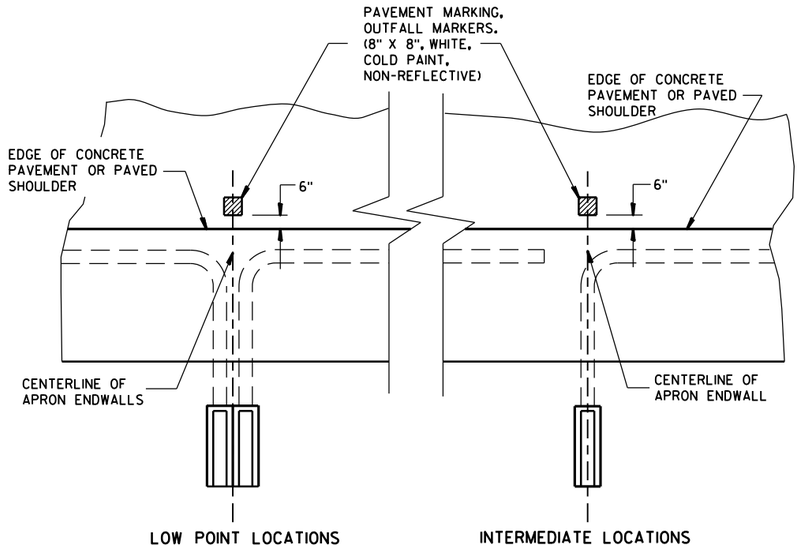
## ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



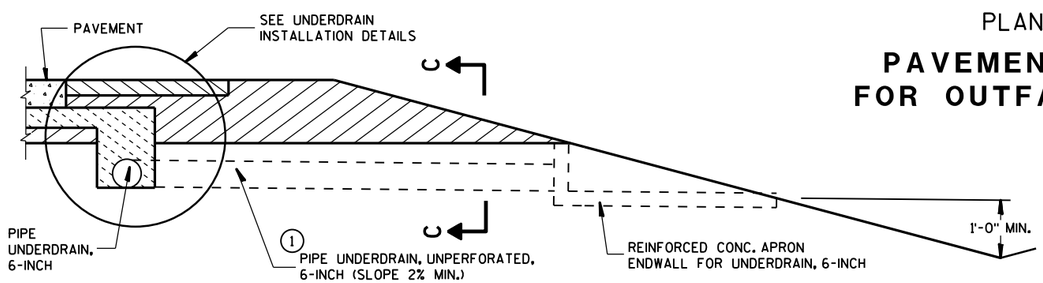

SECTION C-C

## (TRENCH FOR OUTFALL PIPE)




PLAN VIEW

## PAVEMENT MARKING FOR OUTFALL MARKERS




SECTION A-A

## RURAL CROSS SECTION

**EDGEDRAIN OUTLET AND OUTFALL MARKERS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

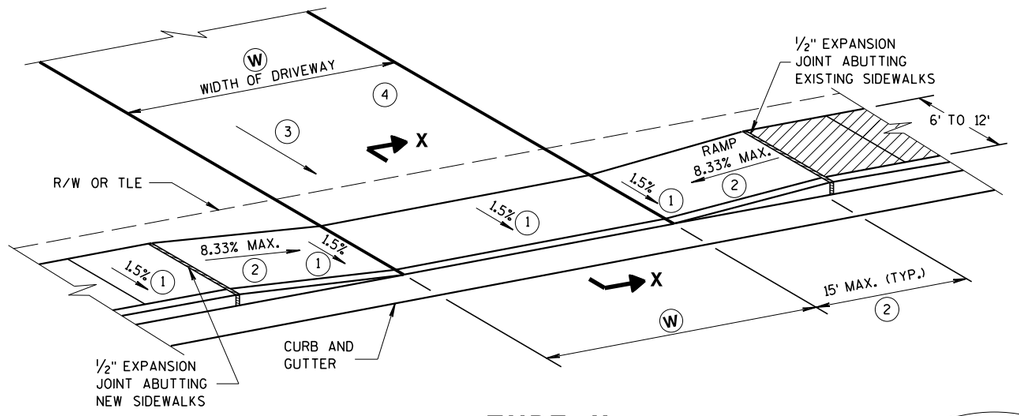


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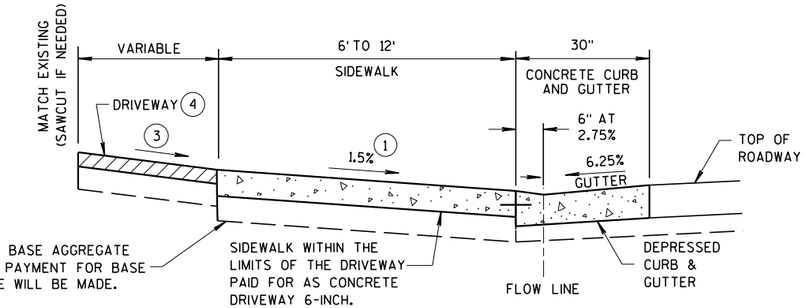
S.D.D. 8 D 15-5a

6

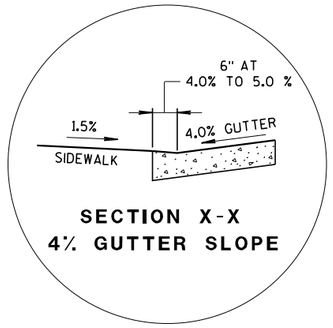
S.D.D. 8 D 15-5a



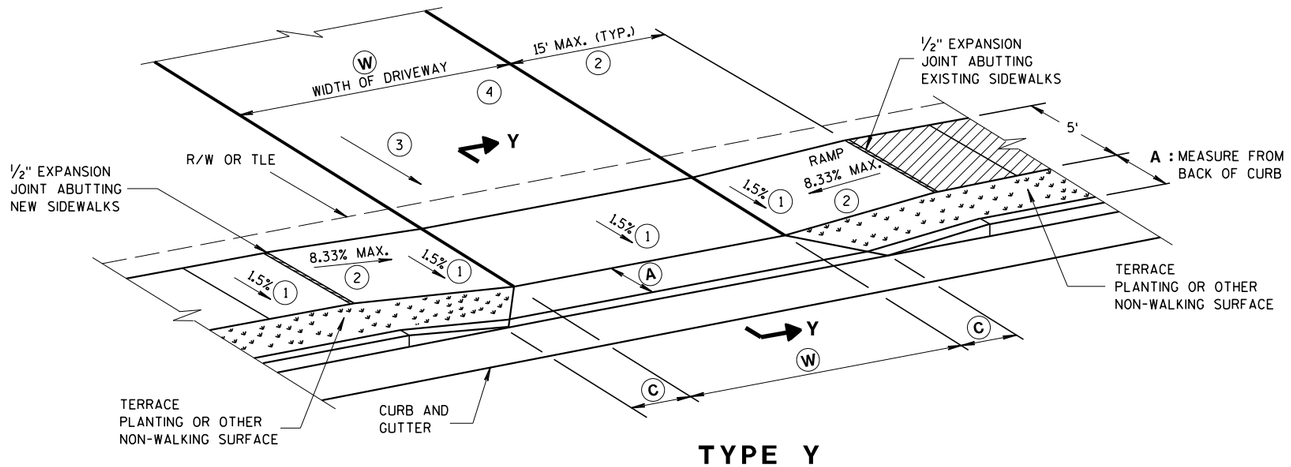

# TYPE X
## SIDEWALK ABUTS CURB & GUTTER
## TERRACE VARIES 0 TO 3 FEET




SECTION X-X




SECTION X-X
4% GUTTER SLOPE




# TYPE Y
## SIDEWALK WITH NARROWER TERRACE
## TERRACE VARIES 4 TO 6 FEET

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

# 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.

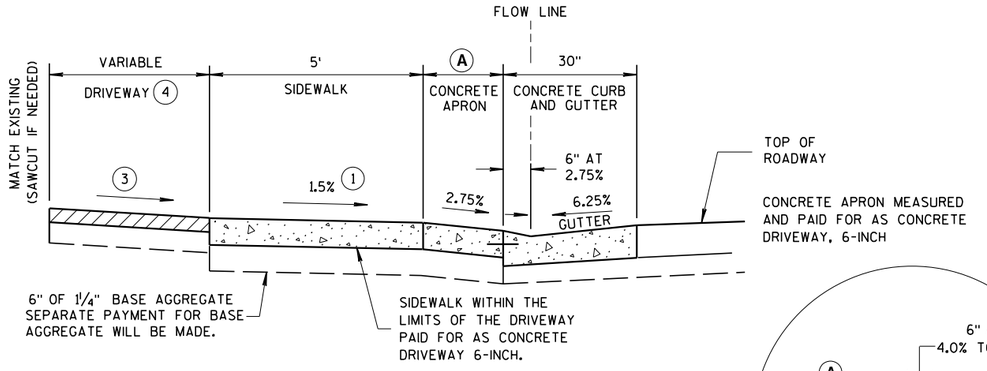
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(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. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

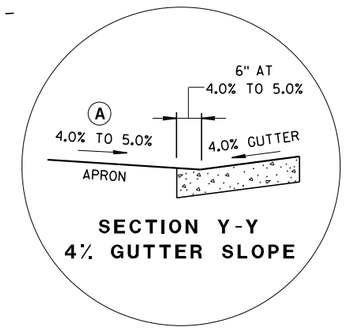
(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) 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)




NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y




SECTION Y-Y
4% GUTTER SLOPE

# DRIVEWAY DETAIL
## WITH CONCRETE CURB & GUTTER
### (URBAN AND SUBURBAN)

TABLE Y

| (A) FEET | (C) FEET |
|---|---|
| 3.5' | 2.0' |
| 4.5' | 3.0' |
| 5.5' | 3.5' |

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

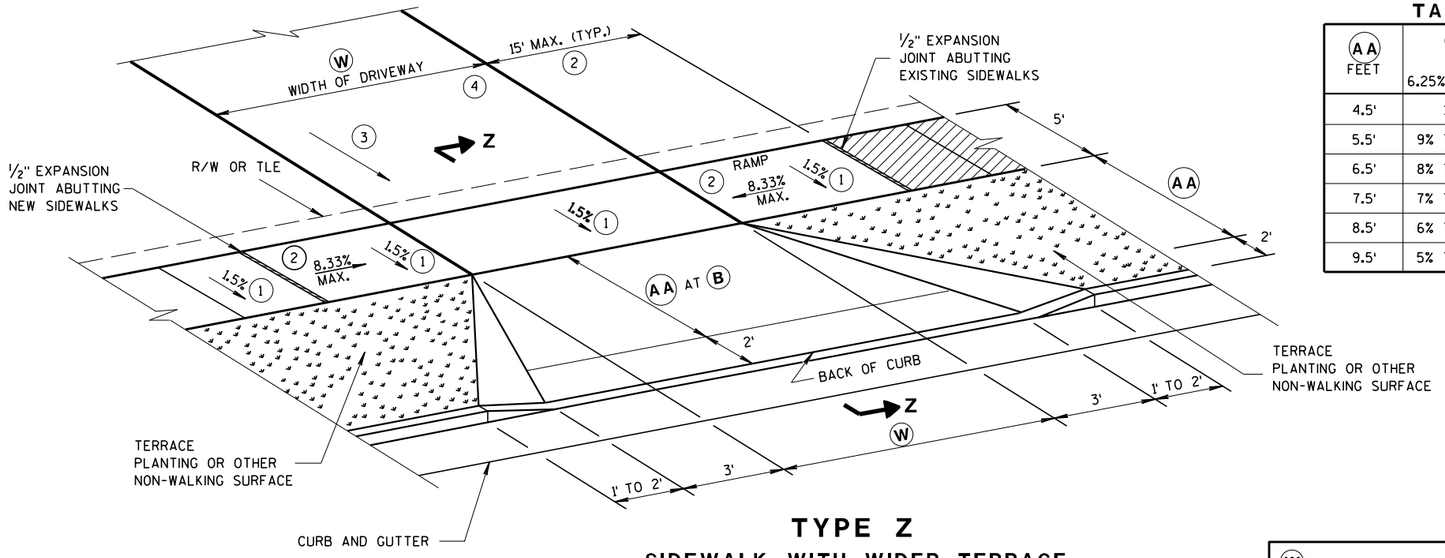
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



S.D.D. 8 D 18-2

S.D.D. 8 D 18-2




# TYPE Z

## SIDEWALK WITH WIDER TERRACE
## TERRACE VARIES 7 TO 12 FEET

**TABLE Z**

| (AA) 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% |

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

## 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.

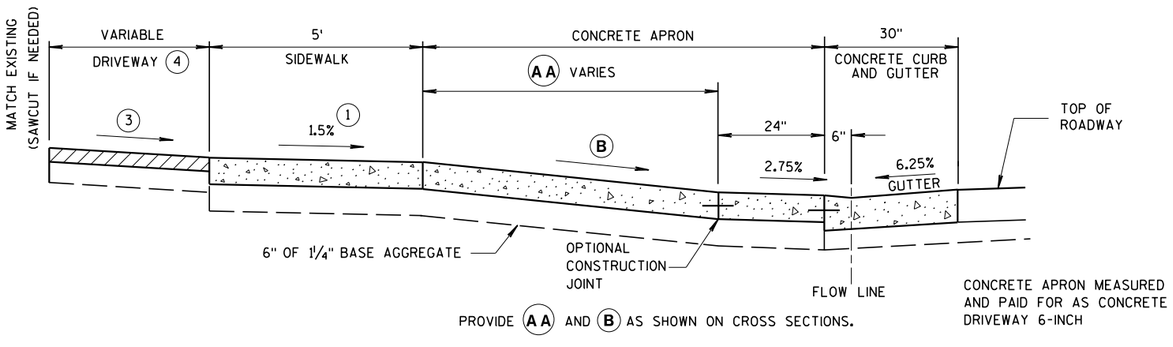
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

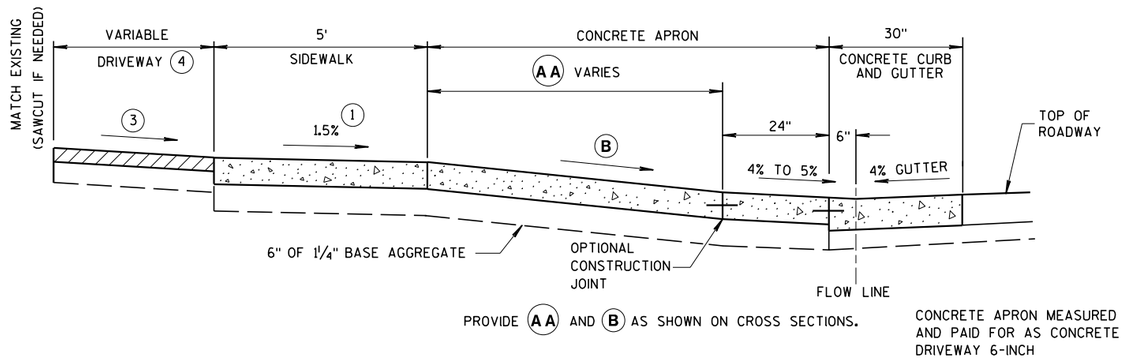
(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
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ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

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- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
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- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)




### 6.25% GUTTER SLOPE




### 4% GUTTER SLOPE

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)

NOT TO SCALE

**DRIVEWAY AND SIDEWALK RAMPS TYPE Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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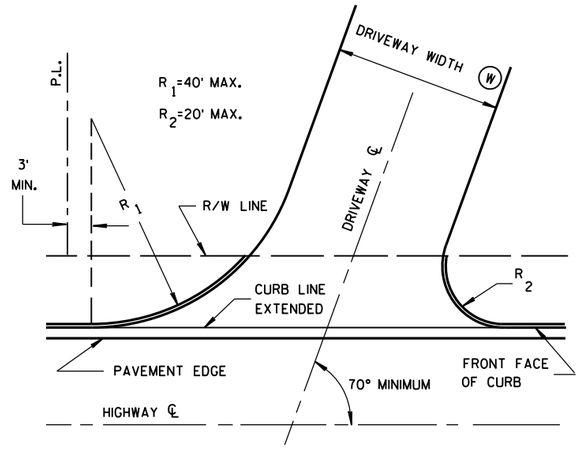


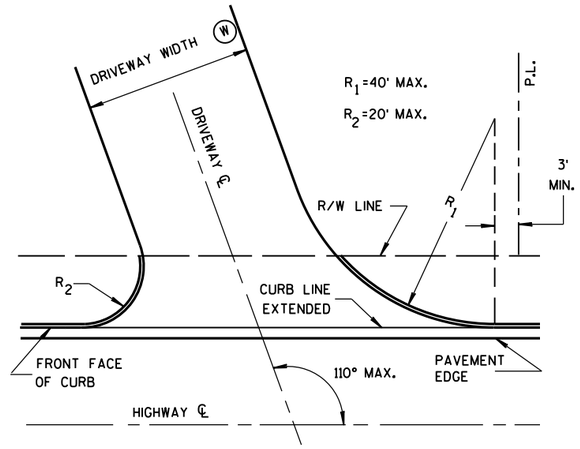
6

S.D.D. 8 D 19-2

6

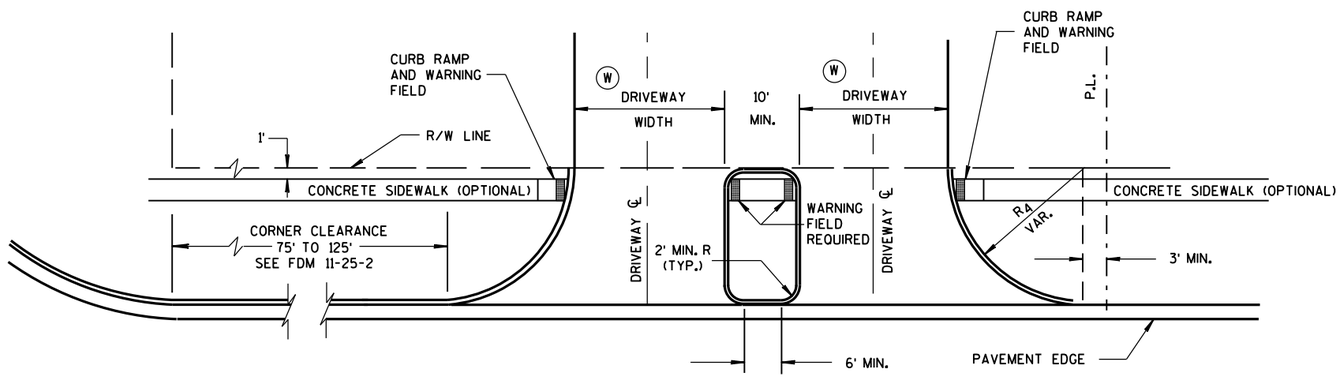
S.D.D. 8 D 19-2




## SKEWED DRIVEWAY DETAILS
## (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN




## DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

### NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

**DRIVEWAYS WITH CURB & GUTTER RETURNS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
FHWA



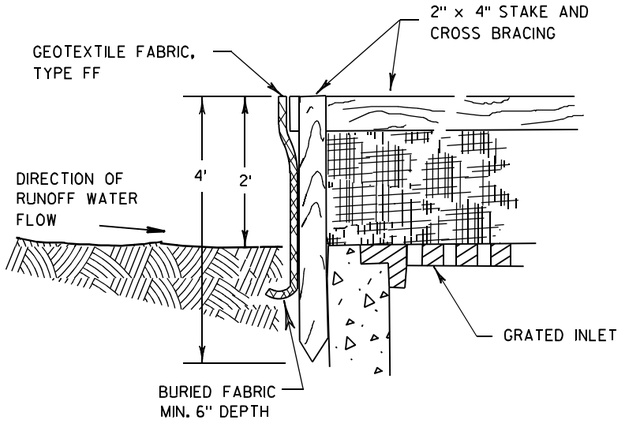
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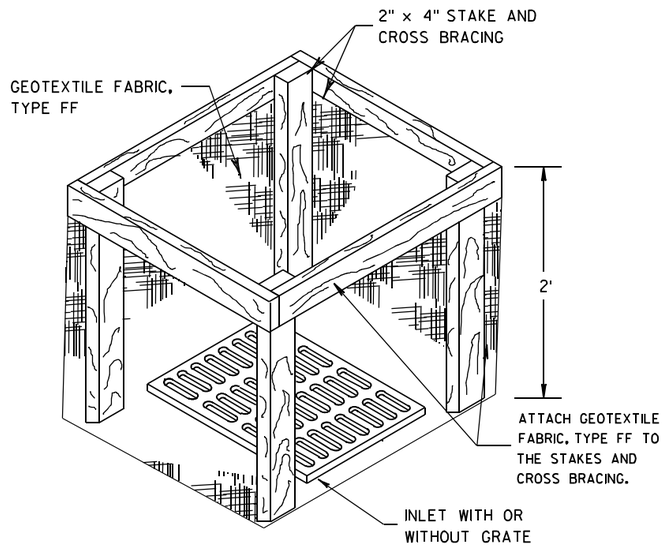
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S.D.D. 8 D 20-1

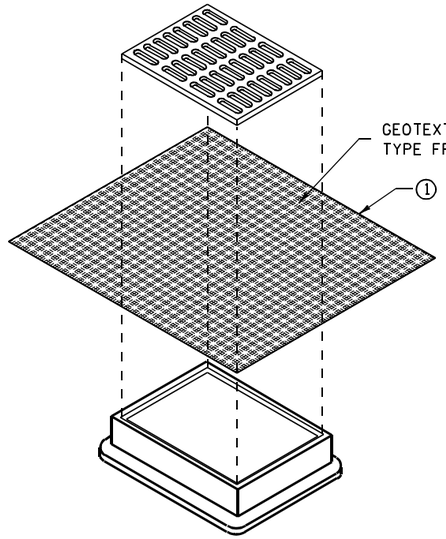
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S.D.D. 8 D 20-1



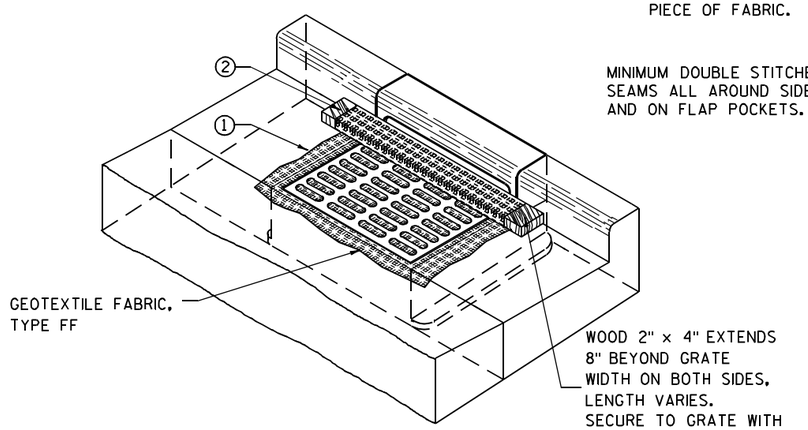




## INLET PROTECTION, TYPE A

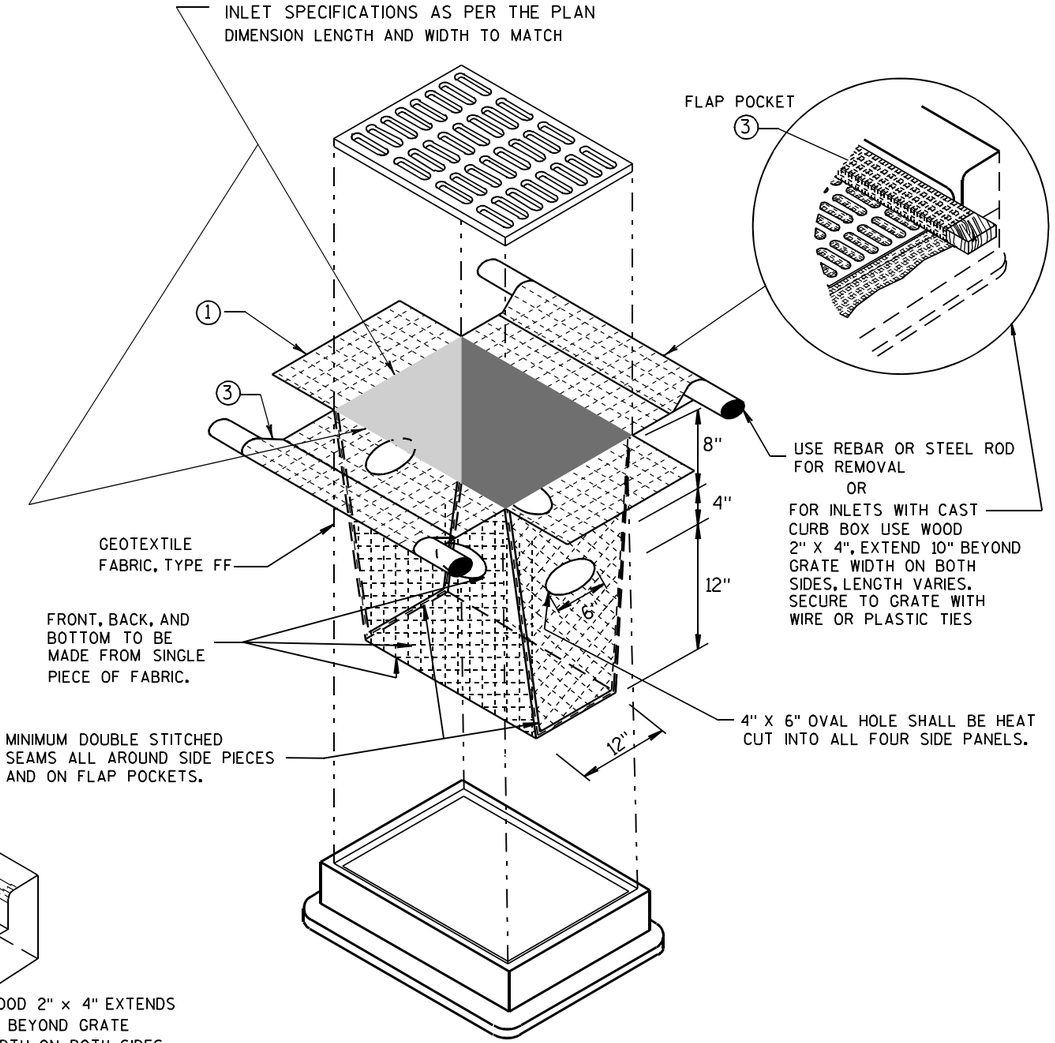



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

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




## INLET PROTECTION, TYPE C (WITH CURB BOX)




## INLET PROTECTION, TYPE D

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

## 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.

## 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.

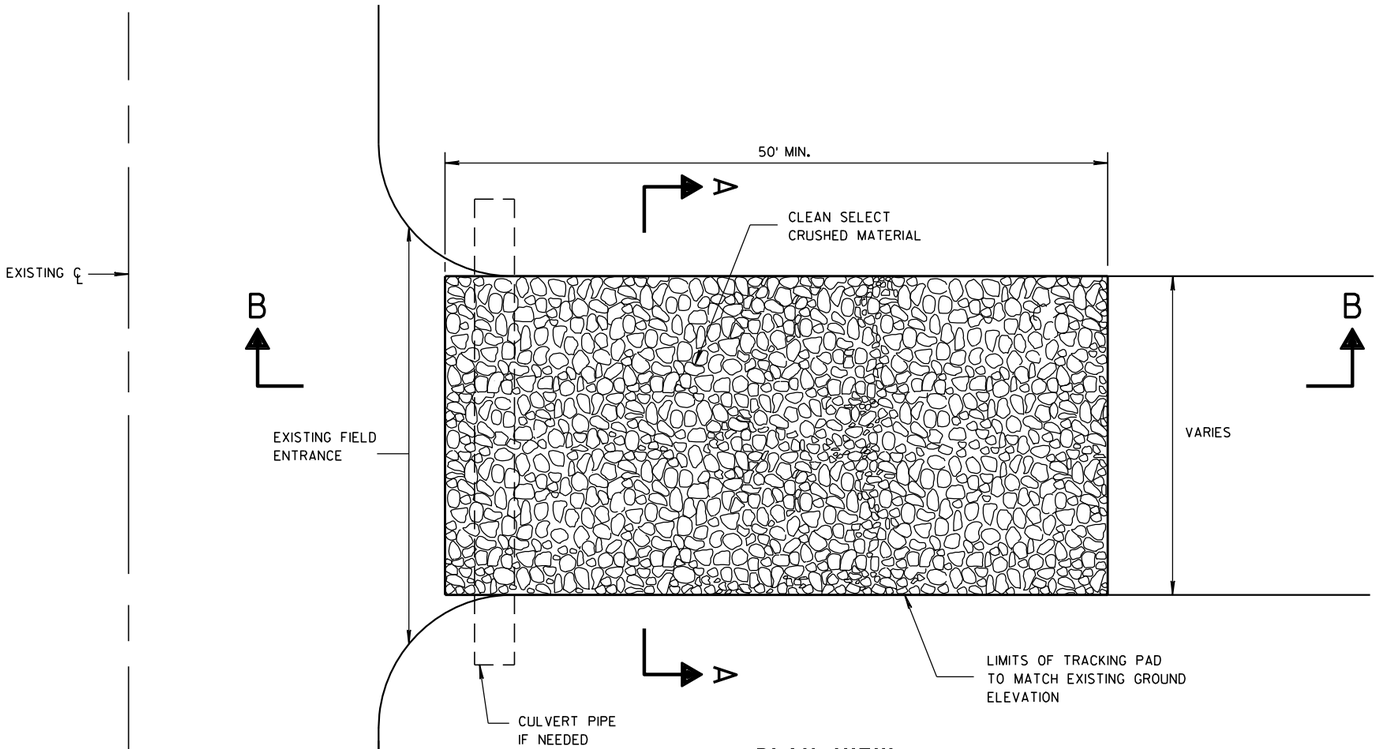
**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

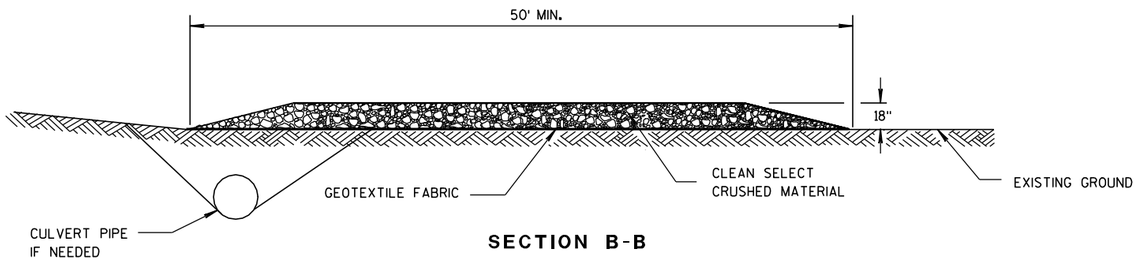
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 8 E 10-2




PLAN VIEW




SECTION B-B

## GENERAL NOTES

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

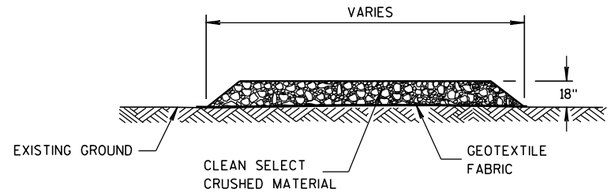
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.




SECTION A-A

# TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA



6



S.D.D. 8 E 14-1

## METAL APRON ENDWALLS

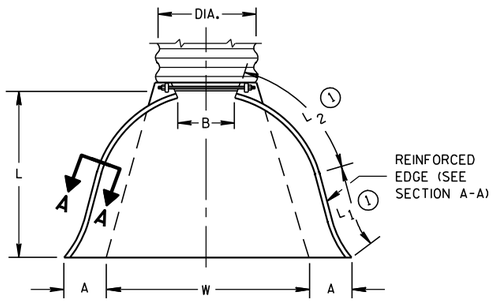
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 to 1 | 1 Pc. |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21 3/4 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28 1/4 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29 5/8 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37 1/4 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52 1/4 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59 3/4 | 72 | 2 1/2 to 1 | 2 Pc. |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75 5/8 | 84 | 2 1/2 to 1 | 2 Pc. |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2 1/4 to 1 | 3 Pc. |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85 1/2 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | .109× | .105× | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109× | .105× | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109× | .105× | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109× | .105× | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109× | .105× | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109× | .105× | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109× | .105× | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

× EXCEPT CENTER PANEL SEE GENERAL NOTES

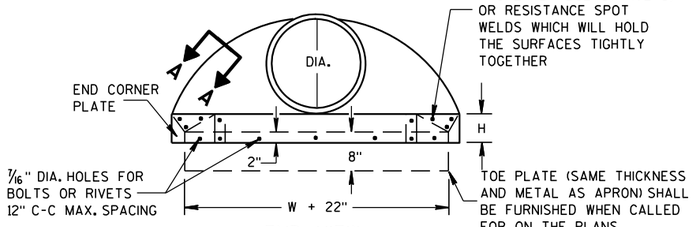
## REINFORCED CONCRETE APRON ENDWALLS

| PIPE DIA. (IN.) | DIMENSIONS (Inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 72 1/8 | 24 | 2 | 3 to 1 |
| 15 | 2 1/4 | 6 | 27 | 46 | 73 | 30 | 2 1/4 | 3 to 1 |
| 18 | 2 1/2 | 9 | 27 | 46 | 73 | 36 | 2 1/2 | 3 to 1 |
| 21 | 2 3/4 | 9 | 36 | 37 1/2 | 73 1/2 | 42 | 2 3/4 | 3 to 1 |
| 24 | 3 | 9 1/2 | 43 1/2 | 30 | 73 1/2 | 48 | 3 | 3 to 1 |
| 27 | 3 1/4 | 10 1/2 | 49 1/2 | 24 | 73 1/2 | 54 | 3 1/4 | 3 to 1 |
| 30 | 3 1/2 | 12 | 54 | 19 3/4 | 73 1/2 | 60 | 3 1/2 | 3 to 1 |
| 36 | 4 | 15 | 63 | 34 3/4 | 97 3/4 | 72 | 4 | 3 to 1 |
| 42 | 4 1/2 | 21 | 63 | 35 | 98 | 78 | 4 1/2 | 3 to 1 |
| 48 | 5 | 24 | 72 | 26 | 98 | 84 | 5 | 3 to 1 |
| 54 | 5 1/2 | 27 | 65 | * 33 1/4 - ** 35 | * 98 1/4 - ** 100 | 90 | 5 1/2 | 2 2/5 to 1 |
| 60 | 6 | * 30 - ** 35 | 60 | 39 | 99 | 96 | 5 | 2 to 1 |
| 66 | 6 1/2 | * 24 - ** 30 | * 72 - ** 78 | * 21 - ** 27 | 99 | 102 | 5 1/2 | 2 to 1 |
| 72 | 7 | * 24 - ** 36 | 78 | 21 | 99 | 108 | 6 | 2 to 1 |
| 78 | 7 1/2 | * 24 - ** 36 | 78 | 21 | 99 | 114 | 6 1/2 | 2 to 1 |
| 84 | 8 | 36 | 90 1/2 | 21 | 111 1/2 | 120 | 6 1/2 | 1 1/2 to 1 |
| 90 | 8 1/2 | 41 | 87 1/2 | 24 | 111 1/2 | 132 | 6 1/2 | 1 1/2 to 1 |

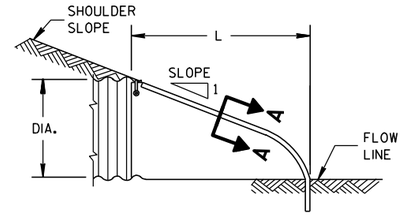
*MINIMUM
**MAXIMUM




PLAN VIEW

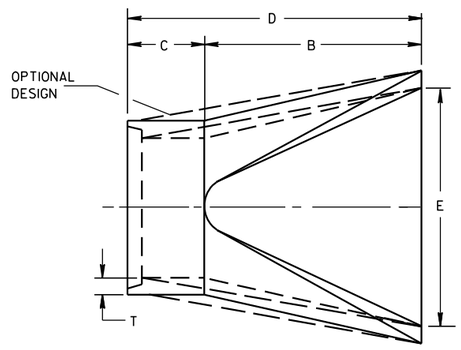



END VIEW

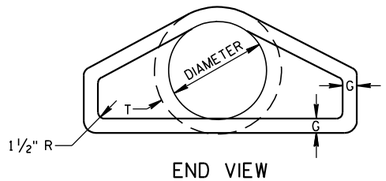



SIDE ELEVATION

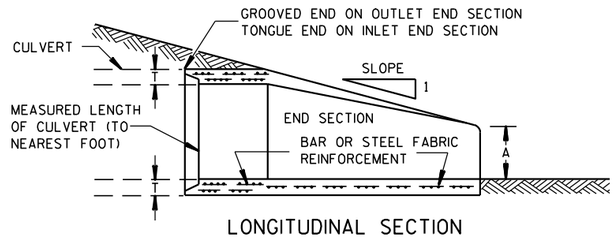
## METAL ENDWALLS




PLAN

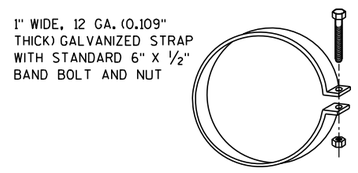



END VIEW



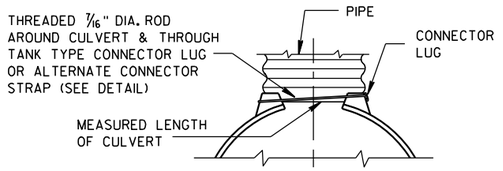

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

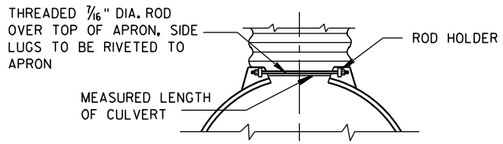



ALTERNATE FOR TYPE 1 CONNECTION

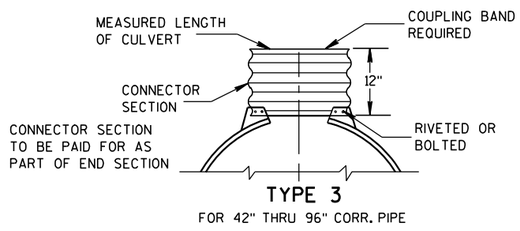
## END SECTION CONNECTOR STRAP



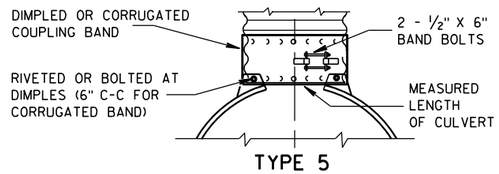

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

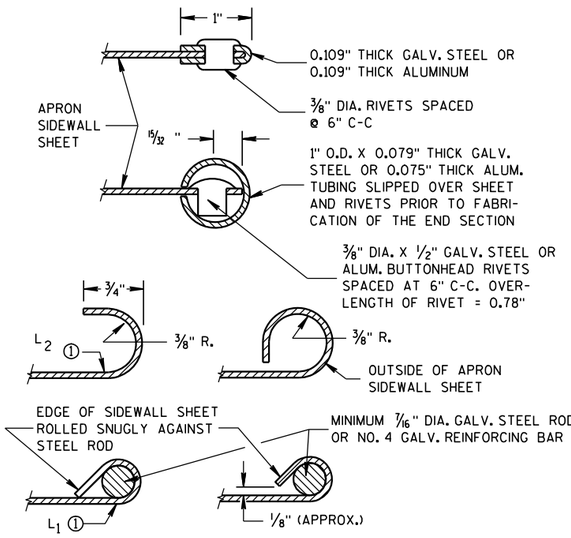
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

## CONNECTION DETAILS




## SECTION A-A

## GENERAL NOTES

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

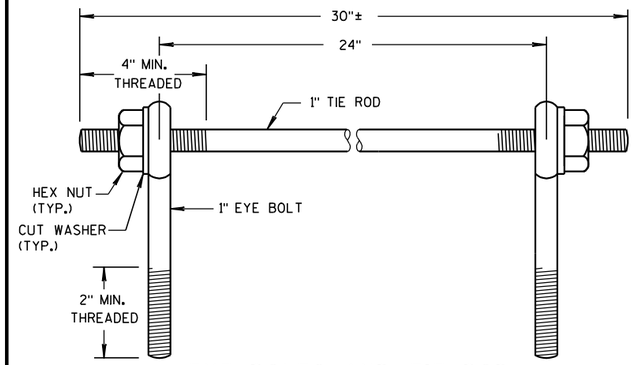
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

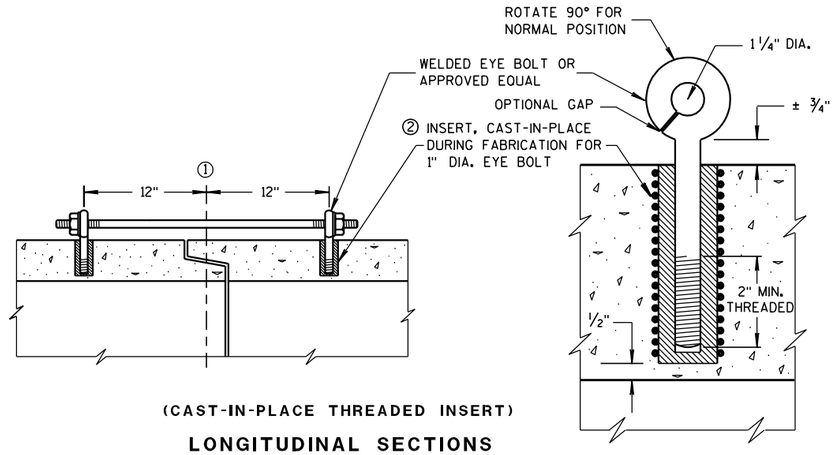


6

S.D.D. 8 F 1-11




EYE BOLTS AND TIE ROD




(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

## 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.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

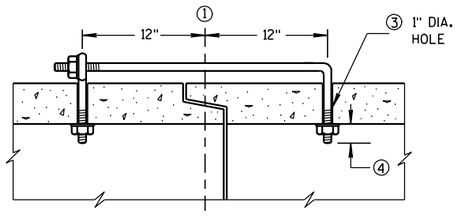
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

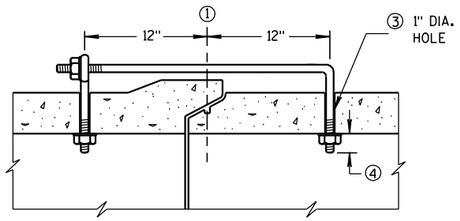
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.




(TONGUE & GROOVE PIPE)

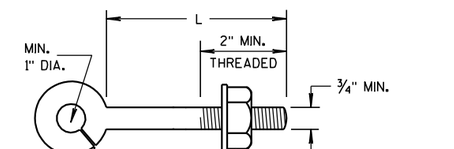



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

**EYE BOLT DIMENSION TABLE**

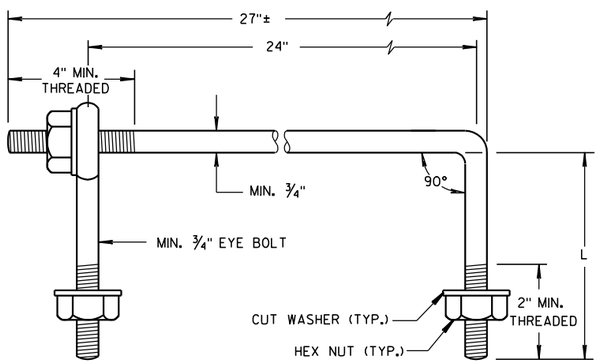
| PIPE SIZE | L = LENGTH | |
|---|---|---|
| | TONGUE & GROOVE PIPE | MODIFIED BELL PIPE |
| 18" TO 24" | 4 1/2" | 6 1/4" |
| 30" | 5" | 7" |
| 36" | 5 1/2" | 7" |
| 42" | 6" | |
| 48" | 6 1/2" | |
| 60" | 7 1/2" | |
| 66" | 8" | |




NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




EYE BOLT AND TIE ROD

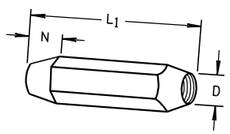
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

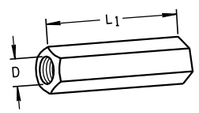
**ADJUSTABLE TIE ROD TABLE**

| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12-60 | 5/8 | 5/8 | 5 | 1/2 |
| 66-84 | 3/4 | 3/4 | 5 | 1/2 |
| 90-108 | 1 | 1 | 7 | 1 1/16 |

DIMENSIONS SHOWN ARE IN INCHES



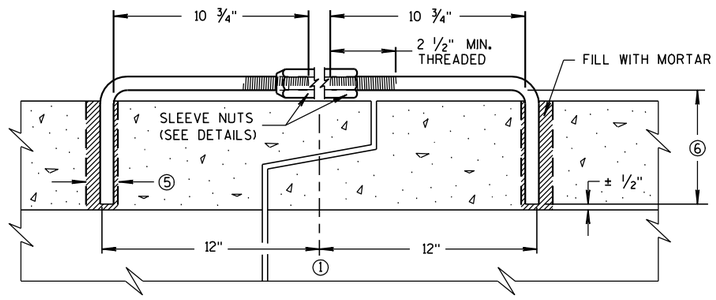

TAPERED




PLAIN

RIGHT AND LEFT THREADS

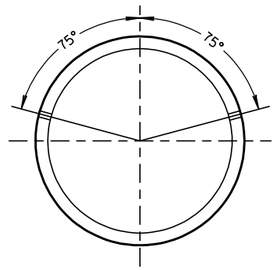
SLEEVE NUTS




LONGITUDINAL SECTION

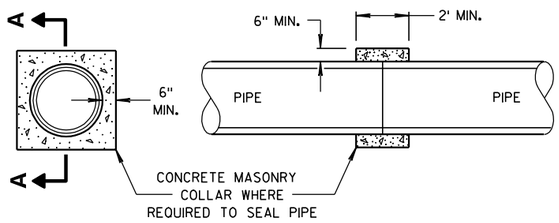
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

# ADJUSTABLE TIE ROD (ALTERNATE NO. 3)




PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION




SECTION A-A

# CONCRETE COLLAR DETAIL

**JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

FHWA

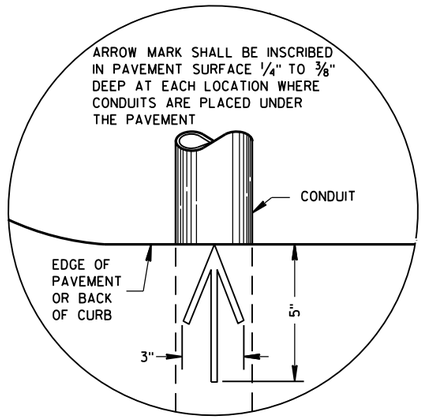


6

S.D.D. 8 F 4-7

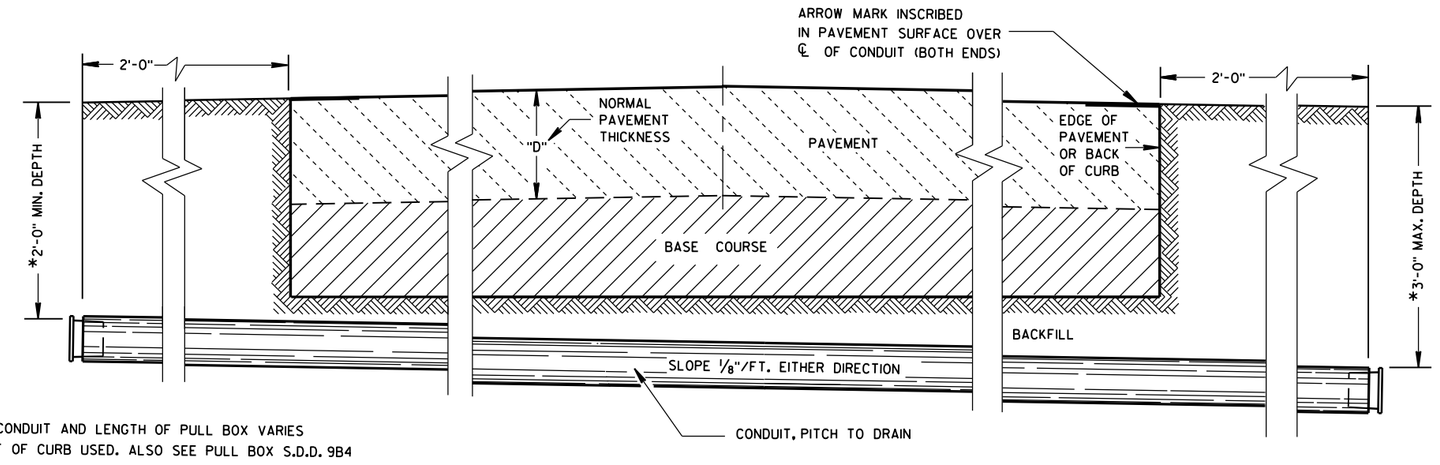
6

S.D.D. 8 F 4-7




**PLAN VIEW**

## ARROW MARK




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

**SIDE ELEVATION**

## DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

## 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 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




6

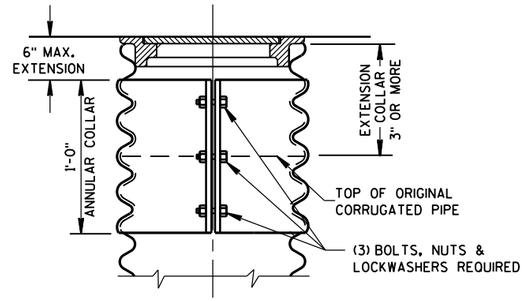
S.D.D. 9 B 2-10

## TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

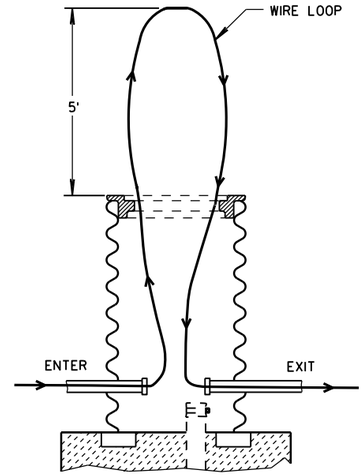
| DIMENSION IN INCHES | | CORRUGATED STEEL PIPE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 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.

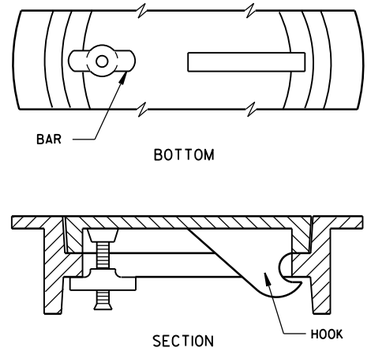
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.




CORRUGATED PIPE EXTENDER

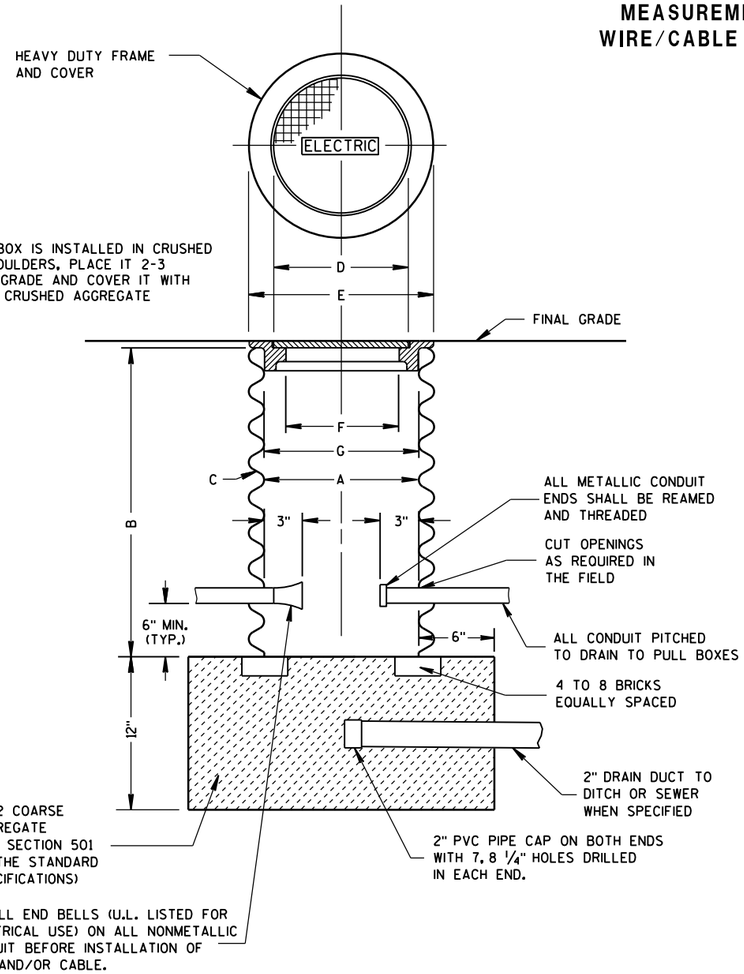



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



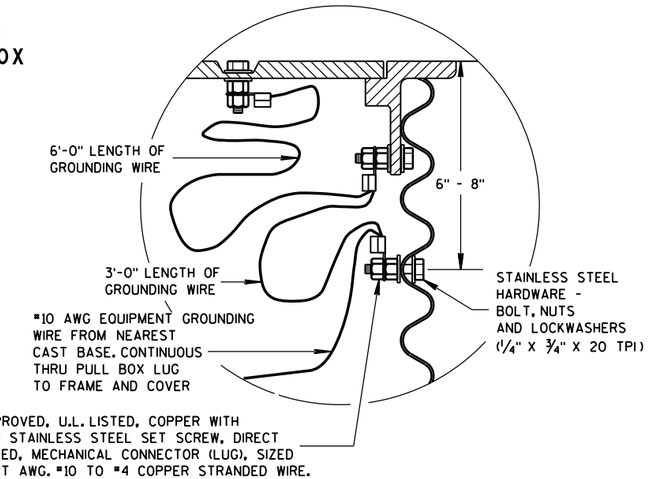

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

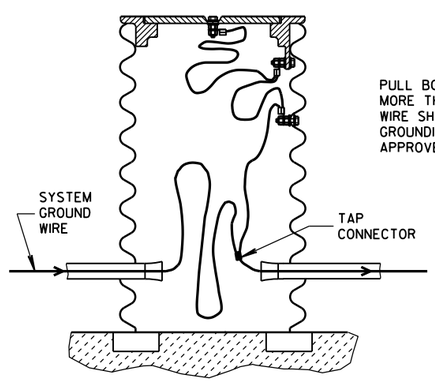



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX




EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES




PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

## 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

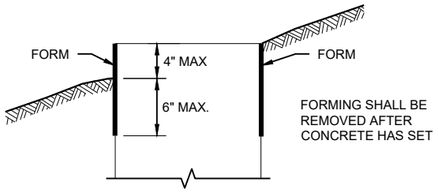
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




6


S.D.D. 9 B 4-11

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 |

# GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO 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.

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.

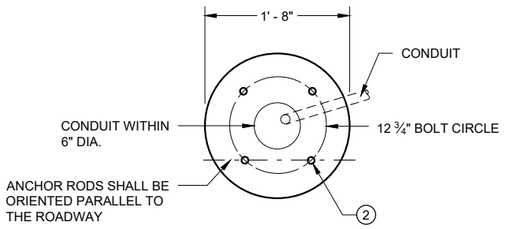
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

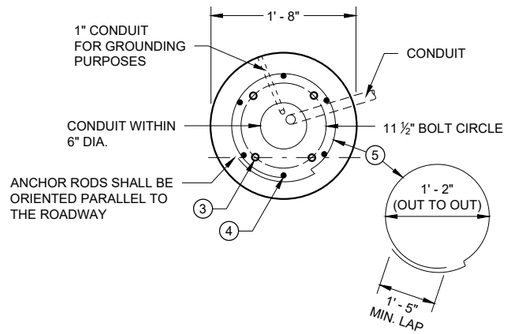
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

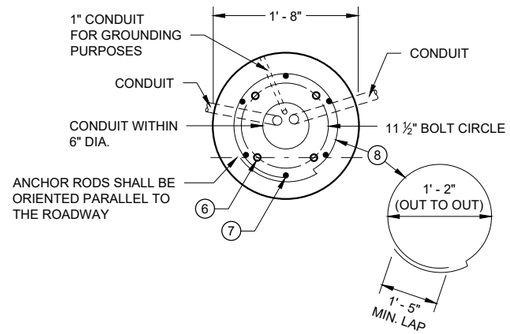
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

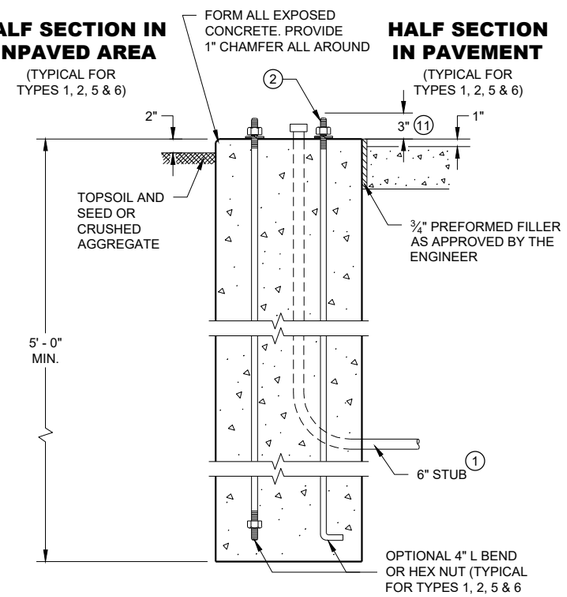
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

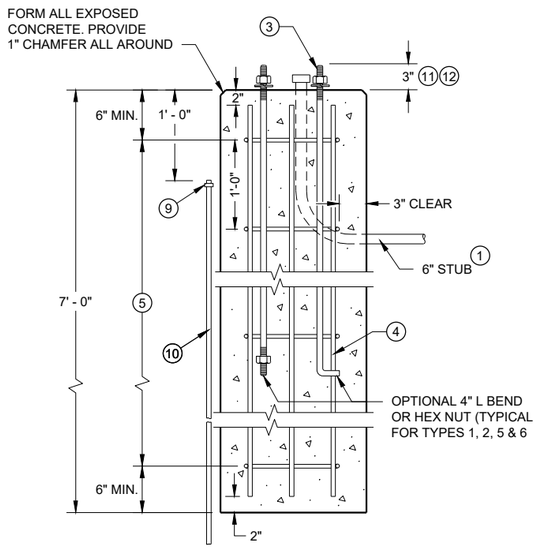
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

**HALF SECTION IN UNPAVED AREA**
(TYPICAL FOR TYPES 1, 2, 5 & 6)

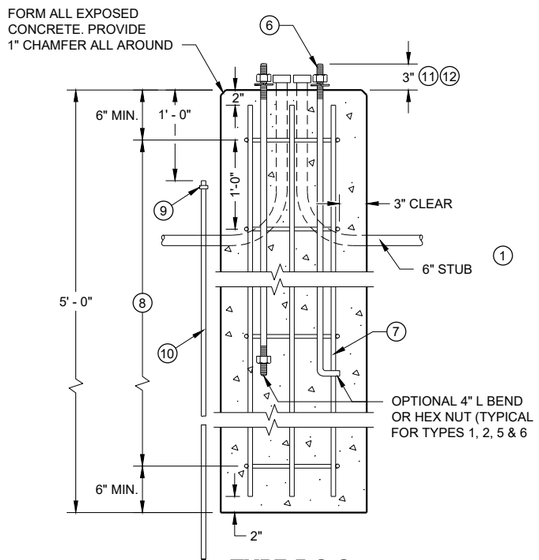
**HALF SECTION IN PAVEMENT**
(TYPICAL FOR TYPES 1, 2, 5 & 6)




**TYPE 1**




**TYPE 2**




**TYPE 5 & 6**

## CONCRETE BASES

**CONCRETE BASES**
**TYPES 1, 2, 5, & 6**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

128

## GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

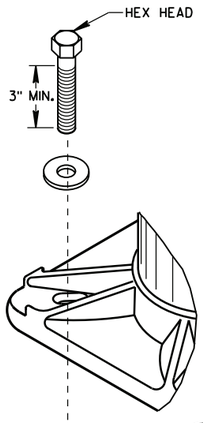
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

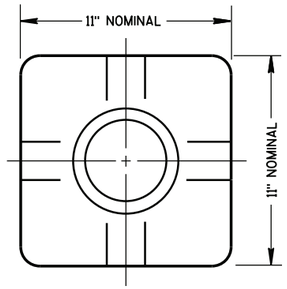
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

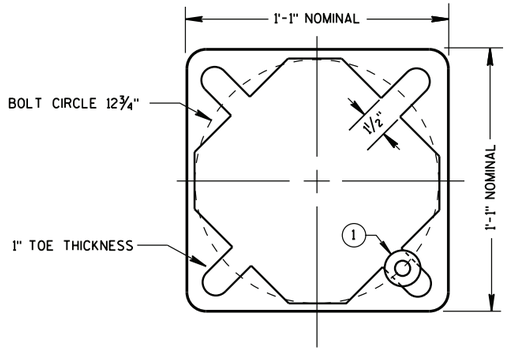
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

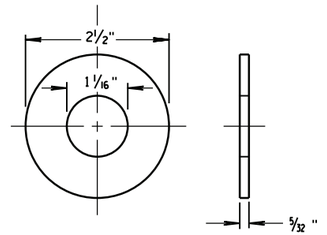



TOP VIEW
(PEDESTAL BASE)

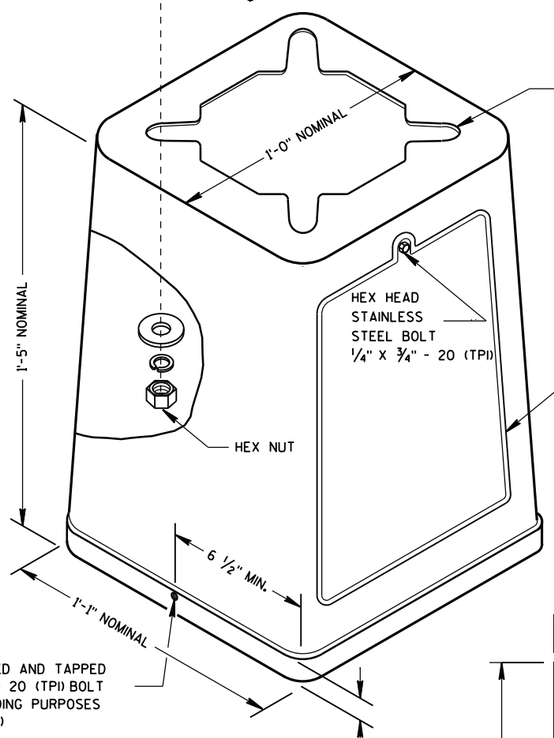



BOTTOM VIEW
(PEDESTAL BASE)

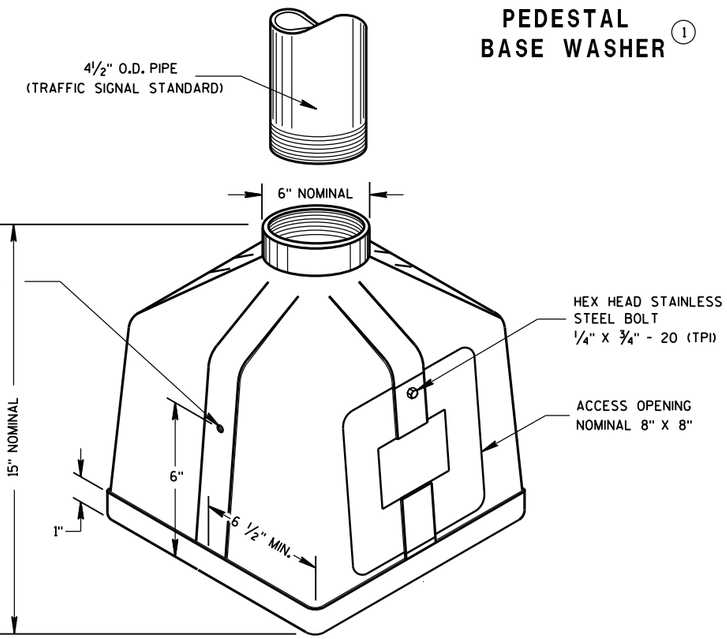



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

**PEDESTAL BASE WASHER** (1)

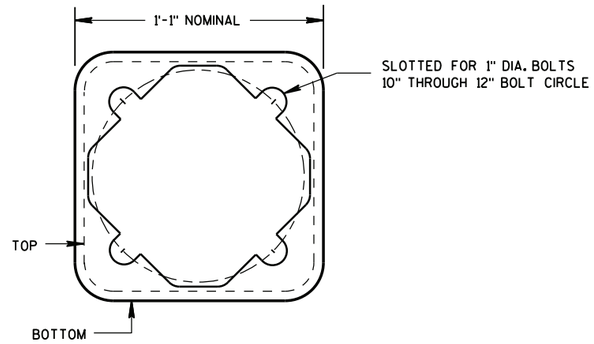



ISOMETRIC VIEW

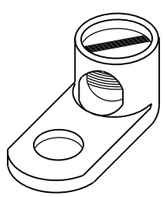



ISOMETRIC VIEW

**PEDESTAL BASE**




BOTTOM VIEW
(TRANSFORMER BASE)

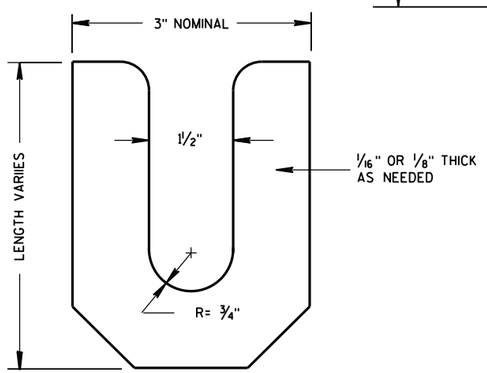


**TYPICAL MECHANICAL CONNECTOR LUG**

TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE**

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

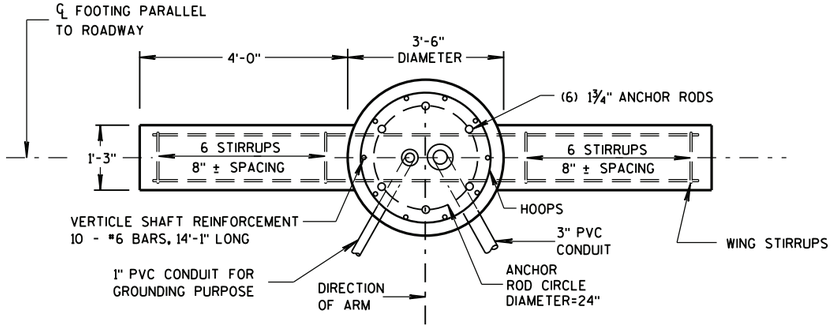


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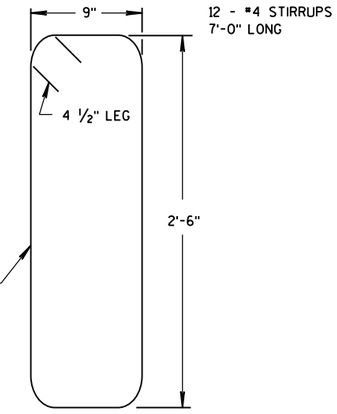
S.D.D. 9 C 3-4

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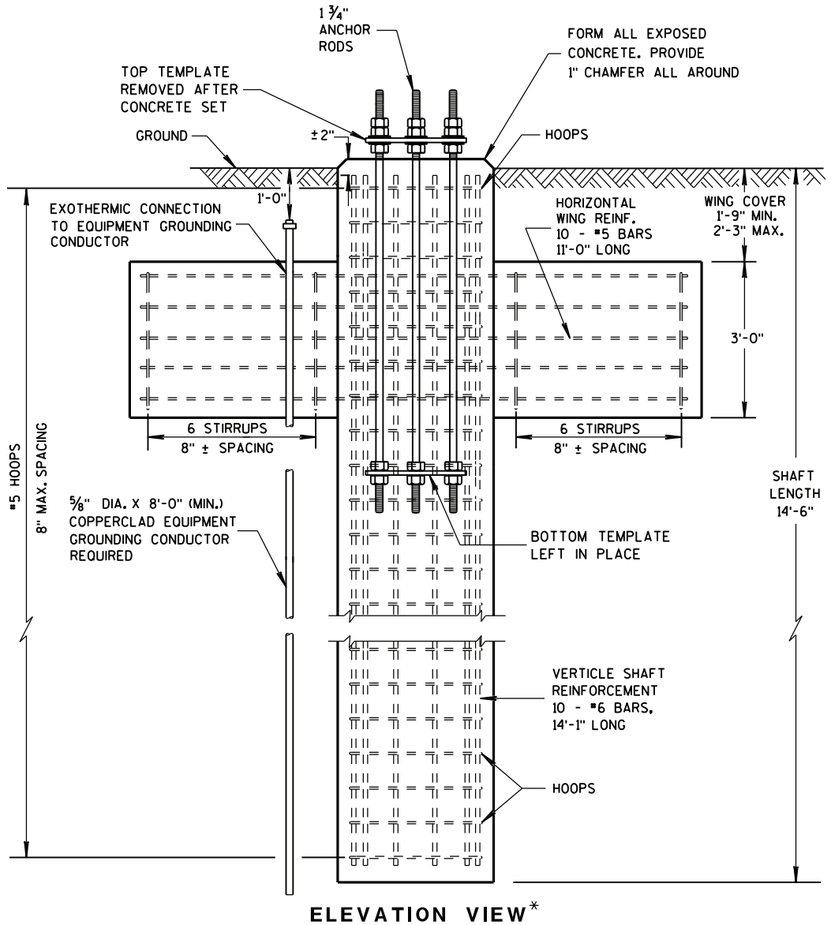
S.D.D. 9 C 3-4




PLAN VIEW

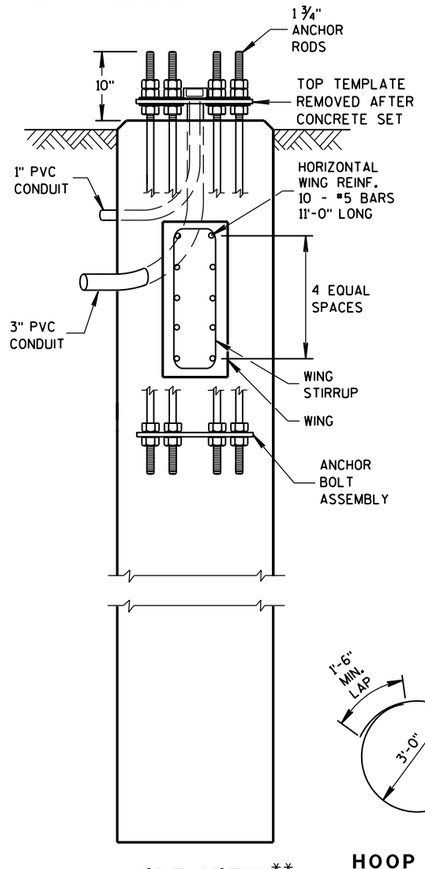



WING STIRRUP



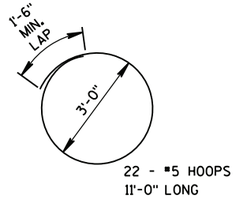

ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY




SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY




HOOP DETAIL

## GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

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

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

| | |
|---|---|
| CONCRETE MASONRY | fc=3,500 p.s.i. |
| HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 | fy=60,000 p.s.i. |
| ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS | fy=55,000 p.s.i. |
| TEMPLATES, ASTM A709 GRADE 36 | fy=36,000 p.s.i. |

**(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)**

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

**TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.**
**SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.**

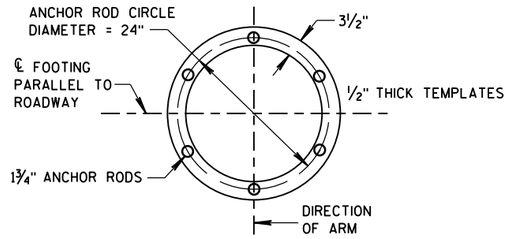
# CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

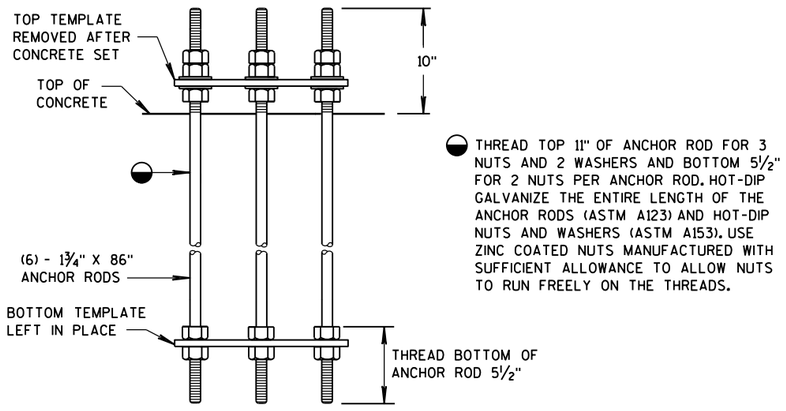



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S.D.D. 9 C 12-9a

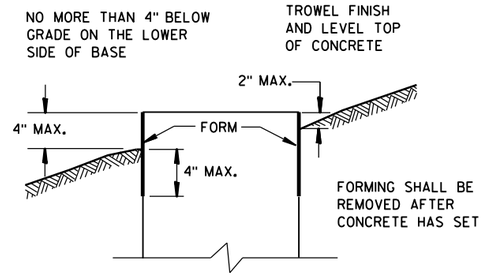



**TOP AND BOTTOM TEMPLATES**




**ANCHOR BOLT ASSEMBLY DETAIL**

# CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY




**FORMING DETAIL**

6

S.D.D. 9 C 12-9b

CONCRETE BASE TYPE 13

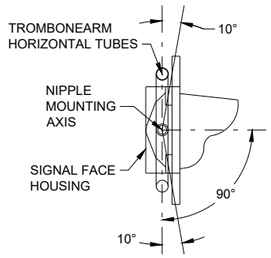
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



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S.D.D. 9 C 12-9b

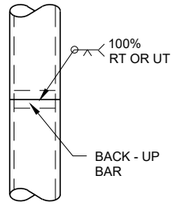



**SECTION A-A**

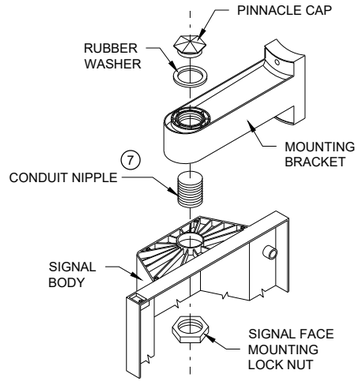
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

**FOR MANUFACTURERS USE ONLY**

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.




**POLE SPLICE DETAIL**




**SIGNAL FACE MOUNTING DETAIL**

**(BANDED)**

## GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING,PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) ASREQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

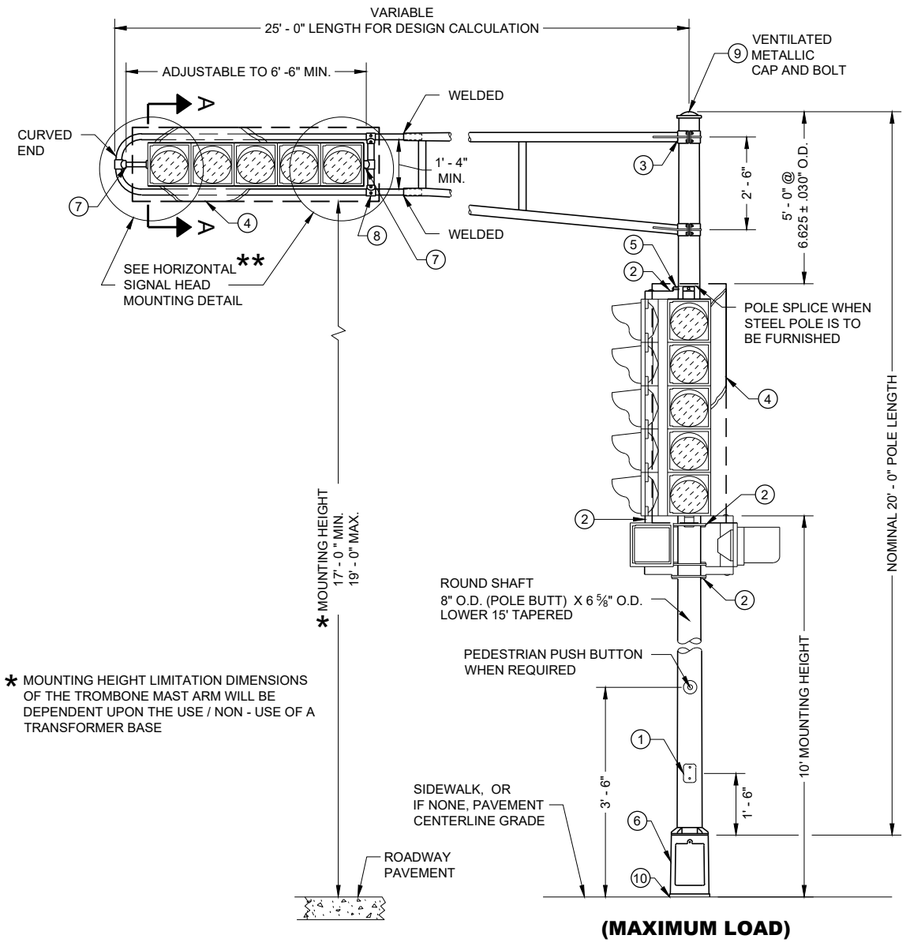
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW ( ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTIS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

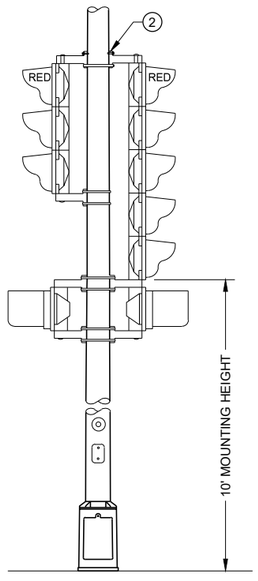
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

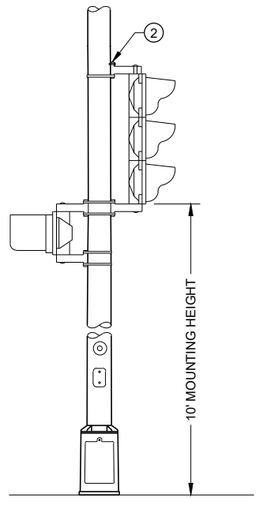



* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

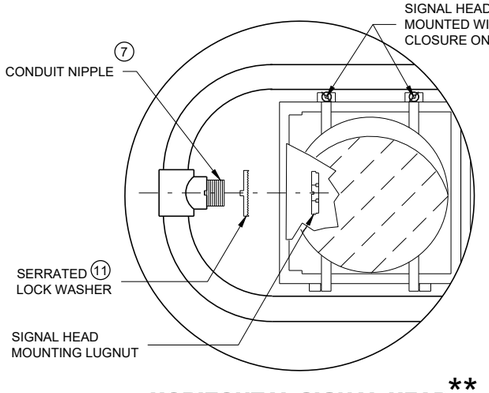
**(MAXIMUM LOAD)**




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**




**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**




**HORIZONTAL SIGNAL HEAD MOUNTING DETAIL** **

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

**TYPE 2 POLE MOUNTING CONFIGURATION**

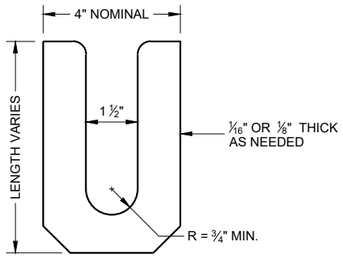
**POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

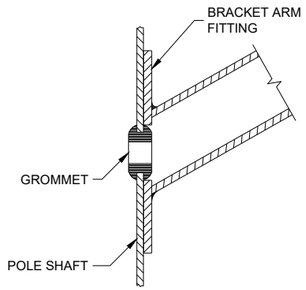




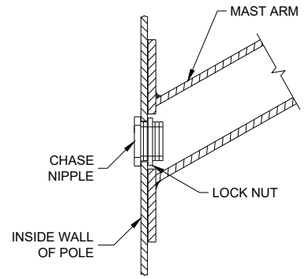
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SDD 09E01 - 15a




**LEVELING SHIM** (1)
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.

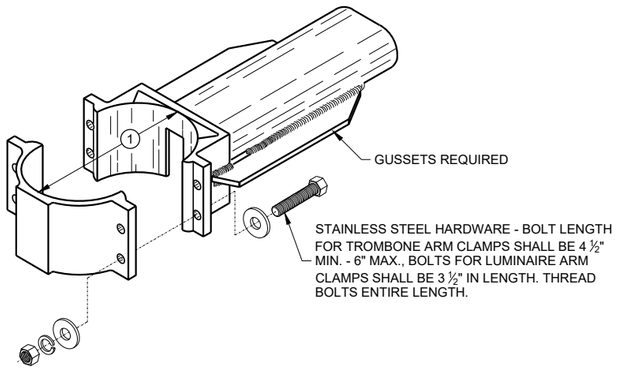
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

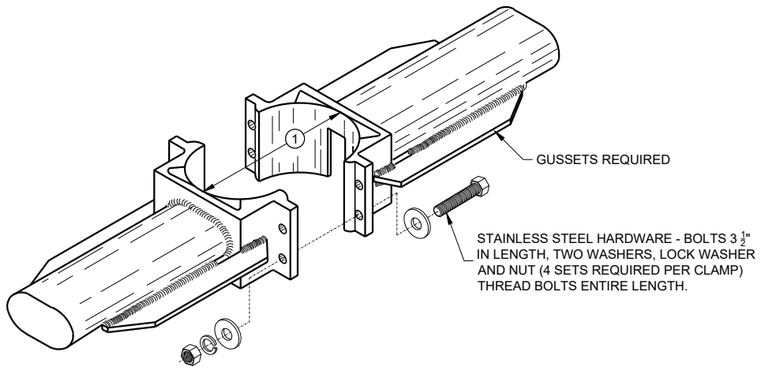
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

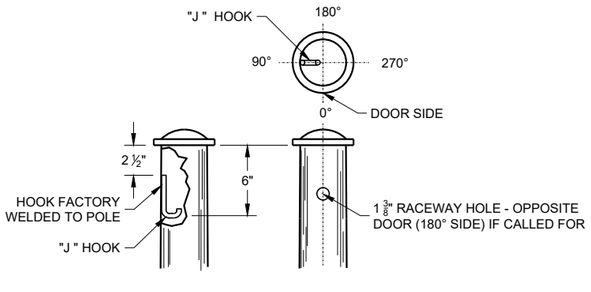
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



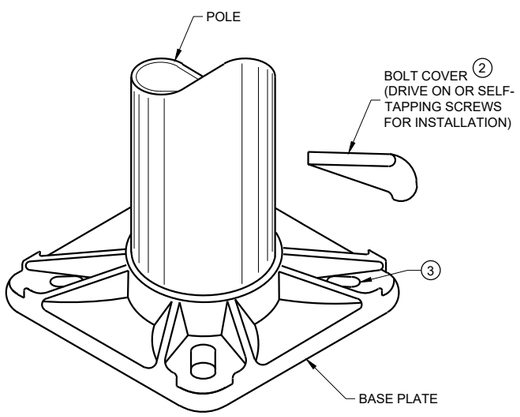

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



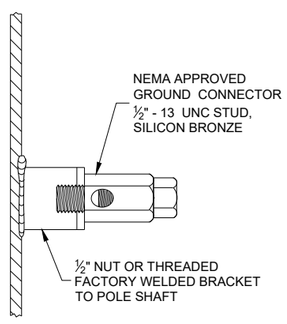

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

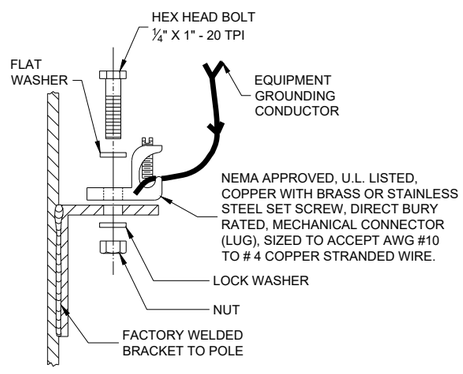


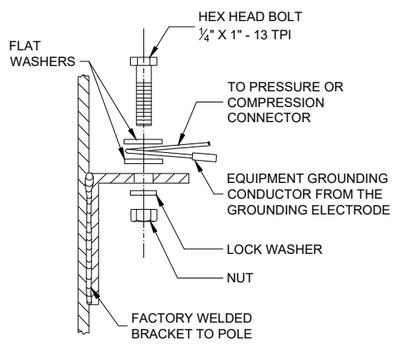

**TYPICAL "J" HOOK LOCATION**




**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
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI



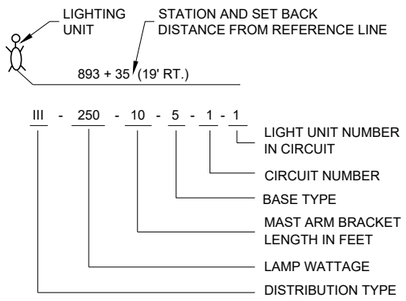
FHWA

## GENERAL NOTES

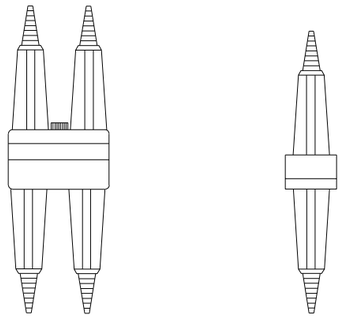
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



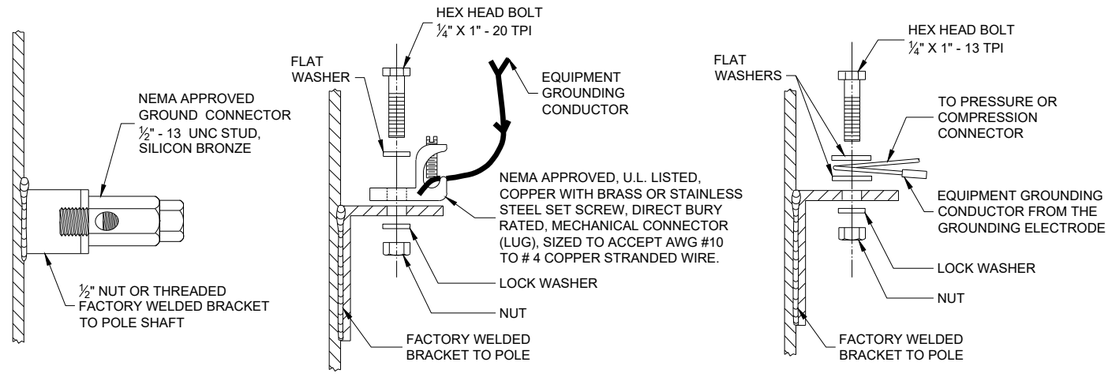

**LIGHTING UNIT CODE**
**(TYPICAL)**



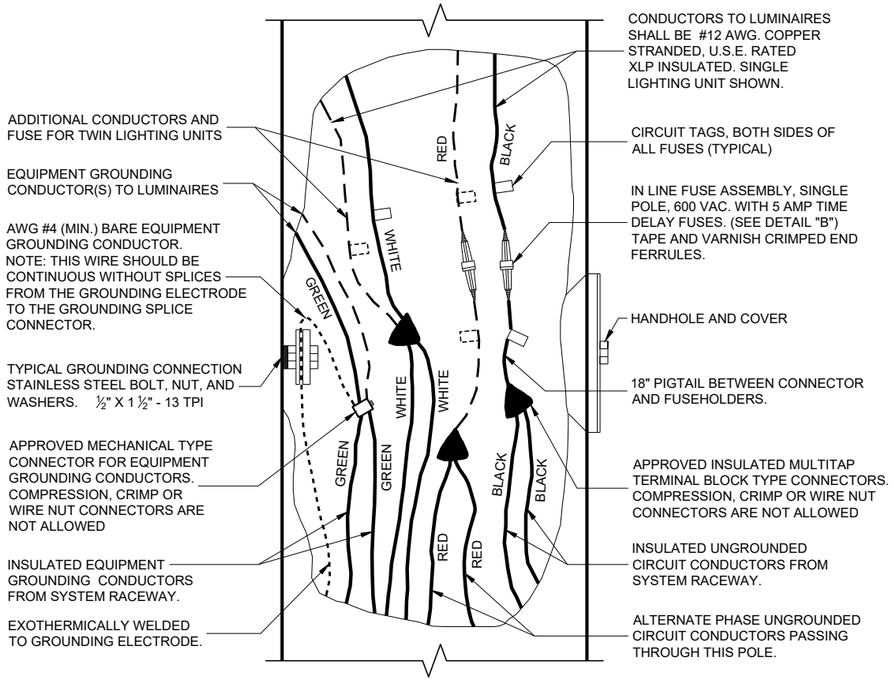
**DETAIL "A"**
**BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT**



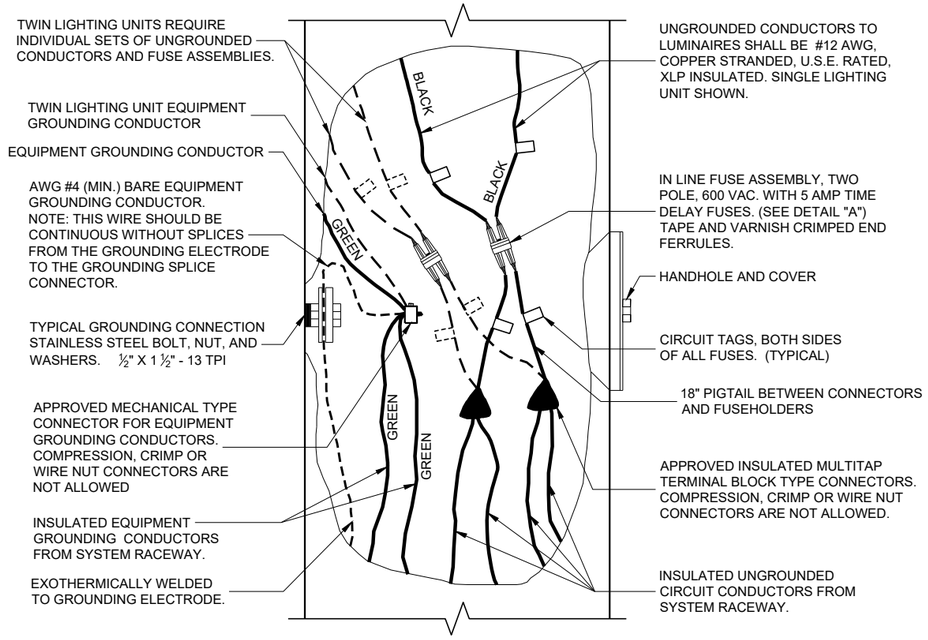
**DETAIL "B"**
**BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT**




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




**3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR**




**2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR**

**NON - FREEWAY LIGHTING UNIT POLE WIRING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

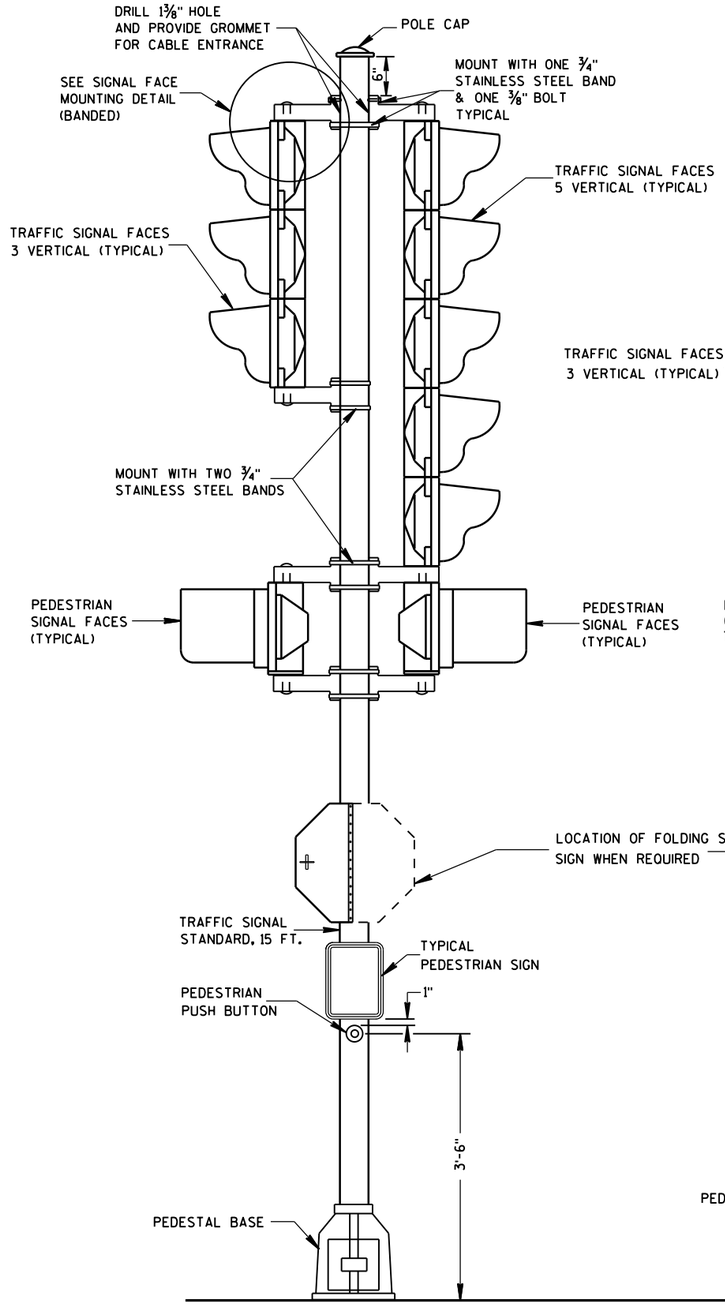
APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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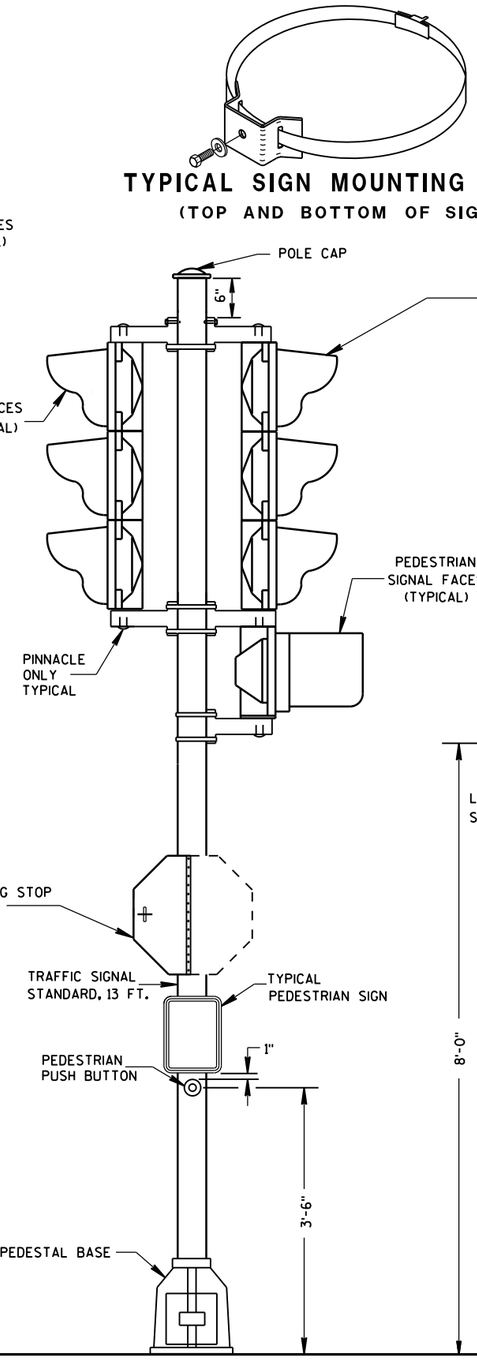



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SDD 09E03 - 06

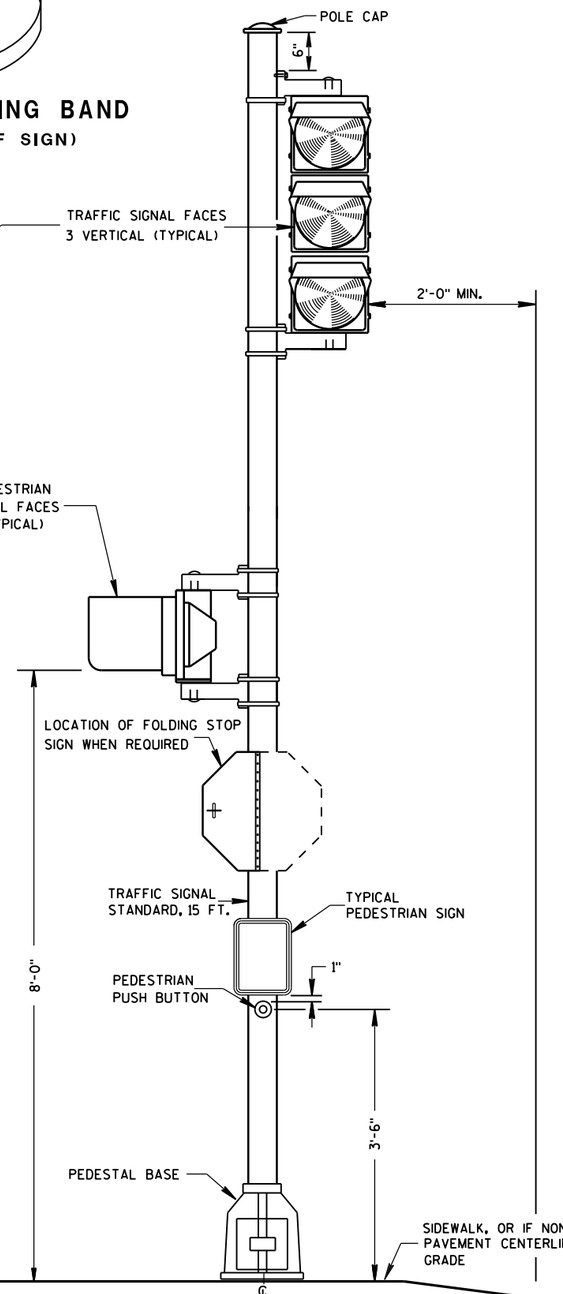



TRAFFIC SIGNAL STANDARD-15 FT.




TRAFFIC SIGNAL STANDARD-13 FT.

## TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)




TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

## 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.

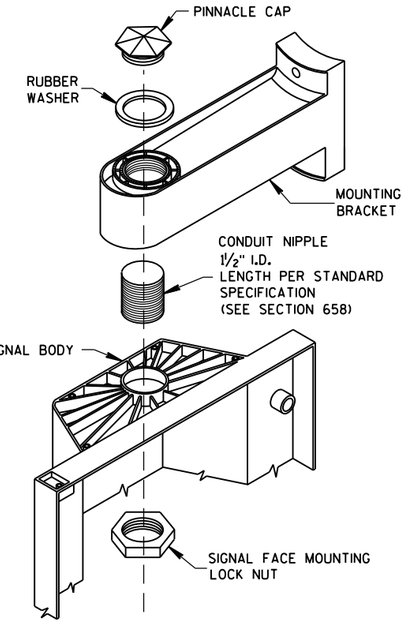
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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 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) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.




## SIGNAL FACE MOUNTING DETAIL
(BANDED)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

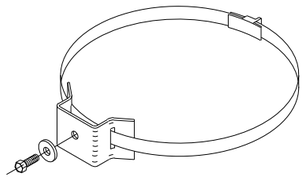
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



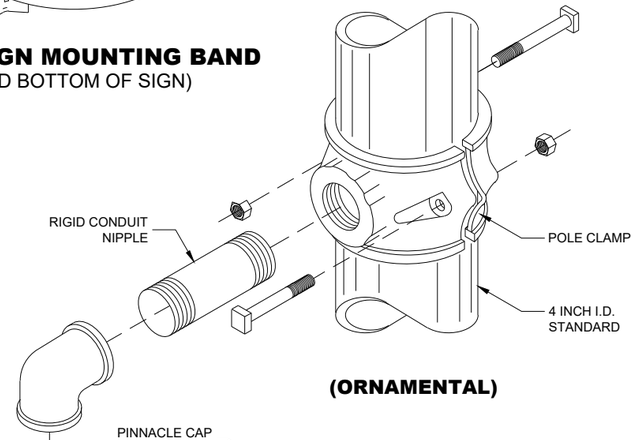


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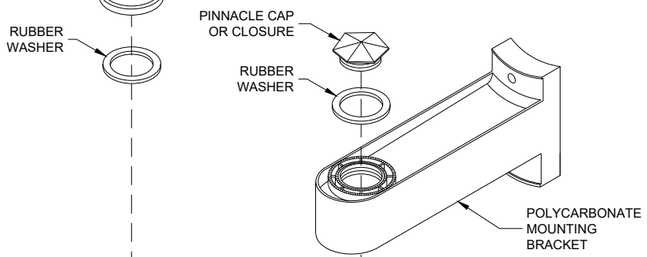
S.D.D. 9 E 6-5



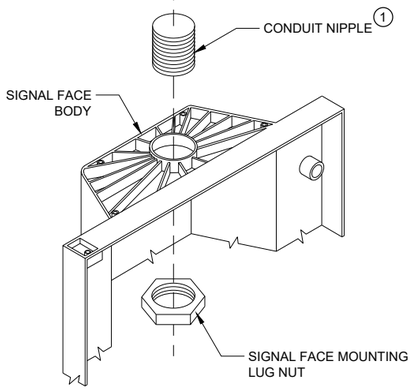
**TYPICAL SIGN MOUNTING BAND**
(TOP AND BOTTOM OF SIGN)



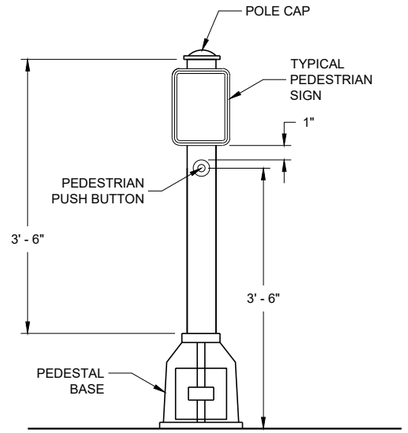

**(ORNAMENTAL)**




**(BANDED)**




**SIGNAL FACE MOUNTING DETAILS**




**PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING**

## 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.

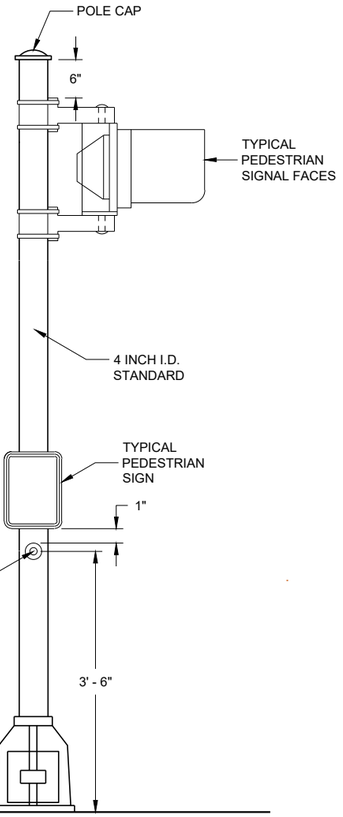
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

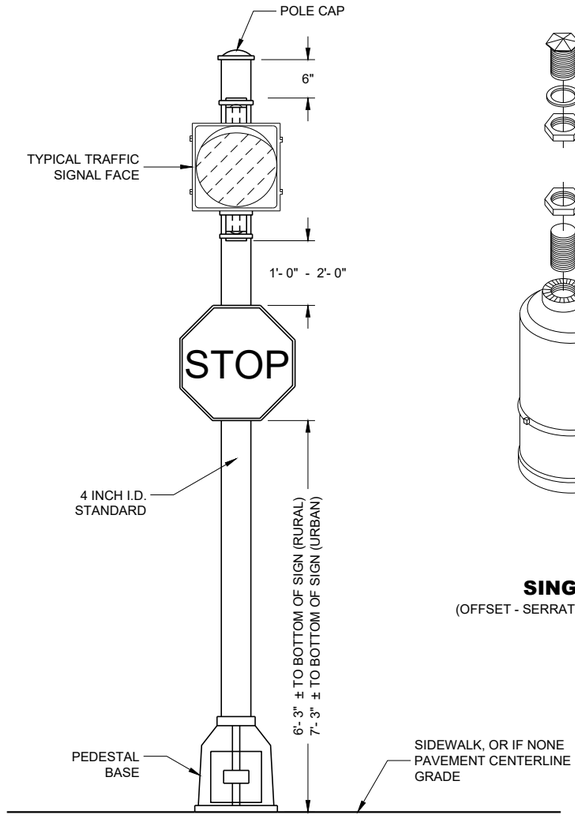
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

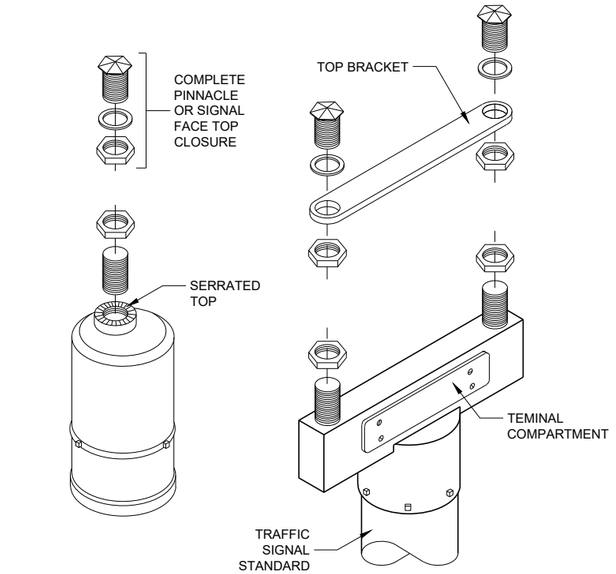
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.




**PEDESTRIAN FACE STANDARD - 10 FT.**
(WALK - DON'T WALK)




**STANDARD FLASHER**
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED




**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
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

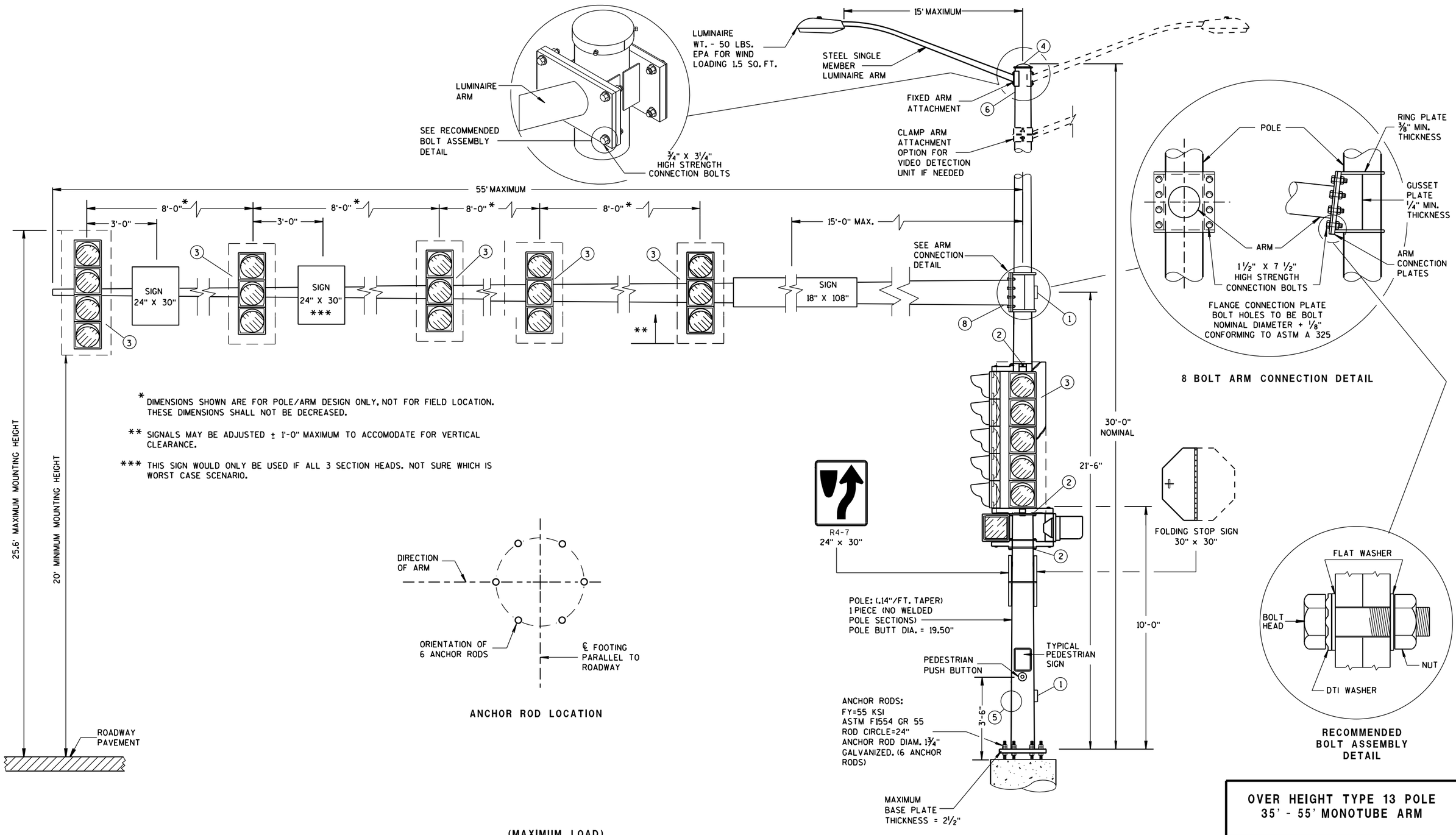
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SDD 09E07 - 06




* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY. NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

*** THIS SIGN WOULD ONLY BE USED IF ALL 3 SECTION HEADS. NOT SURE WHICH IS WORST CASE SCENARIO.

8 BOLT ARM CONNECTION DETAIL




ANCHOR ROD LOCATION

RECOMMENDED BOLT ASSEMBLY DETAIL

(MAXIMUM LOAD)

# OVER HEIGHT TYPE 13 POLE 35'- 55' MONOTUBE ARM

**OVER HEIGHT TYPE 13 POLE 35' - 55' MONOTUBE ARM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




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S.D.D. 9 E 12-1d

## GENERAL NOTES

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

OVER HEIGHT POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

OVER HEIGHT POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING 2017 INTERIM REVISIONS) AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS ( AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS ( AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT ( NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

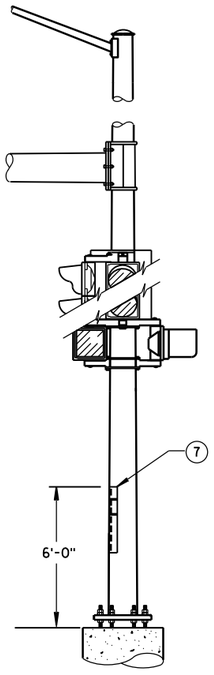
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

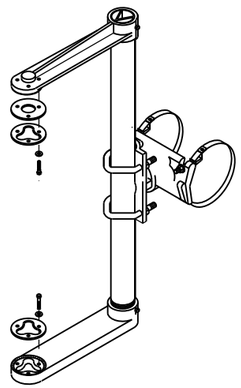
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

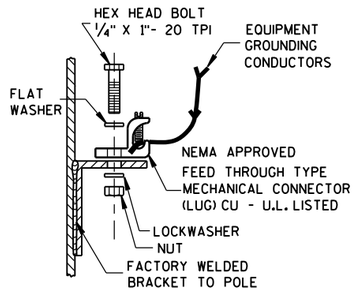



STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



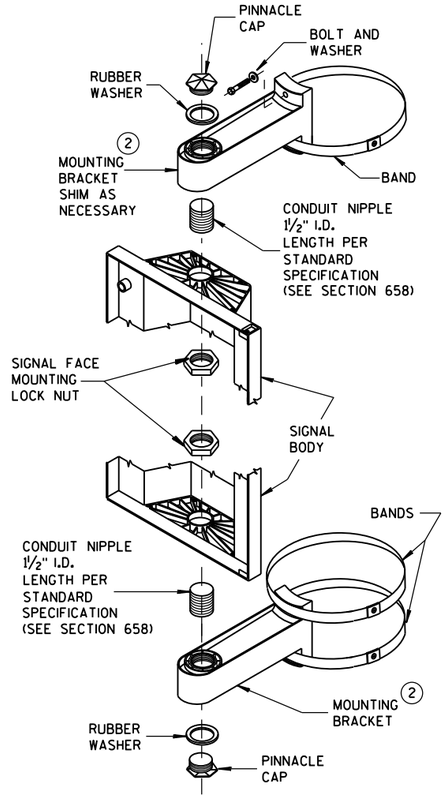
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

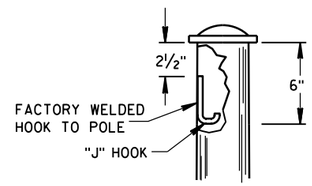



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




SIGNAL FACE VERTICAL MOUNTING DETAIL




"J" HOOK WIRE SUPPORT (6)

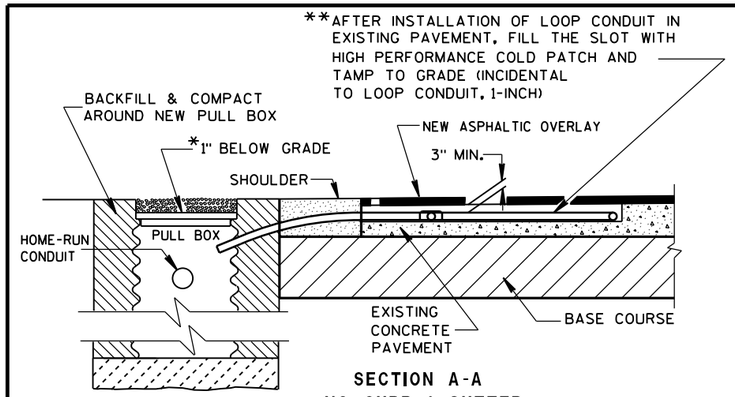
**GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



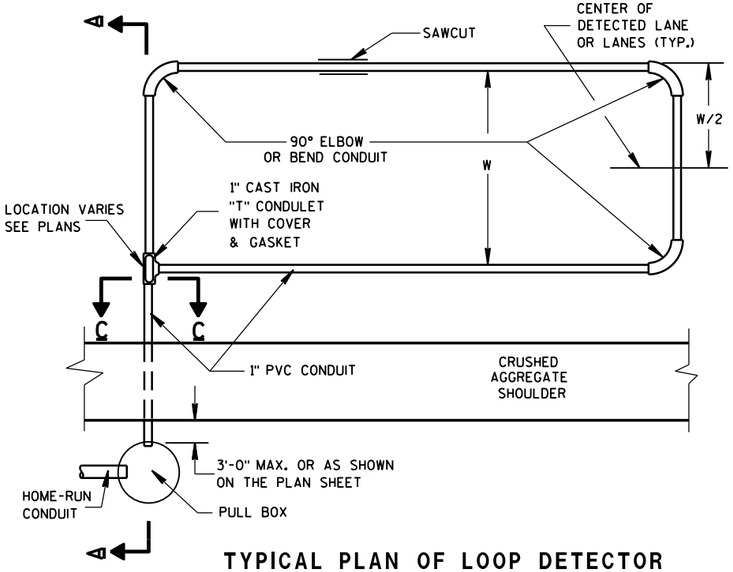

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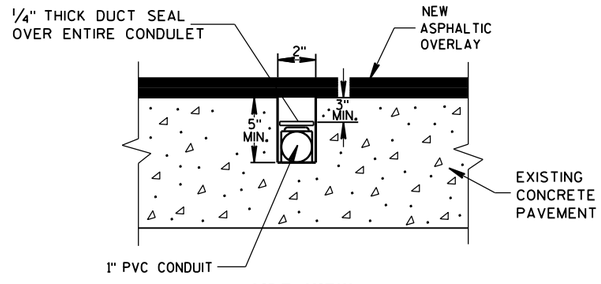

**SECTION A-A**
**NO CURB & GUTTER**

## LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

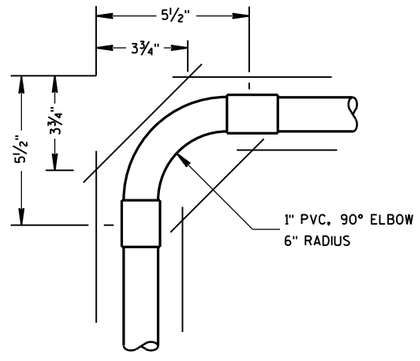



## TYPICAL PLAN OF LOOP DETECTOR




**SIDE VIEW**
**SECTION C-C**

## LOOP DETECTOR SLOT DETAIL




**TOP VIEW**

## CORNER SAW SLOT DETAIL

## GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

IN THE EVENT EPOXY IS USED AS A LOOP SLOT FILLER, THE SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

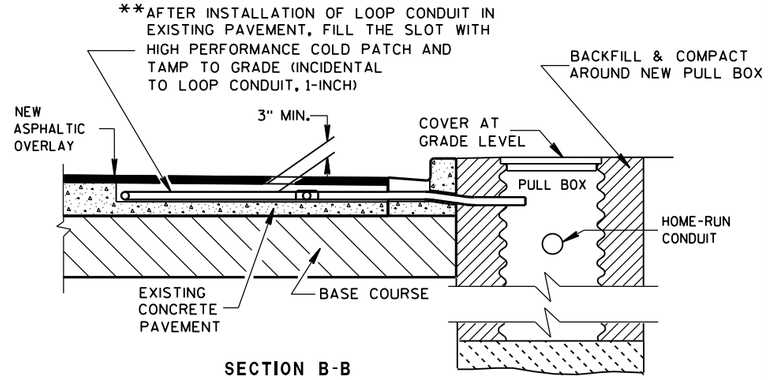
LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

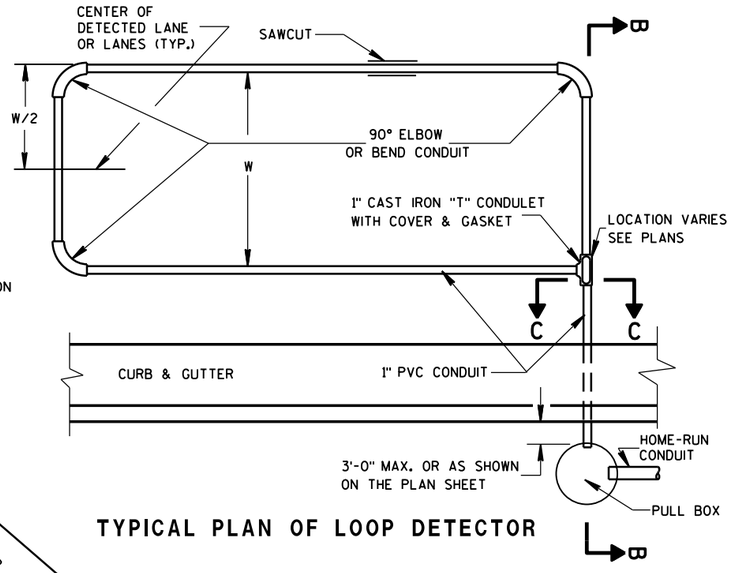
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

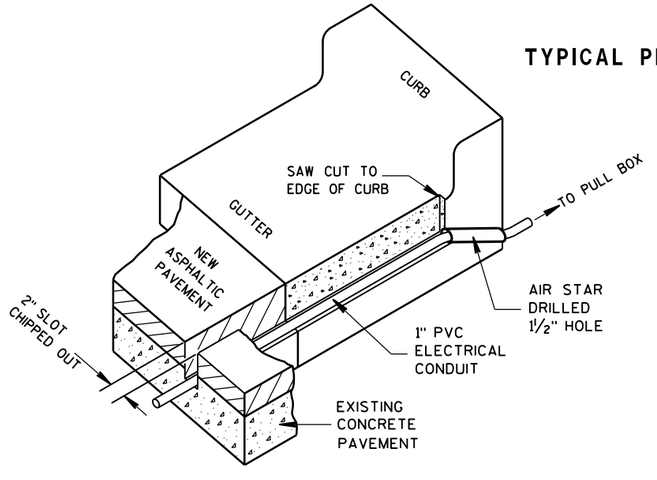



**SECTION B-B**
**CURB & GUTTER**

## LOOP DETECTOR INSTALLATION DETAIL




## TYPICAL PLAN OF LOOP DETECTOR




**ISOMETRIC VIEW**

## TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

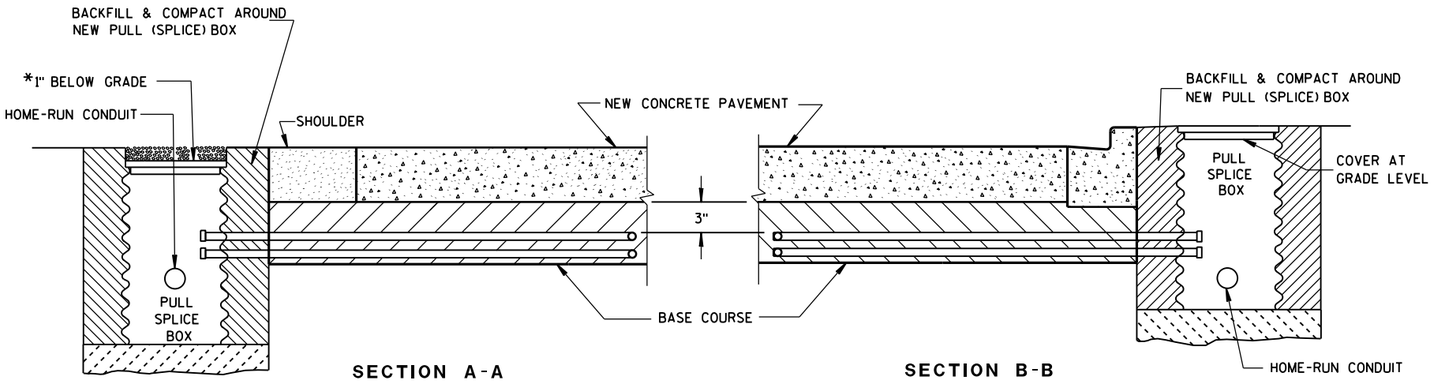
**LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT WITH NEW ASPHALTIC OVERLAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



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**SECTION A-A**
**NO CURB & GUTTER**

**SECTION B-B**
**CURB & GUTTER**

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

## LOOP DETECTOR INSTALLATION DETAIL

## GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

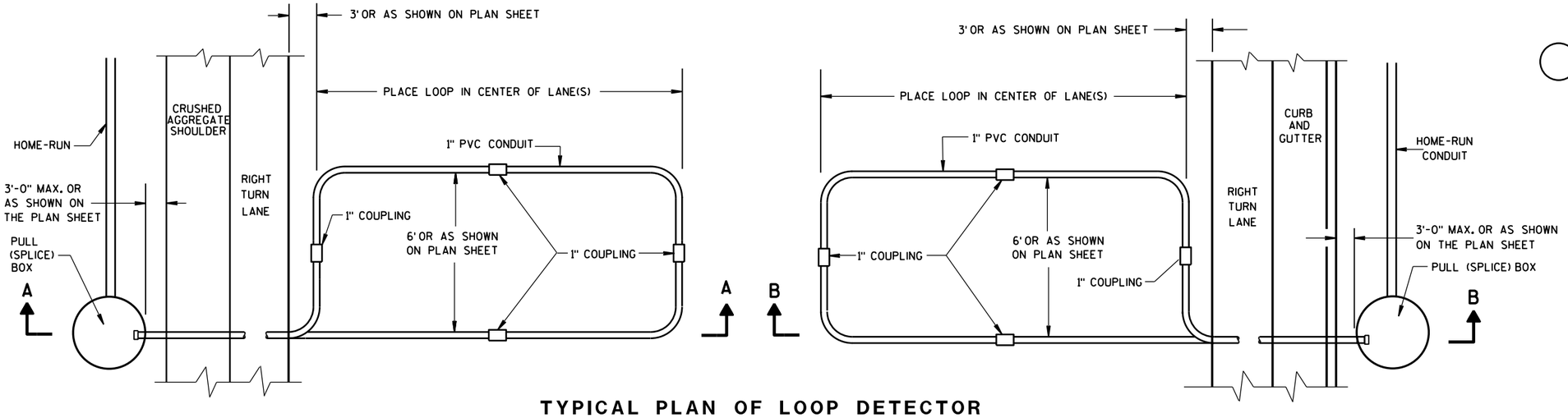
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

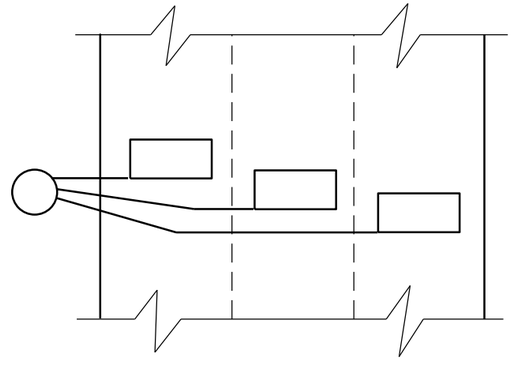
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.




## TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



## MULTI-LANE INSTALLATION

**LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)**

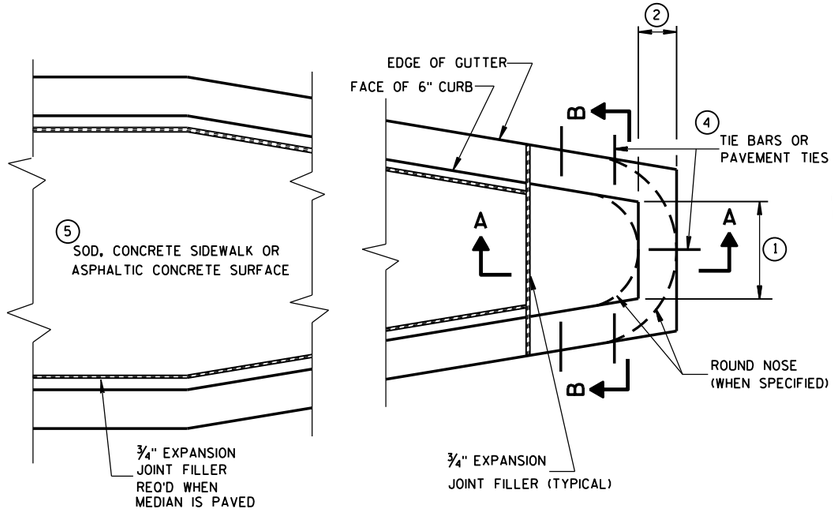
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

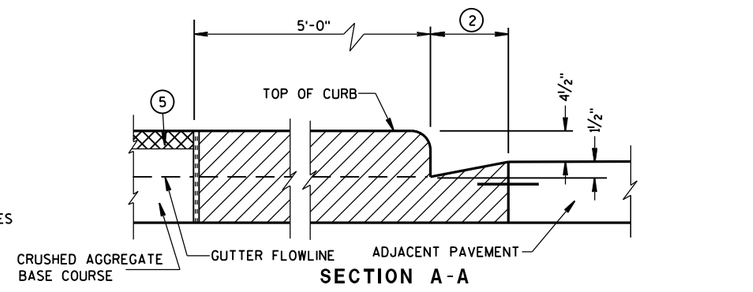
APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA




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## CONCRETE MEDIAN BLUNT NOSE DETAIL

## GENERAL NOTES

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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

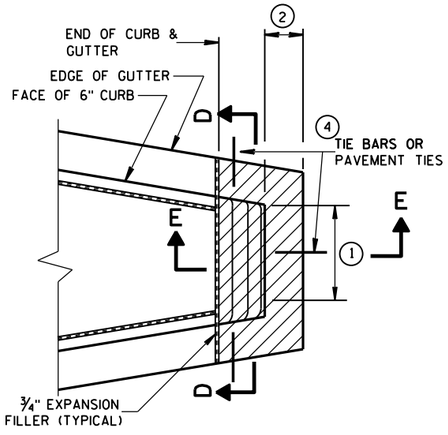
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

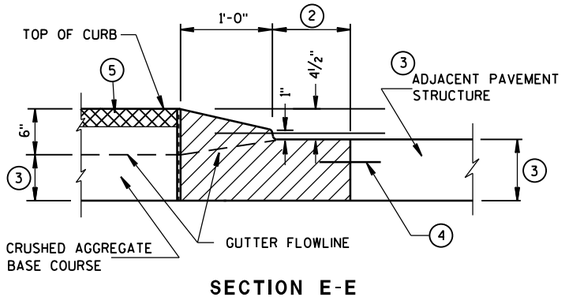
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

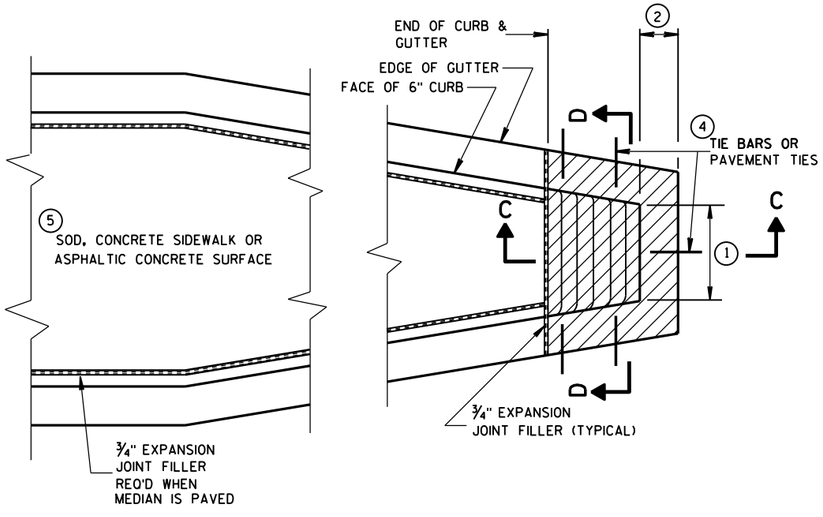
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

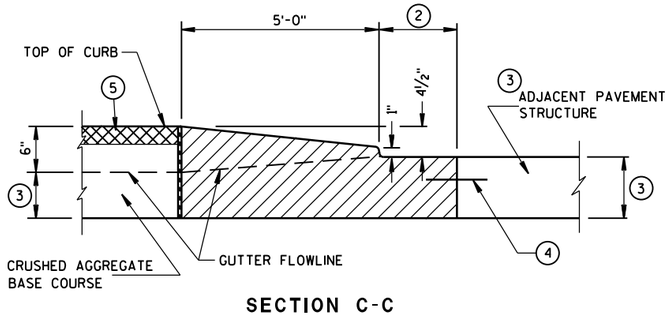
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



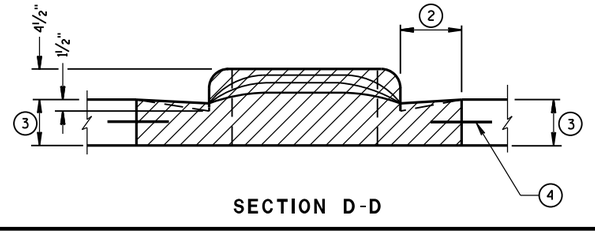




## CONCRETE MEDIAN SLOPED NOSE TYPE 2




## CONCRETE MEDIAN SLOPED NOSE TYPE 1

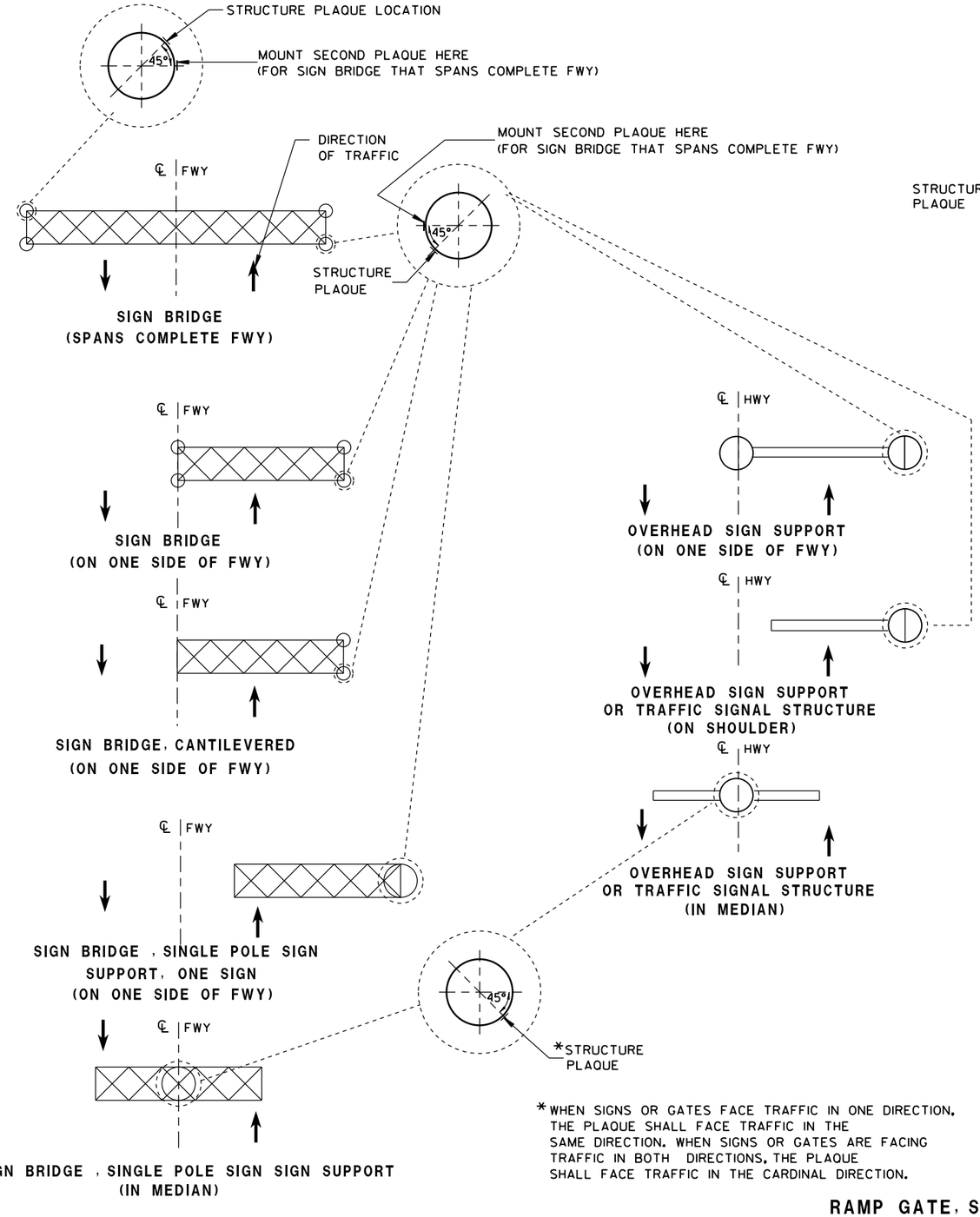



| CONCRETE MEDIAN NOSE | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>6/8/2006<br>DATE<br>FHWA | /S/ Jerry H. Zogg<br>ROADWAY STANDARDS D<br>ENGINEER |



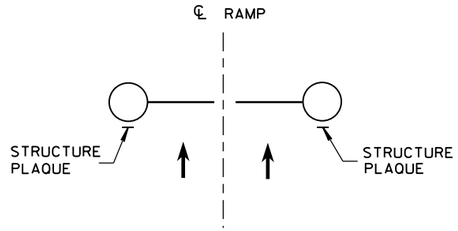

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S.D.D. 11 B 2-2

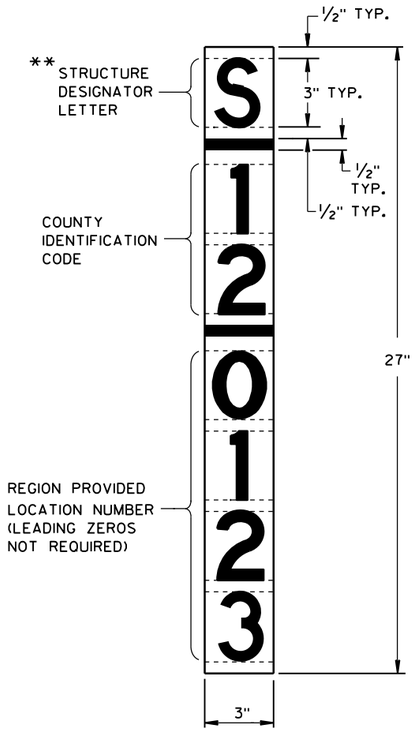



*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

**LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES**




**RAMP GATE
(ACROSS FWY ON-RAMP)**




**RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED**

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

## GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

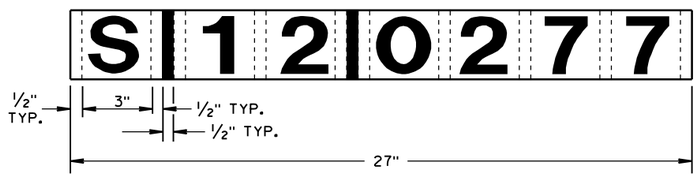
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.




**IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED**

**STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS**

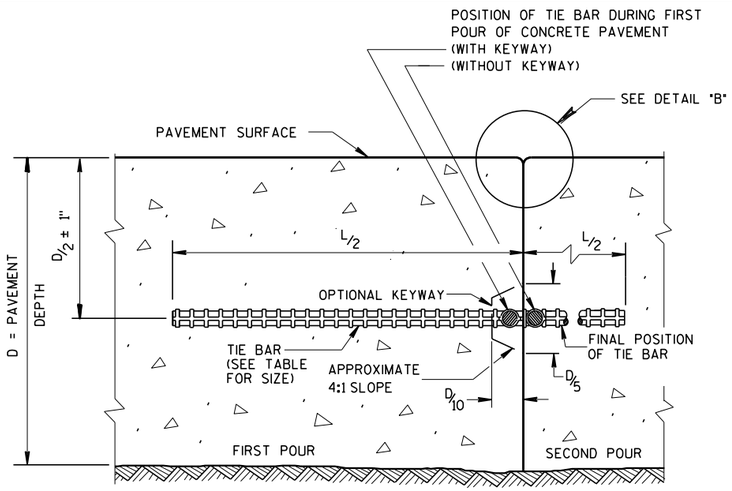
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

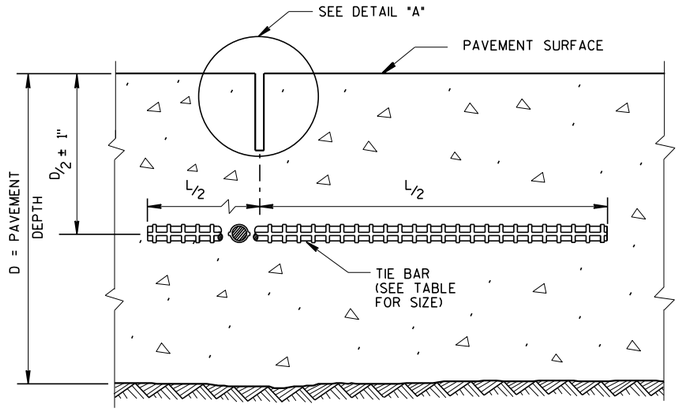



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S.D.D. 12 A 4-3




## CONSTRUCTION JOINT




## SAWED JOINT

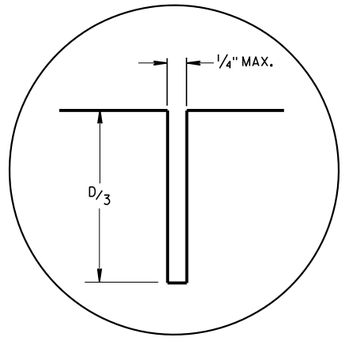
## GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

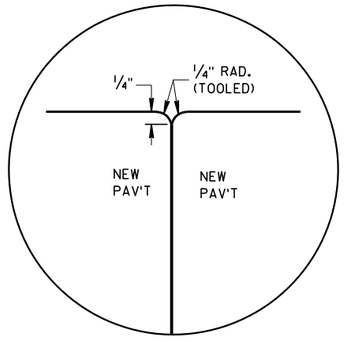
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

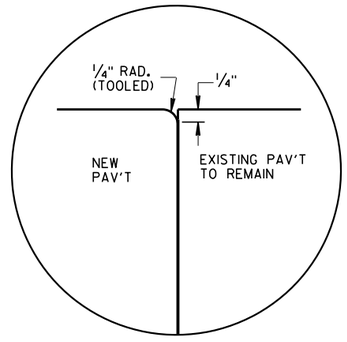
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



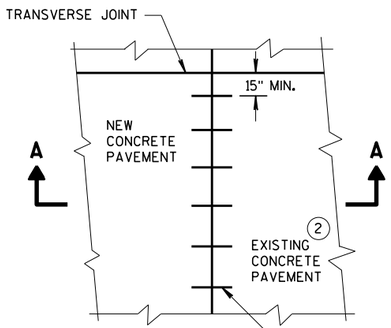

## DETAIL "A"



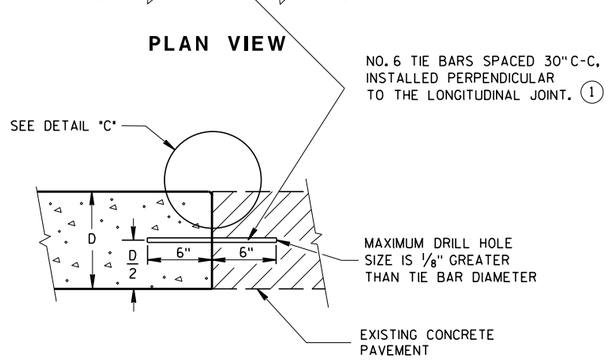

## DETAIL "B"




## DETAIL "C"




## PLAN VIEW



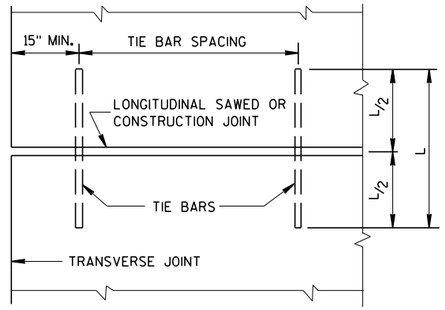

## SECTION A-A
## LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

### 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" MINUMUM 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

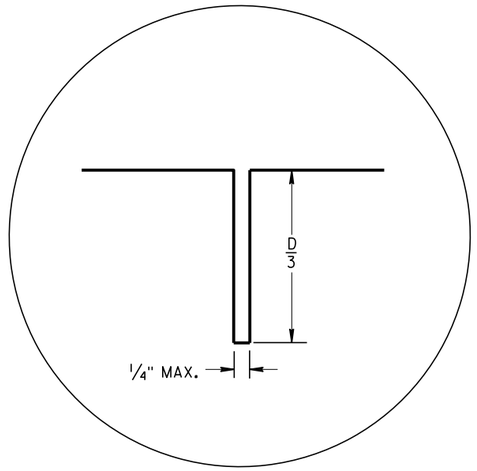
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

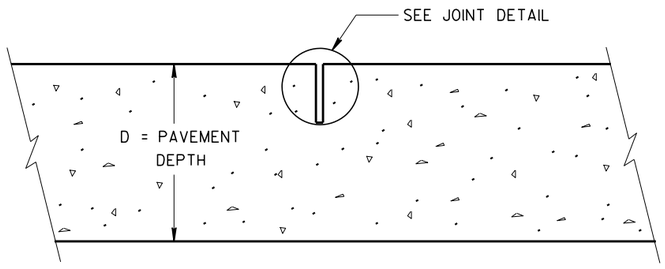




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S.D.D. 13 C 1-19



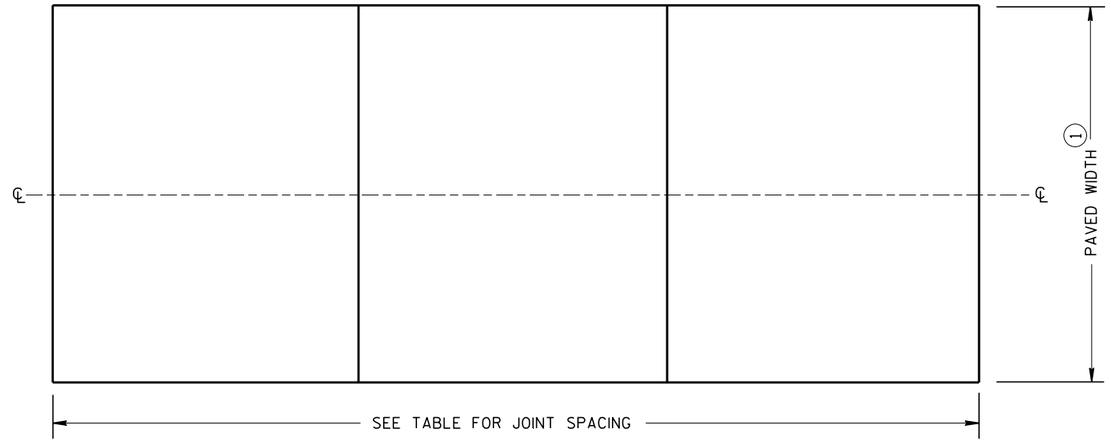

## JOINT DETAIL




## CONTRACTION JOINT

### 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' |




## CONTRACTION JOINT LOCATIONS

## GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONSTRUCTION JOINTS

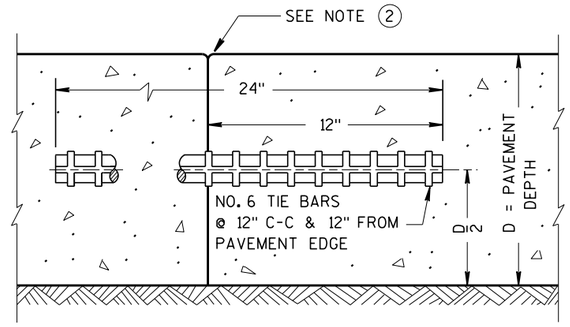
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.




## TIED TRANSVERSE CONSTRUCTION JOINT

**URBAN**
**NON-DOWELED CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




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S.D.D. 13 C 4-17

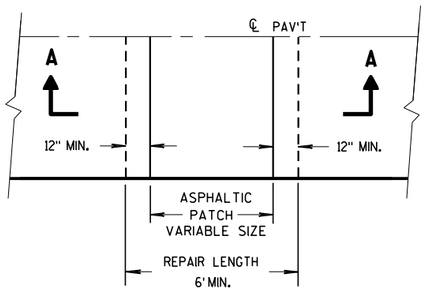
## GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

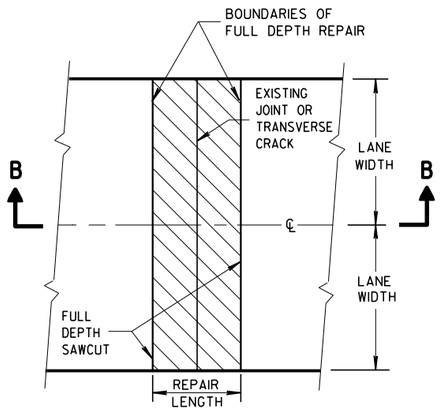
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

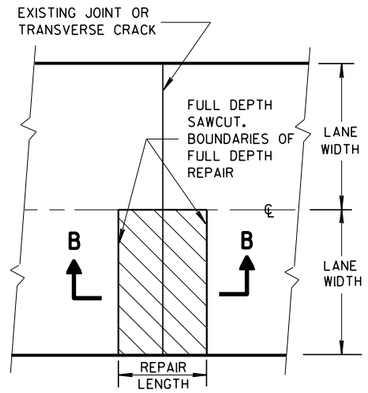
(1) DOWEL BARS MIGHT NOT EXIST.




PLAN VIEW

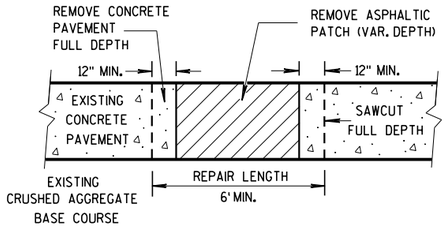



PLAN VIEW
(DOUBLE LANE REPAIR)



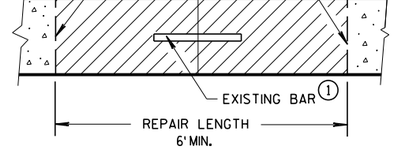

PLAN VIEW
(SINGLE LANE REPAIR)

## FULL DEPTH CONCRETE PAVEMENT REMOVAL




SECTION A-A

HMA PATCH REMOVAL




SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

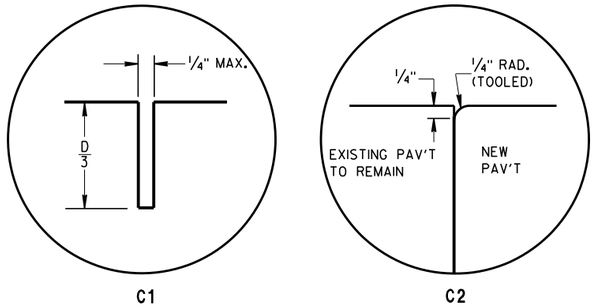


6

S.D.D. 13 C 9-15a

6

S.D.D. 13 C 9-15a




C1 C2

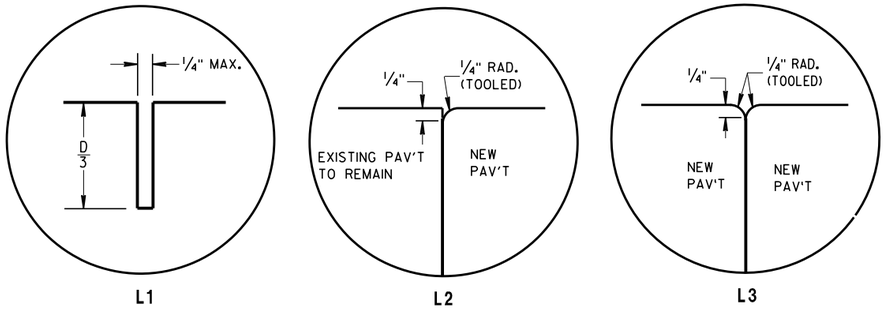
## TRANSVERSE JOINTS

### 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"** |

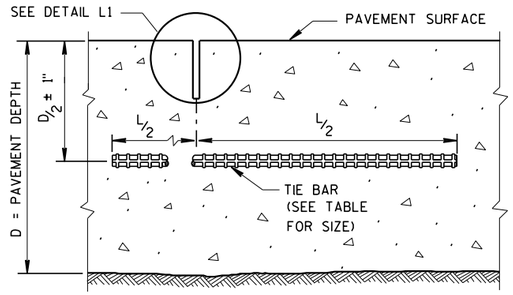
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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




L1 L2 L3

## LONGITUDINAL JOINTS




SECTION C-C

## SAWED LONGITUDINAL JOINT

## GENERAL NOTES

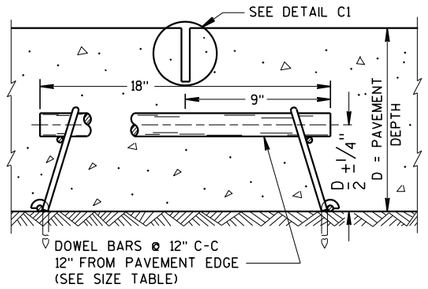
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

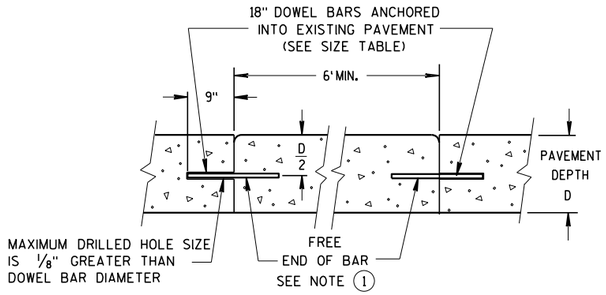
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

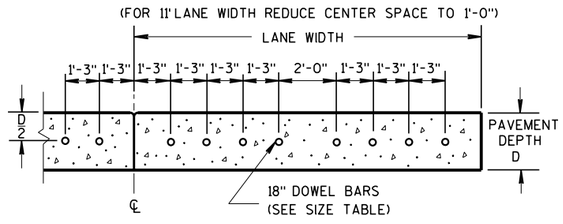



SECTION F-F

## CONTRACTION JOINT




SECTION D-D

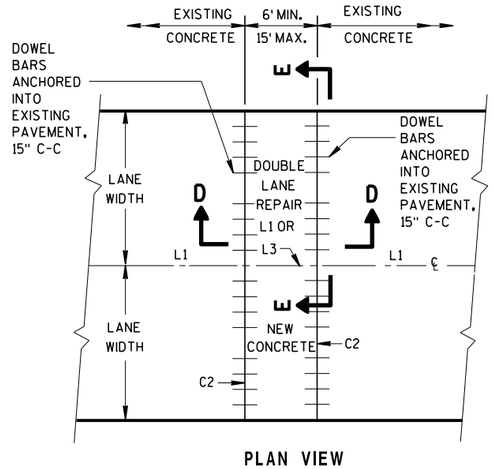



SECTION E-E

## DRILLED DOWEL BAR CONSTRUCTION JOINT

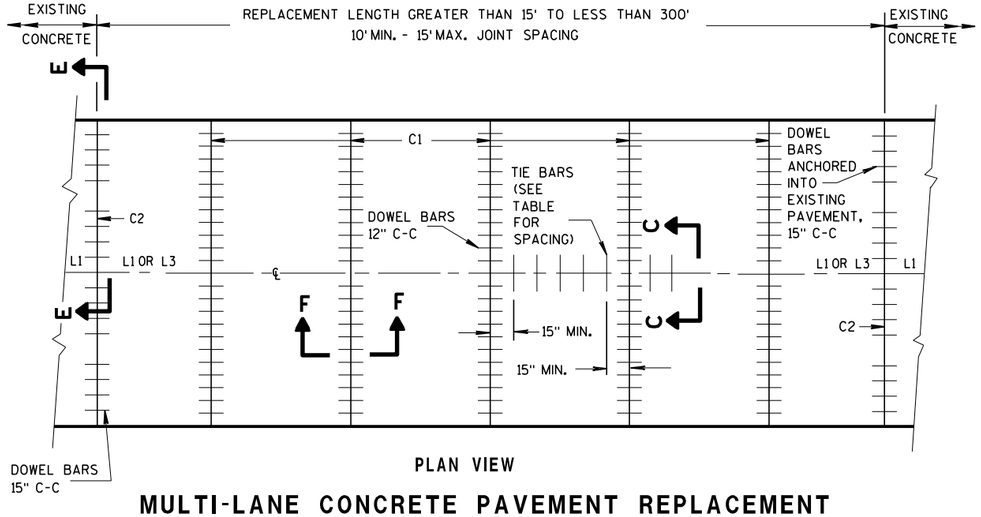
### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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




PLAN VIEW

## MULTI-LANE CONCRETE PAVEMENT REPAIR




PLAN VIEW

## MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

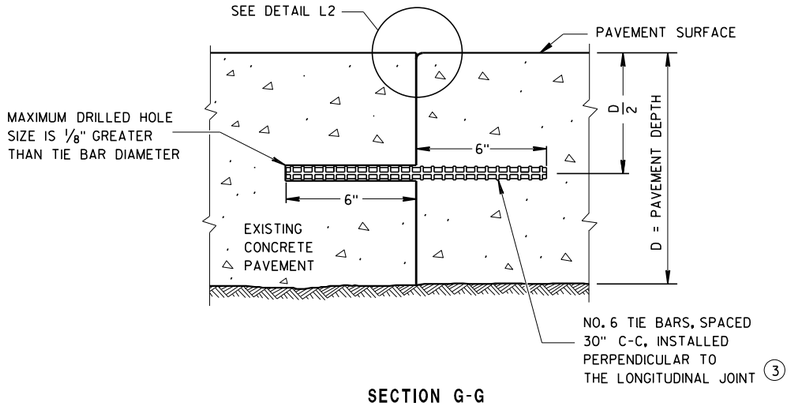
**CONCRETE PAVEMENT REPAIR AND REPLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6


S.D.D. 13 C 9-15b




SECTION G-G

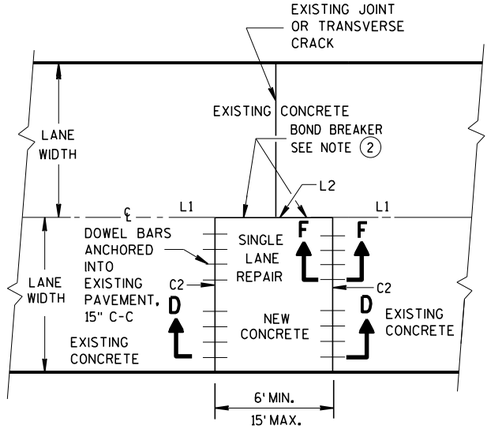
## TIE BARS ANCHORED INTO EXISTING PAVEMENT

## GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

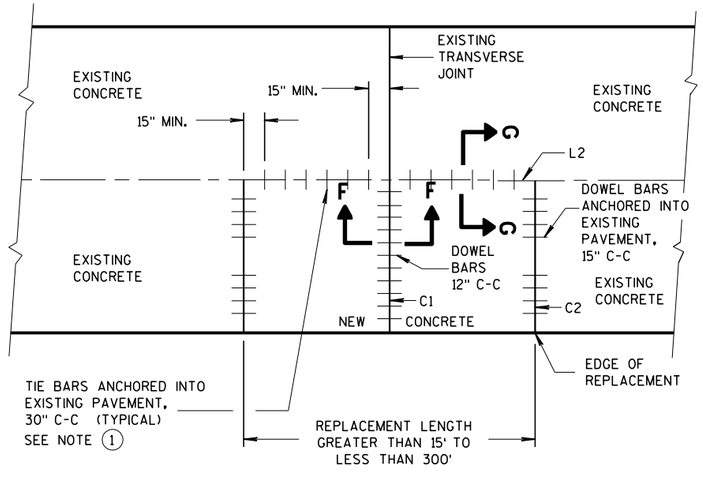
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.




PLAN VIEW

## SINGLE LANE CONCRETE PAVEMENT REPAIR




PLAN VIEW

## SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

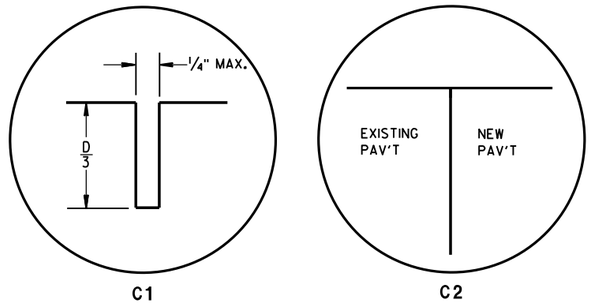
## CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

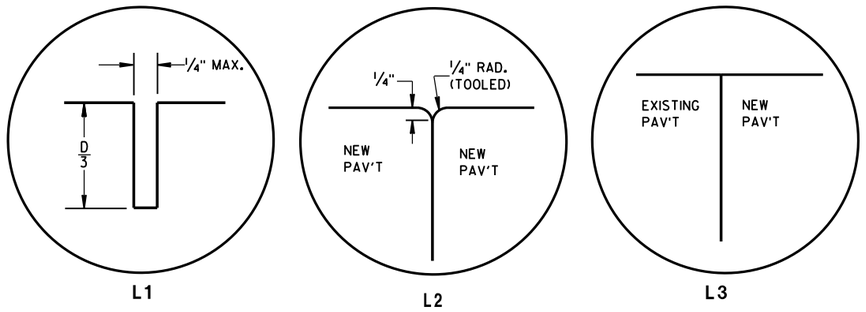
APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA



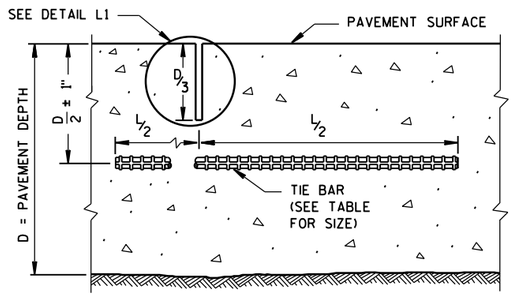

6
S.D.D. 13 C 9-15c




## TRANSVERSE JOINTS

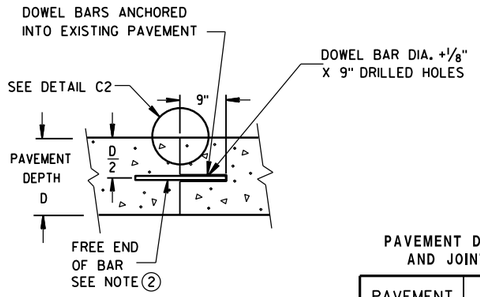



## LONGITUDINAL JOINTS




SECTION C-C

## SAWED JOINT




SECTION D-D

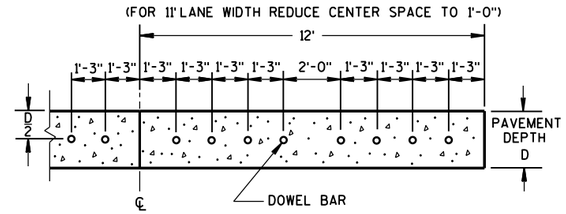
## GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.




SECTION E-E

## SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

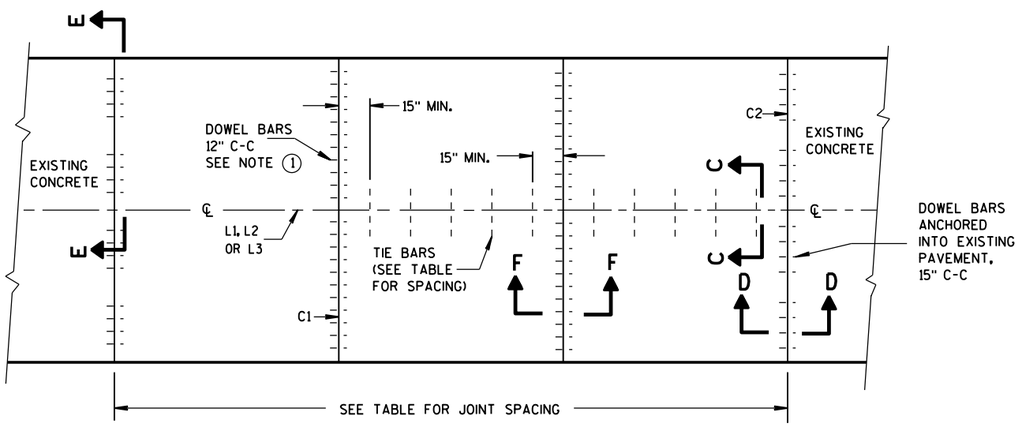
| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 5½", 6, 6 ½" | NONE | 12' |
| 7, 7 ½" | 1" | 14' |
| 8, 8 ½" | 1 ¼" | 15' |
| 9, 9 ½" | 1 ¼" | 15' |
| 10" & ABOVE | 1 ½" | 15' |

## TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24" ** |

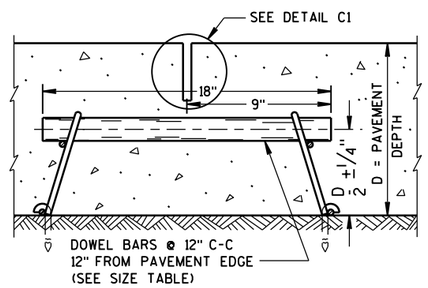
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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




PLAN VIEW

## CONCRETE BASE CONTRACTION JOINT LOCATIONS




SECTION F-F

## CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI





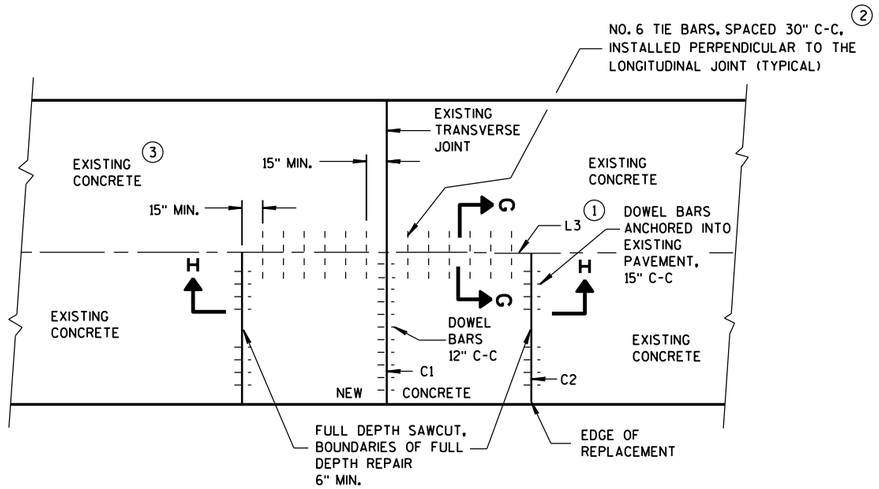
6
S.D.D. 13 C 15-6a

## GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.

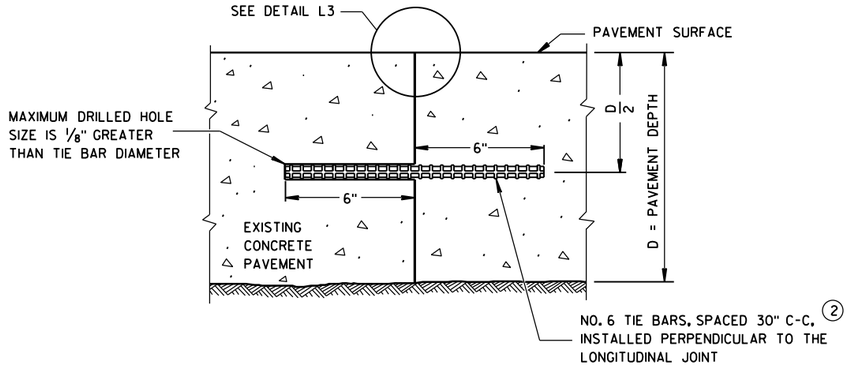
(2) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(3) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



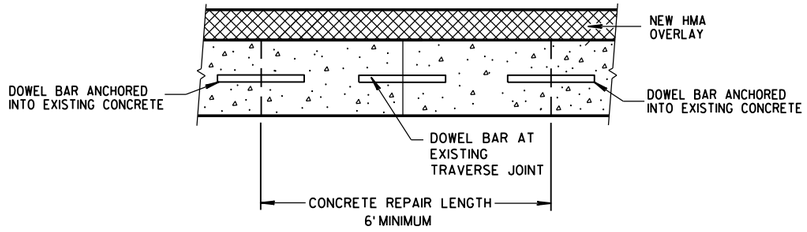

PLAN VIEW

### SINGLE LANE CONCRETE BASE REPAIR




SECTION G-G

### TIE BARS ANCHORED INTO EXISTING PAVEMENT



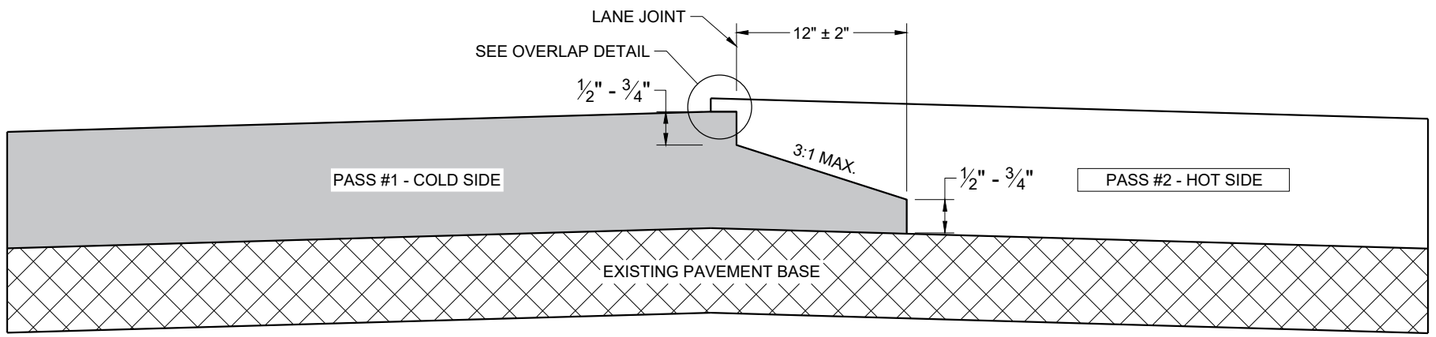

SECTION H-H

CONCRETE BASE

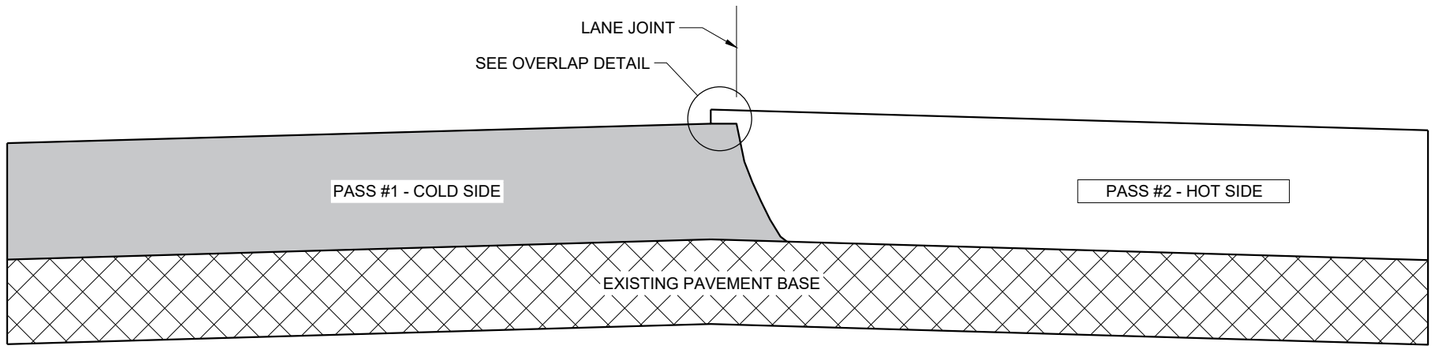
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEI
FHWA

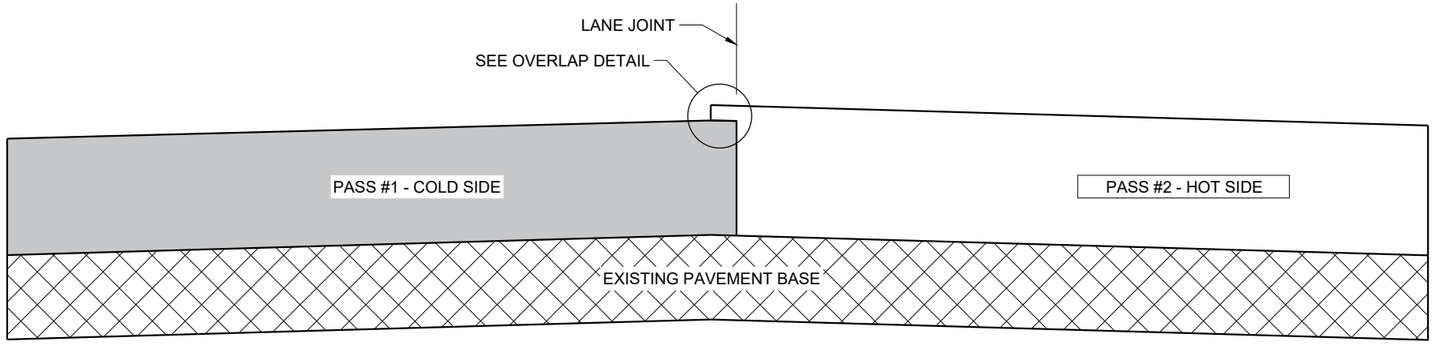

6
S.D.D. 13 C 15-6b




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

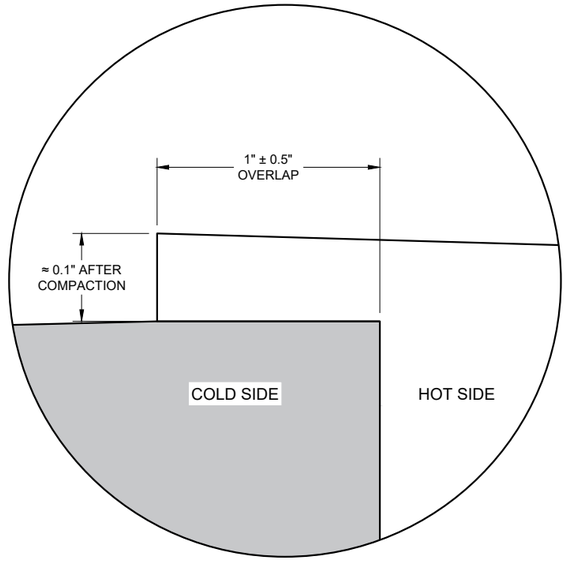
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.




**OVERLAP DETAIL (TYPICAL)**

6

6

SDD 13C19 - 03

SDD 13C19 - 03

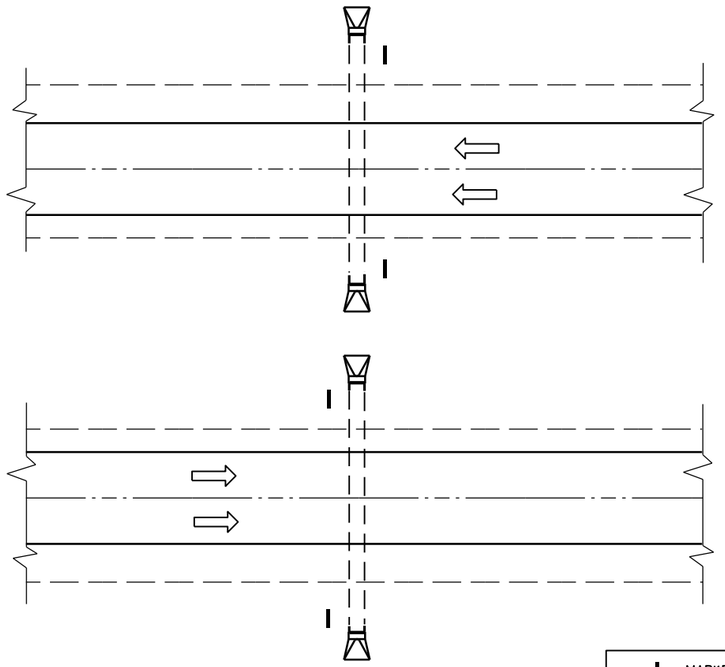
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

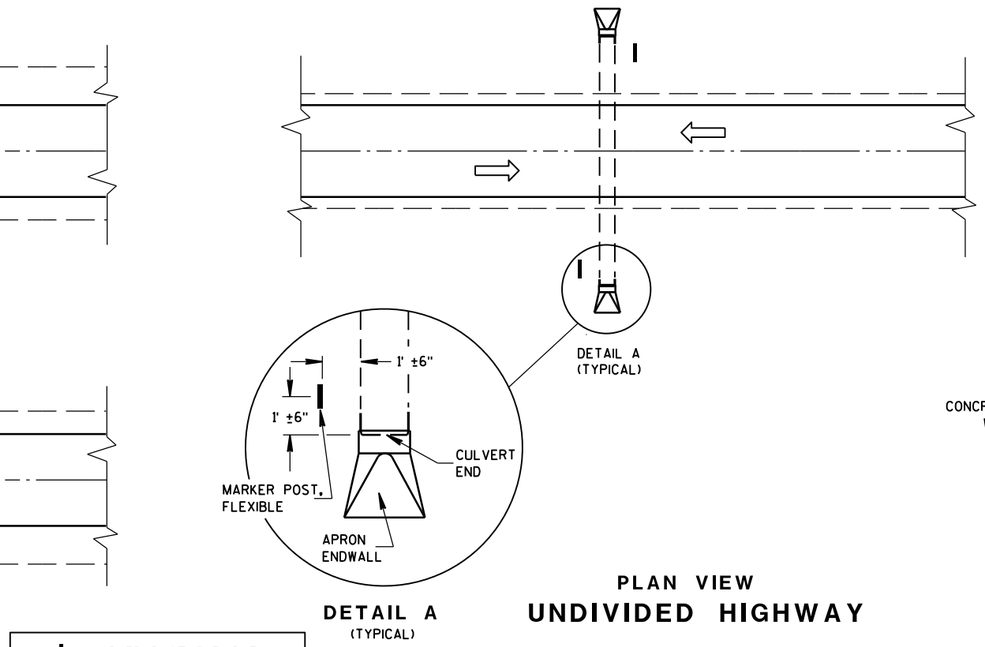
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



PLAN VIEW

## DIVIDED HIGHWAY




DETAIL A
(TYPICAL)

PLAN VIEW

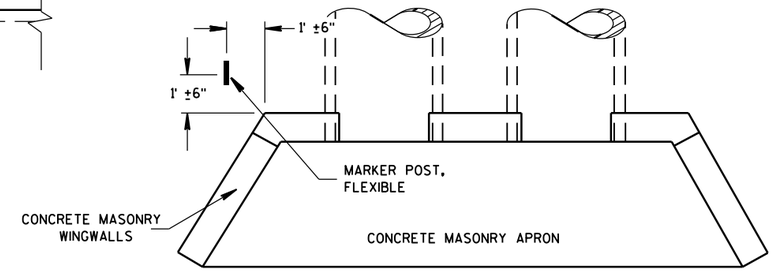
## UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

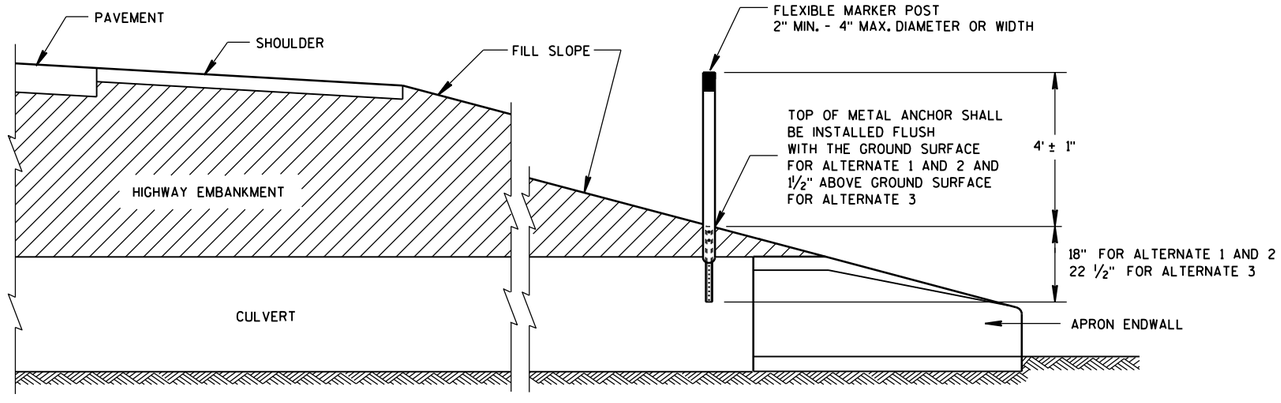
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




PLAN VIEW

## CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

## FLEXIBLE MARKER POST LOCATION




CROSS SECTION

## FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

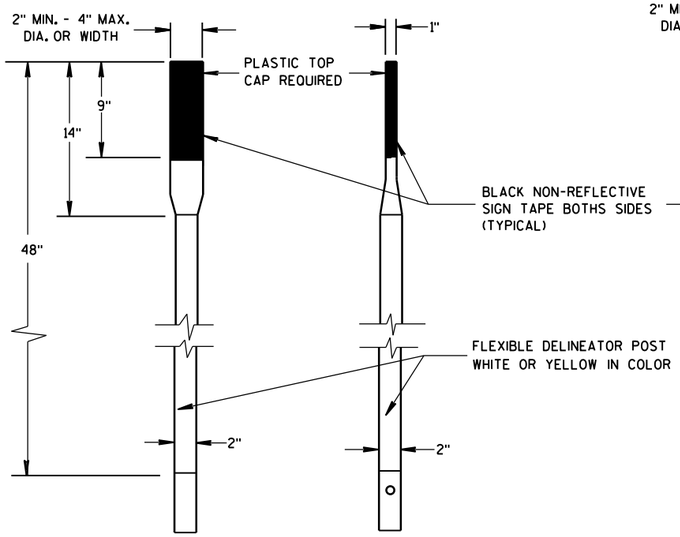


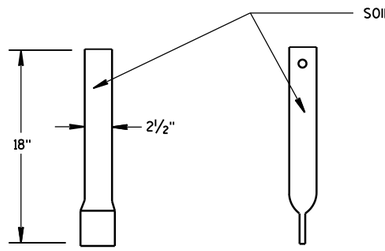


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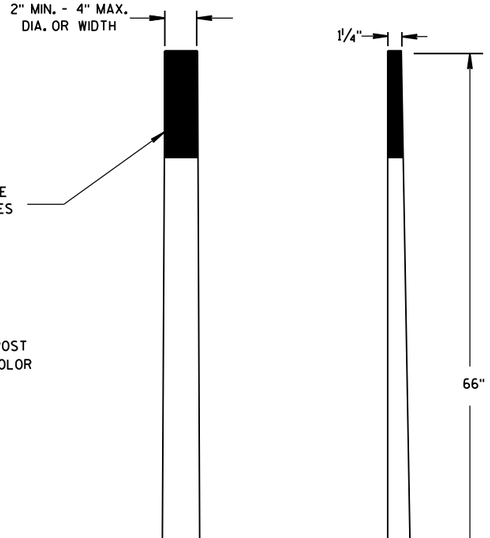
S.D.D. 15 A 3-2a



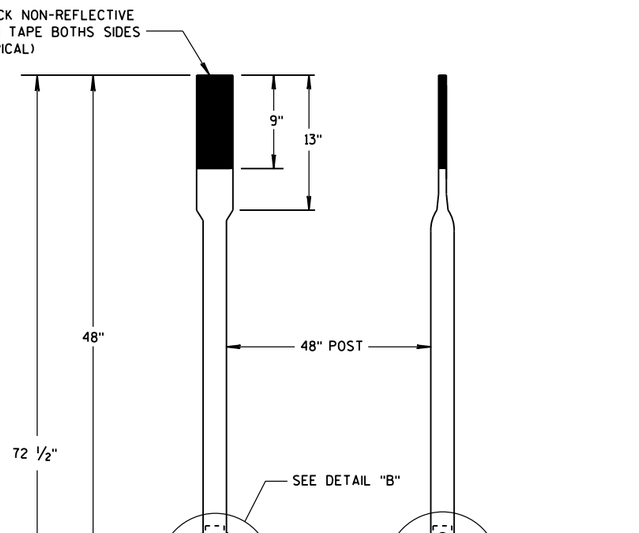

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

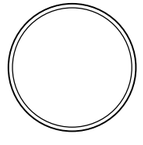
ALTERNATE 2



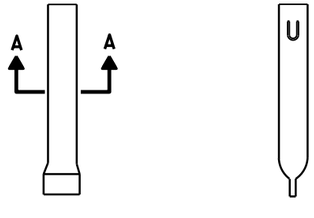

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POSTS

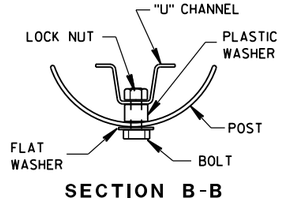


SECTION A-A

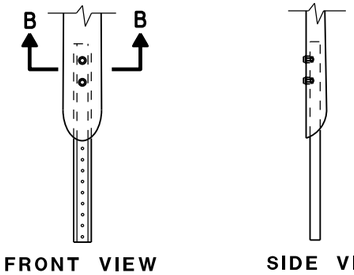



FRONT VIEW SIDE VIEW

ALTERNATE 1

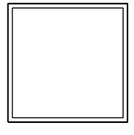



SECTION B-B

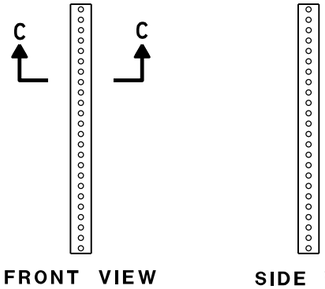



FRONT VIEW SIDE VIEW

ALTERNATE 2



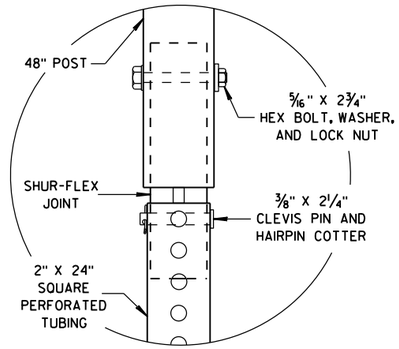
SECTION C-C



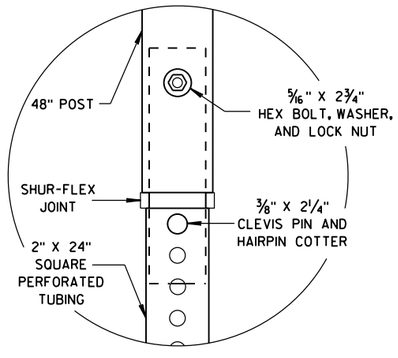

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS




DETAIL B




DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA



6

S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b

## GENERAL NOTES

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

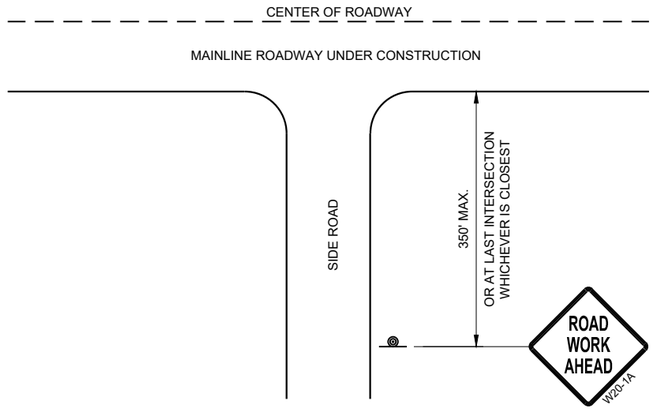
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



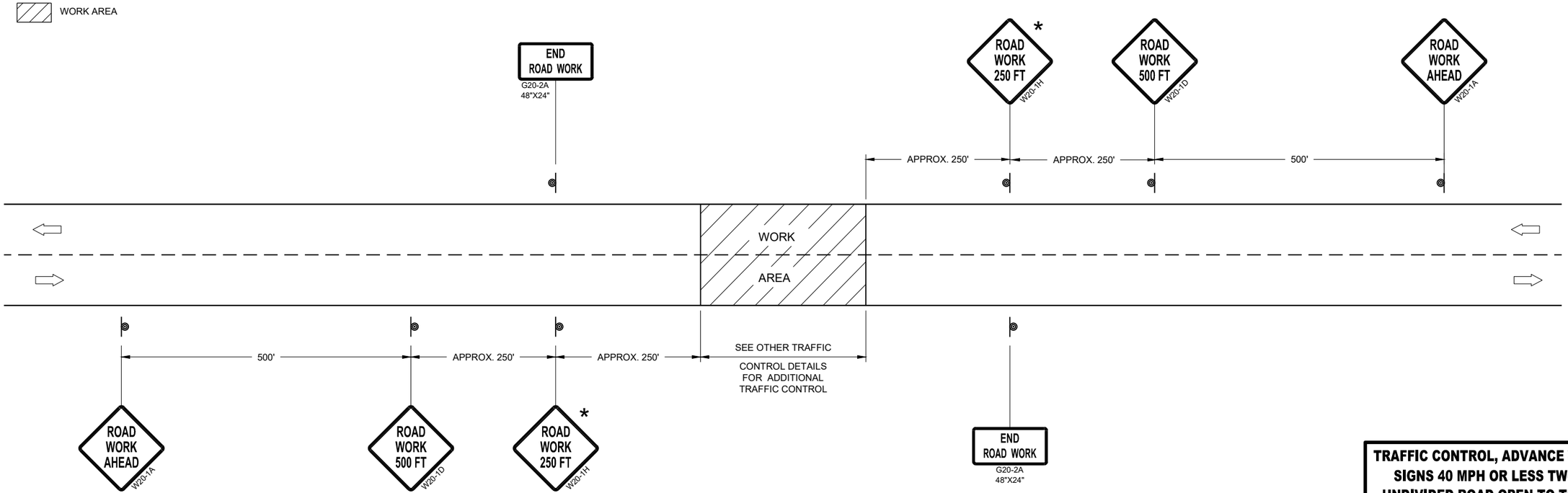

**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA




**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS**

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFICE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

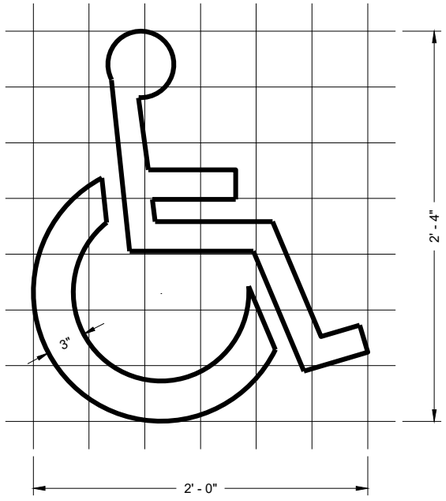



6

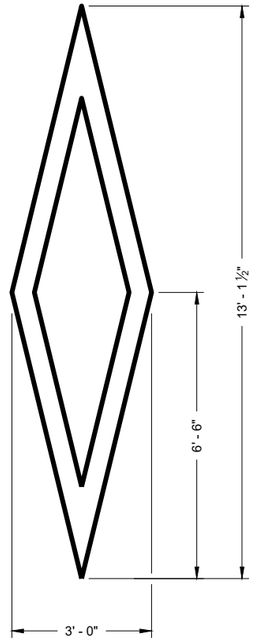

SDD 15C05 - 05

## GENERAL NOTES

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




**HANDICAP SYMBOL**




**PREFERENTIAL LANE SYMBOL**

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

**PAVEMENT MARKING SYMBOLS**

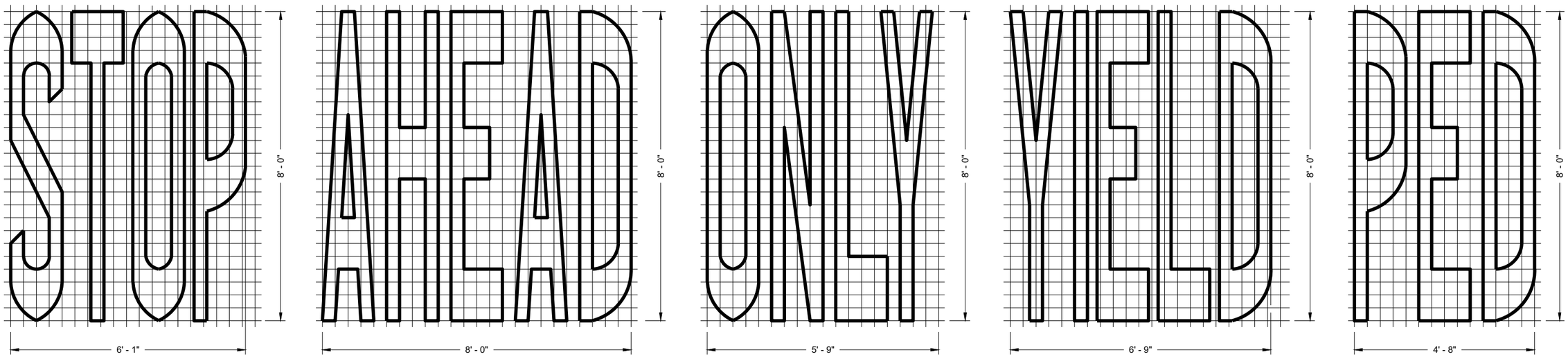
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

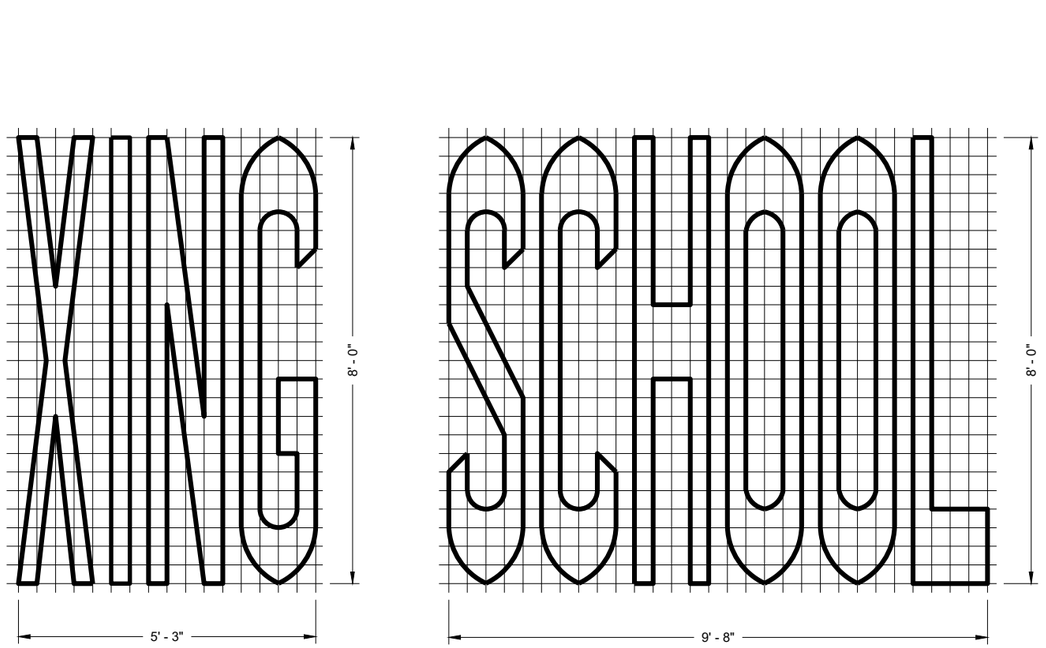
APPROVED

November 2019
DATE

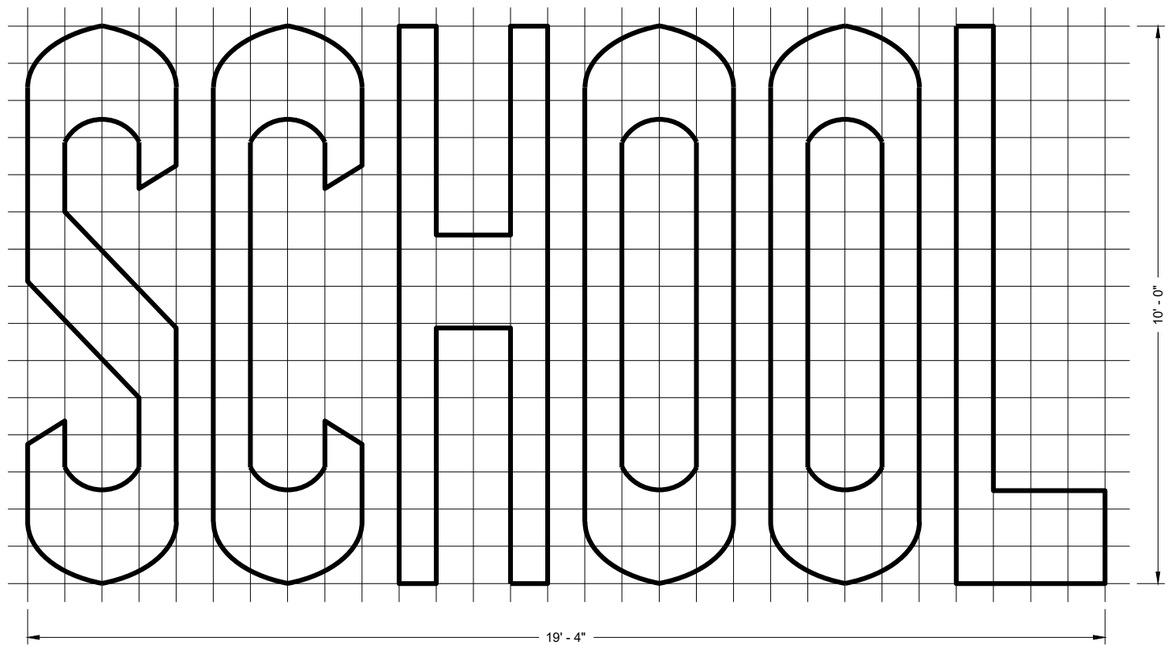
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA




SINGLE LANE




TWO - LANE

## GENERAL NOTES

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

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

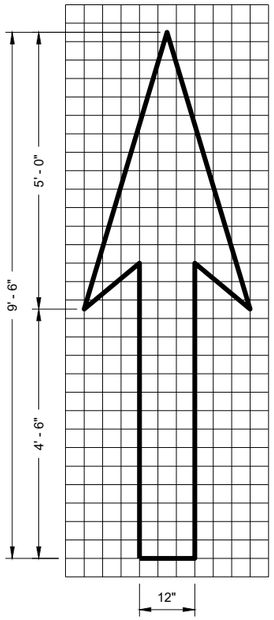



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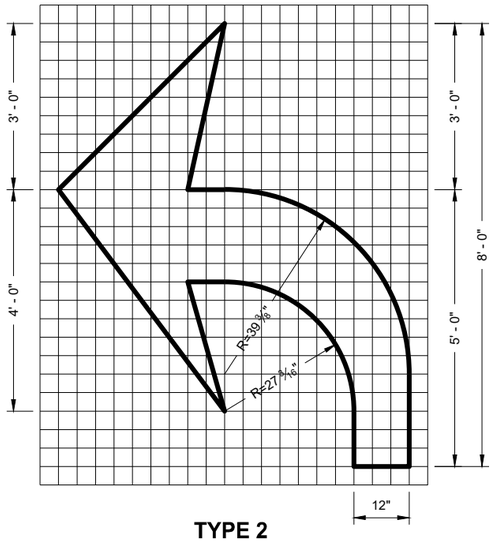

SDD 15C07 - 15b

## GENERAL NOTES

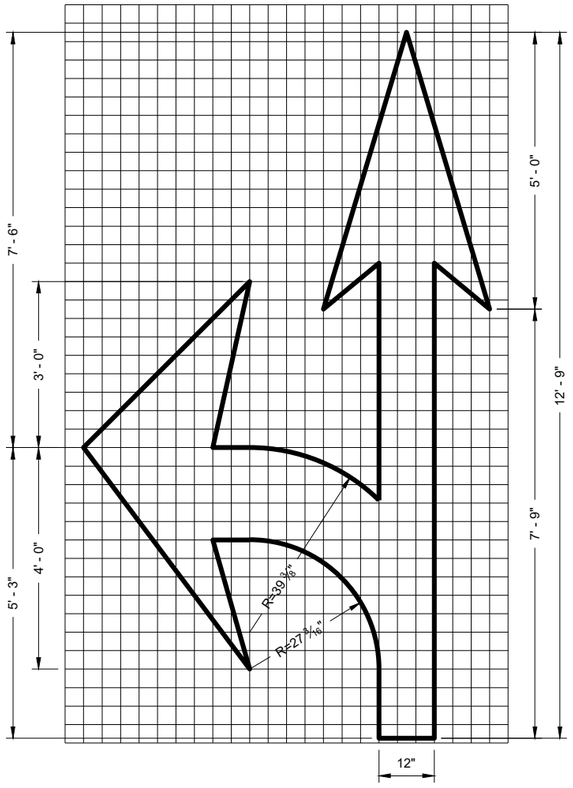
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



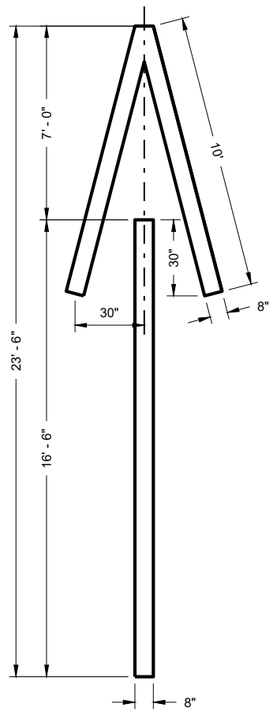

TYPE 1



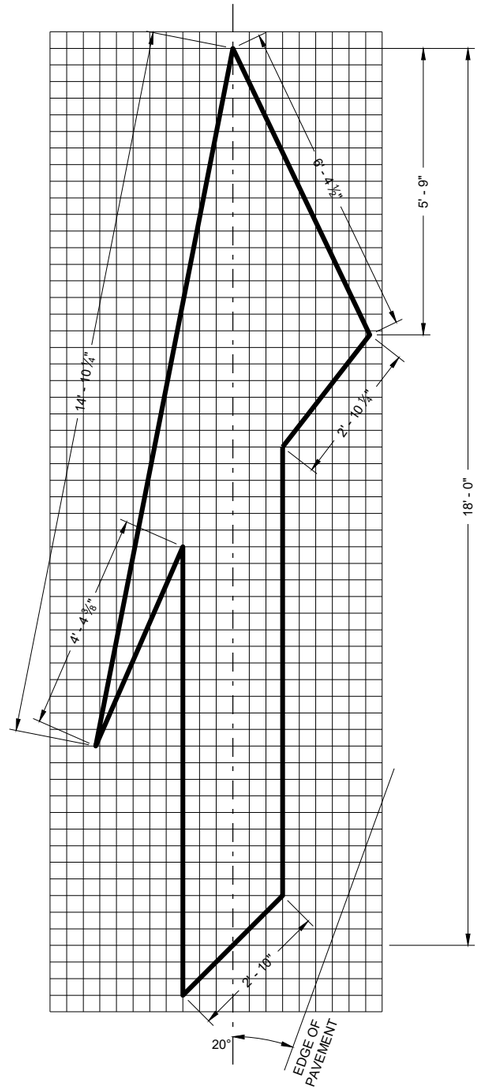

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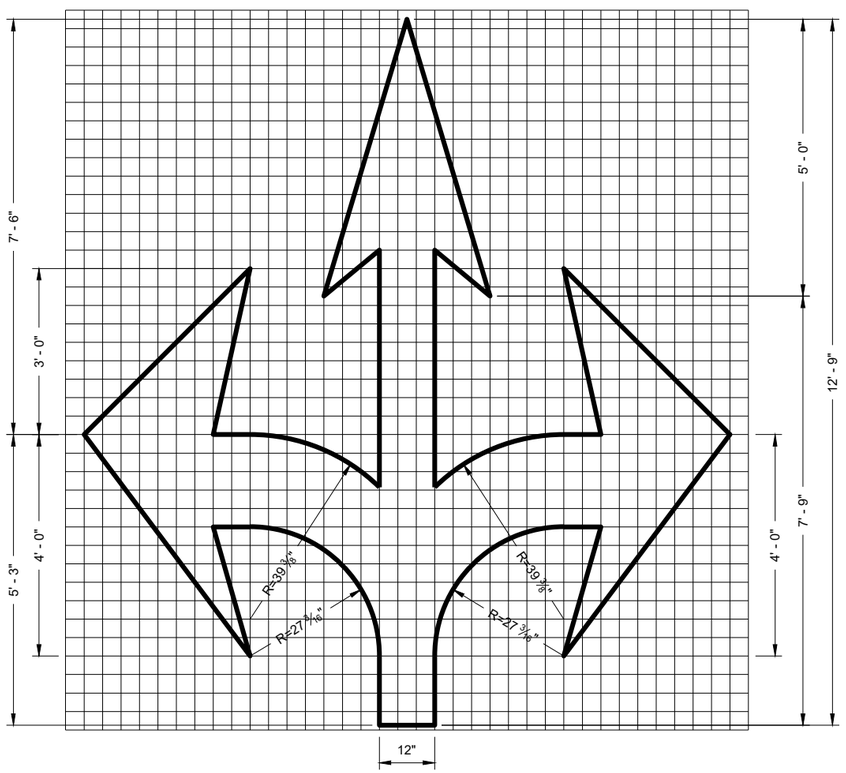

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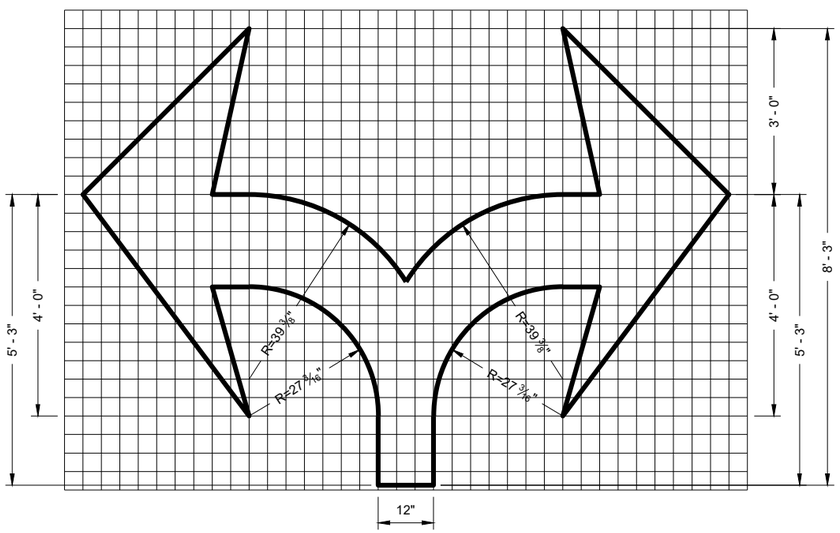

TYPE 4




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

**PAVEMENT MARKING ARROWS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

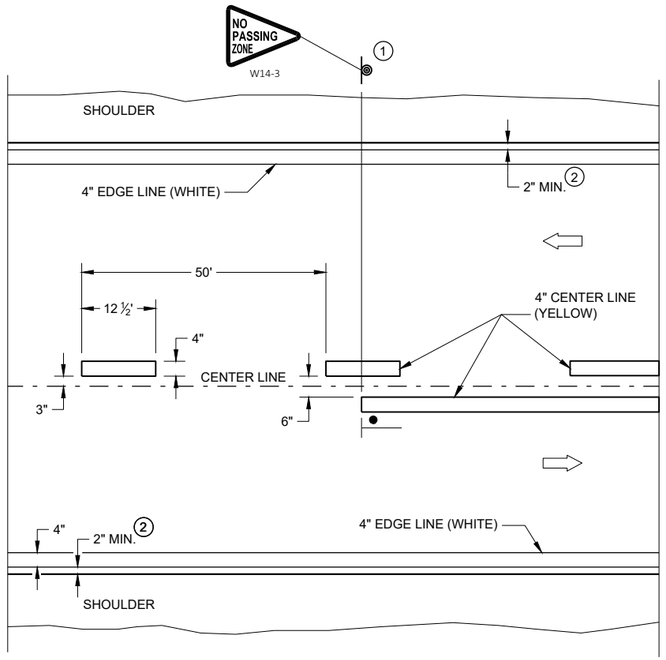


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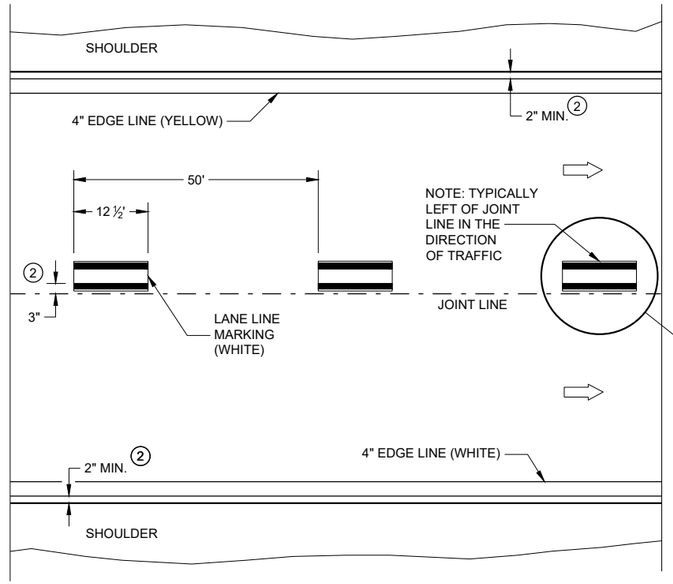
SDD 15C07 - 15c

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SDD 15C07 - 15c

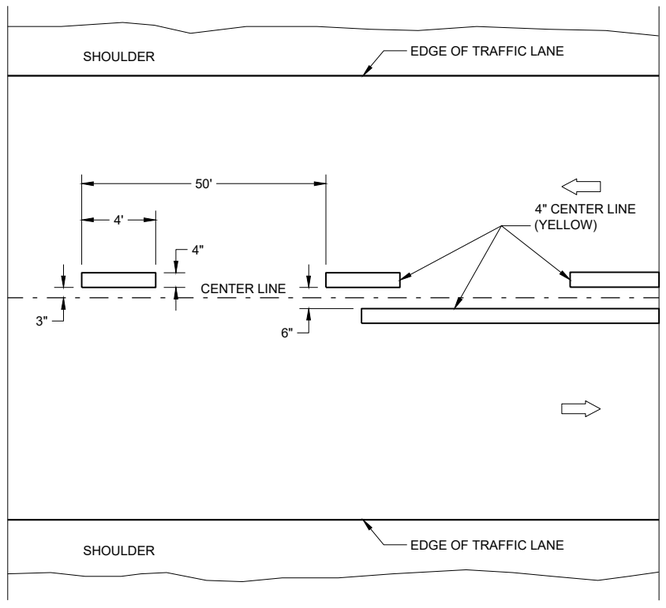



**TWO WAY TRAFFIC**

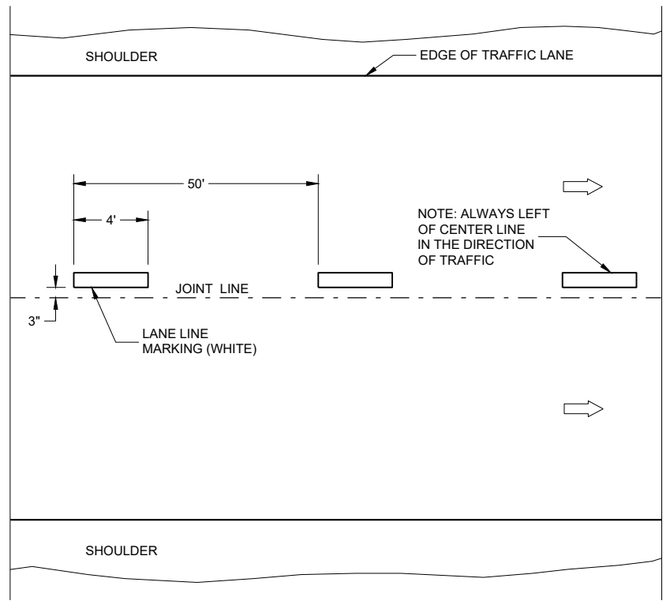



**ONE WAY TRAFFIC**

## PERMANENT PAVEMENT MARKING




**TWO WAY TRAFFIC**




**ONE WAY TRAFFIC**

## TEMPORARY PAVEMENT MARKING

## GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

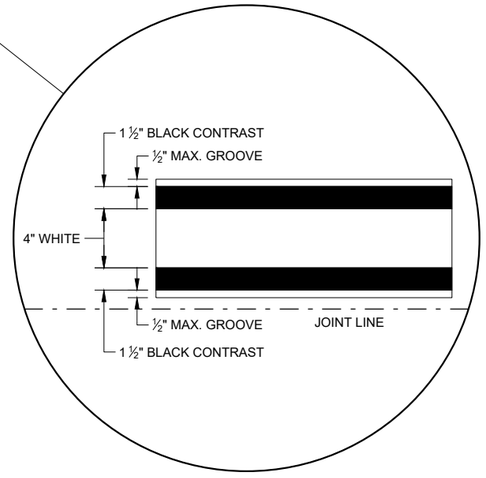
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

## LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC




**LONGITUDINAL MARKING (MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA



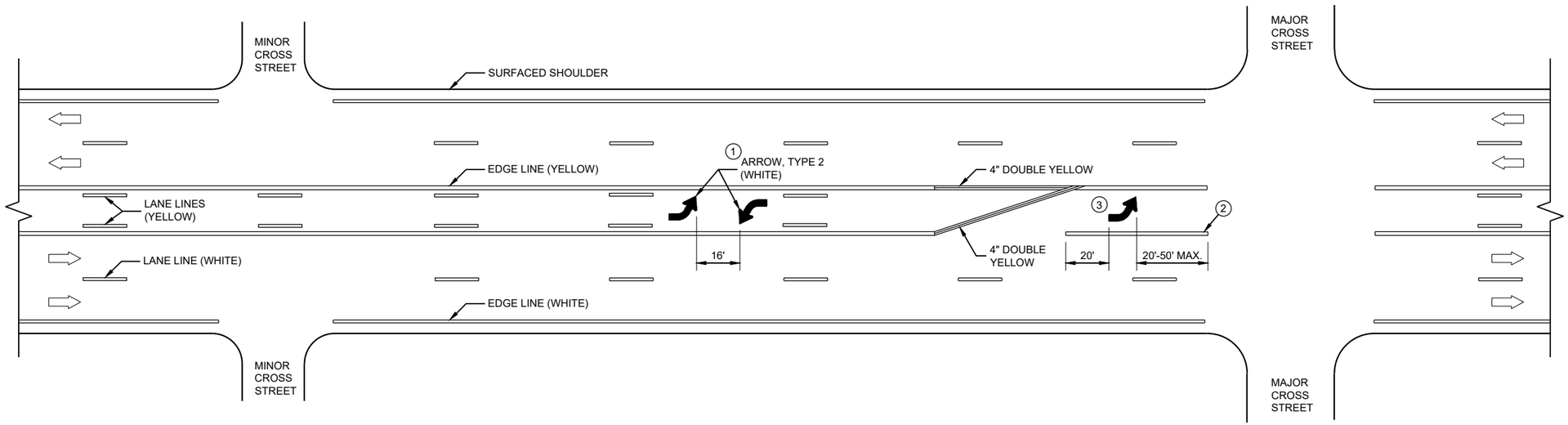
SDD 15C08 - 20a

SDD 15C08 - 20a

## GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC




## TWO WAY LEFT TURN LANE

6

SDD 15C08 - 20b

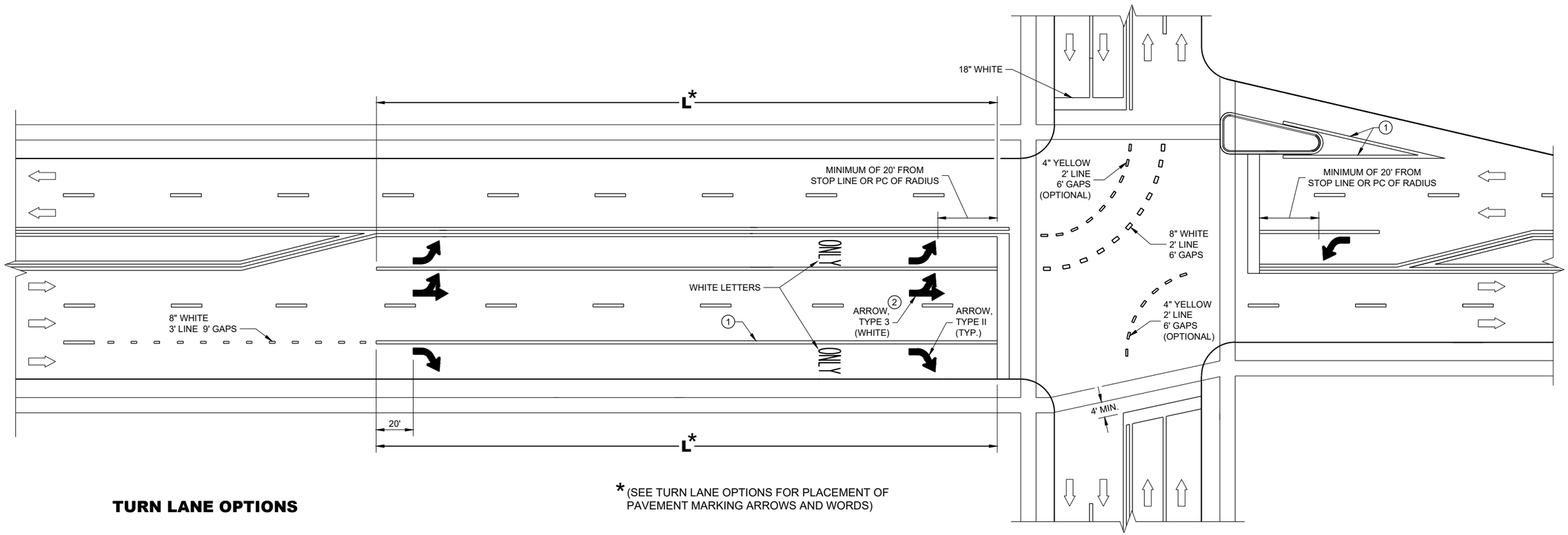
**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6

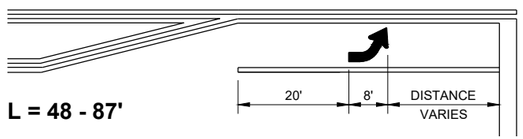
SDD 15C08 - 20b



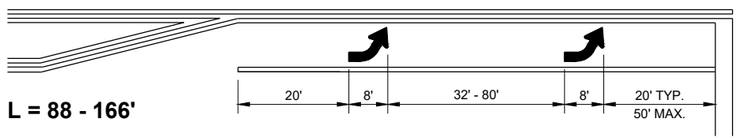

* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

## TURN LANE OPTIONS

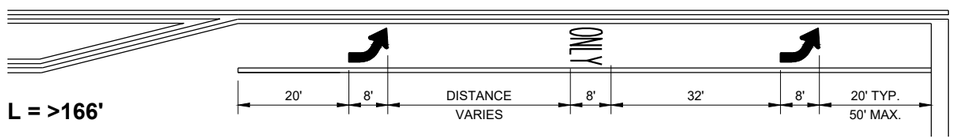
LENGTH OF TURN BAY ( **L** ) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS




**L = 48 - 87'**




**L = 88 - 166'**




**L = >166'**

## GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

**L** = LENGTH OF TURN BAY

**PAVEMENT MARKING (TURN LANES)**

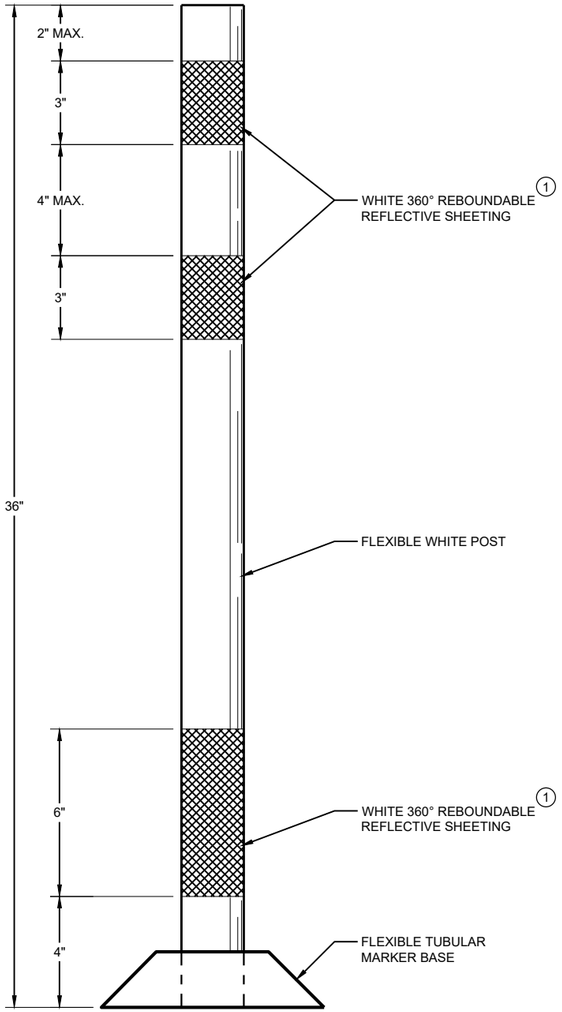
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



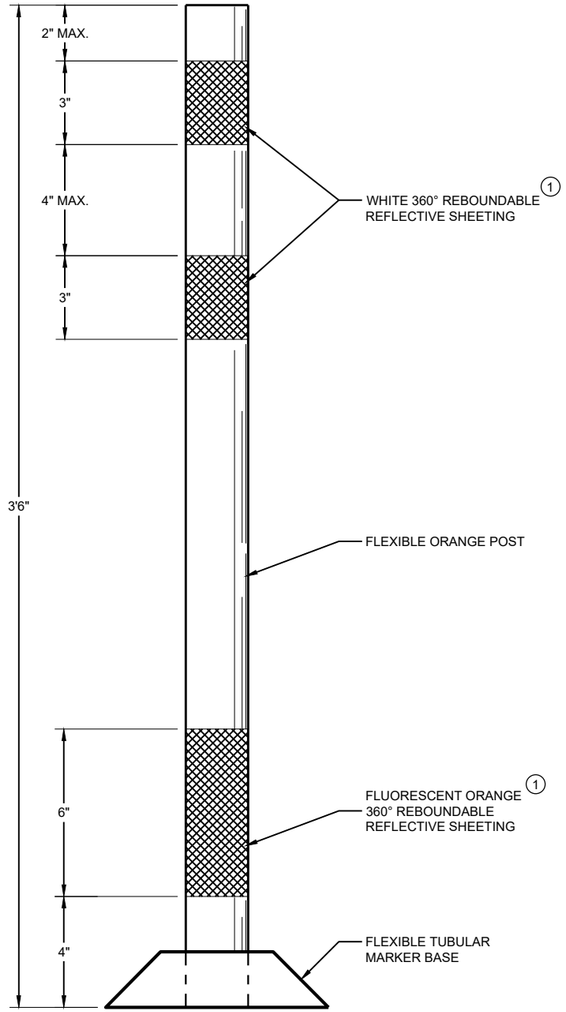


6

SDD 15C08 - 20c




**FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER**




**FLEXIBLE TUBULAR MARKER POST WORK ZONE**

## GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15C11 - 07a

**CHANNELIZING DEVICES**
**FLEXIBLE TUBULAR MARKER POST**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

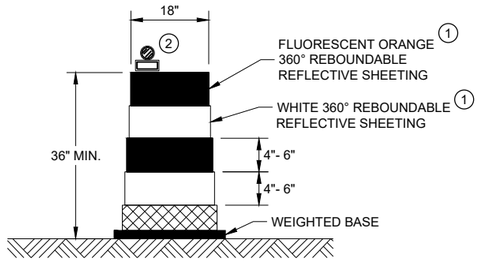


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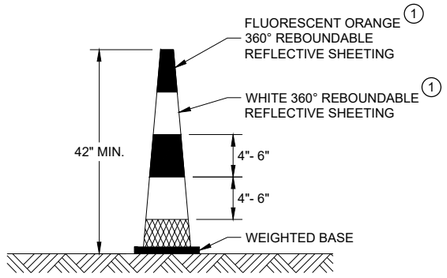
SDD 15C11 - 07a

## 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.

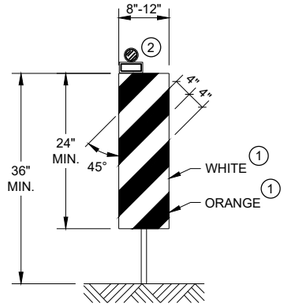



### DRUM



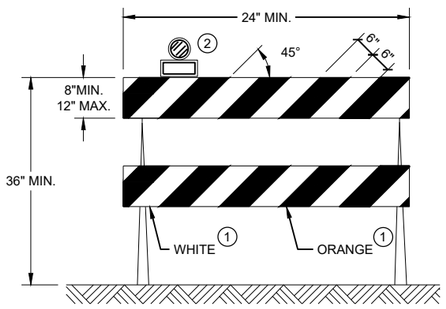

### 42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



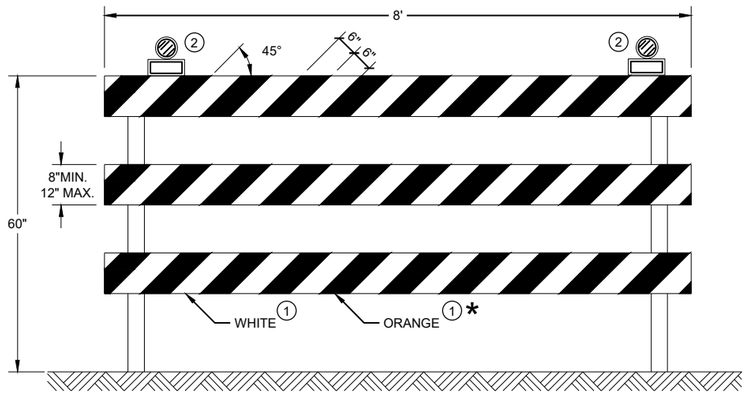

### VERTICAL PANEL

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.

**CHANNELIZING DEVICES**
**DRUMS, CONES, BARRICADES**
**AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

## LEGEND

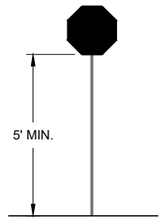
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF




**STOP/SLOW PADDLE ON SUPPORT STAFF**

## GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

## FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

## TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

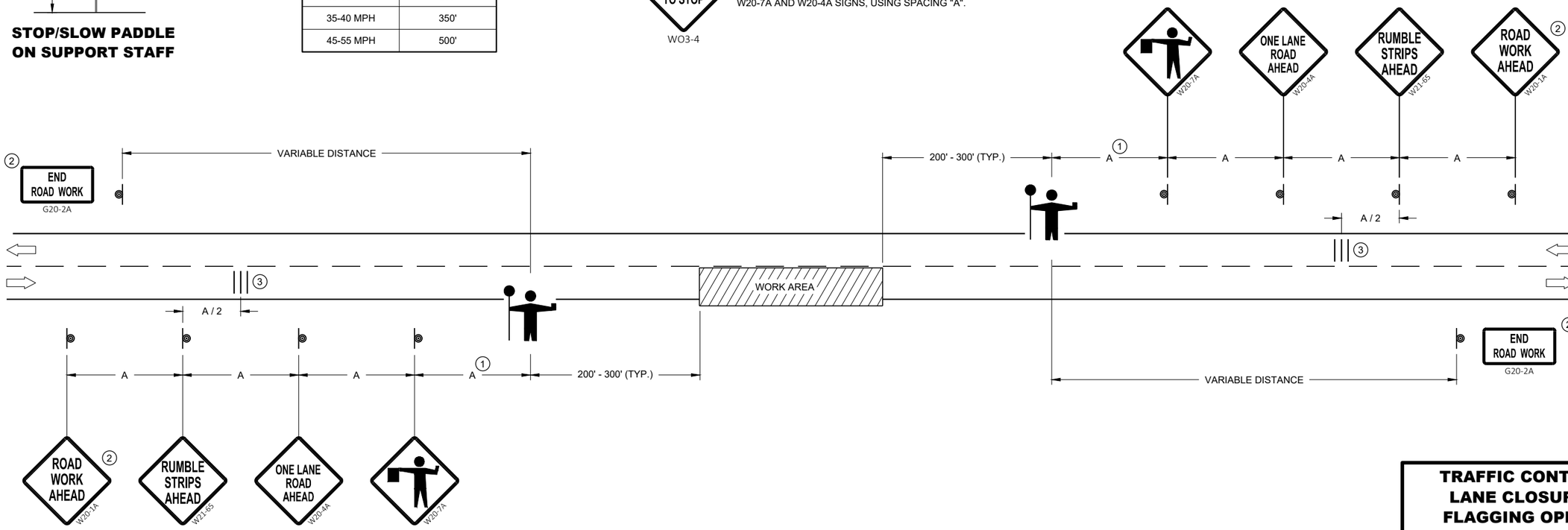
## SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING "A" |
|---|---|
| 25-30 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |




WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".




**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

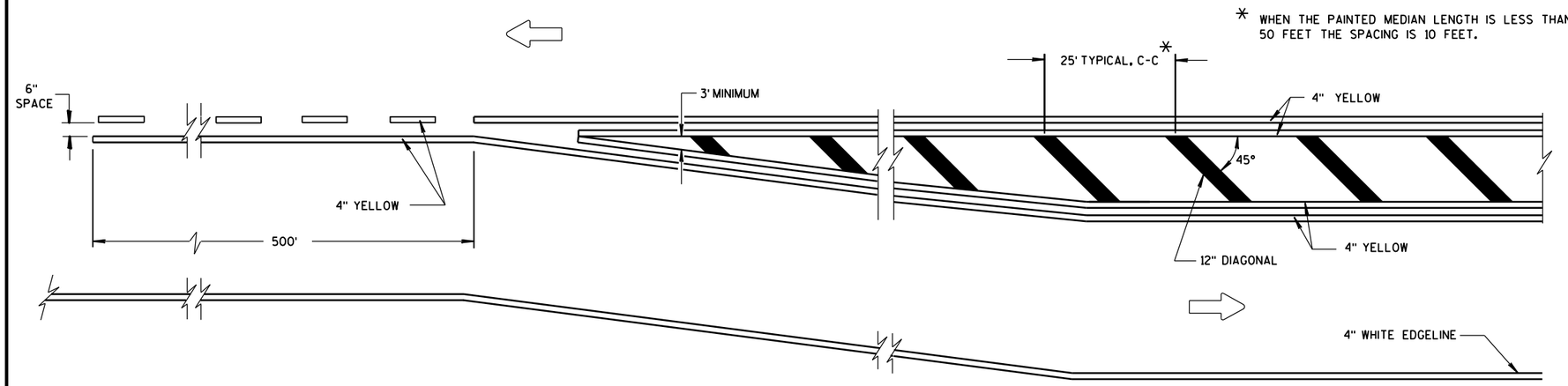
FHWA



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SDD 15C12 - 07

SDD 15C12 - 07

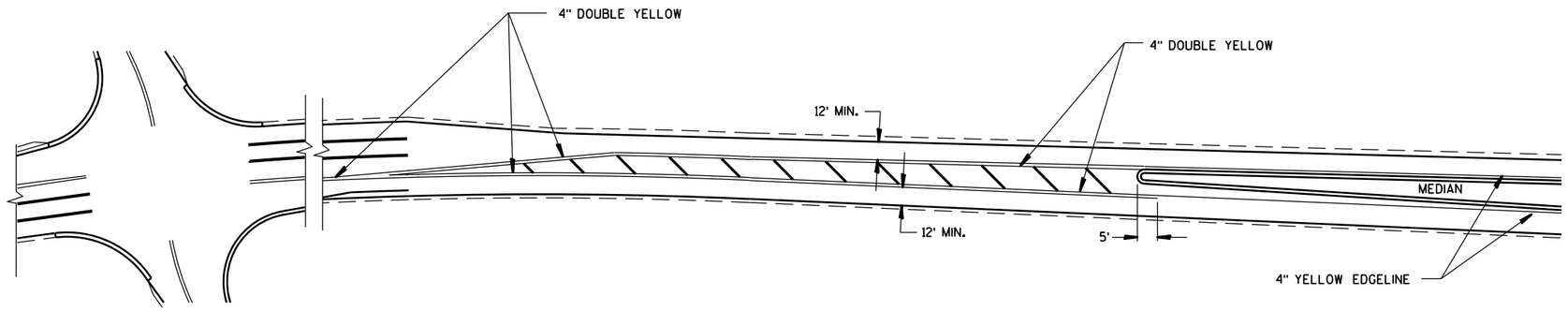



## MEDIAN ISLAND DETAIL

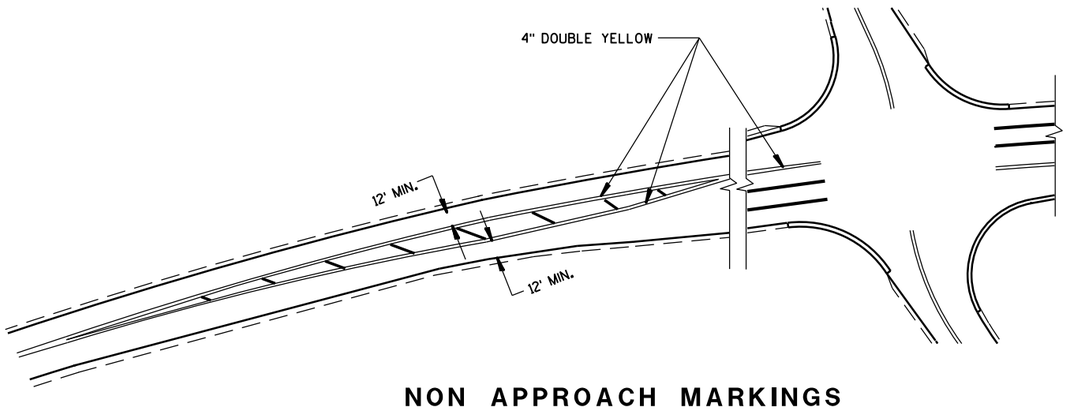
## GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL




## APPROACH MARKINGS FOR OTHER MEDIAN TYPES




## NON APPROACH MARKINGS

| | |
|---|---|
| MEDIAN ISLAND MARKING | |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>June 2017<br>DATE<br>FHWA | /S/ Matthew Rauch<br>STATE SIGNING AND MARK 163 EER |

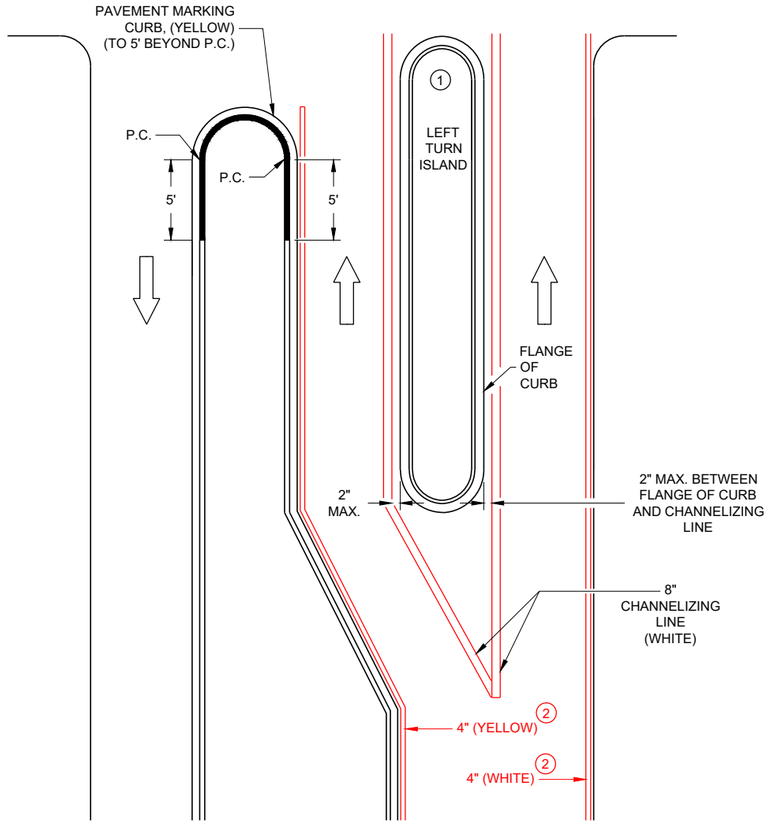
6

S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4

| REQUIREMENTS FOR EDGE LINES | | |
|---|---|---|
| POSTED SPEED | IS THERE CONTINUOUS LIGHTING? | |
| | YES | NO |
| ≤ 30 MPH | NO | OPTIONAL |
| 35 OR 40 MPH | OPTIONAL | RECOMMENDED |
| ≥ 45 MPH | RECOMMENDED | REQUIRED |




**LEFT TURN & MEDIAN ISLAND**

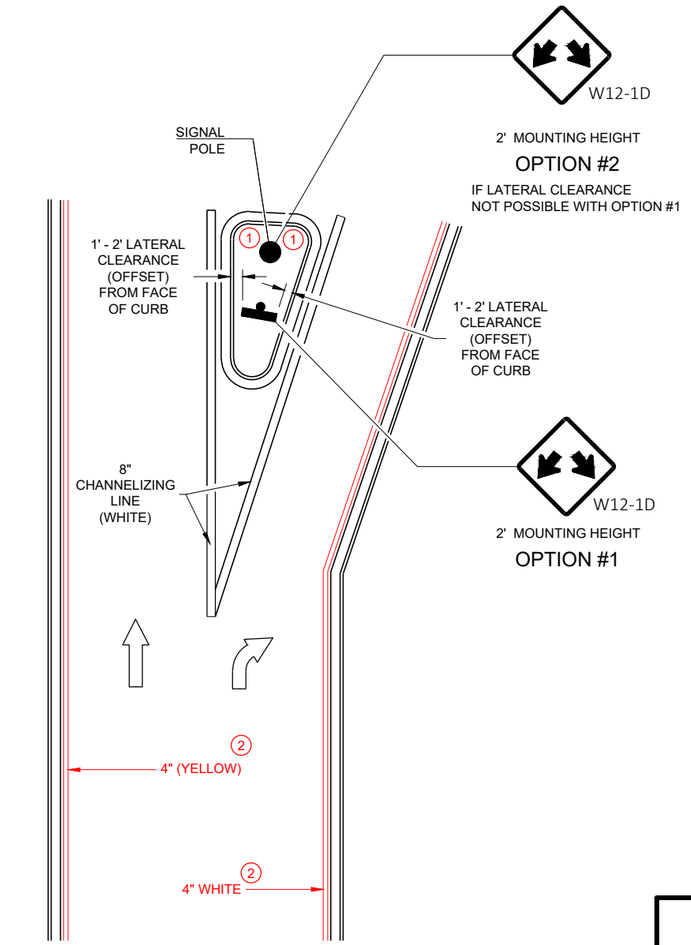
## GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL




**RIGHT TURN ISLAND**

**DOUBLE ARROW**
**WARNING SIGN PLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

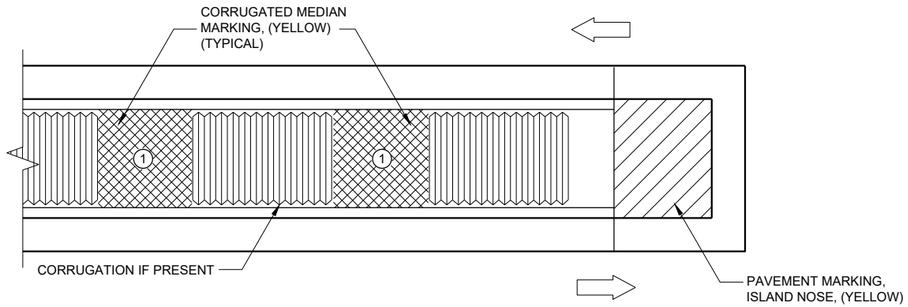


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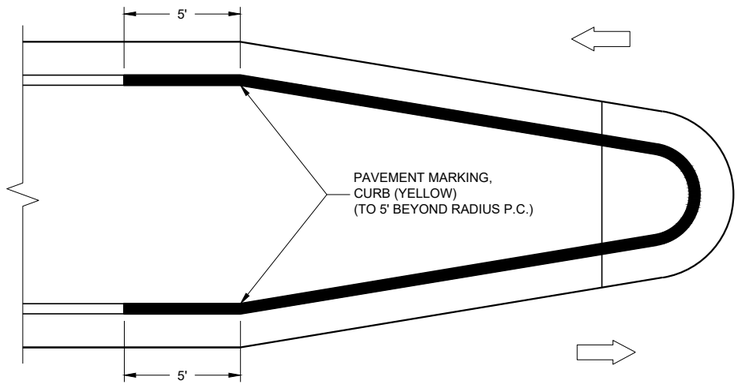
SDD 15C27 - 03a

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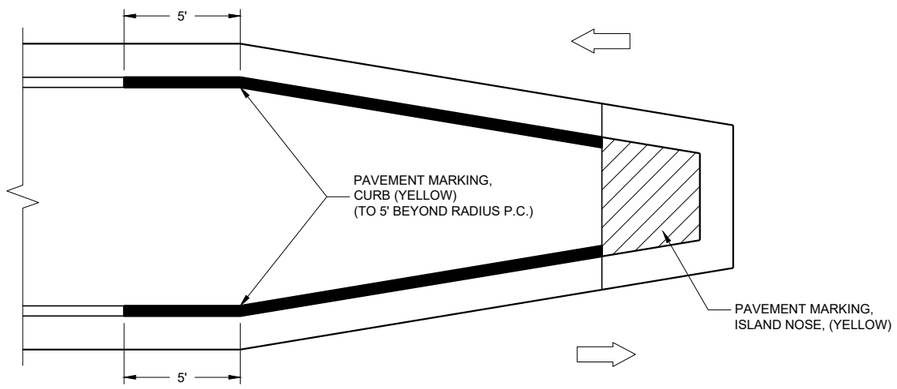
SDD 15C27 - 03a




MEDIAN ISLAND WITH SQUARE BLUNT NOSE




MEDIAN ISLAND WITH ROUND BLUNT NOSE

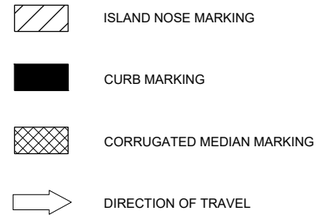



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF**
**PAVEMENT MARKING ON MEDIAN ISLANDS**

## GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.




**PAVEMENT MARKINGS**
**(ISLANDS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



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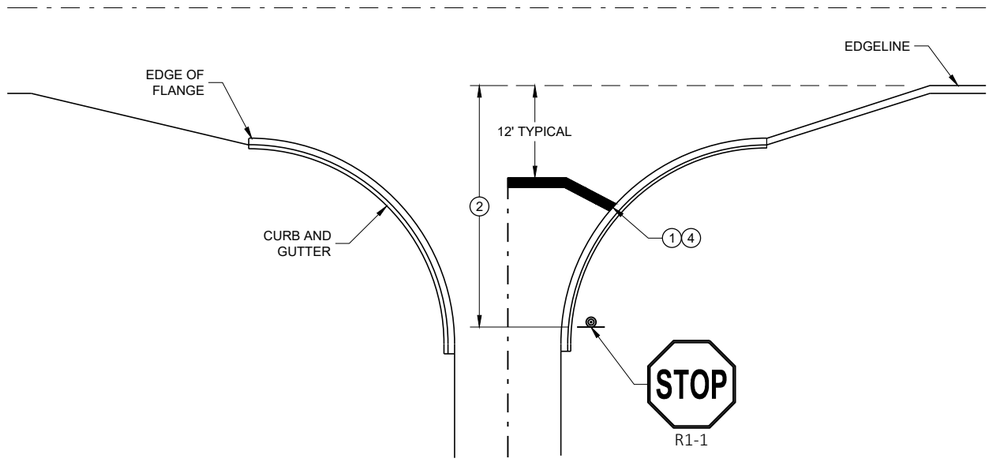
SDD 15C27 - 03b

SDD15C27 - 03b

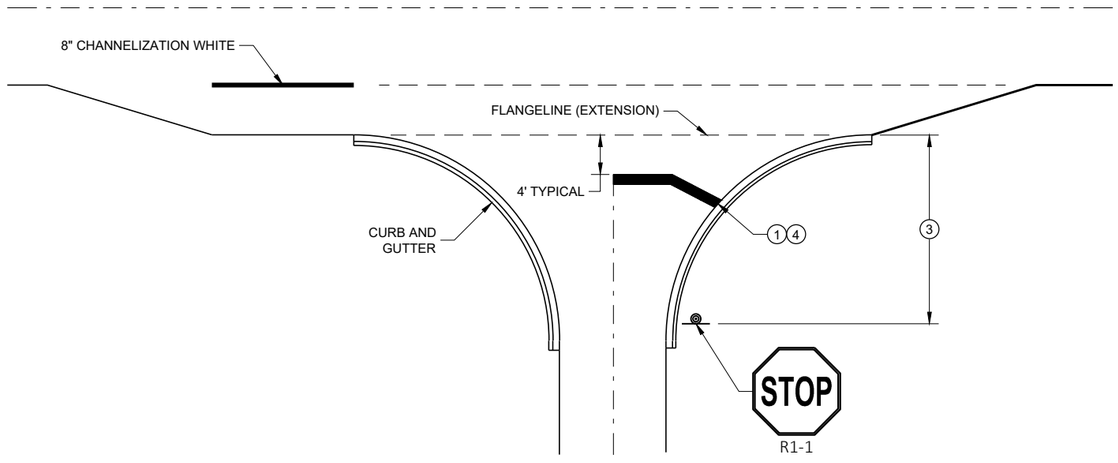
## GENERAL NOTES

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

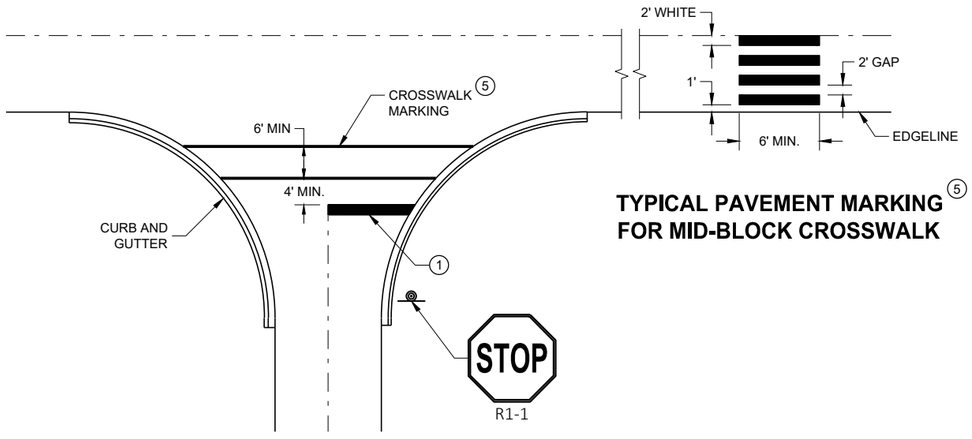
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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.




**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**

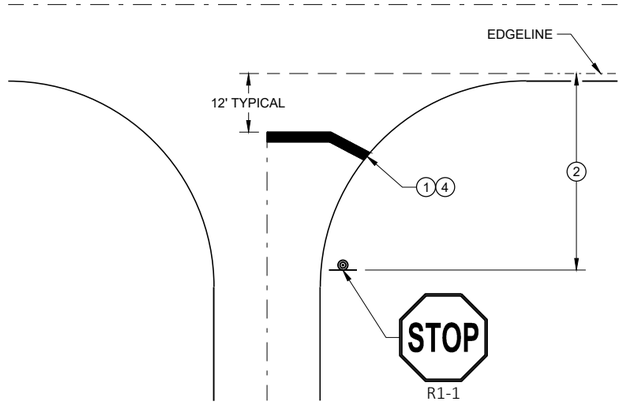



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**




**TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5**

**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**




**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



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SDD 15C33 - 04

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SDD 15C33 - 04

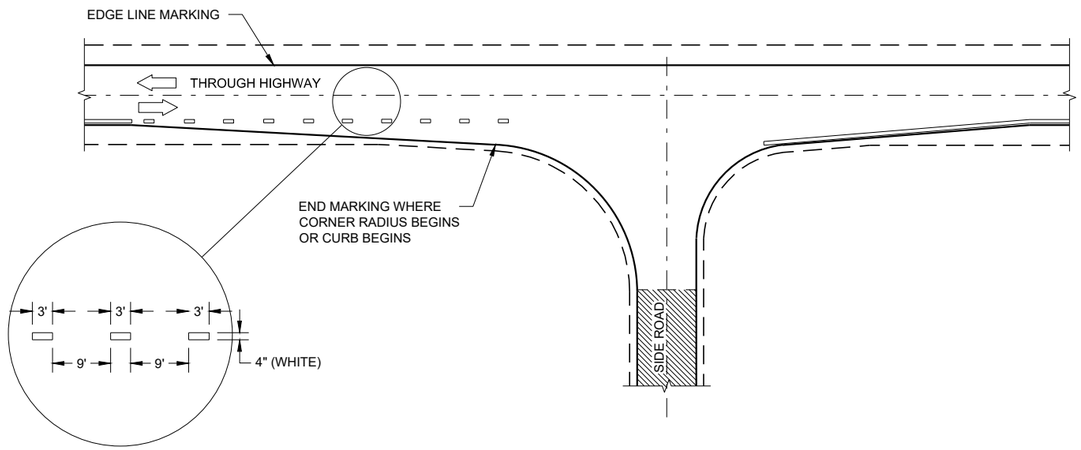
## GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

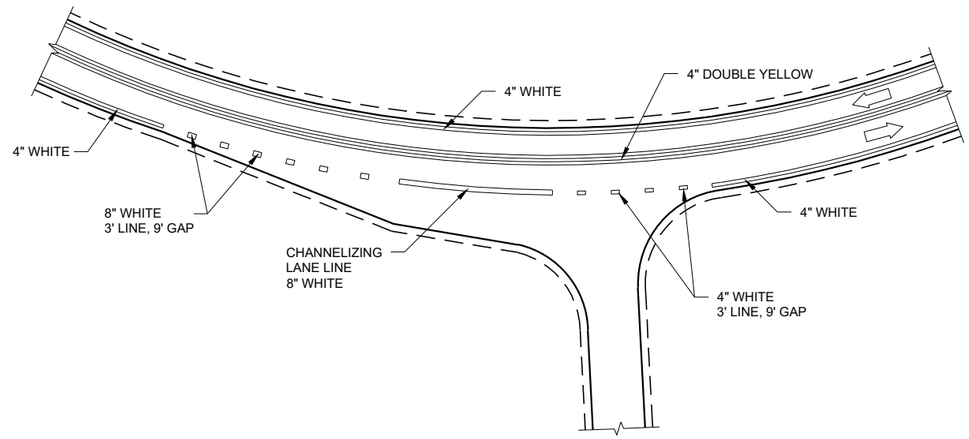
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

## LEGEND

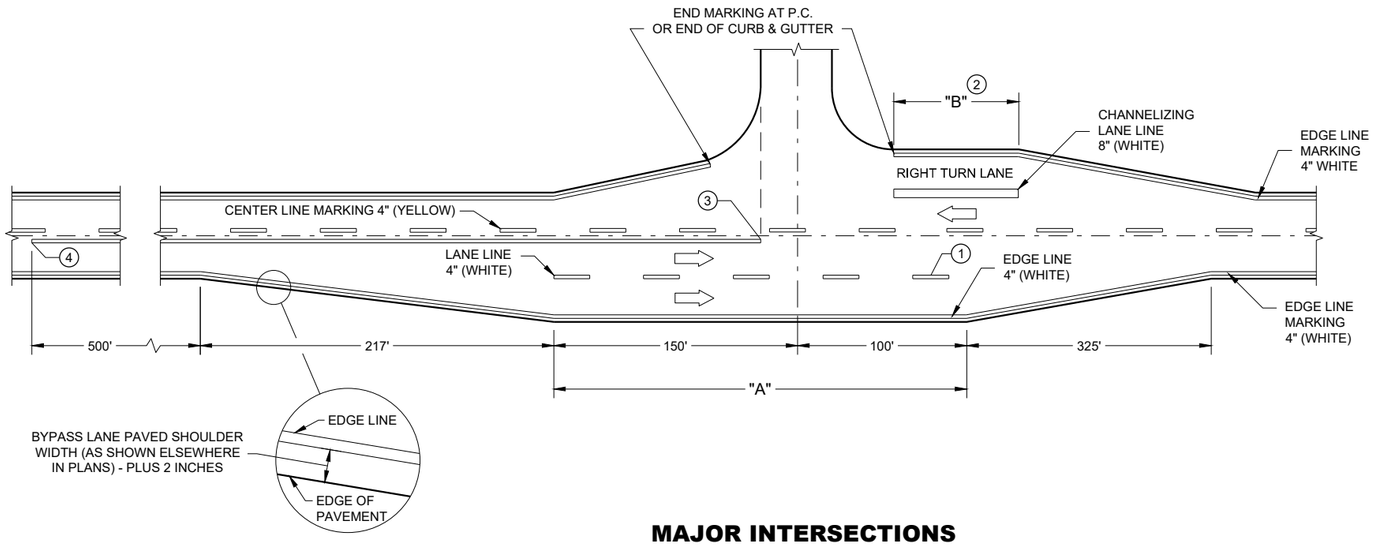
DIRECTION OF TRAVEL




**MINOR INTERSECTION**




**INTERSECTION ON OUTSIDE OF CURVE**




**MAJOR INTERSECTIONS**

**(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

**PAVEMENT MARKING (INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

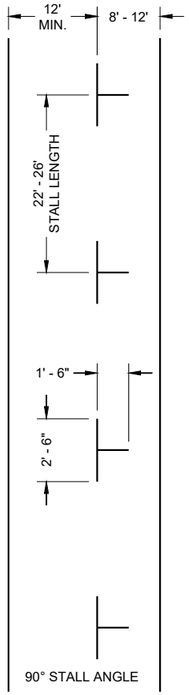


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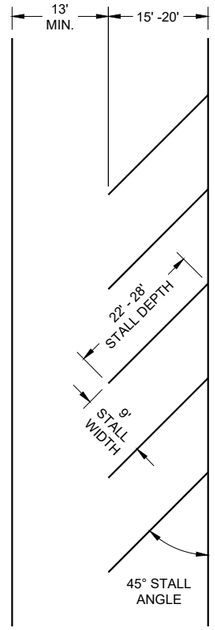
SDD 15C35 - 04a

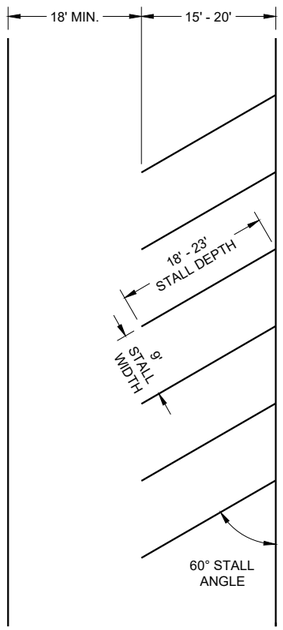
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SDD 15C35 - 04a



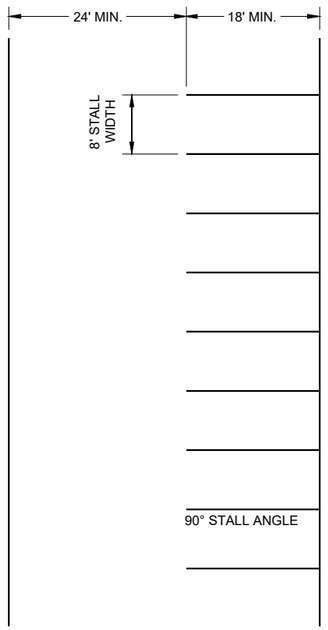

## PARALLEL PARKING




## ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)




## PARKING LOTS

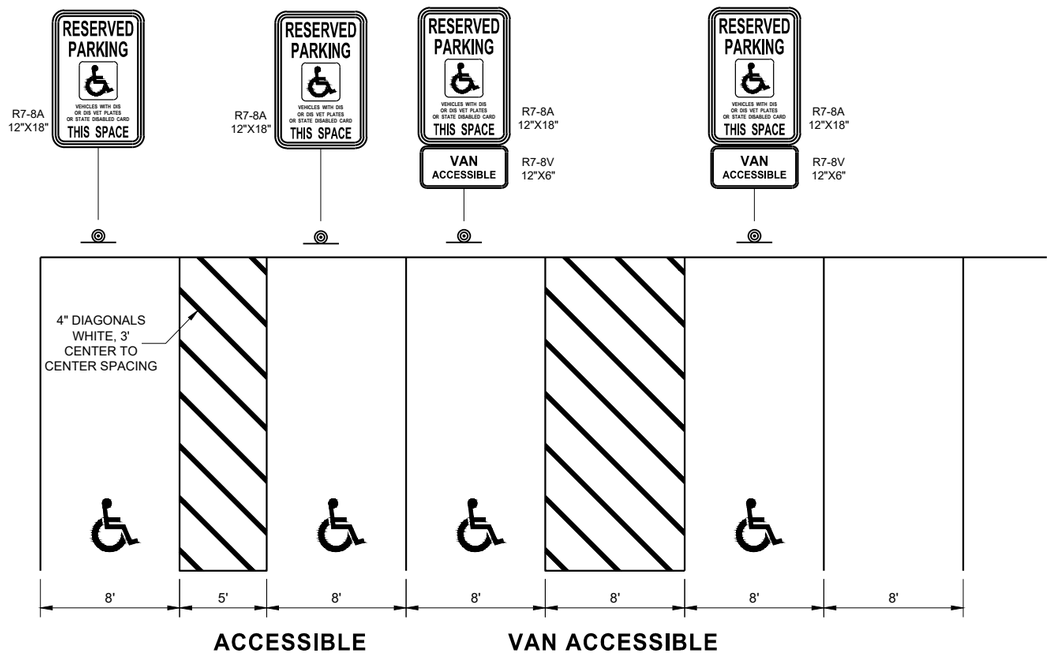
## GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

## LEGEND

SIGN ON PERMANENT SUPPORT




## PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA




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SDD 15C36 - 01

## LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

## GENERAL NOTES

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 THE REGIONAL TRAFFIC UNIT.

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

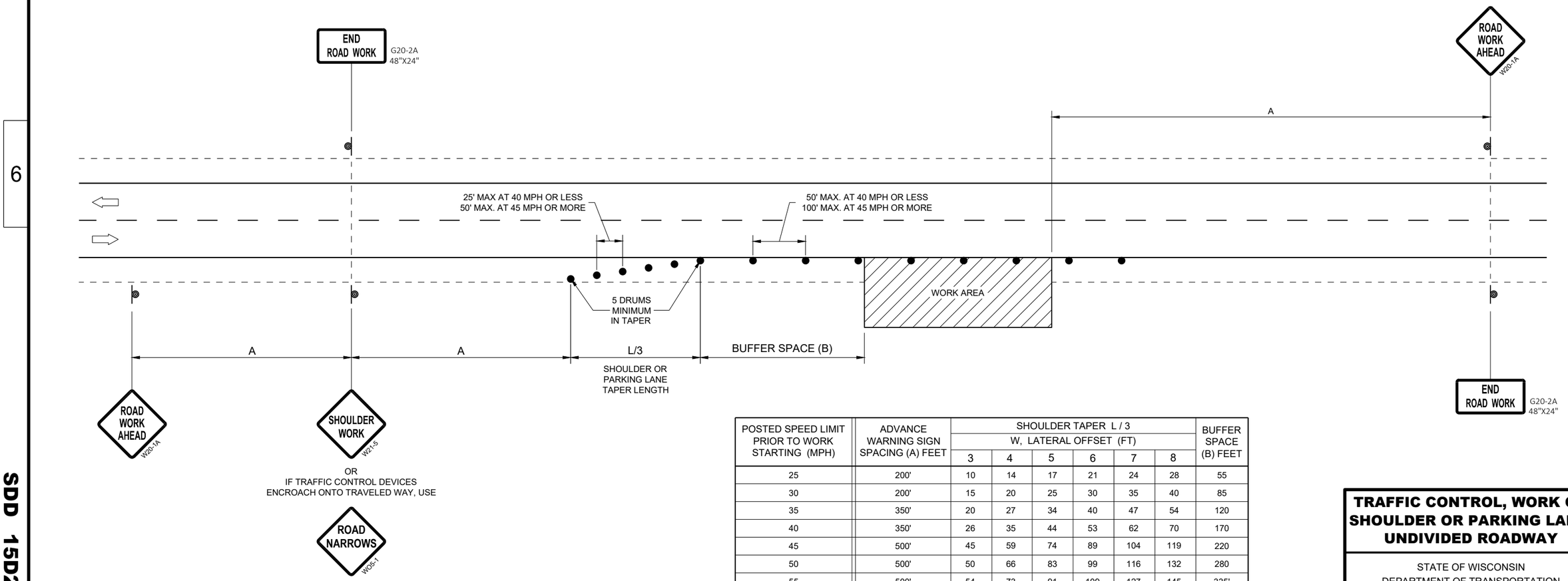
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.




| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT) | | | | | | BUFFER SPACE (B) FEET |
|---|---|---|---|---|---|---|---|---|
| | | 3 | 4 | 5 | 6 | 7 | 8 | |
| 25 | 200' | 10 | 14 | 17 | 21 | 24 | 28 | 55 |
| 30 | 200' | 15 | 20 | 25 | 30 | 35 | 40 | 85 |
| 35 | 350' | 20 | 27 | 34 | 40 | 47 | 54 | 120 |
| 40 | 350' | 26 | 35 | 44 | 53 | 62 | 70 | 170 |
| 45 | 500' | 45 | 59 | 74 | 89 | 104 | 119 | 220 |
| 50 | 500' | 50 | 66 | 83 | 99 | 116 | 132 | 280 |
| 55 | 500' | 54 | 73 | 91 | 109 | 127 | 145 | 335' |

# TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

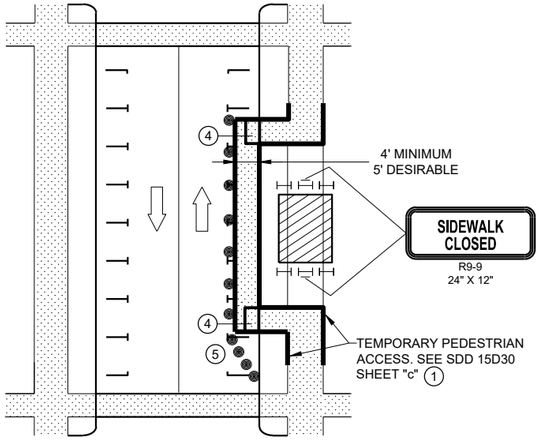
FHWA



SDD 15D28 - 04

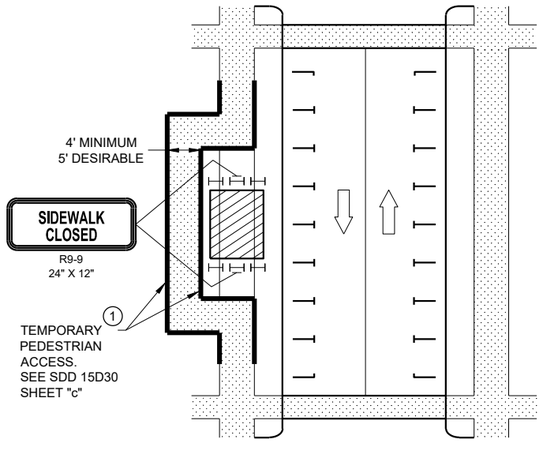
SDD 15D28 - 04

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

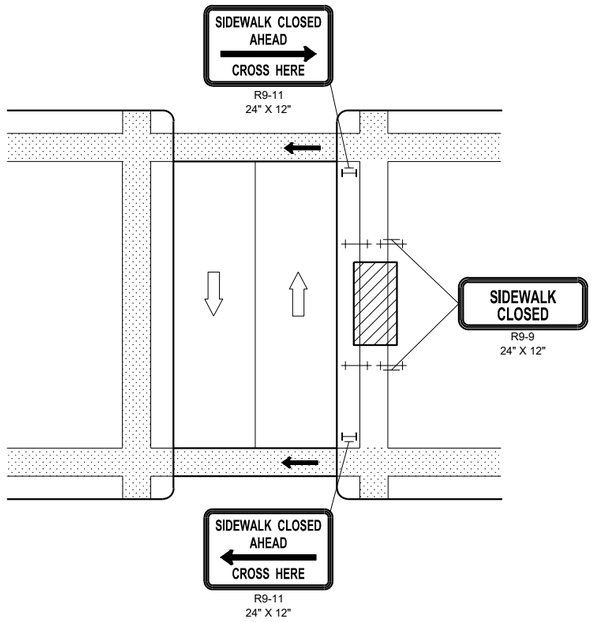



**MID-BLOCK SIDEWALK SIDEWALK CLOSURE IN PARKING LANE**

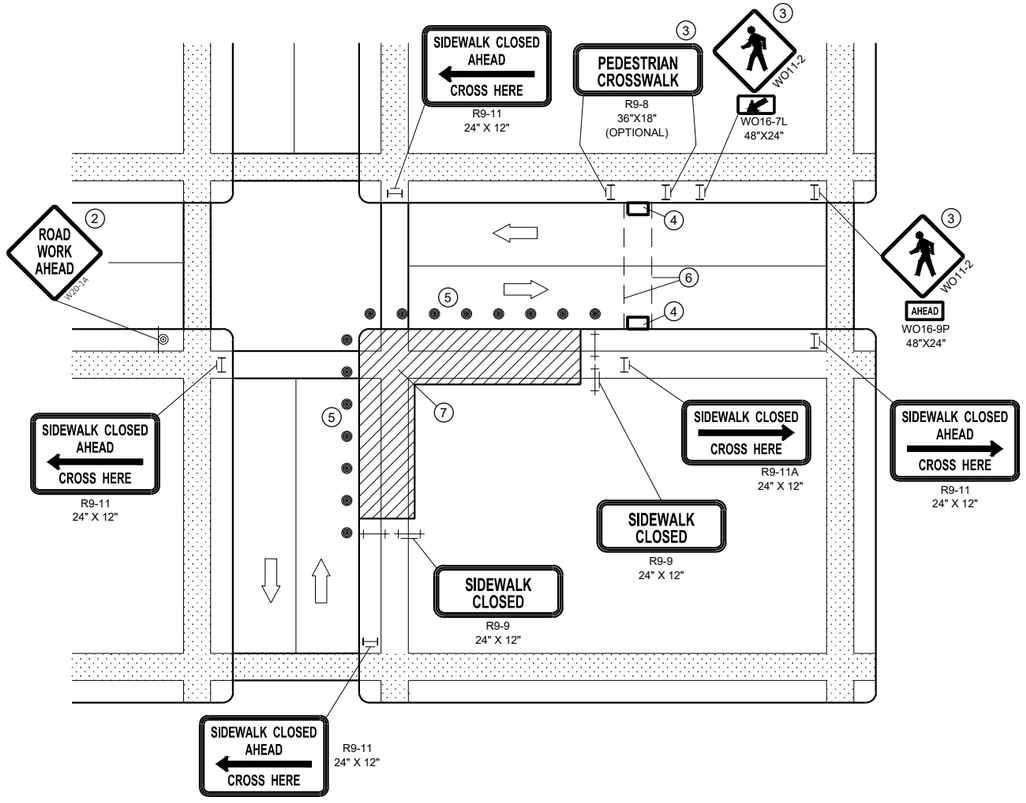
NOTE: LAYOUT SAME AS ABOVE.




**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 NIGHTIME 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 BETWEEK 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

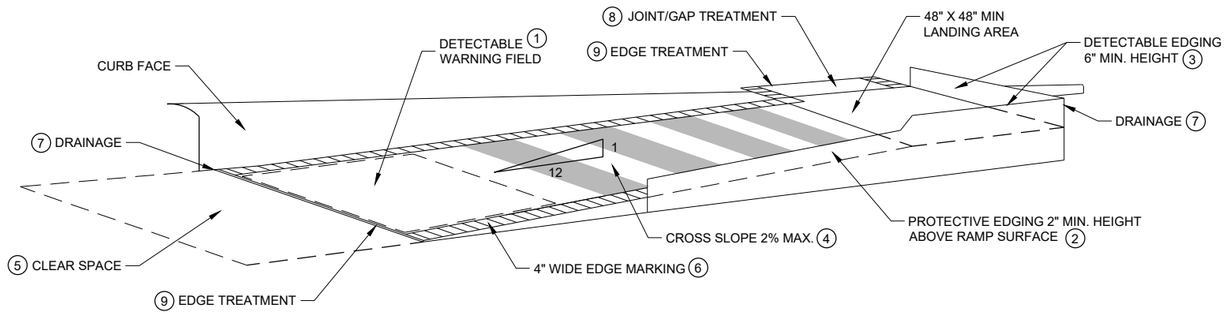
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

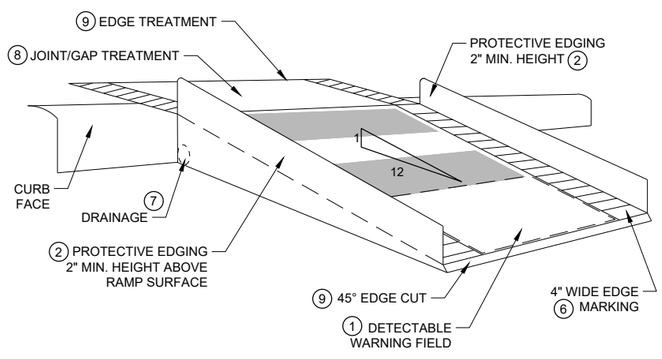



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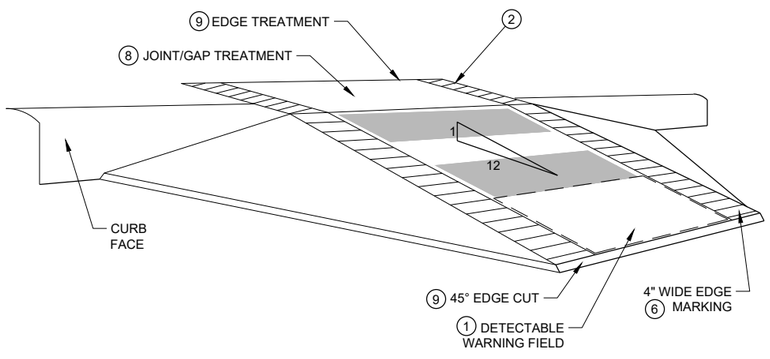
SDD 15D30 - 06a
SDD15D30 - 06a




## TEMPORARY CURB RAMP PARALLEL TO CURB




WITH PROTECTIVE EDGE




WITH SIDE APRON

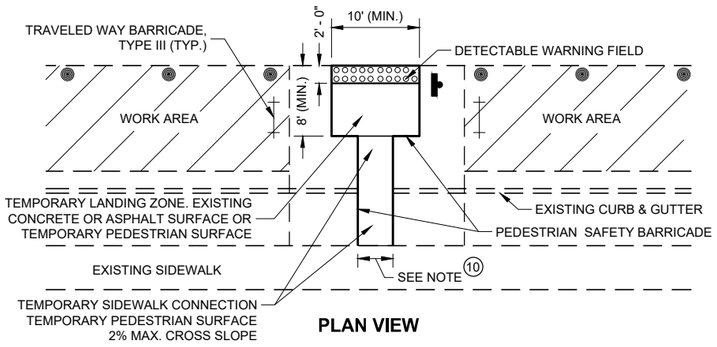
## TEMPORARY CURB RAMP PERPENDICULAR TO CURB

## GENERAL NOTES

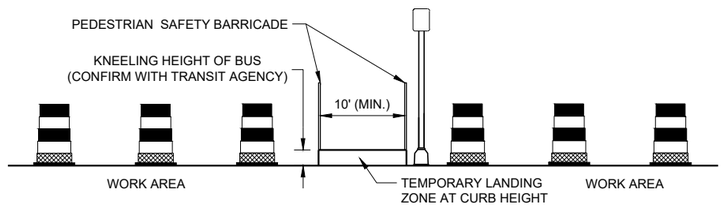
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A 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 ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.




PLAN VIEW




PROFILE VIEW

## TEMPORARY BUS STOP PAD

### LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

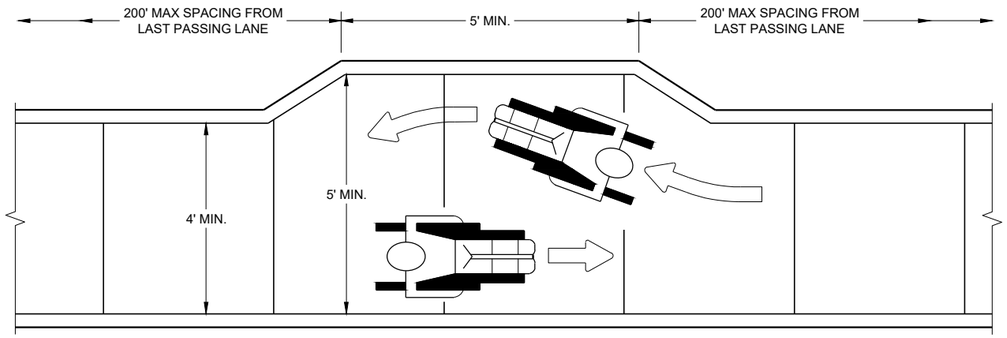
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

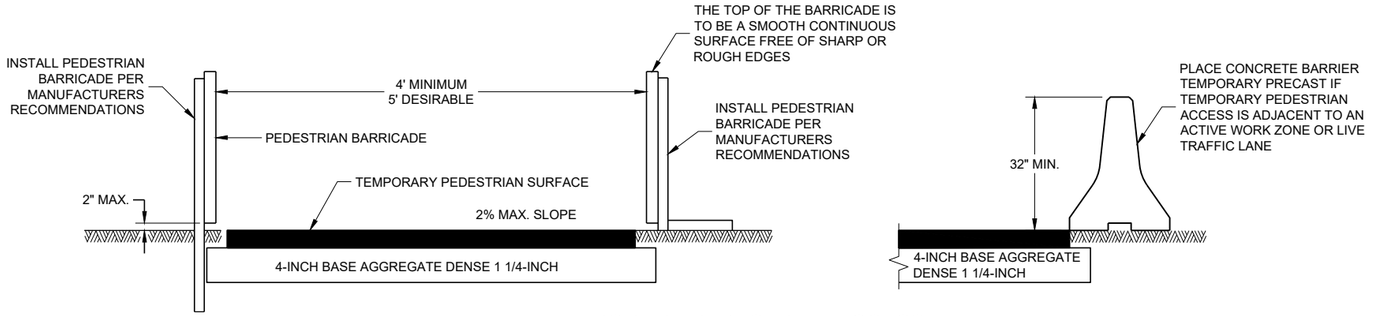



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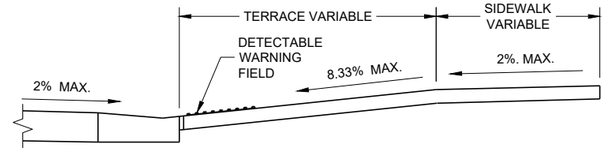

SDD 15D30 - 06b



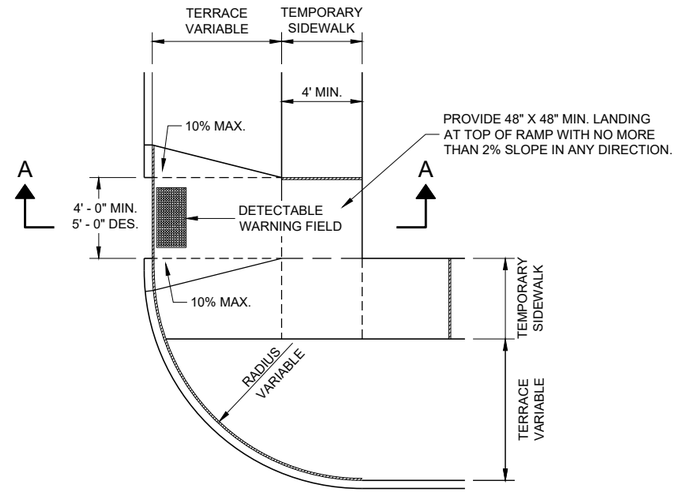

## NARROW SIDEWALK PASSING DETAIL



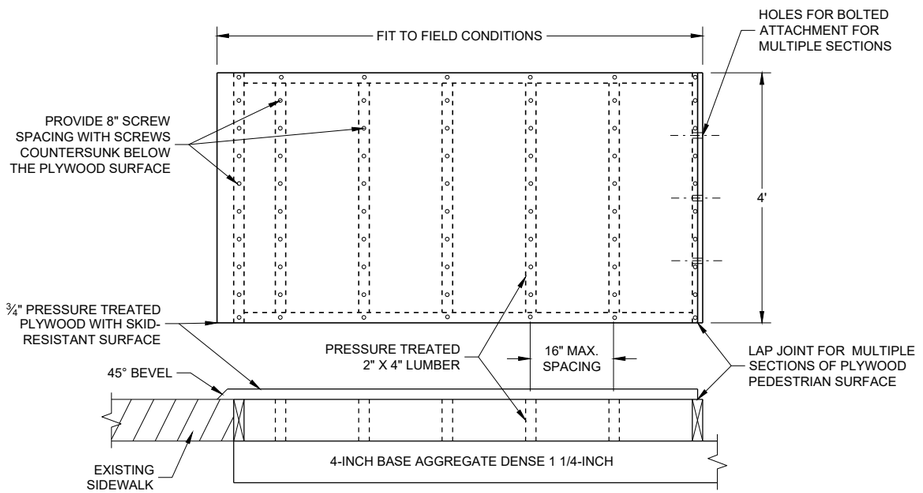

## TEMPORARY PEDESTRIAN ACCESS



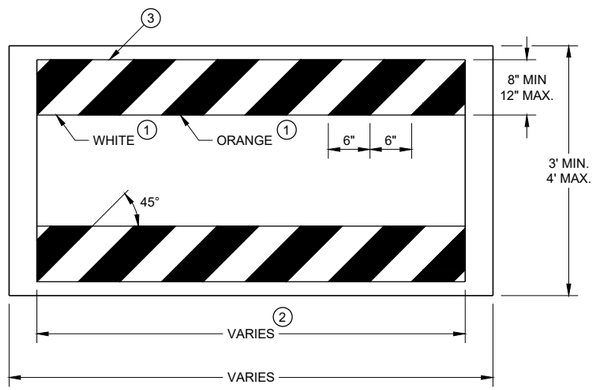

## SECTION A - A




## 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
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

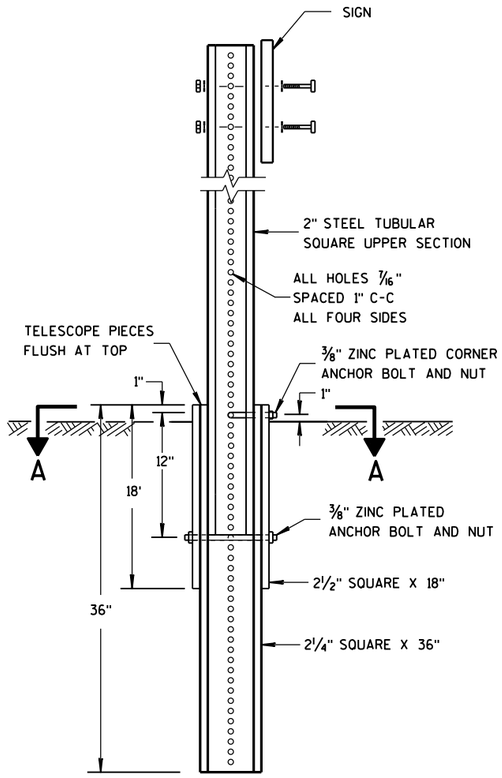
FHWA



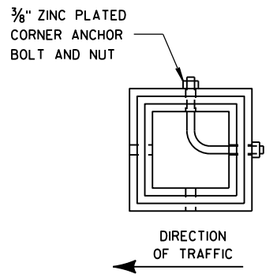
SDD 15D30 - 06c

6

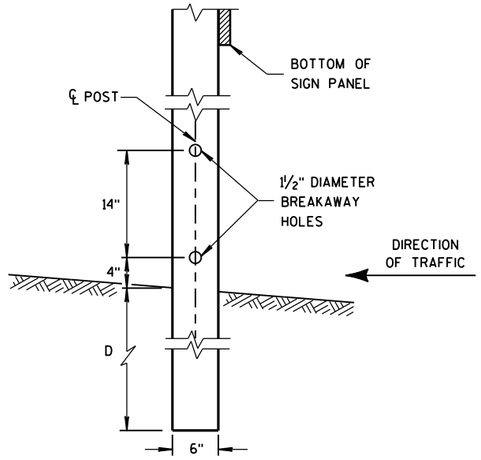
SDD 15D30 - 06c




## DETAIL OF TUBULAR STEEL SIGN POST




## SECTION A-A



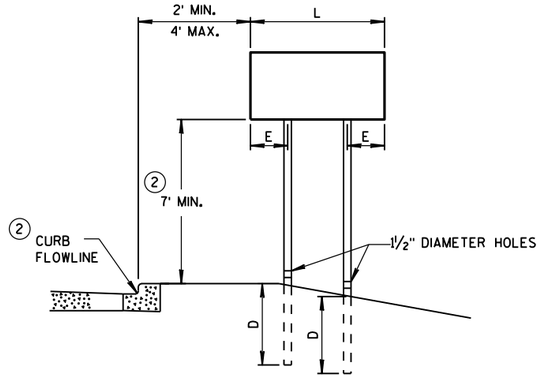

## 4"x6" WOOD POST MODIFICATION

## GENERAL NOTES

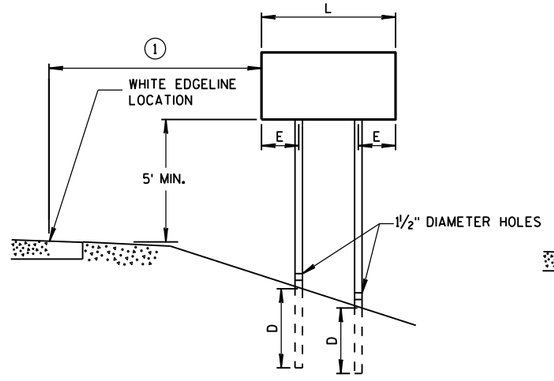
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

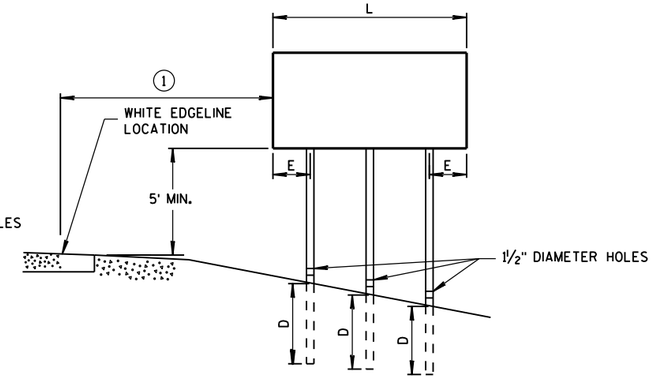
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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.




## URBAN AREA




## RURAL AREA

## POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

### 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 WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

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

### WOOD POST EMBEDMENT DEPTH

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

### 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)

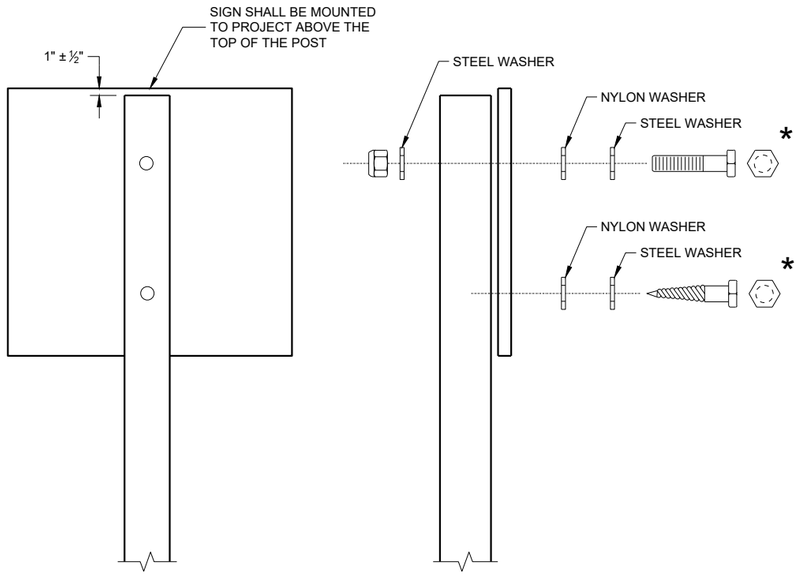
TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI




6

S.D.D. 15 D 38-2a




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 - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (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 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" 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.

6

6

SDD 15D38 - 02b

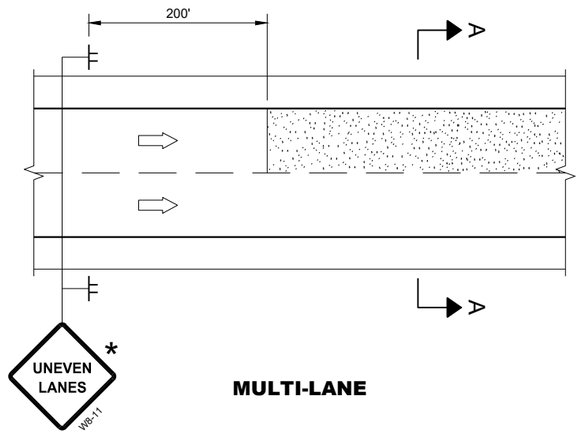
SDD15D38 - 02b

**ATTACHMENT OF SIGNS TO POSTS**

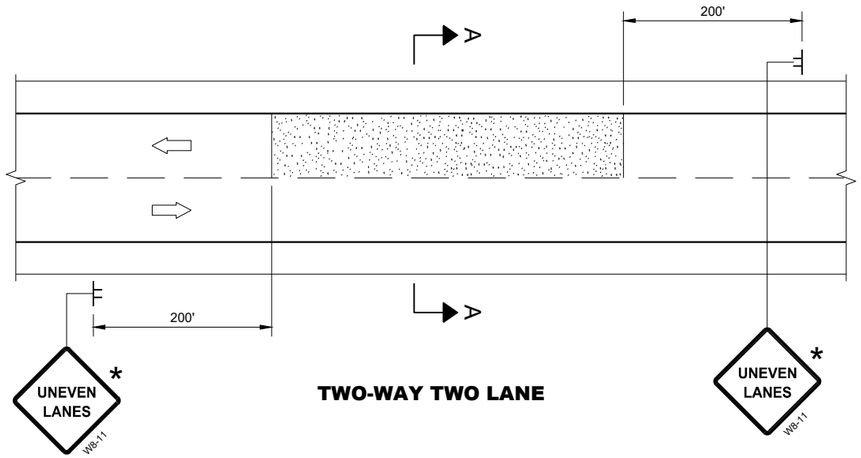
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA




**MULTI-LANE**




**TWO-WAY TWO LANE**

## GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

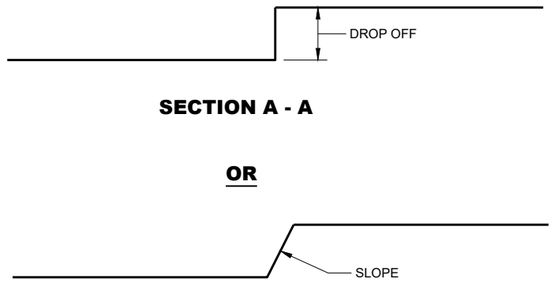
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

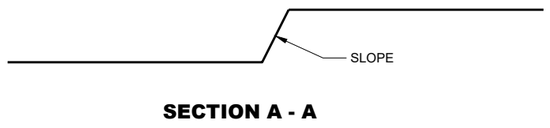
## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

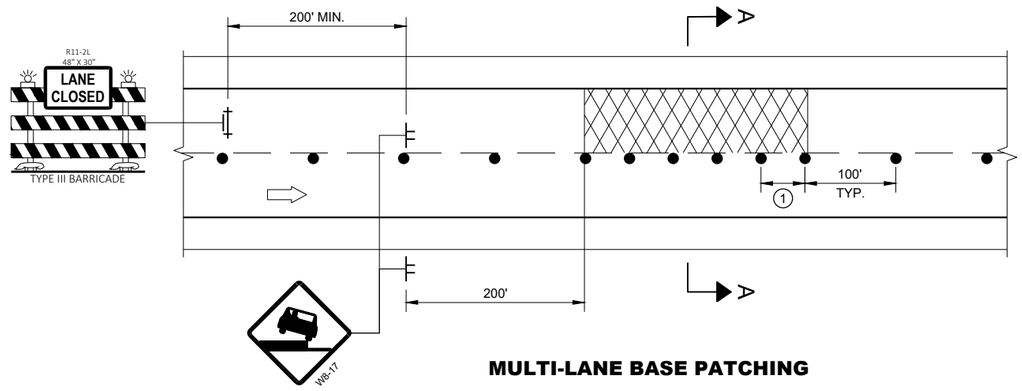



**SECTION A - A**

**OR**

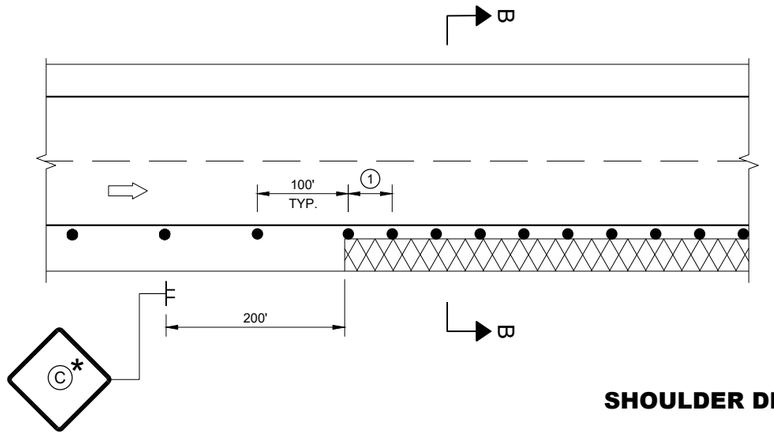



**SECTION A - A**

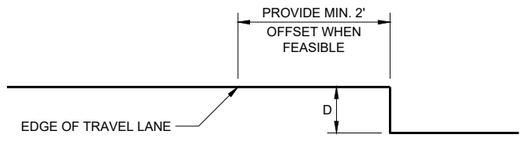



**MULTI-LANE BASE PATCHING**

**ADJACENT LANE DROP-OFFS**




**SHOULDER DROP-OFFS**




**SECTION B - B**

| D | SIGN (C) |
|---|---|
| < 2" WITH A SLOPE STEEPER THAN 3:1 | LOW SHOULDER<br>WO8-9 |
| 2" < 6" WITH A SLOPE STEEPER THAN 3:1 | SHOULDER DROP - OFF<br>W8-9A<br>PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT |

**TRAFFIC CONTROL, DROP-OFF SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



SDD 15D39 - 02

SDD 15D39 - 02

6

6

## GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

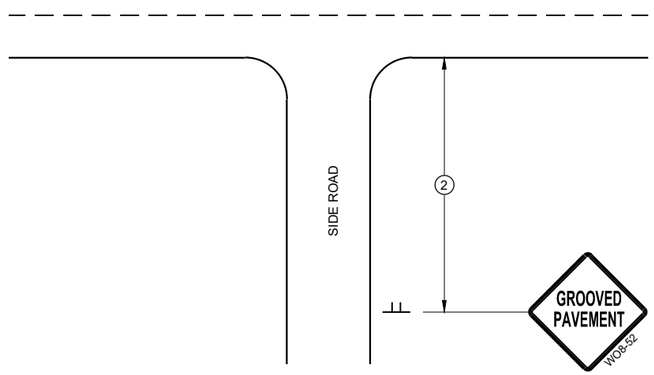
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

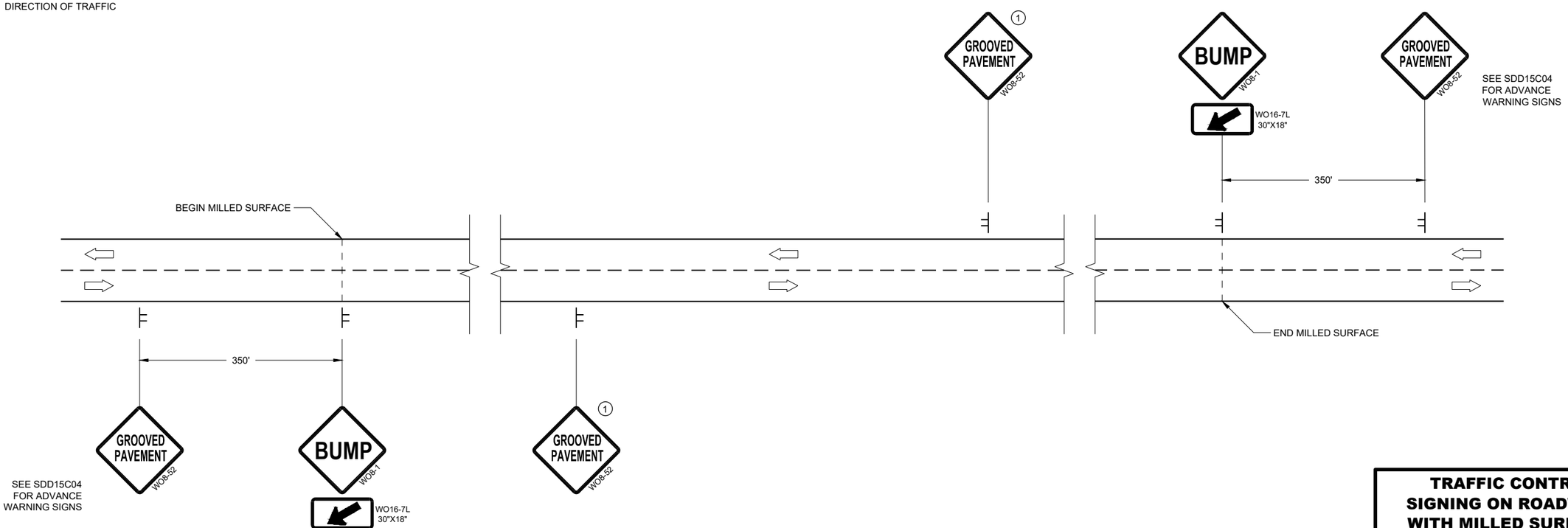
## LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC




**TYPICAL SIDE ROAD APPROACH SIGN DETAIL**




**DETAIL FOR SIGNING ON MILLED SURFACES**

**TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

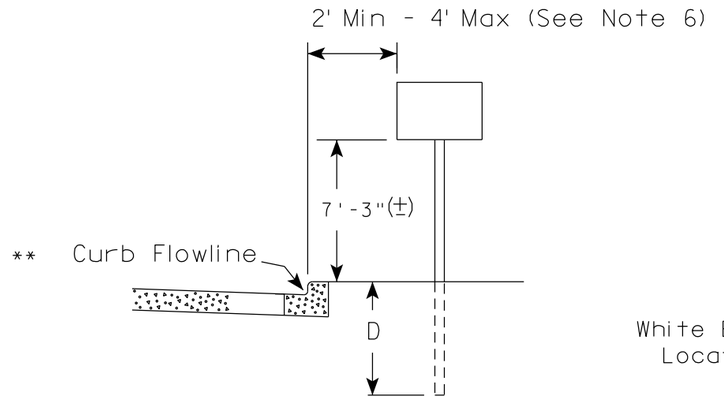
FHWA



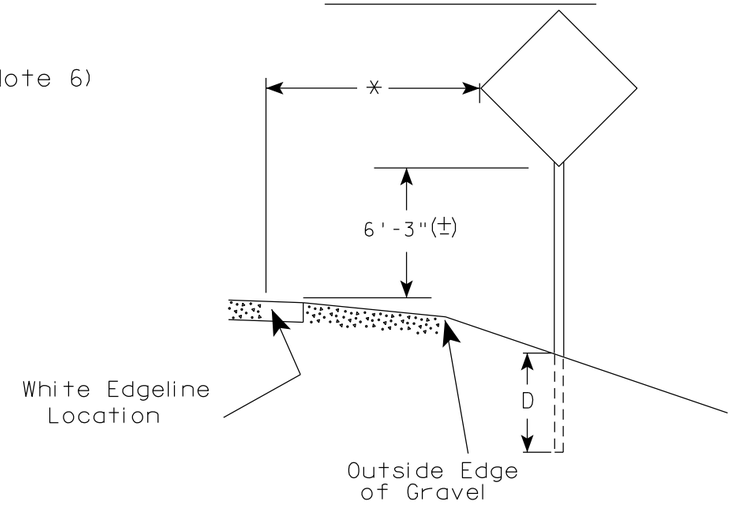


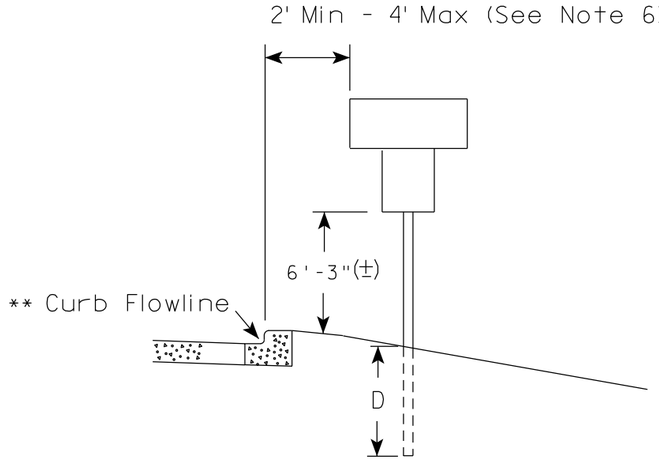
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SDD 15D44 - 02

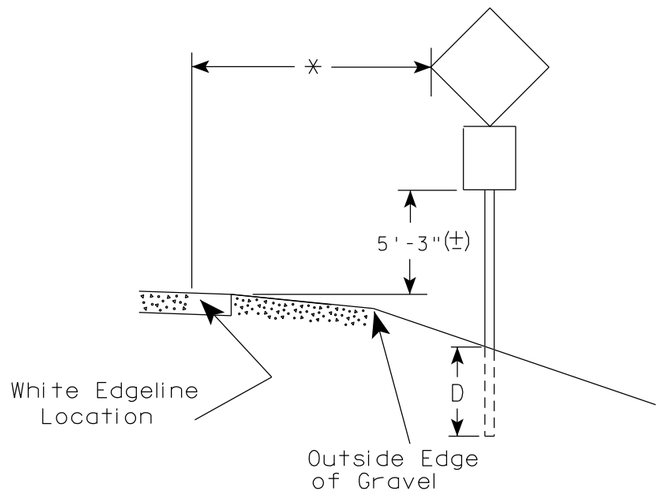
## URBAN AREA




## RURAL AREA (See Note 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. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

### POST EMBEDMENT DEPTH

| Area of Sign Installation ( Sq.Ft.) | D ( Min ) |
|---|---|
| 20 or Less | 4' |
| Greater than 20 | 5' |

### GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

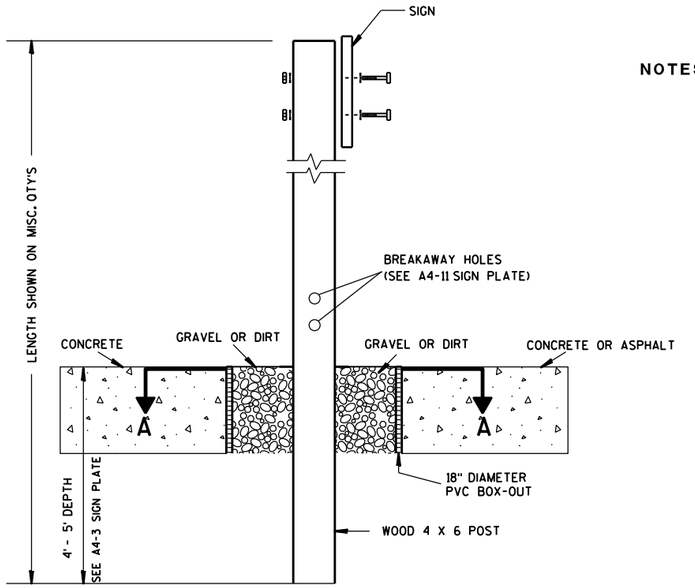
# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

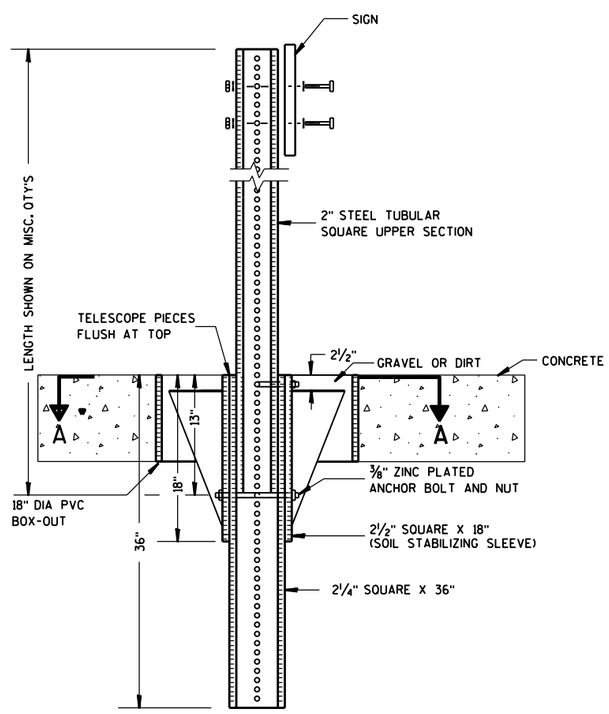
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 177 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

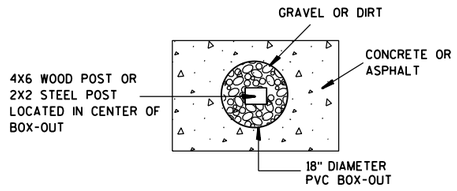
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

**DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT**




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

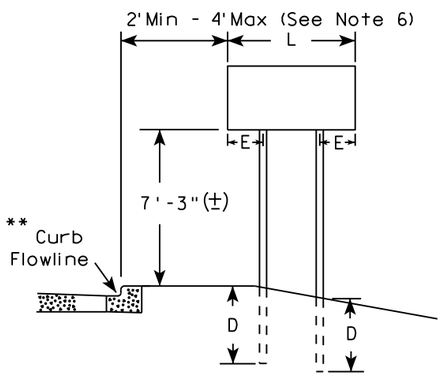
DATE 1/27/14 PLATE NO. A4-3B.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

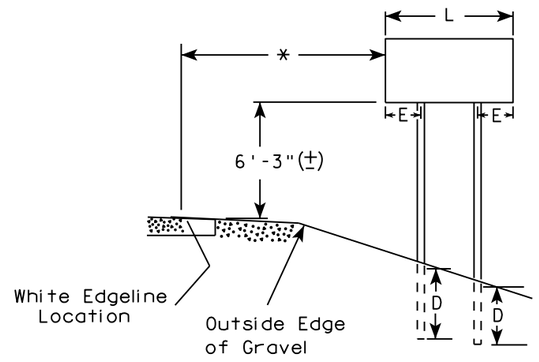


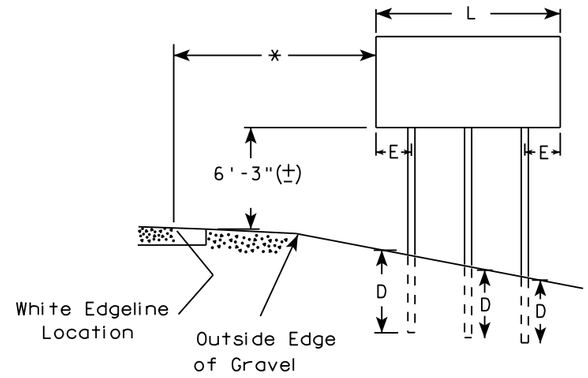
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

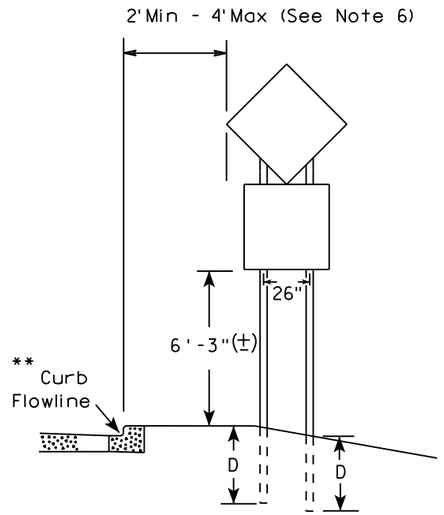
## URBAN AREA



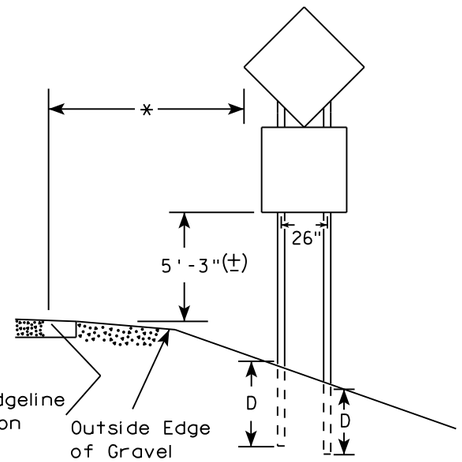

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | | |
|---|---|---|
| | L | E |
| *** | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

### GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** 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. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

### POST EMBEDMENT DEPTH

| Area of Sign Installation ( Sq. Ft. ) | D ( Min ) |
|---|---|
| 20 or Less | 4' |
| Greater than 20 | 5' |

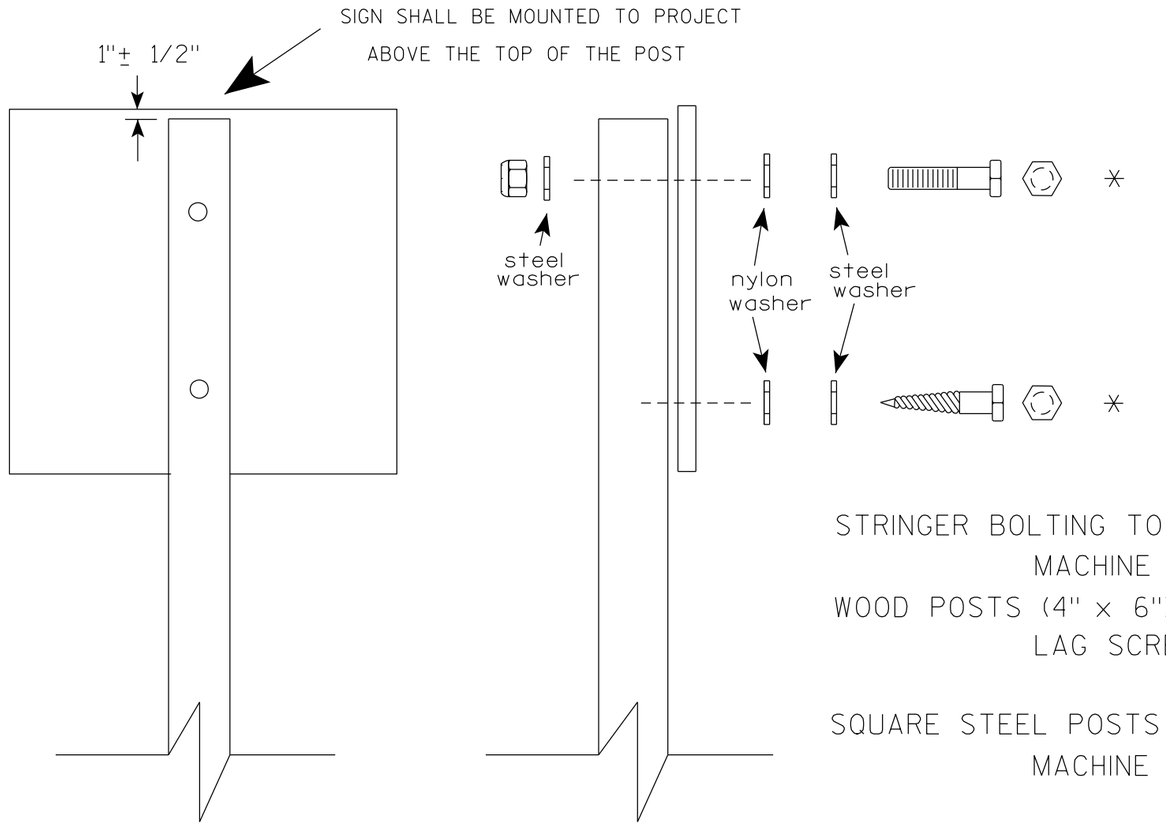
**TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS**

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 179 | E |
|---|---|---|---|---|---|




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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.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 .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, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

# ATTACHMENT OF SIGNS TO POSTS

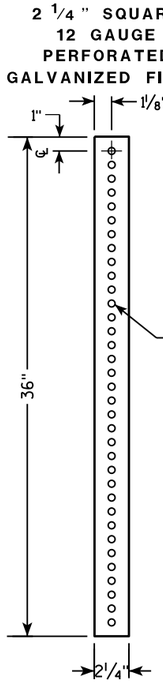
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

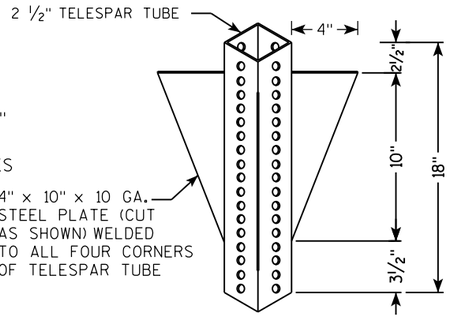
DATE 4/1/2020 PLATE NO. A4-8.9

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

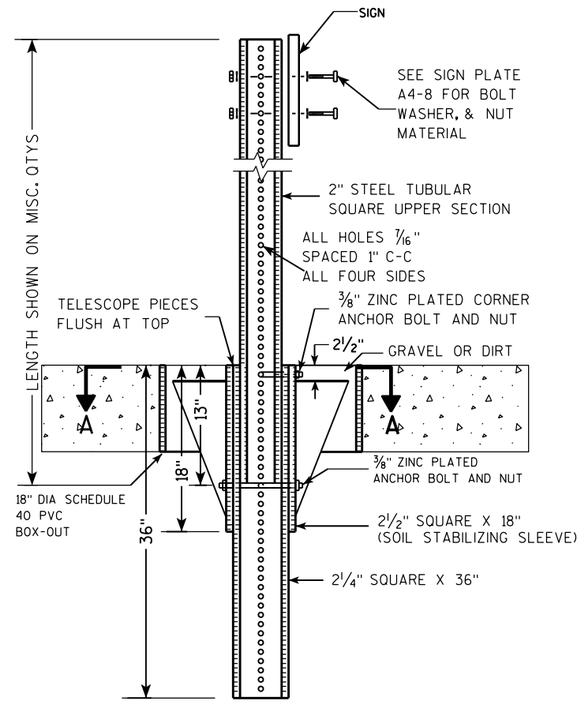
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



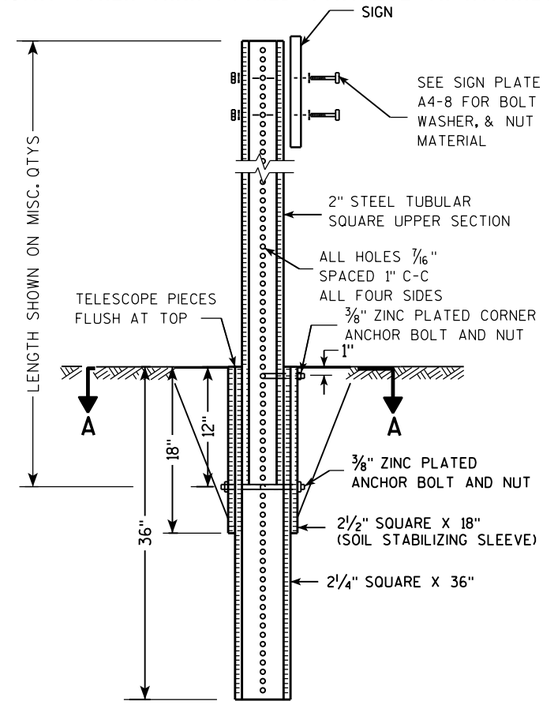

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

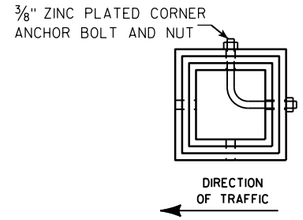



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required 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 wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

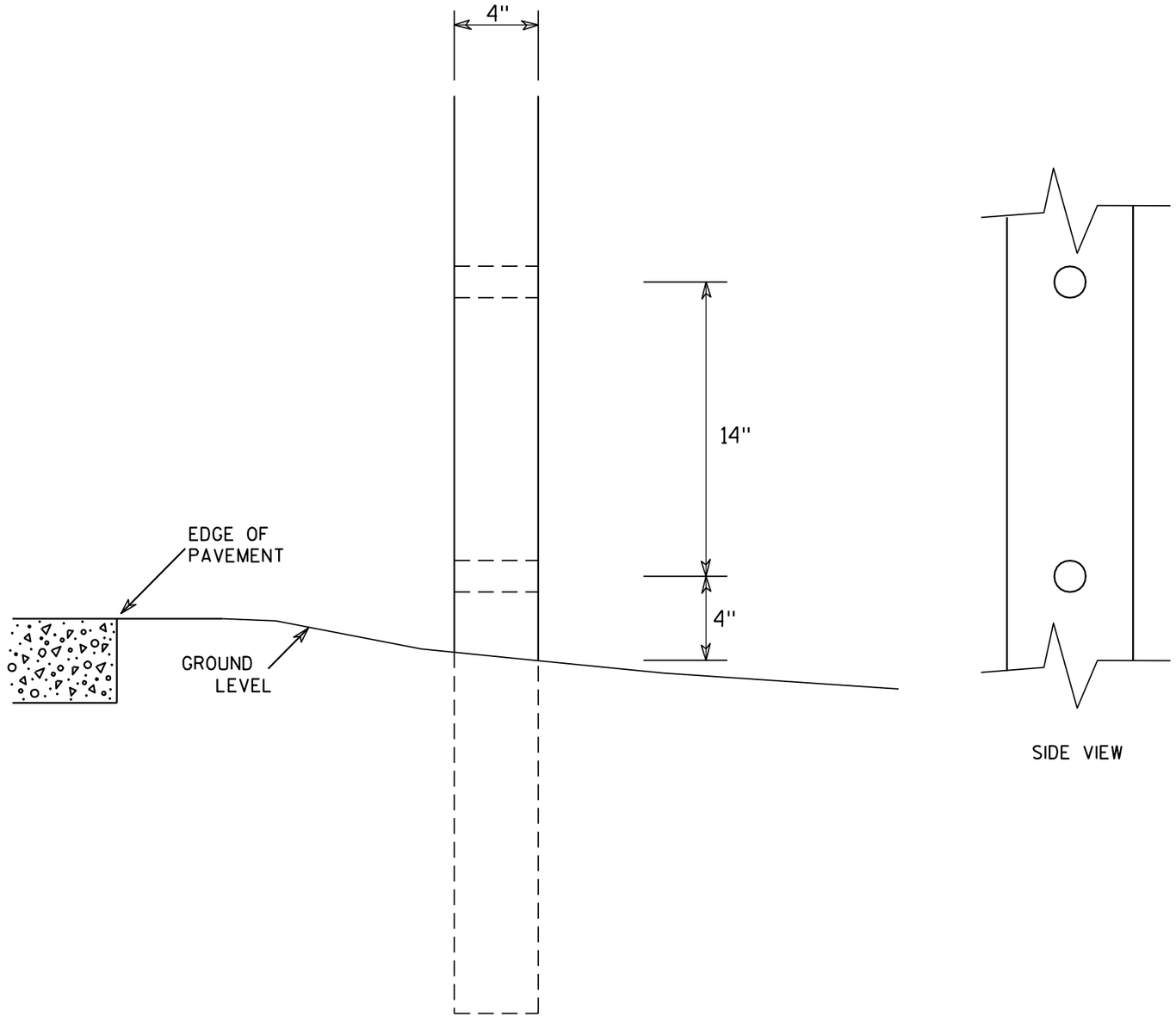
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9



| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42






SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

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# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

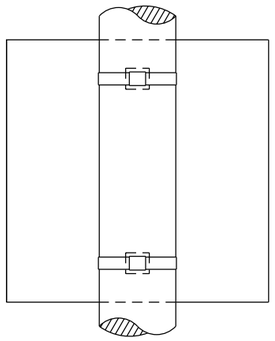
APPROVED Chester J Spang for State Traffic Engineer

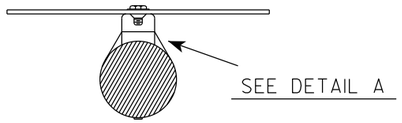
DATE 3/27/97 PLATE NO. A4-11.2

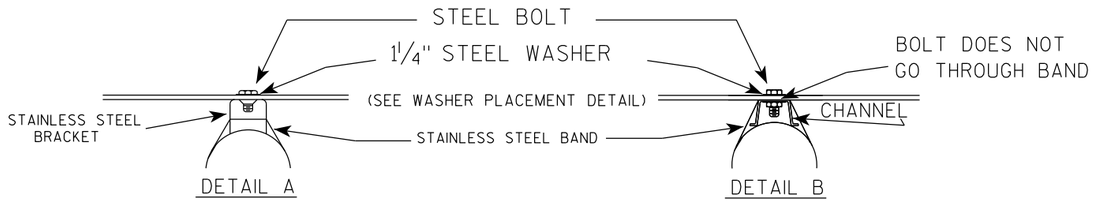
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 182 | E |
|---|---|---|---|---|---|

# BANDING

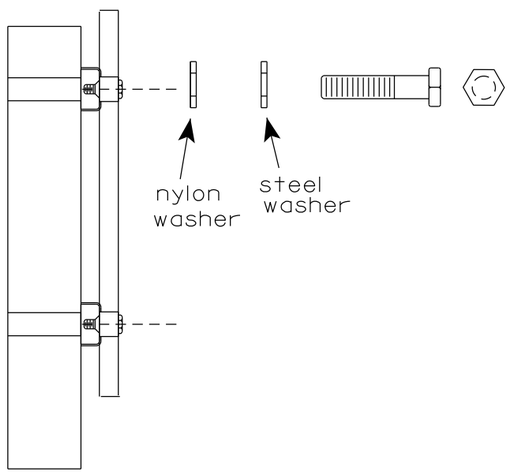
SINGLE SIGN






WASHER PLACEMENT

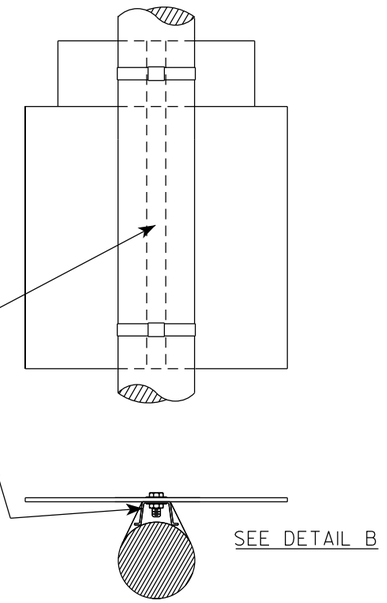



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY




STANDARD SIGN
SIGN BANDING DETAILS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

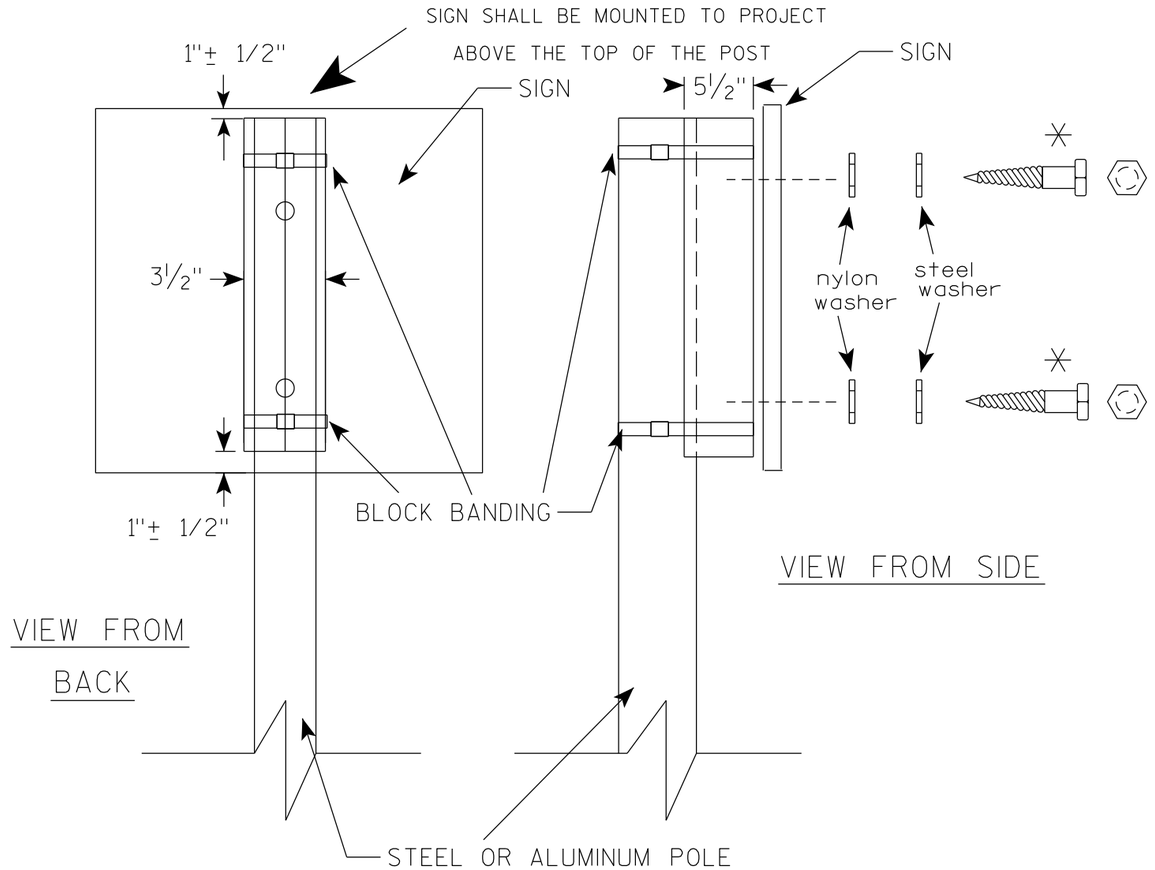
DATE 6/10/19 PLATE NO. A5-9.4

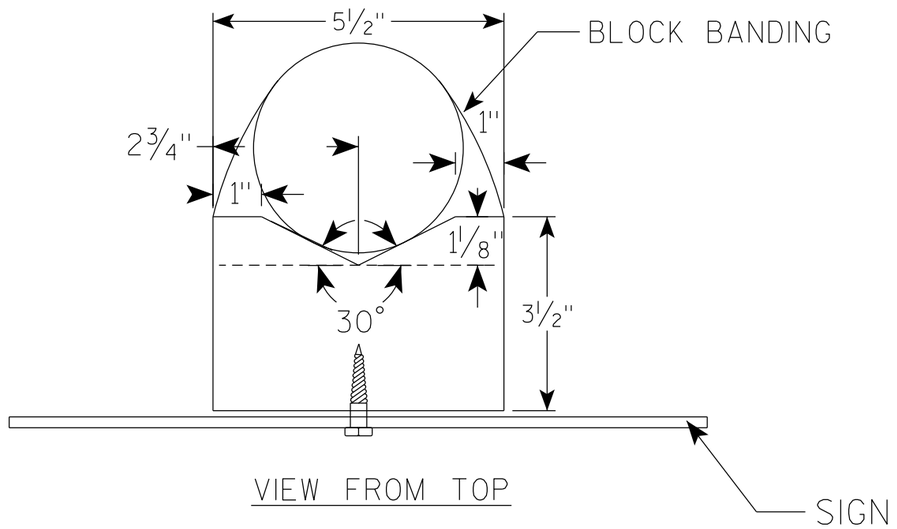
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 183 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

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## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

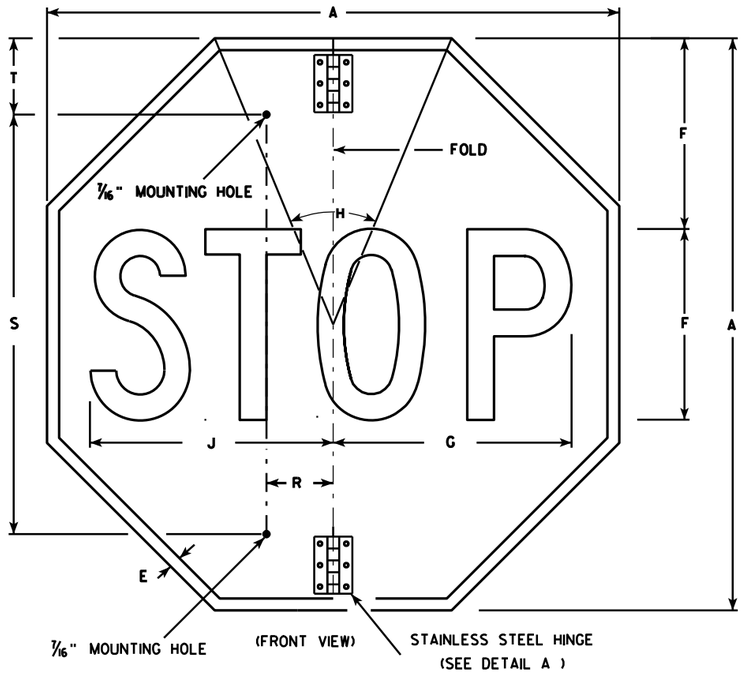
# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

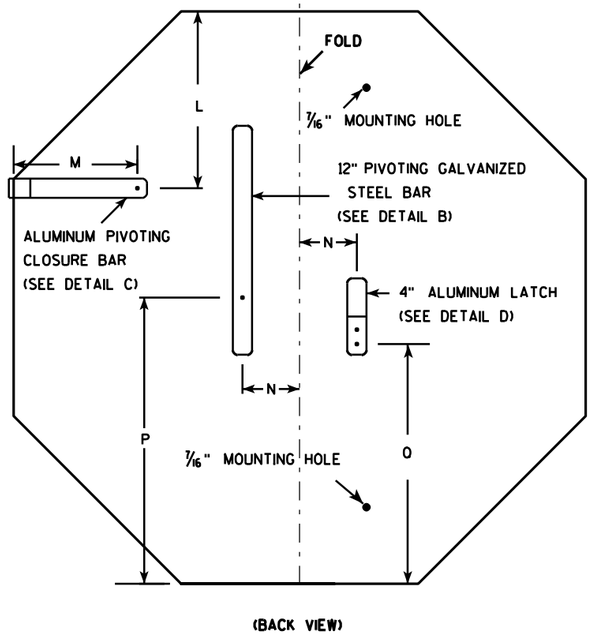
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

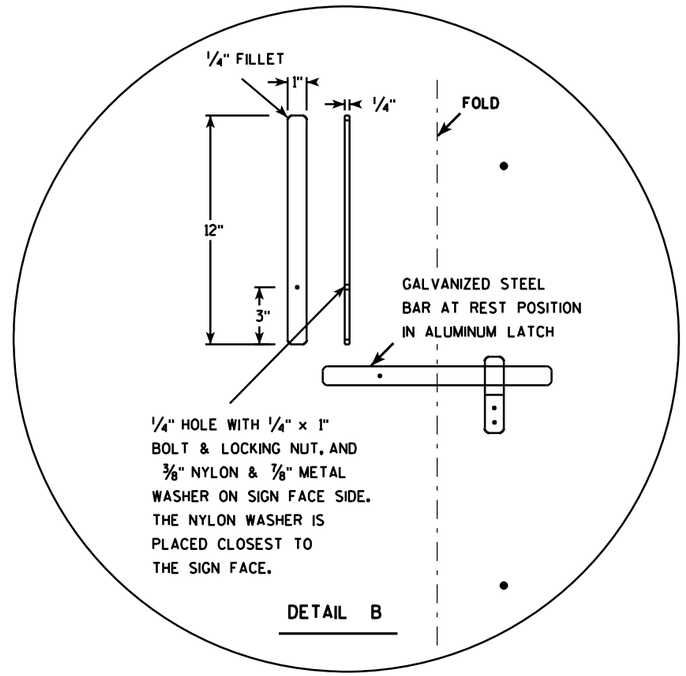
| PROJECT NO: | | | | SHEET NO: 184 | E |
|---|---|---|---|---|---|



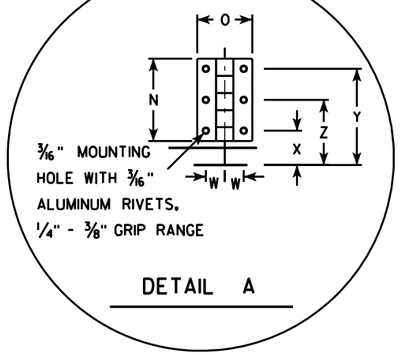




## NOTES

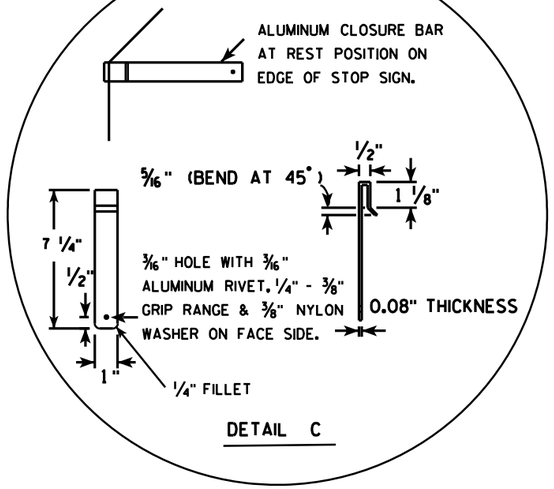
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



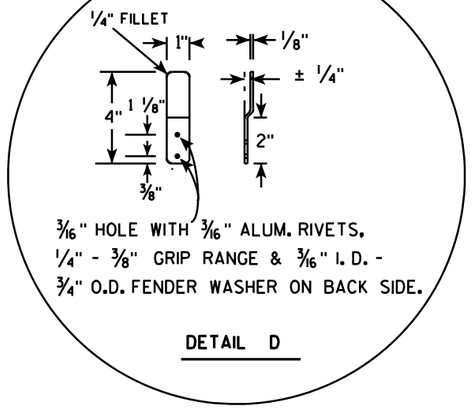

DETAIL B




DETAIL A




DETAIL C




DETAIL D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45 | | 12 3/4 | | 9 1/4 | 6 1/2 | 3 | 2 | 15 | 12 3/8 | 2 1/2 | 22 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45 | | 15 3/8 | | 11 | 6 1/2 | 3 | 2 | 18 | 15 3/8 | 2 1/2 | 26 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45 | | 15 3/8 | | 11 | 6 1/2 | 3 | 2 | 18 | 15 3/8 | 2 1/2 | 26 | 5 | | | 11/16 | 1 1/4 | 3 1/2 | 2 3/8 | 7.46 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

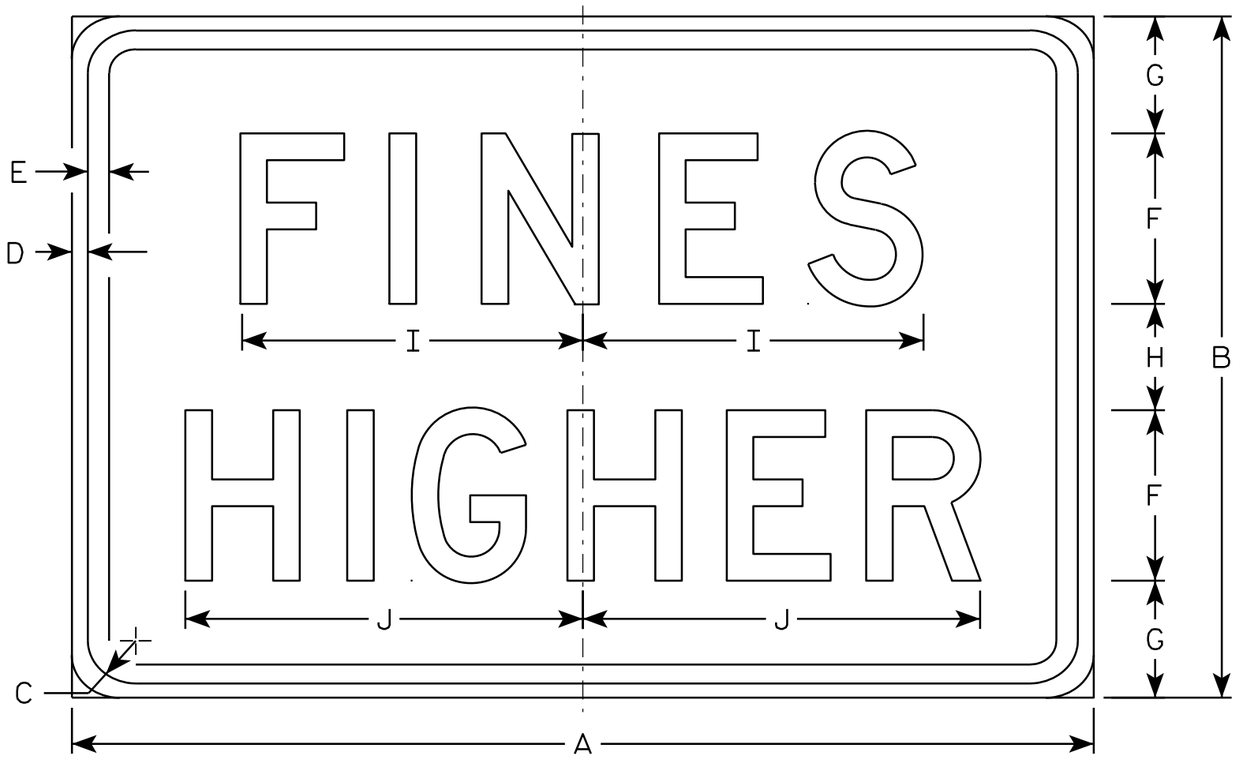
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7




R2-6P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 18 | 1 1/8 | 3/8 | 3/8 | 4 | 3 1/2 | 3 | 7 5/8 | 9 1/4 | | | | | | | | | | | | | | | | | 3.0 |
| 2M | 24 | 18 | 1 1/8 | 3/8 | 3/8 | 4 | 3 1/2 | 3 | 7 5/8 | 9 1/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/8 | 3 3/4 | 12 | 14 | | | | | | | | | | | | | | | | | 6.0 |
| 4 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/8 | 3 3/4 | 12 | 14 | | | | | | | | | | | | | | | | | 6.0 |
| 5 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 15 1/8 | 19 | | | | | | | | | | | | | | | | | 12.0 |

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

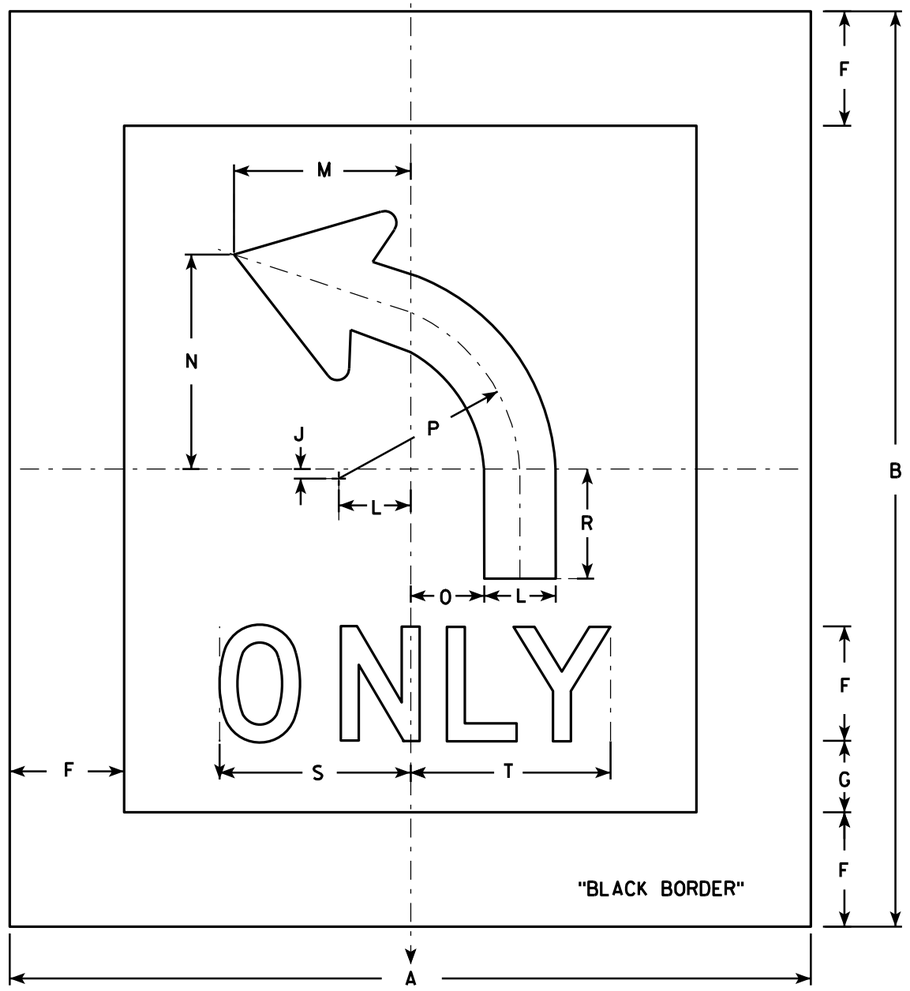
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E



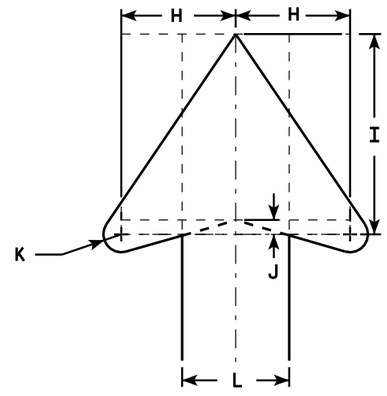

7




R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective black.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 42 | 48 | | | | 6 | 3 3/4 | 4 | 7 | 1/2 | 5/8 | 3 3/4 | 9 1/4 | 11 1/4 | 3 7/8 | 9 1/2 | | 5 3/4 | 10 | 10 1/2 | | | | | | | 1.26 |
| 2M | 42 | 48 | | | | 6 | 3 3/4 | 4 | 7 | 1/2 | 5/8 | 3 3/4 | 9 1/4 | 11 1/4 | 3 7/8 | 9 1/2 | | 5 3/4 | 10 | 10 1/2 | | | | | | | 1.26 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

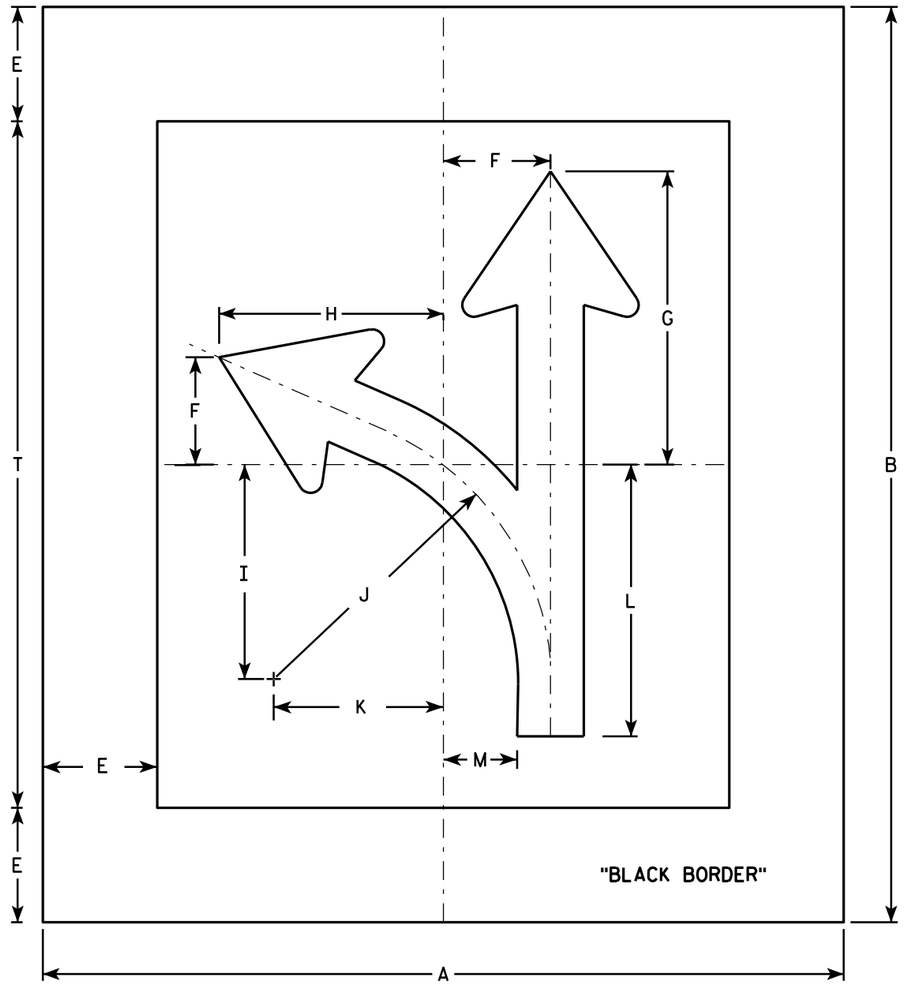
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

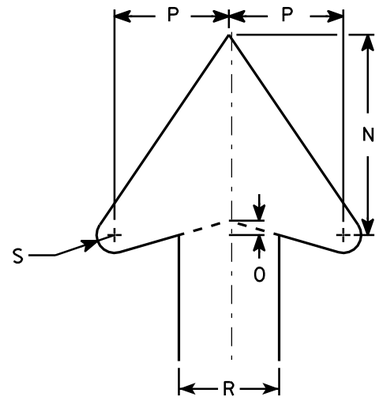
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E




R3-6L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. R3-6R is the same as R3-6L except curved portion of arrow points right.
5. The 6" border is non-reflective black.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | | 3 1/2 | 5/8 | 36 | | | | | | | 14.0 |
| 2M | 42 | 48 | | | 6 | 5 5/8 | 15 3/8 | 11 3/4 | 11 1/4 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | 1/2 | 4 | | 3 1/2 | 5/8 | 36 | | | | | | | 14.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

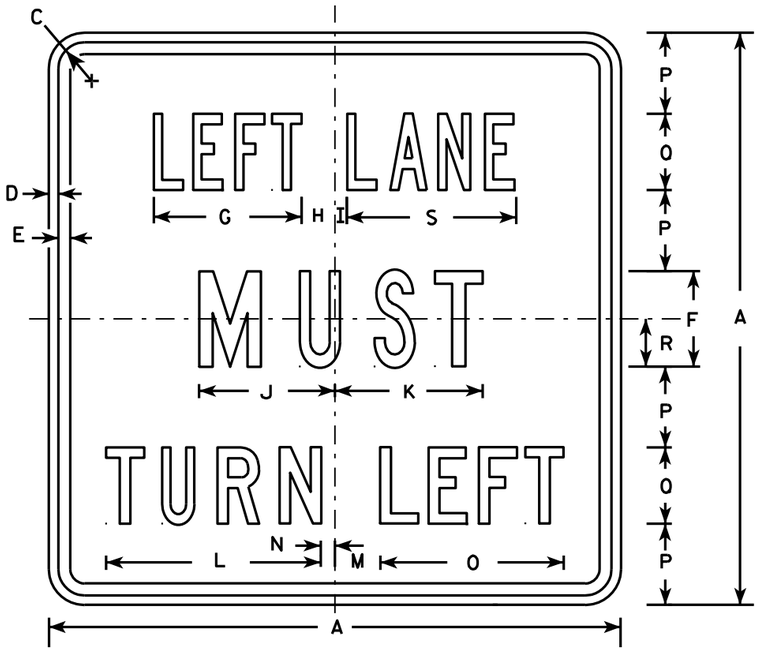
# STANDARD SIGN
# R3-6

WISCONSIN DEPT OF TRANSPORTATION

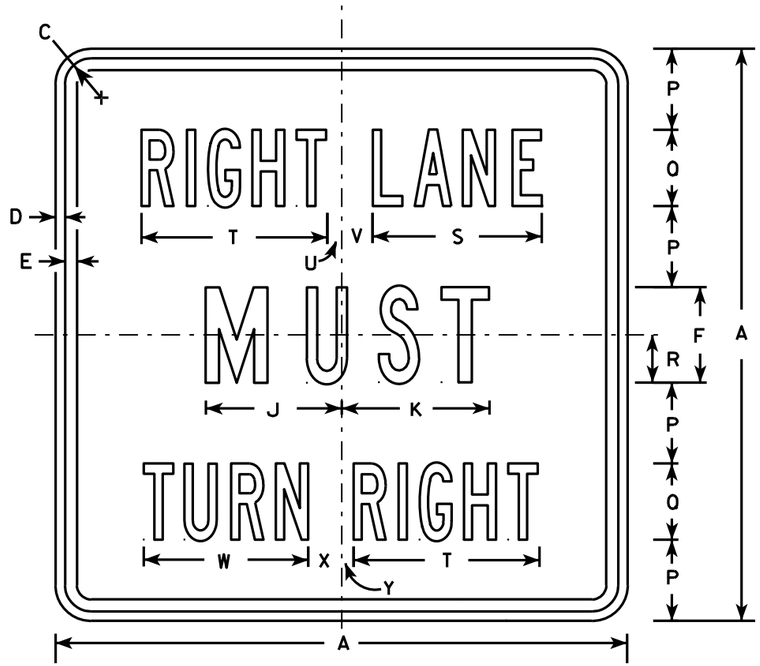
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-6.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E




R3-7L




R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 7 3/4 | 1 3/4 | 5/8 | 7 1/8 | 7 3/4 | 11 1/4 | 2 3/8 | 3/4 | 9 5/8 | 4 1/4 | 4 | 2 1/2 | 8 7/8 | 9 3/4 | 3/4 | 1 5/8 | 8 5/8 | 1 5/8 | 5/8 | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 9 5/8 | 2 | 1 1/8 | 8 3/4 | 9 | 13 1/2 | 3 7/8 | 1 1/2 | 12 1/2 | 5 | 5 | 3 | 10 5/8 | 12 | 7/8 | 2 1/4 | 10 5/8 | 2 1/8 | 1 | | 9.00 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 13 1/2 | 2 3/8 | 1 1/2 | 11 1/2 | 11 7/8 | 17 3/4 | 3 5/8 | 2 1/2 | 16 3/8 | 6 1/2 | 7 | 4 | 14 3/8 | 16 7/8 | 5/8 | 3 1/4 | 15 1/8 | 2 3/4 | 1 1/8 | | 16.00 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

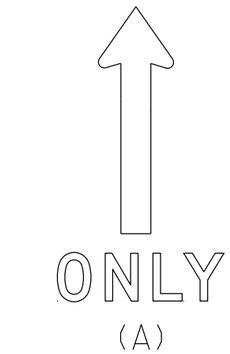
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

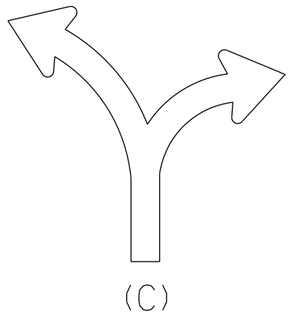
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 189 | E

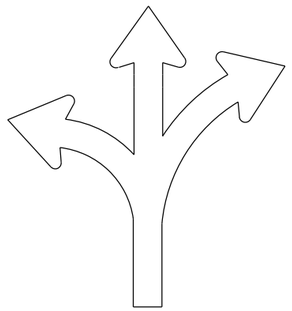


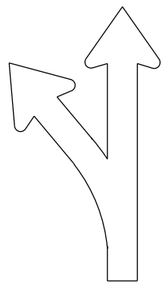
(A)

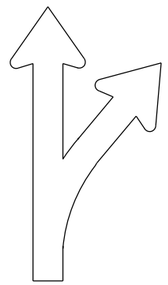


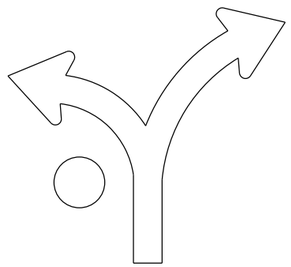
(B)

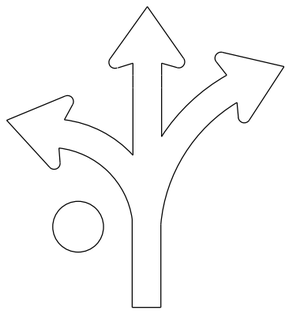

(C)


(D)


(E)


(F)

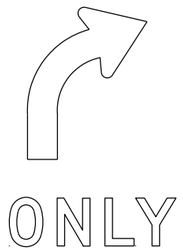

(G)


(H)

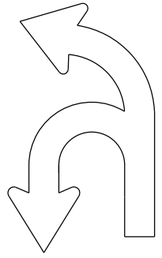

(I)



(L)



(R)


(U)

## NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

| | | |
|---|---|---|
| 1 | Letter = | 3.75 sq ft for Size 2 |
| | | 6.0 sq ft for Size 3 |
| | | 10.0 sq ft for Size 4 or 5 |
| 2 | Letters = | 7.5 sq ft for Size 2 |
| | | 12.0 sq ft for Size 3 |
| | | 20.0 sq ft for Size 4 or 5 |
| 3 | Letters = | 11.25 sq ft for Size 2 |
| | | 18.0 sq ft for Size 3 |
| | | 30.0 sq ft for Size 4 or 5 |
| 4 | Letters = | 15.0 sq ft for Size 2 |
| | | 24.0 sq ft for Size 3 |
| | | 40.0 sq ft for Size 4 or 5 |
| 5 | Letters = | 18.75 sq ft for Size 2 |
| | | 30.0 sq ft for Size 3 |
| | | 50.0 sq ft for Size 4 or 5 |
| 6 | Letters = | 22.5 sq ft for Size 2 |
| | | 36.0 sq ft for Size 3 |
| | | 60.0 sq ft for Size 4 or 5 |

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

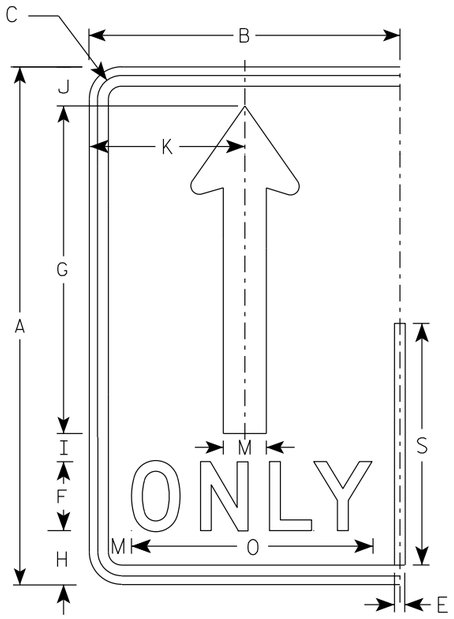
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

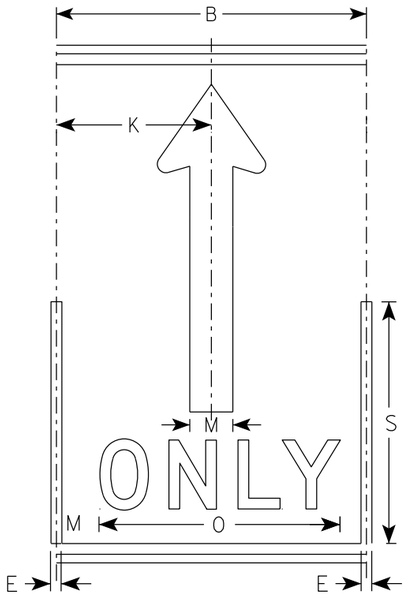
DATE 5/21/19 PLATE NO. R3-8.1

NOTES

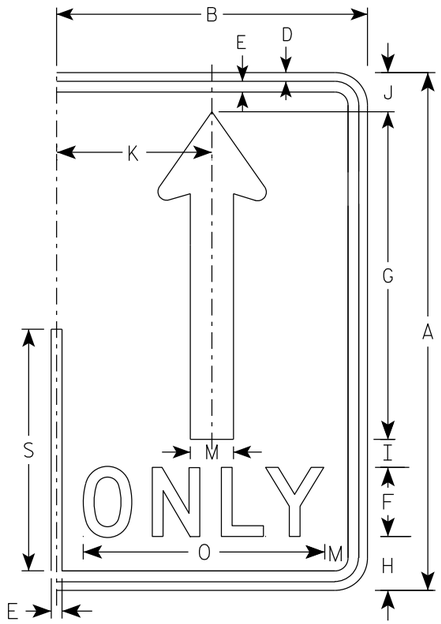
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



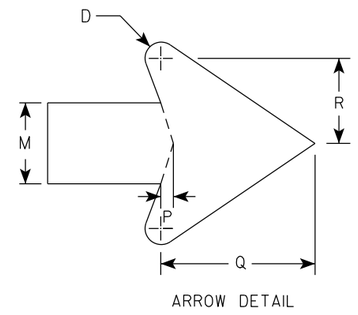

(A)




(A)




(A)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 19 | 3 1/8 | 1 5/8 | 2 1/4 | 9 | | 2 1/2 | | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | 5 | 22 3/4 | 3 3/4 | 1 3/4 | 2 3/4 | 12 | | 3 | | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 30 3/8 | 5 1/8 | 2 7/8 | 3 5/8 | 15 | | 4 | | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

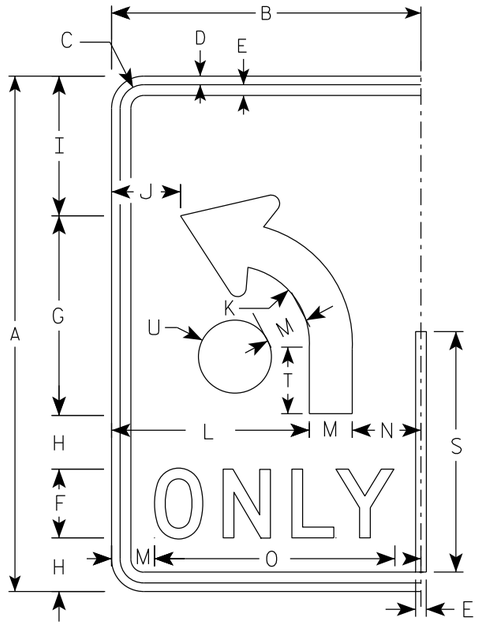
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

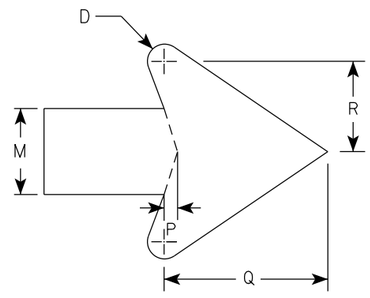
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D




(B)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

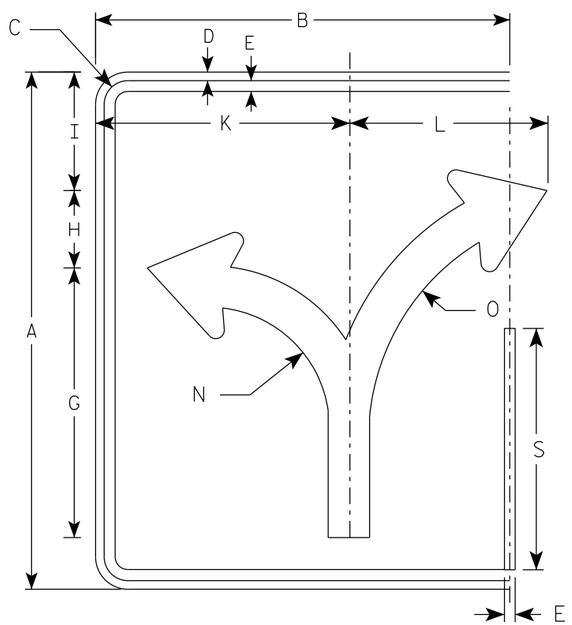
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

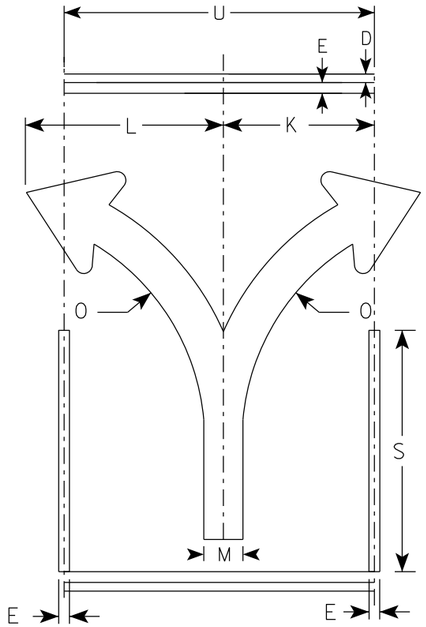
SHEET NO: 192 E

NOTES

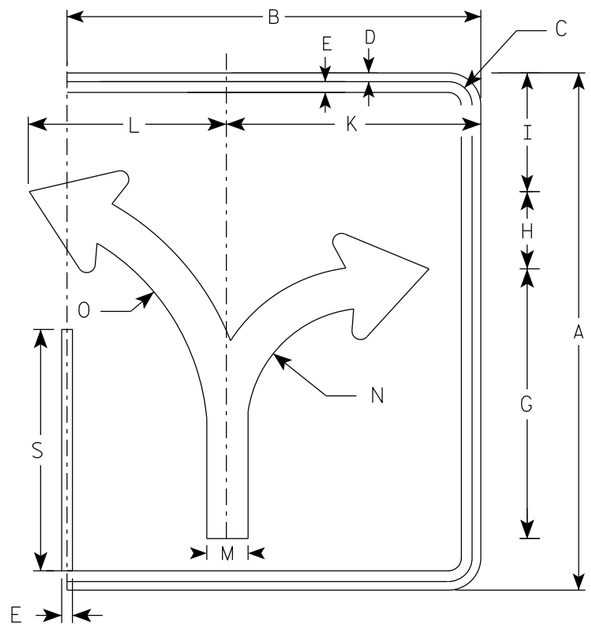
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



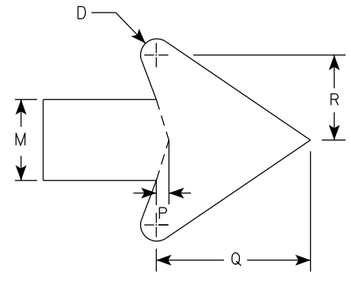

(C)




(C)




(C)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 3/8 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

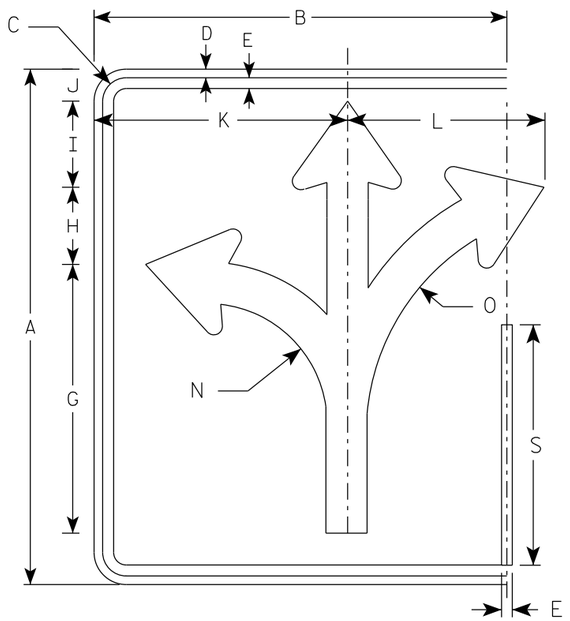
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

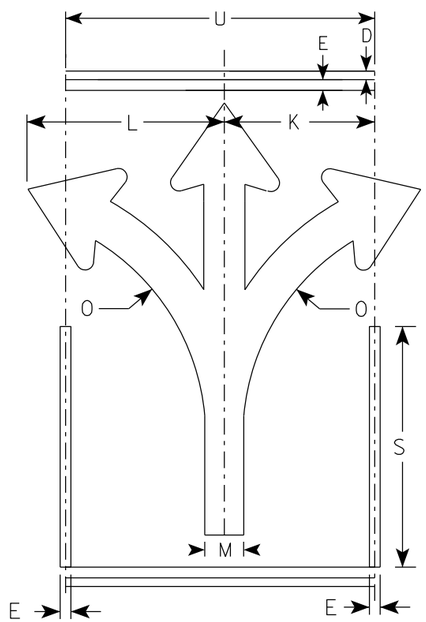
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E

NOTES

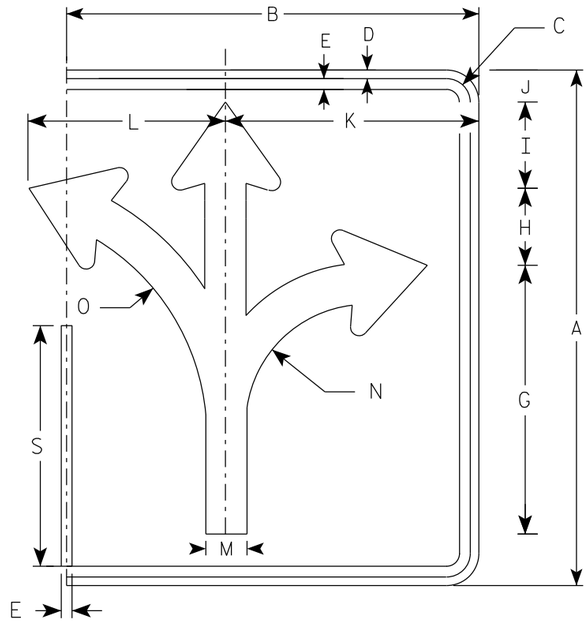
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



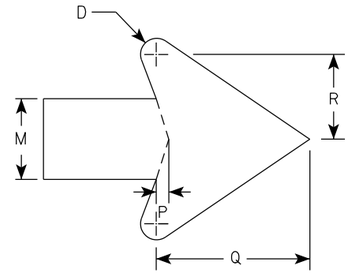

(D)




(D)




(D)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ENDS Area sq. ft. | MIDDLE Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 2M | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 18 | | | | | | 5.0 | 3.75 |
| 3 | 36 | 30 | 1 3/8 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 2 1/4 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 24 | | | | | | 7.5 | 6.0 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 30 | | | | | | 12.0 | 10.0 |

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

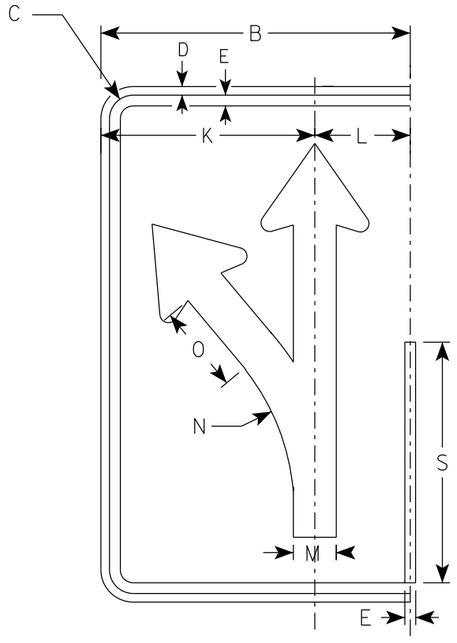
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

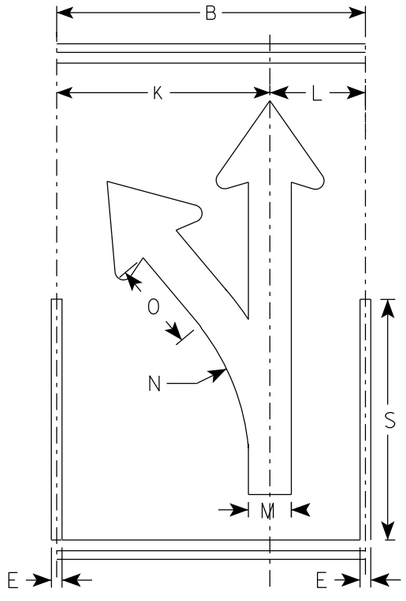
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 | E

NOTES

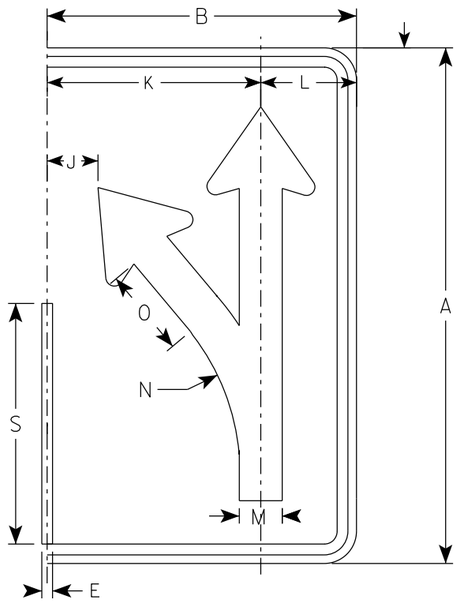
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



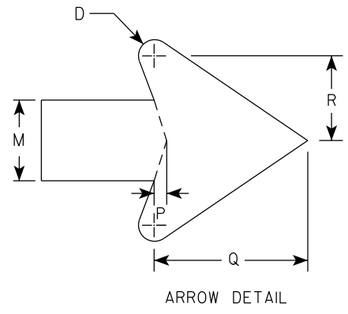

(E)




(E)




(E)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

# STANDARD SIGN
# R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

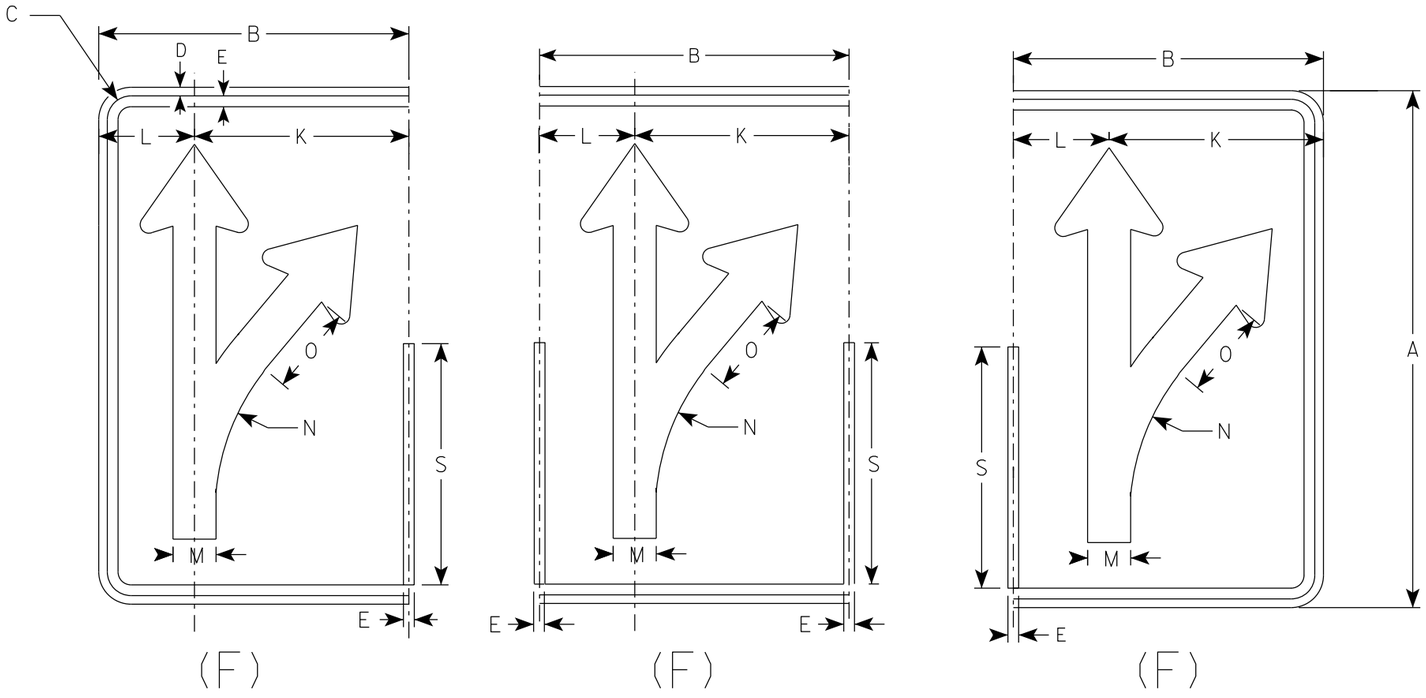
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

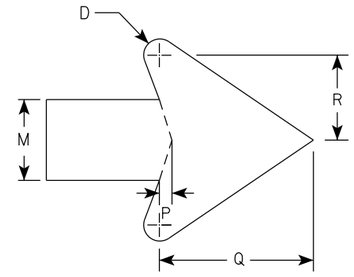
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(F) (F) (F)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | | | | | | | 10.0 |

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

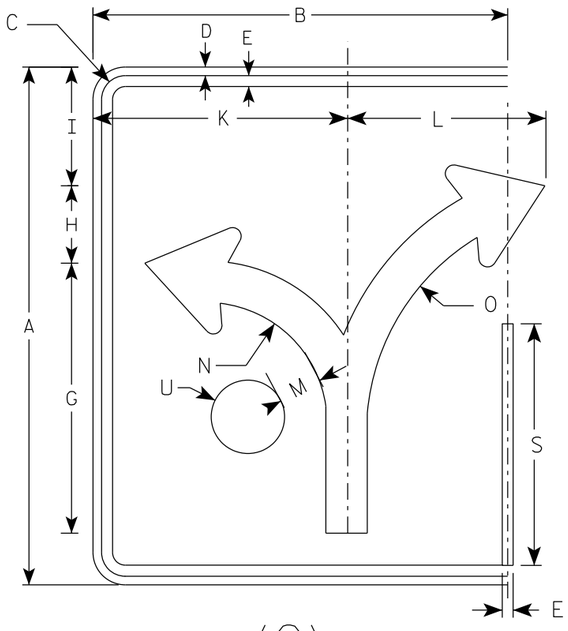
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

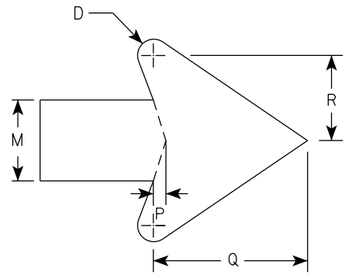
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 196 | E

## NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(G)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 6 7/8 | | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 3/8 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 8 1/4 | | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 11 | | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

# STANDARD SIGN
# R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

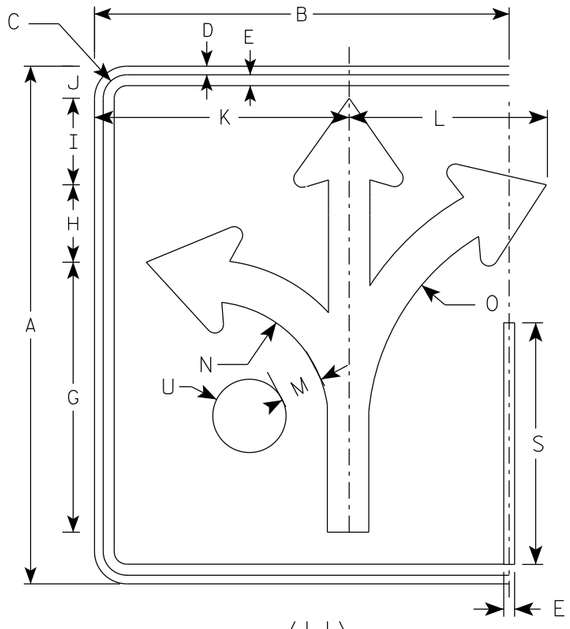
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 197 | E |
|---|---|---|---|---|---|



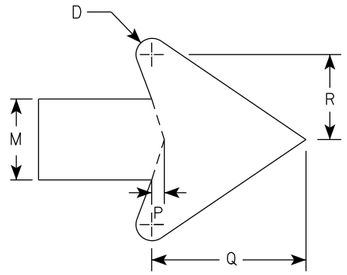

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:38 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(H)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 2M | 30 | 24 | 1 3/8 | 1/2 | 5/8 | | 15 5/8 | 4 1/2 | 5 | 1 7/8 | 14 3/4 | 11 1/2 | 2 3/8 | 7 | 13 1/4 | 3/8 | 4 1/2 | 2 1/2 | 14 | | 2 1/8 | | | | | | 5.0 |
| 3 | 36 | 30 | 1 3/8 | 1/2 | 5/8 | | 18 3/4 | 5 1/2 | 6 | 3 1/8 | 17 1/4 | 17 1/4 | 2 7/8 | 8 3/8 | 16 | 1/2 | 5 1/2 | 3 | 16 3/4 | | 2 1/2 | | | | | | 7.5 |
| 4 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |
| 5 | 48 | 36 | 2 1/4 | 3/4 | 1 | | 24 7/8 | 7 1/4 | 7 7/8 | 3 1/8 | 23 1/8 | 18 | 3 3/4 | 11 1/8 | 21 1/4 | 5/8 | 7 1/8 | 4 | 22 3/8 | | 3 3/8 | | | | | | 12.0 |

STANDARD SIGN
R3-8 (H) Arrow

*WISCONSIN DEPT OF TRANSPORTATION*

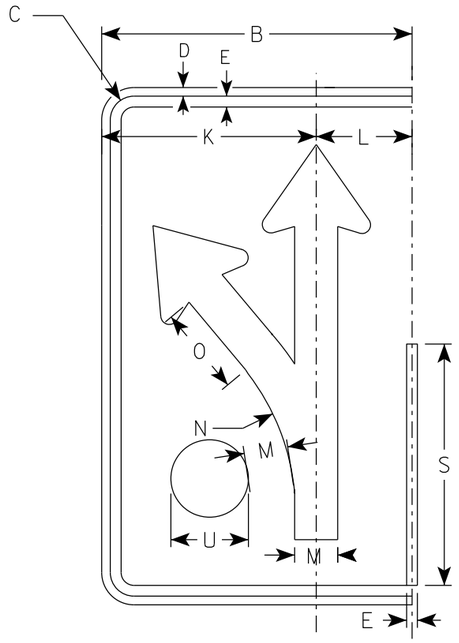
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

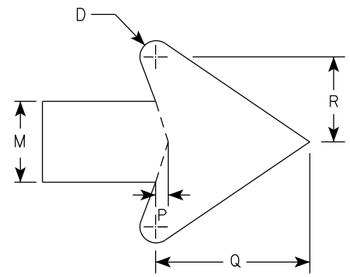
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 198 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(I)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 18 1/4 | 4 3/4 | 3 1/4 | 3 | 12 1/2 | 5 1/2 | 2 1/2 | 13 1/4 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | | 2 1/8 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | | 21 7/8 | 5 5/8 | 4 | 4 7/8 | 16 1/8 | 7 3/4 | 3 | 15 7/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | | 2 1/2 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 7 1/2 | 5 1/4 | 5 3/8 | 20 1/2 | 9 1/2 | 4 | 21 1/4 | 8 1/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | | 3 3/8 | | | | | | 10.0 |

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

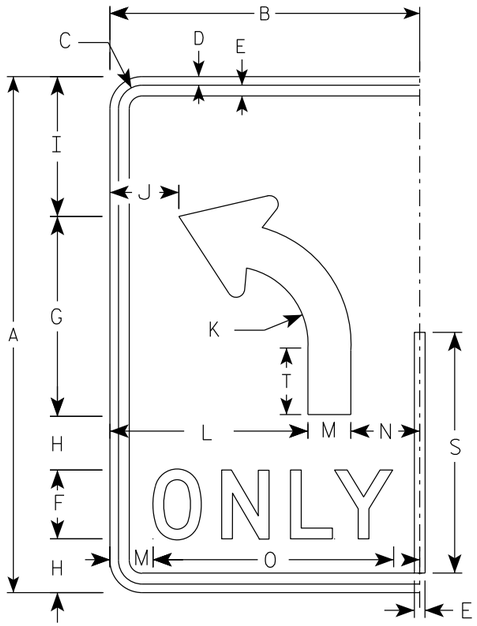
APPROVED Matthew R Rauch
For State Traffic Engineer

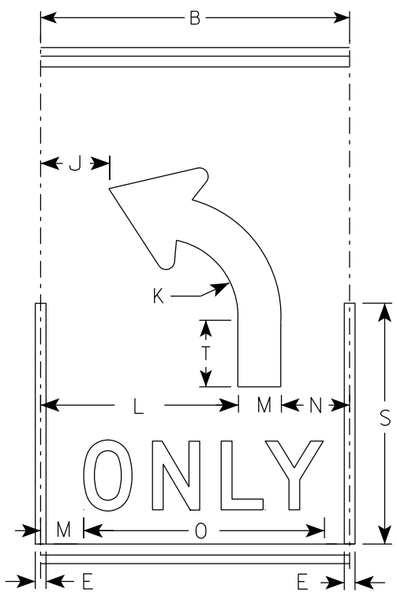
DATE 5/21/19 PLATE NO. R3-8.1

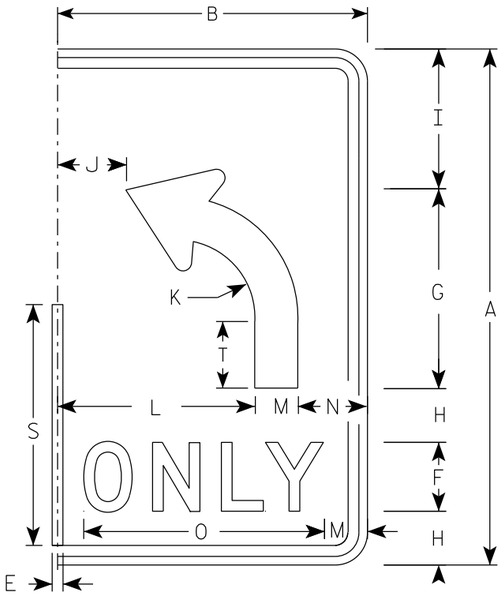
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 199 | E

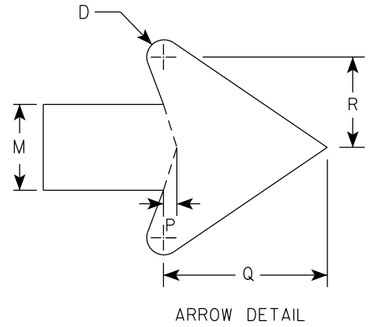
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

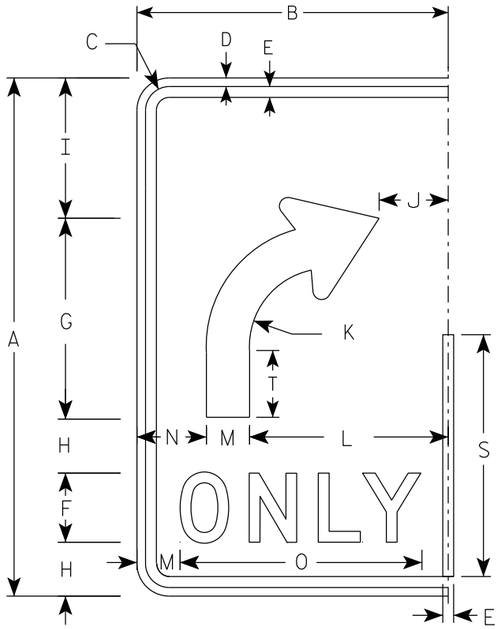
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

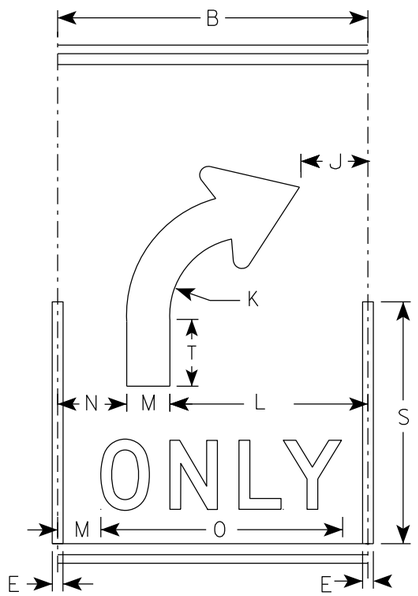
SHEET NO: 200 E

NOTES

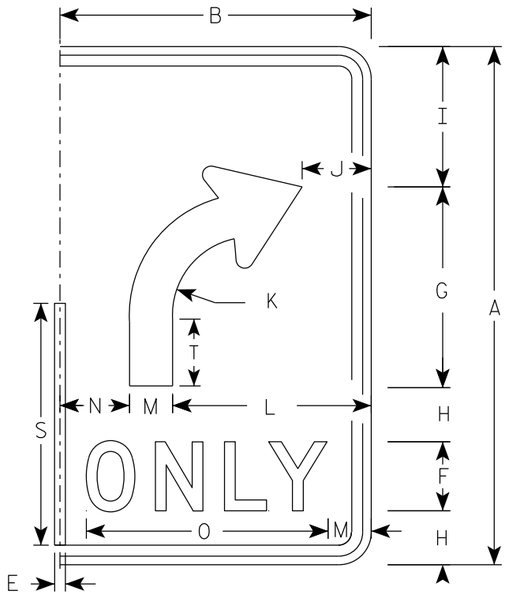
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



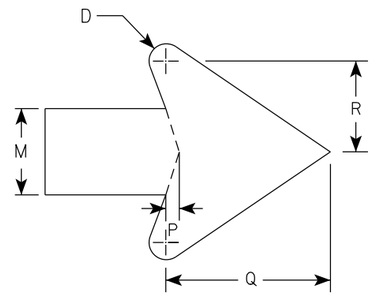

(R)




(R)




(R)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 11 5/8 | 3 1/8 | 8 1/8 | 4 | 4 1/2 | 11 1/2 | 2 1/2 | 4 | 14 | 3/8 | 4 3/4 | 2 5/8 | 14 | 3 7/8 | | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | 5 | 14 | 3 1/2 | 9 3/4 | 6 | 5 3/8 | 15 | 3 | 6 | 17 5/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 4 5/8 | | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | 6 | 18 5/8 | 5 1/8 | 13 1/8 | 6 1/8 | 7 1/4 | 18 | 4 | 8 | 21 3/4 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 6 1/4 | | | | | | | 10.0 |

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

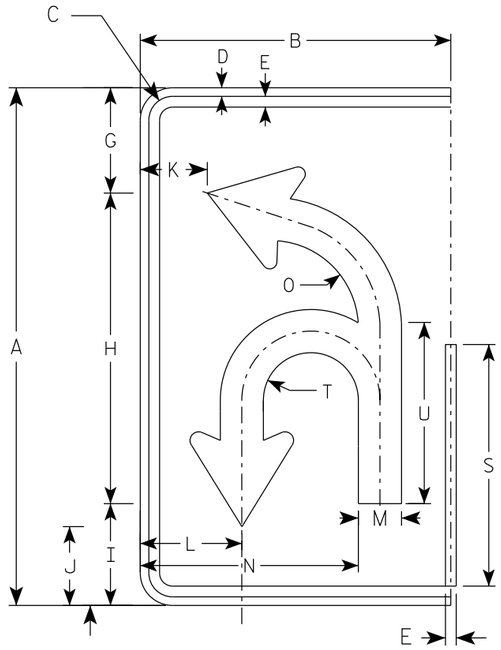
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

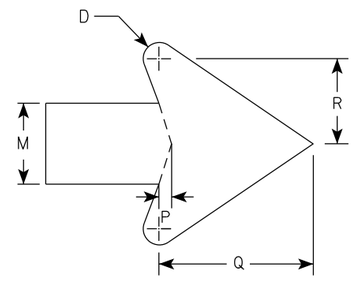
SHEET NO: 201 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None




(U)




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 2M | 30 | 18 | 1 3/8 | 1/2 | 5/8 | | 6 1/8 | 18 | 5 7/8 | 4 5/8 | 3 7/8 | 5 7/8 | 2 1/2 | 12 5/8 | 5 1/8 | 3/8 | 4 3/4 | 2 5/8 | 14 | 2 3/4 | 10 1/2 | | | | | | 3.75 |
| 3 | 36 | 24 | 1 3/8 | 1/2 | 5/8 | | 21 7/8 | 21 5/8 | 7 1/8 | 5 1/2 | 5 7/8 | 8 1/4 | 3 | 16 3/8 | 6 1/8 | 1/2 | 5 3/4 | 3 1/8 | 16 3/4 | 3 1/4 | 12 5/8 | | | | | | 6.0 |
| 4 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |
| 5 | 48 | 30 | 2 1/4 | 3/4 | 1 | | 29 1/8 | 28 3/4 | 9 3/8 | 7 1/4 | 6 7/8 | 10 | 4 | 20 7/8 | 8 1/8 | 5/8 | 7 5/8 | 4 1/4 | 22 3/8 | 4 3/8 | 16 3/4 | | | | | | 10.0 |

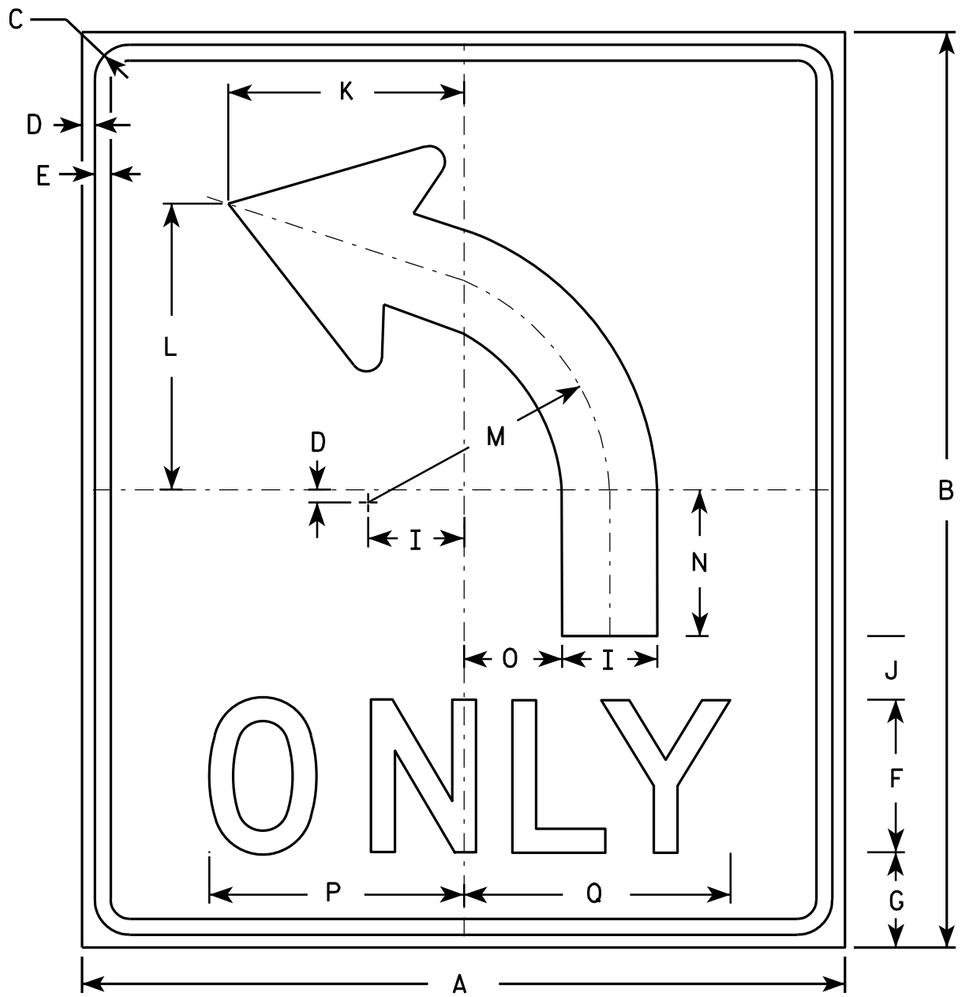
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

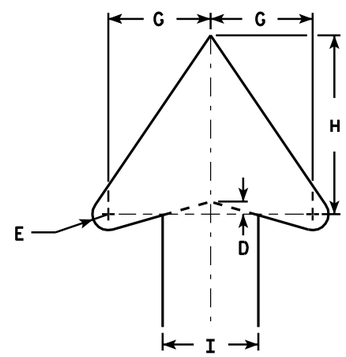
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | E




R3-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-50R is the same as R3-50L except curved portion of arrow points right.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 6 | 4 | 7 | 3 3/4 | 2 1/2 | 9 1/4 | 11 1/4 | 9 1/2 | 5 3/4 | 3 7/8 | 10 | 10 1/2 | | | | | | | | | | 7.5 |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 6 | 4 | 7 | 3 3/4 | 2 1/2 | 9 1/4 | 11 1/4 | 9 1/2 | 5 3/4 | 3 7/8 | 10 | 10 1/2 | | | | | | | | | | 7.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-50.2

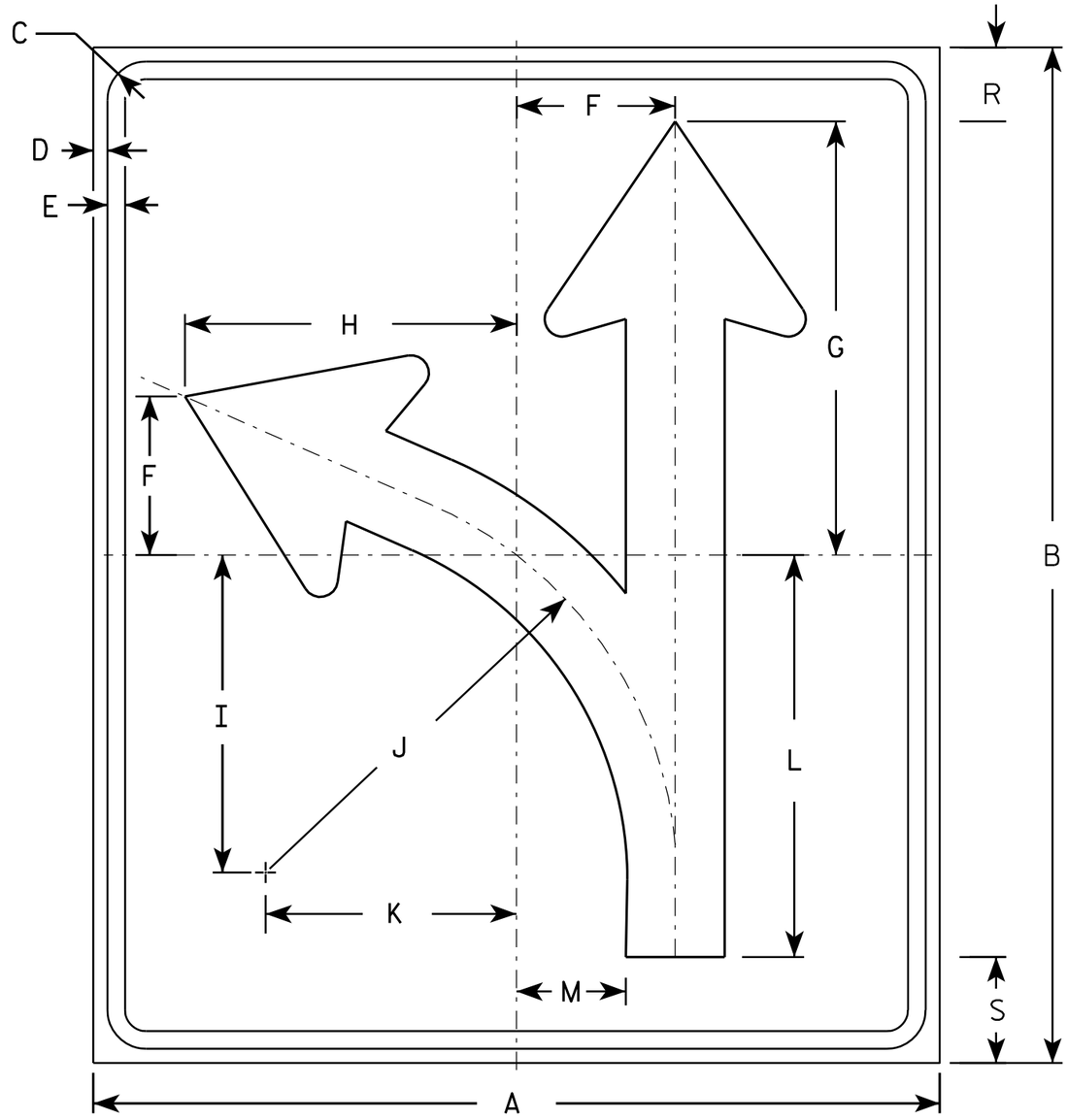
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 203 | E |
|---|---|---|---|---|---|

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R350.DGN PLOT DATE : 24-MAR-2011 13:40 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

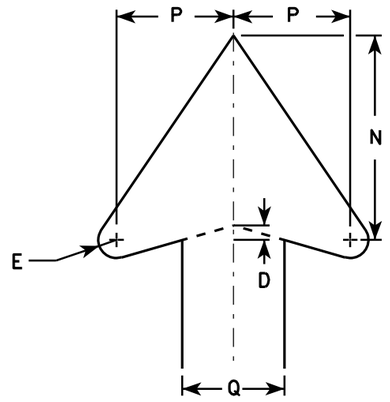
7




R3-60L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. R3-60R is the same as R3-60L except curved portion of arrow points to right.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 5 5/8 | 15 3/8 | 11 1/4 | 5 3/8 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | | 4 | 3 1/2 | 2 5/8 | 3 3/4 | | | | | | | | 7.5 |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 5 5/8 | 15 3/8 | 11 1/4 | 5 3/8 | 14 1/2 | 8 7/8 | 14 1/4 | 3 7/8 | 7 | | 4 | 3 1/2 | 2 5/8 | 3 3/4 | | | | | | | | 7.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R3-60.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 204 | E |
|---|---|---|---|---|---|

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R360.DGN PLOT DATE : 25-MAR-2011 13:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.214163:1.000000

WISDOT/CADDS SHEET 42

7

7




R9-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 3 are Series C
   Line 2 is Series B

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 12 | 18 | 1 1/8 | 3/8 | 3/8 | 3 | 2 | 2 1/4 | 3 1/2 | 4 7/8 | | | | | | | | | | | | | | | | | 1.5 |
| 2M | 12 | 18 | 1 1/8 | 3/8 | 3/8 | 3 | 2 | 2 1/4 | 3 1/2 | 4 7/8 | | | | | | | | | | | | | | | | | 1.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

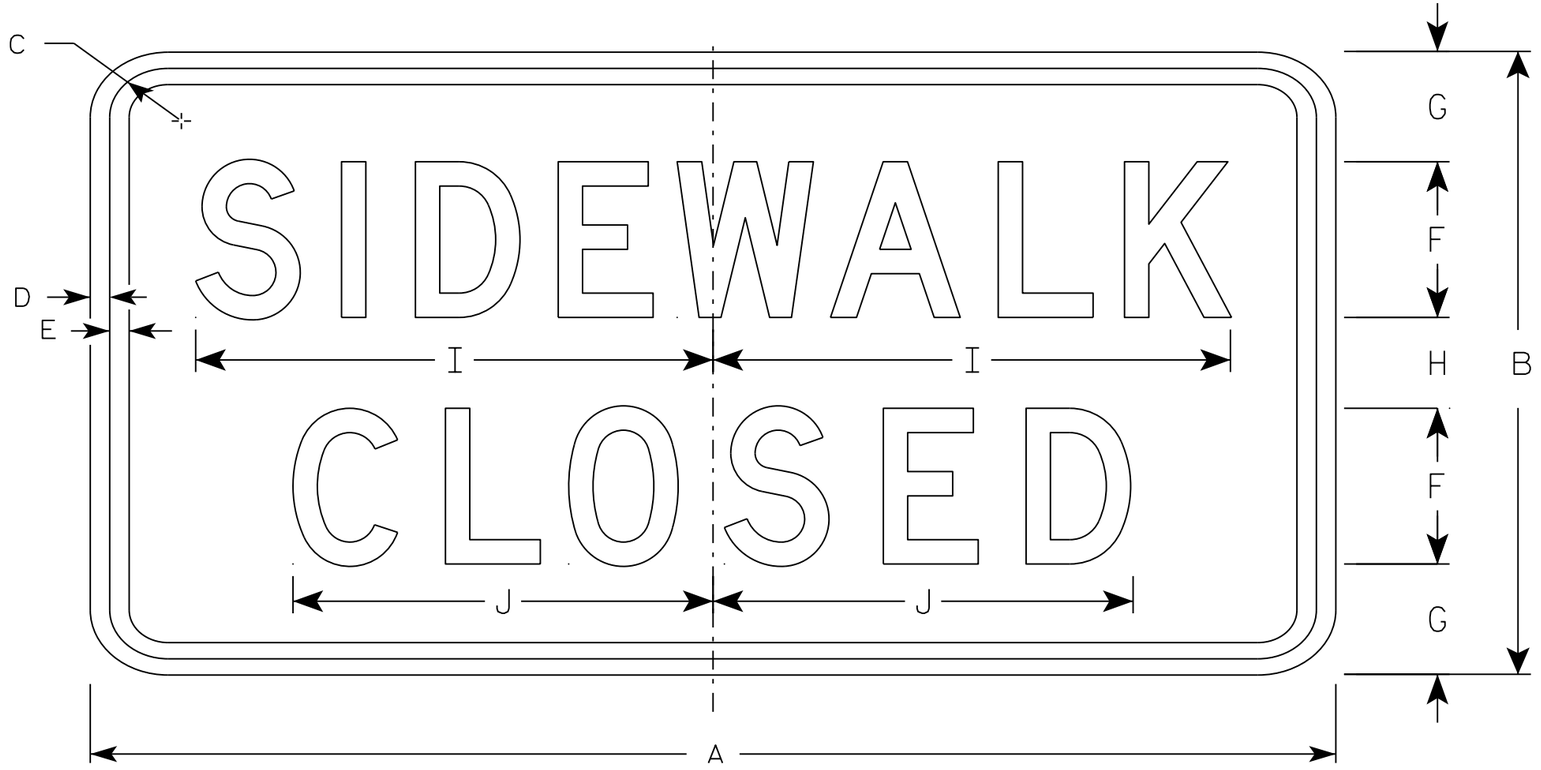
STANDARD SIGN
R9-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-3.6

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 205 | E |
|---|---|---|---|---|---|




R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 3/4 | 1/2 | 1/2 | 4 | 3 1/2 | 3 | 12 1/2 | 10 1/4 | | | | | | | | | | | | | | | | | 3.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

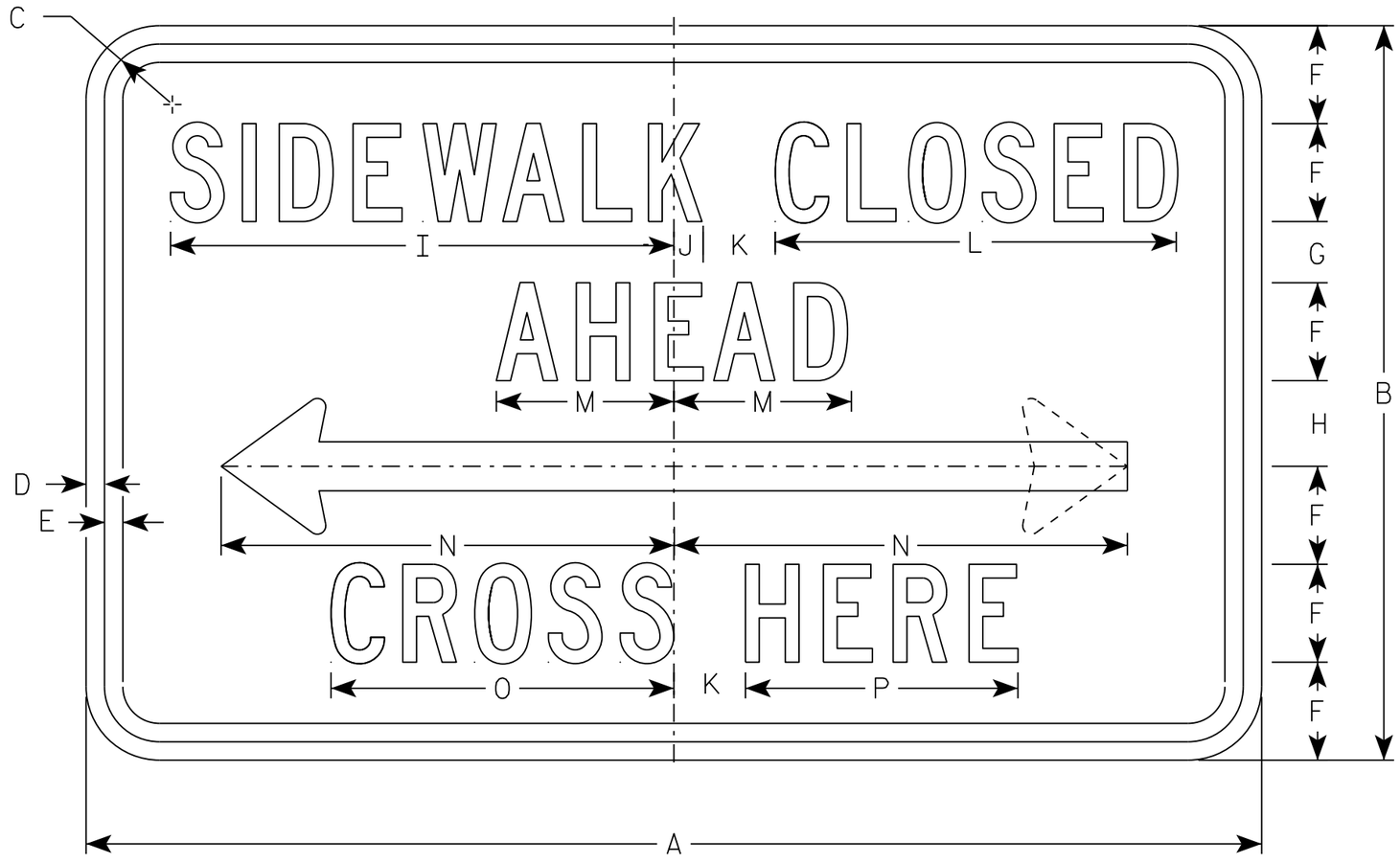
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 206 R9-9.6

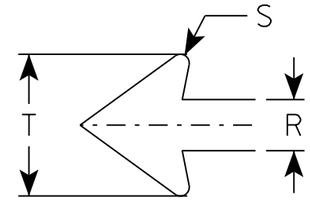
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000




R9-11




NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 1 1/2 | 1 1/2 | 1 1/2 | 9 3/4 | 5/8 | 1 1/2 | 7 5/8 | 3 1/2 | 9 1/4 | 6 5/8 | 5 1/8 | | 1 | 1/8 | 2 3/4 | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 1 1/2 | 1 1/2 | 1 1/2 | 9 3/4 | 5/8 | 1 1/2 | 7 5/8 | 3 1/2 | 9 1/4 | 6 5/8 | 5 1/8 | | 1 | 1/8 | 2 3/4 | | | | | | | 2.0 |
| 3 | 30 | 15 | 1 1/8 | 3/8 | 1/2 | 2 | 1 1/2 | 1 1/2 | 13 | 3/4 | 2 | 10 1/4 | 4 5/8 | 12 3/8 | 8 7/8 | 6 7/8 | | 1 1/4 | 1/4 | 3 5/8 | | | | | | | 3.125 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

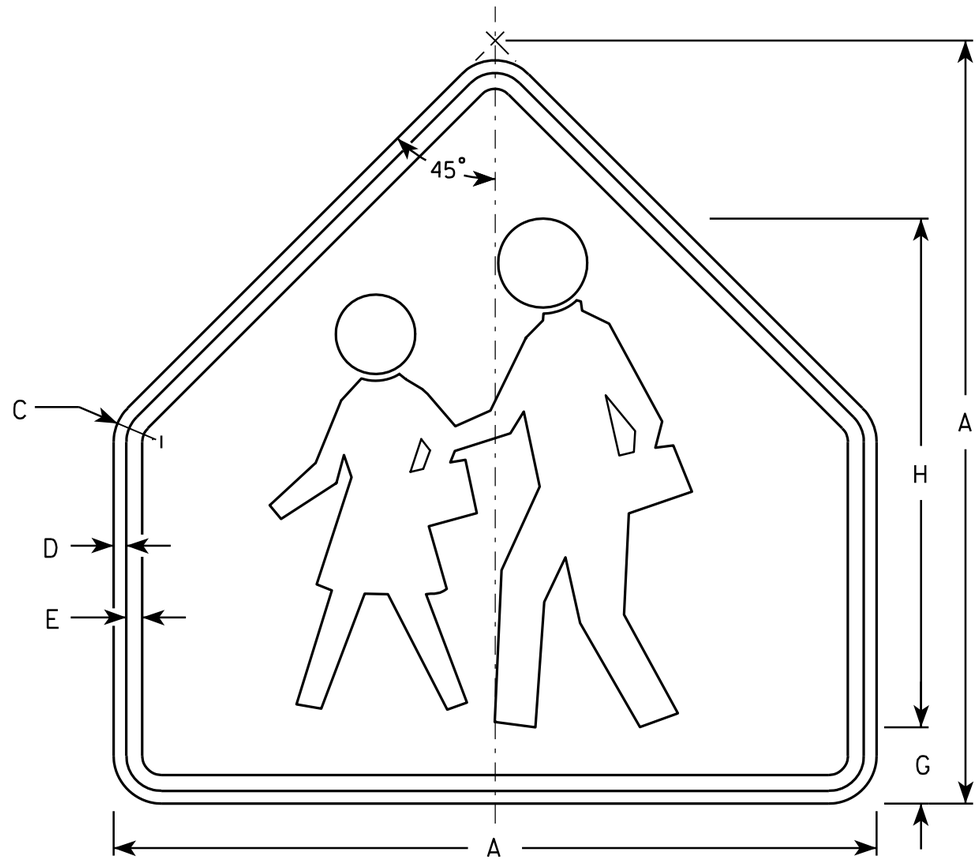
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 207 | E |
|---|---|---|---|---|---|




S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 3 | 20 | | | | | | | | | | | | | | | | | | | 4.69 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 1/2 | 24 | | | | | | | | | | | | | | | | | | | 6.75 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 1/2 | 24 | | | | | | | | | | | | | | | | | | | 6.75 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 4 3/4 | 32 | | | | | | | | | | | | | | | | | | | 12 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

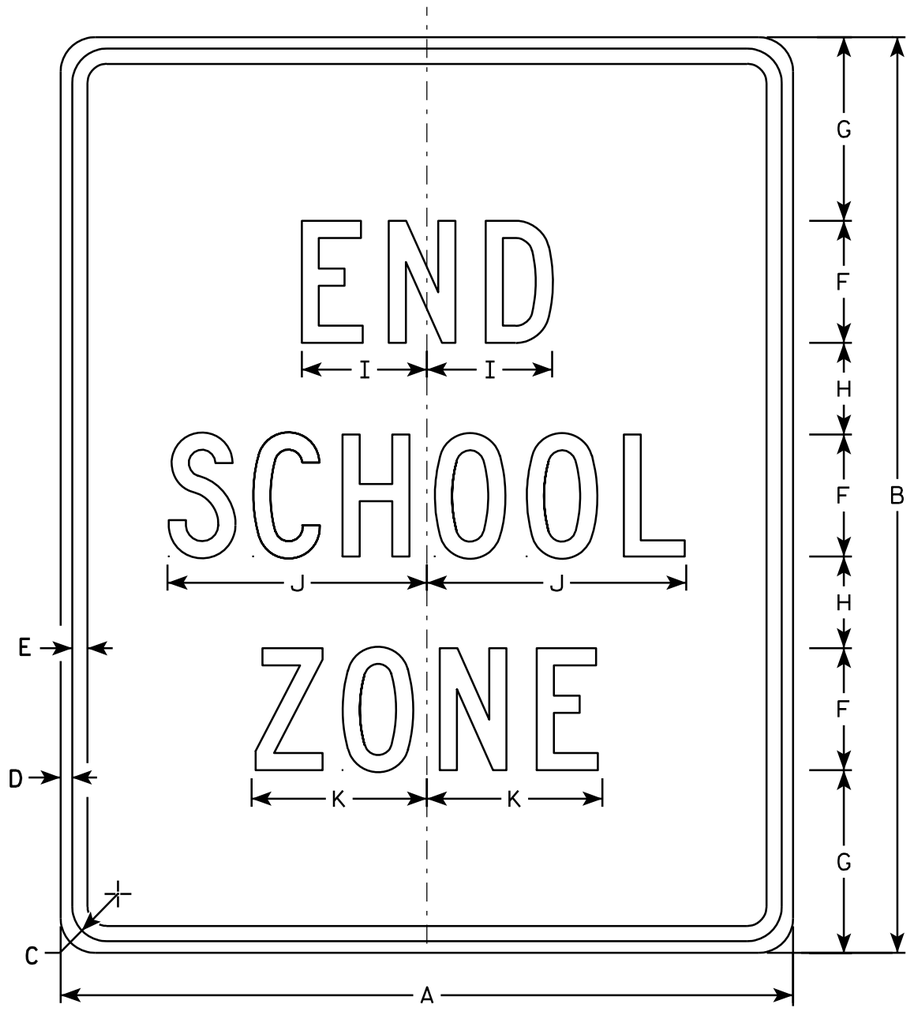
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 208 | E |
|---|---|---|---|---|---|




S5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 | 6 | 3 | 4 1/8 | 8 1/2 | 5 3/4 | | | | | | | | | | | | | | | | 5.0 |
| 3 | 36 | 42 | 1 5/8 | 5/8 | 3/4 | 6 | 7 | 5 | 6 1/8 | 12 5/8 | 8 5/8 | | | | | | | | | | | | | | | | 10.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

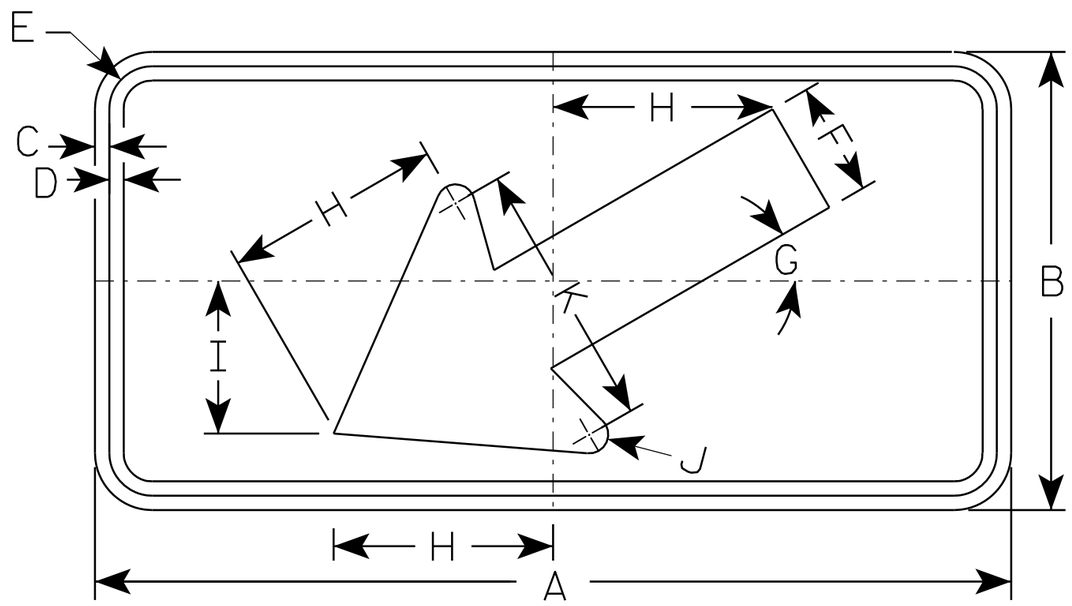
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E




S16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 12 | 3/8 | 3/8 | 1 1/8 | 3 | 30° | 5 3/4 | 4 | 1/2 | 7 | | | | | | | | | | | | | | | | 2.0 |
| 2S | 30 | 18 | 3/8 | 1/2 | 1 1/8 | 4 1/2 | 30° | 8 1/2 | 6 | 5/8 | 10 1/4 | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 3/8 | 1/2 | 1 1/8 | 4 1/2 | 30° | 8 1/2 | 6 | 5/8 | 10 1/4 | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 3/8 | 1/2 | 1 1/8 | 4 1/2 | 30° | 8 1/2 | 6 | 5/8 | 10 1/4 | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1/2 | 5/8 | 1 3/8 | 6 | 30° | 11 1/2 | 8 | 1 | 14 | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

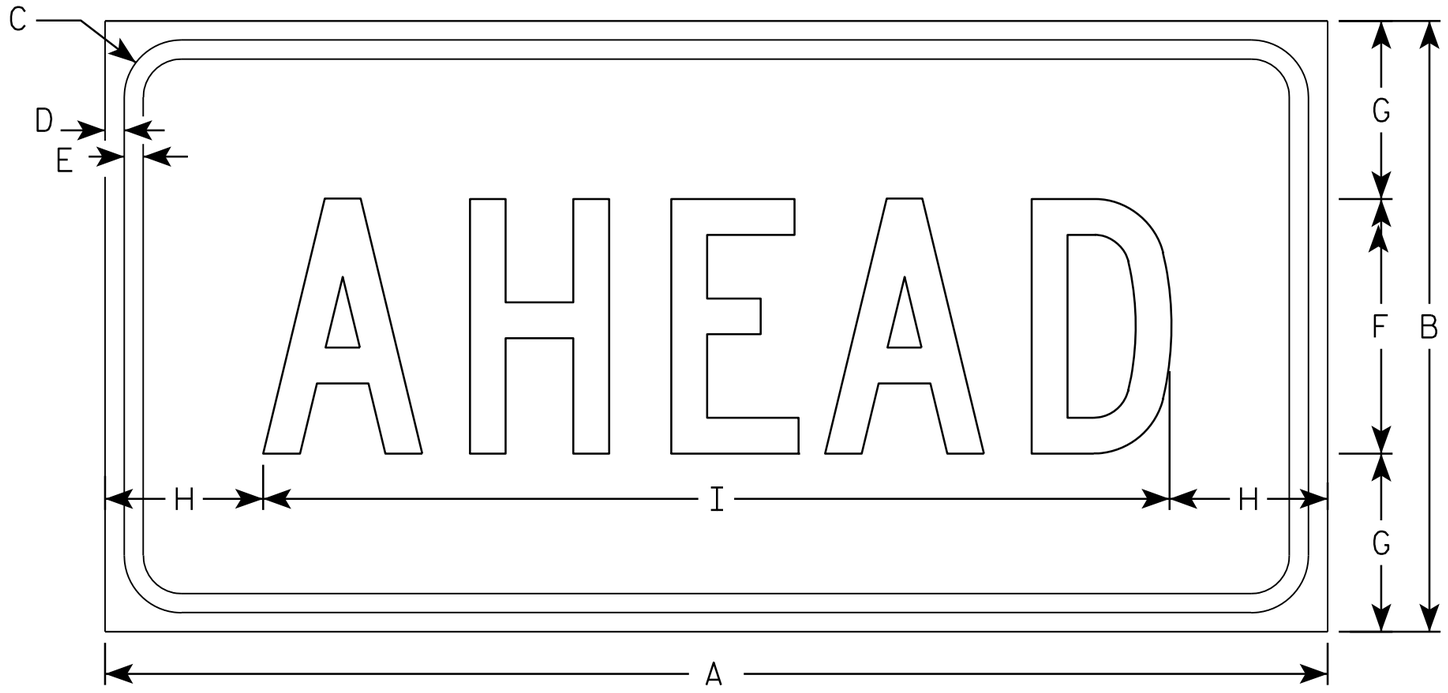
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E




S16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 5 | 3 1/2 | 3 1/8 | 17 3/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2S | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 3 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 10 | 7 | 6 1/8 | 35 3/4 | | | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

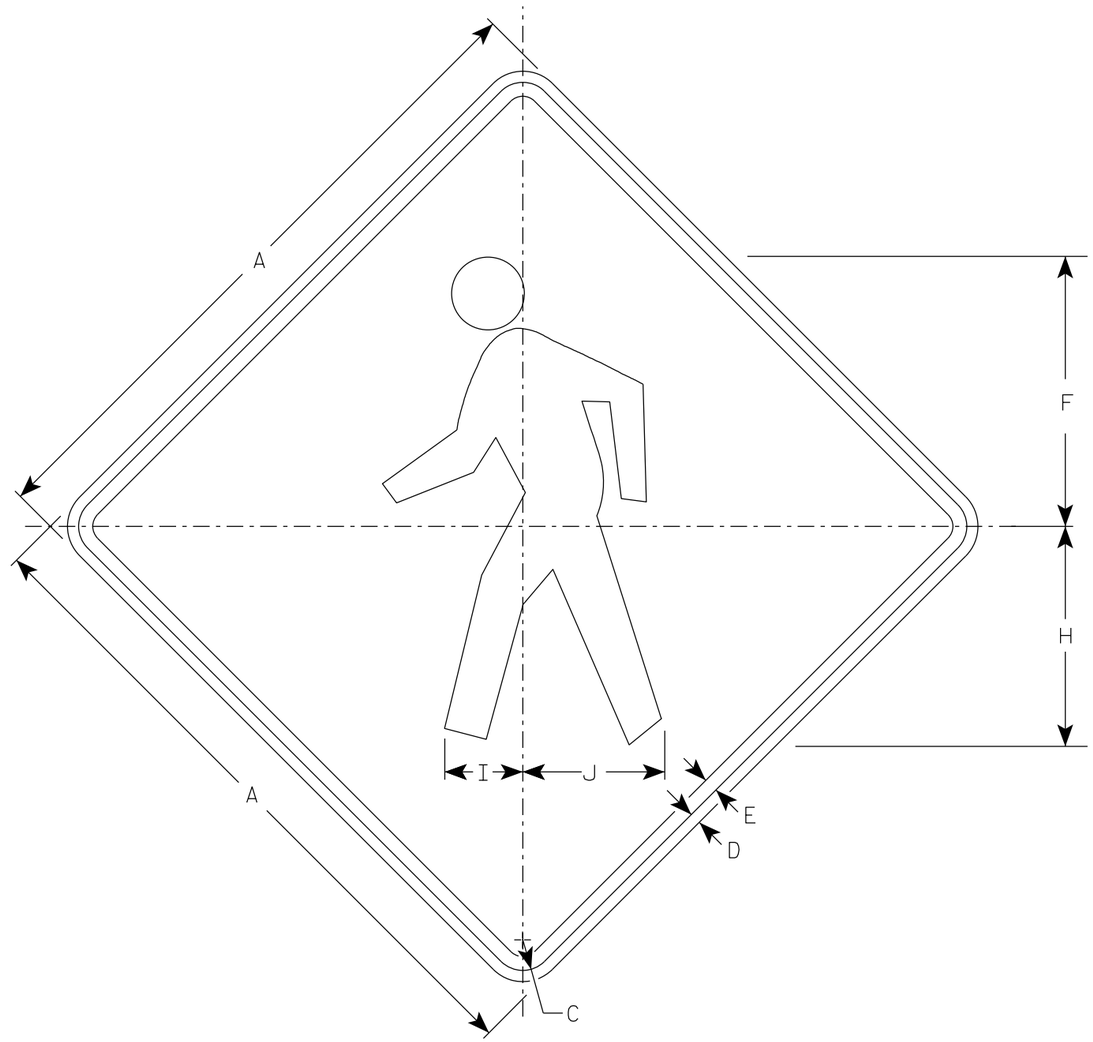
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 211 | E



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\S169P.dgn PLOT DATE : 22-JUL-2013 10:32 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 2.977140:1.000000




W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 9 3/4 | | 7 7/8 | 2 7/8 | 5 1/8 | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 12 1/8 | | 9 7/8 | 3 1/2 | 6 3/8 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# STANDARD SIGN
# W11-2

*WISCONSIN DEPT OF TRANSPORTATION*

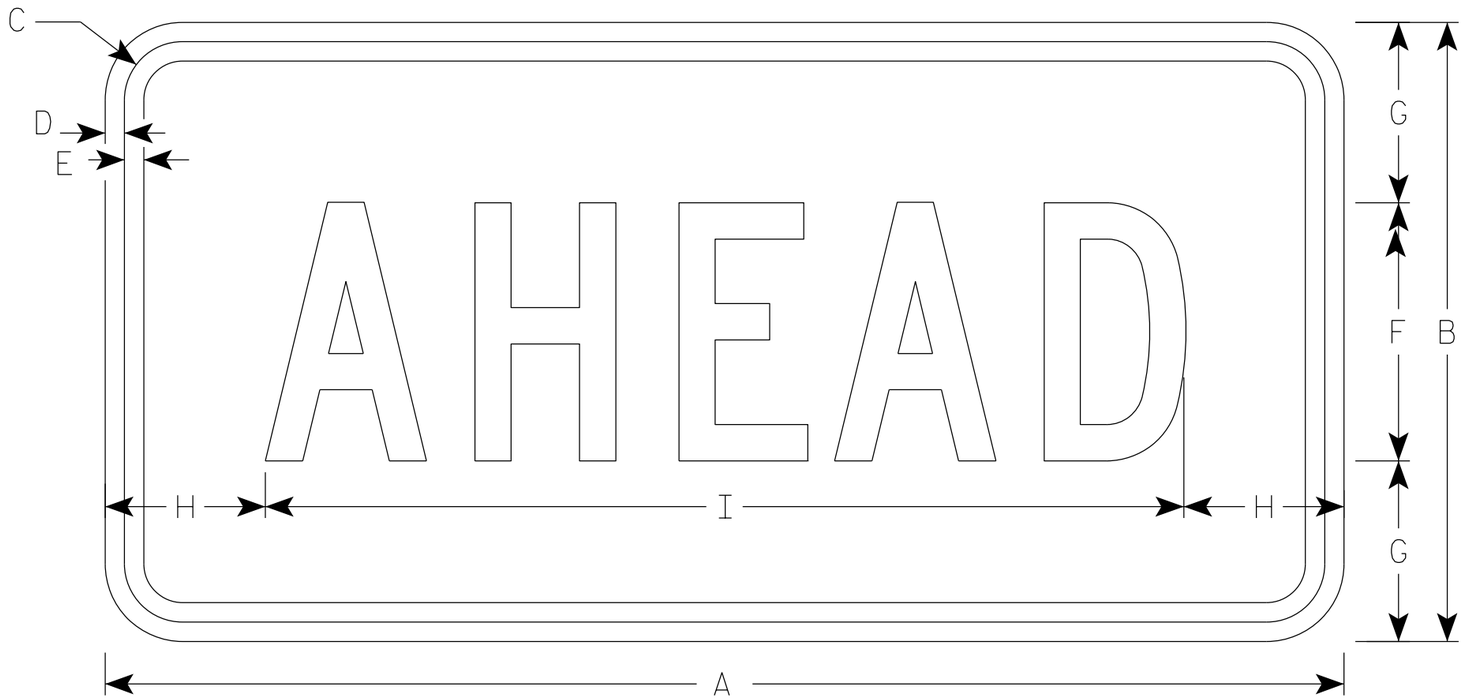
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 212 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C




W16-9P

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 5 | 3 1/2 | 3 1/8 | 17 3/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 3 | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 3 1/2 | 2 3/4 | 24 1/2 | | | | | | | | | | | | | | | | | | 3.75 |
| 4 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 10 | 7 | 6 1/8 | 35 3/4 | | | | | | | | | | | | | | | | | | 8.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

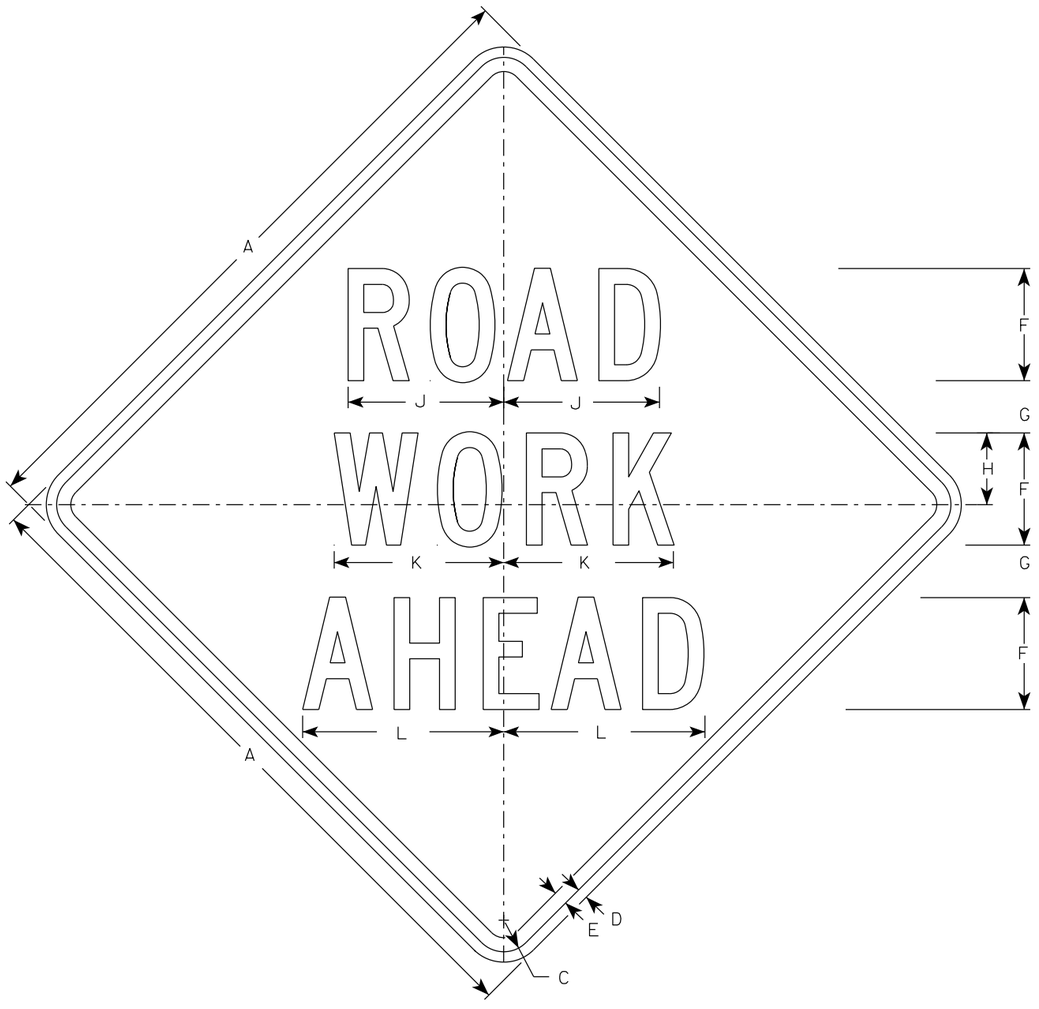
DATE 3/7/19 PLATE NO. W16-9P.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 213 E

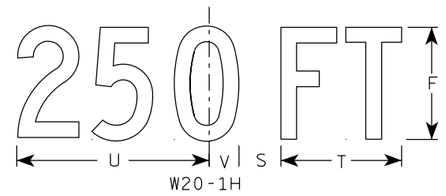
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W169P.DGN PLOT DATE : 07-MAR-2019 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



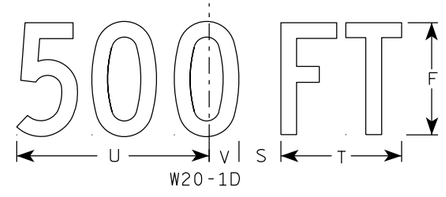

7




W20-1A



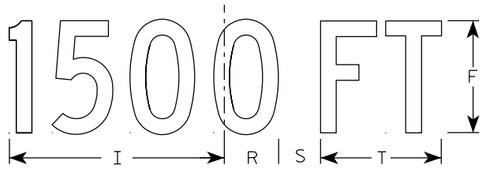

W20-1H




W20-1D



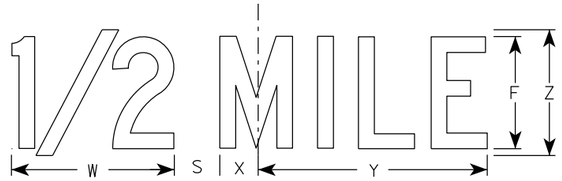

W20-1C



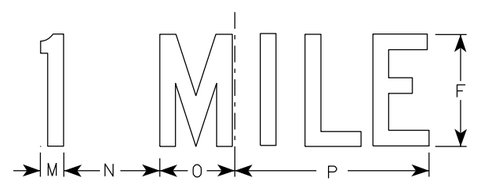

W20-1B

NOTES

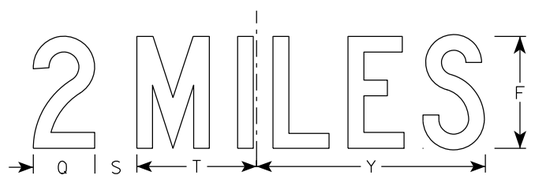
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




W20-1G




W20-1F




W20-1E

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 3 1/4 | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

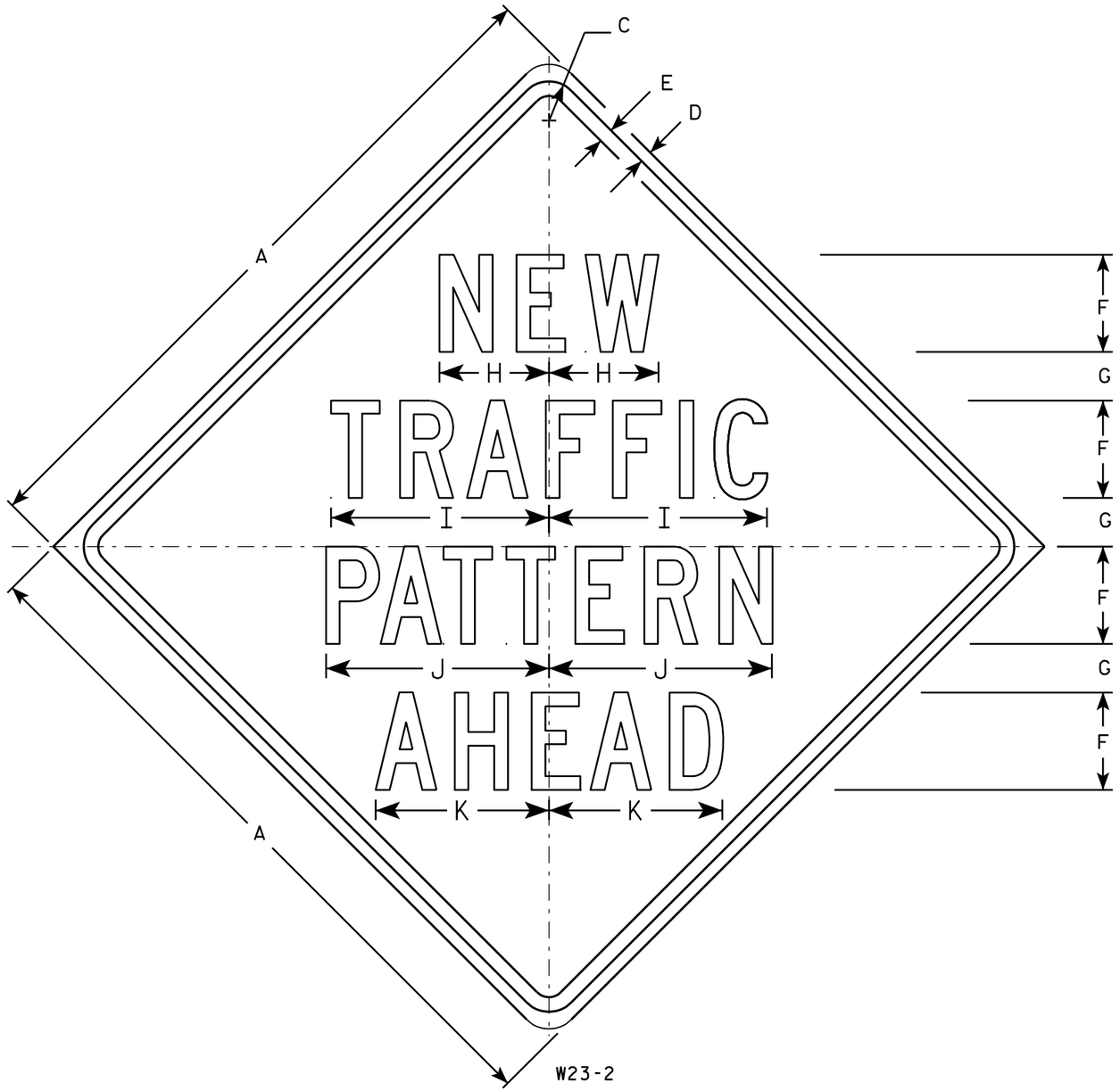


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7




NOTES

1. Sign isType II - Type F Reflective - reference WIS DOT Standard Specification forHIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 2 1/2 | 5 5/8 | 11 1/4 | 11 1/2 | 8 7/8 | | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 2 1/2 | 5 5/8 | 11 1/4 | 11 1/2 | 8 7/8 | | | | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

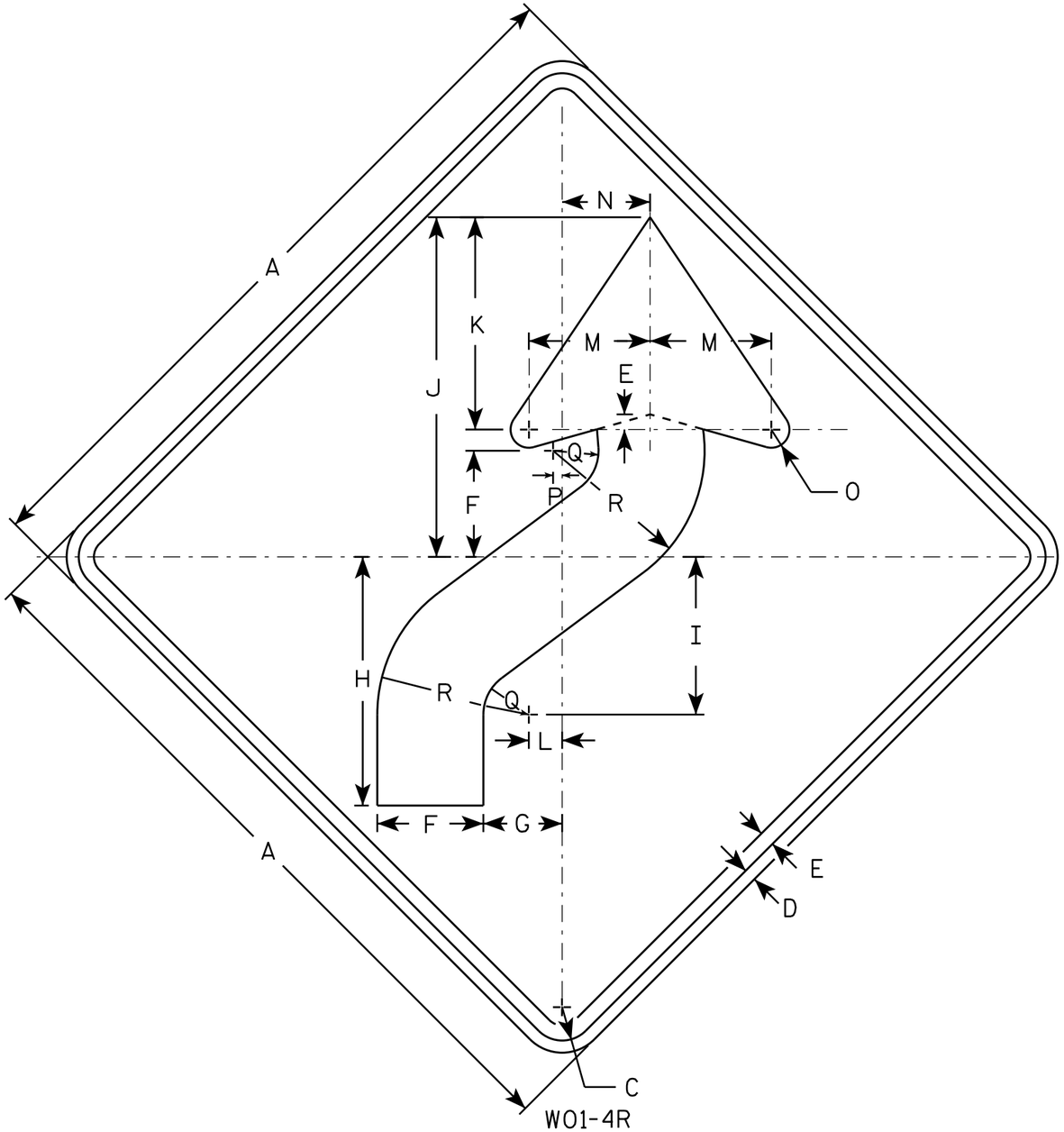
STANDARD SIGN
W23-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W23-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E




W01-4R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

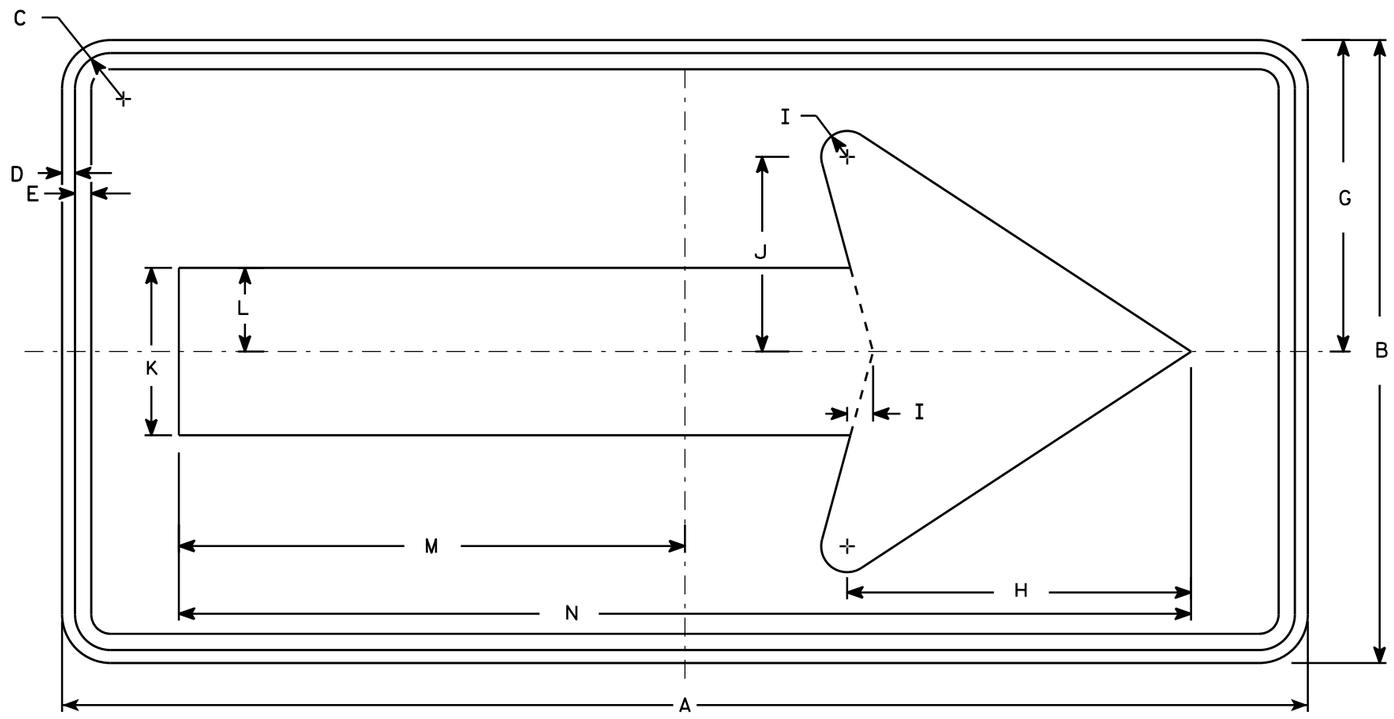
DATE 11/18/13 PLATE NO W01-4.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42




W01-6

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

# STANDARD SIGN
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1



PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

## DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONS DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE.
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS.
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS. (700 YEAR MEAN RECURRENCE INTERVAL)

| WIND COMPONENTS | NORMAL | TRANSVERSE |
|---|---|---|
| LOAD CASE 1: | 1.00 | 0.00 |
| LOAD CASE 2: | 0.00 | 1.00 |
| LOAD CASE 3: | 0.75 | 0.75 |

LOAD COMBINATIONS

STRENGTH I: 1.25 DC + 1.6 LL
EXTREME I (MAX DC): 1.1 DC + 1.0 W + 1.0 ICE
EXTERME I (MIN DC): 0.9 DC + 1.0 W
SERVICE I: 1.0 DC + 1.0 W
FATIGUE I: 1.0 NWG (NATURAL WIND GUST VIBRATION)
1.0 TRG (TRUCK INDUCED GUST VIBRATION)
1.0 GVW (GALLOPING - CANTILEVER ONLY)

## MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 3,500 psi

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60..... fy = 60,000 psi

HIGH STRENGTH BOLTS - A325..... fy = 92,000 psi

ANCHOR RODS - ASTM F1554 GRADE 55..... fy = 55,000 psi

HEAVY HEX NUTS FOR ANCHOR RODS - ASTM A563A

WASHERS FOR ANCHOR RODS - ASTM F436

## FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING DRILLING OF THE SHAFT HOLE TO CONFIRM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), PIERCE 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 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" DIA A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE 1/4 THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

## STRUCTURE DATA

| SIGN STR | ACTUAL SIGN AREA | ACTUAL SIGN DEPTH | STANDARD TYPE |
|---|---|---|---|
| S-47-16 | 43 SF | 4'-0" | C6 |

STATE PROJECT NUMBER

1530-03-76

## TRAFFIC VOLUME

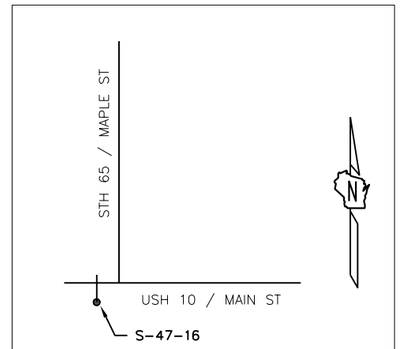
A.A.D.T. (2041) = 9,270
R.D.S. = 25 MPH

## LIST OF DRAWINGS

1. GENERAL NOTES & DESIGN DATA
2. GENERAL LAYOUT S-47-16

## LIST OF OSS STANDARD DESIGN DRAWINGS

3. I. MONOTUBE & 2-CHORD TRUSS DETAILS 1
4. II. MONOTUBE & CHORD TRUSS DETAILS 2
5. III. MONOTUBE & TWO-CHORD TRUSS STANDARD ELECTRICAL DETAILS
6. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATION DETAILS




LOCATION MAP

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NO. | BID ITEM | UNIT | S-47-16 |
|---|---|---|---|
| 531.2042 | DRILLING SHAFT 42-INCH | LF | 18 |
| 531.5130 | FOUNDATION SINGLE-SHAFT TYPE MC-III S-47-16 | EA | 1 |
| 532.5130 | MONOTUBE CANTILEVER TYPE III S-47-16 | EA | 1 |


STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
CHAD HALVERSON (608) 663-1218


THESE ARE STANDARD DESIGN PLANS, DEVELOPED AND MAINTAINED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISCONSIN BRIDGE MANUAL CHAPTER 39.




October 29, 2020

| DATE | REVISION | BY |
|---|---|---|

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 01/19/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

# MONOTUBE AND 2-CHORD TRUSS PLANS

USH 10 EB

| COUNTY | ~~Town/City~~/Village |
|---|---|
| PIERCE | ELLSWORTH |

DESIGN SPEC. AASHTO LRFDLTS-1 W/INTERIMS

| DESIGNED BY | DESIGNED CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| BOS | BOS | STD | CAH |

GENERAL NOTES & DESIGN DATA

SHEET 1 OF 6

218

I.D. 1530-03-76 DATE: 7-27-2020

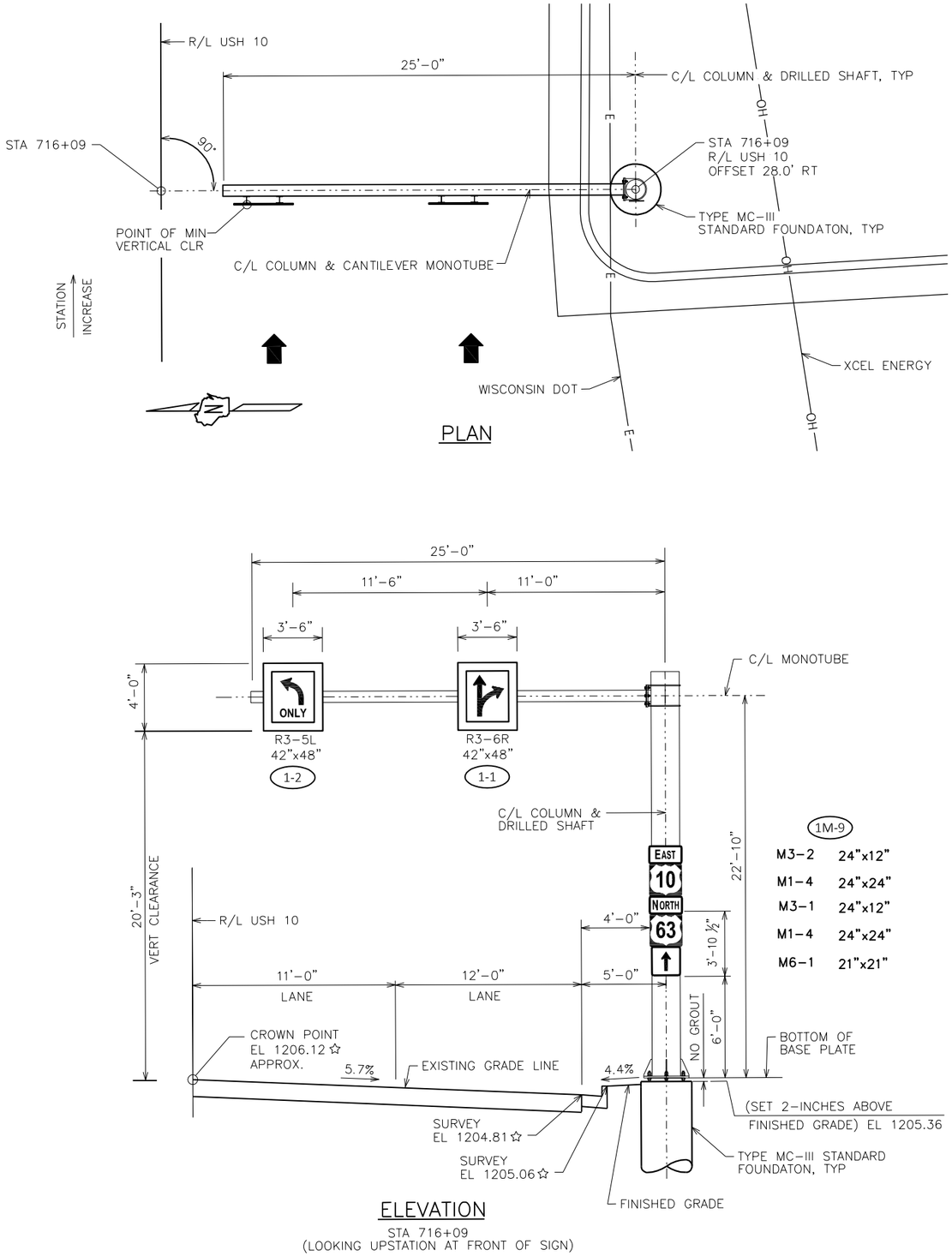
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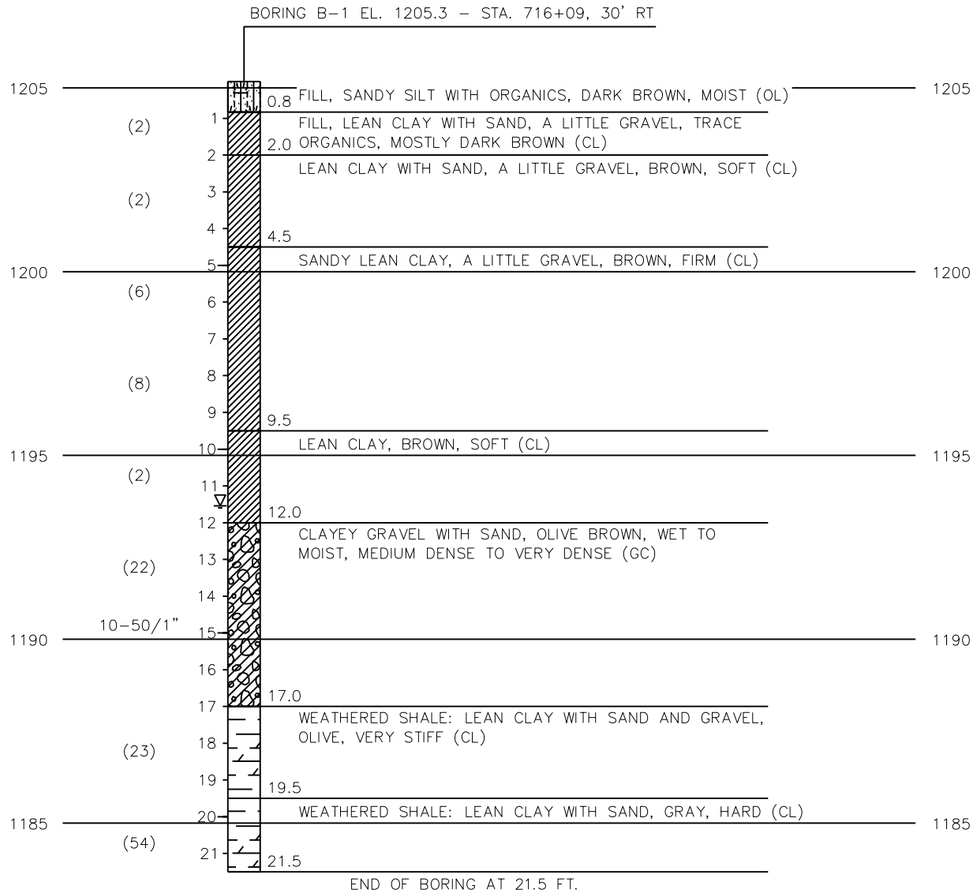
8

8

STATE PROJECT NUMBER

1530-03-76




BORING LOG

## NOTE

POINT OF MIN VERTICAL CLEARANCE
STA 716+09, 3.9' RT
EL 1205.91

## LEGEND

☆ ELEVATIONS GIVEN ALONG C/L MONOTUBE CHORD

(X-XX) SIGN NUMBERS (PERMANENT SIGNING PLAN)

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-47-16

DRAWN BY STD | PLANS CK'D. CAH

GENERAL LAYOUT
S-47-16

SHEET 2 OF 6

219

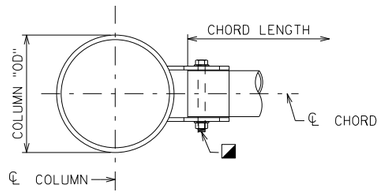
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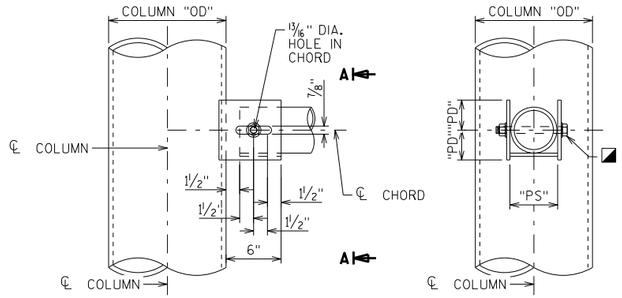
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STATE PROJECT NUMBER

STANDARD




PLAN




ELEVATION SECTION A-A

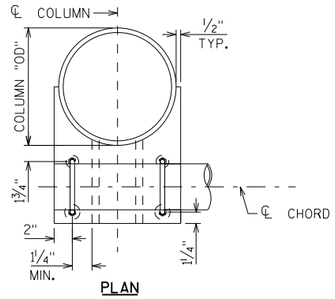
## FULL SPAN SADDLE CONNECTION

PREFERRED

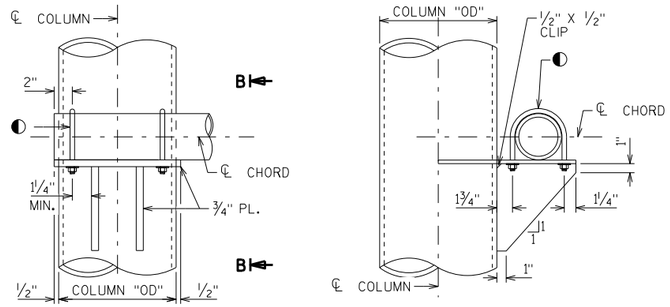
3/4" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT, WASHER

"PD" = (CHORD "OD")/2 + 3/4"

"PS" = CHORD "OD" + 3/16"




PLAN

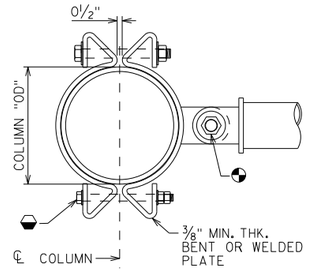



ELEVATION SECTION B-B

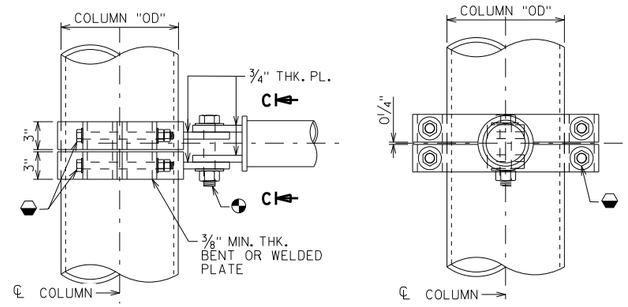
## FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

◐ (2) - 1/2" MIN. GALVANIZED U-BOLT, NUT, WASHER AND LOCK WASHER




PLAN



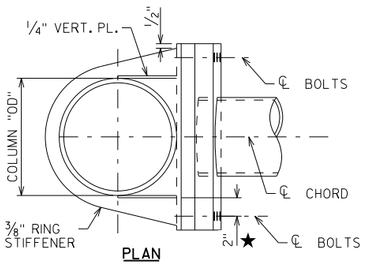

ELEVATION SECTION C-C

## FULL SPAN CLAMP CONNECTION

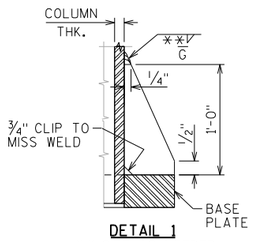
ALTERNATE 2 - TAPERED COLUMNS ONLY

1 1/4" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

1" GALVANIZED A449 HEAVY HEX BOLT, NUT AND WASHER

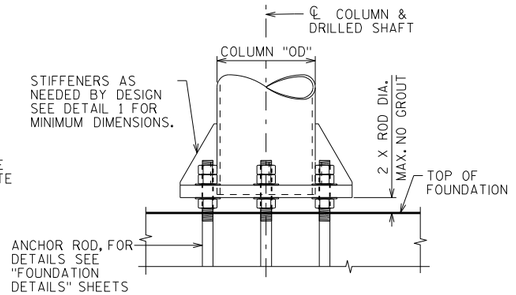



PLAN



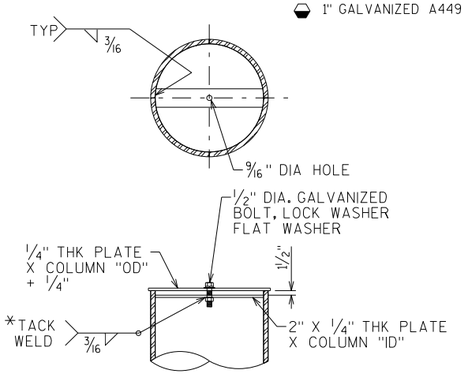

DETAIL 1

** SIZE AS NEEDED



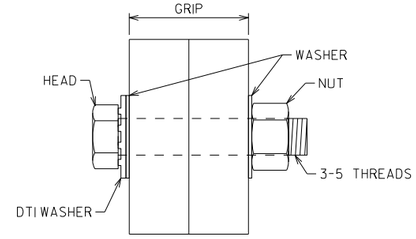

## BASE PLATE & COLUMN DETAIL

LOOKING AT FRONT FACE OF STRUCTURE

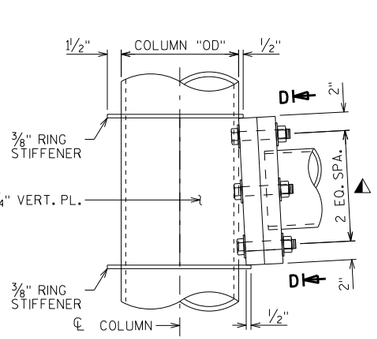



## COLUMN/CHORD CAP DETAIL

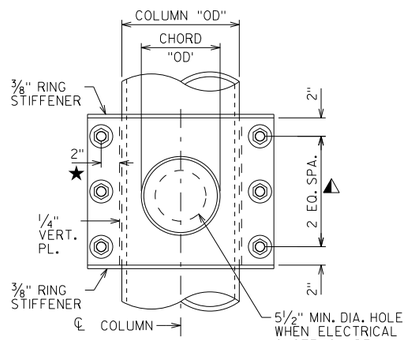
*PLACE TACK EVERY OTHER FLAT TO SECURE NUT OR USE 1/2" THICK AND TAP PLATE HOLE FOR BOLT THREADS




## RECOMMENDED BOLT DETAIL WITH DTI




ELEVATION

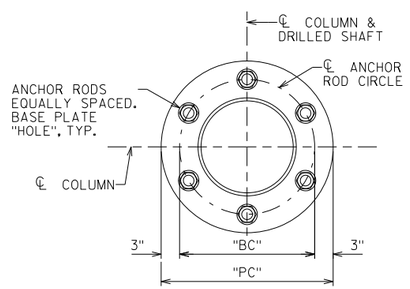



SECTION D-D

## CANTILEVER POST TO CHORD CONNECTION

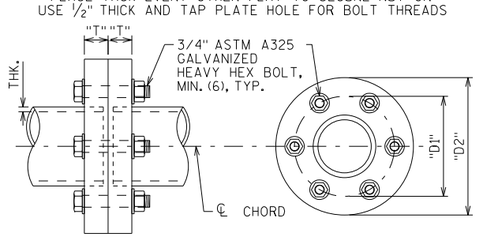
◭ MIN. CONNECTION = (6) - 1" GALVANIZED A325 BOLTS, NUT, WASHER AND DTI

★ MEASURED FROM EXT. FACE OF VERT. PLATE




## BASE PLATE

PLAN




## CHORD SPLICE DETAIL

"D1" = CHORD "OD" + 3"

"D2" = CHORD "OD" + 6"

"T" = BY DESIGN

**NOTES:**

MINIMUM VALUES SHOWN

ALL CONNETIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURE LOADS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: APRIL 2020

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS DETAILS 1

SHEET 1 OF IV

220

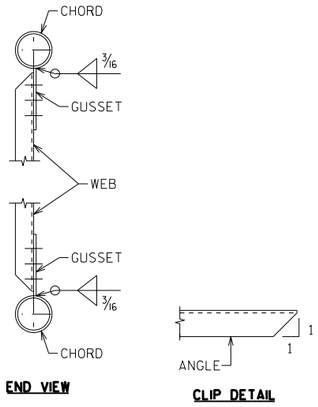
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8

SCALE = 1.00

STATE PROJECT NUMBER

STANDARD

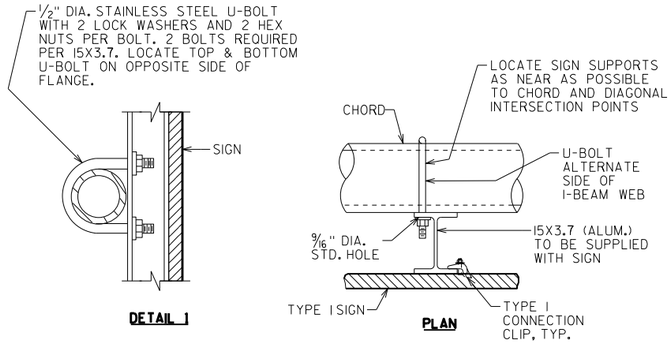



END VIEW

CLIP DETAIL

## TRUSS CONNECTION DETAILS

BOLTED CONNECTIONS SHOWN, NUMBER OF BOLTS BY DESIGN
WELDED CONNECTIONS SIMILAR

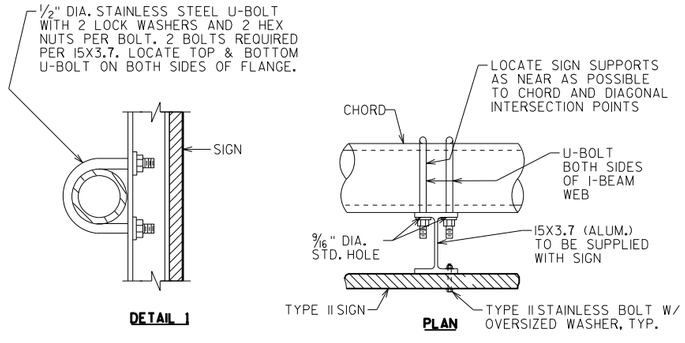



DETAIL 1

PLAN

## 2-CHORD TRUSS SIGN CONNECTION

SEE SIGN PLATE MANUAL A4-7A FOR DETAILS

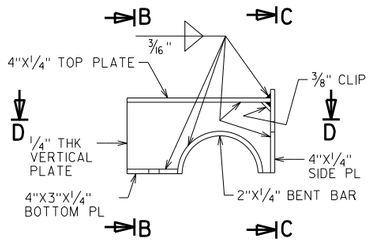



DETAIL 1

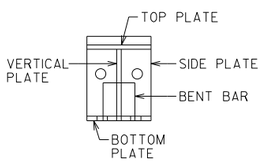
PLAN

## MONOTUBE SIGN CONNECTION

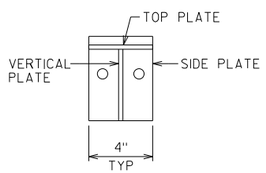
SEE SIGN PLATE MANUAL A4-7B FOR DETAILS



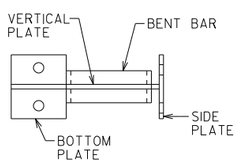

ELEVATION




SECTION B-B



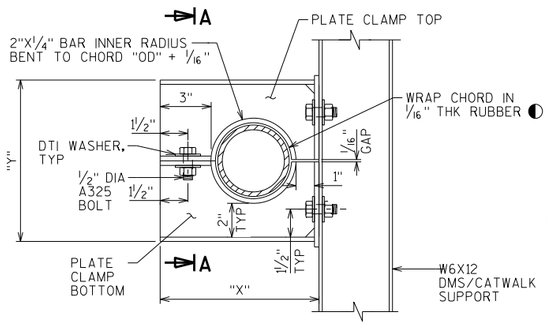

SECTION C-C




SECTION D-D

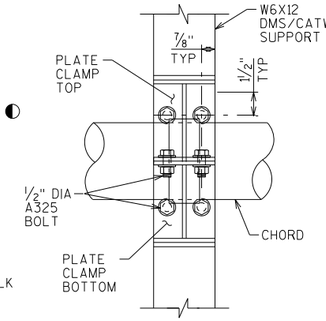
## DMS WELDED PLATE CONNECTION DETAILS

TOP PLATE CLAMP SHOWN
BOTTOM PLATE CLAMP SIMILIAR




| CHORD OUTER DIA | "X" | "Y" |
|---|---|---|
| "OD" | "OD"+4 13/16" | "OD"+5 1/16" |

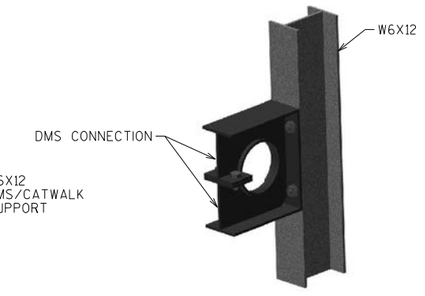
DETAIL 2




SECTION A-A

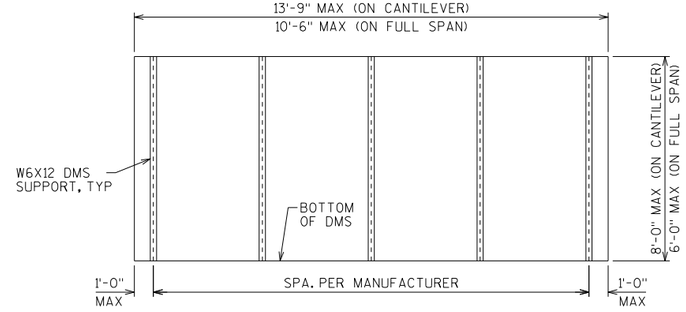
## TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD SPEC 506.2.6.1



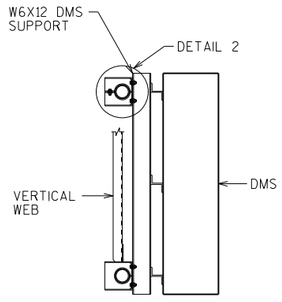

## 3-D VIEW DMS CONNECTION

CHORD NOT SHOWN FOR CLARITY




## DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF CONFLICT WITH TRUSS IS ENCOUNTERED.




## SECTION THRU TRUSS

FOR DMS CONNECTION

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: APRIL 2020

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MONOTUBE & CHORD TRUSS DETAILS 2

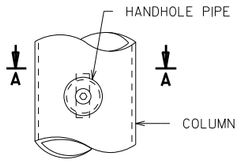
SHEET II OF IV

221

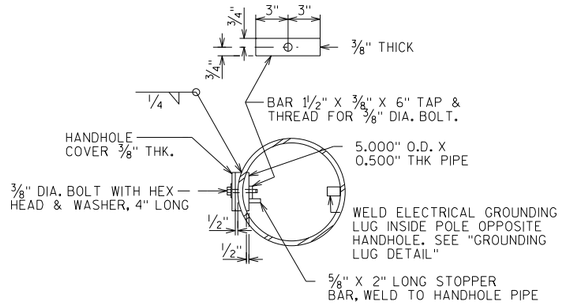
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STATE PROJECT NUMBER

STANDARD




**HANDHOLE DETAILS**

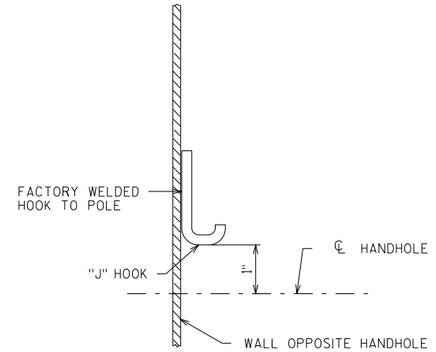



**SECTION A-A**

## HANDHOLE NOTES

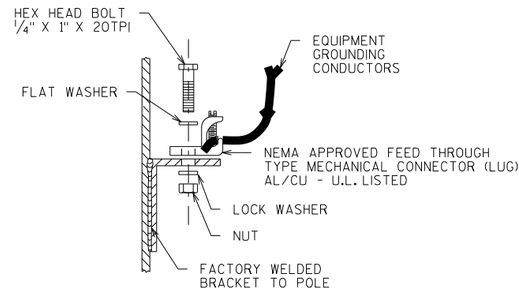
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



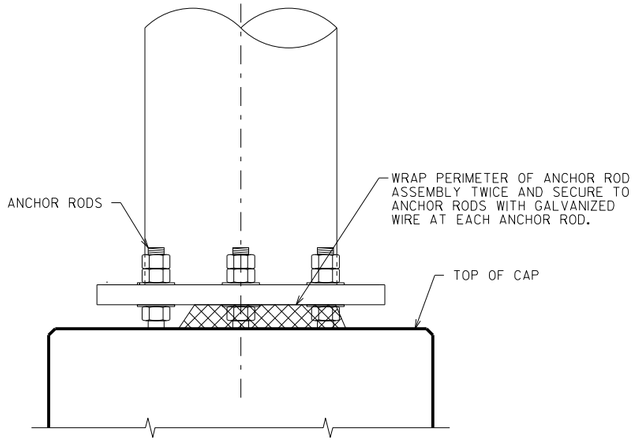

**TYPICAL "J" HOOK LOCATION**

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.




**GROUNDING LUG DETAIL**

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




## RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

LAST UPDATE: APRIL 2020

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS

SHEET III

222

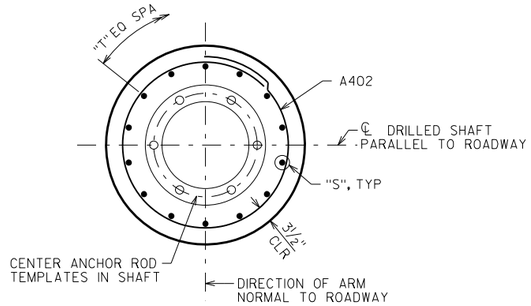
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STATE PROJECT NUMBER

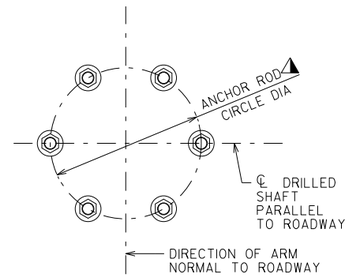
STANDARD

## FOUNDATION & REINFORCING DATA

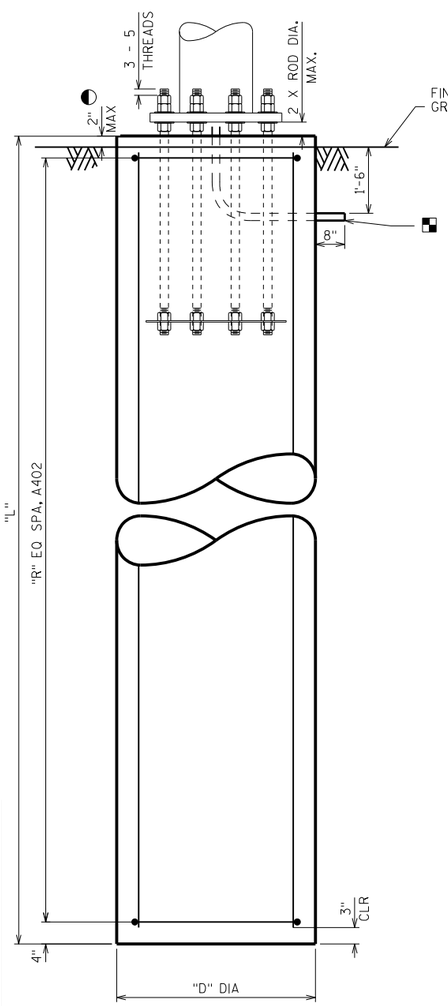
| STANDARD FOUNDATION TYPE | SHAFT VARIABLES | | | | | |
|---|---|---|---|---|---|---|
| | "D" | "L" | "R" | "S" | "T" | "BC" MAX |
| MFI | 2'-0" | 12'-0" | 12 | A801 | 6 | 12" |
| MFII | 2'-6" | 13'-0" | 13 | A801 | 10 | 17" |
| MCI/MCII/TFI | 2'-6" | 17'-0" | 17 | A801 | 10 | 17" |
| TCI | 3'-0" | 18'-0" | 18 | A801 | 14 | 22" |
| TFII | 3'-0" | 20'-0" | 20 | A801 | 14 | 22" |
| MCIII/TCII/TFIII | 3'-6" | 18'-0" | 18 | A901 | 14 | 28" |
| MCIV/TFIV | 3'-6" | 23'-0" | 23 | A901 | 14 | 28" |
| TCIII | 4'-0" | 23'-0" | 23 | A1001 | 14 | 34" |
| TCIV | 4'-0" | 28'-0" | 28 | A1001 | 14 | 34" |



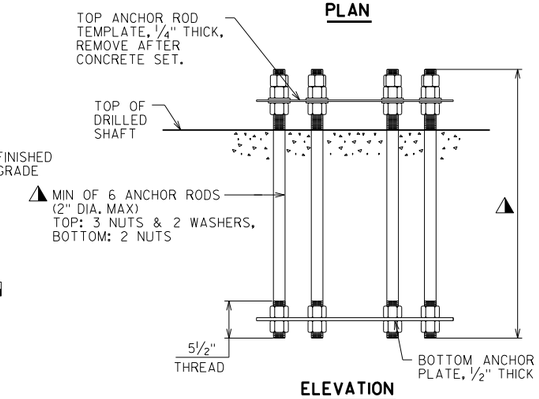

PLAN




PLAN



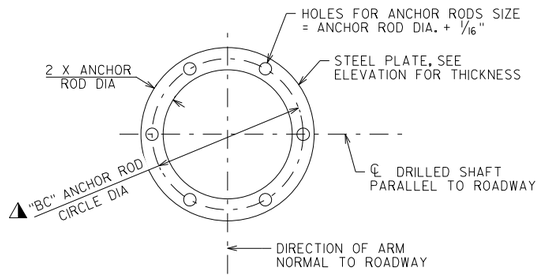

ELEVATION




ELEVATION

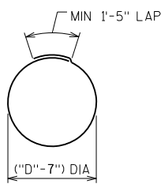
## ANCHOR ROD ASSEMBLY DETAILS

⚠ ANCHOR ROD NUMBER, DIAMETER, LENGTH & ORIENTATION AS SHOWN ON FABRICATION DRAWING.




## ANCHOR PLATE/TOP TEMPLATE

PLAN




A402

NOTE:
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

## BILL OF BARS - STANDARD FOUNDATIONS

**STANDARD FOUNDATION MFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 6 | 11'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 13 | 5'-10" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION MFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 10 | 12'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 14 | 7'-5" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION MCI/MCII/TFI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 10 | 16'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 18 | 7'-5" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION TCI**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 14 | 17'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 9'-0" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION TFII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A801 | | 14 | 19'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 21 | 9'-0" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION MCIII/TCII/TFIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 14 | 17'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 19 | 10'-6" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION MCIV/TFIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A901 | | 14 | 22'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 10'-6" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION TCIII**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 22'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 24 | 12'-2" | X | | DRILLED SHAFT - HORIZONTAL |

**STANDARD FOUNDATION TCIV**

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A1001 | | 14 | 27'-7" | | | DRILLED SHAFT - VERTICAL |
| A402 | | 29 | 12'-2" | X | | DRILLED SHAFT - HORIZONTAL |

## ESTIMATED QUANTITIES - FOUNDATIONS

| STANDARD FOUNDATION TYPE | CONCRETE MASONRY (CY) | STEEL REINFORCEMENT HS (LBS) | FOUNDATION DRILLING (LF) | | | | |
|---|---|---|---|---|---|---|---|
| | | | 24" DIA. | 30" DIA. | 36" DIA. | 42" DIA. | 48" DIA. |
| MFI | 2 | 240 | 12 | | | | |
| MFII | 3 | 410 | | 13 | | | |
| MCI/MCII/TFI | 4 | 540 | | 17 | | | |
| TCI | 5 | 780 | | | 18 | | |
| TFII | 6 | 860 | | | 20 | | |
| MCIII/TCII/TFIII | 7 | 970 | | | | 18 | |
| MCIV/TFIV | 9 | 1,250 | | | | 23 | |
| TCIII | 11 | 1,560 | | | | | 23 |
| TCIV | 13 | 1,900 | | | | | 28 |

✳✳ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS

## NOTES

CENTER ANCHOR ROD ASSEMBLY ON DRILLED SHAFT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.

◐ FOR OVERHEAD SIGN STRUCTURES THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE SHAFT SHALL BE POURED FLUSH WITH THE FINISHED GRADE.

◪ 2" DIA NONMETALLIC CONDUITS, INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO THE DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: APRIL 2020

DRAWN BY BOS | PLANS CK'D. BOS

MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

SHEET IV OF IV

223

SCALE = 1.67

8

8

**DIVISION 2-1/CAT. 0010 (STA 718+44 - STA 719+26): STAGE 1 CONSTRUCTION - USH 10**

| STATION | Distance | Area | | Incremental | | Cumulative Vol (CY) | | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|
| | | Cut (SF) | Fill (SF) | Cut Note 1 (CY) | Fill Note 2 (CY) | Cut 1.00 Note 3 | Fill 1.00 Note 4 | Expanded Fill 1.3 | Note 5 |
| 718+44 | | 26.6 | 0.0 | | | | | | |
| 718+50 | 6 | 26.6 | 0.0 | 6 | 0 | 6 | 0 | 0 | 6 |
| 718+60 | 10 | 20.8 | 0.0 | 9 | 0 | 15 | 0 | 0 | 15 |
| 718+75 | 15 | 17.6 | 0.0 | 11 | 0 | 25 | 0 | 0 | 25 |
| 719+00 | 25 | 17.4 | 0.0 | 16 | 0 | 42 | 0 | 0 | 42 |
| 719+25 | 25 | 18.0 | 0.0 | 16 | 0 | 58 | 0 | 0 | 58 |
| 719+26 | 1 | 18.0 | 0.0 | 1 | 0 | 59 | 0 | 0 | 59 |
| | | | Column totals | 59 | 0 | | | | |

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

**DIVISION 2-2/CAT. 0010 (STA 717+16 - STA 718+00): STAGE 2 CONSTRUCTION - USH 10**

| STATION | Distance | Area | | Incremental | | Cumulative Vol (CY) | | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|
| | | Cut (SF) | Fill (SF) | Cut Note 1 (CY) | Fill Note 2 (CY) | Cut 1.00 Note 3 | Fill 1.00 Note 4 | Expanded Fill 1.3 | Note 5 |
| 717+16 | | 18.6 | 0.0 | | | | | | |
| 717+25 | 9 | 18.6 | 0.0 | 6 | 0 | 6 | 0 | 0 | 6 |
| 717+33 | 8 | 18.5 | 0.0 | 5 | 0 | 12 | 0 | 0 | 12 |
| 717+50 | 17 | 23.5 | 0.0 | 13 | 0 | 25 | 0 | 0 | 25 |
| 717+75 | 25 | 33.2 | 0.0 | 26 | 0 | 51 | 0 | 0 | 51 |
| 718+00 | 25 | 33.2 | 0.0 | 31 | 0 | 82 | 0 | 0 | 82 |
| | | | Column totals | 82 | 0 | | | | |

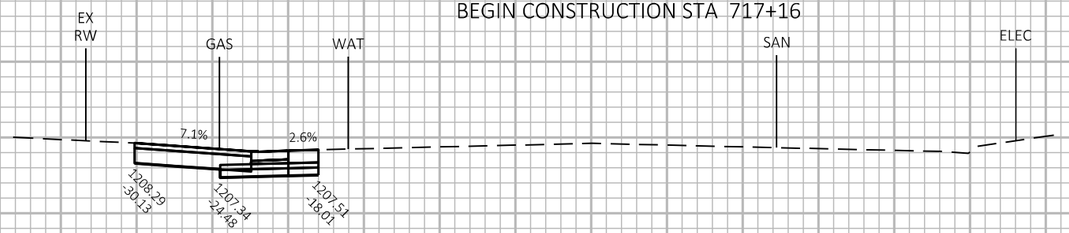
Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

**DIVISION 2-3/CAT. 0010 (STA 718+44 - STA 718+74): STAGE 3 CONSTRUCTION - USH 10**

| STATION | Distance | Area | | Incremental | | Cumulative Vol (CY) | | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|
| | | Cut (SF) | Fill (SF) | Cut Note 1 (CY) | Fill Note 2 (CY) | Cut 1.00 Note 3 | Fill 1.00 Note 4 | Expanded Fill 1.3 | Note 5 |
| 718+44 | | 48.2 | 0.0 | | | | | | |
| 718+50 | 6 | 48.2 | 0.0 | 11 | 0 | 11 | 0 | 0 | 11 |
| 718+60 | 10 | 34.2 | 0.0 | 15 | 0 | 26 | 0 | 0 | 26 |
| 718+74 | 14 | 34.2 | 0.0 | 18 | 0 | 44 | 0 | 0 | 44 |
| | | | Column totals | 44 | 0 | | | | |

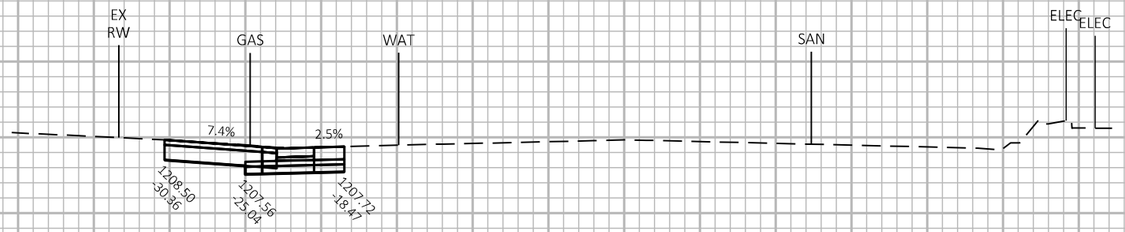
Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

BEGIN CONSTRUCTION STA 717+16

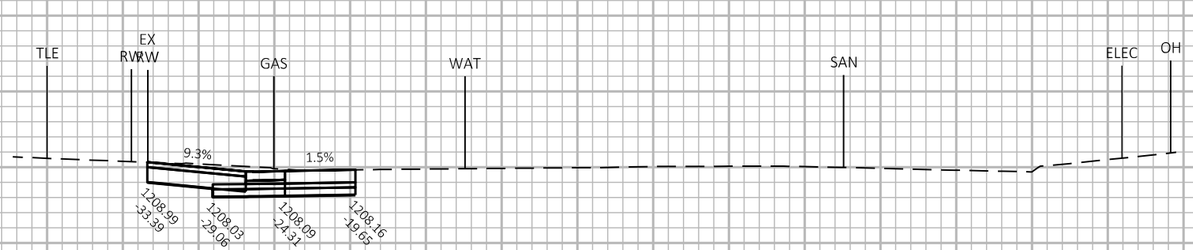



717+25

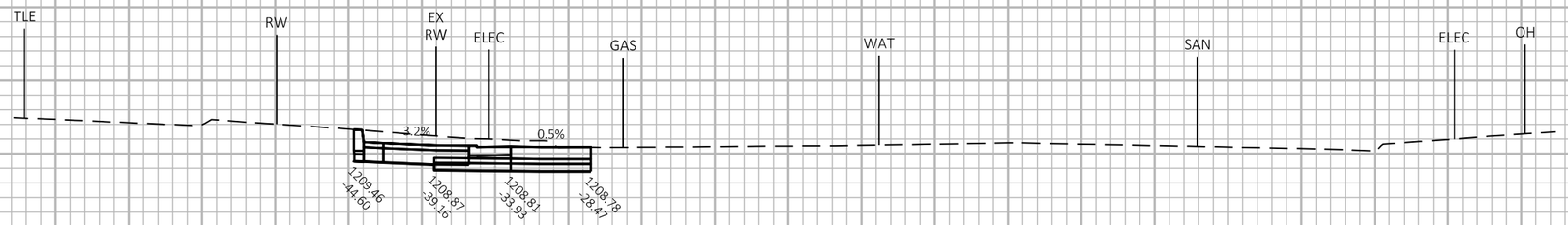
STA 717+33
RECONSTRUCT C.E.



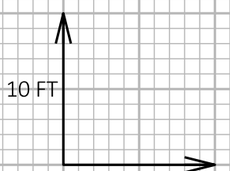

717+33




717+50




717+75




END CONSTRUCTION STA 718+00

9

9

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | CROSS SECTIONS: USH 10 | SHEET 225 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 1

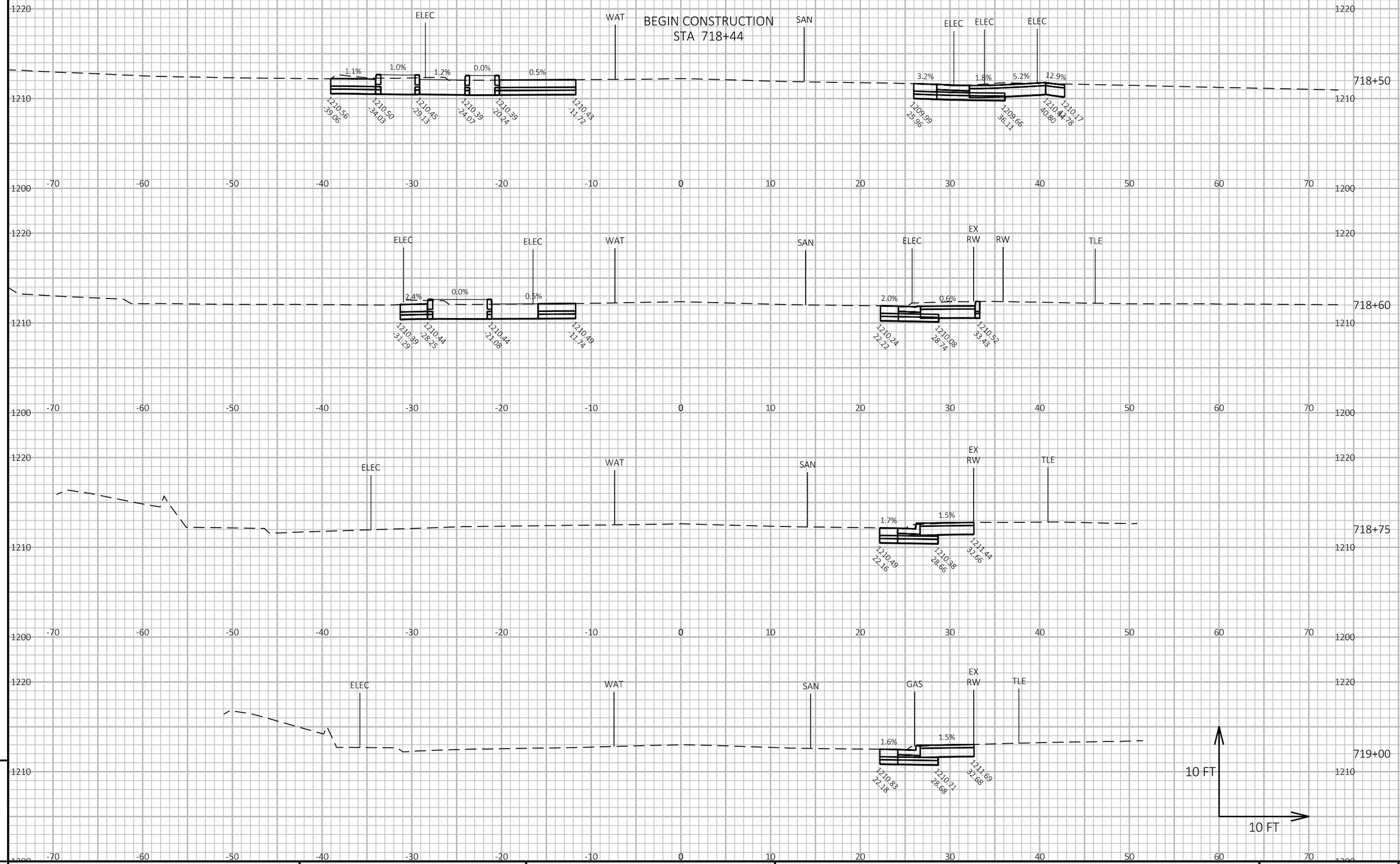
PLOT DATE : 10/6/2020 5:42 PM

PLOT BY : BRIAN ST. VINCENT

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

9

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | CROSS SECTIONS: USH 10 | SHEET 226 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 2

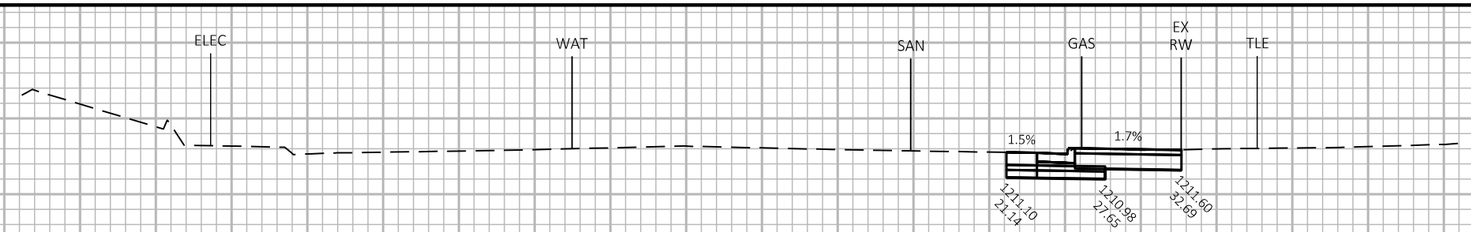
PLOT DATE : 10/6/2020 5:42 PM

PLOT BY : BRIAN ST. VINCENT

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




719+25

END CONSTRUCTION STA 719+26

1220 1210 1200

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9 9

| PROJECT NO: 1530-03-76 | HWY: USH 10 | COUNTY: PIERCE | CROSS SECTIONS: USH 10 | SHEET 227 | E |
|---|---|---|---|---|---|

FILE NAME : G:\WDOTNW\19004-012 (USH 10 ELLSWORTH)\CIVIL 3D\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 2 (2)

PLOT DATE : 10/6/2020 5:42 PM PLOT BY : BRIAN ST. VINCENT PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

*Wisconsin Department of Transportation*

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