

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-PLAN
SECTION NO. 5	PLAN
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 30



N

DESIGN DESIGNATION

A.D.T. (CURRENT)	=	16,400
A.D.T. ()	=	19,700
D.H.V.	=	2,000
D.	=	50%
T.	=	6.4%
DESIGN SPEED	=	35 M.P.H.
ESALS	=	1,898,000

CONVENTIONAL SYMBOLS

PLAN

COUNTY LINE	---
TOWNSHIP OR RANGE LINE	---
SECTION LINE	---
CORPORATE OR CITY LIMITS	---
PROPERTY LINE	---
STANDARD BENCH MARK	⊙
EXISTING RIGHT OF WAY LINE	---
PROPOSED SEWER LATERAL	---
REFERENCE LINE	---
CONCRETE WALK/LOADING ZONE REMOVAL	XXXXXX
LIMITS OF CONCRETE PAVEMENT REMOVAL	XXXXXX

COMBUSTIBLE FLUIDS

RAILROADS	+
FENCE	---

CATCH BASIN OR INLET	⊠
EXISTING	⊠
PROPOSED	⊠

PROFILE

GRADE LINE	---
ORIGINAL GROUND	---
GRADE ELEVATION	---

UTILITIES

ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
TRAFFIC & ELECTRICAL SERVICES	---
MILWAUKEE METRO SEWERAGE DIST	---
CABLE TELEVISION	---
FIRE & POLICE CALL BOX	⊙
LIGHT POLE	⊙
POWER POLE	⊙
TELEPHONE OR TELEGRAPH POLE	⊙
TRAFFIC SIGNAL	⊙
TRAFFIC SIGNAL CONTROL BOX	⊙
HYDRANT	⊙
GAS OR WATER GATE VALVE	⊙
MANHOLES - SEWER	⊙
UTILITY (TYPE)	⊙
TREES - EXISTING	⊙
TO BE REMOVED	⊙

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

WEST KILBOURN AVENUE

NORTH 6TH STREET (STH 145) INTERSECTION

S.T.H. 145

MILWAUKEE COUNTY

STATE PROJECT NUMBER
2707-04-70

BEGIN PROJECT

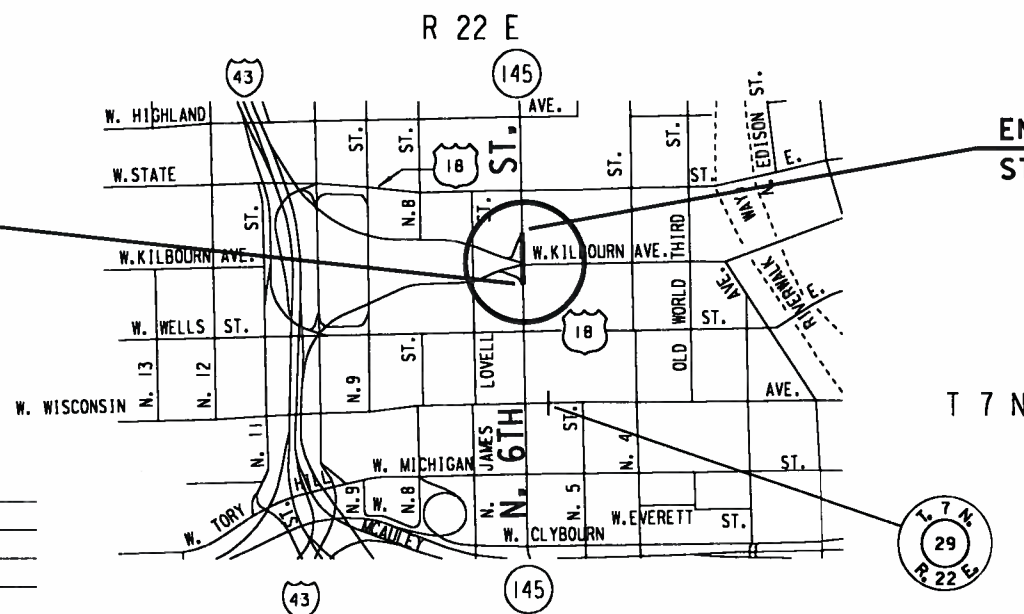
STA. 03+72.0, T/L

Y. = 386,407.52

X. = 2,556,321.71

END PROJECT

STA. 07+00.0, T/L



THE COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, MILWAUKEE COUNTY, NAD 27 SOUTH ZONE.

COMBINATION SCALE AND SEA LEVEL
REDUCTION FACTOR .99992542

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF MILWAUKEE DATUM.

TO CONVERT ELEVATIONS SHOWN ON THIS PLAN TO NATIONAL GEODESIC VERTICAL DATUM OF 1929, ADD 580.603 TO ELEVATIONS SHOWN ON THIS PLAN.

LAYOUT
SCALE 1/4 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.062 MI (URBAN)

STATE PROJECT

2707-04-70

FEDERAL PROJECT

PROJECT

WISC 2013340

CONTRACT

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Accepted For
City of Milwaukee

4/30/13 *Ghassan Hossain*
(Date) Commissioner of Public Works

Original Plans Prepared By



4/29/13 *Jeffrey S. Polenske*
(Date) City Engineer

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	City of Milwaukee
Designer	City of Milwaukee
Project Manager	Mohammad Hossain
Region Examiner	
Region Supervisor	Reem Shahin
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 4/30/13 *Mohammad Hossain*
(Signature)

GENERAL NOTES

ALL OPENINGS BELOW SUBGRADE, RESULTING FROM REMOVALS OR ABANDONMENTS, SHALL BE BACKFILLED WITH GRANULAR MATERIAL TO SUBGRADE ELEVATION.

WHEN THE QUANTITY OF ITEMS OF BASE AGGREGATE & / OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIALS AS DIRECTED BY THE ENGINEER.

ALL ELEVATIONS ARE REFERENCED TO CITY OF MILWAUKEE DATUM.

TRANSVERSE JOINTS IN THE CONCRETE WALK SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGER'S HOTLINE AND ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST THREE DAYS PRIOR TO BEGINNING WORK.

ALL COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, SOUTH ZONE. THE CONTROL SURVEY FOR THIS IMPROVEMENT PROJECT WAS CONDUCTED UNDER AND MET SPECIFICATIONS FOR THIRD ORDER CONTROL CURVEYS.

REPLACE ALL CONCRETE CURB AND GUTTER INDICATED FOR REMOVAL AND REPLACEMENT IN EXISTING LOCATION UNLESS OTHERWISE NOTED ON PLAN.

ALL RADIUS DIMENSIONS TO CURB AND GUTTER SHOWN ON THE PLAN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

INLET SCREENS ARE TO BE PLACED BETWEEN THE FRAME AND GRATE OF CATCH BASINS / INLETS TO PREVENT SOIL FROM ENTERING THE SEWERS.

UTILITIES WITHIN PROJECT LIMITS

CITY OF MILWAUKEE
841 N. BROADWAY, RM 710 MILW., WI 53202
ANTHONY KOTECKI TEL. (414) 286-2433
UTILITY COORDINATOR

WE ENERGIES (GAS)
5400 N. GREEN BAY AVE., MILW., WI 53209
TOM MINESAL, TEL. 944-5755

WE ENERGIES (ELECTRIC)
620 S. 76TH ST., M102, MILW., WI 53214
CURT DAWKINS, TEL. (414) 540-5782

AT&T WISCONSIN
7721 W. FOND DU LAC AVE. FL.1, MILW., WI 53218
TODD BARTELS, TEL. (414) 536-2971

TIME WARNER CABLE
1320 N. DR. MARTIN LUTHER KING JR. DR
MILW., WI 53212
LUKAS LACROSSE, TEL. (414) 430-9321 (414)277-0638 9FAX)

AMERICAN TRANSMISSION COMPANY
PATRICIA ELLIFSON
W234 N2000 RIDGEVIEW PARKWAY CT.
WAUKESHA, WI 53188
TEL. (262) 506-6773
pellifson@atolc.com

OTHER CONTACTS

MILW. CO. TRANSIT SYSTEM
1942 N. 17TH ST., MILW., WI 53205
DAVE ZIAREK, TEL. (414) 343-1764

STATE OF WISCONSIN DEPT. OF NATURAL RESOURCES
2300 N. DR. MARTIN LUTHER KING JR. DR.
MILW., WI 53212
KRISTINA BETZOLD,
TEL. (414) 263-8517, FAX (414) 263-8483

CITY OF MILWAUKEE
841 N. BROADWAY, RM 902 MILW., WI 53202
RATTAN MAHAY, DESIGN
TEL. (414) 286-0486

STATE OF WISCONSIN DEPT. OF TRANSPORTATION
141 NW BARSTOW ST.-WAUKESHA, WI 53188
MOHAMMAD HOSSAIN, PROJECT MANAGER
TEL. (262) 548-8783



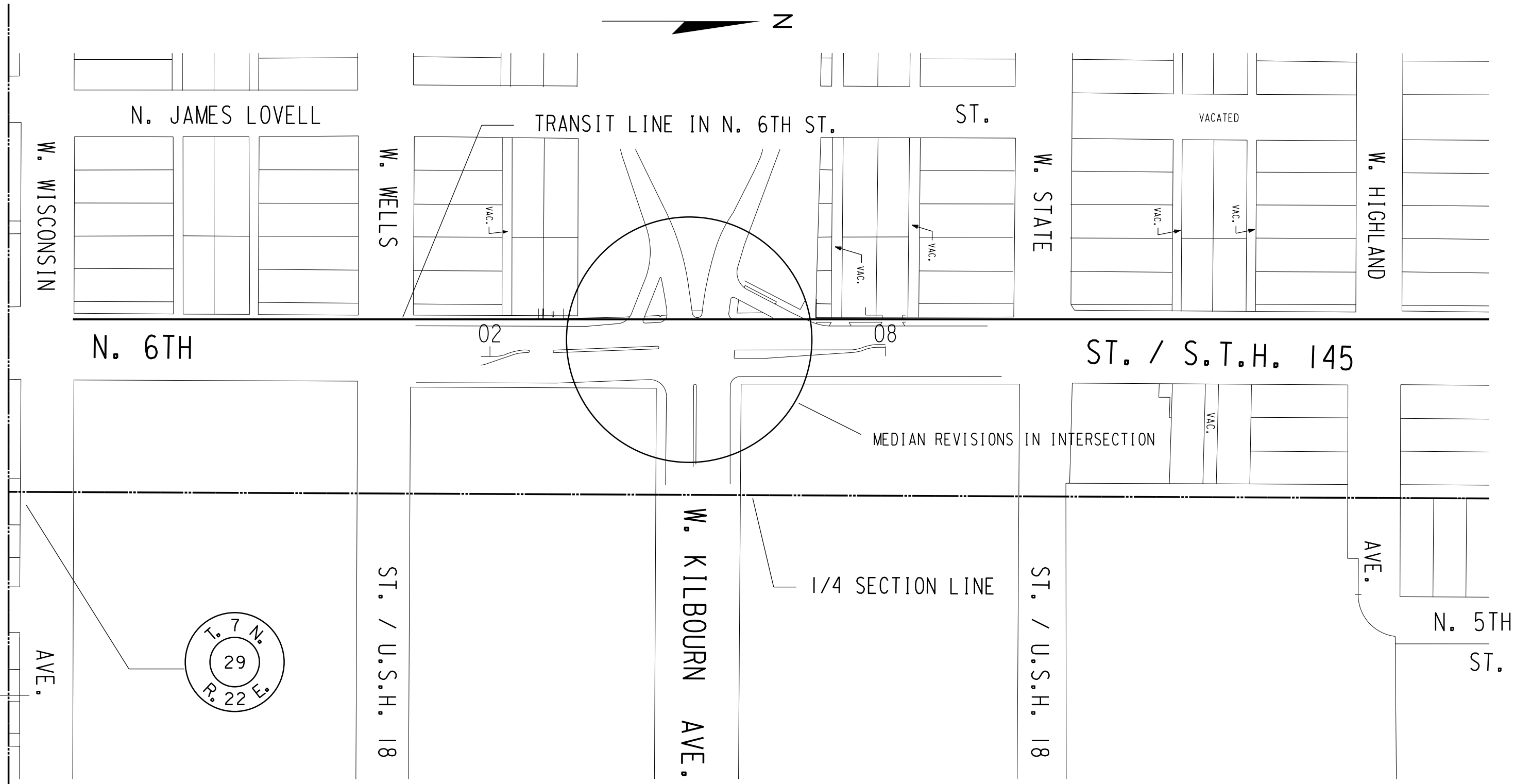
Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

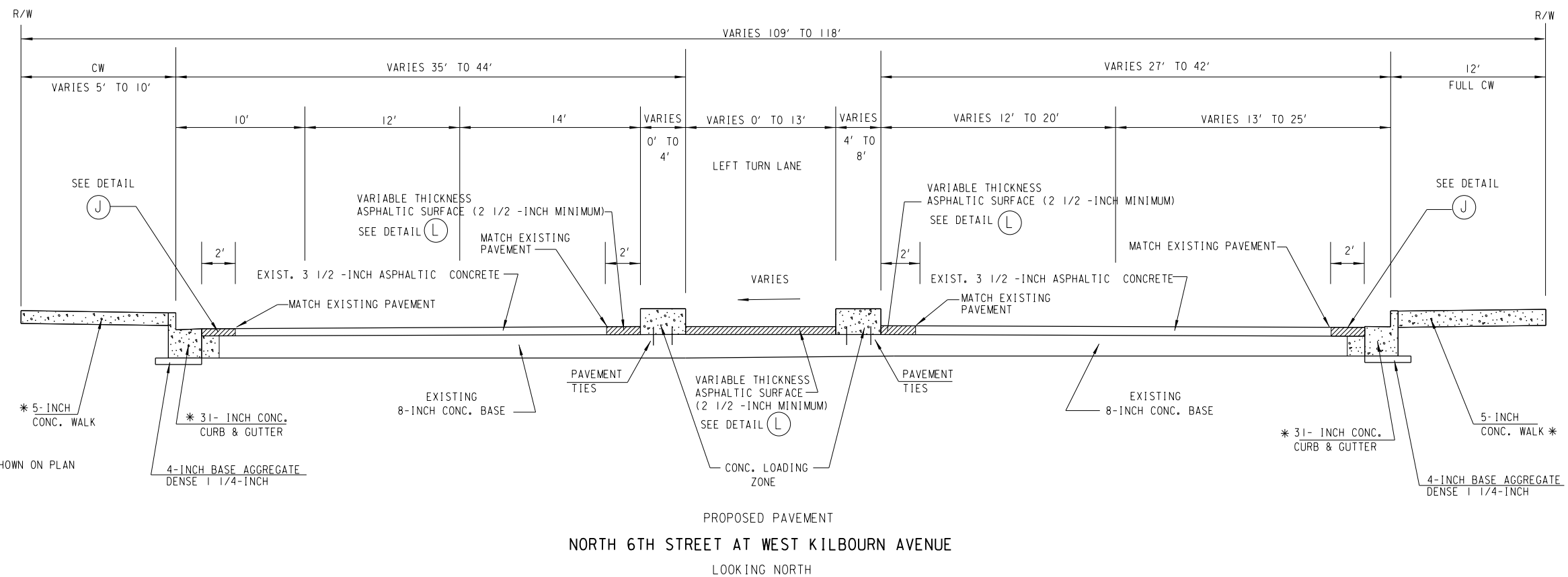
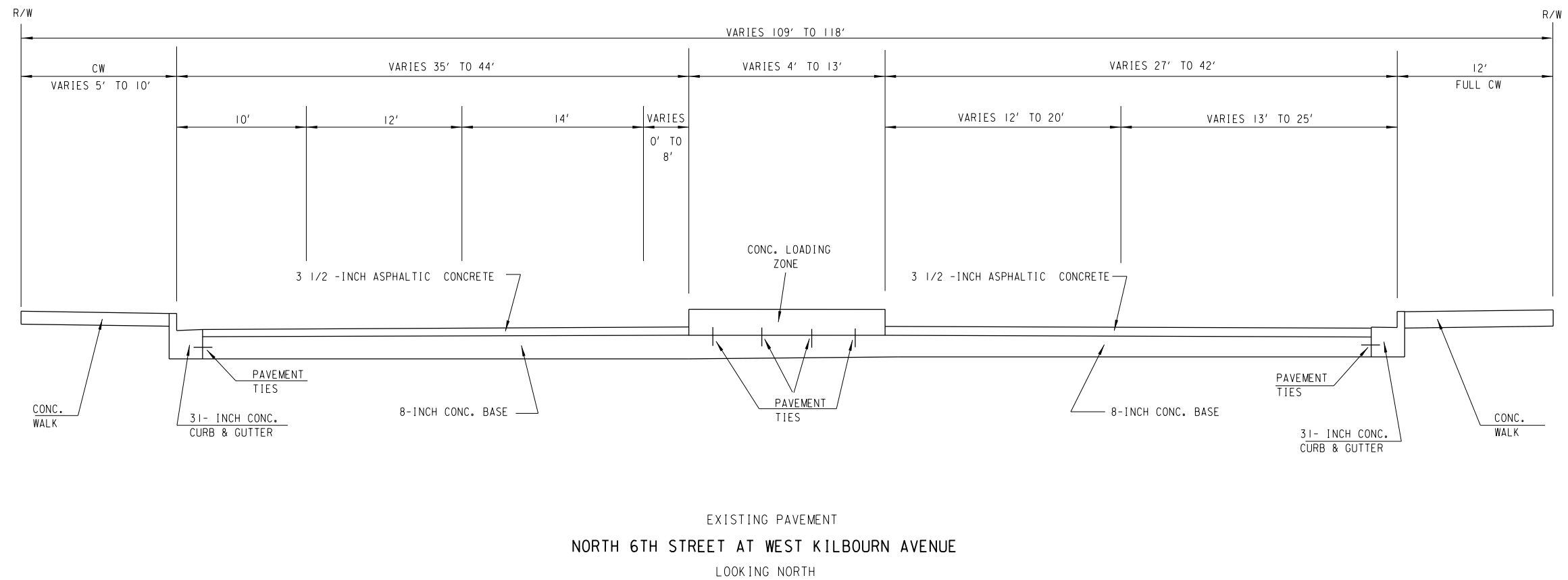
STANDARD ABBREVIATIONS

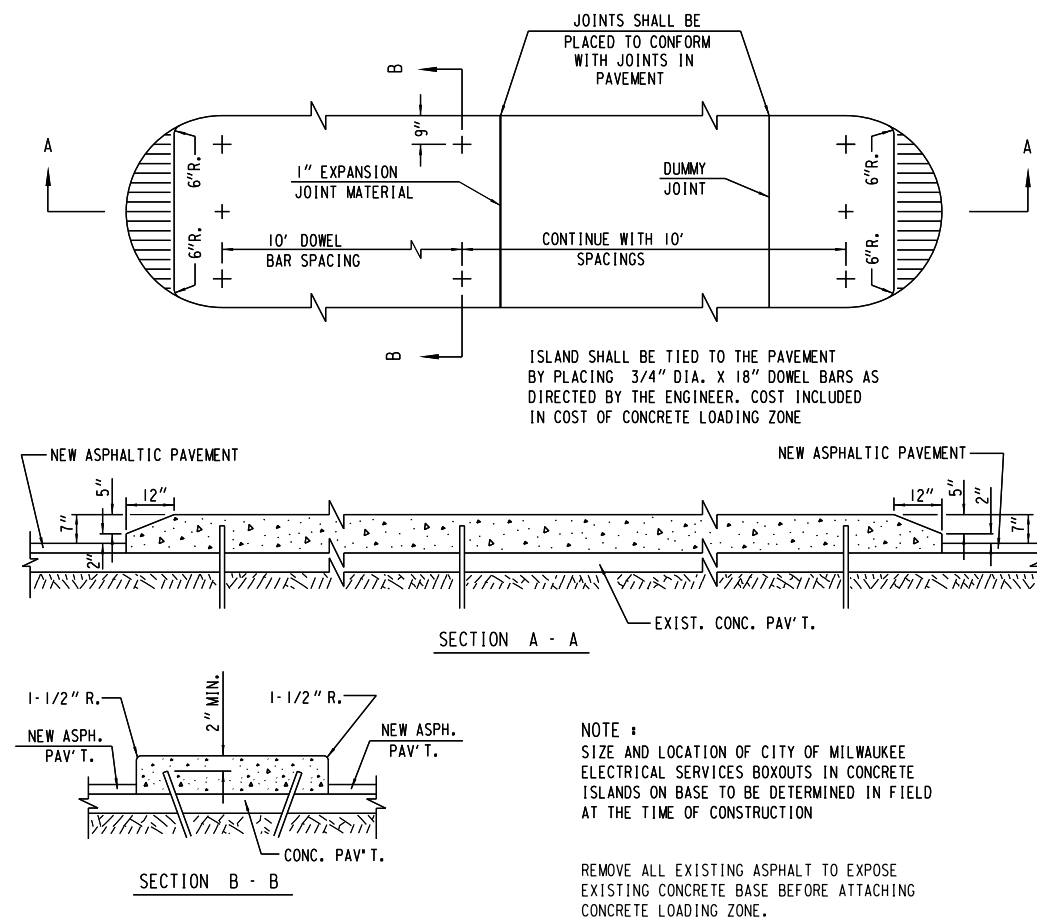
- ASPH. - ASPHALT
- B.M. - BENCH MARK
- CTR. - CENTER
- C/L - CENTER LINE
- COMB. - COMBINED
- CONC. - CONCRETE
- C.W. - CONCRETE WALK
- COR. - CORNER
- C - CURB
- ELEV. - ELEVATION
- ENT. - ENTRANCE
- EXIST. - EXISTING
- F - FLANGE
- G - GUTTER, OR GAS
- HYD. - HYDRANT
- LT. - LEFT
- MMSD - MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
- P/L. - PROPERTY LINE
- R OR RAD. - RADIUS
- RET. - RETAINING
- RT. - RIGHT
- R/W - RIGHT OF WAY
- TEL - AMERITECH
- TES - TRAFFIC ENGINEERING, AND ELECTRICAL SERVICES
- T/L - TRANSIT LINE
- WEP - WISCONSIN ELECTRIC POWER

SECTION 2 SHEET ORDER

- GENERAL NOTES
- PLAN OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAIL
- DRAINAGE DETAILS
- UTILITIES
- PAVEMENT MARKINGS
- TRAFFIC CONTROL

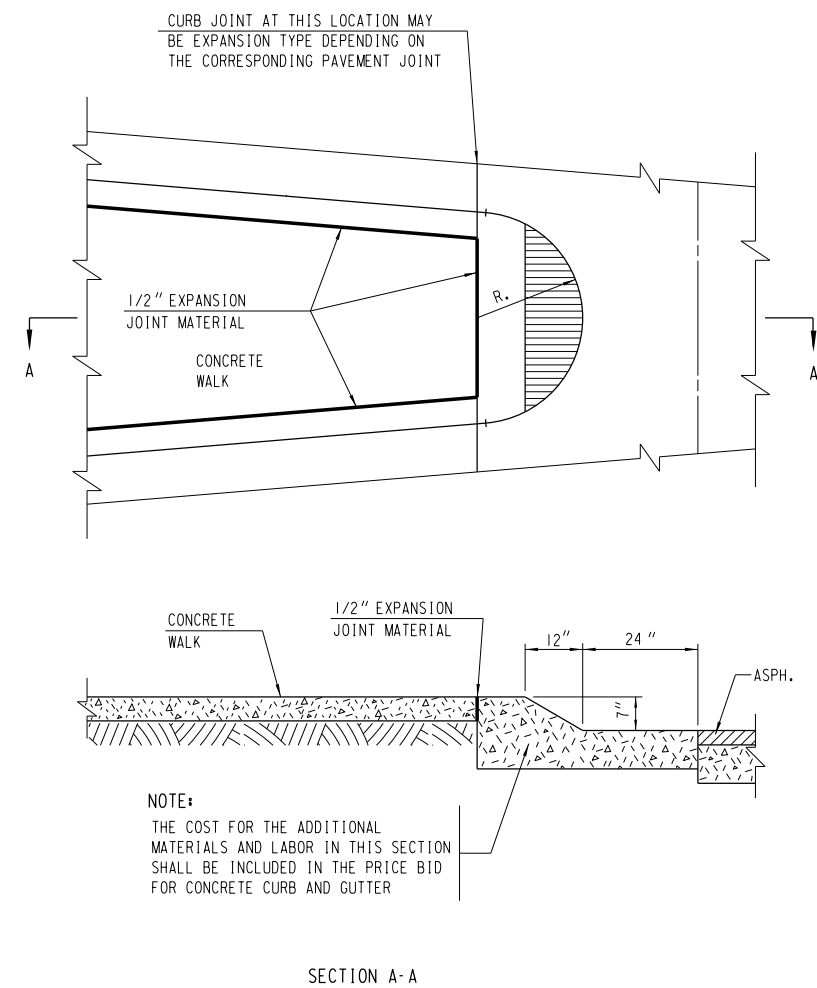






CONCRETE LOADING ZONE
(WITH SNOWPLOWABLE NOSE)

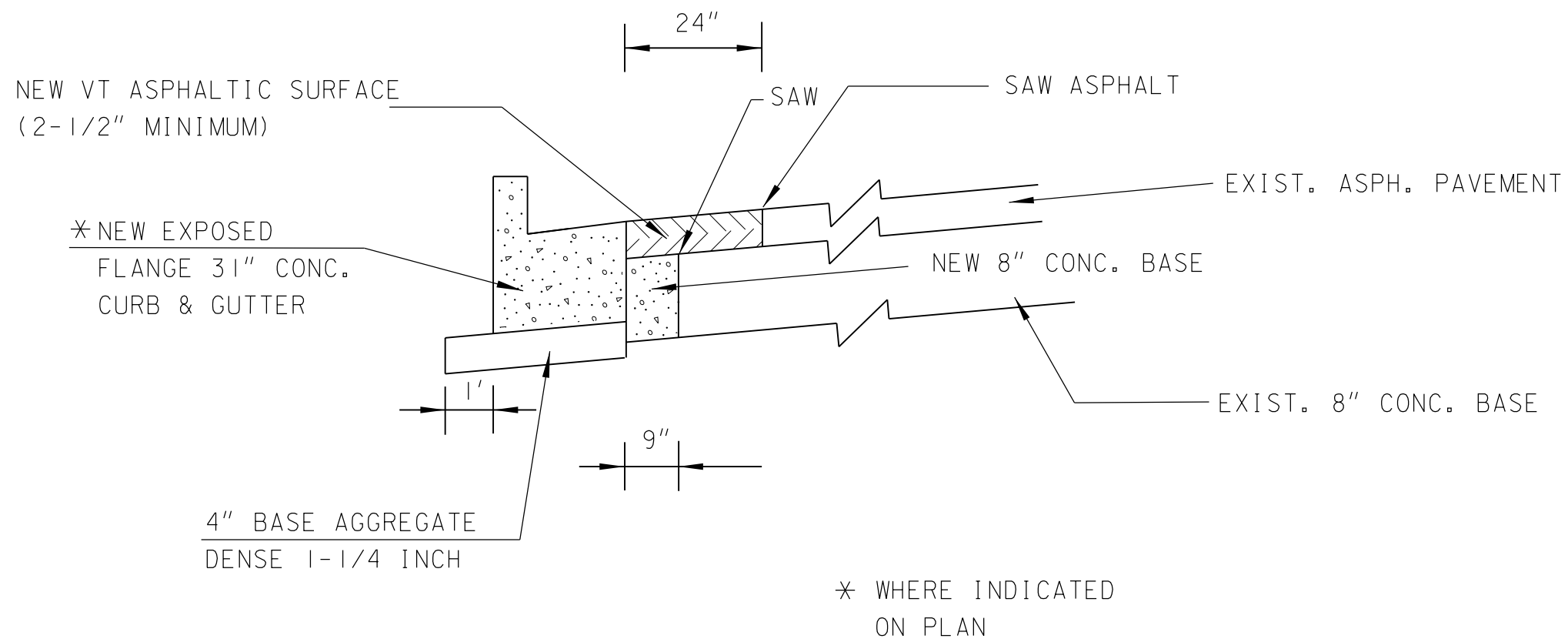
(G)



SNOWPLOWABLE MEDIAN ISLAND NOSE

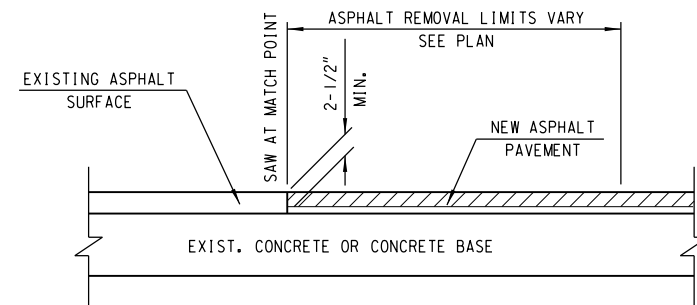
(TYPICAL SECTION OF CONCRETE CURB & GUTTER TO BE CONSTRUCTED AT END OF MEDIAN ISLAND)

(F)



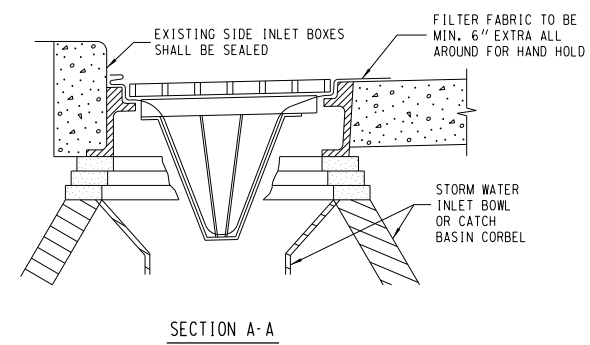
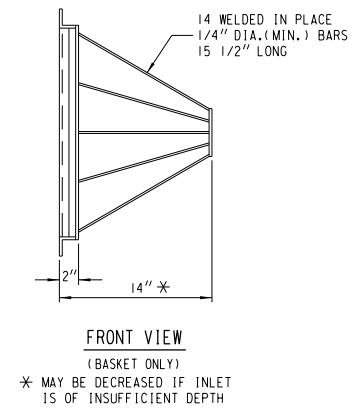
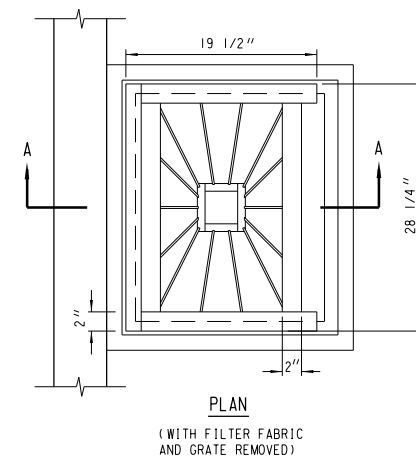
DETAIL (J)

REPAIR OF ASPH/CONC PAVEMENT



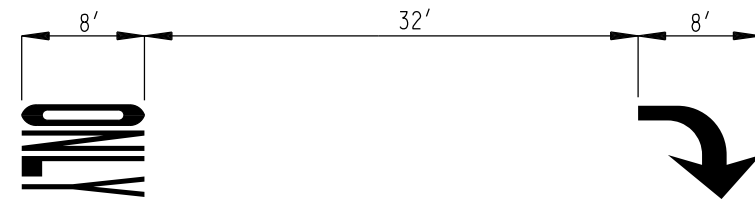
ASPHALT SURFACE REMOVAL DETAIL

Ⓛ

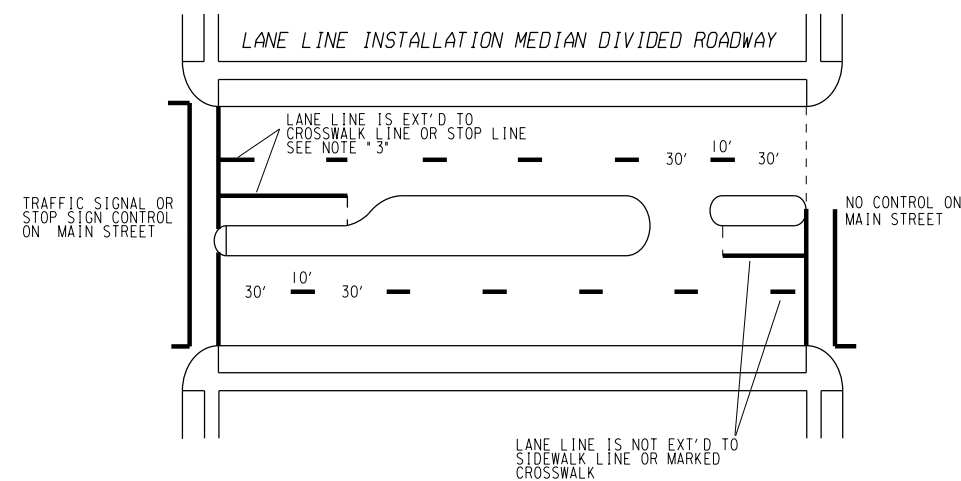


INLET BASKET
(TYPE MM)





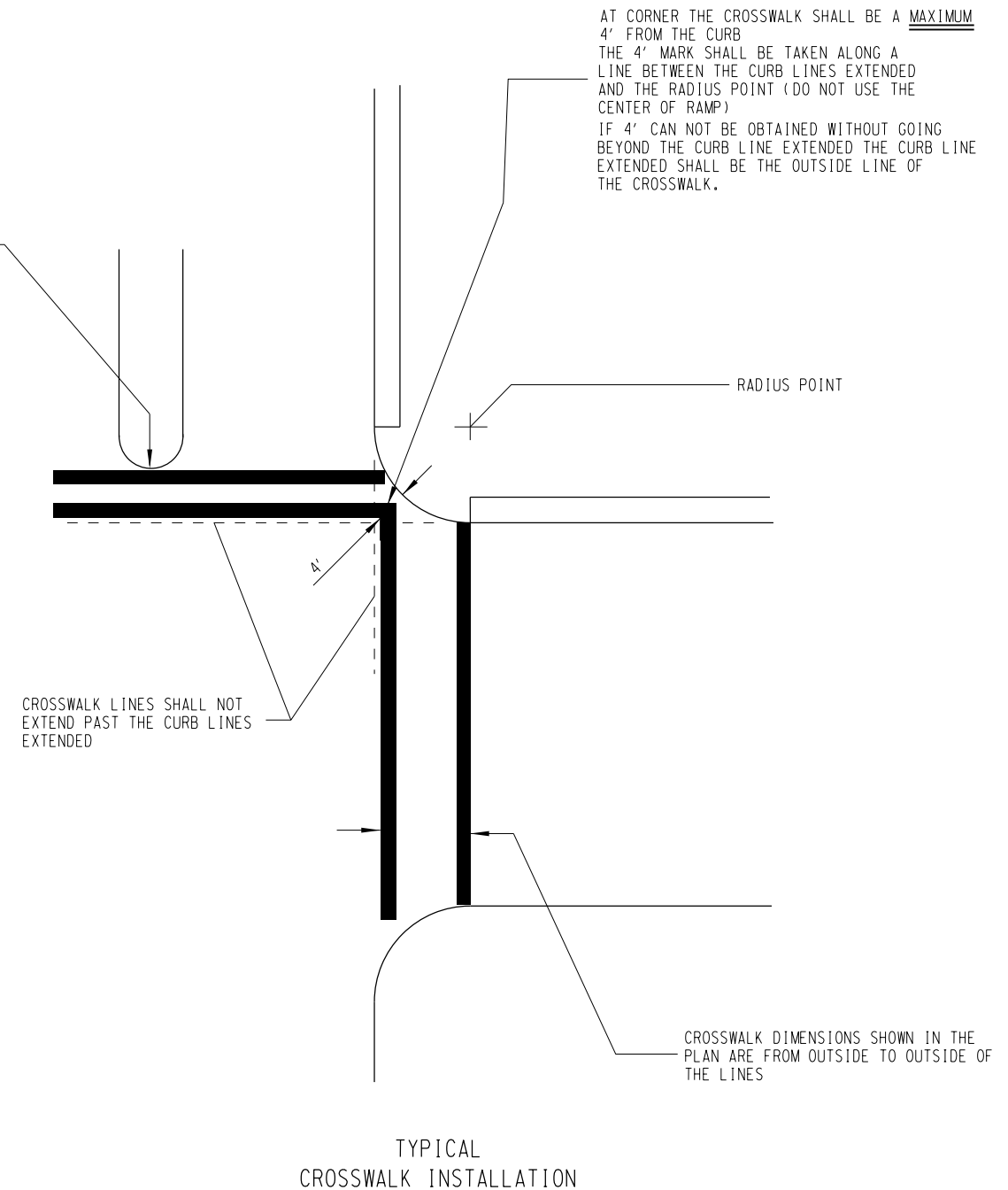
TYPICAL DETAIL
ARROW AND ONLY



PAVEMENT MARKING NOTES

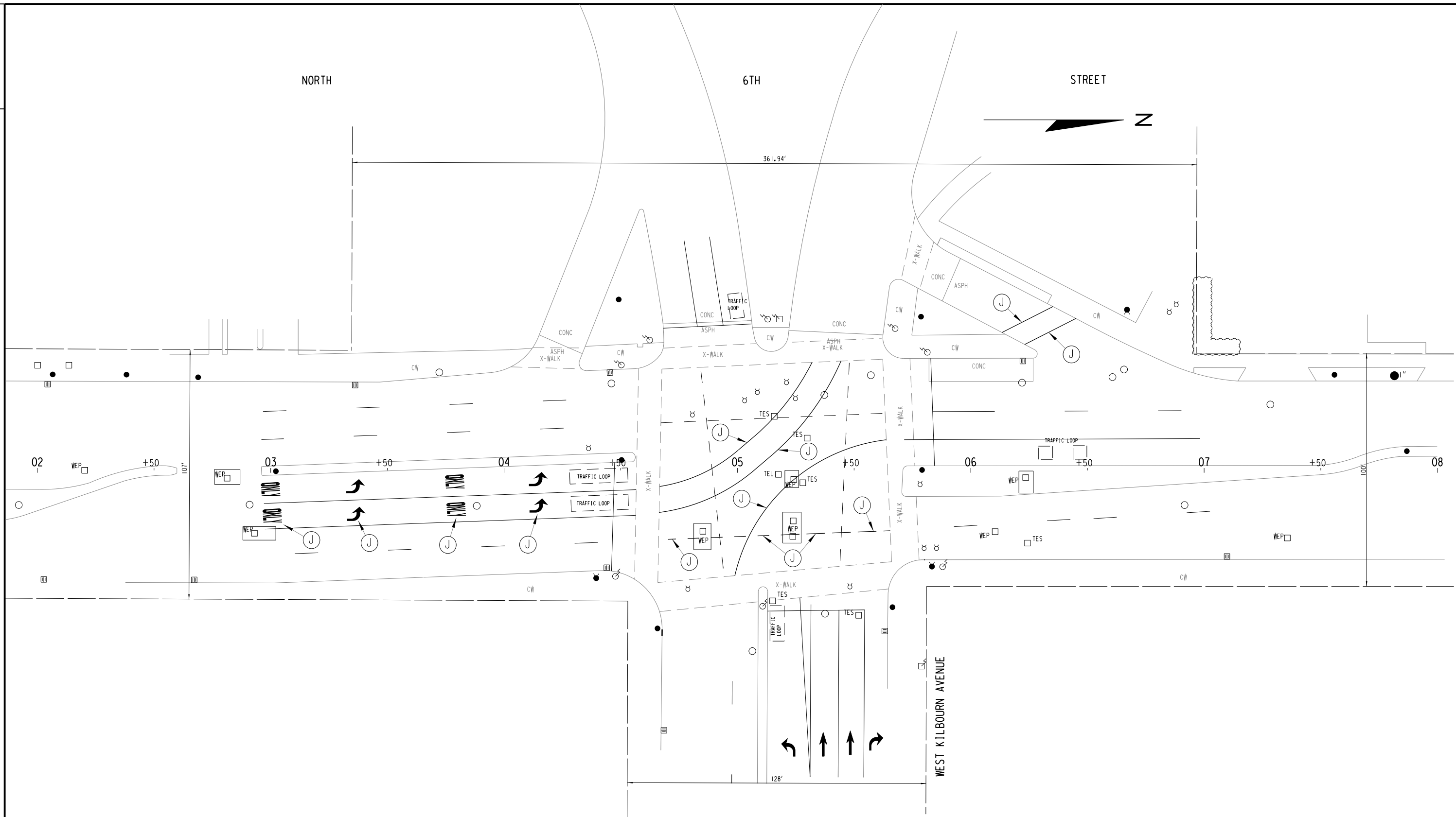
1. DASHED YELLOW CENTER LINES AND WHITE LANE LINES ARE 10 FEET LONG WITH A 30 FOOT GAP.
2. ALL DASHED CENTER LINES AND LANE LINES ARE 4 INCHES WIDE. ALL DOUBLE YELLOW CENTER LINES HAVE A 4 INCH SPACE BETWEEN TWO 4 INCH LINES.
3. AT CONTROLLED INTERSECTION IF LANE LINE IS LESS THAN 10 FEET, THE PRECEDING LINE IS EXTENDED TO THE STOP LINE OR CROSSWALK LINE. THIS BALANCE LINE SHOULD NOT EXCEED 49 FEET. THIS POLICY APPLIES TO LANE LINES ONLY AT TRAFFIC SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTIONS AND CENTER LINES AT ALL LOCATIONS.
4. ALL DIMENSIONS ARE FROM THE FACE OF THE CURB TO THE CENTER OF THE MARKING UNLESS OTHERWISE NOTED.
5. TEMPORARY PAVEMENT MARKINGS MUST BE PLACED ON THE PAVEMENT IF PERMANENT MARKINGS ARE NOT INSTALLED AFTER THE COMPLETION OF PAVING.

MEDIAN NOSE MUST REMAIN OUTSIDE
THE DESIGNATED CROSSWALK AREA.



TYPICAL
CROSSWALK INSTALLATION

SHEET 2 OF 2



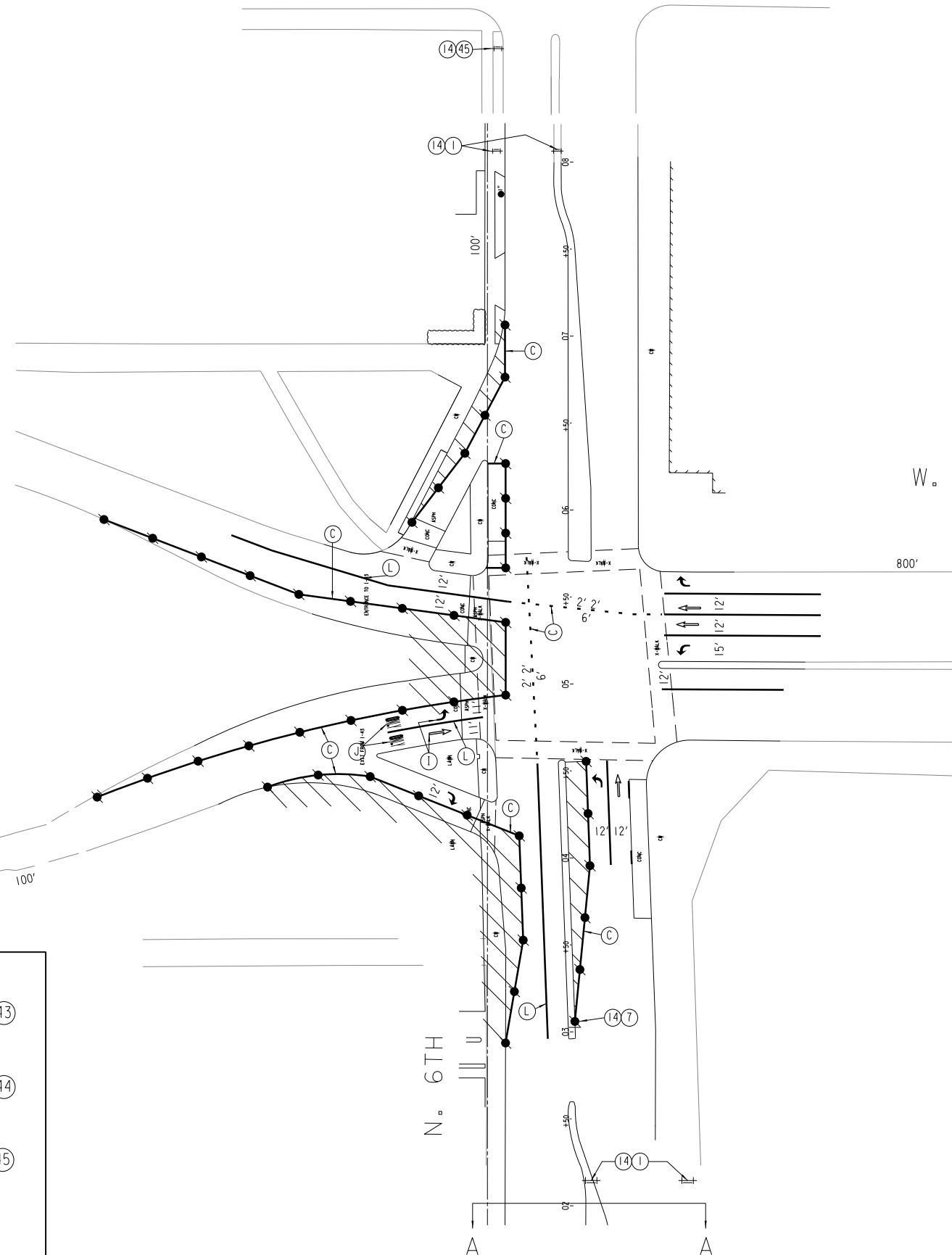
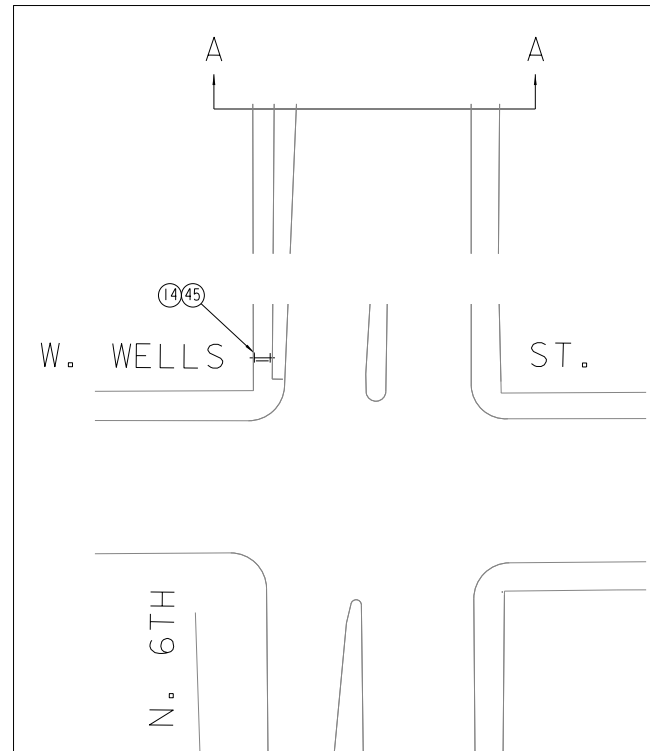
PAVEMENT MARKING LEGEND

(J) REMOVE PAVEMENT MARKING

PAVEMENT MARKING REMOVAL

SHEET 1 OF 1

W. STATE ST. STAGE I



- DRUMS W/LIGHTS 30' SPACING ● — (13)
TYPE III BARRICADES ++ — (14)
TYPE III BARRICADES W/ SIGN ++ — (14) + (X)
SIGNS BANDED TO UTILITY POLE ●
WORK AREA ▨
DIRECTION OF TRAFFIC ⇄
TUBULAR MARKERS 25' SPACING ●

- (A) TPM, REFLECTIVE PAINT, 4" WHITE
(B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
(C) TPM, REMOVABLE TAPE, 4" WHITE
(D) TPM, REMOVABLE TAPE, 4" DOUBLE YELLOW
(E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
(F) TPM, REFLECTIVE PAINT, 8" WHITE
(G) TPM, ARROWS, REFLECTIVE PAINT
(H) TPM, WORDS, REFLECTIVE PAINT
(I) TPM, ARROWS, REMOVABLE TAPE
(J) TPM, WORDS, REMOVABLE TAPE
(K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
(L) TPM, REMOVABLE TAPE, 8" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES
UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING
PAVEMENT MARKINGS.

SHEET 1 OF 3

STATE PROJECT NUMBER - - -

HWY: S.T.H. 145

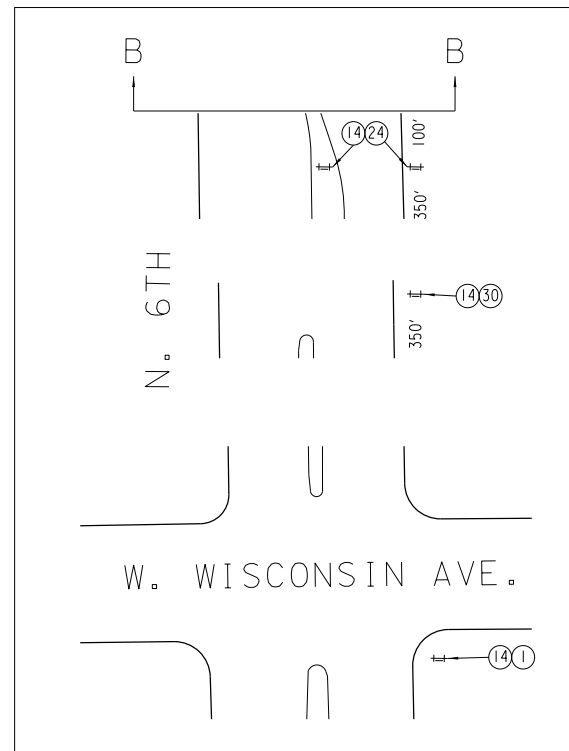
COUNTY: MILWAUKEE

TRAFFIC CONTROL

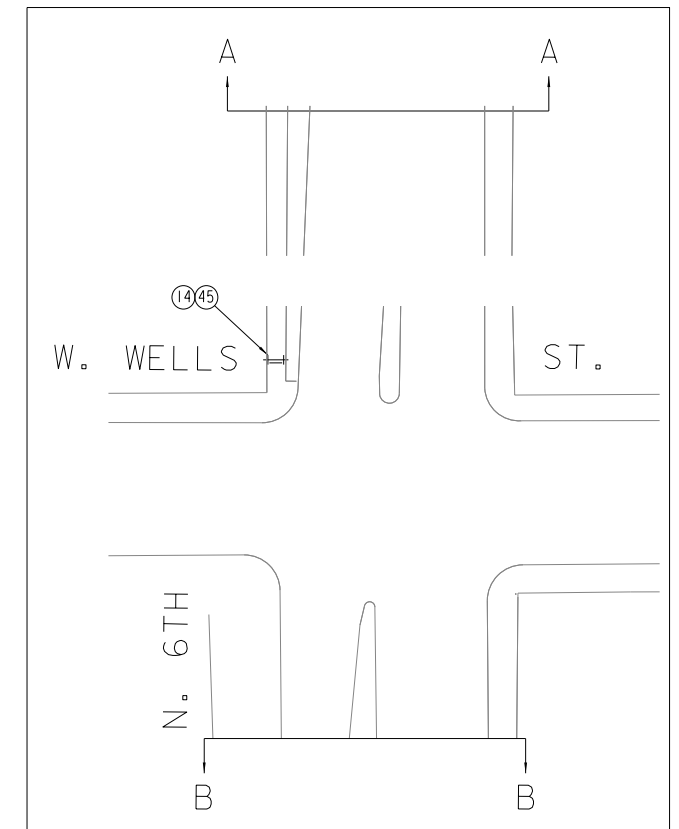
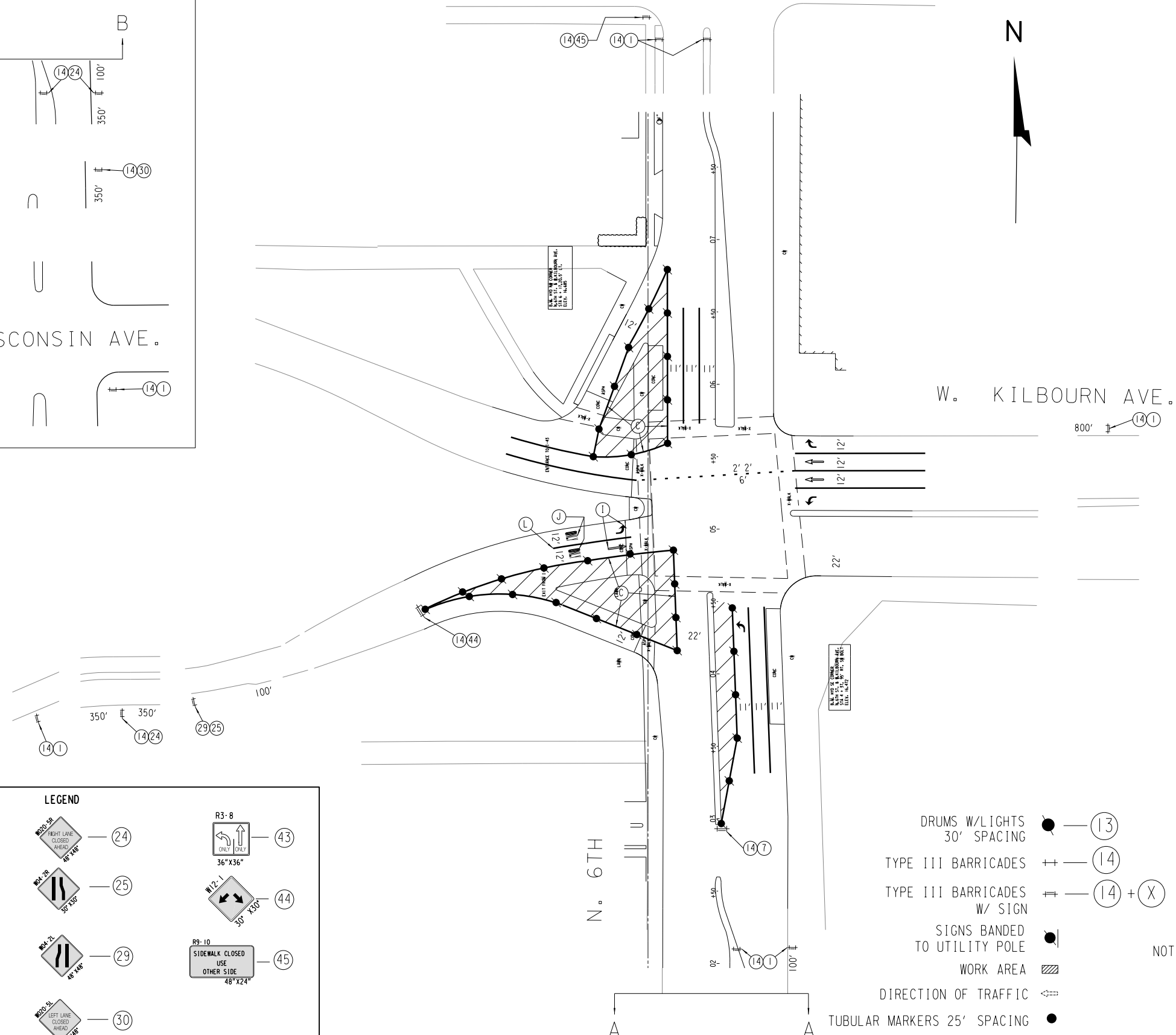
SCALE FEET 0' 80'

SHEET NO:

E



W. STATE ST. STAGE 2



- (A) TPM, REFLECTIVE PAINT, 4" WHITE
- (B) TPM, REFLECTIVE PAINT, 4" DOUBLE YELLOW
- (C) TPM, REMOVABLE TAPE, 4" WHITE
- (D) TPM, REMOVABLE TAPE, 4" DOUBLE YELLOW
- (E) TPM, STOP LINE, REMOVABLE TAPE 24" WHITE
- (F) TPM, REFLECTIVE PAINT, 8" WHITE
- (G) TPM, ARROWS, REFLECTIVE PAINT
- (H) TPM, WORDS, REFLECTIVE PAINT
- (I) TPM, ARROWS, REMOVABLE TAPE
- (J) TPM, WORDS, REMOVABLE TAPE
- (K) TPM, STOP LINE, REFLECTIVE PAINT, 24" WHITE
- (L) TPM, REMOVABLE TAPE, 8" WHITE

NOTE: ALL SIGNING SHALL BE THE CONTRACTORS RESPONSIBILITY.
ALL SIGNS SHALL BE BANDO TO EXISTING UTILITY POLES
UNLESS OTHERWISE NOTED.
CONTRACTOR RESPONSIBLE FOR COVERING ALL CONFLICTING
PAVEMENT MARKINGS.

SHEET 2 OF 3

STATE PROJECT NUMBER

HWY: S.T.H. 145

COUNTY: MILWAUKEE

TRAFFIC CONTROL

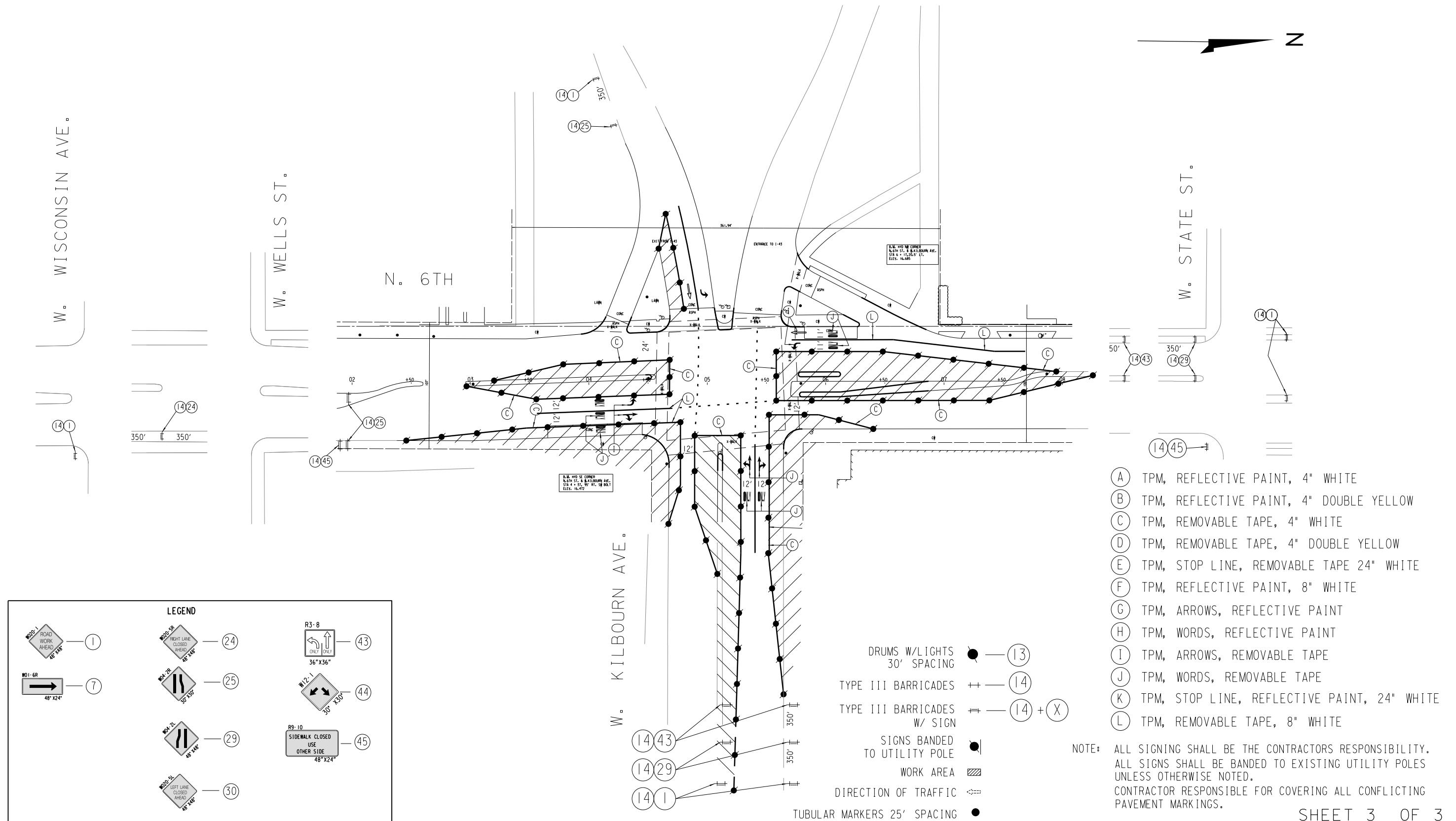
SCALE FEET



SHEET NO:

E

STAGE 3



DATE 20MAY13		E S T I M A T E O F Q U A N T I T I E S			
LINE		2707-04-70			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	REMOVING ASPHALTIC SURFACE	SY	280.000	280.000
0020	204.0150	REMOVING CURB & GUTTER	LF	290.000	290.000
0030	204.0155	REMOVING CONCRETE SIDEWALK	SY	270.000	270.000
0040	205.0100	EXCAVATION COMMON **P**	CY	14.000	14.000
0050	213.0100	FINISHING ROADWAY (PROJECT) 01. 2707-04-70	EACH	1.000	1.000
0060	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	68.000	68.000
0070	320.0145	CONCRETE BASE 8-INCH	SY	26.000	26.000
0080	455.0605	TACK COAT	GAL	11.000	11.000
0090	465.0105	ASPHALTIC SURFACE	TON	40.000	40.000
0100	601.0331	CONCRETE CURB & GUTTER 31-INCH	LF	310.000	310.000
0110	602.0410	CONCRETE SIDEWALK 5-INCH	SF	2,410.000	2,410.000
0120	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	96.000	96.000
0130	602.1000	CONCRETE LOADING ZONE	SF	1,120.000	1,120.000
0140	619.1000	MOBILIZATION	EACH	1.000	1.000
0150	625.0100	TOPSOIL	SY	29.000	29.000
0160	629.0210	FERTILIZER TYPE B	CWT	1.000	1.000
0170	631.1000	SOD LAWN	SY	29.000	29.000
0180	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0190	643.0100	TRAFFIC CONTROL (PROJECT) 01. 2707-04-70	EACH	1.000	1.000
0200	643.0300	TRAFFIC CONTROL DRUMS	DAY	2,198.000	2,198.000
0210	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	672.000	672.000
0220	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,344.000	1,344.000
0230	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	2,198.000	2,198.000
0240	643.0900	TRAFFIC CONTROL SIGNS	DAY	672.000	672.000
0250	646.0600	REMOVING PAVEMENT MARKINGS	LF	400.000	400.000
0260	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	4,516.000	4,516.000
0270	649.0801	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH	LF	760.000	760.000
0280	649.1800	TEMPORARY PAVEMENT MARKING ARROWS	EACH	9.000	9.000
0290	649.2000	REMOVABLE TAPE			
		TEMPORARY PAVEMENT MARKING WORDS	EACH	10.000	10.000
0300	650.5500	REMOVABLE TAPE			
		CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	530.000	530.000
0310	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 2707-04-70	LS	1.000	1.000
0320	690.0150	SAWING ASPHALT	LF	480.000	480.000
0330	690.0250	SAWING CONCRETE	LF	330.000	330.000
0340	SPV.0060	SPECIAL 01. INLET SCREENS TYPE M	EACH	5.000	5.000
0350	SPV.0090	SPECIAL 01. CONSTRUCTION STAKING CONCRETE SIDEWALK	LF	170.000	170.000
0360	SPV.0165	SPECIAL 01. REMOVING CONCRETE LOADING ZONE	SF	1,330.000	1,330.000

Estimate of Traffic Control Items Required (0010 Participating)

Items		Stage 1 (Each) * (Days)		Stage 2 (Each) * (Days)		Stage 3 (Each) * (Days)		Total
(1)643.0300	Traffic Control, Drums	44	616	32	448	81	1,134	2,198
(2)643.0420	Traffic Control, Barricades, Type III	12	168	16	224	20	280	672
643.0705	Traffic Control, Warning Lights, Type "A" (Flashing)	24	336	32	448	40	560	1,344
643.0715	Traffic Control, Warning Lights, Type "C" (Steady)	44	616	32	448	81	1,134	2,198
643.0900	Traffic Control, Signs	12	168	16	224	20	280	672
(3) Temporary Pavement Marking								
649.0400	Temporary Pavement Marking Removable Tape 4-Inch	1,272		956		2288		4,516
649.0801	Temporary Pavment Marking Removeable Tape 8-Inch	380		60		320		760
649.1800	Temporary Pavement Marking Arrows Removable Tape	2		2		5		9
649.2000	Temporary Pavement Marking Words Removable Tape	2		2		6		10
NOTES: THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE. ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" WILL BE COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. THIS WORK WILL BE INCIDENTAL TO THE ITEM OF TRAFFIC CONTROL. CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVELLED LANE WHEN WORK IS NOT IN PROGRESS. WARNING SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.								
(1) All Drums have one steady burning yellow light (2) All Type III Barricades have 2 flashing yellow lights (3) When placing temporary pavement marking removable tape, the tape shall be sliced or cut across its width every 25 feet. This will limit ravelling.								

Items	Stage 1	Stage 2	Stage 3	Size (")
W020-1	7	7	6	48 X 48
W01-6R	1	1	0	24 X 12
W020-5R	0	3	1	36 X 36
W020-5L	1	1	0	36 X 36
W04-2R	0	1	3	30 X 30
W04-2L	1	0	4	30 X 30
R3-8	0	0	4	36 X 36
W12-1	0	1	0	30 X 30
R9-10	2	2	2	48 X 24
Total	12	16	20	

MISCELLANEOUS QUANTITIES

STATION	204.0110 REMOVING ASPHALTIC SURFACE	204.0150 REMOVING CURB & GUTTER	204.0155 REMOVING CONCRETE SIDEWALK	205.0100 EXCAVATION COMMON	213.0100 FINISHING ROADWAY	305.0120 BASE AGGREGATE DENSE 1 1/4 INCH	320.0145 CONCRETE BASE 8-INCH	455.0605 TACK COAT	465.0105 ASPHALTIC SURFACE	601.0331 CONCRETE CURB & GUTTER 31-INCH	602.0410 CONCRETE SIDEWALK 5-INCH	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	602.1000 CONCRETE LOADING ZONE	619.1000 MOBILIZATION
	SY	LF	SY	CY	LS	TON	SY	GAL	TON	LF	SF	SF	SF	EA
STA 3+50 TO 7+00	280	290	270	14	1	68	26	11	40	310	2410	96	1120	1
TOTAL	280	290	270	14	1	68	26	11	40	310	2410	96	1120	1

ALL ITEMS ARE IN CATEGORY 0010

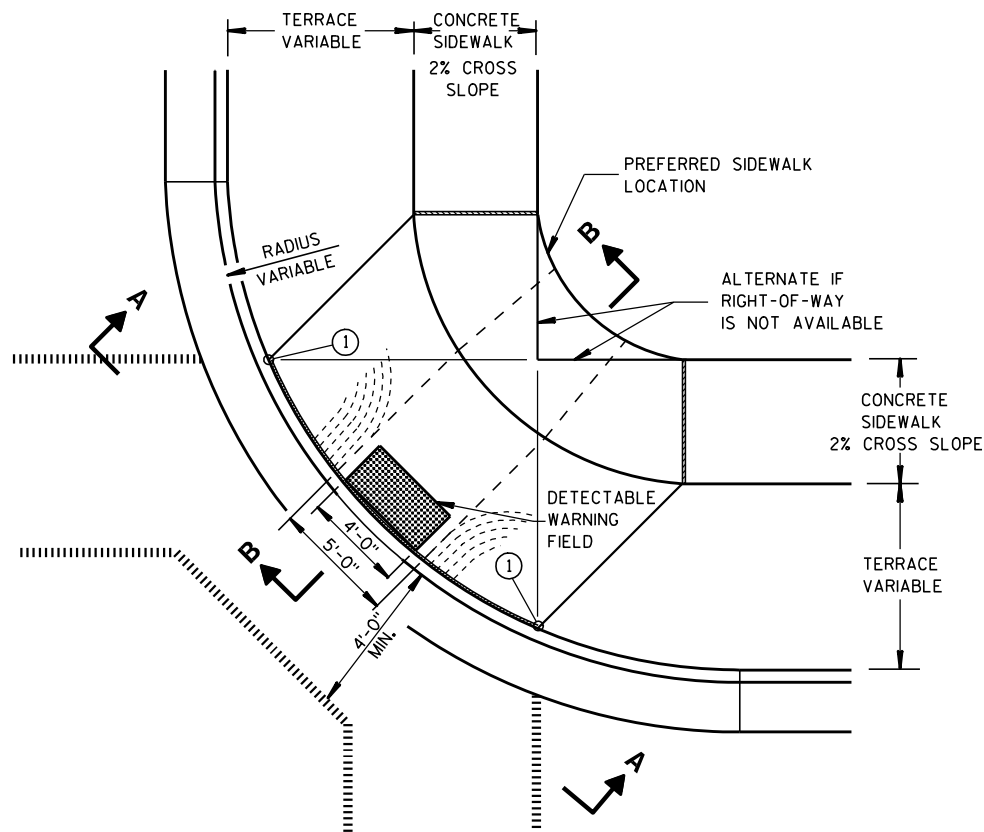
MISCELLANEOUS QUANTITIES (cont.)

625.0100 TOPSOIL	629.0210 FERTILIZER TYPE B	631.1000 SOD LAWN	642.5001 FIELD OFFICE TYPE B	643.0100 TRAFFIC CONTROL (PROJECT)	646.0600 REMOVE PAVEMENT MARKINGS	650.5500 CONSTRUCTION STAKING CURB GUTTER & CURB AND GUTTER	690.0150 SAWING ASPHALT	690.0250 SAWING CONCRETE	SPV.0060.01 INLET SCREENS' TYPE M	SPV.0090.01 CONST. STAKING CONCRETE SIDEWALK	SPV.0165.01 REMOVING CONCRETE LOADING ZONE
SY	CWT	SY	EA	LS	LF	LF	LF	LF	EACH	LF	SF
29	1	29	1	1	400	530	480	330	5	170	1330
29	1	29	1	1	400	530	480	330	5	170	1330

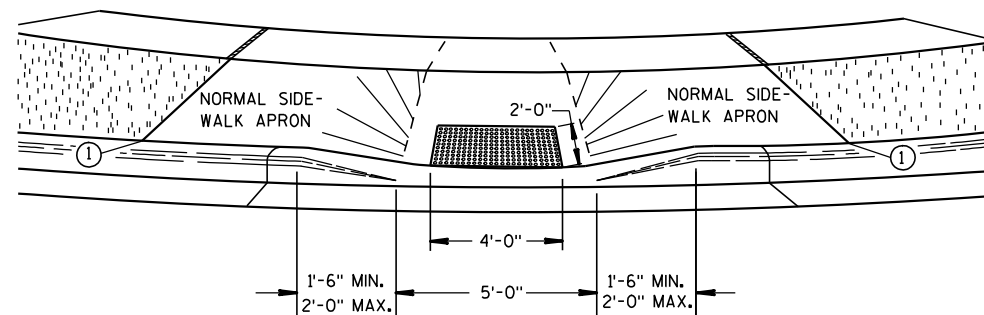
ALL ITEMS ARE IN CATEGORY 0010

Standard Detail Drawing List

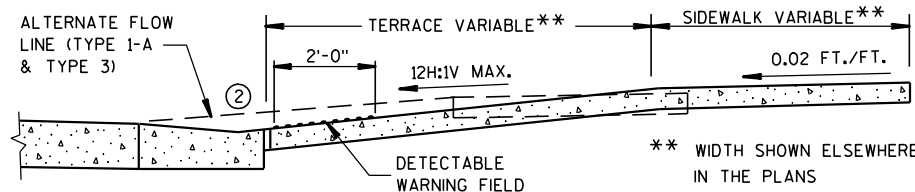
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
11B02-02	CONCRETE MEDIAN NOSE
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



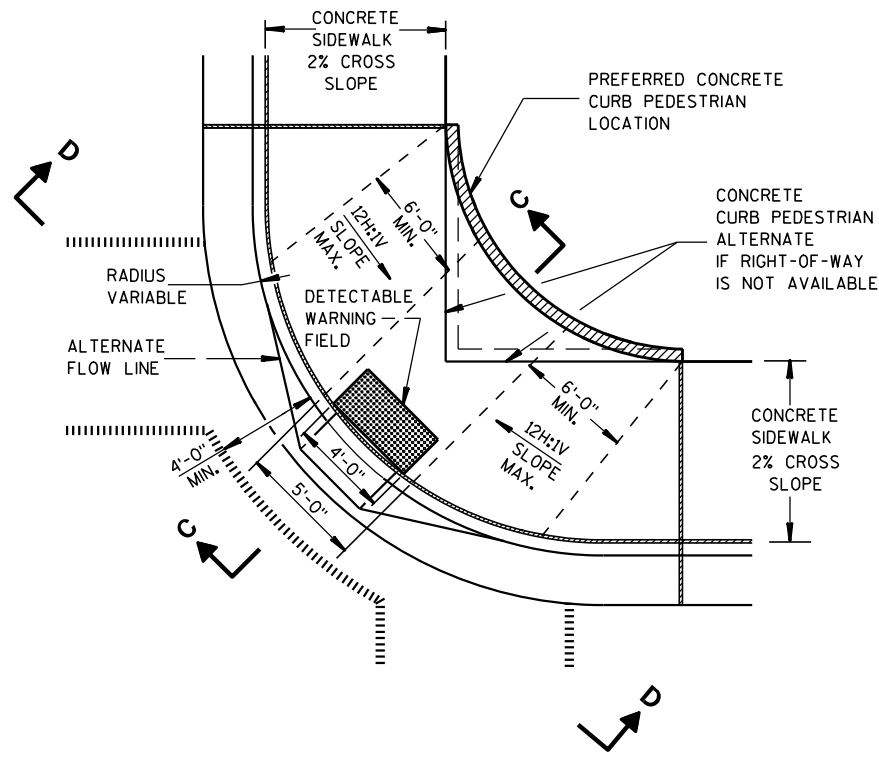
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



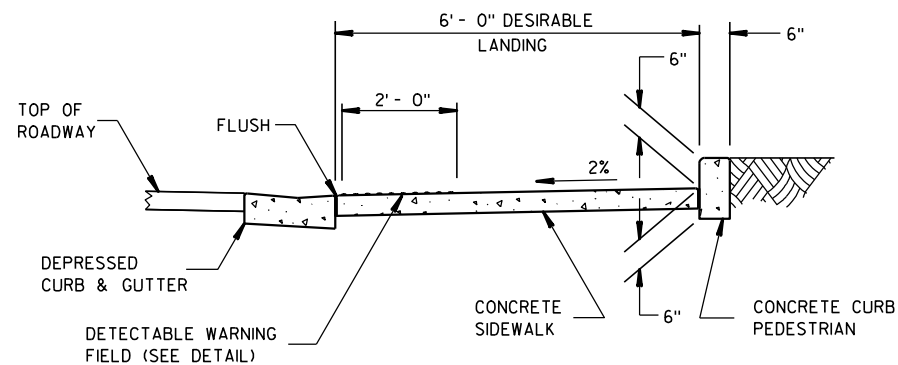
VIEW A-A



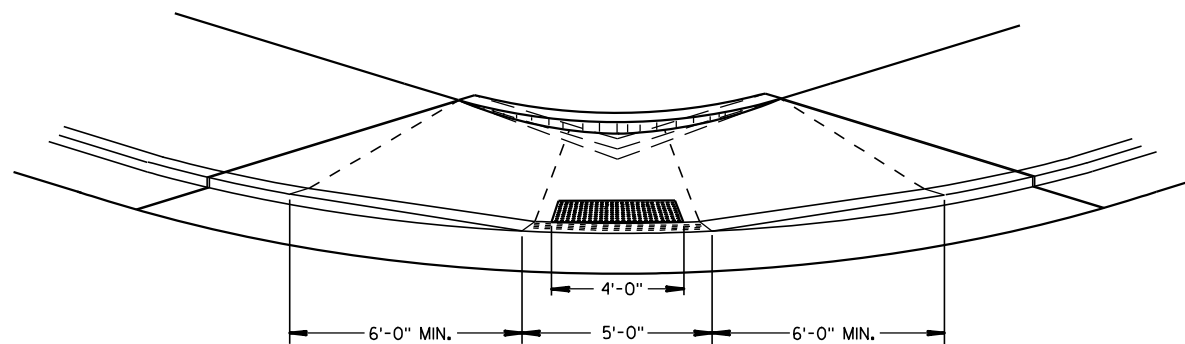
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

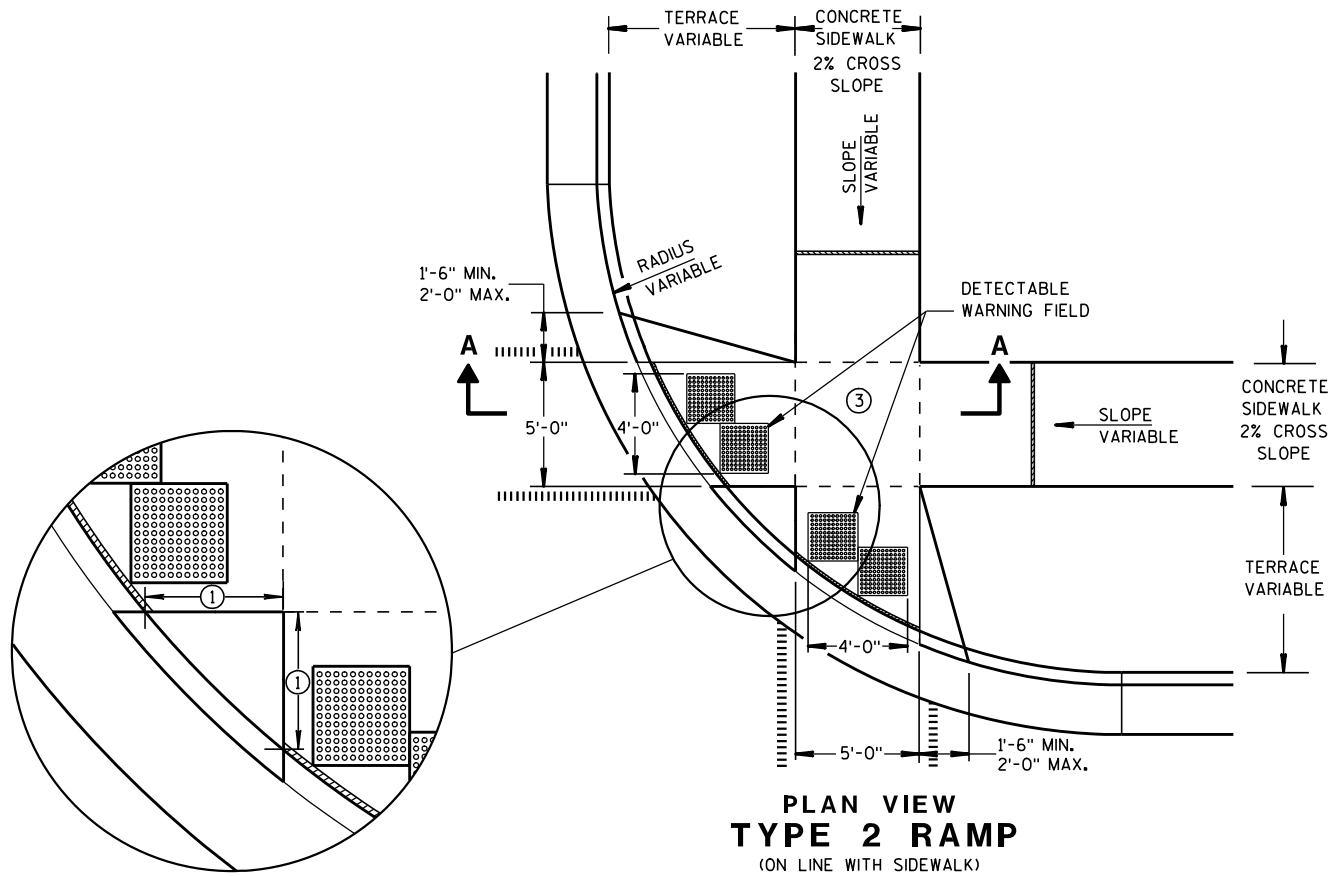
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

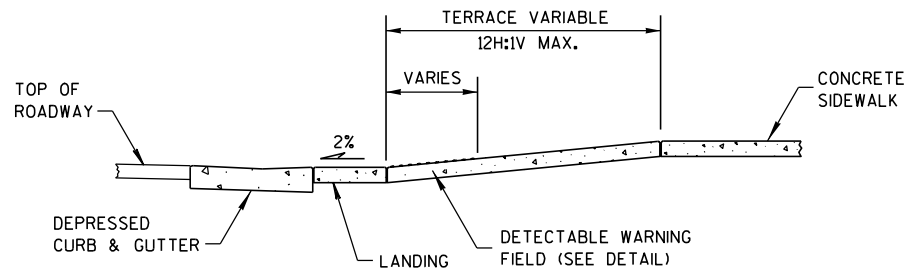
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS
TYPES 1 AND 1-A

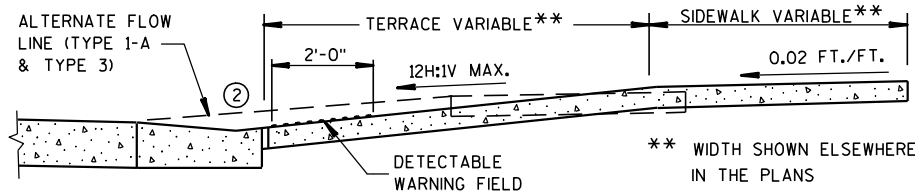
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

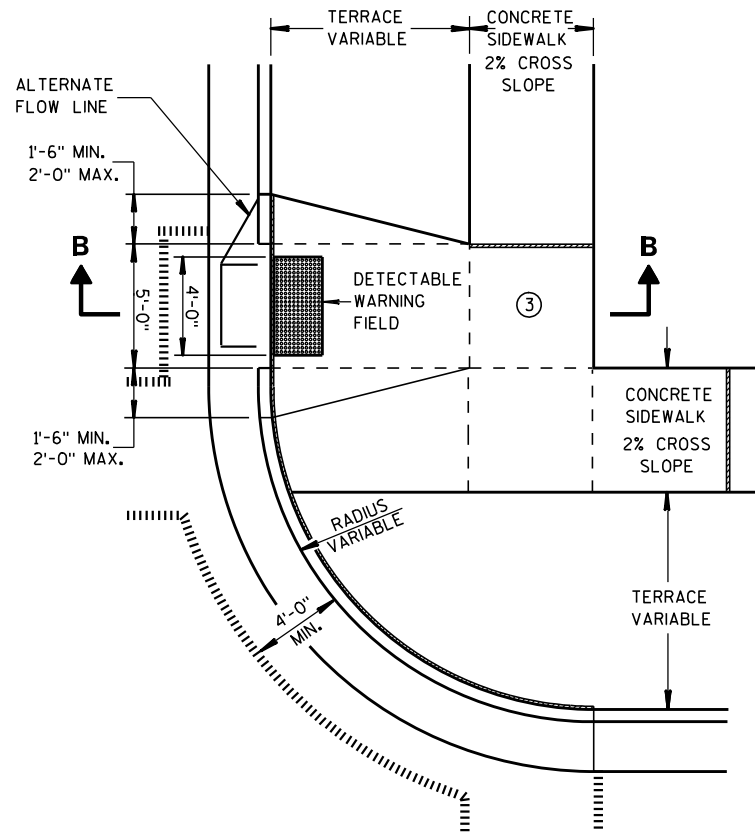
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

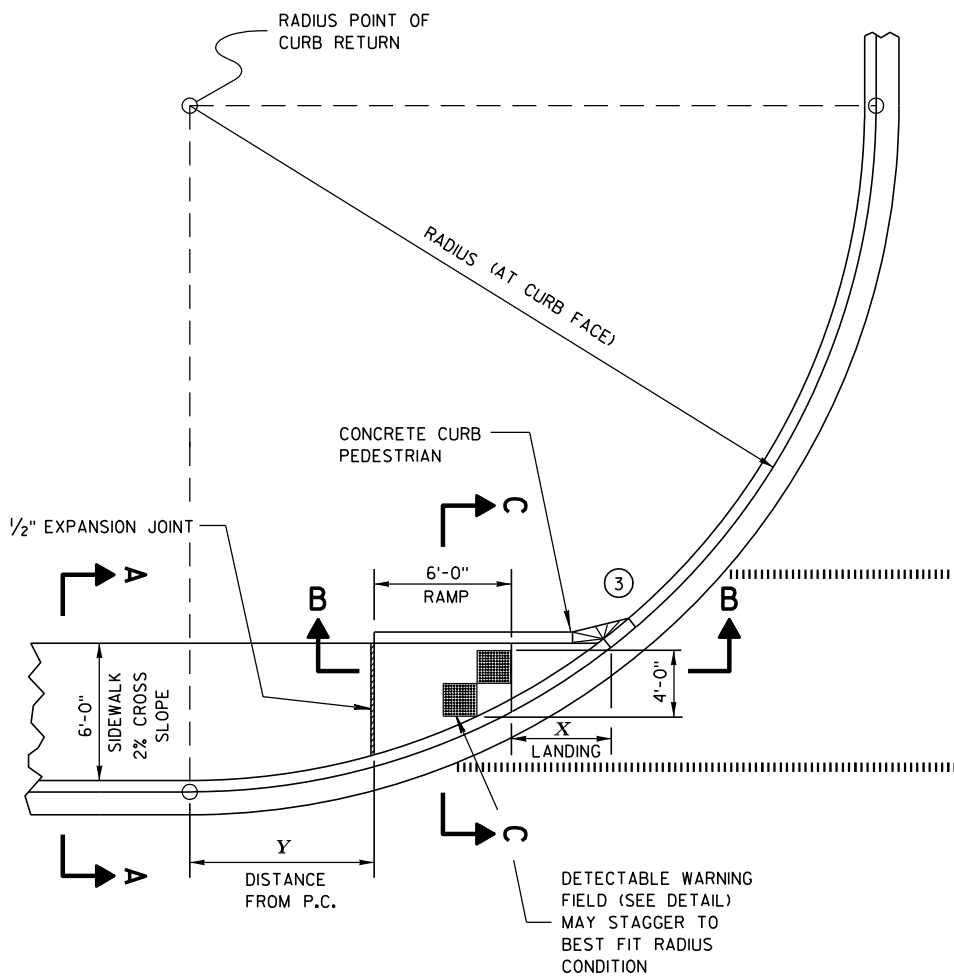
- ===== 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



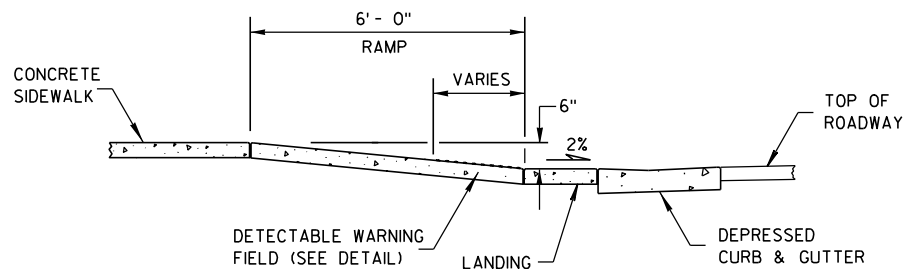
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

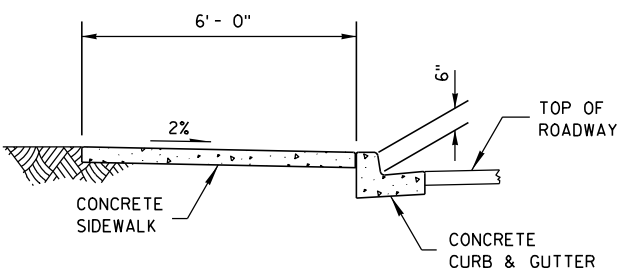
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



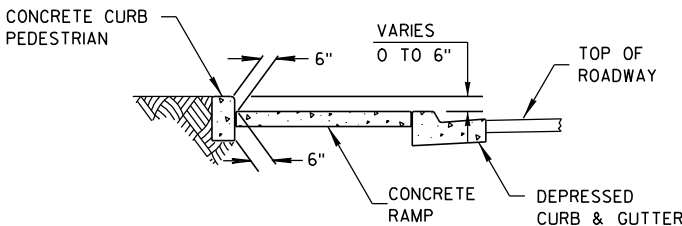
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
30 FEET	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
40 FEET	9'-5 $\frac{1}{4}$ "	6'-5"
50 FEET	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
60 FEET	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

INTERMEDIATE RADII CAN BE INTERPOLATED

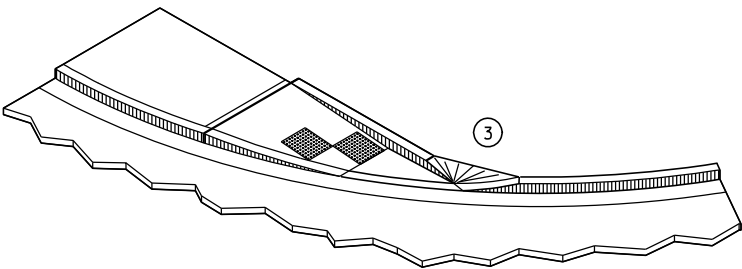
GENERAL NOTES

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

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.



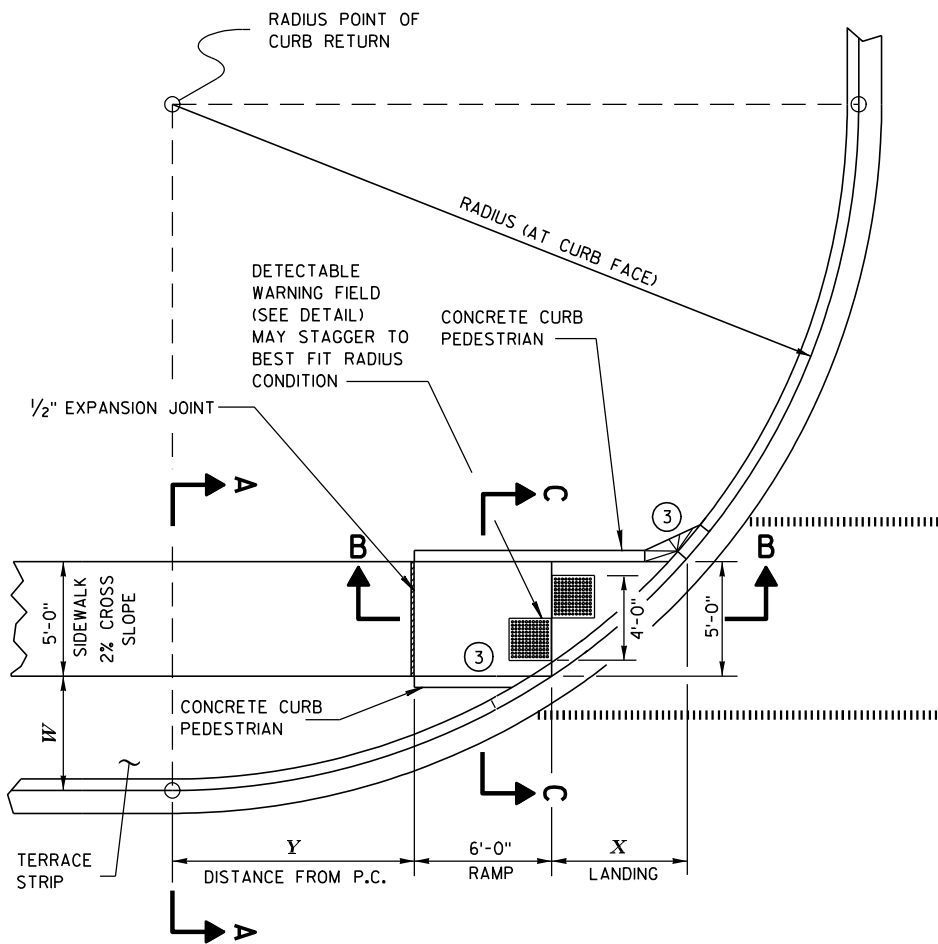
ISOMETRIC VIEW

LEGEND

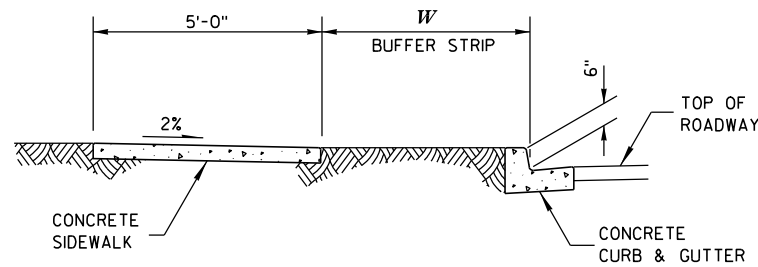
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
..... PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

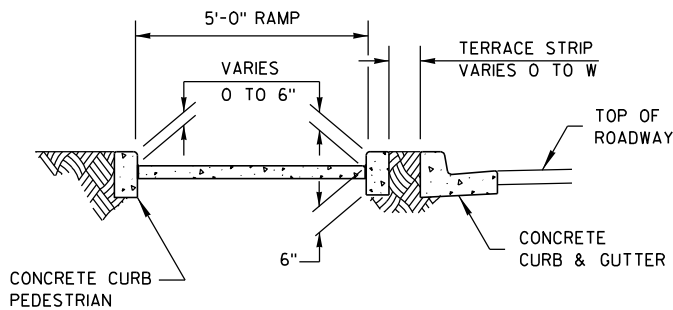
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



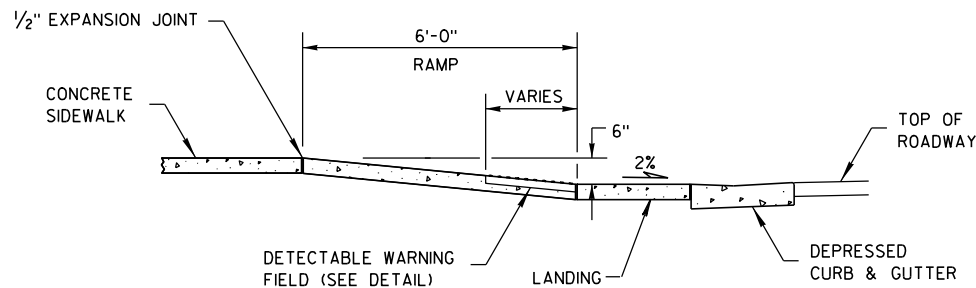
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

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

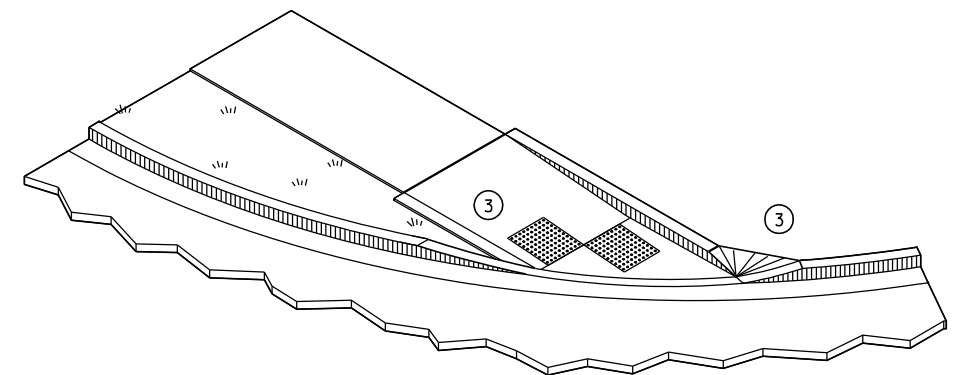
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

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'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



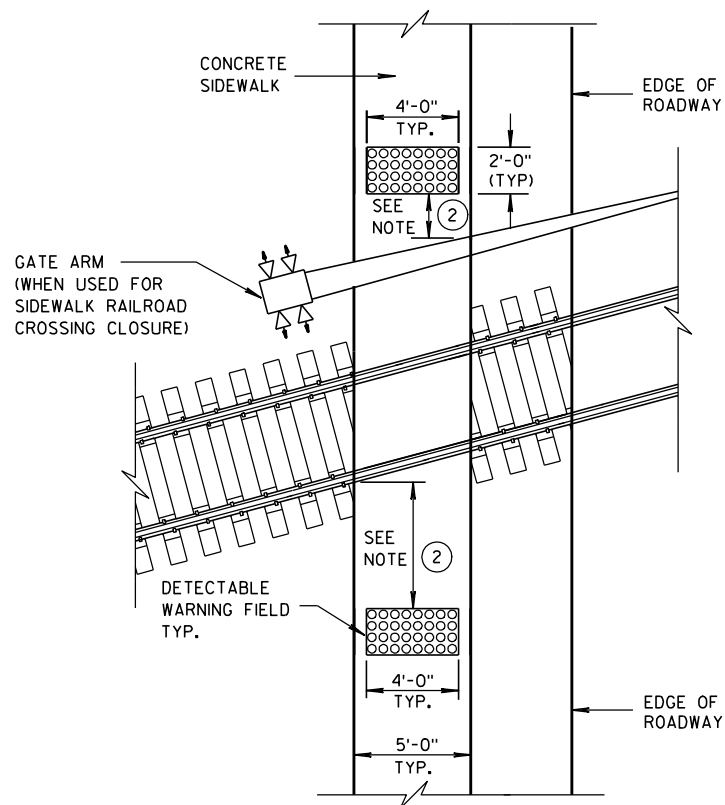
ISOMETRIC VIEW

LEGEND

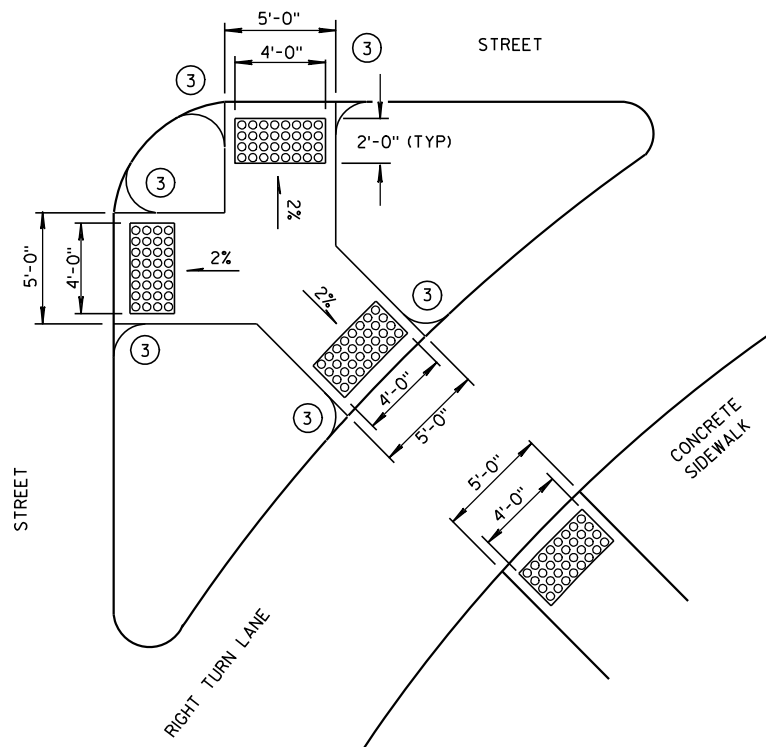
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

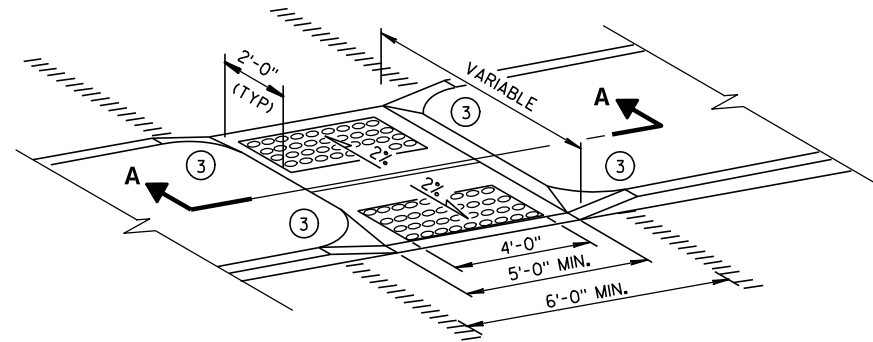
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



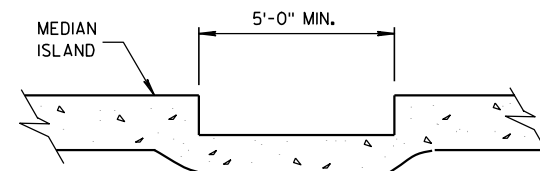
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



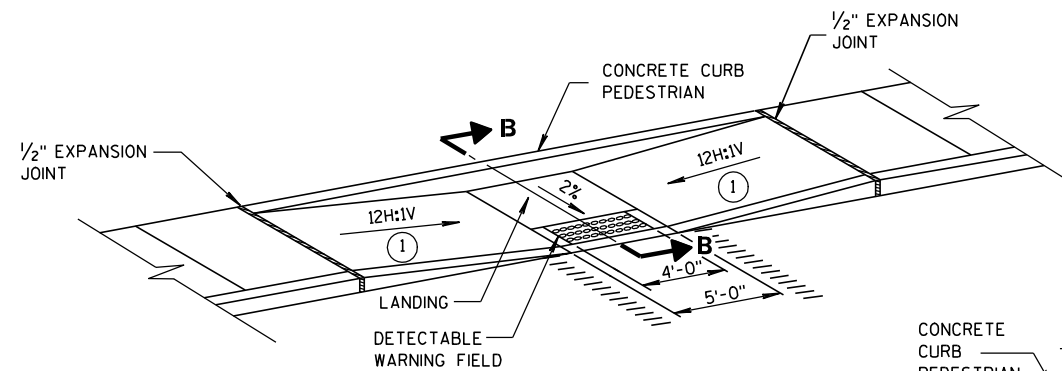
TYPE 6
DETECTABLE WARNING AT ISLANDS



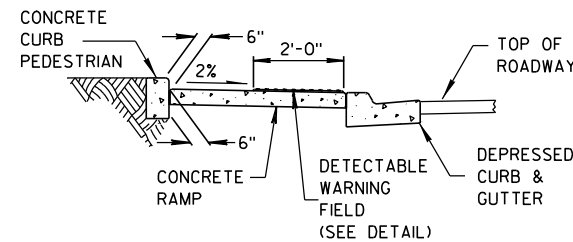
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



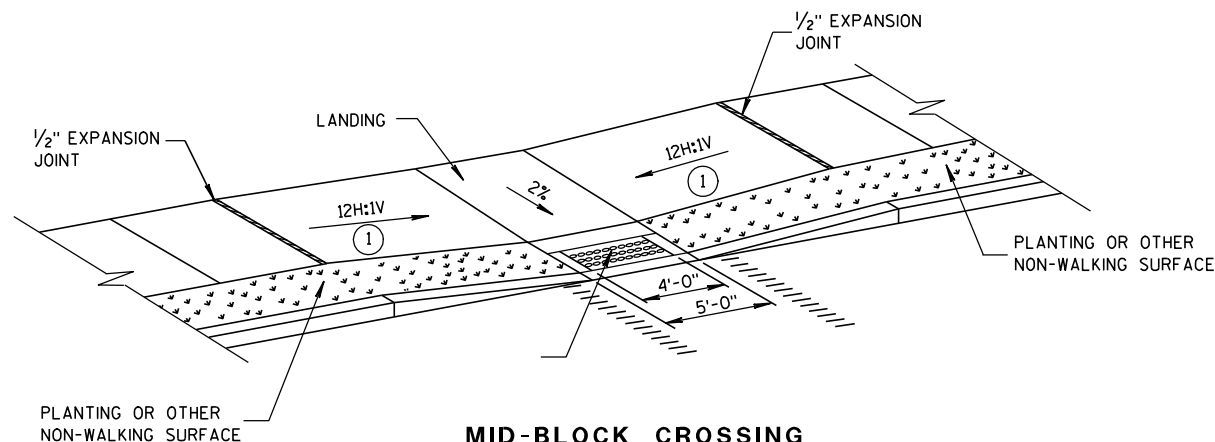
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

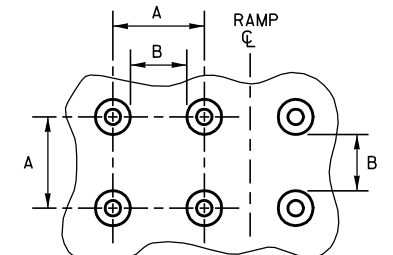
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

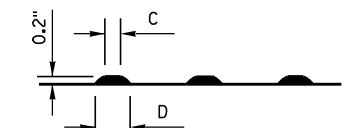
- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET \pm 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE 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.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

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



PLAN VIEW

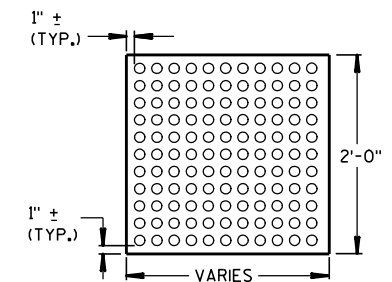


ELEVATION VIEW

	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.

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

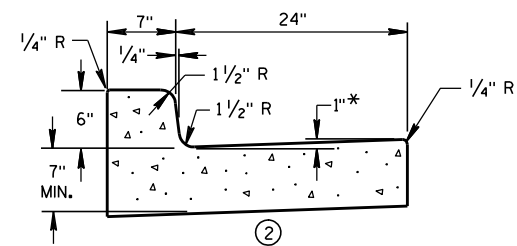
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

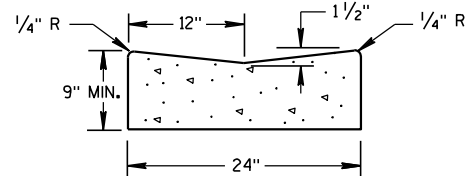
2-9-10
DATE

FHWA

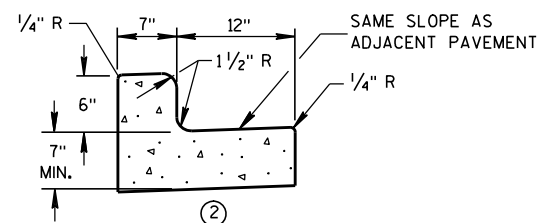
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



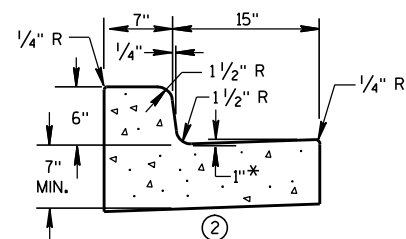
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

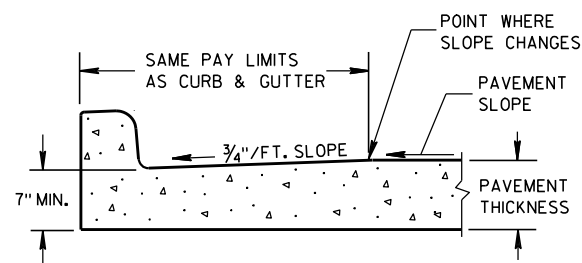


① CONCRETE CURB & GUTTER 19"

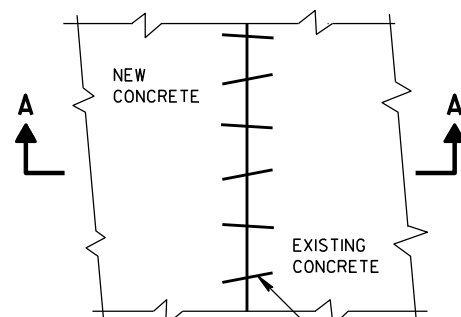


① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



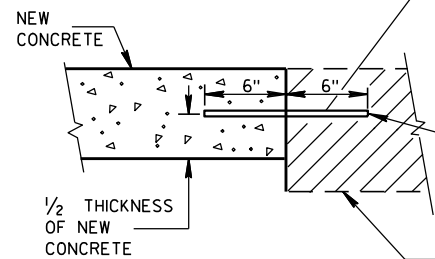
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

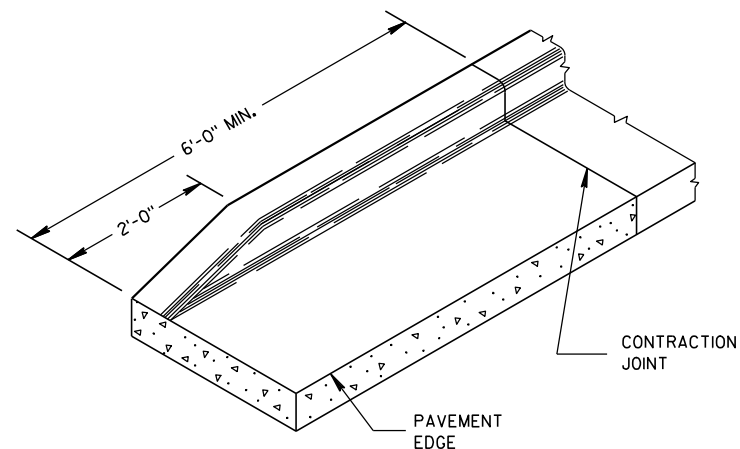


SECTION A-A
PAVEMENT TIES

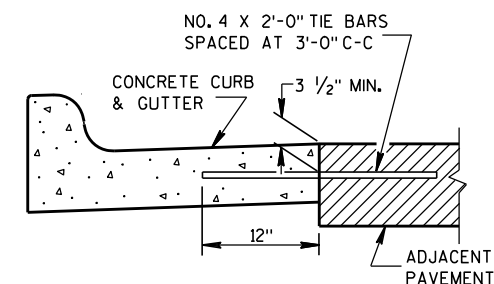
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

EXISTING CONCRETE

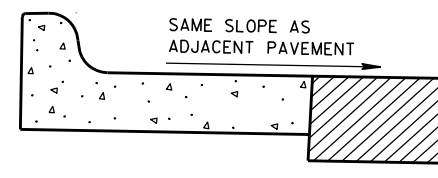
1/2 THICKNESS OF NEW CONCRETE



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION
(TYPICAL FOR ALL 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" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.

CONCRETE GUTTER, CURB AND
GUTTER AND PAVEMENT TIES
(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/22/2010

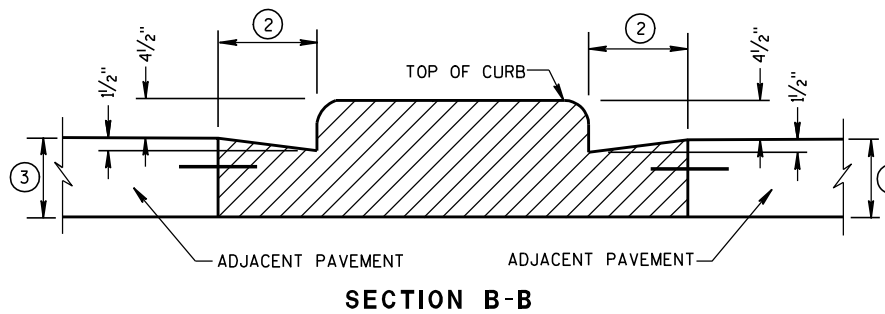
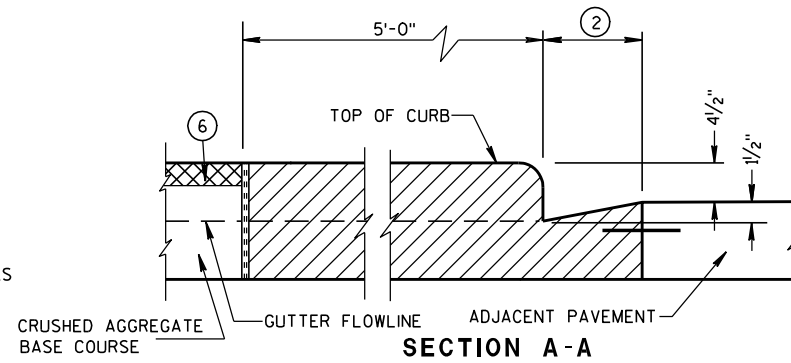
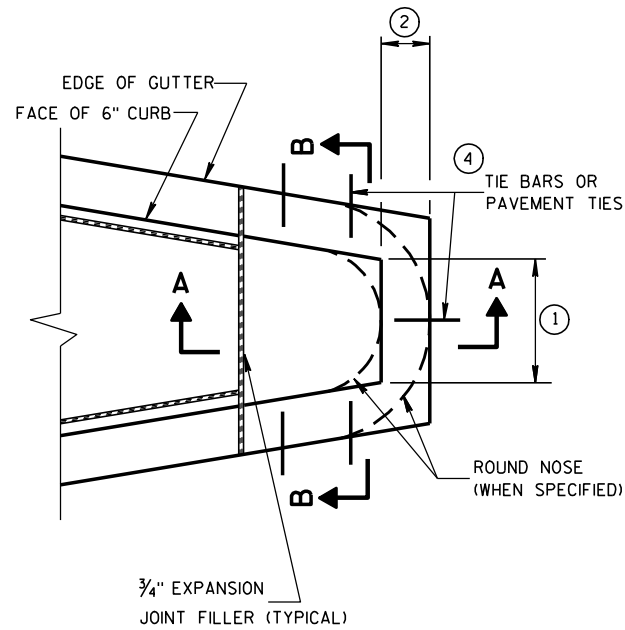
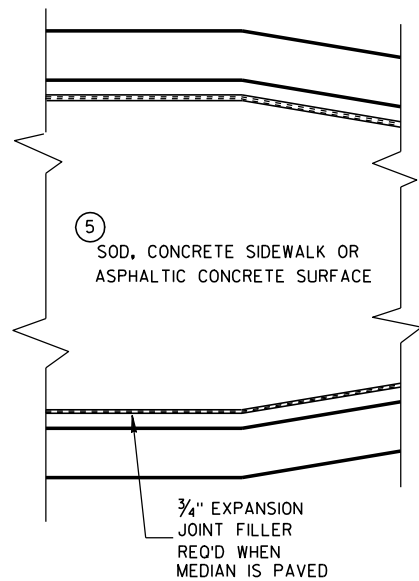
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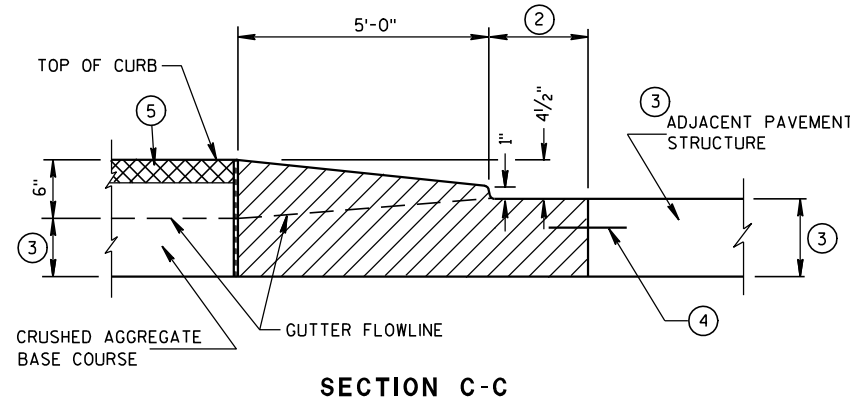
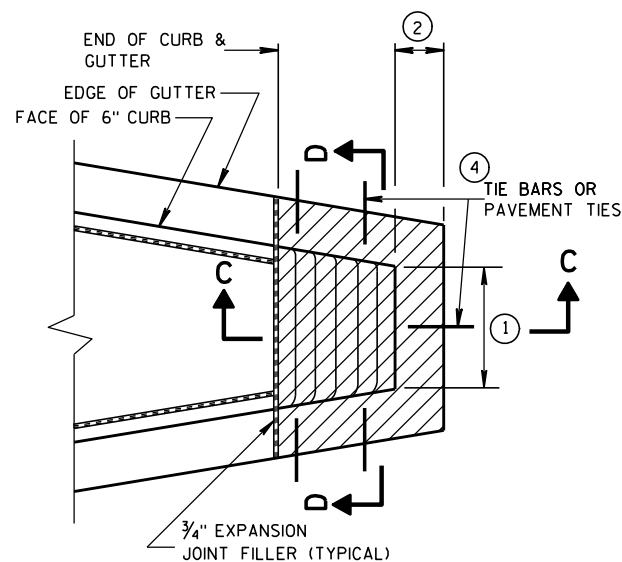
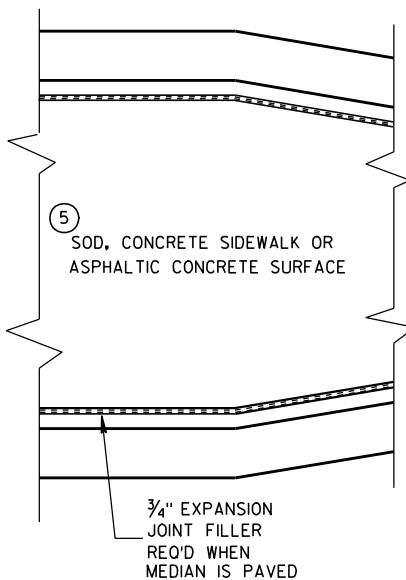
/S/ Jerry Zogg

ROADWAY STANDARDS DEVELOPMENT

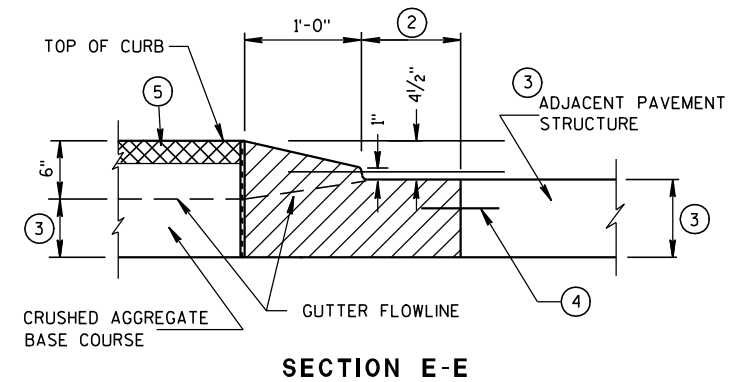
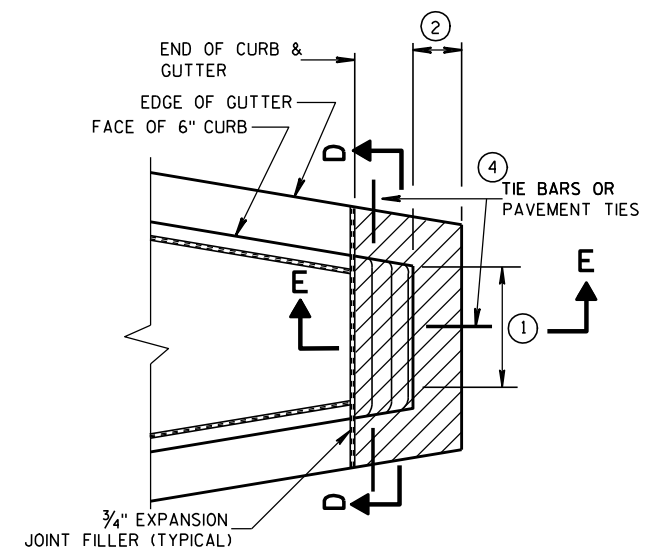
ENGINEER



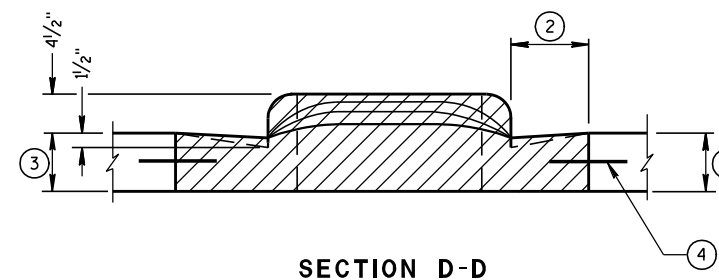
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



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 NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

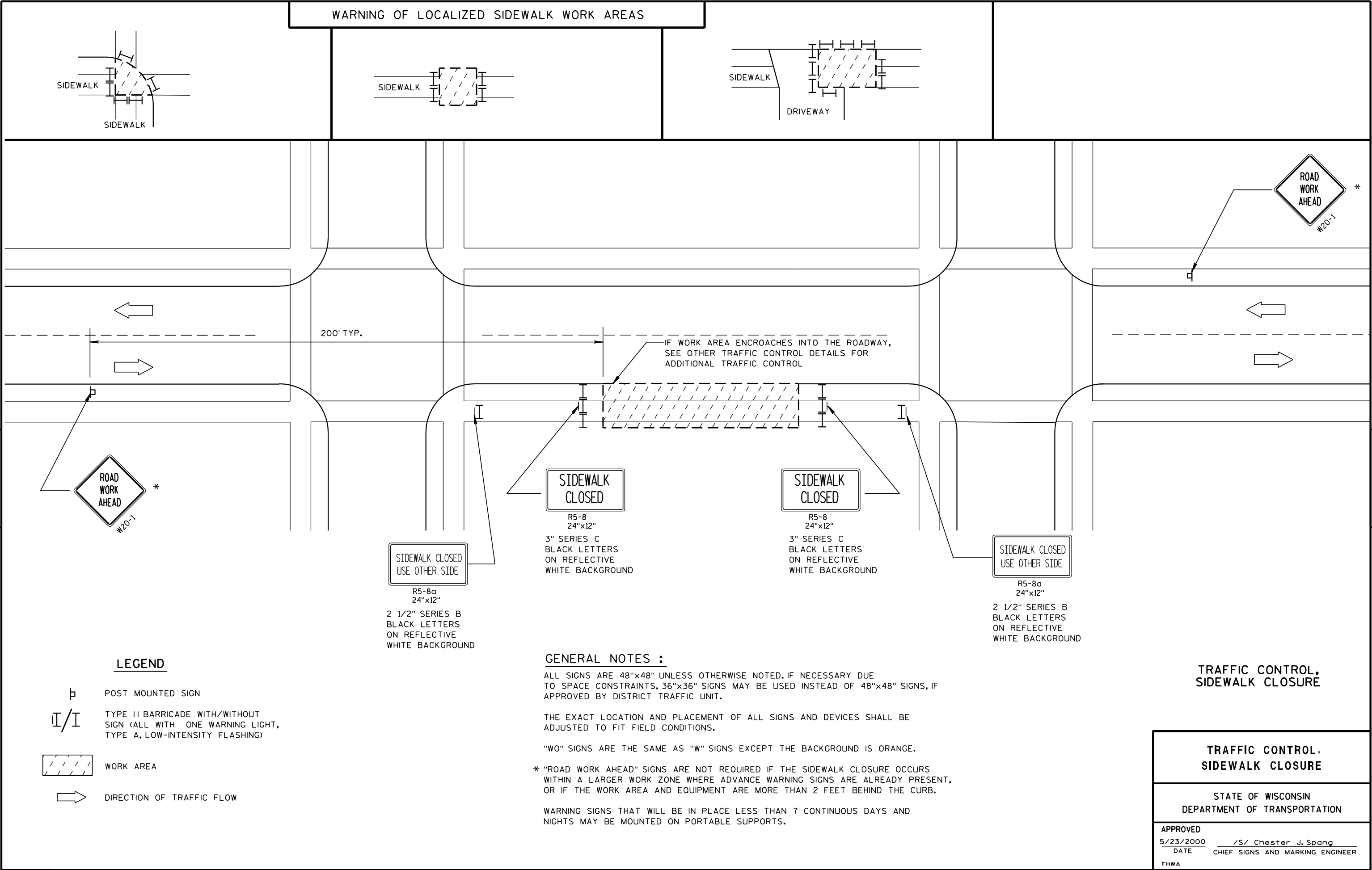
APPROVED

6/8/2006

DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER





Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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