SEL

MAY 2017

PROJECT ID: 2415-00-70

WITH: N/A

COUNTY: MILWAUKEE

ORDER OF SHEETS

SECTION NO.	1	TITLE
SECTION NO.	2	TYPICAL SECTIONS AND DETAILS
SECTION NO.	3	ESTIMATE OF QUANTITIES
SECTION NO.	3	MISCELLANEOUS QUANTITIES
~~SECTION NO.~~	~~4~~	~~RIGHT OF WAY PLAT~~
SECTION NO.	5	PLAN AND PROFILE
SECTION NO.	6	STANDARD DETAIL DRAWINGS
SECTION NO.	7	SIGN PLATES
~~SECTION NO.~~	~~8~~	~~STRUCTURE PLANS~~
SECTION NO.	9	COMPUTER EARTHWORK DATA
SECTION NO.	9	CROSS SECTIONS

TOTAL SHEETS = 302

N

DESIGN DESIGNATION

A.A.D.T. (2015)	=	13,600
A.A.D.T. (2038)	=	15,200
D.H.V.	=	1,700
D.D.	=	0.59
T.	=	3.1%
DESIGN SPEED	=	40 MPH
ESALS	=	820,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

SOUTH 60TH STREET

W COLD SPRING RD TO W MORGAN AVE

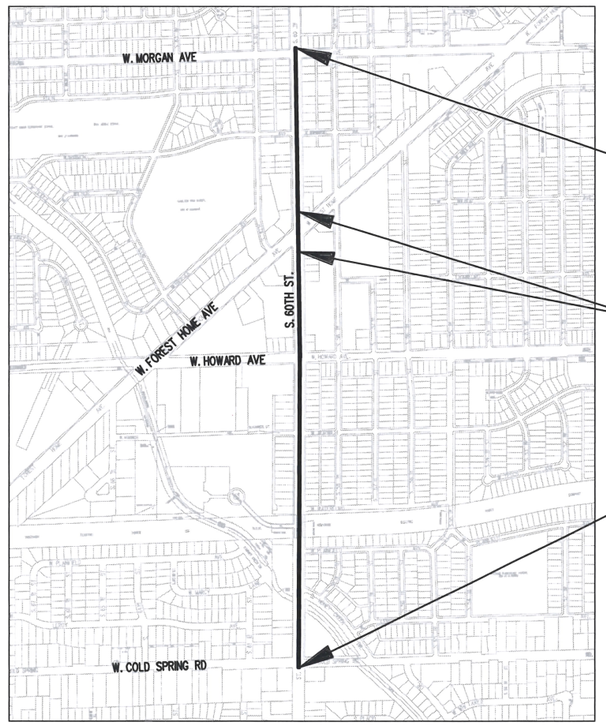
LOCAL STREET

MILWAUKEE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2415-00-70	WISC 2017268	1

STATE PROJECT NUMBER

2415-00-70



END PROJECT
I.D. 2415-00-70
STA 181+00

EXCEPTION TO NET CENTERLINE LENGTH
STA 162+46 TO STA 165+69

STA 162+46
X = 584976.55
Y = 276950.83
STA 165+69
X = 584980.07
Y = 277273.64

BEGIN PROJECT
I.D. 2415-00-70
STA 125+88
X = 584888.17
Y = 273293.88

LAYOUT
SCALE 0 1/8 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.983 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY-NAD83 (2007)

ELEVATIONS SHOWN IN THIS PLAN ARE REFERENCED TO CITY OF MILWAUKEE DATUM.
ADD 580.58 TO PLACE ELEVATIONS ON THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929.
THIS CONVERSION IS A LOCALIZED (S. 60TH ST. CORRIDOR) ADJUSTED CONVERSION.
SEWRPC PROVIDES A CITY WIDE CONVERSION OF 580.60.

ACCEPTED FOR
CITY of MILWAUKEE

3/17/17 Commissioner of P.W.
(Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

WISCONSIN
KERRY C. MEYER
E-36986
MILWAUKEE, WI
PROFESSIONAL ENGINEER

3/15/17 Kerry C. Meyer
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor K. SINGH & ASSOCIATES
Designer CH2M HILL, INC

Management Consultant DAAR ENGINEERING, INC

APPROVED FOR THE DEPARTMENT
DATE: 3/21/17
Management Consultant Signature

E

GENERAL NOTES

CURVE RADII ARE MEASURED TO CURB FLANGE UNLESS OTHERWISE NOTED.

PROPOSED ELEVATIONS ARE LISTED AT CURB FLANGE UNLESS OTHERWISE NOTED.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

THE EXACT LOCATION OF PRIVATE ENTRANCES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

REMOVE SIDEWALK AND CURB & GUTTER TO NEAREST JOINT OR AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF KNOWN EXISTING UTILITIES IN THE VICINITY OF THE PROJECT SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES IN THE AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.

INLET PROTECTION REQUIRED AT ALL INLETS AS PER EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. APPLY SOD AND FERTILIZE TOPSOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL.

ALL OPENINGS BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE FILLED WITH EXCAVATION COMMON AND COMPACTED USING STANDARD COMPACTION, UP TO THE LOWER OF EXISTING GROUND OR PROPOSED SUBGRADE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE COST OF FILL MATERIAL AND COMPACTION SHALL BE INCIDENTAL TO THE REMOVAL OR ABANDONMENT ITEM.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

STORM SEWER DESIGN, CALCULATIONS, QUANTITIES, AND PLAN SHEETS COMPLETED BY K SINGH & ASSOCIATES, INC.

SURVEY AND DATA COLLECTION COMPLETED BY K SINGH & ASSOCIATES, INC.

PERMANENT STREET LIGHTING AND SIGNAL DESIGN, CALCULATIONS, QUANTITIES AND PLANS SHEETS COMPLETED BY THE CITY OF MILWAUKEE, UNLESS OTHERWISE SPECIFIED.

UNDERGROUND CONDUIT DESIGN, CALCULATIONS, QUANTITIES, AND PLANS COMPLETED BY THE CITY OF MILWAUKEE.

CONTRACTOR SHALL WORK WITHIN THE ROAD RIGHT-OF-WAY UNLESS A CONSTRUCTION PERMIT HAS BEEN OBTAINED FROM AN ADJACENT PROPERTY OWNER ALLOWING ACCESS ONTO PRIVATE PROPERTY. SEE PLANS FOR A LIST OF CONSTRUCTION PERMITS THAT HAVE BEEN OBTAINED.

STANDARD ABBREVATIONS

AEW	APRON END WALL
AGG	AGGREGATE
AH	AHEAD
BAD	BASE AGGREGATE DENSE
BK	BACK
BM	BENCH MARK
BT	BEGIN TRANSITION
CE	COMMERCIAL ENTRANCE
C&G	CURB AND GUTTER
C/L OR ℄	CENTER OR CONSTRUCTION LINE
CONC	CONCRETE
CORR	CORRUGATED
CP	CULVERT PIPE
CPCM	CULVERT PIPE CORRUGATED METAL
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
△	DELTA
DISCH	DISCHARGE
EOP	EDGE OF PAVEMENT
ET	END TRANSITION
FE	FIELD ENTRANCE
FERT	FERTILIZER
FS	FULL SUPERELEVATION
HMA	HOT MIX ASPHALT
HP	HIGH POINT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
M/L	MATCH LINE
NB	NORTHBOUND
NC	NORMAL CROWN
NORM	NORMAL
OFF	OFFSET
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
SF	SQUARE FOOT
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
T/L	TRANSIT LINE
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
REMOVAL PLAN DETAILS
CONSTRUCTION DETAILS
CURB RAMP DETAILS
PLAN DETAILS
PAVING GRADES
STORM SEWER
STREET LIGHTING/TRAFFIC SIGNAL PLAN
UNDERGROUND CONDUIT
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT PLAN

UTILITIES

AT&T WISCONSIN
MARK EDER
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
PHONE: 262-896-7434
EMAIL: me1754@att.com

ATC MANAGEMENT
CHRIS DAILY
W234 N2000 RIDGEVIEW PKWY COURT
WAUKESHA, WI 53188
PHONE: 262-506-6884
EMAIL: cdalley@atcllc.com

CITY OF MILWAUKEE - COMMUNICATIONS
COMMUNCATIONS DISPATCH
1440 WEST CANAL STREET
MILWAUKEE, WI 53233
PHONE: 414-286-3686

CITY OF MILWAUKEE - CUC
KAREN ROGNEY
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-3243

CITY OF MILWAUKEE - SEWERS
ZAFAR YOUSUF
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-2467

CITY OF MILWAUKEE - STREET LIGHTING
DENNIS MILLER
1540 WEST CANAL STREET
MILWAUKEE, WI 53233
PHONE: 414-286-5942

CITY OF MILWAUKEE - TRAFFIC SIGNALS
AL NICHOLS
1540 WEST CANAL STREET
MILWAUKEE, WI 53233
PHONE: 414-286-5941

CITY OF MILWAUKEE - WATER WORKS
DAVID GOLDAPP
841 N. BRAODWAY, RM 409
MILWAUKEE, WI 53202
PHONE: 414-286-6301

CITY OF MILWAUKEE - FORESTRY
JAMES KRINGER
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-708-2428

MIDWEST FIBER NETWORKS
RICHARD TRGOVEC
3701 W. BURNHAM STREET, SUITE C
MILWAUKEE, WI 53215
PHONE: 414-459-3554
FAX: 414-226-2269
EMAIL: rtrgovec@midwestfibernetworks.com

MMSD
LARRY ANDERSON
260 W. SEEBOTH STREET
MILWAUKEE, WI 53204-1446
PHONE: 414-225-2241

TIME WARNER / CHARTER CABLE
STEVE CRAMER
1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE: 414-277-4045
FAX: 414-277-0638
EMAIL: steven.cramer@charter.com
Email: wis.engineering@twcable.com

WE ENERGIES ELECTRIC/GAS
LATROY BRUMFIELD
333 W. EVERETT STREET - A299
MILWAUKEE, WI 53203
PHONE: 414-221-5617
FAX: 414-221-2336
EMAIL: latroy.brumfield@we-energies.com

TDS TELECOM
MICHAEL JOHNSON
20875 CROSSROADS CIRCLE, SUITE 800
WAUKESHA, WI 53186
PHONE: 262-754-3052
EMAIL: michael.johnson@tdstelecom.com

WISDOT ELECTRICAL FIELD UNIT
935 SOUTH 60TH STREET
WEST ALLIS, WI 53214
PHONE: 414-266-1170

OTHER CONTACTS

CITY OF MILWAUKEE
JEFF POLENSKE
841 N. BROADWAY, RM 701
MILWAUKEE, WI 53202
PHONE: (414) 286-2400
EMAIL: jeffrey.polenske@milwaukee.gov

CITY OF GREENFIELD
JEFF KATZ
7325 W FOREST HOME AVENUE
GREENFIELD, WI 53220
PHONE: (414) 939-8322
EMAIL: jeffk@greenfieldwi.us

WISDNR
KRISTINA BETZOLD
2300 N. DR. MARTIN LUTHER KING DRIVE
MILWAUKEE, WI 53212
PHONE: 414-263-8517
EMAIL: KRISTINA.BETZOLD@WISCONSIN.GOV

MILWAUKEE COUNTY TRANSIT SYSTEM
ANDY TILLMAN
1942 N. 17TH STREET
MILWAUKEE, WI 53205
PHONE: 414-343-1728
EMAIL: atillman@mcts.org

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

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

2

SIGNED CONSTRUCTION PERMITS

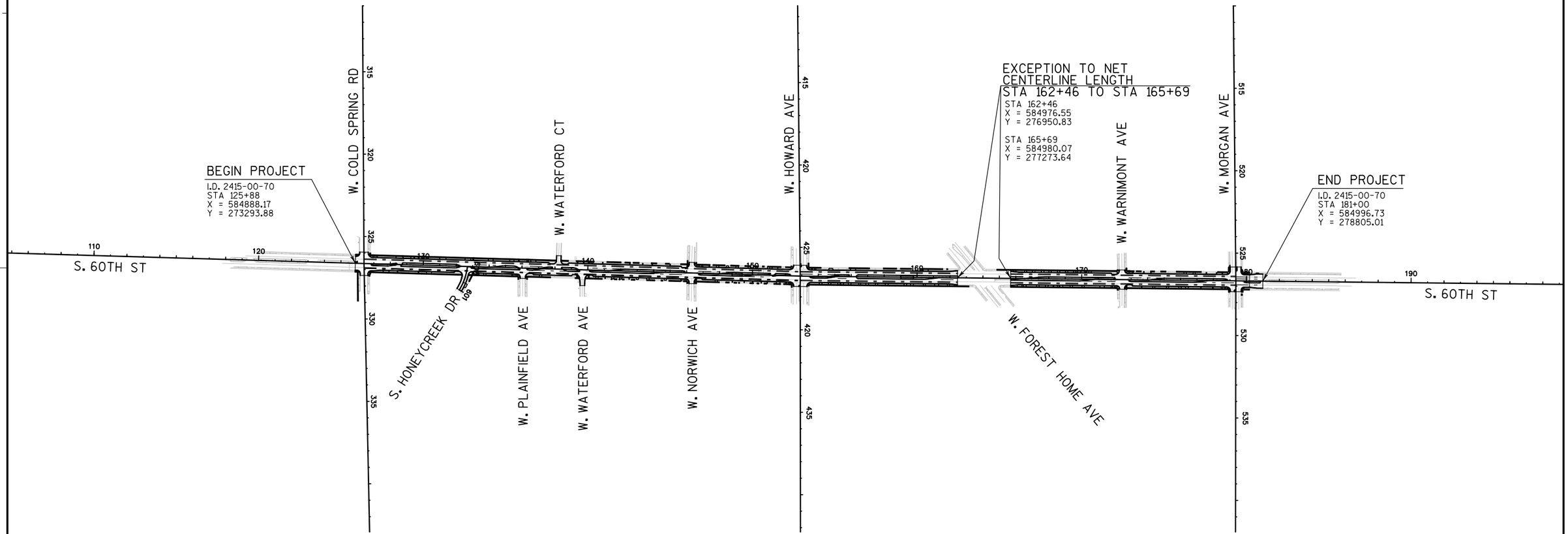
NUMBER	TAX KEY	ADDRESS	STATION	LOCATION
1	5730106100	4266 S. 60TH STREET	127+75	RT
2	5730106200	4246 S. 60TH STREET	130+35	RT
3	5730007000	4168 S. 60TH STREET	133+75	RT
4	5730696100	4068 S. 60TH STREET	140+57	RT
5	5730703000	4008 S. 60TH STREET	144+72	RT
6	5720003000	3957 S. 60TH STREET	147+87	LT
7	5730674000	3956 S. 60TH STREET	147+82	RT
8	5720005000	3939 S. 60TH STREET	149+07	LT
9	5729998210	3931 S. 60TH STREET	149+80	LT
10	5729998110	3919 S. 60TH STREET	150+96	LT
11	5729999110	6005 W. HOWARD AVENUE	151+37	LT
12	5561001000	3874 S. 60TH STREET	154+15	RT
13	5561002000	3872 S. 60TH STREET	154+70	RT
14	5569940120	3848 S. 60TH STREET	155+46	RT
15	5569939100	3826 S. 60TH STREET	156+52	RT
16	5569937100	3810 S. 60TH STREET	157+55	RT
17	5569936100	3804 S. 60TH STREET	158+15	RT
18	5569935100	3800 S. 60TH STREET	159+30	RT
19	5560802000	3780 S. 60TH STREET	159+70	RT
20	5560852000	3760 S. 60TH STREET	161+20	RT
21	5560882000	3738 S. 60TH STREET	162+38	RT
22	5560861000	3680 S. 60TH STREET	166+42	RT
23	5579984000	3671 S. 60TH STREET	166+59	LT
24	5579986000	3657 S. 60TH STREET	167+62	LT
25	5560863000	3656 S. 60TH STREET	167+89	RT
26	5579987000	3653 S. 60TH STREET	168+08	LT
27	5560864000	3652 S. 60TH STREET	168+57	RT
28	5579988000	3645 S. 60TH STREET	168+59	LT
29	5569968000	3640 S. 60TH STREET	168+77	RT
30	5571231000	3637 S. 60TH STREET	169+08	LT
31	5571241000	3631 S. 60TH STREET	169+57	LT
32	5571251000	3625 S. 60TH STREET	170+50	LT
33	5569972000	3622 S. 60TH STREET	170+09	RT
34	5560602000	3608 S. 60TH STREET	171+25	RT
35	5560508000	3558 S. 60TH STREET	174+38	RT
36	5560507000	3546 S. 60TH STREET	175+20	RT
37	5569998000	3538 S. 60TH STREET	175+97	RT
38	5730006000	4176 S. 60TH STREET	133+00	RT
39	5300610000	3470 S. 60TH STREET	179+90	RT

2

N

0 300 600

SCALE IN FEET



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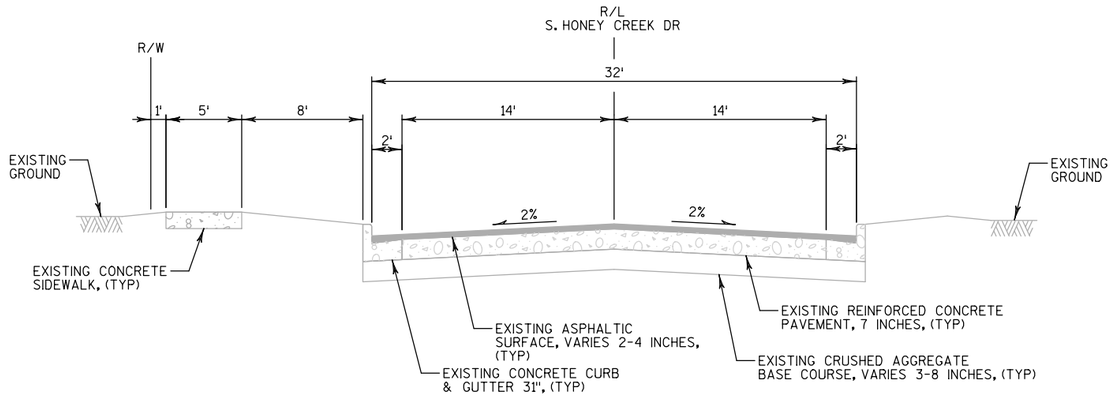
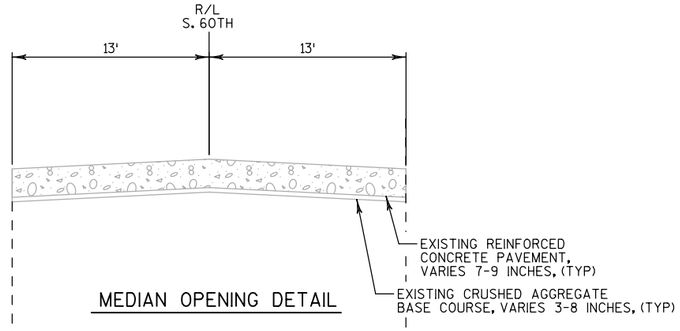
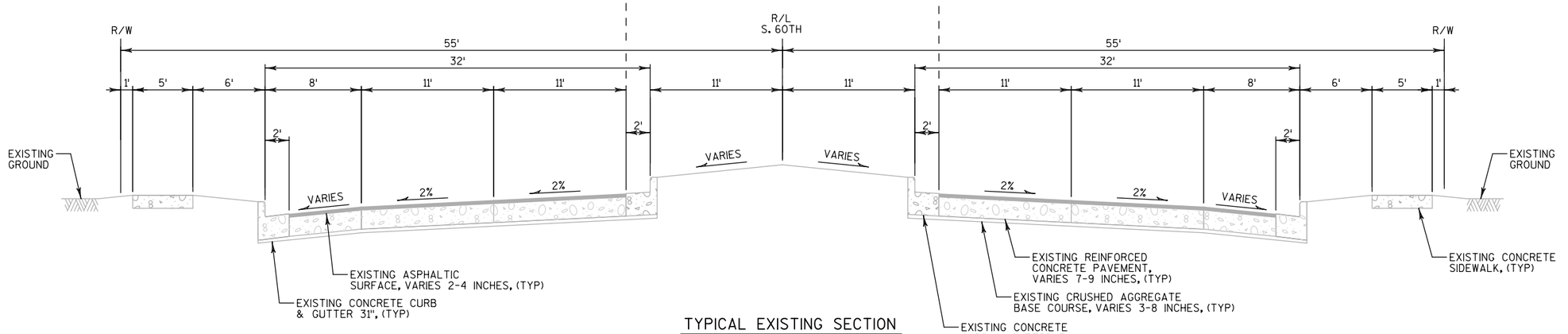


TYPICAL EXISTING SECTION
SOUTH HONEY CREEK DRIVE
STA 600+29 TO STA 601+48



MEDIAN OPENING DETAIL

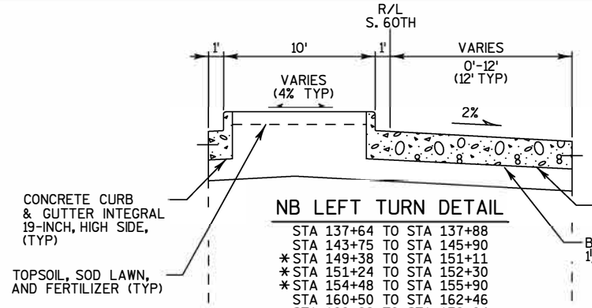


TYPICAL EXISTING SECTION
SOUTH 60TH STREET
STA 125+88 TO STA 162+46
STA 165+69 TO STA 181+00

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	EXISTING TYPICAL SECTION	SHEET 5	E

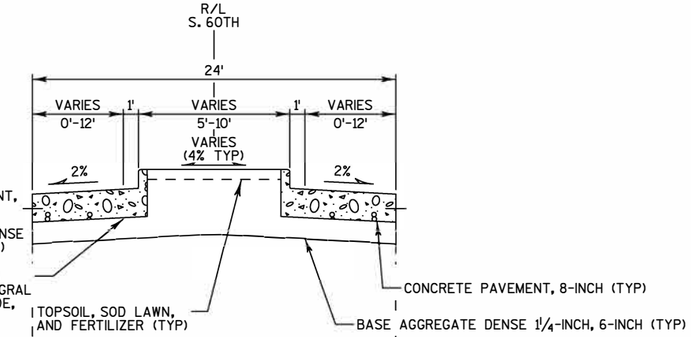
2

* REVERSE TYPICAL SECTION AT THESE LOCATIONS AND PLACE NORMAL CURB & GUTTER.



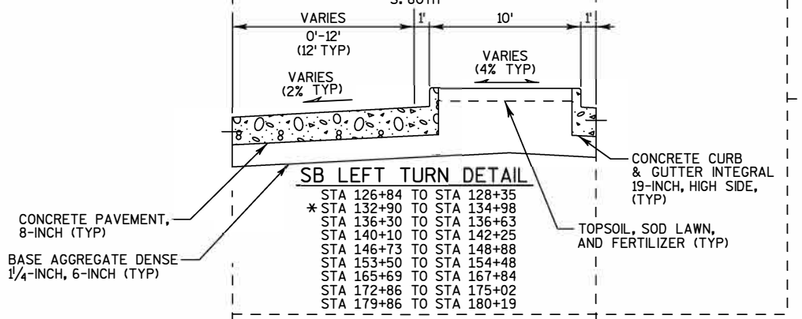
NB LEFT TURN DETAIL

STA 137+64 TO STA 137+88
STA 143+75 TO STA 145+90
* STA 149+38 TO STA 151+11
* STA 151+24 TO STA 152+30
* STA 154+48 TO STA 155+90
STA 160+50 TO STA 162+46
STA 169+88 TO STA 172+04
STA 176+82 TO STA 178+85



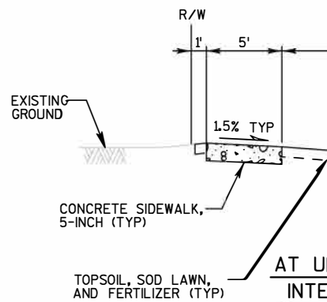
NB/SB LEFT TURN DETAIL

STA 136+63 TO STA 137+64
STA 154+48 TO STA 155+34



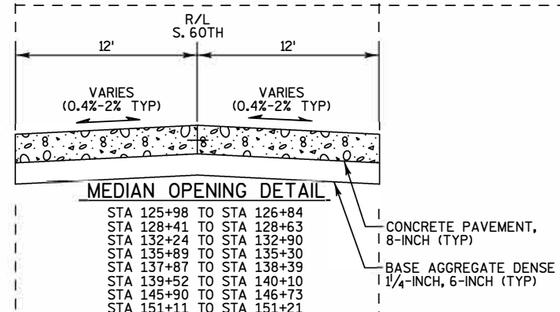
SB LEFT TURN DETAIL

STA 126+84 TO STA 128+35
* STA 132+90 TO STA 134+98
STA 136+30 TO STA 136+63
STA 140+10 TO STA 142+25
STA 146+73 TO STA 148+88
STA 153+50 TO STA 154+48
STA 165+69 TO STA 167+84
STA 172+86 TO STA 175+02
STA 179+86 TO STA 180+19



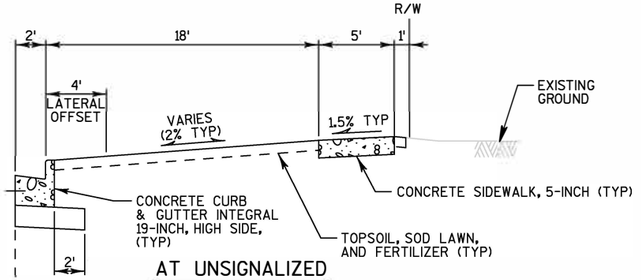
AT UNSIGNALIZED INTERSECTIONS

STA 137+62 TO STA 137+82
STA 138+62 TO STA 138+82
STA 145+72 TO STA 145+92
STA 171+84 TO STA 172+04



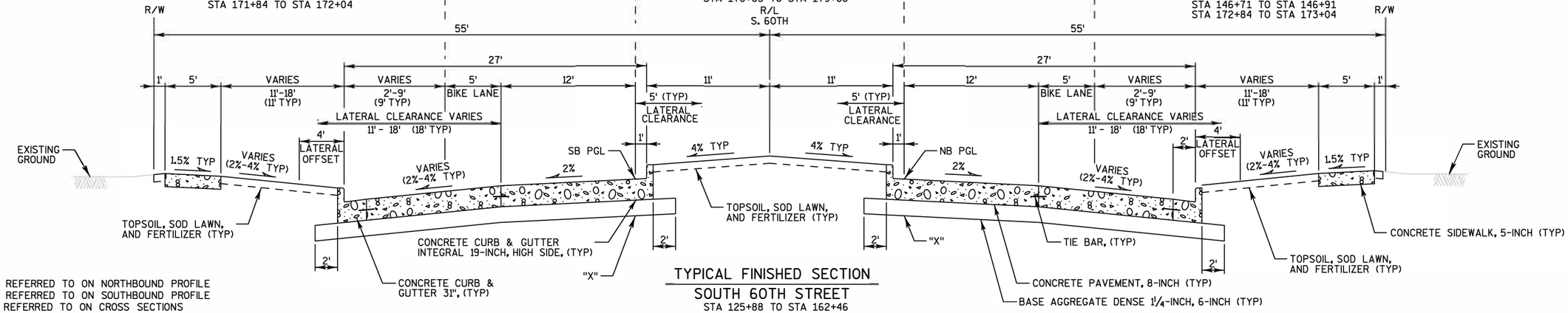
MEDIAN OPENING DETAIL

STA 125+98 TO STA 126+84
STA 128+41 TO STA 128+63
STA 132+24 TO STA 132+90
STA 135+89 TO STA 135+30
STA 137+87 TO STA 138+39
STA 139+52 TO STA 140+10
STA 145+90 TO STA 146+73
STA 151+11 TO STA 151+21
STA 152+30 TO STA 153+50
STA 155+90 TO STA 156+31
STA 172+04 TO STA 172+86
STA 178+85 TO STA 179+86



AT UNSIGNALIZED INTERSECTIONS

STA 131+95 TO STA 132+15
STA 132+99 TO STA 133+19
STA 136+45 TO STA 136+65
STA 139+08 TO STA 139+28
STA 140+08 TO STA 140+28
STA 146+71 TO STA 146+91
STA 172+84 TO STA 173+04



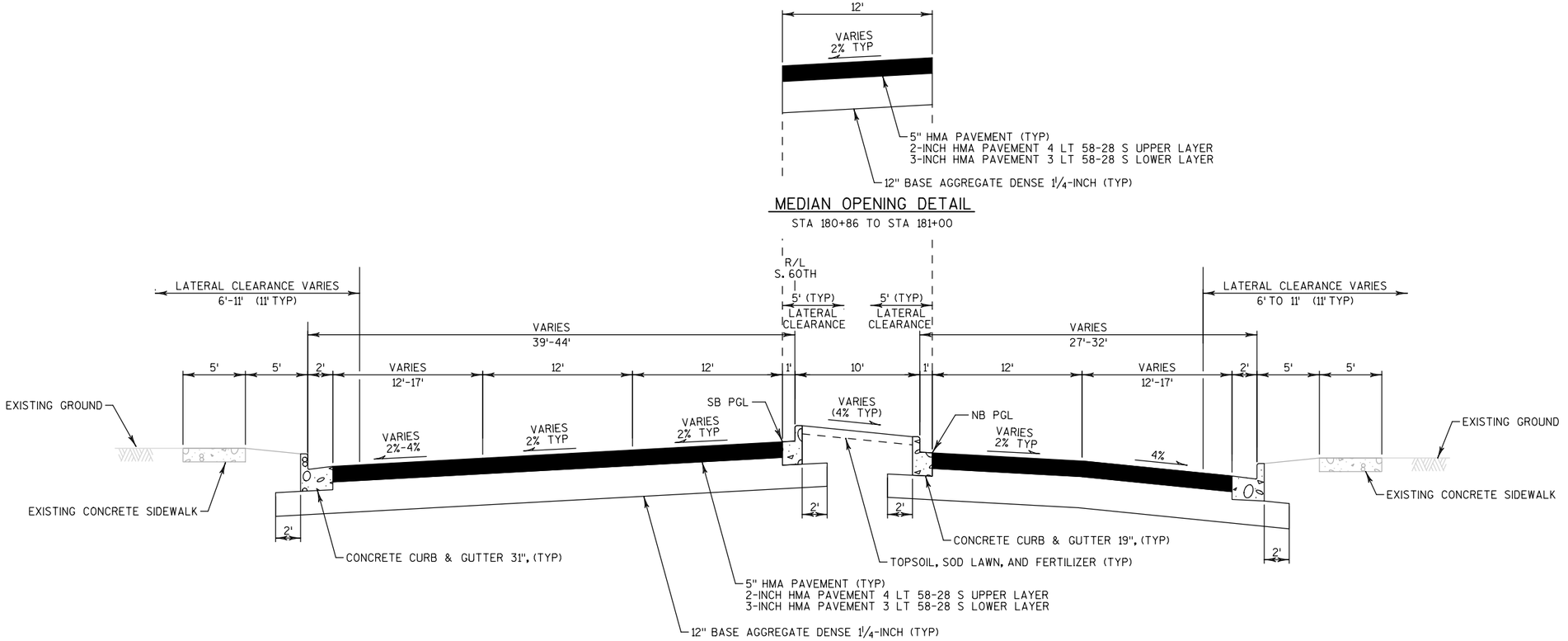
TYPICAL FINISHED SECTION
SOUTH 60TH STREET

STA 125+88 TO STA 162+46
STA 165+69 TO STA 180+19

NB PGL = POINT REFERRED TO ON NORTHBOUND PROFILE
SB PGL = POINT REFERRED TO ON SOUTHBOUND PROFILE
"X" = SUBGRADE REFERRED TO ON CROSS SECTIONS

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TYPICAL FINISHED SECTION	SHEET 6	E

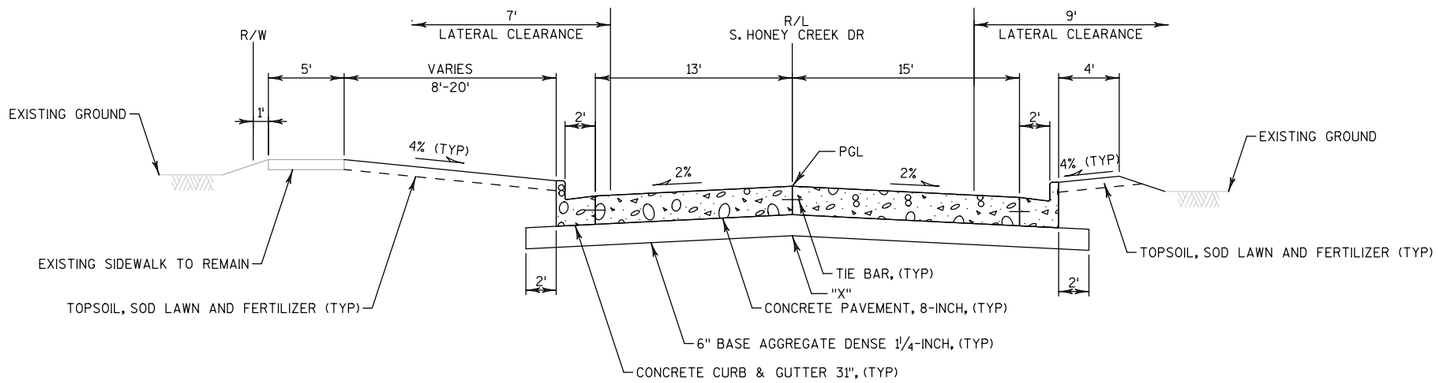
2



MEDIAN OPENING DETAIL

STA 180+86 TO STA 181+00

TYPICAL FINISHED SECTION
SOUTH 60TH STREET
STA 180+19 TO 181+00



PGL = POINT REFERRED TO ON PROFILE
"X" = SUBGRADE REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
SOUTH HONEY CREEK DRIVE
STA 600+29 TO 601+48

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TYPICAL FINISHED SECTION	SHEET 7	E

2

N

0 20 40

SCALE IN FEET

W. COLD SPRING RD

R/L W. COLD SPRING RD

REMOVING SIDEWALK (TYP)

+88 +79 +36 +72 +25 +67

326

124 S. 60TH STREET 125 126 127 128 129 S. 60TH STREET 13

R/L SOUTH 60TH ST

MATCH LINE 130+00

BEGIN PROJECT
STA 125+88

REMOVING ASPHALTIC SURFACE BUTT JOINT

+87

327

+57 +99 +41 +47 +71 +74

+41

REMOVING PAVEMENT (TYP)

SAW CONCRETE (TYP)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 8	E

2

N

0 20 40

SCALE IN FEET

MATCH LINE 130+00

MATCH LINE 136+00

REMOVING SIDEWALK (TYP)

+00 +36 +55 +86 +96 +22 +26 +49 +77.2 +82.2

130 131 132 133 134 135

S. 60TH STREET

R/L SOUTH 60TH ST

+22 +51

REMOVING TREES (TYP)

+37 +40 +70 +81

REMOVING PAVEMENT (TYP)

+78

R/L S. HONEY CREEK DRIVE

601

+83 +03 +22

SAW CONCRETE (TYP)

S. HONEY CREEK DR

REMOVING ASPHALTIC SURFACE BUTT JOINT

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 9	E

FILE NAME : ch_0000_021242_pd.DGN PLOT DATE : 10-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

0 20 40

SCALE IN FEET

W. WATERFORD CT

ASPHALT SIDEWALK

REMOVING SIDEWALK (TYP)

+29 +39 +54 +81 +80 +10 +84 +89 +36 +89 +91 +15 +82 +94

MATCH LINE 136+00

137 138 139 140 141

R/L SOUTH 60TH ST

S. 60TH STREET

MATCH LINE 142+00

+35 +09 +20 +75 +25 +52 +63 +88 +05 +08 +43 +48 +58 +63 +78 +92 +97

REMOVING PAVEMENT (TYP)

REMOVING TREES (TYP)

W. PLAINFIELD AVE

SAW CONCRETE (TYP)

W. WATERFORD AVE

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 10	E

FILE NAME : ch_0000_021243_pd.DGN PLOT DATE : 10-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

N

0 20 40

SCALE IN FEET

W. NORWICH ST

REMOVING SIDEWALK (TYP)

+25 +53 +56 +75 +10 +31 +34 +84 +89 +92 +17 +71 +93 +98 +02 +64 +02 +60 +35 +38 +40 +60 +81 +93

MATCH LINE 142+00

142 143 S. 60TH STREET 144 R/L SOUTH 60TH ST 145 146 147 S. 60TH STREET

MATCH LINE 148+00

+07 +11 +21 +51 +53 +67 +87 +96 +08 +59 +72 +08 +47 +57 +67 +78 +95 +65 +83 +04 +61 +77 +87

REMOVING PAVEMENT (TYP)

REMOVING TREES (TYP)

SAW CONCRETE (TYP)

W. NORWICH ST

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 11	E

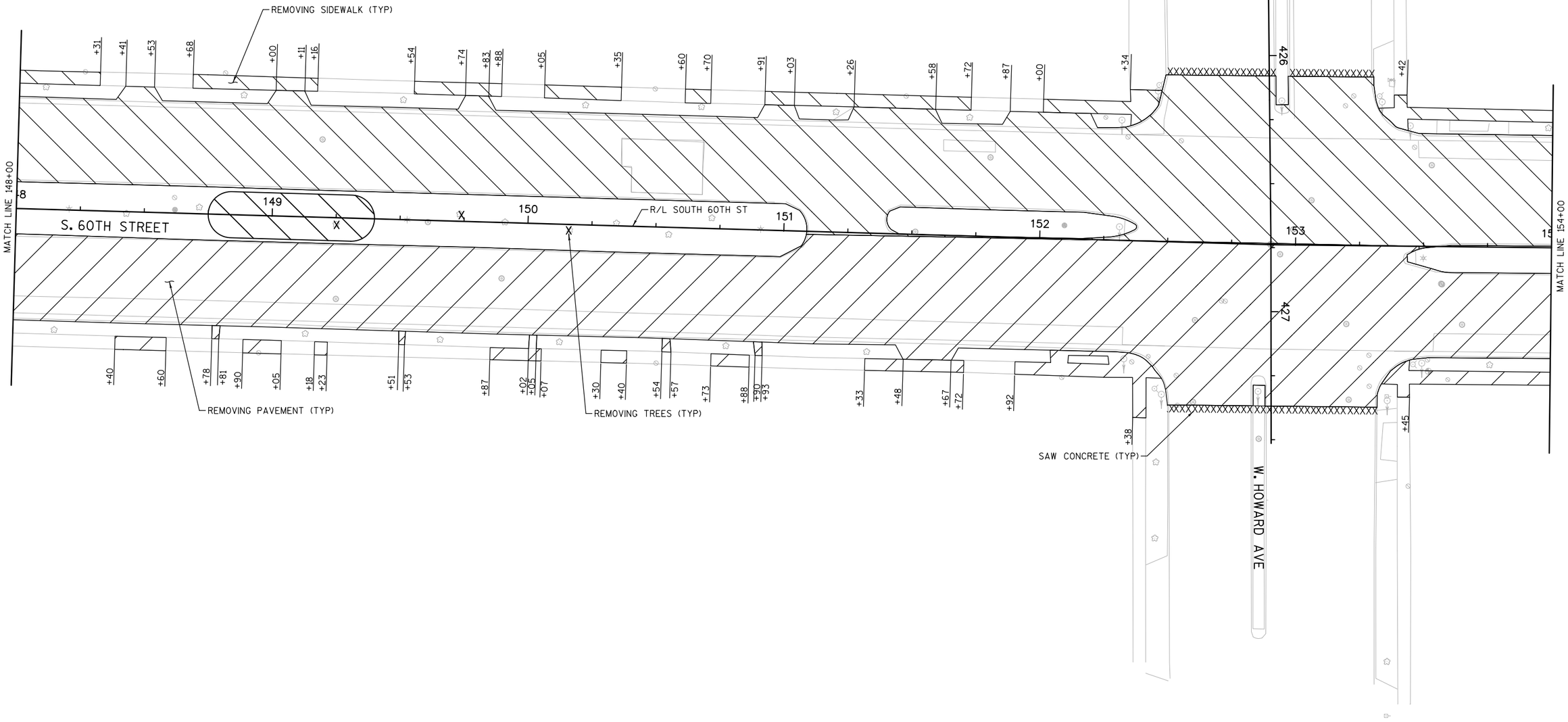
FILE NAME : ch_0000_021244_pd.DGN PLOT DATE : 10-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

2

N

0 20 40

SCALE IN FEET



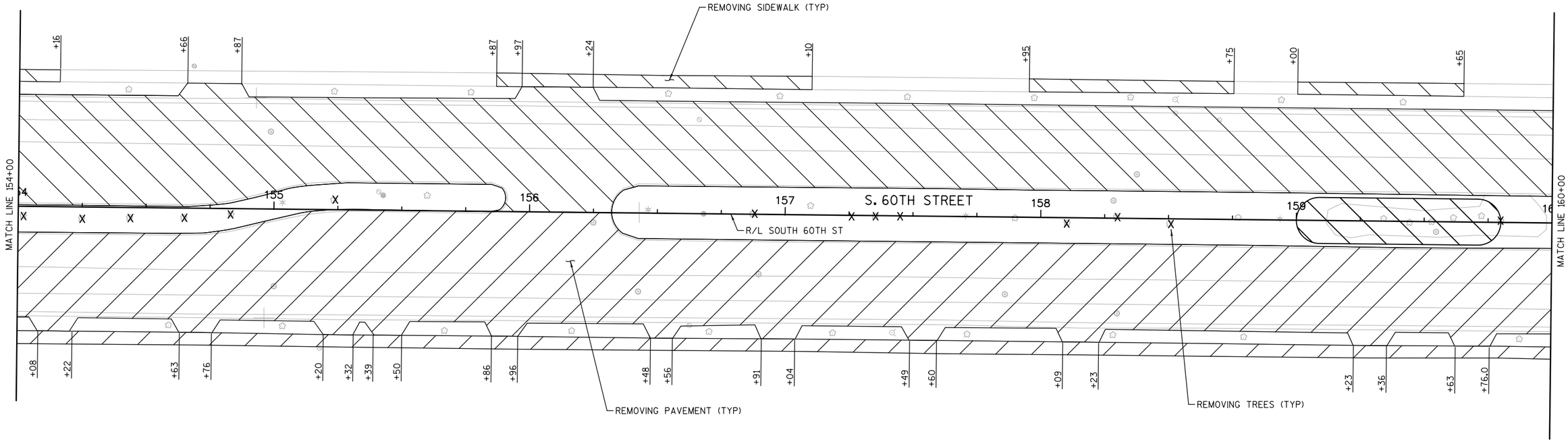
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 12	E

2

N

0 20 40

SCALE IN FEET



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FILE NAME : ch_0000_021246_pd.DGN PLOT DATE : 10-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

2

N

0 20 40

SCALE IN FEET

W. FOREST HOME AVE

REMOVING SIDEWALK (TYP)

REMOVING ASPHALTIC SURFACE BUTT JOINT (TYP)

R/L SOUTH 60TH ST

S. 60TH ST

MATCH LINE 160+00

MATCH LINE 166+00

160

161

162

163

164

165

+20 +38 +65 +55 +80 +85

+85 +89

+40 +50 +09 +30 +86 +96 +30 +55 +15

+69

REMOVING PAVEMENT (TYP)

SAW CONCRETE (TYP)

W. FOREST HOME AVE

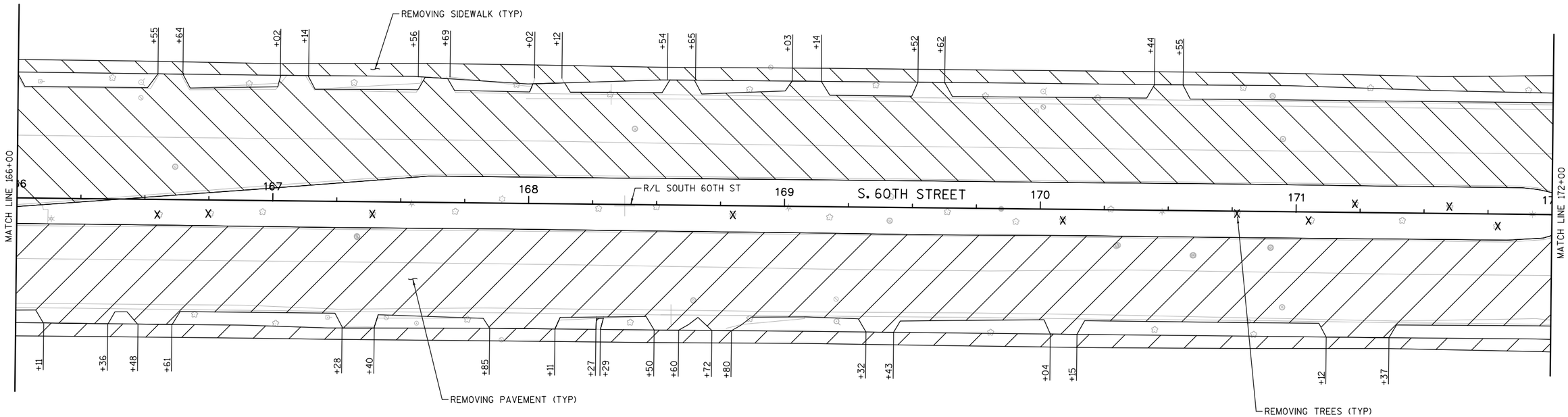
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 14	E

2

N

0 20 40

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 15	E

2

N

0 20 40

SCALE IN FEET

W. WARNIMONT AVE

MATCH LINE 172+00

MATCH LINE 178+00

S. 60TH STREET

173 174 175 176 177

+20 +73 +17 +32 +60 +74 +78 +18 +21 +41 +80 +10 +37 +63 +75 +22 +33 +77 +87 +25 +56 +58

REMOVING SIDEWALK (TYP)

R/L SOUTH 60TH ST

+22 +74 +64 +66 +34 +44 +16 +26 +93 +03 +34 +46 +23 +26 +96 +93

REMOVING TREES (TYP)

REMOVING PAVEMENT (TYP)

SAW CONCRETE (TYP)

REMOVING ASPHALTIC
SURFACE BUTT JOINT (TYP)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 16	E

2

N

0 20 40

SCALE IN FEET

W. MORGAN AVE

REMOVING SIDEWALK (TYP)

R/L W. MORGAN AVE

+92 +17 +22 +25 +51 +54 526 +78 +19

REMOVING ASPHALTIC SURFACE BUTT JOINT (TYP)

MATCH LINE 178+00

178 S. 60TH STREET 179 180 181 182 183 184

R/L SOUTH 60TH ST

527

+19

REMOVING TREES (TYP)

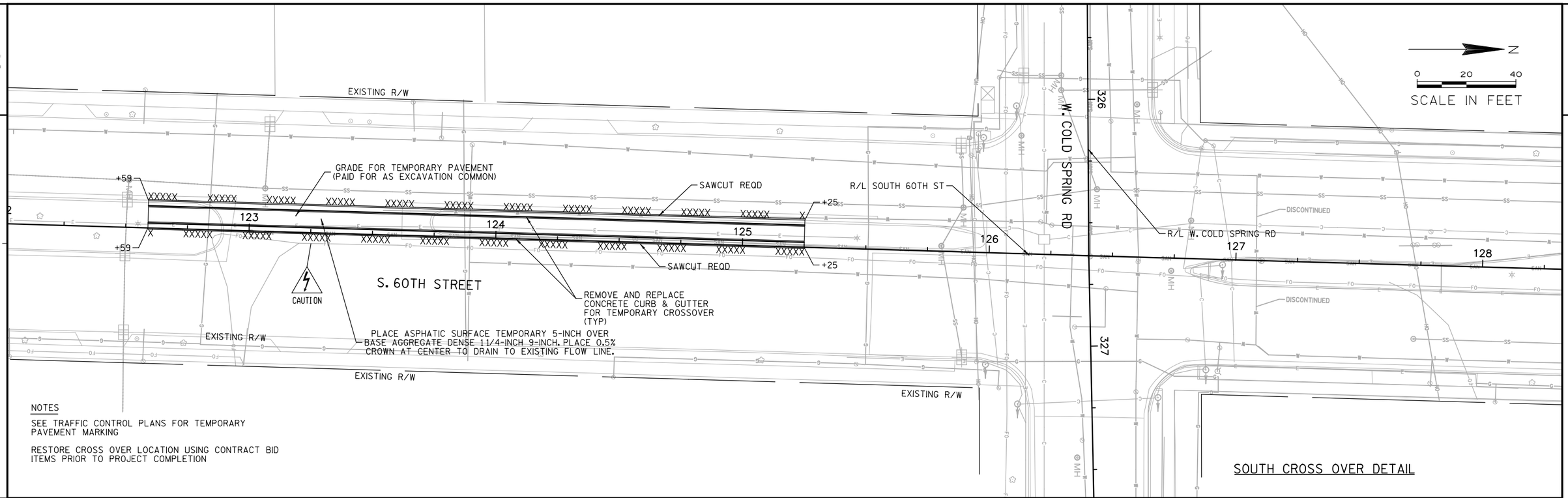
REMOVING PAVEMENT (TYP)

+98 +81

W. MORGAN AVE

SAW CONCRETE (TYP)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	REMOVAL PLAN DETAILS - S. 60TH STREET	SHEET 17	E

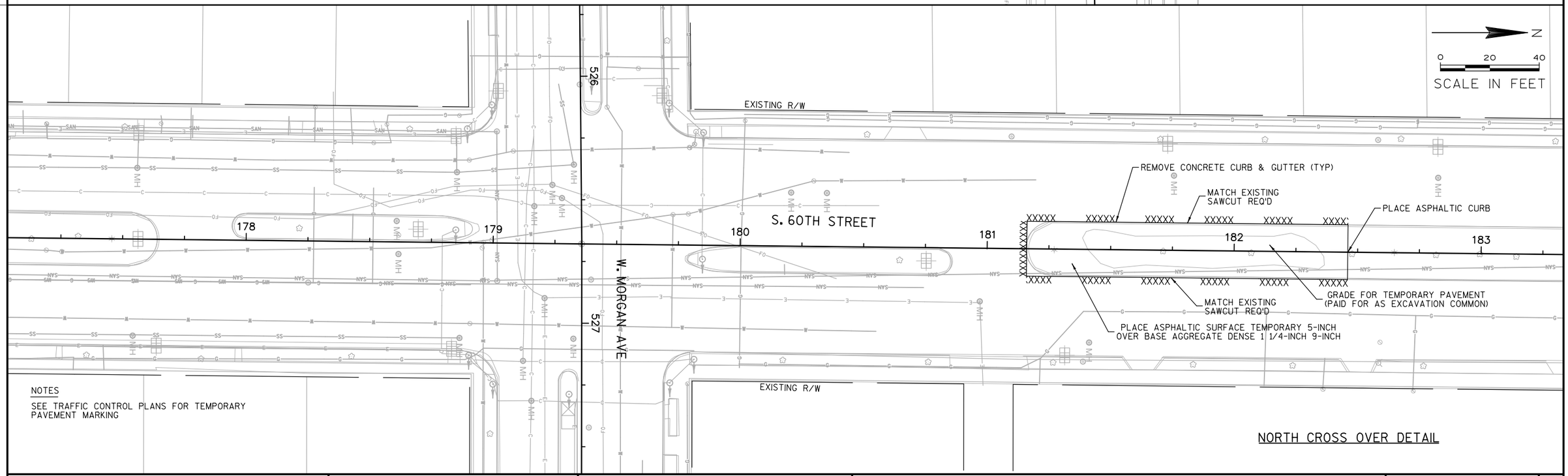


NOTES

SEE TRAFFIC CONTROL PLANS FOR TEMPORARY PAVEMENT MARKING

RESTORE CROSS OVER LOCATION USING CONTRACT BID ITEMS PRIOR TO PROJECT COMPLETION

SOUTH CROSS OVER DETAIL

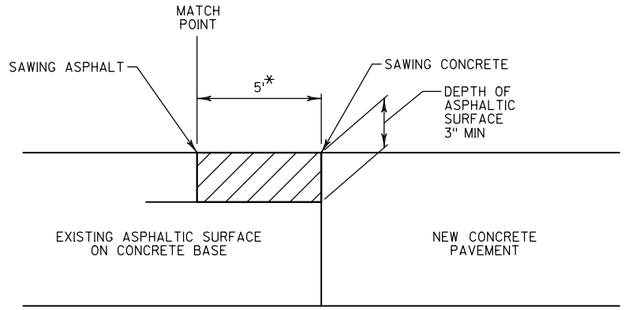


NOTES

SEE TRAFFIC CONTROL PLANS FOR TEMPORARY PAVEMENT MARKING

NORTH CROSS OVER DETAIL

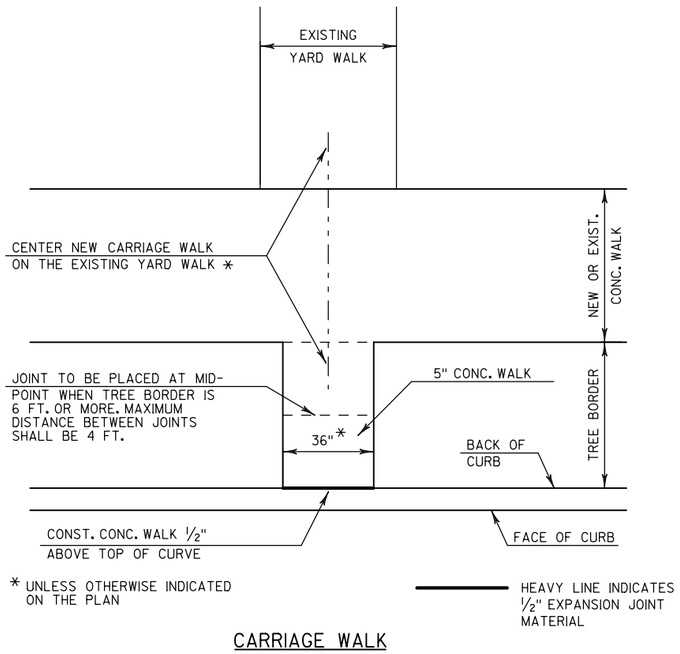
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL	SHEET 18	E



REMOVING ASPHALTIC SURFACE BUTT JOINTS

*EXACT LIMITS TO BE LOCATED BY THE ENGINEER IN THE FIELD

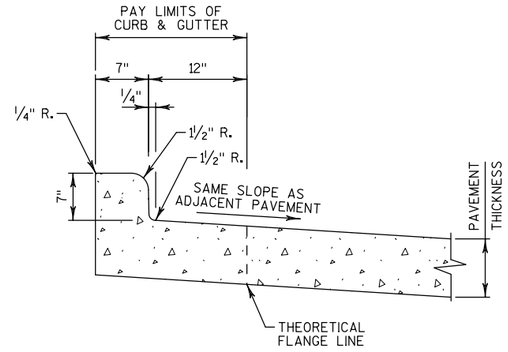
ASPHALTIC SURFACE BUTT JOINTS



* UNLESS OTHERWISE INDICATED ON THE PLAN

HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

CARRIAGE WALK

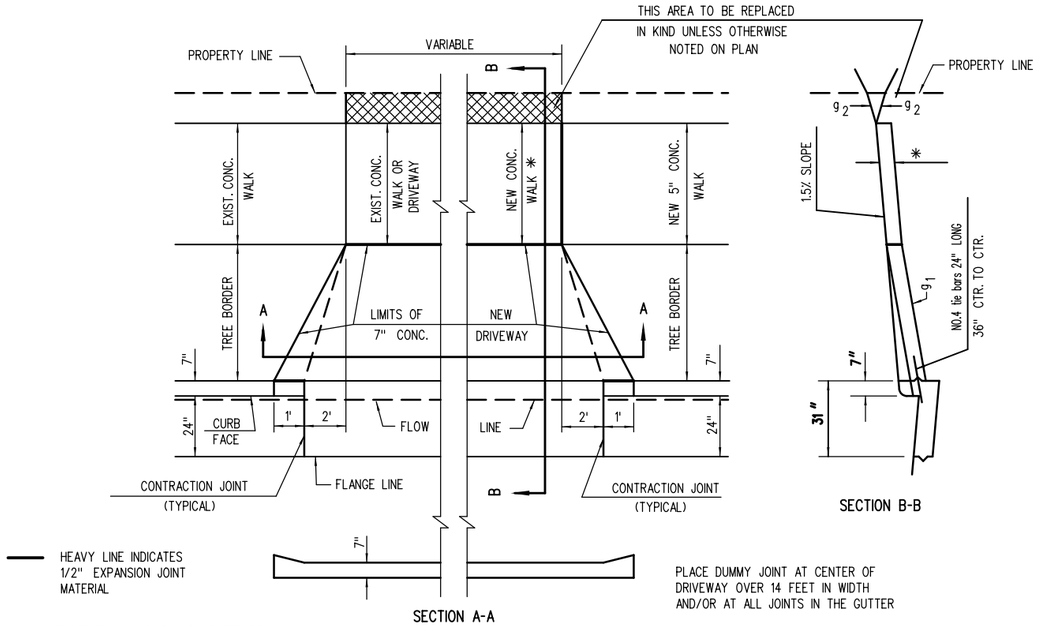


CONCRETE CURB & GUTTER INTEGRAL 19-INCH HIGH SIDE

GENERAL NOTES

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

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.



— HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

PLACE DUMMY JOINTS AT CENTER OF DRIVEWAY AND/OR AT ALL JOINTS IN THE GUTTER

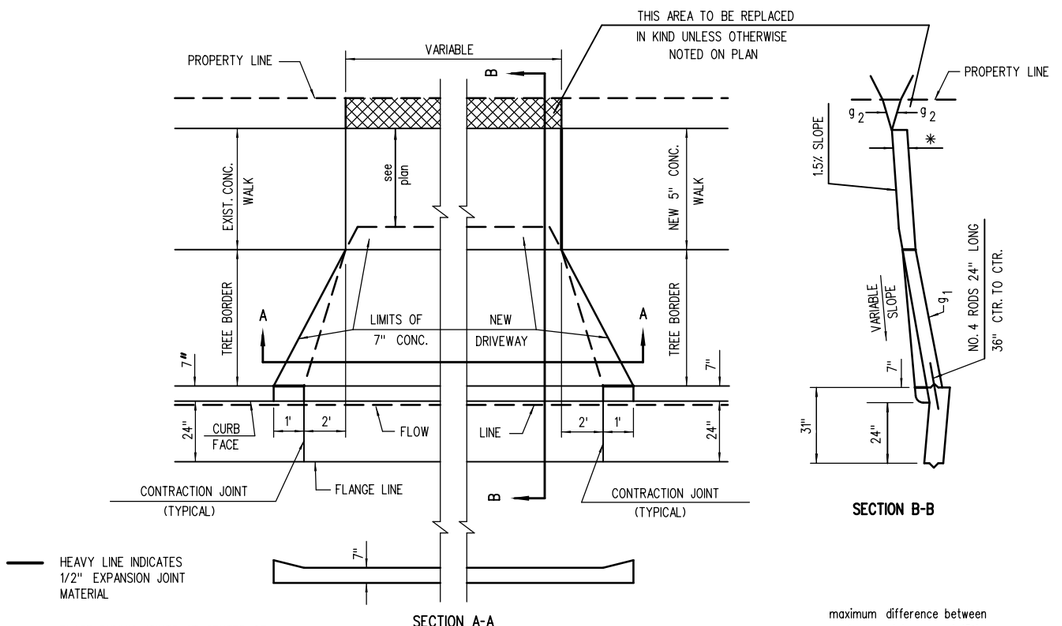
PLACE DUMMY JOINT AT CENTER OF DRIVEWAY OVER 14 FEET IN WIDTH AND/OR AT ALL JOINTS IN THE GUTTER

FLARED CONCRETE DRIVEWAY

maximum difference between g_1 & g_2 not to exceed 15%
desirable maximum = 10%

maximum difference between g_1 & g_2 in fill = 14%

* LOCATIONS PER PLAN: USE 7" CONC. FOR BUSINESS PROPERTY AND 5" CONC. FOR RESIDENTIAL PROPERTY.



— HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

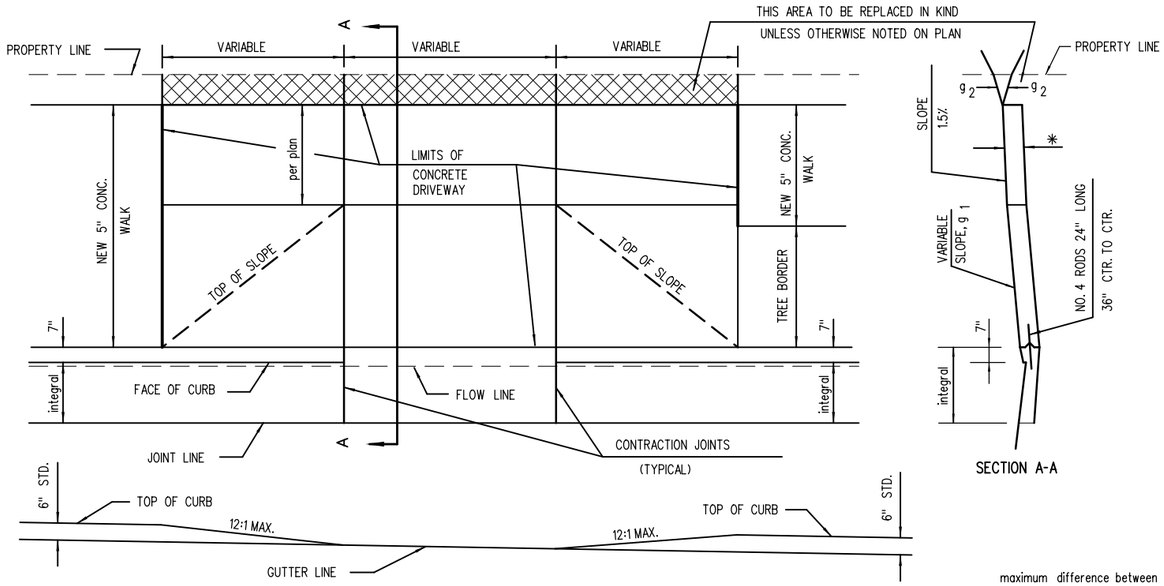
PLACE DUMMY JOINTS AT CENTER OF DRIVEWAY AND/OR AT ALL JOINTS IN THE GUTTER

FLARED CONCRETE DRIVEWAY (MODIFIED)

maximum difference between g_1 & g_2 not to exceed 15%
desirable maximum = 10%

maximum difference between g_1 & g_2 in fill = 14%

* LOCATIONS PER PLAN: USE 7" CONC. FOR BUSINESS PROPERTY AND 5" CONC. FOR RESIDENTIAL PROPERTY.



SECTION A-A

HEAVY LINE INDICATES 1/2" EXPANSION JOINT MATERIAL

DRIVEWAY CONSTRUCTION NOTES

CONSTRUCT DRIVEWAY TO PROPERTY LINE ONLY WHEN MATCHING EXISTING DRIVEWAY AND INSTALL 1/2" EXPANSION JOINT MATERIAL BETWEEN NEW AND OLD DRIVEWAY, PLACE DUMMY JOINT AT CENTER OF DRIVEWAY AND AT ALL JOINTS IN THE GUTTER

maximum difference between g_1 & g_2 not to exceed 15%
desirable maximum = 10%

maximum difference between g_1 & g_2 in fill = 14%

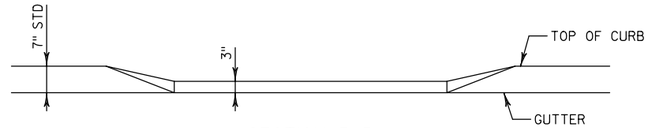
* 7" CONC. THICKNESS UNLESS INDICATED OTHERWISE ON PLANS.

DEPRESSED CONCRETE DRIVEWAY (MODIFIED)

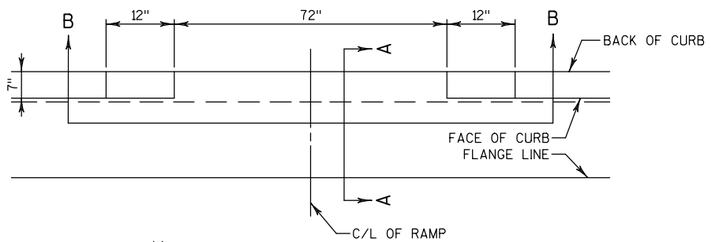
LOCATION AND SIDE OF MEDIAN

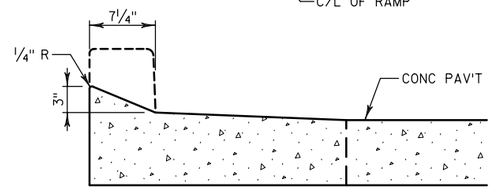
STA 128+25 W	STA 150+85 W
STA 128+85 W	STA 151+35 W
STA 132+00 W	STA 155+75 W
STA 133+25 W	STA 156+50 W
STA 135+65 W	STA 162+25 W
STA 136+50 W	STA 165+80 W
STA 139+25 W	STA 171+75 W
STA 140+25 W	STA 173+10 W
STA 145+75 W	STA 178+60 W
STA 146+85 W	STA 180+15 W

MAINTANCE RAMPS SHOWN ON THE PLAN DETAILS SHEETS MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.



SECTION B-B

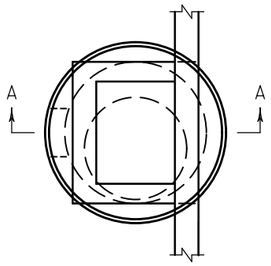




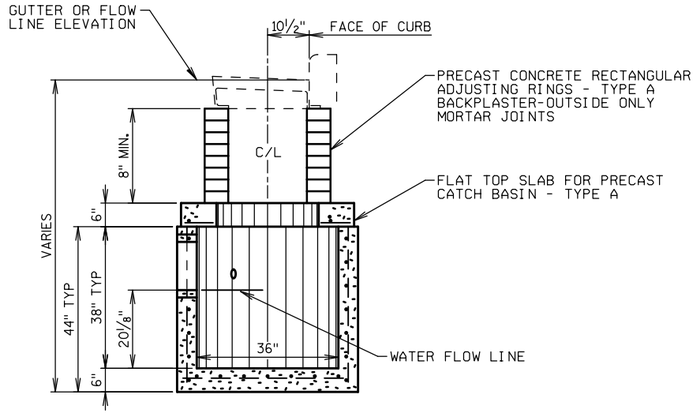
SECTION A-A

MAINTENANCE RAMP

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL	SHEET 21	E



PLAN

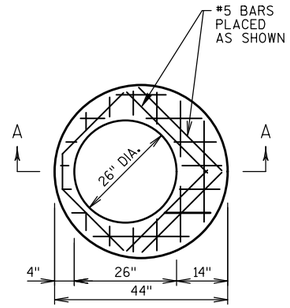


SECTION A-A

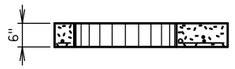
CATCH BASIN - TYPE 45A

GENERAL NOTES

1. PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199 AND ASTM DESIGNATION C-478 AND THESE DETAILED REQUIREMENTS WHICH SHALL GOVERN WHERE THEY ALTER THE AASHTO AND ASTM STANDARDS.
2. ALL REINFORCEMENT STEEL SHALL BE GRADE 60 OR GREATER AND EMBEDDED AT LEAST 1" CLEAR.
3. PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 4 IN DEPTH WHICH MEETS REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
4. SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON PLAN.



PLAN



SECTION A-A

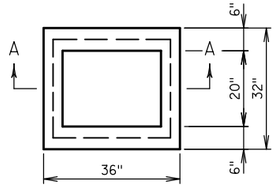
TOP SLAB - TYPE A

FLAT TOP SLAB SHALL BE 6" THICK REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER LINEAL FOOT IN BOTH DIRECTIONS, PLACED NEAR THE BOTTOM OF THE SLAB WITH 1" CLEAR COVER.

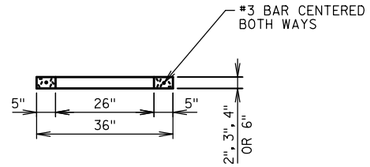
ADDITIONALLY, NO. 5 BARS SHALL BE PLACED AROUND TOP SLAB OPENING AS SHOWN.

REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.



PLAN

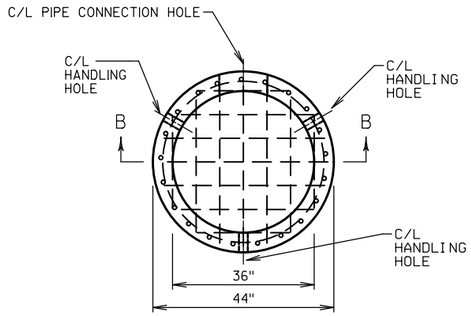


SECTION A-A

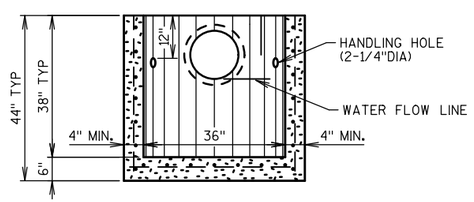
RECTANGULAR ADJUSTING RING - TYPE A

THE ADJUSTING RINGS SHALL BE 2", 3", 4" OR 6" IN HEIGHT.

THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 3300 P.S.I.



RISER SECTION WITH INTEGRAL BASE PLAN



SECTION B-B

CIRCUMFERENTIAL AND LONGITUDINAL REINFORCEMENT IN THE RISER SECTON SHALL EACH CONSIST OF ONE LAYER OF STEEL NOT LESS THAN 0.12 SQ. IN. PER FOOT AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.

THE BASE SLAB SHALL BE REINFORCED WITH ONE LAYER OF STEEL WITH A MINIMUM AREA OF 0.32 SQ. IN. PER FOOT IN BOTH DIRECTIONS, PLACED ABOVE THE MIDPOINT OF THE SLAB.

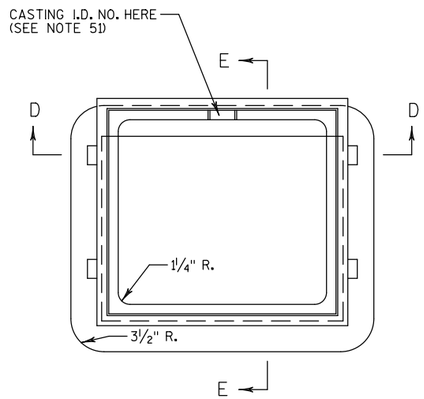
RISER SECTION AND BASE SLAB REINFORCEMENT SHALL BE TIED OR WELDED TOGETHER.

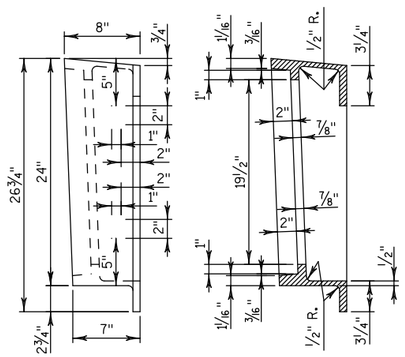
TWO TO THREE HANDLING HOLES 2-¼" IN DIAMETER AND A PIPE CONNECTION HOLE SHALL BE CAST OR CORED IN THE RISER SECTION AT THE LOCATIONS SHOWN AND AS DETAILED IN THE PLANS. LIFTING DEVICES MAY BE SUBSTITUTED FOR HANDLING HOLES.

NO JOINTS OR HOLES SHALL BE BELOW THE WATERLINE.

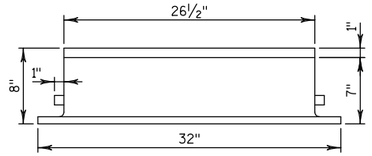
THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE 4000 P.S.I.

RISER SECTION MAY TAPER TO A 33" INTERNAL DIAMETER AT IT'S BOTTOM PROVIDED A 44" MINIMUM OUTSIDE DIAMETER IS MAINTAINED.





SECTION E-E



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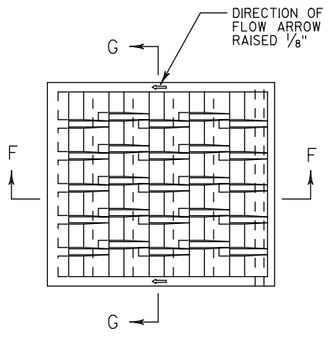
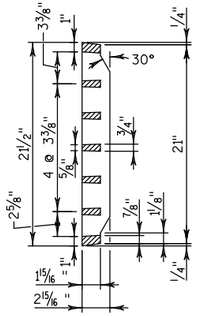
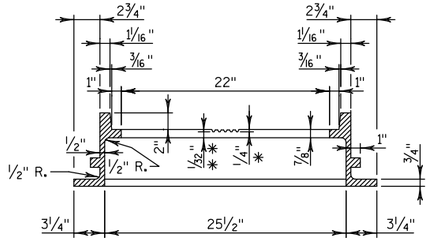


GRATE



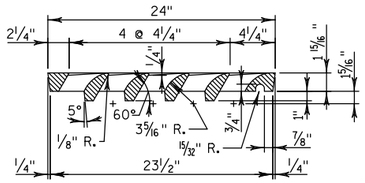
SECTION G-G



SECTION D-D

* DEPRESSION FOR LETTERS

** CLEARANCE FROM TOP OF LETTERS TO FACE OF SEAT



SECTION F-F

GENERAL NOTES

ALL EDGES ARE TO BE GROUND

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8

ON THE FRAME

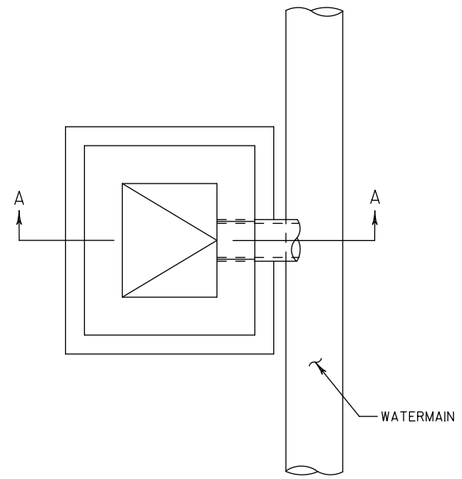
1. ON THE UPPER FACE OF THE FLANGE IN 1 INCH HIGH LETTERS THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.
2. ON THE SEAT OF THE FRAME IN 1 INCH HIGH LETTERS, THE CASTING IDENTIFICATION NUMBER (51).

ON THE GRATE

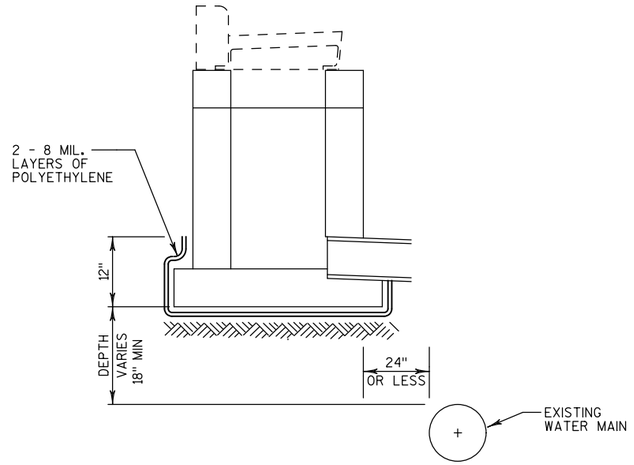
1. ON THE UPPER SIDE OF THE GRATE IN 1 INCH HIGH LETTERS, THE INITIALS OR MONOGRAM OF THE FOUNDRY, THE YEAR MADE, THE CASTING IDENTIFICATION NUMBER (57) AND THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

INLET COVER - TYPE 57

LID-145 LBS., FRAME-204 LBS.



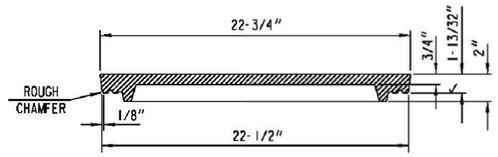
PLAN VIEW



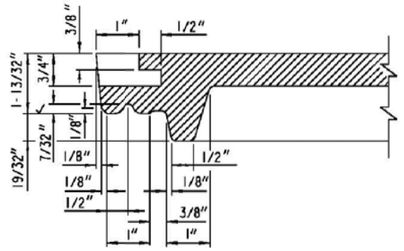
SECTION A-A

WATER MAIN PROTECTION

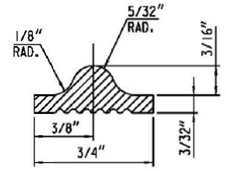
INSTALL ON ALL CATCH BASINS OR INLETS WITH LESS THAN 24" HORIZONTAL OUT-TO-OUT CLEARANCE FROM STRUCTURE TO WATER MAIN



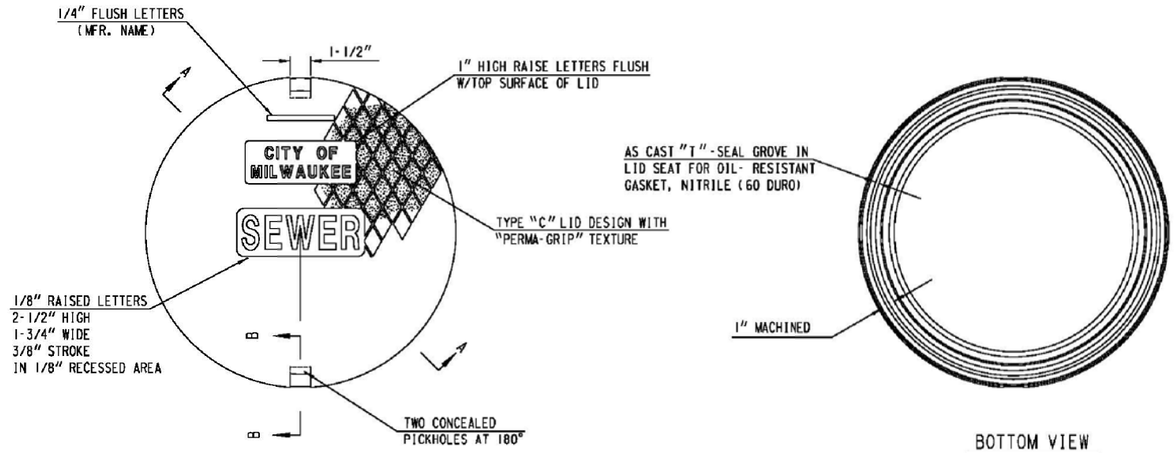
SECTION A-A



SECTION B-B



"T" GASKET DETAIL



TOP VIEW

BOTTOM VIEW

MANHOLE COVER - TYPE MS 58-A

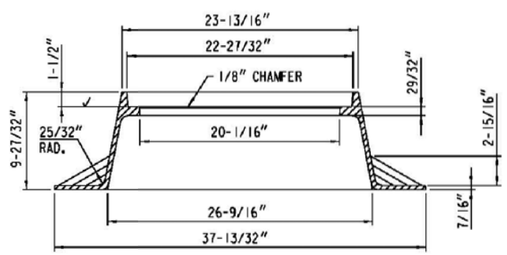
LID - 107 LBS.

NOTE:

ALL CASTINGS SHALL BEAR THE FOLLOWING IDENTIFICATION MARKS IN THE FORM OF LEGIBLE LETTERS OR NUMERALS RAISED 1/8" HAVING A DIGIT OR LETTER HEIGHT OF ONE INCH ON LOWER FACE OF LID:

1. THE INITIALS OR MONOGRAM OF THE FOUNDRY.
2. THE CONTRACT NUMBER (IF APPLICABLE) AND YEAR MADE.
3. THE CASTING IDENTIFICATION NUMBER.
4. THE SERIAL NUMBER OF THE INDIVIDUAL CASTING.

NOTE: ALL EXTERIOR EDGES SHALL BE GROUND.

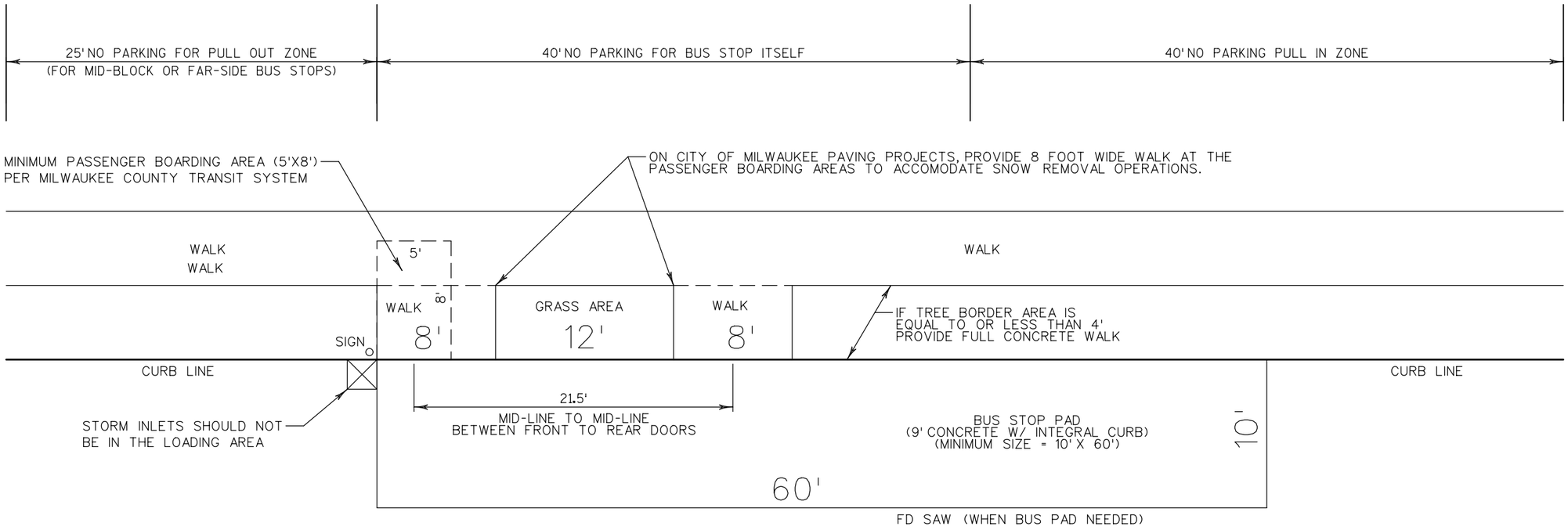


MANHOLE FRAME - TYPE MS 21

FRAME - 182 LBS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL	SHEET 24	E

2



BUS PAD

THE SLOPE OF THE PASSENGER BOARDING AREA SHOULD NOT EXCEED 2%

THERE SHOULD BE NO SEWER GRATES/INLETS IN THE ROADWAY AT THE PASSENGER BOARDING AREA.

BUS STOPS LOCATED ON "PORK CHOP" ISLANDS MUST HAVE AN ADA ACCESSIBLE PATH TO THE CROSSWALK.

SHELTERS SHOULD NOT BE PLACED WITHIN THE MINIMUM PASSENGER BOARDING AREA.

SHELTERS SHOULD BE SETBCAK A MINIMUM OF 2 FEET FROM THE ROADWAY.

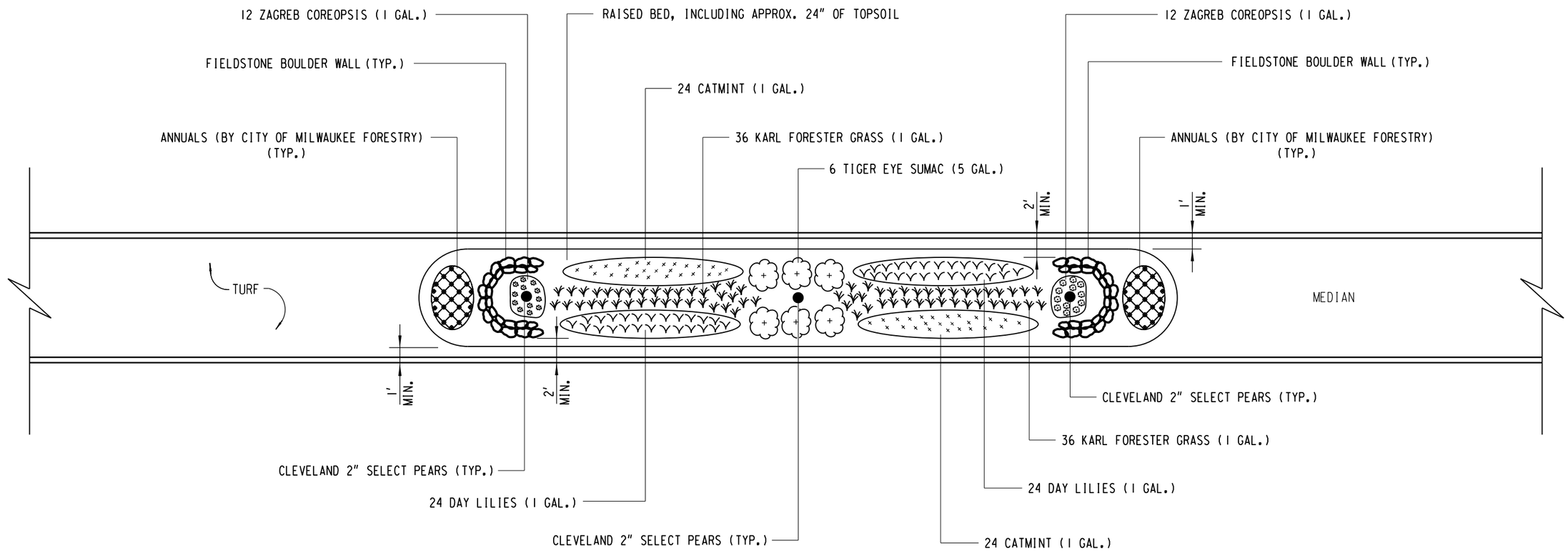
SHELTERS NEED A MINIMUM 3 FOOT CLEARANCE FROM FIRE HYDRANTS.

SHELTERS NEED A MINIMUM 1 FOOT CLEARANCE FROM BUILDINGS OR OTHER STRUCTURES FOR MAINTENANCE PURPOSES.

SHELTERS MUST HAVE A MINIMUM 5 FOOT WIDE CLEAR AREA IN FRONT OF THE SHELTER. (ADJACENT SIDEWALK CAN BE USED TO MEET THIS REQUIREMENT)

SIGNATURE BED DETAIL

N



NO.	LOCATIONS
1.	148 + 60 TO 149 + 40
2.	159 + 00 TO 159 + 80

ESTIMATE OF QUANTITIES

ITEM	UNIT	TOTAL
CLEVELAND SELECT PEAR	EACH	3
KARL FORESTER GRASS	EACH	72
CATMINT BLUE WONDER	EACH	48
TIGER EYE SUMAC	EACH	6
DAY LILIES	EACH	48
ZAGREB COREOPSIS	EACH	24

NOTE:

SHREDDED BARK MULCH AROUND
ALL TREES AND IN BED 3-4" DEPTH.
SHOVEL CUT BED EDGE.

2

126

127

2

N

0 5 10

SCALE IN FEET

S. 60TH STREET

327

W. COLD SPRING ROAD

CURB RAMP TYPE 2

CURB RAMP TYPE 2 MODIFIED

STA 125+95.57, 43.48' RT
EL: 179.59

STA 125+95.54, 48.62' RT
EL: 179.69

STA 125+87.57, 40.97' RT
EL: 179.20

STA 125+87.57, 43.55' RT
EL: 179.61

STA 125+87.57, 48.58' RT
EL: 179.81

TRANSITION SIDEWALK TO MATCH EXISTING IN NEXT 10'

BUS STOP

STA 125+87.57, 53.58' RT
TOC EL: 179.89
SIDEWALK EL: 179.89

EXISTING R/W

STA 126+01.02, 44.62' RT
EL: 179.14

CONCRETE CURB PEDESTRIAN

STA 126+01.17, 48.65' RT
EL: 179.40

STA 126+01.36, 53.65' RT
TOC EL: 179.71
SIDEWALK EL: 179.45

STA 126+06.36, 53.67' RT
EL: 179.40

STA 126+01.04, 40.87' RT
EL: 179.19

STA 126+00.96, 42.87' RT
EL: 179.11

STA 126+06.64, 41.92' RT
EL: 179.27

STA 126+06.00, 43.81' RT
EL: 179.19

STA 126+08.50, 42.66' RT
EL: 179.30

STA 126+06.02, 44.44' RT
EL: 179.20

STA 126+06.18, 48.67' RT
EL: 179.33

STA 126+14.97, 47.36' RT
EL: 179.16

STA 126+13.49, 48.71' RT
EL: 179.07

STA 126+12.69, 48.71' RT
EL: 179.09

STA 126+18.57, 52.94' RT
EL: 179.04

STA 126+16.73, 53.73' RT
EL: 178.95

STA 126+20.19, 60.12' RT
EL: 178.90

STA 126+12.66, 53.71' RT
EL: 179.01

STA 126+20.67, 73.18' RT
EL: 178.68

EXISTING R/W

STA 126+82.26, 42.05' RT
EL: 178.68

STA 126+82.50, 44.03' RT
EL: 178.59

STA 126+76.75, 43.54' RT
EL: 178.78

STA 126+77.54, 45.37' RT
EL: 178.70

STA 126+77.57, 46.00' RT
EL: 178.70

STA 126+77.67, 49.00' RT
EL: 178.80

STA 126+72.23, 46.25' RT
EL: 178.88

STA 126+70.73, 47.57' RT
EL: 178.86

STA 126+72.12, 49.00' LT
EL: 178.78

STA 126+72.97, 49.00' RT
EL: 178.78

STA 126+66.70, 53.12' RT
EL: 178.78

STA 126+68.50, 54.00' RT
EL: 178.71

STA 126+72.97, 54.00' RT
EL: 178.72

STA 126+77.85, 54.00' RT
EL: 178.89

STA 126+64.68, 62.40' RT
EL: 178.69

STA 126+64.93, 72.40' RT
EL: 178.60

STA 126+82.68, 42.00' RT
EL: 178.67

STA 126+82.56, 45.82' RT
EL: 178.63

STA 126+82.67, 49.00' RT
EL: 178.85

EXISTING R/W

STA 126+82.85, 54.00' RT
EL: 178.94

EXISTING R/W

STA 126+77.66, 75.96' RT
EL: 179.12

STA 126+72.66, 75.86' RT
EL: 179.04

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST COLD SPRING ROAD INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 27	E

N

0 5 10

SCALE IN FEET

126

127

S. 60TH STREET

W. COLD SPRING ROAD

327

CURB RAMP TYPE 2

CURB RAMP TYPE 2 MODIFIED

STA 125+95.57, 43.48' RT
EL: 179.59

STA 125+95.54, 48.62' RT
EL: 179.69

STA 125+87.57, 40.97' RT
EL: 179.20

STA 125+87.57, 43.55' RT
EL: 179.61

STA 125+87.57, 48.58' RT
EL: 179.81

TRANSITION SIDEWALK TO MATCH EXISTING IN NEXT 10'

BUS STOP

STA 125+87.57, 53.58' RT
TOC EL: 179.89
SIDEWALK EL: 179.89

EXISTING R/W

STA 126+01.02, 44.62' RT
EL: 179.14

CONCRETE CURB PEDESTRIAN

STA 126+01.17, 48.65' RT
EL: 179.40

STA 126+01.36, 53.65' RT
TOC EL: 179.71
SIDEWALK EL: 179.45

STA 126+06.36, 53.67' RT
EL: 179.40

STA 126+01.04, 40.87' RT
EL: 179.19

STA 126+00.96, 42.87' RT
EL: 179.11

STA 126+06.64, 41.92' RT
EL: 179.27

STA 126+06.00, 43.81' RT
EL: 179.19

STA 126+08.50, 42.66' RT
EL: 179.30

STA 126+06.02, 44.44' RT
EL: 179.20

STA 126+06.18, 48.67' RT
EL: 179.33

STA 126+14.97, 47.36' RT
EL: 179.16

STA 126+13.49, 48.71' RT
EL: 179.07

STA 126+12.69, 48.71' RT
EL: 179.09

STA 126+18.57, 52.94' RT
EL: 179.04

STA 126+16.73, 53.73' RT
EL: 178.95

STA 126+20.19, 60.12' RT
EL: 178.90

STA 126+12.66, 53.71' RT
EL: 179.01

STA 126+20.67, 73.18' RT
EL: 178.68

EXISTING R/W

STA 126+82.26, 42.05' RT
EL: 178.68

STA 126+82.50, 44.03' RT
EL: 178.59

STA 126+76.75, 43.54' RT
EL: 178.78

STA 126+77.54, 45.37' RT
EL: 178.70

STA 126+77.57, 46.00' RT
EL: 178.70

STA 126+77.67, 49.00' RT
EL: 178.82

STA 126+72.23, 46.25' RT
EL: 178.88

STA 126+70.73, 47.57' RT
EL: 178.86

STA 126+72.12, 49.00' LT
EL: 178.78

STA 126+72.97, 49.00' RT
EL: 178.79

STA 126+66.70, 53.12' RT
EL: 178.79

STA 126+68.50, 54.00' RT
EL: 178.71

STA 126+72.97, 54.00' RT
EL: 178.72

STA 126+77.85, 54.00' RT
EL: 178.91

STA 126+64.68, 62.40' RT
EL: 178.69

STA 126+64.93, 72.40' RT
EL: 178.60

STA 126+82.68, 42.00' RT
EL: 178.67

STA 126+82.56, 45.82' RT
EL: 178.63

STA 126+82.67, 49.00' RT
EL: 178.84

EXISTING R/W

STA 126+82.85, 54.00' RT
EL: 178.93

EXISTING R/W

STA 126+77.66, 75.96' RT
EL: 179.12

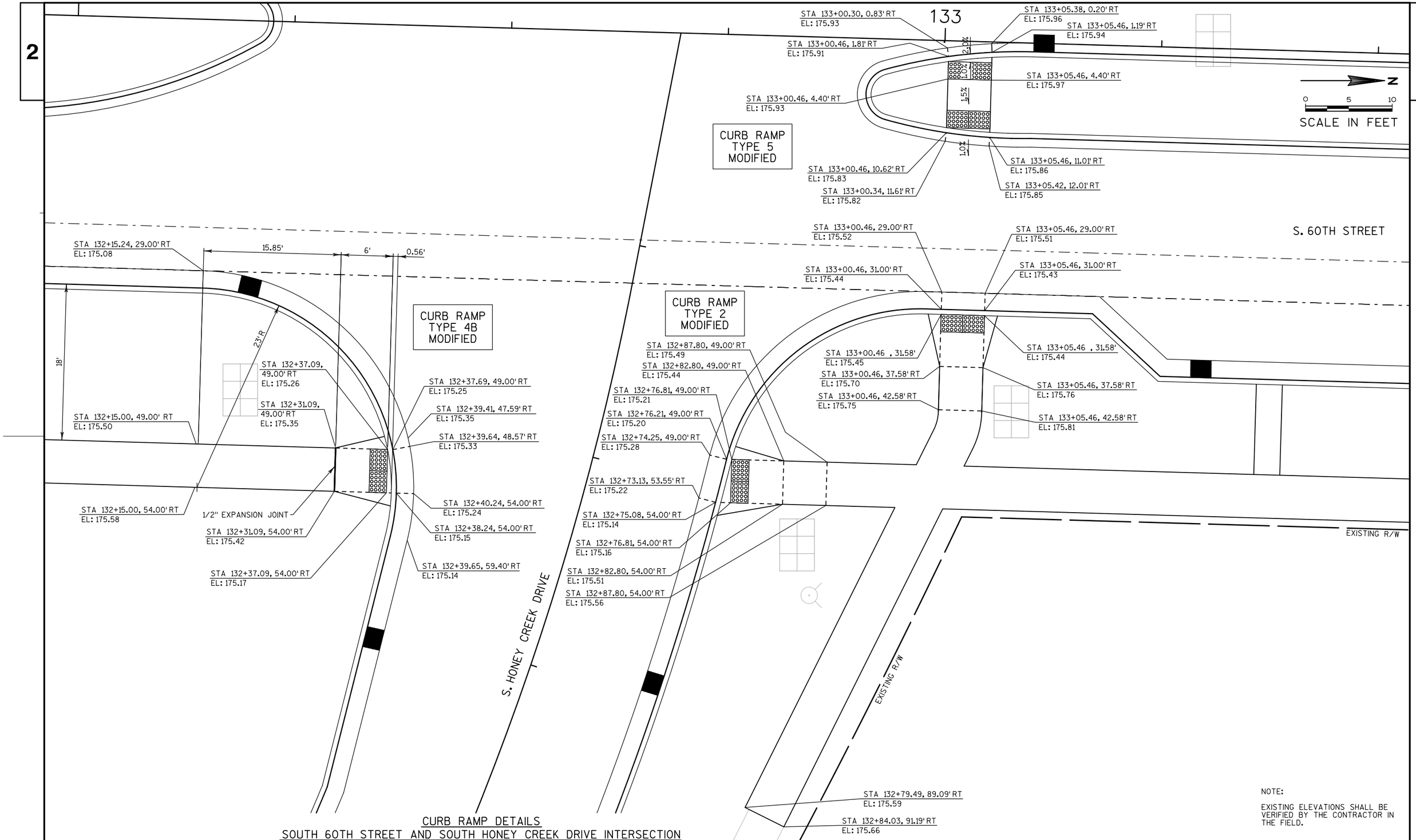
STA 126+72.66, 75.86' RT
EL: 179.04

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST COLD SPRING ROAD INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 28	E



CURB RAMP DETAILS
SOUTH 60TH STREET AND SOUTH HONEY CREEK DRIVE INTERSECTION

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 29	E

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

N

0 5 10

SCALE IN FEET

STA 133+00.46, 54.00' LT
TOC EL: 176.51
SIDEWALK EL:176.31

CONCRETE CURB PEDESTRIAN

STA 132+95.46, 54.00' LT
EL: 176.48

STA 133+05.46, 54.00' LT
TOC EL: 176.54
EL: 176.33

1/2" EXPANSION JOINT

STA 132+95.46, 49.00' LT
EL: 176.40

STA 133+10.46, 54.00' LT
EL: 176.58

1/2" EXPANSION JOINT

EXISTING R/W

EXISTING R/W

STA 133+00.46, 49.00' LT
EL: 176.23

STA 133+10.46, 49.00' LT
EL: 176.50

STA 133+05.46, 49.00' LT
EL: 176.25

BEGIN CURB HEAD TAPER
STA 132+95.46

BEGIN CURB HEAD TAPER
STA 133+10.46

STA 133+00.46, 38.58' LT
EL: 175.51

STA 133+05.46, 38.58' LT
EL: 175.53

STA 133+00.46, 38.00' LT
EL: 175.50

STA 133+05.46, 38.00' LT
EL: 175.52

STA 133+00.46, 36.00' LT
EL: 175.58

STA 133+05.46, 36.00' LT
EL: 175.60

CURB RAMP
TYPE 7B

S. 60TH STREET

132

133

STA 133+05.38, 0.20' RT
EL: 175.96

STA 133+00.30, 0.83' RT
EL: 175.93

STA 133+05.46, 1.19' RT
EL: 175.94

STA 133+00.46, 1.81' RT
EL: 175.91

2.0%

STA 133+05.46, 4.40' RT
EL: 175.97

STA 133+00.46, 4.40' RT
EL: 175.93

1.5%

2.0%

S. HONEY
CREEK DRIVE

CURB RAMP
TYPE 5
MODIFIED

STA 133+00.46, 10.62' RT
EL: 175.83

STA 133+05.46, 11.01' RT
EL: 175.86

STA 133+00.34, 11.61' RT
EL: 175.82

STA 133+05.42, 12.01' RT
EL: 175.85

CURB RAMP DETAILS
SOUTH 60TH STREET AND SOUTH HONEY CREEK DRIVE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 30	E

2

2

N

0 5 10
SCALE IN FEET

136

STA 135+77.70, 2.95' LT
EL: 177.63

STA 135+77.17, 2.10' LT
EL: 177.65

STA 135+82.78, 0.58' RT
EL: 177.73

STA 135+82.17, 1.38' RT
EL: 177.74

STA 135+77.17, 4.12' RT
EL: 177.79

STA 135+82.17, 4.12' RT
EL: 177.84

STA 135+77.17, 8.42' RT
EL: 177.86

STA 135+82.17, 8.42' RT
EL: 177.91

STA 135+77.17, 11.00' RT
EL: 177.83

STA 135+82.17, 11.00' RT
EL: 177.88

STA 135+77.17, 12.00' RT
EL: 177.81

STA 135+82.17, 12.00' RT
EL: 177.86

3.0%
1.5%
2%

CURB RAMP
TYPE 5
MODIFIED

S. 60TH STREET

STA 135+77.17, 38.65' RT
EL: 177.34

STA 135+47.31,
38.58' RT
EL: 177.47

STA 135+77.17, 41.59' RT
EL: 177.38

STA 135+77.70, 36.72' RT
EL: 177.42

STA 135+72.39, 36.00' RT
EL: 177.34

STA 135+39.31,
38.58' RT
EL: 177.39

STA 135+67.31, 38.58' RT
EL: 177.66

STA 135+82.17, 40.89' RT
EL: 177.43

STA 135+83.26, 39.21' RT
EL: 177.51

STA 135+84.08, 39.78' RT
EL: 177.53

STA 135+82.17, 41.59' RT
EL: 177.44

STA 135+59.31,
38.58' RT
EL: 177.58

BUS
STOP

STA 135+59.31,
49.00' RT
EL: 177.79

STA 135+82.17, 49.00' RT
EL: 177.82

STA 135+88.33, 49.00' RT
EL: 177.69

STA 135+90.40, 47.31' RT
EL: 177.74

STA 135+90.81, 48.22' RT
EL: 177.76

STA 135+88.97, 49.00' RT
EL: 177.68

STA 135+88.33, 54.00' RT
EL: 177.78

STA 135+92.26, 53.78' RT
EL: 177.86

STA 135+92.37, 55.26' RT
EL: 177.88

STA 135+90.27, 54.00' RT
EL: 177.78

STA 135+39.31,
49.00' RT
EL: 177.67

STA 135+47.31,
49.00' RT
EL: 177.75

W. PLAINFIELD AVENUE

EXISTING R/W

STA 135+59.31, 54.00' RT
EL: 177.87

STA 135+67.31, 49.00' RT
EL: 177.87

STA 135+67.31, 54.00' RT
EL: 177.97

CONCRETE CURB PEDESTRIAN

STA 135+77.17, 49.00' RT
EL: 177.89

STA 135+77.17, 54.00' RT
EL: 177.95

STA 135+82.17, 54.00' RT
EL: 177.89

STA 135+77.59, 69.00' RT
EL: 178.77

STA 135+92.68, 63.55' RT
EL: 177.96

CURB RAMP
TYPE 2
MODIFIED

STA 135+82.59, 69.00' RT
EL: 178.70

EXISTING R/W

STA 136+27.36, 36.65' RT
EL: 178.28

1' 7' 15'

STA 136+45.36, 29.00' RT
EL: 178.08

23' R

18'

STA 136+30.07,
49.00' RT
EL: 178.15

STA 136+35.07,
49.00' RT
EL: 178.22

STA 136+45.36,
49.00' RT
EL: 178.65

STA 136+22.91, 49.00' RT
EL: 177.92

STA 136+20.96, 48.57' RT
EL: 178.00

STA 136+23.51, 49.00' RT
EL: 177.93

STA 136+20.36, 54.00' RT
EL: 177.89

STA 136+20.38, 54.93' RT
EL: 177.87

STA 136+22.36, 54.00' RT
EL: 177.81

STA 136+23.51, 54.00' RT
EL: 177.83

STA 136+20.66, 62.51' RT
EL: 177.85

STA 136+30.41, 67.00' RT
EL: 178.89

CURB RAMP
TYPE 4B
MODIFIED

EXISTING R/W

STA 136+45.36, 54.00' RT
EL: 178.73

EXISTING R/W

STA 136+35.07, 54.00' RT
EL: 178.28

1/2" EXPANSION JOINT

CONCRETE CURB PEDESTRIAN

STA 136+30.07, 54.00' RT
EL: 178.22

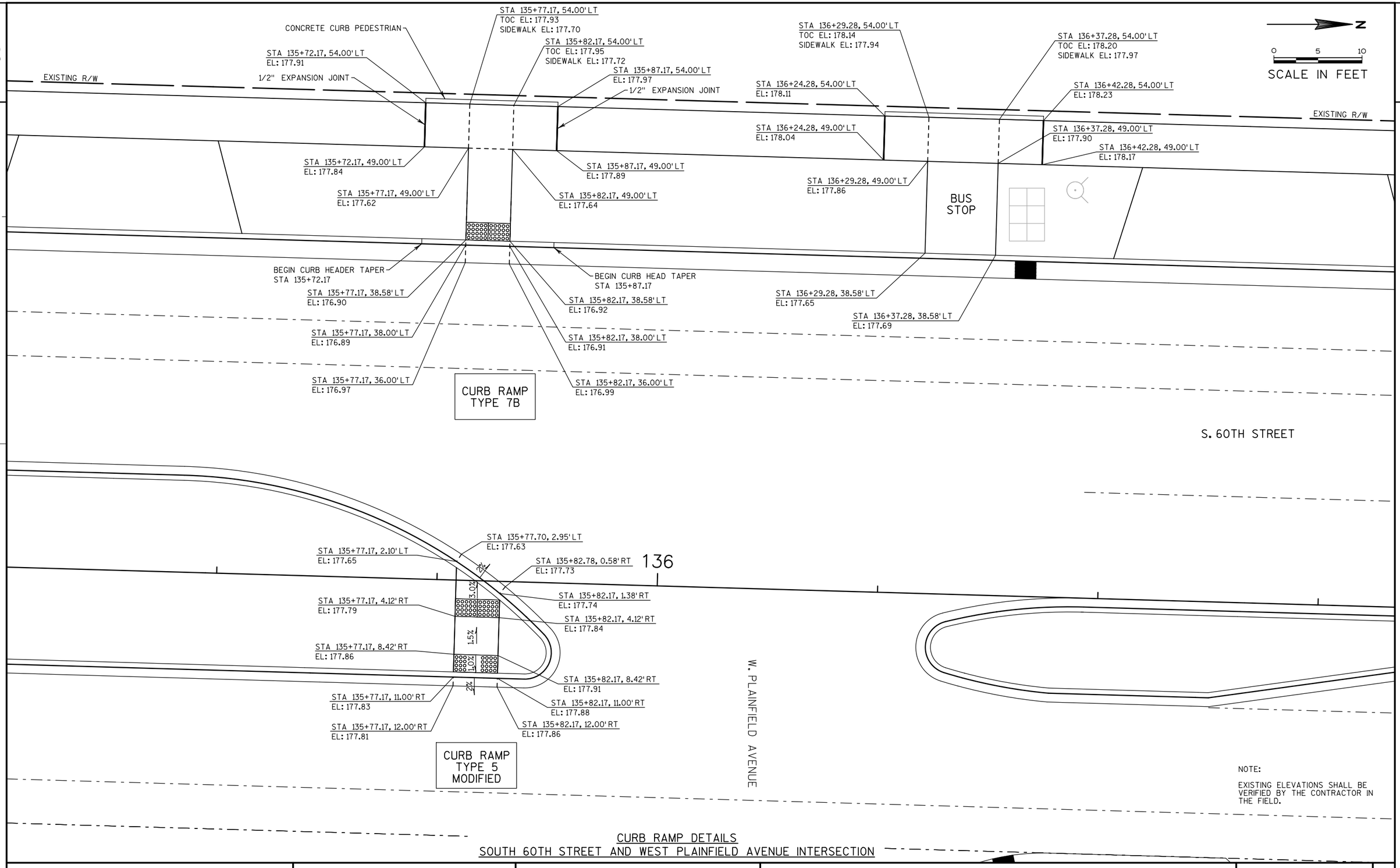
STA 136+35.41, 67.00' RT
EL: 178.96

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST PLAINFIELD AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 31	E



CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST PLAINFIELD AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 32	E

2

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

N

0 5 10

SCALE IN FEET

W. WATERFORD COURT

EXISTING R/W

EXISTING R/W

EXISTING R/W

EXISTING R/W

STA 138+10.13, 81.50'LT
EL: 178.65

STA 138+34.13, 81.50'LT
EL: 178.59

STA 138+07.44, 54.00'LT
EL: 179.08

STA 138+01.44, 54.00'LT
EL: 179.50

1/2" EXPANSION JOINT

STA 137+96.44, 54.00'LT
EL: 179.58

STA 138+10.13, 58.50'LT
EL: 179.20

STA 138+34.13, 58.50'LT
EL: 179.36

STA 138+08.13, 54.00'LT
EL: 179.07

STA 138+36.13, 54.00'LT
EL: 179.23

STA 138+10.13, 54.00'LT
EL: 179.16

STA 138+34.13, 54.00'LT
EL: 179.32

STA 138+34.13, 51.00'LT
EL: 179.29

STA 138+10.13, 51.00'LT
EL: 179.13

STA 138+07.44, 49.00'LT
EL: 179.02

STA 138+34.24, 48.80'LT
EL: 179.28

STA 138+10.02, 48.80'LT
EL: 179.10

STA 138+36.23, 49.00'LT
EL: 179.19

STA 138+08.03, 49.00'LT
EL: 179.01

STA 138+36.81, 49.00'LT
EL: 179.20

STA 138+36.81, 54.00'LT
EL: 179.24

STA 138+42.81, 54.00'LT
EL: 179.48

1/2" EXPANSION JOINT

STA 138+47.81, 54.00'LT
EL: 179.56

STA 138+80.00, 54.00'LT
EL: 179.78

STA 137+96.44, 49.00'LT
EL: 179.52

STA 138+01.44, 49.00'LT
EL: 179.44

STA 138+47.81, 49.00'LT
EL: 179.52

STA 138+80.00, 49.00'LT
EL: 179.71

STA 138+42.81, 49.00'LT
EL: 179.44

18'

20' R

18'

20' R

STA 138+03.68, 35.44'LT
EL: 178.90

STA 138+40.57, 35.44'LT
EL: 179.23

STA 137+88.13, 29.00'LT
EL: 178.67

STA 138+56.13, 29.00'LT
EL: 179.18

13' 6' 1'

1' 6' 13'

CURB RAMP TYPE 4B1 MODIFIED

CURB RAMP TYPE 4B1 MODIFIED

S. 60TH STREET

138

139

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST WATERFORD COURT INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 33	E

2

N

0 5 10

SCALE IN FEET

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

ARMOUR PARK PATH

EXISTING R/W

STA 139+28.80, 54.00'LT
EL: 179.96

STA 139+33.80, 54.00'LT
TOC EL: 179.97
SIDEWALK EL: 179.76

STA 139+38.80, 54.00'LT
TOC EL: 179.99
SIDEWALK EL: 179.78

CONCRETE CURB PEDESTRIAN

STA 139+43.80, 54.00'LT
EL: 180.03

1/2" EXPANSION JOINT

STA 139+99.56, 54.00'LT
EL: 180.56

1/2" EXPANSION JOINT

STA 140+04.56, 54.00'LT
TOC EL: 180.59
SIDEWALK EL: 180.30

STA 140+09.56, 54.00'LT
TOC EL: 180.61
SIDEWALK EL: 180.34

CONCRETE CURB PEDESTRIAN

STA 140+14.56, 54.00'LT
EL: 180.64

1/2" EXPANSION JOINT

EXISTING R/W

1/2" EXPANSION JOINT

STA 139+28.80, 49.00'LT
EL: 179.88

STA 139+33.80, 49.00'LT
EL: 179.69

STA 139+38.80, 49.00'LT
EL: 179.71

STA 139+43.80, 49.00'LT
EL: 179.96

STA 139+99.56, 49.00'LT
EL: 180.48

STA 140+04.56, 49.00'LT
EL: 180.22

STA 140+09.56, 49.00'LT
EL: 180.26

STA 140+14.56, 49.00'LT
EL: 180.56

BEGIN CURB HEAD TAPER
STA 139+28.80

STA 139+33.80, 38.58'LT
EL: 179.17

STA 139+33.80, 38.00'LT
EL: 179.16

STA 139+33.80, 36.00'LT
EL: 179.24

BEGIN CURB HEAD TAPER
STA 139+43.80

STA 139+38.80, 38.58'LT
EL: 179.19

STA 139+38.80, 38.00'LT
EL: 179.18

STA 139+38.80, 36.00'LT
EL: 179.26

BEGIN CURB HEAD TAPER
STA 139+99.56

STA 140+04.56, 38.58'LT
EL: 179.55

STA 140+04.56, 38.00'LT
EL: 179.54

STA 140+04.56, 36.00'LT
EL: 179.62

BEGIN CURB HEAD TAPER
STA 140+14.56

STA 140+09.56, 38.58'LT
EL: 179.59

STA 140+09.56, 38.00'LT
EL: 179.58

STA 140+09.56, 36.00'LT
EL: 179.66

CURB RAMP TYPE 7B

CURB RAMP TYPE 7B

S. 60TH STREET

139

140

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST WATERFORD AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 34	E

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

N

0 5 10

SCALE IN FEET

139

140

S. 60TH STREET

STA 139+33.80, 5.28' LT
EL: 179.85

STA 139+34.23, 6.18' LT
EL: 179.84

STA 139+39.32, 3.45' LT
EL: 179.91

STA 139+38.80, 2.60' LT
EL: 179.92

STA 139+33.80, 2.25' RT
EL: 180.12

STA 139+38.80, 2.25' RT
EL: 180.15

2%

4.17'

1.5%

11.02'

2%

STA 139+33.80, 6.25' RT
EL: 180.18

CURB RAMP
TYPE 5
MODIFIED

STA 139+33.80, 11.00' RT
EL: 180.13

STA 139+33.80, 12.00' RT
EL: 180.11

STA 139+38.80, 6.25' RT
EL: 180.21

STA 139+38.80, 11.00' RT
EL: 180.16

STA 139+38.80, 12.00' RT
EL: 180.14

STA 139+28.35, 29.00' RT
EL: 179.68

STA 139+34.28, 29.71' RT
EL: 179.74

STA 139+39.71, 31.73' RT
EL: 179.80

STA 139+38.80, 33.51' RT
EL: 179.72

STA 139+38.80, 34.17' RT
EL: 179.73

STA 139+38.80, 40.17' RT
EL: 179.88

STA 139+48.24, 38.85' RT
EL: 179.92

STA 139+38.80, 45.17' RT
EL: 179.93

STA 139+38.80, 49.00' RT
EL: 180.00

STA 139+44.20, 49.00' RT
EL: 179.95

STA 139+50.20, 49.00' RT
EL: 179.73

STA 139+52.75, 48.57' RT
EL: 179.80

STA 139+50.80, 49.00' RT
EL: 179.72

STA 139+53.13, 50.68' RT
EL: 179.78

STA 139+53.54, 53.73' RT
EL: 179.77

STA 139+51.55, 54.00' RT
EL: 179.68

STA 139+54.24, 59.00' RT
EL: 179.74

STA 139+33.80, 31.66' RT
EL: 179.66

STA 139+33.80, 34.17' RT
EL: 179.70

STA 139+33.80, 40.17' RT
EL: 179.95

STA 139+33.80, 45.17' RT
EL: 180.00

STA 139+33.80, 49.00' RT
EL: 180.07

STA 139+25.00, 49.00' RT
EL: 180.19

STA 139+25.00, 54.00' RT
EL: 180.21

EXISTING R/W

STA 139+33.80, 54.00' RT
EL: 180.12

STA 139+38.80, 54.00' RT
EL: 180.05

STA 139+44.20, 54.00' RT
EL: 179.99

STA 139+50.20, 54.00' RT
EL: 179.70

EXISTING R/W

CURB RAMP
TYPE 2
MODIFIED

W. WATERFORD AVENUE

CURB RAMP
TYPE 2
MODIFIED

STA 140+04.25, 29.31' RT
EL: 180.20

STA 140+08.15, 29.00' RT
EL: 180.16

STA 140+04.56, 31.28' RT
EL: 180.12

STA 140+04.56, 31.87' RT
EL: 180.12

STA 140+09.56, 29.00' RT
EL: 180.15

STA 140+09.56, 31.00' RT
EL: 180.07

STA 140+04.56, 37.87' RT
EL: 180.36

STA 139+91.07, 35.74' RT
EL: 180.35

STA 140+09.56, 31.87' RT
EL: 180.08

STA 139+97.29, 49.00' RT
EL: 180.24

STA 139+92.29, 49.00' RT
EL: 180.19

STA 140+04.56, 42.87' RT
EL: 180.44

STA 140+09.56, 37.87' RT
EL: 180.41

STA 139+86.29, 49.00' RT
EL: 179.96

STA 140+09.56, 42.87' RT
EL: 180.48

STA 139+83.74, 48.57' RT
EL: 180.03

STA 140+09.56, 49.00' RT
EL: 180.63

STA 140+25.00, 49.00' RT
EL: 180.81

STA 139+85.70, 49.00' RT
EL: 179.95

STA 139+83.20, 52.34' RT
EL: 179.95

STA 139+83.10, 53.87' RT
EL: 179.95

STA 139+85.09, 54.00' RT
EL: 179.86

STA 139+82.76, 59.00' RT
EL: 179.92

EXISTING R/W

STA 140+09.56, 54.00' RT
EL: 180.70

STA 140+04.56, 49.00' RT
EL: 180.55

STA 140+04.56, 54.00' RT
EL: 180.63

STA 140+25.00, 54.00' RT
EL: 180.89

STA 139+97.29, 54.00' RT
EL: 180.29

STA 139+92.29, 54.00' RT
EL: 180.24

STA 139+86.29, 54.00' RT
EL: 179.88

EXISTING R/W

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST WATERFORD AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 35	E

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

0 5 10

SCALE IN FEET

N

146

147

S. 60TH STREET

STA 146+03.25, 38.72' RT
EL: 186.01

STA 146+03.81, 36.80' RT
EL: 186.10

STA 145+98.22, 36.00' RT
EL: 186.02

STA 146+03.33, 41.94' RT
EL: 186.06

STA 145+93.15, 38.58' RT
EL: 186.32

STA 146+08.31, 41.10' RT
EL: 186.09

STA 145+73.15, 38.58' RT
EL: 185.87

STA 146+09.43, 39.44' RT
EL: 186.18

STA 145+65.15,
38.58' RT
EL: 185.68

STA 145+85.15, 38.58' RT
EL: 186.14

STA 146+08.33, 41.82' RT
EL: 186.11

BUS
STOP

STA 145+65.15,
49.00' RT
EL: 185.88

STA 145+73.15,
49.00' RT
EL: 186.06

STA 146+08.51, 49.00' RT
EL: 186.48

STA 146+14.17, 49.00' RT
EL: 186.26

STA 146+14.80, 49.00' RT
EL: 186.25

STA 146+16.64, 48.22' RT
EL: 186.33

STA 146+14.17, 54.00' RT
EL: 186.35

STA 146+18.09, 53.78' RT
EL: 186.41

EXISTING R/W

STA 146+16.11, 54.00' RT
EL: 186.32

STA 146+18.21, 55.39' RT
EL: 186.43

STA 145+83.15, 49.00' RT
EL: 186.21

STA 145+85.15, 49.00' RT
EL: 186.26

STA 145+83.15, 54.00' RT
EL: 186.28

STA 145+93.15, 49.00' RT
EL: 186.48

STA 146+03.51, 49.00' RT
EL: 186.54

STA 146+03.63, 54.00' RT
EL: 186.60

STA 146+08.63, 54.00' RT
EL: 186.54

STA 146+03.88, 64.00' RT
EL: 186.95

STA 146+08.88, 64.00' RT
EL: 186.88

STA 146+18.51, 65.41' RT
EL: 186.36

CURB RAMP
TYPE 2

W. NORWICH STREET

CURB RAMP
TYPE 2
MODIFIED

STA 146+60.48, 31.41' RT
EL: 186.86

STA 146+59.59, 31.86' RT
EL: 186.85

STA 146+54.25, 35.61' RT
EL: 186.78

STA 146+55.61, 37.08' RT
EL: 186.70

STA 146+55.63, 37.86' RT
EL: 186.71

STA 146+55.80, 43.86' RT
EL: 186.79

STA 146+55.94, 49.00' RT
EL: 186.84

STA 146+49.34, 49.00' RT
EL: 186.54

STA 146+47.03, 47.59' RT
EL: 186.63

STA 146+46.79, 48.57' RT
EL: 186.61

STA 146+48.74, 49.00' RT
EL: 186.53

STA 146+46.19, 54.00' RT
EL: 186.52

STA 146+46.20, 54.76' RT
EL: 186.51

STA 146+48.19, 54.00' RT
EL: 186.44

STA 146+49.34, 54.00' RT
EL: 186.45

STA 146+46.50, 64.56' RT
EL: 186.30

STA 146+60.52, 33.63' RT
EL: 186.76

STA 146+71.19, 29.00' RT
EL: 187.19

STA 146+60.63, 37.73' RT
EL: 186.78

STA 146+60.79, 43.72' RT
EL: 186.85

STA 146+60.94, 49.00' RT
EL: 186.91

CONCRETE CURB PEDESTRIAN

STA 146+75.00, 49.00' RT
EL: 187.76

EXISTING R/W

STA 146+61.08, 54.00' RT
EL: 186.97

STA 146+75.00, 54.00' RT
EL: 187.83

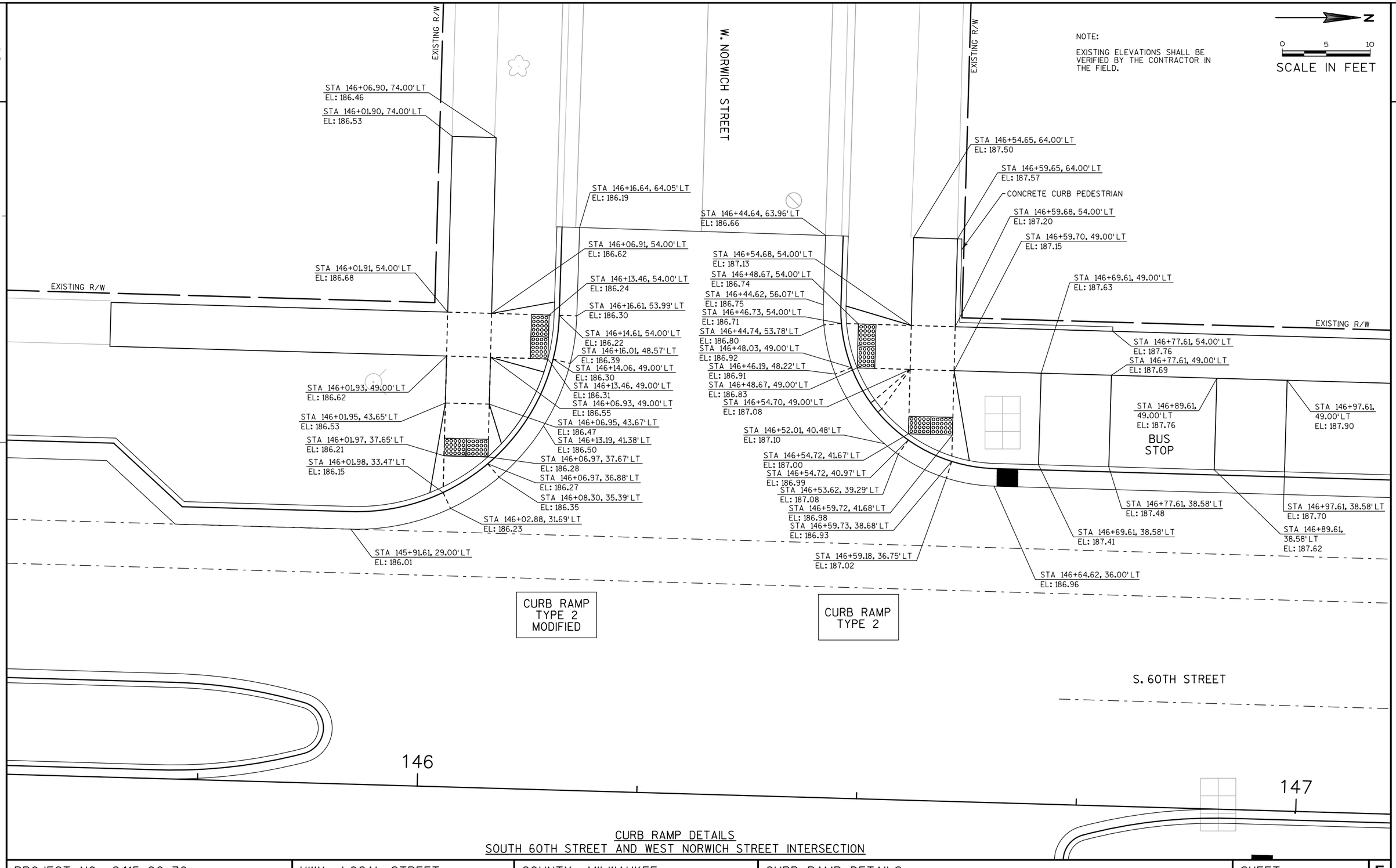
STA 146+56.08, 54.00' RT
EL: 186.91

STA 146+61.36, 64.00' RT
EL: 187.33

STA 146+56.35, 64.00' RT
EL: 187.26

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST NORWICH STREET INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 36	E



CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST NORWICH STREET INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 37	E

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

N

0 5 10

SCALE IN FEET

2

152

153

427

S. 60TH STREET

STA 152+01.23, 38.58' RT EL: 195.86

STA 152+09.23, 38.58' RT EL: 196.08

STA 152+21.23, 38.58' RT EL: 196.41

STA 152+37.51, 43.10' RT EL: 196.39

STA 152+29.23, 36.00' RT EL: 196.21

STA 152+29.23, 38.58' RT EL: 196.63

STA 152+37.16, 37.29' RT EL: 196.49

STA 152+38.10, 37.63' RT EL: 196.51

STA 152+37.39, 39.50' RT EL: 196.43

STA 152+42.48, 42.20' RT EL: 196.53

STA 152+43.63, 40.57' RT EL: 196.62

STA 152+42.50, 42.94' RT EL: 196.54

CURB RAMP TYPE 2 MODIFIED

STA 152+01.23, 49.00' RT EL: 196.07

STA 151+91.75, 49.00' RT EL: 196.17

BUS STOP

STA 152+09.23, 49.00' RT EL: 196.29

STA 152+42.70, 49.00' RT EL: 196.83

STA 152+48.16, 49.00' RT EL: 196.72

STA 152+50.56, 47.96' RT EL: 196.79

STA 152+48.85, 49.00' RT EL: 196.71

STA 152+53.04, 53.39' RT EL: 196.89

STA 152+53.33, 54.35' RT EL: 196.91

STA 152+51.14, 54.00' RT EL: 196.81

STA 152+48.16, 54.00' RT EL: 196.82

STA 152+54.21, 60.18' RT EL: 197.09

STA 151+91.75, 54.00' RT EL: 196.24

EXISTING R/W

STA 152+21.23, 49.00' RT EL: 196.62

STA 152+01.23, 54.00' RT EL: 196.14

STA 152+29.23, 49.00' RT EL: 196.97

STA 152+29.23, 54.00' RT EL: 197.05

STA 152+37.70, 49.00' RT EL: 196.88

STA 152+37.86, 54.00' RT EL: 196.95

STA 152+42.86, 54.00' RT EL: 196.90

STA 152+54.33, 63.67' RT EL: 197.12

STA 152+43.34, 69.00' RT EL: 197.59

CONCRETE CURB PEDESTRIAN

STA 152+38.34, 69.00' RT EL: 197.66

EXISTING R/W

TRANSITION SIDEWALK TO MATCH EXISTING IN NEXT 10'

W. HOWARD AVENUE

CURB RAMP TYPE 2 MODIFIED

STA 153+55.00, 36.00' RT EL: 198.03

STA 153+43.89, 38.60' RT EL: 197.92

STA 153+44.78, 40.40' RT EL: 197.83

STA 153+44.86, 44.36' RT EL: 197.85

STA 153+38.53, 42.19' RT EL: 197.85

STA 153+39.85, 43.70' RT EL: 197.77

STA 153+39.86, 44.47' RT EL: 197.78

STA 153+44.96, 49.00' RT EL: 197.95

STA 153+39.96, 49.06' RT EL: 197.88

STA 153+33.59, 48.09' RT EL: 197.77

STA 153+35.31, 49.12' RT EL: 197.69

STA 153+36.00, 49.11' RT EL: 197.70

STA 153+31.14, 53.56' RT EL: 197.71

STA 153+33.05, 54.15' RT EL: 197.63

STA 153+36.06, 54.11' RT EL: 197.68

STA 153+40.06, 54.06' RT EL: 197.95

STA 153+30.00, 61.01' RT EL: 197.64

STA 153+30.00, 63.01' RT EL: 197.61

STA 153+40.16, 59.00' RT EL: 198.08

STA 153+45.06, 54.00' RT EL: 198.01

STA 153+45.17, 59.00' RT EL: 198.15

EXISTING R/W

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST HOWARD AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 38	E

2

EXISTING R/W

W. HOWARD AVENUE

426

EXISTING R/W

2

STA 152+33.22, 59.00' LT
EL: 195.23

STA 152+33.36, 54.00' LT
EL: 195.45

STA 152+33.49, 49.00' LT
EL: 195.40

STA 152+38.22, 59.00' LT
EL: 195.15

STA 152+38.36, 54.00' LT
EL: 195.40

STA 152+50.41, 65.17' LT
EL: 194.52

STA 152+50.55, 62.10' LT
EL: 194.64

STA 152+44.51, 54.00' LT
EL: 194.98

STA 152+47.48, 54.00' LT
EL: 194.94

STA 152+49.92, 55.32' LT
EL: 194.98

STA 152+49.39, 53.39' LT
EL: 195.02

STA 152+44.51, 49.00' LT
EL: 195.07

STA 152+45.20, 49.00' LT
EL: 195.06

STA 152+46.90, 47.96' LT
EL: 195.15

STA 152+38.50, 49.00' LT
EL: 195.35

STA 152+43.64, 43.72' LT
EL: 195.26

STA 152+38.67, 42.81' LT
EL: 195.13

STA 152+38.69, 42.11' LT
EL: 195.12

STA 152+39.83, 40.46' LT
EL: 195.21

STA 152+33.67, 42.67' LT
EL: 195.11

STA 152+33.76, 39.51' LT
EL: 195.06

STA 152+34.47, 37.64' LT
EL: 195.14

STA 152+25.57, 36.00' LT
EL: 195.05

CURB RAMP
TYPE 2

CURB RAMP
TYPE 2
MODIFIED

STA 153+27.12, 65.88' LT
EL: 195.66

STA 153+27.20, 60.61' LT
EL: 195.84

STA 153+33.27, 54.00' LT
EL: 196.11

STA 153+30.29, 54.00' LT
EL: 196.09

STA 153+28.39, 53.39' LT
EL: 196.17

STA 153+32.58, 49.00' LT
EL: 196.16

STA 153+30.87, 47.96' LT
EL: 196.24

STA 153+33.27, 49.00' LT
EL: 196.17

STA 153+38.13, 49.00' LT
EL: 196.37

STA 153+38.24, 43.46' LT
EL: 196.28

STA 153+38.26, 42.71' LT
EL: 196.26

STA 153+37.05, 41.12' LT
EL: 196.35

STA 153+43.24, 43.56' LT
EL: 196.35

STA 153+43.32, 39.78' LT
EL: 196.34

STA 153+42.55, 37.94' LT
EL: 196.42

STA 153+43.48, 37.57' LT
EL: 196.43

STA 153+52.20, 36.00' LT
EL: 196.70

STA 153+37.66, 79.00' LT
EL: 195.84

STA 153+42.54, 79.00' LT
EL: 195.93

STA 153+38.03, 54.00' LT
EL: 196.42

STA 153+42.94, 59.00' LT
EL: 196.48

STA 153+43.04, 54.00' LT
EL: 196.47

STA 153+43.14, 49.00' LT
EL: 196.42

CONCRETE CURB PEDESTRIAN

STA 153+57.00, 54.00' LT
EL: 197.29

STA 153+57.00, 49.00' LT
EL: 197.21

EXISTING R/W

STA 153+65.00,
49.00' LT
EL: 197.28

STA 153+85.00,
49.00' LT
EL: 197.48

STA 153+77.00,
49.00' LT
EL: 197.44

BUS STOP

STA 153+65.00,
38.58' LT
EL: 197.18

STA 153+77.00, 38.58' LT
EL: 197.23

STA 153+85.00, 38.58' LT
EL: 197.27

STA 153+57.00, 38.58' LT
EL: 197.14

N

0 5 10

SCALE IN FEET

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

S. 60TH STREET

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST HOWARD AVENUE INTERSECTION

153

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 39	E

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

N

0 5 10

SCALE IN FEET

172

173

S. 60TH STREET

STA 172+17.03, 39.57' RT
EL: 189.90

STA 172+12.55, 36.00' RT
EL: 190.10

STA 172+16.55, 36.40' RT
EL: 190.00

STA 172+17.53, 36.63' RT
EL: 189.98

STA 172+07.53, 38.58' RT
EL: 190.52

STA 172+17.06, 41.46' RT
EL: 189.91

STA 172+22.05, 40.71' RT
EL: 189.78

STA 172+23.11, 39.01' RT
EL: 189.87

STA 171+99.53, 38.58' RT
EL: 190.54

STA 172+22.06, 41.41' RT
EL: 189.79

STA 172+22.14, 49.00' RT
EL: 189.86

STA 172+28.50, 49.00' RT
EL: 189.55

STA 172+30.56, 47.31' RT
EL: 189.65

STA 172+29.13, 49.00' RT
EL: 189.55

STA 172+30.98, 48.22' RT
EL: 189.63

STA 172+32.43, 53.78' RT
EL: 189.50

STA 172+30.44, 54.00' RT
EL: 189.42

STA 172+32.55, 55.81' RT
EL: 189.46

STA 172+32.58, 58.49' RT
EL: 189.38

STA 172+28.50, 54.00' RT
EL: 189.46

STA 171+79.53,
38.58' RT
EL: 190.68

STA 171+79.53,
49.00' RT
EL: 190.89

STA 171+87.53,
38.58' RT
EL: 190.62

STA 171+87.53,
49.00' RT
EL: 190.83

BUS STOP

STA 171+99.53
49.00' RT
EL: 190.69

STA 172+07.53,
49.00' RT
EL: 190.57

EXISTING R/W

STA 172+07.53, 54.00' RT
EL: 190.64

CONCRETE CURB PEDESTRIAN

STA 172+17.14, 49.00' RT
EL: 189.95

STA 172+17.19, 54.00' RT
EL: 189.97

STA 172+22.19, 54.00' RT
EL: 189.88

STA 172+17.24, 64.00' RT
EL: 190.16

STA 172+22.24, 64.00' RT
EL: 190.09

CURB RAMP TYPE 2 MODIFIED

EXISTING R/W

STA 172+73.14, 31.26' RT
EL: 189.65

STA 172+83.53, 29.00' RT
EL: 189.56

STA 172+73.14, 31.26' RT
EL: 189.60

STA 172+83.53, 29.00' RT
EL: 189.58

STA 172+67.73, 34.63' RT
EL: 189.68

STA 172+69.00, 36.93' RT
EL: 189.60

STA 172+74.00, 36.90' RT
EL: 189.63

STA 172+65.77, 36.41' RT
EL: 189.70

STA 172+69.04, 42.93' RT
EL: 189.65

STA 172+69.08, 49.00' RT
EL: 189.75

STA 172+74.04, 42.90' RT
EL: 189.73

STA 172+61.68, 49.00' RT
EL: 189.37

STA 172+61.08, 49.00' RT
EL: 189.36

STA 172+74.08, 49.00' RT
EL: 189.82

STA 172+59.13, 48.57' RT
EL: 189.45

STA 172+61.08, 49.00' RT
EL: 189.26

STA 172+58.53, 54.00' RT
EL: 189.35

STA 172+61.68, 54.00' RT
EL: 189.28

STA 172+58.58, 58.49' RT
EL: 189.24

W. WARNIMONT AVENUE

CURB RAMP TYPE 2 MODIFIED

EXISTING R/W

STA 172+74.12, 54.00' RT
EL: 189.87

STA 172+69.12, 54.00' RT
EL: 189.80

CONCRETE CURB PEDESTRIAN

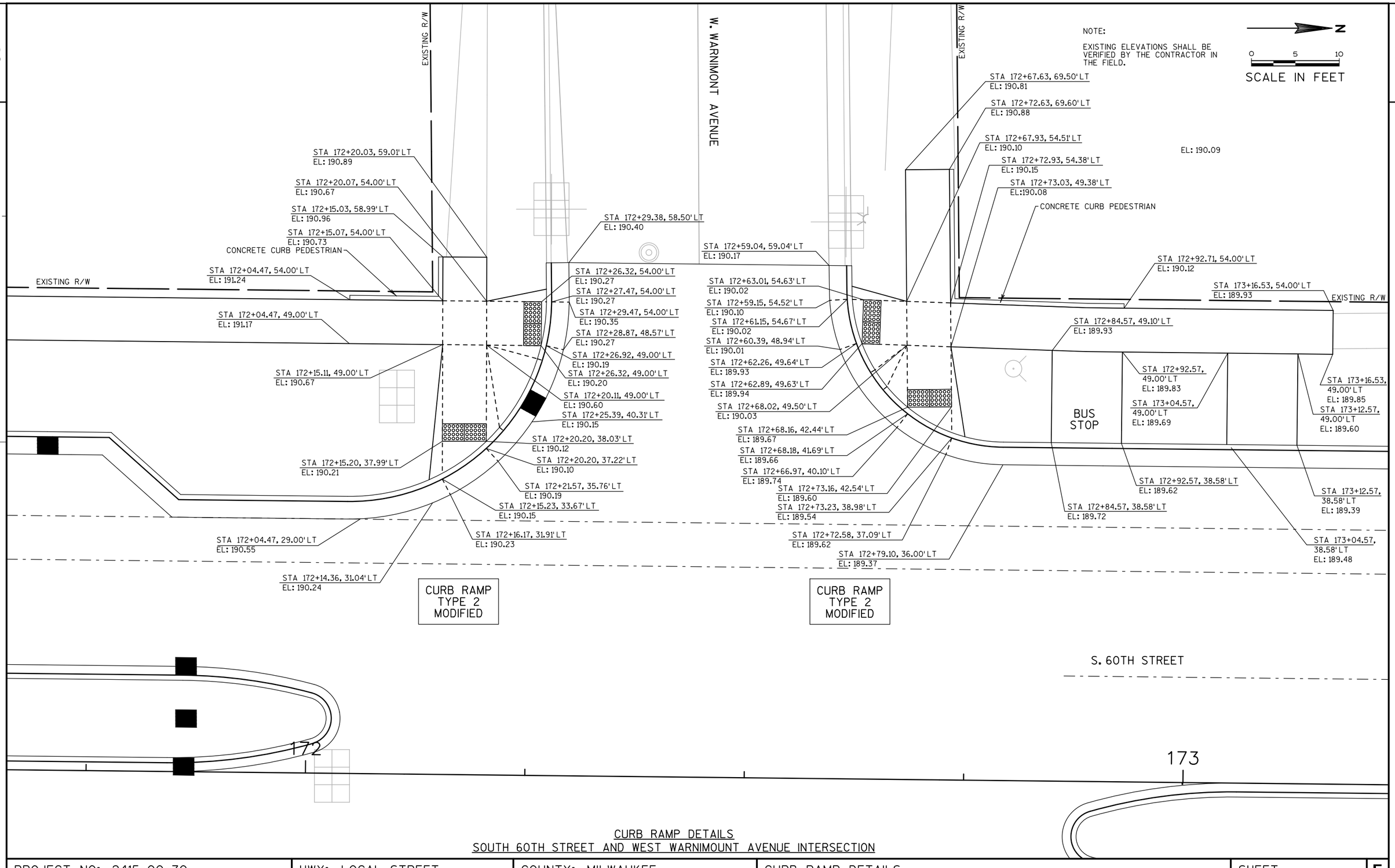
STA 172+74.15, 59.00' RT
EL: 190.00

STA 172+69.15, 59.00' RT
EL: 189.75

EXISTING R/W

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST WARNIMOUNT AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 40	E



CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST WARNIMOUNT AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 41	E

179

180

527

2

2

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SCALE IN FEET

S. 60TH STREET

NOTE:

EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

STA 178+75.47, 38.58' RT
EL: 184.83

STA 178+80.47, 36.00' RT
EL: 184.45

STA 178+47.47, 38.58' RT
EL: 184.74

STA 178+86.19, 36.66' RT
EL: 184.51

STA 178+55.47, 38.58' RT
EL: 184.77

STA 178+85.74, 36.61' RT
EL: 184.42

STA 178+67.47,
38.58' RT
EL: 184.81

STA 178+85.74, 41.07' RT
EL: 184.46

STA 178+91.63, 38.63' RT
EL: 184.57

STA 178+90.74, 40.42' RT
EL: 184.48

STA 178+94.18, 40.09' RT
EL: 184.60

STA 178+90.74, 41.07' RT
EL: 184.49

STA 178+47.47,
49.00' RT
EL: 184.88

BUS
STOP

STA 178+90.74, 49.00' RT
EL: 184.52

CURB RAMP
TYPE 2
MODIFIED

STA 178+97.10, 49.00' RT
EL: 184.42

STA 178+55.47,
49.00' RT
EL: 184.95

STA 179+01.80, 47.96' RT
EL: 184.44

STA 179+00.10, 49.00' RT
EL: 184.36

STA 178+67.47, 49.00' RT
EL: 184.87

STA 178+99.41, 49.00' RT
EL: 184.37

STA 178+75.47, 49.00' RT
EL: 184.86

STA 178+99.41, 54.00' RT
EL: 184.32

STA 179+04.29, 53.39' RT
EL: 184.36

EXISTING R/W

STA 178+80.47, 54.00' RT
EL: 184.93

STA 179+04.57, 54.35' RT
EL: 184.34

STA 179+02.38, 54.00' RT
EL: 184.27

STA 178+85.74, 49.00' RT
EL: 184.59

STA 178+85.74, 54.00' RT
EL: 184.64

STA 179+05.47, 60.76' RT
EL: 184.12

STA 178+90.74, 54.00' RT
EL: 184.57

STA 178+97.10, 54.00' RT
EL: 184.48

STA 178+92.10, 54.00' RT
EL: 184.55

STA 179+05.53, 66.09' RT
EL: 184.00

CONCRETE CURB PEDESTRIAN

STA 178+92.83, 68.84' RT
EL: 184.43

STA 178+97.83, 68.79' RT
EL: 184.33

EXISTING R/W

W. MORGAN AVENUE

STA 179+79.74, 37.55' RT
EL: 184.16

STA 179+85.30, 36.12' RT
EL: 184.21

CURB RAMP
TYPE 2
MODIFIED

STA 179+80.52, 39.40' RT
EL: 184.07

STA 179+85.52, 38.11' RT
EL: 184.13

STA 179+80.52, 40.03' RT
EL: 184.08

STA 179+87.47, 36.00' RT
EL: 184.23

STA 179+80.52, 48.58' RT
EL: 184.19

STA 179+85.52, 40.03' RT
EL: 184.14

STA 179+75.56, 48.58' RT
EL: 184.10

STA 179+69.25, 47.76' RT
EL: 184.02

STA 179+85.52, 48.58' RT
EL: 184.27

STA 179+71.07, 48.58' RT
EL: 183.93

STA 179+71.71, 48.58' RT
EL: 183.94

STA 179+67.53, 54.43' RT
EL: 183.95

STA 179+69.53, 54.58' RT
EL: 183.87

EXISTING R/W
STA 179+90.56,
54.58' RT
EL: 184.67

STA 179+71.71, 54.58' RT
EL: 183.90

STA 179+85.56, 54.58' RT
EL: 184.33

STA 179+70.06, 59.58' RT
EL: 184.26

BUS
STOP

STA 179+80.56, 54.58' RT
EL: 184.25

STA 179+75.56, 59.58' RT
EL: 184.37

STA 179+75.56, 54.58' RT
EL: 184.16

CONCRETE CURB PEDESTRIAN

STA 179+67.48, 65.49' RT
EL: 183.69

STA 179+80.56, 67.58' RT
EL: 184.22

STA 179+70.06, 67.58' RT
EL: 184.05

STA 179+75.56, 67.58' RT
EL: 184.16

EXISTING
R/W

STA 179+70.27, 79.58' RT
EL: 183.56

BUS
STOP

STA 179+70.36, 87.58' RT
EL: 183.27

STA 179+75.88, 79.58' RT
EL: 183.67

STA 179+76.03, 87.58' RT
EL: 183.38

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST MORGAN AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 42	E

2

STA 178+97.37, 94.18' LT
EL: 185.75

STA 178+97.46, 86.18' LT
EL: 185.54

STA 178+91.49, 83.26' LT
EL: 185.79

STA 178+97.49, 83.38' LT
EL: 185.70

BUS STOP

STA 179+00.31, 94.23' LT
EL: 185.69

STA 179+00.50, 86.24' LT
EL: 185.48

STA 179+03.23, 83.49' LT
EL: 185.36

STA 178+95.10, 74.13' LT
EL: 185.58

STA 179+00.83, 74.24' LT
EL: 185.47

STA 178+95.26, 66.13' LT
EL: 185.29

STA 179+00.99, 66.24' LT
EL: 185.18

BUS STOP

STA 178+90.50, 54.00' LT
EL: 185.25

STA 178+85.60, 54.00' LT
EL: 185.29

STA 178+85.60, 49.00' LT
EL: 185.25

EXISTING R/W

STA 179+03.66, 61.49' LT
EL: 185.31

STA 178+95.50, 54.00' LT
EL: 185.21

STA 178+97.60, 54.00' LT
EL: 185.17

STA 179+00.58, 54.00' LT
EL: 185.16

STA 179+02.48, 53.39' LT
EL: 185.25

STA 178+97.60, 49.00' LT
EL: 185.13

STA 178+98.29, 49.00' LT
EL: 185.12

STA 179+00.00, 47.96' LT
EL: 185.21

STA 178+85.74, 42.01' LT
EL: 185.04

STA 178+85.79, 39.13' LT
EL: 185.00

STA 178+95.50, 49.00' LT
EL: 185.17

STA 178+90.60, 49.00' LT
EL: 185.21

CURB RAMP TYPE 2 MODIFIED

STA 178+90.74, 42.11' LT
EL: 185.05

STA 178+90.75, 41.43' LT
EL: 185.04

STA 178+91.80, 39.73' LT
EL: 185.13

STA 178+78.67, 36.00' LT
EL: 185.03

STA 178+86.41, 37.23' LT
EL: 185.08

W. MORGAN AVENUE

526

STA 179+65.22, 84.72' LT
EL: 185.44

STA 179+72.24, 54.20' LT
EL: 185.16

STA 179+70.19, 54.19' LT
EL: 185.10

STA 179+67.89, 54.17' LT
EL: 185.10

STA 179+65.80, 55.61' LT
EL: 185.20

STA 179+65.90, 53.97' LT
EL: 185.18

CURB RAMP TYPE 2 MODIFIED

STA 179+69.58, 48.18' LT
EL: 184.97

STA 179+67.78, 47.31' LT
EL: 185.06

STA 179+70.23, 48.19' LT
EL: 184.99

STA 179+72.37, 48.19' LT
EL: 185.08

STA 179+80.52, 48.25' LT
EL: 185.19

STA 179+80.52, 39.40' LT
EL: 148.66

STA 179+80.52, 38.79' LT
EL: 184.65

STA 179+79.93, 36.88' LT
EL: 184.74

STA 179+85.52, 39.40' LT
EL: 184.57

STA 179+85.52, 38.00' LT
EL: 184.54

STA 179+85.49, 36.00' LT
EL: 184.63

STA 179+85.79, 36.00' LT
EL: 184.62

EXISTING R/W

STA 179+72.02, 64.18' LT
EL: 185.40

STA 179+78.02, 64.31' LT
EL: 185.50

STA 179+78.24, 54.24' LT
EL: 185.24

STA 179+80.52, 54.25' LT
EL: 185.27

STA 179+85.52, 54.29' LT
EL: 185.20

STA 179+85.52, 48.29' LT
EL: 185.13

STA 179+98.86, 48.38' LT
EL: 184.83

STA 180+19.00, 54.51' LT
EL: 184.66

STA 180+18.86, 48.51' LT
EL: 184.60

EXISTING R/W

STA 179+90.86
48.32' LT
EL: 184.96

STA 180+10.86
48.46' LT
EL: 184.66

BUS STOP

STA 179+98.86
38.58' LT
EL: 184.73

BUS STOP

STA 179+90.86
38.58' LT
EL: 184.90

STA 180+10.86, 38.58' LT
EL: 184.62

STA 180+18.86, 38.58' LT
EL: 184.56

S. 60TH STREET

N

0 5 10

SCALE IN FEET

NOTE:

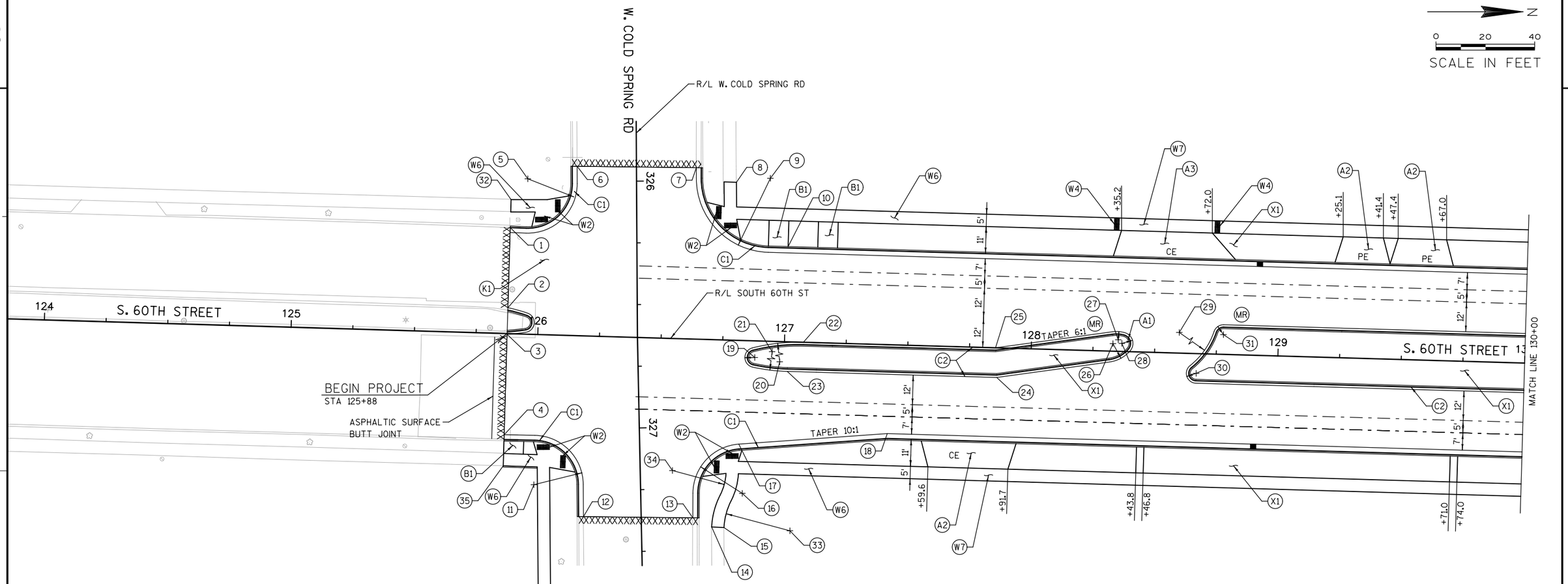
EXISTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

179

180

CURB RAMP DETAILS
SOUTH 60TH STREET AND WEST MORGAN AVENUE INTERSECTION

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CURB RAMP DETAILS	SHEET 43	E



POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS
1	125+87.57	43' LT		19	126+88.13	7' RT	4'
2	125+87.57	11' LT		20	127+07.66	75' RT	75'
3	125+87.57	0' RT		21	127+01.46	63' LT	75'
4	125+87.57	41' RT		22	127+07.66	0' RT	
5	125+94.09	63' LT	20'	23	127+01.46	12' RT	
6	325+93.86	24' RT		24	127+86.99	12' RT	
7	325+94.70	24' LT		25	127+86.00	0' RT	
8	126+78.67	64' LT		26	128+28.80	10' LT	14'
9	126+92.37	66' LT	30'	27	128+35.57	12' LT	12'
10	127+00.37	39' LT		28	128+37.79	4' LT	5'
11	126+00.20	61' RT	20'	29	128+45.07	18' LT	30'
12	327+35.43	23' RT		30	128+66.98	8' RT	4'
13	327+36.86	21' LT		31	128+77.57	8' LT	4'
14	327+40.71	28' LT		32	125+87.57	54' LT	
15	327+41.05	33' LT		33	327+42.91	60' LT	27'
16	126+84.67	62' RT	20'	34	327+17.52	13' LT	22'
17	126+82.68	42' RT		35	125+87.57	54' RT	
18	127+42.69	36' RT		36	328+89.91	44' RT	
				37	328+89.96	39' RT	

LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

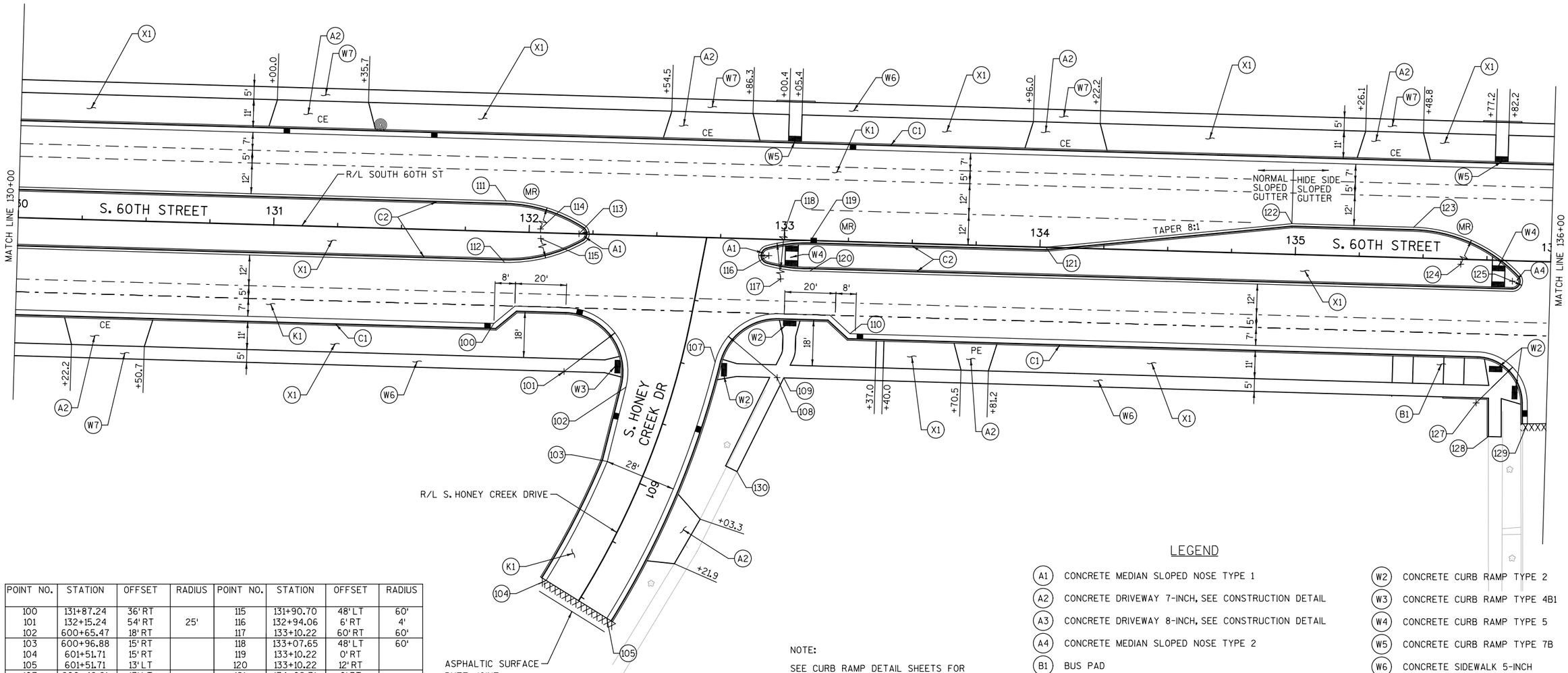
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 44	E

2

N

0 20 40

SCALE IN FEET



POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS
100	131+87.24	36' RT		115	131+90.70	48' LT	60'
101	132+15.24	54' RT	25'	116	132+94.06	6' RT	4'
102	600+65.47	18' RT		117	133+10.22	60' RT	60'
103	600+96.88	15' RT		118	133+07.65	48' LT	60'
104	601+51.71	15' RT		119	133+10.22	0' RT	
105	601+51.71	13' LT		120	133+10.22	12' RT	
107	600+46.61	13' LT		121	134+02.31	0' RT	
108	132+98.66	54' RT	25'	122	134+98.31	12' LT	
109	133+01.28	54' RT		123	135+46.02	12' LT	
110	133+26.66	36' RT		124	135+46.02	48' RT	60'
111	131+90.70	12' LT		125	135+85.20	8' RT	4'
112	131+90.70	12' RT		127	135+72.39	56' RT	20'
113	132+19.55	0' RT	4'	128	135+77.59	69' RT	
114	131+90.70	48' RT	60'	129	135+92.68	64' RT	
				130	600+82.52	34' LT	

NOTE:

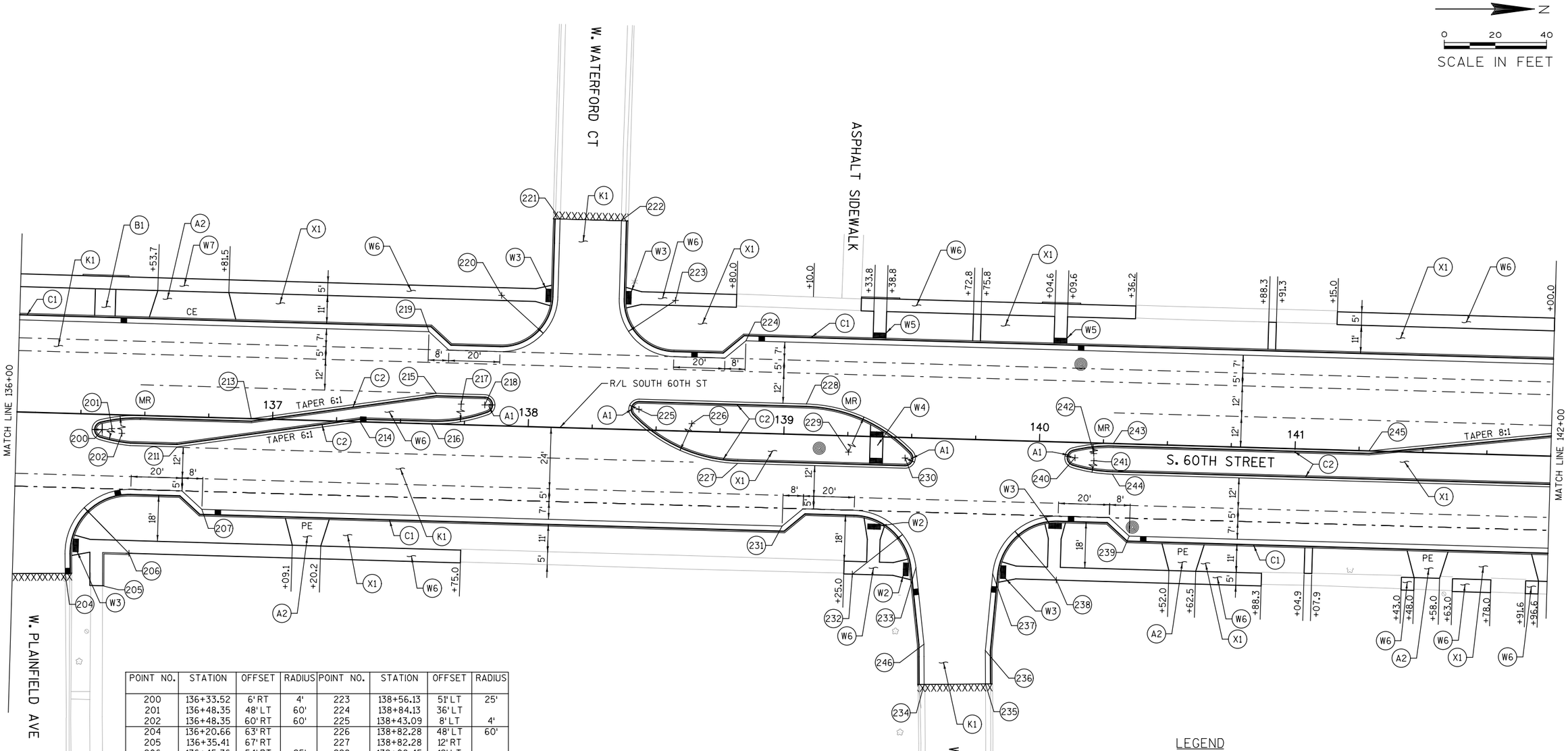
SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

LEGEND

- A1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- A2 CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- A3 CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- A4 CONCRETE MEDIAN SLOPED NOSE TYPE 2
- B1 BUS PAD
- C1 CONCRETE CURB AND GUTTER 31-INCH
- C2 CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- K1 CONCRETE PAVEMENT 8-INCH, DOWELED
- MR MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- W2 CONCRETE CURB RAMP TYPE 2
- W3 CONCRETE CURB RAMP TYPE 4B1
- W4 CONCRETE CURB RAMP TYPE 5
- W5 CONCRETE CURB RAMP TYPE 7B
- W6 CONCRETE SIDEWALK 5-INCH
- W7 CONCRETE SIDEWALK 7-INCH
- X1 TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 45	E



POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS
200	136+33.52	6' RT	4'	223	138+56.13	51' LT	25'
201	136+48.35	48' LT	60'	224	138+84.13	36' LT	
202	136+48.35	60' RT	60'	225	138+43.09	8' LT	4'
204	136+20.66	63' RT		226	138+82.28	48' LT	60'
205	136+35.41	67' RT		227	138+82.28	12' RT	
206	136+45.36	54' RT	25'	228	139+08.45	12' LT	
207	136+73.36	36' RT		229	139+08.45	48' RT	60'
211	136+62.92	12' RT		230	139+47.64	8' RT	4'
213	136+91.66	0' RT		231	139+00.35	36' RT	
214	137+34.24	0' RT		232	139+28.35	54' RT	25'
215	137+63.66	12' LT		233	139+53.13	50.7' RT	
216	137+62.15	0' RT		234	139+57.65	96' RT	
217	137+62.06	60' LT	60'	235	139+81.64	95' RT	
218	137+82.76	8' LT	4'	236	139+81.20	82' RT	
219	137+60.13	36' LT		237	139+83.20	52' RT	
220	137+88.13	51' LT	25'	238	140+08.15	54' RT	25'
221	138+10.03	81.5' LT		239	140+36.15	36' RT	
222	138+34.03	81.5' LT		240	140+14.06	6' RT	4'
				241	140+28.89	48' LT	60'
				242	140+28.89	60' RT	60'
				243	140+28.89	0' RT	
				244	140+28.89	12' RT	
				245	141+28.89	0' RT	
				246	139+57.13	87.6' RT	

NOTE:

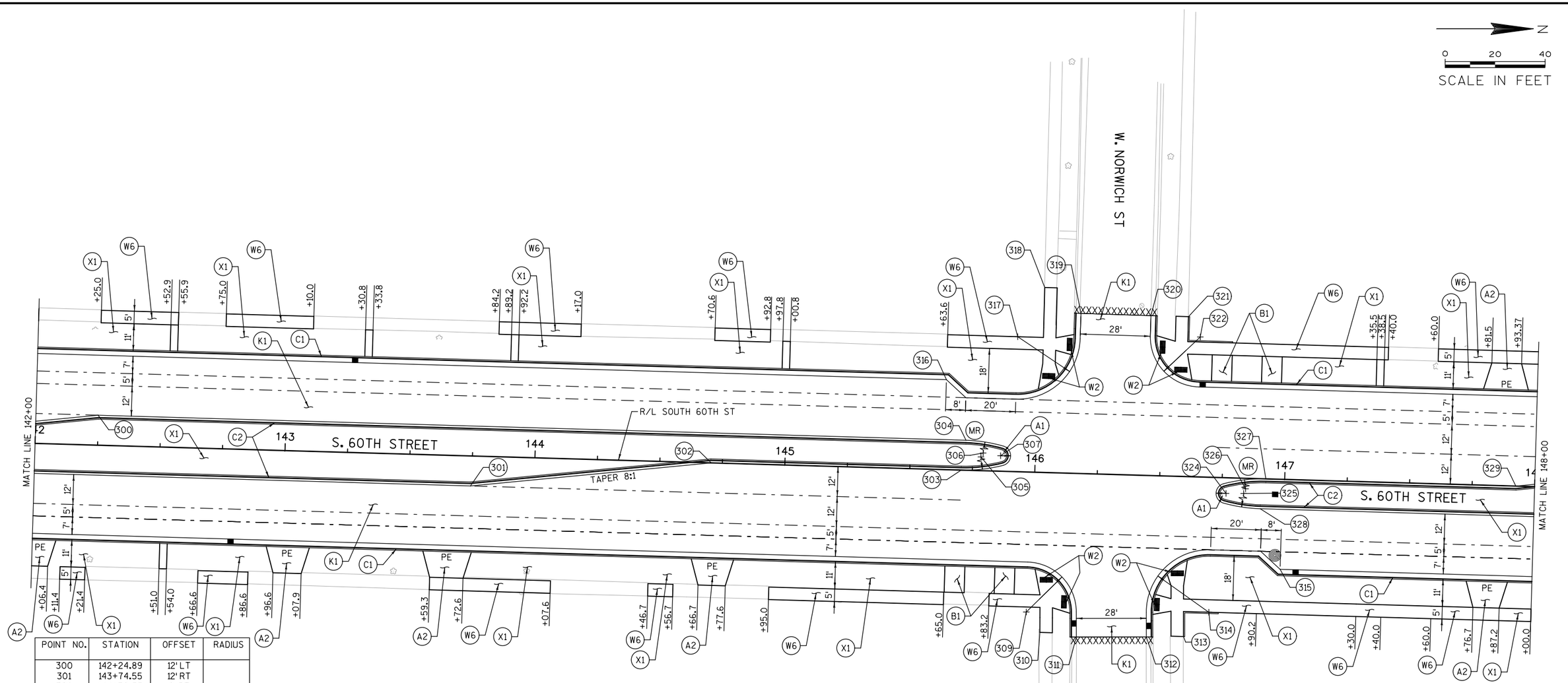
SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

LEGEND

- A1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- A2 CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- A3 CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- B1 BUS PAD
- C1 CONCRETE CURB AND GUTTER 31-INCH
- C2 CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- K1 CONCRETE PAVEMENT 8-INCH, DOWELED
- MR MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- W2 CONCRETE CURB RAMP TYPE 2
- W3 CONCRETE CURB RAMP TYPE 4B1
- W4 CONCRETE CURB RAMP TYPE 5
- W5 CONCRETE CURB RAMP TYPE 7B
- W6 CONCRETE SIDEWALK 5-INCH
- W7 CONCRETE SIDEWALK 7-INCH
- X1 TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 46	E



POINT NO.	STATION	OFFSET	RADIUS
300	142+24.89	12' LT	
301	143+74.55	12' RT	
302	144+70.55	0' RT	
303	145+70.55	0' RT	
304	145+72.13	12' LT	
305	145+70.55	60' LT	60'
306	144+72.13	48' RT	60'
307	145+86.15	6' LT	4'
309	145+98.22	56' RT	20'
310	146+03.88	64' RT	
311	146+18.51	65' RT	
312	146+46.50	65' RT	
313	146+61.36	64' RT	
314	146+71.19	54' RT	25'
315	146+99.19	36' RT	
316	145+63.61	36' LT	
317	145+91.61	54' LT	25'
318	146+01.85	74' LT	
319	146+16.64	64' LT	
320	146+44.64	64' LT	
321	146+59.65	64' LT	
322	146+64.62	56' LT	20'
324	146+76.72	6' RT	4'
325	146+90.55	48' LT	60'
326	146+92.48	60' RT	60'
327	146+92.48	0' RT	
328	146+90.55	12' RT	
329	147+92.48	0' RT	

LEGEND

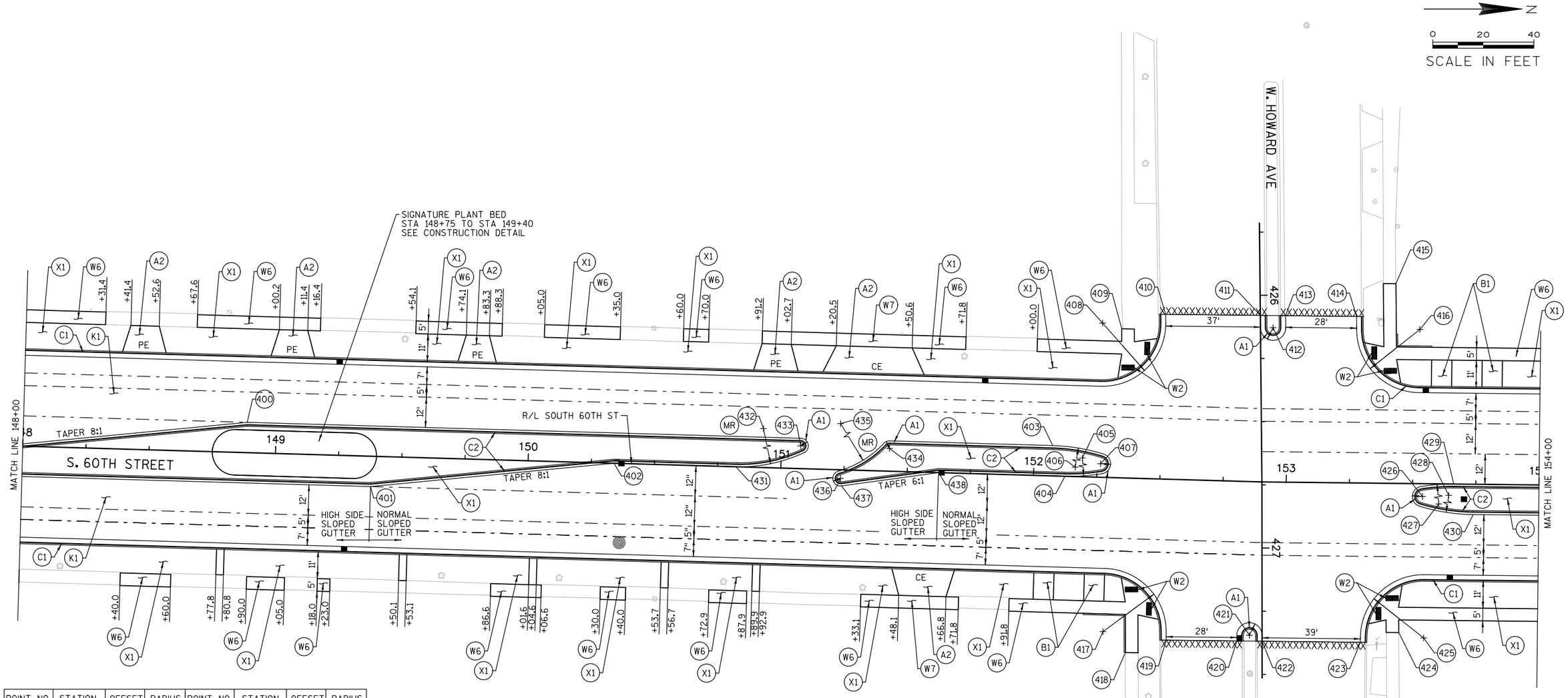
- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 47	E



POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS
400	148+88.48	12' LT		421	427+34.53	5' RT	5'
401	149+37.97	12' RT		422	427+36.86	0' RT	
402	150+33.97	0' RT		423	427+37.32	39' LT	
403	152+07.23	12' LT		424	153+45.17	59' RT	
404	152+12.44	0' RT		425	153+55.00	61' RT	25'
405	152+12.44	75' LT	75'	426	153+53.95	5' RT	4'
406	152+07.23	63' RT	75'	427	153+66.28	75' RT	75'
407	152+26.35	5' LT	4'	428	153+74.11	63' LT	75'
408	152+25.57	61' LT	25'	429	153+66.28	0' RT	
409	152+33.22	59' LT		430	153+74.11	12' RT	
410	426+07.18	37' RT		431	150+82.16	0' RT	
411	426+07.95	0' RT		432	150+82.16	60' LT	60'
412	426+12.86	5' LT	5'	433	151+07.61	9' LT	3'
413	426+08.16	10' LT		434	151+42.74	9' LT	3'
414	426+08.73	38' LT		435	151+10.57	37.5' LT	40'
415	153+42.54	79' LT		436	151+23.68	3.4' RT	3'
416	153+52.20	61' LT	25'	437	151+24.17	6.4' RT	
417	152+29.23	61' RT	25'	438	151+62.44	0' RT	
418	152+38.34	59' RT					
419	427+36.41	38' RT					
420	427+36.74	10' RT					

LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 48	E

2

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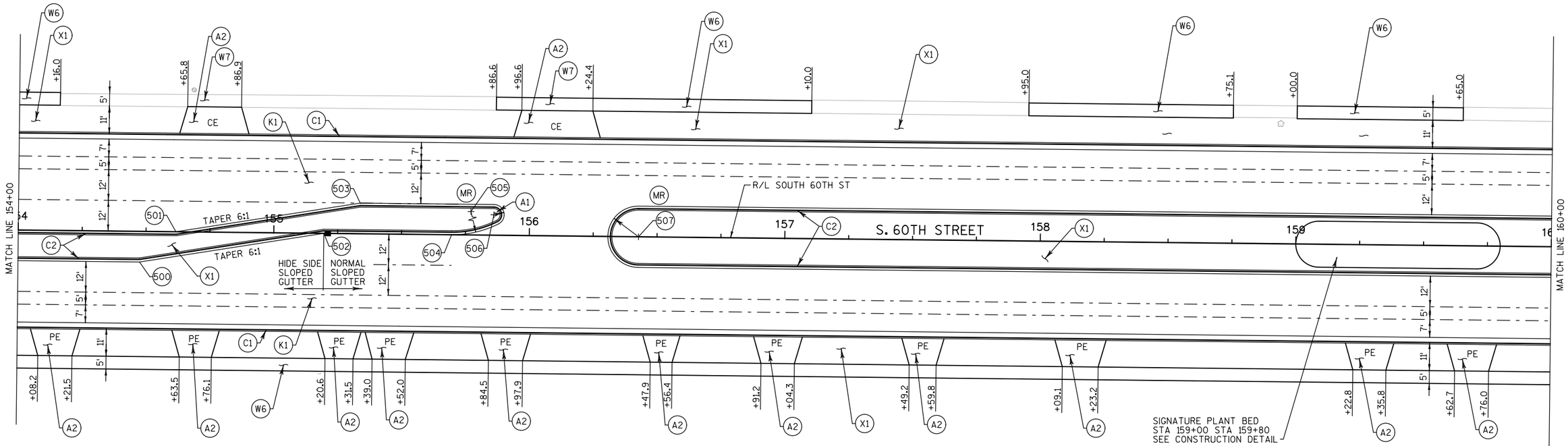
SCALE IN FEET



POINT NO.	STATION	OFFSET	RADIUS
500	154+47.58	12' RT	
501	154+61.69	0' RT	
502	155+19.58	0' RT	
503	155+33.69	12' LT	
504	155+69.58	0' RT	
505	155+69.58	40' LT	40'
506	155+86.08	8' LT	4'
507	156+42.74	0' RT	12'

LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER

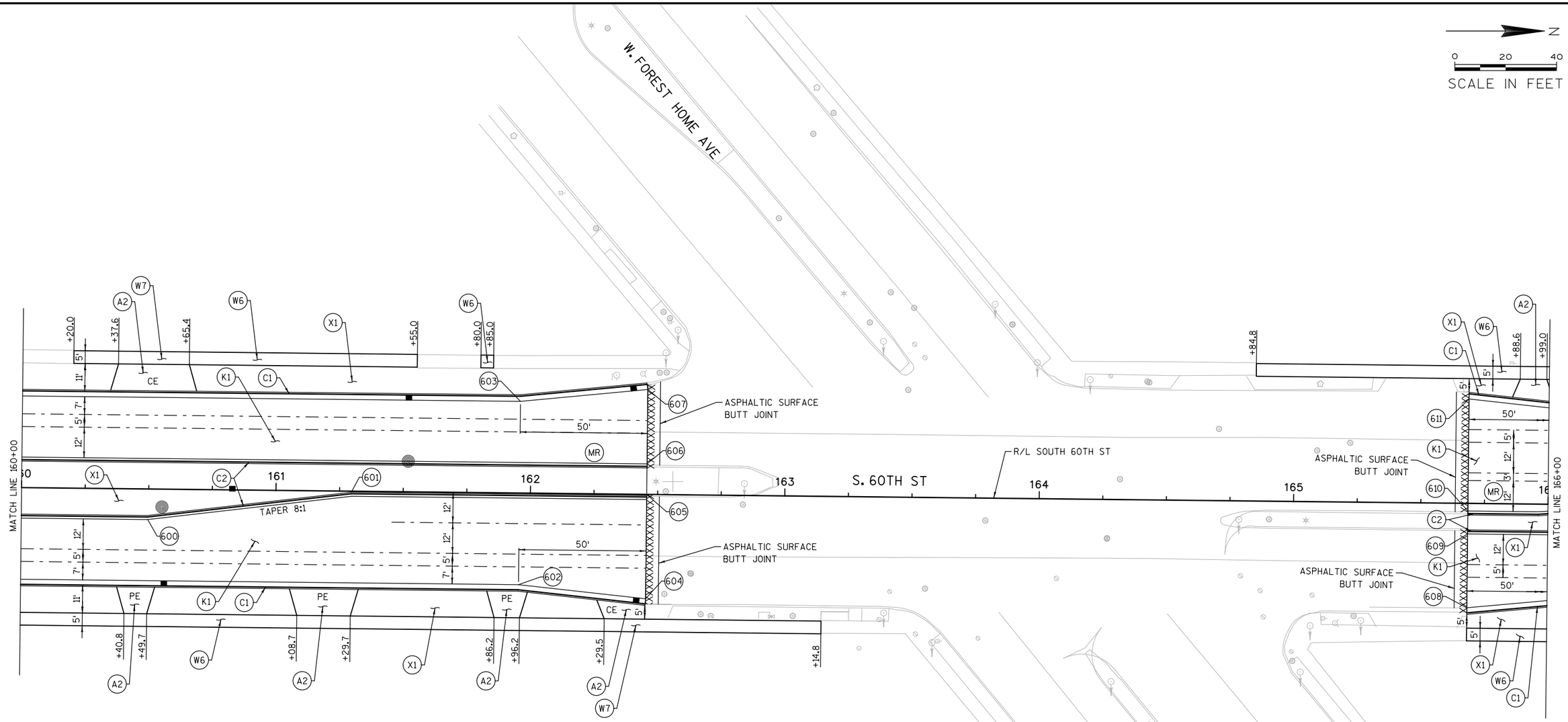
XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 49	E



POINT NO.	STATION	OFFSET	RADIUS
600	160+49.71	12' RT	
601	161+29.71	0' RT	
602	161+95.71	36' LT	
603	161+95.71	36' LT	
604	162+45.71	41' RT	
605	162+45.71	0' RT	
606	162+45.71	12' LT	
607	162+45.71	41' LT	
608	165+68.53	41' RT	
609	165+68.53	12' RT	
610	165+68.53	3' RT	
611	165+68.53	41' LT	

LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 50	E

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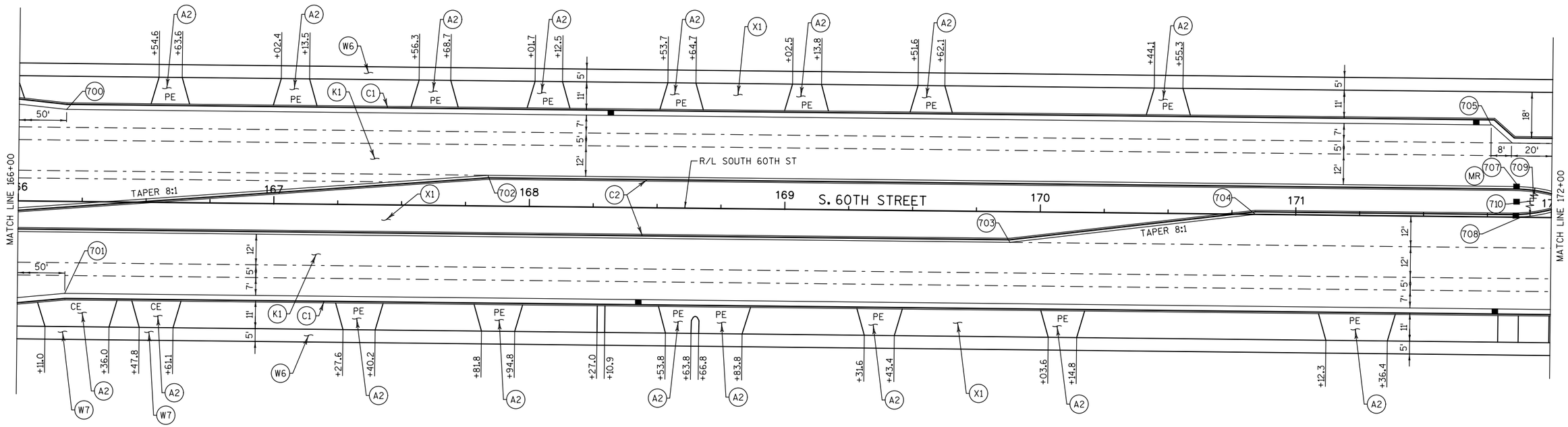
SCALE IN FEET



POINT NO.	STATION	OFFSET	RADIUS
700	166+18.53	36' LT	
701	166+18.53	36' RT	
702	167+83.68	12' LT	
703	169+88.22	12' RT	
704	170+84.22	0' RT	
705	171+76.47	36' LT	
707	171+85.92	12' LT	
708	171+84.22	0' RT	
709	171+85.92	48' RT	60'
710	171+84.22	60' LT	60'

LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

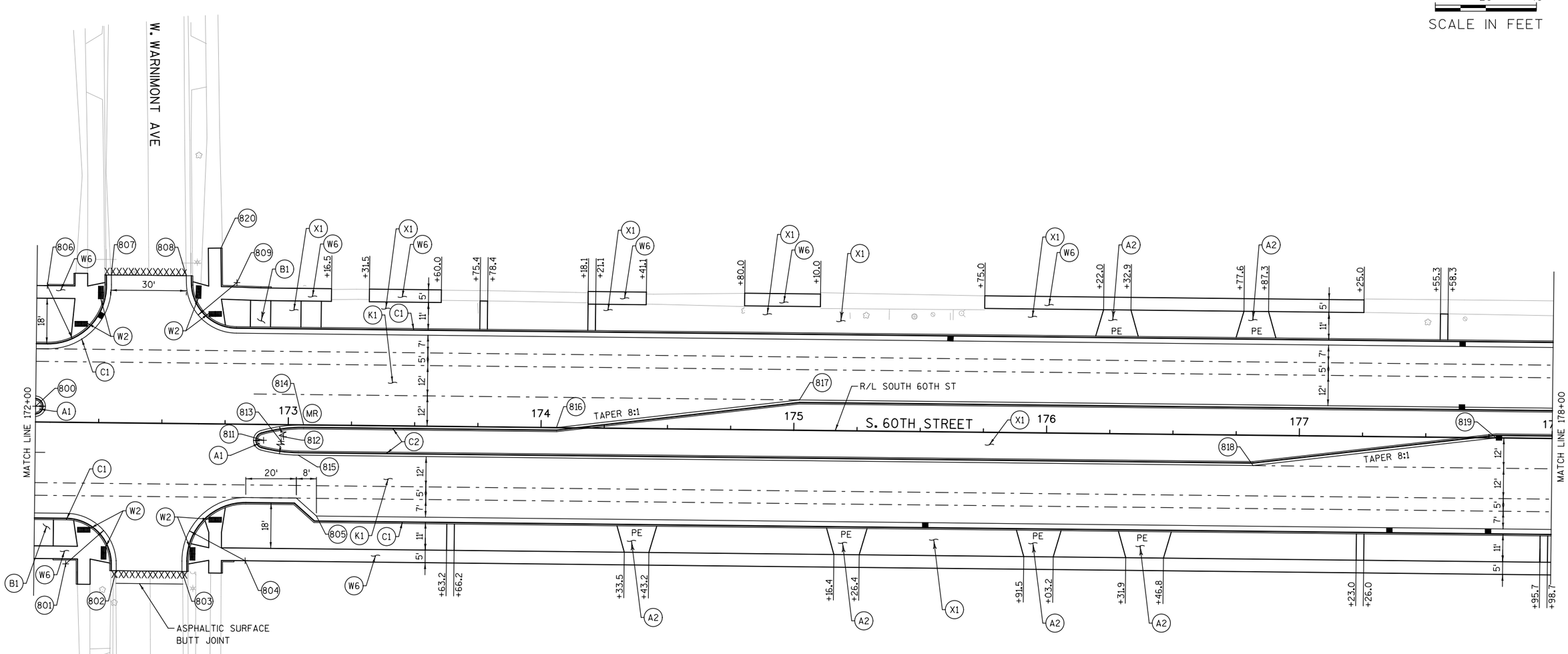
SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

2

N

0 20 40

SCALE IN FEET



POINT NO.	STATION	OFFSET	RADIUS
800	171+99.88	6' LT	4'
801	172+12.55	56' RT	20'
802	172+32.58	58' RT	
803	172+58.58	58' RT	
804	172+83.53	54' RT	25'
805	173+11.53	36' RT	
806	172+04.47	54' LT	25'
807	172+29.38	59' LT	
808	172+59.04	59' LT	
809	172+79.10	56' LT	20'
811	172+90.30	6' RT	4'
812	173+06.10	60' RT	60'
813	173+04.10	48' LT	60'
814	173+06.10	0' RT	
815	173+04.10	12' RT	
816	174+06.10	0' RT	
817	175+02.10	12' LT	
818	176+81.81	12' RT	
819	177+77.81	0' RT	
820	172+72.63	70' LT	

LEGEND

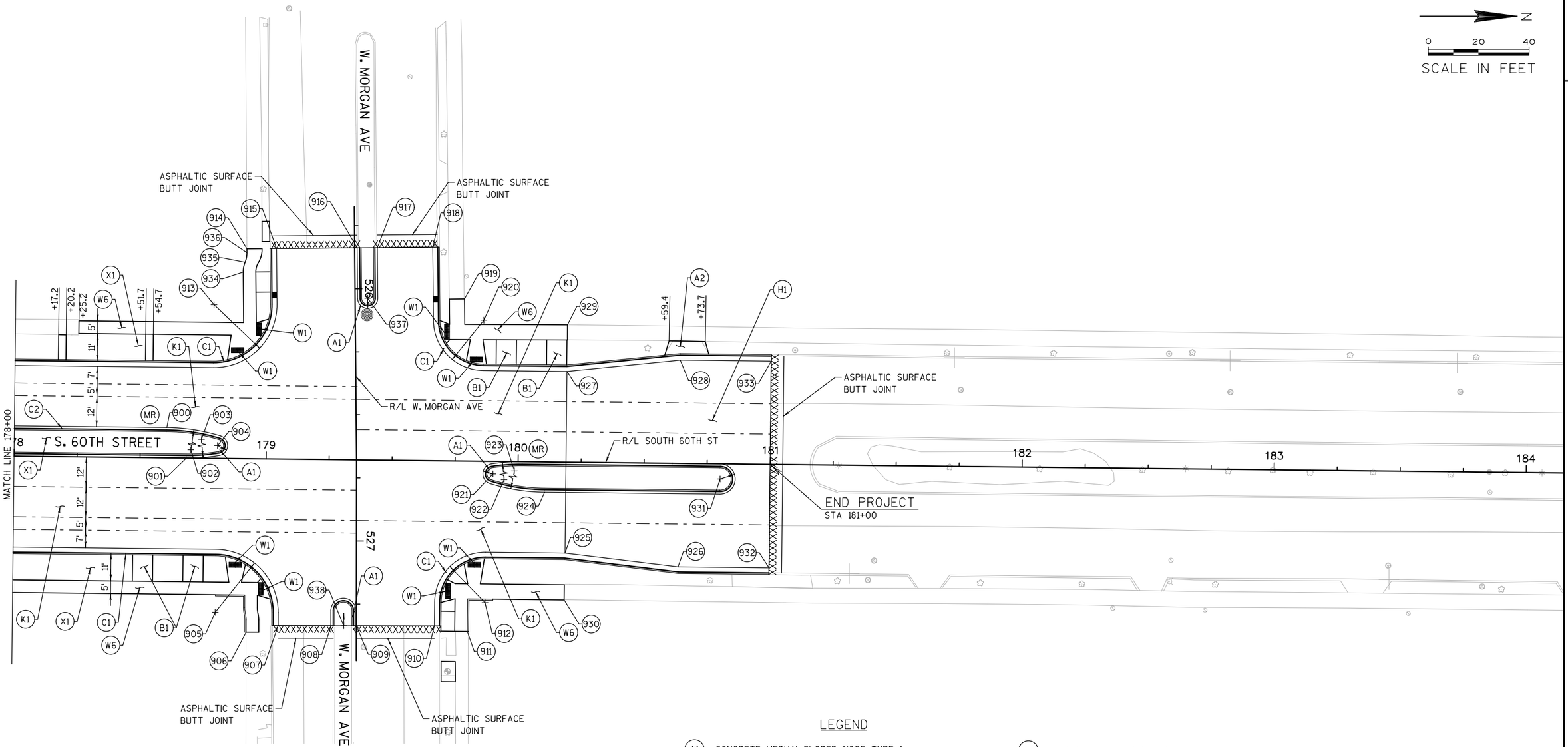
- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN DETAILS - S. 60TH STREET	SHEET 52	E



POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS	POINT NO.	STATION	OFFSET	RADIUS
900	178+60.49	12' LT		915	525+83.77	31' RT		930	180+18.86	55' RT	
901	178+68.39	0' RT		916	525+83.77	1' LT		931	180+80.19	6' RT	6'
902	178+60.49	63' RT	75'	917	525+83.77	9' LT		932	181+00.00	41' RT	
903	178+68.39	75' LT	75'	918	525+83.77	31' LT		933	181+00.00	41' LT	
904	178+80.68	5' LT	4'	919	526+04.04	43' LT		934	525+92.97	44' RT	
905	178+80.47	61' RT	25'	920	179+85.79	56' LT	20'	935	525+89.10	44' RT	
906	527+36.30	44' RT		921	179+90.06	5' RT	4'	936	525+83.77	43' RT	
907	527+33.68	31' RT		922	180+01.61	75' RT	75'	937	526+03.78	5' LT	4'
908	527+33.68	10' RT		923	180+10.66	63' LT	75'	938	527+33.68	5' RT	5'
909	527+33.68	0' RT		924	180+10.66	12' RT					
910	527+33.68	31' LT		925	180+19.00	36' RT					
911	527+35.90	44' LT		926	180+63.89	41' RT					
912	179+87.47	56' RT	20'	927	180+19.00	36' LT					
913	178+78.67	61' LT	25'	928	180+64.00	41' LT					
914	525+83.77	43' RT		929	180+19.00	55' LT					

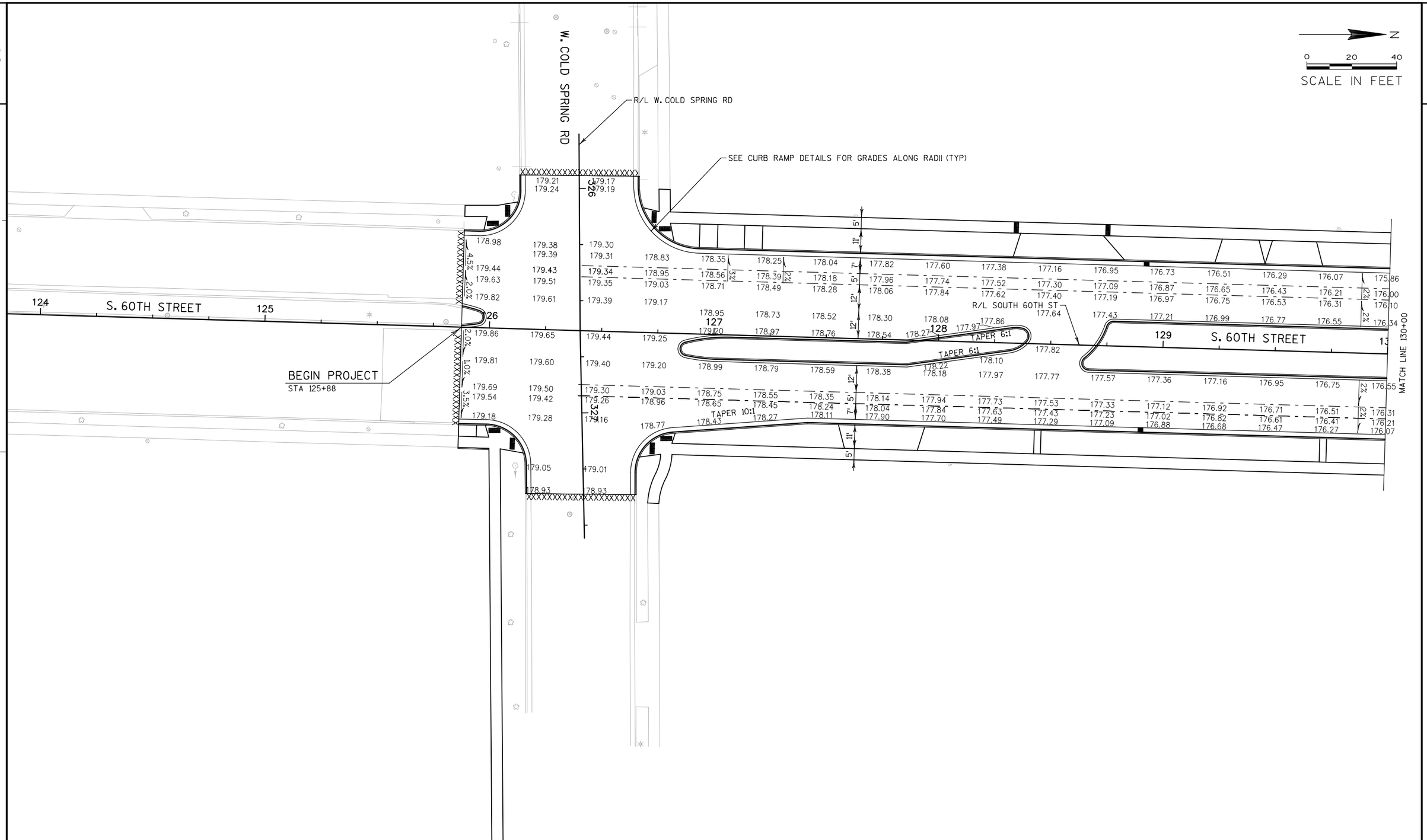
LEGEND

- (A1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (A2) CONCRETE DRIVEWAY 7-INCH, SEE CONSTRUCTION DETAIL
- (A3) CONCRETE DRIVEWAY 8-INCH, SEE CONSTRUCTION DETAIL
- (B1) BUS PAD
- (C1) CONCRETE CURB AND GUTTER 31-INCH
- (C2) CONCRETE CURB AND GUTTER INTEGRAL 19-INCH
- (K1) CONCRETE PAVEMENT 8-INCH, DOWELED
- (MR) MAINTENANCE RAMP, SEE CONSTRUCTION DETAIL
- (W1) CONCRETE CURB RAMP TYPE 3
- (W2) CONCRETE CURB RAMP TYPE 2
- (W3) CONCRETE CURB RAMP TYPE 4B1
- (W4) CONCRETE CURB RAMP TYPE 5
- (W5) CONCRETE CURB RAMP TYPE 7B
- (W6) CONCRETE SIDEWALK 5-INCH
- (W7) CONCRETE SIDEWALK 7-INCH
- (X1) TOPSOIL, SOD LAWN AND FERTILIZER
- XXXXX SAWING CONCRETE

NOTE:

SEE CURB RAMP DETAIL SHEETS FOR CURB RAMP AND BUS PAD DETAILS.

SEE SPECIAL PROVISIONS FOR ALL SIDEWALK ARC LOCATIONS.



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 54	E

FILE NAME : ch_0000_021221_pg.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

2

N

0 20 40

SCALE IN FEET

MATCH LINE 130+00

S. 60TH STREET

131

132

133

134

135

R/L SOUTH 60TH ST

TAPER 8:1

S. 60TH STREET

MATCH LINE 136+00

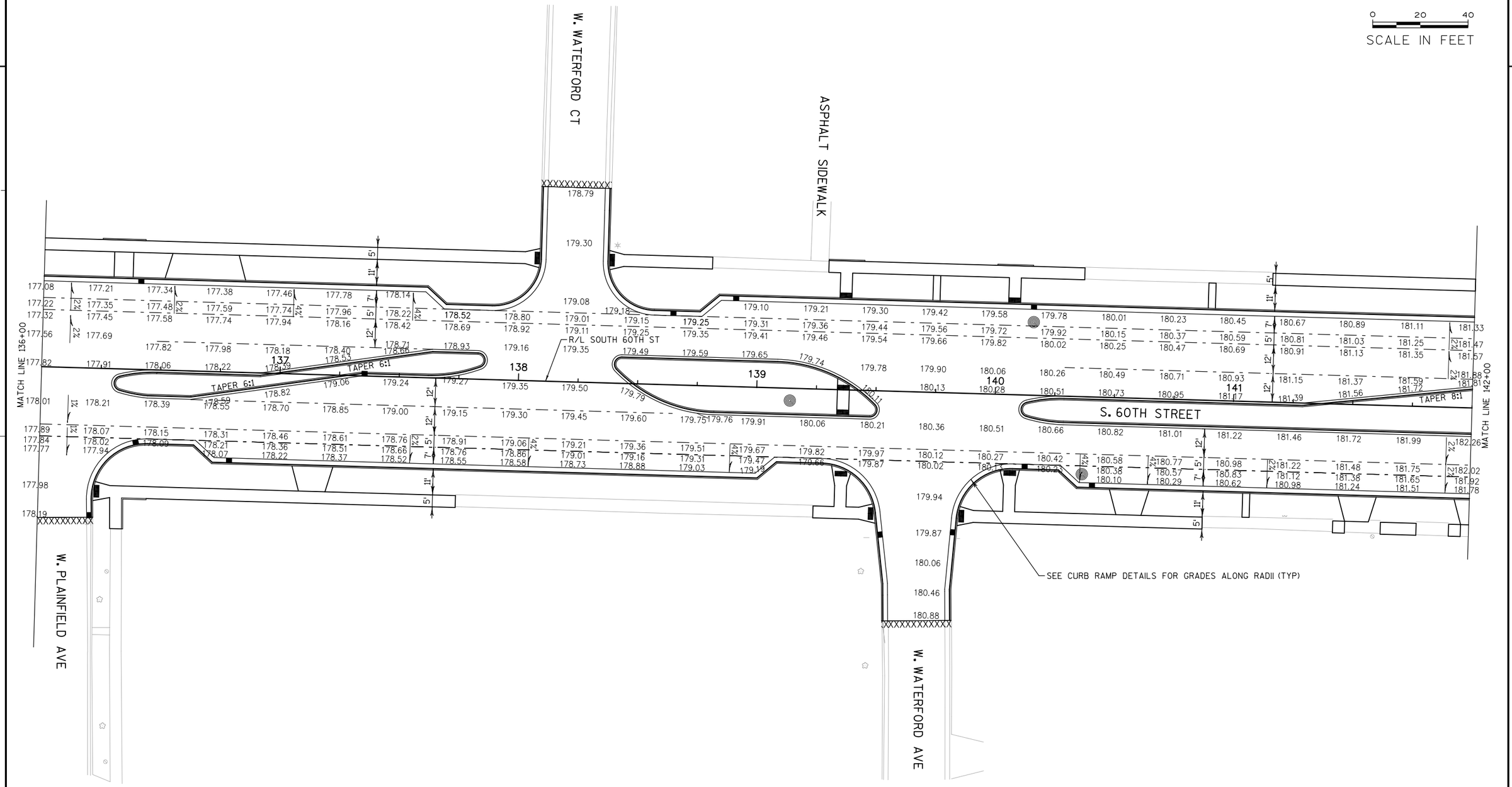
S. HONEY CREEK DR

SEE CURB RAMP DETAILS FOR GRADES ALONG RADII (TYP)

END CONSTRUCTION
STA 601+52

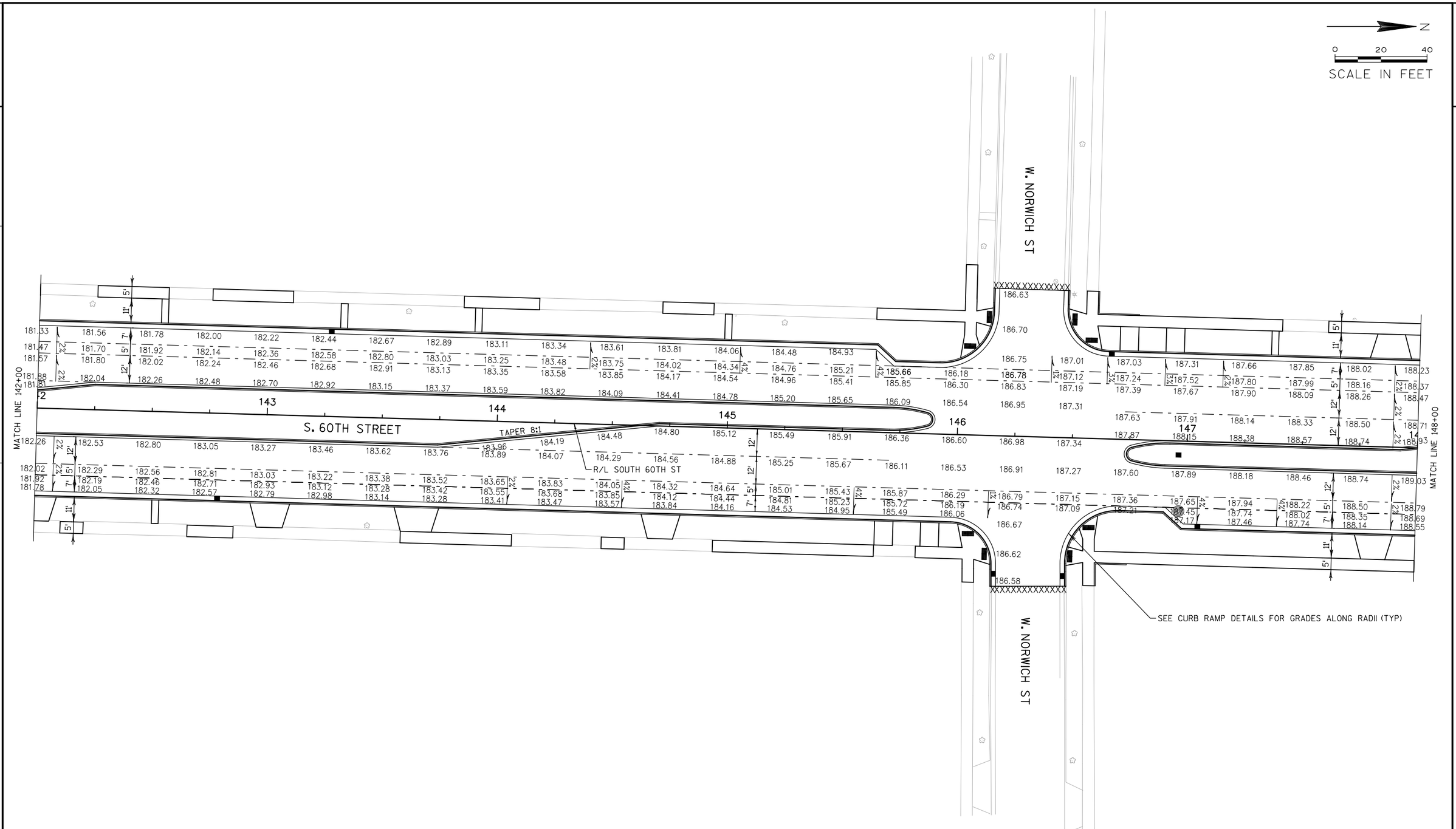
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 55	E

FILE NAME : ch_0000_021222_pg.DGN PLOT DATE : 31-JAN-2017 PLOT BY : szongolo PLOT NAME : PLOT SCALE : 40:1

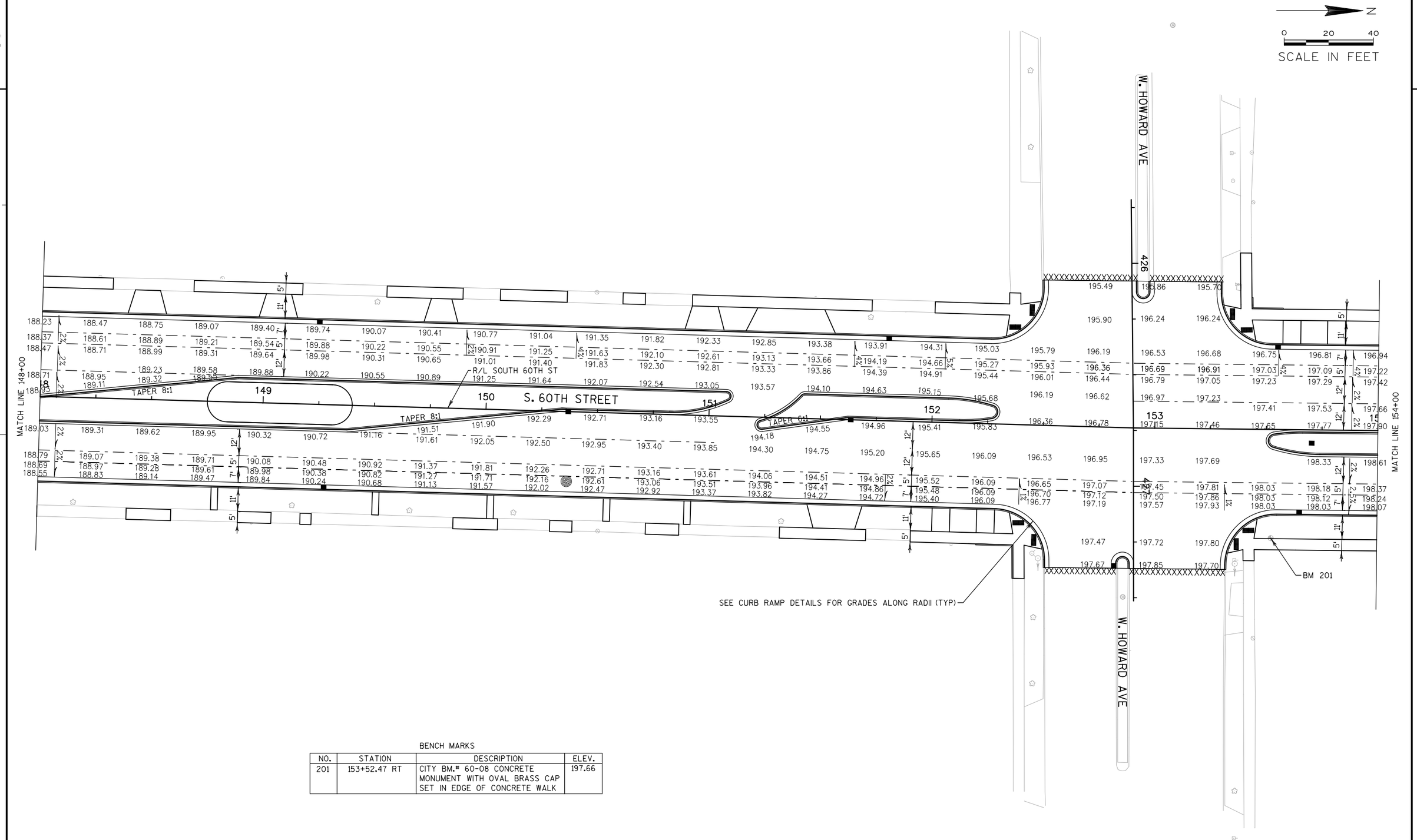


PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 56	E

FILE NAME : ch_0000_021223_pg.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 57	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
201	153+52.47 RT	CITY BM.# 60-08 CONCRETE MONUMENT WITH OVAL BRASS CAP SET IN EDGE OF CONCRETE WALK	197.66

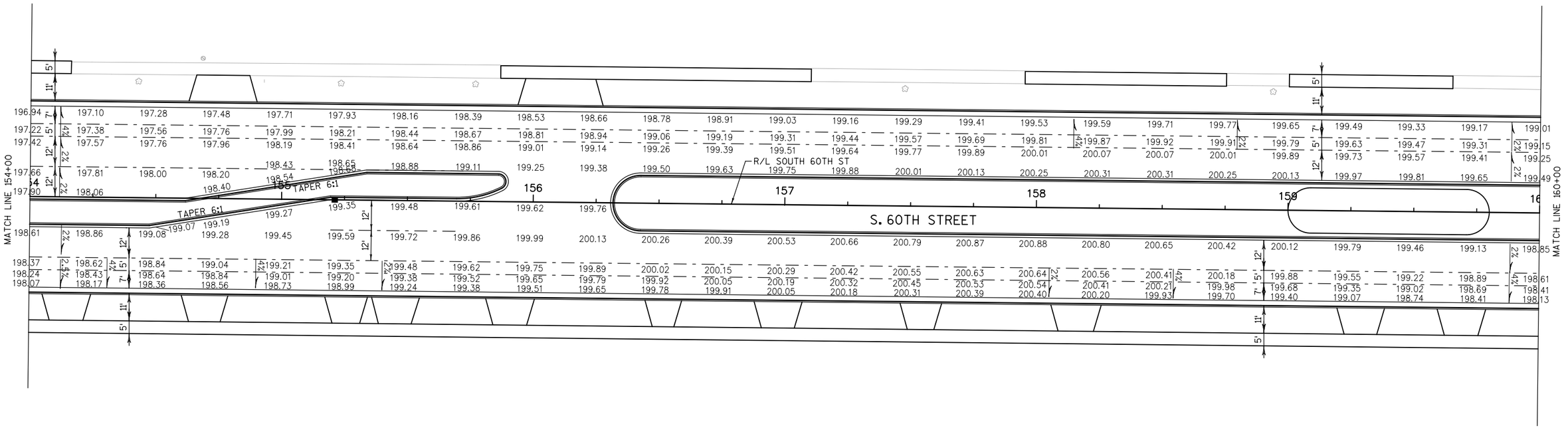
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 58	E

2

N

0 20 40

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 59	E

2

N

0 20 40

SCALE IN FEET

W. FOREST HOME AVE

MATCH LINE 160+00

161 162 163 S. 60TH ST 164 165

R/L SOUTH 60TH ST

TAPER 8:1

MATCH LINE 166+00

W. FOREST HOME AVE

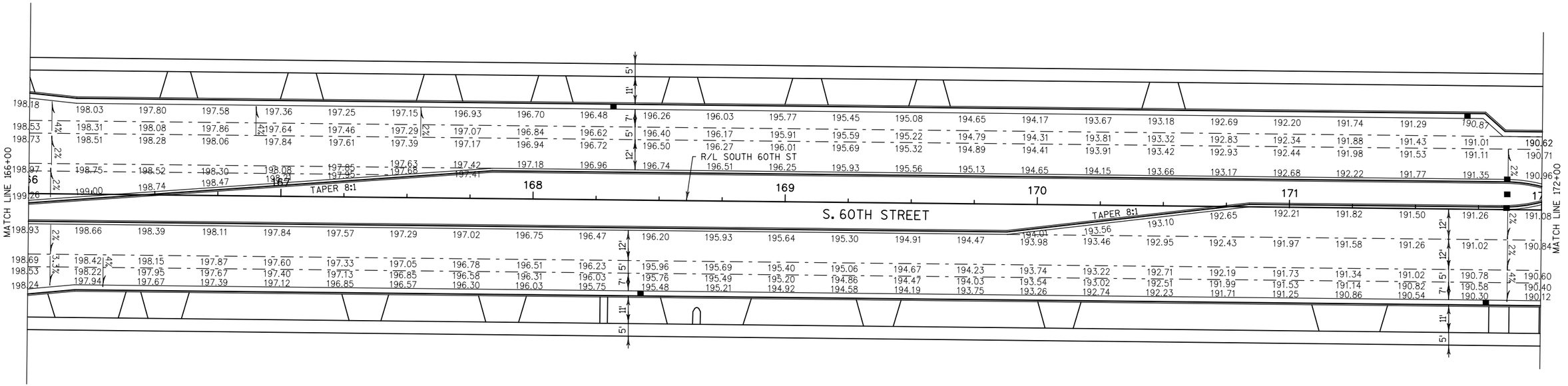
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 60	E

2

N

0 20 40

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 61	E

FILE NAME : ch_0000_021228_pg.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

0 20 40

SCALE IN FEET

W. WARNIMONT AVE

MATCH LINE 172+00

MATCH LINE 178+00

R/L SOUTH 60TH ST

S. 60TH STREET

TAPER 8:1

TAPER 8:1

SEE CURB RAMP DETAILS FOR GRADES ALONG RADII (TYP)

W. WARNIMONT AVE

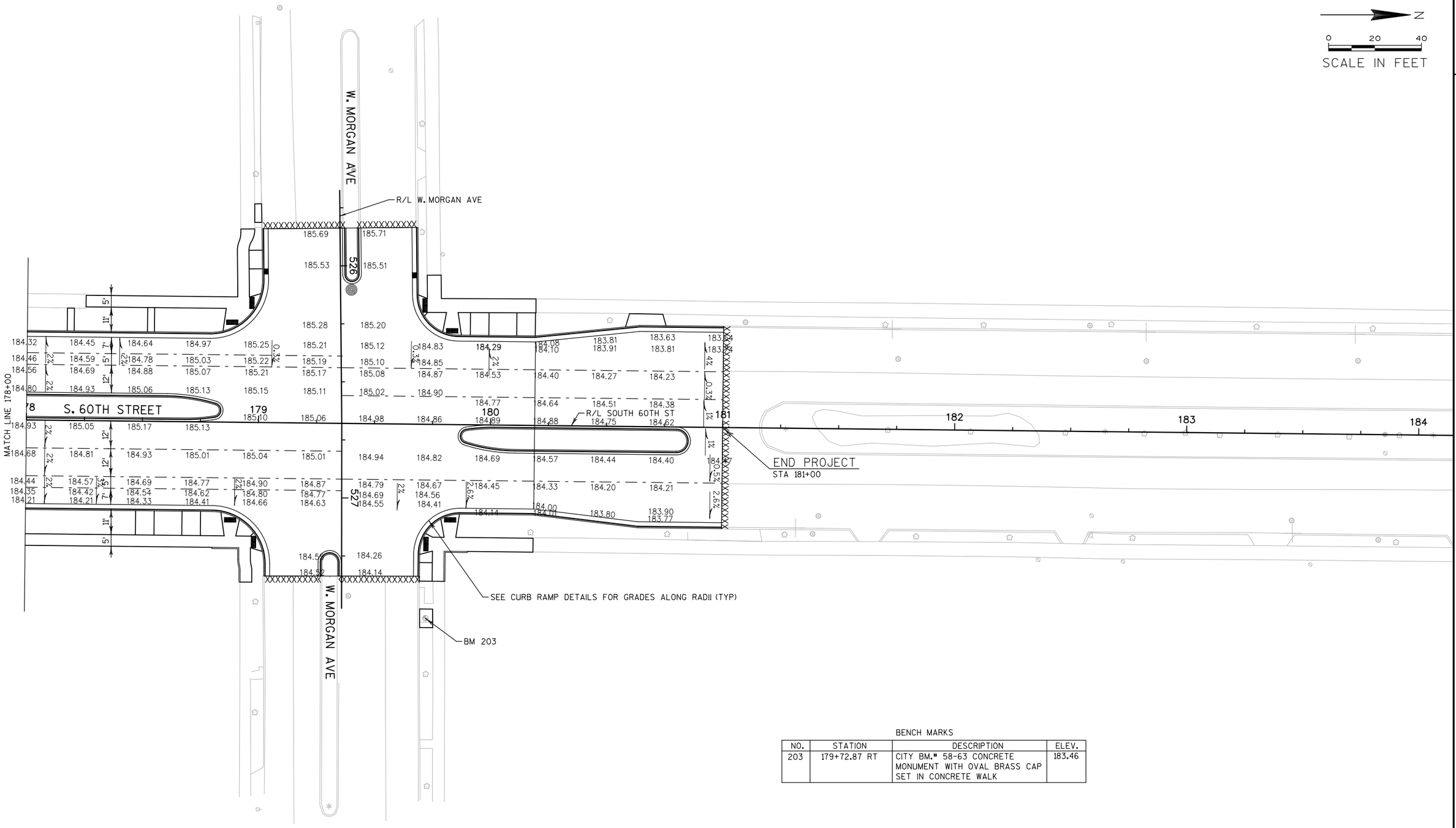
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 62	E

2

N

0 20 40

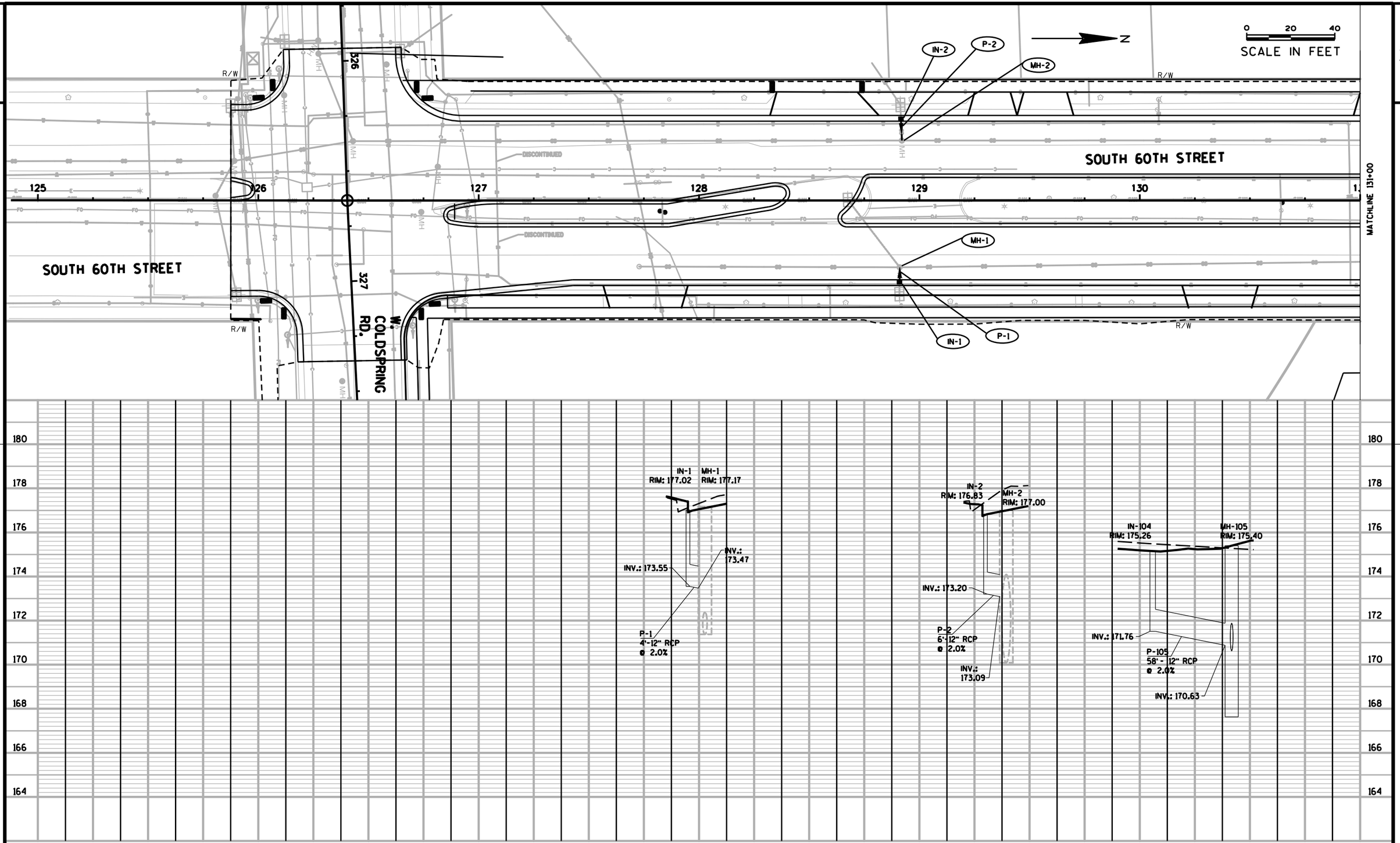
SCALE IN FEET



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
203	179+72.87 RT	CITY BM.# 58-63 CONCRETE MONUMENT WITH OVAL BRASS CAP SET IN CONCRETE WALK	183.46

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVING GRADES - S. 60TH STREET	SHEET 63	E



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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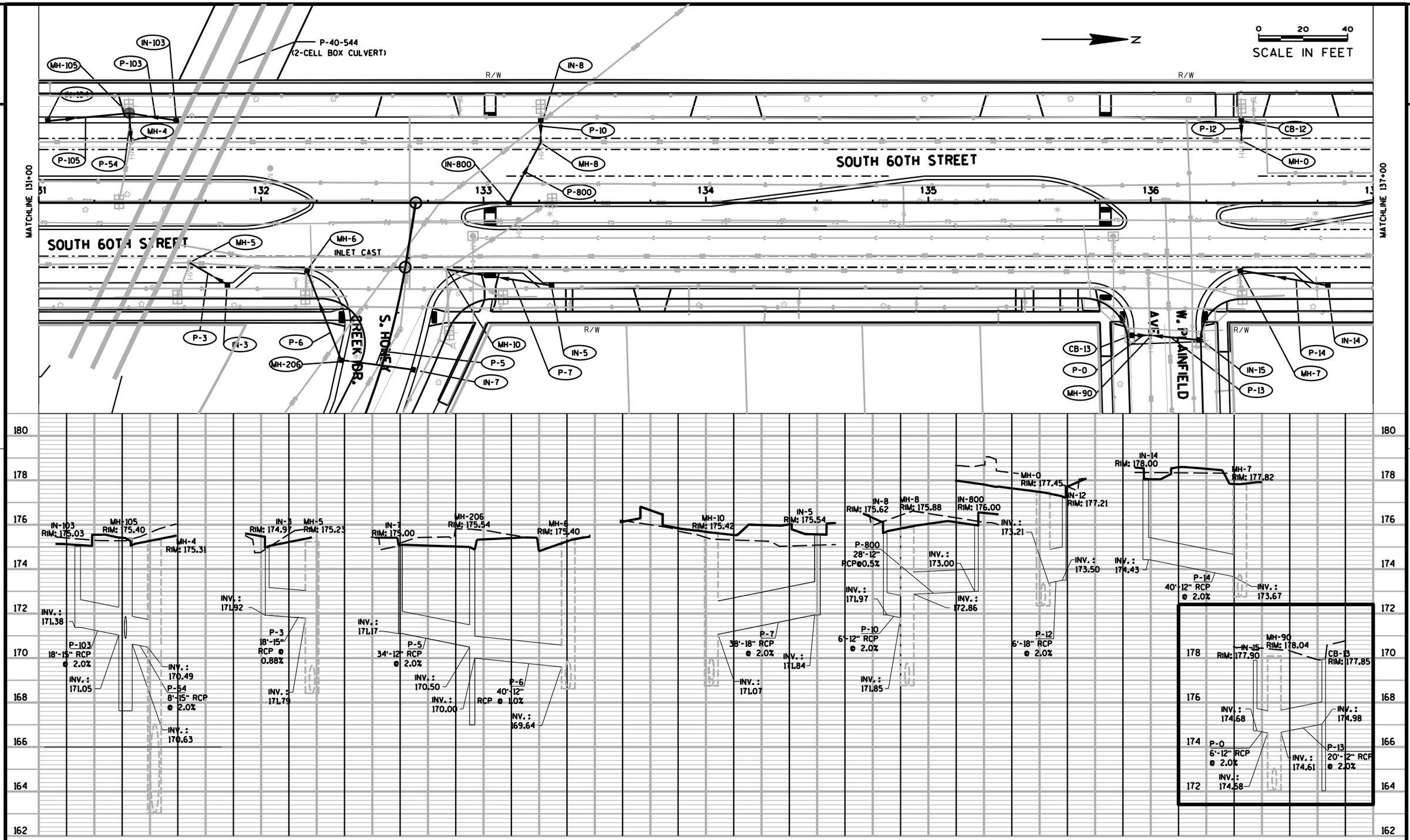

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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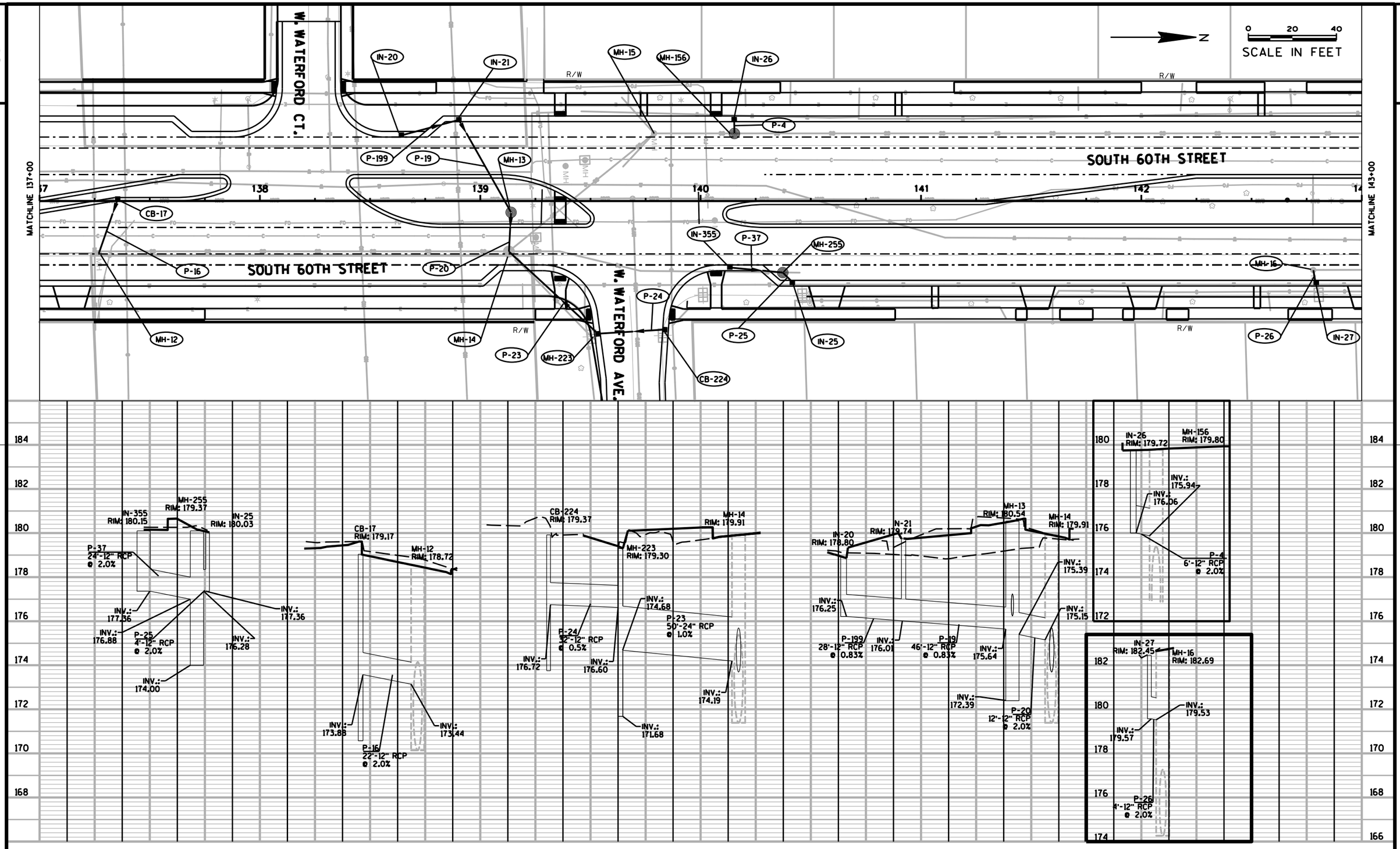
WISDOT/CADDS SHEET 45



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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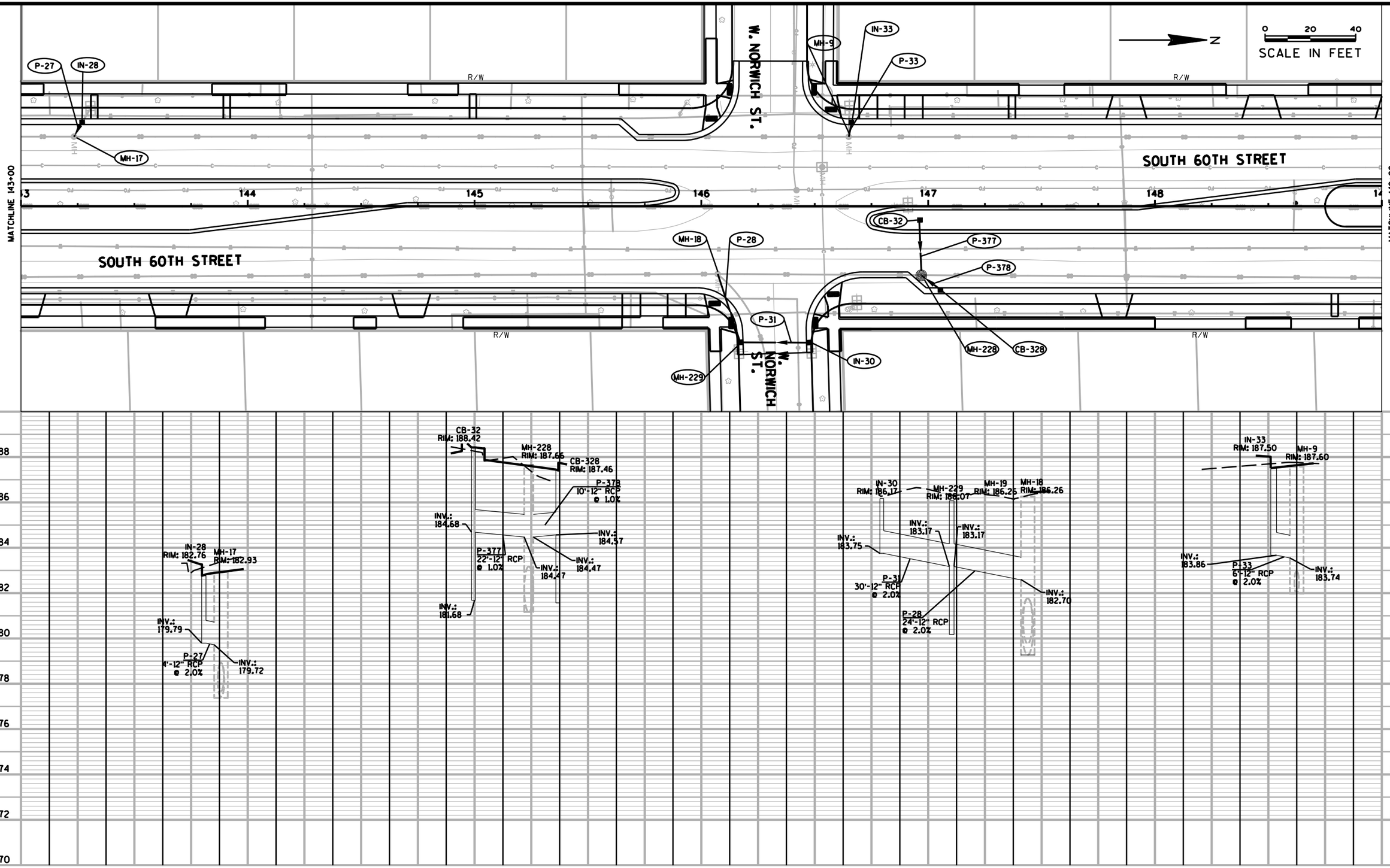

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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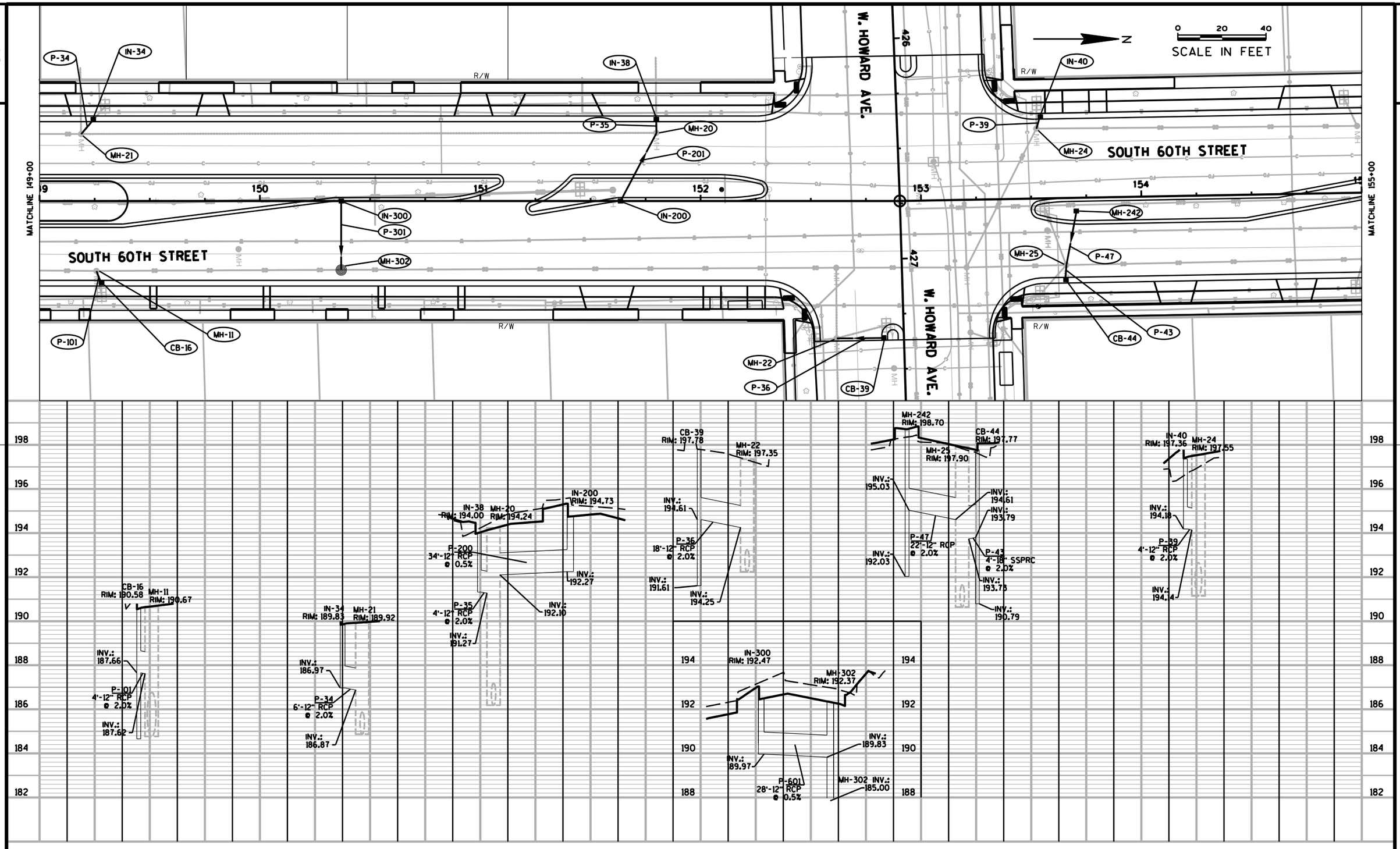
WISDOT/CADDS SHEET 45



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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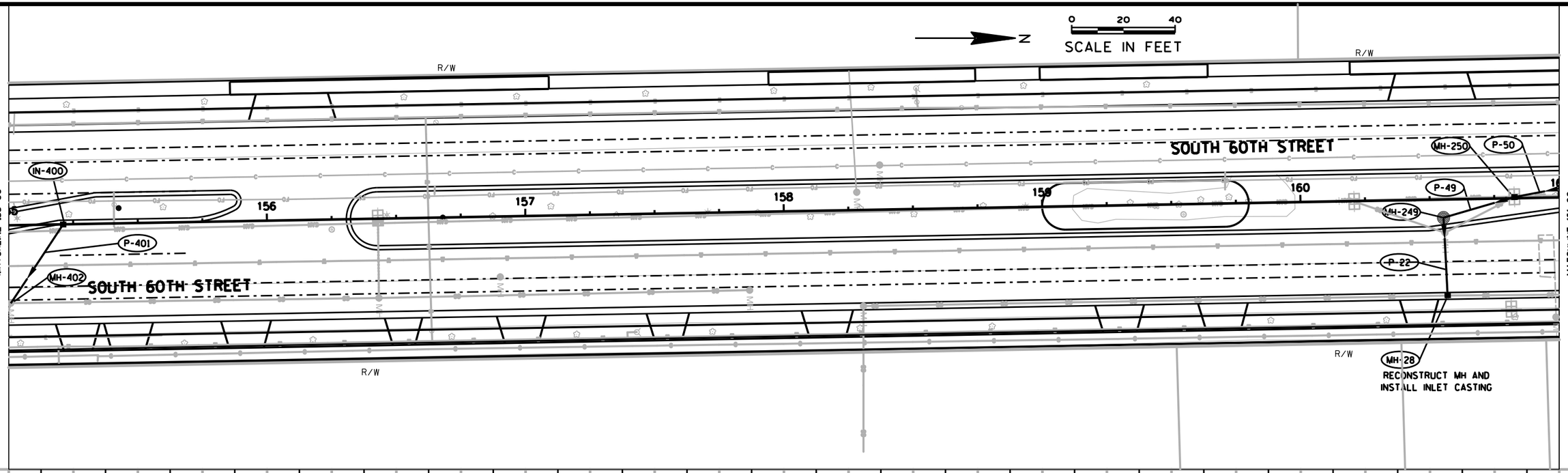

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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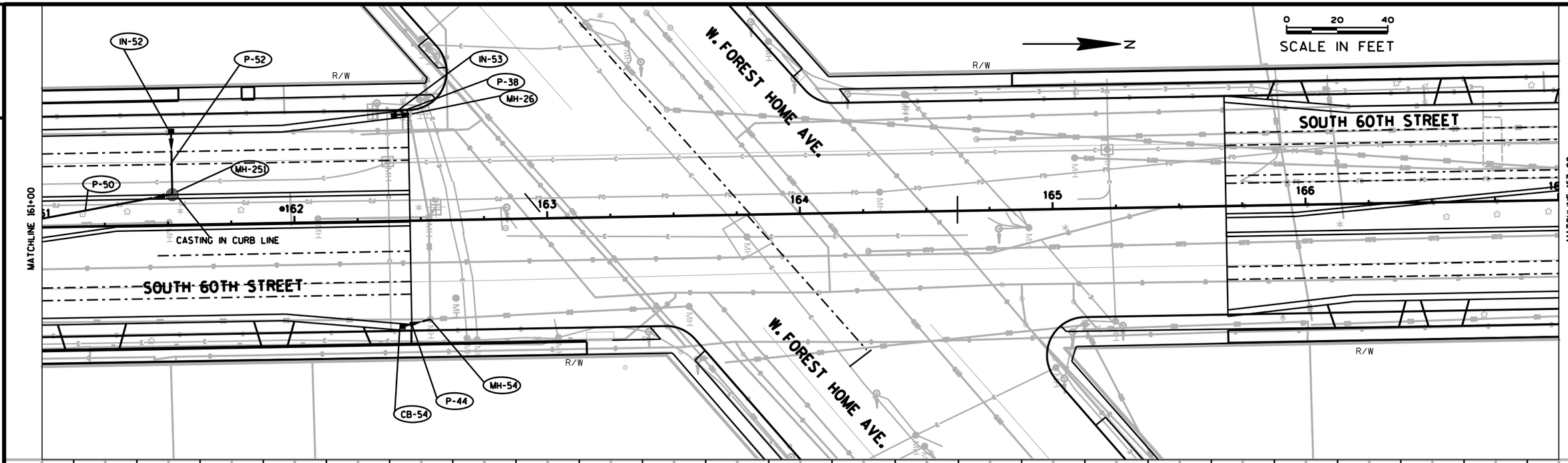

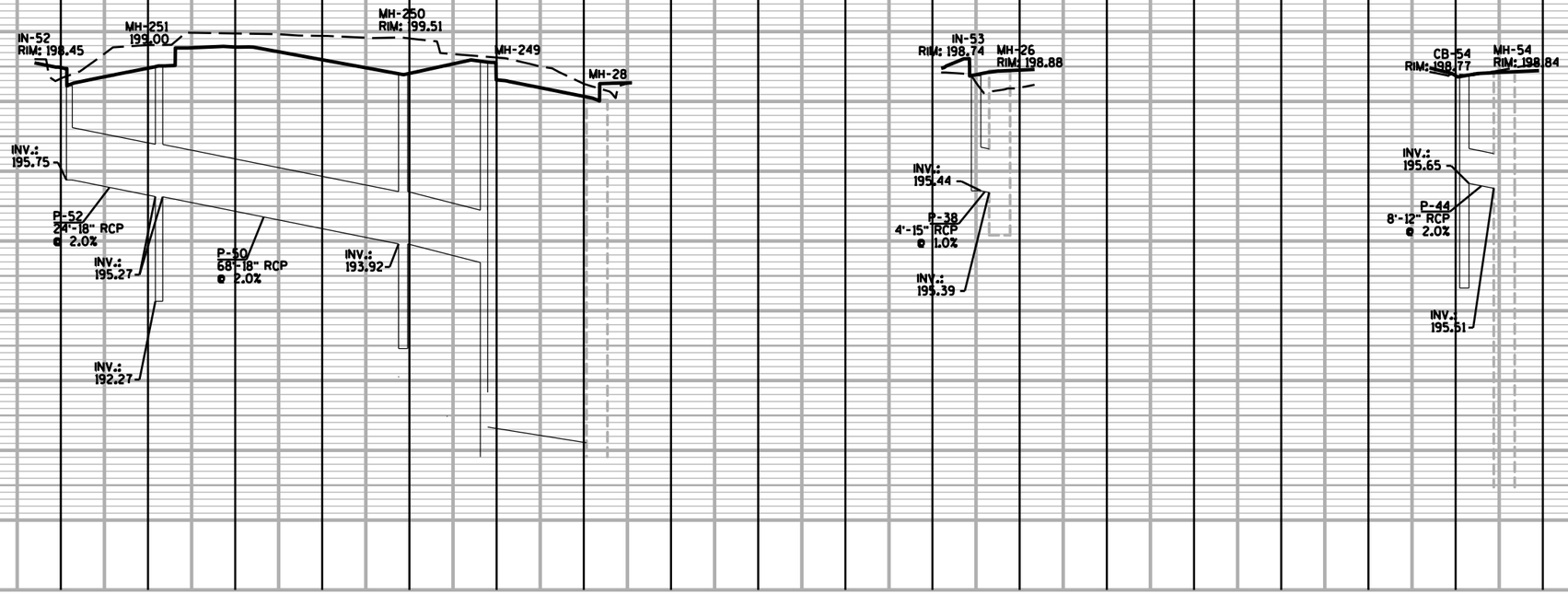

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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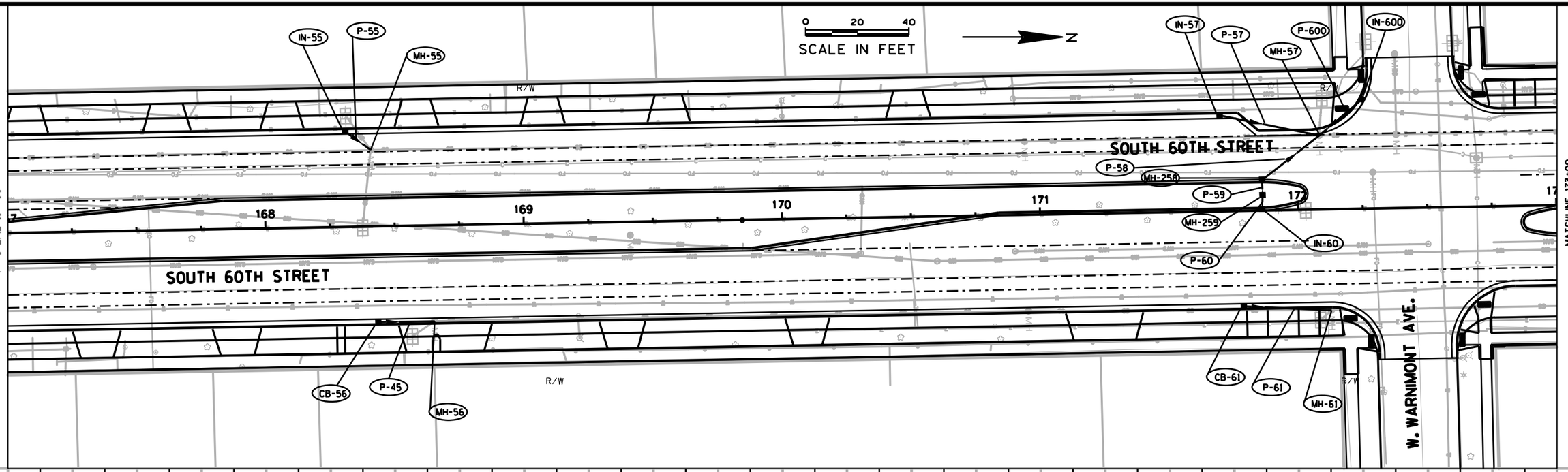

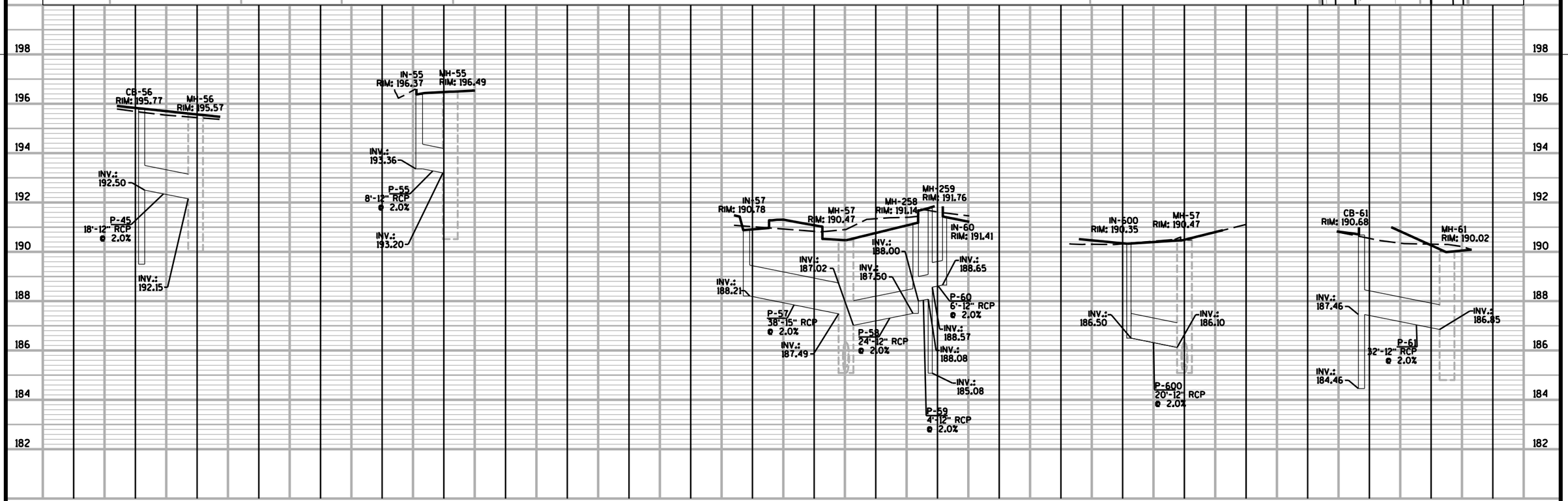

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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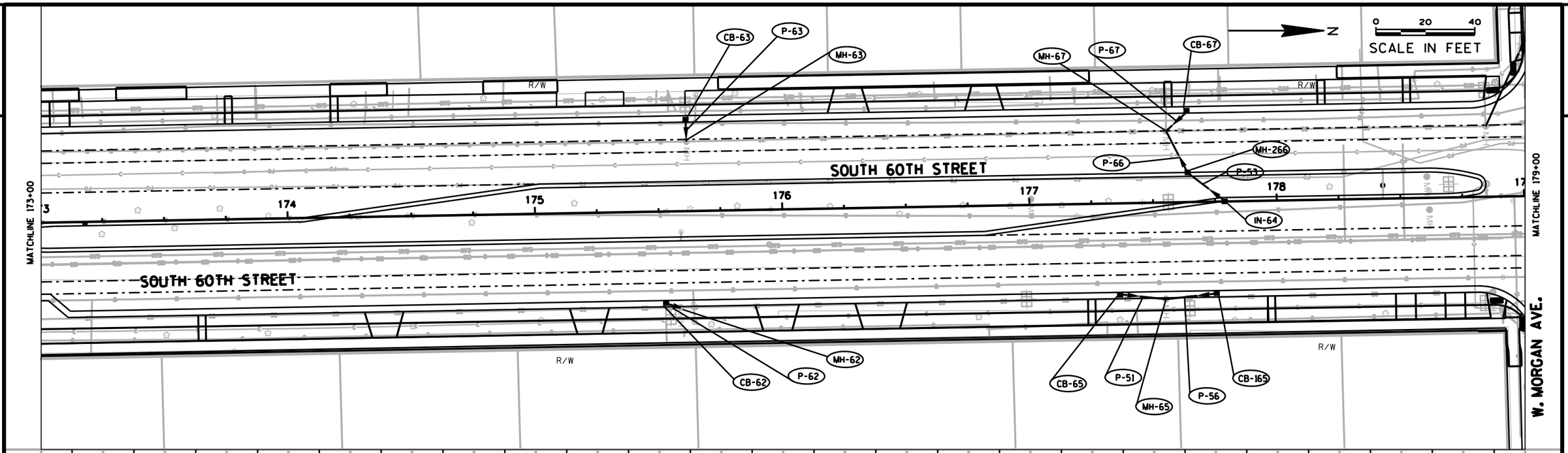
WISDOT/CADDS SHEET 45



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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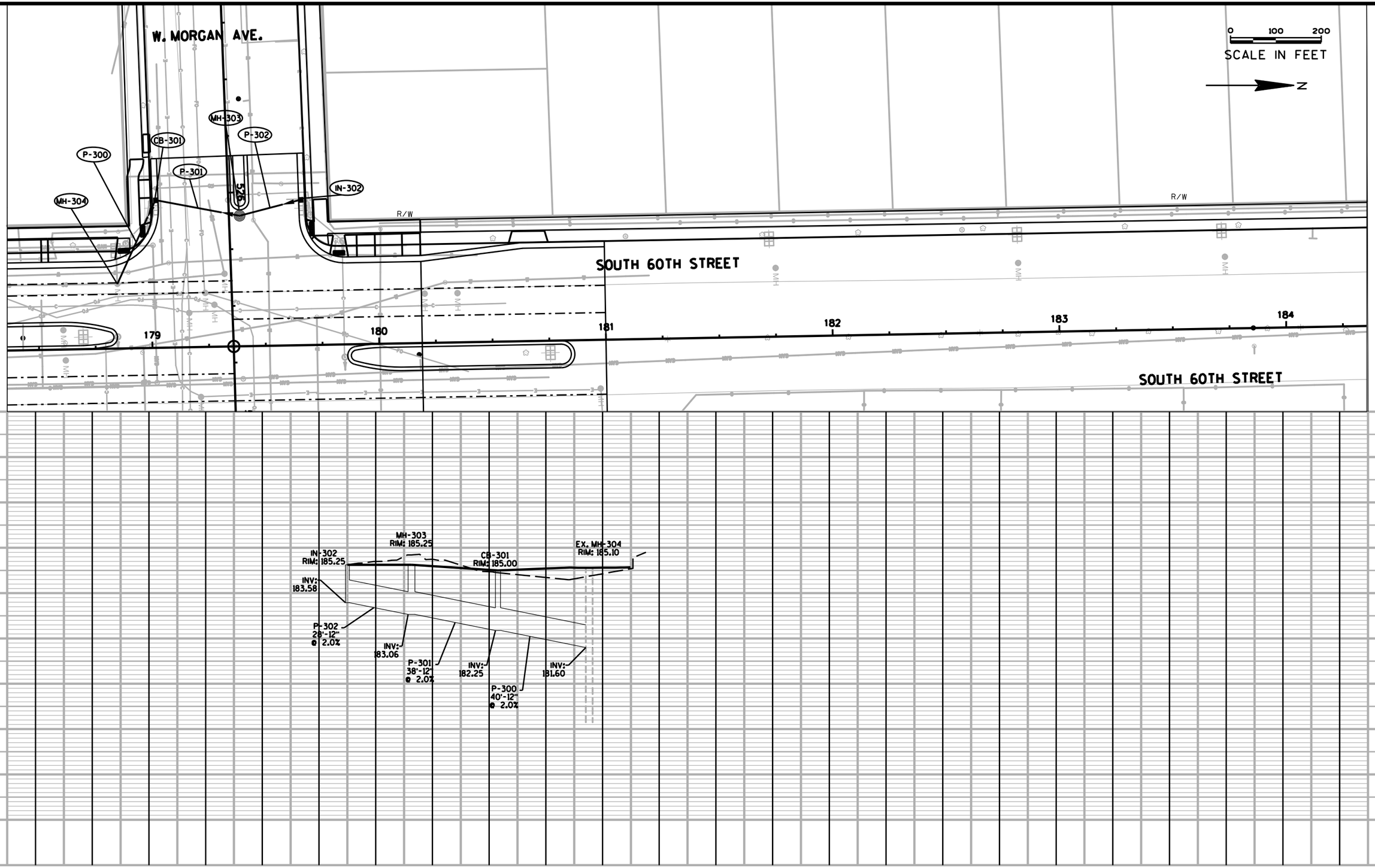

PROJECT NO: 2415-00-70	HWY: LOCAL STREETS	COUNTY: MILWAUKEE	STORM SEWER PLANS	SHEET	E

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WISDOT/CADDS SHEET 45

2

TRAFFIC & STREET LIGHTING GENERAL NOTES:

PRIOR TO CONSTRUCTION, THE LOCATION OF UNDERGROUND UTILITIES SHALL BE DETERMINED IN THE FIELD BY CONTACTING "DIGGERS HOTLINE."

STREET LIGHTING & TRAFFIC SIGNALS SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 652 EXCEPT:

THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCLUDING REPAIRS, REPLACEMENT OR RELOCATION ETC. OF STREET LIGHTING OR TRAFFIC SIGNAL FACILITIES IF THE CONTRACTOR DOES ANY DEVIATION FROM THE STREET LIGHTING OR TRAFFIC SIGNAL DESIGN WITHOUT THE STREET LIGHTING ENGINEERS SIGNED PERMISSION.

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

2 LOCATIONS OF THE PVC CONDUITS WHERE THEY ARE REQUIRED ARE IDENTIFIED IN THE PRINTS. HOWEVER, INSTALLATION MAY REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. ANY RELOCATIONS MUST BE APPROVED BY THE ENGINEER. FIELD MARK EACH CONDUIT LOCATION BY STAMPING AND PAINTING WITH RED PAINT ON TOP AND BACKSIDE OF CURB.

3 TYPICAL CONDUIT INSTALLED UP TO DIRECT BURIED STREET LIGHT POLES IS AS FOLLOWS 3-INCH OR 2.5-INCH (AS NOTED) SCHEDULE 40 RIGID PVC TO STREET LIGHTING METAL HOUSING (PEDESTAL), THE 1.5-INCH SCHEDULE 40 RIGID PVC TO STREET LIGHT POLE CABLE SLOT, AND THE 2-INCH SCHEDULE 40 RIGID PVC TO SIGNAL STANDARD BASE AND RISER FOR TRAFFIC SIGNAL ON STREET LIGHT POLE.

4 DEPTH OF CONDUIT INSTALLED BELOW THE STREETS, HIGHWAYS, ROADS, AND ALLEYS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (MEASURED FROM FINISHED FLANGE LINE)

5 CONDUIT INSTALLED BEHIND CURB, AND UNDER DRIVEWAYS SHALL BE INSTALLED AT A DISTANCE OF 6 INCHES AWAY FROM THE BACK OF CURB TO THE CENTER LINE OF CONDUIT, AND 18 INCHES DOWN MEASURED FROM THE TOP OF CURB OR FINISHED GRADE TO THE TOP OF CONDUIT.

6 WHEN THERE IS MORE THAN ONE CONDUIT TO BE INSTALLED, PLACE ALL CONDUITS IN THE SAME TRENCH.

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

8 THE CONTRACTOR OR HIS SUBCONTRACTOR MUST MAKE SURE THE AREA BEHIND CURB AND/OR TRENCH SHALL BE FREE OF DEBRIS AND OVERPOUR AND SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

9 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.

10 ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS. (SEE NEC 352.28 2008 CODE)

11 PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED IMMEDIATELY AFTER INSTALLATION WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

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

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

14 PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUIT.

15 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 UNLESS OTHERWISE APPROVED BY THE STREET LIGHTING ENGINEER.

16 WHEN ENDS OF CONDUIT DO NOT CONNECT TO A VAULT AND WILL END UP UNDER CONCRETE WALK. THE CONTRACTOR IS REQUIRED TO LEAVE A 24" X 24" BOX FORM CENTERED OVER THE END OF CONDUIT AND FILL THE BOXFORM WITH CRUSHED GRAVEL. (PER WISDOT SPEC 209.2.1(1) GRANULAR BACKFILL)

17 ALL PIPE CROSSINGS AND VAULTS SHALL BE AT LEAST SIX (6) FEET AWAY FROM FIRE HYDRANTS, UNLESS NOTED OTHERWISE, OR APPROVED BY THE STREET LIGHTING ENGINEER.

18 ALL POLES AND TRAFFIC STANDARDS IN CONCRETE ARE REQUIRED TO HAVE A 30"X30" BOX SHAPED JOINT PLACED AROUND THEM USING AN EXPANSION JOINT FILLER. UNLESS NOTED OTHERWISE (SEE DETAIL 122)

19 TYPICAL RECTANGULAR VAULTS SHOULD BE INSTALLED AS SHOWN ON PLANS, BUT WHEN IT IS NOT POSSIBLE, A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS AND FIRE HYDRANTS SHOULD BE USED, OTHERWISE APPROVED BY THE STREET LIGHTING ENGINEER.

TRAFFIC & STREET LIGHTING GENERAL NOTES:

20 COORDINATE NEW CONDUIT CONNECTIONS WITH EXISTING CONDUIT, DUCT PACKAGES, AND VAULTS/ MANHOLES WITH CITY OF MILWAUKEE STREET LIGHTING. THE CITY REQUIRES THREE WORKING DAYS ADVANCED NOTICE. CONTACT ELECTRICAL SUPERVISOR
STREET LIGHTING - DENNIS MILLER (OFFICE) 414-286-5942 (CELL) 414-708-4251 OR DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - AL NICHOLS (OFFICE) 414-286-3687 (CELL) 414-708-5148 OR DISPATCHER @ 414-286-3687

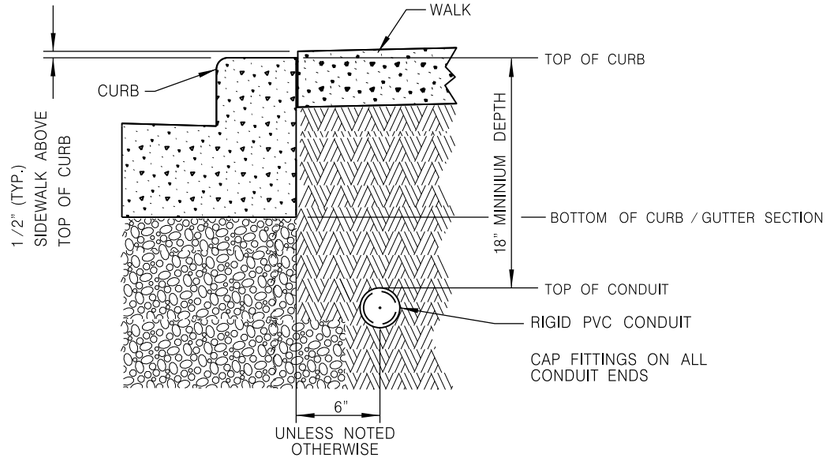
21 IMMEDIATELY AFTER THE CONTRACTOR HAS COMPLETED ALL THE ELECTRICAL VAULT, CONDUIT AND CONDUIT CONNECTIONS, AND JUST BEFORE ELECTRICAL WORK IS COVERED UP WITH CONRETE, SOIL, OR ETC. THE CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SHOP SUPERVISORS FOR FINAL INSPECTION AND APPROVAL OF ALL WORK.
STREET LIGHTING - DENNIS MILLER (OFFICE) 414-286-5942 (CELL) 414-708-4251
STREET LIGHTING - GEORGE BERDINE (OFFICE) 414-286-5943 (CELL) 414-708-4245
STREET LIGHTING - THOMAS HUGHES (OFFICE) 414-286-3457 (CELL) 414-708-3175
STREET LIGHTING - DISPATCHER @ 414-286-5944
TRAFFIC SIGNALS - AL NICHOLS (OFFICE) 414-286-5941 (CELL) 414-708-5148
TRAFFIC SIGNALS - DISPATCHER @ 414-286-3687

22 CONDUIT WILL ONLY BE INSTALLED AFTER THE CURB IS POURED, UNLESS APPROVED BY BOTH THE ENGINEER & STREET LIGHTING SHOP SUPERVISOR.

ELECTRICAL AS-BUILT GUIDELINES:

* LOCATE AND CLEARLY DIMENSION ALL CONDUIT RUNS, FITTINGS, SPLICE VAULTS, PULL BOXES, METER PEDESTALS, LIGHT BASES, TRANSFORMER, POLES AND OTHER APPURTENANCES IN TWO (2) DIRECTIONS. SWING TIES SHOULD BE MADE FROM OBJECTS THAT ARE PERMANENT IN NATURE AND VISIBLE ON THE FINISHED SURFACE.
* STREET NAMES SHALL BE ON ALL SHEETS.
* SHOW ALL SIZES AND MATERIAL TYPES OF PIPES AND CONDUITS.
* ALL HORIZONTAL DISTANCES SHALL BE SHOWN TO THE NEAREST TENTH OF A FOOT (I.E., 205.3'). ALL VERTICAL DISTANCES SHALL BE SHOWN TO THE NEAREST INCH (I.E. 24").
* SHOW LOCATION AND ELEVATIONS OF PIPES AND FITTINGS WHERE CHANGES OR DEFLECTIONS IN DIRECTION OCCUR.
* SPECIAL DETAIL DRAWINGS WILL BE SUPPLIED WHERE REQUIRED FOR CLARITY.
* DEVIATIONS FROM ORIGINAL PLANS OR STANDARD DETAILS SHALL BE NOTED ON AS-BUILT DRAWINGS.

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.
2.) CONDUIT TO BE PLACED 6 INCHES ON CENTER DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.



DETAIL "A"

100 TYPICAL CONDUIT INSTALLATION BEHIND CURB

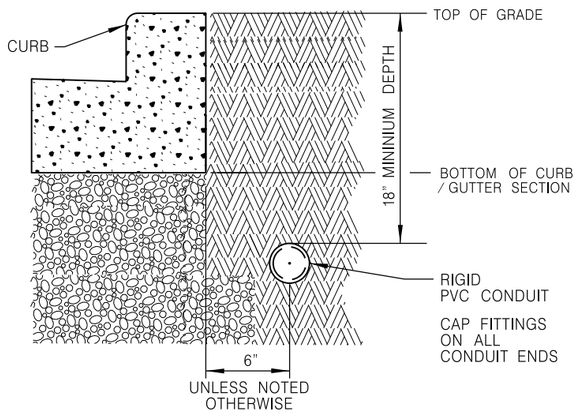
NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

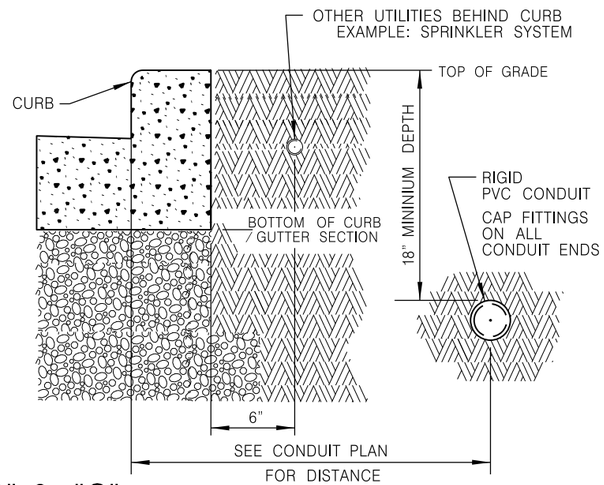
NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.

DETAIL "B"

CONDUIT TO BE PLACED 6" ON CENTER DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.



DETAIL "C"



DETAIL "B" & "C"

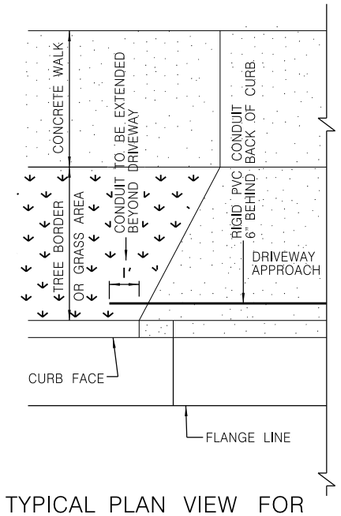
100 TYPICAL CONDUIT INSTALLATION BEHIND CURB

NOT TO SCALE

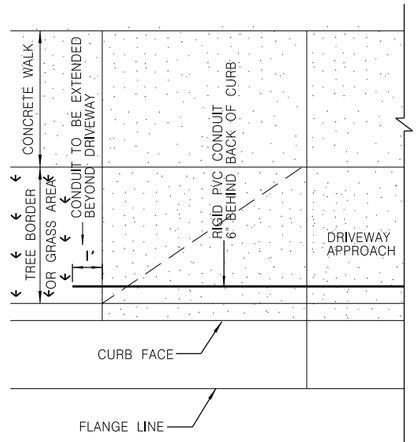
SHEET 2 OF 10

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS	SHEET 75	E

FILE NAME : W:\cendraft\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415–00–00)\s60th St – Cold Spring to Morgan Conduit Details.dgn PLOT DATE : 23–NOV–2016 07:38 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

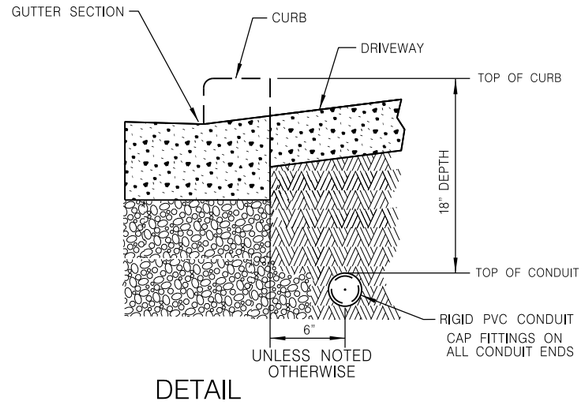


TYPICAL PLAN VIEW FOR
FLARED DRIVEWAY



TYPICAL PLAN VIEW FOR
DEPRESSED DRIVEWAY

NOTE: 1.) KEEP AREA BEHIND CURB FREE OF DEBRIS AND CONCRETE OVERPOUR.
2.) CONDUIT TO BE PLACED 6 INCHES ON CENTER DIRECTLY BEHIND CURB, UNLESS NOTED OR APPROVED BY ENGINEER.

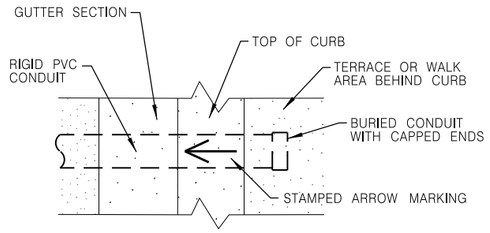


101 DETAIL

NOT TO SCALE

TYPICAL CONDUIT INSTALLATION
UNDER DRIVEWAYS OR PEDESTRIAN RAMPS

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

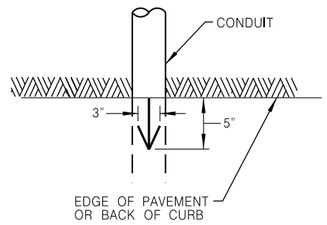


TOP VIEW OF CURB STAMPING

NOT TO SCALE

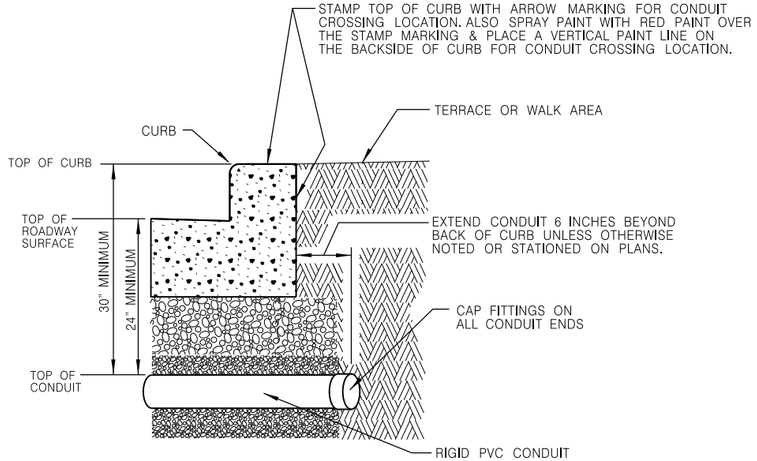
NOTE:

ARROW MARK SHALL BE INSCRIBED IN PAVEMENT SURFACE 1/4-INCH TO 3/8-INCH DEEP AT EACH LOCATION WHERE CONDUITS ARE PLACED UNDER THE PAVEMENT.



ARROW MARK

NOT TO SCALE



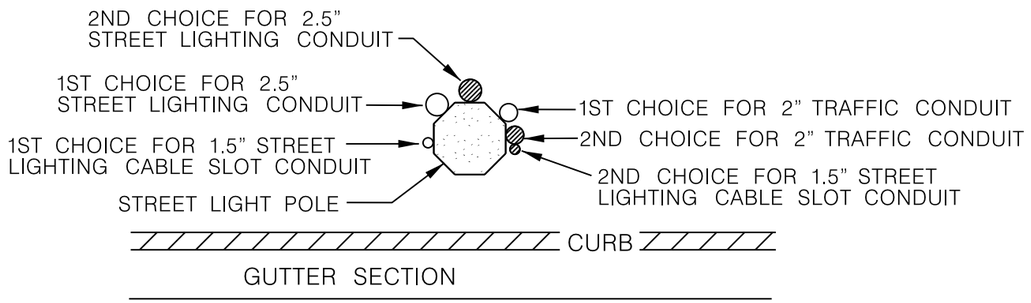
102 DETAIL VERSION #1

TYPICAL CONDUIT INSTALLATION FOR CROSSING ROADWAYS

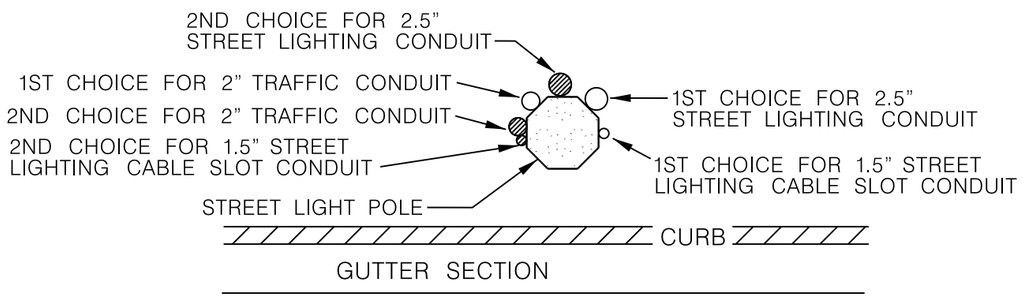
NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOTE: CAP FITTINGS ON CONDUIT ENDS



DIRECTION OF TRAFFIC AT CURB



DIRECTION OF TRAFFIC AT CURB

104 DETAIL

TYPICAL TRAFFIC SIGNAL RISER AND STREET LIGHTING CONDUIT LOCATIONS ON LIGHT POLES DEPENDING ON DIRECTION OF TRAFFIC AT CURB

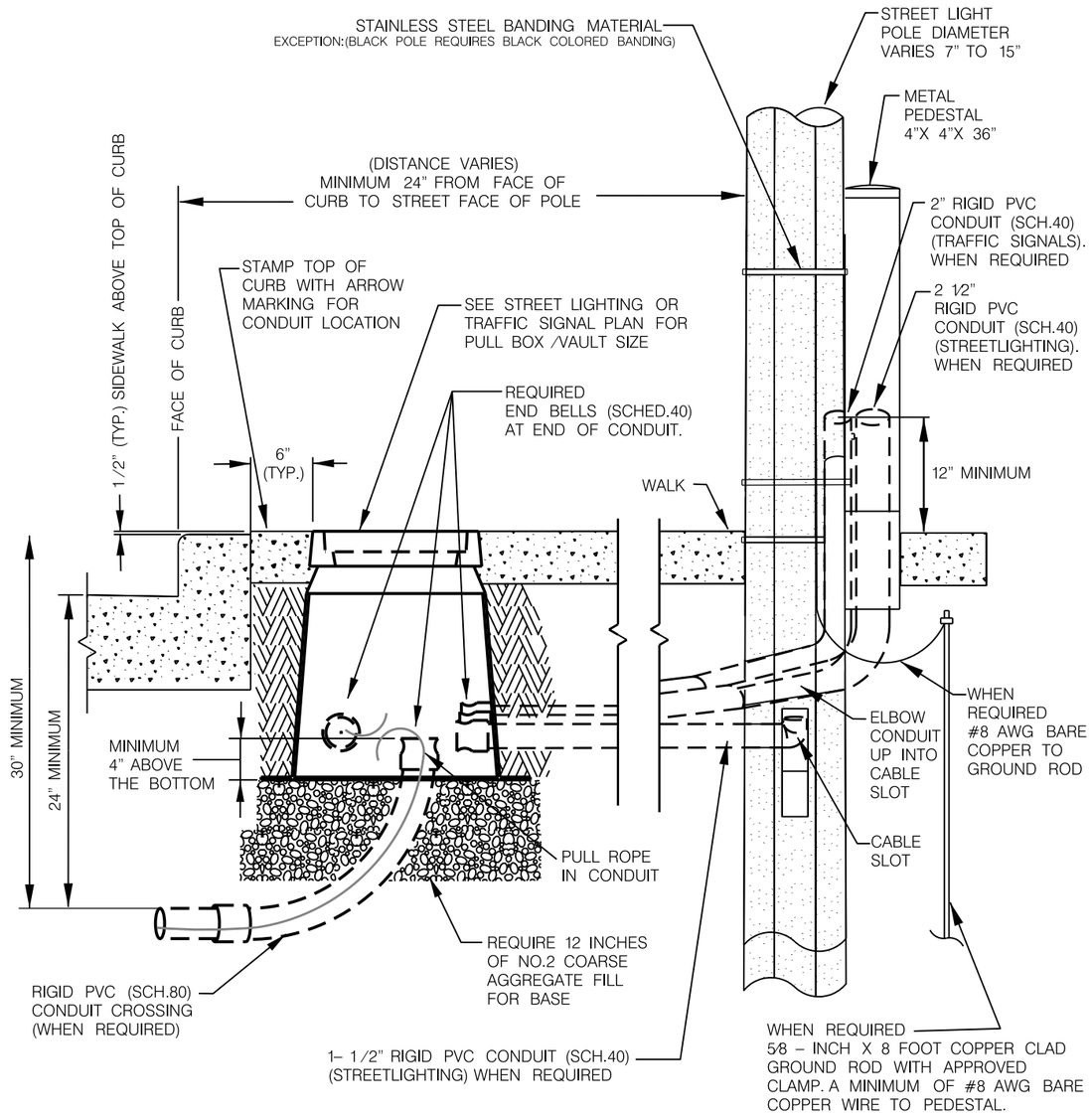
NOT TO SCALE

ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM TRAFFIC / STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS	SHEET 78	E

FILE NAME : W:\cendraft\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415-00-00)\s60th St – Cold Spring to Morgan Conduit Details.dgn PLOT DATE : 23-NOV-2016 07:41 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

2



108

DETAIL VERSION

TYPICAL CONDUIT INSTALLATION FROM PULL BOX /VAULT TO POLE

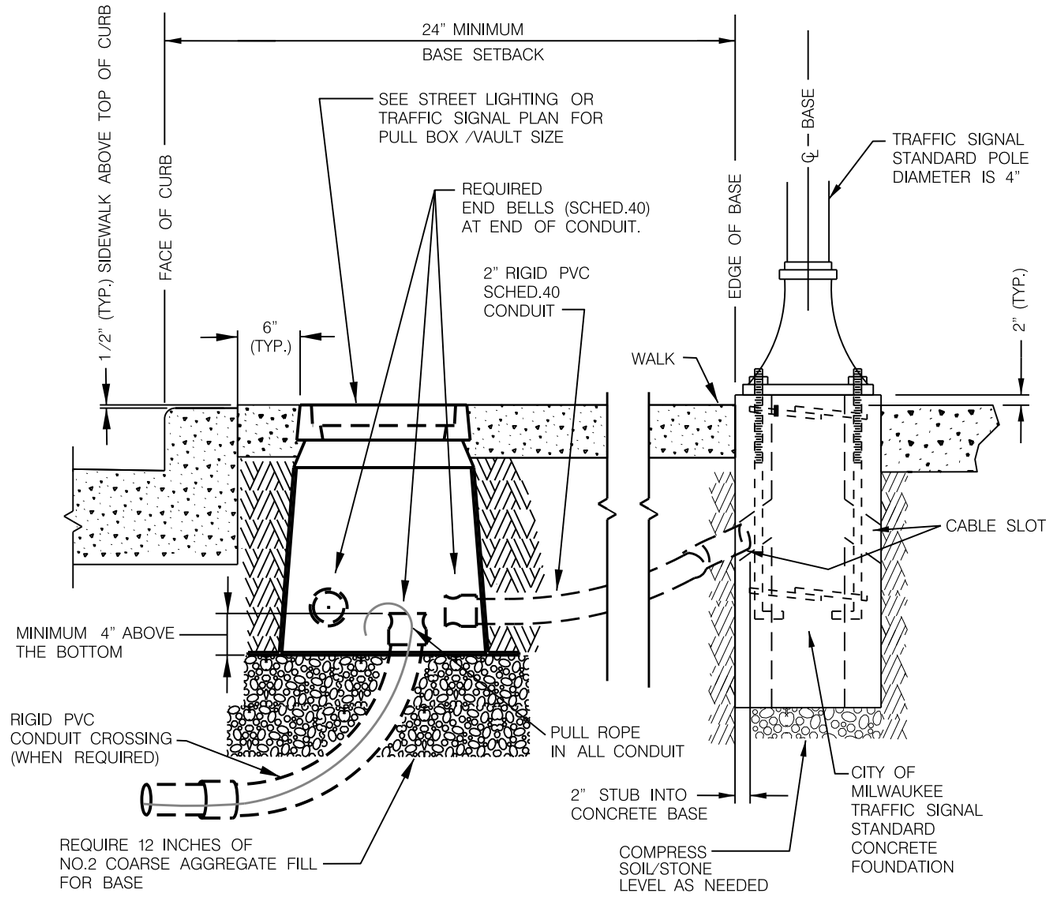
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES. CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOT TO SCALE

PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS	SHEET 79	E

FILE NAME : W:\bes\pavings\2017work\s60th St - Cold Spring to Morgan (2415-00-00)\s60th St - Cold Spring to Morgan Conduit Details.dgn PLOT DATE : 27-JAN-2017 14:47 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

2

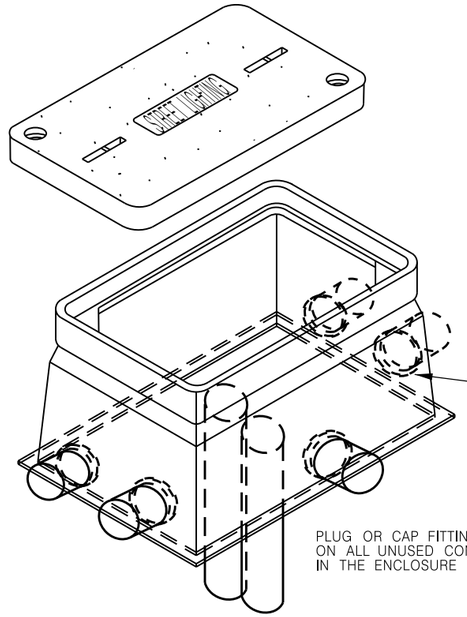


109 DETAIL

TYPICAL CONDUIT INSTALLATION FROM PULL BOX /VAULT TO SIGNAL STANDARD AND TYPICAL BASE INSTALLATION

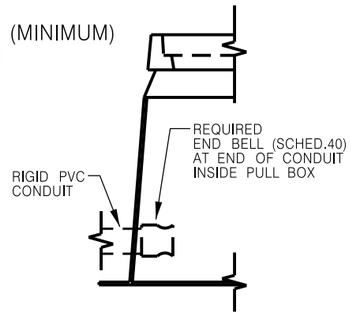
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286–5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

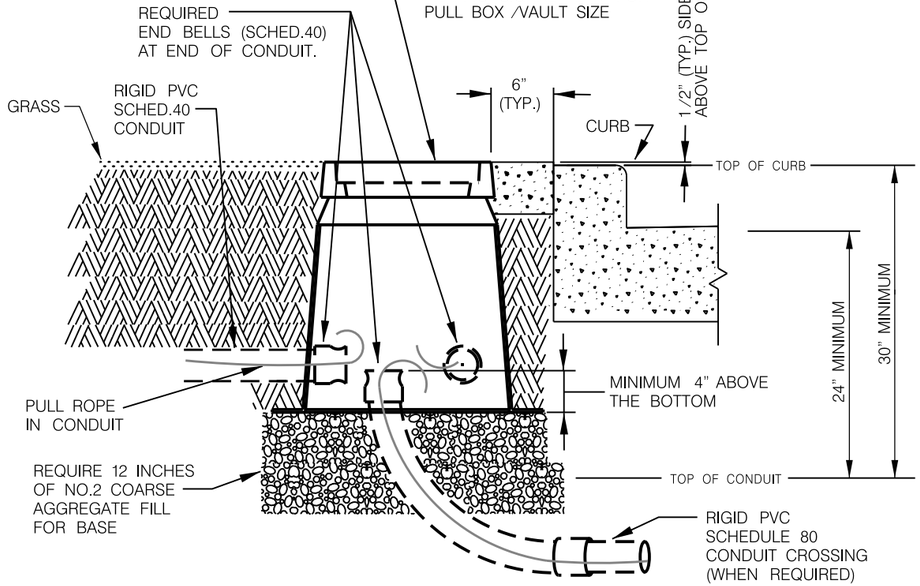
2



HEAVY DUTY COVER
W/ STREETLIGHTING LOGO
& W / 2 BOLTS
COLOR: GRAY
TIER 15 RATING (MINIMUM)

PULL BOX /VAULT
FLARED WALL
BOX W / NO BASE
COLOR: GRAY
TIER 15 RATING (MINIMUM)
(VARIOUS SIZES)





112 DETAIL

TYPICAL PULL BOX /VAULT INSTALLATION
IN EITHER PAVEMENT OR GRASS AREAS

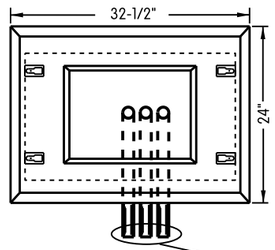
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

NOT TO SCALE

SHEET 8 OF 10

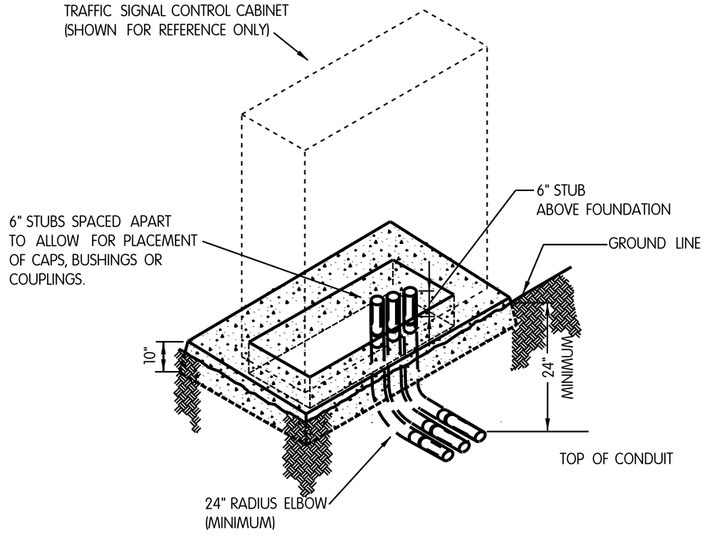
PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS	SHEET 81	E

2



NOTE:
REFER TO STREET LIGHTING AND TRAFFIC SIGNAL CONDUIT PLAN FOR THE QUANTITY & SIZE OF CONDUIT REQUIRED IN THE CONCRETE CONTROL CABINET BASE

PLAN VIEW



ISOMETRIC VIEW

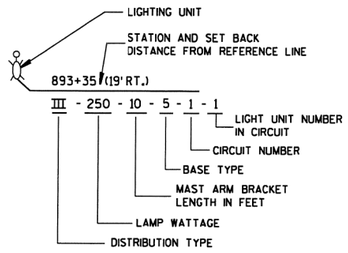
125A

TYPICAL DETAIL

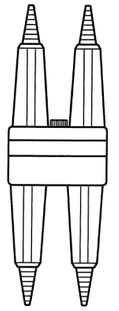
NOT TO SCALE

CONDUIT INSTALLATION TO TRAFFIC CONTROL CABINET CONCRETE FOUNDATION

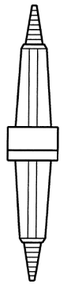
ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.



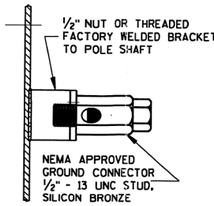
LIGHTING UNIT CODE
(TYPICAL)

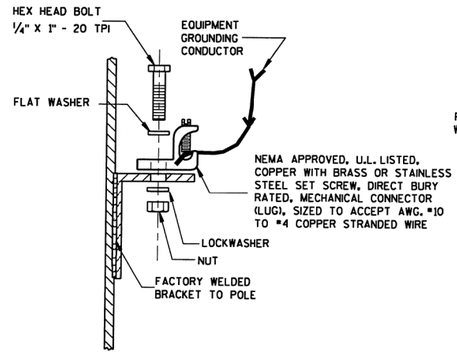


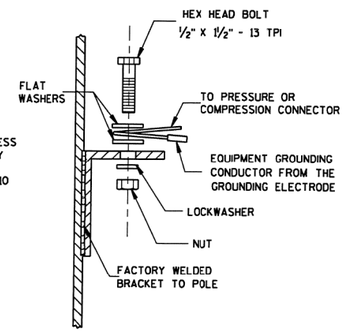
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



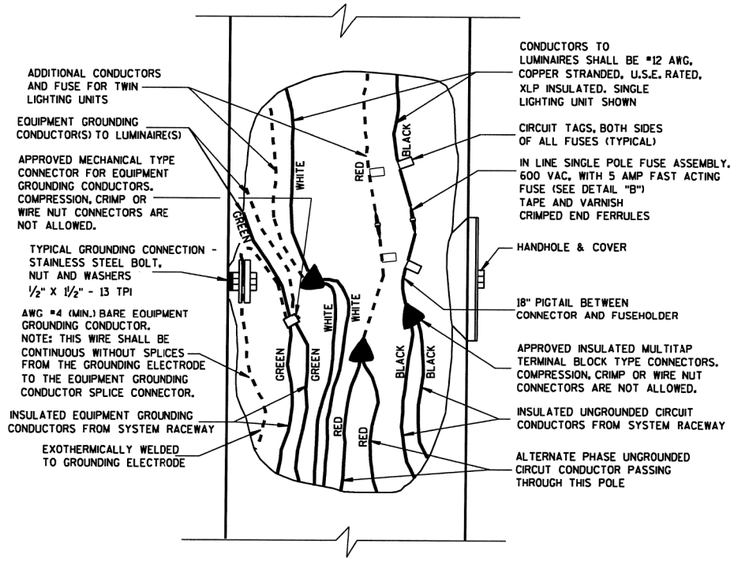
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



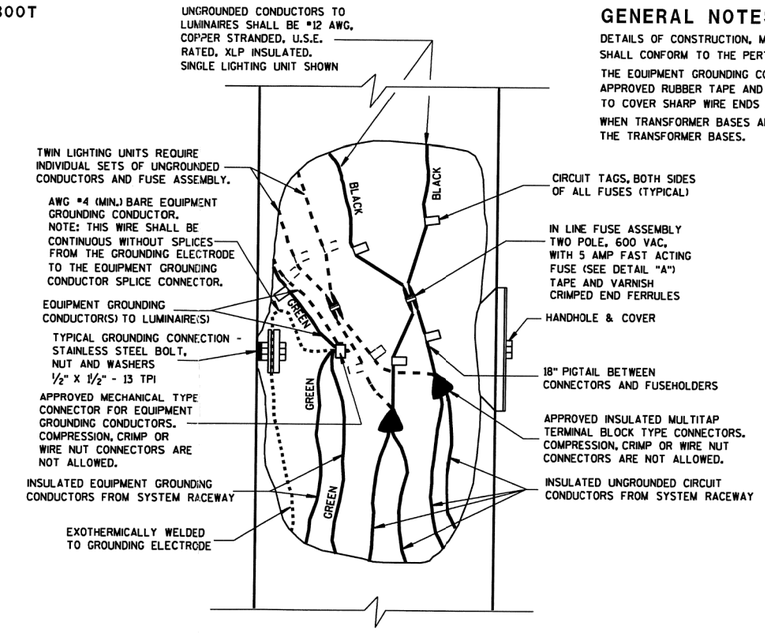




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 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.

CITY OF MILWAUKEE DOES NOT REQUIRE IN-LINE FUSE.

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL DETAILS	SHEET 83	E

FILE NAME : W:\cendraft\bes\pavings\2017work\n92nd St – Capitol to Hampton (2585–00–70)\2585–00–70 n92nd St. – Conduit– Oct 31–2016.dgn
PLOT DATE : 22–NOV–2016 13:07
PLOT BY : lhickm
PLOT NAME :
PLOT SCALE : 20.000000:1.000000
WISDOT/CADDS SHEET 42

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN VACANT CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

TYPICAL RECTANGLAR PULL BOX SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF GREENFIELD ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK WITHIN THEIR JURISDICTION BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

INSTALL PEDESTAL BASE (ITEM 657.0100) ON ALL TYPE 1 BASES

POLE ADDRESS
TRAFFIC
ADDRESS LOCATION
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

112 17"X30"X24"PULL BOX 2" SCH.40 TO SIG. STD. 126+10.3; 62.5'LT
REMOVE EXIST. SIGNAL BASE
INSTALL TYPE 1 BASE 109 126+07.5; 58.0'LT
2-3" SCH 40 101
REMOVE EXIST. SIGNAL BASE
INSTALL 109 TYPE 1 BASE 125+97.0; 47.5'LT
112 17"X30"X24"PULL BOX 2" SCH.40 TO SIG. STD. 125+84.0; 47.0'LT
W. COLD SPRING
CAUTION PROP. OF CITY OF GREENFIELD MAY BE CONTINUOUSLY ENERGIZED
112 17"X30"X24"PULL BOX 126+66.7; 65.0'LT
SP (S40-1708) (A) TYPE 10 BASE TYPE 9 POLE 126+71.0; 65.0'LT
REMOVE EXISTING SIGNAL BASE
109 INSTALL TYPE 1 BASE STATION 126+81.5; 47.5'LT
112 17"X30"X24"PULL BOX 2" SCH.40 TO SIG. STD. 126+98.0; 39.5'LT
3" SCH. 40
30' ARM
DETAIL 102 2-3" SCH.80
101 2-3" SCH.40
2-3" SCH.80 SPECIAL
CITY OF GREENFIELD
CAUTION WEPCO OH
112 13"X24"X24"PULL BOX 128+34.0; 04.5'LT
3#6/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
3#8/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
#4234 2-AMERICAN ELECTRIC ATBM-D-D2 129+53.7; 00.0'
25' ARM
SP (S40-1709) TYPE 10 BASE (H) TYPE 9 POLE 125+78.5; 05.0'LT
3" SCH. 40
REMOVE EXIST. SIGNAL BASE
#4268 EXISTING LIGHT POLE AND SIGNAL (REMOVAL BY CITY) 126+94.5; 03.5'RT
DETAIL I 102 2-3" SCH.80
#4266 SP (S40-1707) TYPE 10 BASE (C) TYPE 10 POLE 2-2#12UF W/G INTERNAL RISER 2-8' STEEL SINGLE MEMBER ARMS 2-AMERICAN ELECTRIC ATBM-H-D2 127+07.5; 05.6'RT
#4246 (REMOVAL BY CITY) EXISTING LIGHT POLE 128+34.0; 0.0'RT
#4244 2-AMERICAN ELECTRIC ATBM-D-D2 128+30.0; 00.0'
3" SCH. 80
DETAIL C 100 3" INSTALLED 2' BACK OF CURB
#4236 (REMOVAL BY CITY) EXISTING LIGHT POLE 129+38.6; 00.0'
CITY OF GREENFIELD
S. 60th
127+00
128+00
129+00
130+00
2-3" SCH.80 SPECIAL
112 17"X30"X18" VAULT 125+74.0; 05.0'LT
REMOVE SIG. BASE
3" SCH.40 TO TYPE 10 BASE
2" SCH.40 TO NEW SIG. STD.
112 17"X30"X18" VAULT 127+02.9; 05.7'RT
DETAIL I 102 2-3" SCH.80
20' ARM
3#8/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
DETAIL C 100 3" INSTALLED 2' BACK OF CURB
2" TO SIGNAL
112 17"X30"X24"PULL BOX 125+74.0; 45.0'RT
109 INSTALL TYPE 1 BASE 124+00.0; 47.5'RT
REMOVE SIGNAL BASE
101 2-3" SCH.40
2" TO NEW TYPE 1 SIGNAL BASE 126+73.0; 57.1'RT
109
CITY OF MILWAUKEE
101 2-3" SCH.40
CAUTION PROP. OF CITY OF GREENFIELD MAY BE CONTINUOUSLY ENERGIZED
112 17"X30"X24"PULL BOX 126+11.8; 64.7'RT
3" SCH.40
SP (S40-1710) (F) TYPE 10 BASE TYPE 9 POLE 126+15.0; 68.5'RT
25' ARM
DETAIL I 102 2-3" SCH.80
CITY OF GREENFIELD
112 17"X30"X18" VAULT 126+68.5; 67.5'RT
101 2-3" SCH.40
112 17"X30"X24"PULL BOX 126+99.5; 45.6'RT
REMOVE EXIST. SIGNAL BASE
109 TYPE 1 BASE STATION 126+84.5; 48.0'RT
125A NEW SIGNAL CABINET PRECAST CONCRET PAD W/CONDUIT STUBS INSTALLED BY CITY 2-3" SCH.40 CONDUIT STUBS TO PULL BOX 126+84.; 59.0'RT
2-3" SCH.40 SIG. CABINET TO 17"X30"X24"PULL BOX 126+83.8; 63.5'RT
EXIST. SIGNAL CABINET REMOVAL BY CITY FORCES
CAUTION WEPCO OH
3#6/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM MONOTUBE MAST ARM
- EVP DETECTOR
- (B) CONNECT TO BLACK CABLE
- (R) CONNECT TO RED CABLE
- SP (S40-XXXX) MONOTUBE STRUCTURE NO.

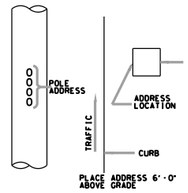
C.O.M. SIGNAL
SW573-1

SCALE, FEET 0 30

SHEET 1 OF 12

PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 84	E

FILE NAME : W:\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415-00-00)\s60th St. – Cold Spring to Morgan Conduit FINAL.dgn
PLOT DATE : 27-JAN-2017 11:31
PLOT BY : lhickm
PLOT NAME :
PLOT SCALE : 30.000000:1.000000
WISDOTCADDS SHEET 42



NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN VACANT CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

TYPICAL RECTANGLAR PULL BOX SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

VERIFY S. HONEY CREEK DR. IS CLEAR OF ASPHALT WARRANTY PRIOR TO START OF WORK IN AREA.

N

#4202
2-AMERICAN ELECTRIC
ATBM-D-D2
132+10.5; 00.0'

3#6/1#8LTP CABLE
CIR.TIIS-D
INSTALLED IN CONDUIT

#4212
2-AMERICAN ELECTRIC
ATBM-D-D2
130+84.7; 00.0'

3" SCH.40 TO
TYPE 5 BASE

(REMOVAL BY CITY)
EXISTING LIGHT POLE
130+77.6; 02.2' RT

112
13"X24"X24"PULL BOX
132+07.5; 05.0' RT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
133+29.9; 05.0' RT

#4176
2-AMERICAN ELECTRIC
ATBM-D-D2
133+33.9; 05.5' RT

112
13"X24"X24"PULL BOX
133+34.7; 08.7' RT

#4162
2-AMERICAN ELECTRIC
ATBM-D-D2
134+52.9; 02.8' RT

CITY OF GREENFIELD

S. 60th

3#8/1#8LTP CABLE
CIR.TIIS-D
INSTALLED IN CONDUIT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
132+15.0; 03.5' RT

CAUTION
54" WATER MAIN
FEEDER

(REMOVAL BY CITY)
EXISTING LIGHT POLE
134+49.40; 02.8' RT

131+00 132+00 133+00 134+00

DETAIL C 100 — 3" INSTALLED 2' BACK OF CURB
CIR.TIIS-D INSTALLED IN CONDUIT
DETAIL C 100 — 3" INSTALLED 2' BACK OF CURB
3#6/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
DETAIL I 102 — 3" SCH.80
3" SCH.40
3#6/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
DETAIL B 100 — 3" SCH.40
DETAIL I 102 — 3" SCH.80
DETAIL C 100 — 3" INSTALLED 2' BACK OF CURB
3#8/1#8LTP CABLE CIR.TIIS-D INSTALLED IN CONDUIT
DETAIL C 100 — 3" INSTALLED 2' BACK OF CURB

CUC, STO, FO

112
13"X24"X24"PULL BOX
132+07.7; 44.8' RT

112|08
13"X24"X24"PULL BOX
120'-3#6/1#8LTP TO #4139
132+28.0; 60.5' RT

#4151
EXISTING LIGHT POLE
(REMOVAL BY CITY)
132+42.0; 69.2' RT

DETAIL B 100
3" INSTALLED
BACK OF CURB

TO LIGHTING UNIT #4139
SEE S. HONEY CREEK CONTINUATION

S. HONEY CREEK

112
13"X24"X24"PULL BOX
132+71.7; 60.0' RT

#4151
26' CONCRETE LIGHT POLE BY CITY
6' UPSWEEP ARM W/ AMERICAN ELECTRIC
ATBM-D-D2
132+28.0; 65.5' RT

DETAIL B 100
3" SPECIAL INSTALLED
BACK OF CURB

#4139
26' CONCRETE LIGHT POLE
TO REMAIN IN SERVICE
131+91.0; 161.5' RT

S. HONEY CREEK

S. 58

112
13"X24"X24"PULL BOX
133+34.5; 40.0' RT

3#6/1#8LTP CABLE
CIR.TIIS-D
INSTALLED IN CONDUIT
PLUS 15' SERVICE LOOP AT UNIT

SCALE, FEET 0 30

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM — MONOTUBE MAST ARM
- (B) CONNECT TO BLACK CABLE
- (R) CONNECT TO RED CABLE

SHEET 2 OF 12

PROJECT NO: 2415-00-70	HWY: S. 60th St.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 85	E

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN VACANT CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

#4146
2-AMERICAN ELECTRIC
ATBM-D-D2
135+71.4; 03.2' RT

112
13"X24"X24" PULL BOX
135+65.0; 08.0' RT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
135+57.8; 03.2' RT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
136+74.0; 05.0' RT

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED
IN CONDUIT

#4132
2-AMERICAN ELECTRIC
ATBM-D-D2
136+65.0; 06.0' RT

DETAIL B
100
13"X24"X24" VAULT
137+83.5; 32.6'LT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
137+80.0; 46.0'LT

#4113
TYPE 5A POLE W/6' UPSWEEP ARM
TYPE 5 CONCRETE BASE
TRANSFORMER PEDESTAL BASE
2#12UF INTERNAL RISER
AMERICAN ELECTRIC ATBM-D-D2
137+86.5; 33.0'LT

N

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

CAUTION
PROP. OF CITY OF GREENFIELD MAY BE CONTINUOUSLY ENERGIZED

CAUTION
WEPCO OH

CAUTION
PROP. OF CITY OF GREENFIELD

#4102
2-AMERICAN ELECTRIC
ATBM-D-D2
139+19.5; 00.0'

(REMOVAL BY CITY)
EXISTING LIGHT POLE
139+23.0; 02.3' RT

W. WATERFORD CT.

CITY OF GREENFIELD

S. 60th

DETAIL I
102
3" SCH 80

112
13"X24"X18" PULL BOX
136+55.6; 05.8' RT

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT 3" SCH.80

DETAIL I
102

112
13"X24"X24" VAULT
137+77.7; 09.0'LT

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED
IN CONDUIT

35+00 | 136+00 | 137+00 | 138+00 | 139+00

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

DETAIL C
100
3" INSTALLED
2' BACK OF CURB

101
3" SCH.40

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

DETAIL I
102
3" SCH.80

101
3" SCH.40

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

CITY OF MILWAUKEE

DETAIL A
100
3" PVC

DETAIL I
102
3" SCH.80

DETAIL B
100
2.5" INSTALLED
2' BACK OF CURB

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

DETAIL C
100
3" INSTALLED
2' BACK OF CURB

DETAIL I
102
3" SCH 80

W. WATERFORD AVE.

W. PLAINFIELD AVE.

112
13"X24"X24" PULL BOX
136+24.0; 69.0' RT

DETAIL I
102
3" SCH. 80

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

13"X24"X24" PULL BOX
135+65.0; 40.0' RT

13"X24"X24" PULL BOX
135+89.0; 69.0' RT

112
13"X24"X24" PULL BOX
136+55.5; 44.0' RT

DETAIL B
100
13"X24"X24" PULL BOX
137+69.5; 39.0' RT

3#8/1#8LTP CABLE
CIR.T1IS-D
INSTALLED IN CONDUIT

2-3#8/1#8LTP
CIR.T1IS-D

3" PVC SPECIAL
TO UNIT #5819

2-3#8/1#8LTP CABLE
PLUS 15' EACH LENGTH
3" PVC SPECIAL
(CONNECTION BY
CITY FORCES)

#4139
26' CONCRETE LIGHT POLE
TO REMAIN IN SERVICE
131+86.0; 200.0' RT

CAUTION
30" HIGH PRESURE

(REMOVAL BY CITY)
EXISTING LIGHT POLE
137+98.5; 44.5'RT

#4114
TYPE 5A POLE W/6' UPSWEEP ARMS
TYPE 5 CONCRETE BASE
TRANSFORMER PEDESTAL BASE
2#12UF INTERNAL RISER
AMERICAN ELECTRIC ATBM-D-D2
137+98.5; 39.5'RT

DETAIL B
100
13"X24"X24" PULL BOX
139+19.5; 39.0' RT

DETAIL A
100
13"X24"X24" PULL BOX
139+45.7; 07.0' RT

CAUTION
WEPCO OH

LEGEND

- EXISTING STREET LIGHT POLE
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8'UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE

SCALE, FEET 0 30

SHEET 3 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 86	E

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN VACANT CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

N

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
139+91.5; 45.8' LT

#4085
TYPE 5A POLE W/8' UPSWEEP ARMS
TYPE 5 CONCRETE BASE
TRANSFORMER PEDESTAL BASE
2#12UF INTERNAL RISER
AMERICAN ELECTRIC ATBM-D-D2
140+24.0; 6.0' LT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
141+33.4; 05.0' LT

#4066
2-AMERICAN ELECTRIC
ATBM-D-D2
141+61.0; 05.0' RT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
142+86.3; 00.0'

#4042
2-AMERICAN ELECTRIC
ATBM-D-D2
143+1.5; 00.0'

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
144+34.9; 0.00'

DETAIL I 102
3" SCH. 80

DETAIL C 100
3" INSTALLED
2' BACK OF CURB

DETAIL C 100
3" INSTALLED
2' BACK OF CURB

DETAIL C 100
3" INSTALLED
2' BACK OF CURB

STO
CUC
TEXES

140+00
141+00
142+00
143+00
144+00

DETAIL 102
3" SCH 80

3#8/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

3#8/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

3#8/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

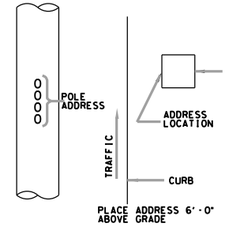
S. 60th

W. WATERFORD AVE

112
13"X24"X24" PULL BOX
140+19.6; 06.0' RT

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE



SHEET 4 OF 12

PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 87	E

FILE NAME : W:\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415-00-00)\s60th St. – Cold Spring to Morgan Conduit FINAL.dgn
PLOT DATE : 27-JAN-2017 11:51
PLOT BY : lhickm
PLOT NAME :
PLOT SCALE : 30.000000:1.000000
WISDOT/CADDS SHEET 42

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN VACANT CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

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ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

W. NORWICH ST.

S. 60th

#6017
NEW LIGHT POLE BY CITY
146+13.5; 143.0' LT

3#8/1#8LTP CABLE
CIR.T46S-C
5' SERVICE LOOP AT UNIT
PROTECT AND TAG END W/CIR. NO.
FINAL CONNECTION BY CITY

DETAIL B 100
3" SPECIAL INSTALLED
BACK OF CURB

#6002
EXISTING LIGHT POLE
RETROFIT TO LED/
MULTIPLE CIRCUIT BY
CITY FORCES
146+49.0; 62.5' LT

#4000
2-AMERICAN ELECTRIC
ATBM-D-D2
145+82.0; 06.0' LT

108
13"X24"X24" BOX
3#8/1#8LTP CABLE
146+13.5; 67.0' LT

#4020
2-AMERICAN ELECTRIC
ATBM-D-D2
144+38.5; 06.0' RT

3"PVC TO UNIT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
145+82.0; 06.5' LT

3#8/1#8LTP CABLE
CIR.T46S-C
INSTALLED
IN CONDUIT

112 108
13"X24"X24" BOX
3#8/1#8LTP CABLE
146+48.5; 67.0' LT

3#8/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

2.5" PVC
TO EXIST.
LIGHT POLE

DETAIL I 102
3" SCH. 80

101
3" SCH. 40

112
13"X24"X18" VAULT
146+84.5; 40.0' LT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
146+84.5; 00.0'

#3974
2-AMERICAN ELECTRIC
ATBM-D-D2
146+89.5; 06.0' RT

#3956
2-AMERICAN ELECTRIC
ATBM-D-D2
148+15.5; 06.0' RT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
148+20.5; 00.0'

DETAIL C 100
3" INSTALLED
2' BACK OF CURB

3#6/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

CUC — 3" SCH. 80 — CUC

3"PVC

3#8/1#8LTP CABLE
CIR.T46S-C CUC
INSTALLED IN CONDUIT

CUC

145+00 146+00 147+00 148+00 149+00

13"X24"X24" PULL BOX
145+86.0; 06.0' LT

3#6/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

DETAIL I 102
3" SCH. 80

13"X24"X24" PULL BOX
146+85.3; 0.06.0' RT

101
3"SCH. 40

3#2/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

3" INSTALLED
2' BACK OF CURB

3#2/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

3" INSTALLED
2' BACK OF CURB

112
13"X24"X24" PULL BOX
145+86.0; 39.5' RT

101
3#2/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

108 112
13"X24"X24" PULL BOX
3#8/1#8LTP CABLE
146+15.0; 58.5' RT

#5939
EXISTING LIGHT POLE
TO REMAIN IN SERVICE
RETROFIT TO LED/
CIRCUIT UPGRADE BY
CITY FORCES
146+14.8; 63.8' RT

CAUTION
UG GAS
IN PROXIMITY

3#2/1#8LTP CABLE
CIR.T46S-C
INSTALLED IN CONDUIT

112
13"X24"X24" PULL BOX
146+85.2; 40.0' RT

112
13"X24"X24" PULL BOX
146+50.0; 58.0' RT

S
1

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

SCALE, FEET 0 30

SHEET 5 OF 12

PROJECT NO: 2415-00-70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN - MONOTUBE MAST ARM	SHEET 88	E

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

INSTALL PEDESTAL BASE (ITEM 657.0100) ON ALL TYPE 1 BASES

17"X30"X24" PULL BOX 112
152+25.0; 46.0' LT

EXISTING LIGHT POLE (REMOVAL BY CITY) BASE BY CONTRACTOR
152+30.6; 05.5' LT

17"X30"X27" PULL BOX 112
152+25.0; 05.5' LT

#3902
SP (S40-1713)
TYPE 10 BASE
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE Ⓘ MEMBER ARMS
2-AMERICAN ELECTRIC ATBM-H-D2
3"PVC TO NEW PULL BOX
152+20.0; 05.5' LT

REMOVE EXIST. BASE

112
17"X30"X24" PULL BOX
152+43.0; 62.0' LT

109
2" TO NEW TYPE I SIGNAL BASE
152+44.0; 56.0' LT

#3938
2-AMERICAN ELECTRIC
ATBM-D-D2
149+45.5; 00.0'

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
149+53.0; 00.0'

#3916
2-AMERICAN ELECTRIC
ATBM-D-D2
150+82.5; 05.0'

EXISTING LIGHT POLE (REMOVAL BY CITY) BASE BY CONTRACTOR
150+91.5; 00.0'

WEPCO WP

W. HOWARD AVE.

WEPCO

CAUTION WEPCO OH

#6002
SP (S40-1712)
900MHZ SYSTEM
BY CITY Ⓛ
TYPE 10 BASE
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC ATBM-H-D2
152+93.5; 61.5' LT

112
17"X30"X24"PULL BOX
152+93.5; 60.8' LT

EXISTING LIGHT POLE BASE BY CONTRACTOR (REMOVAL BY CITY)

125A
TRAFFIC
2-3"PVC TO STUBS
17"X30"X24"PULL BOX
153+31.0; 62.0' LT

109
2" TO NEW TYPE I SIGNAL BASE
153+36.0; 56.0' LT

DETAIL I 102 2-3" SCH.80

101
2-3" SCH.40

112
17"X30"X18" VAULT
153+59.0; 39.5' LT

REMOVE EXIST. BASE

#3878
SP (S40-1711)
2-AMERICAN ELECTRIC ATBM-H-D2
TYPE 10 BASE
TYPE 10 POLE
153+64.0; 06.0' RT

17"X30"X24"PULL BOX
153+60.0; 05.0' RT

EXISTING LIGHT POLE (REMOVAL BY CITY) BASE BY CONTRACTOR
153+50.0; 05.0' RT

109
2" TO NEW TYPE I SIG. BASE
153+59.0; 39.6' LT

REMOVE EXIST. BASE

S. 60th

13"X24"X24" PULL BOX 112
150+97.0; 0.09.0' LT

DETAIL I 102 3" SCH.80

112 13"X24"X24" PULL BOX
151+51.5; 0.096.0' RT

150+00

151+00

152+00

153+00

DETAIL C 100
3" INSTALLED 2' BACK OF CURB

3#2/1#8LTP CABLE CIR.T46S-C INSTALLED IN CONDUIT

DETAIL C 100
3" INSTALLED 2' BACK OF CURB

13"X24"X24" PULL BOX
146+85.3; 0.06.0' RT

3#2/1#8LTP CABLE CIR.T46S-C INSTALLED IN CONDUIT

DETAIL C 100
3" INSTALLED 2' BACK OF CURB

2" PVC TO NEW TYPE I 109 SIGNAL BASE
152+36.0; 47.5' RT

2" PVC TO NEW TYPE I 109 SIGNAL BASE
152+36.0; 47.5' RT

101
17"X30"X24"PULL BOX
152+25.0; 40.0' RT

REMOVE EXISTING SIGNAL BASE
INSTALL TYPE I BASE W/2" PVC 109
152+48.0; 60.0' RT

112
17"X30"X24"PULL BOX
152+48.5; 66.0' RT

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
152+87.0; 57.5' RT

#5916
SP (S40-1714)
Ⓕ TYPE 10 BASE
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC ATBM-H-D2
3"PVC TO NEW PULL BOX
152+87.0; 65.0' RT

DETAIL I 102 2-3" SCH.80

101
2-3" SCH.40

DETAIL I 102 2-3" SCH.80

112
17"X30"X24"PULL BOX
152+87.0; 60.5' RT

DETAIL I 102 2-3" SCH.80

17"X30"X24"PULL BOX
153+59.6; 40.0' RT

DETAIL I 102 2-3" SCH.80

101
2-3" SCH.40

REMOVE EXIST. SIGNAL BASE

2" TO 109 NEW TYPE I SIGNAL BASE
153+50.0; 47.5' LT

WEPCO WP
EXIST. SIG. STD.
2-2"PVC TO NEW PULL BOX

112
17"X30"X24"PULL BOX
153+35.0; 60.0' LT

3"PVC TO UNIT

3"PVC

3"

25' ARM

20' ARM

CUC

TEXAS

SCALE, FEET 0 30

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- EVP DETECTOR
- Ⓑ - CONNECT TO BLACK CABLE
- Ⓡ - CONNECT TO RED CABLE
- SP (S40-XXXX) - MONOTUBE STRUCTURE NO.

POLE ADDRESS
TRAFFIC
ADDRESS LOCATION
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

C.O.M. SIGNAL
NW573-1

SHEET 6 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 89	E

FILE NAME : W:\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415–00–00)\s60th St. – Cold Spring to Morgan Conduit FINAL.dgn PLOT DATE : 27–JAN–2017 11:57 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

2

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

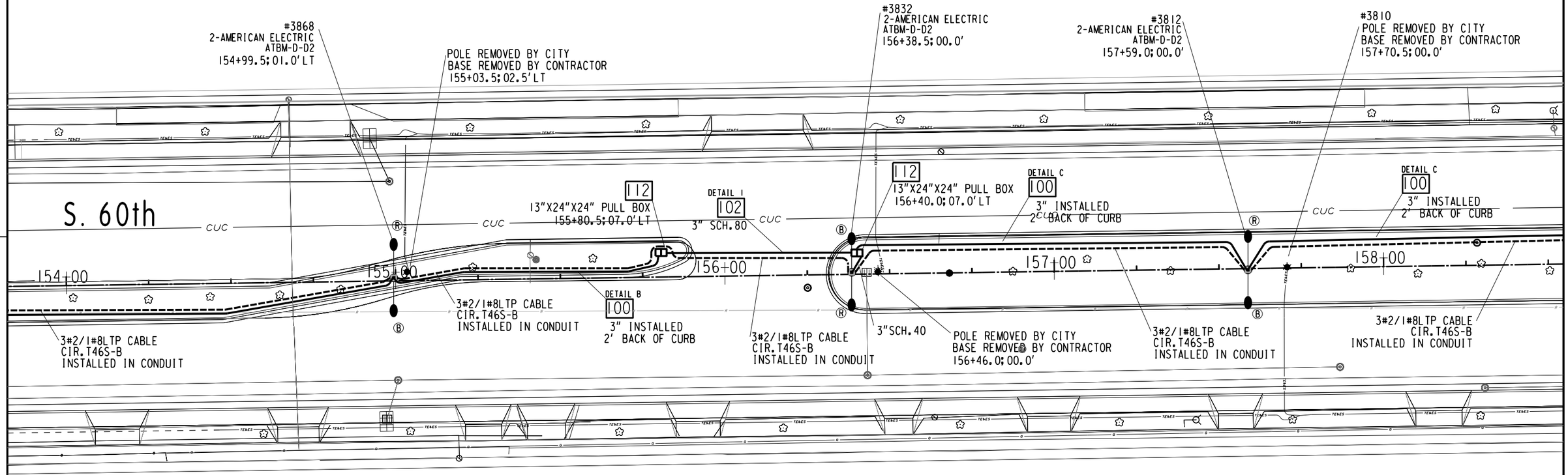
CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

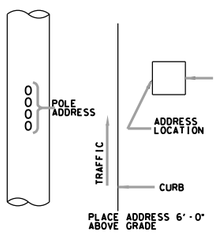
ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

N



LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE



SCALE, FEET 0 30

SHEET 7 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 90	E

FILE NAME : W:\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415–00–00)\s60th St. – Cold Spring to Morgan Conduit FINAL.dgn PLOT DATE : 27–JAN–2017 11:17 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

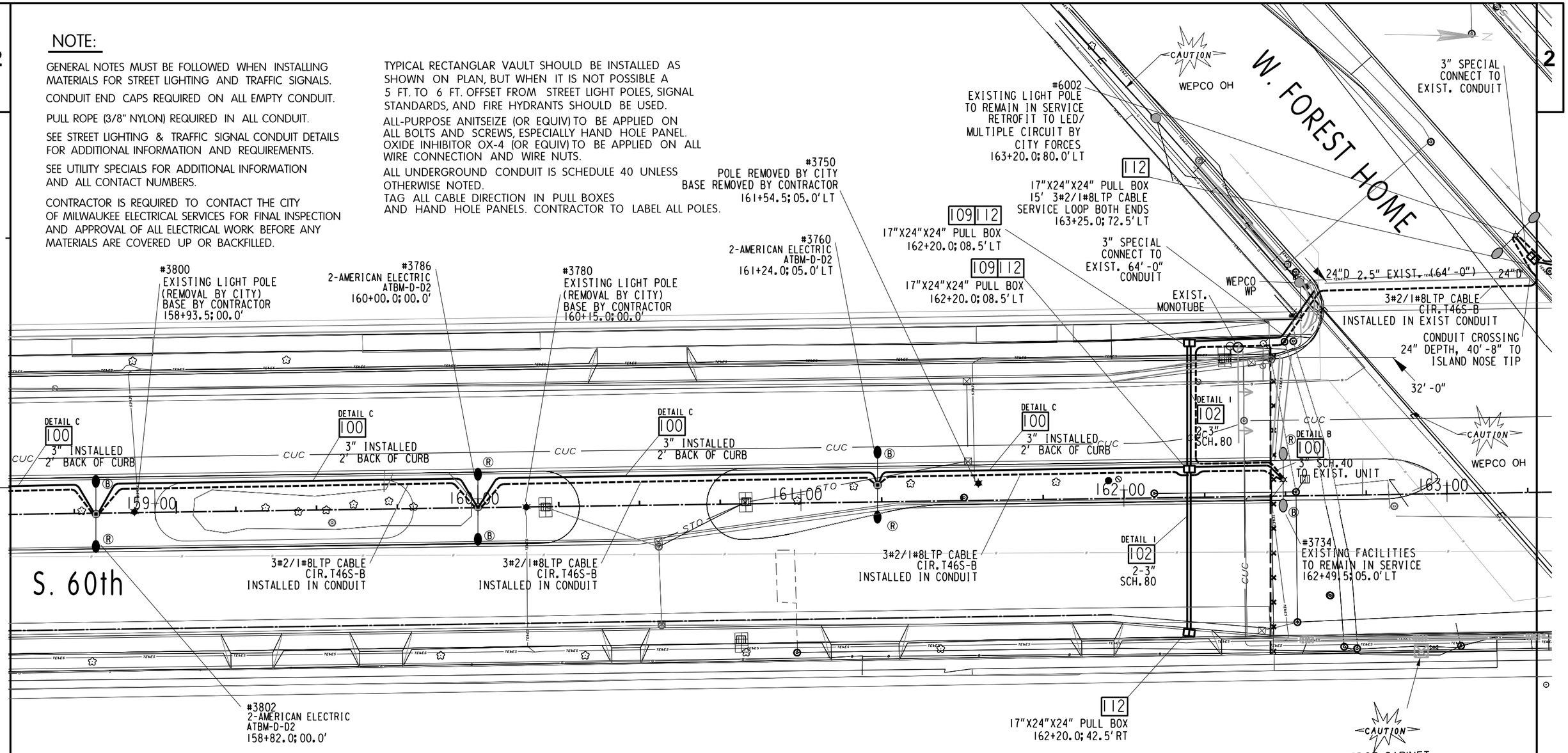
SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

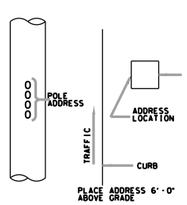
ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.
TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.



LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE



SCALE, FEET 0 30

SHEET 8 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 91	E

FILE NAME : W:\bes\pavings\2017work\s60th St – Cold Spring to Morgan (2415–00–00)\s60th St. – Cold Spring to Morgan Conduit FINAL.dgn PLOT DATE : 27–JAN–2017 13:19 PLOT BY : lhickm PLOT NAME : PLOT SCALE : 30.000000:1.000000

WISDOT/CADDS SHEET 42

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

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ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

3" SPECIAL CONNECT TO EXIST. CONDUIT

CAUTION UG GAS IN PROXIMITY

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN EXIST CONDUIT

3" SPECIAL CONNECT TO EXIST. CONDUIT

40'-8"

24"D

2.5" EXIST.

24"D

40'-0"

EXISTING 2.5" CONDUIT EXTENDS 3'-8" BACK OF N. CURB

16'-6"

10'-0"

100'-0"

3" SPECIAL CONNECT TO EXIST. CONDUIT BOTH ENDS

CUC

2-3" EXIST.

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN EXIST CONDUIT

51'-0"

7'-0"

164+00

#3700 EXISTING LIGHT POLE TO REMAIN IN SERVICE RETROFIT TO LED/ MULTIPLE CIRCUIT BY CITY FORCES 165+05.0; 7.5'LT

CAUTION UG GAS IN PROXIMITY

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN NEW 3" CONDUIT SPECIAL

3" SPECIAL CONNECT TO EXIST. CONDUIT

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN EXIST CONDUIT

2" EXIST.

24"D

165+00

112 17"X30"X24" PULL BOX 165+8.0; 45.0'LT

112 17"X30"X24" PULL BOX 22' 3#2/1#8LTP CABLE SERVICE LOOP BOTH CONDUCTORS 165+22.5; 06.0'RT

3" SPECIAL

CAUTION 54" WATER

CAUTION WEPCO OH

CAUTION WEPCO OH

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN CONDUIT

166+00

#3678 EXISTING LIGHT POLE (REMOVAL BY CITY) BASE BY CONTRACTOR 166+13.5; 08.0'RT

#3674 2-AMERICAN ELECTRIC ATBM-D-D2 166+42.0; 07.5'RT

DETAIL B 100 3" INSTALLED 2' BACK OF CURB

DETAIL B 100 3" INSTALLED 2' BACK OF CURB

S. 60

CAUTION 54" WATER

POLE ADDRESS

ADDRESS LOCATION

TRAFFIC

CURB

PLACE ADDRESS 6'-0" ABOVE GRADE

W. FOREST HOME AVE.

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE

SCALE, FEET 0 30

SHEET 9 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 92	E

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

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TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. LABEL ALL POLES.

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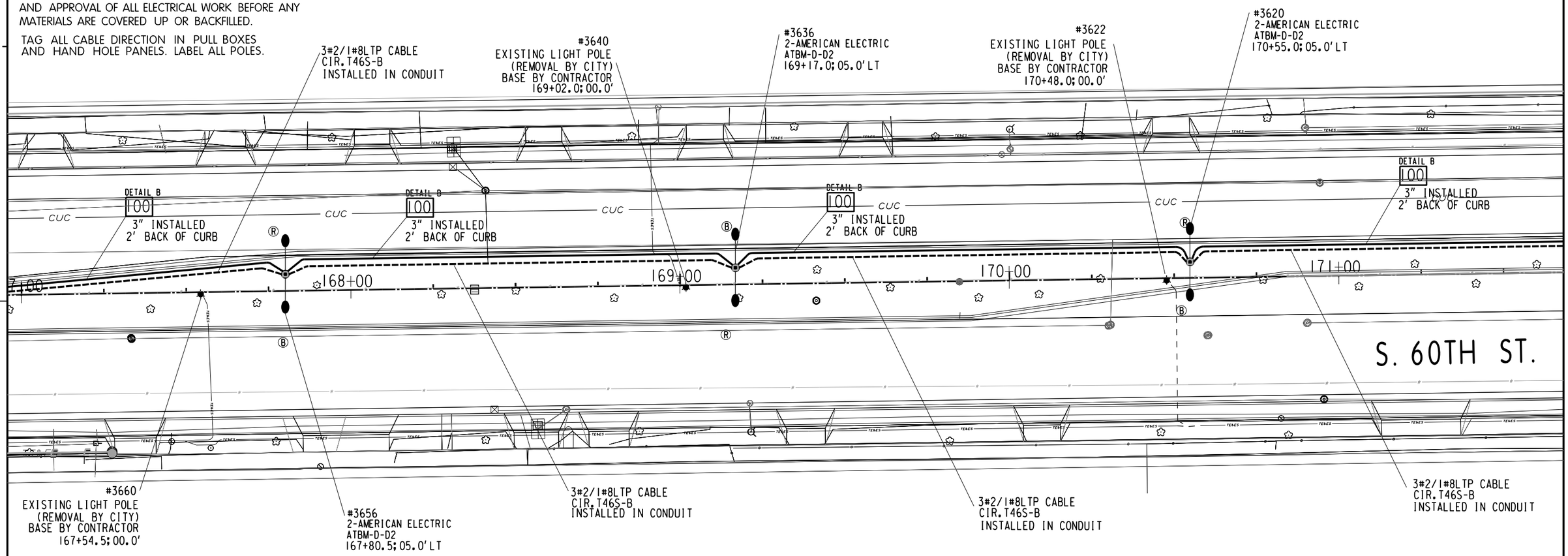

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
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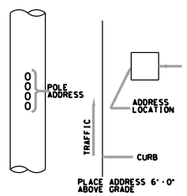
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE



SCALE, FEET 0 30

SHEET 10 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 93	E

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

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ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

N

W. WARNIMONT

S. 60TH ST.

AV.

112 13"X24"X24" PULL BOX 172+25.0; 59.0' LT

112 13"X24"X24" PULL BOX 171+96.0; 41.5' LT

#3600 2-AMERICAN ELECTRIC ATBM-D-D2 171+90.0; 06.0' LT
POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR 171+94.0; 05.5' LT

#6002 EXISTING LIGHT POLE TO REMAIN IN SERVICE LED UPGRADE BY CITY

112 13"X24"X24" PULL BOX 172+62.0; 58.5' LT

3#2/1#8LTP CABLE CIR.T46S-B TO UNIT #6002 CONNECTION BY CITY

112 13"X24"X24" PULL BOX 172+92.5; 39.5' LT

#3578 2-AMERICAN ELECTRIC ATBM-D-D2 172+96.5; 06.0' RT

(REMOVAL BY CITY) EXISTING LIGHT POLE BASE REMOVED BY CONTRACTOR 173+00.0; 00.0'

DETAIL I 102 2-3" SCH.80

101 2-3" SCH.40

112 13"X24"X24" PULL BOX 171+96.0; 06.0' LT

CAUTION 54" WATER

DETAIL I 102 2-3" SCH.80

DETAIL B 100 3" INSTALLED 2' BACK OF CURB

174+00

175+00

176+00

DETAIL B 100 3" INSTALLED 2' BACK OF CURB

DETAIL I 102 2-3" SCH.80

112 13"X24"X24" PULL BOX 171+96.0; 40.0' RT

DETAIL I 102 2-3" SCH.80

3#2/1#8LTP CABLE CIR.T46S-B INSTALLED IN CONDUIT

112 13"X24"X24" PULL BOX 172+92.5; 06.0' RT

112 13"X24"X24" PULL BOX 175+66.5; 40.0' RT SERIES CIR.

101 2-3" SCH.40

112 13"X24"X24" PULL BOX 172+29.5; 58.5' RT

112 13"X24"X24" PULL BOX 172+63.5; 60.5' RT

DETAIL I 102 3" SCH.80

112 13"X24"X24" PULL BOX 172+86.5; 40.0' RT SERIES CIR.

101 2-3" SCH.40

2.5" SCH.40 (SERIES CIR.) CAPPED UG XFMR. BOX-OUT WELL CABLE/CONNECTION BY CITY FORCES

DETAIL B 100 2.5" SCH.40 2' BACK OF CURB SERIES CIR.

3#4/1#8LTP CABLE CIR.T46S-B INSTALLED IN CONDUIT

DETAIL B 100 2.5" SCH.40 2' BACK OF CURB SERIES CIR.

(REMOVAL BY CITY) EXISTING LIGHT POLE BASE BY CONTRACTOR 174+48.5; 00.0'

#3558 2-AMERICAN ELECTRIC ATBM-D-D2 174+44.0; 05.0' RT

DETAIL B 100 2.5" SCH.40 2' BACK OF CURB SERIES CIR.

3#4/1#8LTP CABLE CIR.T46S-B INSTALLED IN CONDUIT

CAUTION UG GAS

#3538 2-AMERICAN ELECTRIC ATBM-D-D2 175+99.0; 03.0' LT

(REMOVAL BY CITY) EXISTING LIGHT POLE BASE BY CONTRACTOR 175+95.5; 00.0' XT

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

SCALE, FEET 0 30

SHEET 11 OF 12

PROJECT NO: 2415–00–70	HWY: S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 94	E

LEGEND

- EXISTING STREET LIGHT POLES
- TYPE 5 REINFORCED BASE TRANSFORMER PEDESTAL BASE 2-2#12 UF INTERNAL RISERS TYPE 5A POLE W/2-8' UPSWEEP ARMS
- TYPE 5 CONCRETE BASE TRANSFORMER PEDESTAL BASE 2#12 UF INTERNAL RISER TYPE 5A POLE W/6' UPSWEEP ARM
- TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
- EXISTING SIGNAL STANDARD
- PULL BOX TO BE INSTALLED
- TRAFFIC CONTROL CABINET
- STREET LIGHTING ENCLOSURE
- PVC CONDUIT (SCH.40 UNLESS NOTED)
- TRAFFIC SIGNAL BASE TO BE INSTALLED
- MONOTUBE MAST BASE TO BE INSTALLED
- XX' ARM - MONOTUBE MAST ARM
- EVP DETECTOR
- (B) - CONNECT TO BLACK CABLE
- (R) - CONNECT TO RED CABLE
- SP (S40-XXXX) - MONOTUBE STRUCTURE NO.

C.O.M. SIGNAL NW556-1

W. MORGAN AVE.

S. 60TH ST.

177+00 178+00 179+00 180+00 181+00

17"X30"X24" PULL BOX 112
15' SERVICE LOOP COILED
3#4/1#8LTP CABLE
179+39.0; 76.0' LT

17"X30"X24" PULL BOX 112
178+99.0; 76.5' LT

INSTALL TYPE I BASE W/2" PVC PULL BOX TO BASE 109
178+97.0; 57.0' LT

REMOVE EXISTING SIGNAL BASES
INSTALL TYPE I BASE W/2" PVC 109
178+83.5; 47.5' LT

17"X30"X24" PULL BOX 112
178+79.0; 39.5' LT

#3502
SP (S40-1717)
TYPE 10 BASE
(I) TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC
ATBM-H-D2
178+74.5; 06.5' LT

3#4/1#8LTP CABLE
CIR.T46S-B
INSTALLED IN CONDUIT

CONNECT TO EXIST. CONDUIT

2-3" SCH.80 SPECIAL

POLE REMOVED BY CITY
BASE REMOVED BY CONTRACTOR
#6004 SP (S40-1716)
TYPE 10 BASE (L)
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC
ATBM-H-D2
179+40.0; 70.5' RT

112 17"X30"X24" PULL BOX
179+91.5; 05.5' RT

112 17"X24"X24" PULL BOX
179+69.5; 75.0' LT

109 2"PVC TO NEW TYPE I SIGNAL BASE
179+71.0; 59.5' LT

#3480
SP (S40-1715)
TYPE 10 BASE (C)
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC
ATBM-H-D2
179+98.5; 05.5' RT

REMOVE EXISTING SIGNAL BASES

20' ARM

2-3" SCH.80 SPECIAL

101 2-3" SCH.40

2-3" SCH.40 101

2"PVC TO TYPE I SIGNAL BASE 109
179+88.0; 47.0' LT

DETAIL B 101 3" INSTALLED 2' BACK OF CURB

DETAIL B 101 3" INSTALLED 2' BACK OF CURB

DETAIL B 101 2.5" INSTALLED 2' BACK OF CURB

DETAIL I 102 2-3" SCH.80

CAUTION UG GAS 3" SCH.40 TO ES MANHOLE #6882
179+2.4; 44.6' RT

54" WATER

3" PVC

3#4/1#8LTP CABLE
CIR.T60S-C
INSTALLED IN CONDUIT

3#4/1#8LTP CABLE
CIR.T60S-C
INSTALLED IN CONDUIT

25' ARM

17"X30"X24"PULL BOX
179+92.5; 04.0' RT

13"X24"X24"PULL BOX
180+81.0; 02.0' RT

109 INSTALL TYPE I BASE W/2" PVC
179+87.5; 46.5' RT

112 17"X30"X24"PULL BOX
179+92.5; 46.0' RT

17"X30"X24" PULL BOX
178+79.3; 05.0' LT

#3500
(REMOVAL BY CITY)
EXISTING LIGHT POLE
BASE BY CONTRACTOR
178+84.8; 05.0' LT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
BASE BY CONTRACTOR
179+90.0; 10.0' RT

13"X24"X24" PULL BOX 112
178+68.0; 40.0' RT

#3520
2-AMERICAN ELECTRIC
ATBM-D-D2
177+41.5; 03.0' LT

#3520
(REMOVAL BY CITY)
EXISTING LIGHT POLE
BASE BY CONTRACTOR
177+45.5; 00.0'

2.5" SCH.40
2' BACK OF CURB
FOR SERIES CIR.
CIR. SP-9(WHITE)/SP-10(BLACK)

3#4/1#8LTP CABLE
CIR.T46S-B
INSTALLED IN CONDUIT

17"X30"X24" PULL BOX 112
178+78.5; 40.0' RT

2" SCH.40 TO NEW TYPE I SIG. BASE 109
178+83.0; 47.5' RT

EXIST. CALL BOX
REMOVE EXISTING SIGNAL BASES
INSTALL TYPE I BASE W/ 2" PVC TO PULL BOX 109
178+99.0; 58.0' RT

112 17"X30"X24" PULL BOX
179+00.0; 69.5' RT

2-3" SCH.80 SPECIAL

#5920
SP (S40-1716)
(F) TYPE 10 BASE
TYPE 10 POLE
2-2#12UF W/G INTERNAL RISER
2-8' STEEL SINGLE MEMBER ARMS
2-AMERICAN ELECTRIC
ATBM-H-D2
179+31.5; 71.5' RT

CONNECT TO EXIST. CONDUIT

REMOVE EXISTING SIGNAL BASES

109 INSTALL TYPE I BASE W/2" PVC
179+73.5; 57.5' RT

3#4/1#8LTP CABLE
CIR.T60S-C
INSTALLED IN CONDUIT

112 17"X30"X24"PULL BOX
179+72.5; 86.5' RT

125A PRECAST CONCRETE PAD
SIGNAL CABINET
2-3" SCH.40 CABINET TO PULL BOX
179+74.; 87.5' RT

3#4/1#8LTP CABLE
CIR.T60S-C
INSTALLED IN CONDUIT

(REMOVAL BY CITY)
EXISTING LIGHT POLE
BASE BY CONTRACTOR
179+32.5; 61.5' RT

(REMOVAL BY CITY)
EXISTING SIGNAL CABINET
179+32.5; 67.0' RT

112 17"X30"X18" VAULT
15' SERVICE LOOP COILED & TAGGED
3#4/1#8LTP CABLE
179+31.0; 76.0' RT

POLE ADDRESS
ADDRESS LOCATION
TRAFFIC
CURB
PLACE ADDRESS 6'-0" ABOVE GRADE

SCALE, FEET 0 30

NOTE:

GENERAL NOTES MUST BE FOLLOWED WHEN INSTALLING MATERIALS FOR STREET LIGHTING AND TRAFFIC SIGNALS.

CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.

PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.

SEE STREET LIGHTING & TRAFFIC SIGNAL CONDUIT DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEE UTILITY SPECIALS FOR ADDITIONAL INFORMATION AND ALL CONTACT NUMBERS.

CONTRACTOR IS REQUIRED TO CONTACT THE CITY OF MILWAUKEE ELECTRICAL SERVICES FOR FINAL INSPECTION AND APPROVAL OF ALL ELECTRICAL WORK BEFORE ANY MATERIALS ARE COVERED UP OR BACKFILLED.

TYPICAL RECTANGLAR VAULT SHOULD BE INSTALLED AS SHOWN ON PLAN, BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.

ALL-PURPOSE ANITSEIZE (OR EQUIV) TO BE APPLIED ON ALL BOLTS AND SCREWS, ESPECIALLY HAND HOLE PANEL. OXIDE INHIBITOR OX-4 (OR EQUIV) TO BE APPLIED ON ALL WIRE CONNECTION AND WIRE NUTS.

ALL UNDERGROUND CONDUIT IS SCHEDULE 40 UNLESS OTHERWISE NOTED.

TAG ALL CABLE DIRECTION IN PULL BOXES AND HAND HOLE PANELS. CONTRACTOR TO LABEL ALL POLES.

INSTALL PEDESTAL BASE (ITEM 657.0100) ON ALL TYPE 1 BASES

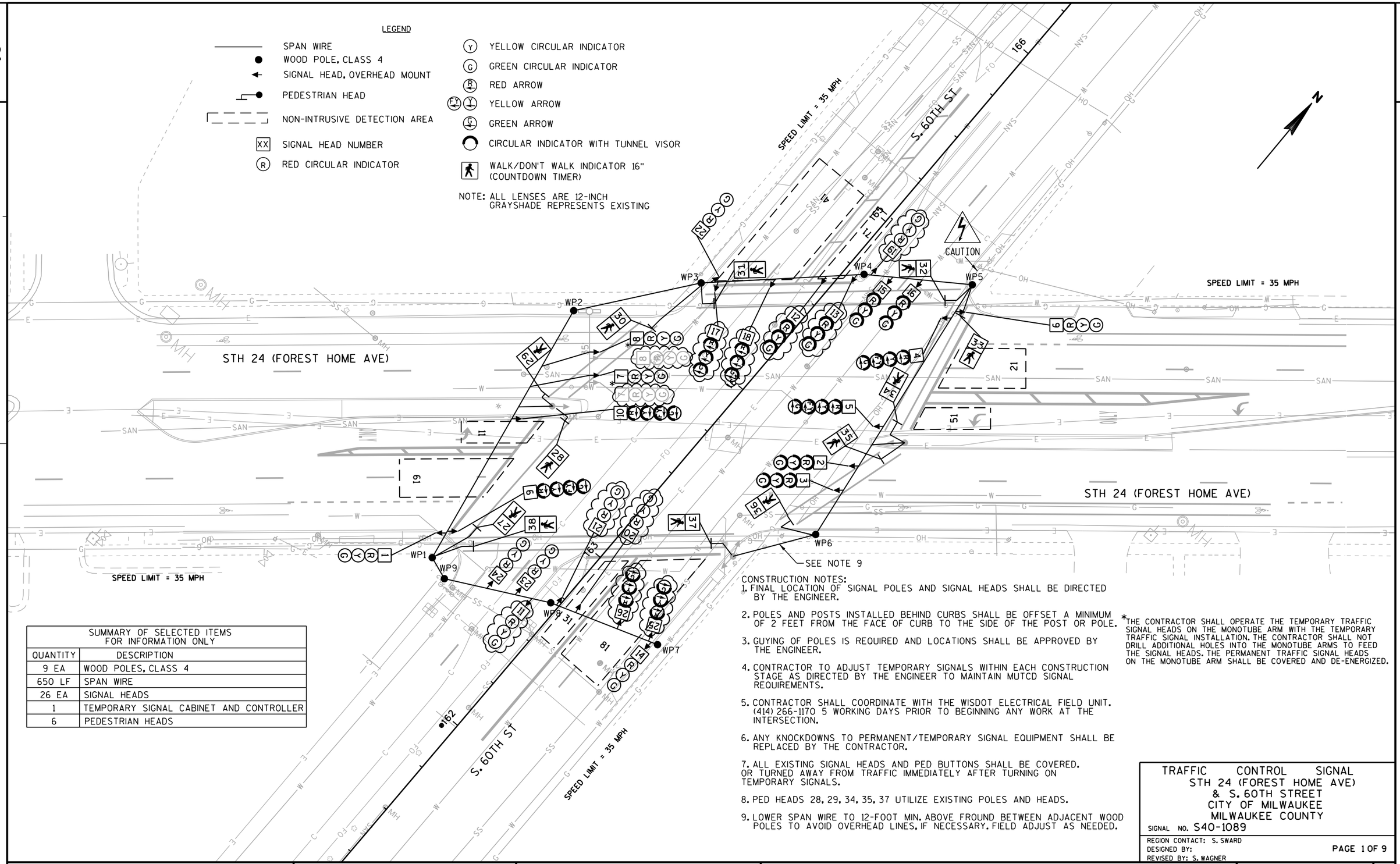
SHEET 12 OF 12

PROJECT NO: 2415-00-70	HWY:S. 60th ST.	COUNTY: MILWAUKEE	STREET LIGHTING & TRAFFIC SIGNAL PLAN	SHEET 95	E

LEGEND

- SPAN WIRE
- WOOD POLE, CLASS 4
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN HEAD
- NON-INTRUSIVE DETECTION AREA
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- CIRCULAR INDICATOR WITH TUNNEL VISOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
9 EA	WOOD POLES, CLASS 4
650 LF	SPAN WIRE
26 EA	SIGNAL HEADS
1	TEMPORARY SIGNAL CABINET AND CONTROLLER
6	PEDESTRIAN HEADS

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT. (414) 266-1170 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. ALL EXISTING SIGNAL HEADS AND PED BUTTONS SHALL BE COVERED. OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
8. PED HEADS 28, 29, 34, 35, 37 UTILIZE EXISTING POLES AND HEADS.
9. LOWER SPAN WIRE TO 12-FOOT MIN. ABOVE FROUND BETWEEN ADJACENT WOOD POLES TO AVOID OVERHEAD LINES, IF NECESSARY. FIELD ADJUST AS NEEDED.

*THE CONTRACTOR SHALL OPERATE THE TEMPORARY TRAFFIC SIGNAL HEADS ON THE MONOTUBE ARM WITH THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL NOT DRILL ADDITIONAL HOLES INTO THE MONOTUBE ARMS TO FEED THE SIGNAL HEADS. THE PERMANENT TRAFFIC SIGNAL HEADS ON THE MONOTUBE ARM SHALL BE COVERED AND DE-ENERGIZED.

TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

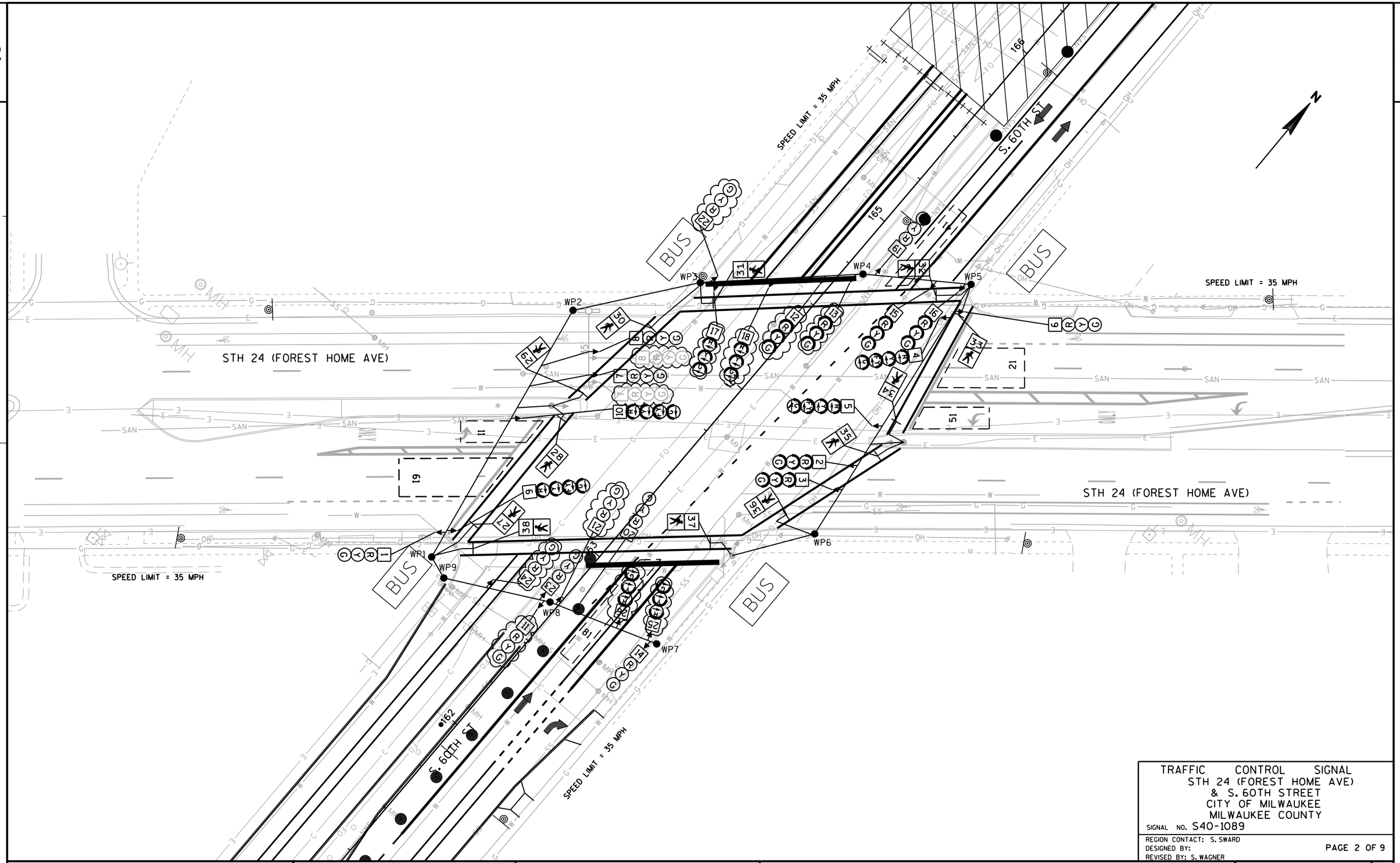
PAGE 1 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - PRECONSTRUCTION STAGE	SHEET 96 E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_TPRE.dgn PLOT DATE : 19-JAN-2017 08:38 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

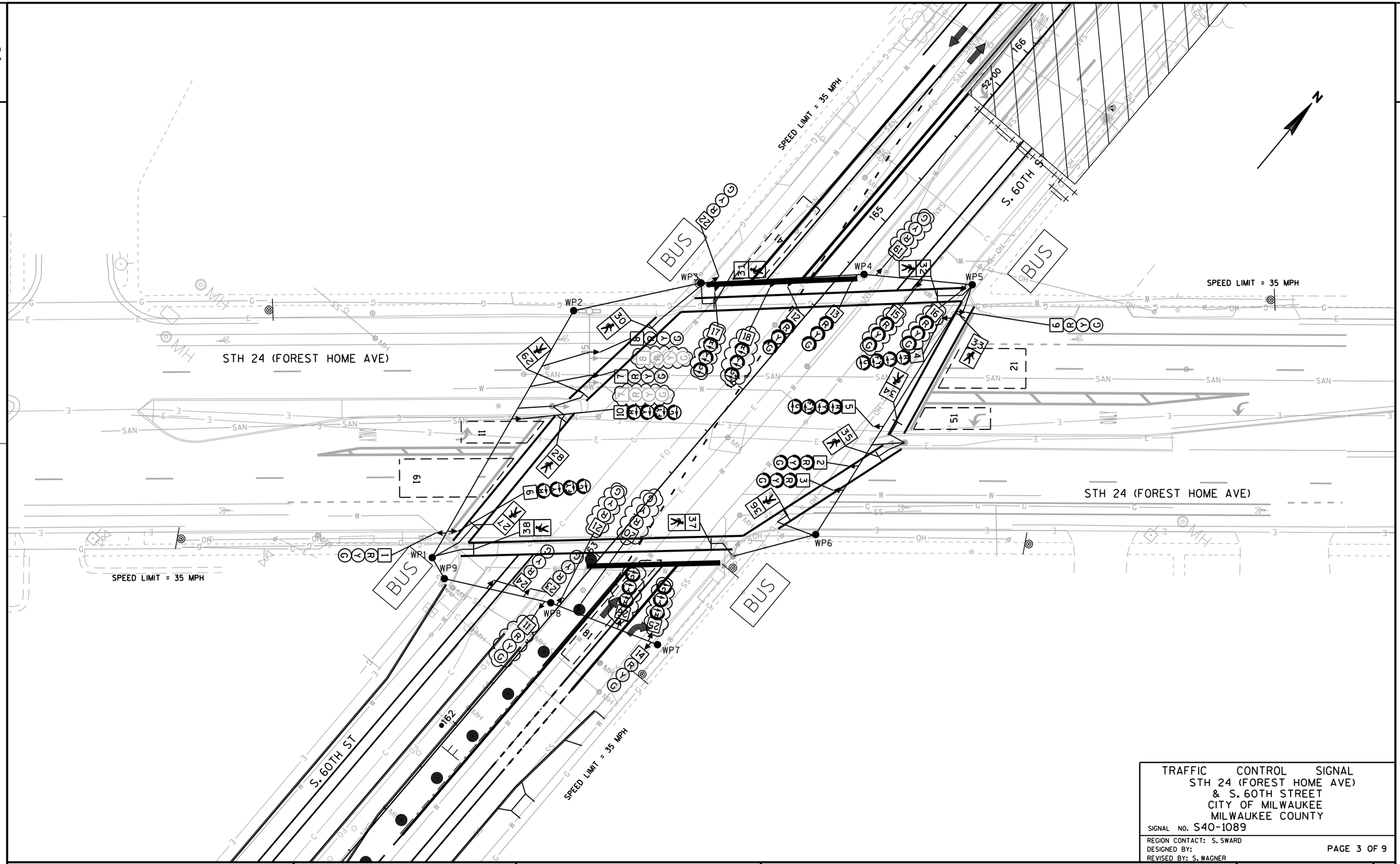
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 1A & 1B	SHEET 97	E

2



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

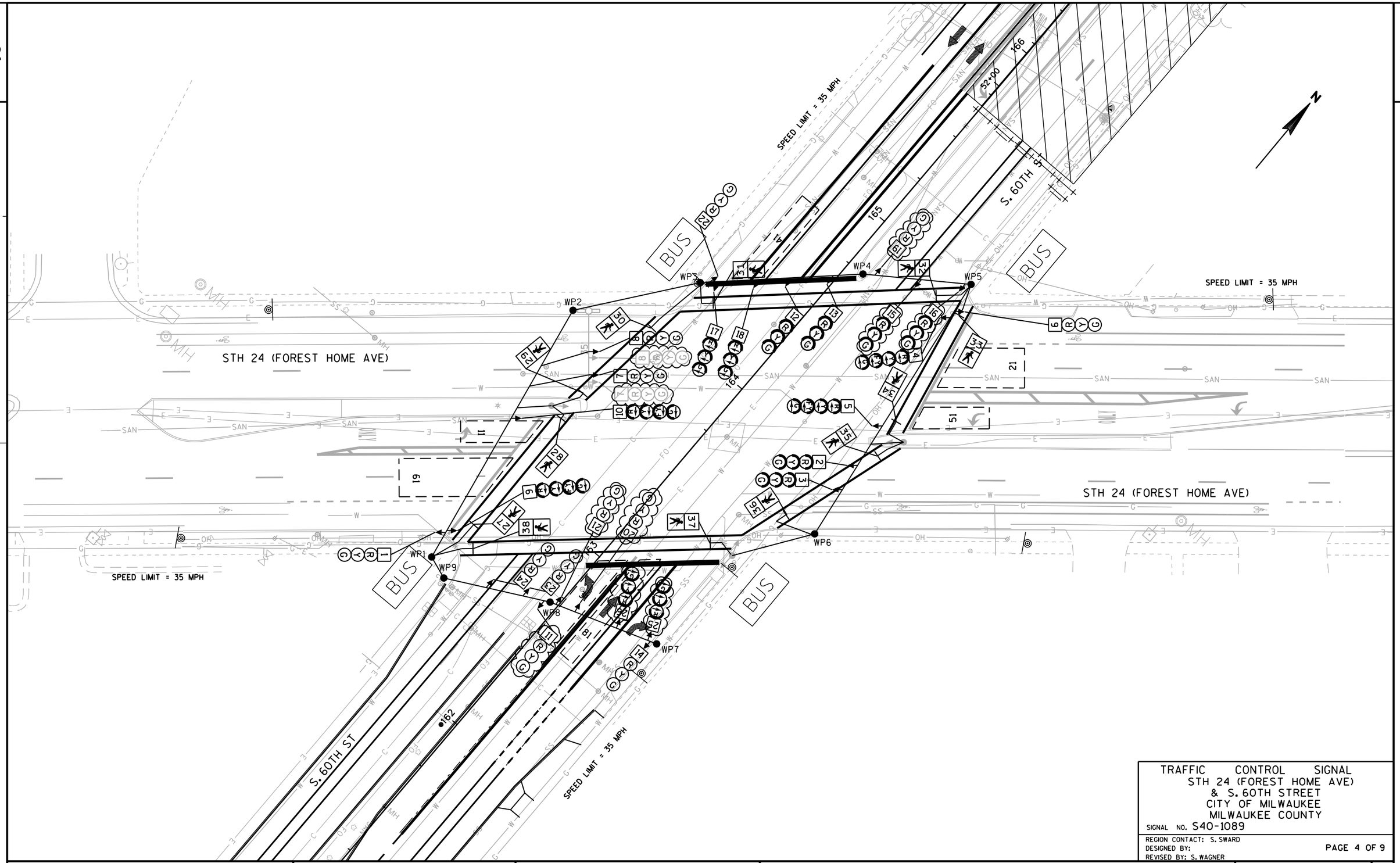
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 3 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 98	E

2



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

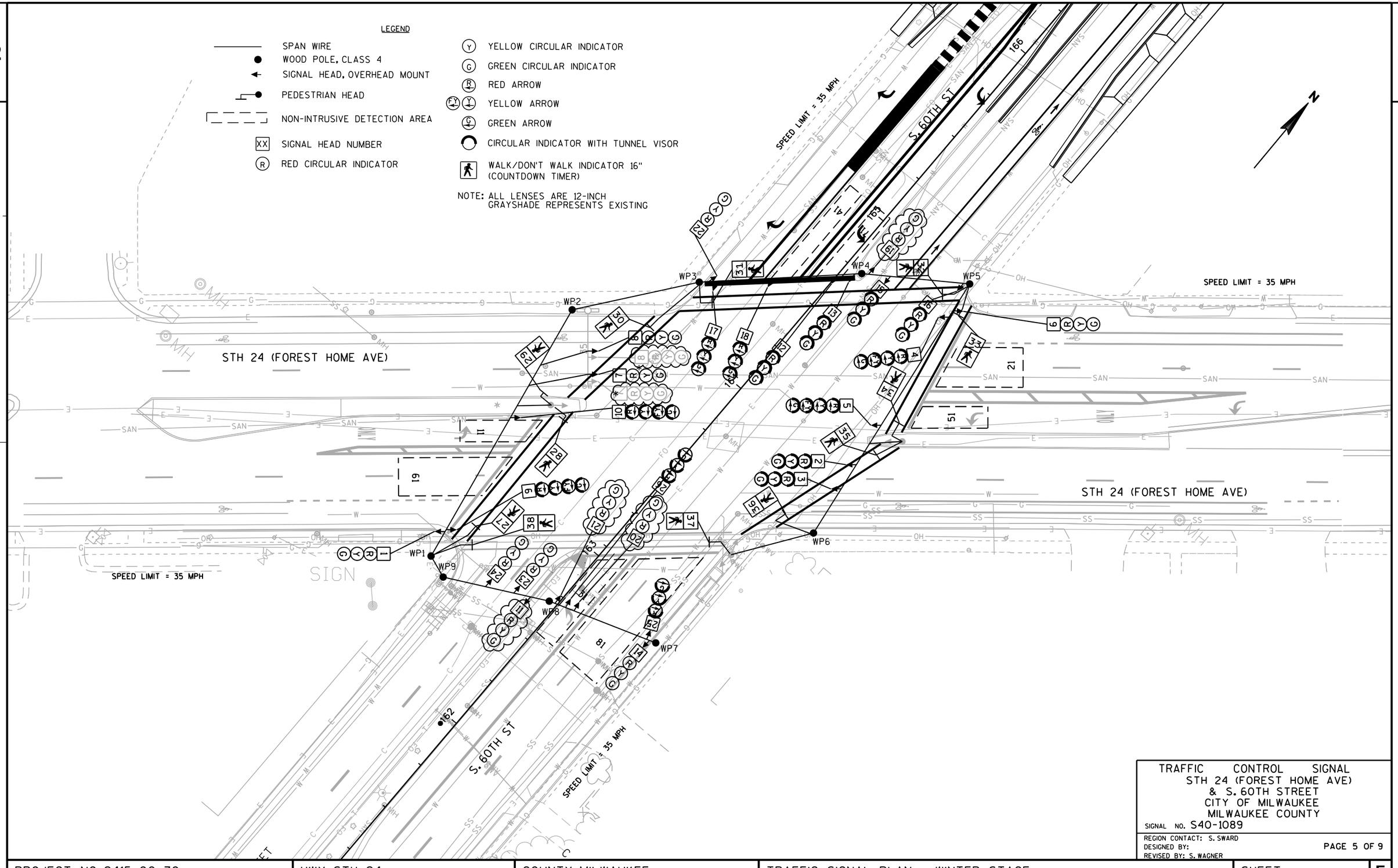
PAGE 4 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 99	E

LEGEND

- SPAN WIRE
- WOOD POLE, CLASS 4
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN HEAD
- NON-INTRUSIVE DETECTION AREA
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY)(Y) YELLOW ARROW
- (G) GREEN ARROW
- CIRCULAR INDICATOR WITH TUNNEL VISOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

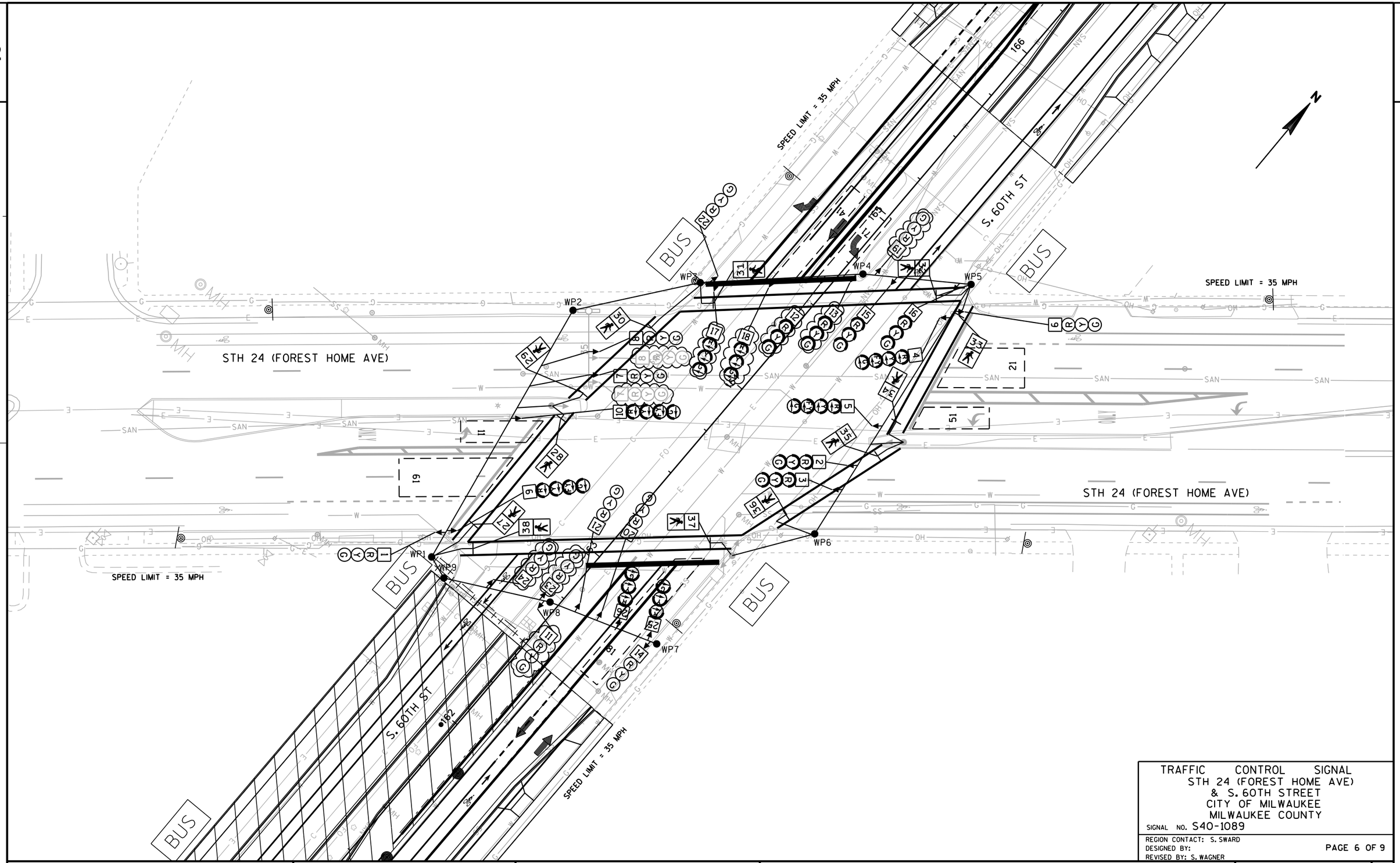
PAGE 5 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - WINTER STAGE	SHEET 100 E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_TSWIN.dgn PLOT DATE : 19-JAN-2017 08:38 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



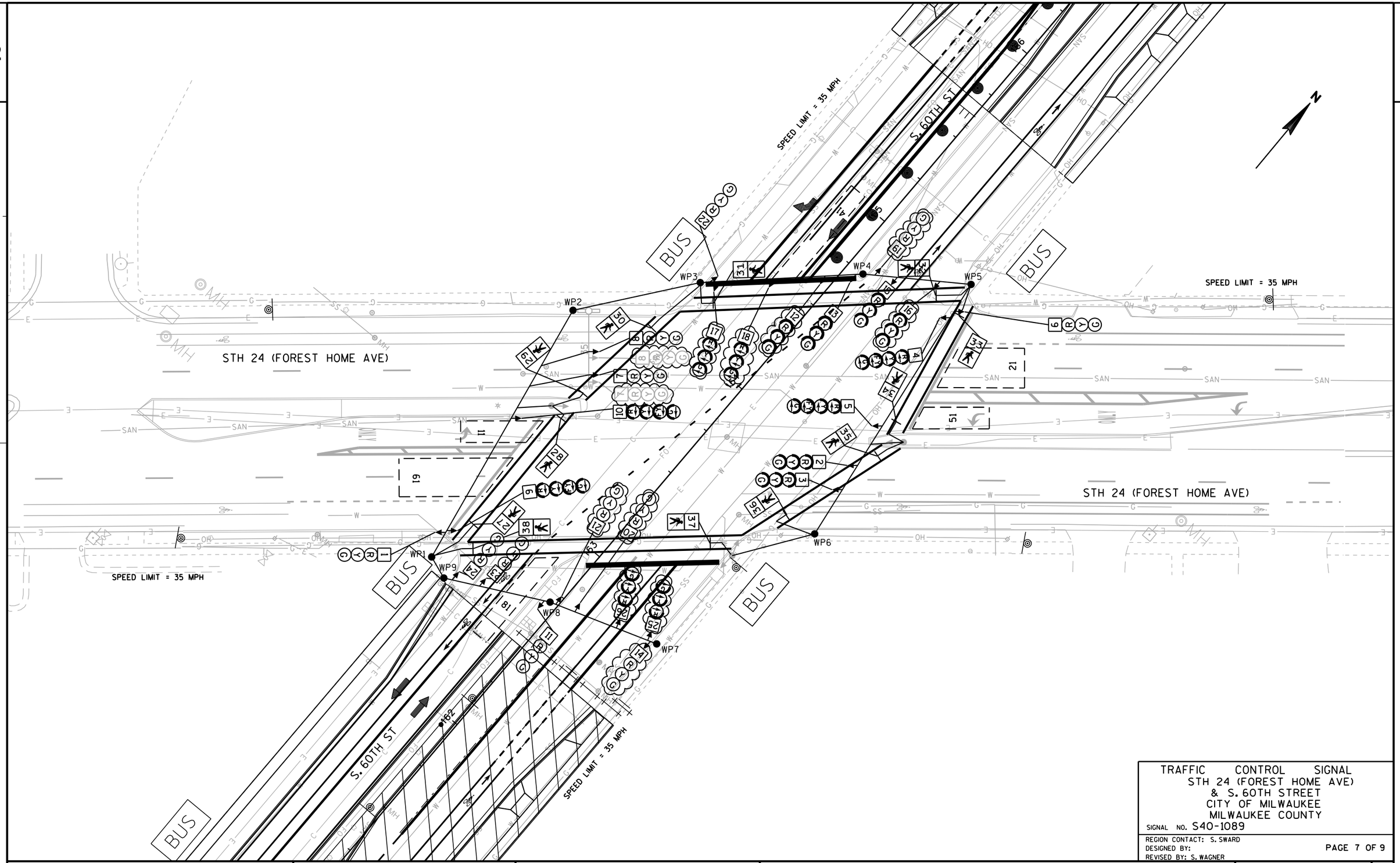
TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 6 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 3A & 3B	SHEET 101	E

2



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. S40-1089

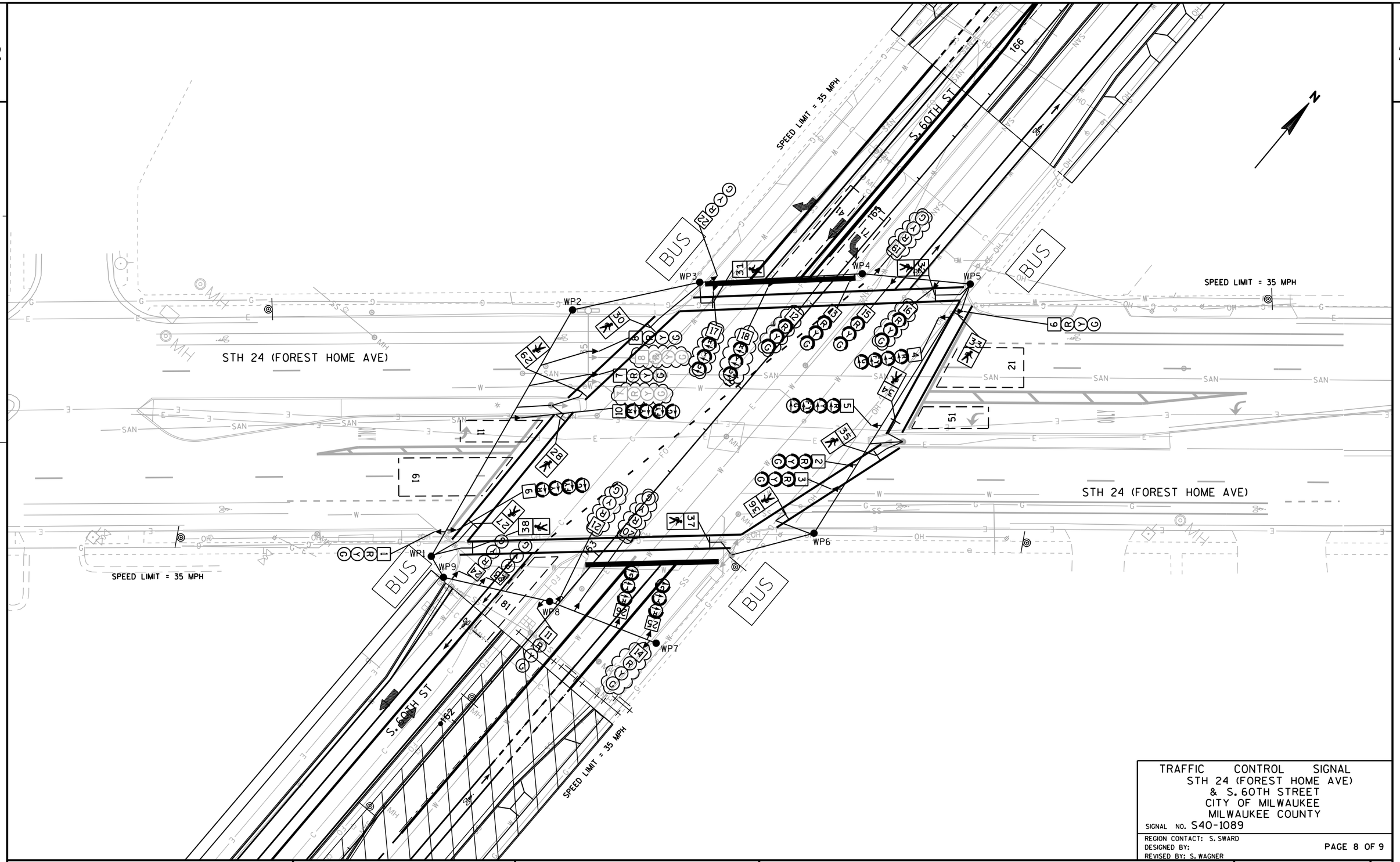
REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 7 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 4A	SHEET 102	E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_TSt4A.dgn PLOT DATE : 19-JAN-2017 08:38 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42



TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

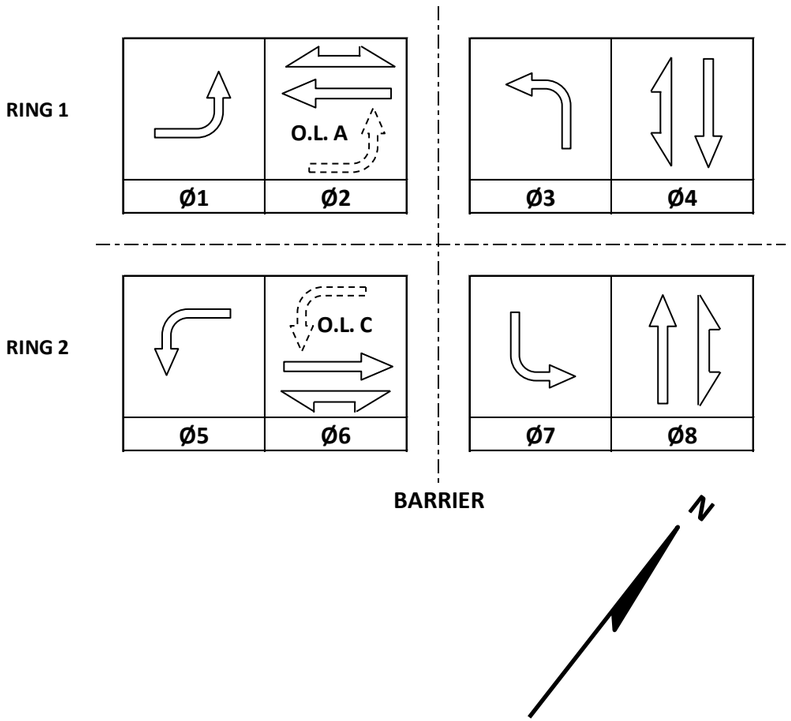
PAGE 8 OF 9

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN - STAGE 4B	SHEET 103	E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_TSt4B.dgn PLOT DATE : 19-JAN-2017 08:38 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5	-
Ø2	6, 7, 8	R
Ø3	16, 17	R ←
Ø4	18, 19, 20, 21, 22	R
Ø5	9, 10	-
Ø6	1, 2, 3	R
Ø7	23, 24	R ←
Ø8	11, 12, 13, 14, 15	R
Ø2P	29, 30	
Ø4P	25, 26, 27, 28	
Ø6P	35, 36	
Ø8P	31, 32, 33, 34	
OLA	4, 5	R ←
OLB		
OLC	9, 10	R ←
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
11		X			1	2				VIDEO	
21		X			2	2				VIDEO	
31		X			3	3				VIDEO	
41		X			4	4				VIDEO	
51		X			5	6				VIDEO	
71		X			7	7				VIDEO	
81		X			8	8				VIDEO	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

GENERAL NOTES:

1. DURING STAGES 1A, 1B, 2A, AND 4A, PHASE 3 & 7 IS OMITTED.
2. DURING STAGES 2B, 3A, AND 3B, PHASE 7 IS OMITTED.
3. DURING STAGE 4B, PHASE 3 IS OMITTED.
4 PHASE 1 & 5 ALWAYS LEAD WHEN ACTIVATED.

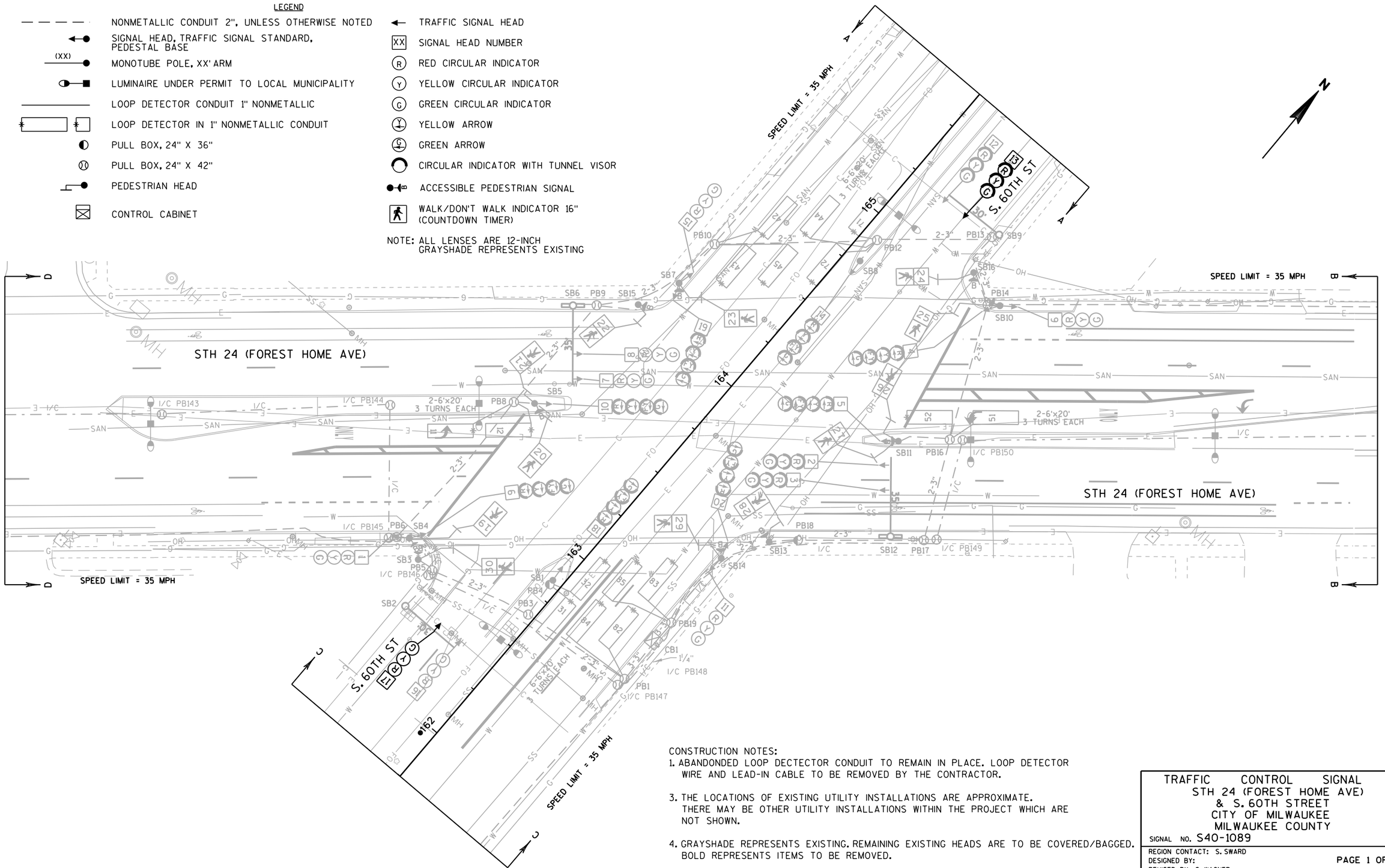
STH 24 (FOREST HOME AVE) & S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO: S40-1089
CONTROLLER TYPE: TEMP
DATE: JAN 2017 PAGE NO. 9 OF 9

FILE NAME : N:\SPO\Operations\Signals\Projects\2415-00-00 STH 24 - 60th St Local/TS1.pptm PLOT DATE : 1/23/2017 1:41 PM PLOT BY : SWARD, STEPHANIE PLOT NAME : _____ PLOT SCALE : 1:1

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE POLE, XX' ARM
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- PEDESTRIAN HEAD
- CONTROL CABINET
- TRAFFIC SIGNAL HEAD
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- CIRCULAR INDICATOR WITH TUNNEL VISOR
- ACCESSIBLE PEDESTRIAN SIGNAL
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. ABANDONDED LOOP DECTECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING. REMAINING EXISTING HEADS ARE TO BE COVERED/BAGGED. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

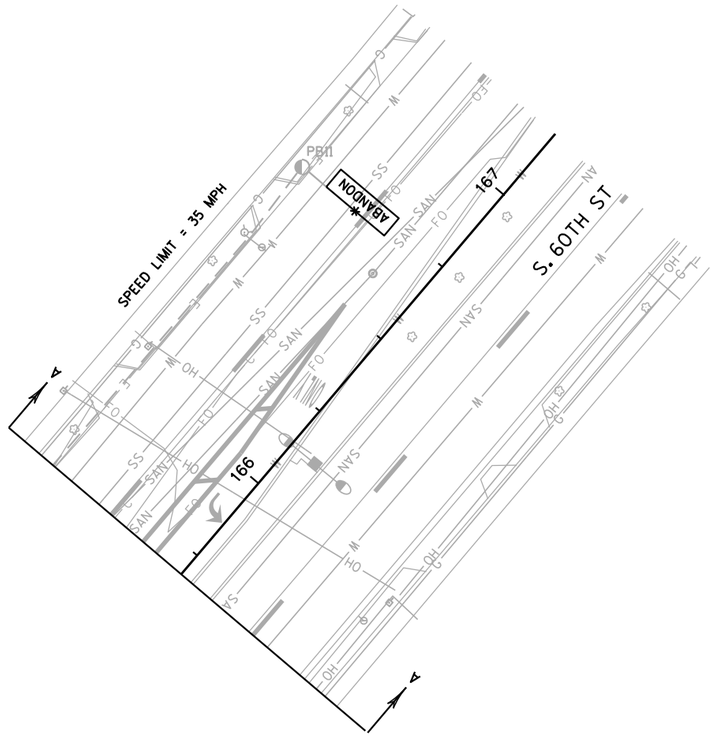
PAGE 1 OF 3

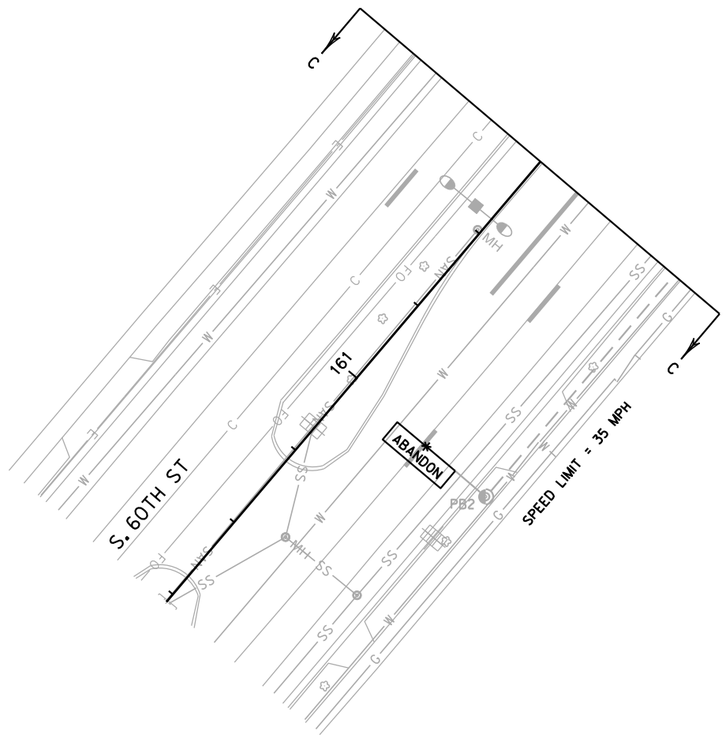
PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 105 E

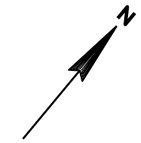
FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_rem_pg1.dgn PLOT DATE : 20-JAN-2017 07:36 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2







TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

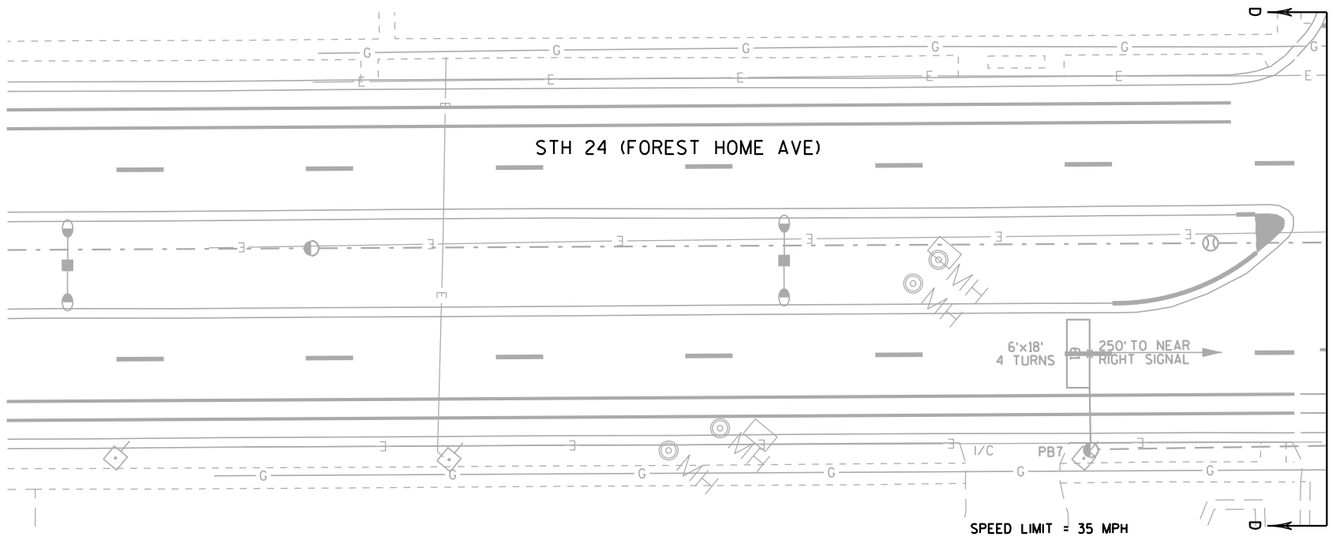
SIGNAL NO. S40-1089

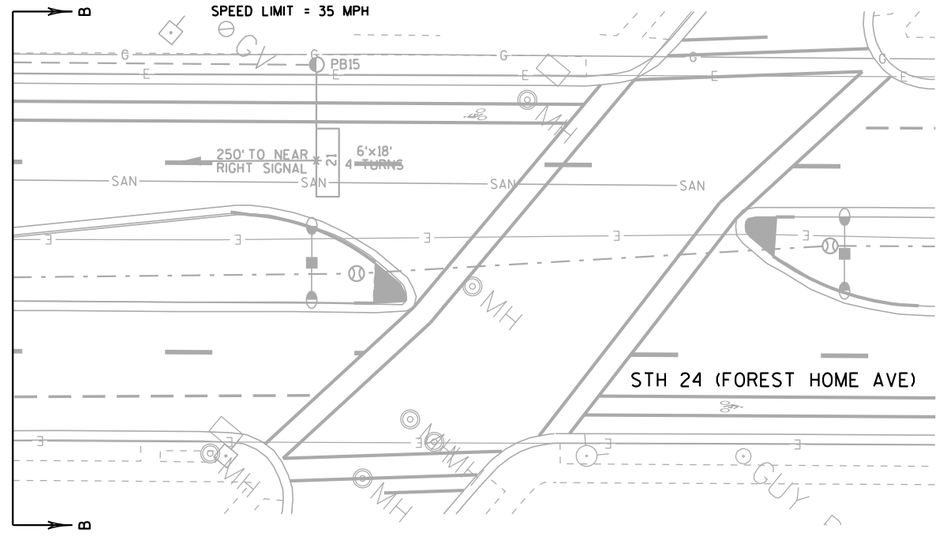
REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 3

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 106 E

2





TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 3 OF 3

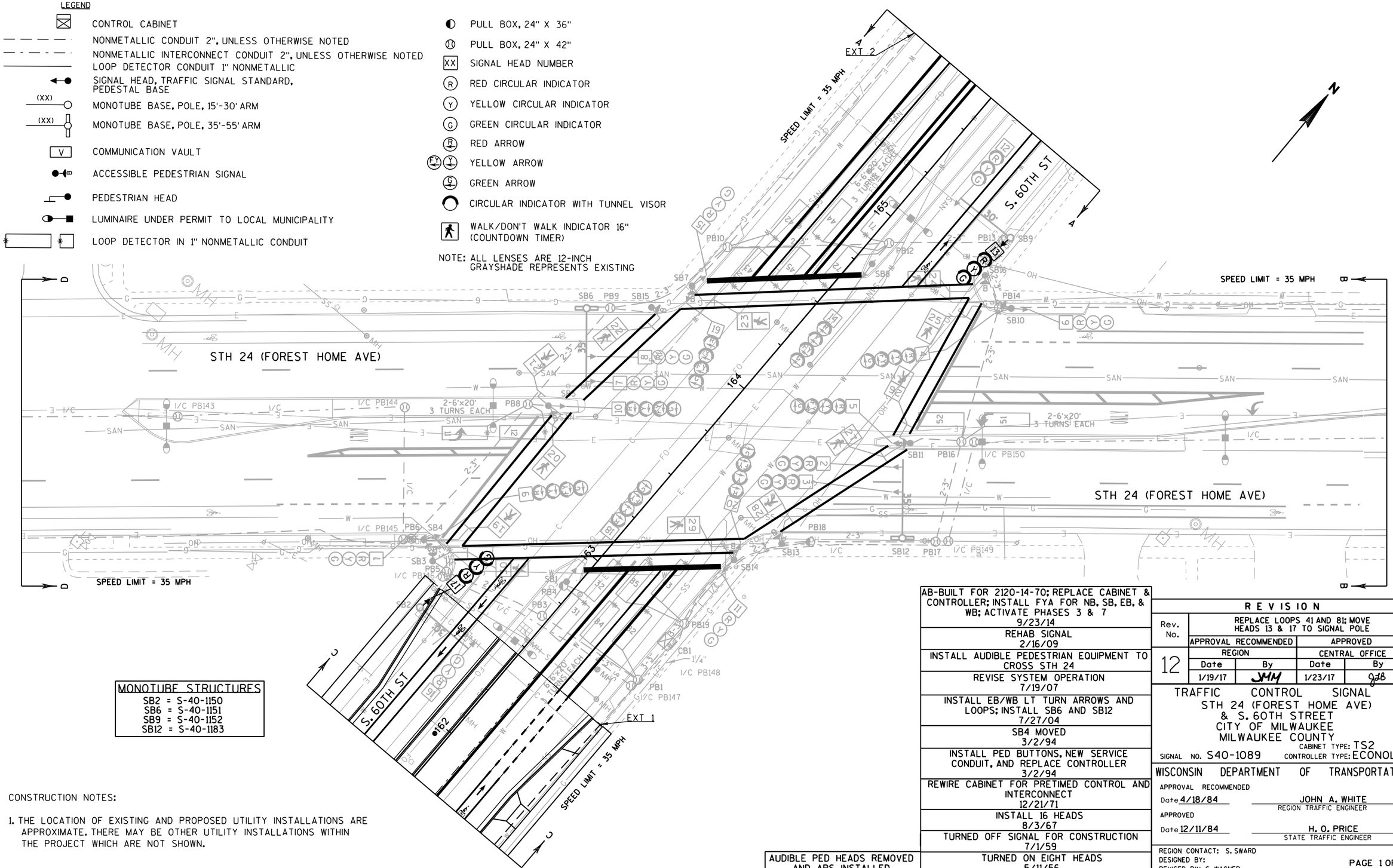
PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 107	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- V COMMUNICATION VAULT
- ACCESSIBLE PEDESTRIAN SIGNAL
- PEDESTRIAN HEAD
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- CIRCULAR INDICATOR WITH TUNNEL VISOR
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



MONOTUBE STRUCTURES
SB2 = S-40-1150
SB6 = S-40-1151
SB9 = S-40-1152
SB12 = S-40-1183

CONSTRUCTION NOTES:

1. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

AUDIBLE PED HEADS REMOVED AND APS INSTALLED

AB-BUILT FOR 2120-14-70; REPLACE CABINET & CONTROLLER; INSTALL FYA FOR NB, SB, EB, & WB; ACTIVATE PHASES 3 & 7
9/23/14

REHAB SIGNAL
2/16/09

INSTALL AUDIBLE PEDESTRIAN EQUIPMENT TO CROSS STH 24
REVISE SYSTEM OPERATION
7/19/07

INSTALL EB/WB LT TURN ARROWS AND LOOPS; INSTALL SB6 AND SB12
7/27/04

SB4 MOVED
3/2/94

INSTALL PED BUTTONS, NEW SERVICE CONDUIT, AND REPLACE CONTROLLER
3/2/94

REWIRE CABINET FOR PRETIMED CONTROL AND INTERCONNECT
12/21/71

INSTALL 16 HEADS
8/3/67

TURNED OFF SIGNAL FOR CONSTRUCTION
7/1/59

TURNED ON EIGHT HEADS
5/11/56

REVISION

Rev. No.	REPLACE LOOPS 41 AND 81; MOVE HEADS 13 & 17 TO SIGNAL POLE			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
12	Date	By	Date	By
	1/19/17	JHH	1/23/17	gjb

TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
CABINET TYPE: TS2
SIGNAL NO. S40-1089 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 4/18/84 JOHN A. WHITE, REGION TRAFFIC ENGINEER

APPROVED
Date 12/11/84 H. O. PRICE, STATE TRAFFIC ENGINEER

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

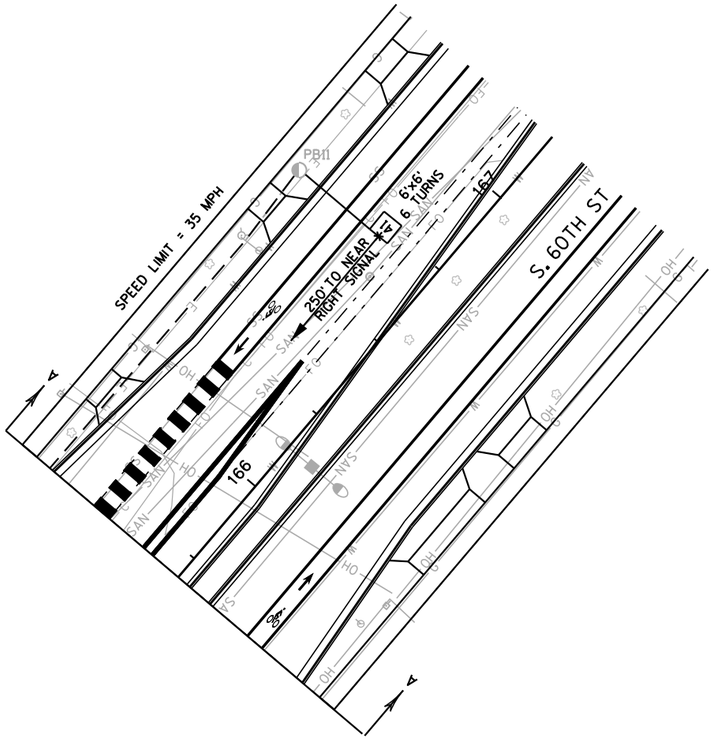
PAGE 1 OF 4

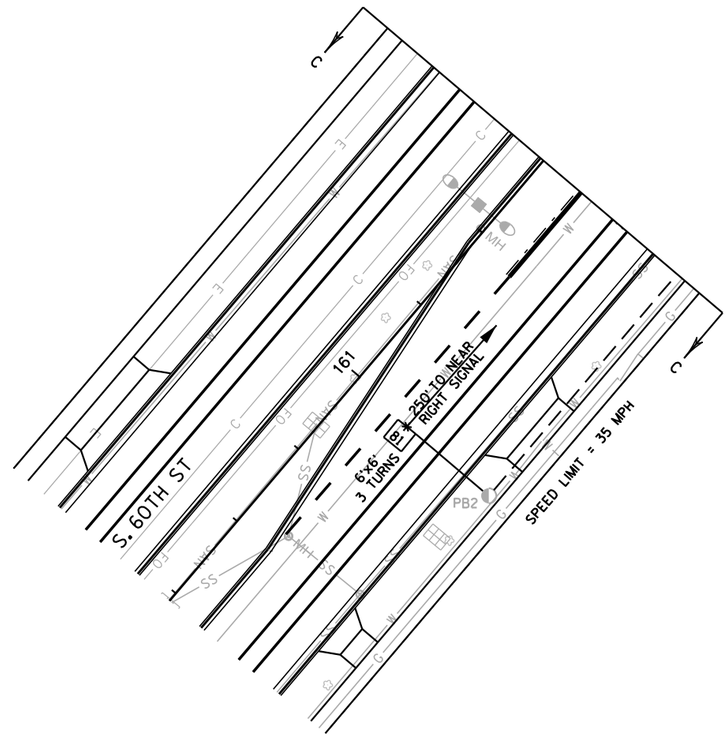
PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 108	E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_N_pg1.dgn PLOT DATE : 23-JAN-2017 15:27 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2





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TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

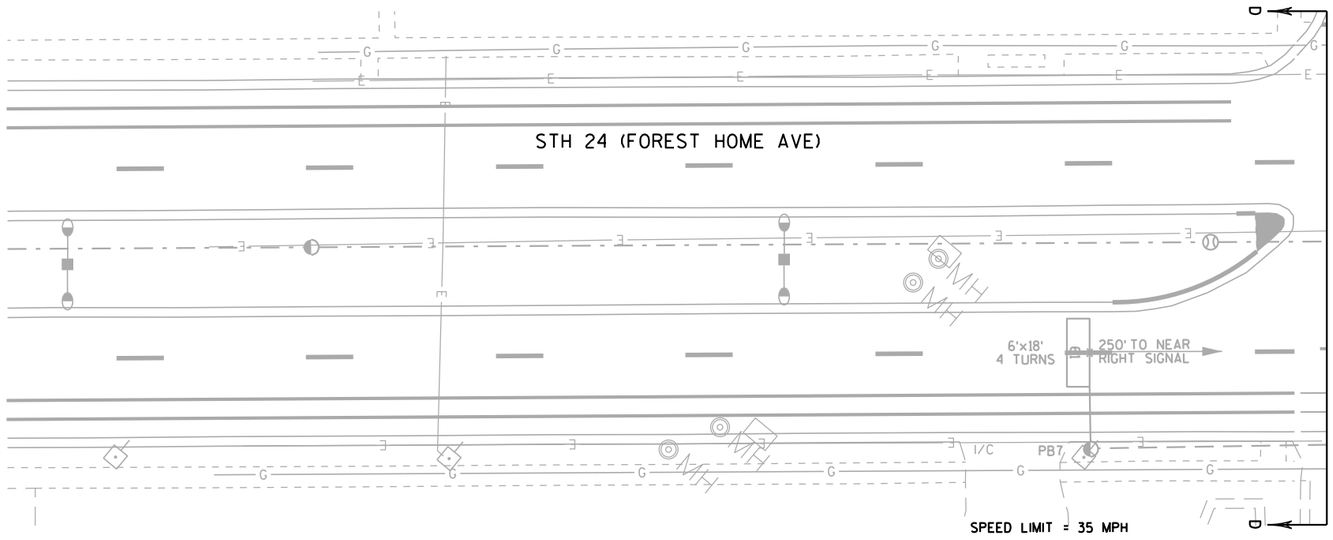
SIGNAL NO. S40-1089

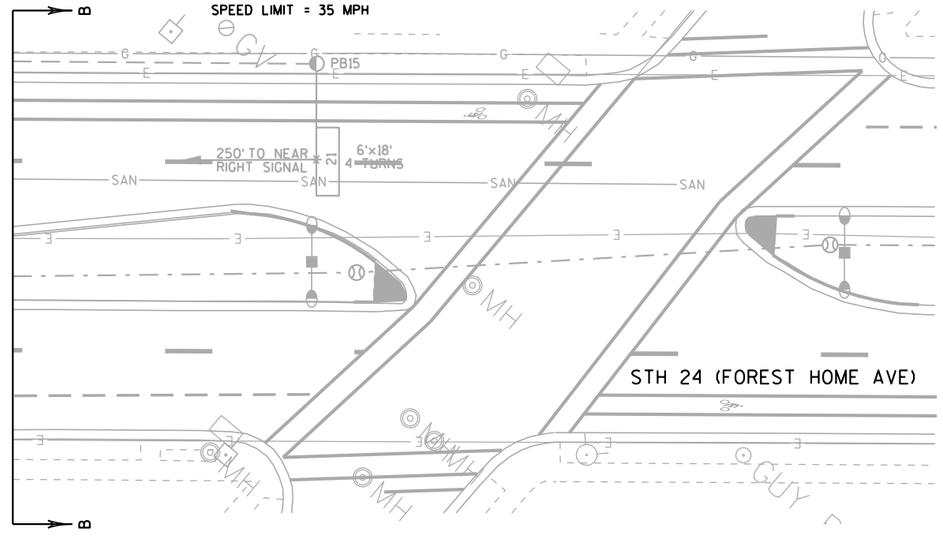
REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 4

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 109	E

2





TRAFFIC CONTROL SIGNAL
STH 24 (FOREST HOME AVE)
& S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY

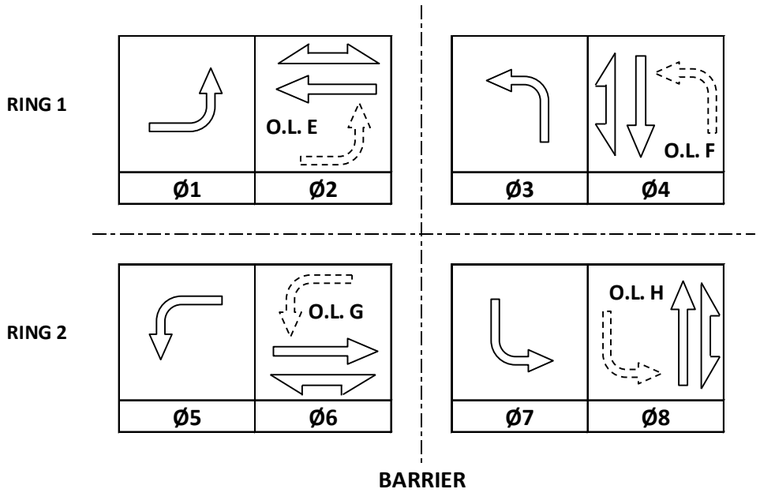
SIGNAL NO. S40-1089

REGION CONTACT: S. SWARD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 3 OF 4

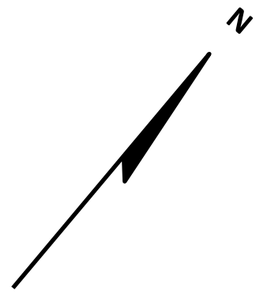
PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 110	E

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3	14,19	R ←
Ø4	15,16,17	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7	18,20	R ←
Ø8	11,12,13	R
Ø2P	23,24	
Ø4P	19,20,21,22	
Ø6P	29,30	
Ø8P	25,26,27,28	
OLE	4,5	-
OLF	14,19	-
OLG	9,10	-
OLH	18,20	-



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X



TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-22

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	41	11,12	51,52	44,45	84,85	81		
CALLED PHASE	4	1	5	4	8	8		
CALL OPTION		X	X	X	X			
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME	X					X		
USE ADDED INITIAL								
CROSS SWITCH PHASE		2	6					

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

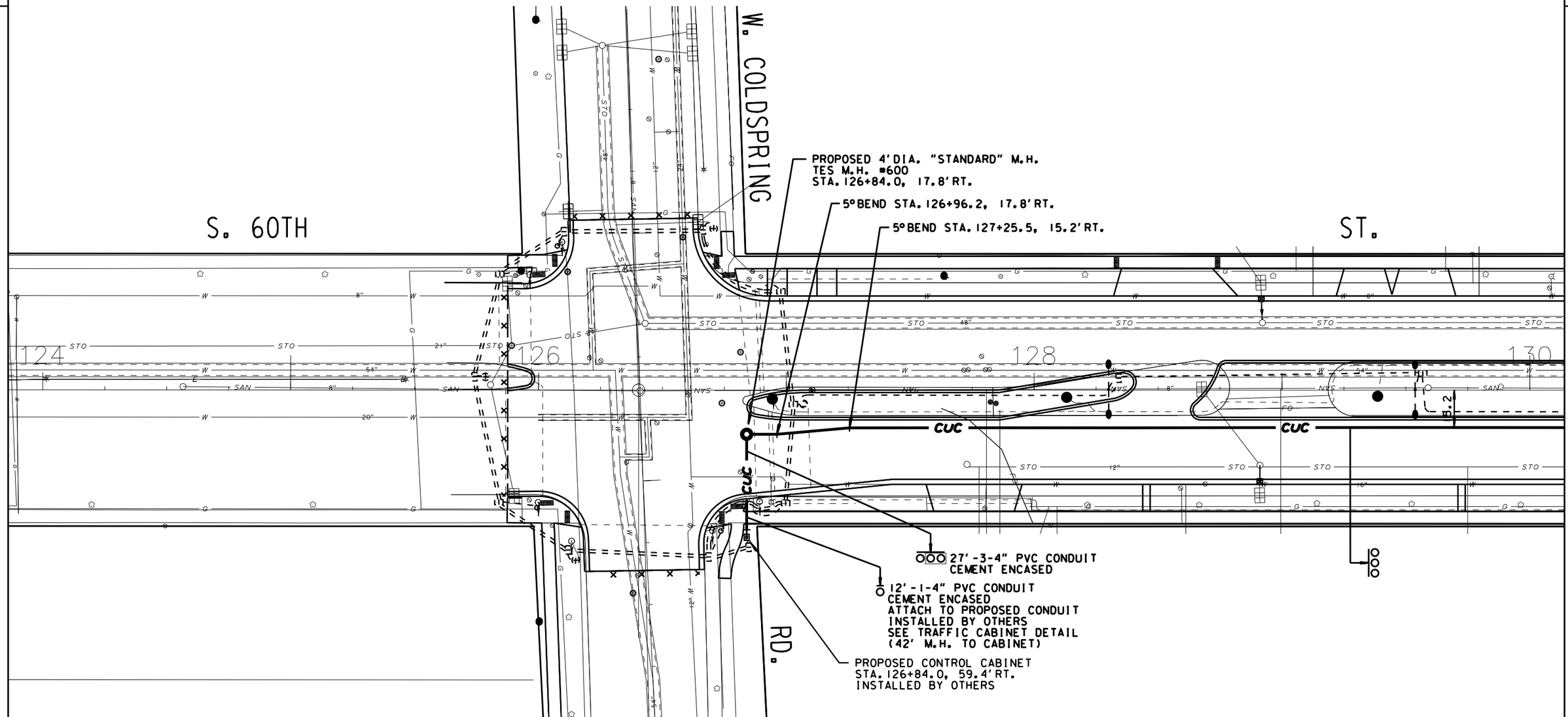
DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	42,43	21	61	71,72	31,32	82,83		
CALLED PHASE	4	2	6	7	3	8		
CALL OPTION	X	X	X	X	X	X		
DELAY TIME	X					X		
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME								
USE ADDED INITIAL		X	X					
CROSS SWITCH PHASE				8	4			

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

STH 24 (FOREST HOME AVE.) & S. 60TH STREET
CITY OF MILWAUKEE
MILWAUKEE COUNTY
SIGNAL NO: S40-1089 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 01/17 PAGE NO. 4 OF 4

FILE NAME : \\WKE31FP1\n3public\SPO\Operations\Signal_Ops\Databases\Signal Intersection Files\S40-1089\PLANS\Econolite SEQ.pptm PLOT DATE : 1/5/2017 1:50 PM PLOT BY : SWARD, STEPHANIE PLOT NAME : _____ PLOT SCALE : 1:1

2



NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.

LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— cuc —	EXISTING CONDUIT

SHEET 1 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 112 E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\124-130.DGN

2

2

S. 60TH ST.

130 132 134 136

607'-3-4"PVC CONDUIT
CEMENT ENCASED

ADJUST TES M.H.
EXISTING TES M.H. #601
STA. 132+95.2, 15.0'RT.

S. HONEY CREEK DR.

ADJUST TES M.H.
EXISTING TES M.H. #602
STA. 135+83.0, 15.1'RT.

W. PLAINFIELD AVE

NOTES:

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LEGEND

— CUC — PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.

PROPOSED TES MANHOLE

— CUC — EXISTING CONDUIT

SHEET 2 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 113	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\130-136.DGN

2

2

S. 60TH ST.

W. WATERFORD CT.

W. PLAINFIELD AVE

W. WATERFORD AVE.

REMOVE TES MANHOLE #604
STA. 139+47.6, 18.5' LT.

PROPOSED MANHOLE #605
STA. 139+47.6, 18.5' LT.
PRECAST 5' DIA. 'DOGHOUSE'
SEE DETAIL

ADJUST TES M.H.
EXISTING TES M.H. #603
STA. 139+25.3, 16.5' RT.

STA. 139+50

INSTALL CITY UNDERGROUND CONDUIT PROTECTION

136 138 140 142

NOTES:

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LEGEND

— CUC — PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.

PROPOSED TES MANHOLE

— CUC — EXISTING CONDUIT

SHEET 3 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 114	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\136-142.DGN

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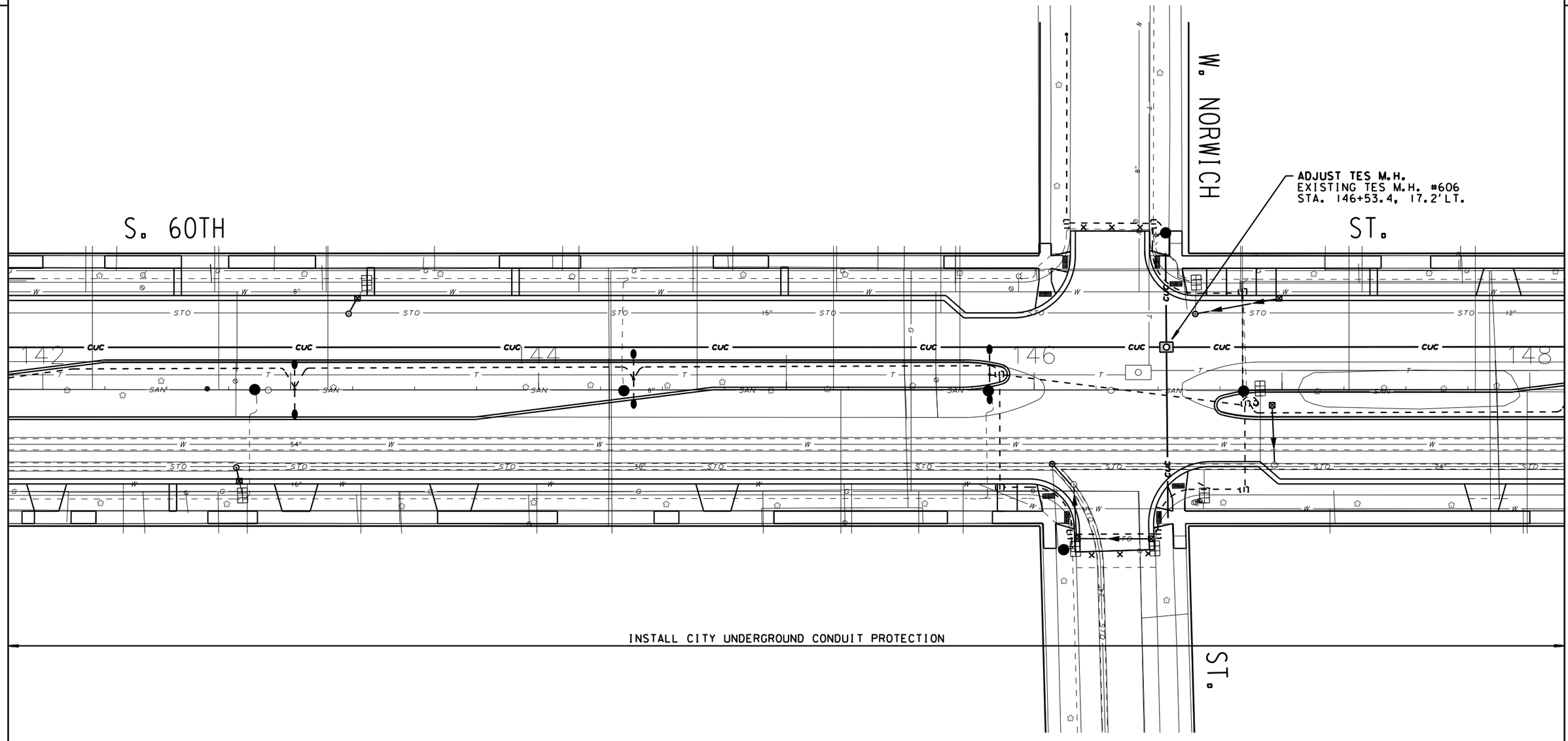

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LEGEND

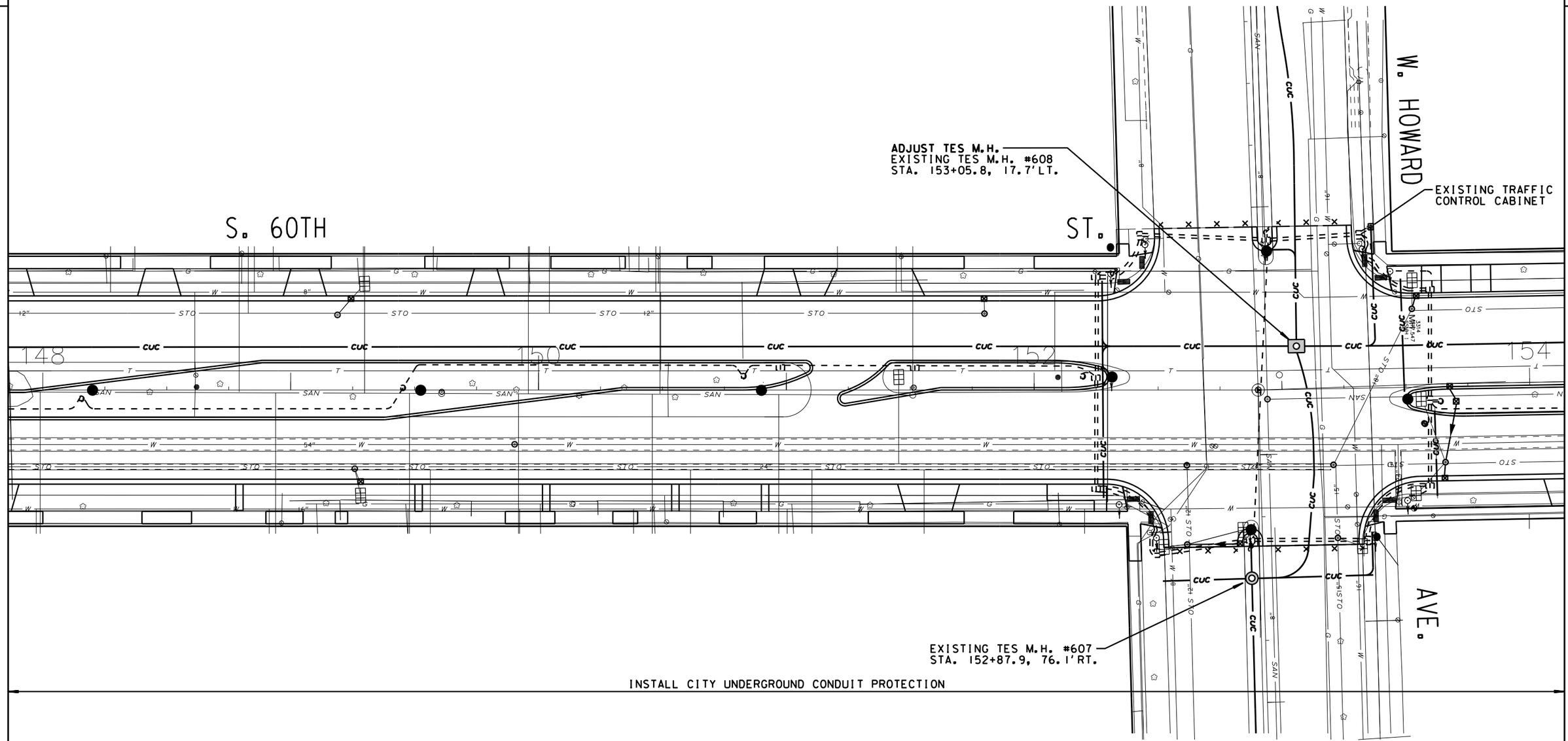
— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
⊙	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT

SHEET 4 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 115	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\142-148.DGN

2



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LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT

SHEET 5 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 116 E

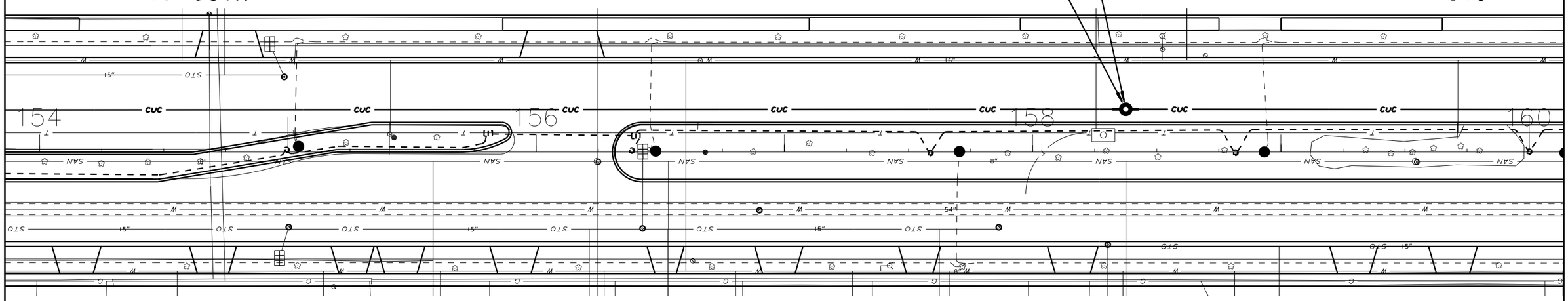
FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\148-154.DGN

2

2

REMOVE TES MANHOLE #609
STA. 158+37.5, 17.2' LT.

PROPOSED MANHOLE #610
STA. 158+37.5, 17.2' LT.
PRECAST 4' DIA. 'DOGHOUSE'
SEE DETAIL



INSTALL CITY UNDERGROUND CONDUIT PROTECTION

NOTES:

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LEGEND

— CUC — PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.

PROPOSED TES MANHOLE

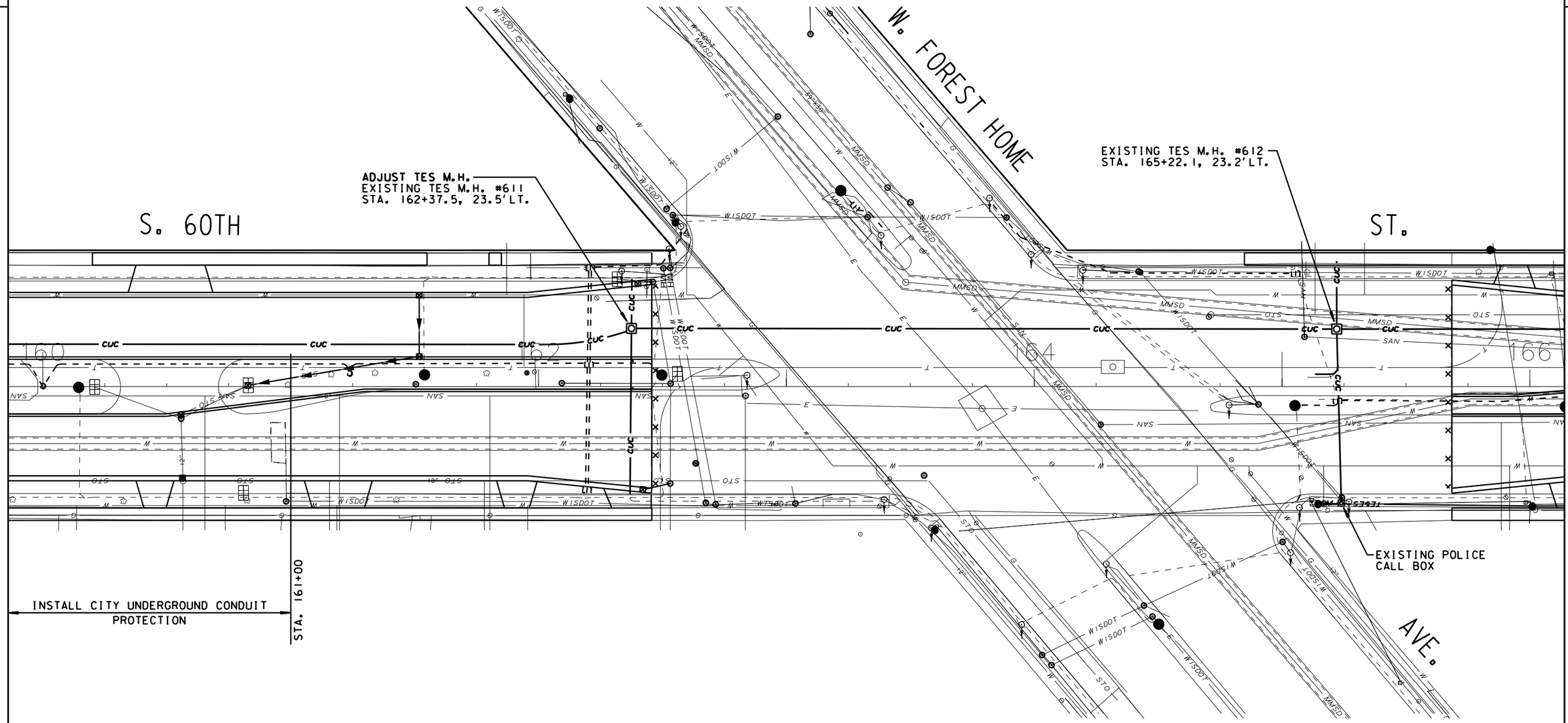
— CUC — EXISTING CONDUIT

SHEET 6 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 117	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\154-160.DGN

2



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LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT

SHEET 7 OF 14

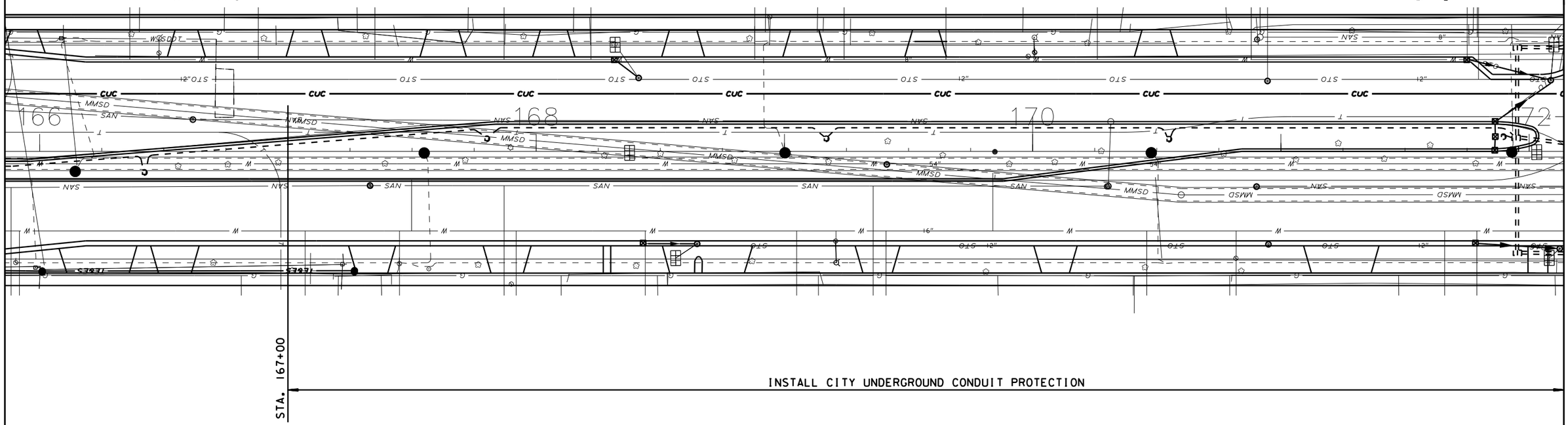
STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 118 E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\160-166.DGN

2

2

S. 60TH ST.



STA. 167+00

INSTALL CITY UNDERGROUND CONDUIT PROTECTION

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LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT

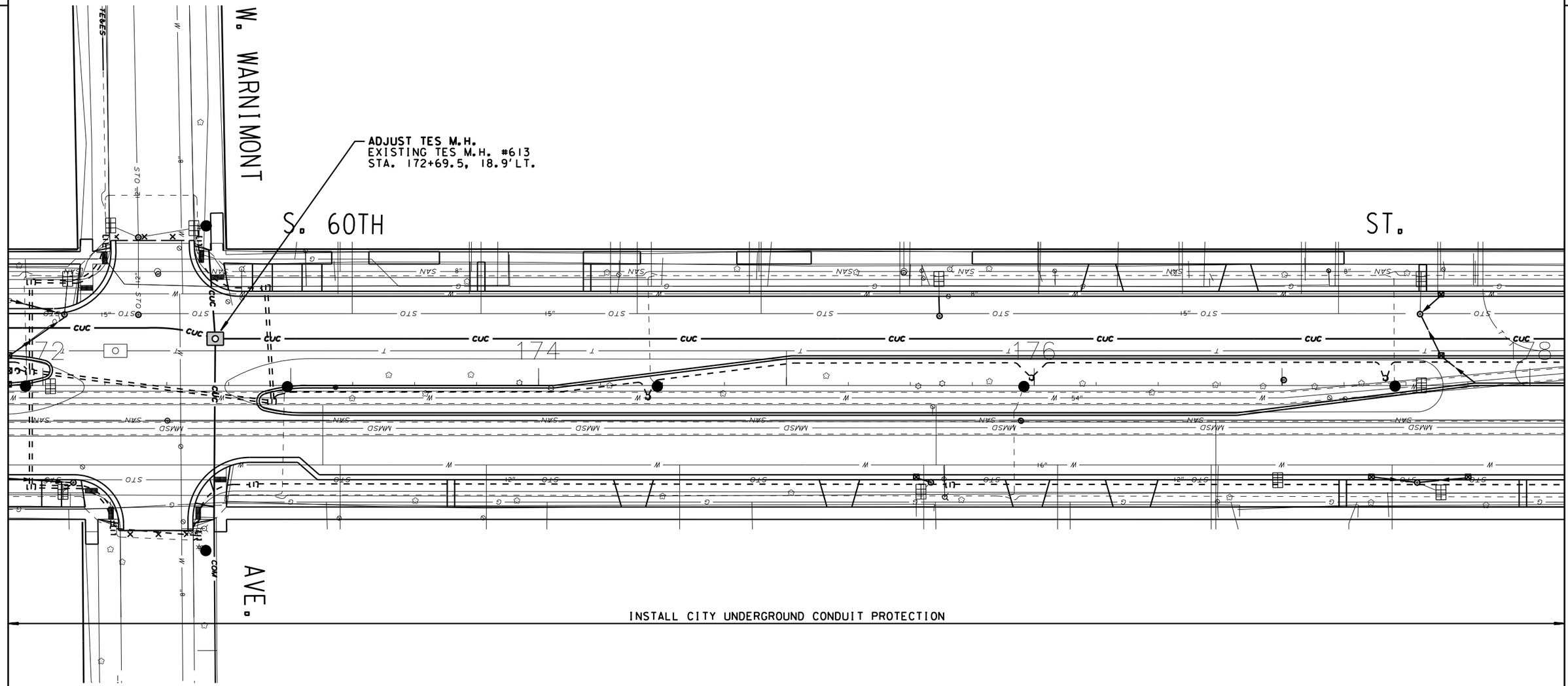
SHEET 8 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 119	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\166-172.DGN

2

2



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LEGEND

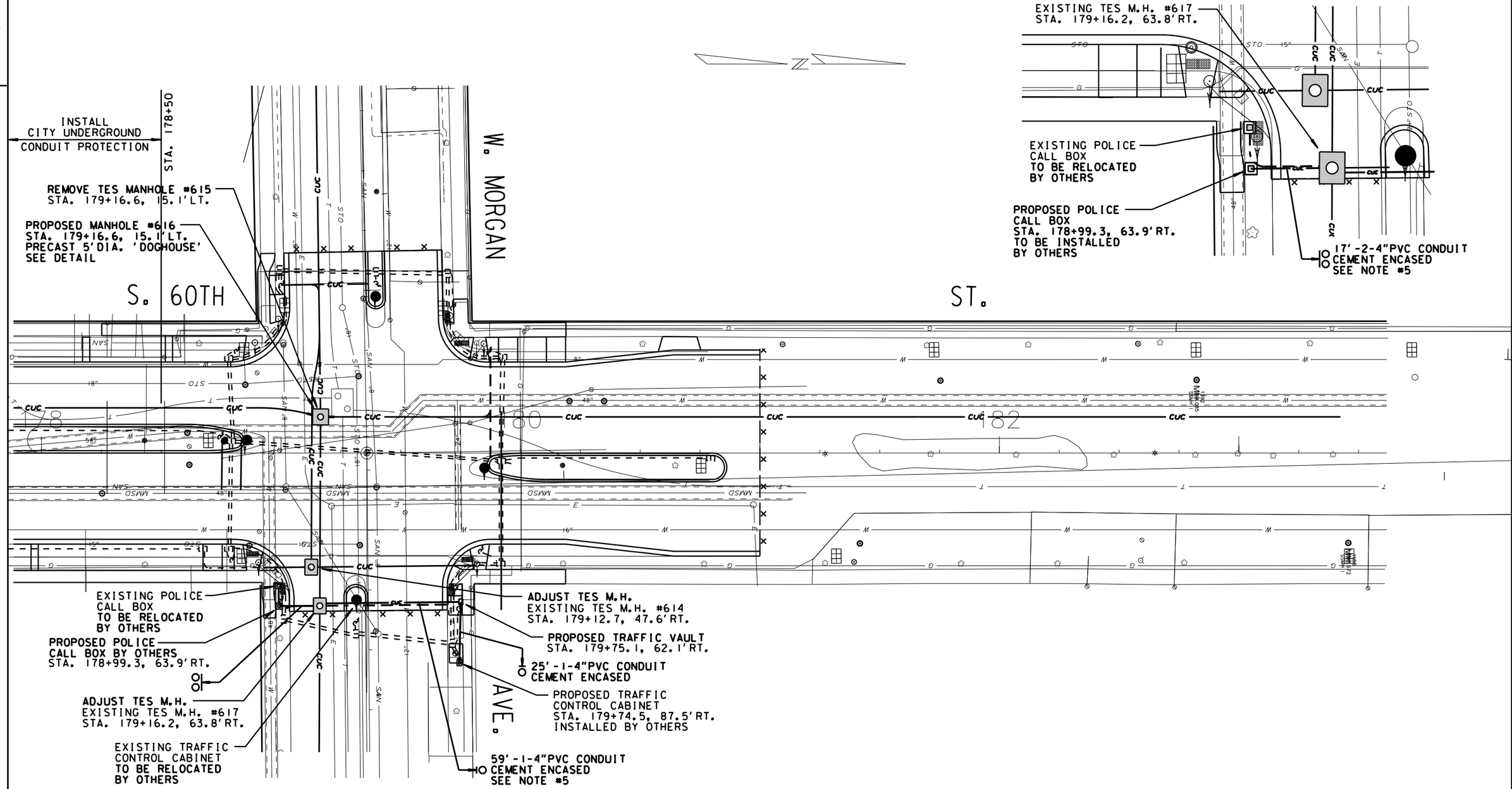
— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT

SHEET 9 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 120 E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\172-178.DGN

2



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4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
5) REMOVE ABANDONED CONDUIT AS NEEDED FOR PROPOSED INSTALLATION.

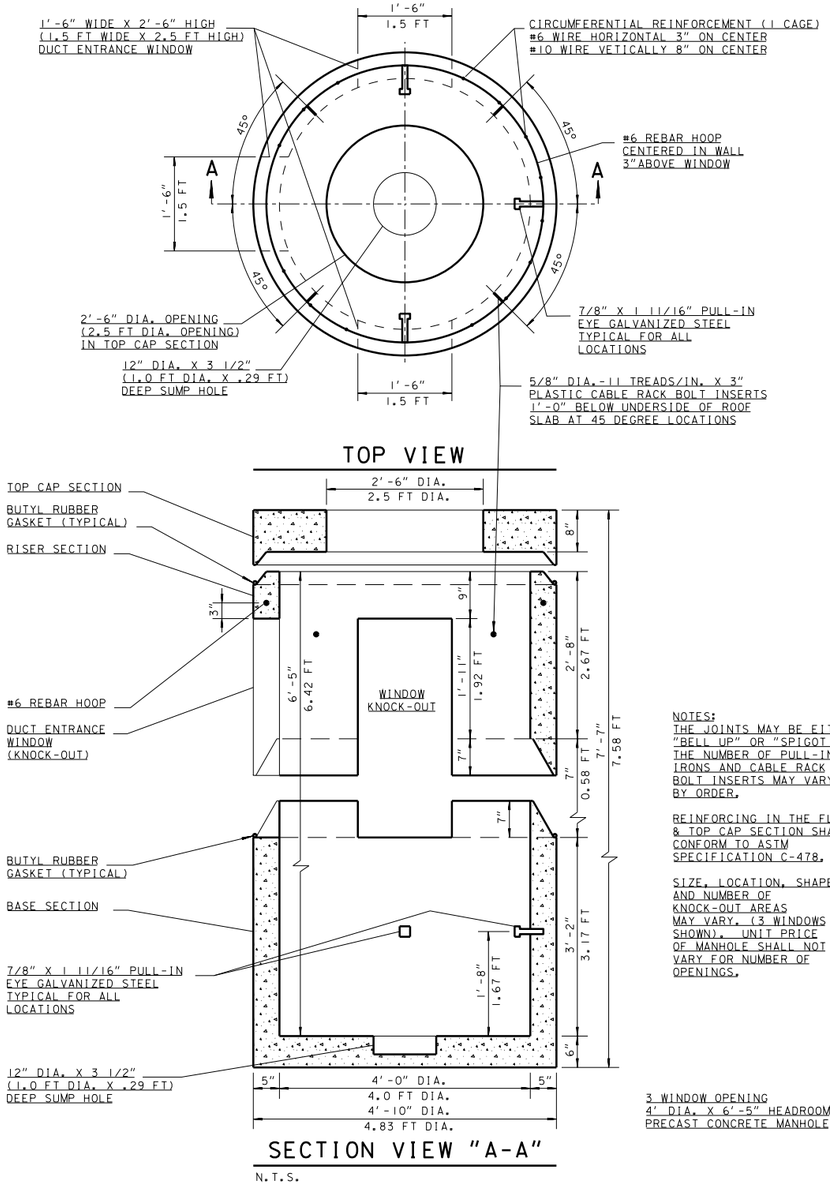
LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
⊙	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT
— — — —	ABANDONED CONDUIT

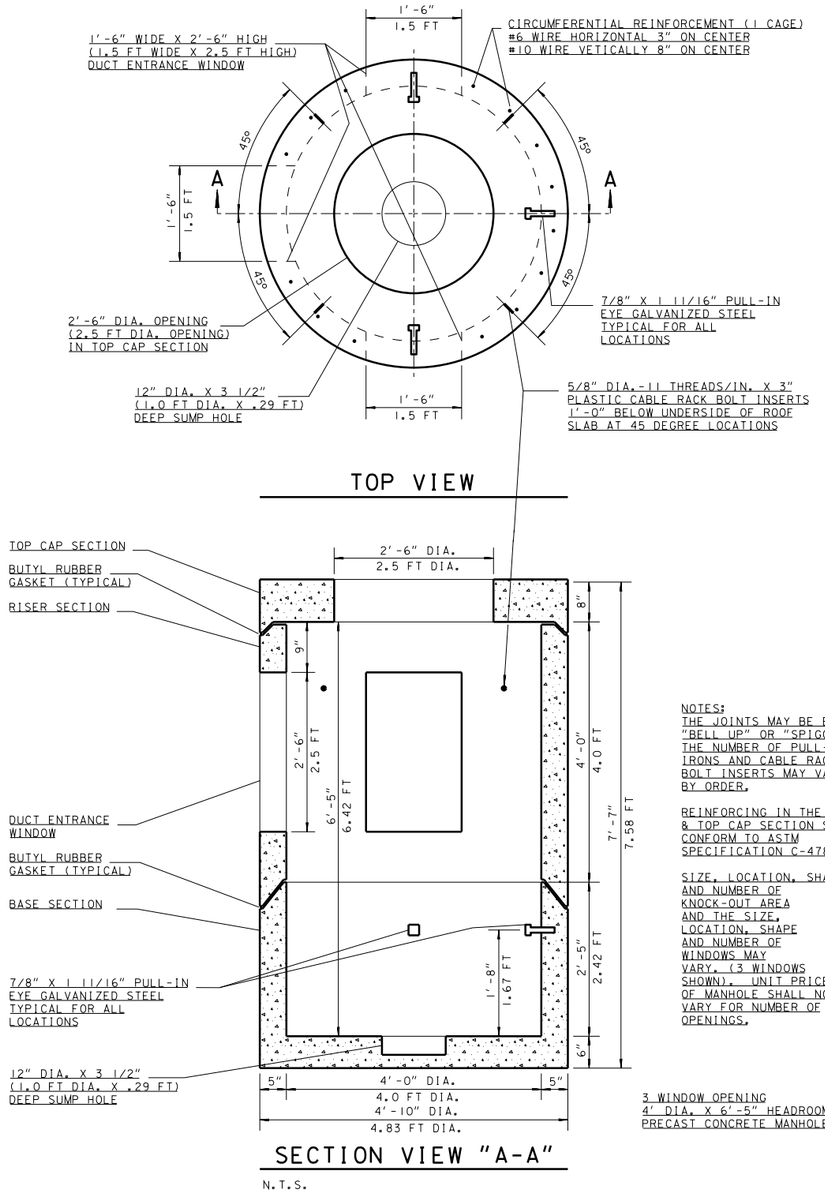
SHEET 10 OF 14

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET 0' 40'	SHEET NO: 121	E

FILENAME: W:\UGD\CONDUIT WORK FILES\UCONDUIT\2016\S 60TH ST\178-184.DGN

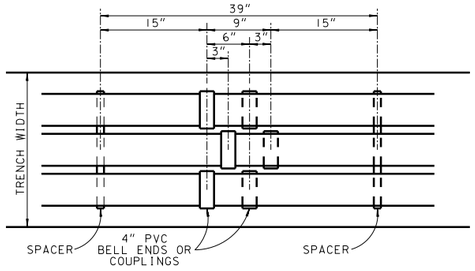


4' DIAMETER "DOGHOUSE" TYPE TES MANHOLE

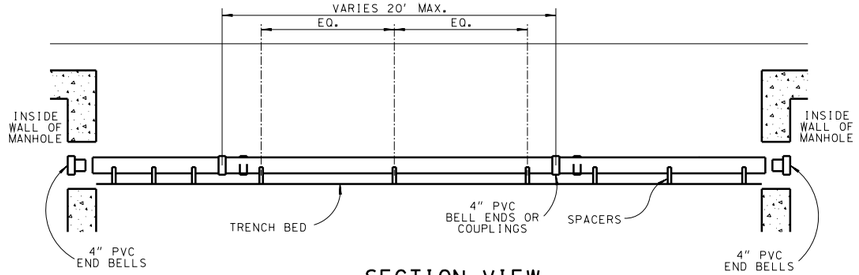


4' DIAMETER STANDARD TYPE TES MANHOLE

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT DETAILS (TES)	SCALE FEET	SHEET NO: 122	E

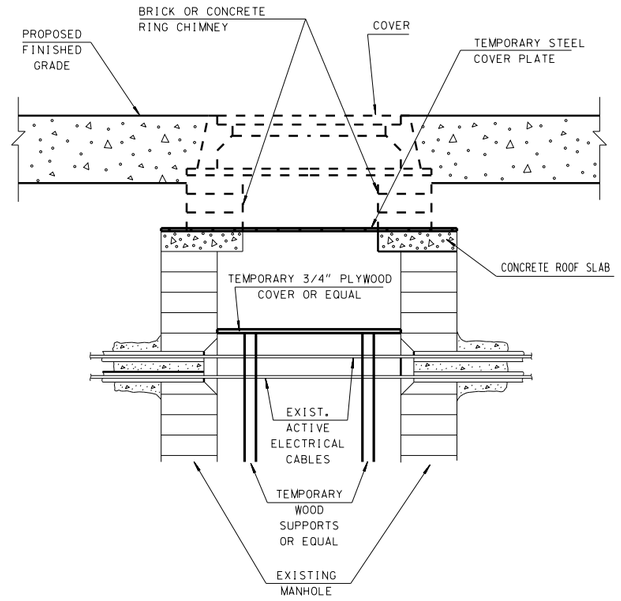


PLAN VIEW
N.T.S.



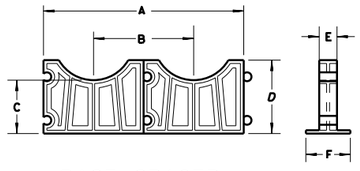
SECTION VIEW
N.T.S.

DUCT INSTALLATION DETAIL



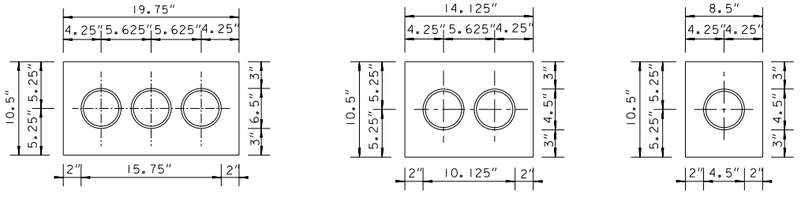
ADJUSTING TES MANHOLES

COND.	3"	4"
A	10"	11 ¼"
B	5"	5 ⅝"
C	3"	3"
D	3 ⅞"	4 ¼"
E	1"	1"
F	2 ½"	2 ½"

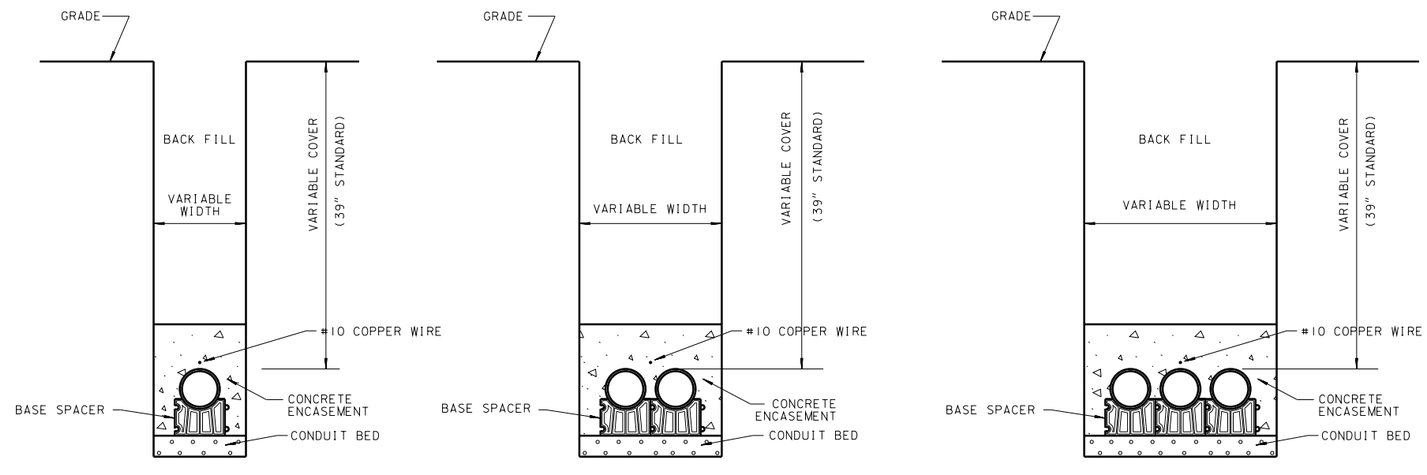


BASE SPACER

INTERMEDIATE AND BASE SPACER DETAIL

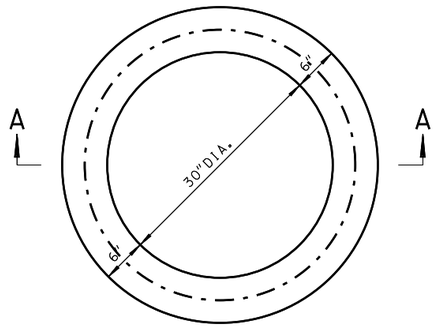


CROSS SECTION VIEW
N.T.S.

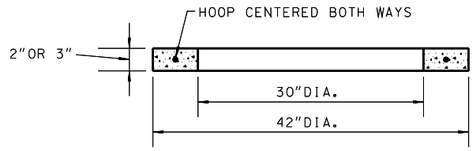


CROSS SECTION VIEW, TYP.
N.T.S.

STATE PROJECT NUMBER 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT DETAILS (TES)	SCALE FEET	SHEET NO: 123	E



PLAN



SECTION A-A

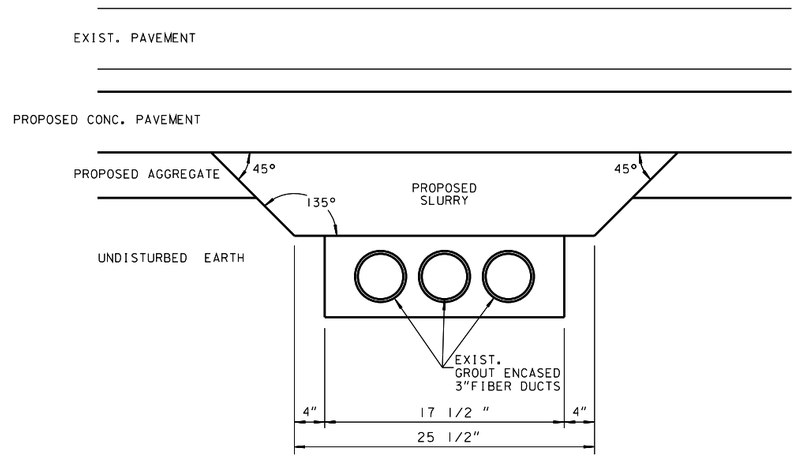
THE ADJUSTING RING SHALL BE 2" OR 3" IN HEIGHT.

THE CIRCUMFERENTIAL STEEL SHALL BE CENTERED WITHIN THE RING.

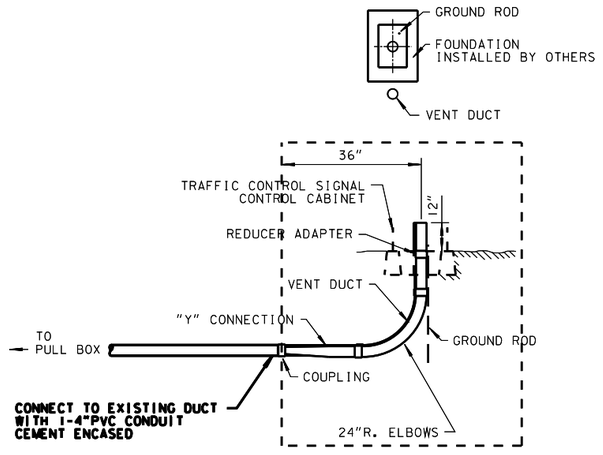
AREA OF CIRCUMFERENTIAL STEEL = 0.07 SQ. INCH PER VERTICAL FOOT WITH A MINIMUM OF .024 SQ. INCH IN ANY ONE RING.

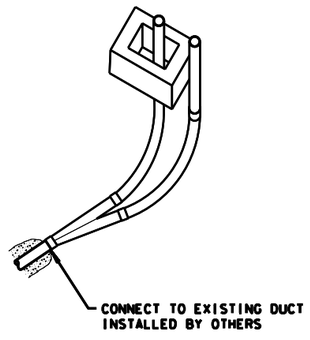
THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE CORE SHALL BE 4000 P.S.I.

CONCRETE ADJUSTING RING



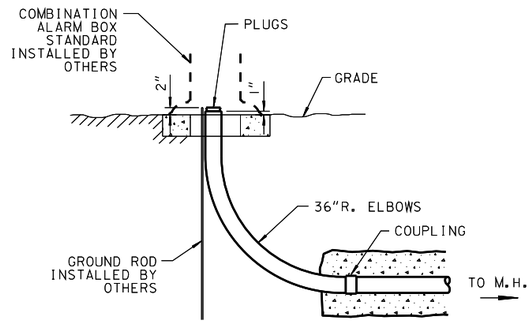
CITY UNDERGROUND CONDUIT PROTECTION

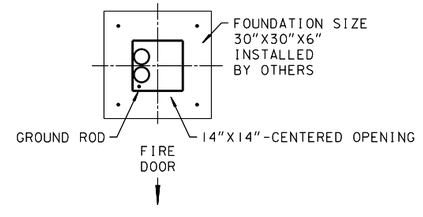




CONTROL CABINET

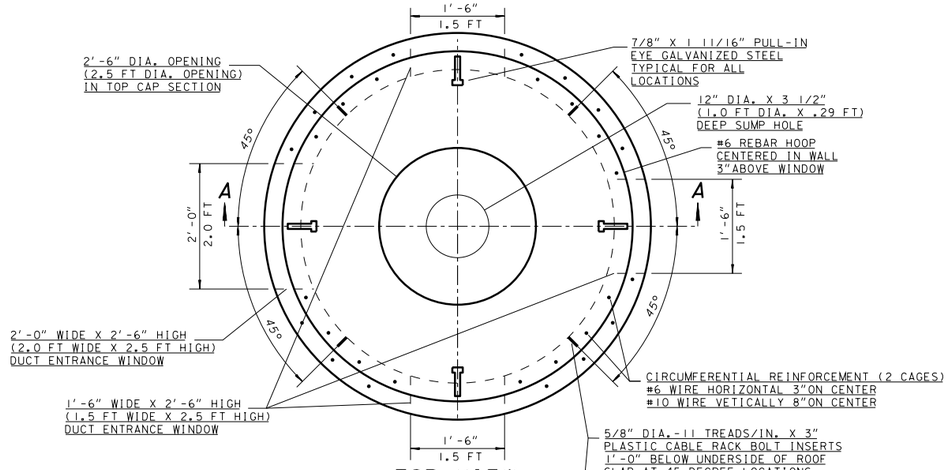
FOR REFERENCE ONLY



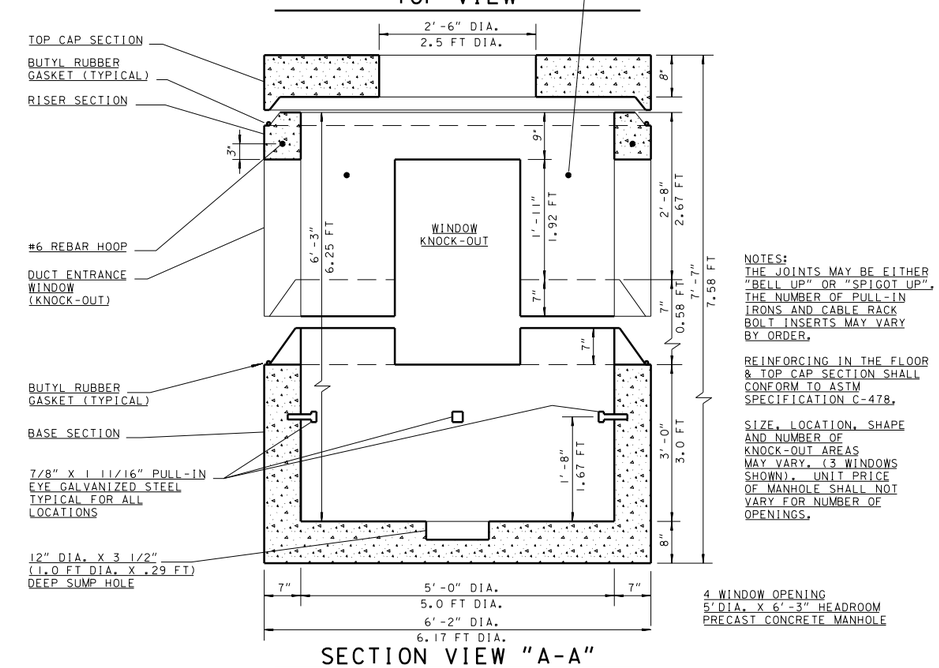


POLICE CALL BOX DETAIL

SHEET 13 OF 14



TOP VIEW



NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP", THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

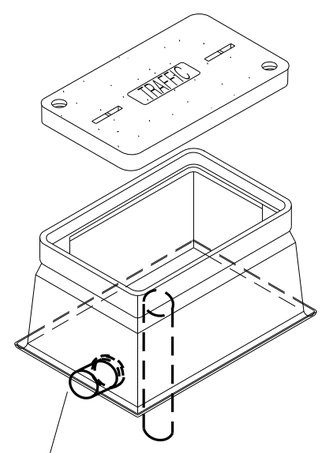
SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREAS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

4 WINDOW OPENING
5'DIA. X 6'-3" HEADROOM
PRECAST CONCRETE MANHOLE

SECTION VIEW "A-A"

N.T.S.

5' DIAMETER "DOGHOUSE" TYPE TES MANHOLE



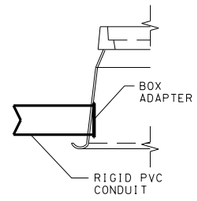
HEAVY DUTY COVER
WITH TRAFFIC LOGO
& WITH 2 BOLTS
COLOR: GRAY

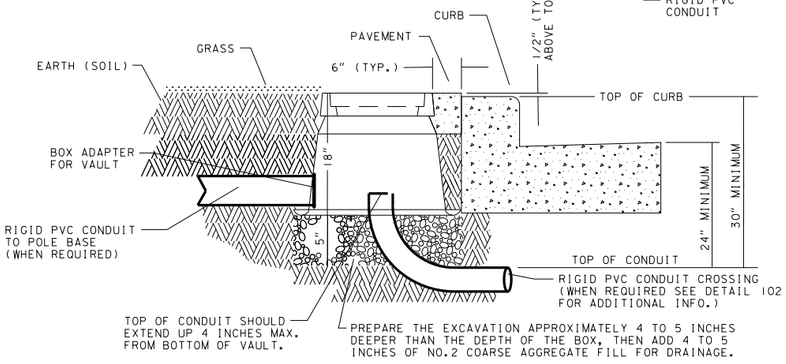
ELECTRICAL VAULT
FLARED WALL
BOX WITH NO BASE
COLOR: GRAY

(VARIOUS SIZES)

PLUG OR CAP FITTINGS ON ALL
UNUSED CONDUITS IN THE ENCLOSURE

BOX ADAPTERS, COUPLINGS
TO ALL PVC CONDUITS



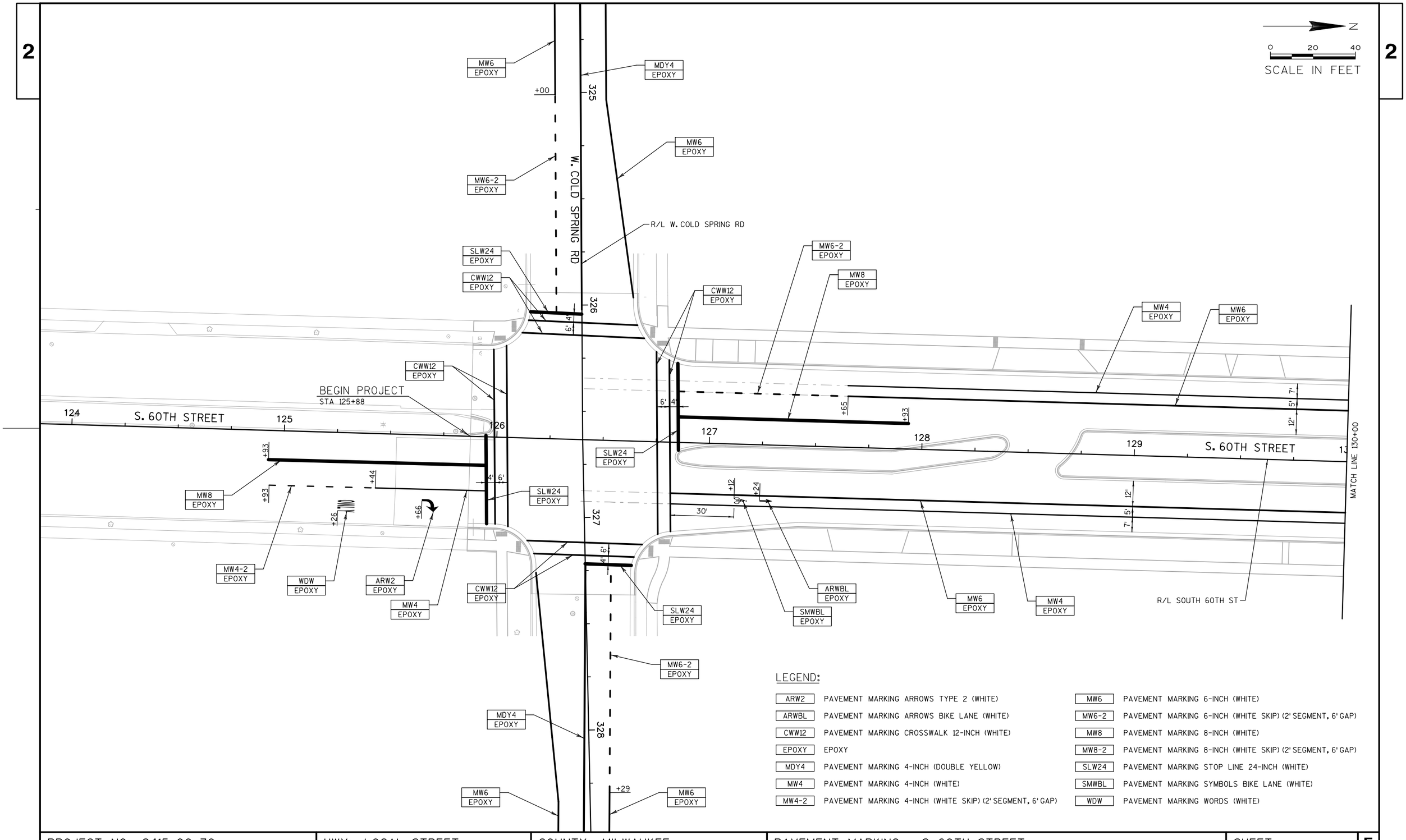


ANY DEVIATIONS FROM DETAIL WILL REQUIRE PERMISSION FROM STREET LIGHTING FORCES.
CONTACT DISPATCHER AT (414) 286-5944 FOR THE APPROPRIATE SHOP SUPERVISOR.

TYPICAL VAULT INSTALLATION

NOT TO SCALE

STATE PROJECT NUMBER 2415-00-70 - -	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CITY UG CONDUIT DETAILS (TES)	SCALE FEET	SHEET NO: 125	E



LEGEND:

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)	MW6	PAVEMENT MARKING 6-INCH (WHITE)
ARWBL	PAVEMENT MARKING ARROWS BIKE LANE (WHITE)	MW6-2	PAVEMENT MARKING 6-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)	MW8	PAVEMENT MARKING 8-INCH (WHITE)
EPOXY	EPOXY	MW8-2	PAVEMENT MARKING 8-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)	SLW24	PAVEMENT MARKING STOP LINE 24-INCH (WHITE)
MW4	PAVEMENT MARKING 4-INCH (WHITE)	SMWBL	PAVEMENT MARKING SYMBOLS BIKE LANE (WHITE)
MW4-2	PAVEMENT MARKING 4-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)	WDW	PAVEMENT MARKING WORDS (WHITE)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 126	E

2

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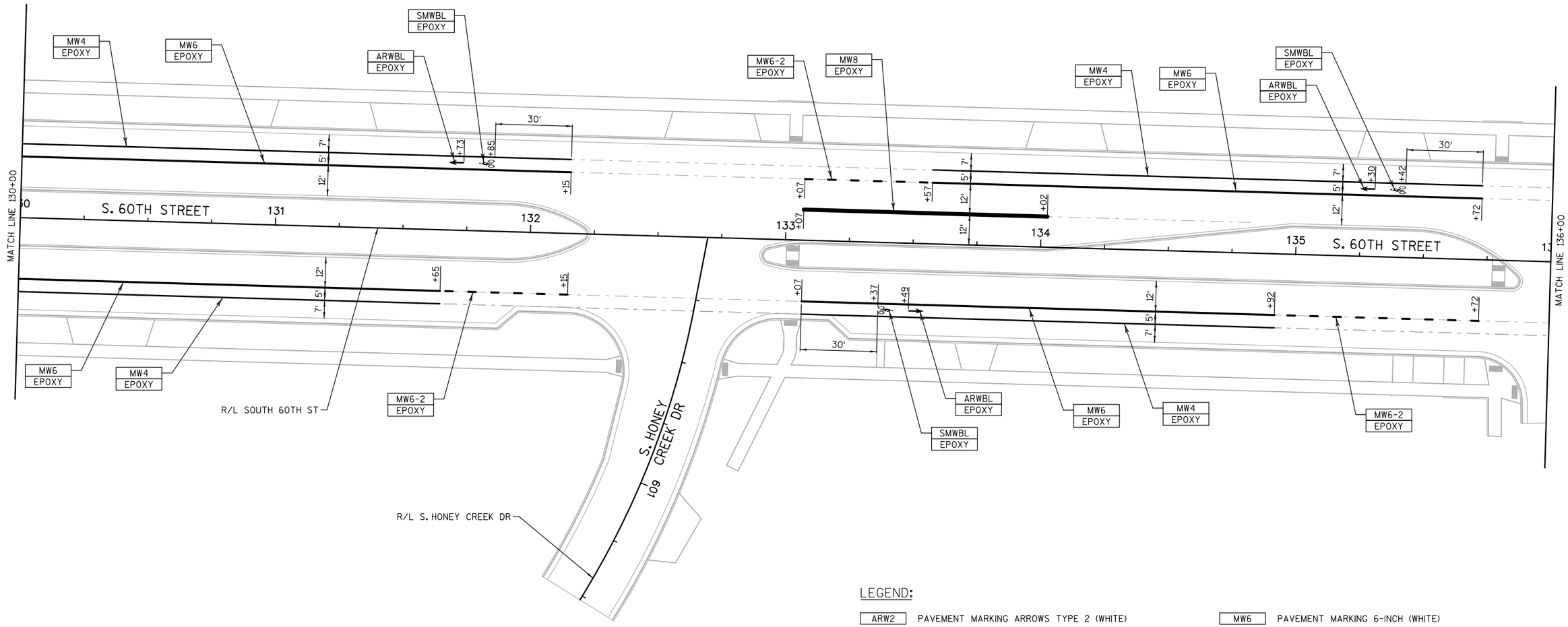
0 20 40

SCALE IN FEET



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PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 127	E

2

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SCALE IN FEET

W. WATERFORD CT

ASPHALT SIDEWALK

R/L SOUTH 60TH ST

S. 60TH STREET

MATCH LINE 136+00

MATCH LINE 142+00

W. PLAINFIELD AVE

W. WATERFORD AVE

136

137

138

139

140

141

30'

24'

12'

7'

5'

6'

+45 +75 +87 +95 +92 +88 +82 +56 +91 +03 +06 +83 +92 +04 +10 +60 +29 +40 +52

MW4 EPOXY

MW6 EPOXY

MW8 EPOXY

MW6-2 EPOXY

ARWBL EPOXY

SMWBL EPOXY

CWW12 EPOXY

LEGEND:

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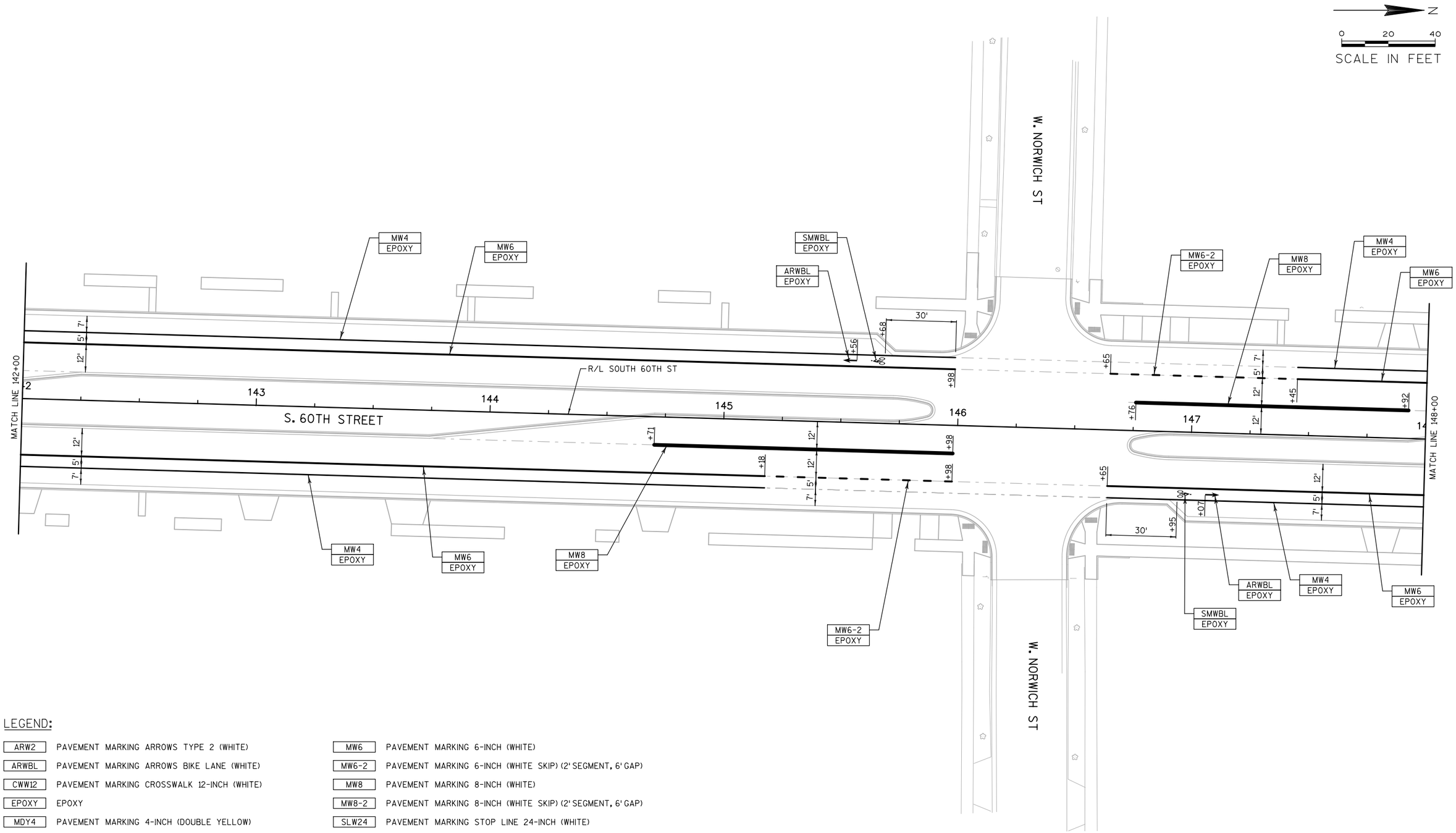
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 128	E



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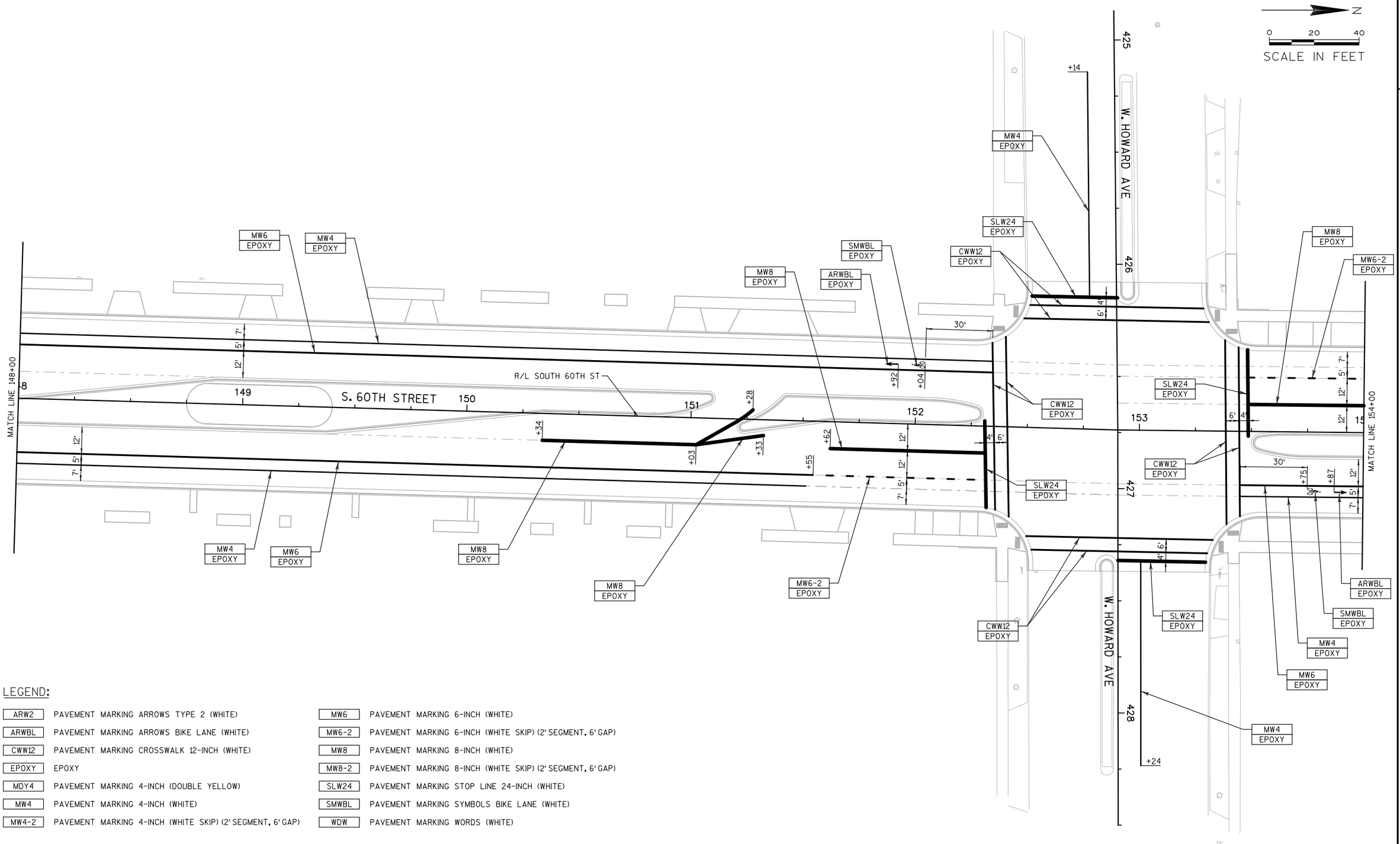
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 129	E



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PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 130	E

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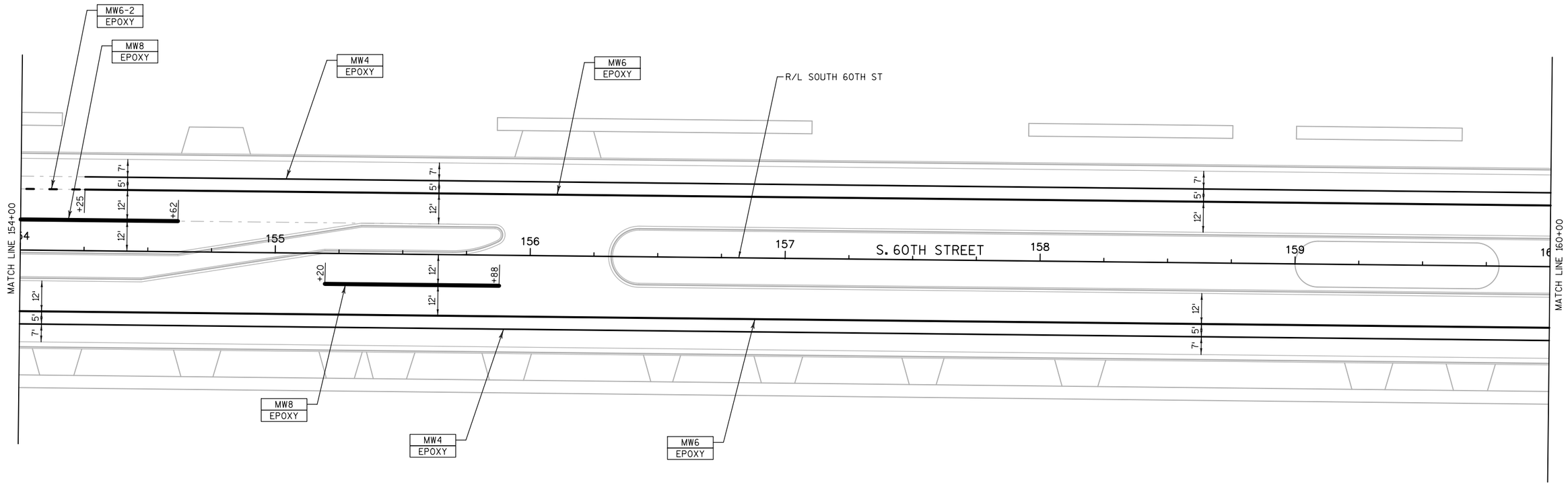
SCALE IN FEET



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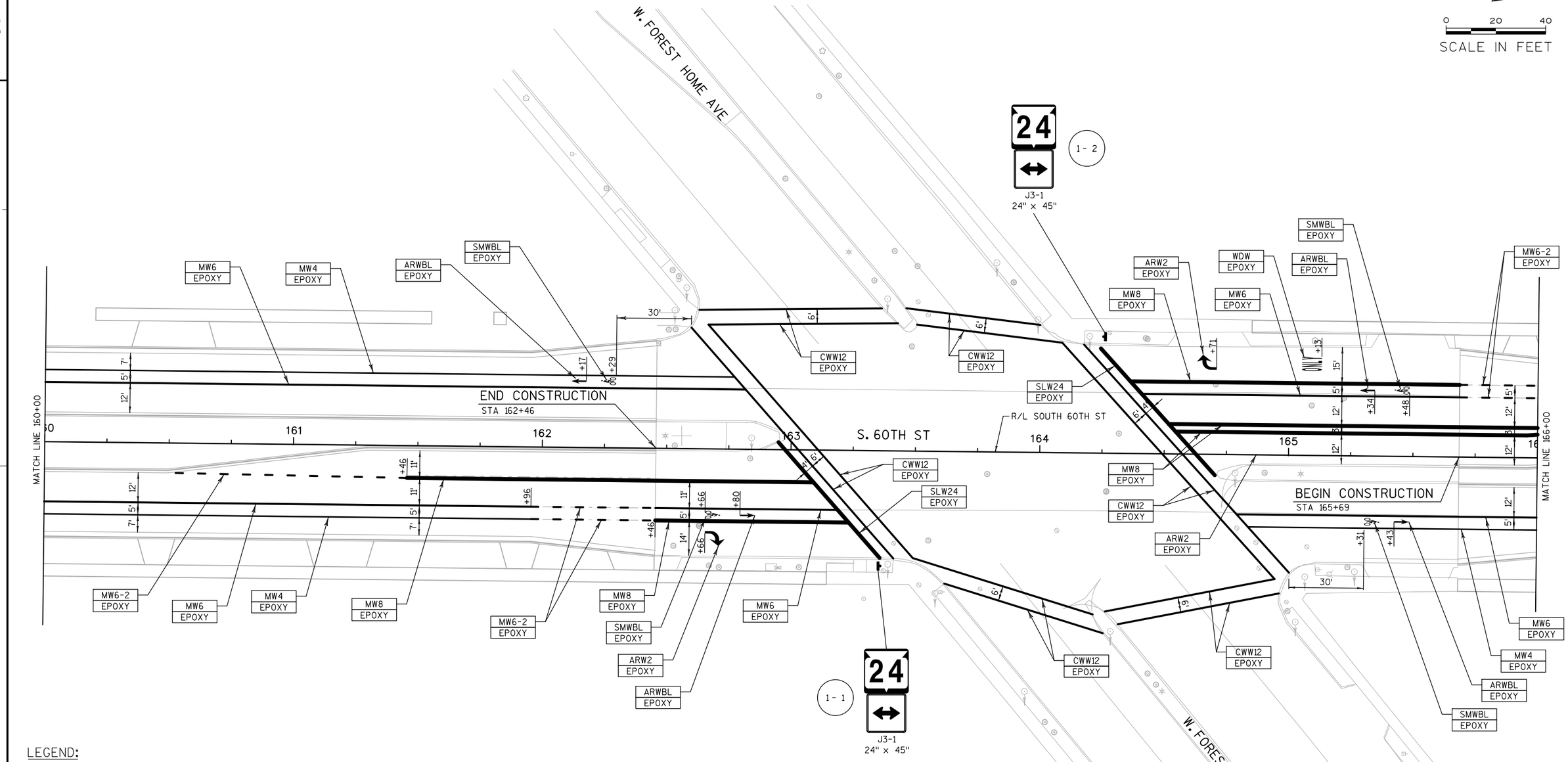
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 131	E



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PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 132	E

2

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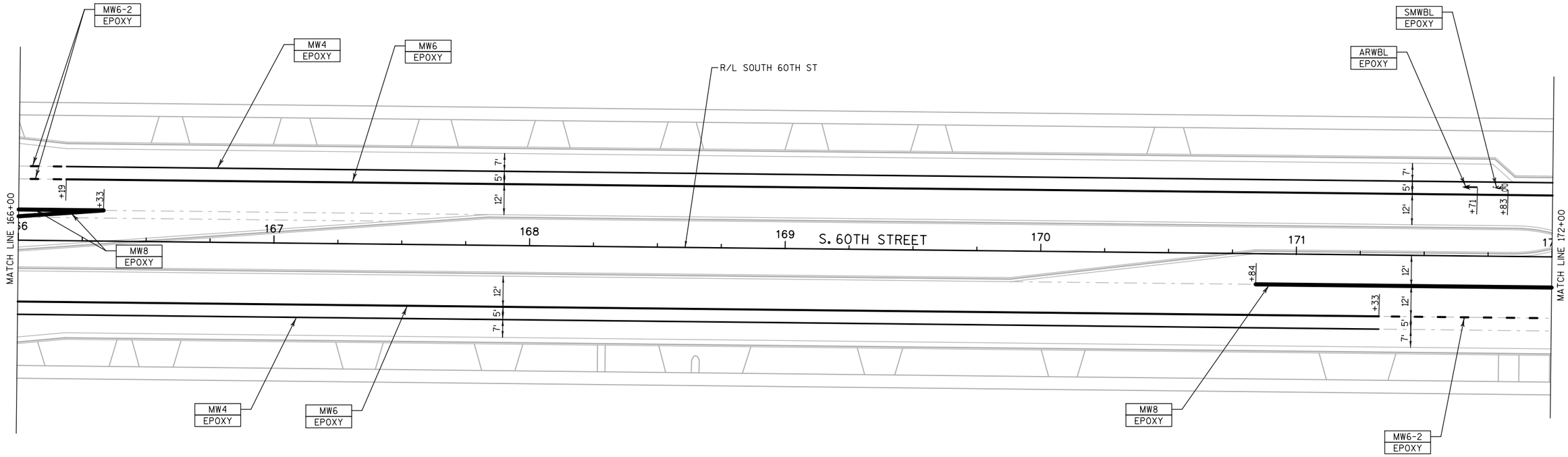
0 20 40

SCALE IN FEET



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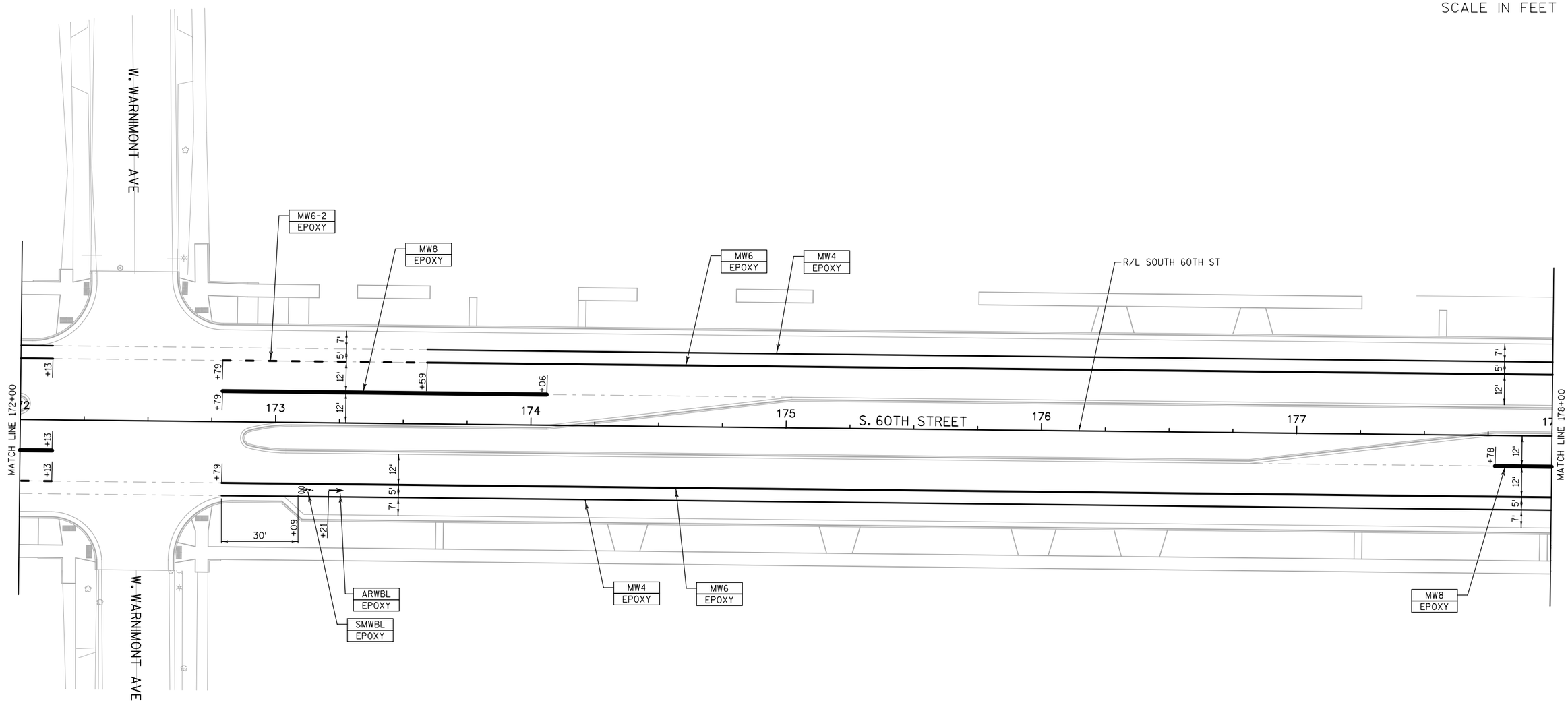
SCALE IN FEET



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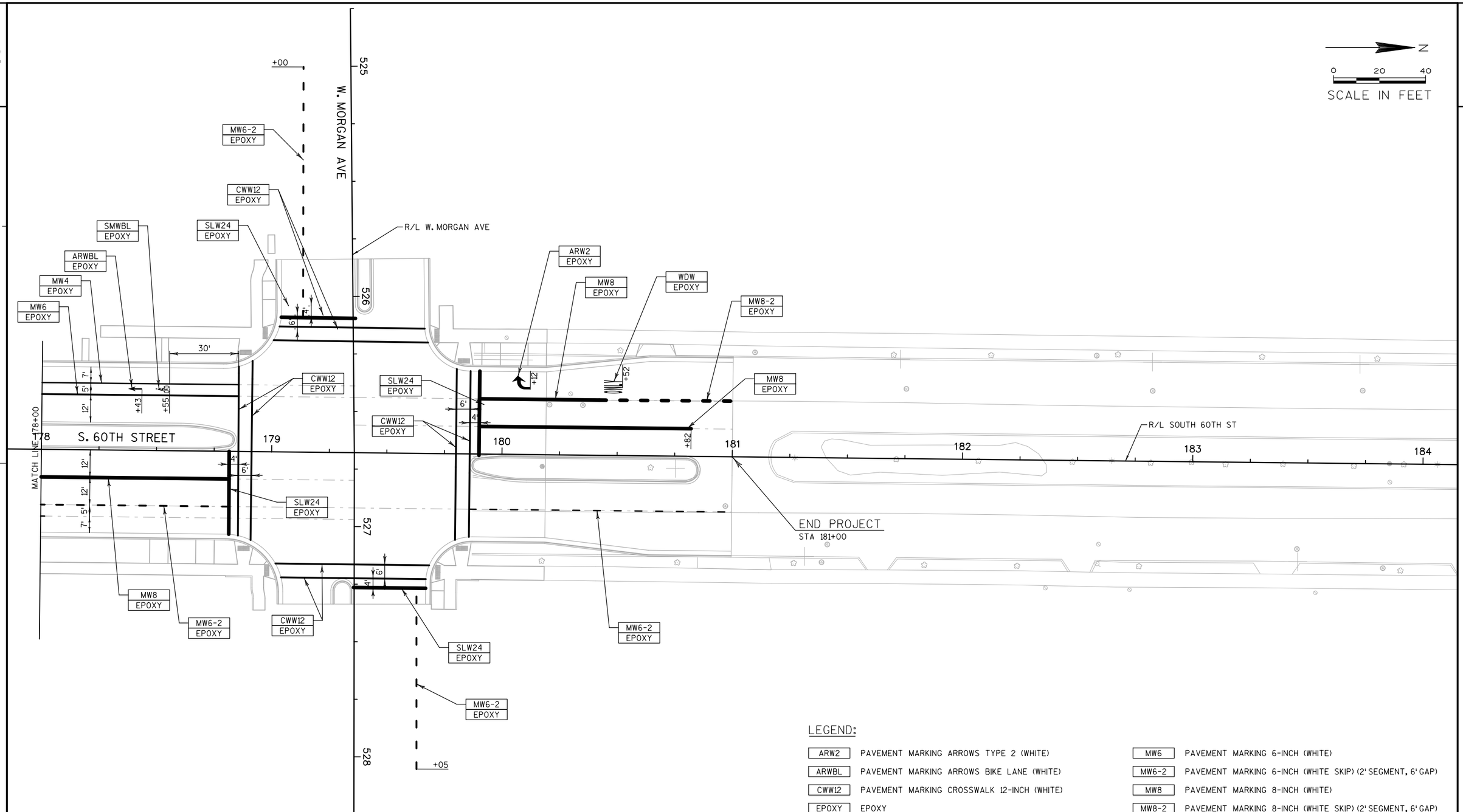
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)	MW8	PAVEMENT MARKING 8-INCH (WHITE)
EPOXY	EPOXY	MW8-2	PAVEMENT MARKING 8-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)	SLW24	PAVEMENT MARKING STOP LINE 24-INCH (WHITE)
MW4	PAVEMENT MARKING 4-INCH (WHITE)	SMWGBL	PAVEMENT MARKING GREEN BIKE LANE SYMBOLS (WHITE)
MW4-2	PAVEMENT MARKING 4-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)	WDW	PAVEMENT MARKING WORDS (WHITE)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 134	E

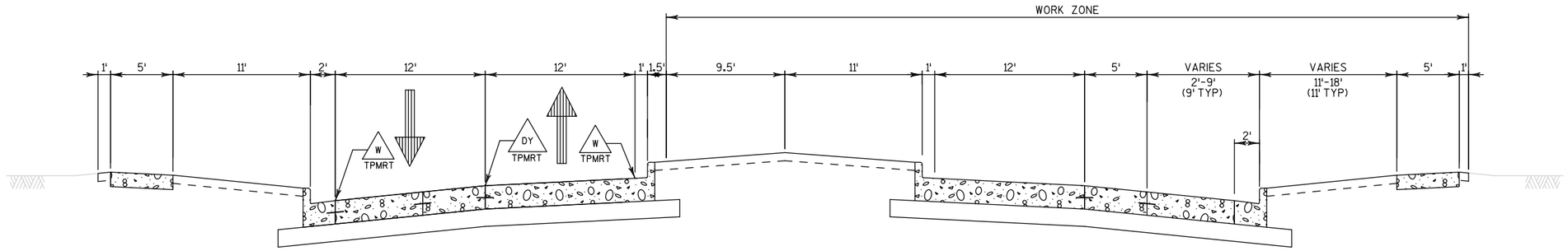


LEGEND:

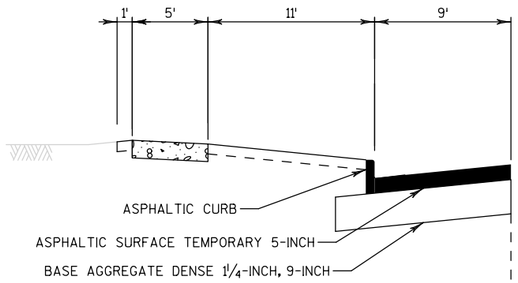
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)	MW6	PAVEMENT MARKING 6-INCH (WHITE)
ARWBL	PAVEMENT MARKING ARROWS BIKE LANE (WHITE)	MW6-2	PAVEMENT MARKING 6-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)	MW8	PAVEMENT MARKING 8-INCH (WHITE)
EPOXY	EPOXY	MW8-2	PAVEMENT MARKING 8-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)	SLW24	PAVEMENT MARKING STOP LINE 24-INCH (WHITE)
MW4	PAVEMENT MARKING 4-INCH (WHITE)	SMWBL	PAVEMENT MARKING SYMBOLS BIKE LANE (WHITE)
MW4-2	PAVEMENT MARKING 4-INCH (WHITE SKIP) (2' SEGMENT, 6' GAP)	WDW	PAVEMENT MARKING WORDS (WHITE)

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING - S. 60TH STREET	SHEET 135	E

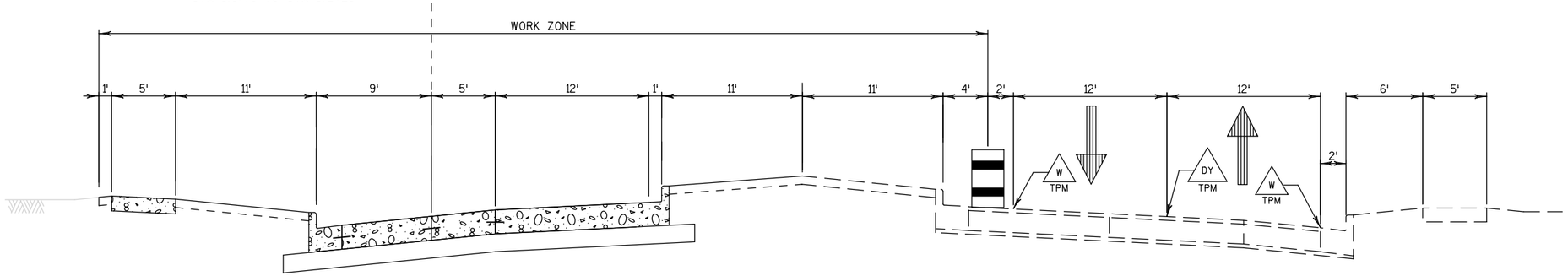
2



STAGE 2 TYPICAL SECTION
SOUTH 60TH STREET
NORTH OF FOREST HOME AVENUE



TEMPORARY PAVEMENT
STA 171+76 TO STA 172+23

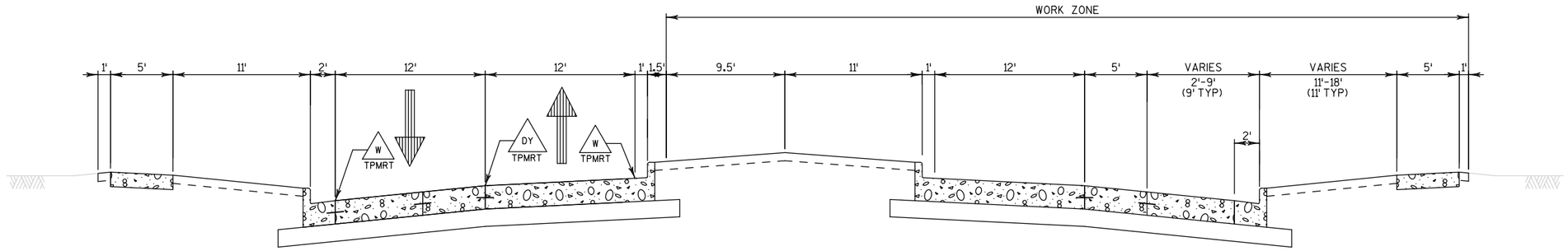


STAGE 1 TYPICAL SECTION
SOUTH 60TH STREET
NORTH OF FOREST HOME AVENUE

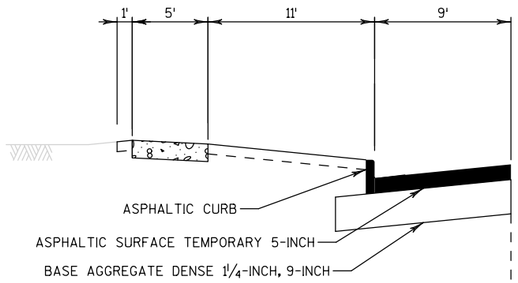
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING TYPICALS	SHEET 136	E

FILE NAME : ch_0000_025101_ts.dgn PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 10:1

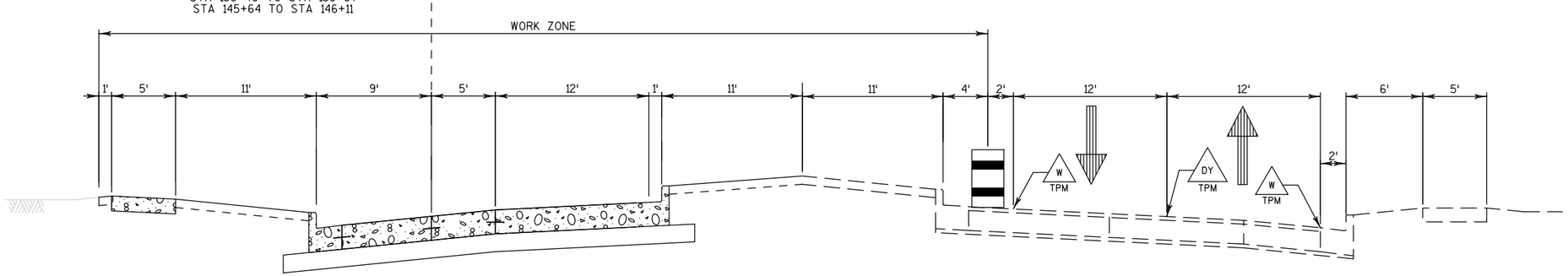
2



STAGE 4 TYPICAL SECTION
SOUTH 60TH STREET
SOUTH OF FOREST HOME AVENUE



TEMPORARY PAVEMENT
STA 137+57 TO STA 138+05
STA 138+40 TO STA 138+87
STA 145+64 TO STA 146+11



STAGE 3 TYPICAL SECTION
SOUTH 60TH STREET
SOUTH OF FOREST HOME AVENUE

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CONSTRUCTION STAGING TYPICALS	SHEET 137	E

STAGE 1

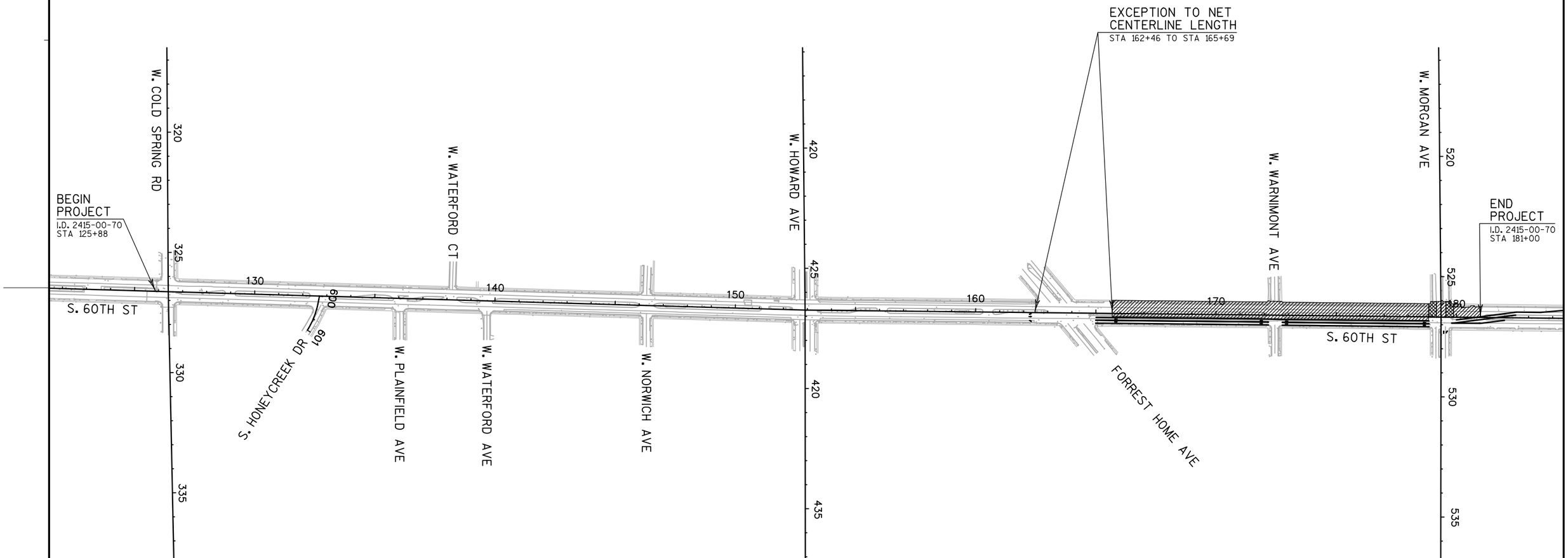
CONSTRUCT SB LANES FROM FOREST HOME TO MORGAN.
REMOVE MEDIAN AND CONSTRUCT TEMPORARY PAVEMENT
PRIOR TO STAGE 1.

TRAFFIC - ONE LANE IN EACH DIRECTION ON THE NB LANES.

N

0 200 400

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET OVERVIEW STAGE 1	SHEET 138	E

2

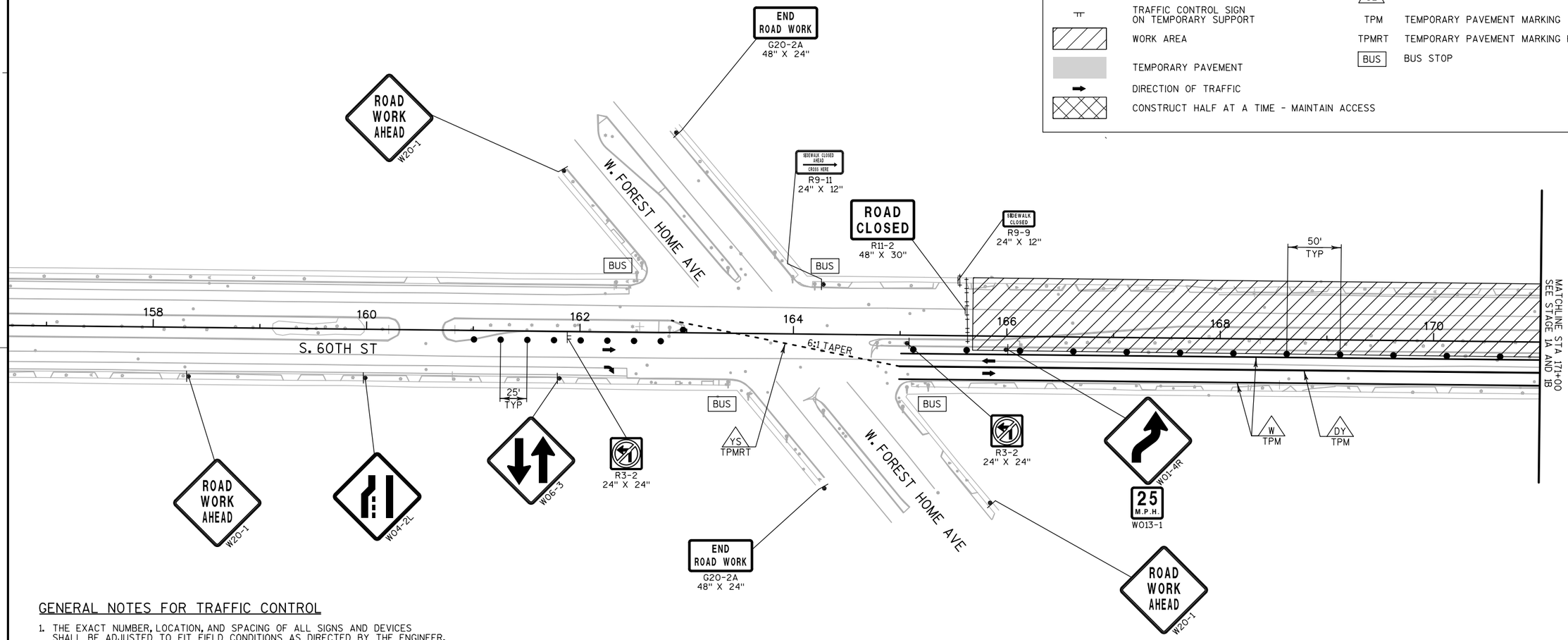
N

0 50 100

SCALE IN FEET

LEGEND

- TRAFFIC CONTROL TYPE III BARRICADE
- TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL ARROW BOARD
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS
- Y — 4-INCH (SOLID YELLOW)
- W — 4-INCH (SOLID WHITE)
- CH — 8-INCH (CHANNELIZING WHITE)
- DY — 4-INCH (SOLID DOUBLE YELLOW)
- YS — 4-INCH (YELLOW 2'LINE 6'GAP)
- SL — STOP LINE 12-INCH
- TPM — TEMPORARY PAVEMENT MARKING
- TPMRT — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- BUS — BUS STOP



GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. (INCIDENTAL TO WORK).
3. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
4. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
5. ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
6. TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.
7. MAINTAIN SIDEWALK ON AT LEAST ONE SIDE OF THE STREET AT ALL TIMES. WHEN EVER ACCESS TO SIDEWALK IS OUT OF SERVICE FOR MORE THAN 48 HOURS, PROVIDE TEMPORARY PEDESTRIAN ACCESS.
8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 1	SHEET 139	E

2

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2'LINE 6'GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

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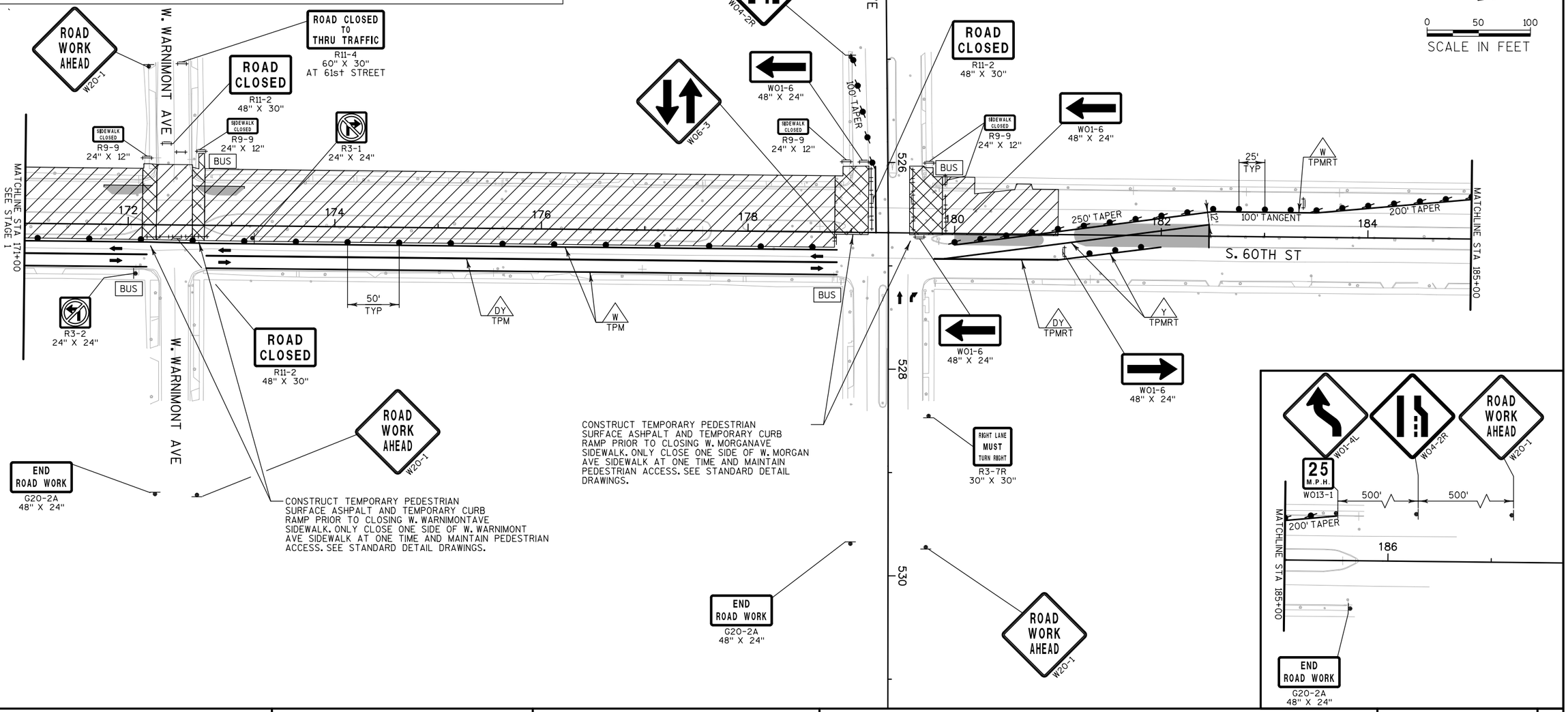
8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.

N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 1A	SHEET 140 E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
	TRAFFIC CONTROL ARROW BOARD
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY PAVEMENT
➡	DIRECTION OF TRAFFIC
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS

Y	4-INCH (SOLID YELLOW)
W	4-INCH (SOLID WHITE)
CH	8-INCH (CHANNELIZING WHITE)
DY	4-INCH (SOLID DOUBLE YELLOW)
YS	4-INCH (YELLOW 2'LINE 6'GAP)
SL	STOP LINE 12-INCH
TPM	TEMPORARY PAVEMENT MARKING
TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
BUS	BUS STOP

GENERAL NOTES FOR TRAFFIC CONTROL

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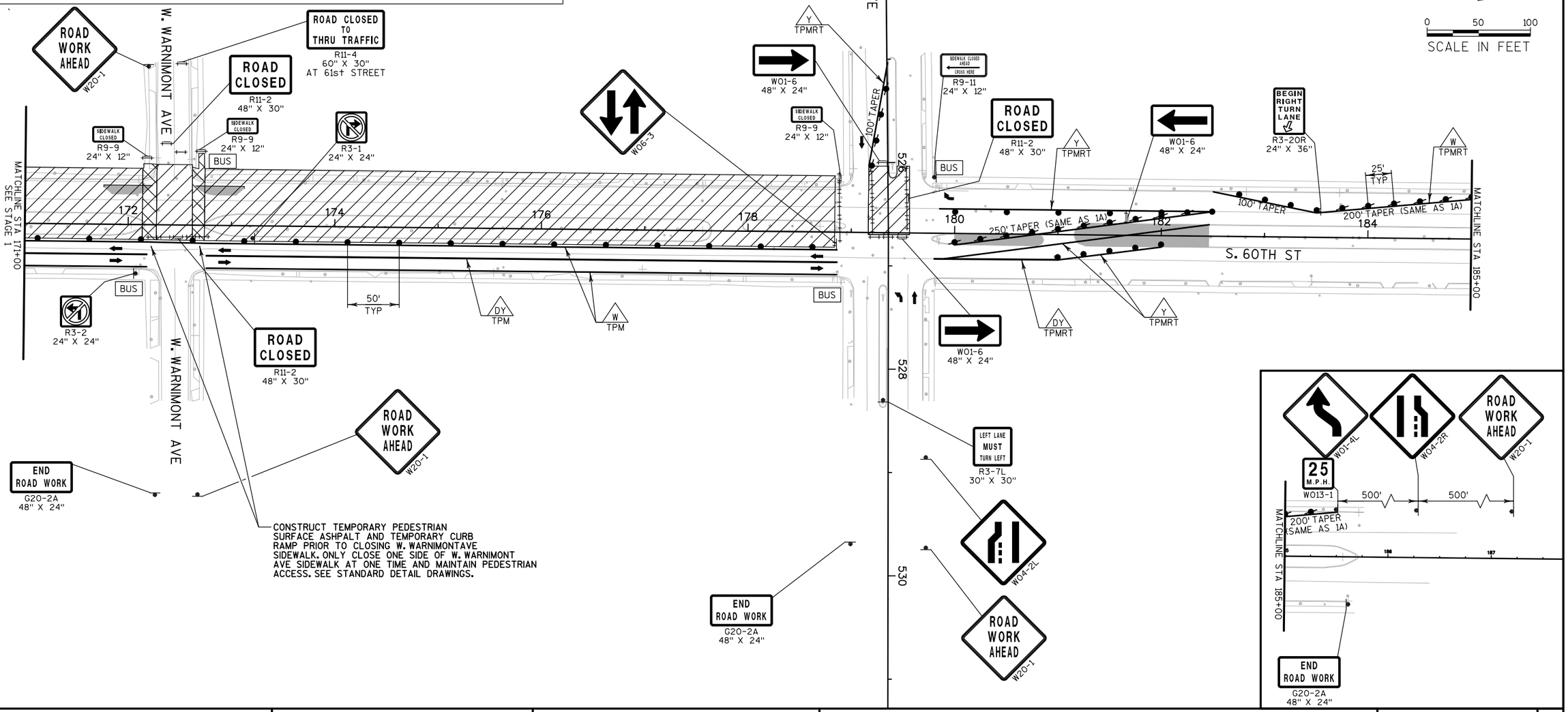
N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 1B	SHEET 141 E

STAGE 2

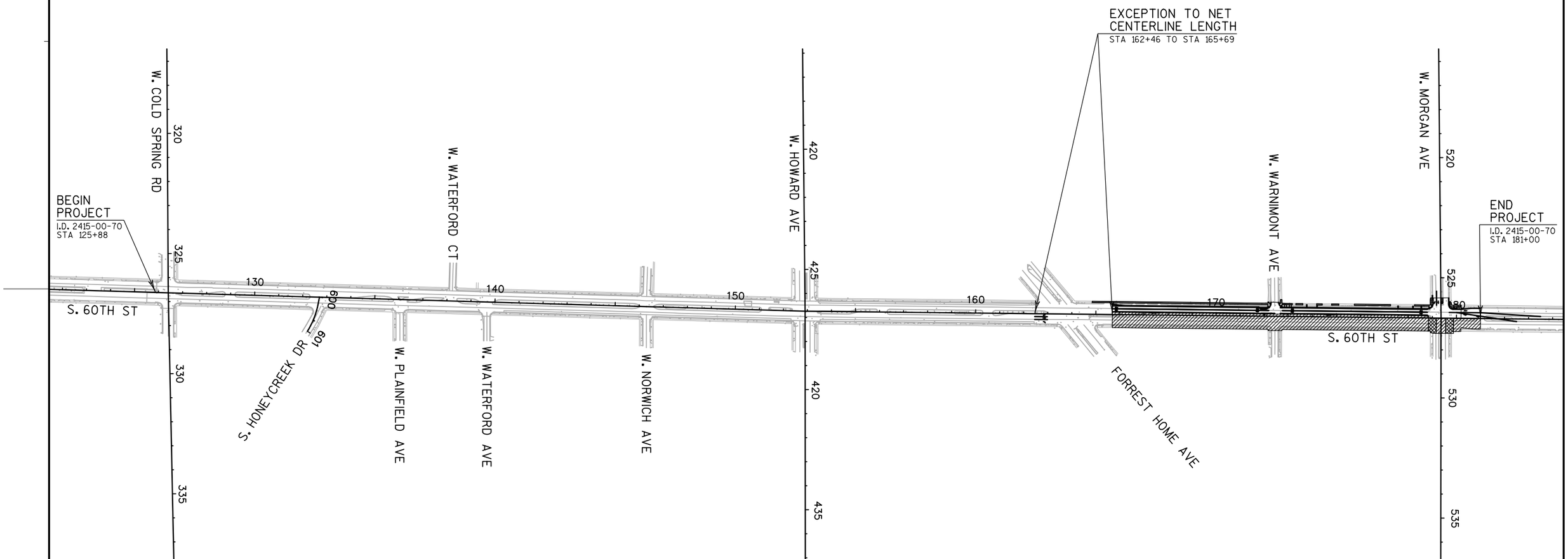
CONSTRUCT NB LANES FROM FOREST HOME TO MORGAN.

TRAFFIC - ONE LANE IN EACH DIRECTION ON THE SB LANES.

N

0 200 400

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET OVERVIEW STAGE 2	SHEET 142	E

2

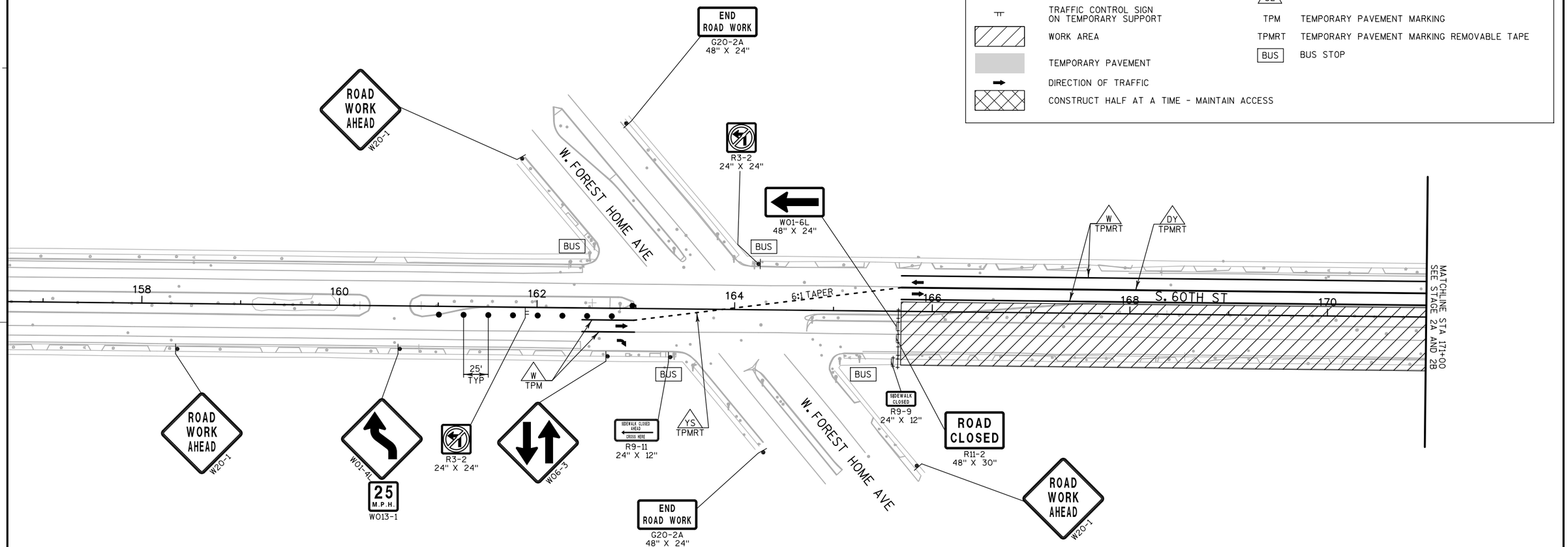
N

0 50 100

SCALE IN FEET

LEGEND

- TRAFFIC CONTROL TYPE III BARRICADE
- TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL ARROW BOARD
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS
- Y — 4-INCH (SOLID YELLOW)
- W — 4-INCH (SOLID WHITE)
- CH — 8-INCH (CHANNELIZING WHITE)
- DY — 4-INCH (SOLID DOUBLE YELLOW)
- YS — 4-INCH (YELLOW 2'LINE 6'GAP)
- SL — STOP LINE 12-INCH
- TPM — TEMPORARY PAVEMENT MARKING
- TPMRT — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
- BUS — BUS STOP



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8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 2	SHEET 143	E

2

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2'LINE 6'GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

ROAD WORK AHEAD W20-1

W04-2R

W. MORGAN AVE

522

524

526

528

530

END ROAD WORK G20-2A 48" X 24"

N

0 50 100

SCALE IN FEET

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W. WARNIMONT AVE

MATCHLINE STA 171+00 SEE STAGE 2

ROAD WORK AHEAD W20-1

END ROAD WORK G20-2A 48" X 24"

R3-2 24" X 24"

CONSTRUCT TEMPORARY PEDESTRIAN SURFACE ASHPALT AND TEMPORARY CURB RAMP PRIOR TO CLOSING W. WARNIMONTAVE SIDEWALK. ONLY CLOSE ONE SIDE OF W. WARNIMONT AVE SIDEWALK AT ONE TIME AND MAINTAIN PEDESTRIAN ACCESS. SEE STANDARD DETAIL DRAWINGS.

RIGHT LANE MUST TURN RIGHT R3-7R 30" X 30"

W01-6 48" X 24"

BUS

25' TYP

DY TPMRT

W TPMRT

172 174 176 178

R3-1 24" X 24"

SIDEWALK CLOSED R9-9 24" X 12"

ROAD CLOSED R11-2 48" X 30"

ROAD WORK AHEAD W20-1

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30" AT 58th STREET

END ROAD WORK G20-2A 48" X 24"

W01-3R

25 M.P.H. W013-1

CONSTRUCT TEMPORARY PEDESTRIAN SURFACE ASHPALT AND TEMPORARY CURB RAMP PRIOR TO CLOSING W. MORGAN AVE SIDEWALK. ONLY CLOSE ONE SIDE OF W. MORGAN AVE SIDEWALK AT ONE TIME AND MAINTAIN PEDESTRIAN ACCESS. SEE STANDARD DETAIL DRAWINGS.

END ROAD WORK G20-2A 48" X 24"

W06-3 W04-2L ROAD WORK AHEAD W20-1

500' 500'

Y TPMRT

250' TAPER

180 182 184

S. 60TH ST

100' TAPER

W01-6 48" X 24"

END ROAD WORK G20-2A 48" X 24"

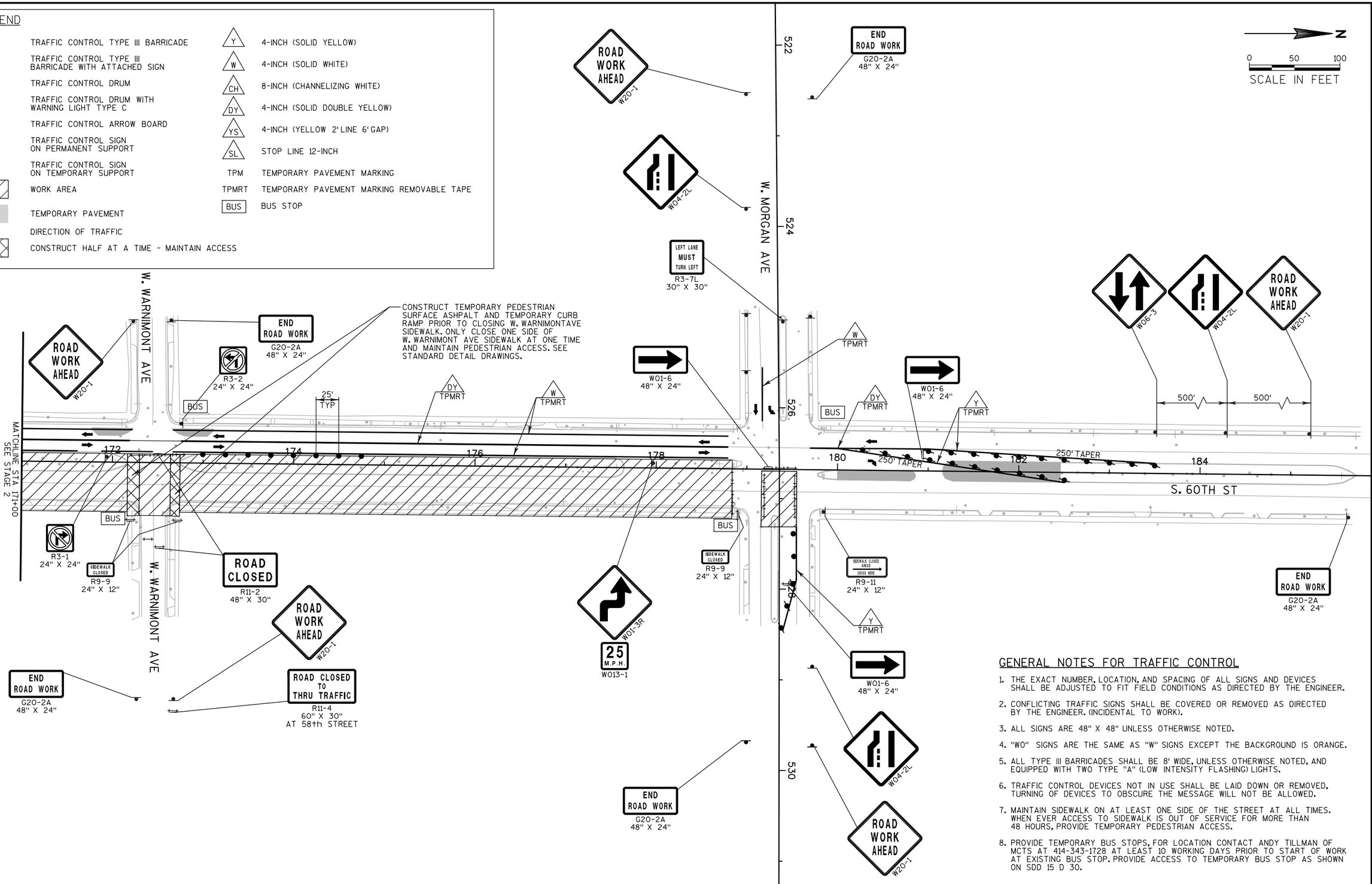
W04-2R

ROAD WORK AHEAD W20-1

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 2A	SHEET 144 E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2'LINE 6'GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		



GENERAL NOTES FOR TRAFFIC CONTROL

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7. MAINTAIN SIDEWALK ON AT LEAST ONE SIDE OF THE STREET AT ALL TIMES. WHEN EVER ACCESS TO SIDEWALK IS OUT OF SERVICE FOR MORE THAN 48 HOURS, PROVIDE TEMPORARY PEDESTRIAN ACCESS.
8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 2B	SHEET 145 E

STAGE 3

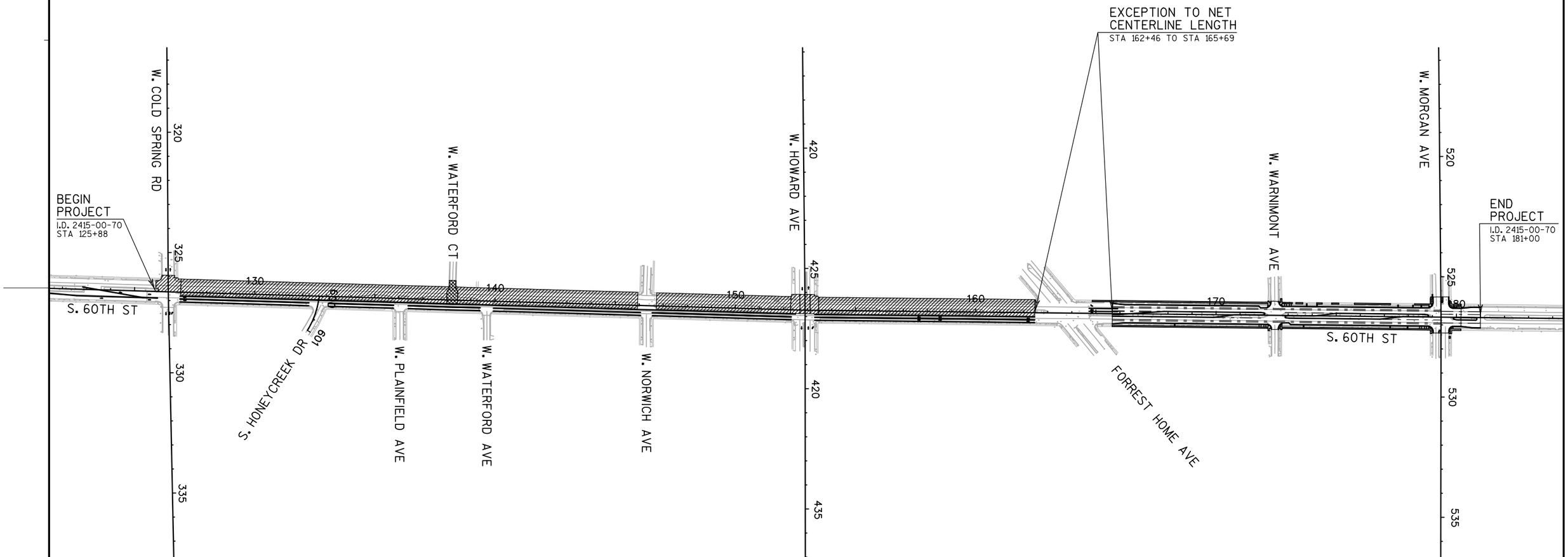
CONSTRUCT SB LANES FROM COLD SPRING TO FOREST HOME.
CONSTRUCT TEMPORARY PAVEMENT.

TRAFFIC - ONE LANE IN EACH DIRECTION ON THE NB LANES.

N

0 200 400

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET OVERVIEW STAGE 3	SHEET 146	E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
⇉	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2' LINE 6' GAP)
●	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
⊤	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
▨	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
▩	TEMPORARY PAVEMENT	BUS	BUS STOP
→	DIRECTION OF TRAFFIC		
▨	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

N

0 50 100

SCALE IN FEET

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. (INCIDENTAL TO WORK).
3. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
4. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
5. ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
6. TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.
7. MAINTAIN SIDEWALK ON AT LEAST ONE SIDE OF THE STREET AT ALL TIMES. WHEN EVER ACCESS TO SIDEWALK IS OUT OF SERVICE FOR MORE THAN 48 HOURS, PROVIDE TEMPORARY PEDESTRIAN ACCESS.
8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.

S. 60TH ST

W. COLD SPRING RD

BEGIN PROJECT
I.D. 2415-00-70
STA 125+93

END ROAD WORK
G20-2A
48" X 24"

500'

ROAD WORK AHEAD
W20-1

W04-2L

NO PARKING ANY TIME
R7-1L
18" X 24"

W06-3

500' 500'

W01-4R

25 M.P.H.
W013-1

25' TYP

250' TAPER

Y TPMRT

SIDEWALK CLOSED AHEAD CROSS HERE
R9-11
24" X 12"

DY TPMRT

WO1-6
48" X 24"

100' TAPER

100' TANGENT

BUS

SIDEWALK CLOSED
R9-9
24" X 12"

DY TPM

W TPM

50' TYP

RIGHT LANE MUST TURN RIGHT
R3-7R
30" X 30"

CONSTRUCT TEMPORARY PEDESTRIAN SURFACE ASHPALT AND TEMPORARY CURB RAMP PRIOR TO CLOSING W. COLD SPRING RD SIDEWALK. ONLY CLOSE ONE SIDE OF W. COLD SPRING RD SIDEWALK AT ONE TIME AND MAINTAIN PEDESTRIAN ACCESS. SEE STANDARD DETAIL DRAWINGS.

W01-4L

MATCHLINE STA 131+00
SEE STAGE 3

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3A	SHEET 147	E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2' LINE 6' GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

N

0 50 100

SCALE IN FEET

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
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END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

W01-4R

CONSTRUCT TEMPORARY PEDESTRIAN SURFACE ASHPALT AND TEMPORARY CURB RAMP PRIOR TO CLOSING W. COLD SPRING RD SIDEWALK. ONLY CLOSE ONE SIDE OF W. COLD SPRING RD SIDEWALK AT ONE TIME AND MAINTAIN PEDESTRIAN ACCESS. SEE STANDARD DETAIL DRAWINGS.

W01-6
48" X 24"

BEGIN PROJECT
I.D. 2415-00-70
STA 125+93

25 M.P.H.
W013-1

W. COLD SPRING RD

322 324 326 328 330

100' TAPER

100' TANGENT

DY TPMRT

SIDEWALK/CROSSWALK OPEN

SIDEWALK CLOSED
R9-9
24" X 12"

BUS

MATCHLINE STA 131+00
SEE STAGE 3

END ROAD WORK
G20-2A
48" X 24"

500'

116 118 120 S. 60TH ST 122 124 126 128 130

25' TYP

250' TAPER

NO PARKING ANY TIME
R7-1L
18" X 24"

W04-2L

W06-3

Y TPMRT

DY TPMRT

W01-6
48" X 24"

DY TPM

W TPM

50' TYP

ROAD WORK AHEAD
W20-1

500' 500'

W04-2L

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3B	SHEET 148	E

FILE NAME : ch_0000_026203_s3b.dgn PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

LEGEND

⊢⊣	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⊢⊣	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2'LINE 6'GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

N

0 50 100

SCALE IN FEET

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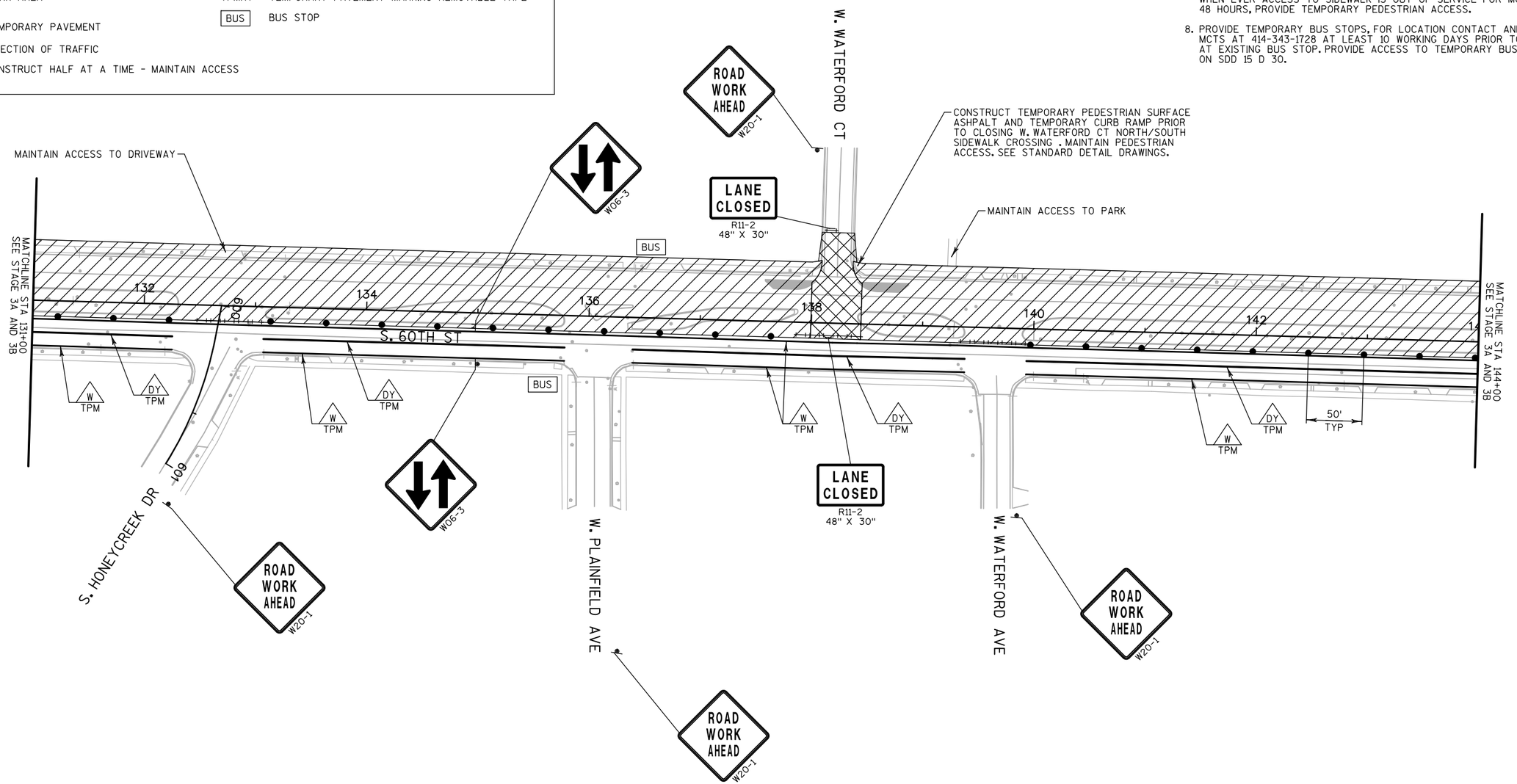

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3	SHEET 149	E

FILE NAME : ch_0000_026204_s3.dgn PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

LEGEND

	TRAFFIC CONTROL TYPE III BARRICADE
	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
	TRAFFIC CONTROL ARROW BOARD
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS

Y	4-INCH (SOLID YELLOW)
W	4-INCH (SOLID WHITE)
CH	8-INCH (CHANNELIZING WHITE)
DY	4-INCH (SOLID DOUBLE YELLOW)
YS	4-INCH (YELLOW 2'LINE 6'GAP)
SL	STOP LINE 12-INCH
TPM	TEMPORARY PAVEMENT MARKING
TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
BUS	BUS STOP

GENERAL NOTES FOR TRAFFIC CONTROL

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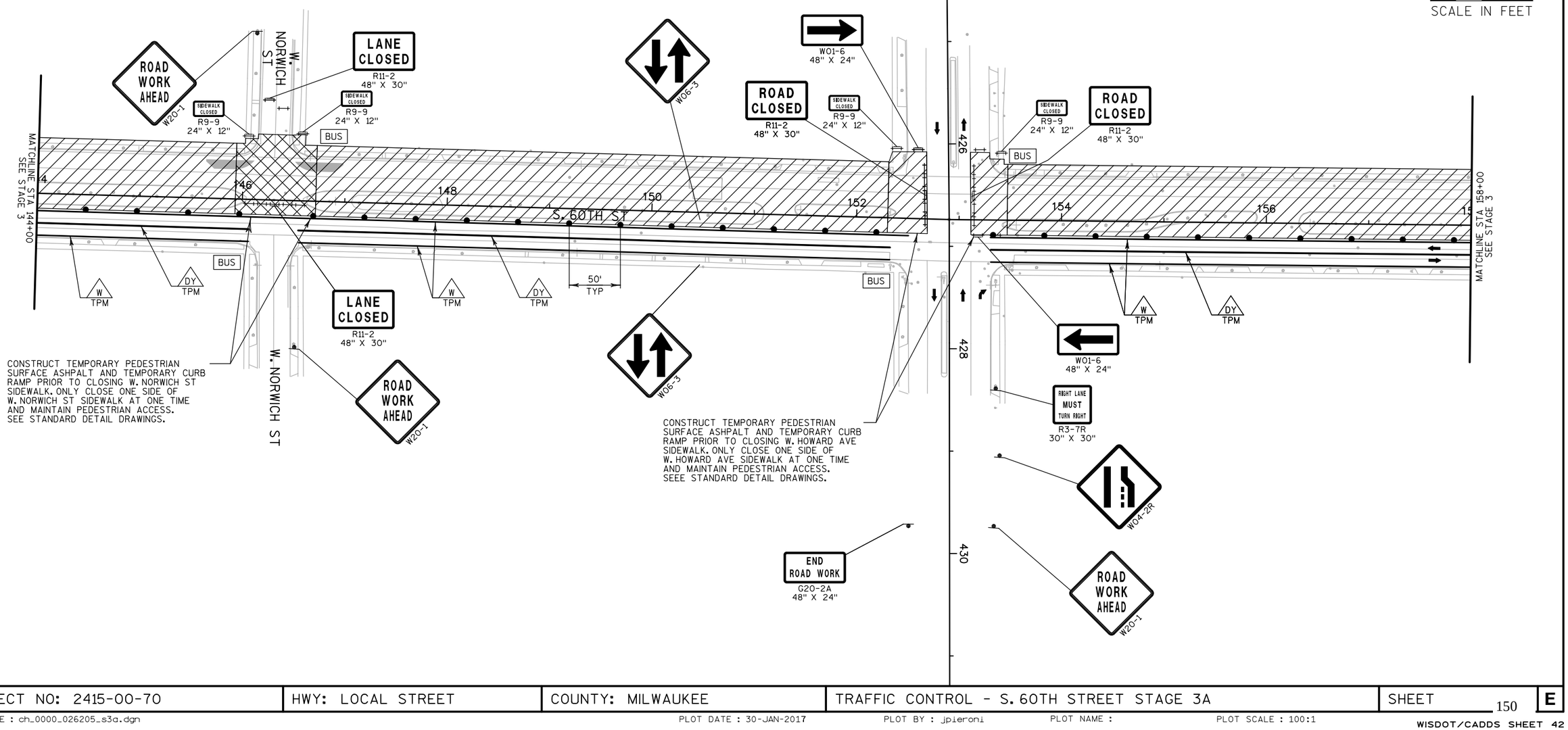
N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3A	SHEET 150 E

LEGEND

	TRAFFIC CONTROL TYPE III BARRICADE
	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
	TRAFFIC CONTROL ARROW BOARD
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS

Y	4-INCH (SOLID YELLOW)
W	4-INCH (SOLID WHITE)
CH	8-INCH (CHANNELIZING WHITE)
DY	4-INCH (SOLID DOUBLE YELLOW)
YS	4-INCH (YELLOW 2'LINE 6'GAP)
SL	STOP LINE 12-INCH
TPM	TEMPORARY PAVEMENT MARKING
TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
BUS	BUS STOP

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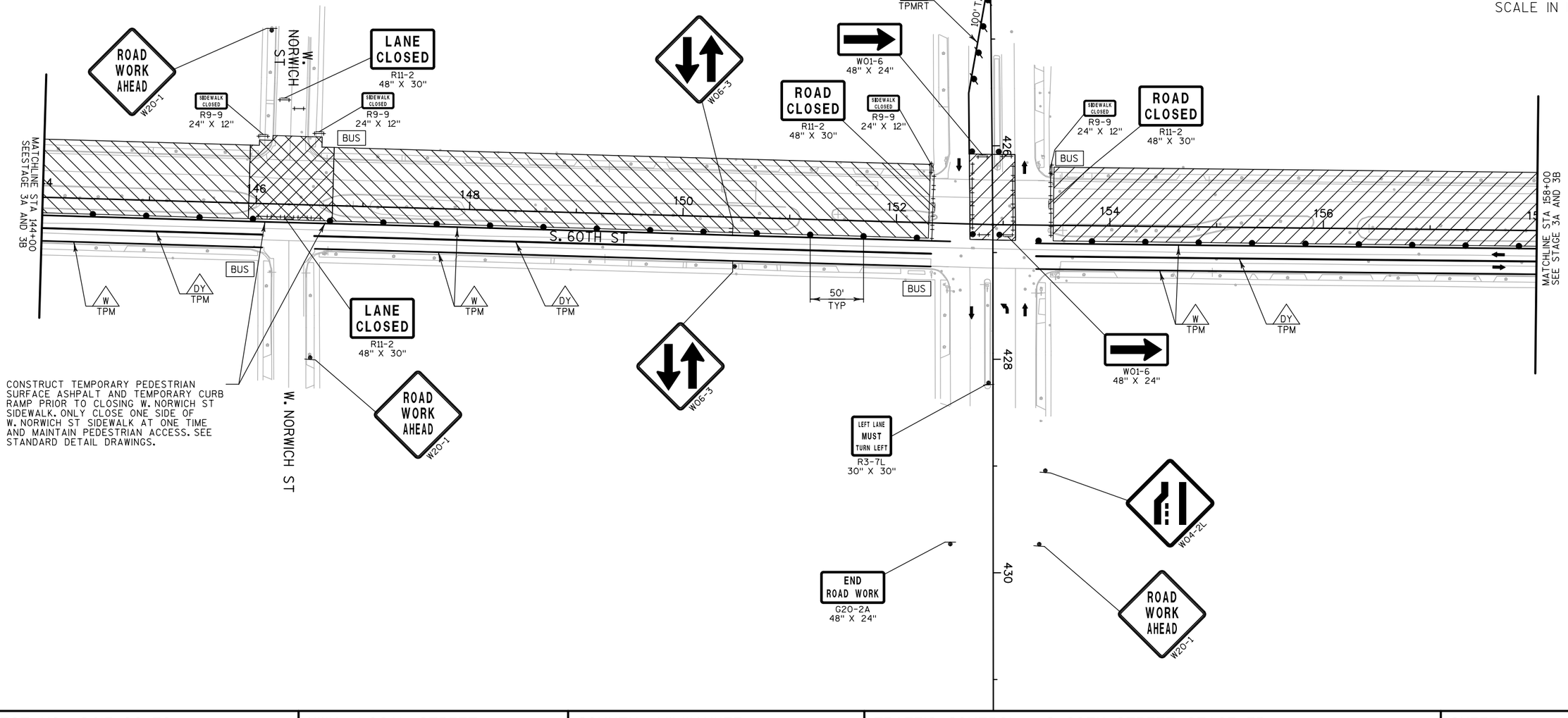
N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3B	SHEET 151 E

2

N

0 50 100

SCALE IN FEET

LEGEND

	TRAFFIC CONTROL TYPE III BARRICADE
	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
	TRAFFIC CONTROL ARROW BOARD
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS
Y	4-INCH (SOLID YELLOW)
W	4-INCH (SOLID WHITE)
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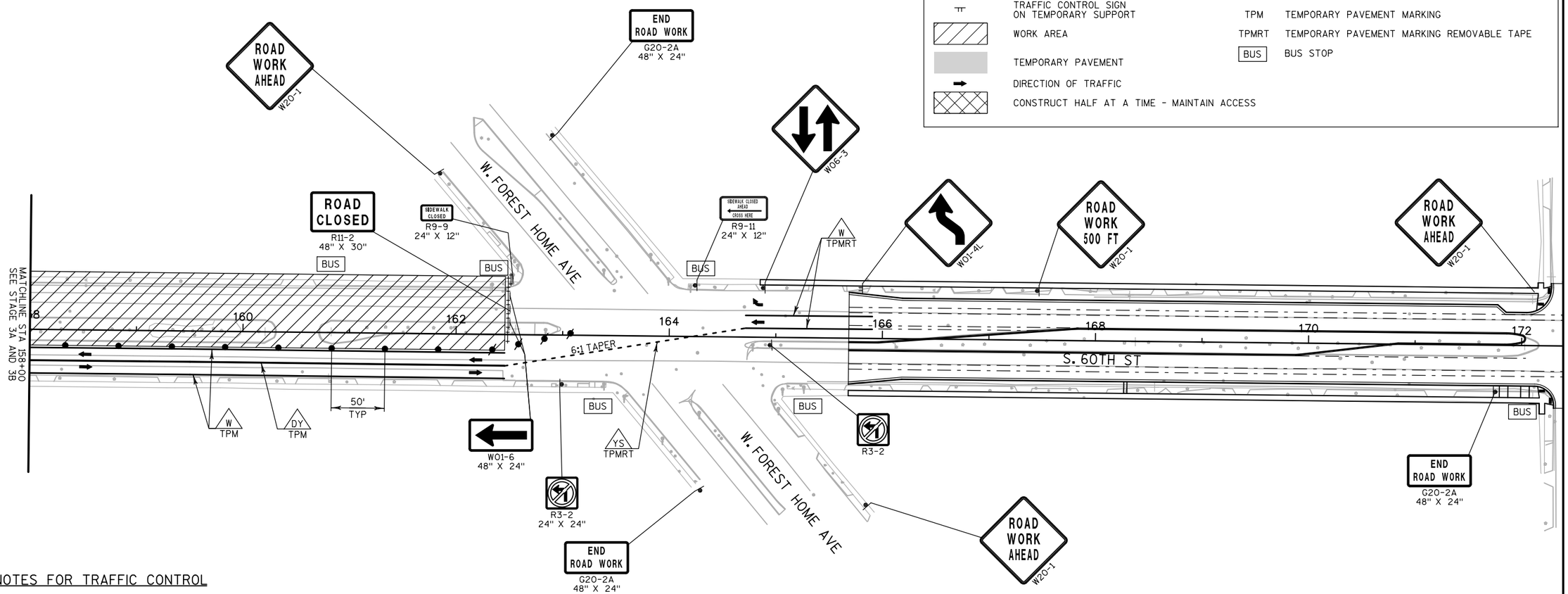
TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
BUS	BUS STOP



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PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 3	SHEET 152	E

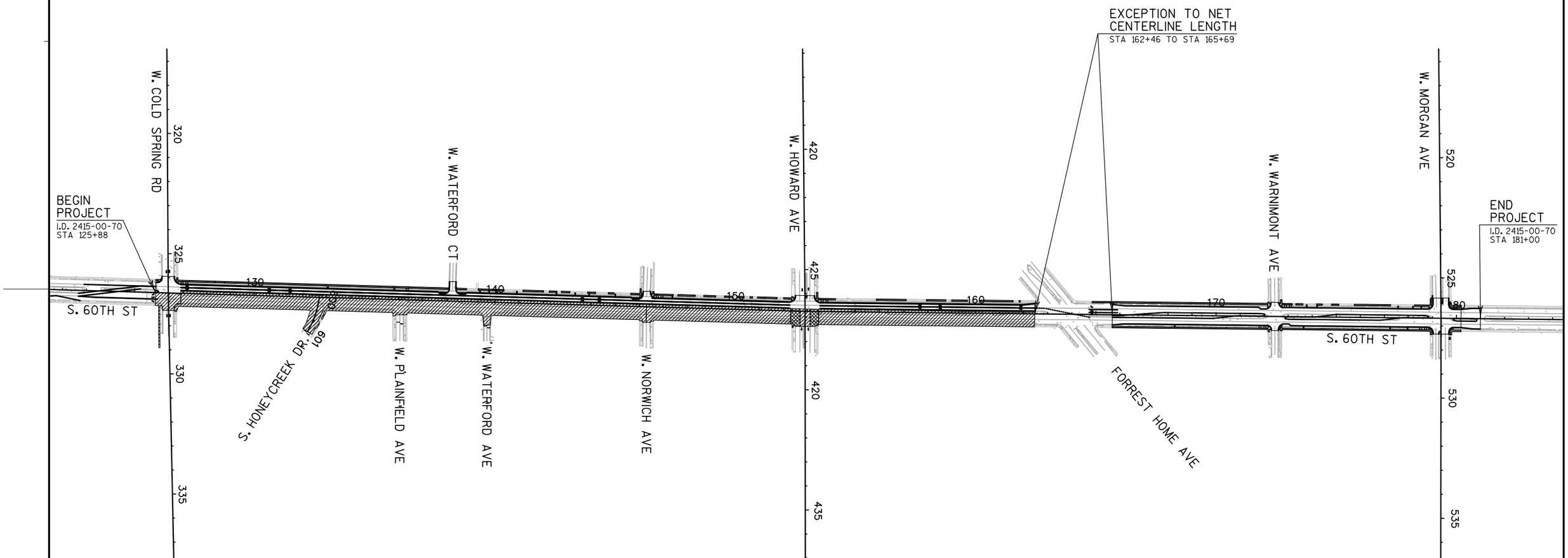
STAGE 4

CONSTRUCT NB LANES FROM COLD SPRING TO FOREST HOME.
CONSTRUCT TEMPORARY PAVEMENT.

TRAFFIC - ONE LANE EACH DIRECTION ON THE
SB LANES CONSTRUCTED IN STAGE 1.

N

0 200 400
SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET OVERVIEW STAGE 4	SHEET 153	E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
⇉	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2' LINE 6' GAP)
●	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
⊤	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
▨	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
▩	TEMPORARY PAVEMENT	BUS	BUS STOP
→	DIRECTION OF TRAFFIC		
▨	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

N

0 50 100

SCALE IN FEET

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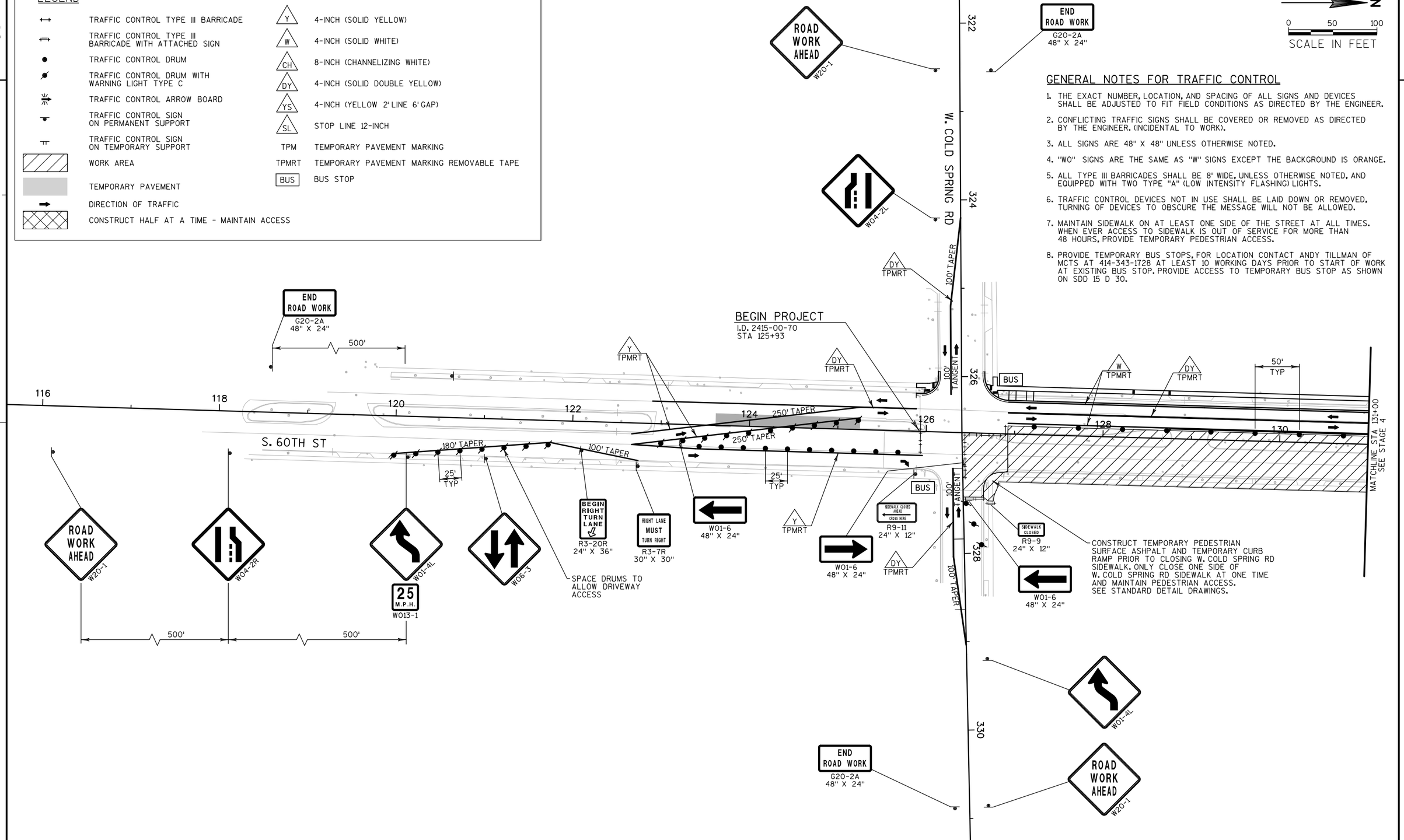

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 4A	SHEET 154	E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2' LINE 6' GAP)
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	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

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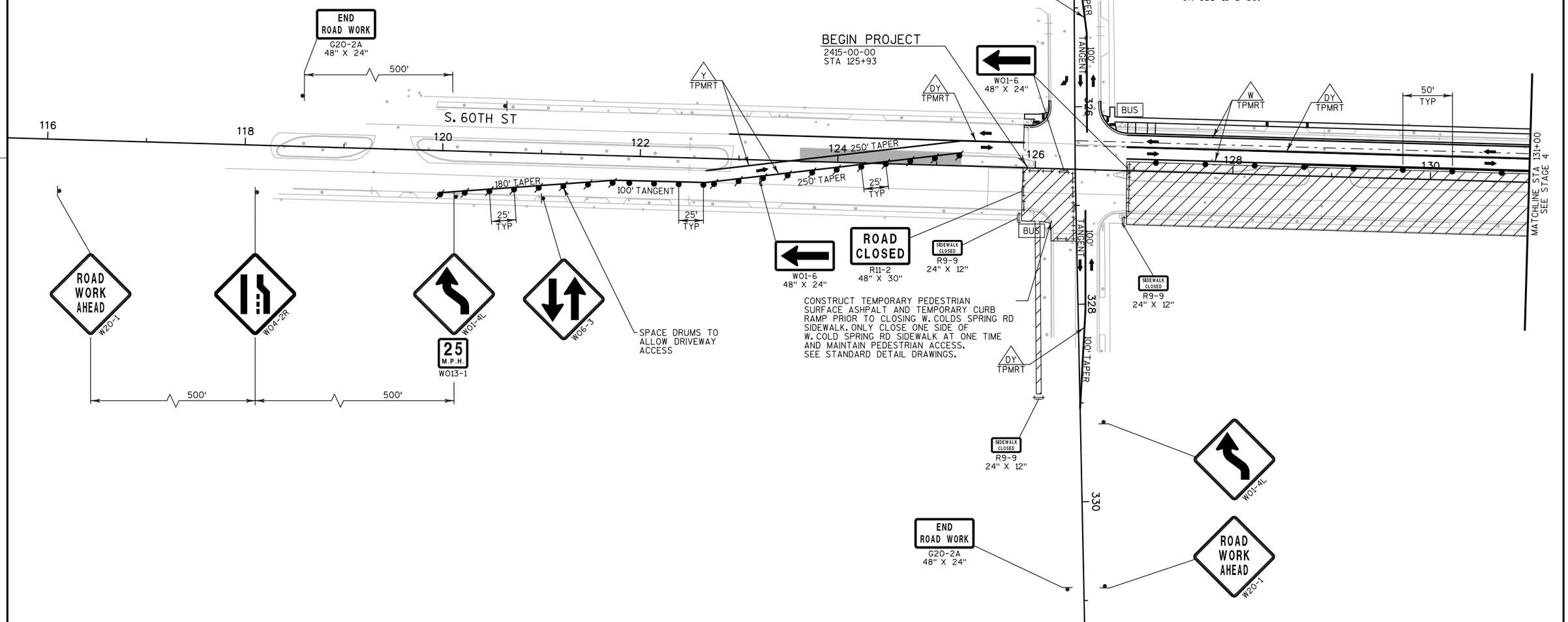


PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 4B	SHEET 155	E

LEGEND

⟷	TRAFFIC CONTROL TYPE III BARRICADE	Y	4-INCH (SOLID YELLOW)
⟷	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	W	4-INCH (SOLID WHITE)
●	TRAFFIC CONTROL DRUM	CH	8-INCH (CHANNELIZING WHITE)
●	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	DY	4-INCH (SOLID DOUBLE YELLOW)
	TRAFFIC CONTROL ARROW BOARD	YS	4-INCH (YELLOW 2'LINE 6'GAP)
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	SL	STOP LINE 12-INCH
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TPM	TEMPORARY PAVEMENT MARKING
	WORK AREA	TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
	TEMPORARY PAVEMENT	BUS	BUS STOP
➡	DIRECTION OF TRAFFIC		
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS		

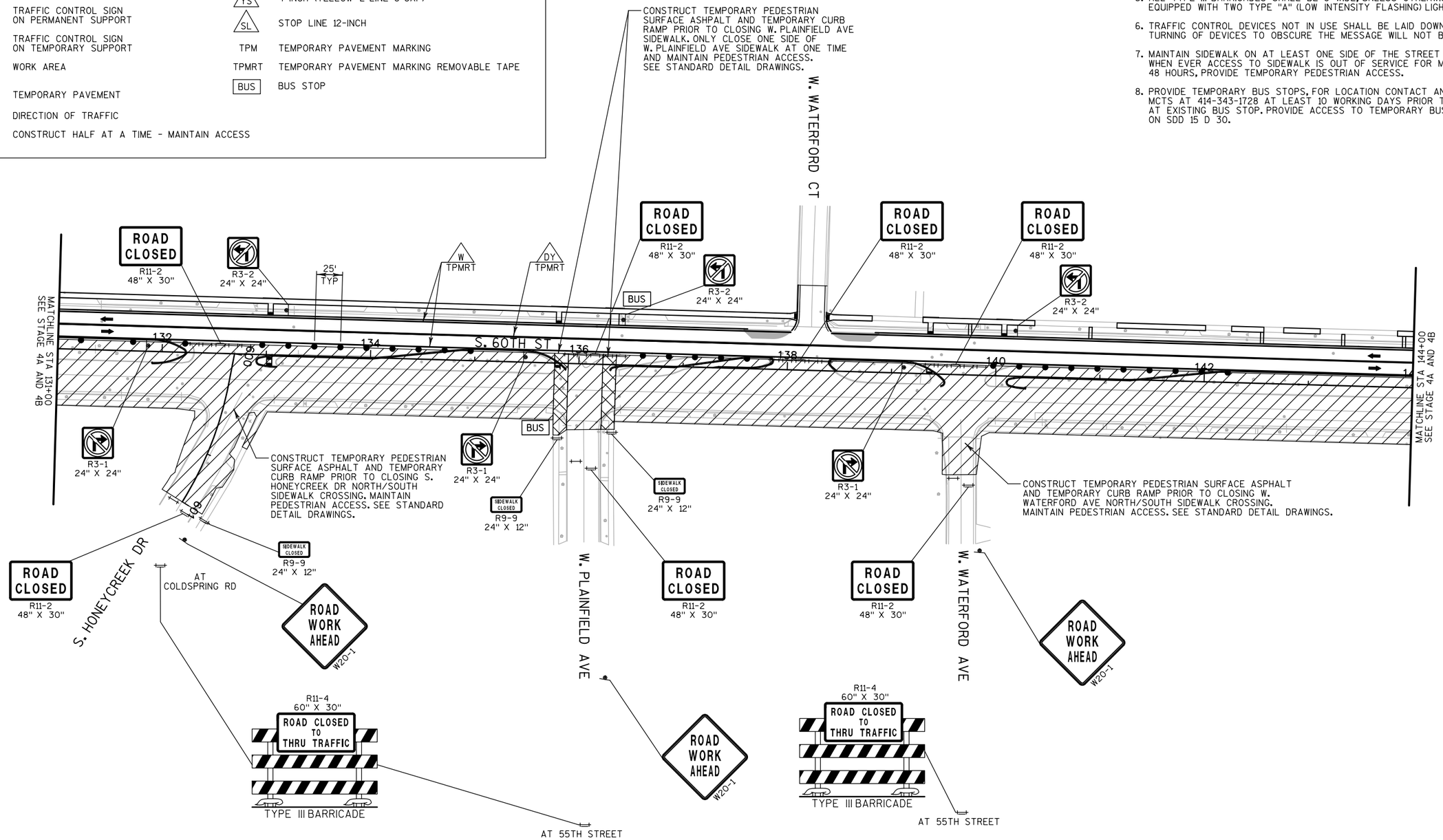
N

0 50 100

SCALE IN FEET

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. (INCIDENTAL TO WORK).
3. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
4. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
5. ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
6. TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.
7. MAINTAIN SIDEWALK ON AT LEAST ONE SIDE OF THE STREET AT ALL TIMES. WHEN EVER ACCESS TO SIDEWALK IS OUT OF SERVICE FOR MORE THAN 48 HOURS, PROVIDE TEMPORARY PEDESTRIAN ACCESS.
8. PROVIDE TEMPORARY BUS STOPS, FOR LOCATION CONTACT ANDY TILLMAN OF MCTS AT 414-343-1728 AT LEAST 10 WORKING DAYS PRIOR TO START OF WORK AT EXISTING BUS STOP. PROVIDE ACCESS TO TEMPORARY BUS STOP AS SHOWN ON SDD 15 D 30.



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 4	SHEET 156	E

2

LEGEND

TRAFFIC CONTROL TYPE III BARRICADE	4-INCH (SOLID YELLOW)
TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	4-INCH (SOLID WHITE)
TRAFFIC CONTROL DRUM	8-INCH (CHANNELIZING WHITE)
TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	4-INCH (SOLID DOUBLE YELLOW)
TRAFFIC CONTROL ARROW BOARD	4-INCH (YELLOW 2'LINE 6'GAP)
TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	STOP LINE 12-INCH
TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TEMPORARY PAVEMENT MARKING
WORK AREA	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TEMPORARY PAVEMENT	BUS STOP
DIRECTION OF TRAFFIC	
CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS	

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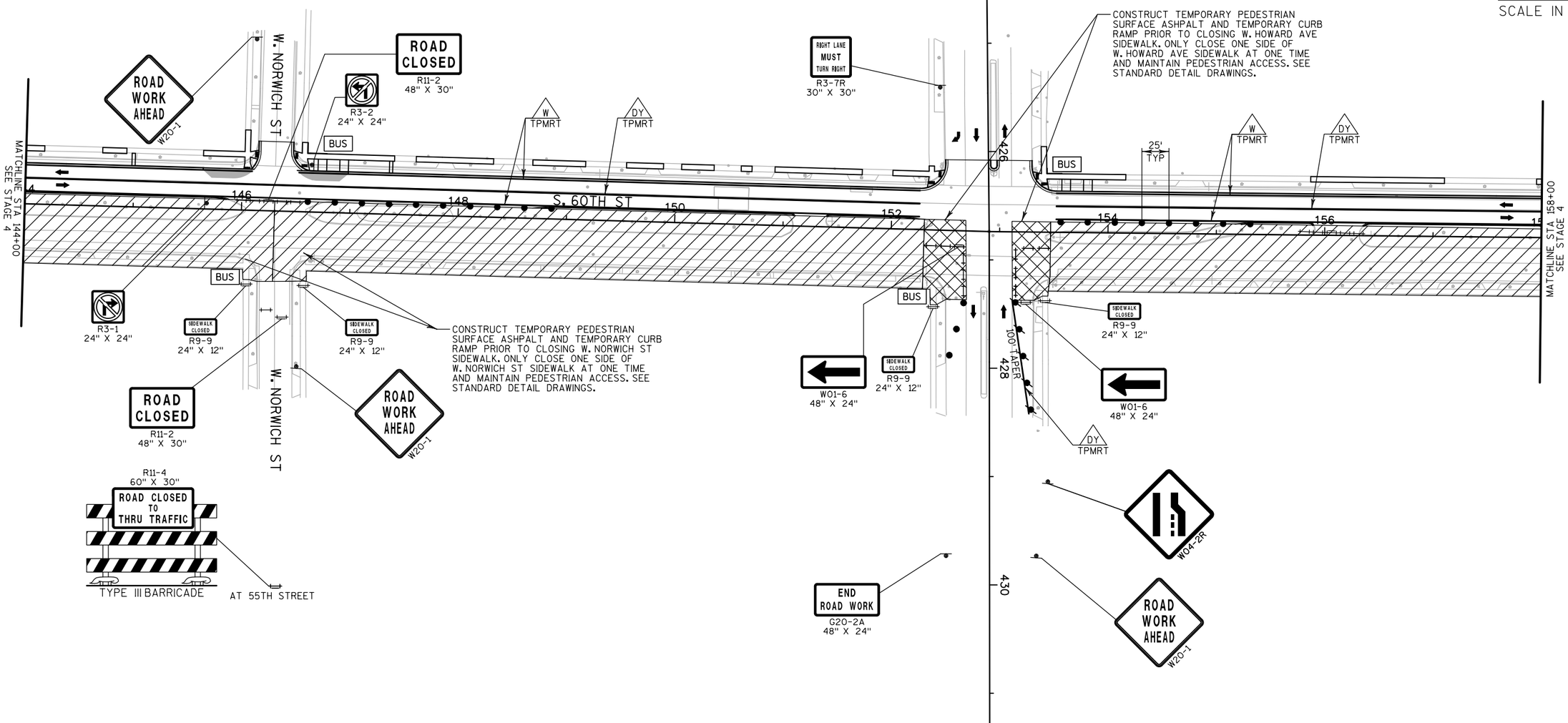
N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 4A	SHEET 157	E

LEGEND

TRAFFIC CONTROL TYPE III BARRICADE	4-INCH (SOLID YELLOW)
TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN	4-INCH (SOLID WHITE)
TRAFFIC CONTROL DRUM	8-INCH (CHANNELIZING WHITE)
TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C	4-INCH (SOLID DOUBLE YELLOW)
TRAFFIC CONTROL ARROW BOARD	4-INCH (YELLOW 2'LINE 6'GAP)
TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT	STOP LINE 12-INCH
TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT	TEMPORARY PAVEMENT MARKING
WORK AREA	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
TEMPORARY PAVEMENT	BUS STOP
DIRECTION OF TRAFFIC	
CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS	

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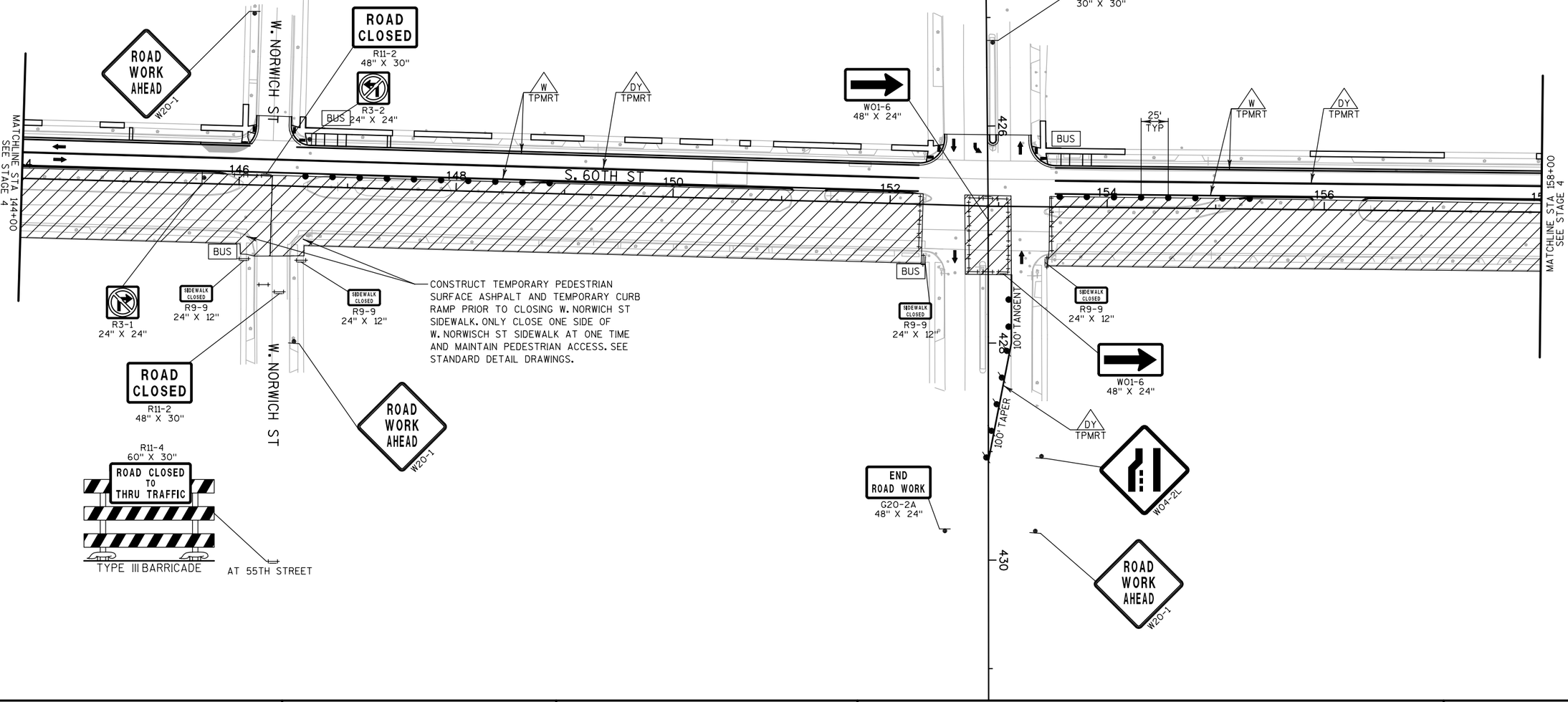
N

0 50 100

SCALE IN FEET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S. 60TH STREET STAGE 4B	SHEET 158	E

2

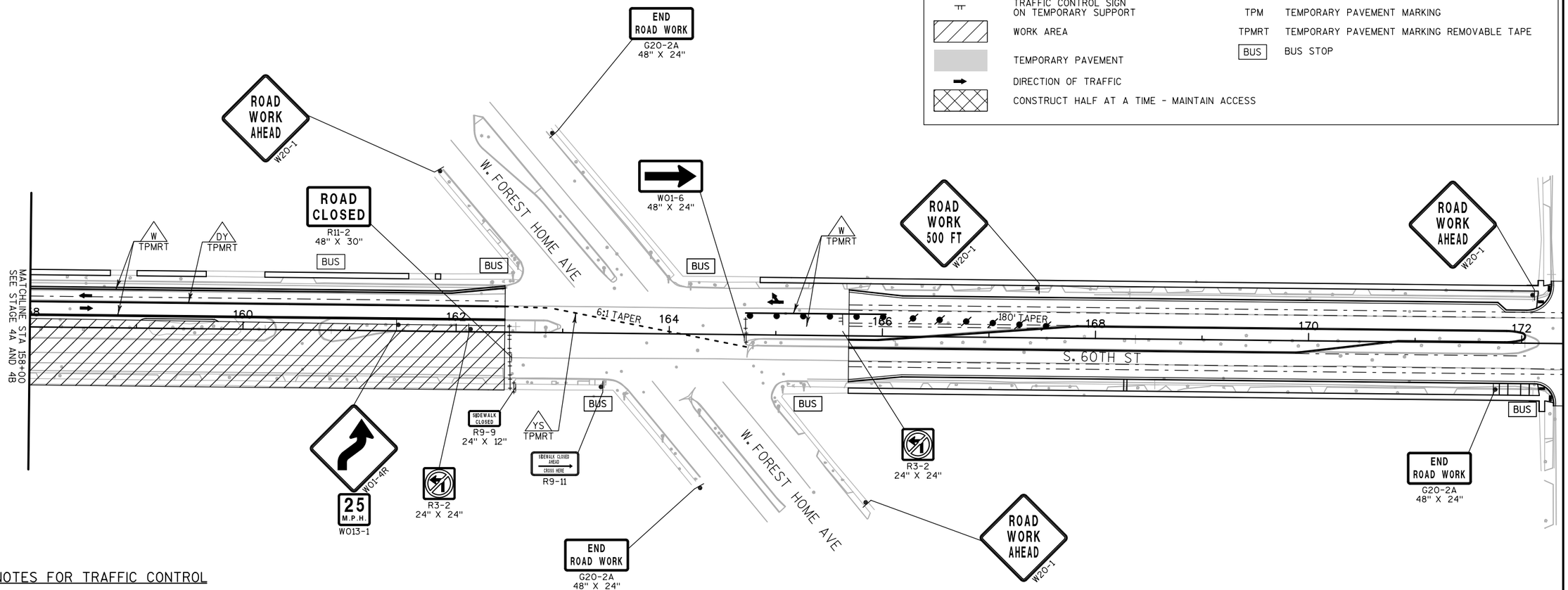
N

0 50 100

SCALE IN FEET

LEGEND

	TRAFFIC CONTROL TYPE III BARRICADE
	TRAFFIC CONTROL TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
	TRAFFIC CONTROL ARROW BOARD
	TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONSTRUCT HALF AT A TIME - MAINTAIN ACCESS
Y	4-INCH (SOLID YELLOW)
W	4-INCH (SOLID WHITE)
CH	8-INCH (CHANNELIZING WHITE)
DY	4-INCH (SOLID DOUBLE YELLOW)
YS	4-INCH (YELLOW 2'LINE 6'GAP)
SL	STOP LINE 12-INCH
TPM	TEMPORARY PAVEMENT MARKING
TPMRT	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
BUS	BUS STOP



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2

BEGIN PROJECT
I.D. 2415-00-70
STA 125+88
X = 584888.17
Y = 273293.88

PI STA 100+00.00
X = 584811.92
Y = 270707.43

T 6 N
22 23
27 26
R 21 E

N 1°41'19" E

126 128 130 132 134 136 138 140

PI STA 126+40.39
= STA 326+63.33
X = 584889.72
Y = 273346.67

T 6 N
22 23
22 23
R 21 E

R/L W. COLD SPRING RD

N 89°40'07" E

326

PI STA 300+00.00
X = 582226.43
Y = 273331.26

T 6 N
22 22
22 22
R 21 E

W. COLD SPRING RD

328

N 88°48'38" E

PI STA 353+22.80
X = 587548.61
Y = 273401.88

T 6 N
23 23
23 23
R 21 E

R/L S. 60TH ST

N 1°39'09" E

SOUTH 60TH STREET

MATCH LINE 140+00

CURVE 1

S. HONEY CREEK DR

S 78°59'50" E

600

601

CURVE 1
PC = 600+29.39
X = 584907.87
Y = 273969.95
PI = 600+91.24
X = 584997.43
Y = 273958.14
PT = 601+51.71
X = 585049.92
Y = 273925.44
R = 335.00
DELTA = 20°55'11.58"
D = 17°06'11.58"
L = 122.32
T = 61.85
BK = S 78°59'49.99" E
AH = S 58°04'34.75" E

N
0 50 100
SCALE IN FEET

2

T 6 N
15 15
22 22
R 21 E

PI STA 400+00.00
X = 582292.43
Y = 275969.86

W. HOWARD AVE

R/L W. HOWARD AVE

N 89°26'57" E

426

MATCH LINE 140+00

140 142 144 146 148 150 152 154

N 1°39'09" E

SOUTH 60TH STREET

R/L S. 60TH ST

N 0°37'27" E

MATCH LINE 155+00

PI STA 152+90.38
= STA 426+73.84
X = 584966.14
Y = 275995.56

T 6 N
15 14
22 23
R 21 E

N 89°56'30" E

428

T 6 N
14 14
23 23
R 21 E

PI STA 453+17.15
X = 587609.45
Y = 275998.25

N
0 50 100
SCALE IN FEET

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	ALIGNMENT PLAN	SHEET 160	E

2

N

0 50 100

SCALE IN FEET

EXCEPTION TO NET CENTERLINE LENGTH
STA 162+46 TO STA 165+69

STA 162+46
X = 584976.55
Y = 276950.83
STA 165+69
X = 584980.07
Y = 277273.64

MATCH LINE 155+00

156 158 R/L S. 60TH ST 160 162 164 166 168 17

N 0°37'27" E

SOUTH 60TH STREET

MATCH LINE 170+00

PI STA 500+00.00
X = 582327.17
Y = 278617.15

T 6 N
15 15
15 15
R 21 E

N 89°29'23" E

W. MORGAN AVE

R/L W. MORGAN AVE

526

END PROJECT
I.D. 2415-00-70
STA 181+00
X = 584996.73
Y = 278805.01

N

0 50 100

SCALE IN FEET

MATCH LINE 170+00

170 172 174 R/L S. 60TH ST 176 178 180 182

SOUTH 60TH STREET

N 0°37'27" E

N 0°37'10" E

PI STA 179+35.89
= STA 526+67.89
X = 584994.96
Y = 278640.91

T 6 N
15 14
15 14
R 21 E

S 89°55'50" E

528

T 6 N
10 11
15 14
R 21 E

PI STA 205+81.91
X = 585023.57
Y = 281286.78

T 6 N
14 14
14 14
R 21 E

PI STA 553+18.69
X = 587645.76
Y = 278637.70

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	ALIGNMENT PLAN	SHEET 161	E

2415-00-70

Line	Item	Item Description	Unit	Total	Qty
0010	201.0105	Clearing	STA	4.000	4.000
0020	201.0120	Clearing	ID	240.000	240.000
0030	201.0205	Grubbing	STA	4.000	4.000
0040	201.0220	Grubbing	ID	240.000	240.000
0050	204.0100	Removing Pavement	SY	45,381.000	45,381.000
0060	204.0110	Removing Asphaltic Surface	SY	131.000	131.000
0070	204.0115	Removing Asphaltic Surface Butt Joints	SY	249.000	249.000
0080	204.0155	Removing Concrete Sidewalk	SY	4,582.000	4,582.000
0090	204.0195	Removing Concrete Bases	EACH	54.000	54.000
0100	204.0220	Removing Inlets	EACH	33.000	33.000
0110	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	355.000	355.000
0120	205.0100	Excavation Common	CY	28,385.000	28,385.000
0130	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	510.000	510.000
0140	213.0100	Finishing Roadway (project) 01. 2415-00-70	EACH	1.000	1.000
0150	305.0110	Base Aggregate Dense 3/4-Inch	TON	344.000	344.000
0160	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	22,481.000	22,481.000
0170	415.0080	Concrete Pavement 8-Inch	SY	35,042.000	35,042.000
0180	415.0210	Concrete Pavement Gaps	EACH	7.000	7.000
0190	416.0170	Concrete Driveway 7-Inch	SY	1,434.000	1,434.000
0200	416.0180	Concrete Driveway 8-Inch	SY	50.000	50.000
0210	416.0610	Drilled Tie Bars	EACH	406.000	406.000
0220	455.0605	Tack Coat	GAL	40.000	40.000
0230	460.5223	HMA Pavement 3 LT 58-28 S	TON	108.000	108.000
0240	460.5224	HMA Pavement 4 LT 58-28 S	TON	143.000	143.000
0250	465.0125	Asphaltic Surface Temporary	TON	259.000	259.000
0260	465.0310	Asphaltic Curb	LF	240.000	240.000
0270	601.0331	Concrete Curb & Gutter 31-Inch	LF	11,147.000	11,147.000
0280	601.0600	Concrete Curb Pedestrian	LF	382.000	382.000
0290	602.0410	Concrete Sidewalk 5-Inch	SF	44,876.000	44,876.000
0300	602.0420	Concrete Sidewalk 7-Inch	SF	2,043.000	2,043.000
0310	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	644.000	644.000
0320	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	998.000	998.000
0330	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	86.000	86.000
0340	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	186.000	186.000
0350	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	130.000	130.000
0360	611.0420	Reconstructing Manholes	EACH	37.000	37.000

2415-00-70

Line	Item	Item Description	Unit	Total	Qty
0370	611.2004	Manholes 4-FT Diameter	EACH	14.000	14.000
0380	611.2005	Manholes 5-FT Diameter	EACH	2.000	2.000
0390	611.3225	Inlets 2x2.5-FT	EACH	35.000	35.000
0400	611.8110	Adjusting Manhole Covers	EACH	43.000	43.000
0410	619.1000	Mobilization	EACH	1.000	1.000
0420	620.0300	Concrete Median Sloped Nose	SF	1,171.000	1,171.000
0430	621.0100	Landmark Reference Monuments	EACH	3.000	3.000
0440	624.0100	Water	MGAL	822.000	822.000
0450	625.0100	Topsoil	SY	20,686.000	20,686.000
0460	628.1504	Silt Fence	LF	740.000	740.000
0470	628.1520	Silt Fence Maintenance	LF	740.000	740.000
0480	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0490	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0500	628.7005	Inlet Protection Type A	EACH	19.000	19.000
0510	628.7010	Inlet Protection Type B	EACH	46.000	46.000
0520	628.7015	Inlet Protection Type C	EACH	71.000	71.000
0530	629.0210	Fertilizer Type B	CWT	15.000	15.000
0540	631.1000	Sod Lawn	SY	20,668.000	20,668.000
0550	632.0101	Trees (species) (size) (root) 01. Callery Pear 4" Cal B&B	EACH	5.000	5.000
0560	632.0101	Trees (species) (size) (root) 02. Freeman Maple 4" Cal B&B	EACH	3.000	3.000
0570	632.0101	Trees (species) (size) (root) 03. Ivory Silk Lilac 4" Cal B&B	EACH	3.000	3.000
0580	632.0101	Trees (species) (size) (root) 04. Bald Cypress 4" Cal B&B	EACH	2.000	2.000
0590	632.0101	Trees (species) (size) (root) 05. Red Bud 2" Cal B&B	EACH	2.000	2.000
0600	632.0101	Trees (species) (size) (root) 06. Sunburst Locust 4" Cal B&B	EACH	2.000	2.000
0610	632.0101	Trees (species) (size) (root) 07. Cleveland Select Pear 2" Cal B&B	EACH	6.000	6.000
0620	632.0201	Shrubs (species) (size) (root) 01. Tiger Eye Sumac #5 CG	EACH	12.000	12.000
0630	632.0201	Shrubs (species) (size) (root) 02. Zagreb Coreopsis #1 CG	EACH	48.000	48.000
0640	632.0301	Vines (species) (size) (root) 01. Karl Forester Grass #1 CG	EACH	144.000	144.000
0650	632.0301	Vines (species) (size) (root) 02. Catmint Blue Wonder #1 CG	EACH	96.000	96.000
0660	632.0301	Vines (species) (size) (root) 03. Daylilies #1 CG	EACH	96.000	96.000
0670	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	20.000	20.000
0680	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000

2415-00-70

Line	Item	Item Description	Unit	Total	Qty
0690	637.2210	Signs Type II Reflective H	SF	15.000	15.000
0700	642.5201	Field Office Type C	EACH	1.000	1.000
0710	643.0100	Traffic Control (project) 01. 2415-00-70	EACH	1.000	1.000
0720	643.0300	Traffic Control Drums	DAY	13,608.000	13,608.000
0730	643.0420	Traffic Control Barricades Type III	DAY	10,390.000	10,390.000
0740	643.0705	Traffic Control Warning Lights Type A	DAY	16,112.000	16,112.000
0750	643.0715	Traffic Control Warning Lights Type C	DAY	3,051.000	3,051.000
0760	643.0900	Traffic Control Signs	DAY	11,143.000	11,143.000
0770	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	5,614.000	5,614.000
0780	644.1420.S	Temporary Pedestrian Surface Plywood	SF	2,000.000	2,000.000
0790	644.1430.S	Temporary Pedestrian Surface Plate	SF	4,000.000	4,000.000
0800	644.1601.S	Temporary Curb Ramp	EACH	60.000	60.000
0810	644.1616.S	Temporary Pedestrian Safety Fence	LF	200.000	200.000
0820	646.0103	Pavement Marking Paint 4-Inch	LF	20,444.000	20,444.000
0830	646.0106	Pavement Marking Epoxy 4-Inch	LF	8,413.000	8,413.000
0840	646.0116	Pavement Marking Epoxy 6-Inch	LF	8,613.000	8,613.000
0850	646.0126	Pavement Marking Epoxy 8-Inch	LF	2,375.000	2,375.000
0860	646.0600	Removing Pavement Markings	LF	27,583.000	27,583.000
0870	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	4.000	4.000
0880	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	20.000	20.000
0890	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	20.000	20.000
0900	647.0356	Pavement Marking Words Epoxy	EACH	3.000	3.000
0910	647.0576	Pavement Marking Stop Line Epoxy 24-Inch	LF	550.000	550.000
0920	647.0776	Pavement Marking Crosswalk Epoxy 12-Inch	LF	2,873.000	2,873.000
0930	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	28,151.000	28,151.000
0940	650.4000	Construction Staking Storm Sewer	EACH	63.000	63.000
0950	650.4500	Construction Staking Subgrade	LF	5,298.000	5,298.000
0960	650.5000	Construction Staking Base	LF	81.000	81.000
0970	650.7000	Construction Staking Concrete Pavement	LF	5,217.000	5,217.000
0980	650.8500	Construction Staking Electrical Installations (project) 01. 2415-00-70	LS	1.000	1.000
0990	650.9910	Construction Staking Supplemental Control (project) 01. 2415-00-70	LS	1.000	1.000
1000	650.9920	Construction Staking Slope Stakes	LF	5,217.000	5,217.000
1010	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	601.000	601.000
1020	652.0230	Conduit Rigid Nonmetallic Schedule 40 2 1/2-Inch	LF	700.000	700.000
1030	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	4,750.000	4,750.000
1040	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	2,840.000	2,840.000
1050	652.0615	Conduit Special 3-Inch	LF	840.000	840.000
1060	652.0700.S	Install Conduit into Existing Item	EACH	2.000	2.000

2415-00-70

Line	Item	Item Description	Unit	Total	Qty
1070	652.0800	Conduit Loop Detector	LF	146.000	146.000
1080	654.0101	Concrete Bases Type 1	EACH	14.000	14.000
1090	654.0105	Concrete Bases Type 5	EACH	34.000	34.000
1100	654.0110	Concrete Bases Type 10	EACH	12.000	12.000
1110	655.0230	Cable Traffic Signal 5-14 AWG	LF	50.000	50.000
1120	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,500.000	1,500.000
1130	655.0700	Loop Detector Lead In Cable	LF	809.000	809.000
1140	655.0800	Loop Detector Wire	LF	654.000	654.000
1150	657.0100	Pedestal Bases	EACH	21.000	21.000
1160	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	34.000	34.000
1170	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	2.000	2.000
1180	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	66.000	66.000
1190	661.0200	Temporary Traffic Signals for Intersections (location) 01. STH 24 (Forest home Ave) and S. 60th Street	LS	1.000	1.000
1200	690.0150	Sawing Asphalt	LF	532.000	532.000
1210	690.0250	Sawing Concrete	LF	2,416.000	2,416.000
1220	715.0415	Incentive Strength Concrete Pavement	DOL	10,513.000	10,513.000
1230	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,100.000	1,100.000
1240	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,600.000	1,600.000
1250	SPV.0060	Special 01. Signature Bed	EACH	2.000	2.000
1260	SPV.0060	Special 02. Temporary Bus Stop Pad	EACH	11.000	11.000
1270	SPV.0060	Special 03. Utility Line Opening (ULO)	EACH	10.000	10.000
1280	SPV.0060	Special 04. Construction Staking Curb Ramp	EACH	64.000	64.000
1290	SPV.0060	Special 06. Inlet Covers Type 57	EACH	64.000	64.000
1300	SPV.0060	Special 07. Manhole Covers Type 58A	EACH	56.000	56.000
1310	SPV.0060	Special 08. Catch basins Type 45A	EACH	17.000	17.000
1320	SPV.0060	Special 09. Water Main Protection	EACH	24.000	24.000
1330	SPV.0060	Special 30. Internal Sanitary Manhole Seals	EACH	19.000	19.000
1340	SPV.0060	Special 31. External Sanitary Manhole Seals	EACH	5.000	5.000
1350	SPV.0060	Special 40. Adjusting Water Box	EACH	70.000	70.000
1360	SPV.0060	Special 41. Adjusting Water Manhole	EACH	10.000	10.000
1370	SPV.0060	Special 50. Luminaire Utility LED 95W Type 2	EACH	68.000	68.000
1380	SPV.0060	Special 51. Luminaire Utility LED 164W Type 2	EACH	18.000	18.000
1390	SPV.0060	Special 52. Fiberglass/Polymer Concrete Pull Box 13" x 24" x 24"	EACH	43.000	43.000
1400	SPV.0060	Special 53. Fiberglass/Polymer Concrete Pull Box 17" x 30" x 24"	EACH	42.000	42.000
1410	SPV.0060	Special 54. Pole Type 5A Aluminum 25-FT	EACH	34.000	34.000
1420	SPV.0060	Special 55. Pole Type 9	EACH	3.000	3.000
1430	SPV.0060	Special 56. Pole Type 10	EACH	9.000	9.000

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Line	Item	Item Description	Unit	Total	Qty
1440	SPV.0060	Special 61. Luminaire Arm Steel 8-FT	EACH	18.000	18.000
1450	SPV.0060	Special 62. Monotube Arm 20-FT	EACH	5.000	5.000
1460	SPV.0060	Special 63. Monotube Arm 25-FT	EACH	6.000	6.000
1470	SPV.0060	Special 64. Monotube Arm 30-FT	EACH	1.000	1.000
1480	SPV.0060	Special 75. Install Conduit into Existing Manhole	EACH	4.000	4.000
1490	SPV.0060	Special 80. Adjusting TES Manhole Covers	EACH	13.000	13.000
1500	SPV.0060	Special 81. Remove TES Manhole	EACH	3.000	3.000
1510	SPV.0060	Special 83. 4' Diameter "Standard" Manhole Type TES	EACH	1.000	1.000
1520	SPV.0060	Special 84. 4' Diameter "Doghouse" Manhole Type TES	EACH	1.000	1.000
1530	SPV.0060	Special 85. 5' Diameter "Doghouse" Manhole Type TES	EACH	2.000	2.000
1540	SPV.0090	Special 01. Fieldstone Boulder Wall	LF	80.000	80.000
1550	SPV.0090	Special 02. Construction Staking Concrete Sidewalk	LF	10,325.000	10,325.000
1560	SPV.0090	Special 03. Concrete Curb and Gutter Integral 19-Inch	LF	8,677.000	8,677.000
1570	SPV.0090	Special 50. Cable Type 3#2 / 1#8 LTP	LF	3,650.000	3,650.000
1580	SPV.0090	Special 51. Cable Type 3#4 / 1#8 LTP	LF	900.000	900.000
1590	SPV.0090	Special 52. Cable Type 3#6 / 1#8 LTP	LF	1,200.000	1,200.000
1600	SPV.0090	Special 53. Cable Type 3#8 / 1#8 LTP	LF	1,000.000	1,000.000
1610	SPV.0090	Special 80. 3-Duct Conduit Cement Encased 4 Inch Rigid Nonmetallic Conduit DB-60	LF	634.000	634.000
1620	SPV.0090	Special 81. 1-Duct Conduit Cement Encased 4 Inch Rigid Nonmetallic Conduit DB-60	LF	92.000	92.000
1630	SPV.0090	Special 82. 2-Duct Conduit Cement Encased 4 Inch Rigid Nonmetallic Conduit DB-60	LF	17.000	17.000
1640	SPV.0090	Special 83. City Underground Conduit Protection	LF	3,300.000	3,300.000
1650	SPV.0105	Special 01. Remove Traffic Signals STH 24 (Forest Home Ave) & S. 60th Street	LS	1.000	1.000
1660	SPV.0105	Special 02. Temporary Non-Intrusive Vehicle Detection System, STH 24 (Forest Home Ave) and S. 60th Street	LS	1.000	1.000
1670	SPV.0105	Special 03. Remove loop Detector Wire and Lead-in Cable STH 24 (Forest Home Ave) and S. 60th Street	LS	1.000	1.000
1680	SPV.0170	Special 01. Test Rolling	STA	105.000	105.000
1690	SPV.0180	Special 01. Joint Sealing	SY	35,081.000	35,081.000
1700	SPV.0195	Special 01. Excavation, Hauling, and Disposal of Lead Contaminated Soil	TON	2,023.000	2,023.000

CLEARING AND GRUBBING ITEMS

STATION	LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
CAT 0010					
STAGE 1					
S. 60TH STREET					
166+55	MED	--	4	--	4
166+75	MED	--	3	--	3
167+39	MED	--	4	--	4
168+80	MED	--	7	--	7
169+41	MED	--	9	--	9
170+09	MED	--	3	--	3
170+77	MED	--	11	--	11
171+05	MED	--	2	--	2
171+23	MED	--	3	--	3
171+42	MED	--	3	--	3
171+60	MED	--	3	--	3
171+79	MED	--	3	--	3
173+24	MED	--	3	--	3
173+40	MED	--	2	--	2
173+54	MED	--	1	--	1
173+72	MED	--	3	--	3
174+00 - 175+00	MED	1	--	1	--
174+05	MED	--	10	--	10
174+29	MED	--	11	--	11
175+16	MED	--	11	--	11
180+66	MED	--	4	--	4
STAGE 1 SUBTOTAL		**1**	**100**	**1**	**100**
STAGE 3					
S. 60TH STREET					
131+87	RT	--	1	--	1
131+97	LT	--	1	--	1
140+71	MED	--	10	--	10
141+06	MED	--	11	--	11
141+61	MED	--	2	--	2
141+80	MED	--	2	--	2
144+52	MED	--	3	--	3
144+74	MED	--	3	--	3
144+95	MED	--	9	--	9
145+17	MED	--	3	--	3
145+52	MED	--	3	--	3
147+15	MED	--	7	--	7
147+42	MED	--	5	--	5
147+66	MED	--	6	--	6
147+86	MED	--	9	--	9
149+26	MED	--	11	--	11
149+74	MED	--	4	--	4
150+16	MED	--	9	--	9
154+02	MED	--	3	--	3
154+25	MED	--	3	--	3
154+44	MED	--	2	--	2
154+65	MED	--	3	--	3
154+83	MED	--	3	--	3
155+24	MED	--	3	--	3
156+00 - 159+00	MED	3	--	3	--
157+40	MED	--	8	--	8
158+10	MED	--	11	--	11
158+50	MED	--	5	--	5
STAGE 3 SUBTOTAL		**3**	**140**	**3**	**140**
PROJECT TOTAL		**4**	**240**	**4**	**240**

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY
CAT 0010			
STAGE 1			
S. 60TH STREET			
165+69 - 172+12	LT	2632	--
172+12 - 172+77	LT	383	--
172+77 - 178+86	LT	2347	--
178+86 - 180+19	LT	936	--
180+19 - 181+00	LT	397	--
STAGE 1 SUBTOTAL		**6695**	**0**
STAGE 2			
S. 60TH STREET			
165+69 - 172+12	RT	2505	--
172+12 - 172+77	RT	379	--
172+77 - 178+86	RT	2459	--
178+86 - 180+19	RT	763	--
180+19 - 181+00	RT	319	--
STAGE 2 SUBTOTAL		**6425**	**0**
STAGE 3			
S. 60TH STREET			
125+93 - 126+81	LT	617	--
126+81 - 132+37	LT	2382	--
132+37 - 132+98	LT	319	--
132+98 - 135+77	LT	1253	--
135+77 - 136+40	LT	345	--
136+40 - 137+89	LT	645	--
137+89 - 138+49	LT	416	--
138+49 - 139+39	LT	355	--
139+39 - 139+94	LT	269	--
139+94 - 146+00	LT	2289	--
146+00 - 146+64	LT	402	--
146+64 - 152+30	LT	2230	--
152+30 - 153+48	LT	775	--
153+48 - 162+46	LT	3649	--
STAGE 3 SUBTOTAL		**15946**	**0**
STAGE 4			
S. 60TH STREET			
122+59 - 125+25	LT	633	131
125+93 - 126+81	RT	633	--
126+81 - 132+37	RT	2170	--
132+37 - 132+98	RT	290	--
132+98 - 135+77	RT	1061	--
135+77 - 136+40	RT	355	--
136+40 - 137+89	RT	664	--
137+89 - 138+49	RT	292	--
138+49 - 139+39	RT	345	--
139+39 - 139+94	RT	468	--
139+94 - 146+00	RT	2302	--
146+00 - 146+64	RT	407	--
146+64 - 152+30	RT	2262	--
152+30 - 153+48	RT	767	--
153+48 - 162+46	RT	3832	--
S. HONEY CREEK DRIVE			
600+43 - 601+52	LT/RT	466	--
STAGE 4 SUBTOTAL		**16315**	**131**
PROJECT TOTAL		**45381**	**131**

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
CAT 0010		
STAGE 1		
S. 60TH STREET		
165+64 - 165+69	LT	24
181+00 - 181+05	LT	24
W. MORGAN AVENUE		
525+79 - 525+84	LT/RT	32
STAGE 1 SUBTOTAL		**80**
STAGE 2		
S. 60TH STREET		
165+64 - 165+69	LT	17
172+32 - 172+59	RT	15
181+00 - 181+05	RT	24
W. MORGAN AVENUE		
527+34 - 527+39	LT/RT	32
STAGE 2 SUBTOTAL		**87**
STAGE 3		
S. 60TH STREET		
162+46 - 162+51	LT	18
STAGE 3 SUBTOTAL		**18**
STAGE 4		
S. 60TH STREET		
125+88 - 125+93	RT	23
162+46 - 162+51	RT	23
S. HONEY CREEK DRIVE		
601+52 - 601+57	LT/RT	18
STAGE 4 SUBTOTAL		**64**
PROJECT TOTAL		**249**

HAZARDOUS MATERIALS EXCAVATION

LOCATION		205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON	SPV.0195.01 EXCAVATION, HAULING, AND DISPOSAL OF LEAD CONTAMINATED SOIL TON
CAT 0010			
127+75 - 128+25	LT	510	--
151+00 - 152+75	LT	--	2,023
PROJECT TOTAL		**510**	**2023**

REMOVING SIDEWALK

STATION - STATION	LOCATION	204.0155 REMOVING SIDEWALK SY
CAT 0010		
STAGE 1		
S. 60TH STREET		
164+85 - 172+26	LT	434
172+63 - 179+01	LT	241
179+69 - 180+19	LT	40
W. MORGAN AVENUE		
525+83 - 526+12	RT	22
STAGE 1 SUBTOTAL		**736**
STAGE 2		
S. 60TH STREET		
165+69 - 172+30	RT	371
172+64 - 179+03	RT	319
179+70 - 180+19	RT	34
W. MORGAN AVENUE		
527+23 - 527+54	LT	17
STAGE 2 SUBTOTAL		**741**
STAGE 3		
S. 60TH STREET		
125+932- 126+09	LT	13
126+67 - 138+08	LT	664
138+37 - 146+12	LT	243
146+49 - 152+46	LT	250
153+32 - 161+85	LT	286
STAGE 3 SUBTOTAL		**1456**
STAGE 4		
S. 60TH STREET		
125+93 - 126+16	RT	26
126+69 - 132+44	RT	345
132+88 - 135+88	RT	194
136+25 - 138+48	RT	106
139+85 - 146+14	RT	190
146+51 - 152+49	RT	222
153+34 - 163+15	RT	546
S. HONEY CREEK DRIVE		
600+47 - 600+82	LT	20
STAGE 4 SUBTOTAL		**1649**
PROJECT TOTAL		**4582**

CATEGORY 0010 UNLESS OTHERWISE NOTED

3

EARTHWORK SUMMARY - S. 60TH STREET

DIVISION	FROM/TO STATION	LOCATION	EXCAVATION COMMON (ITEM #205.0100)		SALVAGED / UNUSABLE PAVEMENT MATERIAL (NOTE 3)	AVAILABLE MATERIAL (NOTE 4)	UNEXPANDED FILL	EXPANDED FILL (NOTE 5)	MASS ORDINATE +/- (NOTE 6)	WASTE
			CUT (NOTE 1)	EBS EXCAVATION (NOTE 2)				FACTOR 1.15		
DIVISION 1	165+69 TO 181+00	S. 60TH STREET	3,511	527	1,767	1,744	93	107	1,636	
SUBTOTAL			3,511	527	1,767	1,744	93	107	1,636	1,636
DIVISION 2	165+69 TO 181+00	S. 60TH STREET	3,631	545	1,767	1,863	50	58	1,806	
SUBTOTAL			3,631	545	1,767	1,863	50	58	1,806	1,806
DIVISION 3	125+88 TO 162+46	S. 60TH STREET	9,320	1,398	4,223	5,098	122	140	4,958	
SUBTOTAL			9,320	1,398	4,223	5,098	122	140	4,958	4,958
DIVISION 4	125+88 TO 162+46 600+29 TO 601+52	S. 60TH STREET S. HONEY CREEK DRIVE	7,987 233	1,198 35	4,223 129	3,764 104	187 26	215 30	3,549 74	
SUBTOTAL			8,220	1,233	4,352	3,868	213	245	3,623	3,623
GRAND TOTAL			24,682	3,703	12,109	12,573	478	550	12,023	12,023
		TOTAL EXCAVATION COMMON	28,385							

1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
2) ESTIMATED AT 15% OF EXCAVATION COMMON. ASSUMED TO BE HAULED AWAY. TO BE BACKFILLED WITH BASE AGGREGATE DENSE 1 1/4-INCH.
3) SALVAGED/UNUSABLE PAVEMENT MATERIAL = LENGTH * TYPICAL WIDTH * TYPICAL DEPTH
4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) EXPANDED FILL. FACTOR = 1.15. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

CATEGORY 0010 UNLESS OTHERWISE NOTED

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
CAT 0010			
STAGE 1			
S. 60TH STREET			
165+69 - 172+12	LT	33	833
172+12 - 172+77	LT	--	125
172+77 - 178+86	LT	7	802
178+86 - 180+19	LT	--	321
180+19 - 181+00	LT	--	287
181+16 - 182+46	LT/RT	--	212
UNDISTRIBUTED	--	--	1,238
STAGE 1 SUBTOTAL		**40**	**3819**
STAGE 2			
S. 60TH STREET			
165+69 - 172+12	RT	44	851
172+12 - 172+77	RT	--	123
172+77 - 178+86	RT	16	797
178+86 - 180+19	RT	--	262
180+19 - 181+00	RT	--	221
UNDISTRIBUTED	--	--	672
STAGE 2 SUBTOTAL		**60**	**2926**
STAGE 3			
S. 60TH STREET			
122+59 - 125+25	LT	--	267
125+93 - 126+81	LT	--	210
126+81 - 132+37	LT	33	742
132+37 - 132+98	LT	9	92
132+98 - 135+77	LT	15	403
135+77 - 136+40	LT	--	95
136+40 - 137+89	LT	8	209
137+89 - 138+49	LT	--	145
138+49 - 139+39	LT	--	103
139+39 - 139+94	LT	--	83
139+94 - 146+00	LT	--	798
146+00 - 146+64	LT	--	130
146+64 - 152+30	LT	29	765
152+30 - 153+48	LT	--	262
153+48 - 162+46	LT	23	1,159
UNDISTRIBUTED	--	--	3,338
STAGE 3 SUBTOTAL		**118**	**8801**
STAGE 4			
S. 60TH STREET			
125+93 - 126+81	RT	--	217
126+81 - 132+37	RT	18	692
132+37 - 132+98	RT	--	93
132+98 - 135+77	RT	4	326
135+77 - 136+40	RT	--	125
136+40 - 137+89	RT	4	212
137+89 - 138+49	RT	--	91
138+49 - 139+39	RT	--	103
139+39 - 139+94	RT	--	156
139+94 - 146+00	RT	23	798
146+00 - 146+64	RT	--	131
146+64 - 152+30	RT	9	773
152+30 - 153+48	RT	--	257
153+48 - 162+46	RT	61	1,195
UNDISTRIBUTED	--	--	1,612
S. HONEY CREEK DRIVE			
600+43 - 601+52	LT/RT	7	153
STAGE 4 SUBTOTAL		**126**	**6936**
PROJECT TOTAL		**344**	**22,481**

HMA PAVEMENTS AND MATERIALS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON
CAT 0010				
STAGE 1				
S. 60TH STREET				
165+64 - 165+69	LT	0.8	--	7
180+19 - 181+00	LT	18.1	62	42
181+00 - 181+05	LT	0.8	--	7
W. MORGAN AVENUE				
525+79 - 525+84	LT/RT	1.1	--	9
STAGE 1 SUBTOTAL		**21**	**62**	**65**
STAGE 2				
S. 60TH STREET				
165+64 - 165+69	RT	0.6	--	5
172+32 - 172+59	RT	0.5	--	4
180+19 - 181+00	RT	13.2	45	30
181+00 - 181+05	RT	0.8	--	7
W. MORGAN AVENUE				
527+34 - 527+39	LT/RT	1.1	--	9
STAGE 2 SUBTOTAL		**16**	**45**	**55**
STAGE 3				
S. 60TH STREET				
162+46 - 162+51	LT	0.6	--	5
STAGE 3 SUBTOTAL		**1**	**--**	**5**
STAGE 4				
S. 60TH STREET				
125+88 - 125+93	RT	0.8	--	7
162+46 - 162+51	RT	0.8	--	7
S. HONEY CREEK DRIVE				
601+52 - 601+57	LT/RT	0.6	--	5
STAGE 4 SUBTOTAL		**2**	**--**	**18**
PROJECT TOTAL		**40**	**108**	**143**

TEMPORARY ASPHALTIC SURFACE

STATION - STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF
CAT 0010			
STAGE 1			
S. 60TH STREET			
171+76 - 172+23	LT	11	48
180+29 - 180+86	RT	20	13
181+16 - 182+46	LT/RT	87	22
STAGE 1 SUBTOTAL		**117**	**83**
STAGE 3			
S. 60TH STREET			
122+59 - 125+25	LT	110	13
137+57 - 138+05	LT	11	48
138+40 - 138+87	LT	11	48
145+64 - 146+11	LT	11	48
STAGE 3 SUBTOTAL		**141**	**157**
PROJECT TOTAL		**259**	**240**

DRILLED TIE BARS

STATION - STATION	LOCATION	416.0610 DRILLED TIE BARS EACH
CAT 0010		
STAGE 1		
S. 60TH STREET		
165+69	LT	16
172+27 - 172+62	LT	12
181+00	LT	2
W. MORGAN AVENUE		
525+84	LT/RT	21
STAGE 1 SUBTOTAL		**50**
STAGE 2		
S. 60TH STREET		
165+69	RT	11
172+30 - 172+61	RT	10
181+00	LT	2
W. MORGAN AVENUE		
527+34	LT/RT	20
STAGE 2 SUBTOTAL		**44**
STAGE 3		
S. 60TH STREET		
125+88	LT	12
138+07 - 138+37	LT	10
146+14 - 146+47	LT	11
162+46	LT	11
W. COLD SPRING ROAD		
325+95	LT/RT	18
W. HOWARD AVENUE		
426+08	LT/RT	27
STAGE 3 SUBTOTAL		**88**
STAGE 4		
S. 60TH STREET		
122+59 - 125+25	LT	108
125+88	RT	15
135+90 - 136+23	RT	11
139+55 - 139+84	RT	10
146+16 - 146+49	RT	11
162+46	RT	14
W. COLD SPRING ROAD		
327+36	LT/RT	16
W. HOWARD AVENUE		
427+37	LT/RT	27
S. HONEY CREEK DRIVE		
601+52	LT/RT	11
STAGE 4 SUBTOTAL		**224**
PROJECT TOTAL		**406**

CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE PAVEMENT AND DRIVEWAYS

STATION - STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	416.0170 CONCRETE DRIVEWAY 7-INCH SY	416.0180 CONCRETE DRIVEWAY 8-INCH SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
CAT 0010						
STAGE 1						
S. 60TH STREET						
165+69 - 172+12	LT	1,918	--	--	--	575
165+94	LT	--	--	12	--	--
166+59	LT	--	--	14	--	--
167+08	LT	--	--	16	--	--
167+63	LT	--	--	18	--	--
168+07	LT	--	--	16	--	--
168+59	LT	--	--	17	--	--
169+08	LT	--	--	16	--	--
169+57	LT	--	--	16	--	--
170+50	LT	--	--	16	--	--
172+12 - 172+77	LT	345	--	--	--	104
172+77 - 178+87	LT	1,866	--	--	--	560
176+27	LT	--	--	16	--	--
176+80	LT	--	--	15	--	--
178+86 - 180+19	LT	866	--	--	--	260
180+60	LT	--	--	9	--	--
STAGE 1 SUBTOTAL		**4995**	**0**	**181**	**0**	**1498**
STAGE 2						
S. 60TH STREET						
165+69 - 172+12	RT	1,971	--	--	--	591
166+24	RT	--	1	32	--	--
166+54	RT	--	--	19	--	--
167+34	RT	--	--	18	--	--
167+89	RT	--	--	19	--	--
168+56	RT	--	--	14	--	--
168+78	RT	--	--	22	--	--
169+38	RT	--	--	17	--	--
170+09	RT	--	--	16	--	--
171+24	RT	--	--	31	--	--
172+12 - 172+77	RT	335	--	--	--	101
172+77 - 178+87	RT	1,832	--	--	--	550
174+38	RT	--	--	15	--	--
175+21	RT	--	--	15	--	--
175+97	RT	--	--	17	--	--
176+39	RT	--	--	21	--	--
178+86 - 180+19	RT	706	--	--	--	212
STAGE 2 SUBTOTAL		**4844**	**1**	**256**	**0**	**1453**

CONCRETE PAVEMENT AND DRIVEWAYS

STATION - STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	416.0170 CONCRETE DRIVEWAY 7-INCH SY	416.0180 CONCRETE DRIVEWAY 8-INCH SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
CAT 0010						
STAGE 3						
S. 60TH STREET						
125+88 - 126+81	LT	581	--	--	--	174
126+81 - 132+37	LT	1,745	--	--	--	523
128+54	LT	--	--	--	50	--
129+32	LT	--	--	22	--	--
129+58	LT	--	--	26	--	--
131+18	LT	--	--	45	--	--
132+37 - 132+98	LT	244	--	--	--	73
132+70	LT	--	1	40	--	--
132+98 - 135+77	LT	956	--	--	--	287
134+09	LT	--	--	36	--	--
135+37	LT	--	--	30	--	--
135+77 - 136+40	LT	251	--	--	--	75
136+40 - 137+89	LT	498	--	--	--	149
136+68	LT	--	--	36	--	--
136+70	LT	--	1	--	--	--
137+89 - 138+49	LT	345	--	--	--	103
138+25	LT	--	1	--	--	--
138+49 - 139+39	LT	226	--	--	--	68
139+39 - 139+94	LT	220	--	--	--	66
139+94 - 146+00	LT	1,854	--	--	--	556
146+00 - 146+64	LT	353	--	--	--	106
146+25	LT	--	1	--	--	--
146+64 - 152+30	LT	1,787	--	--	--	536
147+87	LT	--	--	17	--	--
148+47	LT	--	--	16	--	--
149+06	LT	--	--	16	--	--
149+79	LT	--	--	14	--	--
150+97	LT	--	--	17	--	--
151+34	LT	--	--	42	--	--
152+30 - 153+48	LT	741	--	--	--	222
153+48 - 162+46	LT	2,670	--	--	--	801
154+76	LT	--	1	28	--	--
156+10	LT	--	1	36	--	--
160+52	LT	--	--	36	--	--
STAGE 3 SUBTOTAL		**12471**	**6**	**456**	**50**	**3741**

CONCRETE PAVEMENT AND DRIVEWAYS

STATION - STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	416.0170 CONCRETE DRIVEWAY 7-INCH SY	416.0180 CONCRETE DRIVEWAY 8-INCH SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
CAT 0010						
STAGE 4						
S. 60TH STREET						
125+88 - 126+81	RT	607	--	--	--	182
126+81 - 132+37	RT	1,573	--	--	--	472
127+75	RT	--	--	41	--	--
130+36	RT	--	--	36	--	--
132+37 - 132+98	RT	261	--	--	--	78
132+98 - 135+77	RT	724	--	--	--	217
133+76	RT	--	--	16	--	--
135+77 - 136+40	RT	322	--	--	--	97
136+40 - 137+89	RT	500	--	--	--	150
137+15	RT	--	--	16	--	--
137+89 - 138+49	RT	241	--	--	--	72
138+49 - 139+39	RT	226	--	--	--	68
139+39 - 139+94	RT	394	--	--	--	118
139+94 - 146+00	RT	1,852	--	--	--	556
140+57	RT	--	--	16	--	--
141+50	RT	--	--	15	--	--
142+00	RT	--	--	15	--	--
143+02	RT	--	--	17	--	--
143+66	RT	--	--	19	--	--
144+72	RT	--	--	16	--	--
146+00 - 146+64	RT	356	--	--	--	107
146+64 - 152+30	RT	1,811	--	--	--	543
147+82	RT	--	--	16	--	--
151+57	RT	--	--	25	--	--
152+30 - 153+48	RT	729	--	--	--	219
153+48 - 162+46	RT	2,787	--	--	--	836
154+15	RT	--	--	19	--	--
154+70	RT	--	--	18	--	--
155+26	RT	--	--	16	--	--
155+45	RT	--	--	19	--	--
155+91	RT	--	--	19	--	--
156+52	RT	--	--	13	--	--
156+98	RT	--	--	19	--	--
157+54	RT	--	--	16	--	--
158+16	RT	--	--	20	--	--
159+29	RT	--	--	18	--	--
154+69	RT	--	--	19	--	--
160+45	RT	--	--	14	--	--
161+19	RT	--	--	28	--	--
161+91	RT	--	--	15	--	--
162+39	RT	--	--	12	--	--
S. HONEY CREEK DRIVE						
600+43 - 601+52	LT/RT	350	--	--	--	105
601+12	LT	--	--	29	--	--
STAGE 4 SUBTOTAL		**12733**	**0**	**541**	**0**	**3820**
PROJECT TOTAL		**35042**	**7**	**1434**	**50**	**10513**

CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE CURB AND GUTTER

STATION-STATION	LOCATION	601.0331 CONCRETE CURB & GUTTER 31-INCH LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.03 CONCRETE CURB & GUTTER INTEGRAL 19-INCH LF
CAT 0010				
STAGE 1				
S. 60TH STREET				
165+69 - 172+27	LT	679	--	--
165+69 - 171+98	MED	--	--	630
172+04 - 172+15	LT	--	16	--
172+61 - 179+01	LT	689	--	--
172+73 - 172+93	LT	--	35	--
172+92 - 178+79	MED	--	--	587
179+67 - 181+00	LT	172	--	--
W. MORGAN AVENUE				
525+84 - 526+02	MED	--	--	36
STAGE 1 SUBTOTAL		**1,540**	**51**	**1,253**
STAGE 2				
S. 60TH STREET				
165+69 - 172+30	RT	675	--	--
165+69 - 171+98	MED	--	--	630
172+08 - 172+18	RT	--	20	--
172+61 - 179+04	RT	681	--	--
172+74 - 172+79	RT	--	10	--
172+92 - 178+79	MED	--	--	587
178+80 - 178+93	RT	--	27	--
179+69 - 181+00	RT	151	--	--
179+81 - 179+91	RT	--	23	--
179+92 - 180+85	MED	--	--	192
W. MORGAN AVENUE				
527+28 - 527+33	RT	--	--	10
STAGE 2 SUBTOTAL		**1,507**	**80**	**1,419**

CONCRETE CURB AND GUTTER

STATION-STATION	LOCATION	601.0331 CONCRETE CURB & GUTTER 31-INCH LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.03 CONCRETE CURB & GUTTER INTEGRAL 19-INCH LF
CAT 0010				
STAGE 3				
S. 60TH STREET				
125+88 - 126+12	LT	42	--	--
125+88 - 125+93	MED	--	--	10
126+64 - 138+08	LT	1,208	--	--
126+90 - 128+34	MED	--	--	145
128+75 - 132+17	MED	--	--	345
132+95 - 133+10	LT	--	15	--
132+96 - 135+83	MED	--	--	291
135+72 - 135+87	LT	--	15	--
136+24 - 136+42	LT	--	18	--
136+35 - 137+81	MED	--	--	146
138+36 - 146+15	LT	849	--	--
138+45 - 139+45	MED	--	--	103
139+29 - 139+44	LT	--	15	--
140+00 - 140+15	LT	--	15	--
140+16 - 145+84	MED	--	--	569
146+47 - 152+48	LT	637	--	--
146+60 - 146+78	LT	--	28	--
146+79 - 151+04	MED	--	--	426
151+26 - 152+24	MED	--	--	103
153+29 - 162+45	LT	935	--	--
153+43 - 153+57	LT	--	19	--
153+56 - 155+84	MED	--	--	229
156+32 - 162+46	MED	--	--	620
W. HOWARD AVENUE				
426+05 - 426+10	MED	--	--	6
STAGE 3 SUBTOTAL		**3,671**	**125**	**2,993**

CONCRETE CURB AND GUTTER

STATION-STATION	LOCATION	601.0331 CONCRETE CURB & GUTTER 31-INCH LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.03 CONCRETE CURB & GUTTER INTEGRAL 19-INCH LF
CAT 0010				
STAGE 4				
S. 60TH STREET				
122+59 - 125+25	LT	532	--	--
125+88 - 126+19	RT	53	--	--
125+88 - 126+01	RT	--	14	--
126+67 - 132+38	RT	613	--	--
126+91 - 128+38	MED	--	--	148
128+64 - 132+18	MED	--	--	377
132+76 - 135+91	RT	344	--	--
132+96 - 135+83	MED	--	--	287
135+59 - 135+77	RT	--	33	--
136+23 - 139+56	RT	412	--	--
136+35 - 136+45	RT	--	23	--
136+35 - 137+81	MED	--	--	147
138+46 - 139+45	MED	--	--	103
139+84 - 146+17	RT	708	--	--
140+16 - 145+84	MED	--	--	569
146+49 - 152+52	RT	646	--	--
146+61 - 146+75	RT	--	24	--
146+79 - 151+05	MED	--	--	432
151+27 - 152+24	MED	--	--	98
152+22 - 152+38	RT	--	32	--
153+32 - 162+46	RT	929	--	--
153+56 - 155+84	MED	--	--	230
156+32 - 162+46	MED	--	--	621
S. HONEY CREEK DRIVE				
600+47 - 601+52	LT	110	--	--
600+66 - 601+52	RT	82	--	--
STAGE 4 SUBTOTAL		**4,429**	**126**	**3,012**
PROJECT TOTAL		**11,147**	**382**	**8,677**

CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
CAT 0010					
STAGE 1					
S. 60TH STREET					
164+85 - 172+27	LT	3,853	--	20	--
172+62 - 179+01	LT	2,376	--	40	--
179+69 - 180+19	LT	582	--	22	--
W. MORGAN AVENUE					
525+73 - 526+08	RT	196	--	--	--
526+05	MED	--	--	--	41
STAGE 1 SUBTOTAL		**7,007**	**--**	**82**	**41**
STAGE 2					
S. 60TH STREET					
165+69 - 172+30	RT	3,447	191	20	--
172+00	MED	--	--	--	43
172+62 - 179+03	RT	3,712	--	40	--
172+90	MED	--	--	--	43
178+80	MED	--	--	--	43
179+70 - 180+19	RT	381	--	22	--
179+90	MED	--	--	--	42
W. MORGAN AVENUE					
527+28 - 527+57	LT	130	--	--	--
527+30	MED	--	--	--	49
STAGE 2 SUBTOTAL		**7,670**	**191**	**82**	**220**
STAGE 3					
S. 60TH STREET					
125+88 - 126+10	LT	155	--	20	--
125+94	MED	--	--	--	43
126+67 - 138+05	LT	5,246	904	70	--
138+39 - 146+14	LT	2,525	--	50	--
146+47 - 152+47	LT	2,347	150	40	--
153+30 - 161+85	LT	2,538	278	20	--
W. HOWARD AVENUE					
426+15	MED	--	--	--	59
STAGE 3 SUBTOTAL		**12,811**	**1,332**	**200**	**102**

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
CAT 0010					
STAGE 4					
S. 60TH STREET					
126+68 - 132+38	RT	2,750	305	30	--
126+88	MED	--	--	--	43
128+38	MED	--	--	--	49
132+20	MED	--	--	--	47
132+78 - 135+90	RT	2,034	--	40	--
132+90 - 133+05	MED	71	--	20	43
135+77 - 135+89	MED	57	--	20	51
136+23 - 139+51	RT	1,063	--	30	--
136+35 - 137+87	MED	895	--	--	87
138+40	MED	--	--	--	51
139+34 - 139+52	MED	137	--	20	48
139+86 - 146+16	RT	2,053	--	40	--
140+15	MED	--	--	--	43
145+85	MED	--	--	--	43
146+49 - 152+51	RT	2,171	93	40	--
146+75	MED	--	--	--	43
151+05	MED	--	--	--	35
151+25	MED	--	--	--	33
152+25	MED	--	--	--	43
153+33 - 163+15	RT	4,856	122	20	--
153+55	MED	--	--	--	43
155+85	MED	--	--	--	44
W. COLD SPRING ROAD					
327+04 - 328+90	RT	1,102	--	20	--
W. HOWARD AVENUE					
427+35	MED	--	--	--	62
S. HONEY CREEK DRIVE					
600+47 - 600+82	LT	199	--	--	--
STAGE 4 SUBTOTAL		**17,388**	**520**	**280**	**808**
PROJECT TOTAL		**44876**	**2043**	**644**	**1171**

ADJUSTING SANITARY MANHOLE COVERS

STATION	OFFSET	611.8110 * ADJUSTING MANHOLE COVERS EACH	SPV.0060.30 INTERNAL SANITARY MANHOLE SEALS EACH	SPV.0060.31 EXTERNAL SANITARY MANHOLE SEALS EACH
CAT 0020				
136+07	1' LT	1	1	--
139+68	1' LT	1	1	--
142+90	0'	1	1	--
146+30	0'	1	1	--
149+60	1' RT	1	1	--
151+60	5' LT	1	1	--
152+93	4' RT	1	1	--
156+25	4' RT	1	1	--
159+54	4' RT	1	1	--
166+60	12' LT	1	1	--
167+33	13' RT	1	1	--
170+30	12' RT	1	1	--
170+31	12' LT	1	1	--
170+87	42' LT	1	1	--
170+88	14' RT	1	1	--
172+45	44' LT	1	1	--
172+49	13' RT	1	1	--
175+45	44' LT	1	1	--
175+92	14' RT	1	1	--
CAT 0020 SUBTOTAL:		19	19	0
CAT 0030				
126+40	0' LT	1	--	1
132+70	1' LT	1	--	1
133+06	0' LT	1	--	1
136+35	0' LT	1	--	1
139+69	1' LT	1	--	1
CAT 0030 SUBTOTAL:		5	0	5
PROJECT TOTAL:		24	19	5

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

MOBILIZATION

LOCATION	619.1000 MOBILIZATION EACH
CAT 0010	
PROJECT	1
PROJECT TOTAL	**1**

MOBILIZATION EROSION CONTROL ITEMS

LOCATION	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
CAT 0010		
STAGE 1	2	1
STAGE 2	1	1
STAGE 3	1	1
STAGE 4	1	1
PROJECT TOTAL	**5**	**4**

ADJUSTING WATER STRUCTURES

LOCATION	SPV.0060.40 ADJUSTING WATER BOX EACH	SPV.0060.41 ADJUSTING WATER MANHOLE EACH
CAT 0020		
PROJECT	70	10
PROJECT TOTAL	**70**	**10**

CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING STORM SEWER

STATION	OFFSET**	204.0220 REMOVING INLETS EACH	204.0245 REMOVING STORM SEWER 12-INCH LF	COMMENTS
128+91	43.0' RT	1	6	
128+92	43.0' LT	1	6	
131+04	36.9' LT		1	
132+85	60.0' RT	1	26	REMOVE EXISTING BACK TO MH-10
133+25	43.0' LT	1	6	
136+15	35.0' LT	--	45	REMOVE BACK TO EXISITNG MH AT W. PLAINFIELD
136+40	42.0' LT	1	6	
136+40	43.0' RT	1	--	
140+00	43.0' RT	1	--	
140+45	43.0' RT	1	--	
142+79	43.0' RT	1	6	
143+27	43.0' LT	1	6	
146+90	0.0' LT	1	10	
146+65	43.0' LT	1	6	
146+65	43.0' RT	1	6	
149+30	43.0' LT	1	10	
149+25	43.0' RT	1	6	
152+83	60.0' RT	1	26	REMOVE EXISTING BACK TO MH-22
153+55	5.0' RT TO 45.0' RT	2	40	REMOVE EXISTING LT AND RT OF MH-25
153+53	43.0' LT	1	6	
160+35	10.0' RT	1	34	
168+50	43.0' RT	1	6	
168+31	43.0' LT	1	6	
168+30	0.0' LT	1	30	
172+08	28.7' LT	1	16	
172+12	39.1' RT	1	6	
175+61	43.0' LT	1	6	
175+52	43.0' RT	1	6	
177+55	43.0' RT	1	6	
177+55	43.0 ' LT	1	6	
177+55	0.0' LT	1	--	
178+70	5.0' LT	1	--	
178+80	43.0 ' LT	1	6	
178+80	43.0 ' RT	1	9	
	TOTAL:	33	355	

STORM SEWER PIPES - CONCRETE

PHASE 1	PIPE #	* 608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	* 608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	* 608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	* 608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
	P-55	8	--	--	--	193.36	193.20	0.0200
	P-45	18	--	--	--	192.50	192.15	0.0200
	P-57	--	38	--	--	188.21	187.49	0.0200
	P-600	20	--	--	--	186.50	186.10	0.0200
	P-58	24	--	--	--	187.50	187.02	0.0200
	P-59	4	--	--	--	188.08	188.00	0.0200
	P-60	6	--	--	--	188.65	188.57	0.0200
	P-61	32	--	--	--	187.46	186.85	0.0200
	P-63	6	--	--	--	183.07	182.96	0.0200
	P-62	4	--	--	--	183.06	183.02	0.0200
	P-67	8	--	--	--	181.45	181.29	0.0200
	P-66	16	--	--	--	181.60	181.29	0.0200
	P-53	18	--	--	--	181.92	181.60	0.0200
	P-51	--	--	16	--	180.06	179.77	0.0200
	P-56	18	--	--	--	180.55	180.22	0.0200
	P-300	40	--	--	--	182.25	181.60	0.0200
	P-301	38	--	--	--	183.06	182.25	0.0200
	P-302	28	--	--	--	183.58	183.06	0.0200
	TOTAL (PHASE 1):	288	38	16	0			

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

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FILE NAME : P://8394 IH 39 AECOM/TRANSPORTATION/CADD/WOODMAN/SHEETSET/030201_mq.ppt PLOT DATE : 1/30/2017 12:46:15 PM PLOT BY : AJAY SINGH PLOT NAME : 030201_mq PLOT SCALE : 1:1

STORM SEWER PIPES - CONCRETE, CONTINUED

		*	*	*	*			
		608.0412	608.0415	608.0418	608.0424			
		STORM SEWER PIPE REINFORCED CONCRETE CLASS IV						
		12-INCH	15-INCH	18-INCH	24-INCH	INLET	DISCHARGE	SLOPE
PHASE 2	PIPE #	LF	LF	LF	LF	ELEVATION	ELEVATION	FT/FT
	P-1	4	--	--	--	173.55	173.47	0.0200
	P-2	6	--	--	--	173.20	173.09	0.0200
	P-105	58	--	--	--	171.76	170.63	0.0200
	P-54	--	8	--	--	170.63	170.49	0.0200
	P-103	--	18	--	--	171.38	171.05	0.0200
	P-3	--	18	--	--	171.92	171.79	0.0088
	P-4	6	--	--	--	176.06	175.94	0.0050
	P-5	34	--	--	--	171.17	170.50	0.0200
	P-6	40	--	--	--	170.00	169.64	0.0100
	P-7	--	--	38	--	171.84	171.07	0.0200
	P-10	6	--	--	--	172.57	172.45	0.0200
	P-800	28	--	--	--	173.00	172.86	0.0050
	P-14	40	--	--	--	174.43	173.67	0.0200
	P-13	20	--	--	--	174.98	174.61	0.0200
	P-0	6	--	--	--	174.68	174.58	0.0200
	P-12	--	--	6	--	173.50	173.38	0.0200
	P-16	22	--	--	--	173.88	173.44	0.0200
	P-19	46	--	--	--	176.01	175.64	0.0083
	P-199	28	--	--	--	176.25	176.01	0.0083
	P-20	12	--	--	--	175.39	175.15	0.0200
	P-21	28	--	--	--	176.77	176.23	0.0200
	P-23	--	--	--	50	174.68	174.19	0.0100
	P-24	32	--	--	--	176.72	176.60	0.0050
	P-25	4	--	--	--	177.36	177.34	0.0200
	P-37	24	--	--	--	177.36	176.88	0.0200
	P-26	4	--	--	--	179.57	179.53	0.0200
	P-27	4	--	--	--	179.79	179.72	0.0200
	P-28	24	--	--	--	182.82	182.70	0.0200
	P-31	30	--	--	--	183.75	183.17	0.0200
	P-377	22	--	--	--	184.68	184.47	0.0100
	P-378	10	--	--	--	184.57	184.47	0.0100
	P-33	6	--	--	--	183.86	183.74	0.0200
	SUBTOTAL (PHASE 2):	544	44	44	50			

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

STORM SEWER PIPES - CONCRETE, CONTINUED

		*	*	*	*			
		608.0412	608.0415	608.0418	608.0424			
		STORM SEWER PIPE REINFORCED CONCRETE CLASS IV				INLET	DISCHARGE	SLOPE
		12-INCH	15-INCH	18-INCH	24-INCH	INLET	DISCHARGE	SLOPE
PHASE 2	PIPE #	LF	LF	LF	LF	ELEVATION	ELEVATION	FT/FT
	P-34	6	--	--	--	186.97	186.87	0.0200
	P-101	4	--	--	--	187.66	187.62	0.0200
	P-601	28	--	--	--	190.47	190.33	0.0050
	P-200	34	--	--	--	192.77	192.60	0.0050
	P-35	4	--	--	--	191.32	191.27	0.0200
	P-36	18	--	--	50	194.61	194.25	0.0200
	P-47	22	--	--	--	195.03	194.61	0.0200
	P-39	4	--	--	--	194.18	194.14	0.0200
	P-401	38	--	--	--	197.37	197.18	0.0050
	P-43	--	--	4	--	193.79	193.73	0.0200
	P-22	--	--	--	30	186.70	186.22	0.0165
	P-49	--	--	30	--	193.92	193.39	0.0200
	P-50	--	--	68	--	195.27	193.92	0.0200
	P-52	--	--	24	--	195.75	195.27	0.0200
	P-38	--	4	--	--	195.44	195.39	0.0100
	P-44	8	--	--	--	195.65	195.51	0.0200
SUBTOTAL (PHASE 2):		166	4	126	80			
TOTAL (PHASE 2):		710	48	170	130			
TOTAL (PROJECT)		998	86	186	130			

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

WATER MAIN PROTECTION

STRUCTURE	STATION	OFFSET	SPV.0060.09
IN-1	128+91	37.0' RT	1
IN-2	128+92	37.0' LT	1
IN-3	131+65	37.1 RT	1
IN-7	132+70	75.4' RT	1
IN-5	133+30	37.2' RT	1
IN-8	133+25	37.0' LT	1
IN-12	136+40	37.0' LT	1
IN-14	136+76	37.0' RT	1
IN-15	136+21	61.6' RT	1
IN-25	140+37	37.0' RT	1
IN-26	140+15	37.0' LT	1
IN-27	142+79	37.0' RT	1
IN-28	143+27	37.0' LT	1
IN-33	146+98	37.0' LT	1
IN-34	149+24	37.0' LT	1
IN-38	151+79	37.0' LT	1
IN-40	153+54	37.0' LT	1
IN-52	161+51	37.0' LT	1
IN-55	168+30	37.0' LT	1
CB-56	168+42	37.0' RT	1
IN-57	171+74	37.0' LT	1
MH-57	172+08	28.7' LT	1
MH-259	171+86	5.8' LT	1
IN-60	171+86	1.0' LT	1
CB-63	175+61	37.0' LT	1
IN-64	177+78	0.0'	1
CB-301	179+05	65' LT	1
		TOTAL:	27

FILE NAME : P://8394 IH 39 AECOM/TRANSPORTATION/CADD/WOODMAN/SHEETSET/030201_mq.ppt PLOT DATE : 1/31/2017 9:46:12 AM PLOT BY : AJAY SINGH PLOT NAME : 030201_mq PLOT SCALE : 1:1

STORM SEWER STRUCTURES - CONCRETE

PHASE 1	STRUCTURE	STATION	OFFSET**	* SPV.0060.07 MANHOLE COVERS TYPE 58A EACH	* SPV.0060.06 INLET COVERS TYPE 57 EACH	* SPV.0060.08 CATCH BASINS TYPE 45A EACH	* 611.2004 MANHOLES 4-FT DIAMETER EACH	* 611.2005 MANHOLES 5-FT DIAMETER EACH	* 611.3225 INLETS 2x2.5-FT EACH	* 611.0420 RECONSTRUCTING MANHOLES EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH*** FT	NOTES
	CB-56	168+42	37.0' RT	--	1	1	--	--	--	--	195.77	192.50	1.97	
	MH-56	168+64	37.2' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-55	168+31	37.0' LT	--	1	--	--	--	1	--	196.37	193.36	1.71	
	MH-55	168+41	29.5' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-57	171+74	37.0' LT	--	1	--	--	--	1	--	190.78	188.21	1.27	
	MH-57	172+08	28.7' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	MH-258	171+86	12.0' LT	--	1	--	1	--	--	--	191.14	187.50	2.34	NEW MH W/ SUMP
	MH-259	171+86	5.8' LT	--	1	--	1	--	--	--	191.76	185.08	5.38	NEW MH W/ SUMP
	IN-60	171+86	1.0' LT	--	1	--	--	--	1	--	191.41	188.65	1.46	
	CB-61	171+78	37.0' RT	--	1	1	--	--	--	--	190.68	184.46	4.92	
	MH-61	172+12	39.1' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-600	172+25	42.0' LT	--	1	--	--	--	1	--	190.35	186.50	2.55	
	CB-63	175+61	37.0' LT	--	1	1	--	--	--	--	186.24	180.07	4.87	
	MH-63	175+61	28.0' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-62	175+52	37.0' RT	--	1	1	--	--	--	--	185.65	180.06	4.29	
	MH-62	175+58	39.0' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-67	177+64	37.0' LT	--	1	1	--	--	--	--	184.12	178.45	4.37	
	MH-67	177+55	28.8' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	MH-266	177+64	12.0' LT	--	1	--	1	--	--	--	184.69	178.60	4.79	NEW MH W/ SUMP
	IN-64	177+78	0.0'	--	1	--	--	--	1	--	185.33	181.92	2.11	
	CB-165	177+75	37.0' RT	--	1	1	--	--	--	--	184.21	180.55	2.36	
	MH-65	177+54	43.9' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-65	177+36	37.0' RT	--	1	1	--	--	--	--	184.07	177.06	5.71	
	IN-302	179+68	64.0' LT	--	1	--	--	--	1	--	185.25	183.58	0.37	
	MH-303	179+37.5	58.5' LT	1	--	--	1	--	--	--	185.25	183.06	0.89	NEW MH
	CB-301	179+05	65' LT	--	1	1	--	--	--	--	185.00	182.25	1.45	
	MH-304	178+85	29' LT	--	--	--	--	--	--	1	--	--	--	EXISTING MH
SUBTOTAL (PHASE 1):				9	17	8	4	0	6	9				

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

REMARKS

** STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

STORM SEWER STRUCTURES - CONCRETE, CONTINUED

PHASE 2	STRUCTURE	STATION	OFFSET**	* SPV.0060.07 MANHOLE COVERS TYPE 58A EACH	* SPV.0060.06 INLET COVERS TYPE 57 EACH	* SPV.0060.08 CATCH BASINS TYPE 45A EACH	* 611.2004 MANHOLES 4-FT DIAMETER EACH	* 611.2005 MANHOLES 5-FT DIAMETER EACH	* 611.3225 INLETS 2x2.5-FT EACH	* 611.0420 RECONSTRUCTING MANHOLES EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH*** FT	NOTES
	IN-1	128+91	37.0' RT		1	--	--	--	1	--	177.02	173.55	2.17	
	MH-1	128+91	30.3' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-2	128+92	37.0' LT		1	--	--	--	1	--	176.83	173.20	2.33	
	MH-2	128+92	27.2' LT	1		--	--	--	--	1	--	--	--	EXISTING MH
	IN-104	131+04	36.9' LT		1	--	--	--	1	--	175.26	171.76	2.20	
	MH-105	131+40	40.3' LT	1	--	--	--	1	--	--	175.40	167.63	6.47	NEW MH W/ SUMP
	IN-103	131+61	37.0' LT	--	1	--	--	--	1	--	175.03	171.38	2.35	
	MH-4	131+41	27.3' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-3	131+65	37.1 RT	--	1	--	--	--	1	--	174.97	171.92	1.75	
	MH-5	131+67	27.0' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-7	132+70	75.4' RT	--	1	--	--	--	1	--	175.00	171.17	2.53	
	MH-206	132+36	70.7' RT	--	1	--	1	--	--	--	175.54	167.00	7.24	NEW MH W/ SUMP
	MH-6	132+20	30.5' RT	--	1	--	--	--	--	1	--	--	--	EXISTING MH
	MH-10	132+83	30.0' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-5	133+30	37.2' RT	--	1	--	--	--	1	--	175.54	171.84	2.40	
	IN-8	133+25	37.0' LT	--	1	--	--	--	1	--	175.62	172.57	1.75	
	MH-8	133+25	27.2' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-800	133+10	1.0' RT	--	1	--	--	--	1	--	176.00	173.00	1.70	
	MH-0	136+40	27.9' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-12	136+40	37.0' LT	--	1	--	--	--	1	--	177.21	173.50	2.41	
	IN-14	136+76	37.0' RT	--	1	--	--	--	1	--	178.00	174.43	2.27	
	MH-7	136+39	30.3' RT	--	1	--	--	--	--	1	--	--	--	EXISTING MH
	IN-15	136+21	61.6' RT	--	1	--	--	--	1	--	177.90	174.68	1.92	
	MH-90	135+99	59.6' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-13	135+91	59.6' RT	--	1	1	--	--	--	--	177.85	171.98	4.57	
	IN-20	138+65	31' LT	--	1	--	--	--	1	--	178.80	176.25	1.25	
	CB-17	137+35	1.0' LT	--	1	1	--	--	--	--	179.17	170.88	6.99	
	MH-12	137+26	23.7' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-355	140+13	31' RT	--	1	--	--	--	1	--	180.15	177.36	1.49	
	MH-255	140+37	31.0' RT	1	--	--	1	--	--	--	179.37	174.00	4.07	NEW MH W/ SUMP
	IN-25	140+42	37.0' RT	--	1	--	--	--	1	--	180.03	176.28	2.45	
SUBTOTAL (PHASE 2):				11	20	2	2	1	15	11				

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

STORM SEWER STRUCTURES - CONCRETE, CONTINUED

PHASE 2	STRUCTURE	STATION	OFFSET**	* SPV.0060.07 MANHOLE COVERS TYPE 58A EACH	* SPV.0060.06 INLET COVERS TYPE 57 EACH	* SPV.0060.08 CATCH BASINS TYPE 45A EACH	* 611.2004 MANHOLES 4-FT DIAMETER EACH	* 611.2005 MANHOLES 5-FT DIAMETER EACH	* 611.3225 INLETS 2x2.5-FT EACH	* 611.0420 RECONSTRUCTING MANHOLES EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH*** FT	NOTES
	CB-224	139+83	58.3' RT	--	1	1	--	--	--	--	179.37	173.72	4.35	NEW MH W/ SUMP
	MH-223	139+52	60.3' RT	--	1	--	1	--	--	--	179.30	171.68	6.32	NEW MH W/ SUMP
	MH-14	139+12	22.9' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-21	138+88	25.0' LT	--	1	--	--	--	1	--	179.74	176.01	2.43	
	MH-13	139+14	5.1' RT	1	--	--	--	1	--	--	180.54	172.39	6.85	NEW MH W/ SUMP
	IN-26	140+15	37.0' LT	--	1	--	--	--	1	--	179.72	176.06	2.36	
	MH-15	139+79	30.6' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	MH-156	140+15	30.6' LT	1	--	--	1	--	--	--	179.80	173.71	4.79	
	IN-27	142+79	37.0' RT	--	1	--	--	--	1	--	182.45	179.57	1.58	
	MH-16	142+78	31.3' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-28	143+27	37.0' LT	--	1	--	--	--	1	--	182.76	179.79	1.67	
	MH-17	143+23	30.6' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-32	146+96	6.0' RT	--	1	1	--	--	--	--	188.42	181.68	5.44	
	MH-228	146+97	30.4' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-328	147+07	37' RT	--	1	1	--	--	--	--	187.46	181.57	4.59	
	IN-30	146+47	60.1' RT	--	1	--	--	--	1	--	186.17	183.75	1.12	
	MH-229	146+17	60.0' RT	--	1	--	1	--	--	--	186.07	180.17	4.60	NEW MH W/ SUMP
	MH-18	146+07	29.9' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-33	146+98	37.0' LT	--	1	--	--	--	1	--	187.50	183.86	2.34	
	MH-9	146+65	30.5' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-16	149+28	37.0' RT	--	1	1	--	--	--	--	190.58	187.66	1.62	
	MH-11	149+25	31.7' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-34	149+24	37.0' LT	--	1	--	--	--	1	--	189.83	186.97	1.56	
	MH-21	149+18	30.33' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-300	150+37	1.0' LT	--	1	--	--	--	1	--	192.47	189.97	1.20	EXISTING MH
	MH-302	150+37	31.7' RT	1	--	--	1	--	--	--	192.37	185.00	6.07	NEW MH
	IN-200	151+65	1.0' LT	--	1	--	--	--	1	--	194.73	192.27	1.16	
	IN-38	151+79	37.0' LT	--	1	--	--	--	1	--	194.49	191.32	1.87	
	MH-20	151+79	30.8' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-39	152+83	62.1' RT	--	1	1	--	--	--	--	197.78	191.61	4.87	
	MH-22	152+61	62.3' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	MH-242	153+70	5.9' RT	--	1	--	1	--	--	--	198.70	192.03	5.37	NEW MH W/ SUMP
	SUBTOTAL (PHASE 2):			14	18	5	5	1	10	11				

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

3

STORM SEWER STRUCTURES - CONCRETE, CONTINUED

PHASE 2	STRUCTURE	STATION	OFFSET**	* SPV.0060.07 MANHOLE COVERS TYPE 58A EACH	* SPV.0060.06 INLET COVERS TYPE 57 EACH	* SPV.0060.08 CATCH BASINS TYPE 45A EACH	* 611.2004 MANHOLES 4-FT DIAMETER EACH	* 611.2005 MANHOLES 5-FT DIAMETER EACH	* 611.3225 INLETS 2x2.5-FT EACH	* 611.0420 RECONSTRUCTING MANHOLES EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH*** FT	NOTES
	MH-25	153+65	30.4' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	CB-44	153+65	37.0' RT	--	1	1	--	--	--	--	197.77	190.79	5.68	
	IN-40	153+54	37.0' LT	--	1	--	--	--	1	--	197.36	194.18	1.88	
	MH-24	153+53	31.6' LT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	MH-402	155+02	30.4' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
	IN-400	155+20	1.0' LT	--	1	--	--	--	1	--	198.98	196.68	1.00	
	MH-250	160+82	1.0' LT	--	1	--	1	--	--	--	198.80	190.92	6.58	NEW MH W/ SUMP
	MH-249	160+55	11.3' RT	1	--	--	1	--	--	--	198.58	186.70	10.58	NEW MH W/ SUMP
	MH-28	160+55	37.2' RT	--	1	--	--	--	--	1	--	--	--	EXISTING MH
	IN-52	161+51	37.0' LT	--	1	--	--	--	1	--	198.45	195.75	1.40	
	MH-251	161+51	12.0' LT	1	--	--	1	--	--	--	199.00	192.27	5.43	NEW MH W/ SUMP
	IN-53	162+39	43.3' LT	--	1	--	--	--	1	--	198.74	195.44	2.00	
	MH-26	162+46	42.2' LT	--	1	--	--	--	--	1	--	--	--	EXISTING MH
	CB-54	162+41	41.6' RT	--	1	1	--	--	--	--	198.77	195.65	1.82	
	MH-54	162+53	40.3' RT	1	--	--	--	--	--	1	--	--	--	EXISTING MH
SUBTOTAL (PHASE 2):				6	9	2	3	0	4	6				
TOTAL (PHASE 2):				31	47	9	10	2	29	28				
TOTAL (PROJECT)				40	64	17	14	2	35	37				

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

ADJUSTING STORM MANHOLE COVERS

STATION	OFFSET**	* 611.8110 ADJUSTING MANHOLE COVERS EACH	* SPV.0060.07 MANHOLE COVERS TYPE 58A EACH
126+27	61' LT	1	--
126+45	27' LT	1	--
127+70	30' RT	1	--
136+00	31' RT	1	1
152+62	30' RT	1	1
153+20	30' RT	1	1
153+21	60' RT	1	1
154+98	30' LT	1	1
155+01	30' RT	1	1
156+43	30' RT	1	1
157+86	30' RT	1	1
158+30	37' RT	1	1
170+91	26' LT	1	1
170+92	36' RT	1	1
172+38	28' LT	1	1
172+38	48' LT	1	1
178+82	38' RT	1	1
178+84	38' RT	1	1
179+35	32' LT	1	1
	TOTAL:	19	16

* = QUANTITIES SHOWN ELSEWHERE IN THE PLANS

CONSTRUCTION STAKING

LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
STAGE 1 & 2	18
STAGE 3 & 4	45
TOTAL:	63

3

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	631.1000 SOD LAWN SY
CAT 0010				
STAGE 1				
S. 60TH STREET				
165+69 - 172+26	LT	625	.4	625
172+73 - 179+01	LT	670	.5	670
179+68 - 181+00	LT	93	.1	92
STAGE 1 SUBTOTAL		**1,388**	**1**	**1,387**
STAGE 2				
S. 60TH STREET				
165+69 - 172+30	RT	524	.4	524
165+69 - 171+98	MED	1,038	.7	1,037
172+61 - 179+03	RT	666	.5	666
172+92 - 178+79	MED	940	.6	940
179+70 - 180+86	RT	97	.1	97
179+92 - 180+85	MED	89	.1	88
STAGE 2 SUBTOTAL		**3,354**	**2**	**3,351**
STAGE 3				
S. 60TH STREET				
125+92 - 126+11	LT	7	.1	7
127+00 - 138+04	LT	1,006	.7	1,006
138+40 - 146+13	LT	908	.6	907
146+60 - 152+33	LT	543	.4	542
153+43 - 162+46	LT	915	.6	915
STAGE 3 SUBTOTAL		**3,379**	**2**	**3,376**
STAGE 4				
S. 60TH STREET				
122+59 - 125+25	LT	237	.2	236
126+67 - 132+37	RT	578	.4	577
126+86 - 128+40	MED	147	.1	146
128+59 - 132+22	MED	794	.5	793
132+77 - 135+77	RT	335	.3	334
133+05 - 135+77	MED	426	.3	426
136+24 - 139+50	RT	405	.3	404
138+45 - 139+34	MED	183	.2	182
139+87 - 146+04	RT	620	.4	620
140+16 - 145+84	MED	882	.6	882
146+50 - 152+38	RT	635	.4	635
146+79 - 151+05	MED	607	.4	607
151+26 - 152+24	MED	95	.1	95
153+45 - 162+30	RT	770	.5	769
153+56 - 155+84	MED	202	.2	201
156+32 - 162+46	MED	1,218	.8	1,217
W. COLD SPRING ROAD				
327+15 - 328+90	RT	205	.2	205
S. HONEY CREEK DRIVE				
600+47 - 601+03	LT	89	.1	89
STAGE 4 SUBTOTAL		**8,428**	**6**	**8,419**
UNDISTRIBUTED		**4,137**	**3**	**4,134**
PROJECT TOTAL		**20,686**	**15**	**20,668**

SILT FENCE

STATION-STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE EACH
CAT 0010			
STAGE 4			
S. 60TH STREET			
130+61 - 132+30	RT	240	240
STAGE 4 SUBTOTAL		**240**	**240**
UNDISTRIBUTED		**500**	**500**
PROJECT TOTAL		**740**	**740**

WATER

STATION - STATION	LOCATION	624.0100 WATER MGAL
CAT 0010		
STAGE 1		
S. 60TH STREET		
165+69 - 181+00	LT	131
STAGE 1 SUBTOTAL		**131**
STAGE 2		
S. 60TH STREET		
165+69 - 181+00	RT	106
STAGE 2 SUBTOTAL		**106**
STAGE 3		
S. 60TH STREET		
125+88 - 162+46	LT	323
STAGE 3 SUBTOTAL		**323**
STAGE 4		
S. 60TH STREET		
125+88 - 162+46	RT	256
S. HONEY CREEK DRIVE		
600+43 - 601+52	LT/RT	6
STAGE 4 SUBTOTAL		**262**
PROJECT TOTAL		**822**

FIELD OFFICE

	642.5201 FIELD OFFICE TYPE C EACH
CAT 0010	
PROJECT I.D. 2415-00-70	1
PROJECT TOTAL	**1**

TRAFFIC CONTROL PROJECT

	643.0100 TRAFFIC CONTROL 2415-00-70 EACH
CAT 0010	
PROJECT I.D. 2415-00-70	1
PROJECT TOTAL	**1**

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	621.0100 LANDMARK REFERENCE MONUMENTS EACH
CAT 0010		
STAGE 2		
S. 60TH STREET		
179+36	LT/RT	1
STAGE 2 SUBTOTAL		**1**
STAGE 4		
S. 60TH STREET		
126+40	LT/RT	1
152+90	LT/RT	1
STAGE 3 SUBTOTAL		**2**
PROJECT TOTAL		**3**

CATEGORY 0010 UNLESS OTHERWISE NOTED

EROSION CONTROL ITEMS

STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
CAT 0010				
S. 60TH STREET				
125+88	LT	--	--	1
125+89	RT	--	--	1
128+68	LT	--	1	--
128+90	RT	--	1	1
128+92	LT	--	1	1
130+99	LT	--	1	--
131+36	LT	1	--	--
131+41	LT	--	1	--
131+62	LT	--	--	1
131+64	RT	--	1	1
132+20	RT	--	1	1
133+09	RT	--	1	--
133+26	LT	--	1	1
133+30	RT	--	--	1
133+31	LT	--	1	--
135+95	RT	--	--	1
136+21	RT	--	--	1
136+37	RT	--	--	1
136+41	LT	--	1	1
136+76	RT	--	--	1
137+35	LT	--	--	1
138+70	LT	--	--	1
138+89	LT	--	--	1
139+53	RT	--	--	1
139+84	RT	--	--	1
140+15	LT	--	--	1
140+15	RT	--	--	1
140+37	RT	--	1	1
142+79	RT	--	1	1
143+27	LT	--	1	1
146+17	RT	--	--	1
146+47	RT	--	--	1
146+65	LT	--	1	1
146+68	RT	--	1	--
146+91	LT	--	1	--
146+97	RT	1	--	1
149+25	LT	--	1	1
149+28	RT	--	1	1
151+45	LT	1	--	--
151+80	LT	--	--	1
153+54	LT	--	1	1
153+58	RT	1	--	--
153+61	RT	--	1	1
153+71	RT	1	--	--
154+93	LT	--	1	--

EROSION CONTROL ITEMS

STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
CAT 0010				
154+96	RT	--	1	--
156+43	RT	1	--	--
160+20	RT	1	--	--
160+56	RT	--	--	1
160+82	RT	--	1	--
160+83	RT	1	--	--
161+52	LT	--	--	1
162+37	LT	--	1	1
162+41	RT	--	--	1
162+56	LT	1	--	--
168+32	LT	--	1	1
168+37	RT	1	--	--
168+43	RT	--	1	1
171+75	LT	--	--	1
171+78	RT	--	--	1
171+86	LT	1	--	2
172+03	RT	1	--	--
172+10	LT	--	1	--
172+25	LT	--	1	--
172+28	LT	--	--	1
172+61	LT	--	--	1
175+54	RT	--	1	1
175+62	LT	--	1	1
176+98	RT	--	1	--
177+36	RT	--	--	1
177+56	LT	1	1	--
177+64	LT	--	--	2
177+64	RT	--	1	--
177+75	RT	--	--	2
178+71	LT	1	--	--
178+83	RT	--	1	--
178+85	LT	--	1	--
180+75	RT	1	--	--
W. HOWARD AVENUE				
427+34	RT	--	1	1
W. MORGAN AVENUE				
526+06	LT	--	--	1
526+06	RT	--	--	1
S. HONEY CREEK DRIVE				
600+72	LT	--	--	1
600+78	RT	--	--	1
SUBTOTAL		**15**	**37**	**57**
UNDISTRIBUTED		**4**	**9**	**14**
PROJECT TOTAL		**19**	**46**	**71**

TEST ROLLING

SPV.0170.01
TEST ROLLING

STATION - STATION	LOCATION	STA
CAT 0010		
STAGE 1		
S. 60TH STREET		
165+69 - 181+00	LT	15
STAGE 1 SUBTOTAL		**15**
STAGE 2		
S. 60TH STREET		
165+69 - 181+00	RT	15
STAGE 2 SUBTOTAL		**15**
STAGE 3		
S. 60TH STREET		
125+88 - 162+46	LT	37
STAGE 3 SUBTOTAL		**37**
STAGE 4		
S. 60TH STREET		
125+88 - 162+46	RT	37
S. HONEY CREEK DRIVE		
600+43 - 601+52	LT/RT	1
STAGE 4 SUBTOTAL		**38**
PROJECT TOTAL		**105**

3

CATEGORY 0010
UNLESS OTHERWISE
NOTED

3

TREE PLANTING

STATION	LOCATION	632.0101.01 CALLERY PEAR 4" CAL, B&B EACH	632.0101.02 FREEMAN MAPLE, 4" CAL, B&B EACH	632.0101.03 IVORY SILK LILAC, 4" CAL, B&B EACH	632.0101.04 BALD CYPRESS, 4" CAL, B&B EACH	632.0101.05 RED BUD, 2" CAL, B&B EACH	632.0101.06 SUNBURST LOCUST, 4" CAL, B&B EACH
CAT 0010							
STAGE 2							
S. 60TH STREET							
166+75	MED	--	--	--	--	1	--
167+39	MED	--	--	--	--	1	--
168+80	MED	1	--	--	--	--	--
169+41	MED	1	--	--	--	--	--
170+09	MED	1	--	--	--	--	--
174+76	MED	--	--	--	--	--	1
175+16	MED	--	--	--	--	--	1
STAGE 2 SUBTOTAL		**3**	**--**	**--**	**--**	**2**	**2**
STAGE 4							
S. 60TH STREET							
131+22	MED	1	--	--	--	--	--
131+56	MED	1	--	--	--	--	--
141+61	MED	--	1	--	--	--	--
141+86	MED	--	1	--	--	--	--
144+52	MED	--	1	--	--	--	--
156+68	MED	--	--	1	--	--	--
157+10	MED	--	--	1	--	--	--
157+40	MED	--	--	1	--	--	--
158+20	MED	--	--	--	1	--	--
158+58	MED	--	--	--	1	--	--
STAGE 4 SUBTOTAL		**2**	**3**	**3**	**2**	**--**	**--**
PROJECT TOTAL		**5**	**3**	**3**	**2**	**2**	**2**

SIGNATURE BED ITEMS

LOCATION	CAT 10 632.0101.07 CLEVELAND SELECT PEAR, 2" CAL, B&B EACH	CAT 10 632.0201.01 TIGER EYE SUMAC, #5, C.G. EACH	CAT 10 632.0201.02 ZAGREB COREOPSIS, #1, C.G. EACH	CAT 10 632.0301.01 KARL FORESTER GRASS, #1, C.G. EACH	CAT 10 632.0301.02 CATMINT BLUE WONDER, #1, C.G. EACH	CAT 10 632.0301.03 DAYLILIES #1, C.G. EACH	CAT 10 SPV.0060.01 SIGNATURE BED EACH	CAT 10 SPV.0090.01 FIELDSTONE BOULDER WALL L.F.
Signature Bed #1	3	6	24	72	48	48	1	40
Signature Bed #2	3	6	24	72	48	48	1	40
PROJECT TOTAL	6	12	48	144	96	96	2	80

TRAFFIC CONTROL ITEMS

STAGE	643.0300 DRUMS EACH	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS
CAT 0010										
S. 60TH STREET										
STAGE 1A	64	1,408	29	638	46	1,012	19	418	40	880
STAGE 1B	61	1,342	26	572	40	880	12	264	39	858
STAGE 2A	39	858	33	726	54	1,188	14	308	36	792
STAGE 2B	39	858	33	726	52	1,144	12	264	37	814
STAGE 3A	89	2,492	51	1,428	78	2,184	13	364	57	1,596
STAGE 3B	99	2,772	68	1,904	90	2,520	22	616	58	1,624
STAGE 4A	62	1,736	71	1,988	118	3,304	14	392	70	1,960
STAGE 4B	49	1,372	65	1,820	106	2,968	9	252	71	1,988
UNDISTRIBUTED		770		588		912		173		631
PROJECT TOTAL		**13,608**		**10,390**		**16,112**		**3,051**		**11,143**

CONSTRUCTION STAKING

STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	SPV.0060.04 CONSTRUCTION STAKING CURB RAMP EACH	SPV.0090.02 CONSTRUCTION STAKING CONCRETE SIDEWALK LF
CAT 0010							
S. 60TH STREET							
125+88 - 162+46	LT/RT	3,658	--	3,658	3,658	48	7,316
165+69 - 180+19	LT/RT	1,450	--	1,450	1,450	16	2,900
180+19 - 181+00	LT/RT	81	81	--	--	--	--
S. HONEY CREEK DRIVE							
600+43 - 601+52	LT/RT	109	--	109	109	--	109
PROJECT TOTAL		**5,298**	**81**	**5,217**	**5,217**	**64**	**10,325**

CONSTRUCTION STAKING

LOCATION	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS
CAT 0010	
PROJECT	1
PROJECT TOTAL	**1**

LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES

	YEAR 2018	YEAR 2019	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH
CAT 0010			
S. 60TH STREET			
MAY	1	1	2
JUNE	2	2	4
JULY	2	2	4
AUGUST	2	2	4
SEPTEMBER	2	2	4
OCTOBER	1	1	2
PROJECT TOTAL			**20**

CATEGORY 0010 UNLESS OTHERWISE NOTED

TEMPORARY PAVEMENT MARKING

STATION - STATION	LOCATION	646.0103 PAVEMENT MARKING PAINT 4-INCH WHITE LF	646.0103 PAVEMENT MARKING PAINT 4-INCH YELLOW LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH WHITE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH YELLOW LF
CAT 0010					
STAGE 1					
S. 60TH STREET					
162+80 - 184+00	LT/RT	2,714	2,658	386	435
179+85 - 181+10	LT/RT	--	--	--	212
W. MORGAN AVENUE					
525+05 - 526+05	RT	--	--	102	--
STAGE 1 SUBTOTAL		**5,372**		**1,135**	
STAGE 2					
S. 60TH STREET					
162+45 - 182+40	LT/RT	106	--	2,525	2,996
W. MORGAN AVENUE					
525+55 - 526+15	RT	--	--	58	--
527+30 - 528+45	LT/RT	--	--	116	--
STAGE 2 SUBTOTAL		**106**		**5,695**	
STAGE 3					
S. 60TH STREET					
120+00 - 166+00	LT/RT	6,686	6,421	238	906
W. COLD SPRING ROAD					
324+55 - 328+40	RT	--	--	--	572
324+50 - 328+50	LT/RT	--	--	--	585
W. HOWARD AVENUE					
424+35 - 426+10	RT	--	--	174	--
STAGE 3 SUBTOTAL		**13,107**		**2,475**	
STAGE 4					
S. 60TH STREET					
122+90 - 166+00	LT/RT	--	--	7,009	7,835
W. COLD SPRING ROAD					
324+55 - 328+60	RT	--	--	--	615
324+45 - 328+50	LT/RT	--	--	--	549
W. HOWARD AVENUE					
427+40 - 428+40	LT	--	--	106	--
427+40 - 429+10	LT	--	--	173	--
STAGE 4 SUBTOTAL		**--**		**16,287**	
UNDISTRIBUTED		**1,859**		**2,559**	
PROJECT TOTAL		**20,444**		**28,151**	

REMOVING PAVEMENT MARKINGS

STATION - STATION	646.0600 REMOVING PAVEMENT MARKINGS LF
CAT 0010	
STAGE 1	
S. 60TH STREET	
164+25 - 172+50	812
172+50 - 179+25	397
179+25 - 181+10	280
W. MORGAN AVENUE	
525+05 - 526+05	25
STAGE 1 SUBTOTAL	**1,514**
STAGE 2	
S. 60TH STREET	
164+25 - 172+50	2,942
172+50 - 179+25	2,499
W. MORGAN AVENUE	
527+30 - 528+05	19
STAGE 2 SUBTOTAL	**5,460**
STAGE 3	
S. 60TH STREET	
120+00 - 126+50	369
126+50 - 146+25	2,062
146+25 - 153+00	369
153+00 - 163+00	863
W. COLD SPRING ROAD	
324+50 - 326+00	525
327+25 - 328+50	322
W. HOWARD AVENUE	
425+14 - 426+18	104
STAGE 3 SUBTOTAL	**4,614**
STAGE 4	
S. 60TH STREET	
122+90 - 126+50	293
126+50 - 146+25	7,095
146+25 - 153+00	2,353
153+00 - 163+00	3,658
W. HOWARD AVENUE	
427+34 - 428+24	90
STAGE 4 SUBTOTAL	**13,489**
UNDISTRIBUTED	**2,508**
PROJECT TOTAL	**27,583**

SAWING

STATION - STATION	LOCATION	690.0150 SAWING APHALT LF	690.0250 SAWING CONCRETE LF
CAT 0010			
STAGE 1			
S. 60TH STREET			
164+85	LT	--	5
165+69	LT	--	48
172+15 - 172+761	LT	--	40
172+65 - 178+25	LT	--	68
180+19	LT	--	6
181+00	LT	--	44
181+16 - 182+46	LT	--	282
W. MORGAN AVENUE			
525+83 - 526+04	LT/RT	--	75
STAGE 1 SUBTOTAL		**--**	**568**
STAGE 2			
S. 60TH STREET			
165+69	RT	--	38
172+17 - 172+74	RT	--	40
180+19	LT/RT	--	6
181+00	LT/RT	--	44
W. MORGAN AVENUE			
527+32 - 527+54	LT/RT	--	71
STAGE 2 SUBTOTAL		**--**	**199**
STAGE 3			
S. 60TH STREET			
122+59 - 125+25	LT	--	532
125+88 - 125+92	LT	--	41
138+07 - 138+37	LT	--	29
138+80 - 146+07	LT	--	84
146+14 - 146+47	LT	--	33
146+54 - 152+46	LT	--	87
153+38 - 161+85	LT	--	60
162+46	LT	--	33
W. COLD SPRING ROAD			
325+94 - 326+00	LT/RT	--	59
W. HOWARD AVENUE			
426+09	LT/RT	--	76
STAGE 3 SUBTOTAL		**--**	**1,034**
STAGE 4			
S. 60TH STREET			
122+59 - 125+25	LT	532	--
125+88	RT	--	50
135+78 - 136+23	RT	--	38
136+31 - 139+25	RT	--	15
139+55 - 139+84	RT	--	29
140+88 - 146+09	RT	--	101
146+16 - 146+49	RT	--	33
146+56 - 152+44	RT	--	122
162+46	RT	--	43
163+15	RT	--	5
W. COLD SPRING ROAD			
327+36 - 347+41	LT/RT	--	55
328+90	RT	--	5
W. HOWARD AVENUE			
427+33 - 427+37	LT/RT	--	81
S. HONEY CREEK DRIVE			
600+82	LT	--	5
601+52	LT/RT	--	33
STAGE 4 SUBTOTAL		**532**	**615**
PROJECT TOTAL		**532**	**2,416**

CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING

STATION - STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0116 PAVEMENT MARKING EPOXY 6-INCH WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH WHITE LF	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 WHITE EACH	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY WHITE EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY WHITE EACH	647.0356 PAVEMENT MARKING WORDS EPOXY WHITE EACH	647.0576 PAVEMENT MARKING STOP LINE EPOXY 24-INCH WHITE LF	647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH WHITE LF
CAT 0010											
STAGE 2											
S. 60TH STREET											
164+36 - 165+69	LT	--	--	--	132	--	--	--	--	--	--
164+41 - 172+12	LT	--	--	747	--	--	--	--	--	--	--
164+48	LT	--	--	--	--	--	--	1	--	--	--
164+52 - 166+33	LT	--	--	--	360	--	--	--	--	--	--
164+71	LT	--	--	--	--	1	--	--	--	--	--
164+79 - 172+12	RT	--	--	673	--	--	--	--	--	--	--
164+84 - 171+33	RT	649	--	--	--	--	--	--	--	--	--
165+13	LT	--	--	--	--	--	--	--	1	--	--
165+31	RT	--	--	--	--	--	--	1	--	--	--
165+34	LT	--	--	--	--	--	1	--	--	--	--
165+43	RT	--	--	--	--	--	1	--	--	--	--
166+19 - 172+12	LT	594	--	--	--	--	--	--	--	--	--
170+84 - 172+13	RT	--	--	--	128	--	--	--	--	--	--
171+71	LT	--	--	--	--	--	1	--	--	--	--
171+83	LT	--	--	--	--	--	--	1	--	--	--
172+79 - 178+02	RT	523	--	--	--	--	--	--	--	--	--
172+79 - 178+85	LT	--	--	546	--	--	--	--	--	--	--
172+79 - 178+82	RT	--	--	543	--	--	--	--	--	--	--
172+79 - 174+06	LT	--	--	--	127	--	--	--	--	--	--
173+09	RT	--	--	--	--	--	--	1	--	--	--
173+21	RT	--	--	--	--	--	1	--	--	--	--
173+59 - 178+85	LT	526	--	--	--	--	--	--	--	--	--
177+78 - 178+82	RT	--	--	--	104	--	--	--	--	--	--
178+43	LT	--	--	--	--	--	1	--	--	--	--
178+55	LT	--	--	--	--	--	--	1	--	--	--
178+82	RT	--	--	--	--	--	--	--	--	36	--
178+86 - 178+92	LT/RT	--	--	--	--	--	--	--	--	--	151
179+80 - 179+86	LT/RT	--	--	--	--	--	--	--	--	--	146
179+86 - 181+00	RT	--	--	29	--	--	--	--	--	--	--
179+90	LT	--	--	--	--	--	--	--	--	37	--
179+90 - 181+00	LT	--	--	--	159	--	--	--	--	--	--
180+12	LT	--	--	--	--	1	--	--	--	--	--
180+52	LT	--	--	--	--	--	--	--	1	--	--
W. MORGAN AVENUE											
525+00 - 526+09	RT	--	--	27	--	--	--	--	--	--	--
526+09	RT	--	--	--	--	--	--	--	--	32	--
526+13 - 526+19	LT/RT	--	--	--	--	--	--	--	--	--	130
527+16 - 527+22	LT/RT	--	--	--	--	--	--	--	--	--	130
527+27	LT	--	--	--	--	--	--	--	--	31	--
527+27 - 528+05	LT	--	--	20	--	--	--	--	--	--	--
STAGE 2 SUBTOTAL		**2,292**	**--**	**2,585**	**1,010**	**2**	**5**	**5**	**2**	**136**	**557**

CATEGORY 0010
UNLESS OTHERWISE
NOTED

3

PAVEMENT MARKING

STATION - STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0116 PAVEMENT MARKING EPOXY 6-INCH WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH WHITE LF	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 WHITE EACH	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY WHITE EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY WHITE EACH	647.0356 PAVEMENT MARKING WORDS EPOXY WHITE EACH	647.0576 PAVEMENT MARKING STOP LINE EPOXY 24-INCH WHITE LF	647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH WHITE LF
CAT 0010											
STAGE 4											
S. 60TH STREET											
124+93 - 125+95	RT	--	--	--	102	--	--	--	--	--	--
124+94 - 125+96	RT	65	--	--	--	--	--	--	--	--	--
125+26	RT	--	--	--	--	--	--	--	1	--	--
125+66	RT	--	--	--	--	1	--	--	--	--	--
125+95	RT	--	--	--	--	--	--	--	--	42	--
125+99 - 126+05	LT/RT	--	--	--	--	--	--	--	--	--	167
126+75 - 126+84	LT/RT	--	--	--	--	--	--	--	--	--	166
126+82 - 132+15	RT	--	--	496	--	--	--	--	--	--	--
126+83 - 131+65	RT	483	--	--	--	--	--	--	--	--	--
126+85 - 132+15	LT	--	--	473	--	--	--	--	--	--	--
126+85	LT/RT	--	--	--	--	--	--	--	--	41	--
126+85 - 127+93	LT	--	--	--	108	--	--	--	--	--	--
127+12	RT	--	--	--	--	--	--	1	--	--	--
127+24	RT	--	--	--	--	--	1	--	--	--	--
127+65 - 132+15	LT	451	--	--	--	--	--	--	--	--	--
131+73	LT	--	--	--	--	--	1	--	--	--	--
131+85	LT	--	--	--	--	--	--	1	--	--	--
133+06 - 135+72	LT	--	--	228	--	--	--	--	--	--	--
133+06 - 135+72	RT	--	--	205	--	--	--	--	--	--	--
133+07 - 134+02	LT	--	--	--	96	--	--	--	--	--	--
133+07 - 134+92	RT	186	--	--	--	--	--	--	--	--	--
133+37	RT	--	--	--	--	--	--	1	--	--	--
133+49	RT	--	--	--	--	--	1	--	--	--	--
133+57 - 135+72	LT	215	--	--	--	--	--	--	--	--	--
135+30	LT	--	--	--	--	--	1	--	--	--	--
135+42	LT	--	--	--	--	--	--	1	--	--	--
136+45 - 138+83	RT	120	--	--	--	--	--	--	--	--	--
136+45 - 137+88	LT	--	--	106	--	--	--	--	--	--	--
136+45 - 137+88	RT	--	--	106	--	--	--	--	--	--	--
136+45 - 136+92	LT	--	--	--	46	--	--	--	--	--	--
136+75	RT	--	--	--	--	--	--	1	--	--	--
136+87	RT	--	--	--	--	--	1	--	--	--	--
136+95 - 139+22	LT	120	--	--	--	--	--	--	--	--	--
137+34 - 137+82	RT	--	--	--	48	--	--	--	--	--	--
137+42	LT	--	--	--	--	--	1	--	--	--	--
137+55	LT	--	--	--	--	--	--	1	--	--	--
138+56 - 139+33	LT	--	--	40	--	--	--	--	--	--	--
138+56 - 139+33	RT	--	--	40	--	--	--	--	--	--	--
138+91	LT	--	--	--	--	--	1	--	--	--	--
138+92	RT	--	--	--	--	--	--	1	--	--	--
139+03	LT	--	--	--	--	--	--	1	--	--	--
139+04	RT	--	--	--	--	--	1	--	--	--	--
139+33 - 139+39	LT/RT	--	--	--	--	--	--	--	--	--	98
140+10 - 145+18	RT	508	--	--	--	--	--	--	--	--	--
140+10 - 145+98	LT	--	--	551	--	--	--	--	--	--	--
140+10 - 145+98	RT	--	--	528	--	--	--	--	--	--	--
140+29 - 141+29	LT	--	--	--	100	--	--	--	--	--	--
140+40	RT	--	--	--	--	--	--	1	--	--	--
140+52	RT	--	--	--	--	--	1	--	--	--	--
140+60 - 145+98	LT	538	--	--	--	--	--	--	--	--	--
144+71 - 145+98	RT	--	--	--	128	--	--	--	--	--	--
145+56	LT	--	--	--	--	--	1	--	--	--	--
145+68	LT	--	--	--	--	--	--	1	--	--	--
146+65 - 151+55	RT	491	--	--	--	--	--	--	--	--	--
146+65 - 152+34	LT	--	--	509	--	--	--	--	--	--	--

CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING

STATION - STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0116 PAVEMENT MARKING EPOXY 6-INCH WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH WHITE LF	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 WHITE EACH	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY WHITE EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY WHITE EACH	647.0356 PAVEMENT MARKING WORDS EPOXY WHITE EACH	647.0576 PAVEMENT MARKING STOP LINE EPOXY 24-INCH WHITE LF	647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH WHITE LF
CAT 0010											
146+65 - 152+32	RT	--	--	506	--	--	--	--	--	--	--
146+76 - 147+92	LT	--	--	--	117	--	--	--	--	--	--
146+95	RT	--	--	--	--	--	--	1	--	--	--
147+07	RT	--	--	--	--	--	1	--	--	--	--
147+45 - 152+34	LT	489	--	--	--	--	--	--	--	--	--
150+34 - 151+33	LT/RT	--	--	--	129	--	--	--	--	--	--
151+62 - 152+32	RT	--	--	--	69	--	--	--	--	--	--
151+92	LT	--	--	--	--	--	1	--	--	--	--
152+04	LT	--	--	--	--	--	--	1	--	--	--
152+31	LT/RT	--	--	--	--	--	--	--	--	39	--
152+36 - 152+42	LT/RT	--	--	--	--	--	--	--	--	--	155
153+39 - 153+45	LT/RT	--	--	--	--	--	--	--	--	--	158
153+45 - 161+96	RT	851	--	--	--	--	--	--	--	--	--
153+45 - 163+19	RT	--	--	973	--	--	--	--	--	--	--
153+48 - 162+82	LT	--	--	875	--	--	--	--	--	--	--
153+48 - 154+62	LT	--	--	--	113	--	--	--	--	--	--
153+49	LT	--	--	--	--	--	--	--	--	39	--
153+75	RT	--	--	--	--	--	--	1	--	--	--
153+87	RT	--	--	--	--	--	1	--	--	--	--
154+25 - 162+77	LT	852	--	--	--	--	--	--	--	--	--
155+20 - 155+88	RT	--	--	--	68	--	--	--	--	--	--
161+46 - 163+09	RT	--	--	--	163	--	--	--	--	--	--
162+17	LT	--	--	--	--	--	1	--	--	--	--
162+29	LT	--	--	--	--	--	--	1	--	--	--
162+46 - 163+24	RT	--	--	--	78	--	--	--	--	--	--
162+66	RT	--	--	--	--	1	--	--	--	--	--
162+66	RT	--	--	--	--	--	--	1	--	--	--
162+80	RT	--	--	--	--	--	1	--	--	--	--
162+67 - 163+49	LT/RT	--	--	--	--	--	--	--	--	--	248
162+67 - 164+09	LT	--	--	--	--	--	--	--	--	--	263
162+95 - 163+36	LT/RT	--	--	--	--	--	--	--	--	62	--
163+49 - 164+95	RT	--	--	--	--	--	--	--	--	--	278
164+09 - 164+95	LT/RT	--	--	--	--	--	--	--	--	--	251
164+24 - 164+70	LT/RT	--	--	--	--	--	--	--	--	68	--
W. COLD SPRING ROAD											
324+50 - 326+00	LT/RT	--	305	--	--	--	--	--	--	--	--
324+50 - 326+04	RT	--	--	76	--	--	--	--	--	--	--
324+50 - 325+97	LT	--	--	147	--	--	--	--	--	--	--
326+04	RT	--	--	--	--	--	--	--	--	24	--
326+08 - 326+14	LT/RT	--	--	--	--	--	--	--	--	--	109
327+12 - 327+18	LT/RT	--	--	--	--	--	--	--	--	--	101
327+22	LT	--	--	--	--	--	--	--	--	22	--
327+22 - 328+50	LT	--	--	48	--	--	--	--	--	--	--
327+24 - 328+50	LT/RT	--	256	--	--	--	--	--	--	--	--
327+25 - 328+50	RT	--	--	125	--	--	--	--	--	--	--
W. HOWARD AVENUE											
425+13 - 426+13	RT	100	--	--	--	--	--	--	--	--	--
426+15	RT	--	--	--	--	--	--	--	--	38	--
426+19 - 426+25	LT/RT	--	--	--	--	--	--	--	--	--	160
427+22 - 427+28	LT/RT	--	--	--	--	--	--	--	--	--	162
427+32	LT	--	--	--	--	--	--	--	--	39	--
427+33 - 428+24	LT	91	--	--	--	--	--	--	--	--	--
STAGE 4 SUBTOTAL		**5,560**	**561**	**6,029**	**1,365**	**2**	**15**	**15**	**1**	**414**	**2,316**
PROJECT TOTAL		**8,413**		**8,613**	**2,375**	**4**	**20**	**20**	**3**	**550**	**2,873**

CATEGORY 0010 UNLESS OTHERWISE NOTED

3

STREET LIGHTING & TRAFFIC SIGNALS

LOCATION	CAT 0010 REMOVING CONCRETE BASES 204.0195 EACH	CAT 0010 CONSTRUCTION STAKING ELECTRICAL 2415-00-70 650.8500 LS	CAT 0010 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2 INCH 652.0225 LF	CAT 0010 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-1/2 INCH 652.0230 LF	CAT 0010 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3 INCH 652.0235 LF	CAT 0010 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3 INCH 652.0335 LF	CAT 0010 CONDUIT SPECIAL 3 INCH 652.0615 LF	CAT 0010 CONCRETE BASES TYPE 1 654.0101 EACH
PROJECT	54	1	350	700	4,750	2,840	840	14
TOTALS	54	1	350	700	4,750	2,840	840	14

LOCATION	CAT 0010 CONCRETE BASES TYPE 5 654.0105 EACH	CAT 0010 CONCRETE BASES TYPE 10 654.0110 EACH	CAT 0010 CABLE TYPE UF 2#12 AWG GROUNDED 655.0305 LF	CAT 0010 PEDESTAL BASES 657.0100 EACH	CAT 0010 TRANS BASE BREAKAWAY 11-1/2 INCH BOLT CIRCLE 657.0255 EACH	CAT 0010 LUMINAIRE ARM SINGLE MEMBER 4-1/2 INCH CLAMP 6-FOOT 657.0610 EACH	CAT 0010 LUMINAIRE ARM SINGLE MEMBER 4-1/2 INCH CLAMP 8-FOOT 657.0615 EACH	CAT 0010 POLE TYPE 9 SPV.0060.55 EACH
PROJECT	34	12	1,500	21	34	2	66	3
TOTALS	34	12	1,500	21	34	2	66	3

LOCATION	CAT 0010 POLE TYPE 10 SPV.0060.56 EACH	CAT 0010 MONOTUBE ARM 20-FT SPV.0060.62 EACH	CAT 0010 MONOTUBE ARM 25-FT SPV.0060.63 EACH	CAT 0010 MONOTUBE ARM 30-FT SPV.0060.64 EACH	CAT 0010 LUMINAIRE ARM, STEEL 8-FT SPV.0060.61 EACH	CAT 0010 LUMINAIRE UTILITY LED 95W TYPE 2 SPV.0060.50 EACH	CAT 0010 LUMINAIRE UTILITY LED 164W TYPE 2 SPV.0060.51 EACH	CAT 0010 FIBERGLASS/POLYMER CONCRETE PULL BOX 13" x 24" x 24" SPV.0060.52 EACH
PROJECT	9	5	6	1	18	68	18	43
TOTALS	9	5	6	1	18	68	18	43

LOCATION	CAT 0010 FIBERGLASS/POLYMER CONCRETE PULL BOX 17" x 30" x 24" SPV.0060.53 EACH	CAT 0010 POLE TYPE 5A ALUMINUM 25-FT SPV.0060.54 EACH	CAT 0010 INSTALL CONDUIT INTO EXISTING MANHOLE SPV.0060.75 EACH	CAT 0010 CABLE TYPE 3#2/1#8 LTP SPV.0090.50 LF	CAT 0010 CABLE TYPE 3#4/1#8 LTP SPV.0090.51 LF	CAT 0010 CABLE TYPE 3#6/1#8 LTP SPV.0090.52 LF	CAT 0010 CABLE TYPE 3#8/1#8 LTP SPV.0090.53 LF
PROJECT	41	34	1	3,650	900	1,200	1,000
TOTALS	41	34	1	3,650	900	1,200	1,000

NOTE: ID PLAQUES WILL NOT BE INSTALLED ONTO POLES ACCORDING TO CITY OF MILWAUKEE

CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 24 (FOREST HOME AVE.) & S. 60TH STREET
MILWAUKEE COUNTY
CATEGORY 0010
S40-1089

3

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.
EXT 1	PB2	148
EXT 2	PB 11	103
	TOTAL	251

INSTALL CONDUIT INTO EXISTING ITEM

STRUCTURE NO.	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
PB2	1
PB11	1
TOTAL	2

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.
SB2	HEAD 17	25
SB9	HEAD 13	25
	TOTAL	50

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION*	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
41	PB11	STA. 166+71.4, 18.0' LT	6'X6'	6	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	600	432
81	PB2	STA. 160+98.0, 18.0' RT	6'X6'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	209	222
					TOTAL	146	809	654

* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

* * FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH
13	SB9	1	1	1	1	1
17	SB2	1	1	1	1	1
	TOTAL	2	2	2	2	2

PROJECT NO: 2415-00-70	HWY: STH 24	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES	SHEET: 189	E

FILE NAME : J:\projects\d2_24150024\70\SIG\S40-1089_mq.pptx PLOT DATE : 1/20/2017 PLOT BY : DOTSHW PLOT NAME : S40-1089_mq.pdf PLOT SCALE : 1:1

STH 24 (FOREST HOME AVE.) & S. 60TH STREET
MILWAUKEE COUNTY
CATEGORY 0010
S40-1089

3

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.01 REMOVE TRAFFIC SIGNALS L.S.
STH 24 (FOREST HOME AVE) & S. 60TH STREET	1
TOTAL	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.
STH 24 (FOREST HOME AVE) & S. 60TH STREET	1
TOTAL	1

TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM FOR INTERSECTIONS

LOCATION	SPV.0105.02 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM FOR INTERSECTIONS L.S.
STH 24 (FOREST HOME AVE) & S. 60TH STREET	1
TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.03 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
STH 24 (FOREST HOME AVE) & S. 60TH STREET	1
TOTAL	1

3

CONCRETE JOINT SEALER

STATION - STATION	LOCATION	SPV.0180.01 CONCRETE JOINT SEALER SY
CAT 0010		
STAGE 1		
S. 60TH STREET		
165+69 - 180+19	LT	4,995
STAGE 1 SUBTOTAL		**4995**
STAGE 2		
S. 60TH STREET		
165+69 - 180+19	RT	4,851
STAGE 2 SUBTOTAL		**4851**
STAGE 3		
S. 60TH STREET		
125+88 - 162+46	LT	12,503
STAGE 3 SUBTOTAL		**12,503**
STAGE 4		
S. 60TH STREET		
125+88 - 162+46	RT	12,383
S. HONEY CREEK DRIVE		
600+43 - 601+52	LT/RT	350
STAGE 4 SUBTOTAL		**12733**
PROJECT TOTAL		**35081**

SIGN LISTING

SIGN NO.	SIGN CODE	MESSAGE	SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	REMARKS
CAT 0010						
1-1	J3-1	STH 24 DOUBLE ARROW	24 X 45	7.50	1	
	M1-6	STH 24	24 X 24	--	--	PART OF J3-1
	M6-4	DOUBLE ARROW	21 X 21	--	--	PART OF J3-1
1-2	J3-1	STH 24 DOUBLE ARROW	24 X 45	7.50	1	
	M1-6	STH 24	24 X 24	--	--	PART OF J3-1
	M6-4	DOUBLE ARROW	21 X 21	--	--	PART OF J3-1
PROJECT TOTAL				**15.00**	**2**	

NOTE: SEE PAVEMENT MARKING SHEETS FOR LOCATIONS

TEMPORARY PEDESTRIAN

STATION	LOCATION	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1430.S TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601.S TEMPORARY CURB RAMP EACH	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	SPV.0060.02 TEMPORARY BUS STOP PAD EACH
CAT 0010							
STAGE 1							
S. 60TH STREET							
172+50	LT/RT	360	--	--	4	--	1
179+50	LT/RT	360	--	--	4	--	1
UNDISTRIBUTED		180	300	600	3	50	--
STAGE 1 SUBTOTAL		**900**	**300**	**600**	**11**	**50**	**2**
STAGE 2							
S. 60TH STREET							
172+50	RT	360	--	--	4	--	1
179+50	RT	360	--	--	4	--	1
UNDISTRIBUTED		180	300	600	2	50	--
STAGE 2 SUBTOTAL		**900**	**300**	**600**	**10**	**50**	**2**
STAGE 3							
S. 60TH STREET							
126+50	LT/RT	390	--	--	4	--	--
136+40	LT	--	--	--	--	--	1
138+25	LT	195	--	--	2	--	--
146+25	LT/RT	390	--	--	4	--	1
153+00	LT/RT	390	--	--	4	--	1
162+40	LT	--	--	--	--	--	1
UNDISTRIBUTED		244	700	1,400	4	50	--
STAGE 3 SUBTOTAL		**1,609**	**700**	**1,400**	**18**	**50**	**4**
STAGE 4							
S. 60TH STREET							
126+50	RT	420	--	--	4	--	--
132+75	RT	210	--	--	2	--	--
136+00	RT	210	--	--	2	--	1
139+50	RT	210	--	--	2	--	--
146+00	RT	420	--	--	4	--	1
152+20	RT	420	--	--	4	--	1
UNDISTRIBUTED		315	700	1,400	3	50	--
STAGE 4 SUBTOTAL		**2,205**	**700**	**1,400**	**21**	**50**	**3**
PROJECT TOTAL		**5,614**	**2,000**	**4,000**	**60**	**200**	**11**

UTILITY LINE OPENING

LOCATION	SPV.0060.03 UTILITY LINE OPENING (ULO) EACH
CAT 0010	
PROJECT	10
PROJECT TOTAL	**10**

CATEGORY 0010 UNLESS OTHERWISE NOTED

LOCATION	CATEGORY 0010										
	ADJUSTING TES MANHOLE COVERS SPV.0060.80	REMOVE TES MANHOLE SPV.0060.81	INSTALLING CONDUIT INTO EXISTING MANHOLE SPV.0060.75	4' DIAMETER "STANDARD" MANHOLE TYPE TES SPV.0060.83	4' DIAMETER "DOGHOUSE" MANHOLE TYPE TES SPV.0060.84	5' DIAMETER "DOGHOUSE" MANHOLE TYPE TES SPV.0060.85	FIBERGLASS/POLYYMER CONCRETE PULL BOX 17" X 30" X 24" SPV.0060.53	3-DUCT CONDUIT CEMENT ENCASED, 4-INCH NONMETALLIC CONDUIT DB-60 SPV0090.80	1-DUCT CONDUIT CEMENT ENCASED, 4-INCH NONMETALLIC CONDUIT DB-60 SPV0090.81	2-DUCT CONDUIT CEMENT ENCASED, 4-INCH NONMETALLIC CONDUIT DB-60 SPV0090.82	CITY UNDERGROUND CONDUIT PROTECTION SPV0090.83
	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LF	LF	LF	LF
STA 126 + 84.0, 56.4 RT to STA 126 + 84.0, 44.9 RT.									12		
STA 126+84.0, 44.9 RT to MANHOLE 600								27			
MANHOLE 600 - STA 126 + 84.0, 17.8 RT	1			1							
MANHOLE 600 to MANHOLE 601								607			
MANHOLE 601 - STA 132 + 95.2, 15.0 RT	1 NEW FRAME		1								
MANHOLE 602 - STA 135 + 83.0, 15.1 RT	1										
MANHOLE 603 - STA 139 + 25.3, 16.5 RT	1 NEW FRAME										
MANHOLE 604 - STA 139 + 47.6, 18.5 LT		1									
MANHOLE 605 - STA 139 + 47.6, 18.5 LT	1					1					
STA 139 + 50, 17.2 LT to STA 161 + 00, 17.2 LT											2150
MANHOLE 606 - STA 146 + 53.4, 17.2 LT	1 NEW FRAME										
MANHOLE 607 - STA 152 + 87.9, 76.1 RT	OUT OF PAVING										
MANHOLE 608 - STA 153 + 05.8, 17.7 LT	1 NEW FRAME										
MANHOLE 609 - STA 158 + 37.5, 17.2 LT		1									
MANHOLE 610 - STA 158 + 37.5, 17.2 LT	1				1						
MANHOLE 611 - STA 162 + 37.5, 23.5 LT	1 NEW FRAME										
MANHOLE 612 - STA 165 + 22.1, 23.2 LT	OUT OF PAVING										
STA 167 + 00, 23.0 LT to STA 178 + 50, 19.0 LT											1150
MANHOLE 613 - STA 172 + 69.5, 18.9 LT	1										
POLICE CALL BOX to MANHOLE 617										17	
MANHOLE 614 - STA 179 + 12.7, 47.6 RT	1 NEW FRAME										
MANHOLE 615 - STA 179 + 16.6, 15.1 LT		1									
MANHOLE 616 - STA 179 + 16.6, 15.1 LT	1					1					
MANHOLE 617 - STA 179 + 16.2, 63.8 RT	1 NEW FRAME		2								
MANHOLE 617 to TRAFFIC VAULT									55		
TRAFFIC VAULT - STA 179 + 75.1, 62.1 RT							1				
TRAFFIC VAULT to STA 179 + 74.5, 87.5' RT									25		
TOTAL	13	3	3	1	1	2	1	634	92	17	3300

CATEGORY 0010 UNLESS OTHERWISE NOTED

LEGEND

- IPA INLET PROTECTION TYPE A
- IPB INLET PROTECTION TYPE B
- IPC INLET PROTECTION TYPE C
- X CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. COLD SPRING RD

S. 60TH STREET

EXISTING R/W

MATCH EXISTING SAWCUT REQ'D

SLOPE INTERCEPT

BEGIN PROJECT
STA 125+88

CAUTION

R/L W. COLD SPRING RD

R/L SOUTH 60TH ST

DISCONTINUED

TAPER 6:1

TAPER 10:1

CE

PE

SB PGL

NB PGL

MATCH LINE 130+00

MATCH EXISTING SAWCUT REQ'D

1

2

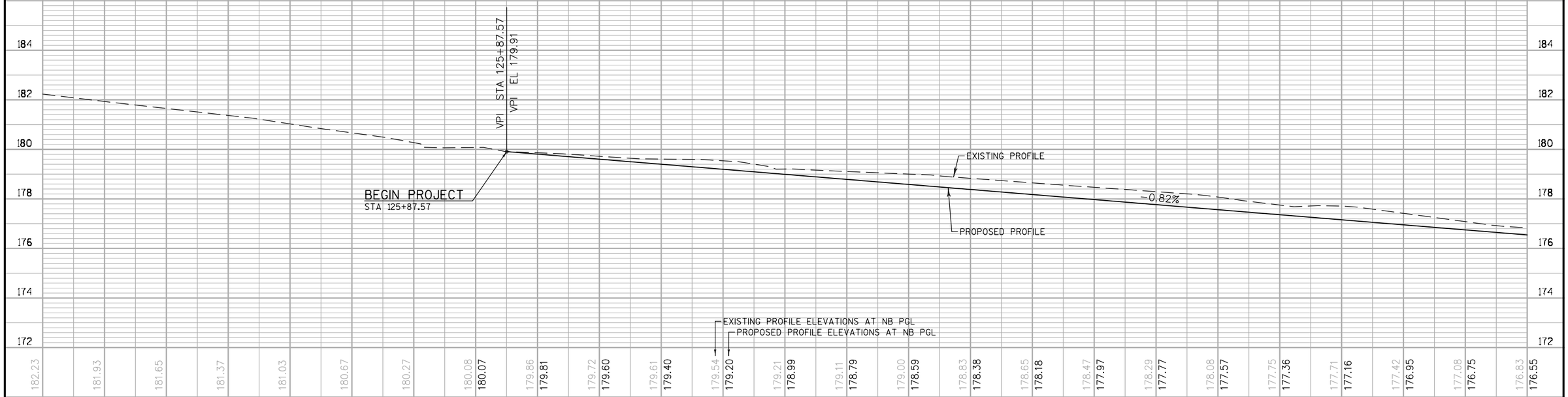
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 193	E

FILE NAME : ch_0000_050101_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44

SOUTHBOUND 60TH STREET

NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 194	E

LEGEND

(IPA) INLET PROTECTION TYPE A

(IPB) INLET PROTECTION TYPE B

(IPC) INLET PROTECTION TYPE C

[X] CONSTRUCTION PERMIT OBTAINED

X TREE REMOVAL

N

0 20 40

SCALE IN FEET

STA 131+60
P-40-544
TWO 10'x10' BOX CULVERTS TO REMAIN

EXISTING R/W

CE

SB PGL

S. 60TH STREET

R/L SOUTH 60TH ST

NB PGL

SLOPE INTERCEPT

TAPER 8:1

MATCH LINE 130+00

MATCH LINE 136+00

CAUTION

SILT FENCE

S. HONEY CREEK DR

PE

MATCH EXISTING
SAW CUT REQ'D

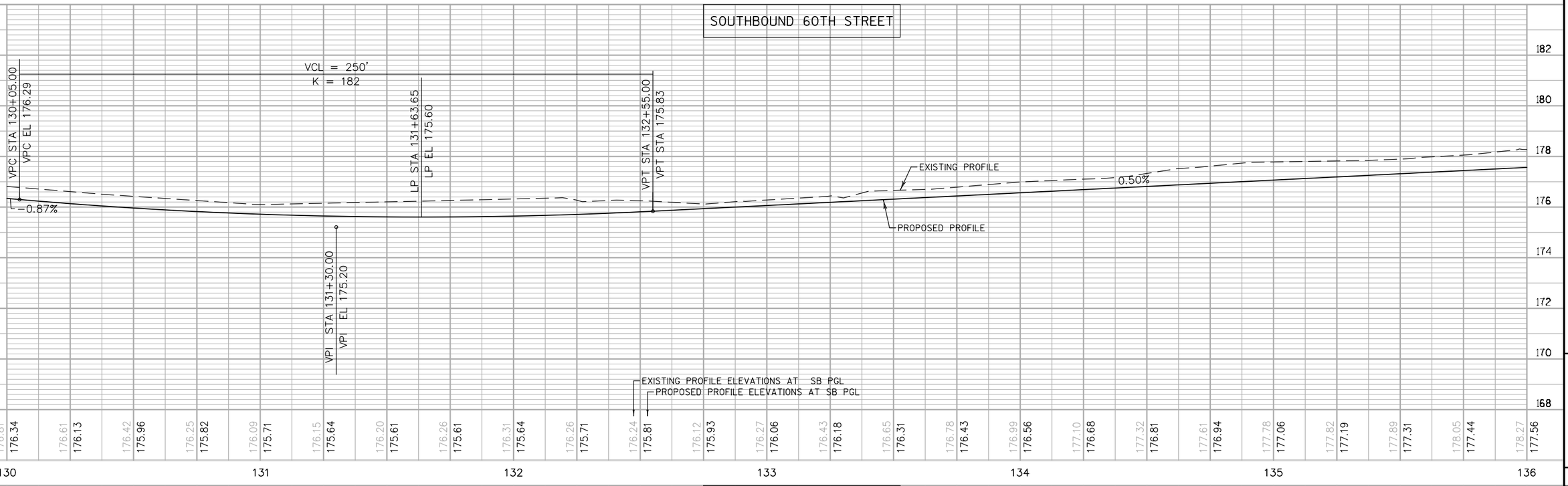
END CONSTRUCTION
STA 601+48.29

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 195 E

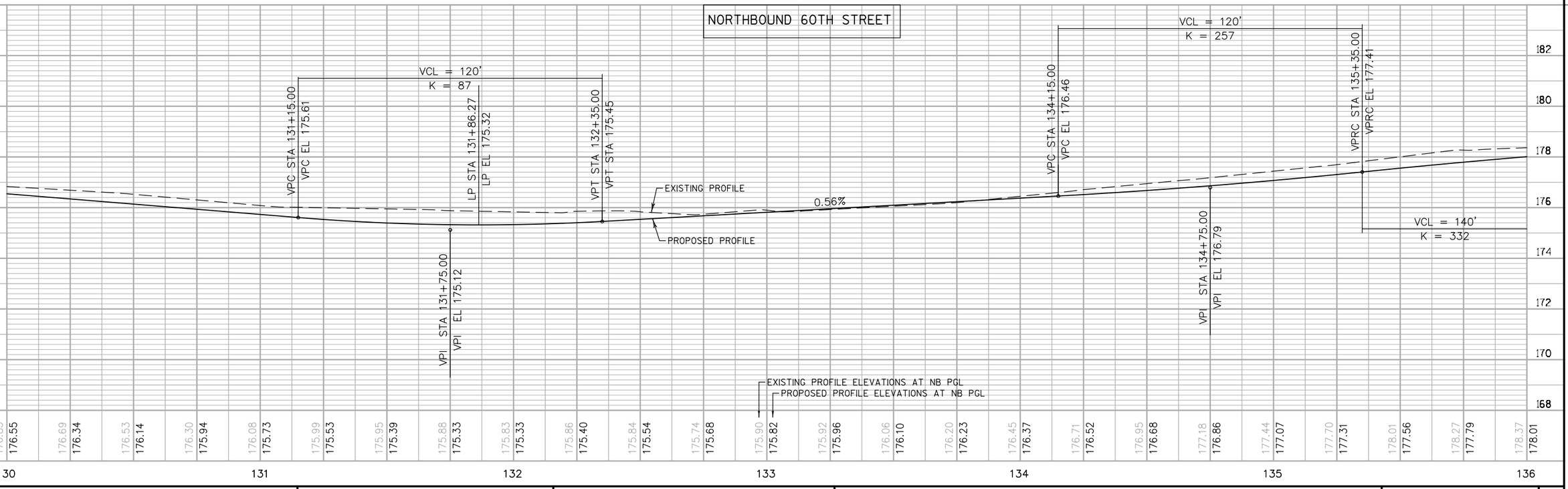
FILE NAME : ch_0000_050102_pp.DGN PLOT DATE : 21-MAR-2017 PLOT BY : kmeyer1 PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 196 E

LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. WATERFORD CT

ASPHALT SIDEWALK

MATCH EXISTING SAWCUT REQ'D

29'

SLOPE INTERCEPT

EXISTING R/W

CE

PE

R/L SOUTH 60TH ST

S. 60TH STREET

SB PGL

NB PGL

TAPER 6:1

TAPER 8:1

MATCH LINE 136+00

MATCH LINE 142+00

136

137

138

139

140

141

CAUTION

W. PLAINFIELD AVE

W. WATERFORD AVE

30" HIGH PRESSURE INSIDE STEEL CASING (40' LONG)

4

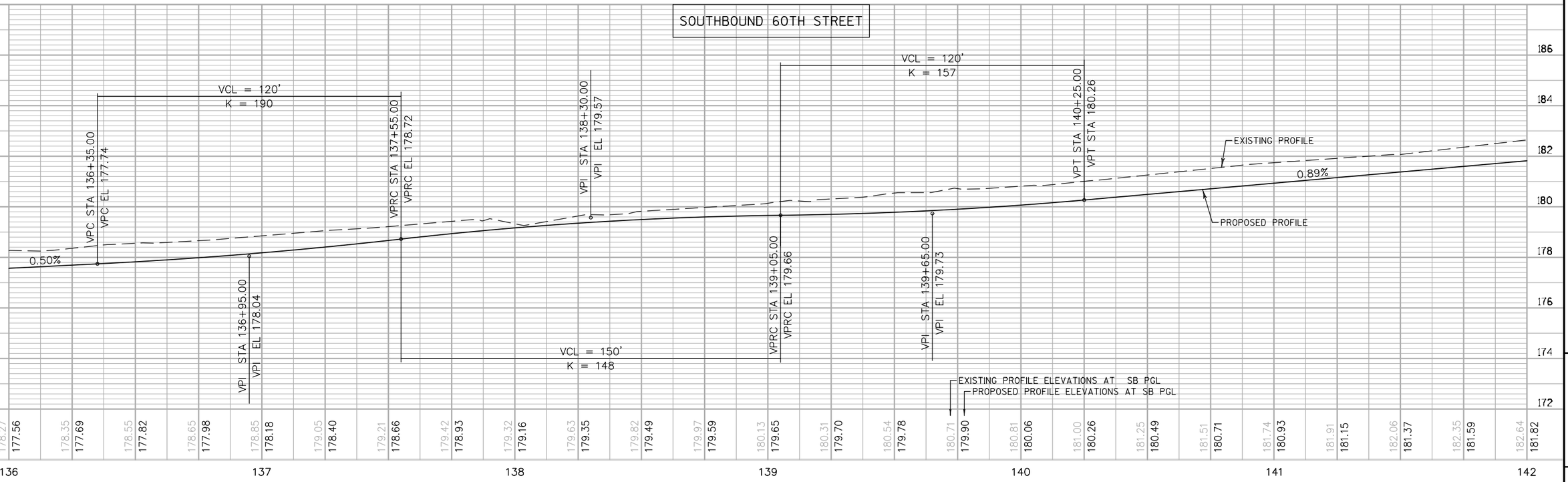
5

5

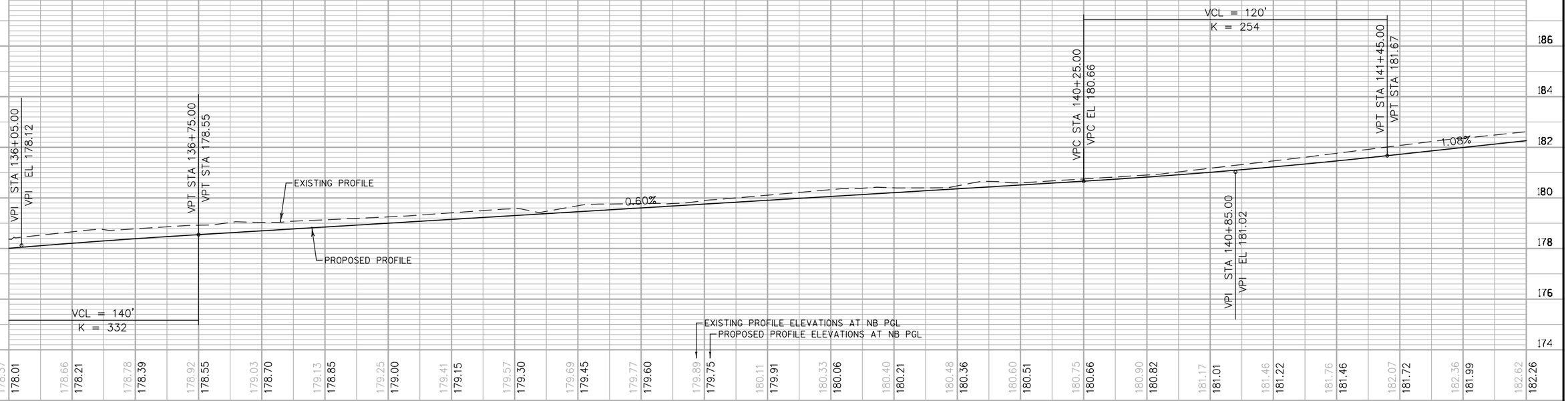
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 197	E

FILE NAME : ch_0000_050103_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 198 E

LEGEND

IPA INLET PROTECTION TYPE A

IPB INLET PROTECTION TYPE B

IPC INLET PROTECTION TYPE C

X CONSTRUCTION PERMIT OBTAINED

X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. NORWICH ST

MATCH EXISTING SAWCUT REQ'D

SLOPE INTERCEPT

EXISTING R/W

CAUTION

R/L SOUTH 60TH ST

SB PGL

NB PGL

TAPER 8:1

S. 60TH STREET

MATCH LINE 142+00

MATCH LINE 148+00

PE

5

6

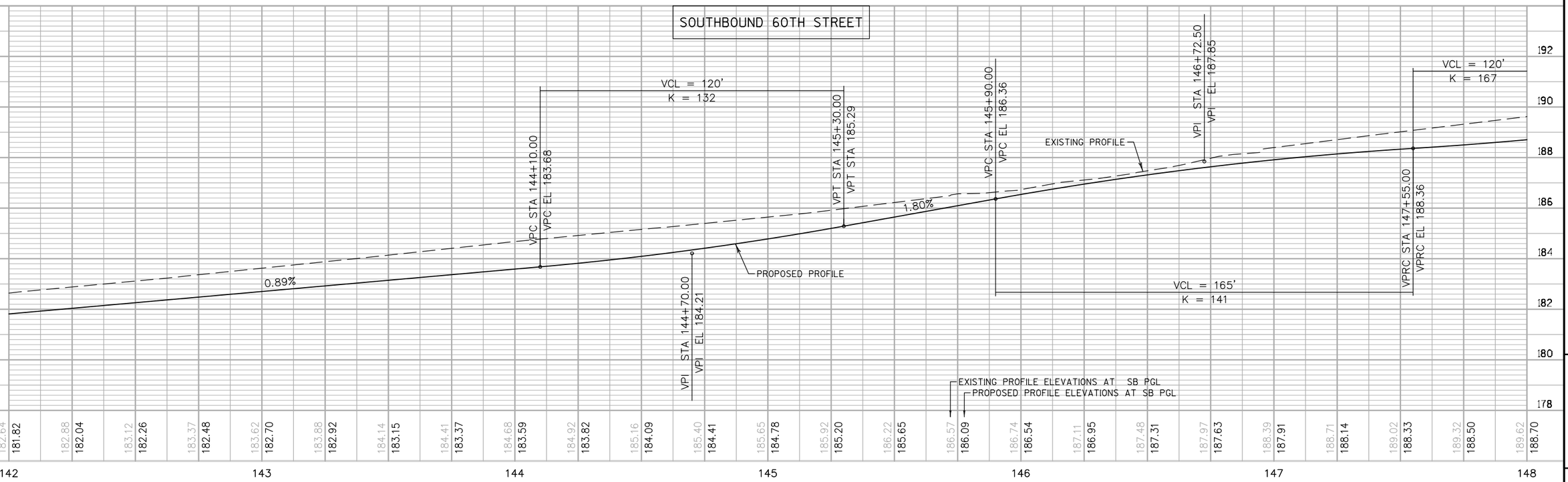
7

PROJECT NO: 2415-00-70 | HWY: LOCAL STREET | COUNTY: MILWAUKEE | PLAN - S. 60TH STREET | SHEET 199 E

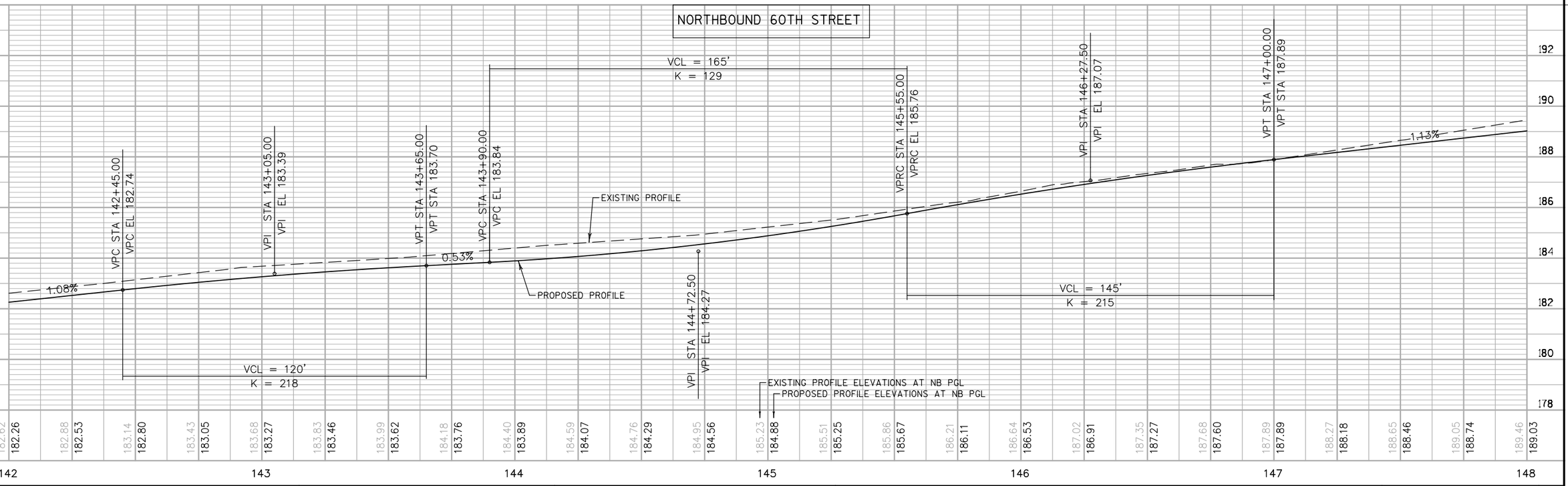
FILE NAME : ch_0000_050104_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 200	E

LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. HOWARD AVE

425

426

427

428

6 8 9 10 11 7 12

EXISTING R/W

5'

11'

PE

CAUTION

IPB

IPC

12'

5' 7'

SB PGL

NB PGL

R/L SOUTH 60TH ST

MATCH LINE 148+00

MATCH LINE 154+00

TAPER 8:1

TAPER 6:1

S. 60TH STREET

148

149

150

151

152

153

154

X

CE

IPA

SLOPE INTERCEPT

MATCH EXISTING SAWCUT REQ'D

42'

32'

28'

39'

SILT FENCE

BM 201

BENCH MARKS

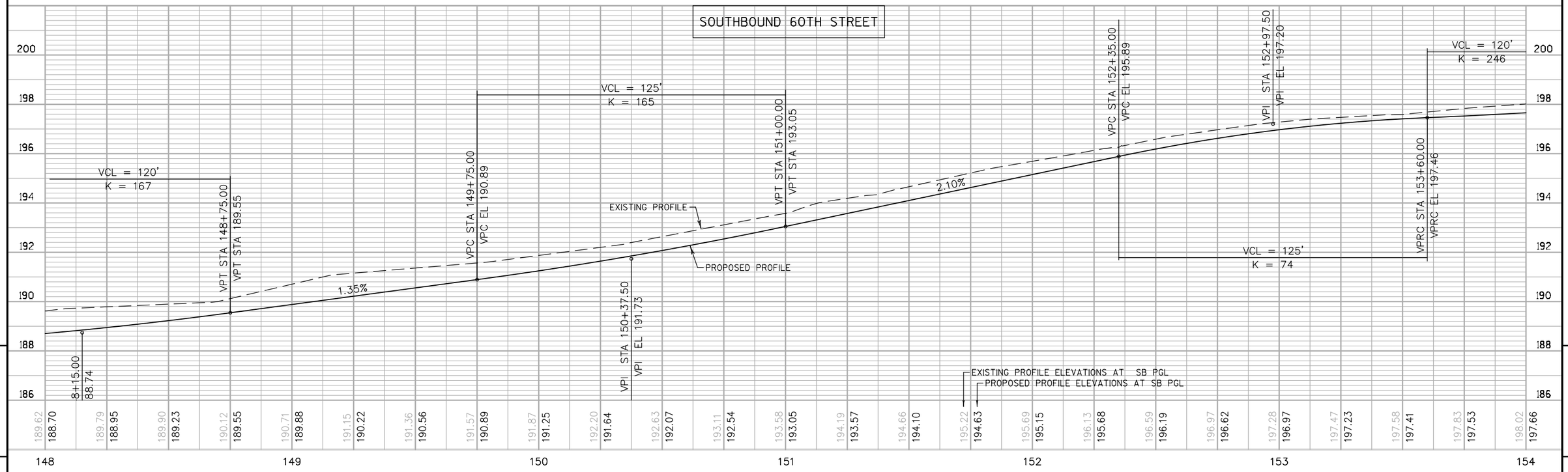
NO.	STATION	DESCRIPTION	ELEV.
201	153+52.47 RT	CITY BM.# 60-08 CONCRETE MONUMENT WITH OVAL BRASS CAP SET IN EDGE OF CONCRETE WALK	197.66

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 201	E

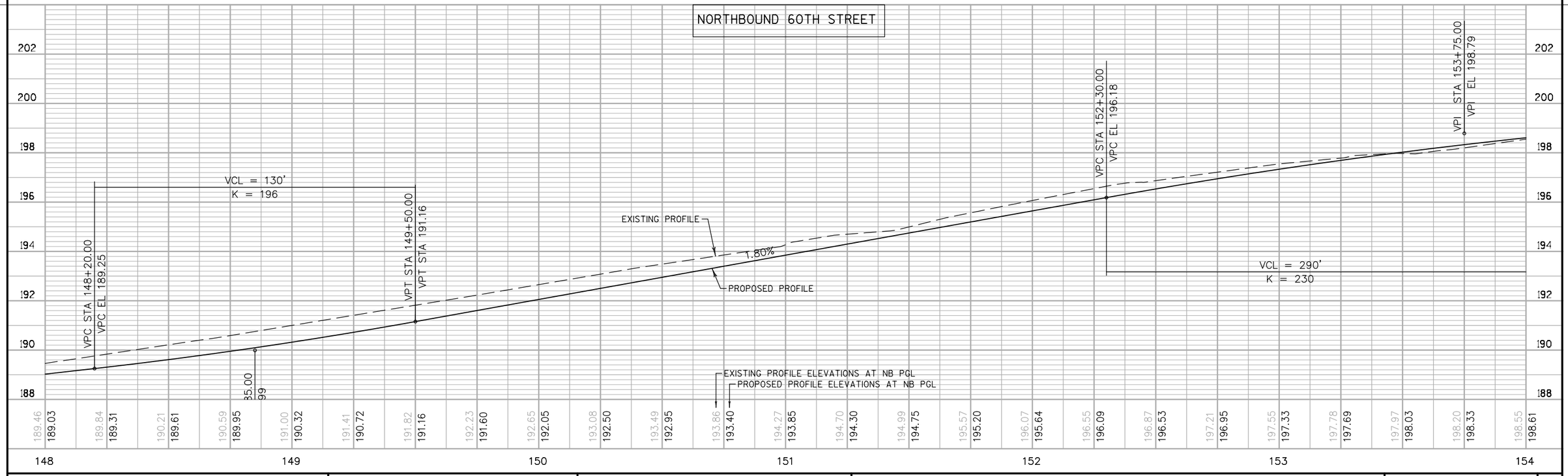
FILE NAME : ch_0000_050105_pp.DGN PLOT DATE : 31-JAN-2017 PLOT BY : szongolo PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 202 E

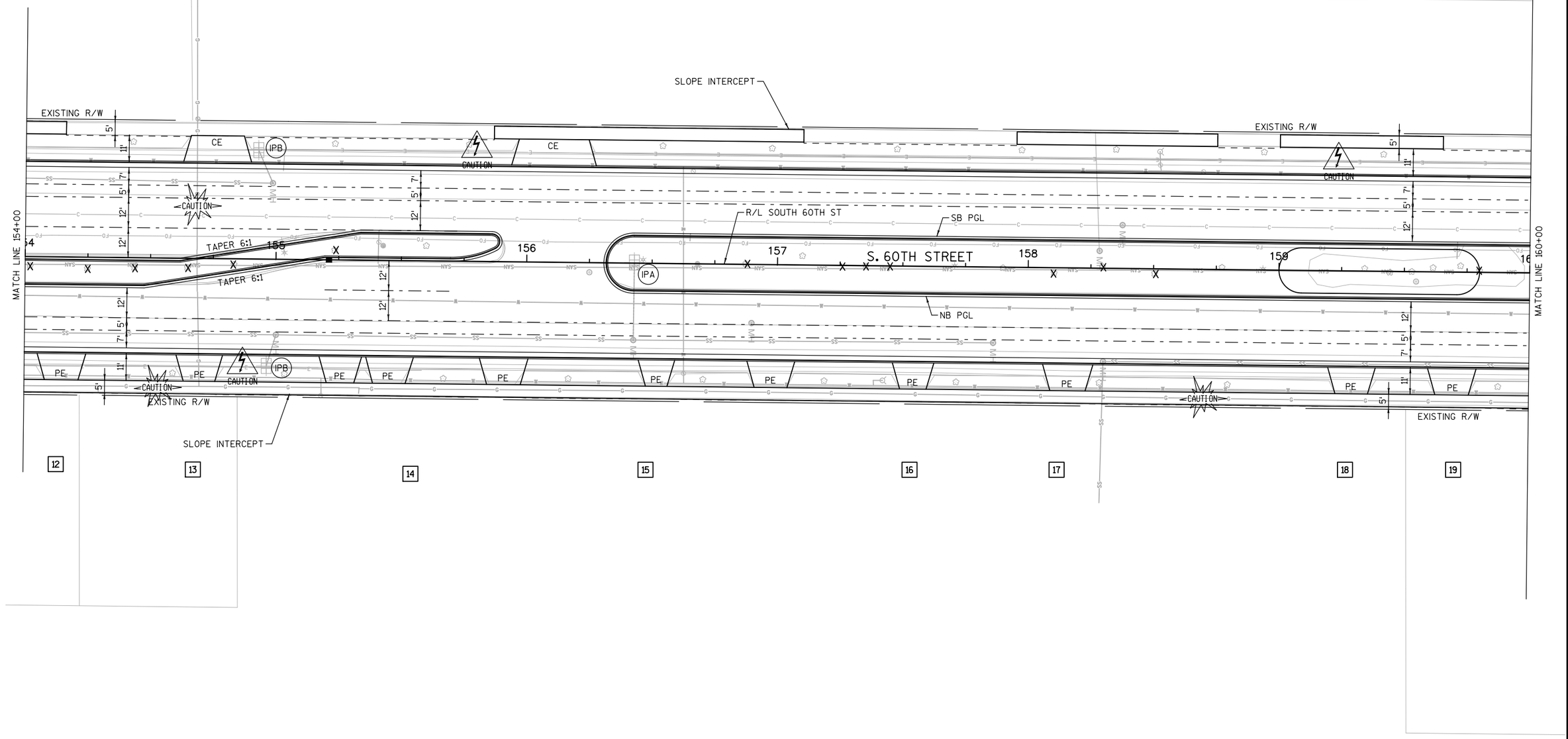
LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

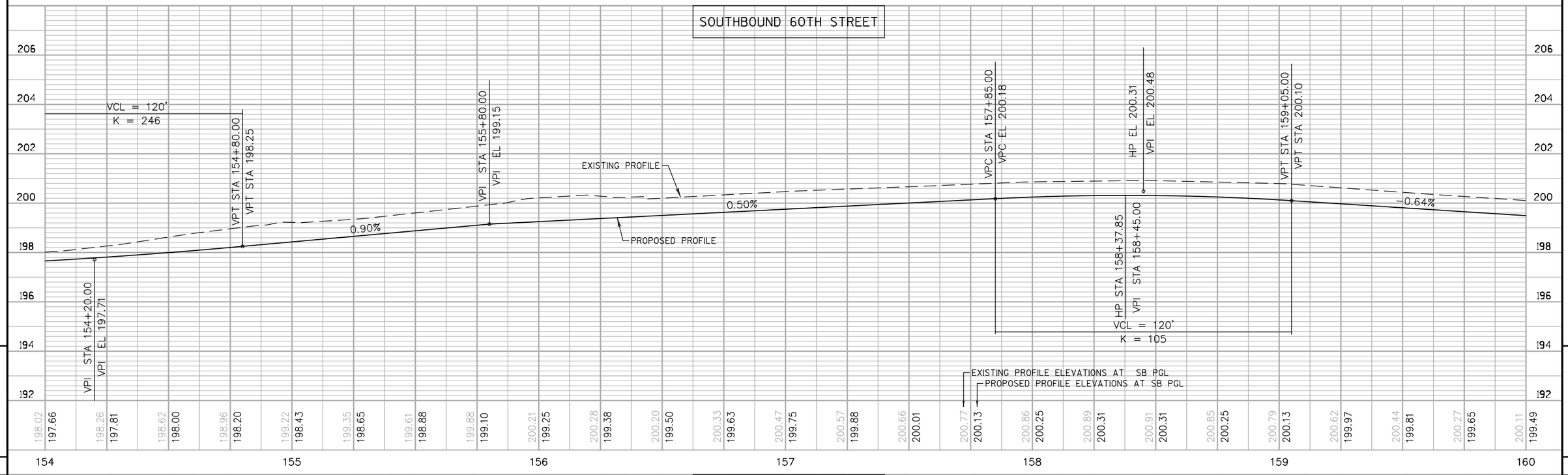
0 20 40

SCALE IN FEET

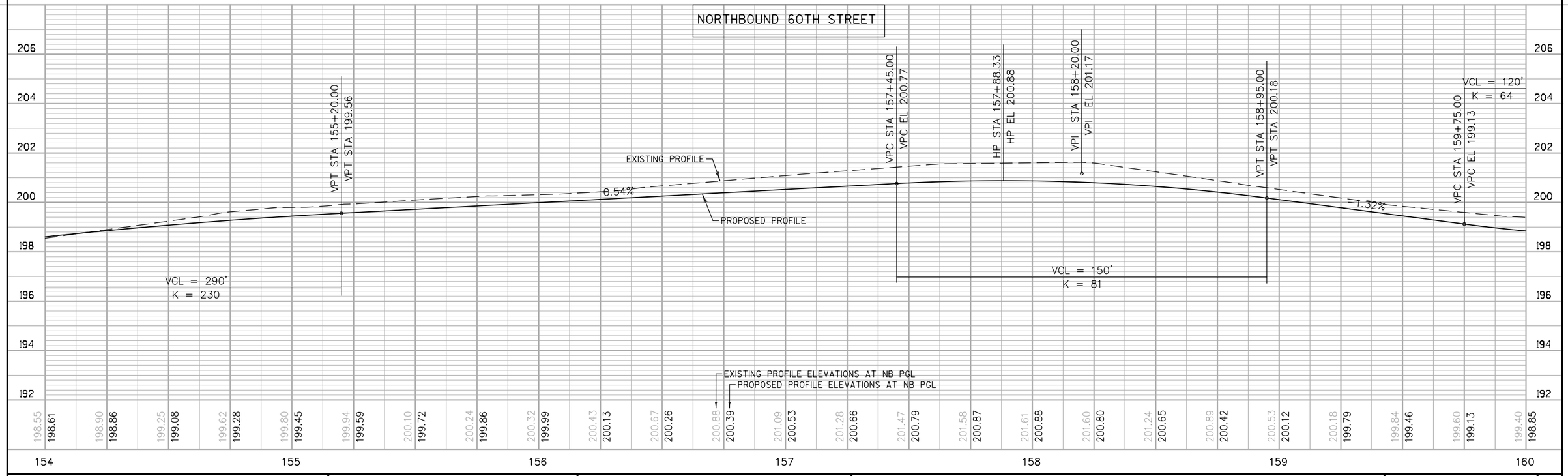


PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 203	E

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 204	E

LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. FOREST HOME AVE

S. 60TH ST

SLOPE INTERCEPT

EXISTING R/W

CE

CAUTION

IPC

IPB

IPA

SB PGL

NB PGL

TAPER 8:1

50'

END CONSTRUCTION
STA 162+46

MATCH EXISTING
SAWCUT REQ'D

R/L SOUTH 60TH ST

BEGIN CONSTRUCTION
STA 165+69

PE

MATCH LINE 160+00

MATCH LINE 166+00

160

161

162

163

164

165

19

20

21

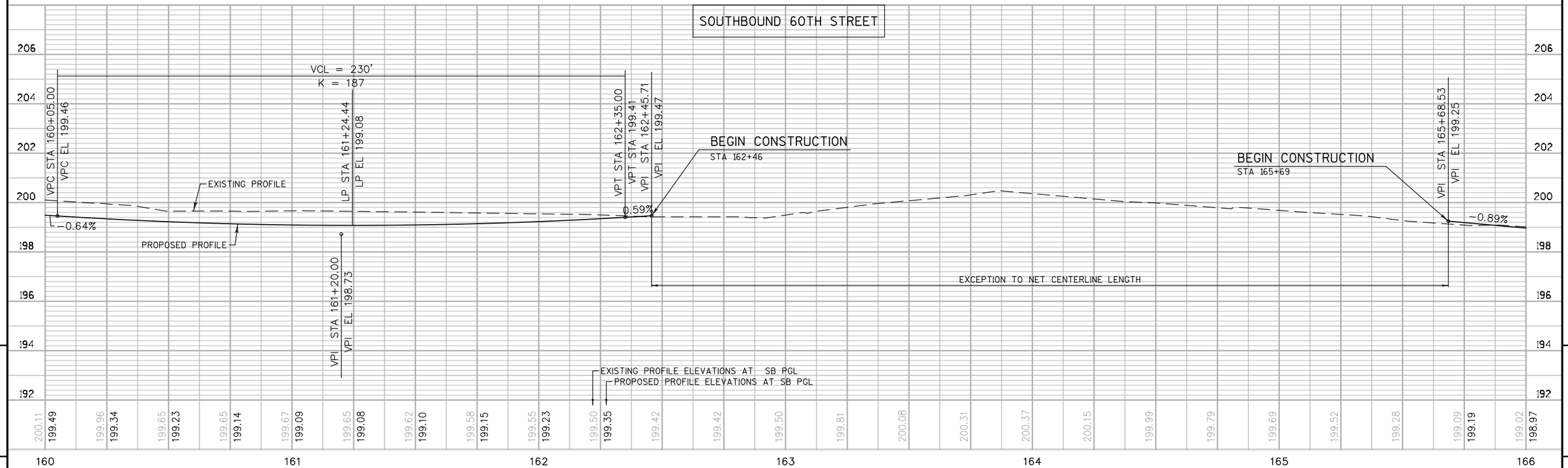
5

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 205 E

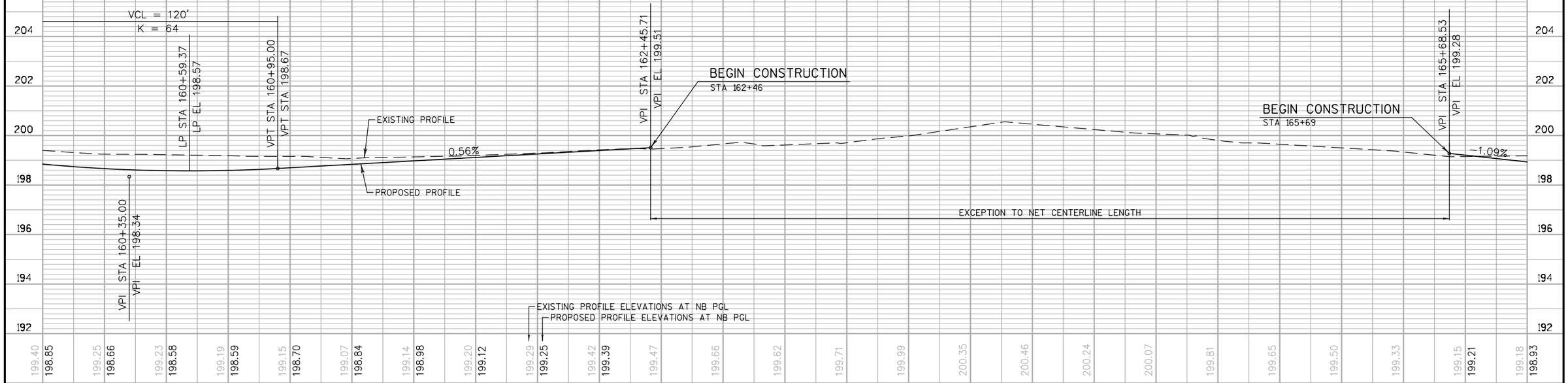
FILE NAME : ch_0000_050107_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 206	E

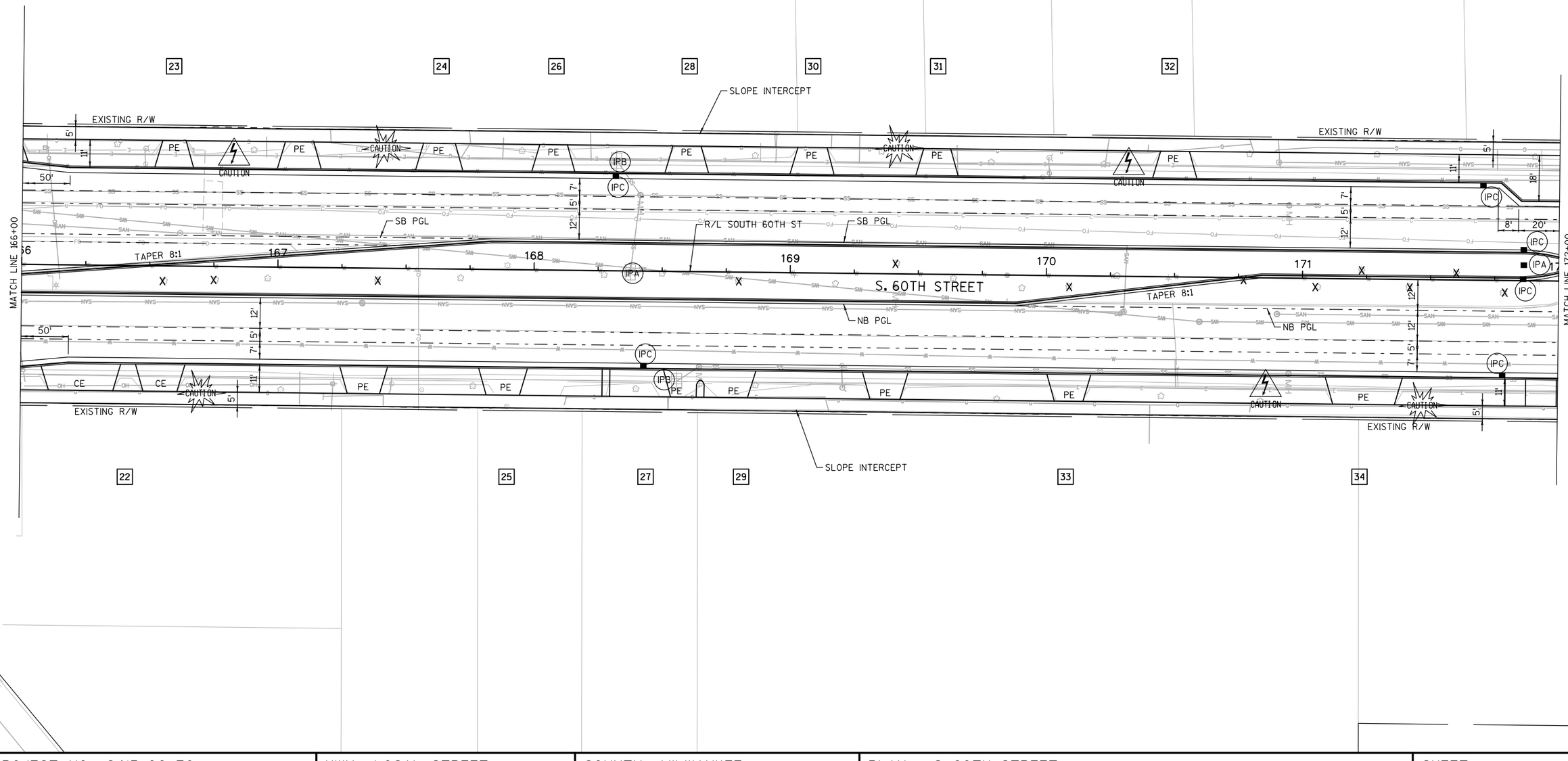
LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

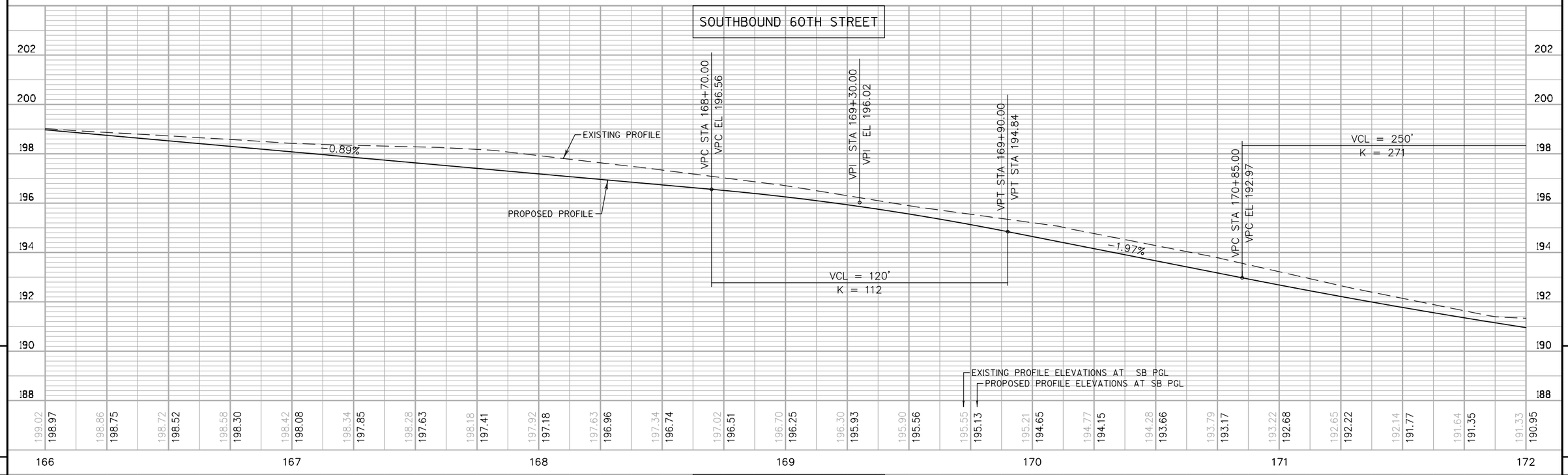
SCALE IN FEET

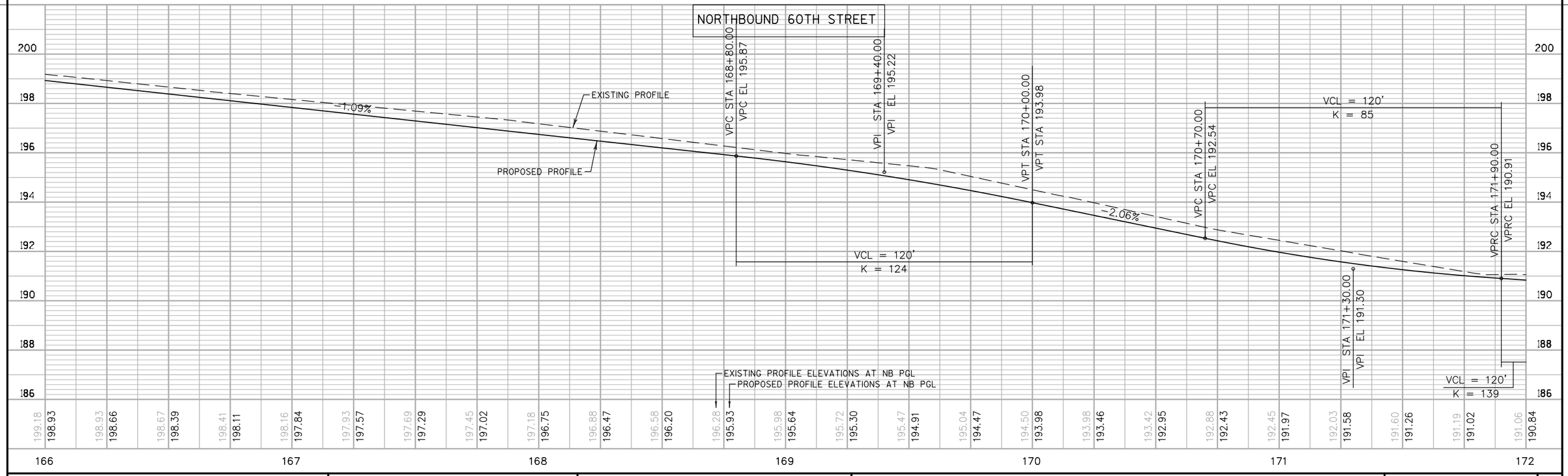


PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 207	E

FILE NAME : ch_0000_050108_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

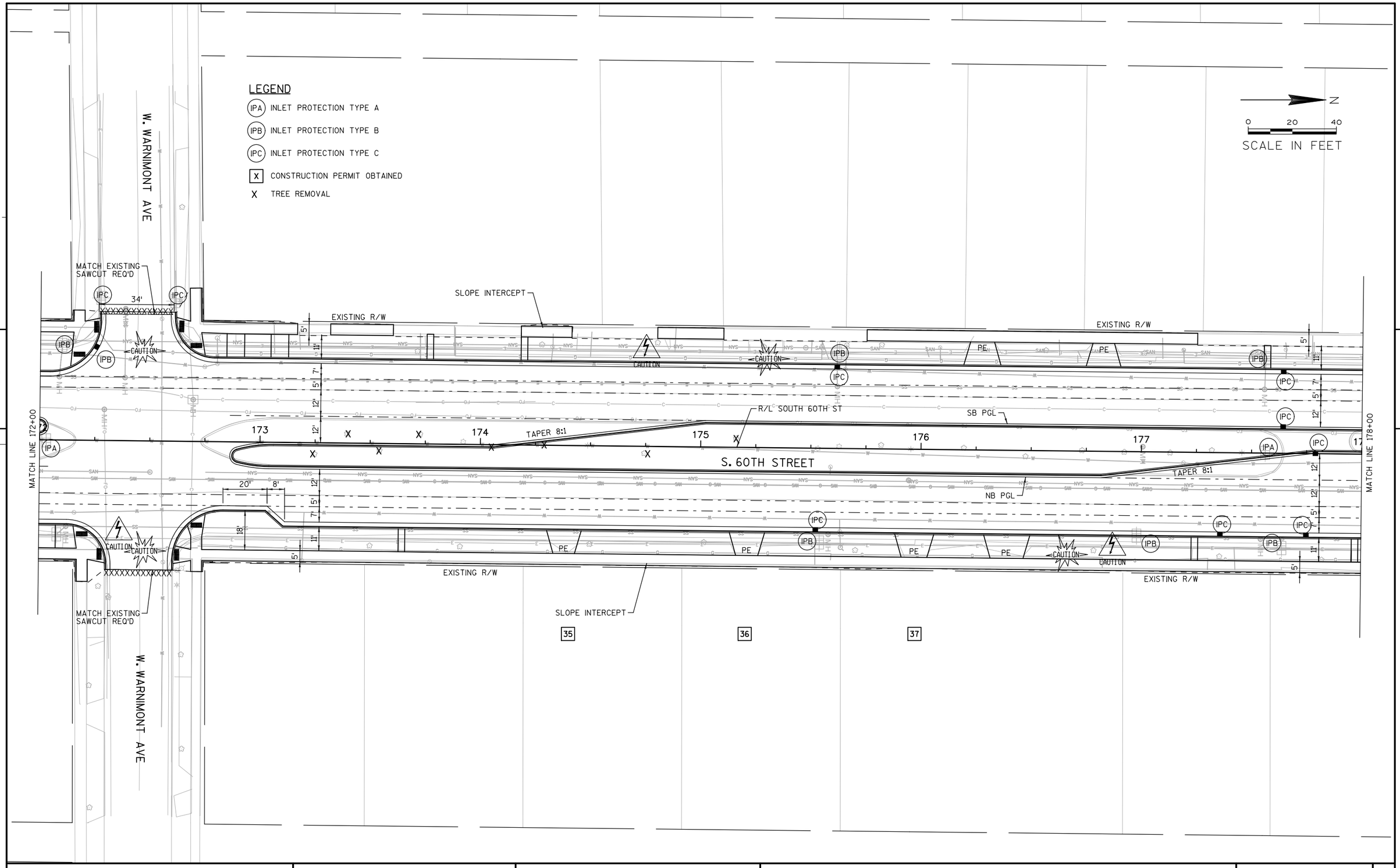
WISDOT/CADDS SHEET 44





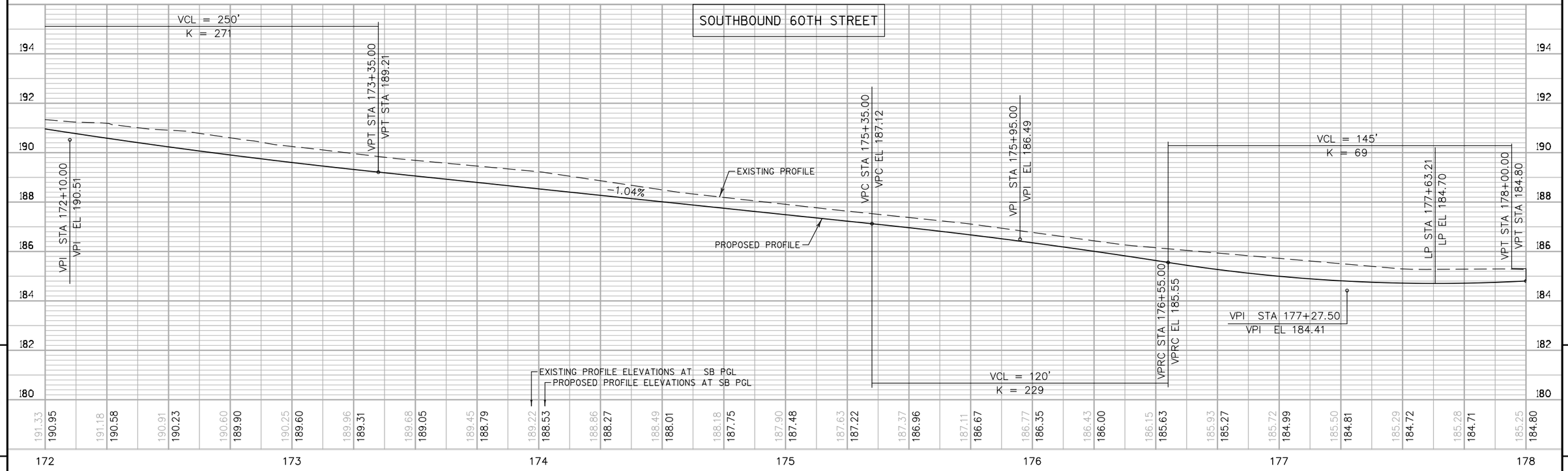
5 5

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 208 E

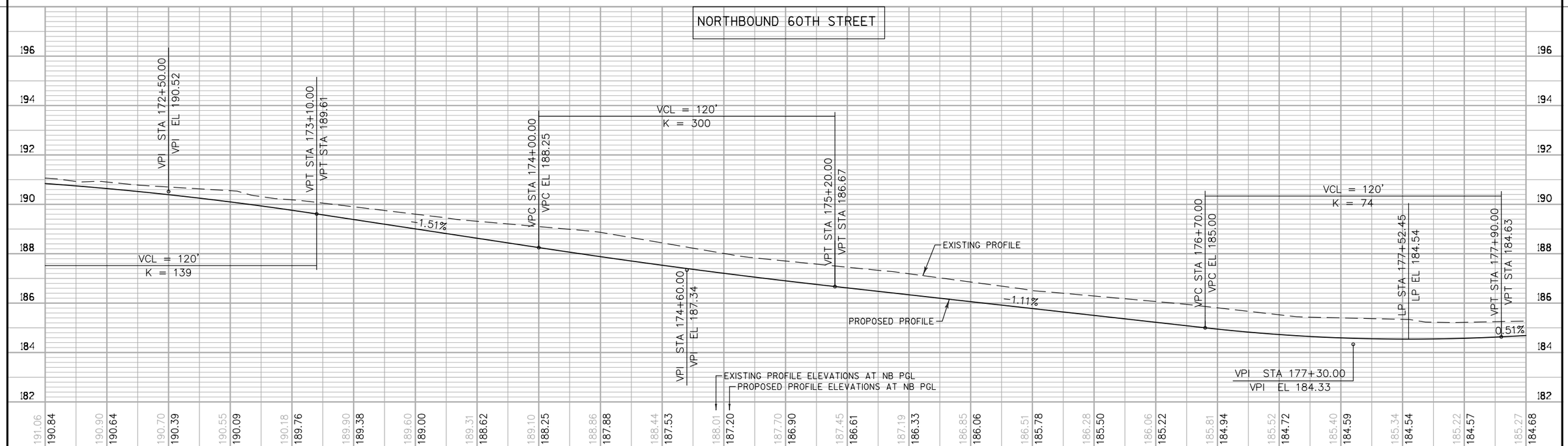


PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 209	E

SOUTHBOUND 60TH STREET



NORTHBOUND 60TH STREET



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 210	E

LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

N

0 20 40

SCALE IN FEET

W. MORGAN AVE

525

526

527

528

MATCH EXISTING SAWCUT REQ'D

SLOPE INTERCEPT

EXISTING R/W

5'

11'

7'

5'

12'

SB PGL

NB PGL

IPA

IPB

IPC

CAUTION

R/L W. MORGAN AVE

R/L SOUTH 60TH ST

MATCH LINE 178+00

178

179

180

181

182

183

184

S. 60TH STREET

X

39

SILT FENCE

BM 203

MATCH EXISTING SAWCUT REQ'D

END PROJECT

STA 181+00.00

MATCH EXISTING

SAWCUT REQ'D

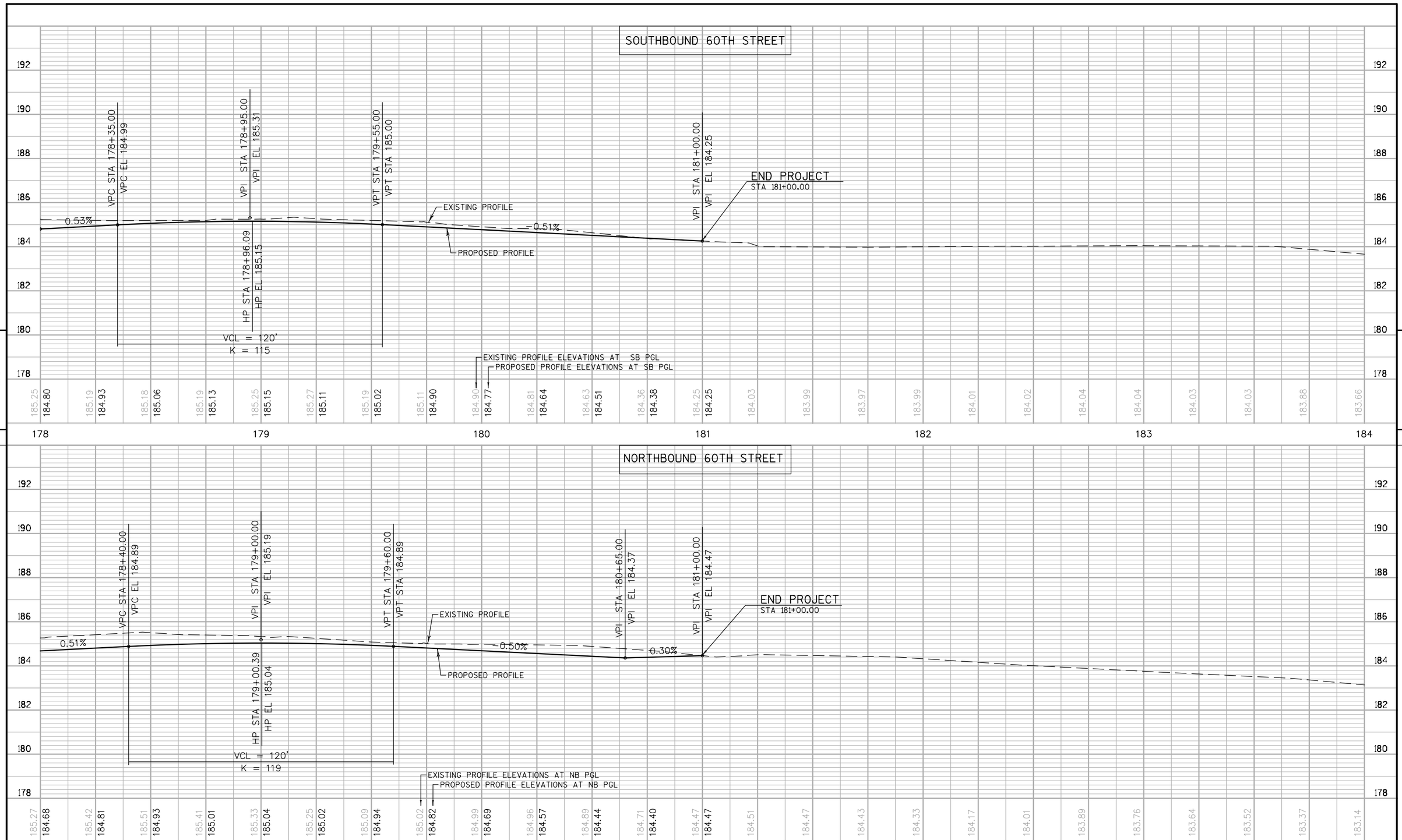
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
203	179+72.87 RT	CITY BM.# 58-63 CONCRETE MONUMENT WITH OVAL BRASS CAP SET IN CONCRETE WALK	183.46

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PLAN - S. 60TH STREET	SHEET 211	E

FILE NAME : ch_0000_050110_pp.DGN PLOT DATE : 21-MAR-2017 PLOT BY : kmeyer1 PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 44



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	PROFILES - S. 60TH STREET	SHEET 212	E

FILE NAME : ch_0000_050110A_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 30

LEGEND

- (IPA) INLET PROTECTION TYPE A
- (IPB) INLET PROTECTION TYPE B
- (IPC) INLET PROTECTION TYPE C
- [X] CONSTRUCTION PERMIT OBTAINED
- X TREE REMOVAL

SLOPE INTERCEPT
R/L SOUTH 60TH ST
EXISTING R/W
CAUTION
SB PGL
S. 60TH STREET 132
133
CE
24'
24'
5'
7'
5'
12'
11'
IPA
IPB
IPC
SLOPE INTERCEPT
EXISTING R/W
R/L S. HONEY CREEK DR
PE
30'
601
CAUTION
NB PGL
5'
12'
5'
7'
11'
MATCH EXISTING
SAWCUT REQ'D
S. HONEY CREEK DR
EXISTING R/W
N
0 20 40
SCALE IN FEET

END CONSTRUCTION
STA 601+51.71

VCL = 90'
K = 37

VPC STA 600+30.00
VPC EL 175.44
LP STA 600+70.02
LP EL 175.23
VPT STA 601+20.00
VPT STA 175.56
VPI STA 601+51.71
VPI EL 175.99
1.35%
EXISTING PROFILE
PROPOSED PROFILE
VPI STA 600+75.00
VPI EL 174.96

EXISTING PROFILE ELEVATIONS AT R/L
PROPOSED PROFILE ELEVATIONS AT R/L

175.94	175.50	175.29	175.28	175.43	175.23	175.50	175.35	175.73	175.63	175.95	175.97

762 760 758 756 754 752 750 748 746

600 601

PROJECT NO: 2415-00-70	HWY: LOCAL STREETS	COUNTY: MILWAUKEE	PLAN AND PROFILE: S. HONEY CREEK DR	SHEET 213	E

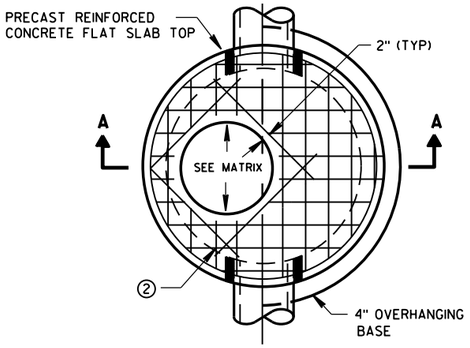
FILE NAME : ch_0000_050111_pp.DGN PLOT DATE : 30-JAN-2017 PLOT BY : jpieroni PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 45

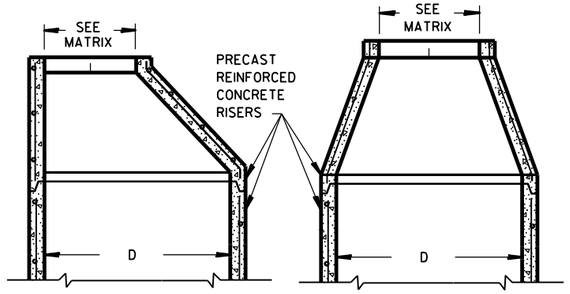
Standard Detail Drawing List

08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-09	CONCRETE BASE TYPE 10
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-16	URBAN NON-DOWELED CONCRETE PAVEMENT
13C18-04A	CONCRETE PAVEMENT JOINTING
13C18-04B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-04C	CONCRETE PAVEMENT JOINT TIES
13C18-04D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14A02-01	TREE PLANTING DETAIL
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-13A	PAVEMENT MARKING SYMBOLS
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C07-13E	PAVEMENT MARKING FOR BIKE LANES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C08-17C	PAVEMENT MARKING (ISLANDS)
15C18-03	MEDIAN ISLAND MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

6

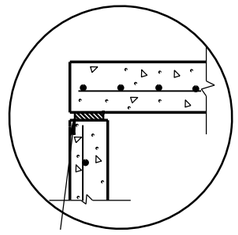


PLAN VIEW CIRCULAR OPENING

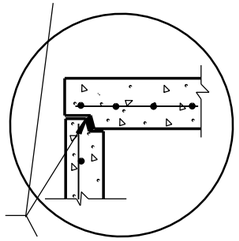


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

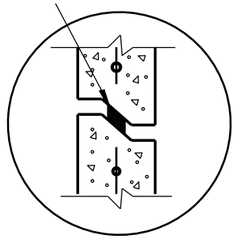


TOP WITH PLAIN END JOINT



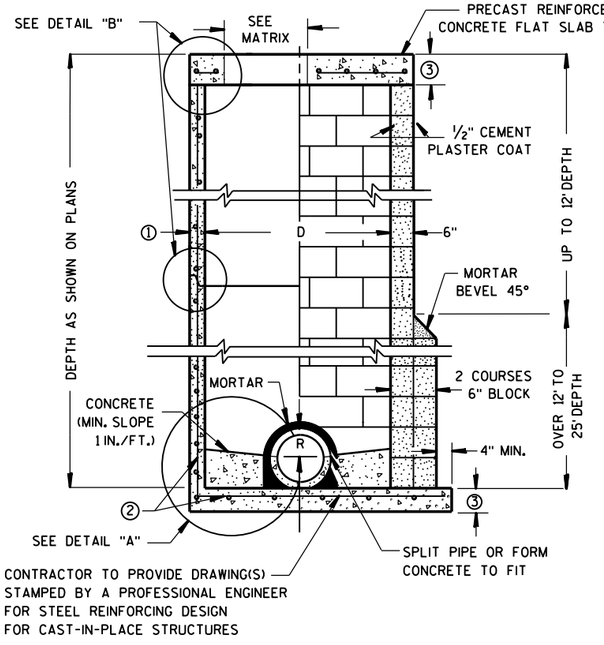
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



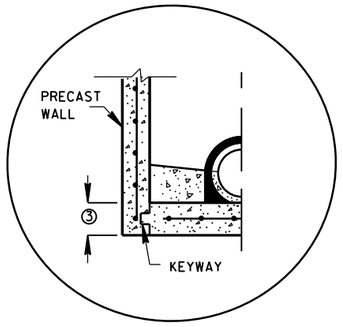
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

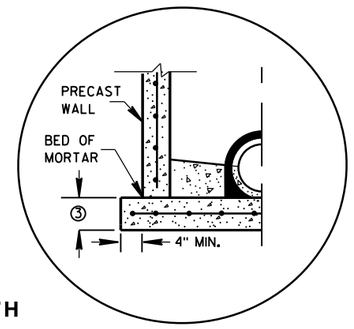


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

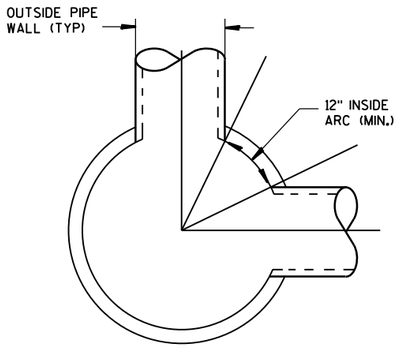


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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 MANHOLE 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 DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE 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.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL 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.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

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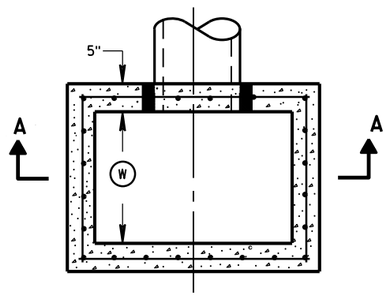
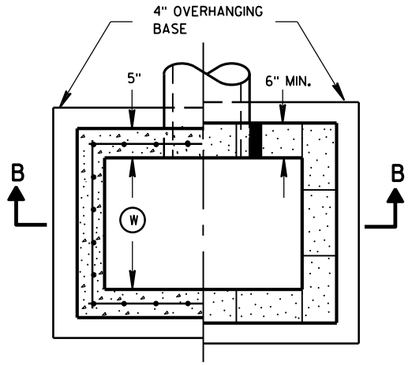
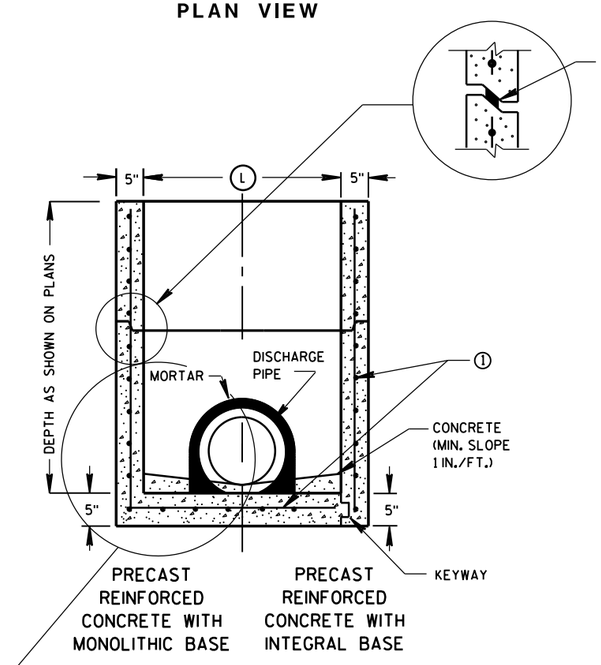
S.D.D. 8 B 9-2



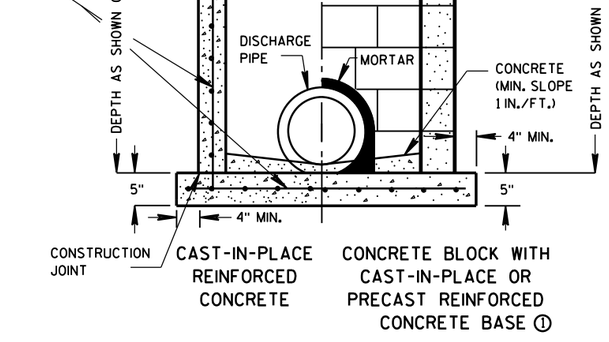
PLAN VIEW



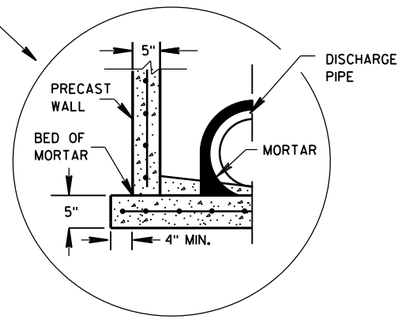
PLAN VIEW



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.

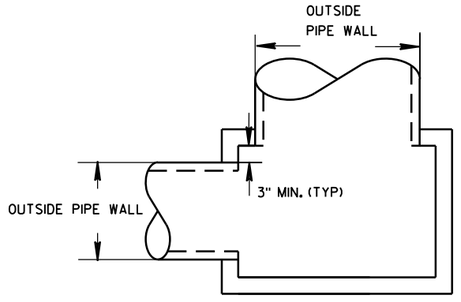
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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



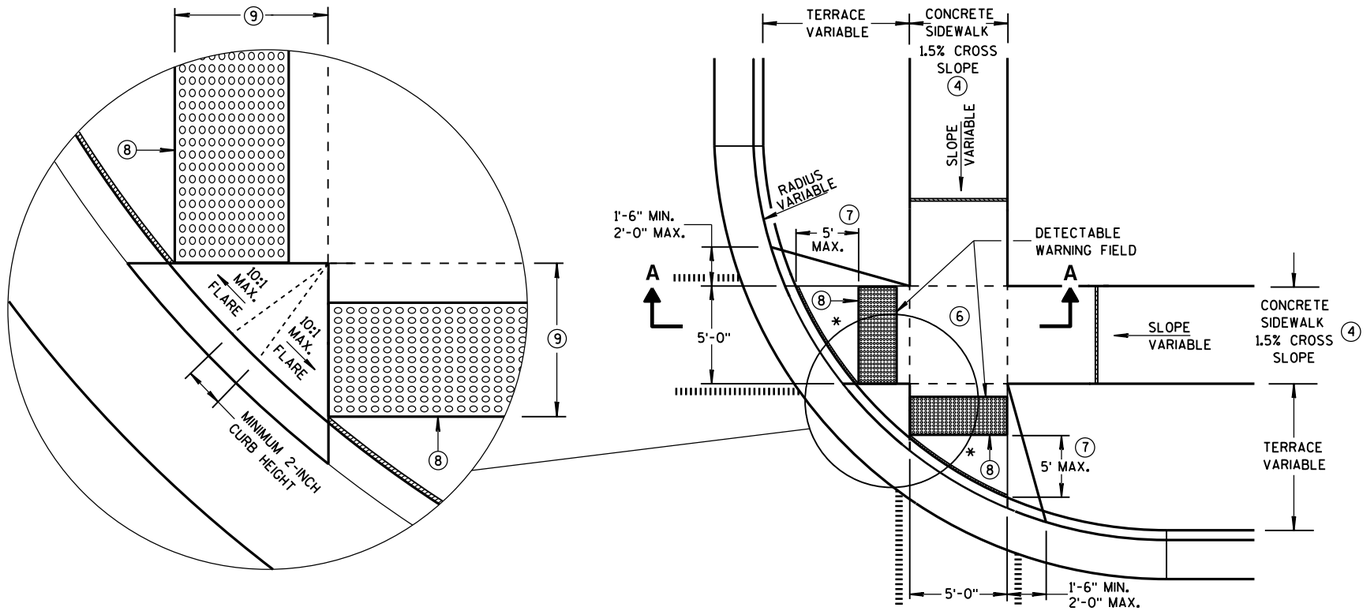
DETAIL "A"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

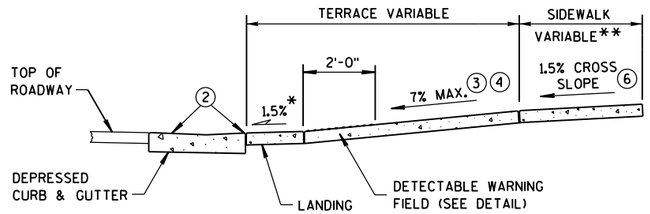


PLAN VIEW

TYPE 2 RAMP

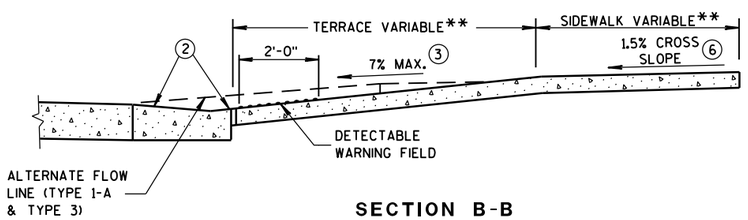
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (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 X 5 FEET.

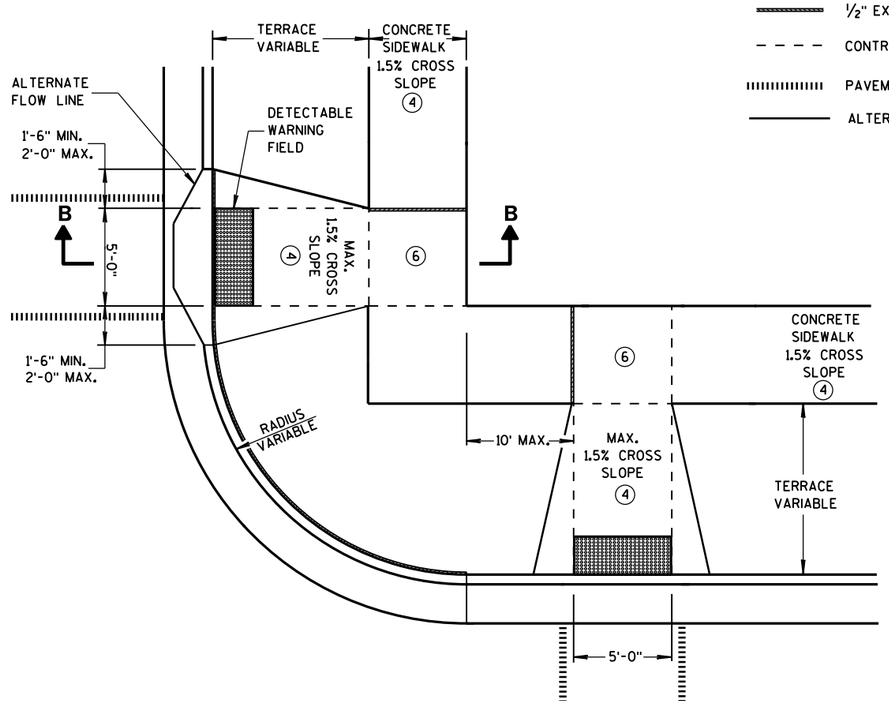
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

(9) WHEN THIS 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.

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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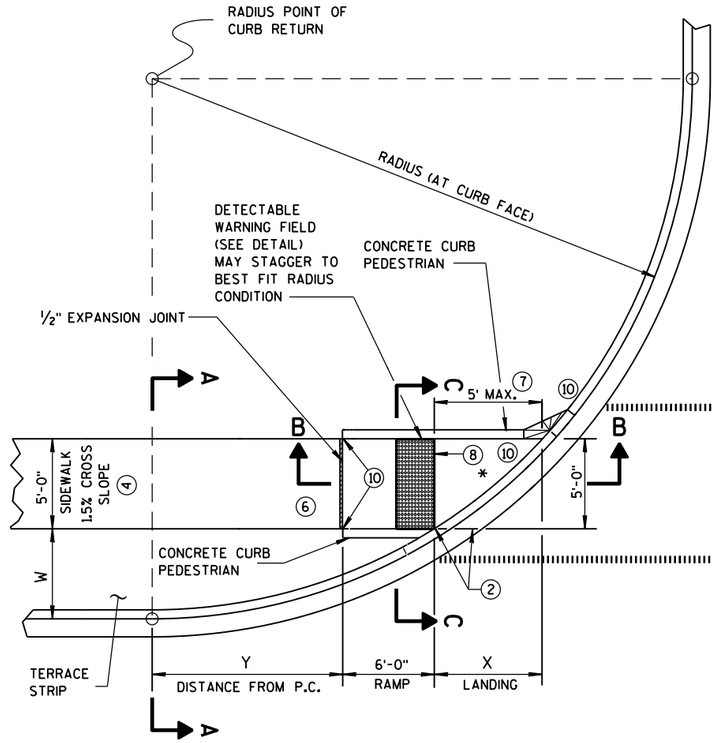
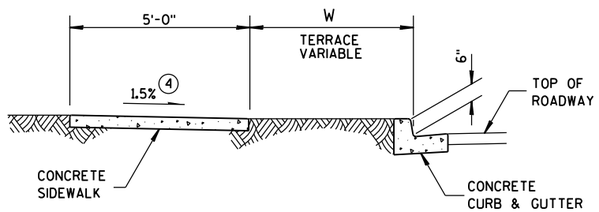
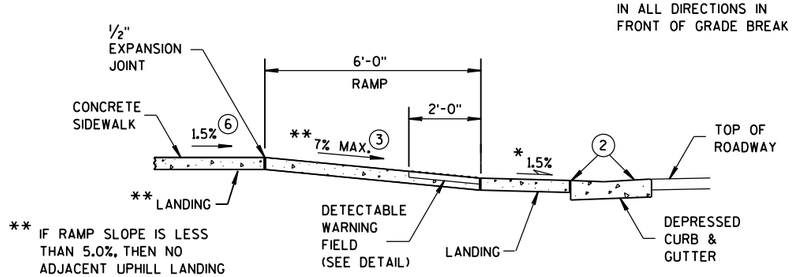
S.D.D. 8 D 5-18b



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



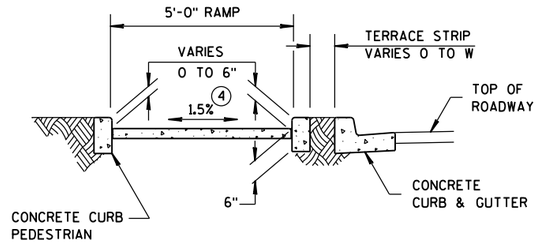
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

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 NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

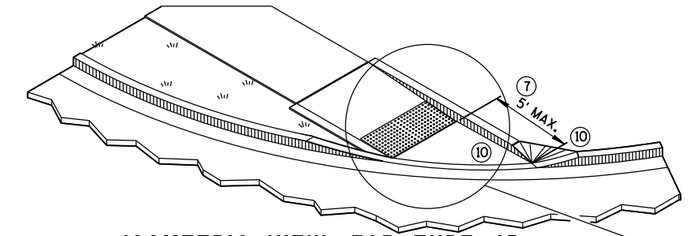
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

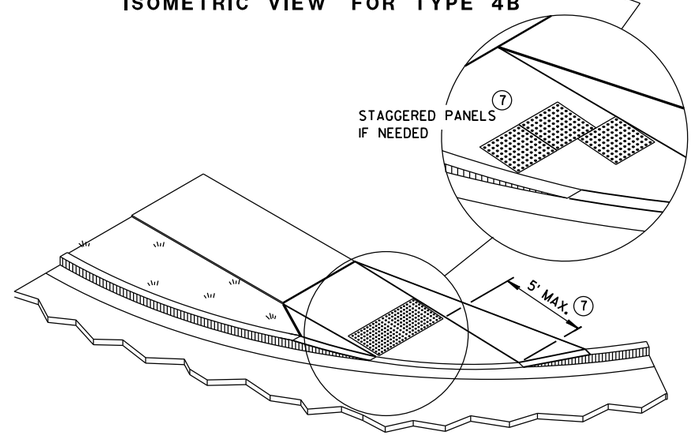
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

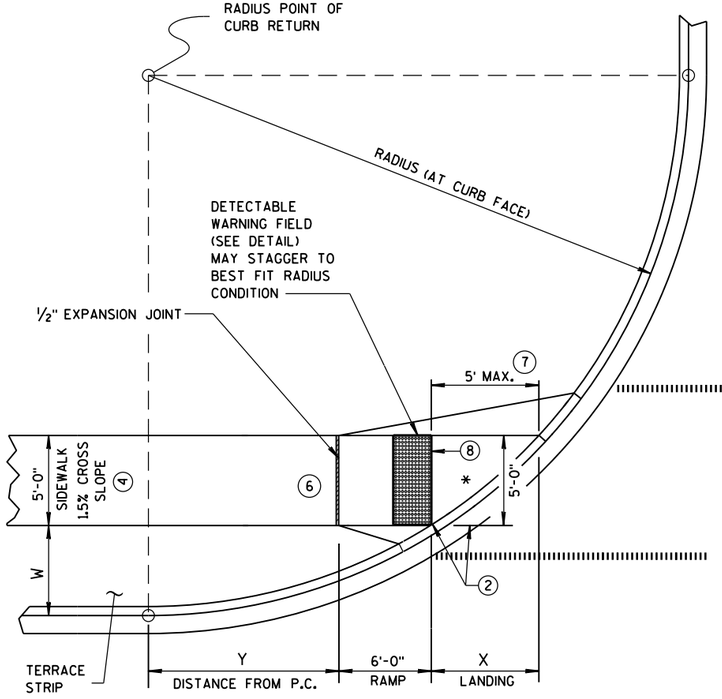
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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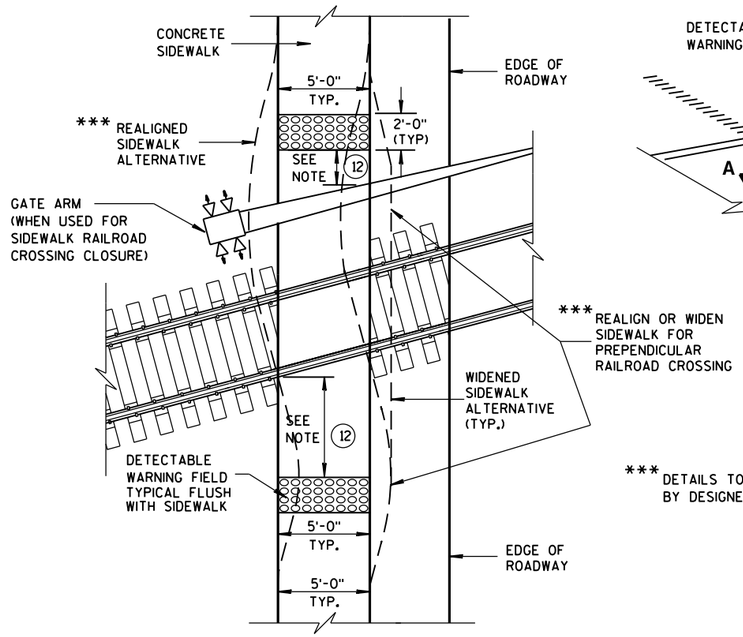
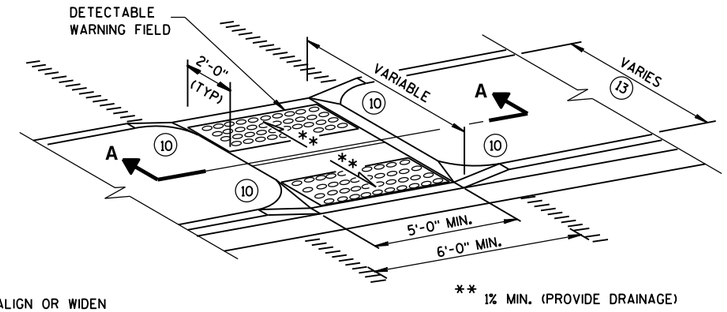
S.D.D. 8 D 5-18d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (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.

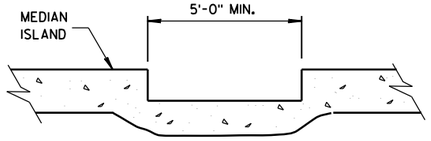
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(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.

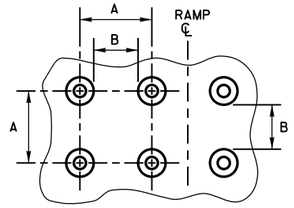
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



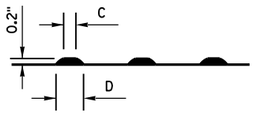
SECTION A-A

	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.

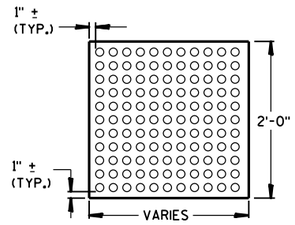


PLAN VIEW

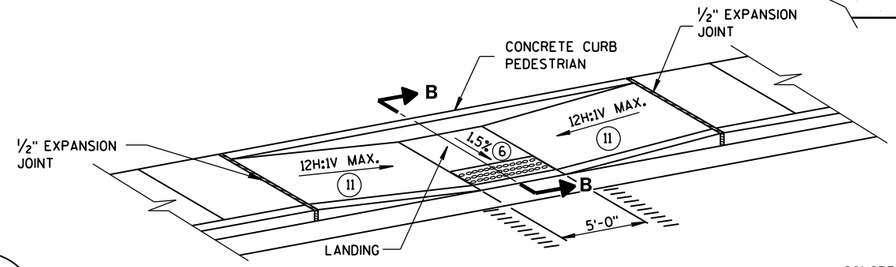


ELEVATION VIEW

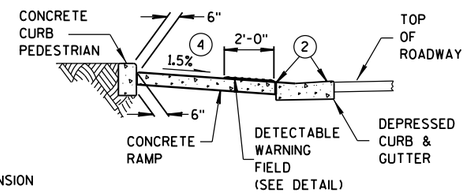
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

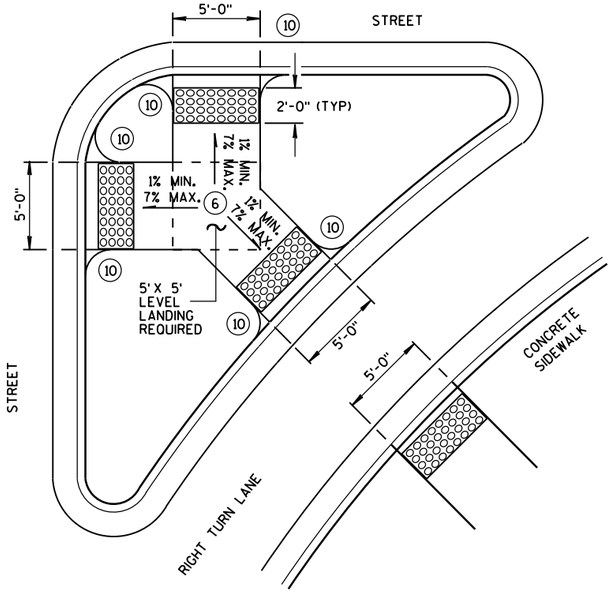


MID-BLOCK CROSSING
TYPE 7A

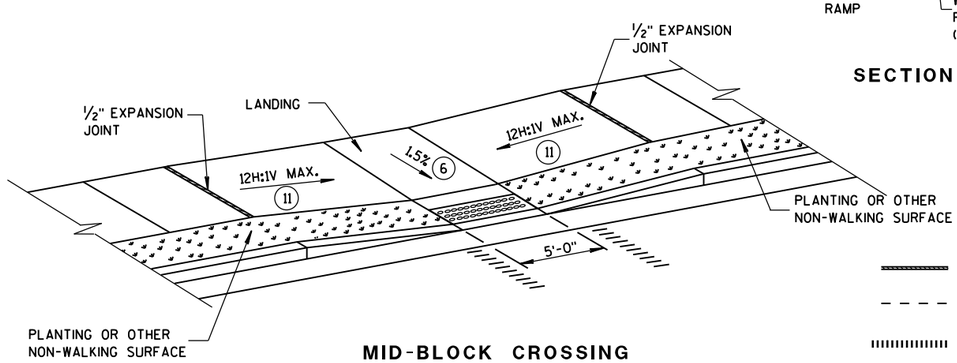


SECTION B-B

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



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
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FHWA

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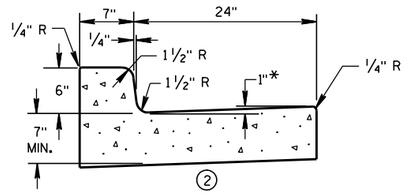
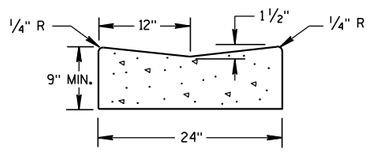
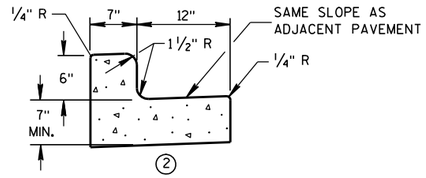


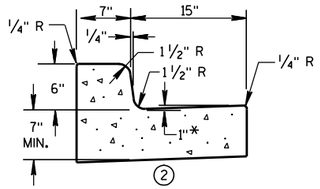
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

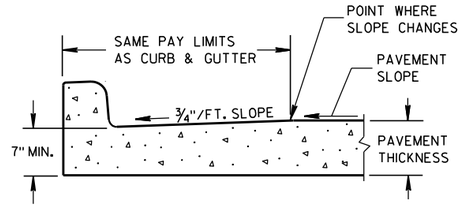


① CONCRETE CURB & GUTTER 19"



① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

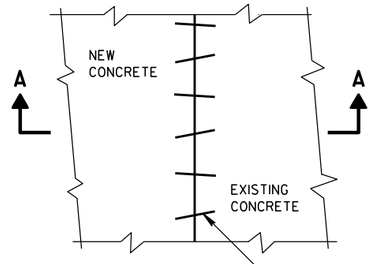
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

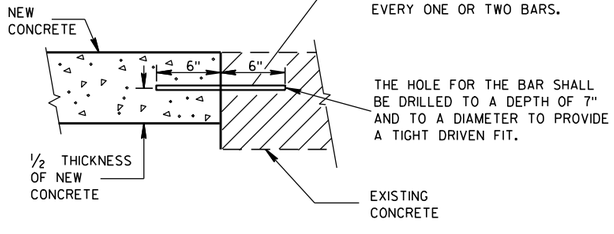
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



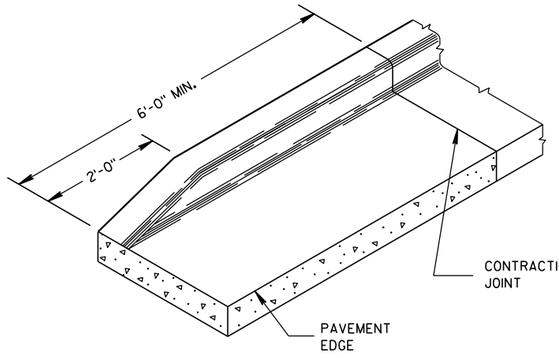
PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

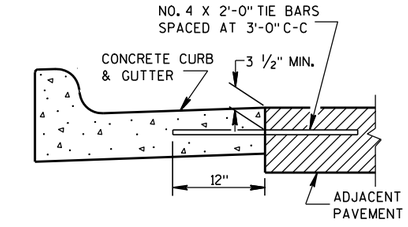


SECTION A-A

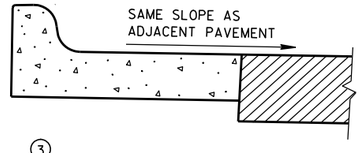
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

/S/ Jerry Zogg — ROADWAY STANDARDS ENGINEER

220 — ENT

FHWA

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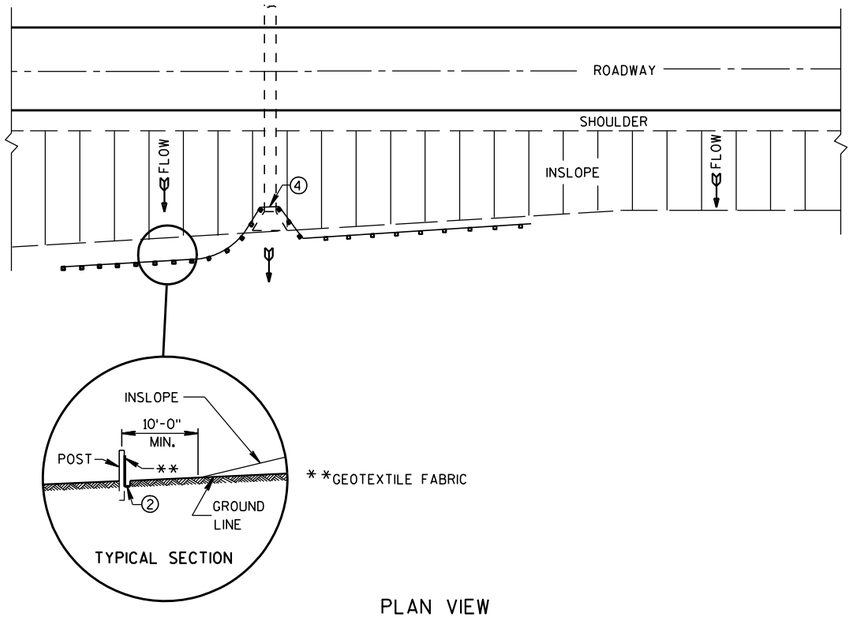
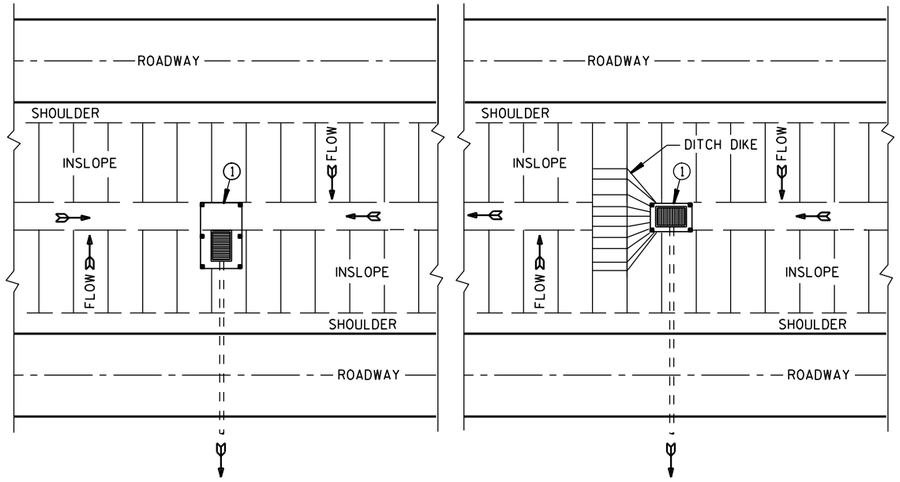
S.D.D. 8 D 16-10



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

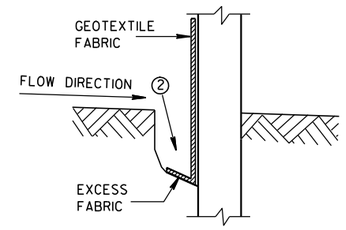
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

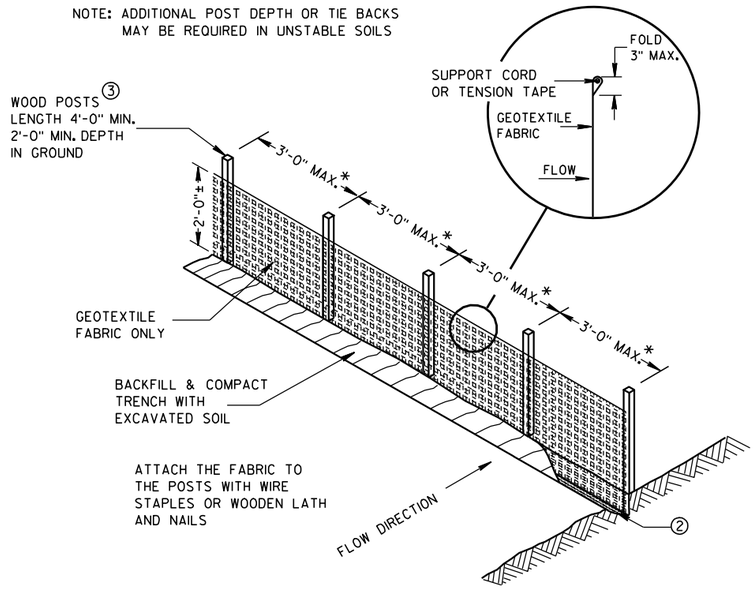
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

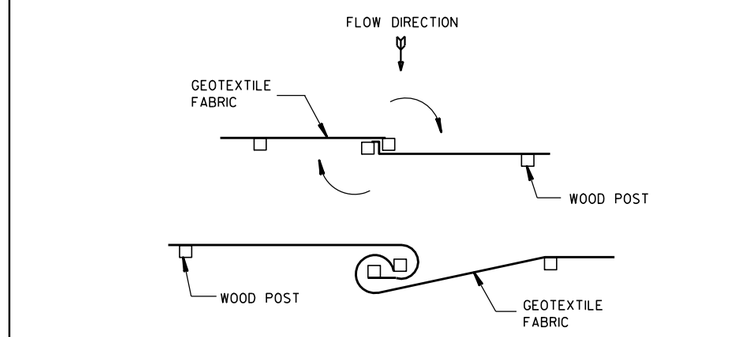


TRENCH DETAIL

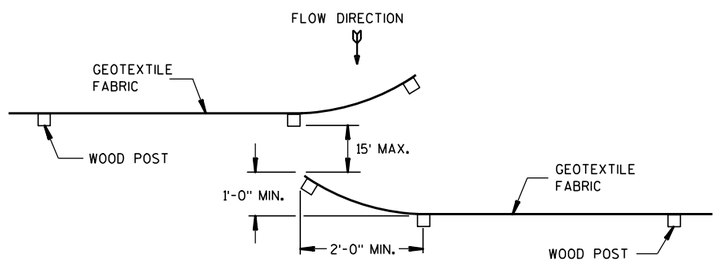


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

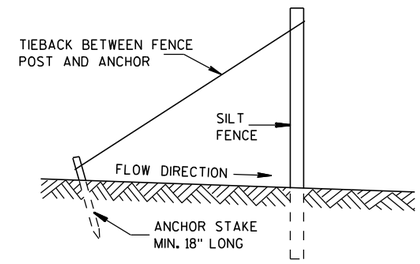


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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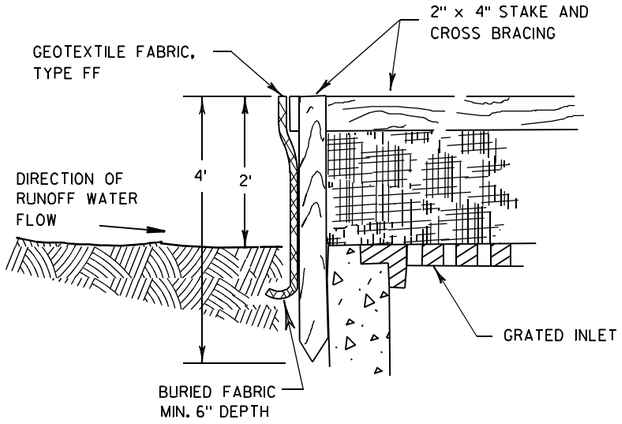
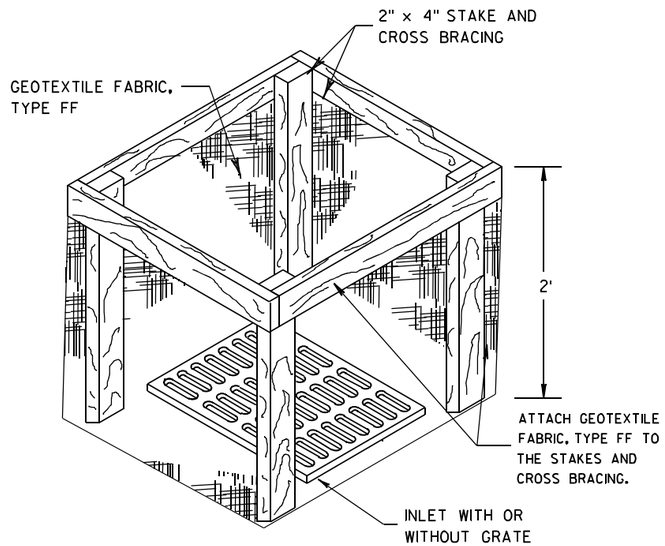
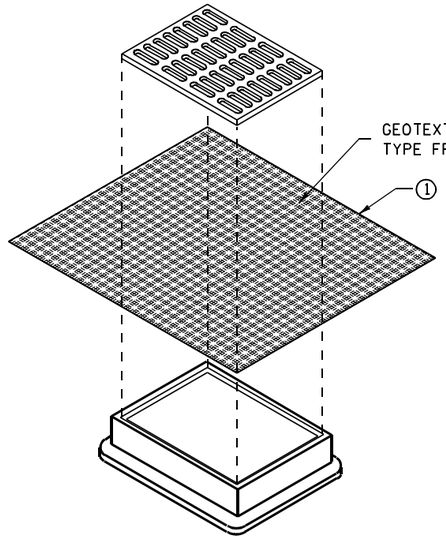
S.D.D. 8 E 9-6



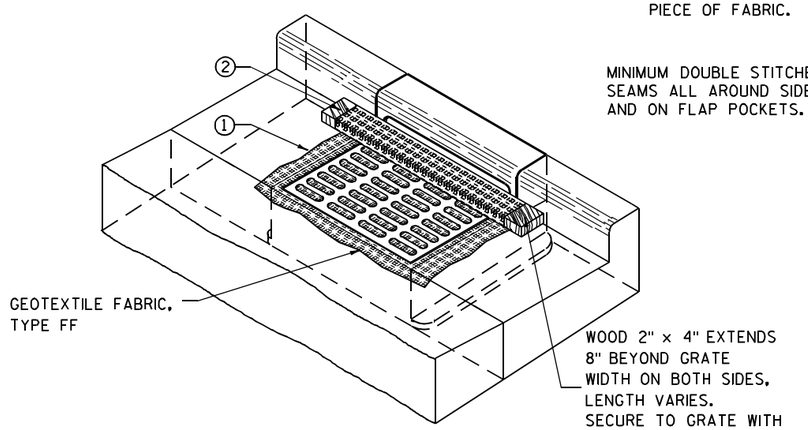


INLET PROTECTION, TYPE A

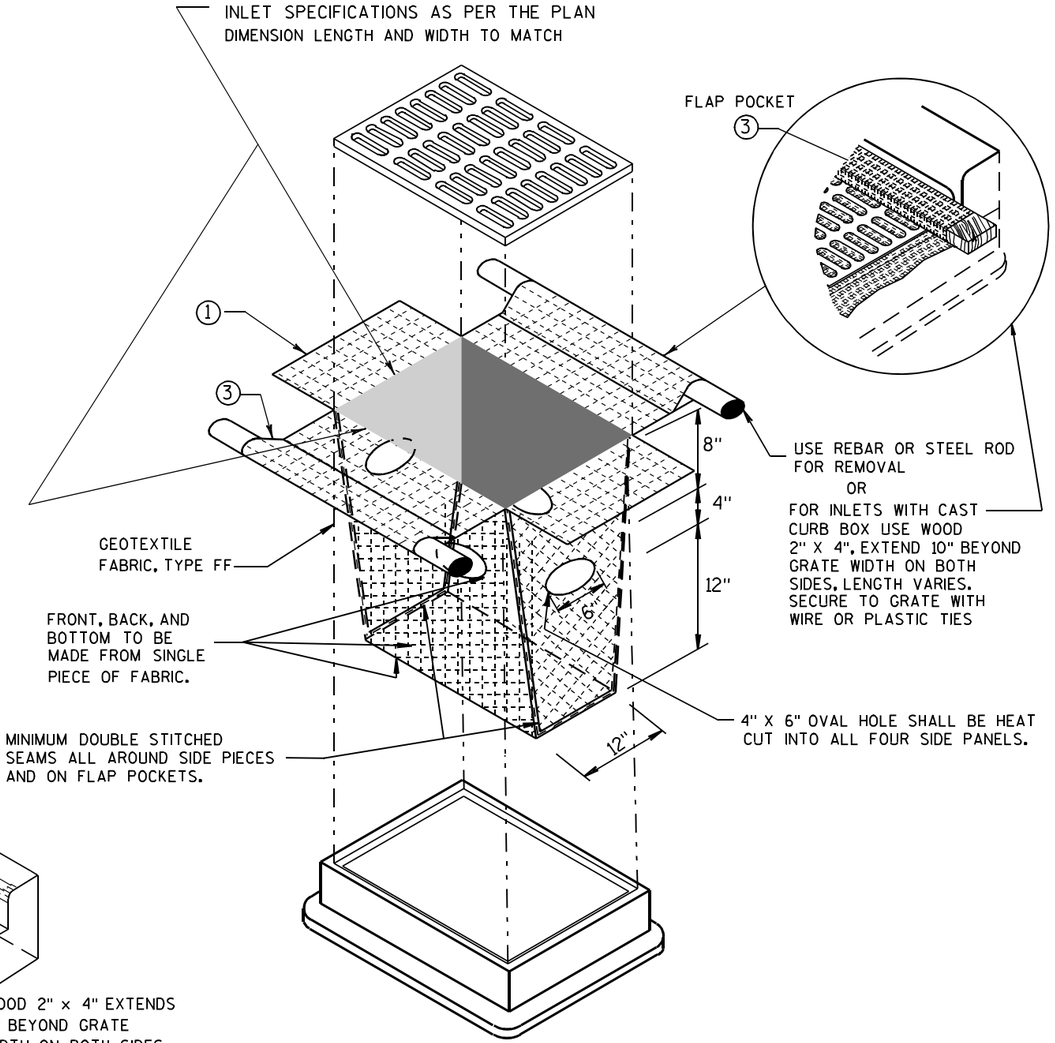


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

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S.D.D. 8 E 10-2

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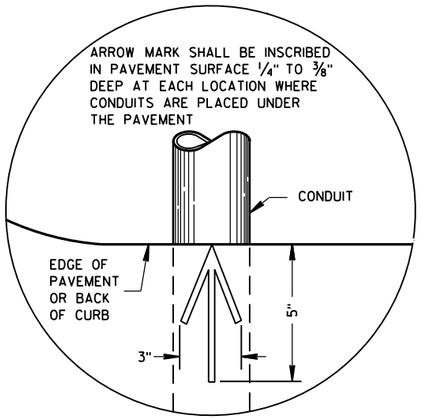
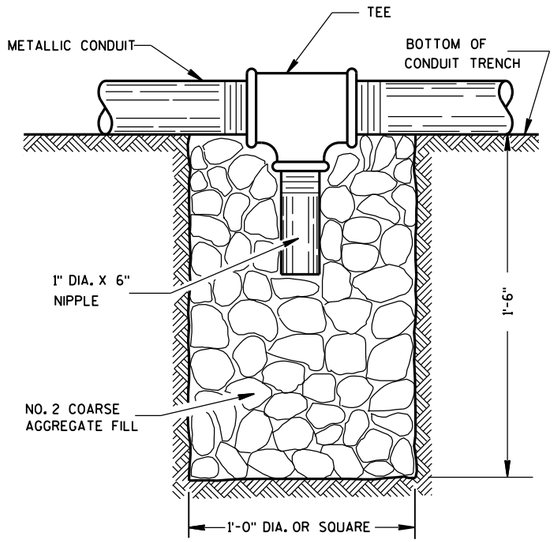
S.D.D. 8 E 10-2



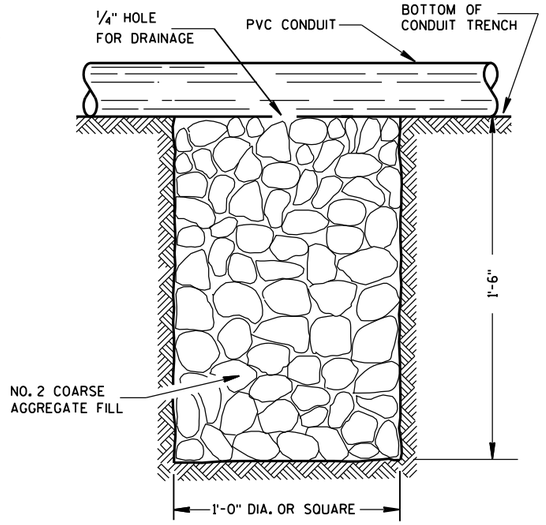
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

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.

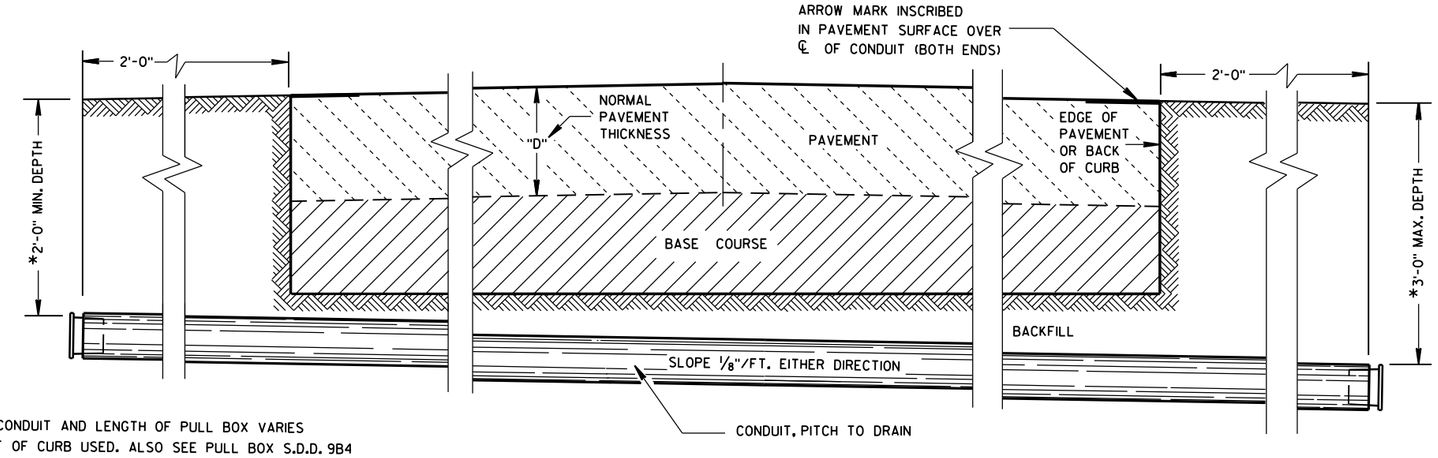
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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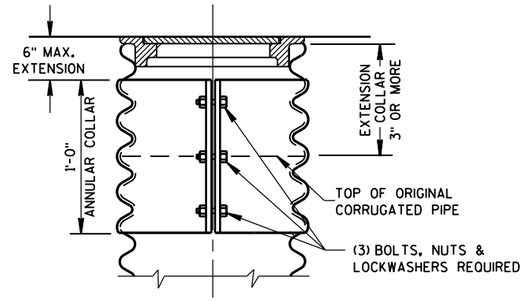
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

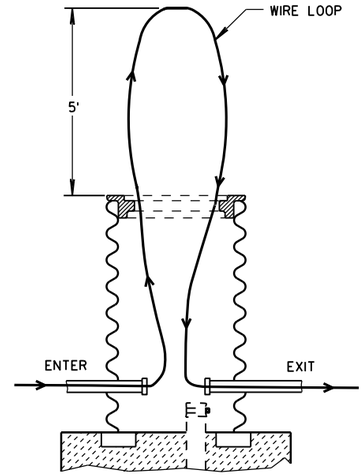
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

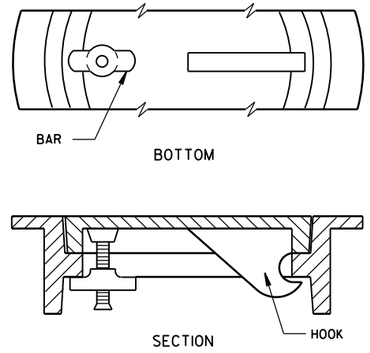
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

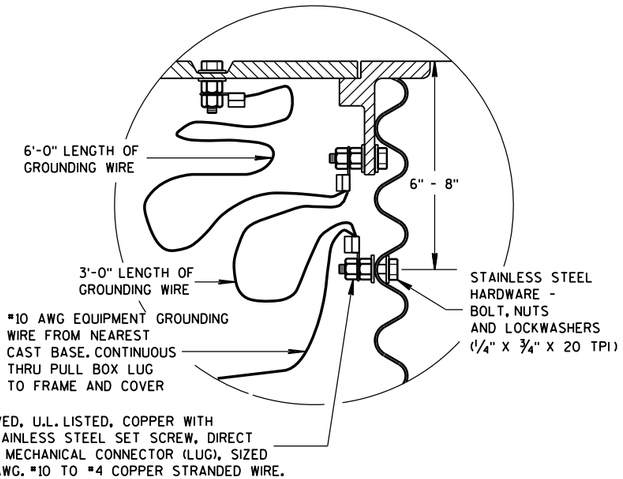


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

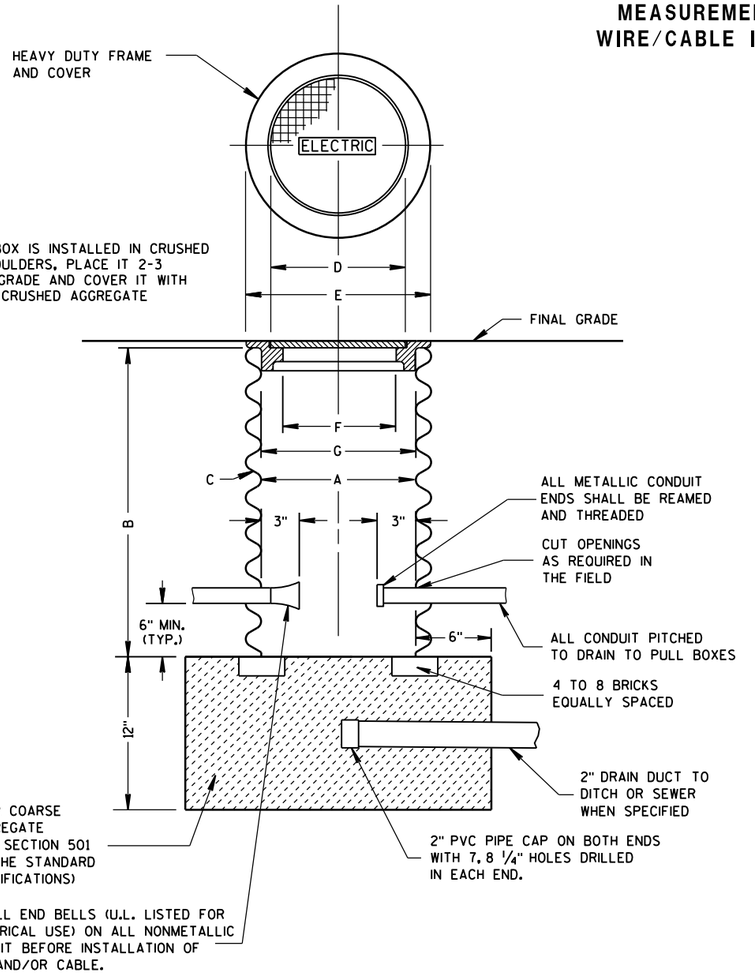


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

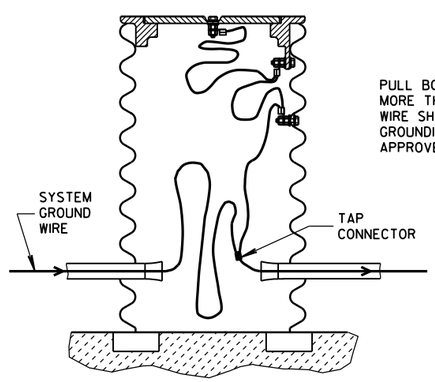
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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 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

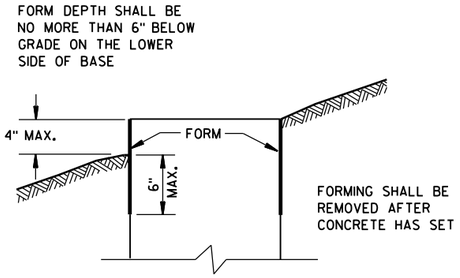
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11



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 DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 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 OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

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

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

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 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 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES 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" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END 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 BY THE ENGINEER.

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

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

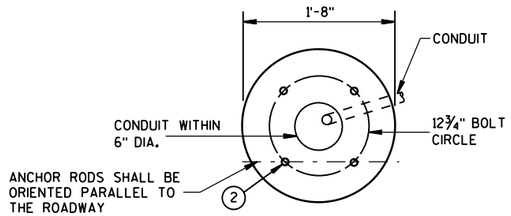
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

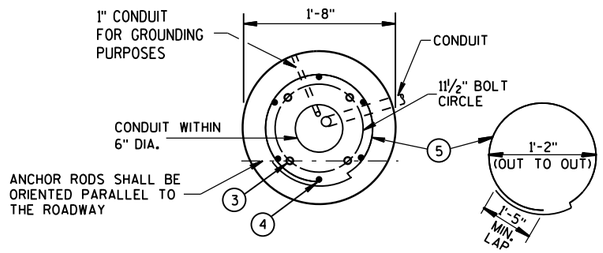
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

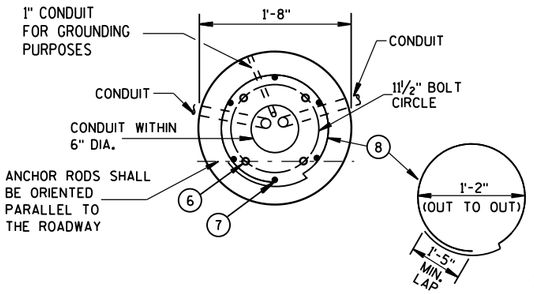
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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

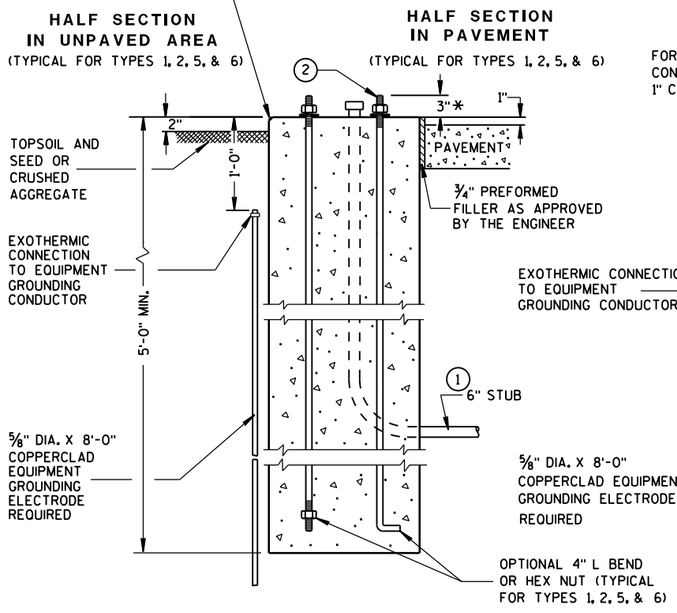


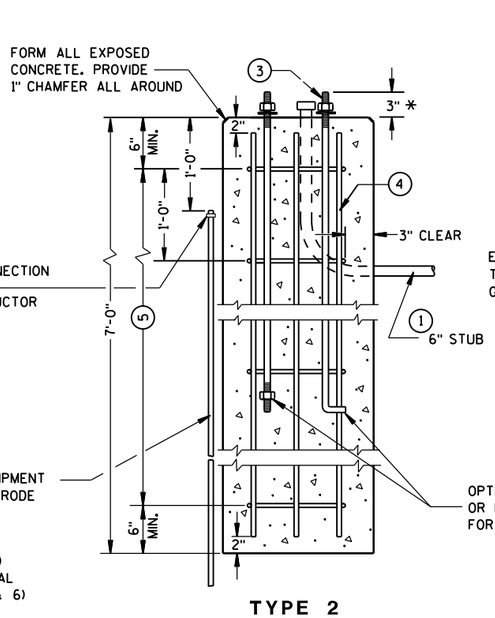




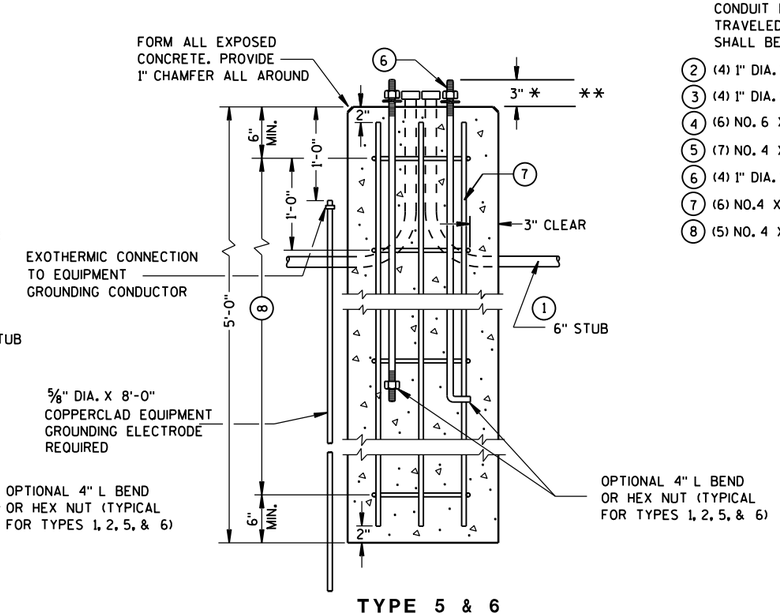
HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)





TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 C 2-7

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 641.2.2 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.

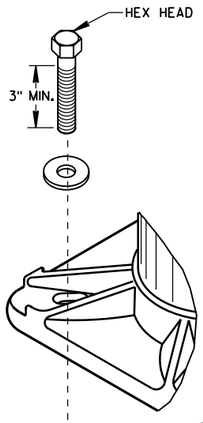
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

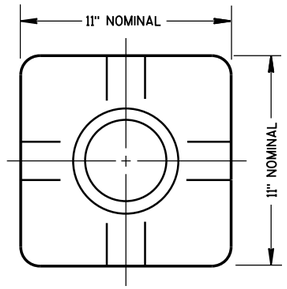
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

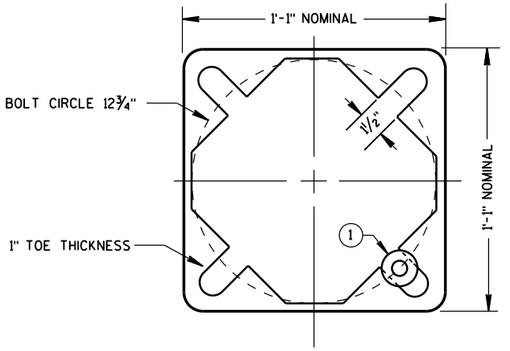
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

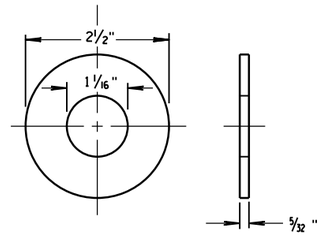




TOP VIEW
(PEDESTAL BASE)

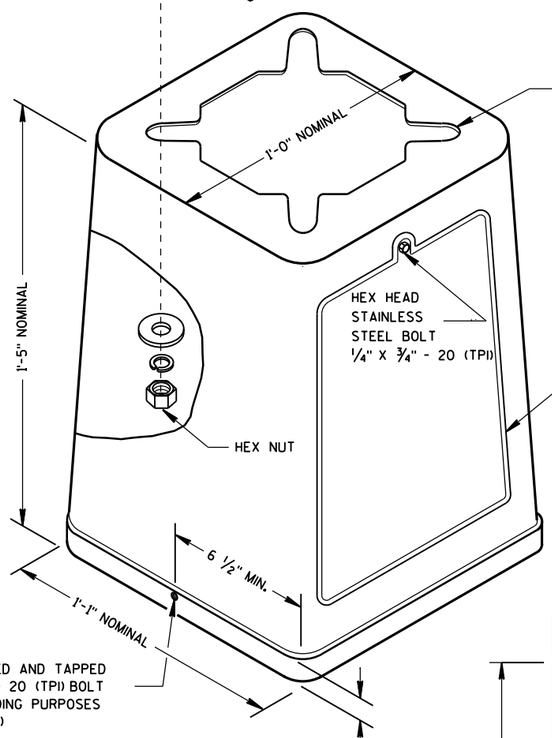


BOTTOM VIEW
(PEDESTAL BASE)

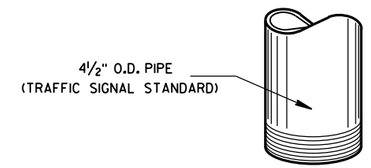


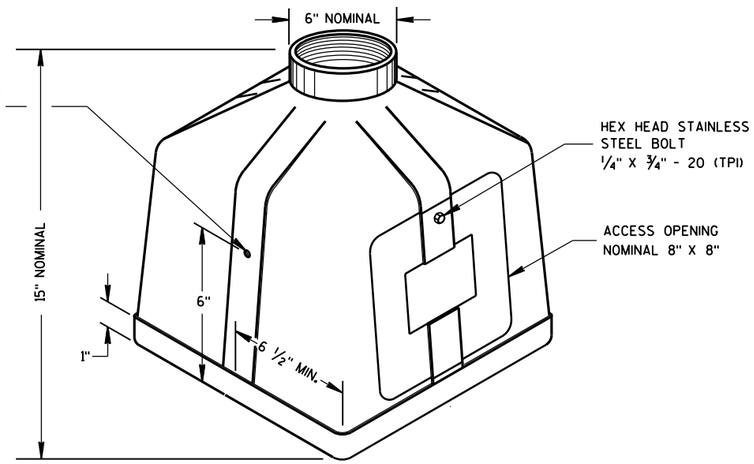
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



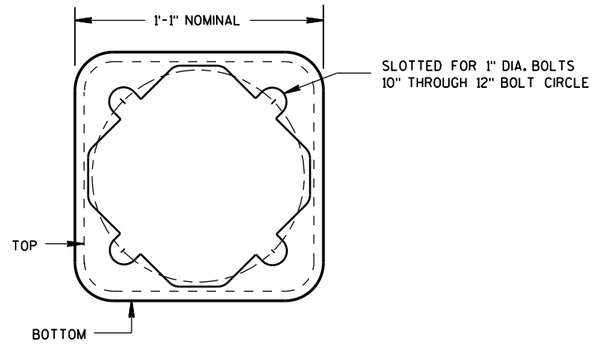
ISOMETRIC VIEW



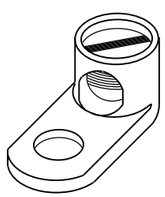


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

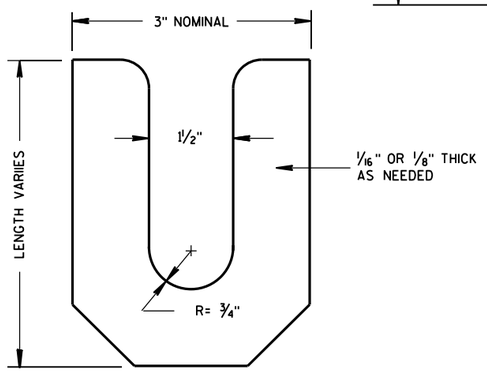


TYPICAL MECHANICAL CONNECTOR LUG

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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GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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. CONDUIT 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.

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

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 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).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL 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.

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

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

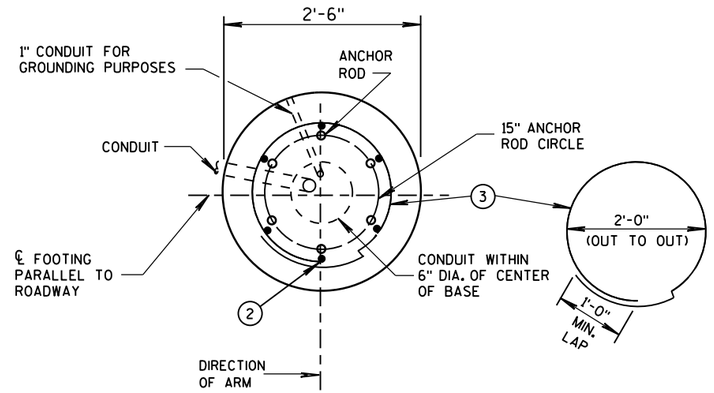
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

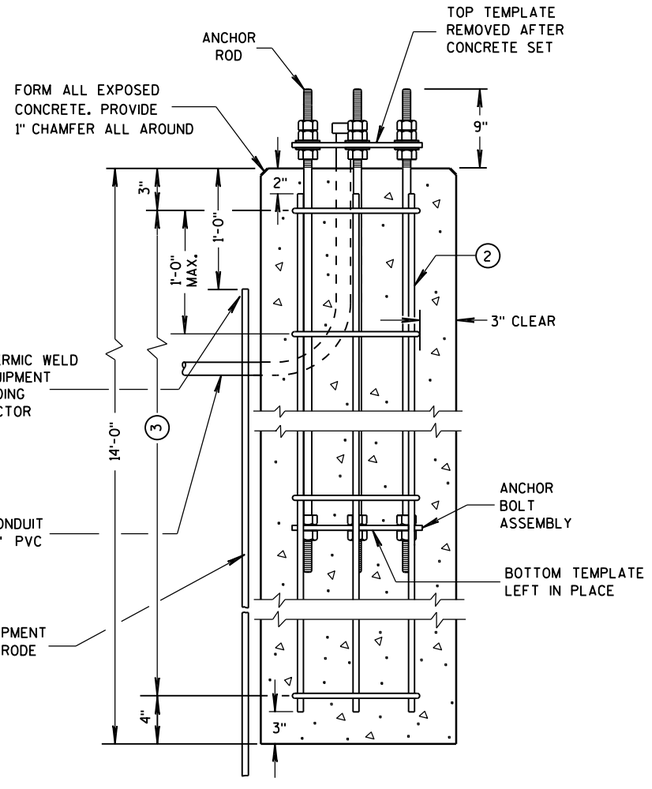
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" MAX. C-C.

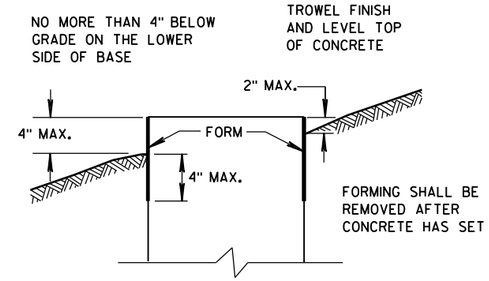
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



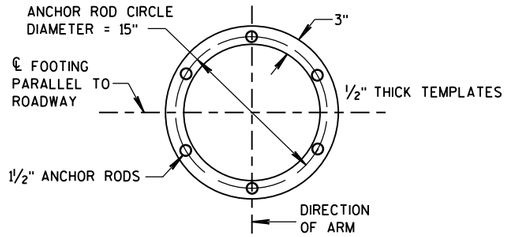


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

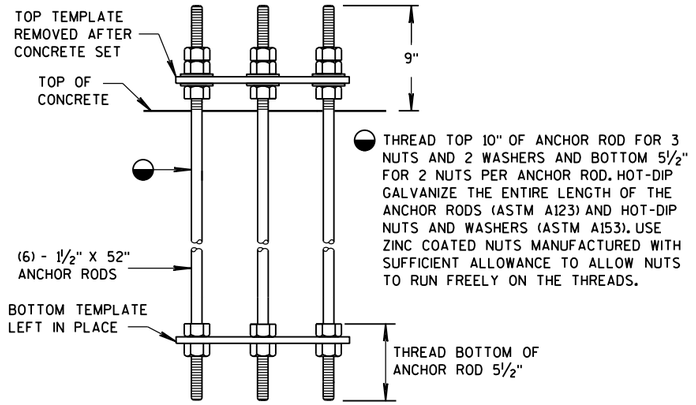
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10
ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
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May 2016 — DATE
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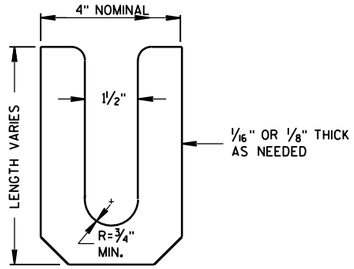
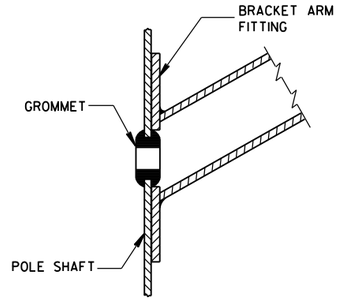
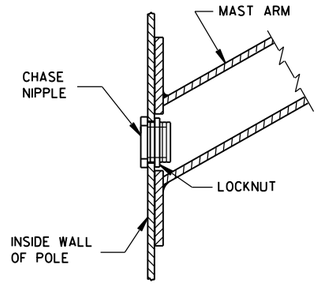


LEVELING SHIM (13)

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.

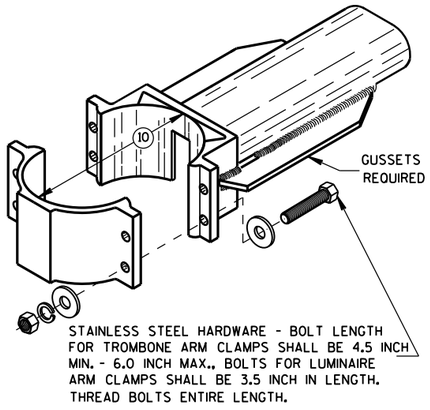
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

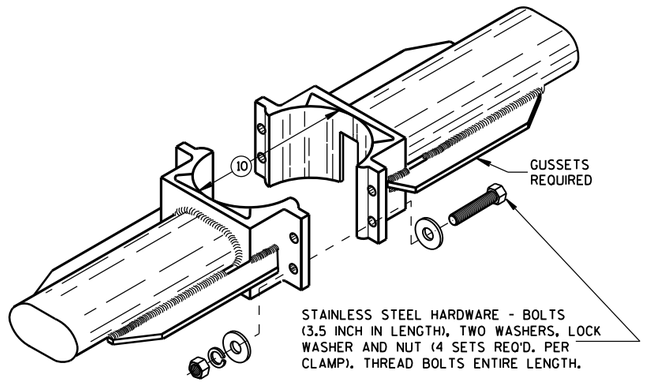
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) 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.

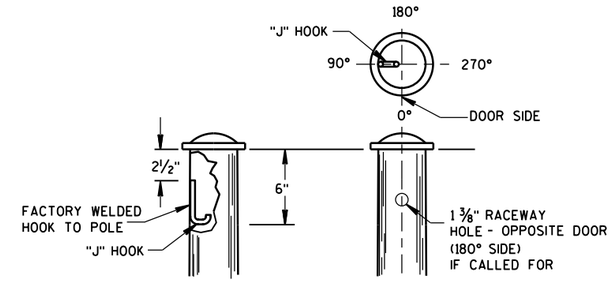
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



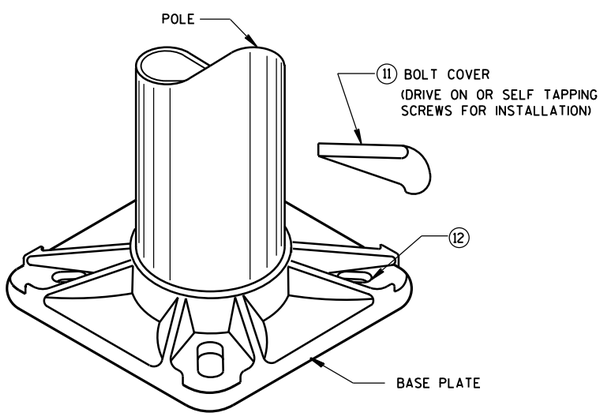
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



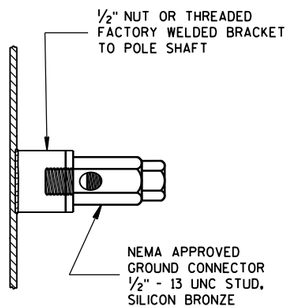
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

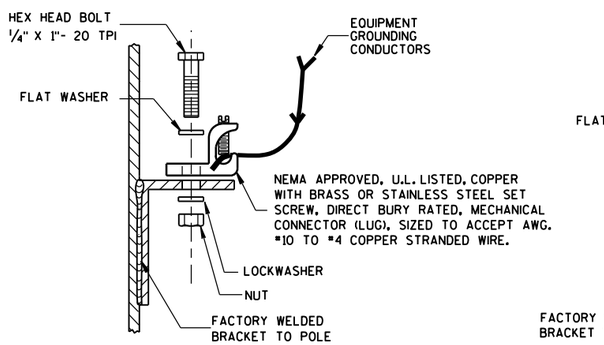


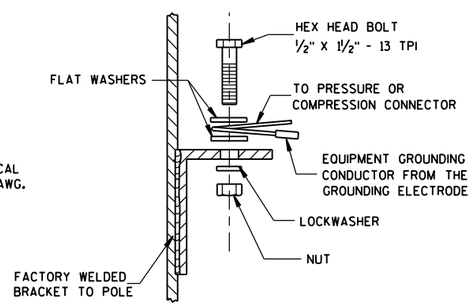
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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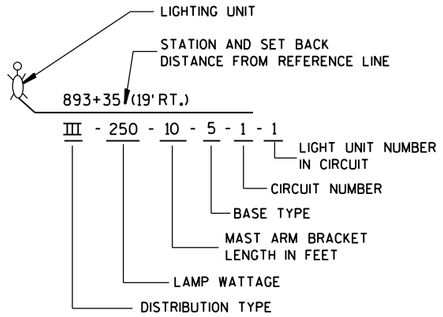
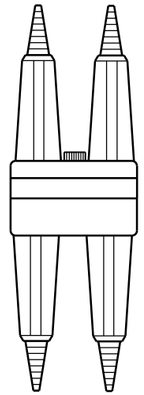
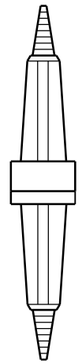


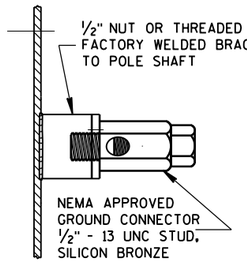
LIGHTING UNIT CODE
(TYPICAL)

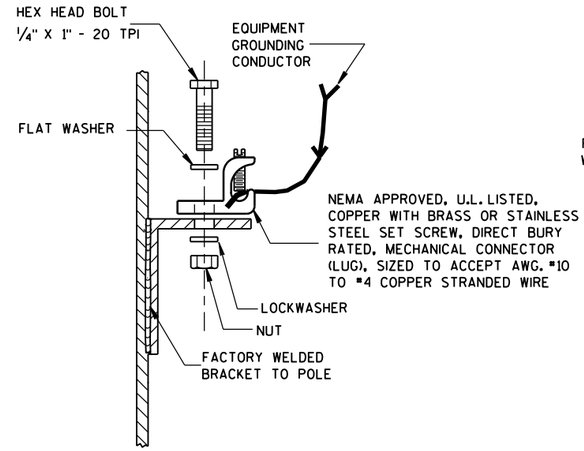


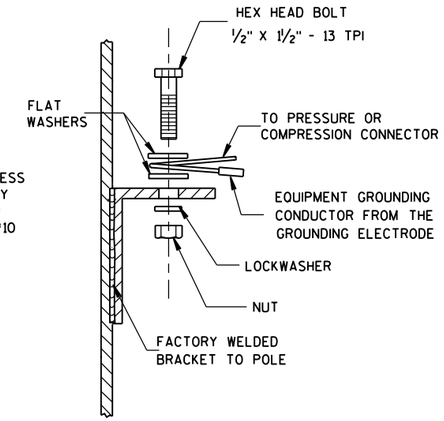
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



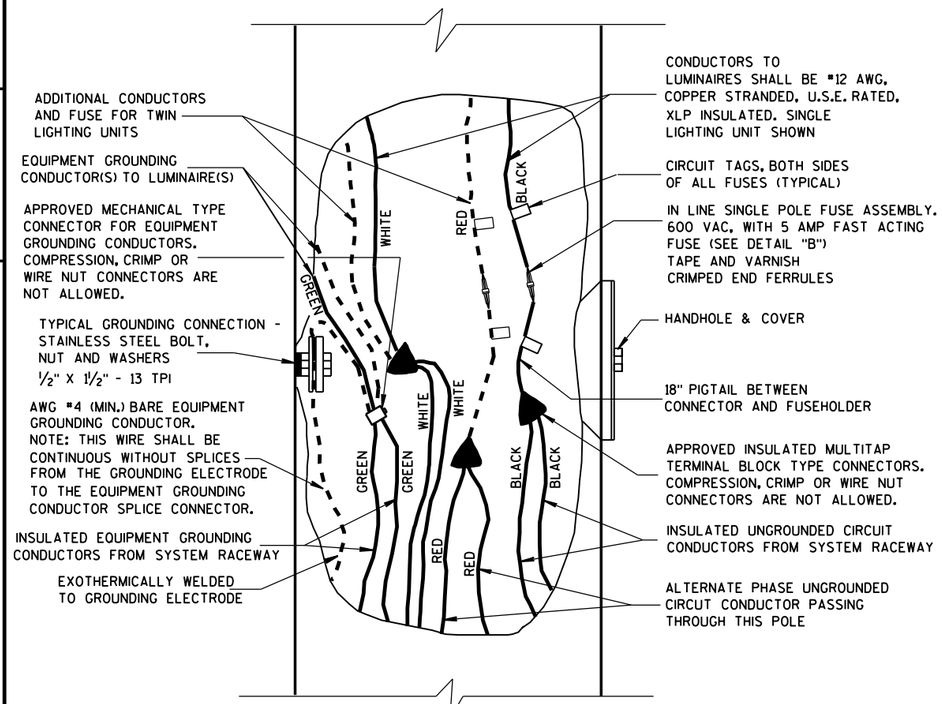
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



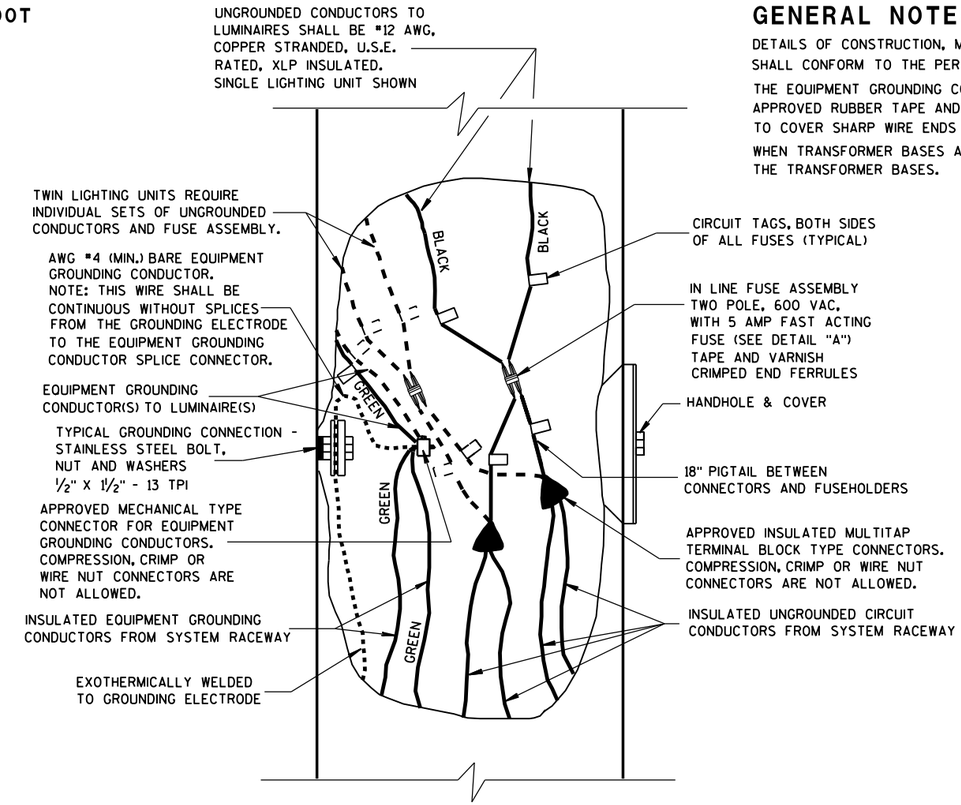




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 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.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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30'-0" MAX.

8'-0" *

15'-0" MAX.

SEE ARM CONNECTION DETAIL

SIGN 18" X 108"

**

* 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.

25'-6" MAXIMUM MOUNTING HEIGHT

17'-6" MINIMUM MOUNTING HEIGHT

ROADWAY PAVEMENT

R4-7
24" x 30"

19'-0"

10'-0"

3'-6"

POLE: (.14"/FT. TAPER)
1 PIECE (NO WELDED POLE SECTIONS)
POLE BUTT DIA. = 11.50"

PEDESTRIAN PUSH BUTTON

TYPICAL PEDESTRIAN SIGN

ANCHOR RODS:
FY=55 KSI
ASTM F1554 GR 55
ROD CIRCLE = 15"
ANCHOR ROD DIAM. 1½"
GALVANIZED. (6 ANCHOR RODS)

MAXIMUM BASE PLATE THICKNESS = 2½"

FOLDING STOP SIGN
30" x 30"

POLE

RING PLATE ⅜" MIN. THICKNESS

GUSSET PLATE ¼" MIN. THICKNESS

ARM

ARM CONNECTION PLATES

1" X 6" HIGH STRENGTH CONNECTION BOLTS

FLANGE CONNECTION
PLATE BOLT HOLES TO BE BOLT NOMINAL DIAMETER + ⅛" CONFORMING TO ASTM A 325

6 BOLT ARM CONNECTION DETAIL

FLAT WASHER

BOLT HEAD

NUT

DTI WASHER

RECOMMENDED BOLT ASSEMBLY DETAIL

DIRECTION OF ARM

ORIENTATION OF 6 ANCHOR RODS

℄ FOOTING PARALLEL TO ROADWAY

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL

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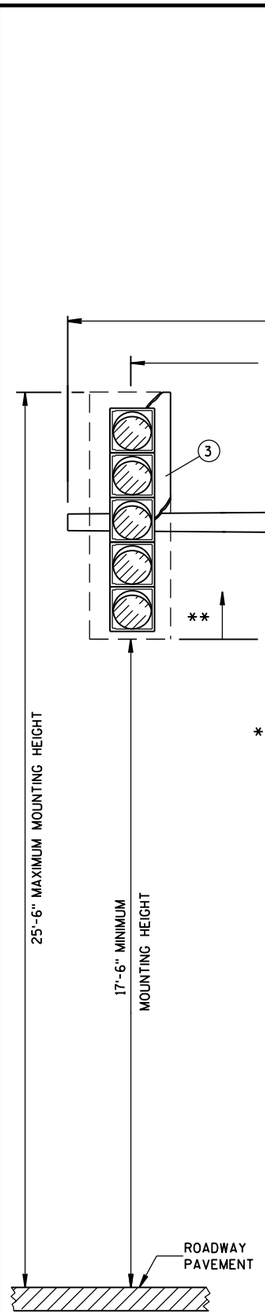
S.D.D. 9 E 8-8a



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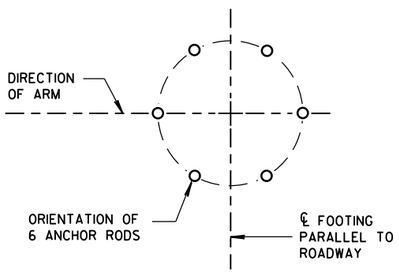
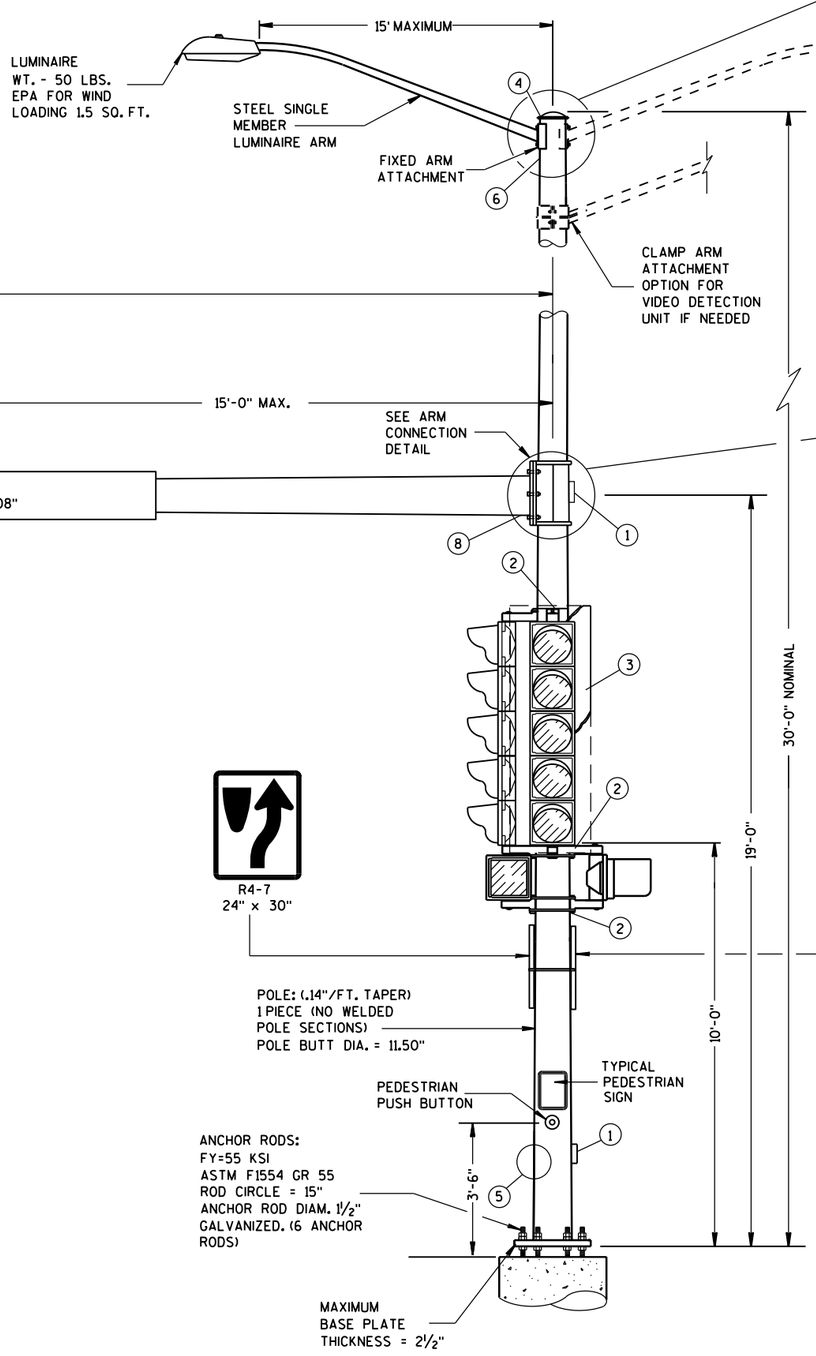
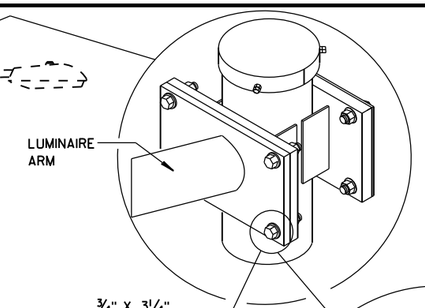
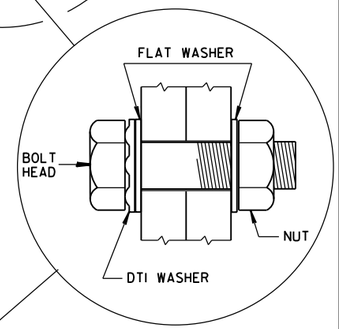
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



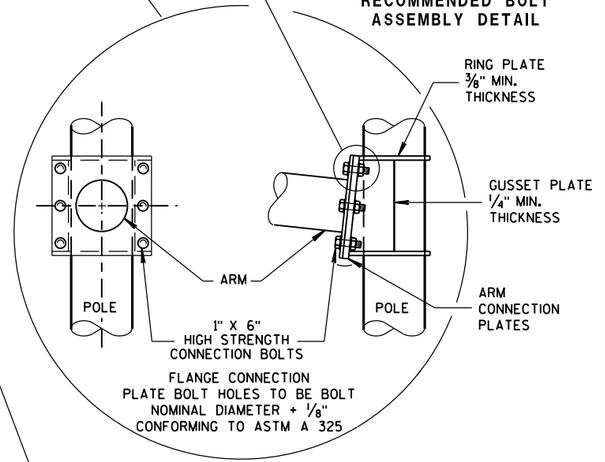
ANCHOR ROD LOCATION



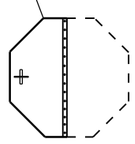




RECOMMENDED BOLT ASSEMBLY DETAIL



6 BOLT ARM CONNECTION DETAIL



(MAXIMUM LOAD)

TYPE 10 POLE 15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

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 2013 6TH EDITION 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.

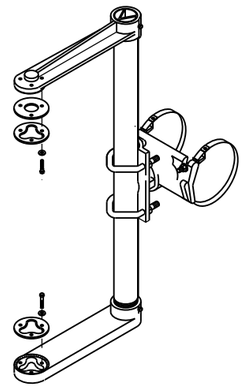
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

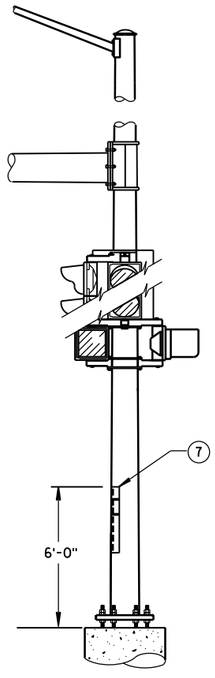
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

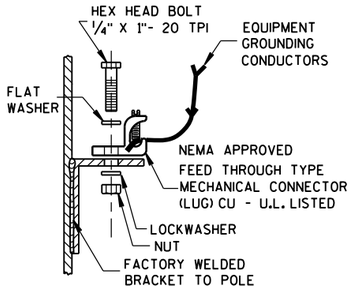


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

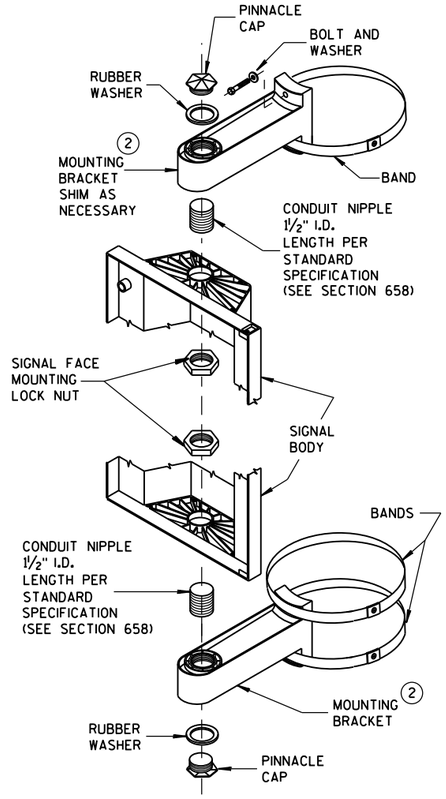


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT

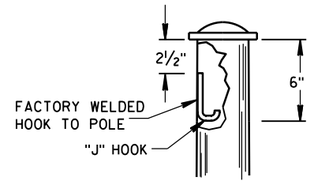


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



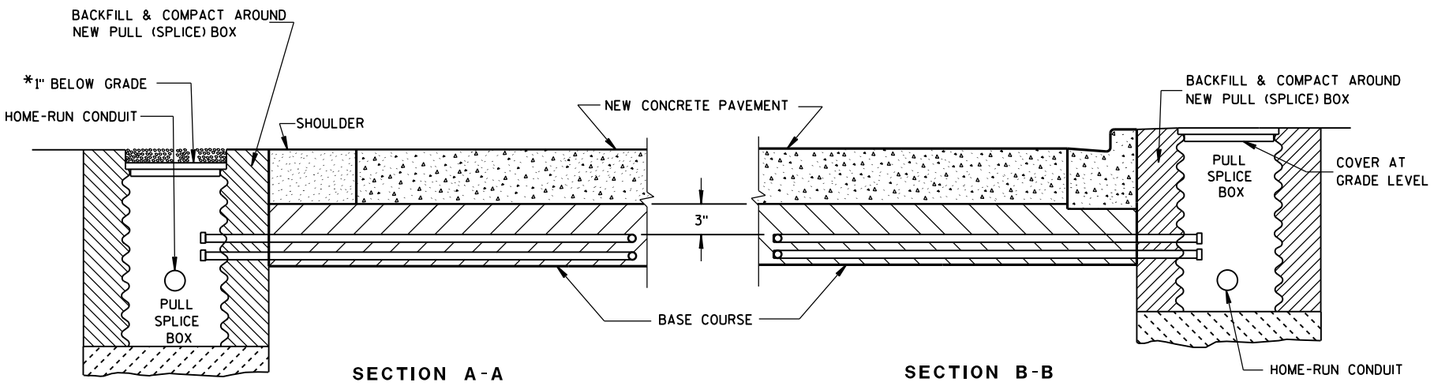
"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 E 8-8e



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.

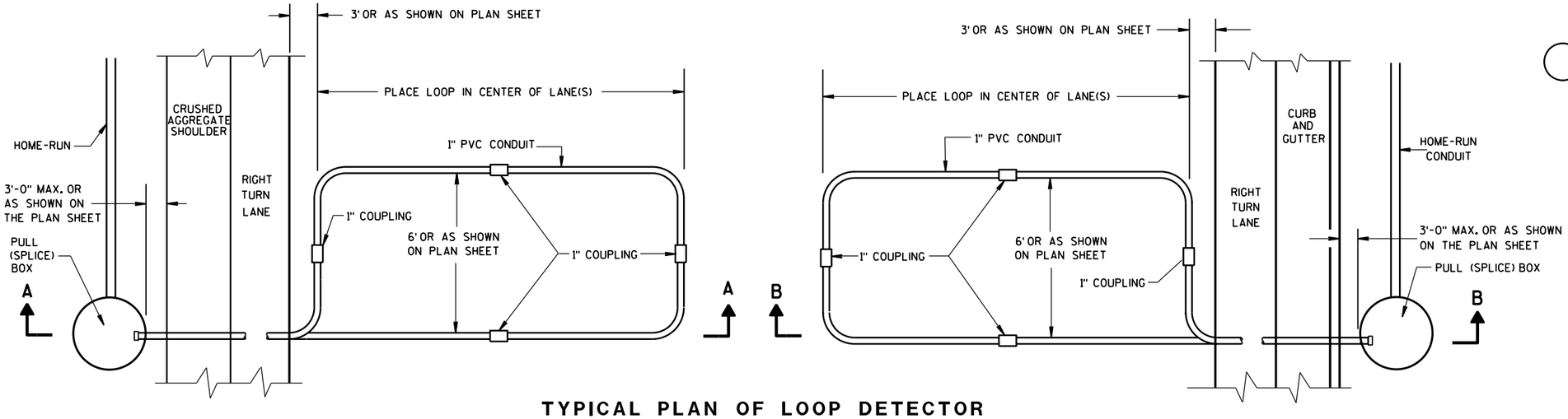
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

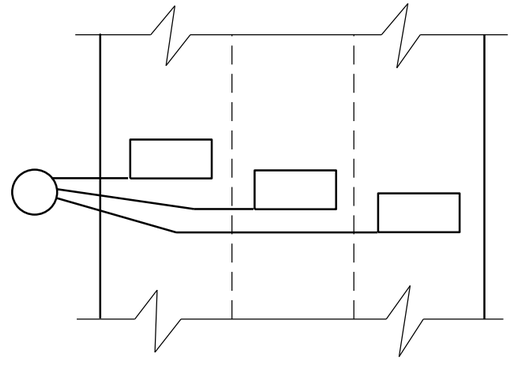
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

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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S.D.D. 9 F 15-4b

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S.D.D. 9 F 15-4b

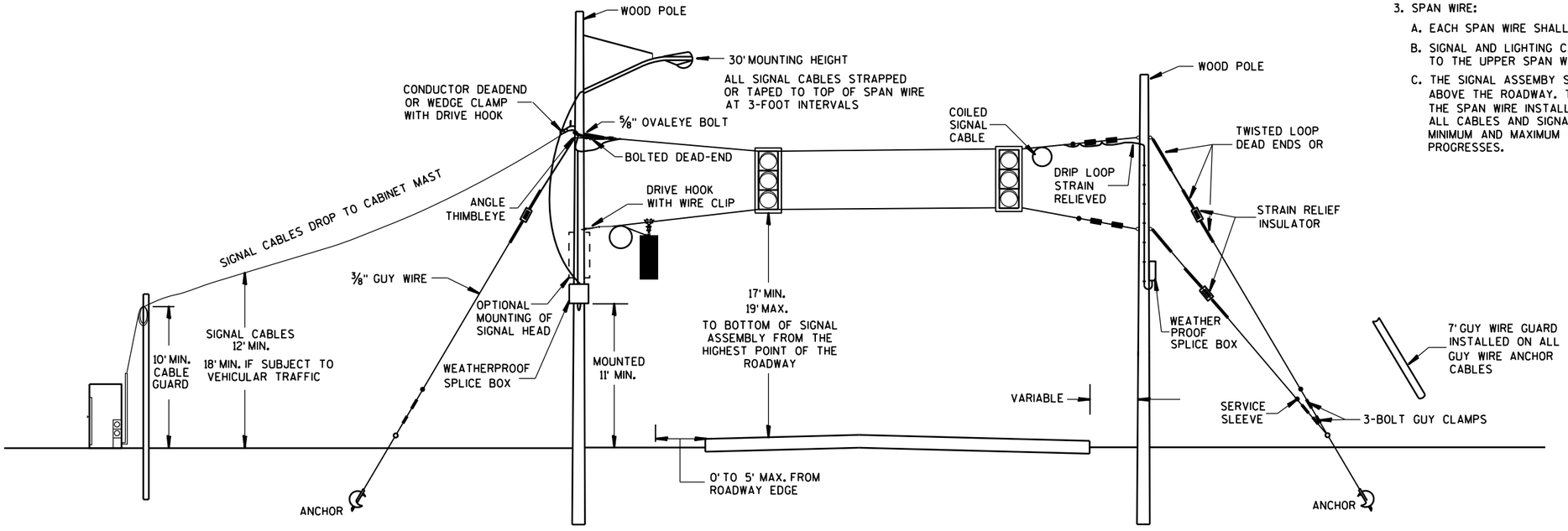
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
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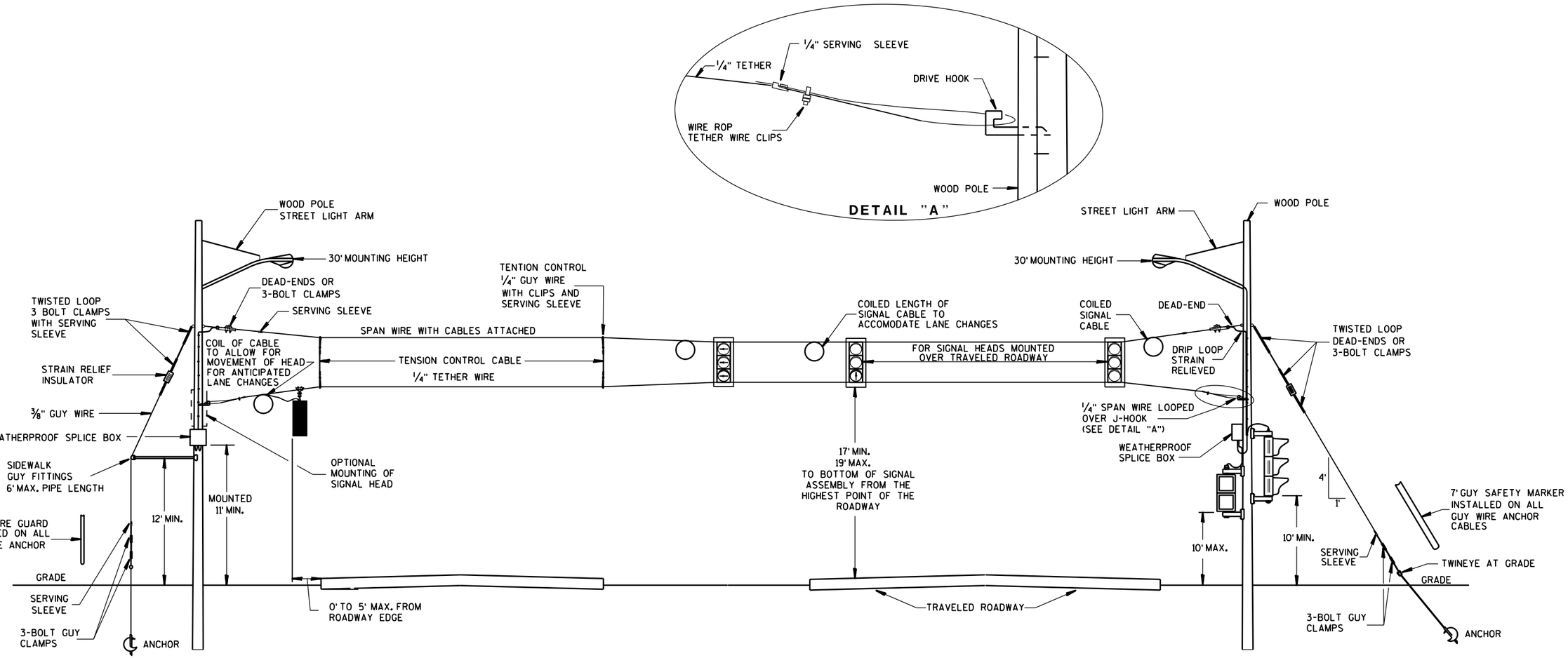
S.D.D. 9 G 1-4a



GENERAL NOTES

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   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
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S.D.D. 9 G 1-4b

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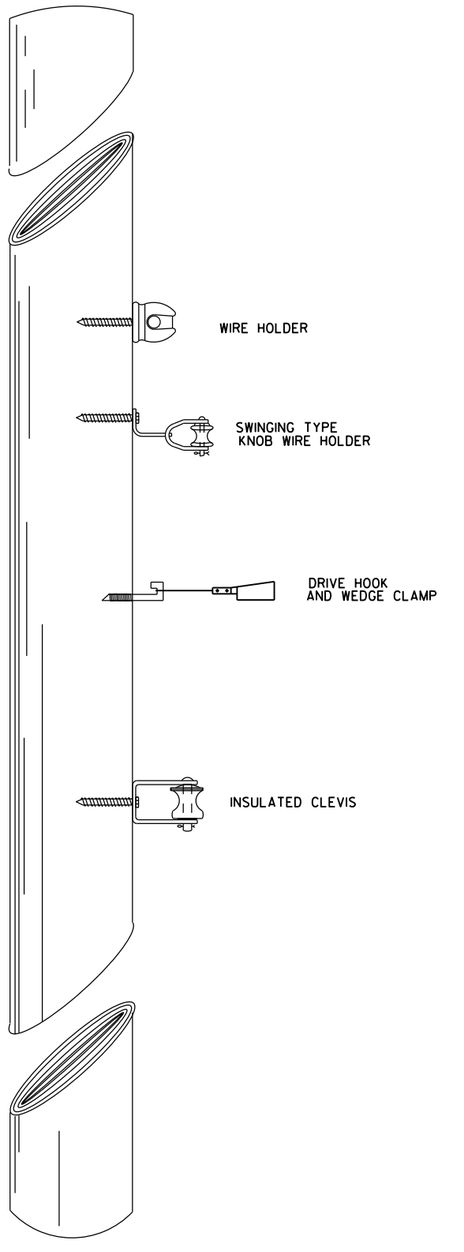
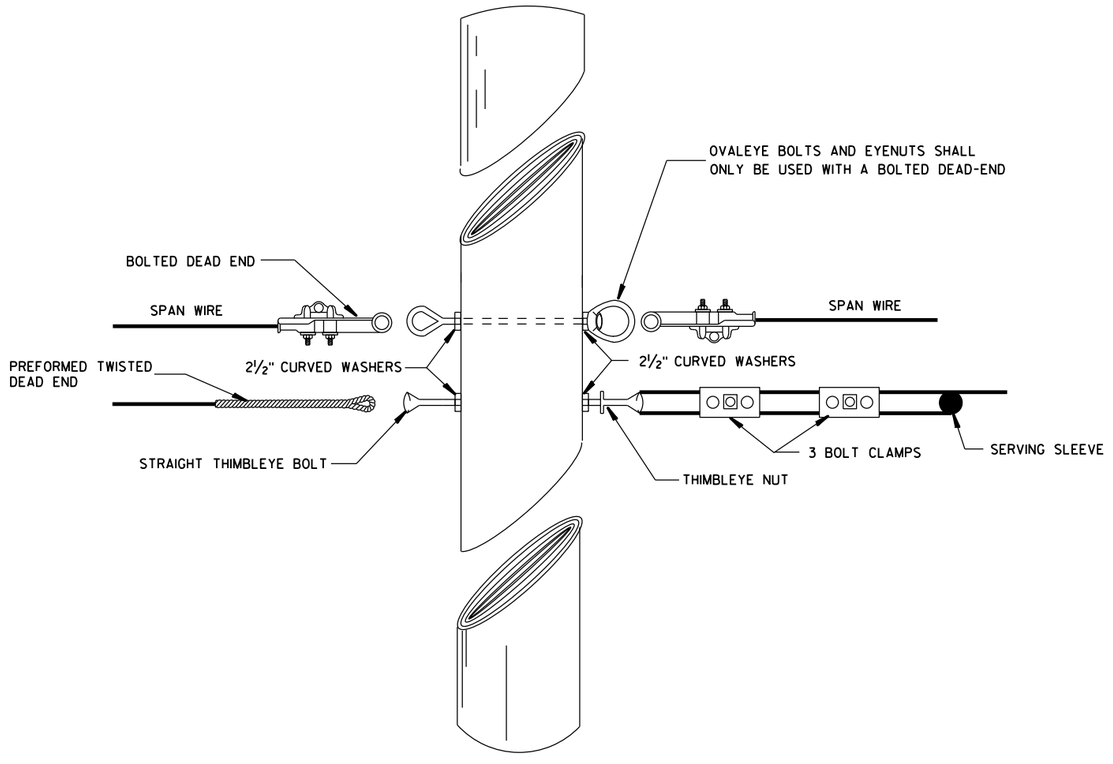
S.D.D. 9 G 1-4b



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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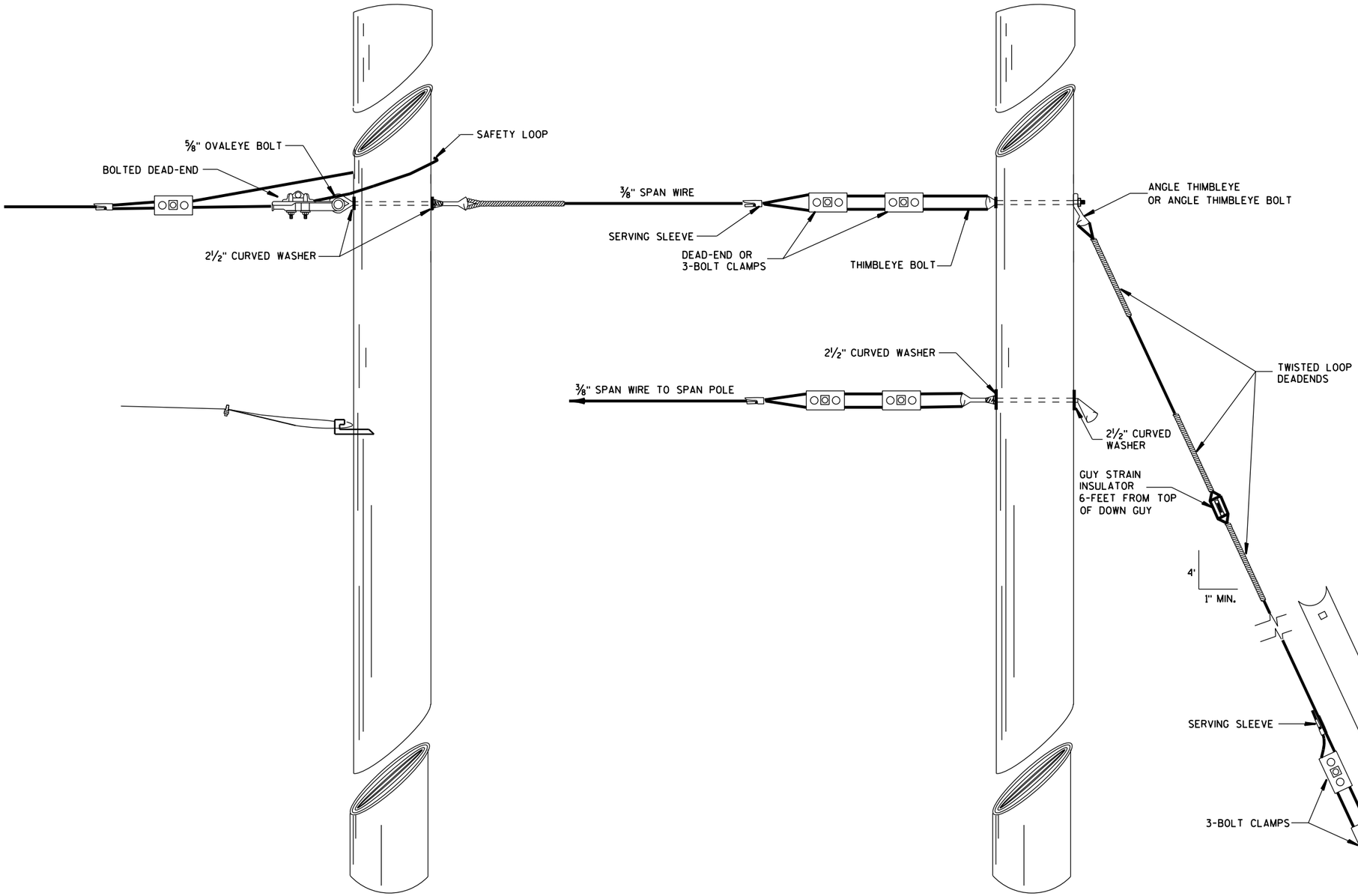
GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June. 2015 — DATE
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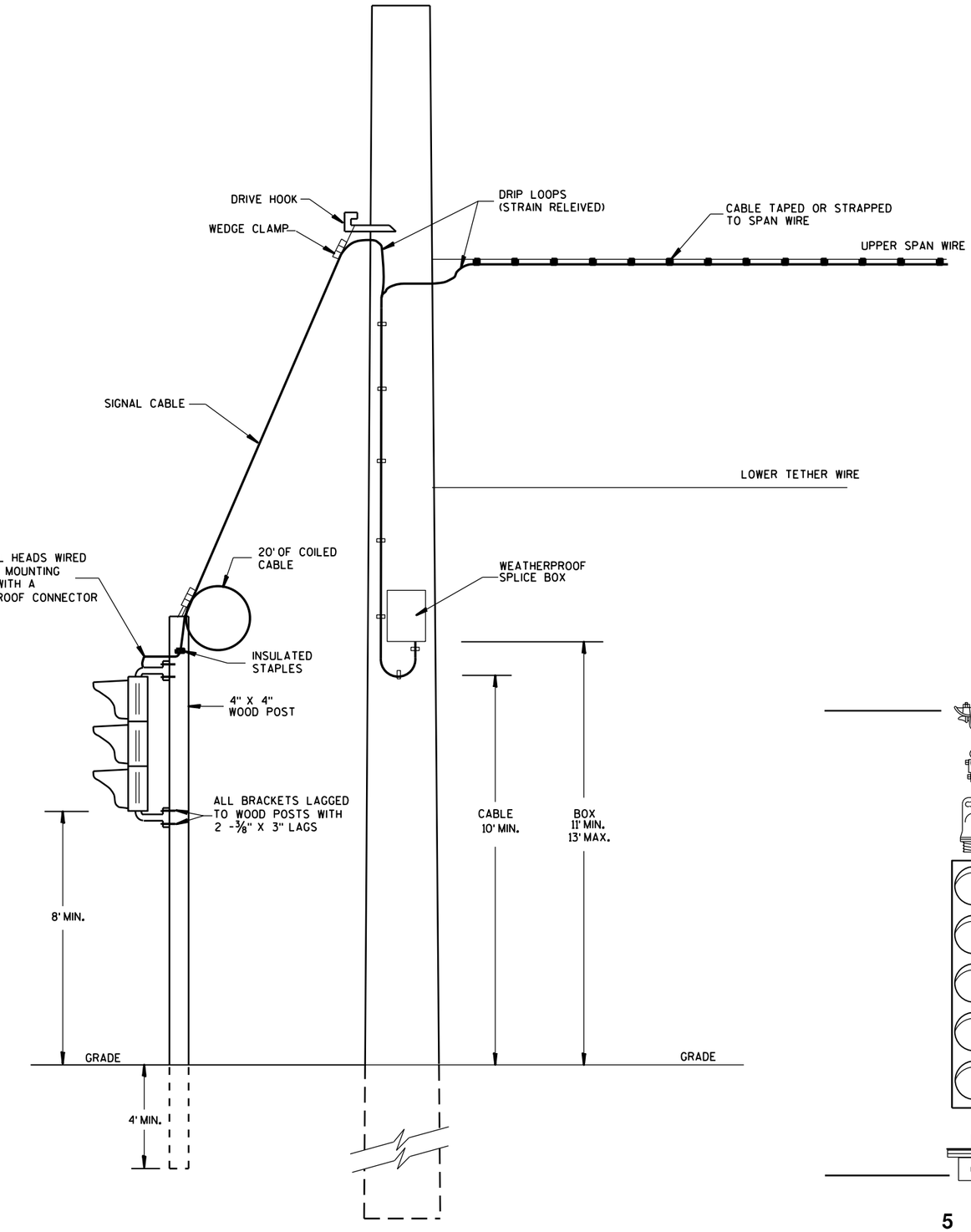
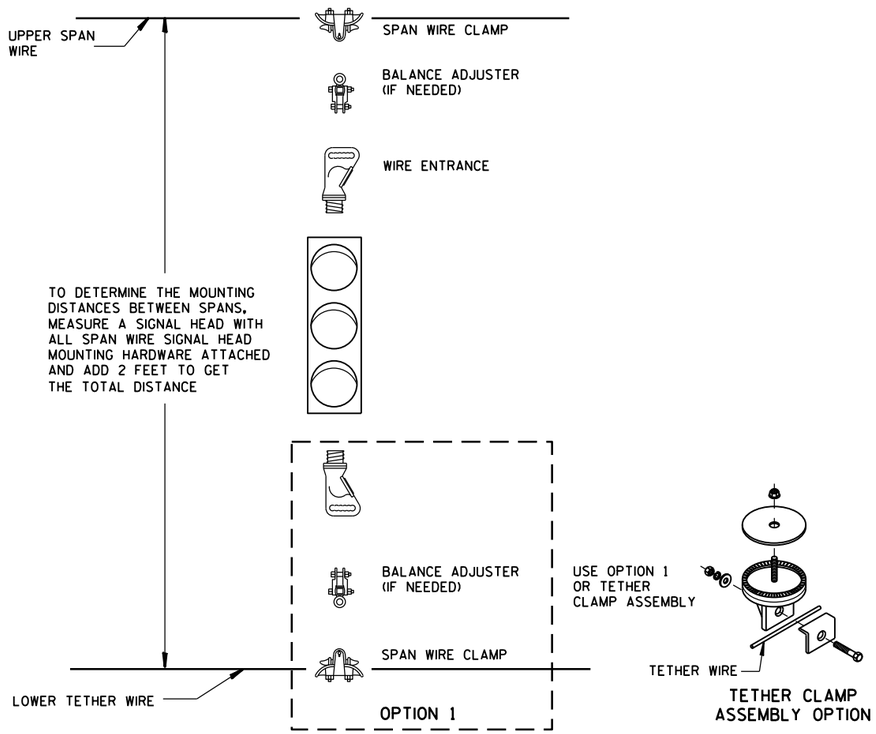
S.D.D. 9 G 1-4e

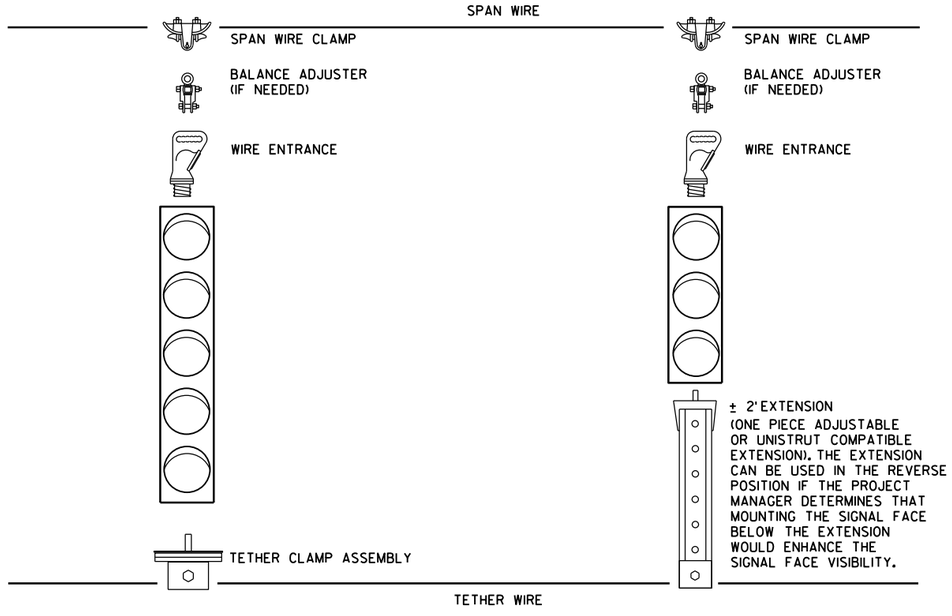


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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APPROVED

June. 2015 — DATE

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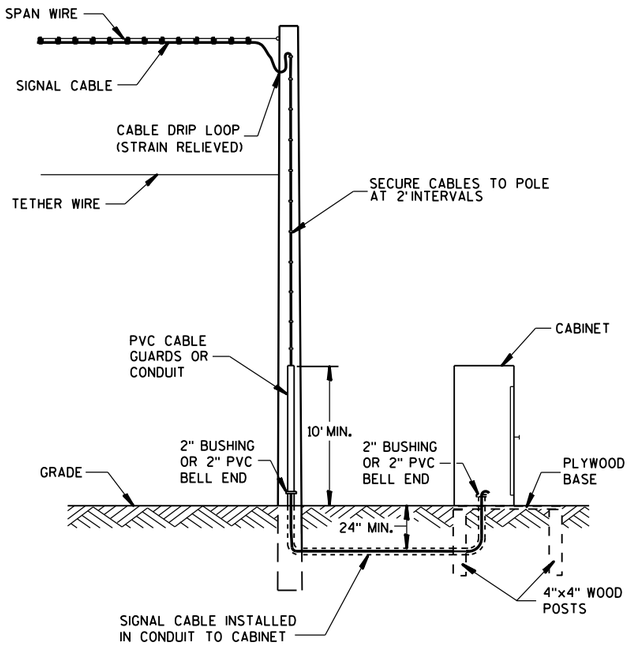
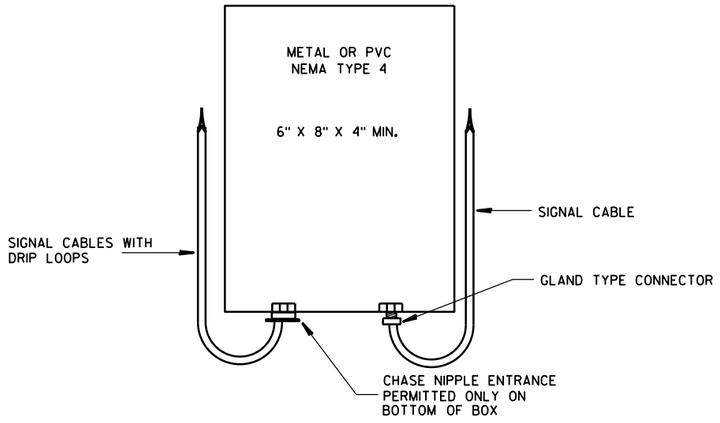
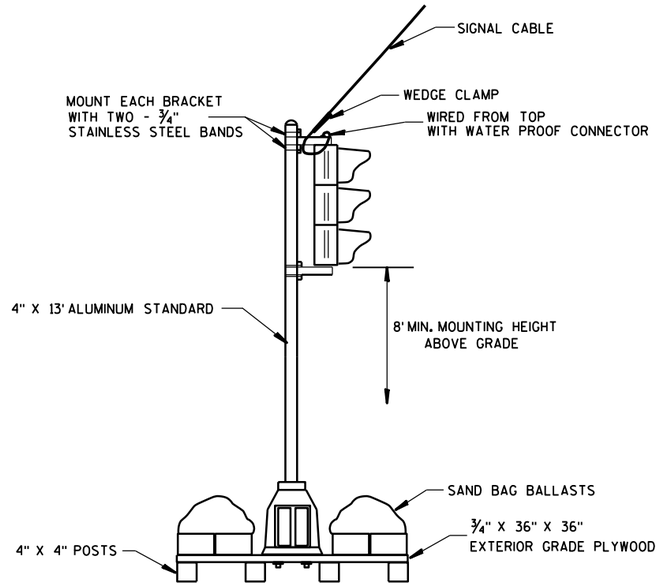
S.D.D. 9 G 1-4f

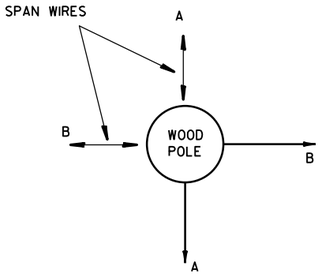




SPLICE BOX

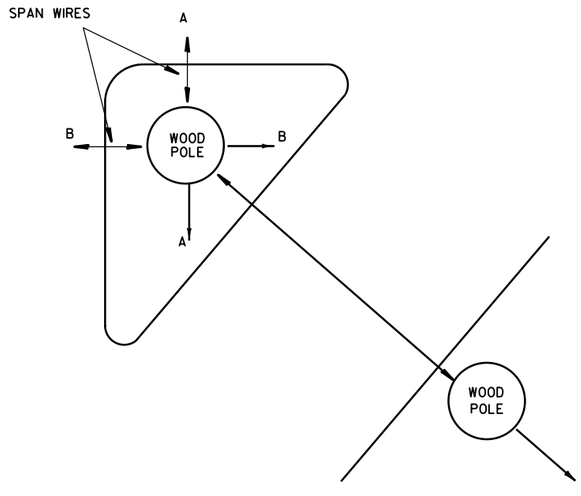


TYPICAL SKID TYPE TEMPORARY

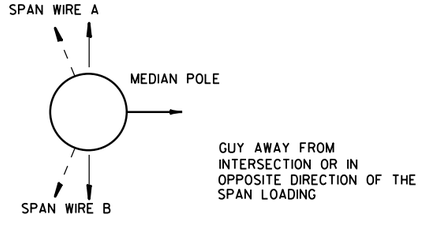


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 G 1-4g

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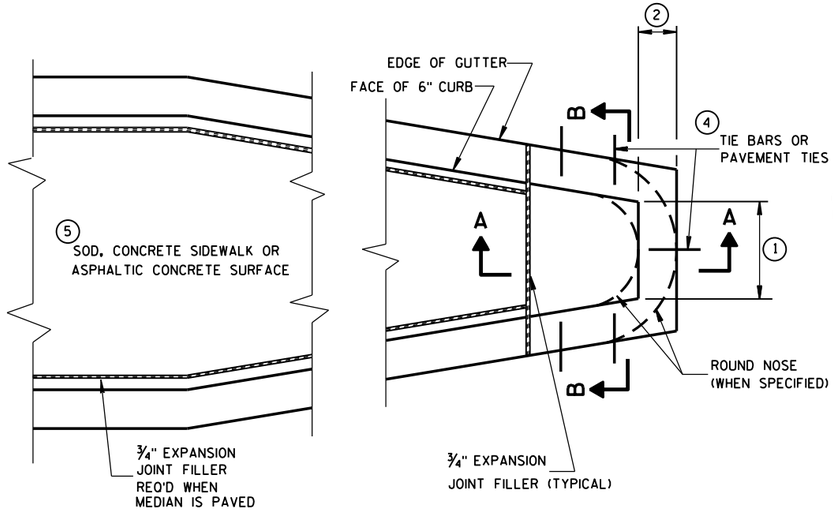
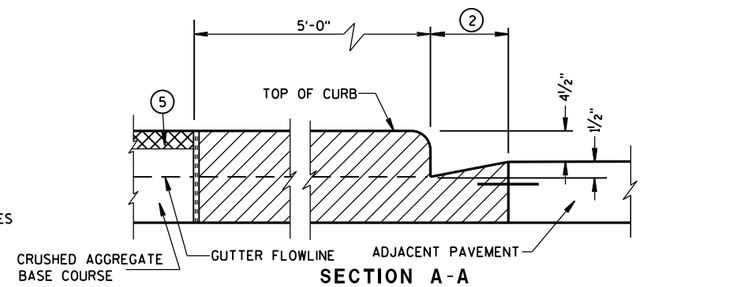
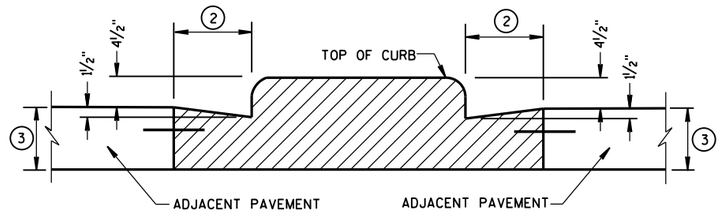
S.D.D. 9 G 1-4g







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.

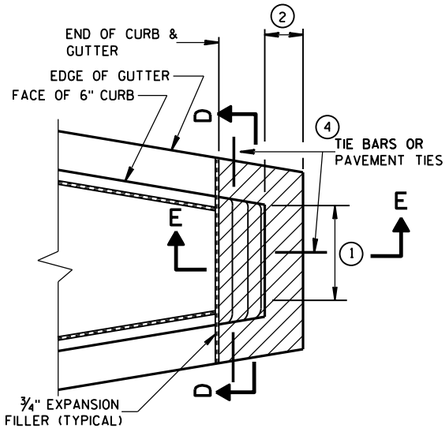
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

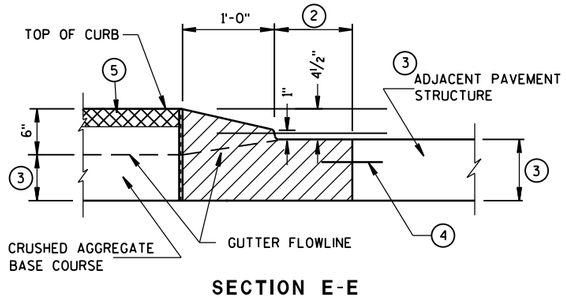
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

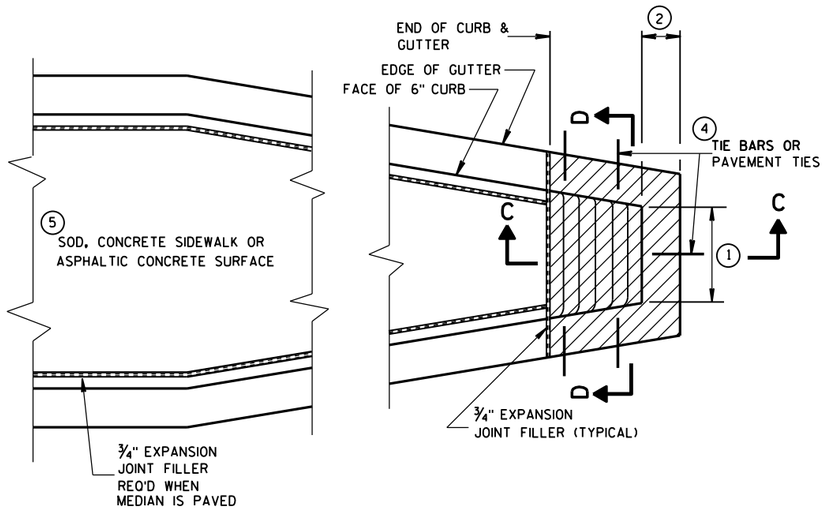
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

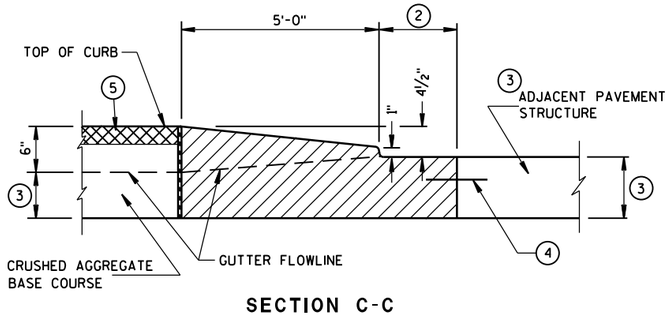
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.





CONCRETE MEDIAN SLOPED NOSE TYPE 2





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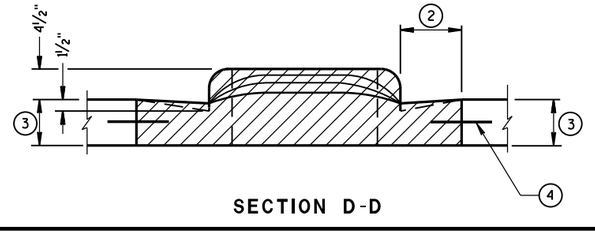

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA

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S.D.D. 11 B 2-2

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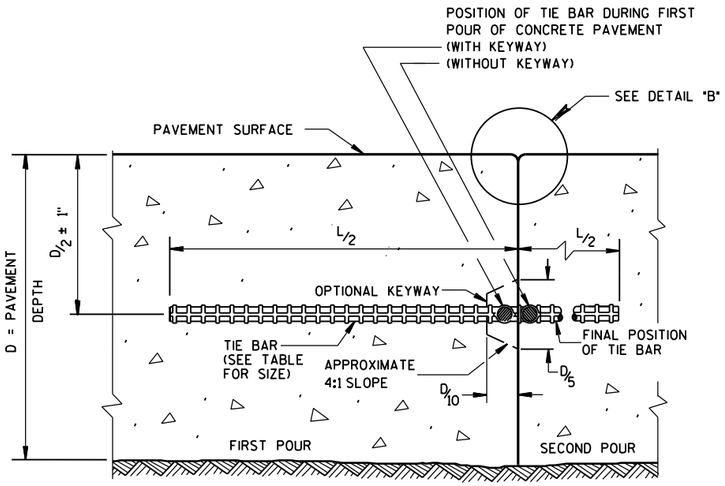
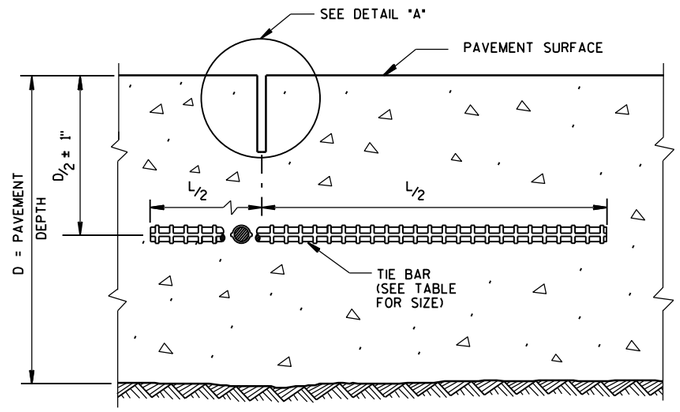
S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

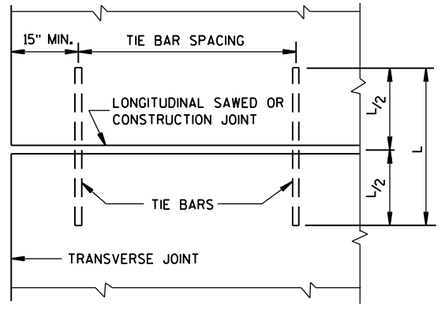
DETAIL "C"

TIE BAR TABLE

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

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

** CONFORM TO 15" 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
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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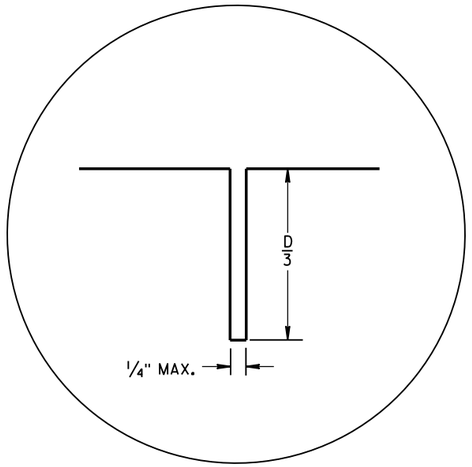
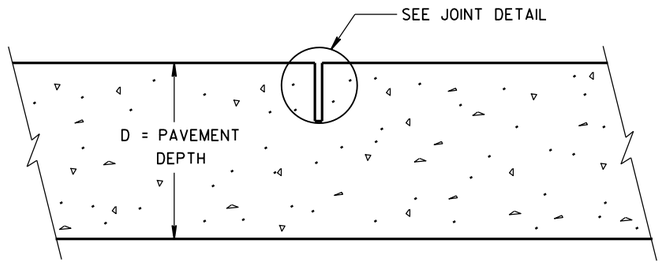
S.D.D. 13 C 1-18



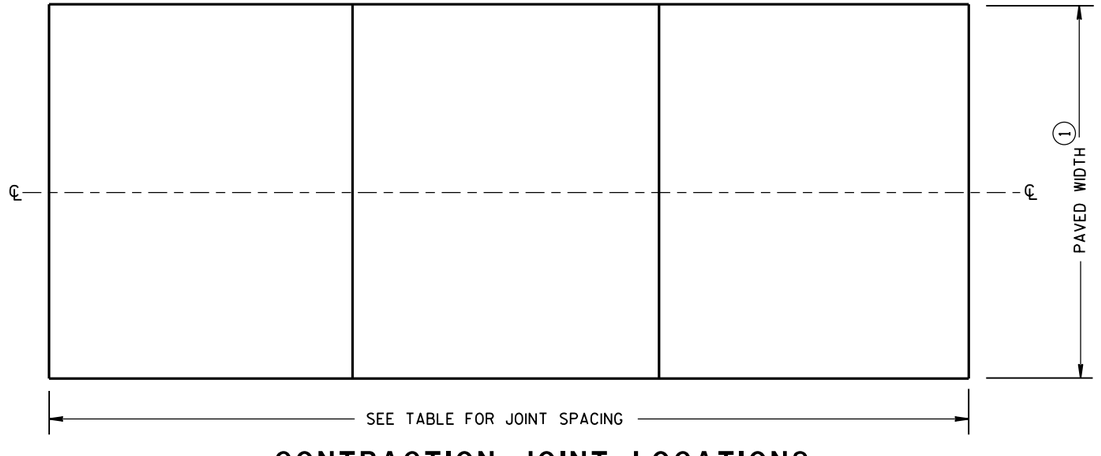
JOINT DETAIL



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.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

CONSTRUCTION JOINTS

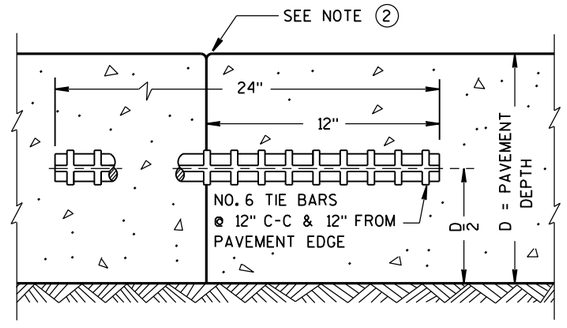
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

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

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S.D.D. 13 C 4-16

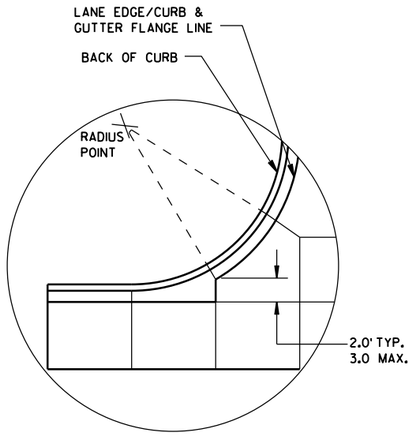
S.D.D. 13 C 4-16

URBAN NON-DOWELED CONCRETE PAVEMENT

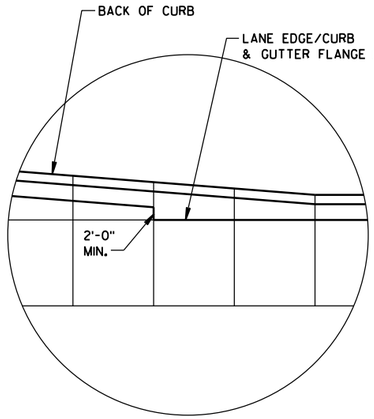
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-3-2013 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
FHWA

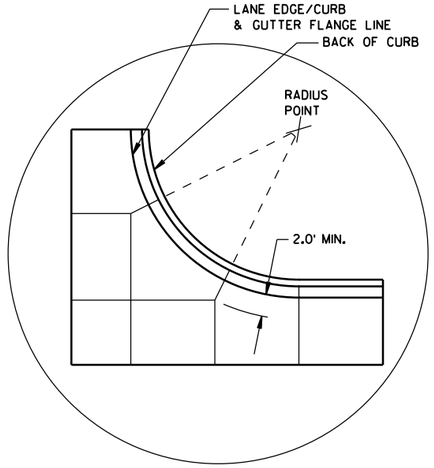
IEER



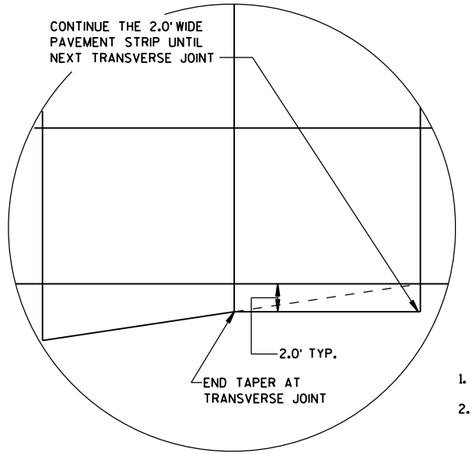
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

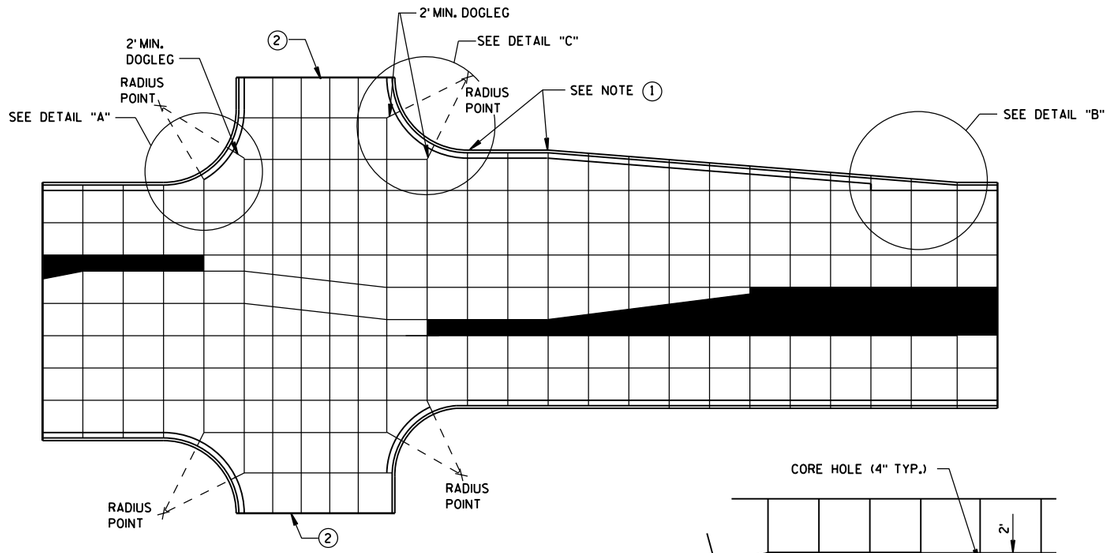
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

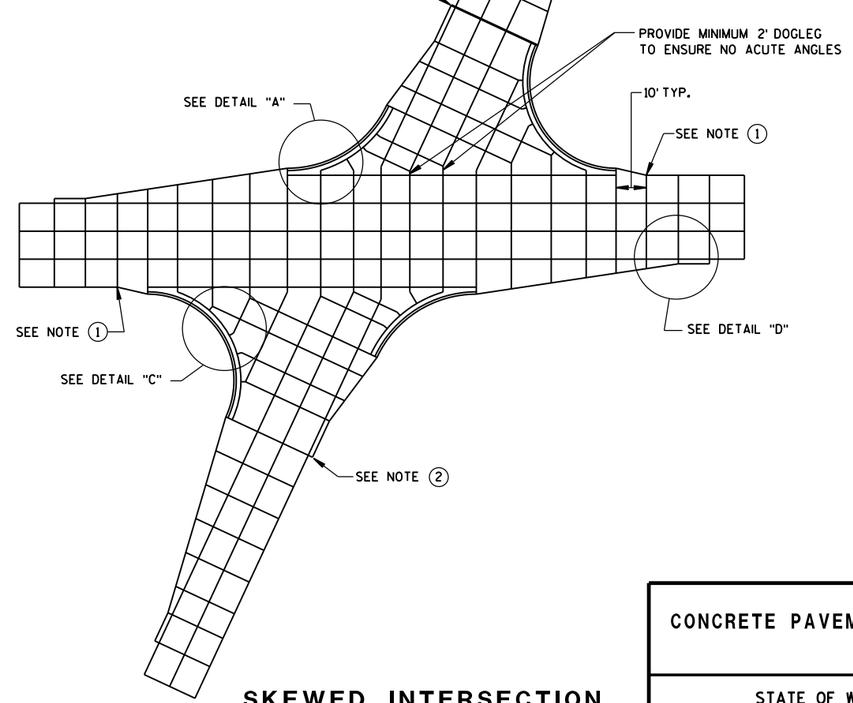
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



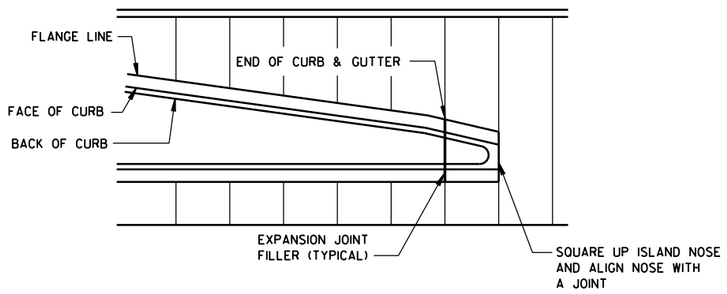
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

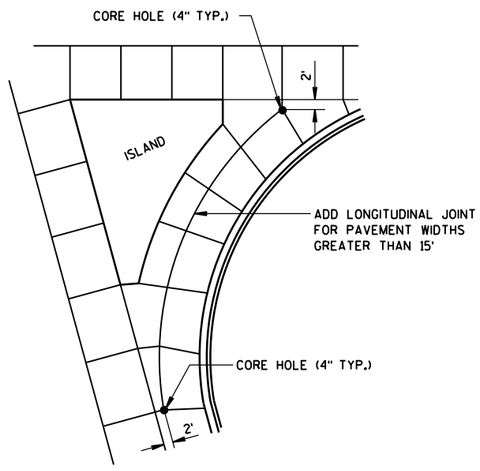
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

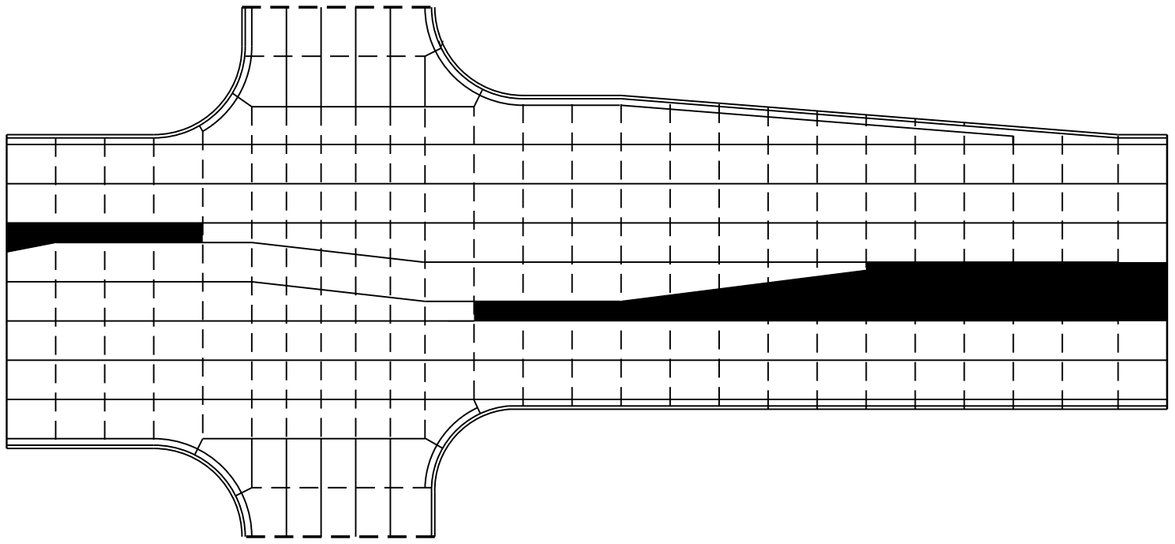
6
S.D.D. 13 C 18-4a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

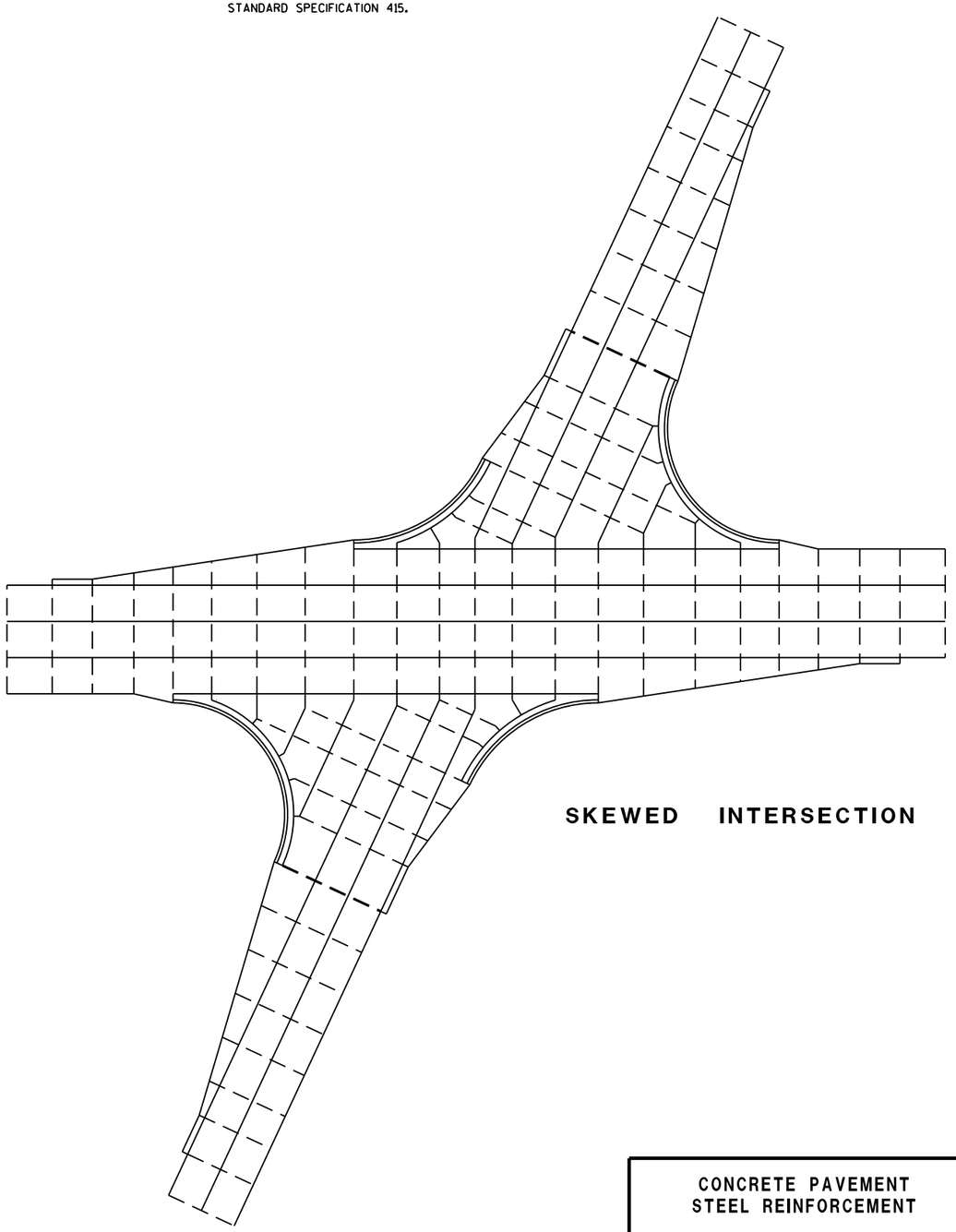
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 13 C 18-4b

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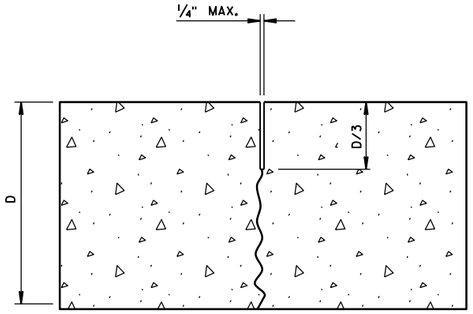
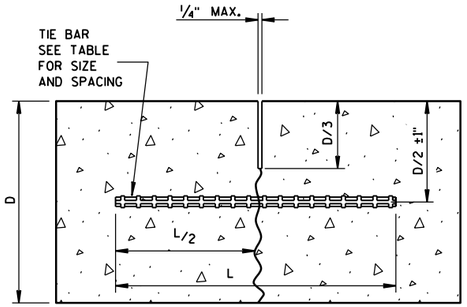
S.D.D. 13 C 18-4b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

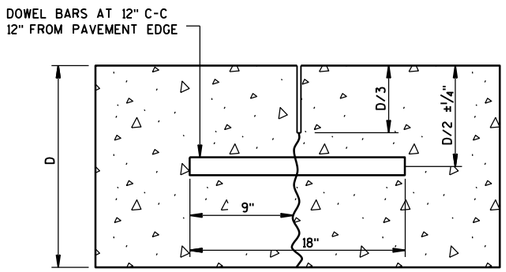
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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.

GENERAL NOTES

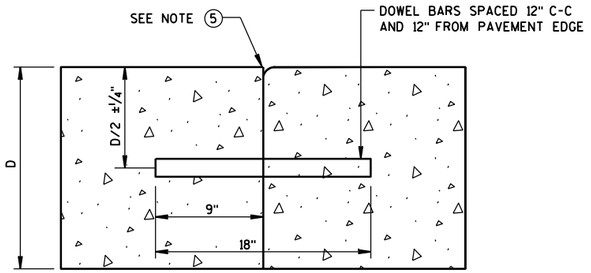
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



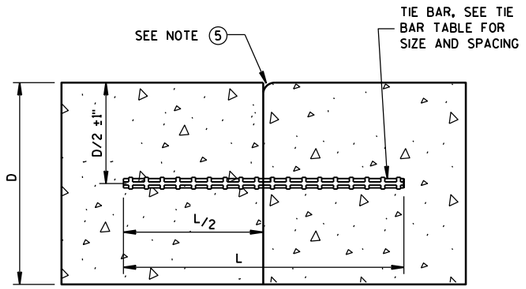
DOWELED-TRANSVERSE

CONTRACTION JOINTS

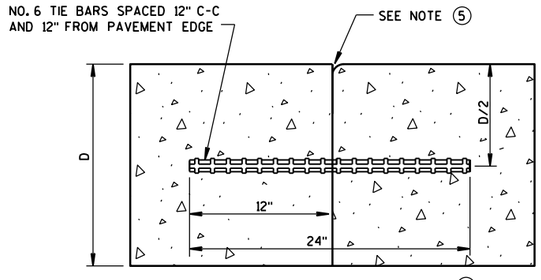
SEE NOTE (2)



DOWELED TRANSVERSE (3)

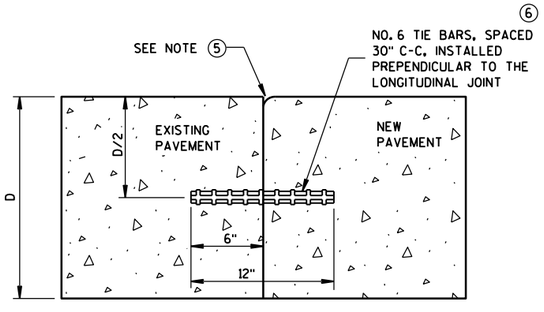


TIED LONGITUDINAL



TIED TRANSVERSE (3)

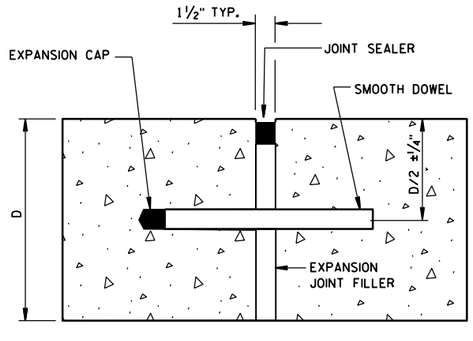
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

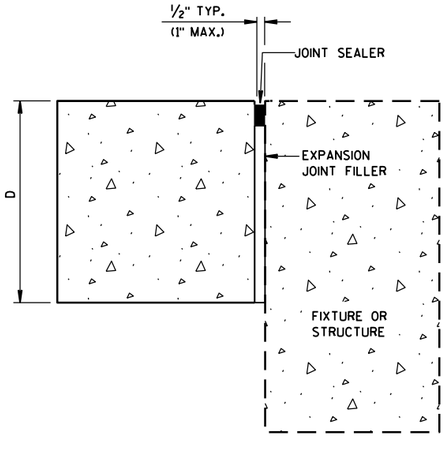
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

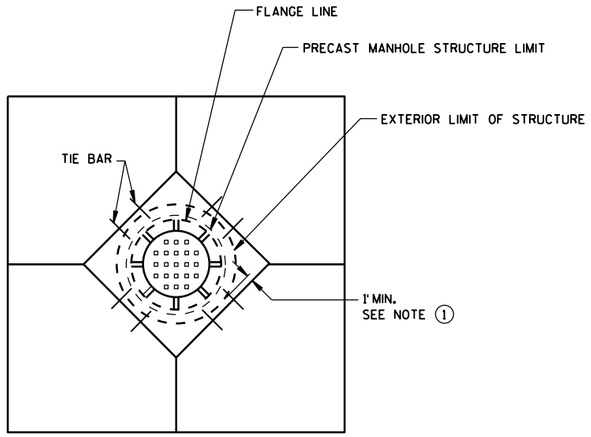
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

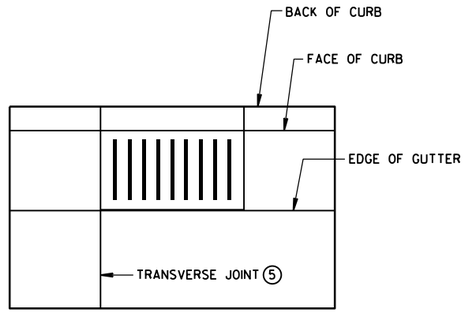
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

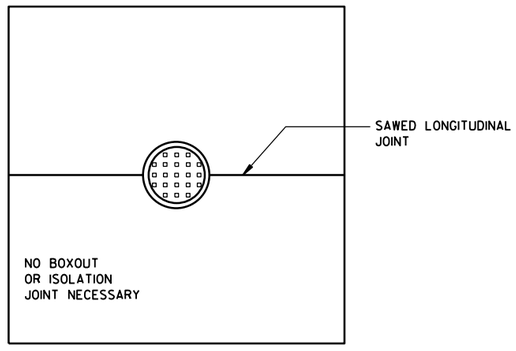
S.D.D. 13 C 18-4c



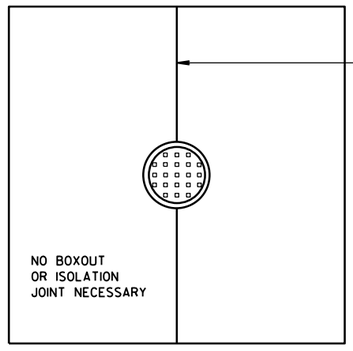
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



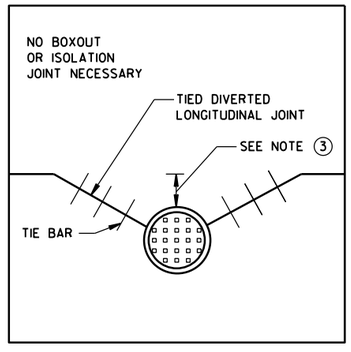
INLET WITH TRANSVERSE JOINT



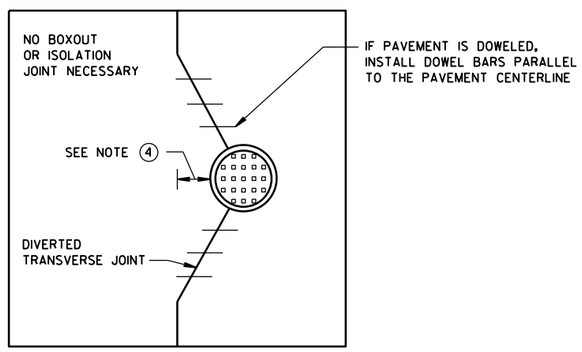
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

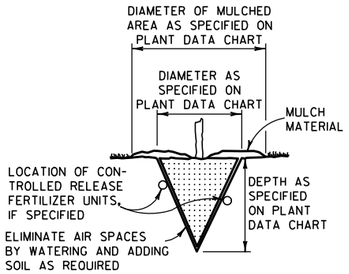
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

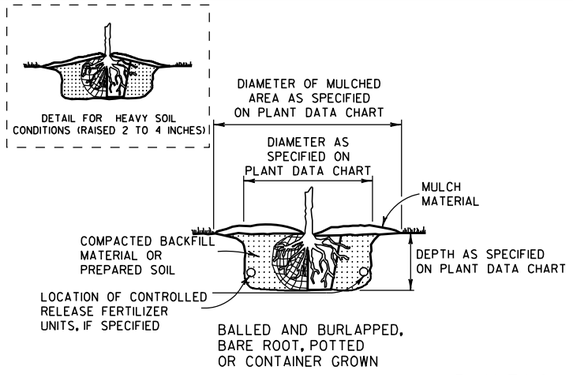
APPROVED
Sept., 2016 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

6

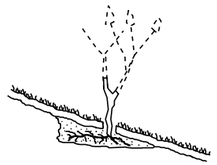
S.D.D. 13 C 18-4d



MACHINE MOVED

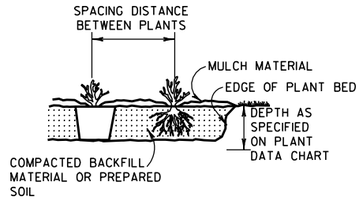


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



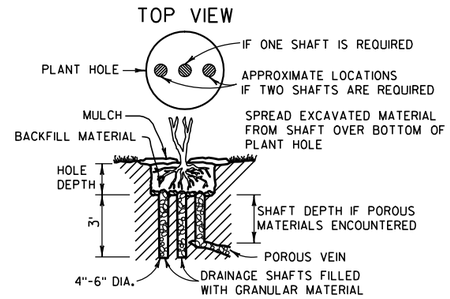
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



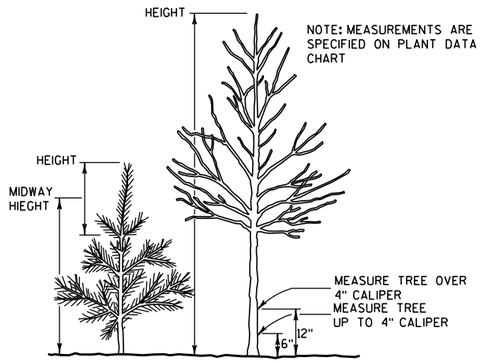
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

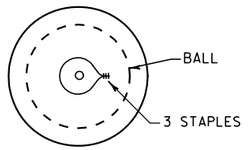


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

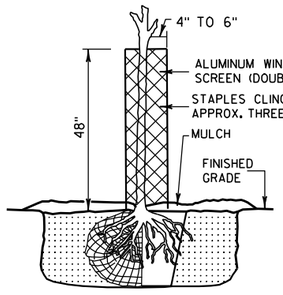
DRAINING



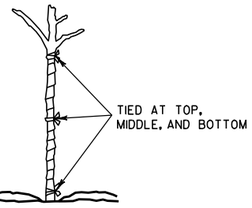
MEASURING



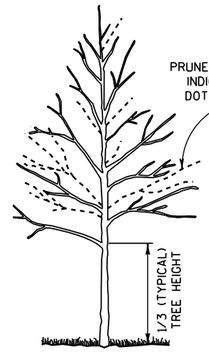
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

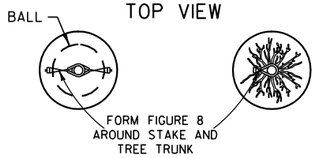
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

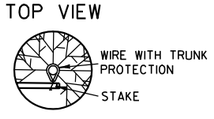
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

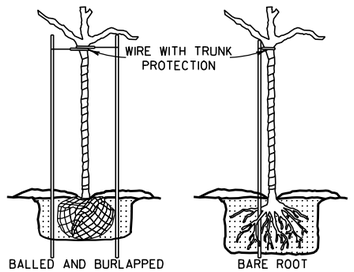
SUMAC

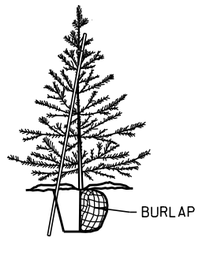
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



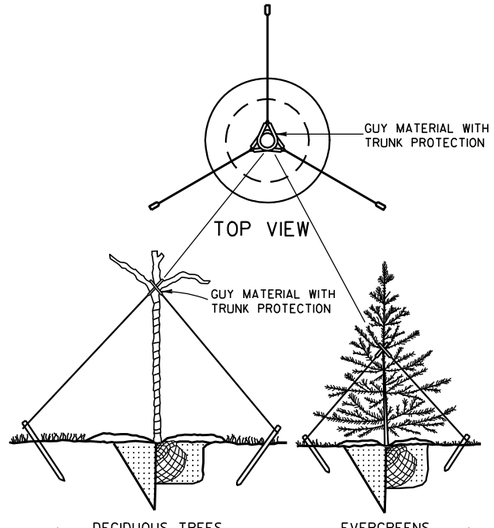






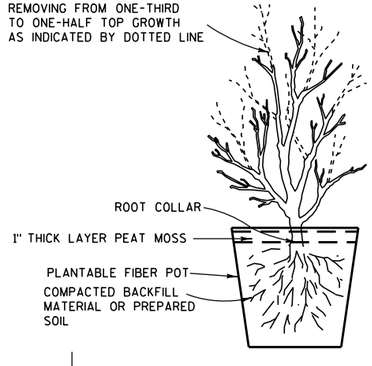
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 A 2-1

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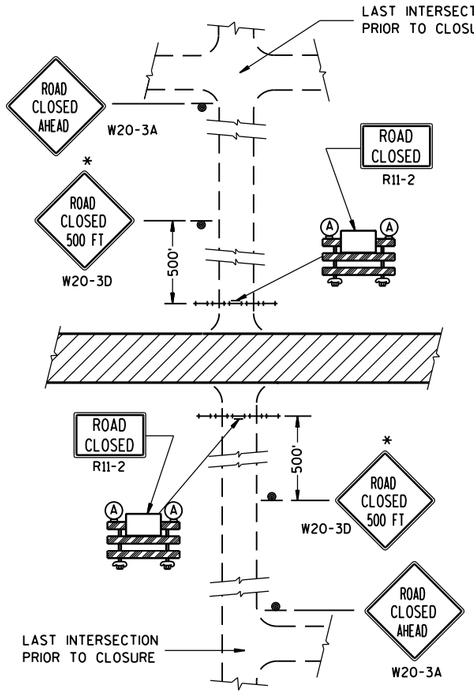
S.D.D. 14 A 2-1



DETAIL 1

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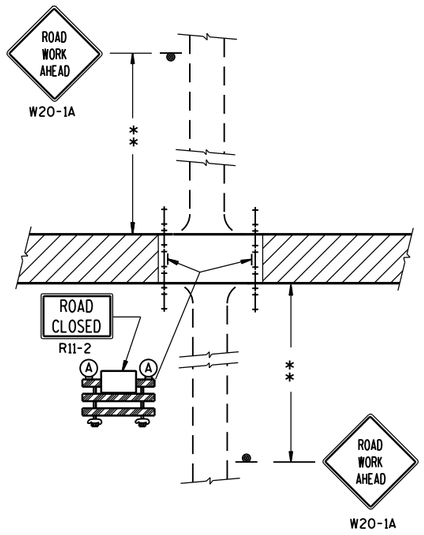

DETAIL 2

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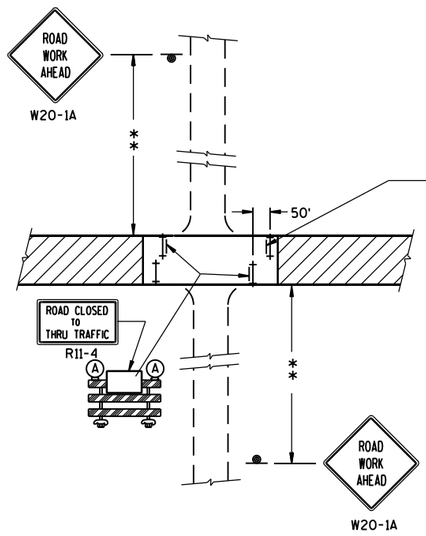
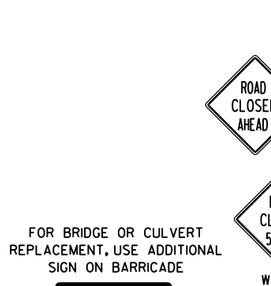
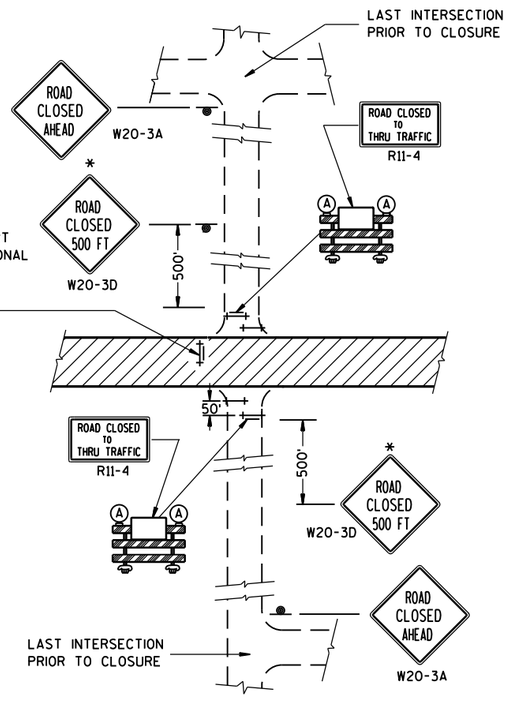




DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

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

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

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S.D.D. 15 C 3-3

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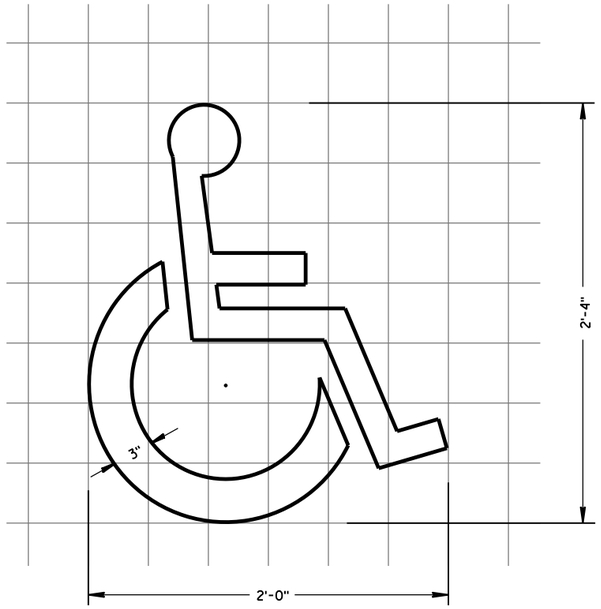
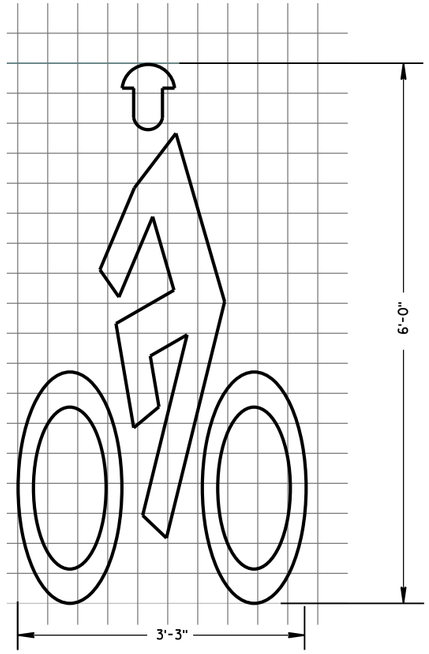
S.D.D. 15 C 3-3

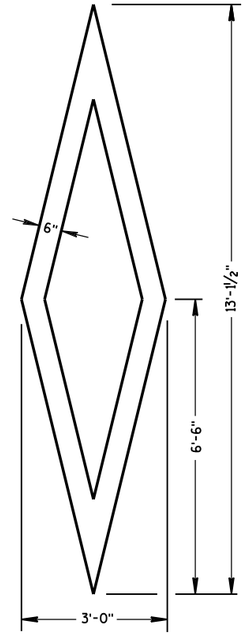
GENERAL NOTES

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.





BIKE CROSSING SYMBOL



PREFERENTIAL LANE SYMBOL

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S.D.D. 15 C 7-13a

S.D.D. 15 C 7-13a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

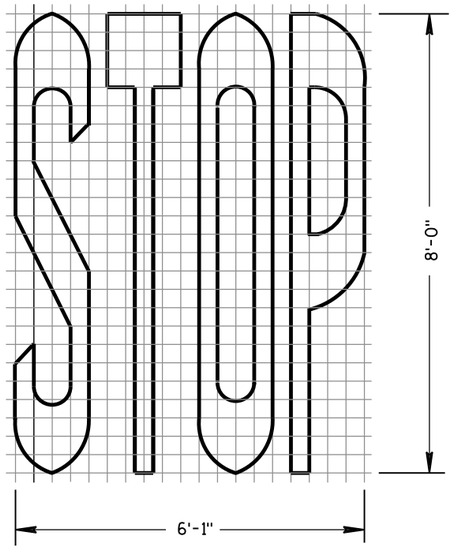
APPROVED

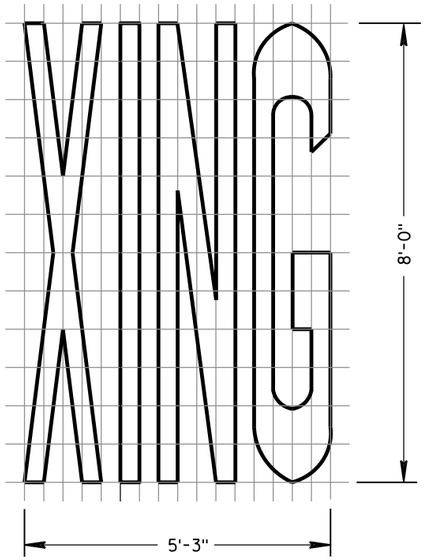
4/18/16	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MARK EER

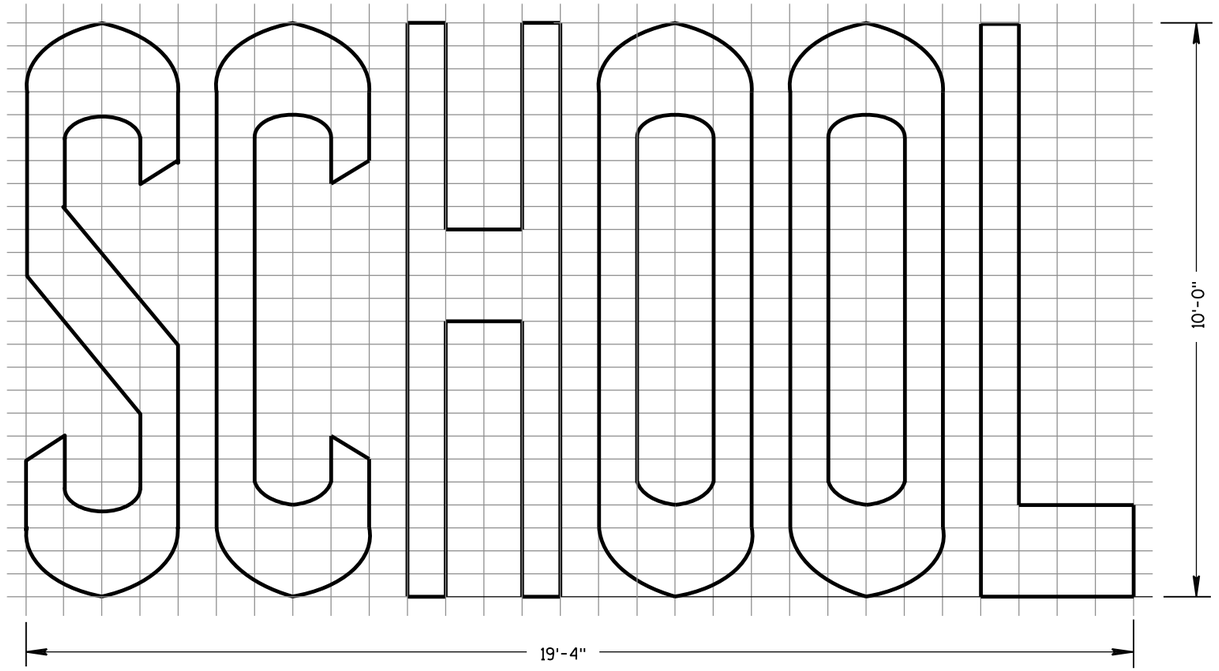
FHWA

GENERAL NOTES

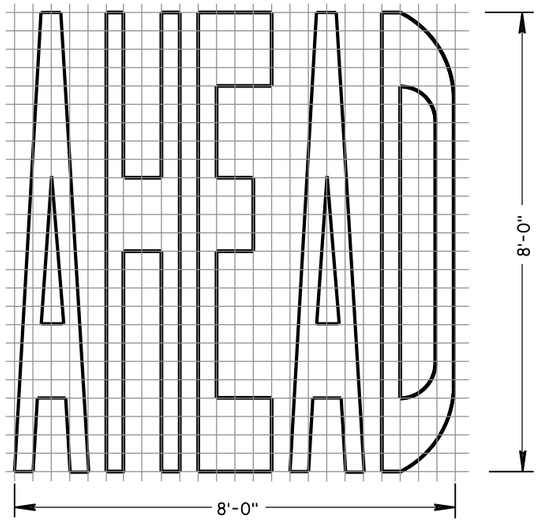
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

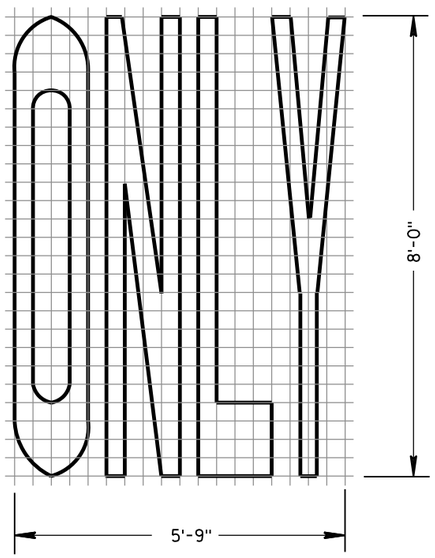


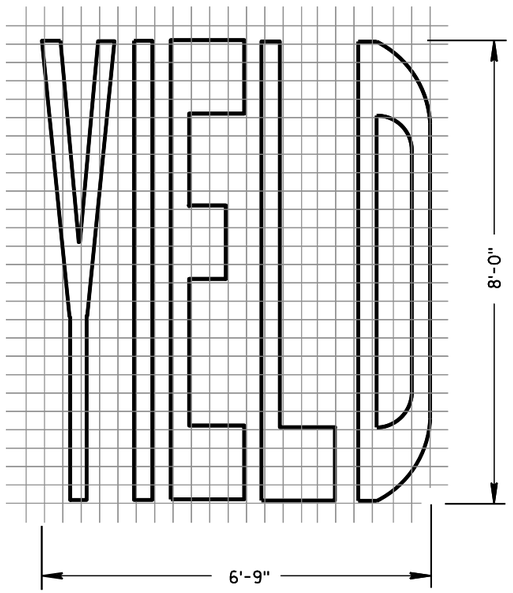


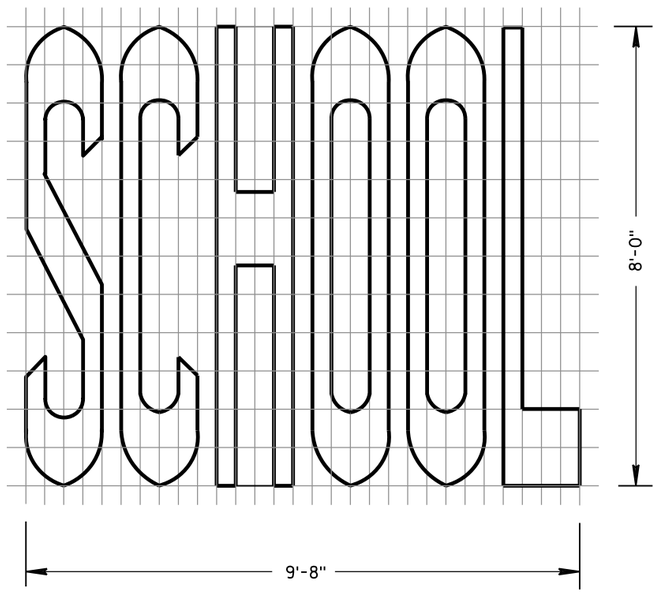


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MARK 250 EER

FHWA

6

S.D.D. 15 C 7-13b

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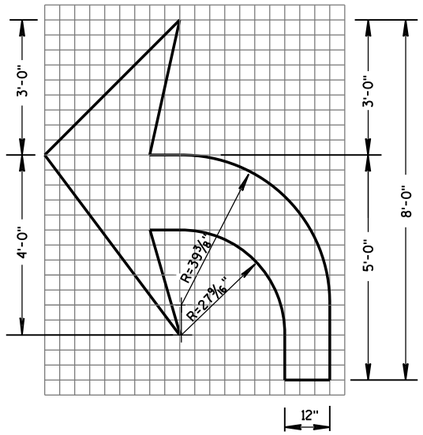
S.D.D. 15 C 7-13b

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.



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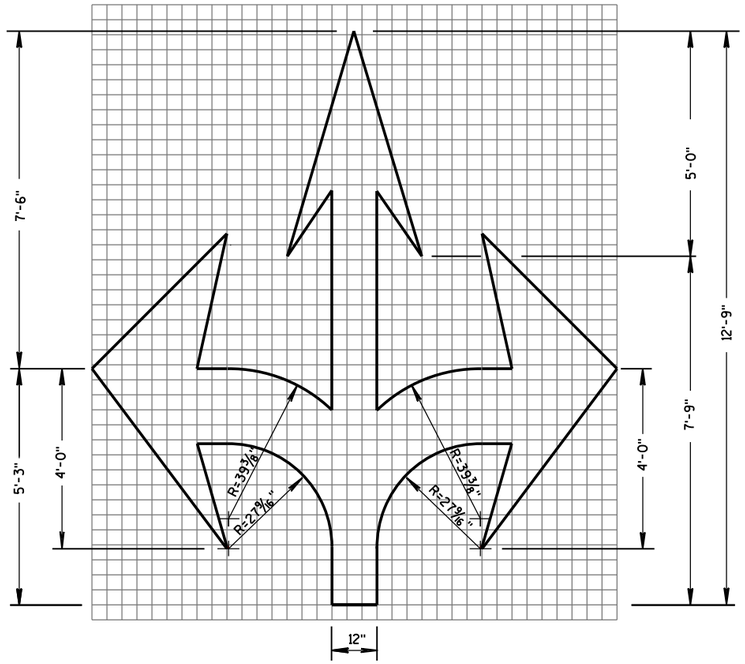

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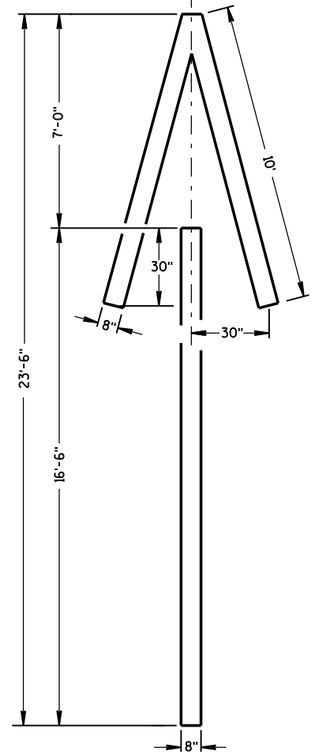

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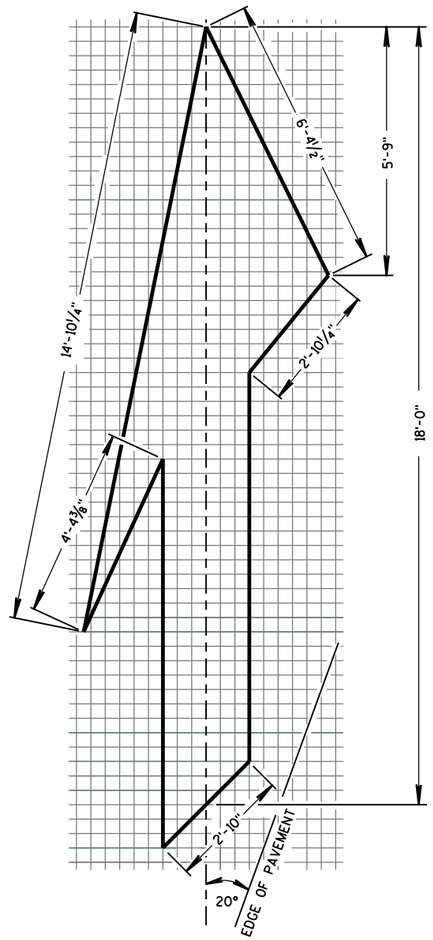
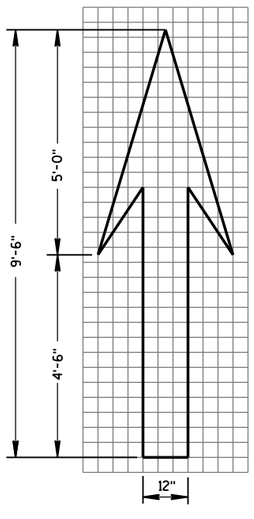
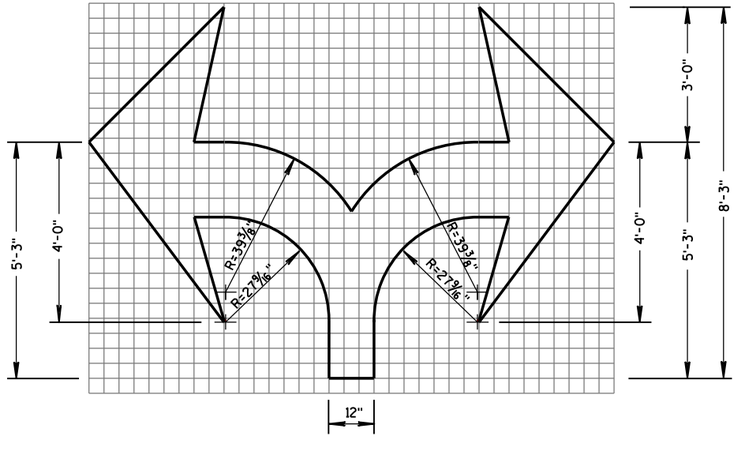


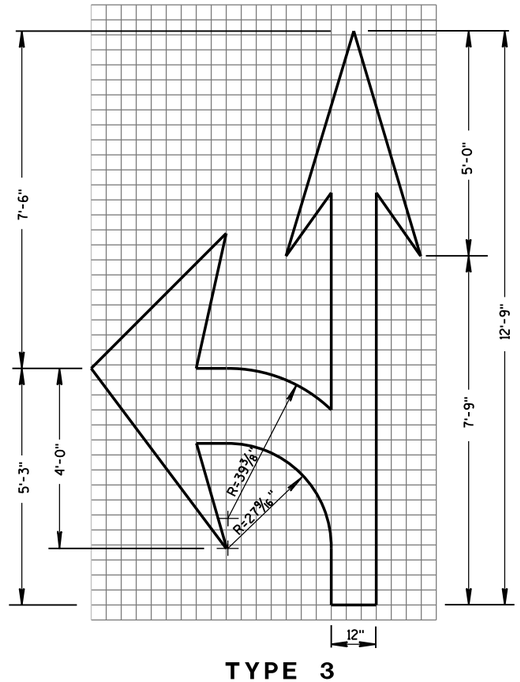
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR
ENGINEER
FHWA

6

S.D.D. 15 C 7-13c

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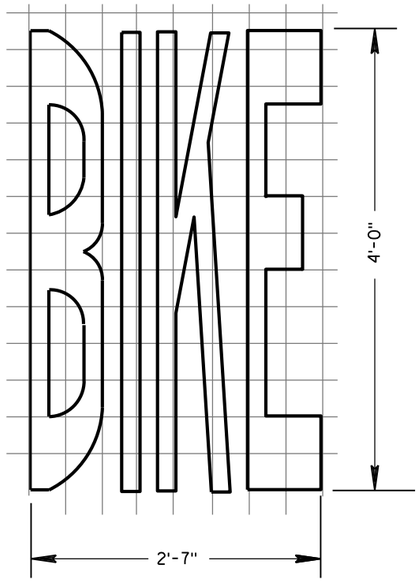
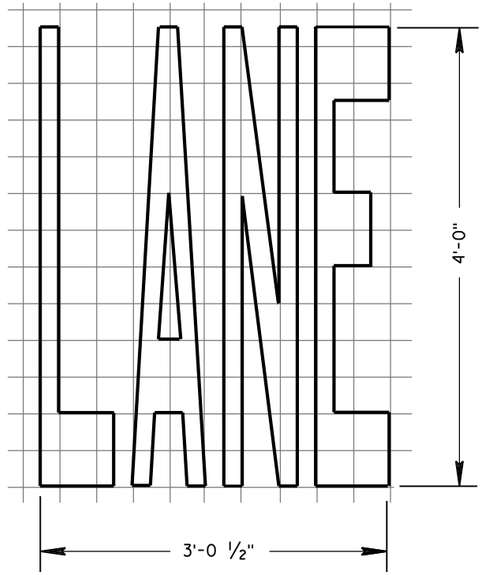
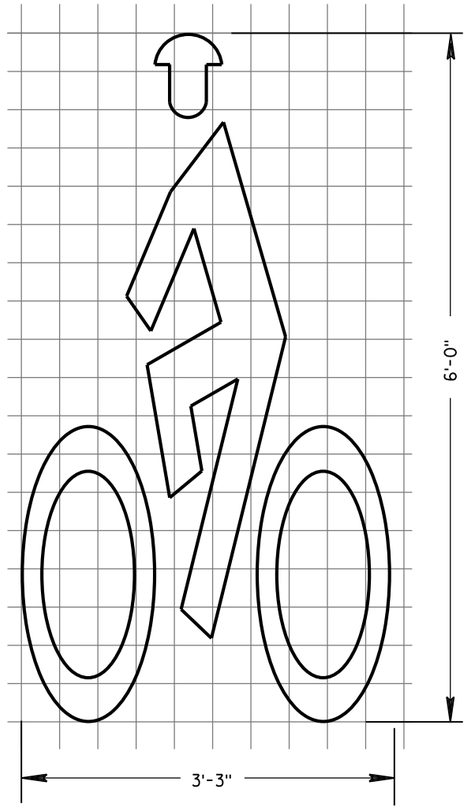
S.D.D. 15 C 7-13c

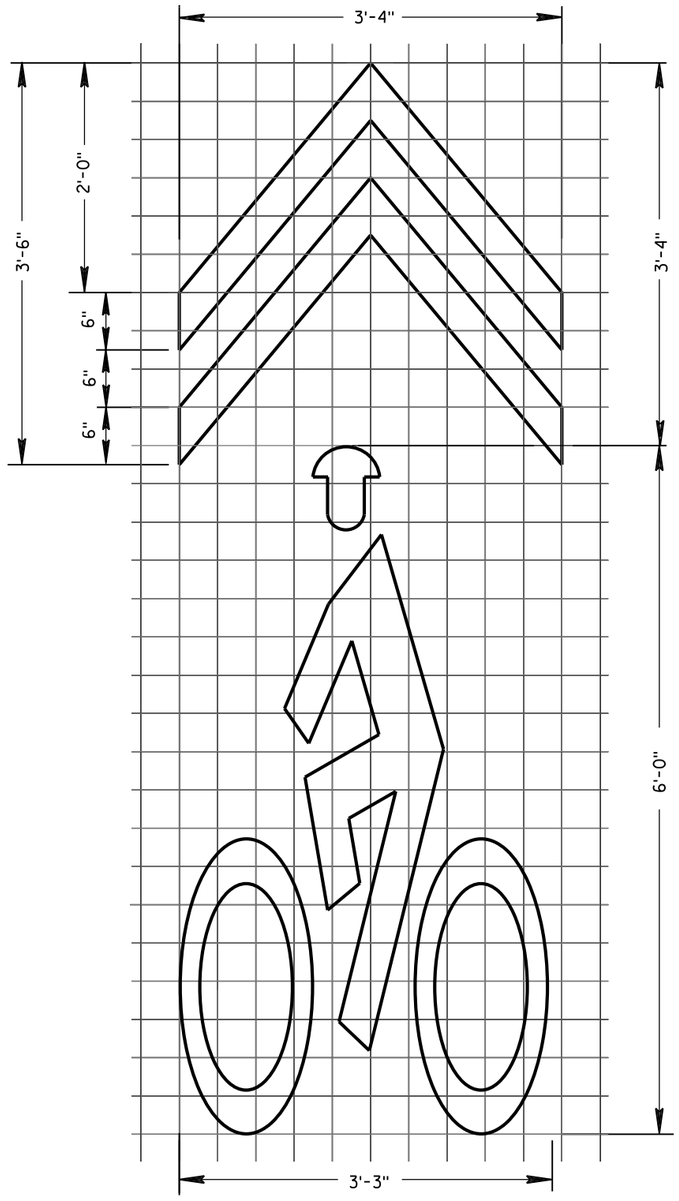




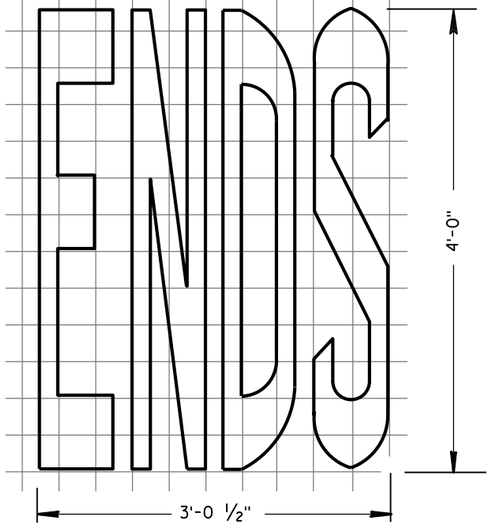
BIKE LANE WORDS



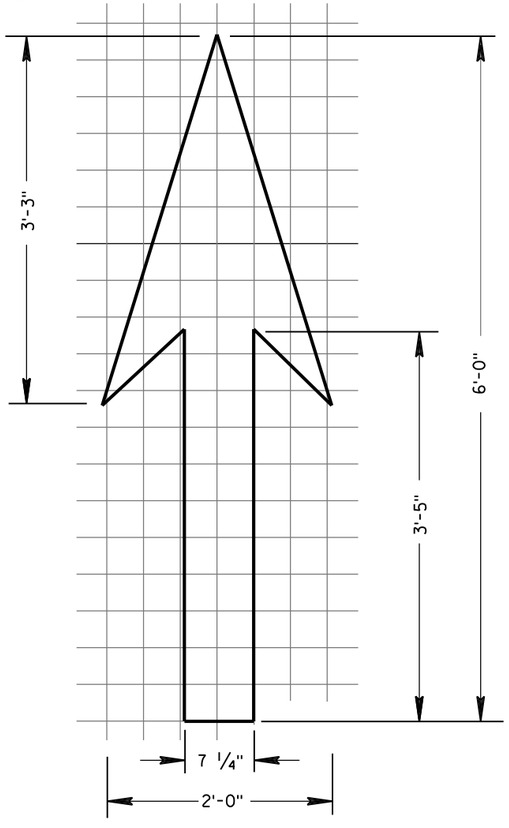
BIKE LANE SYMBOL



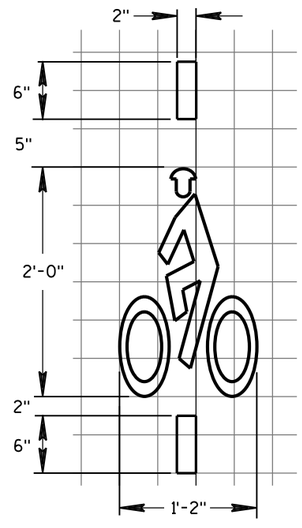
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

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 FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARK 252 EER

FHWA

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S.D.D. 15 C 7-13e

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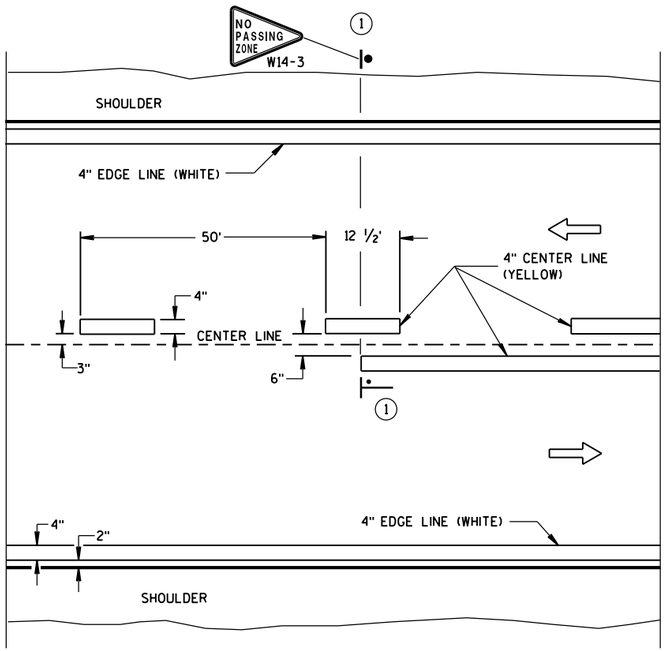
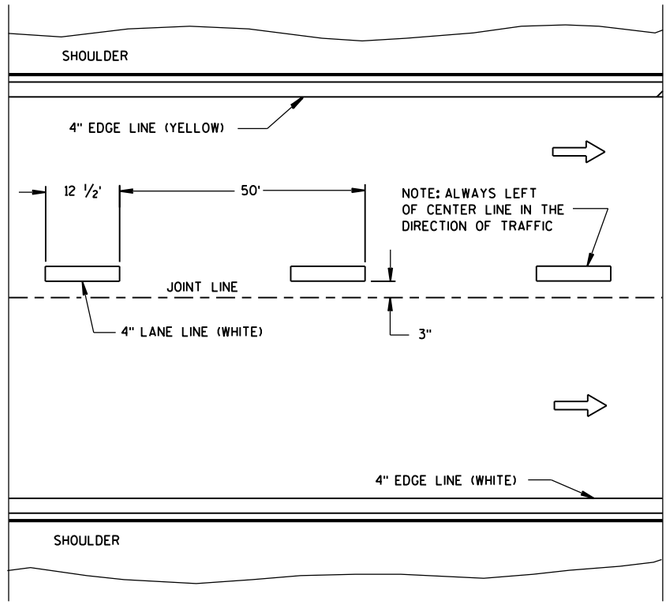
S.D.D. 15 C 7-13e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

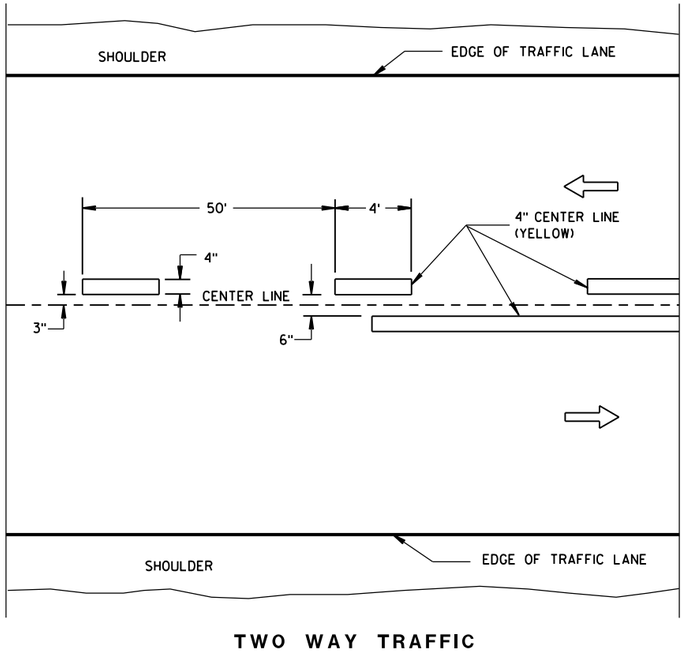
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

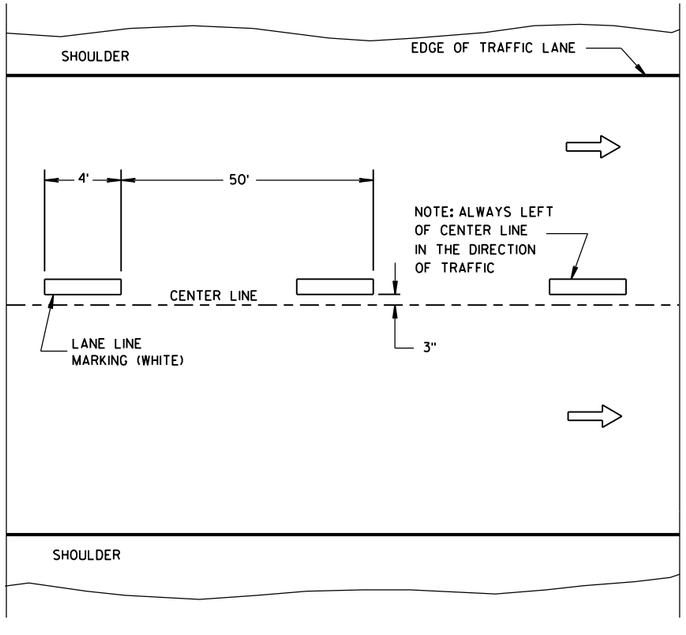
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

S.D.D. 15 C 8-17a

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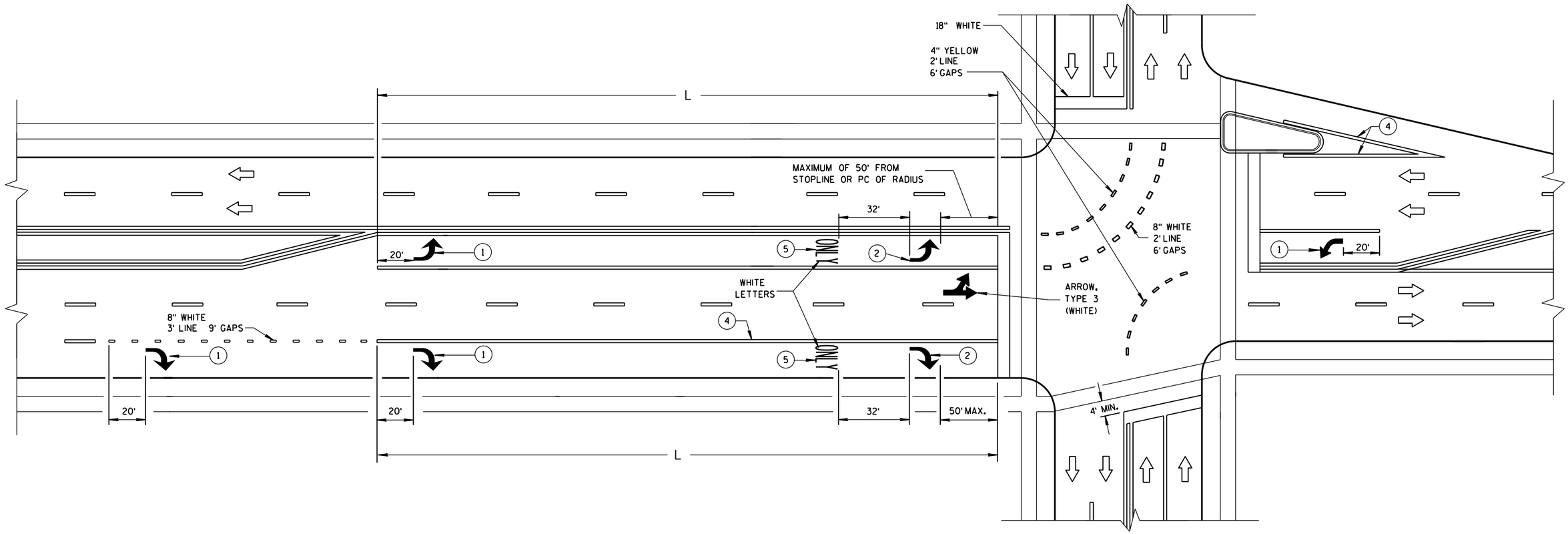
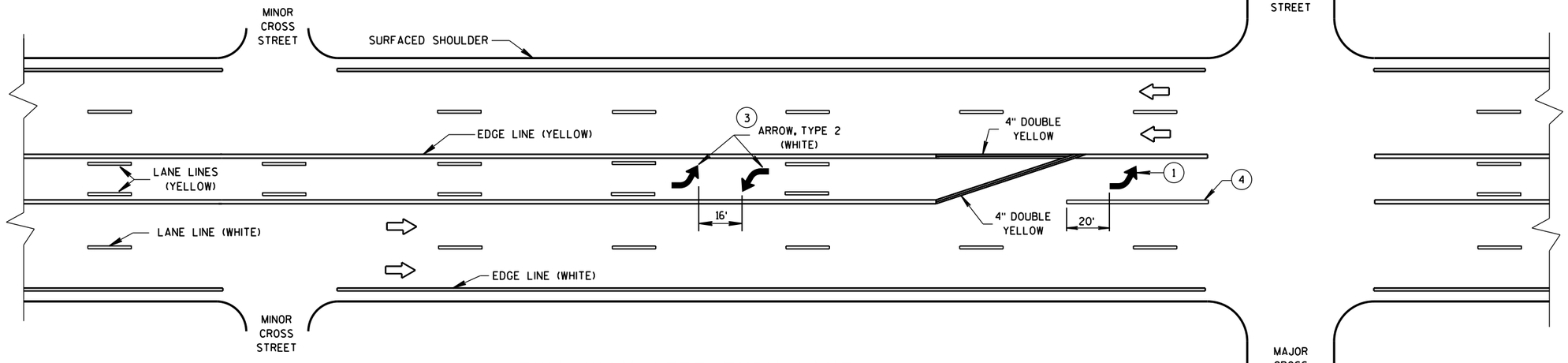
S.D.D. 15 C 8-17a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

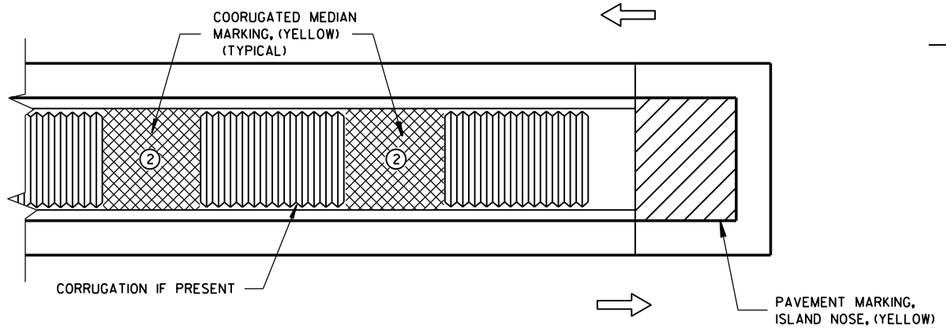
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

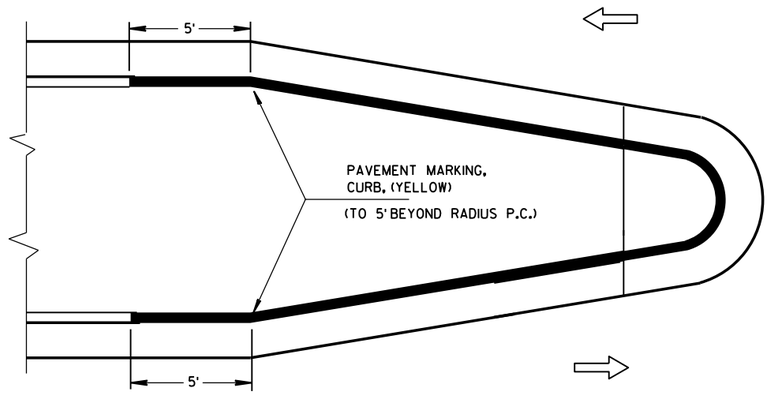
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

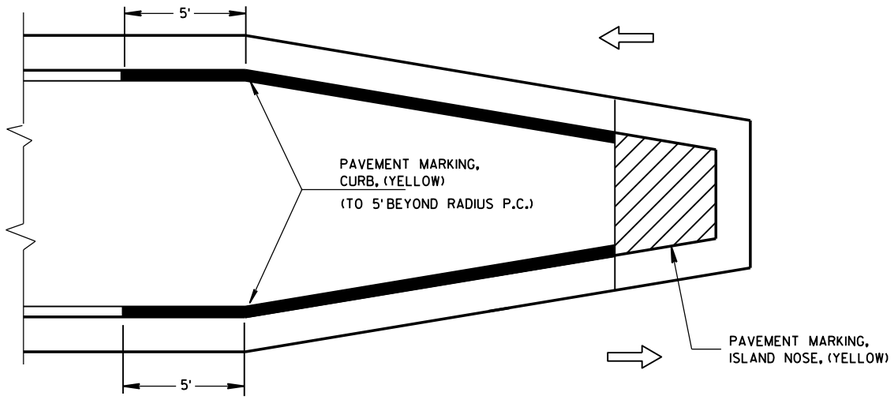
S.D.D. 15 C 8-17b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

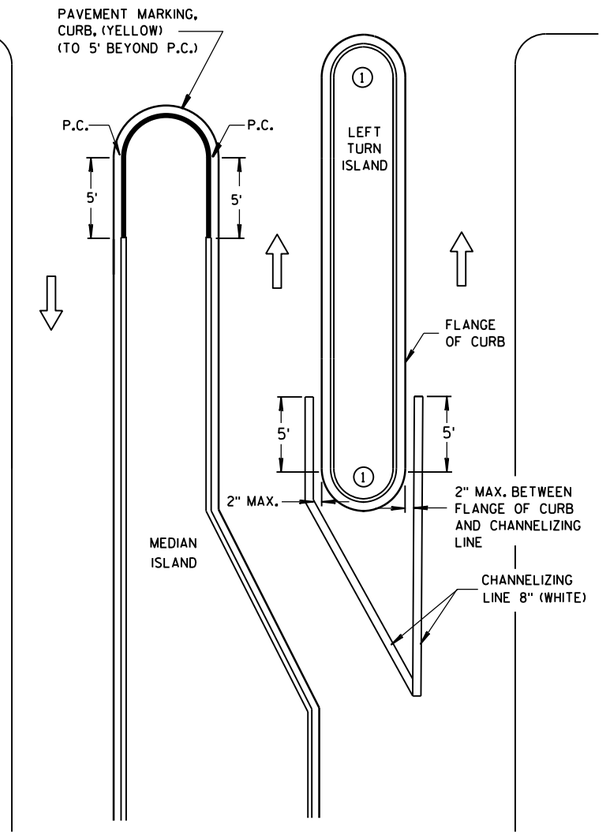


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

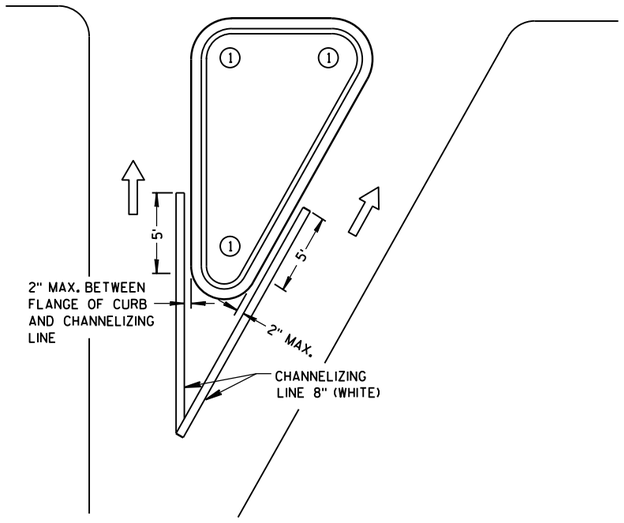


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. 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 AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

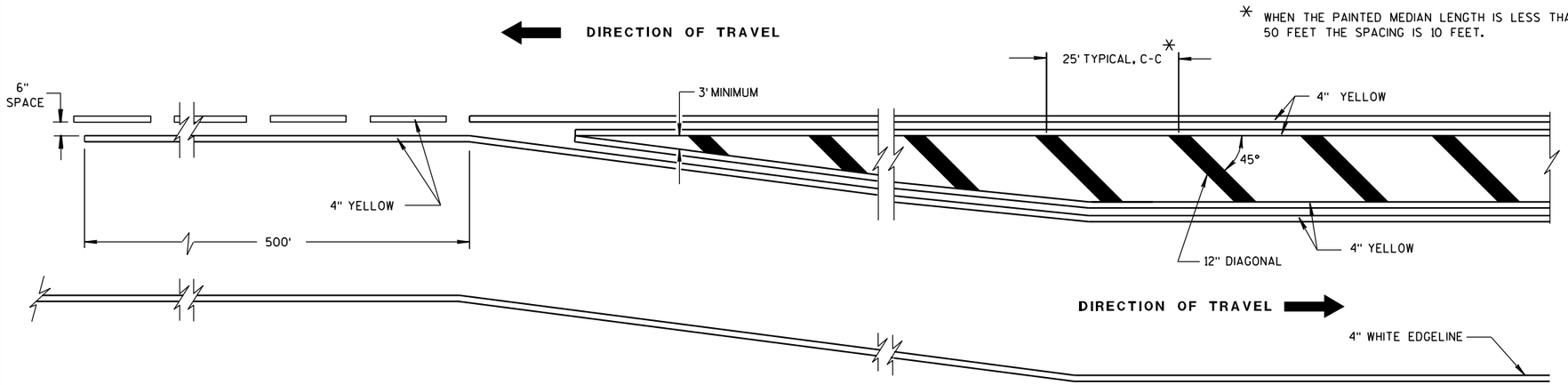
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

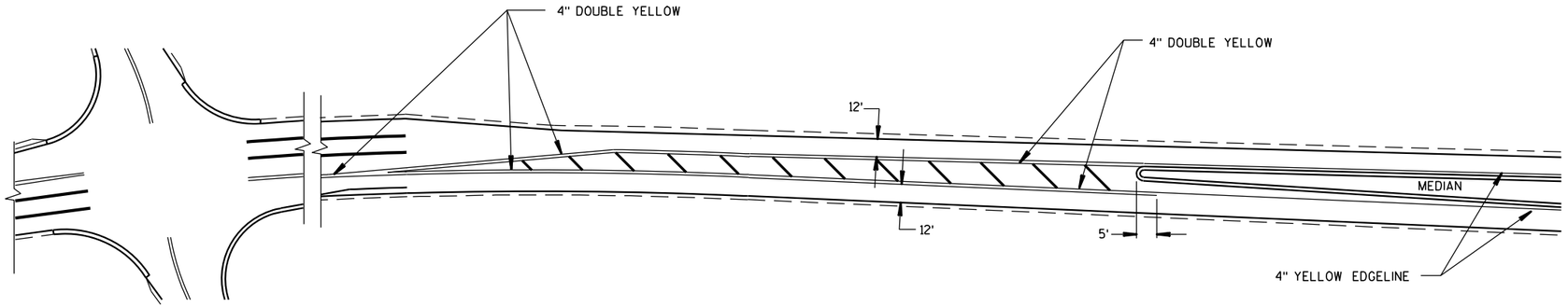
S.D.D. 15 C 8-17c



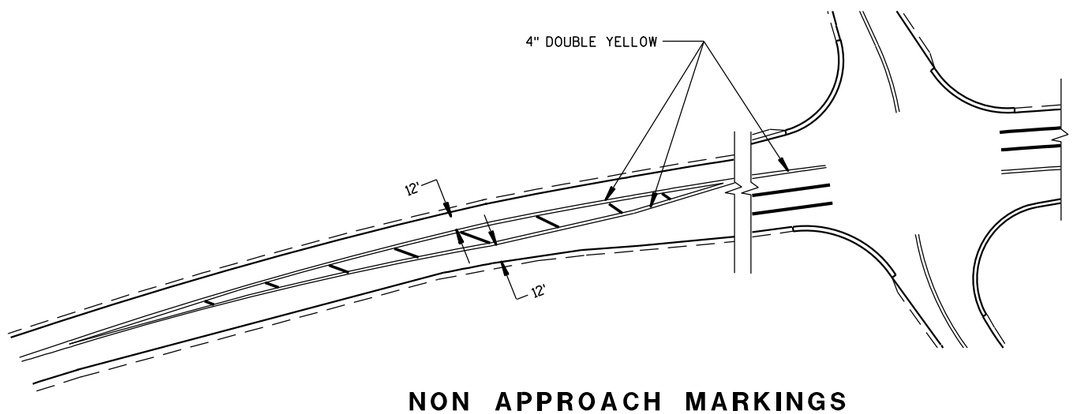
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 256 IGN
FHWA	

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S.D.D. 15 C 18-3

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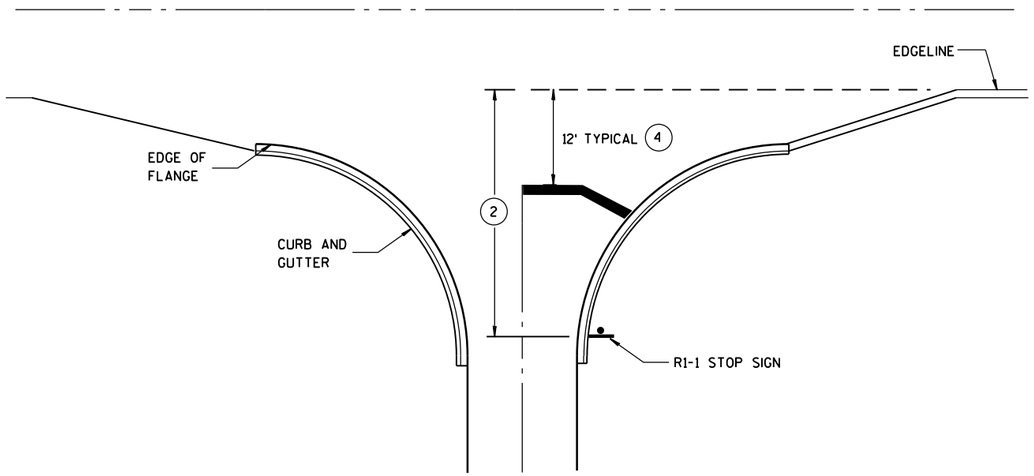
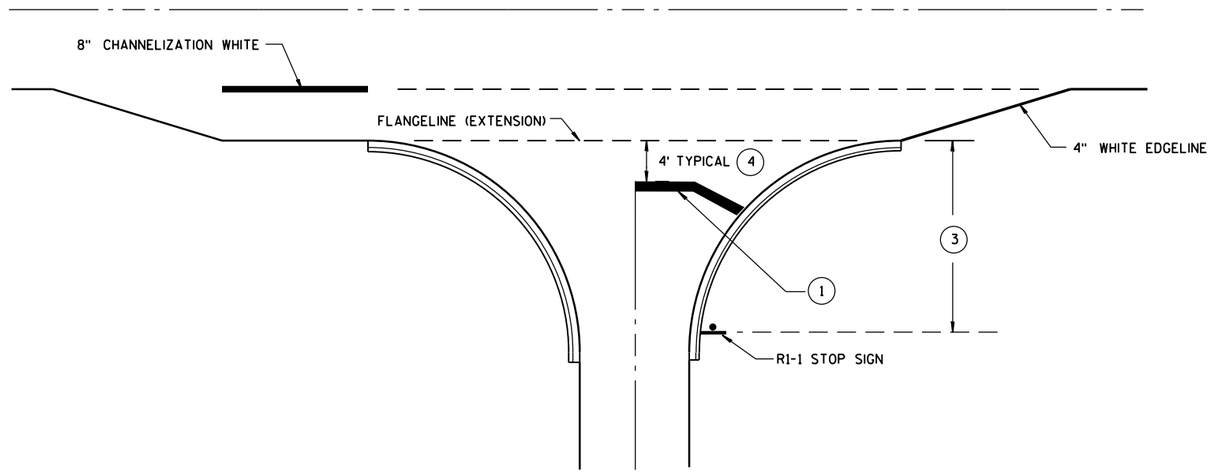
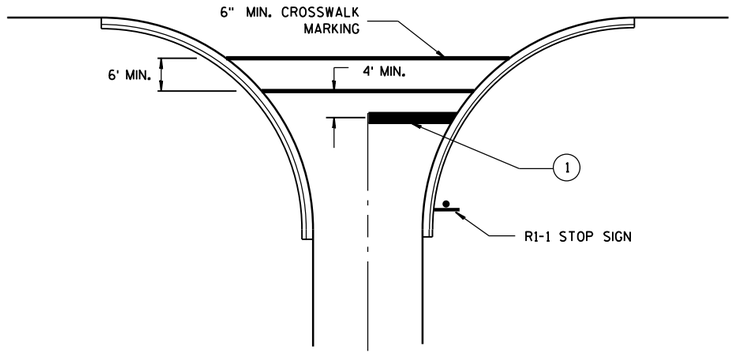
S.D.D. 15 C 18-3



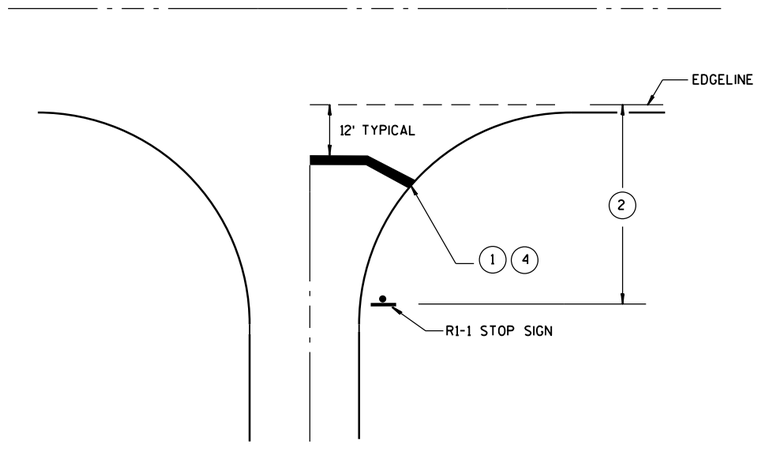
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

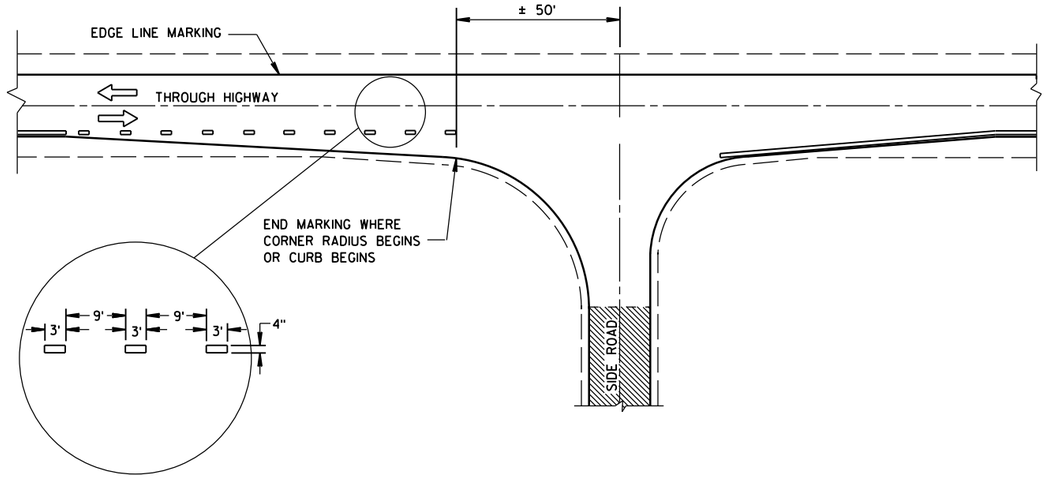
4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 257 NEER

FHWA

6

S.D.D. 15 C 33-2



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

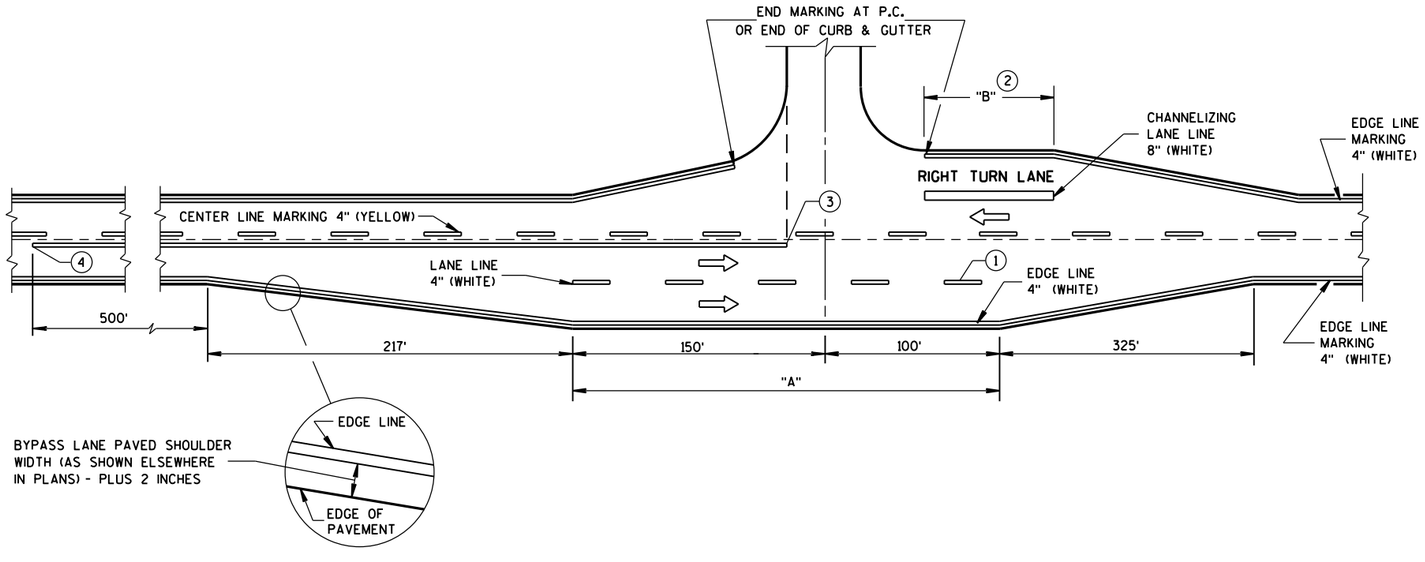
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(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.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 35-1a

LEGEND

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

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

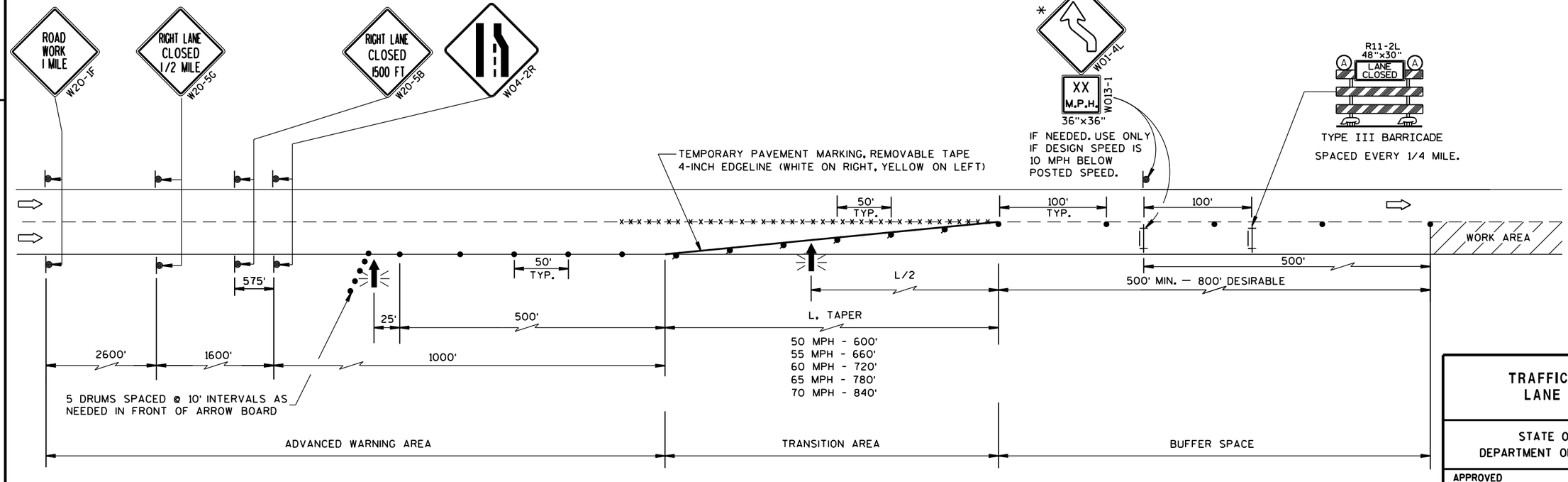
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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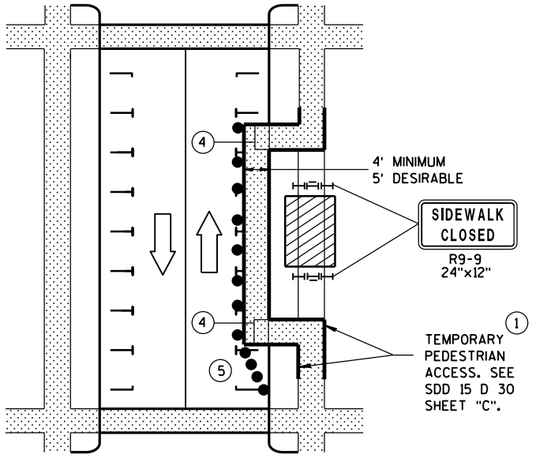
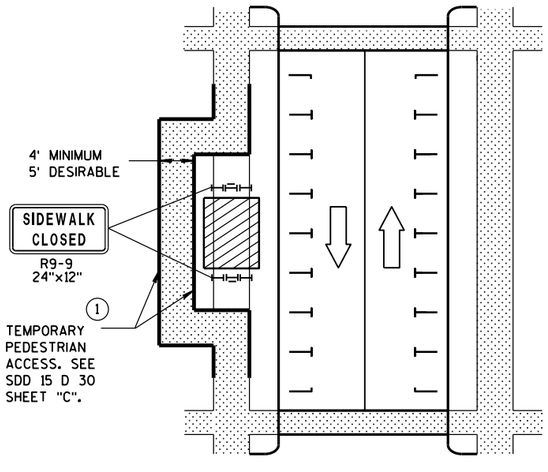
S.D.D. 15 D 12-6a

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

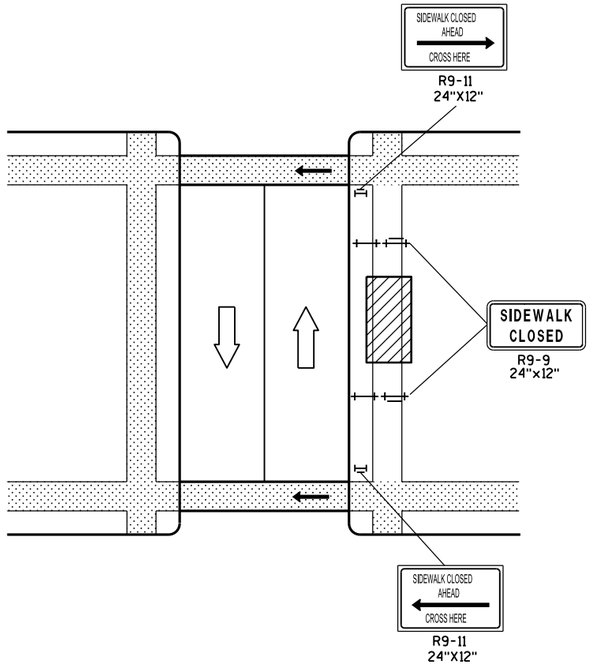


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

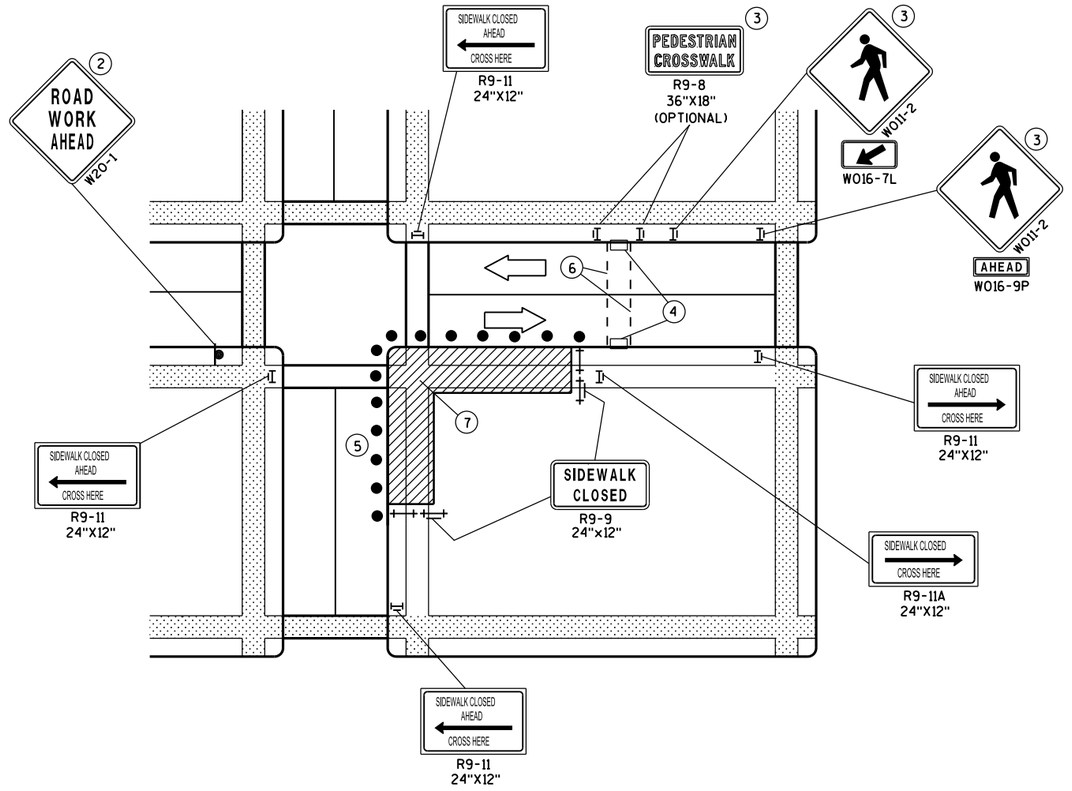
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 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

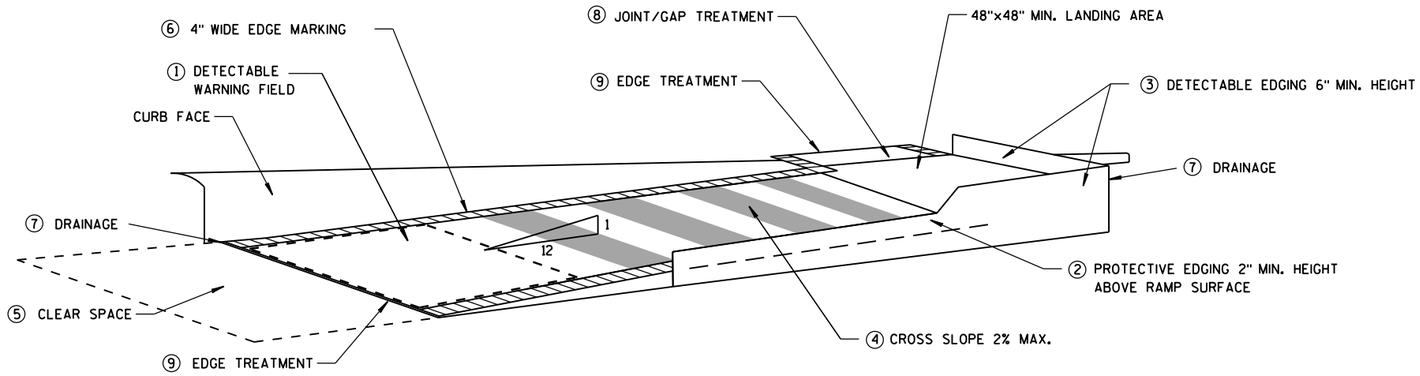
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 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"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

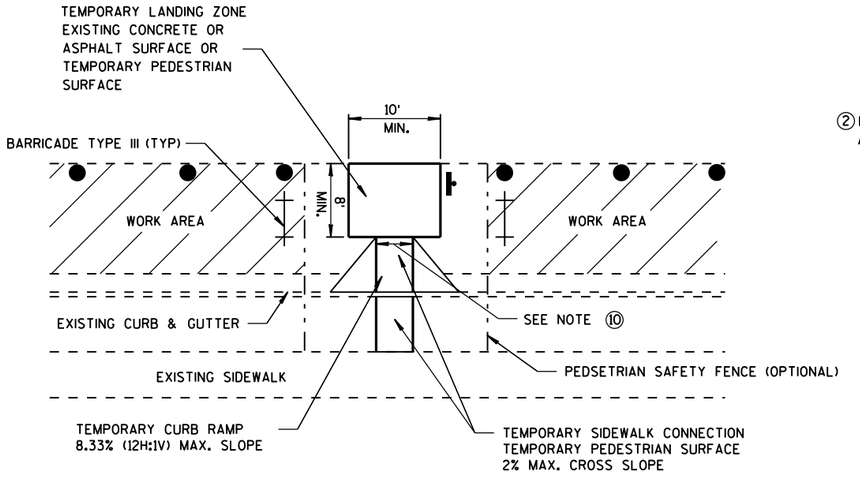
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

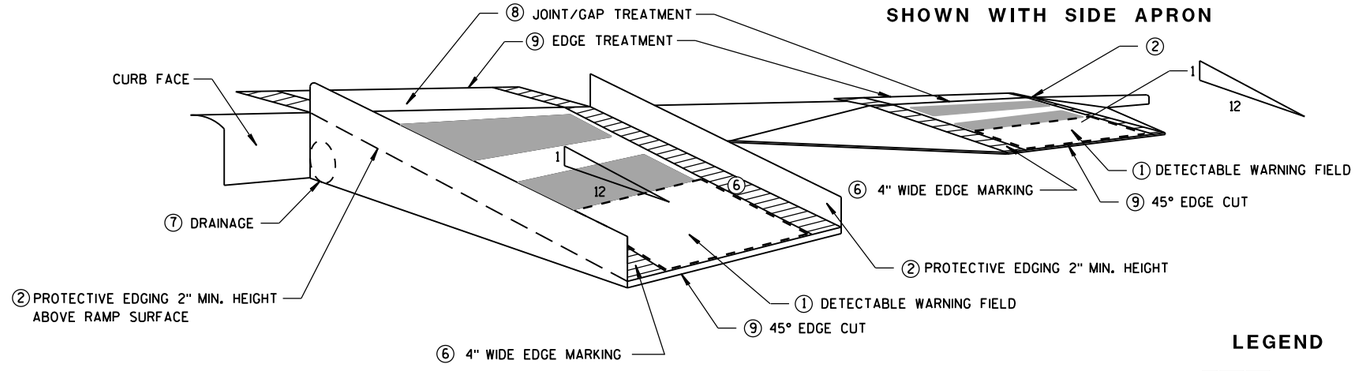
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

SHOWN WITH SIDE APRON

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

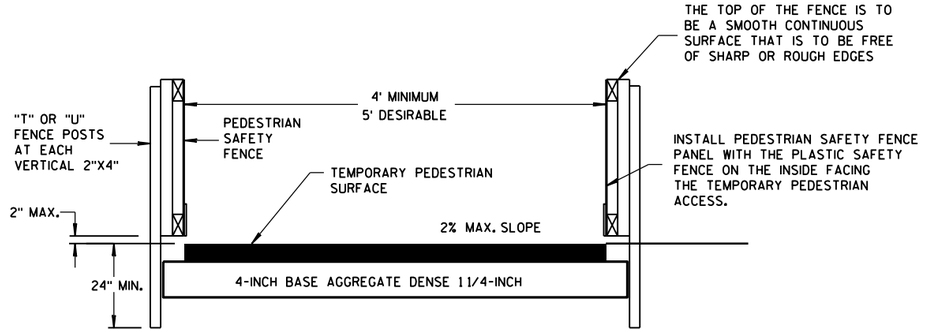
June 2016 — DATE

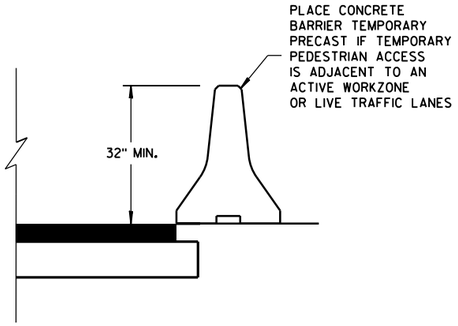
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6

S.D.D. 15 D 30-3b

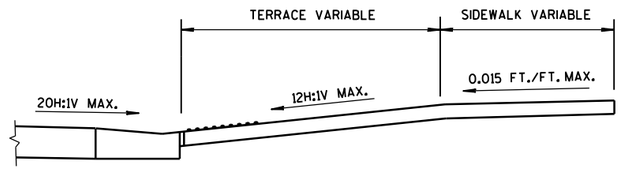




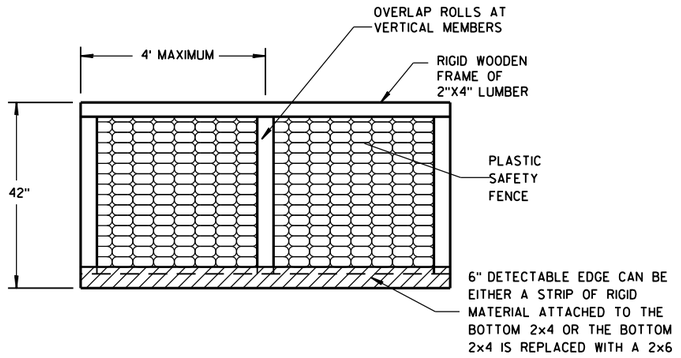
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

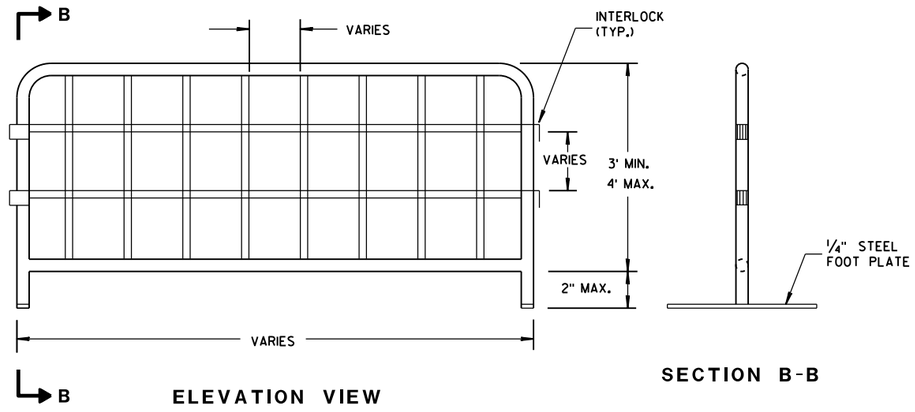
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



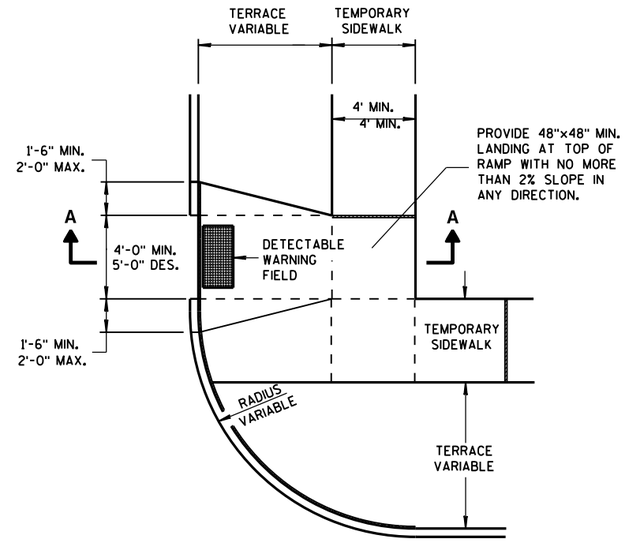
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

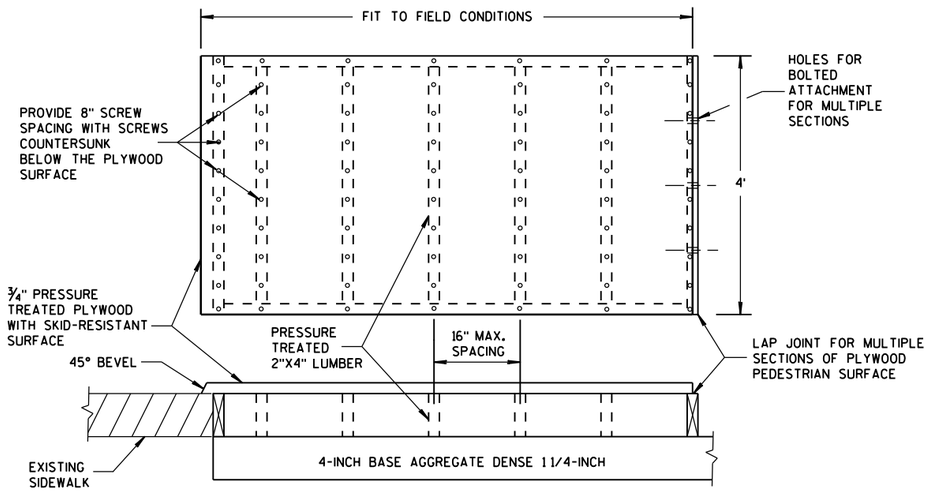
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



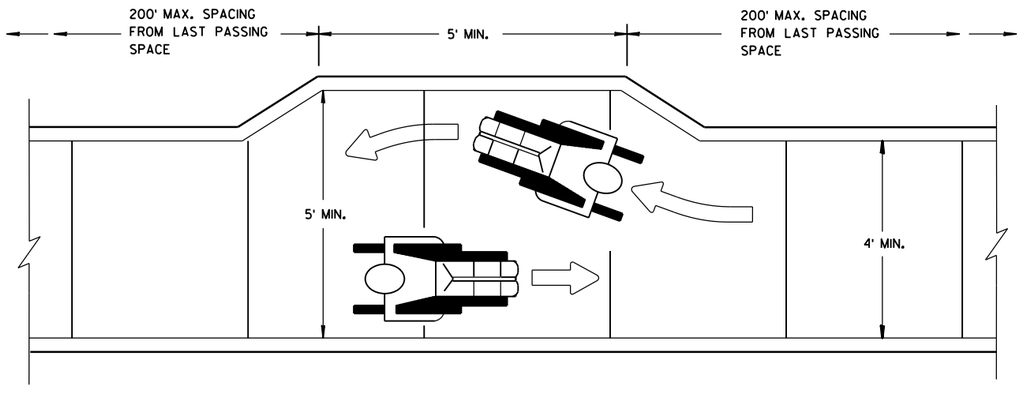
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

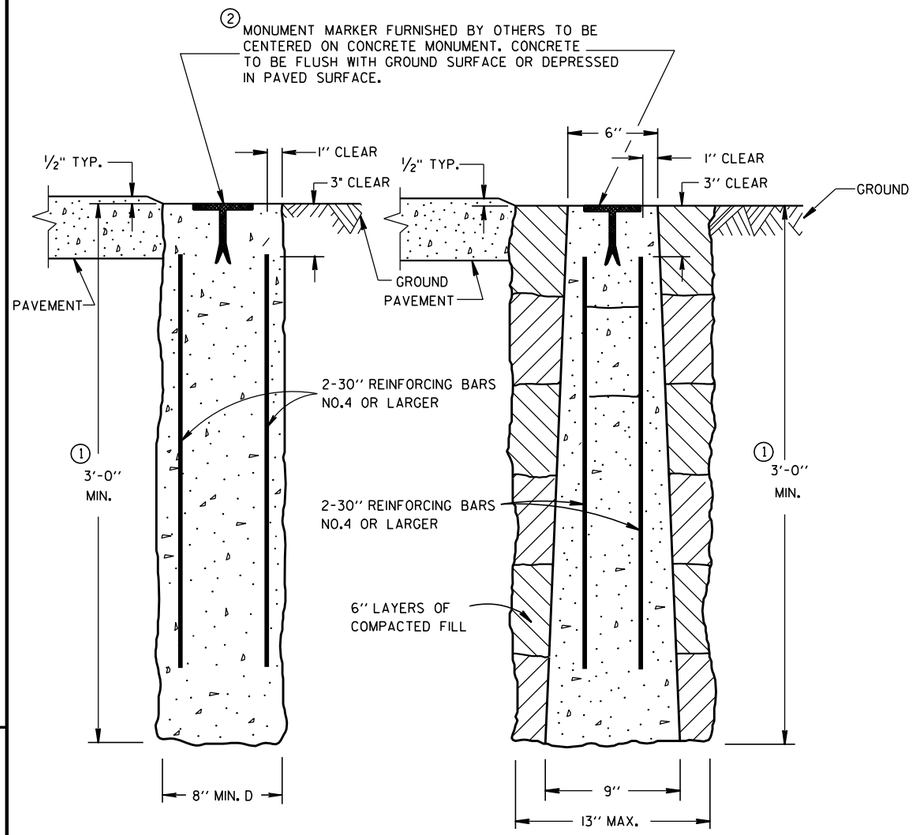
APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON IC
SAFETY ENGIN
FHWA

6

S.D.D. 15 D 30-3c

6

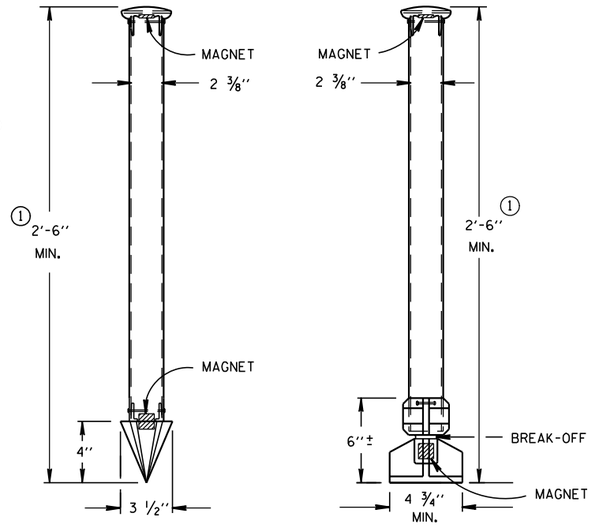
S.D.D. 15 D 30-3c



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

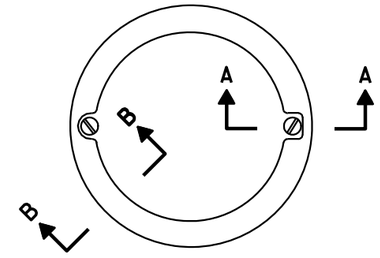
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

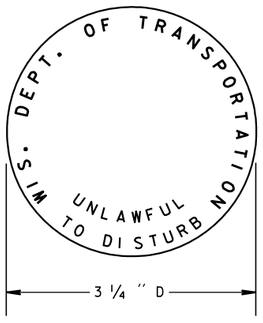
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

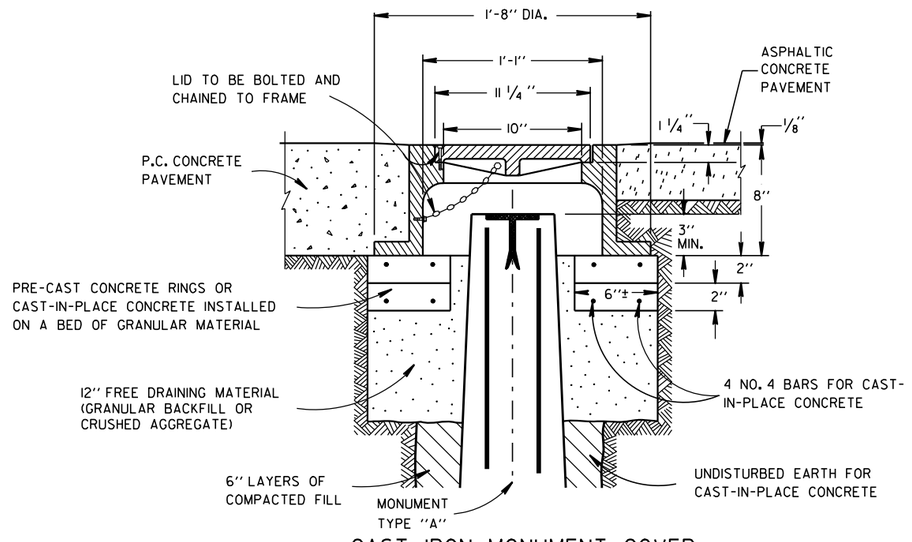
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

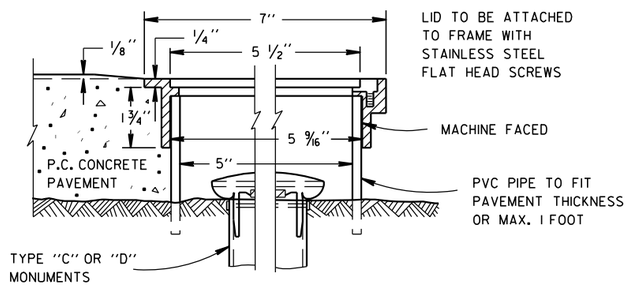


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

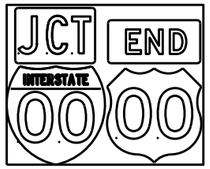
S.D.D. 16 A 1-6

6

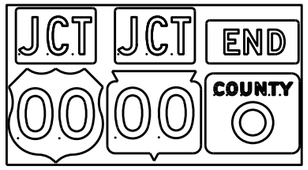
S.D.D. 16 A 1-6

TYPICAL ASSEMBLIES

J1-1

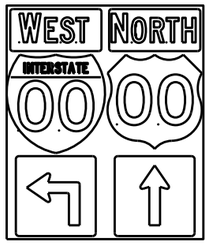


J1-2

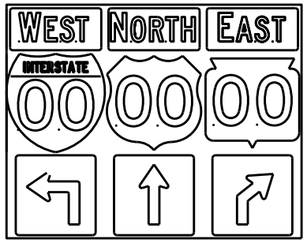


J1-3

J2-1



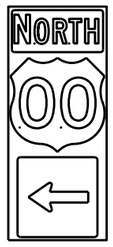
J2-2



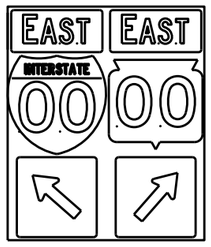
J2-3

JV

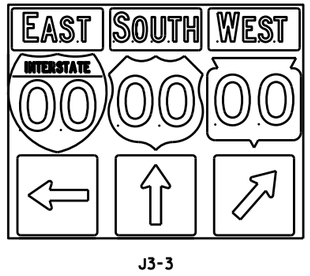
(Typical Vertical J-Assembly
See Note 10 and 11)



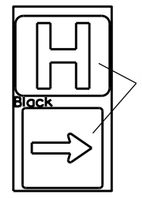
J3-1



J3-2

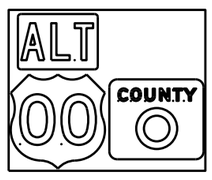


J3-3

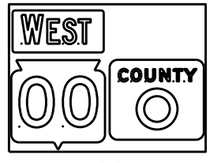


JH-1

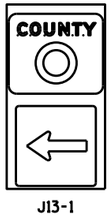
J4-1



J4-2



J4-2



J13-1

J12-1

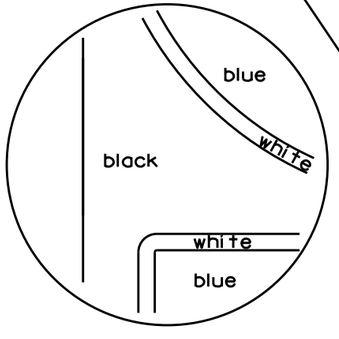
J32-1

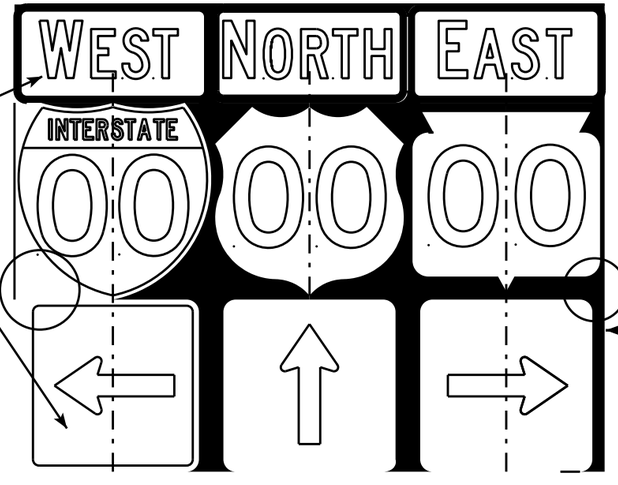
J33-1

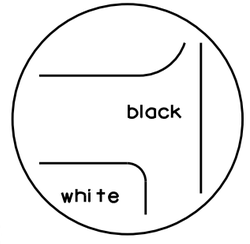
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

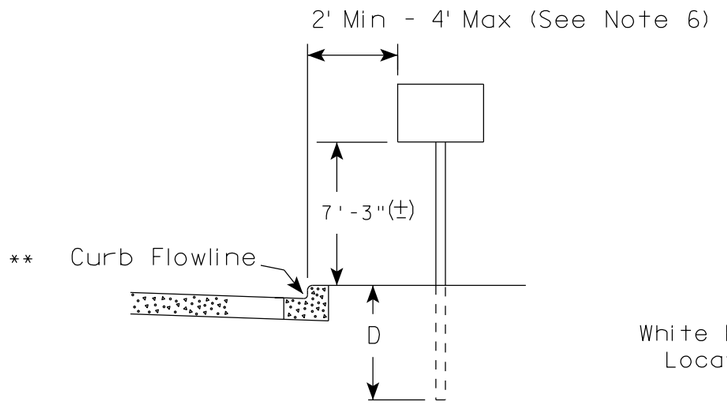
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

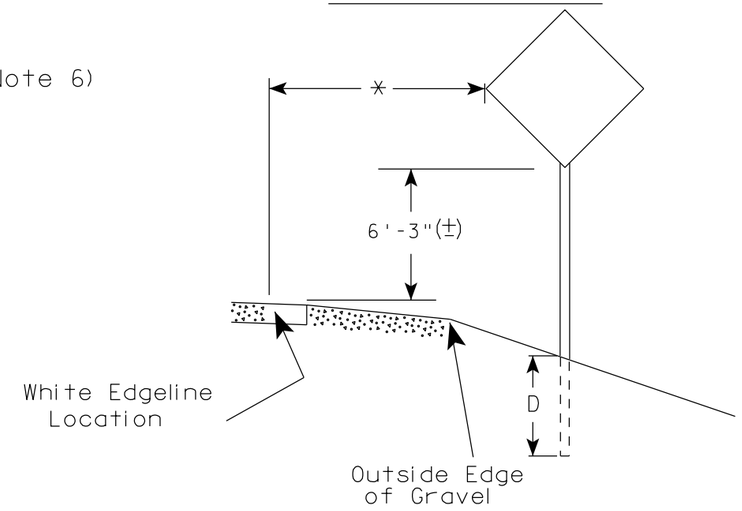
DATE 2/06/14 PL... A2-1S.8

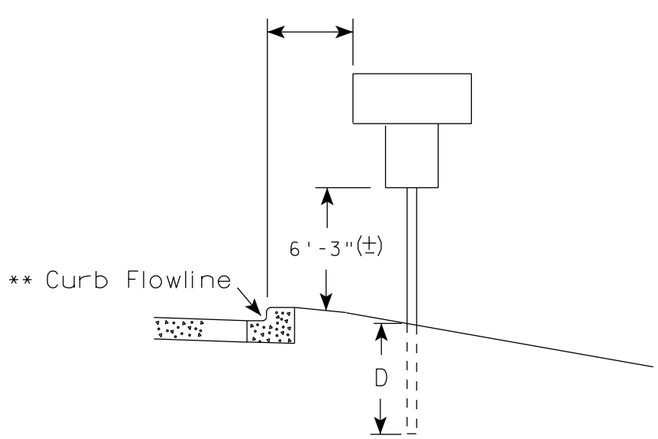
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	SIGNING DETAIL	SHEET NO: E

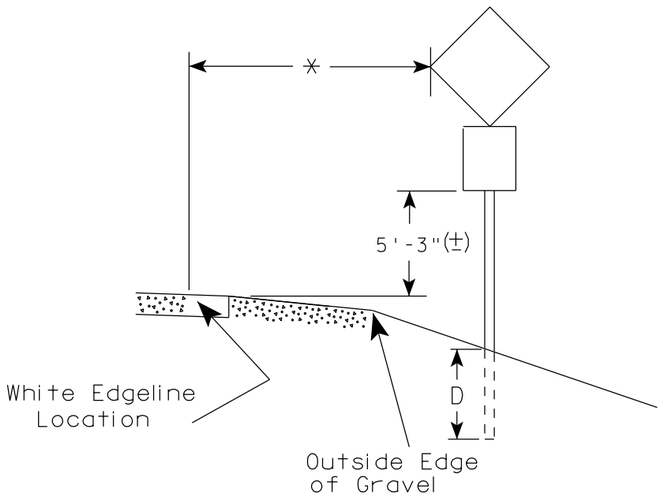
URBAN AREA



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 barrier wall, see A4-10 sign plate.
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 J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. 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), 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" (±).

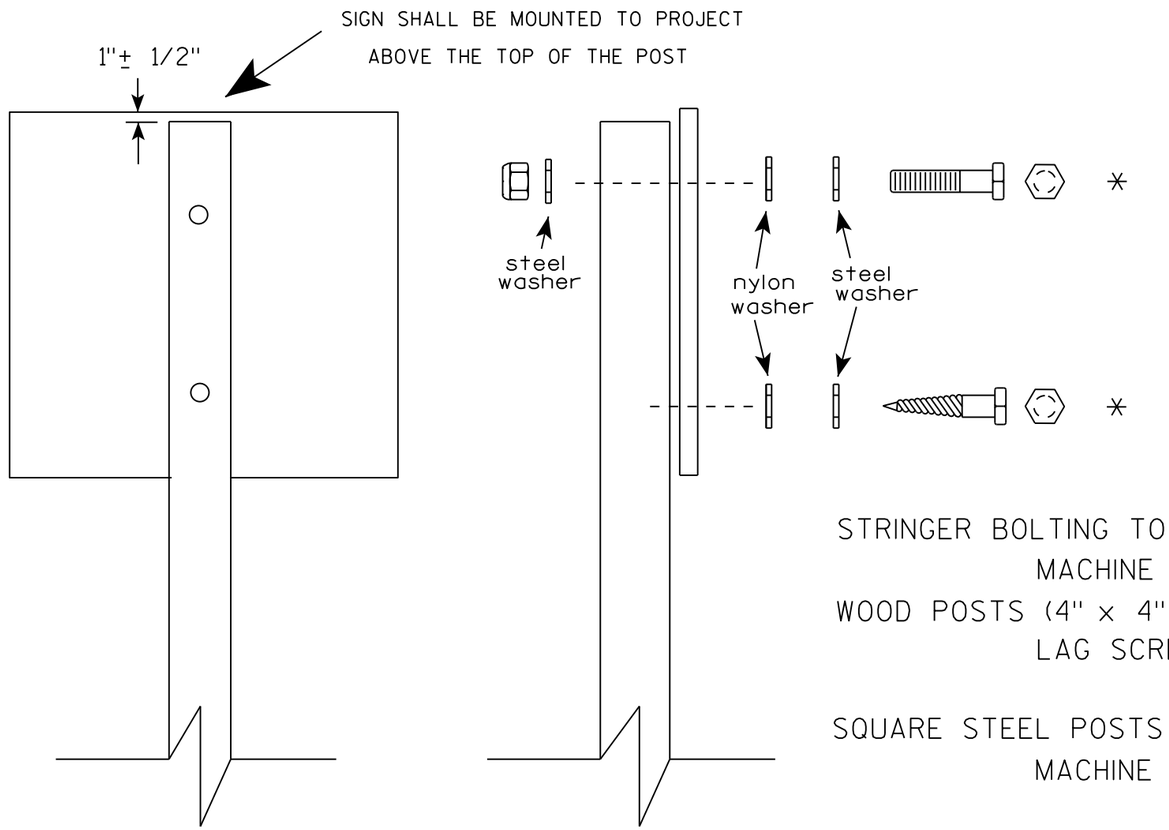
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	SIGNING DETAIL	SHEET NO:	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 4" or 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

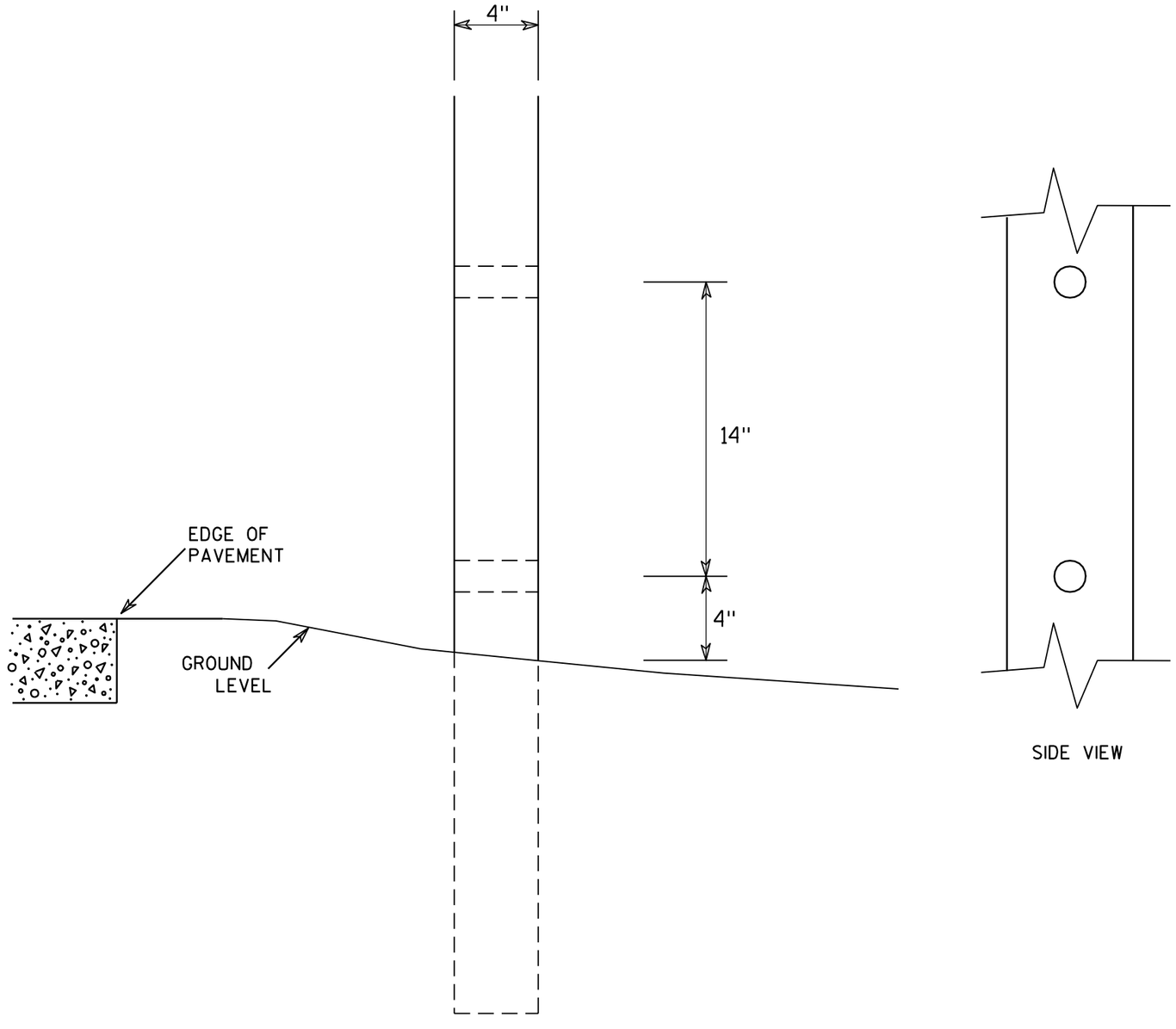
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	SIGNING DETAIL	SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$



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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

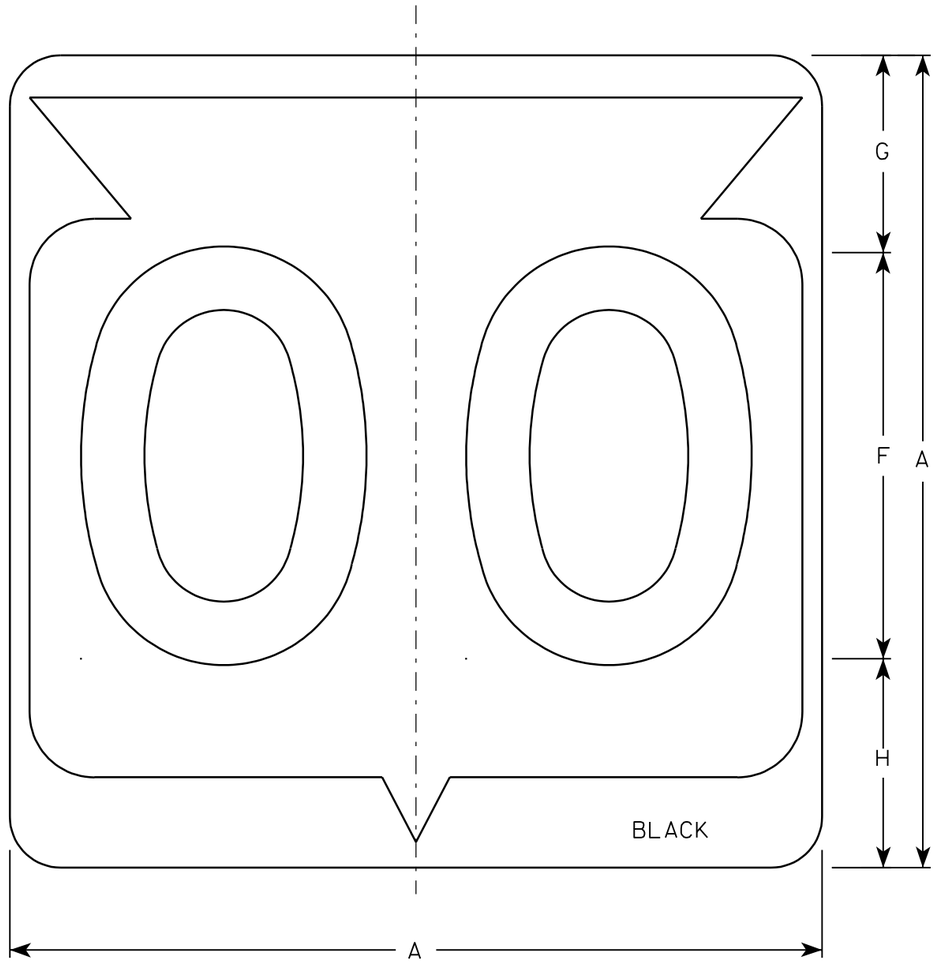
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	SIGNING DETAIL	SHEET NO: 267	E

FILE NAME : C:\Users\Projects\tr_stdplate\A411.DGN PLOT DATE : 10-NOV-2005 10:09 PLOT BY : DOTSJA PLOT NAME : PLOT SCALE : 6.207338:1.000000

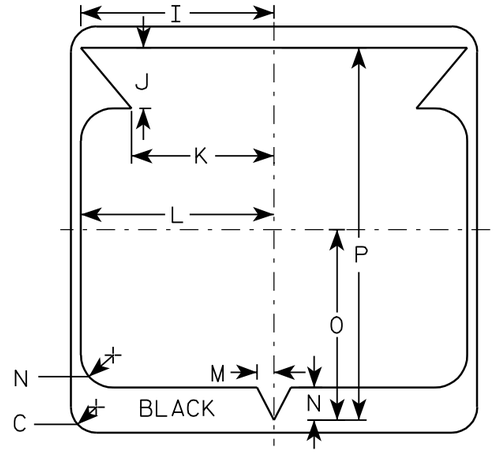
WISDOT/CADDS SHEET 42



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

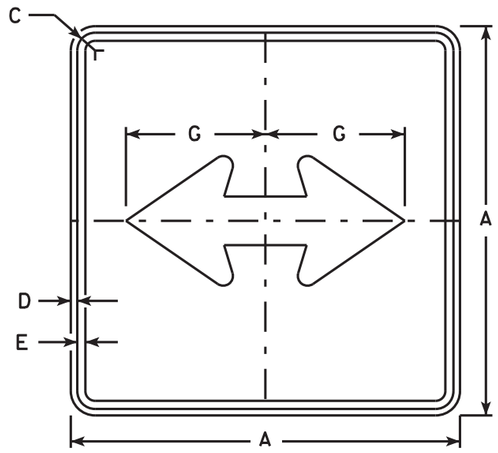
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

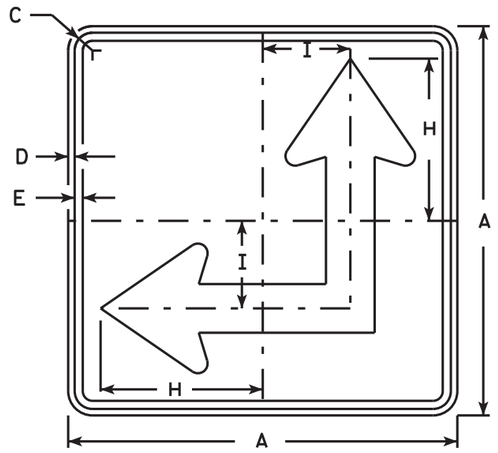
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

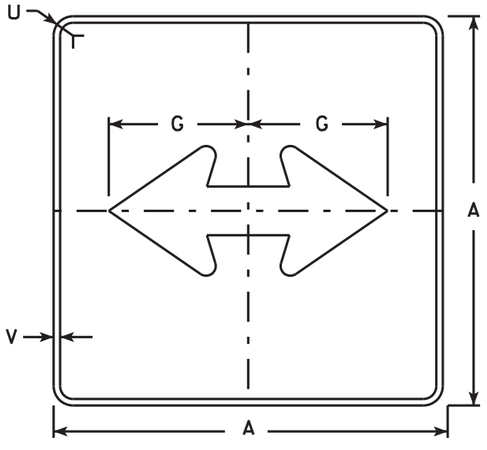
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	SIGNING DETAIL	SHEET NO: 268	E



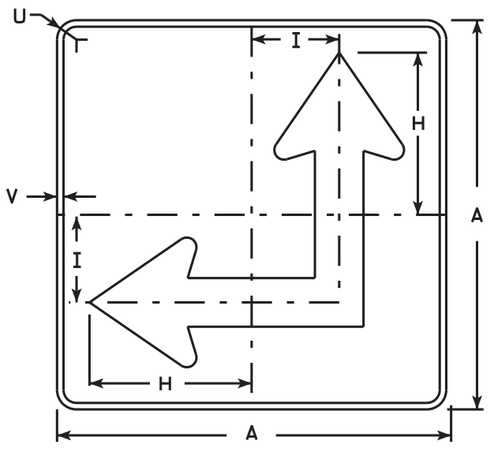
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



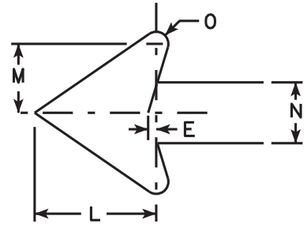
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
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. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



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	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO: 2415-00-70 | HWY: LOCAL STREET | COUNTY: MILWAUKEE | SIGNING DETAIL | SHEET NO. 269 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 15-OCT-2015 13:20 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 18.607113:1.000000 WISDOT/CADDS SHEET 42

DIVISION 1 - S. 60TH STREET

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
165+69 AH	16568.53	0	52.71	1.56	0	0	0	0	0
166+00	16600.00	31	63.04	2.47	67	2	67	3	65
166+50	16650.00	50	62.53	3.09	116	5	184	9	174
167+00	16700.00	50	63.70	1.69	117	4	301	15	286
167+50	16750.00	50	64.61	2.27	119	4	419	19	400
168+00	16800.00	50	56.59	2.35	112	4	532	25	507
168+50	16850.00	50	57.19	2.32	105	4	637	30	607
169+00	16900.00	50	53.53	3.30	103	5	740	37	703
169+50	16950.00	50	53.23	2.42	99	5	838	43	795
170+00	17000.00	50	56.10	2.13	101	4	940	49	891
170+50	17050.00	50	63.59	0.00	111	2	1050	51	999
171+00	17100.00	50	53.30	2.03	108	2	1159	53	1105
171+50	17150.00	50	50.18	1.77	96	4	1254	58	1197
172+00	17200.00	50	39.99	7.66	83	9	1338	69	1269
172+50	17250.00	50	97.40	0.00	127	7	1465	78	1388
173+00	17300.00	50	82.78	0.69	167	1	1632	78	1554
173+50	17350.00	50	81.65	0.89	152	1	1784	80	1704
174+00	17400.00	50	80.89	1.17	151	2	1935	83	1852
174+50	17450.00	50	69.18	0.80	139	2	2074	85	1989
175+00	17500.00	50	55.76	0.64	116	1	2189	87	2103
175+50	17550.00	50	54.46	1.46	102	2	2291	89	2202
176+00	17600.00	50	52.74	1.22	99	2	2391	92	2299
176+50	17650.00	50	56.37	2.57	101	4	2492	97	2395
177+00	17700.00	50	67.50	0.36	115	3	2606	100	2507
177+50	17750.00	50	64.17	0.90	122	1	2728	101	2627
178+00	17800.00	50	57.65	0.81	113	2	2841	103	2738
178+50	17850.00	50	46.16	2.71	96	3	2937	107	2830
179+00	17900.00	50	41.88	0.00	82	3	3019	111	2908
179+50	17950.00	50	94.15	0.00	126	0	3145	111	3034
180+00	18000.00	50	61.35	2.04	144	2	3289	113	3176
180+50	18050.00	50	62.66	0.50	115	2	3404	116	3288
181+00 BK	18100.00	50	53.28	0.37	107	1	3511	117	3394
				COLUMN TOTALS	3511	93			

NOTES:	
1 - CUT	CUT DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SUMMARY SHEET.
2 - FILL	DOES NOT INCLUDE PAVEMENT EXC VOLUME. SALVAGED/UNUSABLE PAVMENT MATERIAL IS CALCULATED ON THE THE SUMMARY SHEET.
3 - MASS ORDINATE	[(CUT) - ((FILL) * FILL FACTOR)]

DIVISION 2 - S. 60TH STREET

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
165+69 AH	16568.53	0	44.67	0.57	0	0	0	0	0
166+00	16600.00	31	44.72	1.32	52	1	52	1	51
166+50	16650.00	50	54.65	0.27	92	1	144	3	141
167+00	16700.00	50	47.04	1.31	94	1	238	5	233
167+50	16750.00	50	51.62	1.53	91	3	330	8	321
168+00	16800.00	50	54.71	0.00	98	1	428	10	418
168+50	16850.00	50	51.68	0.00	99	0	527	10	516
169+00	16900.00	50	46.95	2.64	91	2	618	13	605
169+50	16950.00	50	57.34	0.97	97	3	714	17	697
170+00	17000.00	50	63.15	0.60	112	1	826	19	807
170+50	17050.00	50	75.94	0.52	129	1	955	20	934
171+00	17100.00	50	84.44	1.14	148	2	1103	22	1081
171+50	17150.00	50	75.89	1.10	148	2	1252	25	1227
172+00	17200.00	50	66.86	2.90	132	4	1384	30	1354
172+50	17250.00	50	84.66	0.00	140	3	1524	33	1491
173+00	17300.00	50	42.54	3.63	118	3	1642	37	1605
173+50	17350.00	50	59.14	0.84	94	4	1736	42	1694
174+00	17400.00	50	64.05	0.68	114	1	1850	44	1806
174+50	17450.00	50	66.33	0.52	121	1	1971	45	1925
175+00	17500.00	50	66.48	0.46	123	1	2094	47	2047
175+50	17550.00	50	69.78	0.69	126	1	2220	48	2172
176+00	17600.00	50	72.58	0.00	132	1	2352	49	2303
176+50	17650.00	50	67.07	0.21	129	0	2481	49	2432
177+00	17700.00	50	70.16	0.80	127	1	2608	50	2558
177+50	17750.00	50	82.92	1.18	142	2	2750	52	2698
178+00	17800.00	50	82.25	0.83	153	2	2903	55	2848
178+50	17850.00	50	80.30	1.54	151	2	3053	58	2996
179+00	17900.00	50	53.11	0.00	124	1	3177	59	3118
179+50	17950.00	50	86.75	0.00	130	0	3306	59	3247
180+00	18000.00	50	48.15	1.42	125	1	3431	61	3370
180+50	18050.00	50	58.04	0.06	98	1	3530	63	3467
181+00 BK	18100.00	50	51.10	0.00	101	0	3631	63	3568
			COLUMN TOTALS		3631	50			

NOTES:	
1 - CUT	CUT DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SUMMARY SHEET.
2 - FILL	DOES NOT INCLUDE PAVEMENT EXC VOLUME. SALVAGED/UNUSABLE PAVMENT MATERIAL IS CALCULATED ON THE THE SUMMARY SHEET.
3 - MASS ORDINATE	[(CUT) - ((FILL) * FILL FACTOR)]

DIVISION 3 - S. 60TH STREET

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
125+88 AH	12587.58	0	51.48	0.00	0	0	0	0	0
126+00	12600.00	12	52.81	0.14	24	0	24	0	24
126+50	12650.00	50	83.42	0.00	126	0	150	0	150
127+00	12700.00	50	64.57	2.13	137	2	287	3	284
127+50	12750.00	50	68.51	1.71	123	4	410	7	403
128+00	12800.00	50	71.53	1.67	130	3	540	11	529
128+50	12850.00	50	144.57	0.00	200	2	740	13	727
129+00	12900.00	50	63.99	2.41	193	2	933	16	917
129+50	12950.00	50	63.47	0.00	118	2	1051	19	1033
130+00	13000.00	50	53.49	1.74	108	2	1160	21	1139
130+50	13050.00	50	53.98	1.20	100	3	1259	24	1235
131+00	13100.00	50	50.68	3.88	97	5	1356	30	1326
131+50	13150.00	50	52.97	2.77	96	6	1452	38	1414
132+00	13200.00	50	58.64	1.31	103	4	1555	42	1513
132+50	13250.00	50	67.62	0.98	117	2	1672	45	1627
133+00	13300.00	50	69.60	1.68	127	2	1799	48	1751
133+50	13350.00	50	73.43	1.08	132	3	1932	51	1881
134+00	13400.00	50	82.79	0.00	145	1	2076	52	2024
134+50	13450.00	50	67.19	1.02	139	1	2215	54	2162
135+00	13500.00	50	59.71	0.84	118	2	2333	56	2277
135+50	13550.00	50	60.24	1.01	111	2	2444	58	2386
136+00	13600.00	50	76.67	0.97	127	2	2571	60	2510
136+50	13650.00	50	83.98	0.80	149	2	2719	62	2657
137+00	13700.00	50	84.26	0.20	156	1	2875	63	2812
137+50	13750.00	50	61.93	0.99	135	1	3010	65	2946
138+00	13800.00	50	39.41	0.00	94	1	3104	66	3038
138+50	13850.00	50	34.53	0.00	68	0	3173	66	3107
139+00	13900.00	50	60.64	0.68	88	1	3261	67	3194
139+50	13950.00	50	92.43	0.21	142	1	3403	68	3335
140+00	14000.00	50	82.30	0.26	162	0	3564	68	3496
140+50	14050.00	50	87.00	0.94	157	1	3721	70	3651
141+00	14100.00	50	90.29	1.28	164	2	3885	72	3813
141+50	14150.00	50	78.12	1.54	156	3	4041	76	3966
142+00	14200.00	50	67.09	1.94	134	3	4176	80	4096
142+50	14250.00	50	64.78	1.41	122	3	4298	83	4214
143+00	14300.00	50	69.60	0.75	124	2	4422	86	4336
143+50	14350.00	50	70.08	0.58	129	1	4552	87	4464
144+00	14400.00	50	72.45	0.27	132	1	4684	88	4595
144+50	14450.00	50	71.91	0.27	134	1	4817	89	4728
145+00	14500.00	50	65.15	0.54	127	1	4944	90	4854
145+50	14550.00	50	53.88	1.46	110	2	5054	92	4962
146+00	14600.00	50	42.30	0.00	89	1	5143	94	5049
146+50	14650.00	50	48.51	0.00	84	0	5227	94	5133
147+00	14700.00	50	71.28	1.90	111	2	5338	96	5242
147+50	14750.00	50	81.23	1.03	141	3	5480	100	5380
148+00	14800.00	50	88.90	1.34	158	2	5637	102	5535
148+50	14850.00	50	85.41	0.00	161	1	5798	104	5695
149+00	14900.00	50	66.48	2.32	141	2	5939	107	5833
149+50	14950.00	50	61.64	0.95	119	3	6058	110	5947
150+00	15000.00	50	54.58	1.66	108	2	6165	113	6052
150+50	15050.00	50	56.35	1.53	103	3	6268	117	6151
151+00	15100.00	50	62.77	0.00	110	1	6378	119	6260
151+50	15150.00	50	59.88	0.00	114	0	6492	119	6373
152+00	15200.00	50	51.46	2.24	103	2	6595	121	6474
152+50	15250.00	50	51.14	0.00	95	2	6690	124	6566
153+00	15300.00	50	88.36	0.00	129	0	6819	124	6695
153+50	15350.00	50	52.09	0.69	130	1	6949	125	6824
154+00	15400.00	50	69.79	3.47	113	4	7062	130	6932
154+50	15450.00	50	86.18	0.64	144	4	7207	134	7072
155+00	15500.00	50	79.53	0.42	153	1	7360	136	7224
155+50	15550.00	50	65.96	0.32	135	1	7495	136	7358
156+00	15600.00	50	165.37	0.00	214	0	7709	137	7572
156+50	15650.00	50	65.73	0.67	214	1	7923	138	7785
157+00	15700.00	50	66.43	0.35	122	1	8045	139	7906
157+50	15750.00	50	65.33	0.50	122	1	8167	140	8027
158+00	15800.00	50	63.16	0.59	119	1	8286	141	8145
158+50	15850.00	50	61.35	0.65	115	1	8401	142	8259
159+00	15900.00	50	61.97	0.75	114	1	8516	144	8372
159+50	15950.00	50	62.23	0.32	115	1	8631	145	8485
160+00	16000.00	50	63.61	0.26	117	1	8747	146	8601
160+50	16050.00	50	68.65	0.35	122	1	8870	147	8723
161+00	16100.00	50	63.99	0.18	123	0	8992	147	8845
161+50	16150.00	50	57.36	0.74	112	1	9105	148	8956
162+00	16200.00	50	49.86	0.98	99	2	9204	150	9054
162+46 BK	16245.70	46	42.06	1.26	116	1	3680	70	3610
			COLUMN TOTALS		9320	122			

NOTES:	
1 - CUT	CUT DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SUMMARY SHEET.
2 - FILL	DOES NOT INCLUDE PAVEMENT EXC VOLUME. SALVAGED/UNUSABLE PAVMENT MATERIAL IS CALCULATED ON THE THE SUMMARY SHEET.
3 - MASS ORDINATE	[(CUT) - ((FILL) * FILL FACTOR)]

DIVISION 4 - S. 60TH STREET

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
125+88 AH	12587.58	0	63.95	0.36	0	0	0	0	0
126+00	12600.00	12	50.36	0.00	26	0	26	0	26
126+50	12650.00	50	91.44	0.00	131	0	158	0	157
127+00	12700.00	50	54.78	0.01	135	0	293	0	293
127+50	12750.00	50	51.93	1.25	99	1	392	2	390
128+00	12800.00	50	60.52	1.29	104	2	496	5	491
128+50	12850.00	50	138.44	0.87	184	2	680	7	673
129+00	12900.00	50	48.69	4.28	173	5	853	13	840
129+50	12950.00	50	51.06	2.33	92	6	946	21	925
130+00	13000.00	50	50.08	2.75	94	5	1039	27	1013
130+50	13050.00	50	57.42	0.25	100	3	1139	30	1109
131+00	13100.00	50	49.22	2.14	99	2	1238	33	1205
131+50	13150.00	50	53.85	1.70	95	4	1333	37	1296
132+00	13200.00	50	43.51	5.60	90	7	1423	46	1378
132+50	13250.00	50	40.57	0.00	78	5	1501	52	1449
133+00	13300.00	50	28.78	10.72	64	10	1565	65	1501
133+50	13350.00	50	36.96	3.94	61	14	1626	81	1545
134+00	13400.00	50	42.11	3.02	73	6	1699	90	1610
134+50	13450.00	50	50.32	1.68	86	4	1785	95	1690
135+00	13500.00	50	49.25	2.17	92	4	1877	99	1778
135+50	13550.00	50	53.87	1.14	95	3	1973	103	1869
136+00	13600.00	50	91.28	0.00	134	1	2107	105	2002
136+50	13650.00	50	41.06	5.31	123	5	2230	111	2119
137+00	13700.00	50	58.19	1.56	92	6	2322	119	2203
137+50	13750.00	50	66.02	2.01	115	3	2437	123	2314
138+00	13800.00	50	60.88	0.80	118	3	2554	126	2428
138+50	13850.00	50	59.43	1.41	111	2	2665	129	2537
139+00	13900.00	50	45.40	2.25	97	3	2762	133	2630
139+50	13950.00	50	28.07	0.02	68	2	2830	135	2695
140+00	14000.00	50	45.72	0.00	68	0	2899	136	2763
140+50	14050.00	50	43.76	2.63	83	2	2982	139	2843
141+00	14100.00	50	47.67	1.17	85	4	3066	143	2923
141+50	14150.00	50	54.17	0.01	94	1	3161	144	3016
142+00	14200.00	50	54.17	0.00	100	0	3261	144	3117
142+50	14250.00	50	46.66	1.50	93	1	3354	146	3208
143+00	14300.00	50	57.62	0.00	97	1	3451	148	3303
143+50	14350.00	50	51.58	1.25	101	1	3552	149	3403
144+00	14400.00	50	58.47	1.84	102	3	3654	153	3501
144+50	14450.00	50	71.30	1.66	120	3	3774	157	3617
145+00	14500.00	50	71.60	1.41	132	3	3906	160	3746
145+50	14550.00	50	65.27	1.76	127	3	4033	164	3869
146+00	14600.00	50	47.25	0.00	104	2	4137	166	3971
146+50	14650.00	50	36.34	0.00	77	0	4215	166	4048
147+00	14700.00	50	41.94	5.82	72	5	4287	173	4114
147+50	14750.00	50	47.91	2.42	83	8	4370	182	4188
148+00	14800.00	50	52.90	1.14	93	3	4464	187	4277
148+50	14850.00	50	61.58	0.63	106	2	4570	189	4381
149+00	14900.00	50	63.44	0.00	116	1	4685	189	4496
149+50	14950.00	50	63.76	0.59	118	1	4803	190	4613
150+00	15000.00	50	76.71	0.98	130	1	4933	192	4741
150+50	15050.00	50	82.43	0.72	147	2	5081	194	4887
151+00	15100.00	50	83.95	0.44	154	1	5235	195	5040
151+50	15150.00	50	76.93	0.01	149	0	5384	196	5188
152+00	15200.00	50	74.73	1.80	140	2	5524	198	5326
152+50	15250.00	50	52.99	0.00	118	2	5642	200	5442
153+00	15300.00	50	78.91	0.00	122	0	5764	200	5565
153+50	15350.00	50	27.60	0.96	99	1	5863	201	5662
154+00	15400.00	50	36.94	2.67	60	3	5923	205	5718
154+50	15450.00	50	50.58	0.86	81	3	6004	209	5795
155+00	15500.00	50	69.34	0.36	111	1	6115	211	5904
155+50	15550.00	50	108.80	0.00	165	0	6280	211	6069
156+00	15600.00	50	128.70	1.40	220	1	6500	213	6287
156+50	15650.00	50	57.84	0.00	173	1	6672	214	6458
157+00	15700.00	50	63.59	0.00	112	0	6785	214	6571
157+50	15750.00	50	70.56	0.00	124	0	6909	214	6695
158+00	15800.00	50	62.42	0.75	123	1	7032	215	6817
158+50	15850.00	50	57.97	0.73	111	1	7144	217	6927
159+00	15900.00	50	52.64	0.69	102	1	7246	219	7028
159+50	15950.00	50	52.38	0.00	97	1	7343	219	7124
160+00	16000.00	50	58.33	0.44	103	0	7446	220	7226
160+50	16050.00	50	57.35	0.40	107	1	7553	221	7332
161+00	16100.00	50	65.05	1.51	113	2	7666	223	7443
161+50	16150.00	50	58.26	1.96	114	3	7780	227	7553
162+00	16200.00	50	53.31	2.48	103	4	7884	232	7652
162+46 BK	16245.70	46	57.78	1.82	103	2	3002	138	2864
			COLUMN TOTALS		7987	187			

NOTES:	
1 - CUT	CUT DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SUMMARY SHEET.
2 - FILL	DOES NOT INCLUDE PAVEMENT EXC VOLUME. SALVAGED/UNUSABLE PAVMENT MATERIAL IS CALCULATED ON THE THE SUMMARY SHEET.
3 - MASS ORDINATE	[(CUT) - ((FILL) * FILL FACTOR)]

9

9

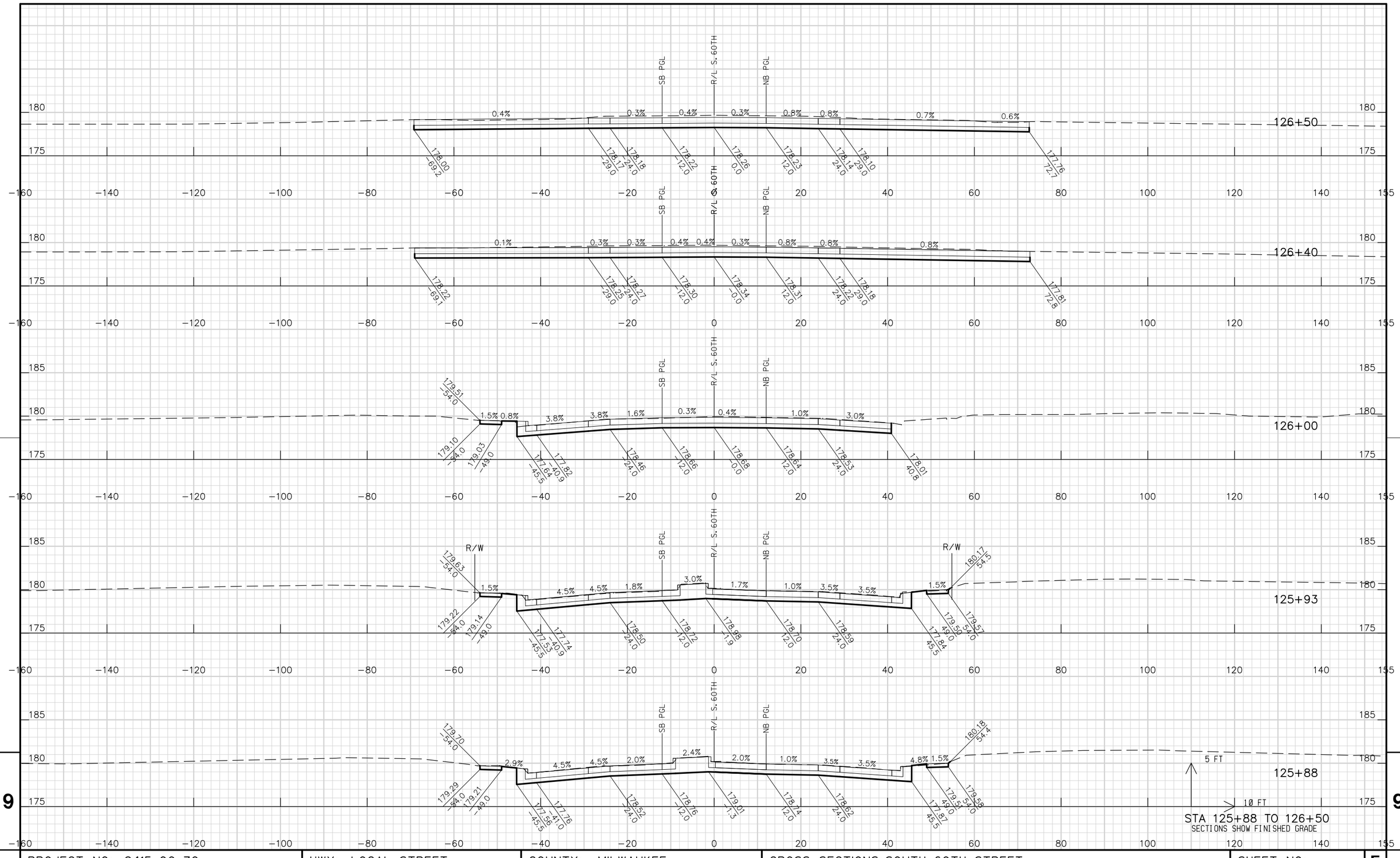
PROJECT NO: 2415-00-70 | HWY: LOCAL STREET | COUNTY: MILWAUKEE | EARTHWORK | SHEET 273 | E

FILE NAME : 33601400_earthwork.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : January 2017 PLOT SCALE : 1:1

DIVISION 4 - HONEY CREEK

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
600+29 AH	60029.39	0	39.94	0.00	0	0	0	0	0
600+50	60050.00	21	54.88	18.63	36	7	36	9	27
601+00	60100.00	50	54.58	0.35	101	18	138	31	107
601+50	60150.00	50	45.22	1.09	92	1	230	33	197
601+52 BK	60151.70	2	44.82	1.16	3	0	233	33	200
				COLUMN TOTALS	233	26			

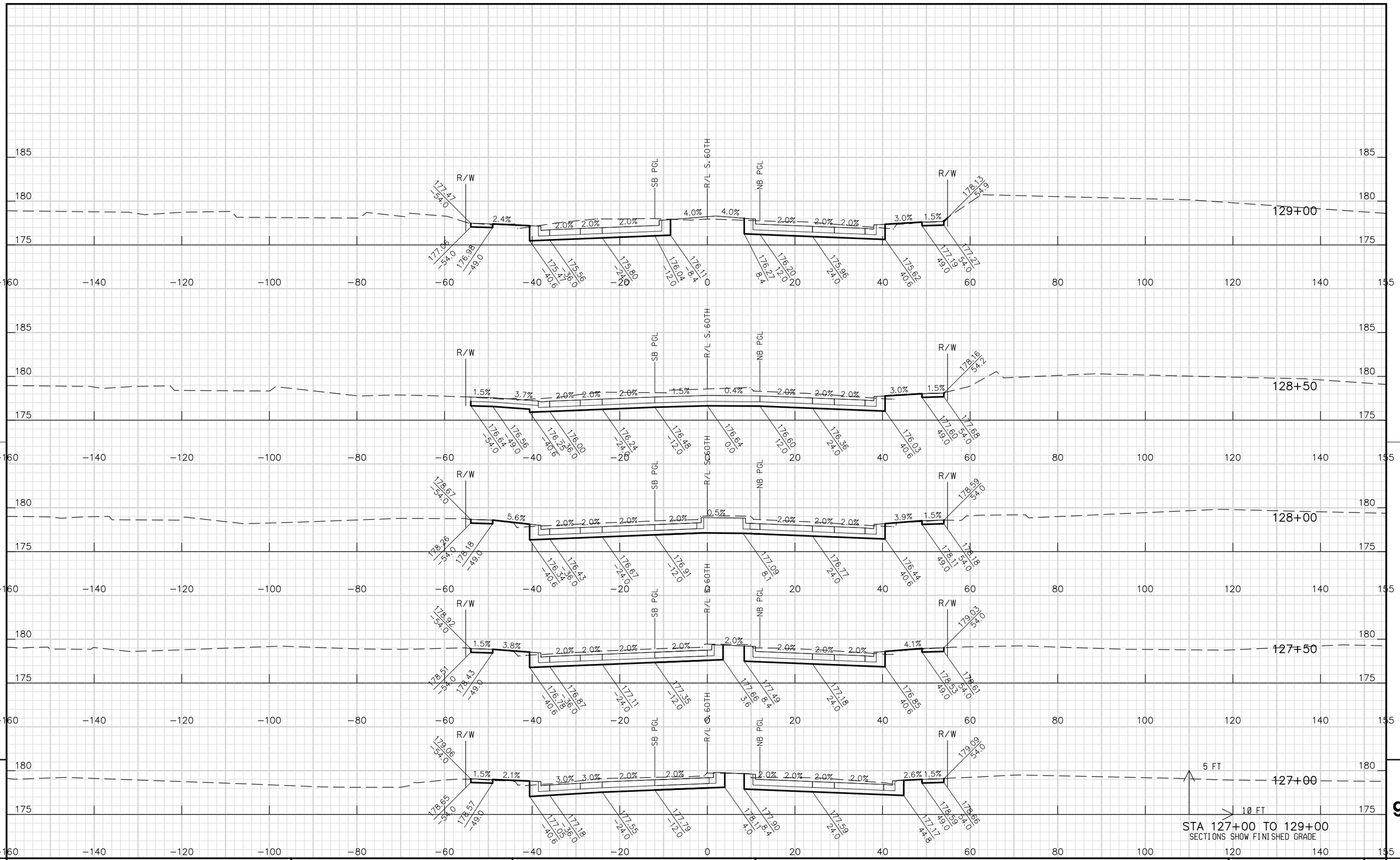
NOTES:	
1 - CUT	CUT DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SUMMARY SHEET.
2 - FILL	DOES NOT INCLUDE PAVEMENT EXC VOLUME. SALVAGED/UNUSABLE PAVMENT MATERIAL IS CALCULATED ON THE THE SUMMARY SHEET.
3 - MASS ORDINATE	[(CUT) - ((FILL) * FILL FACTOR)]



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 275	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

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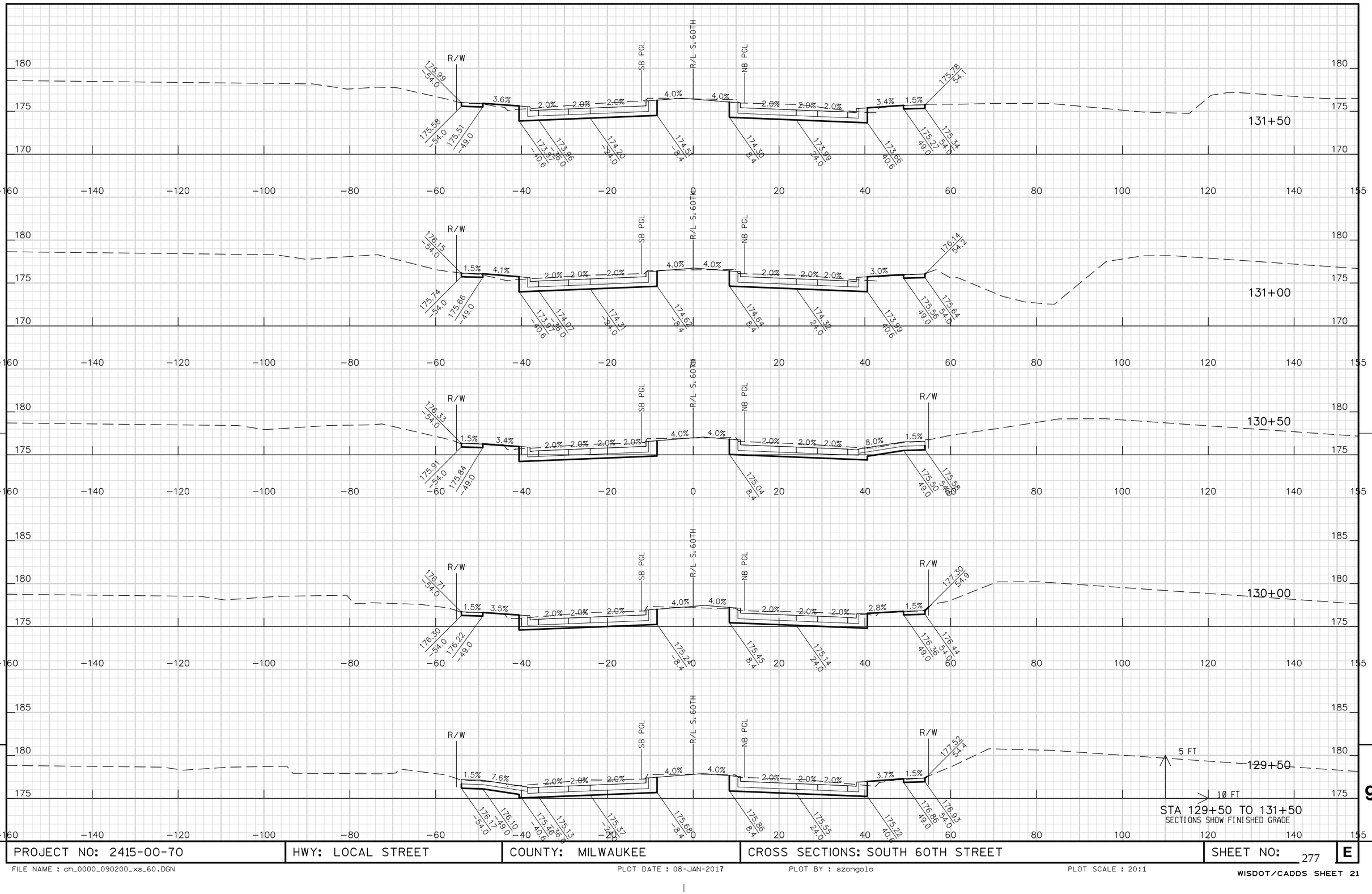
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 276	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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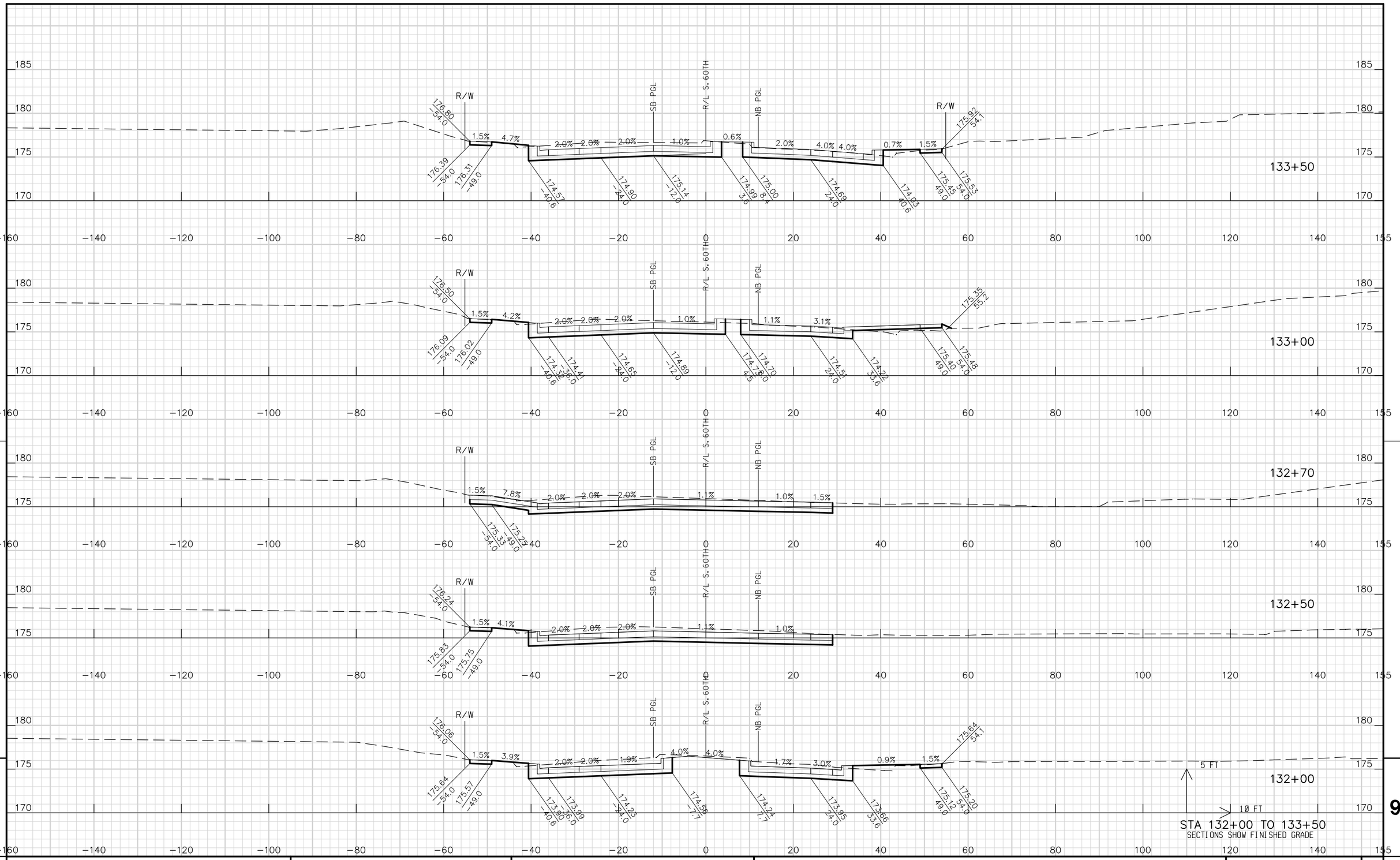
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 277	E



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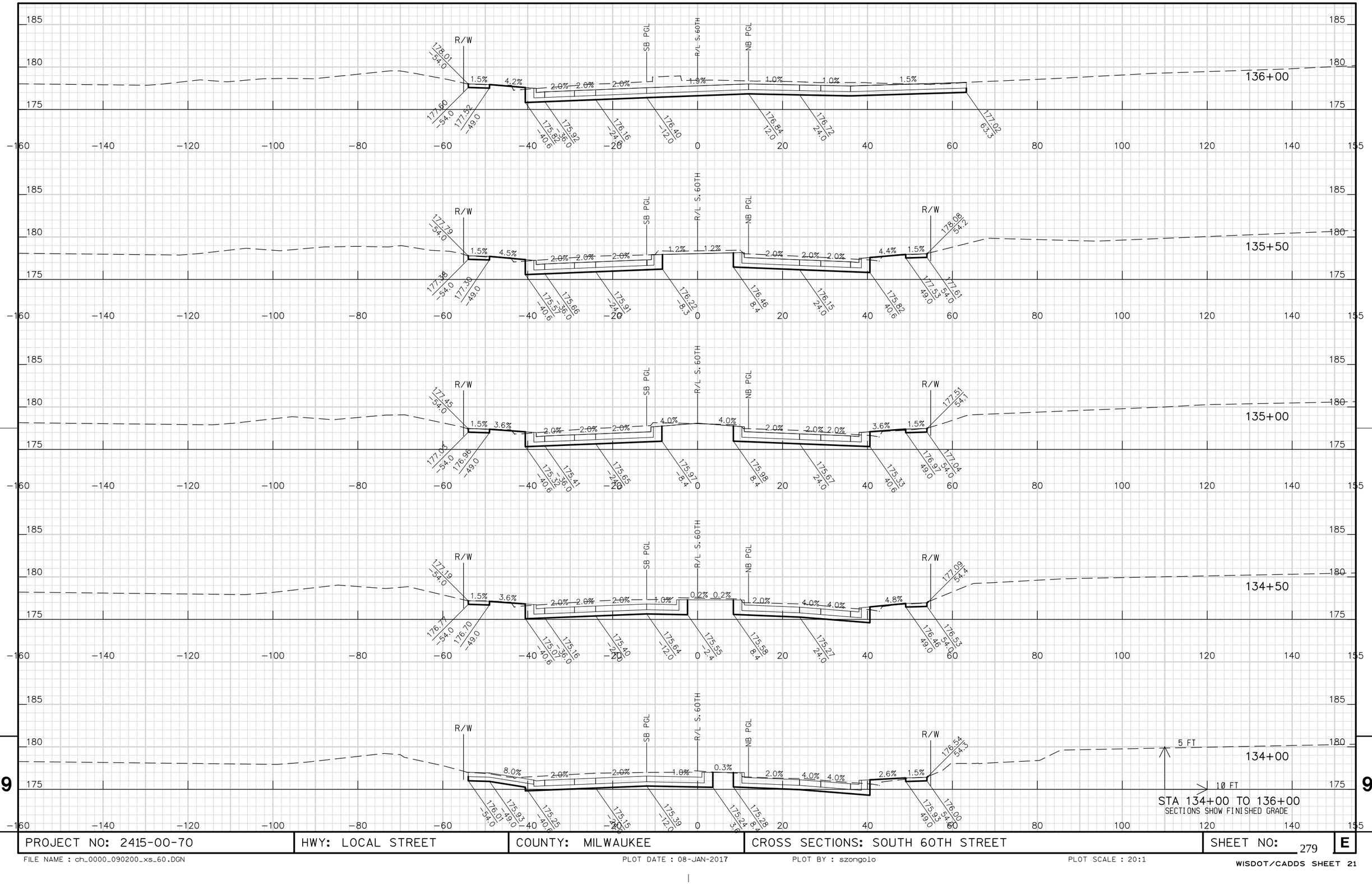
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 278	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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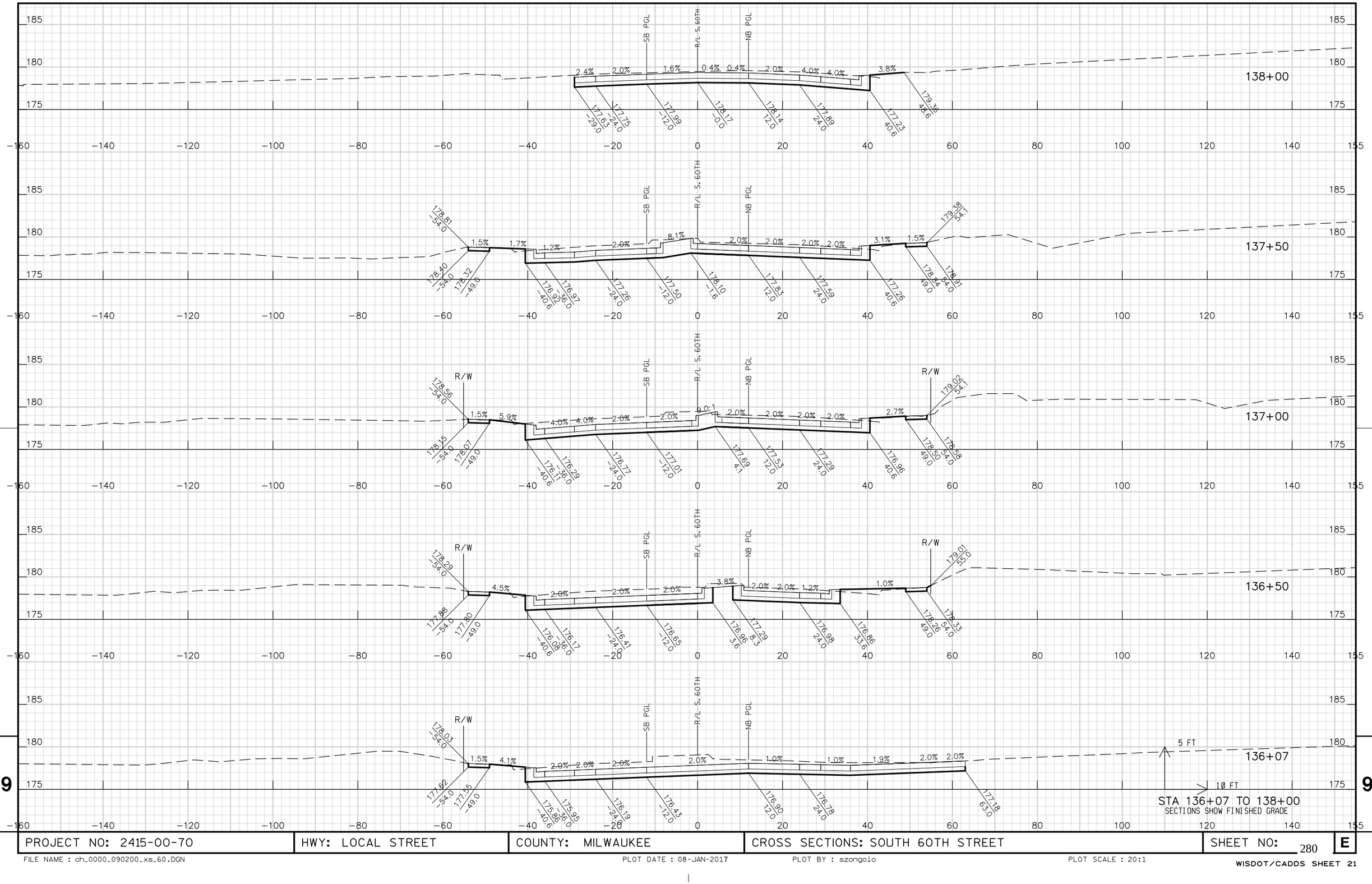
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 279	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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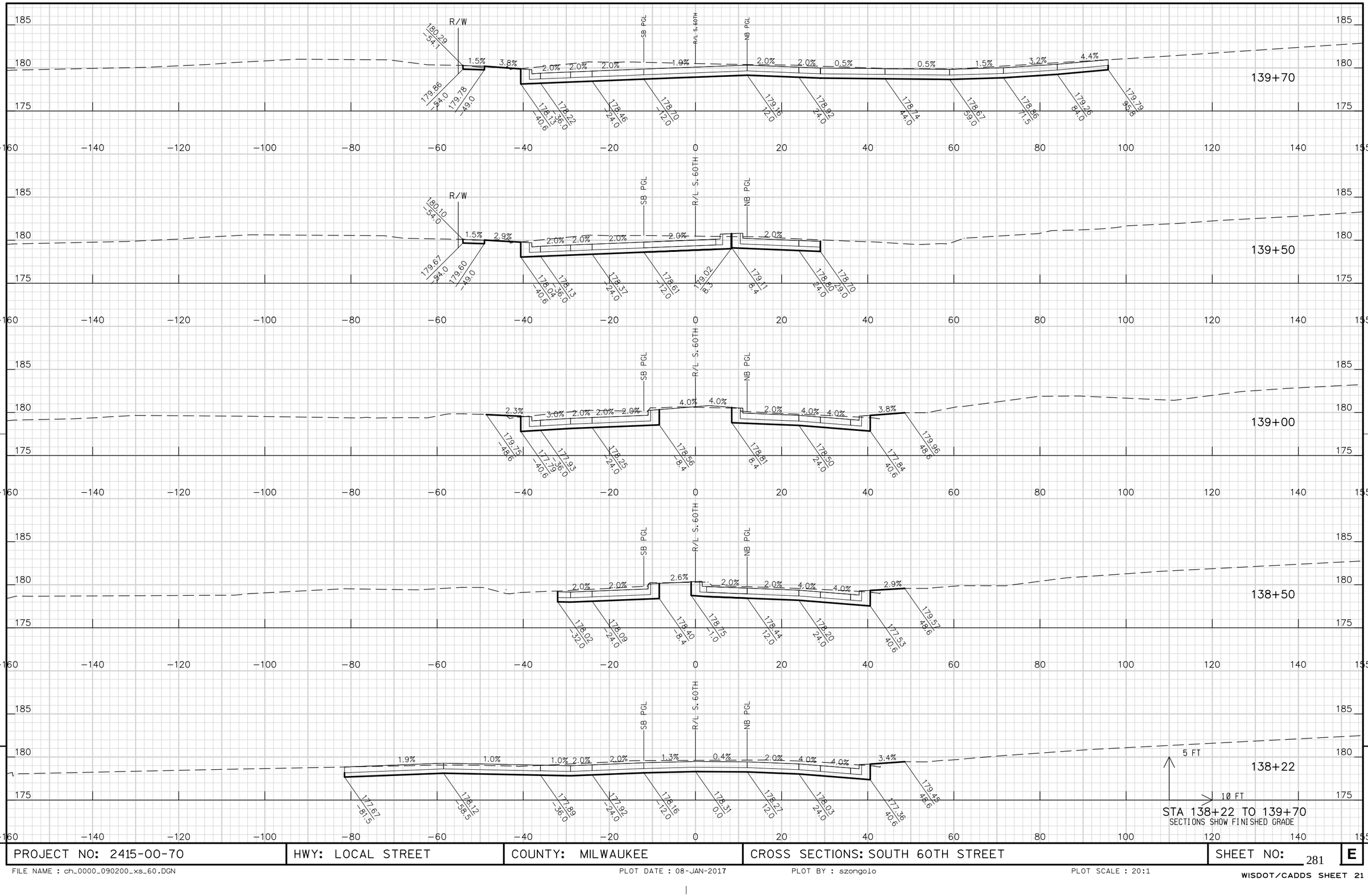
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 280	E



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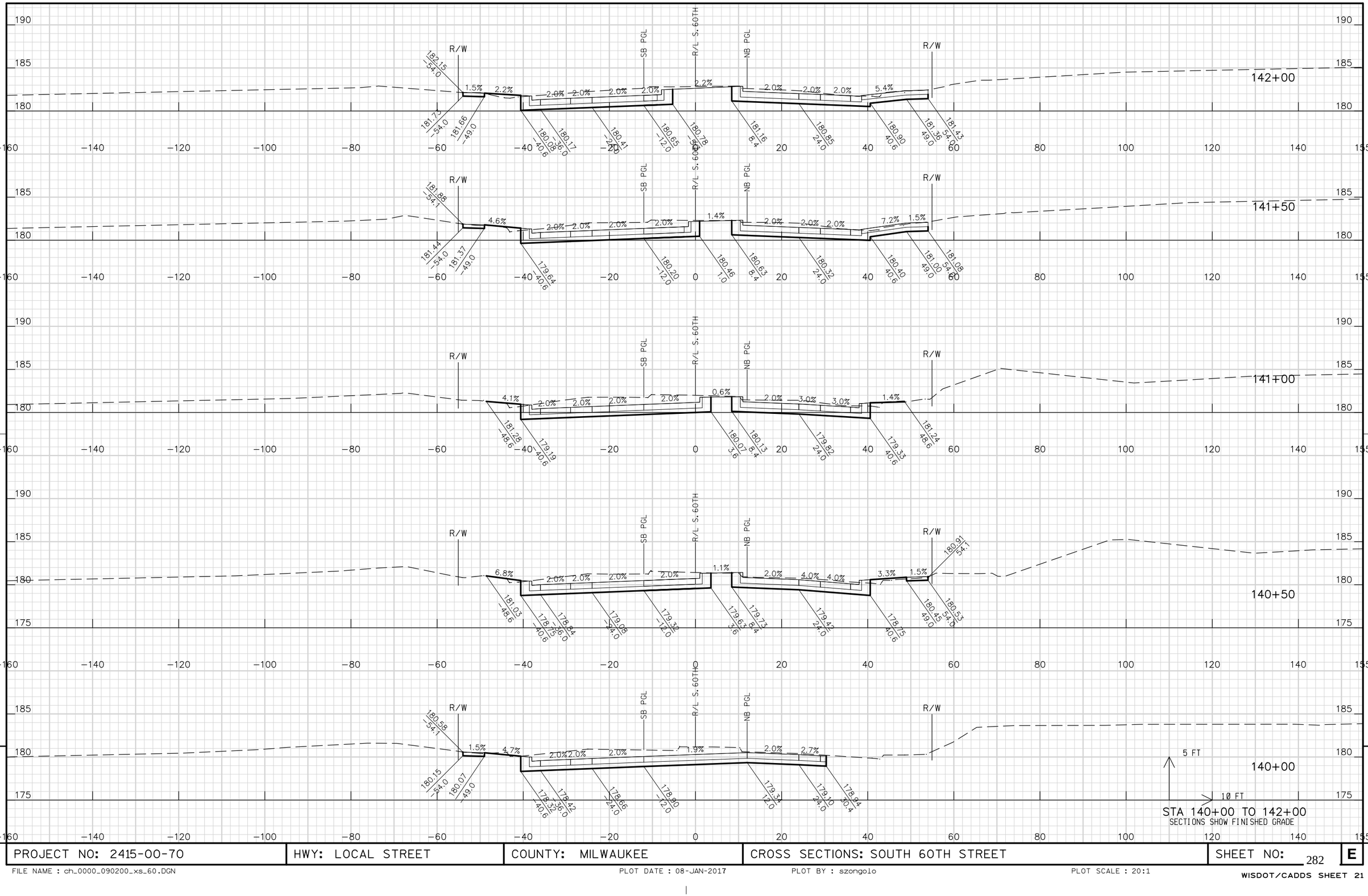
9

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 281	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

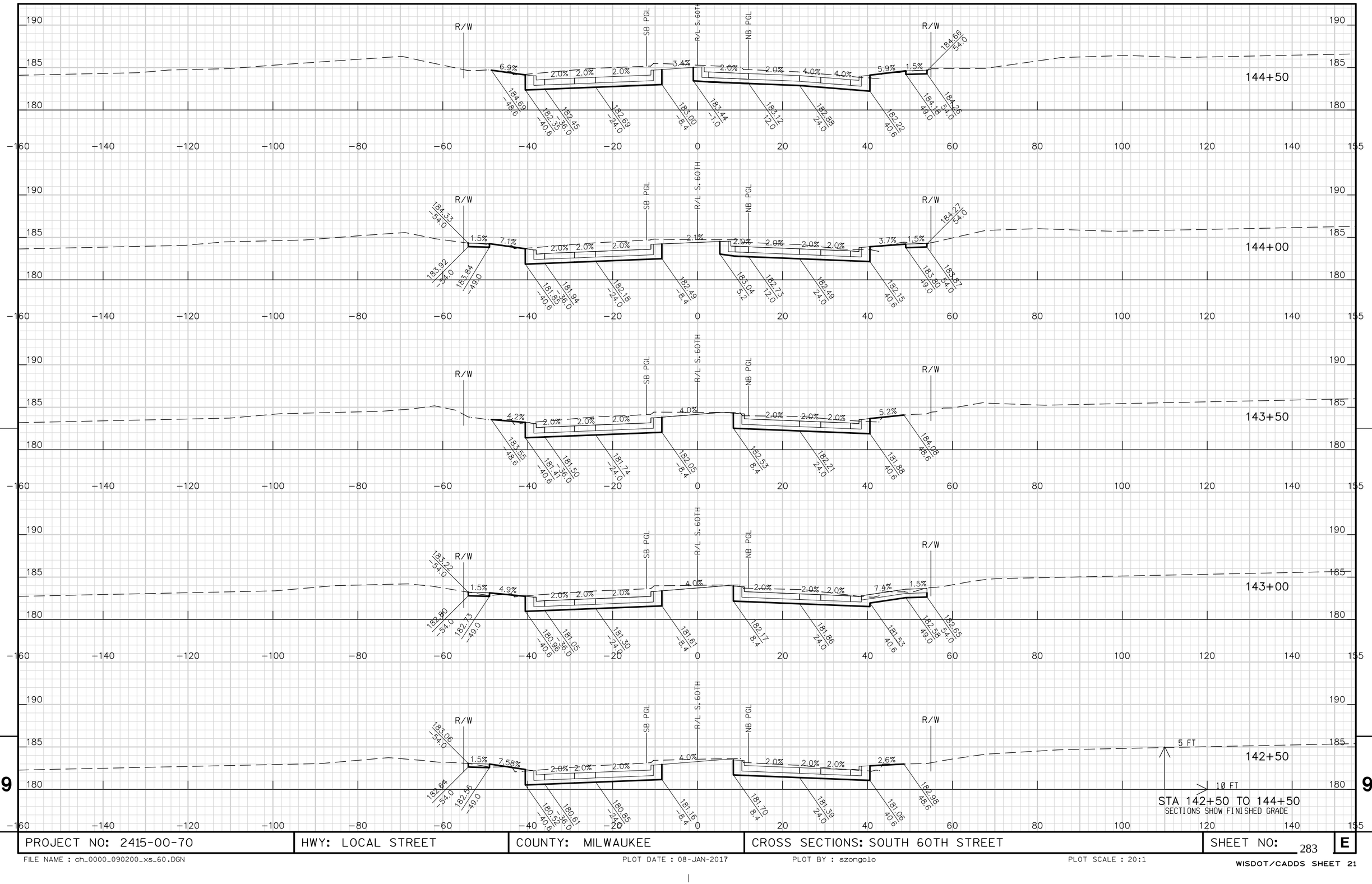
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 282 E

FILE NAME : ch_0000_090200_xs_60.DGN | PLOT DATE : 08-JAN-2017 | PLOT BY : szongolo | PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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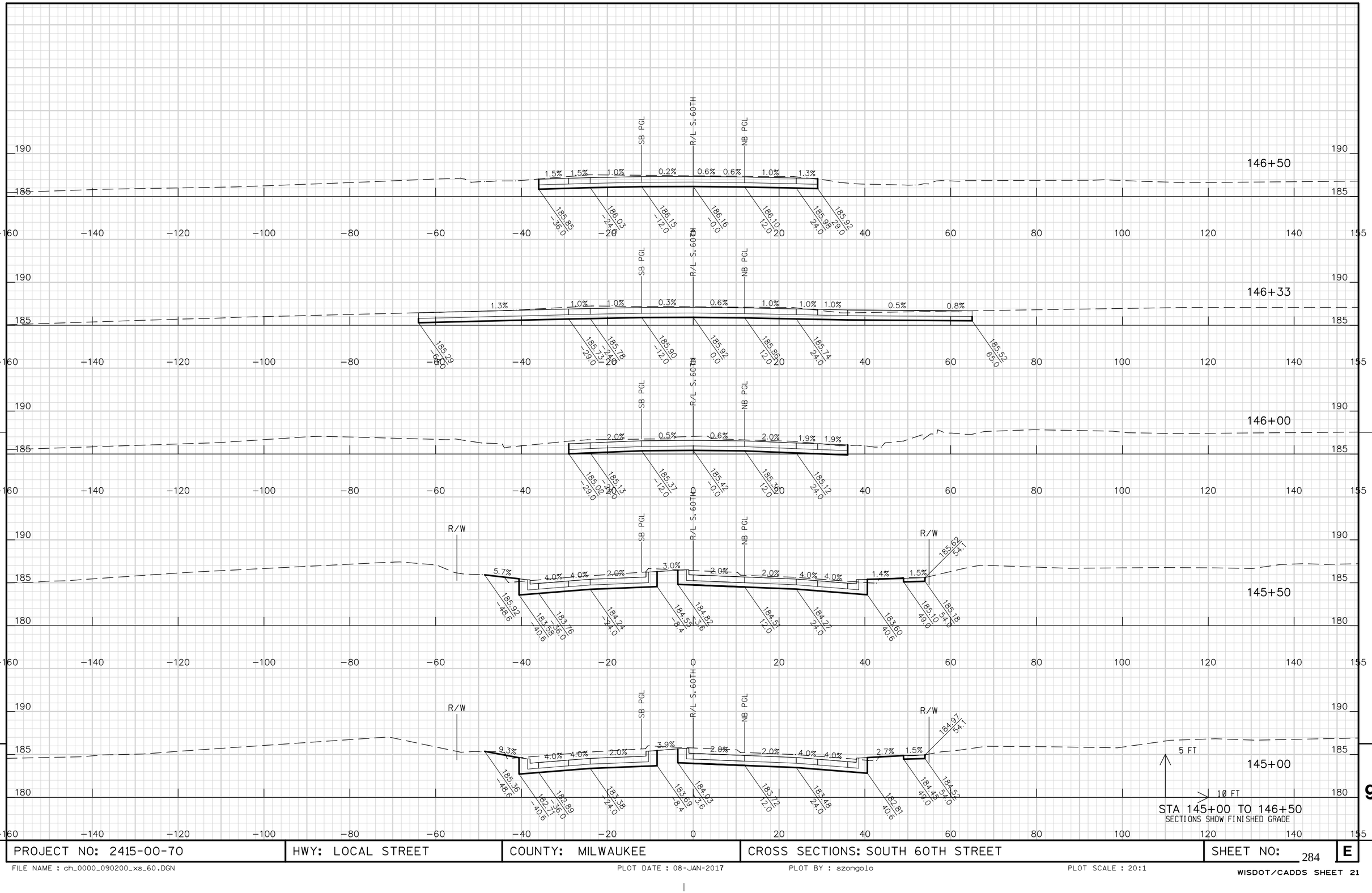
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 283	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

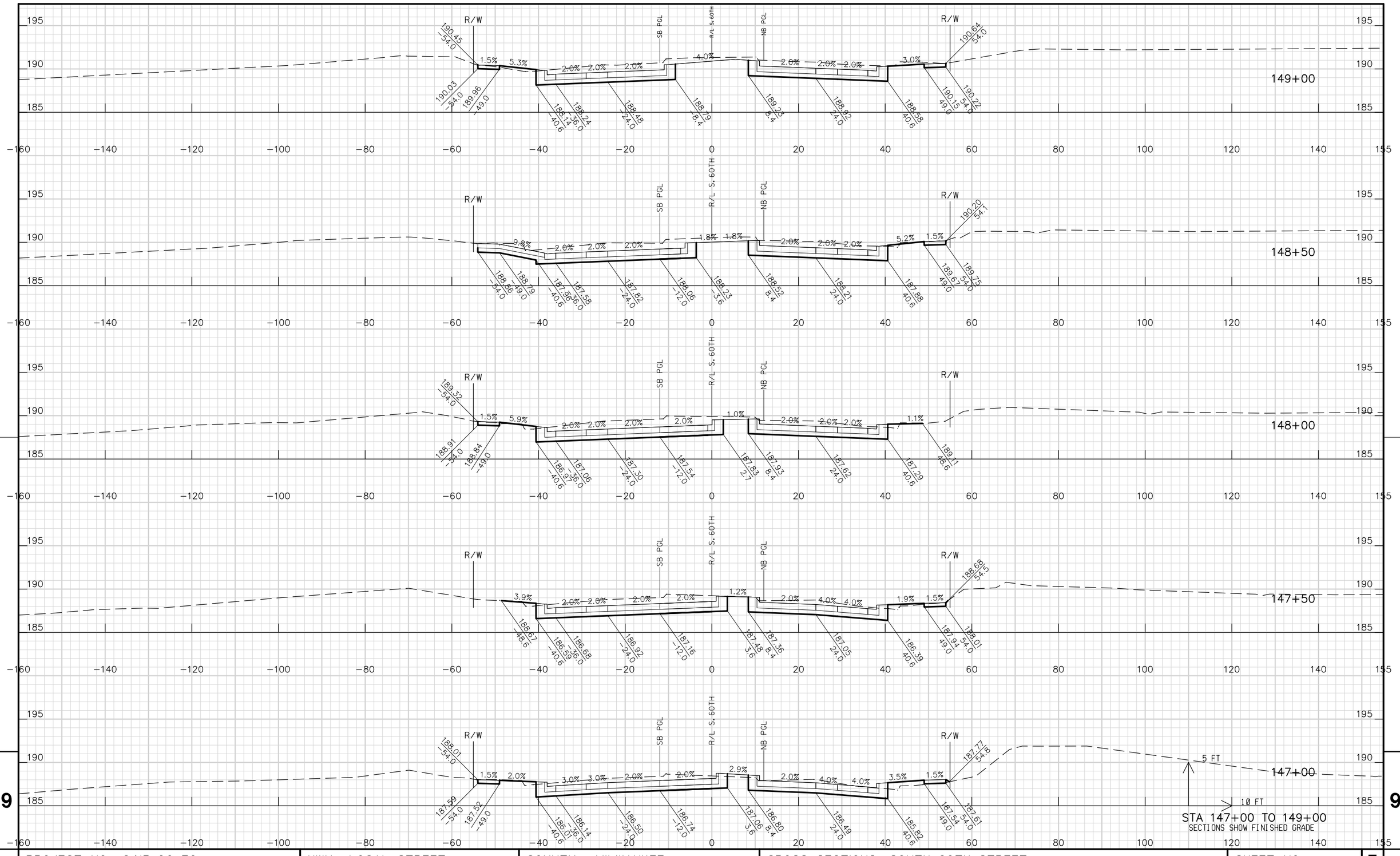
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 284	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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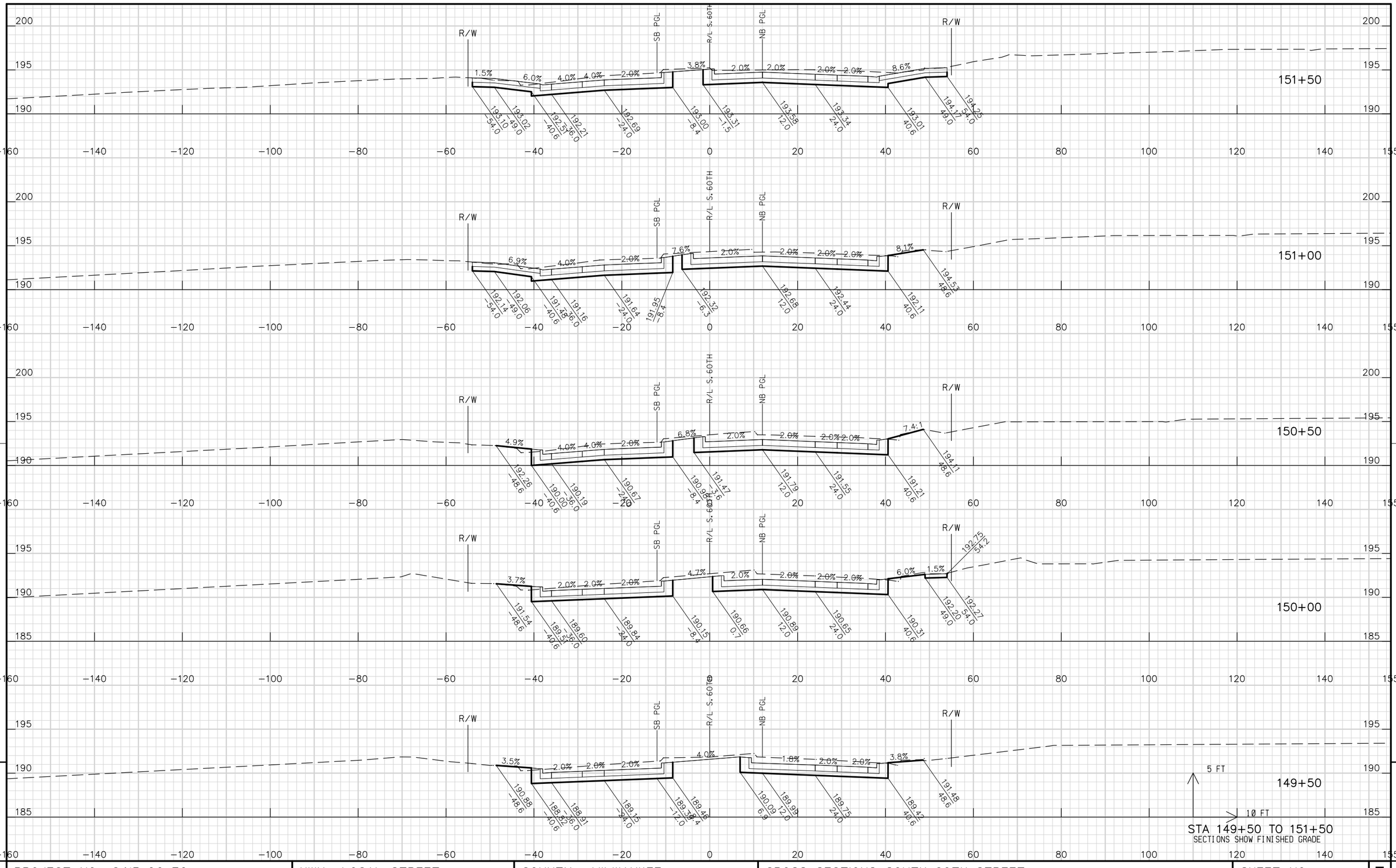
9

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 285	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



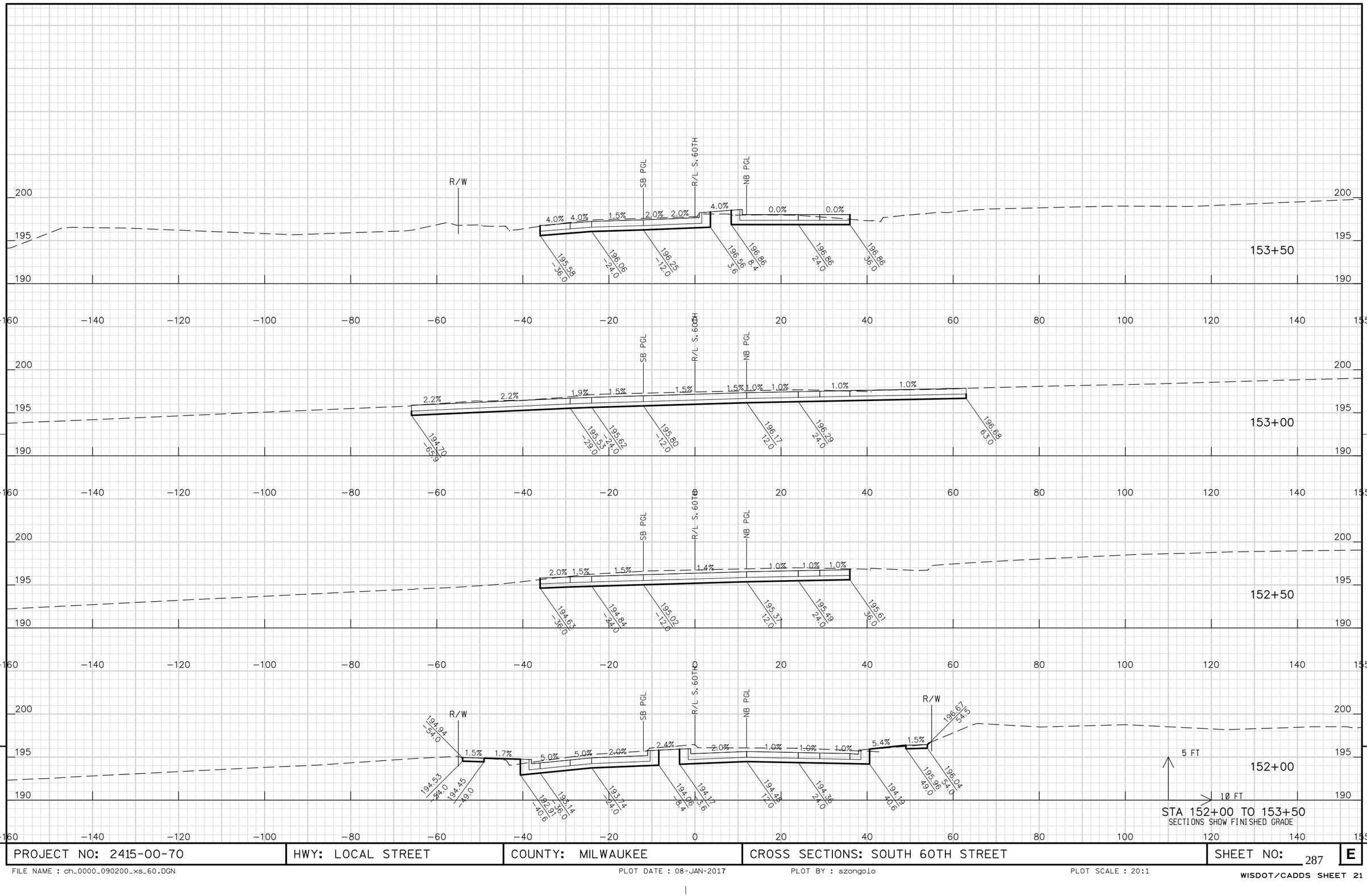
9

9

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 286	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

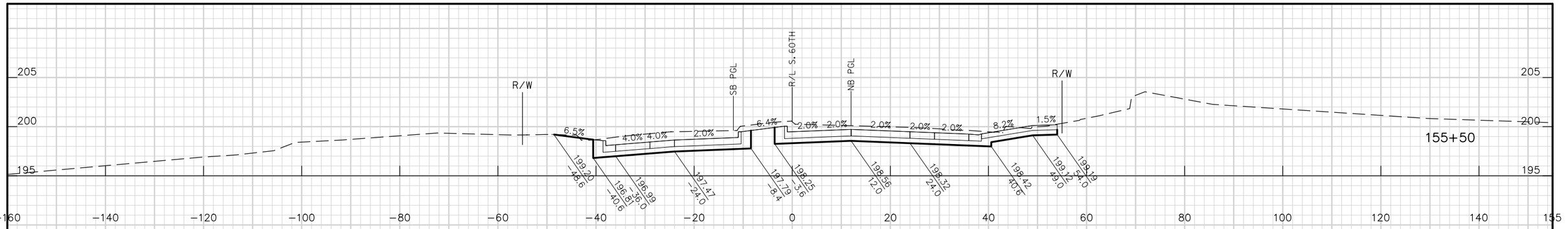


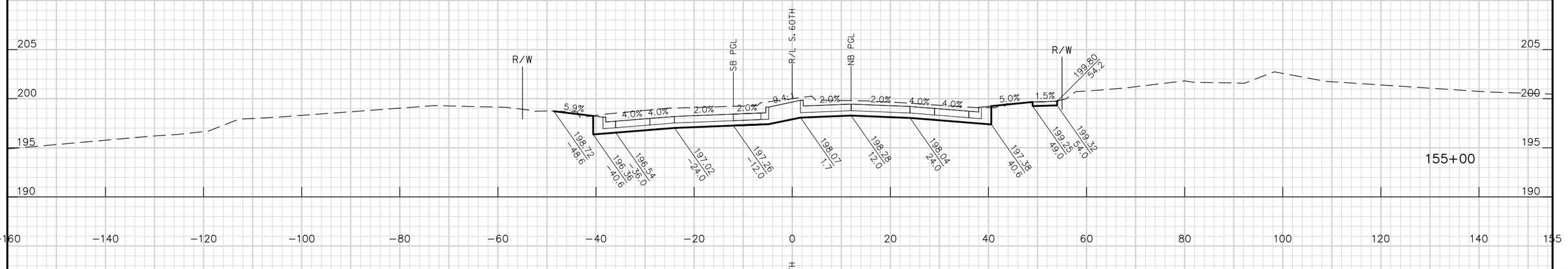
STA 152+00 TO 153+50
SECTIONS SHOW FINISHED GRADE

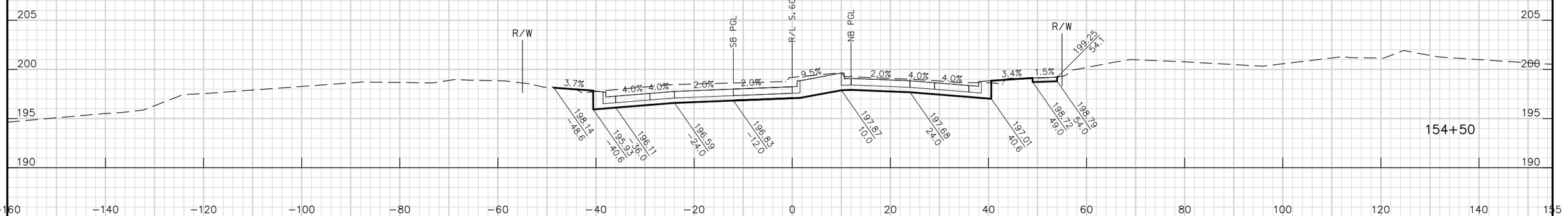
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 287	E

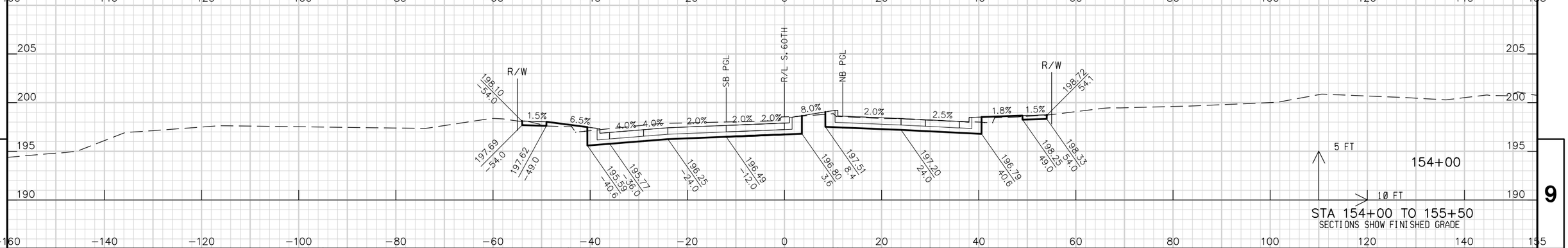
FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21









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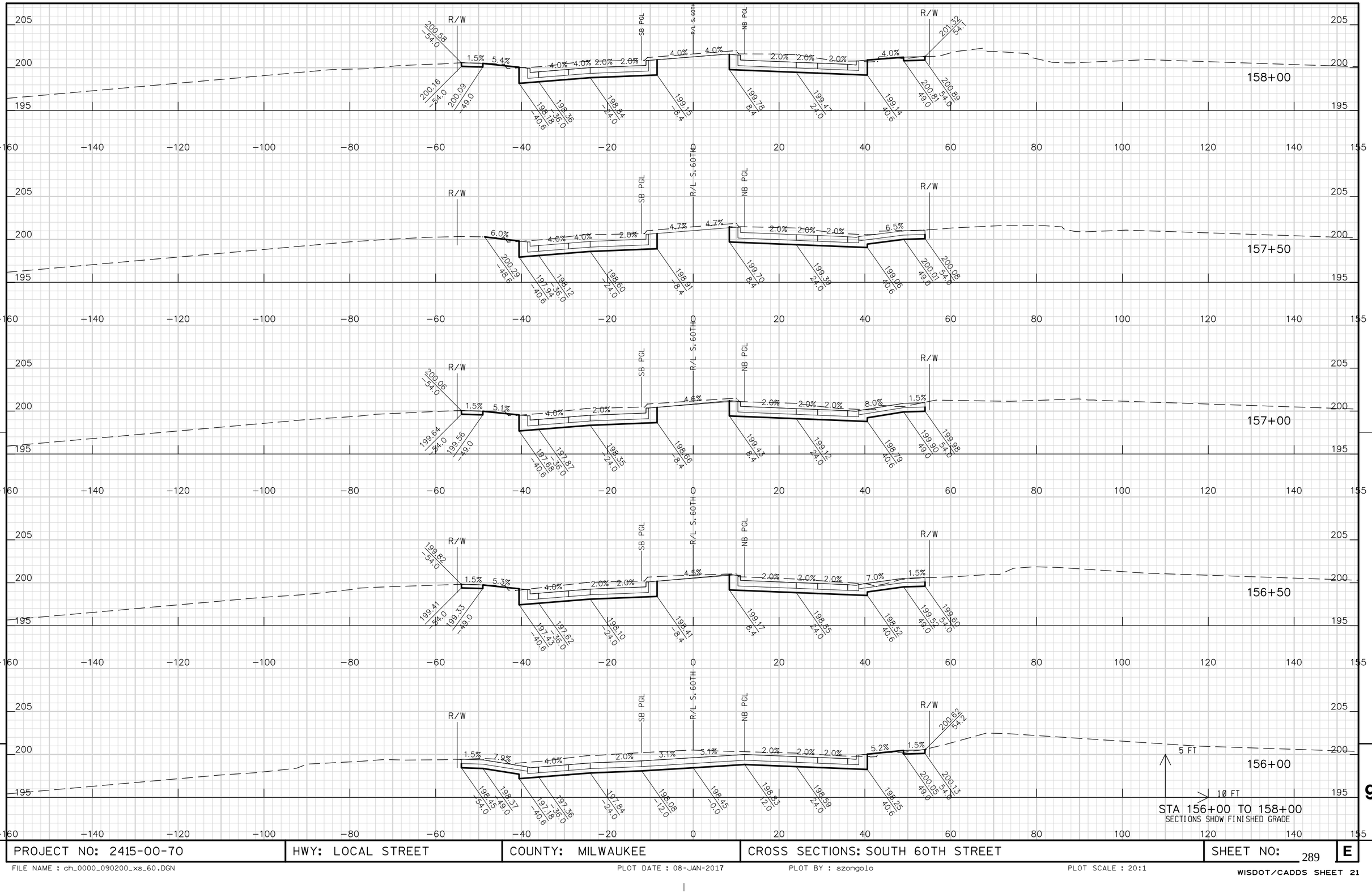
9

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 288	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

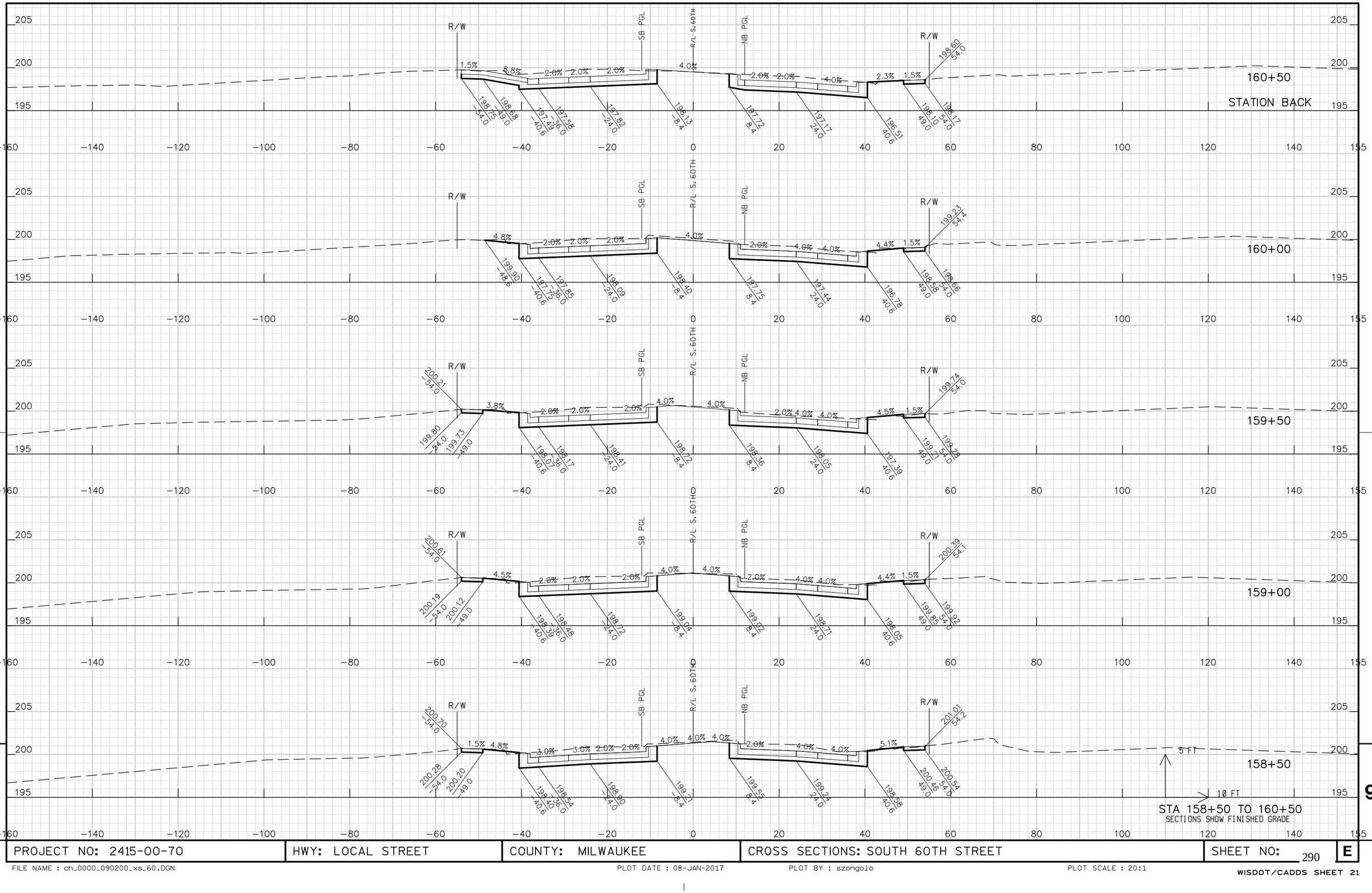
WISDOT/CADDS SHEET 21



9

9

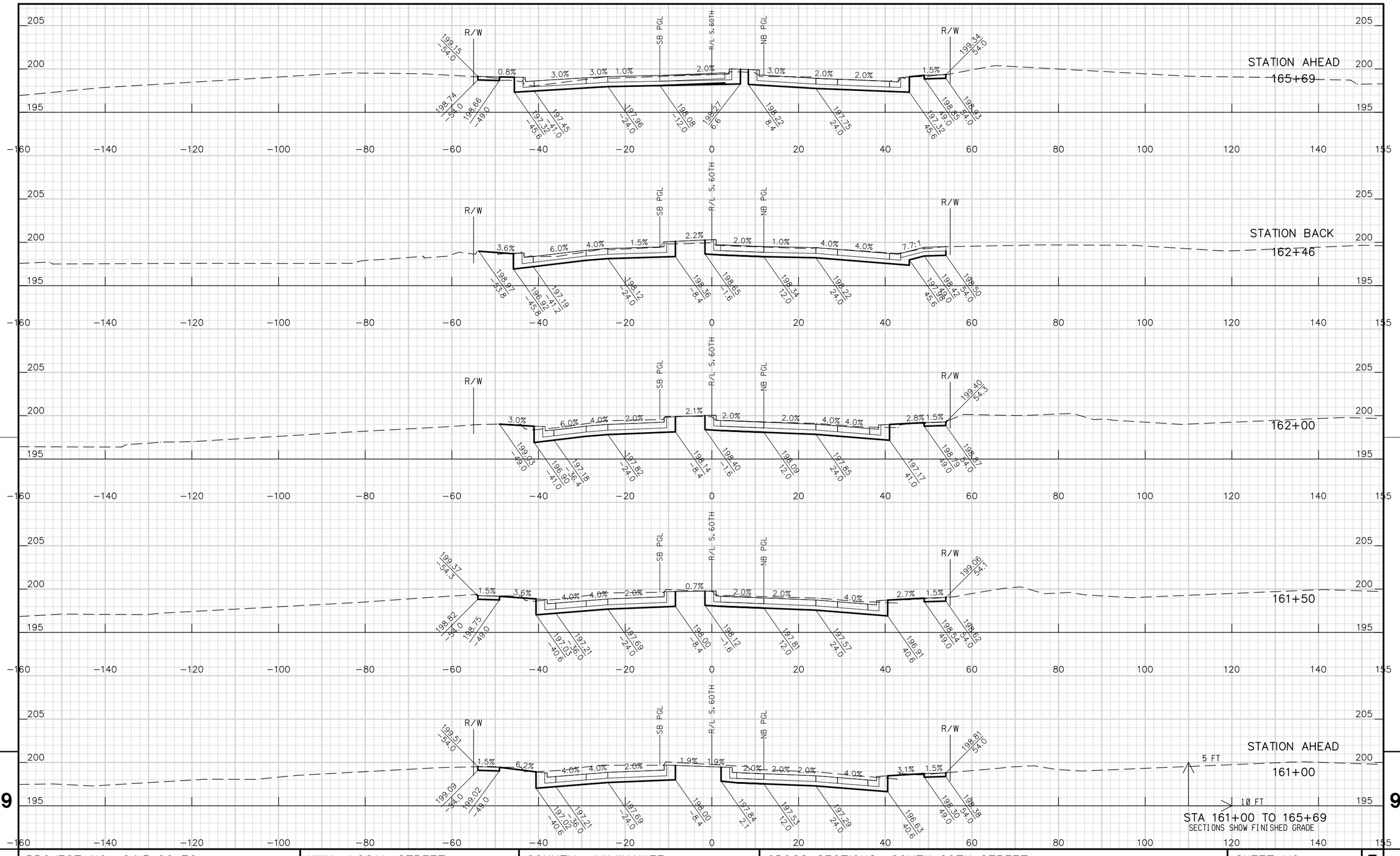
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 289	E



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 290	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

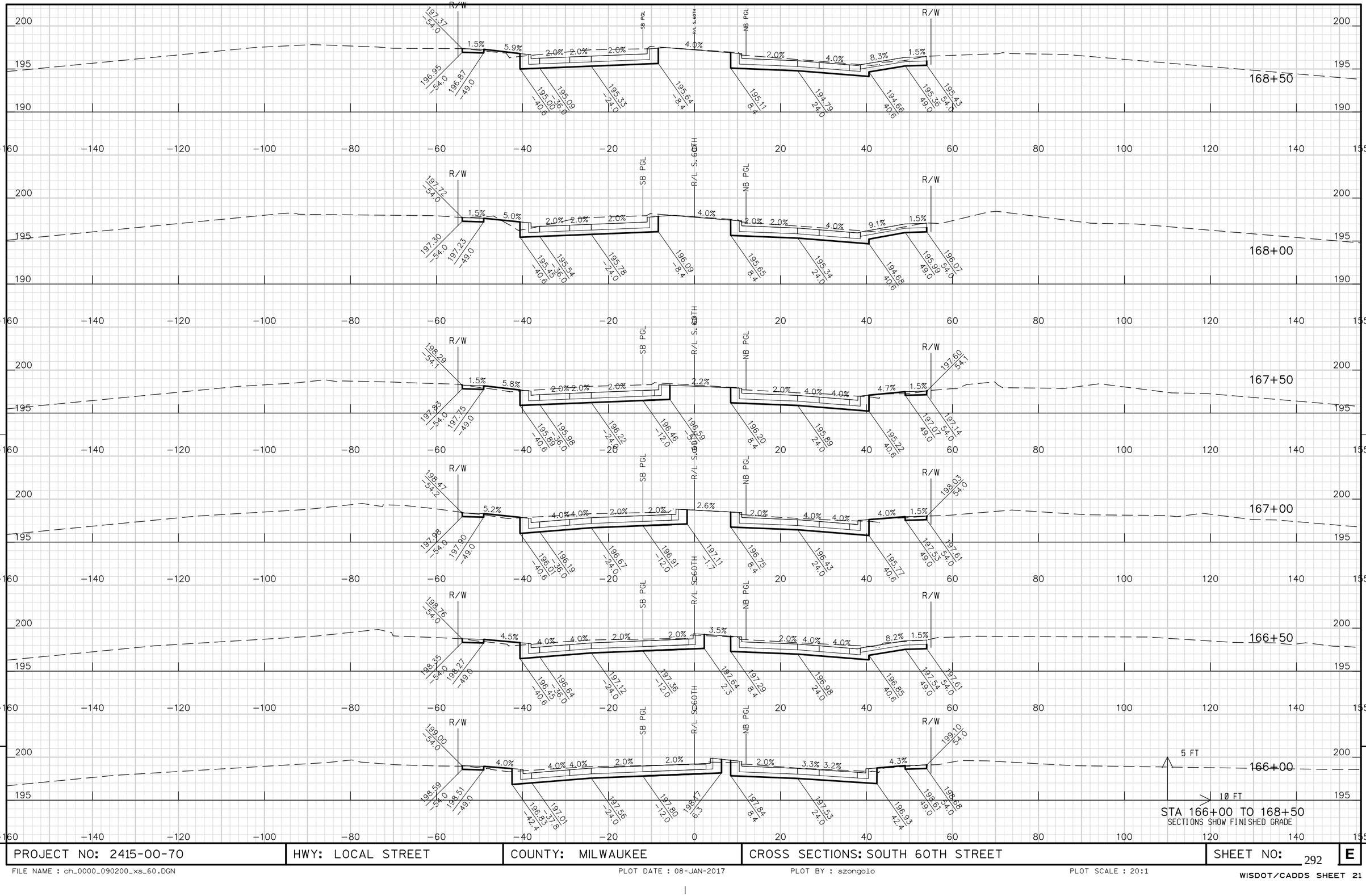
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 291	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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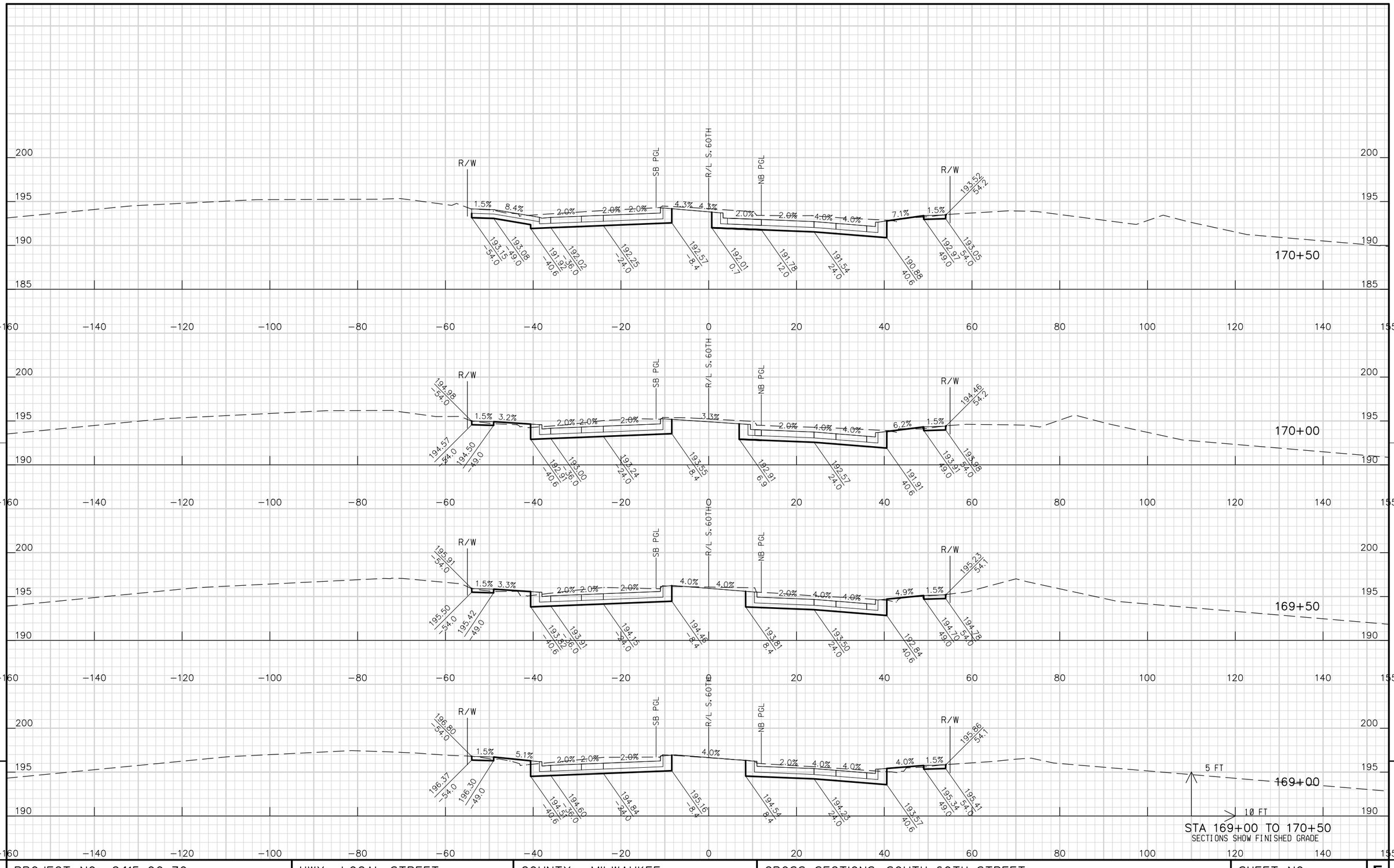
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 292	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

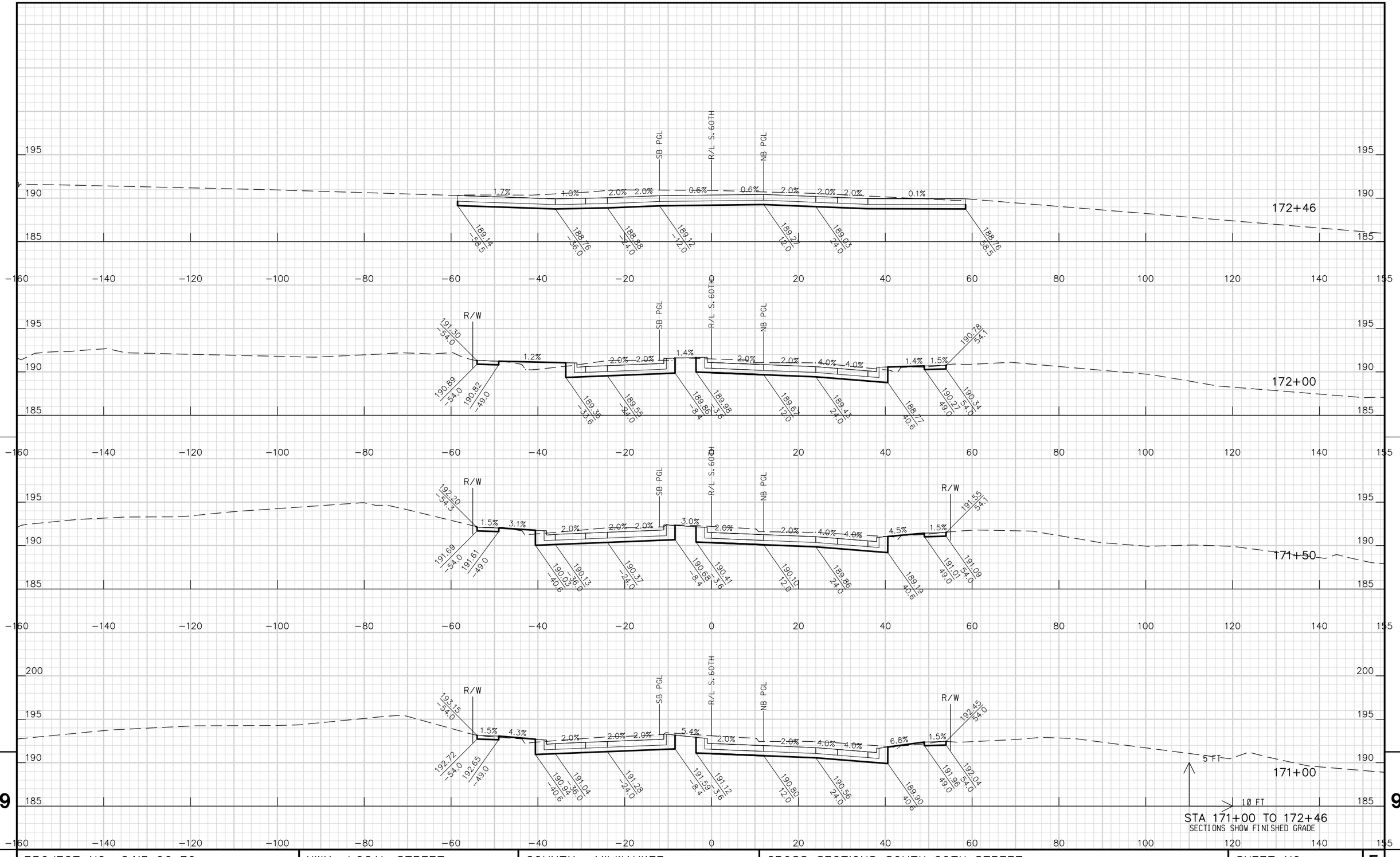
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 293	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

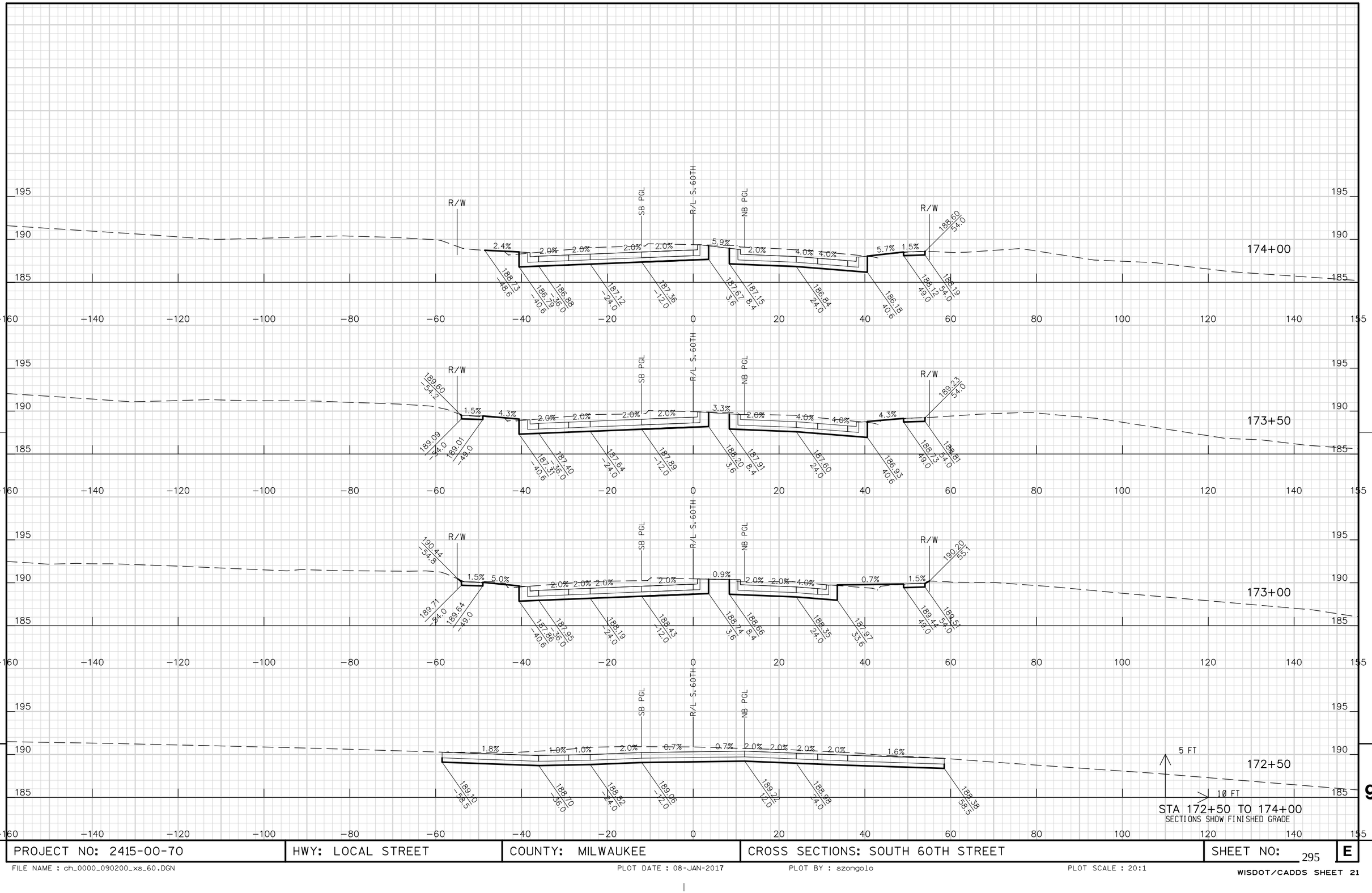
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 294	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 295	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

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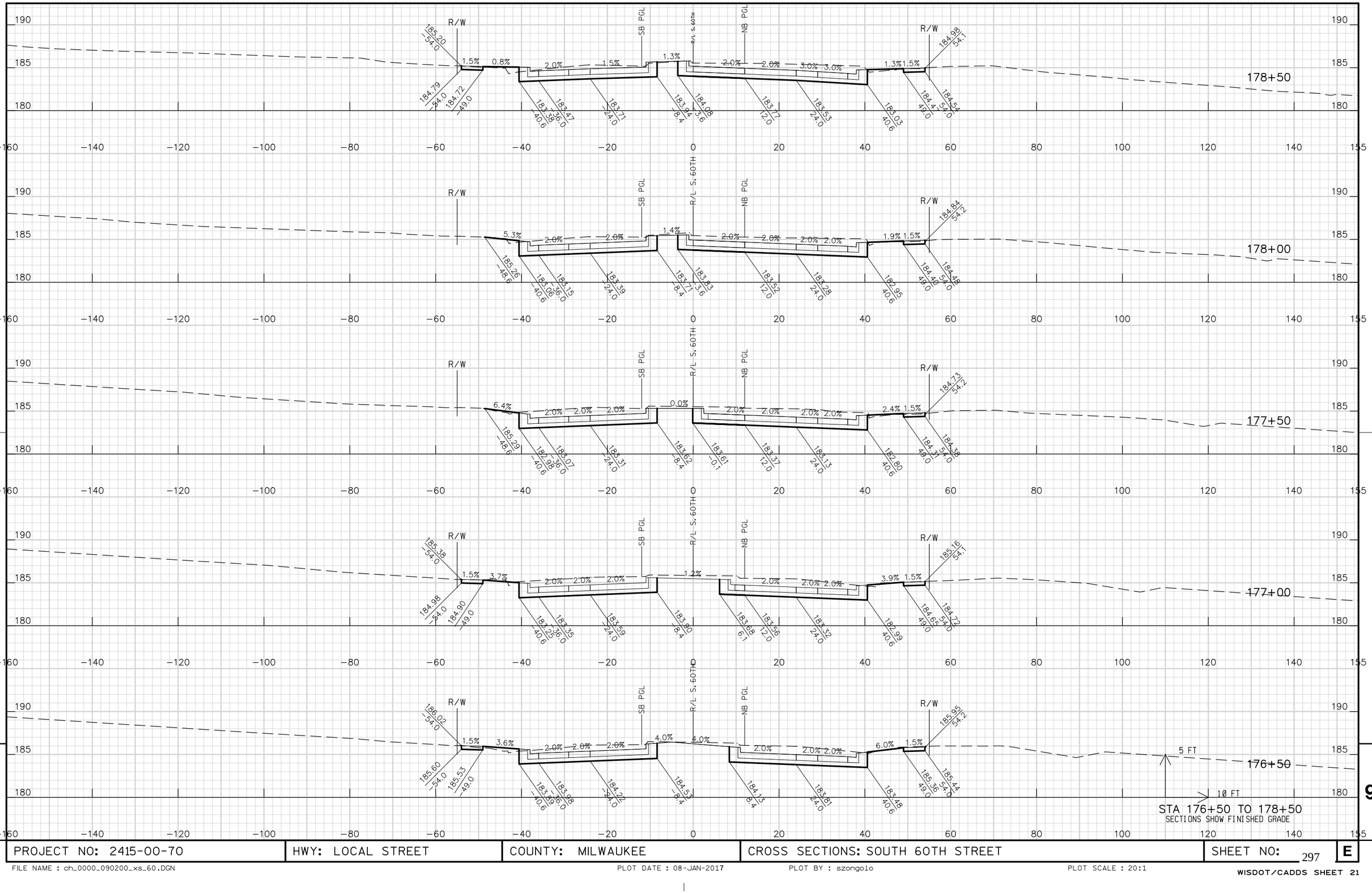
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 296	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

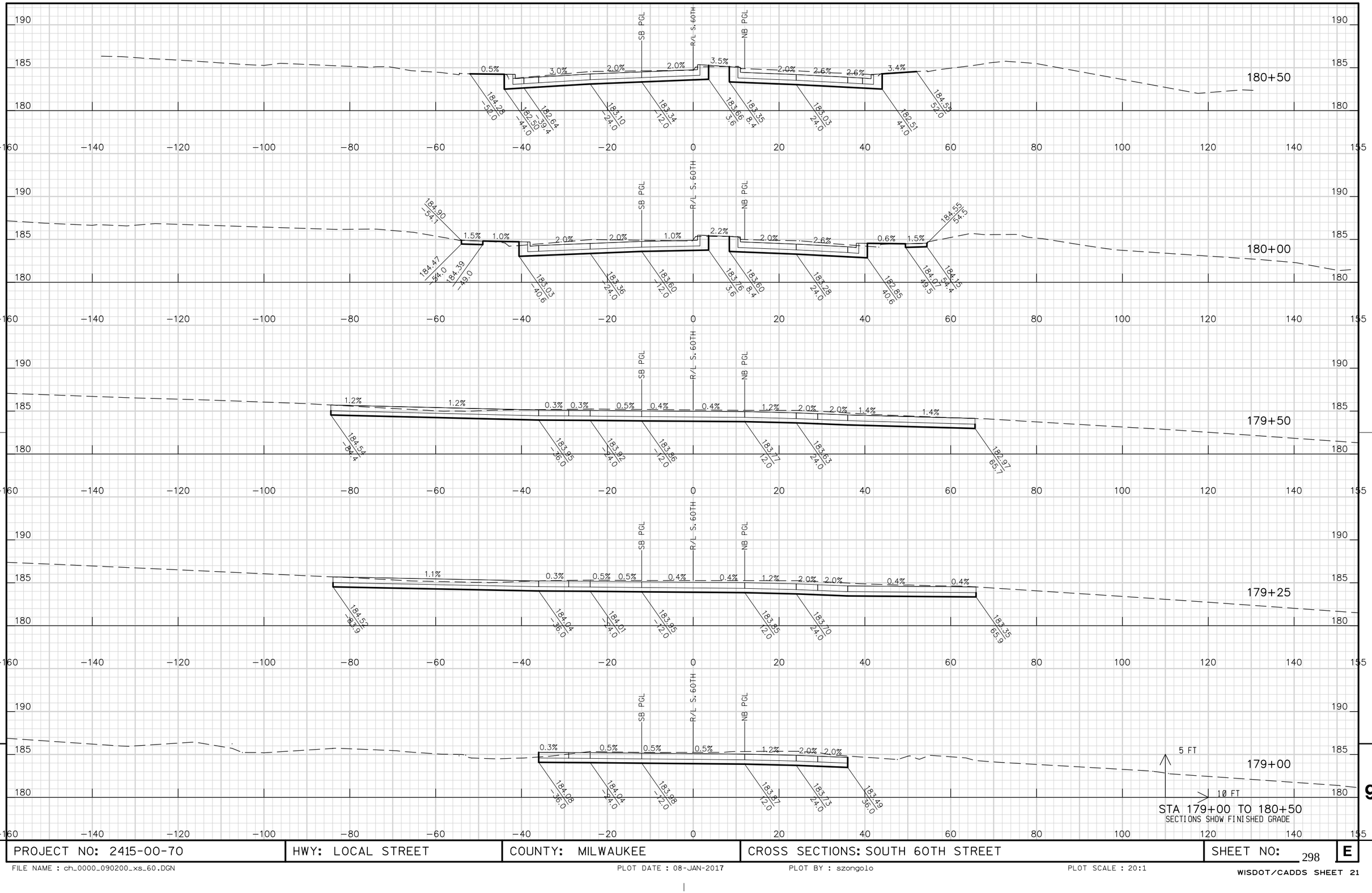
WISDOT/CADDS SHEET 21



PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 297	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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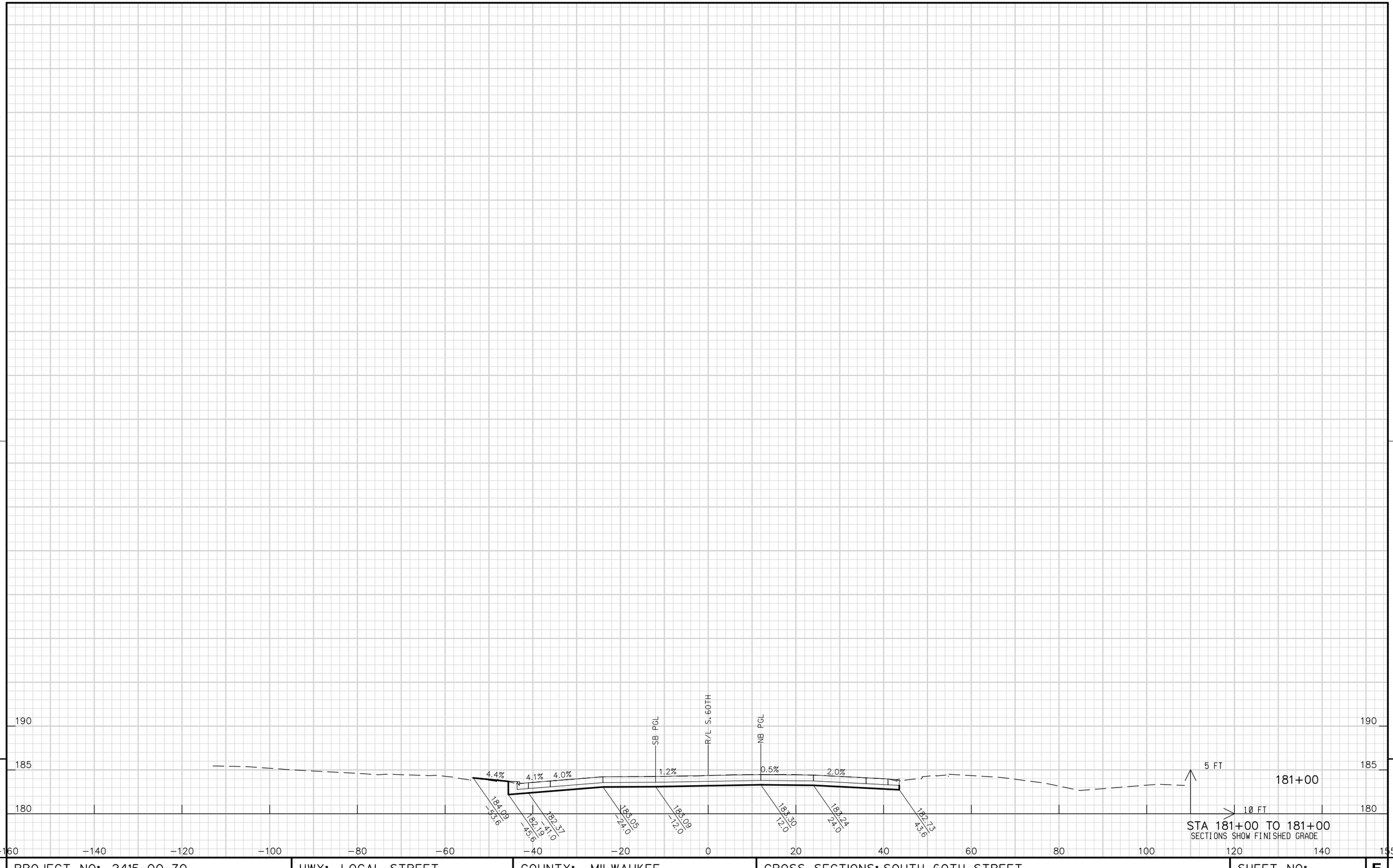
PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 298 E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

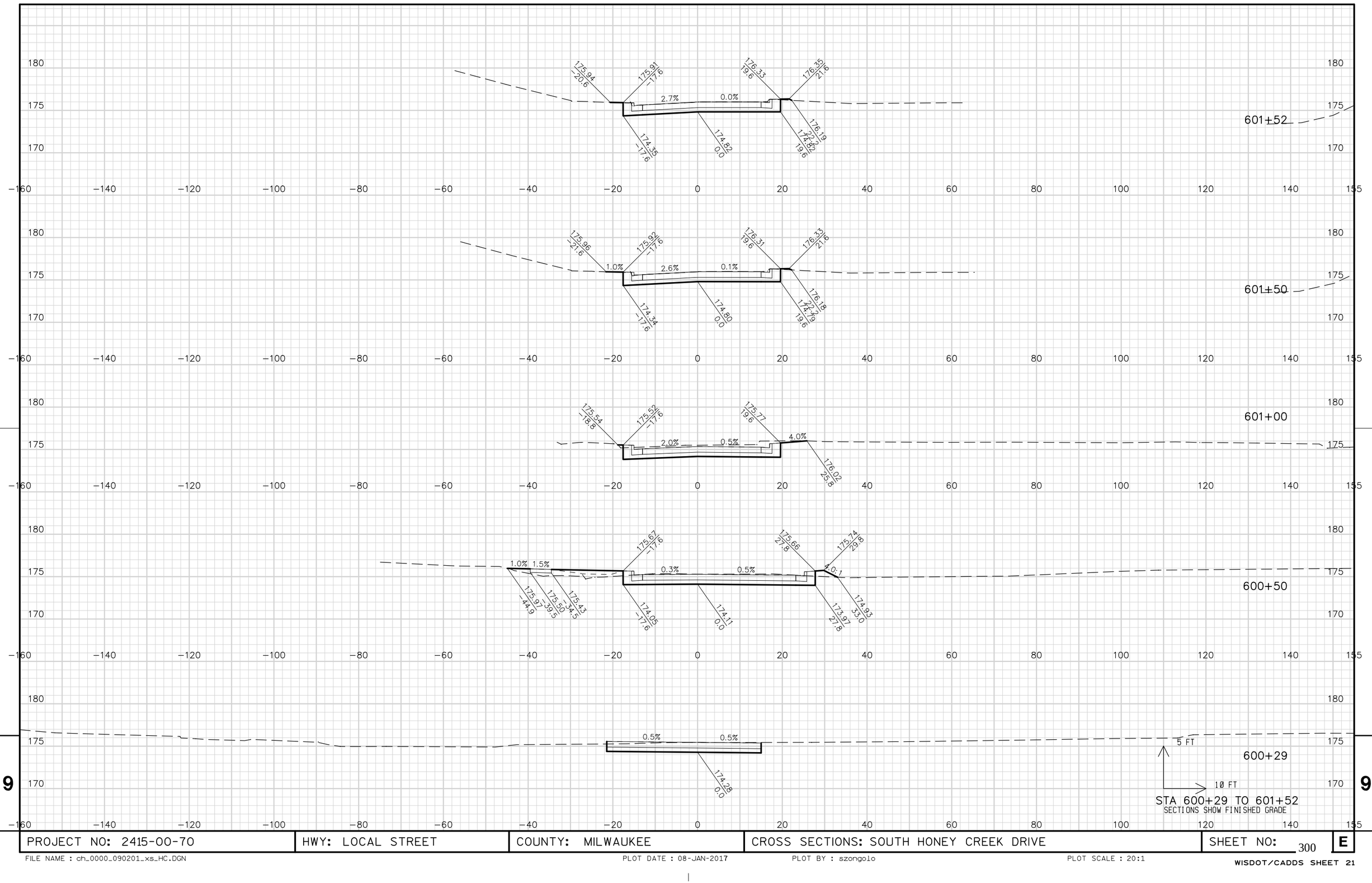


9 9

PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH 60TH STREET	SHEET NO: 299	E

FILE NAME : ch_0000_090200_xs_60.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



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PROJECT NO: 2415-00-70	HWY: LOCAL STREET	COUNTY: MILWAUKEE	CROSS SECTIONS: SOUTH HONEY CREEK DRIVE	SHEET NO: 300	E

FILE NAME : ch_0000_090201_xs_HC.DGN PLOT DATE : 08-JAN-2017 PLOT BY : szongolo PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

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