

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details (Includes Erosion Control)
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 = 168



PROJECT LOCATION

DESIGN DESIGNATION

A.A.D.T. 2010	= 6,600
A.A.D.T. 2030	= 8,400
D.H.V. 2030	= 4243
D.D.	= 60/40
T.	= 4.5%
DESIGN SPEED	= 30 mph
ESALS	= 912,500

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L---
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)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	
OVERHEAD UTILITIES	---
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

1ST STREET NORTH EAST RIVER BANK MULTI-USE TRAIL
EAST JACKSON STREET TO APRICOT STREET
LOCAL STREET
WOOD COUNTY CITY OF WISCONSIN RAPIDS
LOCAL STREET
WOOD COUNTY

STATE PROJECT NUMBER
6999-09-79

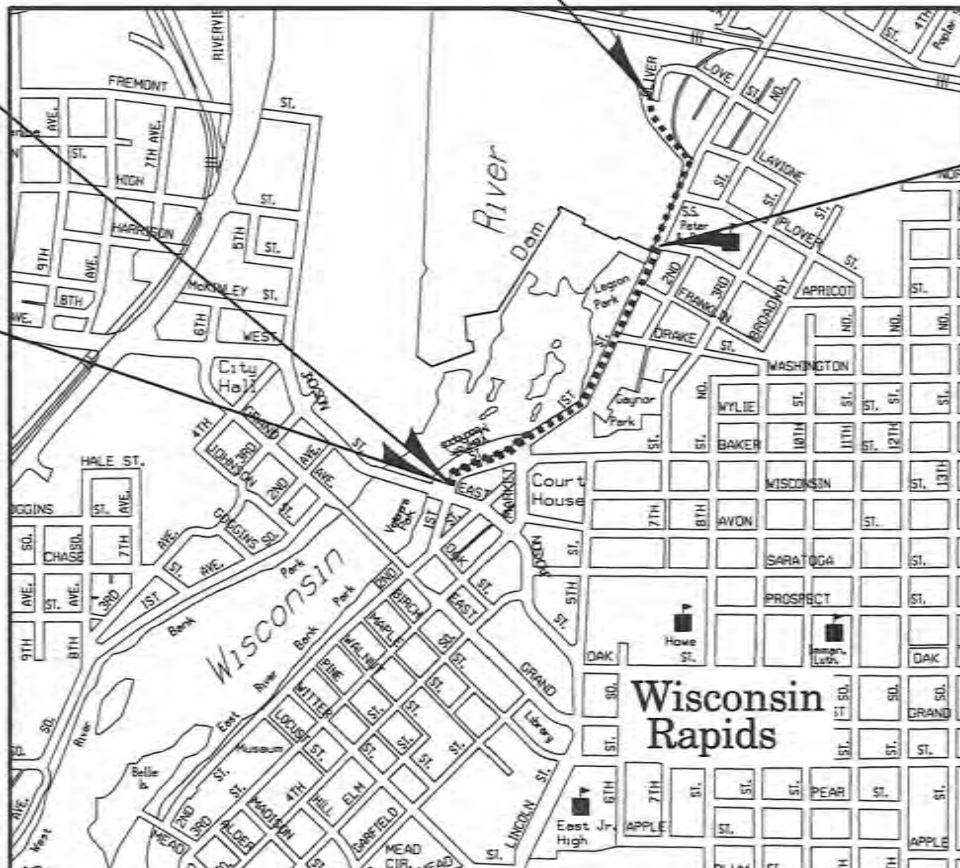
END PROJECT 6999-11-72
STA 395+32.00

STATE PROJECT NUMBER
6999-11-72

BEGIN PROJECT 6999-09-79
STA 308+52.24
Y=452587.615
X=730042.987

BEGIN PROJECT 6999-11-72
STA 308+23.28
Y=452575.057
X=729987.697

END PROJECT 6999-09-79
STA 274+40.00



LAYOUT
SCALE 0 1/8 MI

TOTAL NET LENGTH OF CENTERLINE = 0.438 MI (ID 6999-03-79)
TOTAL NET LENGTH OF CENTERLINE = 0.544 MI (ID 6999-11-72)

Coordinates on this sheet are referenced to the Wisconsin County Coordinate System, Wood County, NAD 83 (1991).

STATE PROJECT

6999-09-79

6999-11-72

FEDERAL PROJECT

PROJECT

WISC 2013383

WISC 2013384

CONTRACT

1

1

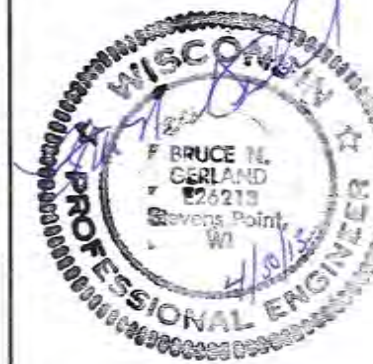
ACCEPTED FOR

CITY OF WISCONSIN RAPIDS

4/30/13
(Date) CITY ENGINEER

ORIGINAL PLANS PREPARED BY

AECOM



(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor CITY OF WISCONSIN RAPIDS

Designer AECOM

Management Consultant CEDAR CORPORATION

APPROVED FOR THE DEPARTMENT

DATE: 4/30/13 (Management Consultant Signature)

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE U.S.G.S. NAVD 1988 DATUM.
NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE TERRACE AND THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

WHEN THE QUANTITY FOR BASE AGGREGATE DENSE AND HMA PAVEMENT ARE 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.

THE LOCATION OF DRIVEWAY SAWCUTS AND INTERSECTION SAWCUTS WILL BE DETERMINED BY THE ENGINEER.

APPROPRIATE EROSION CONTROL MEASURES SHOULD BE UTILIZED TO PROTECT ANY EMBANKMENT OR DITCH AREAS THAT WILL BE DISTURBED DURING THE PROJECT. EROSION CONTROL DETAILS AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

SILT FENCE AS SHOWN ON THE PLANS SHALL BE FIELD ADJUSTED TO FIT EXISTING CONDITIONS.

CURVE DATA IS BASED ON THE ARC DEFINITION.

ALL RADIUS DIMENSIONS ON THE PLAN FOR CURB AND GUTTER ARE TO THE FLANGE LINE, UNLESS OTHERWISE NOTED.

ALL ELEVATIONS ON THE PLAN FOR CURB AND GUTTER ARE TO THE FLANGE LINE, UNLESS OTHERWISE NOTED.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 25 PERCENT. ALL FILL VOLUMES SHOWN ARE ACTUAL VOLUMES.

SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS INCLUDE THE THICKNESS OF TOPSOIL.

4.75-INCH HMA PAVEMENT TYPE E-1 SHALL BE CONSTRUCTED WITH A 2.25-INCH UPPER LAYER AND A 2.5-INCH LOWER LAYER.

TACK COAT WILL BE PLACED BETWEEN LAYERS OF ASPHALT. TACK COAT SHALL BE APPLIED TO VERTICAL SAWCUTS PRIOR TO PLACEMENT OF ASPHALTIC PAVEMENT.

EROSION CONTROL GENERAL NOTES

INSTALL INLET PROTECTION TYPE A ON ALL EXISTING CATCH BASINS PRIOR TO STARTING CONSTRUCTION.

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 6.1 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.3 ACRES

STORM SEWER GENERAL NOTES

OFFSETS TO INLETS AND MANHOLES SHOWN ON THE STORM SEWER DETAILS ARE TO THE CENTER OF THE STRUCTURE OPENING UNLESS NOTED OTHERWISE.

OFFSETS TO APRON ENDWALLS SHOWN ON THE STORM SEWER DETAILS ARE AT THE END OF STORM SEWER PIPE.

IMMEDIATELY AFTER CONSTRUCTION OF ANY INLET, CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL AROUND THE STRUCTURE TO PREVENT SEDIMENTATION OF THE INLET AND THE STORM SEWER.

ELEVATIONS FOR MANHOLES SHOWN ON STORM SEWER DETAILS ARE FINISHED ROADWAY ELEVATION. ELEVATIONS FOR INLETS ARE FLANGE ELEVATION. (SEE DETAILS)

STORM SEWER PIPE SLOPES ARE CALCULATED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD AND MODIFIED IF NECESSARY TO MEET EXISTING CONDITIONS.

INDEX OF TYPICAL SECTION AND DETAIL SHEETS

- GENERAL NOTES, STORM SEWER NOTES, EROSION CONTROL NOTES AND UTILITY CONTACTS
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- LAYOUT
- PAVING GRADES
- STORM SEWER
- PERMANENT SIGNING
- PAVEMENT MARKINGS AND SIGNING REMOVAL
- LIGHTING PLAN
- TRAFFIC CONTROL
- ALIGNMENT DIAGRAM

UTILITY CONTACTS

JESSE GRUNY, CONSTRUCTION COORDINATOR
CHARTER COMMUNICATIONS - CABLE TV
508 N CENTRAL AVENUE #103
MARSHFIELD WI 54449
715-370-4171
Jesse.Gruny@chartercom.com

DENNIS PIERCE, FACILITIES ENGINEER
SOLARUS - TELEPHONE
440 EAST GRAND AVENUE
WISCONSIN RAPIDS, WI 54494
TEL:715-421-8172
FAX:715-423-0840
pierce@solarus.biz

JEM BROWN, GENERAL MANAGER
WISCONSIN RAPIDS WATER WORKS &
LIGHTING COMMISSION - ELECTRIC & WATER
221 16TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
715-423-6323
jem.brown@wrwwlc.com

THOMAS J. KROSTAG, DISTRICT CONSTRUCTION COORDINATOR
WE ENERGIES - GAS
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
TEL:715-421-7268
CELL: 715-459-1772
FAX: 715-421-7298
thomas.krostag@we-energies.com

DAVE LASPA, CITY ENGINEER
CITY OF WISCONSIN - SANITARY & STORM SEWER
444 W GRAND AVENUE
WISCONSIN RAPIDS, WI 54495
717-421-8210

** DENOTES UTILITIES THAT ARE NOT
DIGGER'S HOTLINE MEMBERS



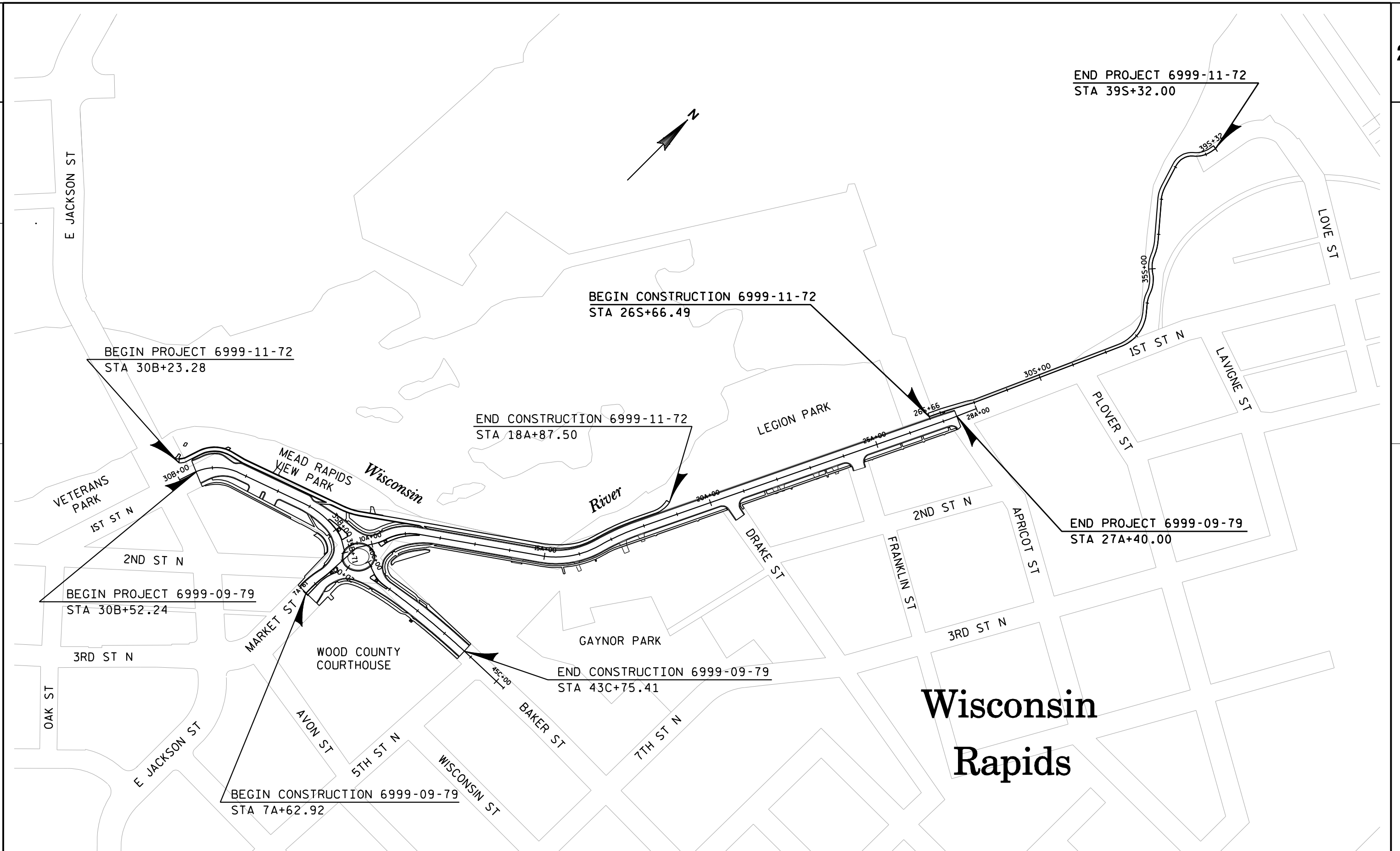
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

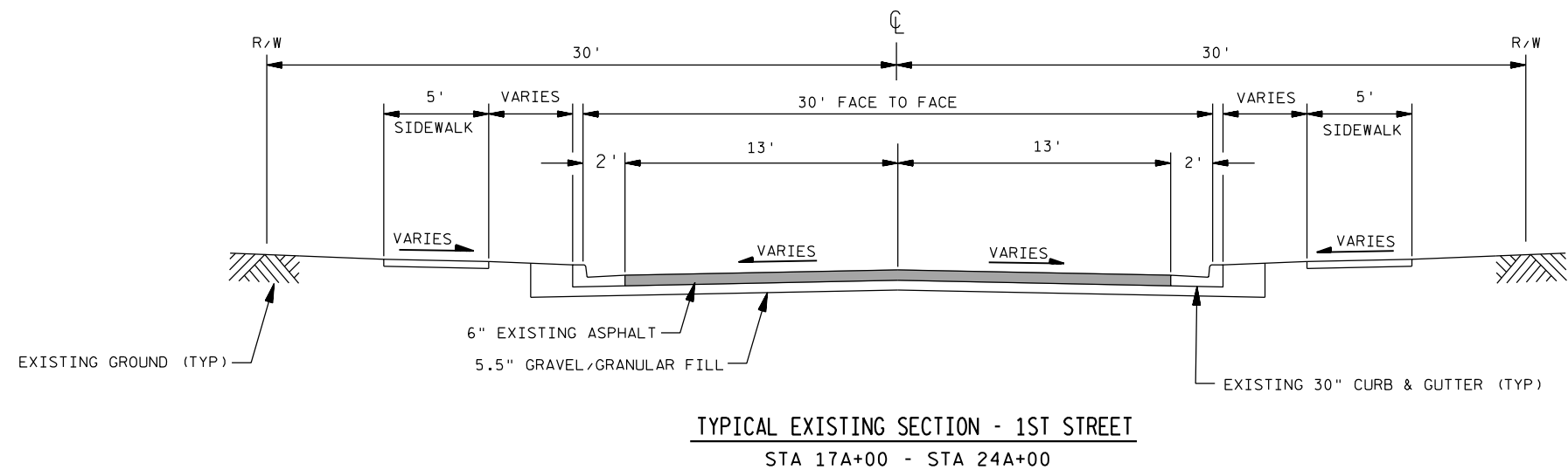
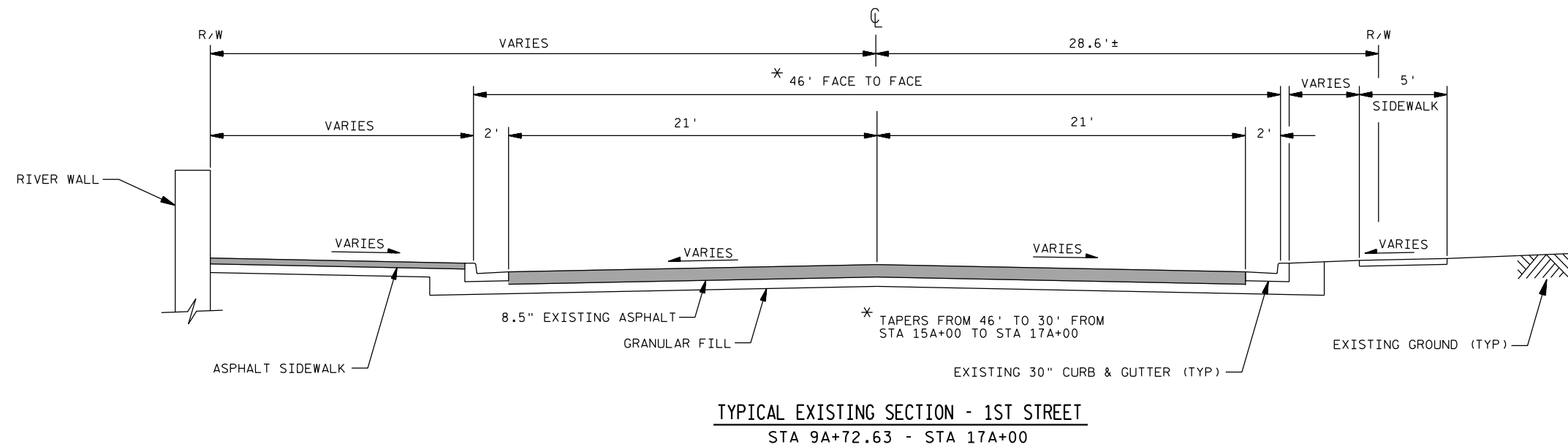
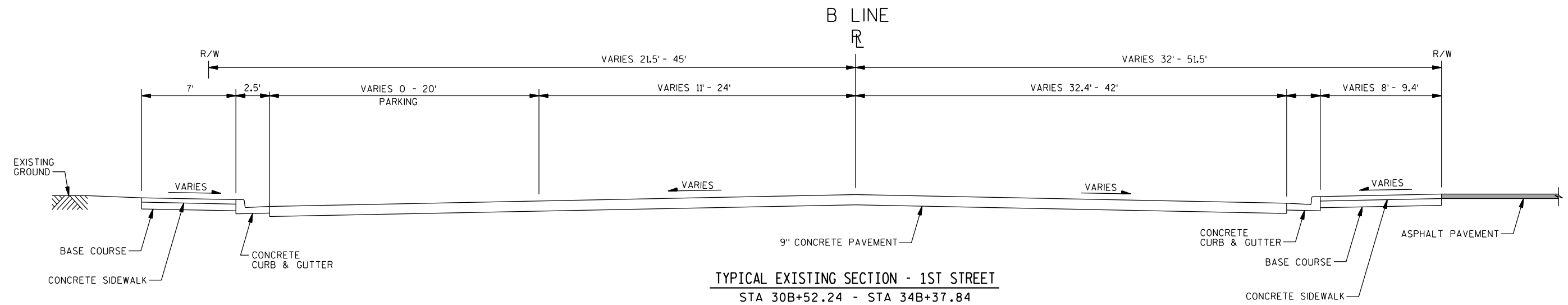
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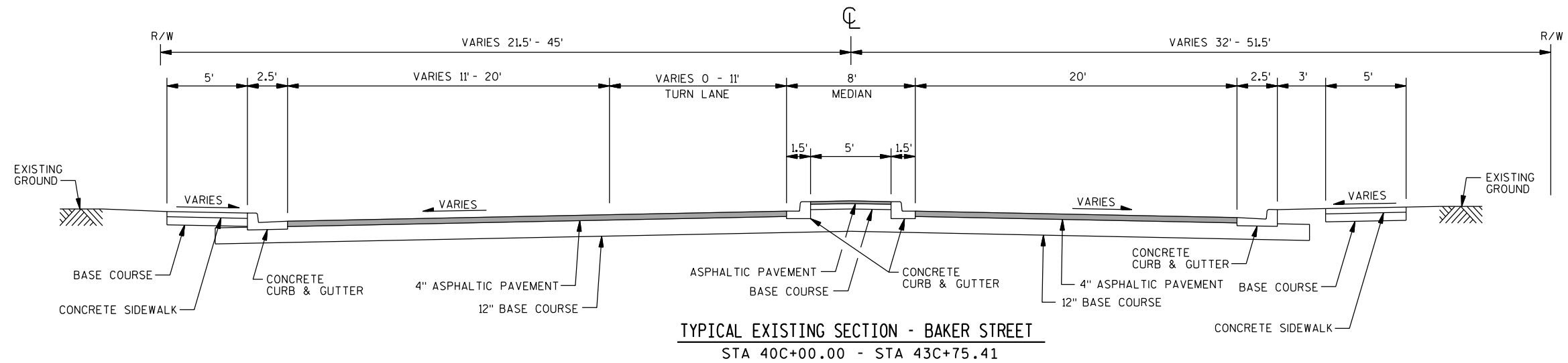
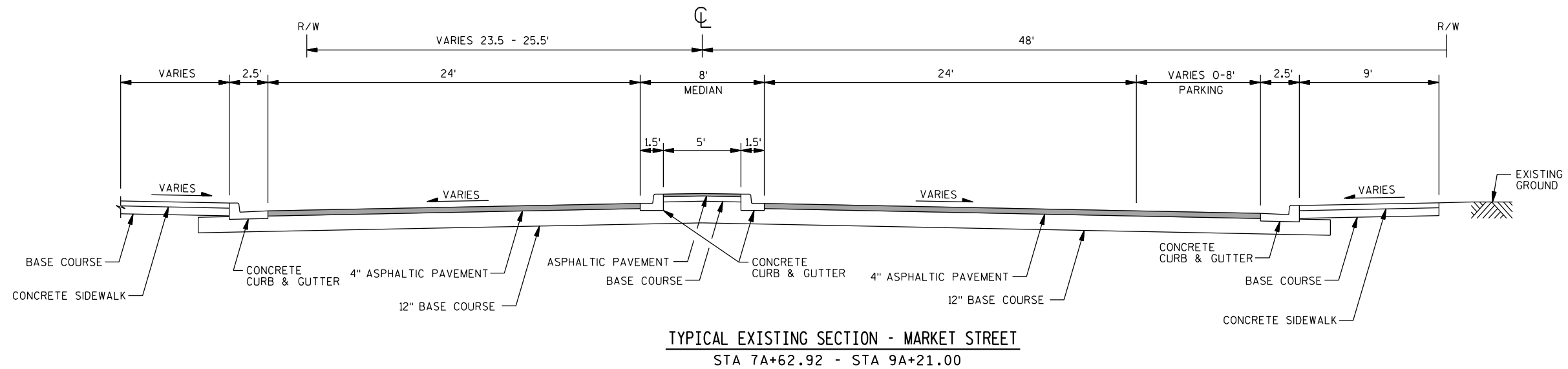
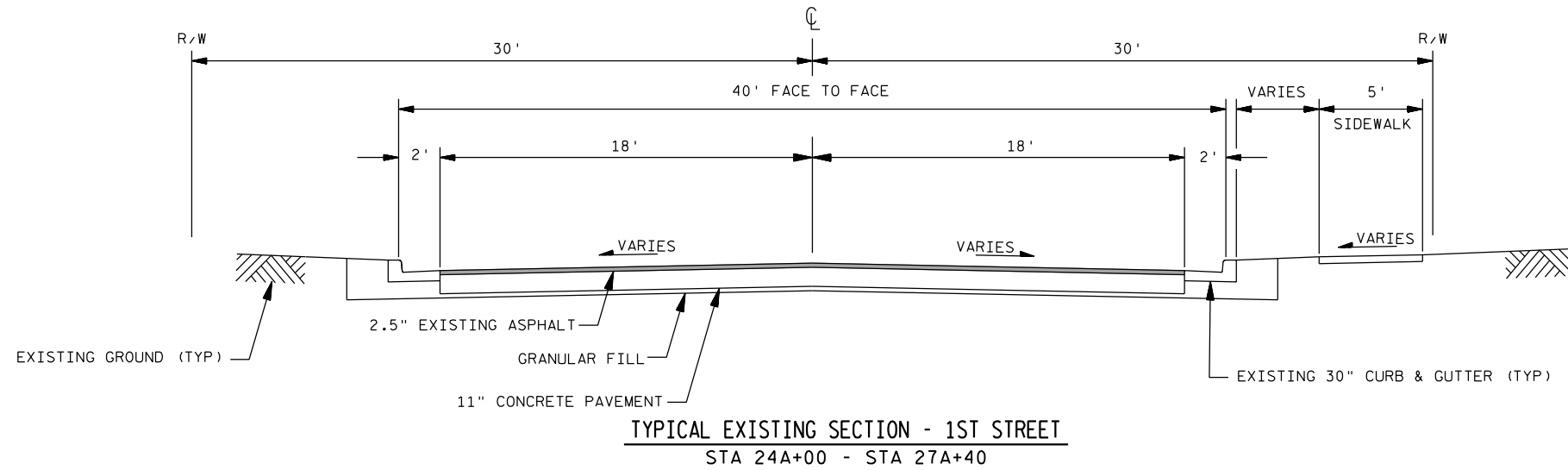
MARC HERSHFIELD
DNR SERVICE CENTER
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
715-421-7867
EMAIL: marc.hershfield@wisconsin.gov

** U.S. ARMY CORPS OF ENGINEERS LIAISON

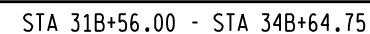
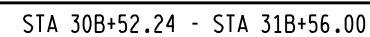
Eric Norton
1314 CONTRACTORS BLVD.
PLOVER, WISCONSIN 54467
715-345-7911
EMAIL: eric.m.norton@usace.army.mil

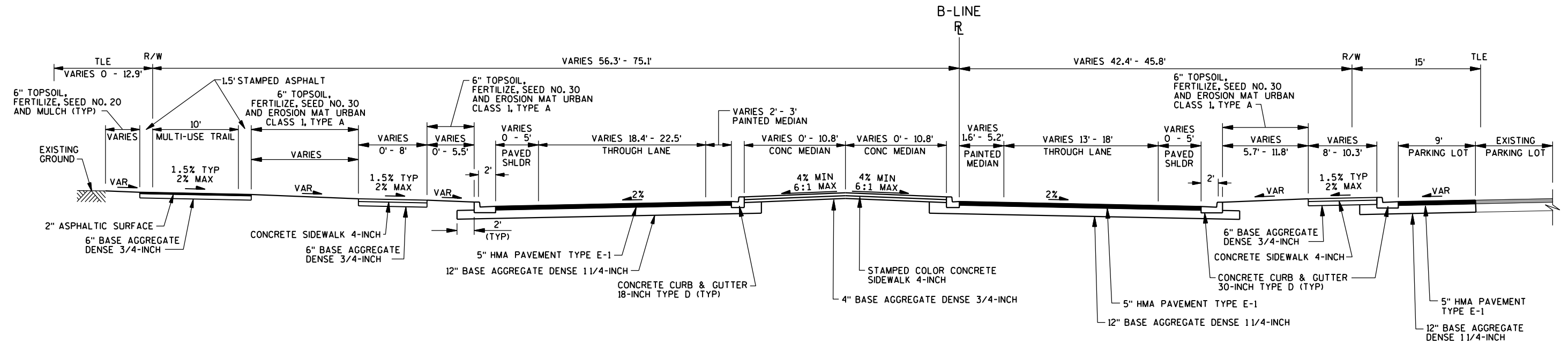






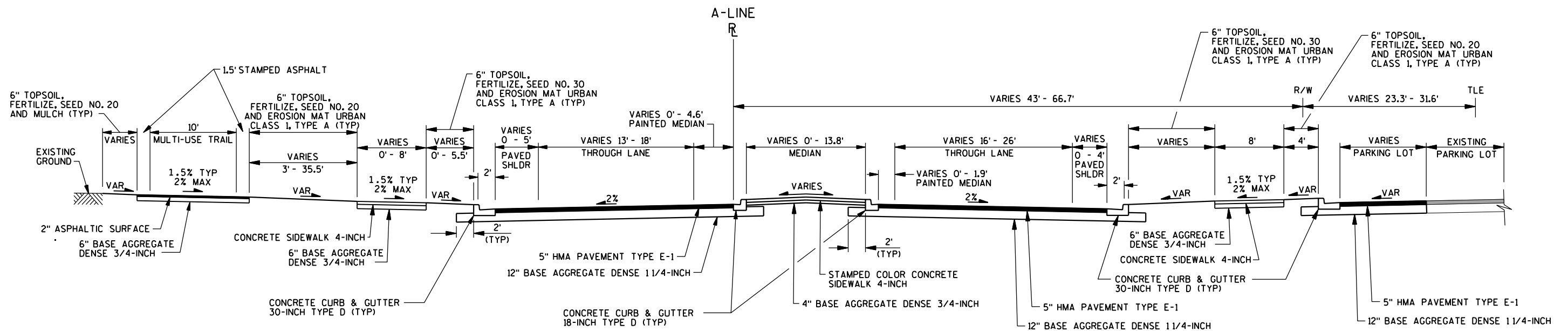
2





TYPICAL FINISHED SECTION - 1ST STREET NORTH ENTERING RAB

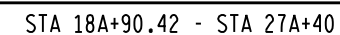
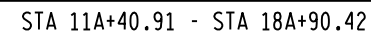
STA 34B+64.75 - STA 35B+34.00

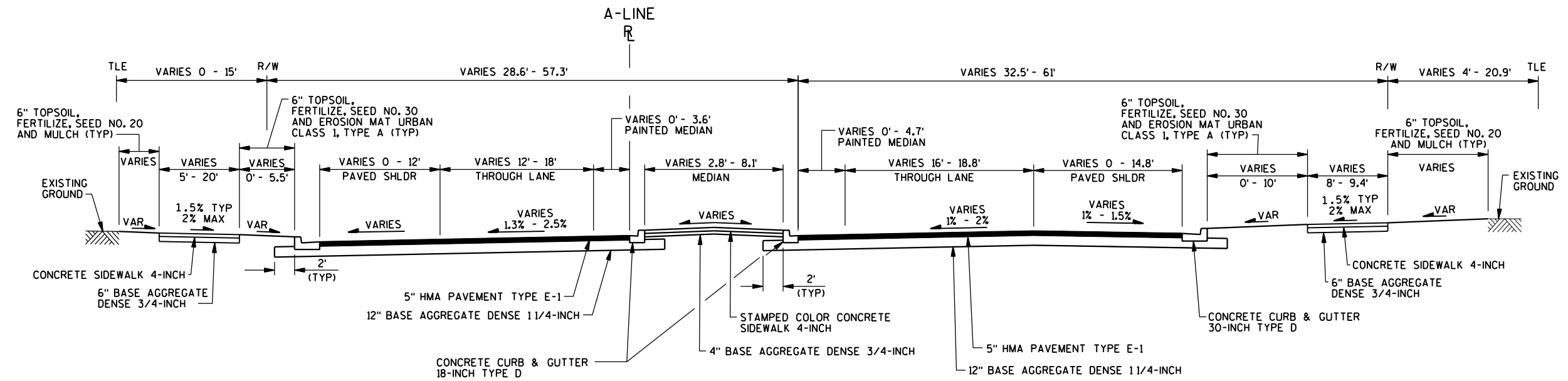


TYPICAL FINISHED SECTION - 1ST STREET NORTH EXITING RAB

STA 10A+18.00 - STA 11A+40.91

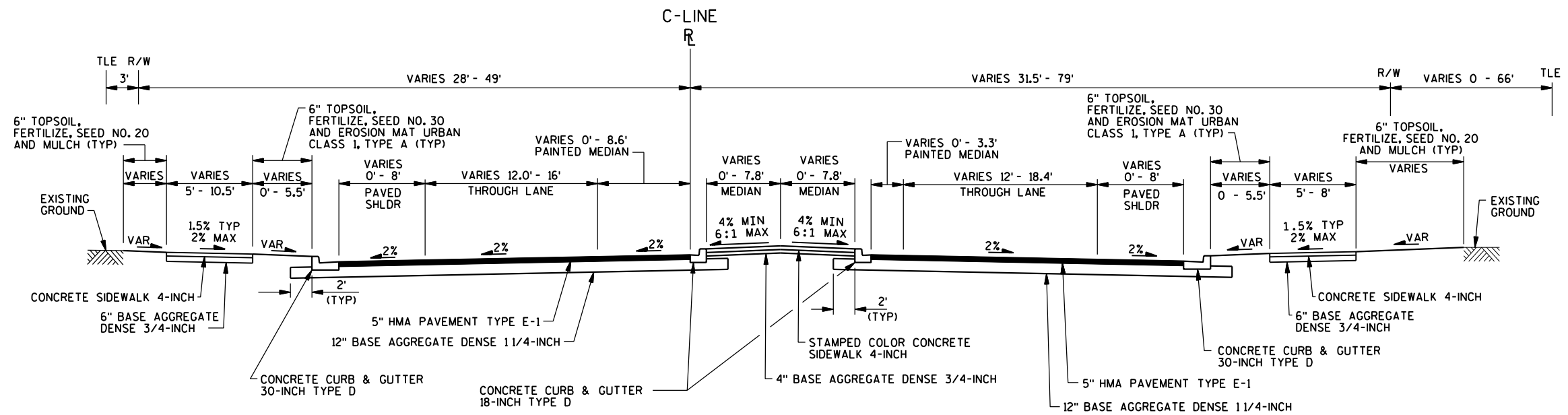
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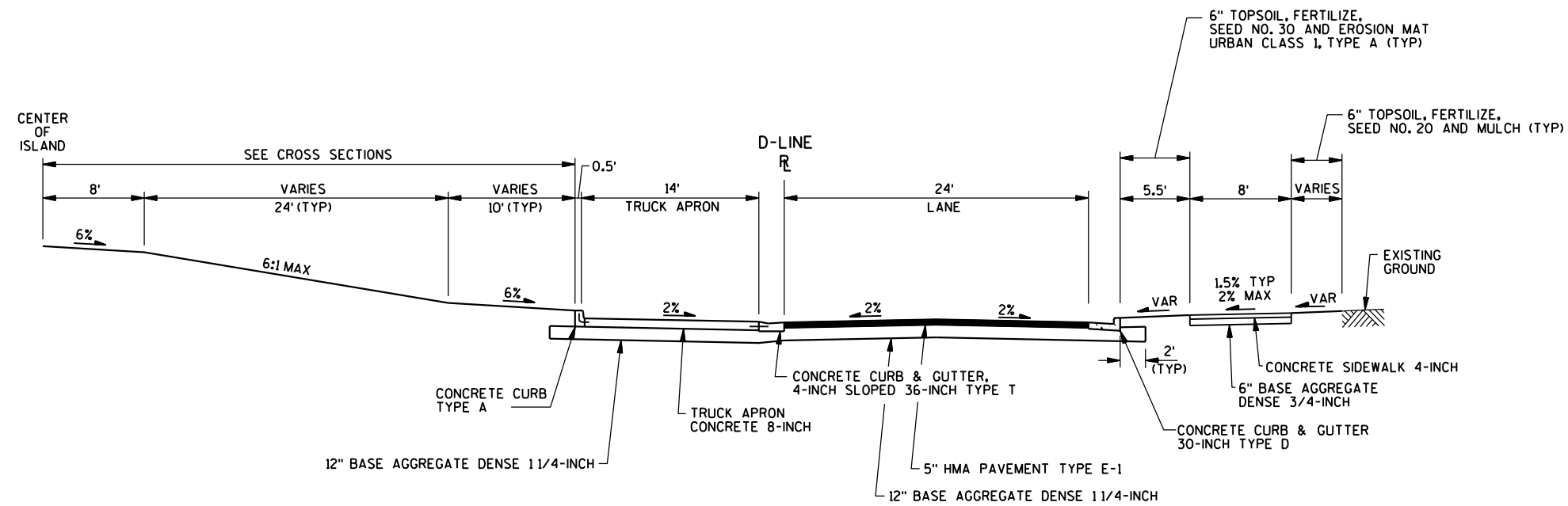
TYPICAL FINISHED SECTION - MARKET STREET

STA 7A+62.92 - STA 8A+74.64



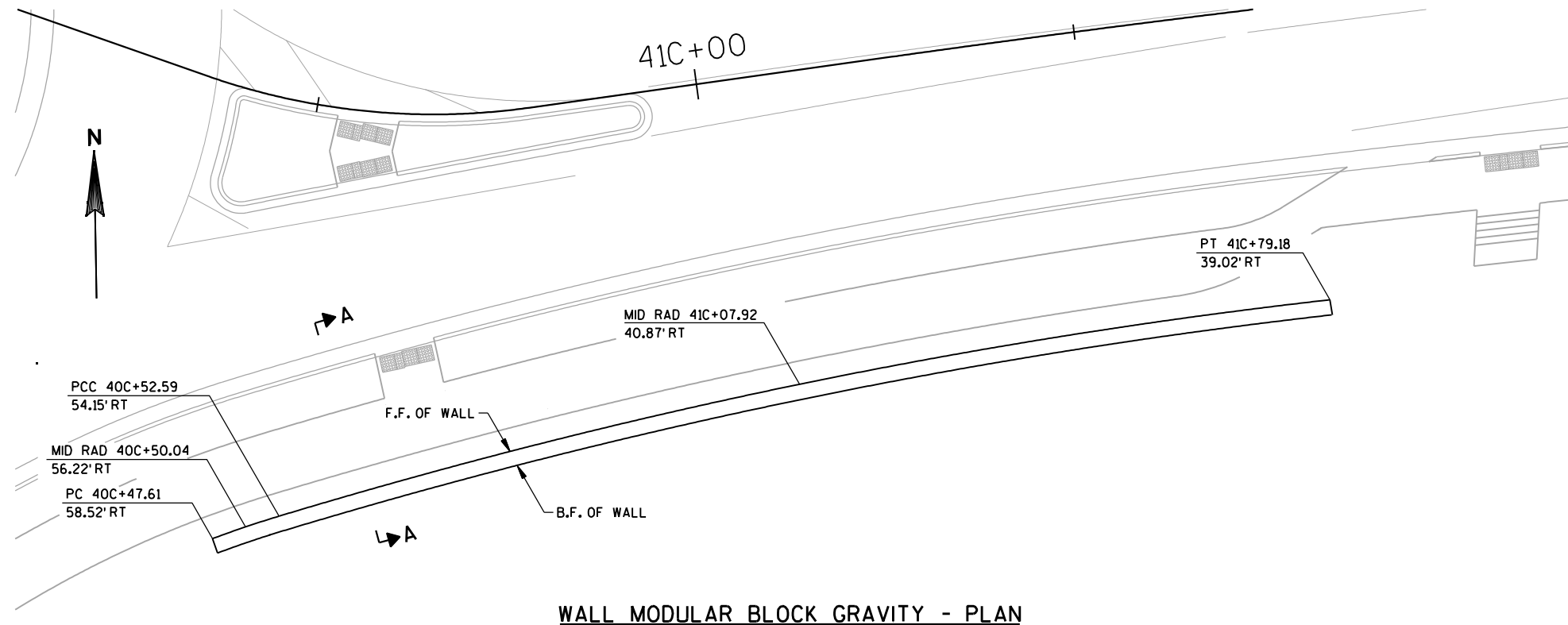
TYPICAL FINISHED SECTION - BAKER STREET

STA 40C+38.70 - STA 43C+75.41



TYPICAL FINISHED SECTION - 1ST STREET NORTH RAB

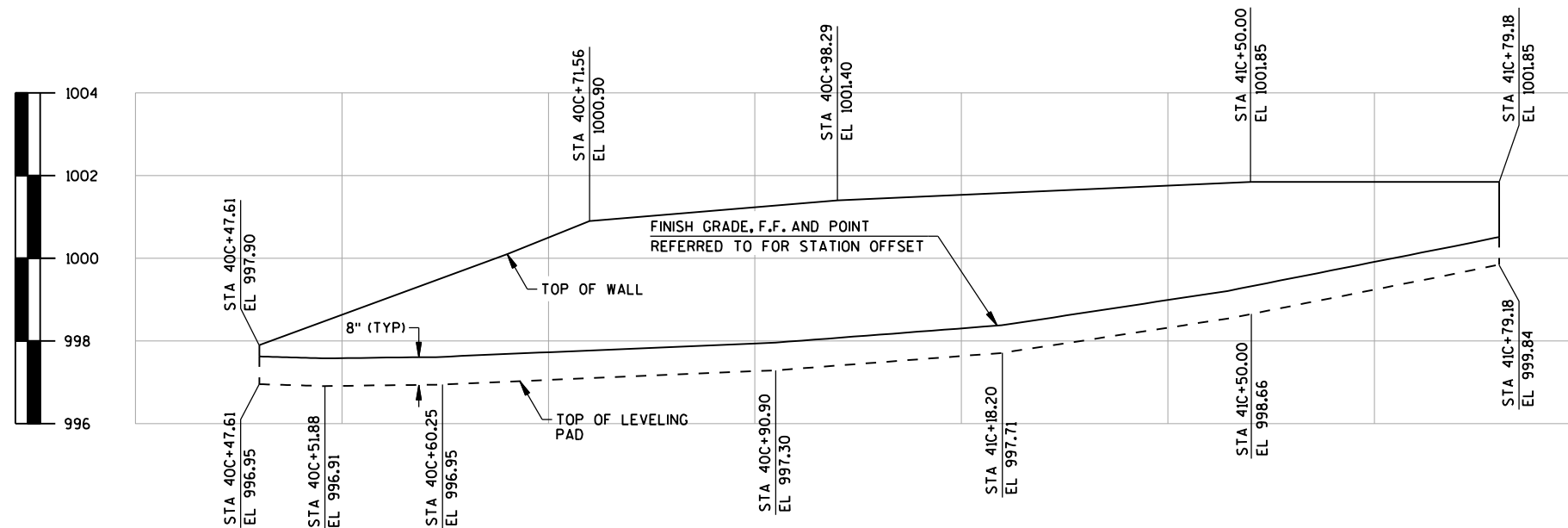
STA 2D+00.00 - STA 4D+00.83



WALL MODULAR BLOCK GRAVITY - PLAN

ALLOWABLE WALL SYSTEMS

1. WALL MODULAR BLOCK GRAVITY



WALL MODULAR BLOCK GRAVITY - ELEVATION

MINIMUM ALLOWABLE SAFETY FACTORS

FAILURE MODE	WALL MODULAR BLOCK GRAVITY
SLIDING FACTOR OF SAFETY	1.5
OVERTURNING FACTOR OF SAFETY	2.0
GLOBAL STABILITY FACTOR OF SAFETY	1.3

GENERAL NOTES

ALL BACKFILL MATERIAL AND GEOTEXTILE FABRIC TYPE DF SCHEDULE A SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY".

RETAINING WALL SHALL BE BID AS "WALL MODULAR BLOCK GRAVITY".

ANTI-GRAFFITISHIELD AND PRIMER SHALL BE APPLIED TO ALL EXPOSED SURFACES OF RETAINING WALL.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE MODULAR BLOCK GRAVITY RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO ANY WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

RETAINING WALL DESIGN TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN ON THE CROSS SECTIONS.

DRAWINGS SHALL NOT BE SCALED.

RETAINING WALLS SHALL BE DESIGNED FOR 2 FT=240 LB/SF OF LIVE LOAD SURCHARGE WHERE VEHICULAR LOADS CAN BE EXPECTED WITHIN A DISTANCE EQUAL TO ONE-HALF THE WALL HEIGHT BEHIND THE BACK FACE OF THE WALL.

RETAINED SOIL SHALL BE COMPACTED ACCORDING TO SECTION 207.3.6 OF THE STATE STANDARD SPECIFICATIONS.

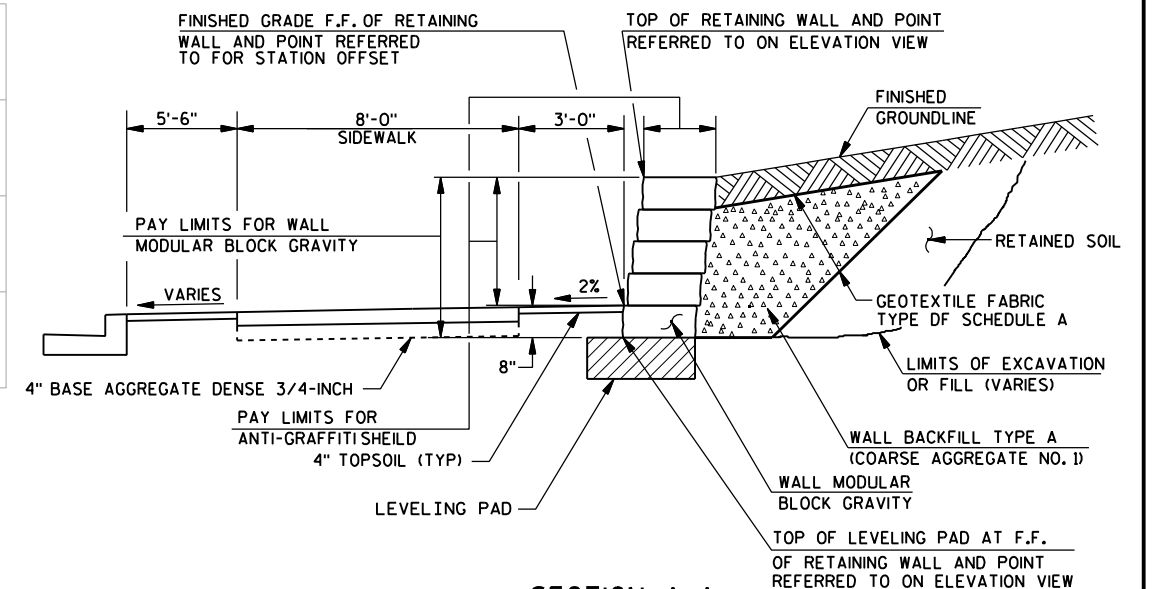
B.F. = BACK FACE

F.F. = FRONT FACE

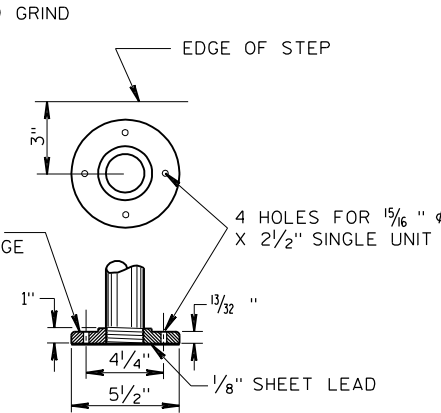
GEOTECHNICAL DATA IS NOT AVAILABLE FOR THIS PROJECT. ALL SOILS DATA, INCLUDING BEARING CAPACITY, SHALL BE BASED ON GENERAL SOIL CONDITIONS FOR THIS SITE. AFTER COMPLETION OF EXCAVATION, THE ENGINEER WILL INSPECT THE SITE AND WILL DETERMINE IF THE FOUNDATION IS ADEQUATE FOR THE INTENDED LOADS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

THE WALL MODULAR BLOCK GRAVITY SHALL BE FEDERAL COLOR FS31667.



2



NOTE:

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

STEEL REINFORCEMENT AND PIPE RAILING NOT REQUIRED ON STEPS WITH 2 RISERS OR LESS.

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.



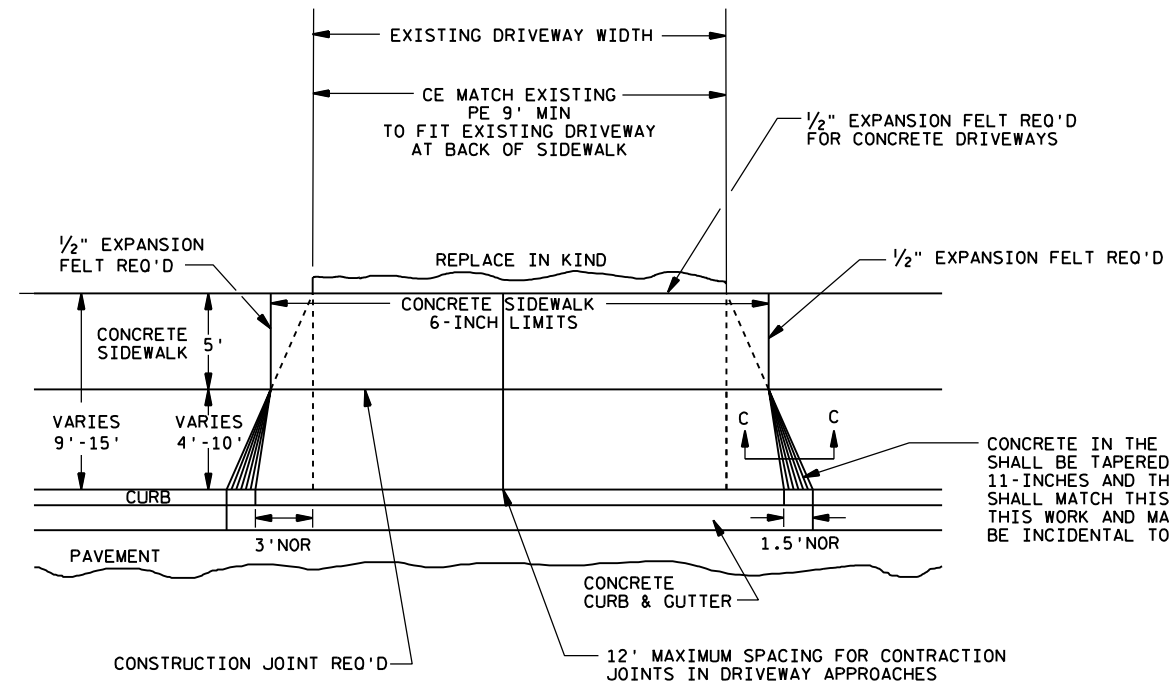
DETAIL OF CURB & GUTTER AT INLETS

The diagram is a cross-sectional view of a bridge deck. A vertical dashed line runs through the center of the deck, representing the axis of symmetry. On the left side, a sloped line represents the 'EXISTING CONE'. On the right side, a horizontal line represents the 'MATCH PROPOSED GROUND SURFACE'. The bridge deck is shown with a central span and two side spans. The ground surface is shown as a series of horizontal lines, with a break symbol indicating that the ground surface continues beyond the shown limits.

ADJUSTING MANHOLE COVERS/RECONSTRUCTING MANHOLES

12

WISDOT/CADDS SHEET 42

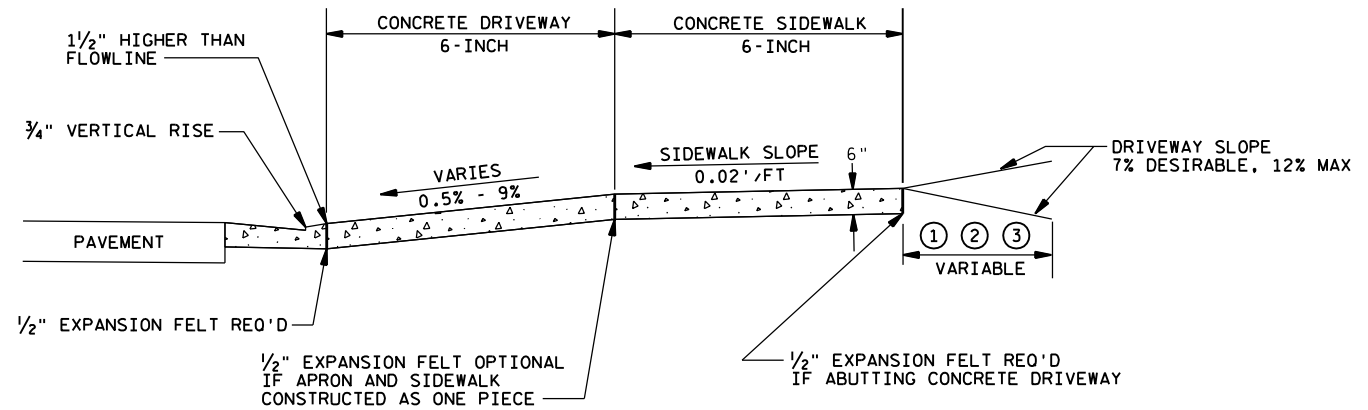


PLAN VIEW

NTS

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

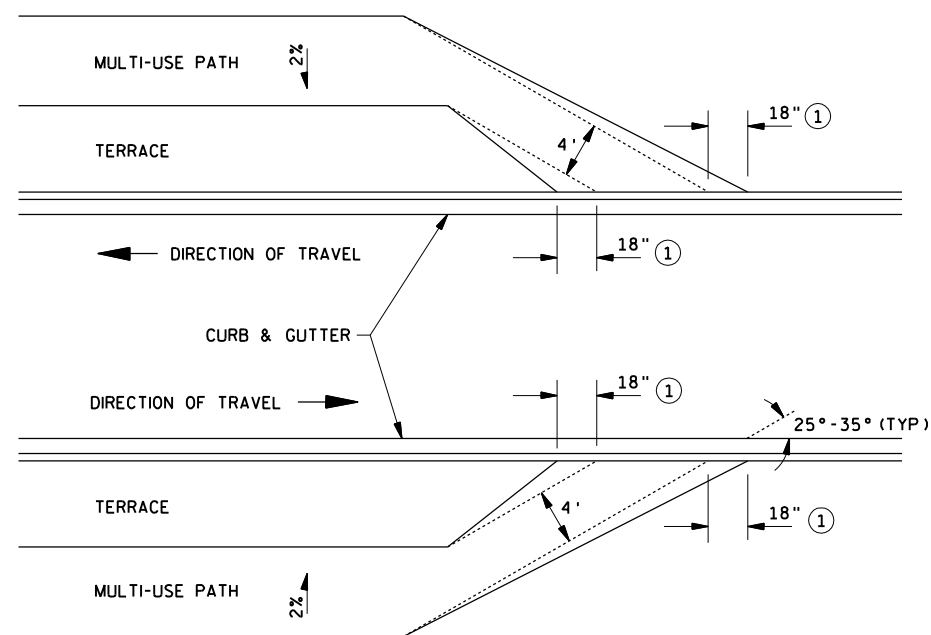
NTS



SECTION C-C

NTS

- ① 6" CONCRETE DRIVEWAY
- ② 6" BASE AGGREGATE DENSE 3/4-INCH
- ③ 6" BASE AGGREGATE DENSE 3/4-INCH WITH 3" ASPHALTIC SURFACE



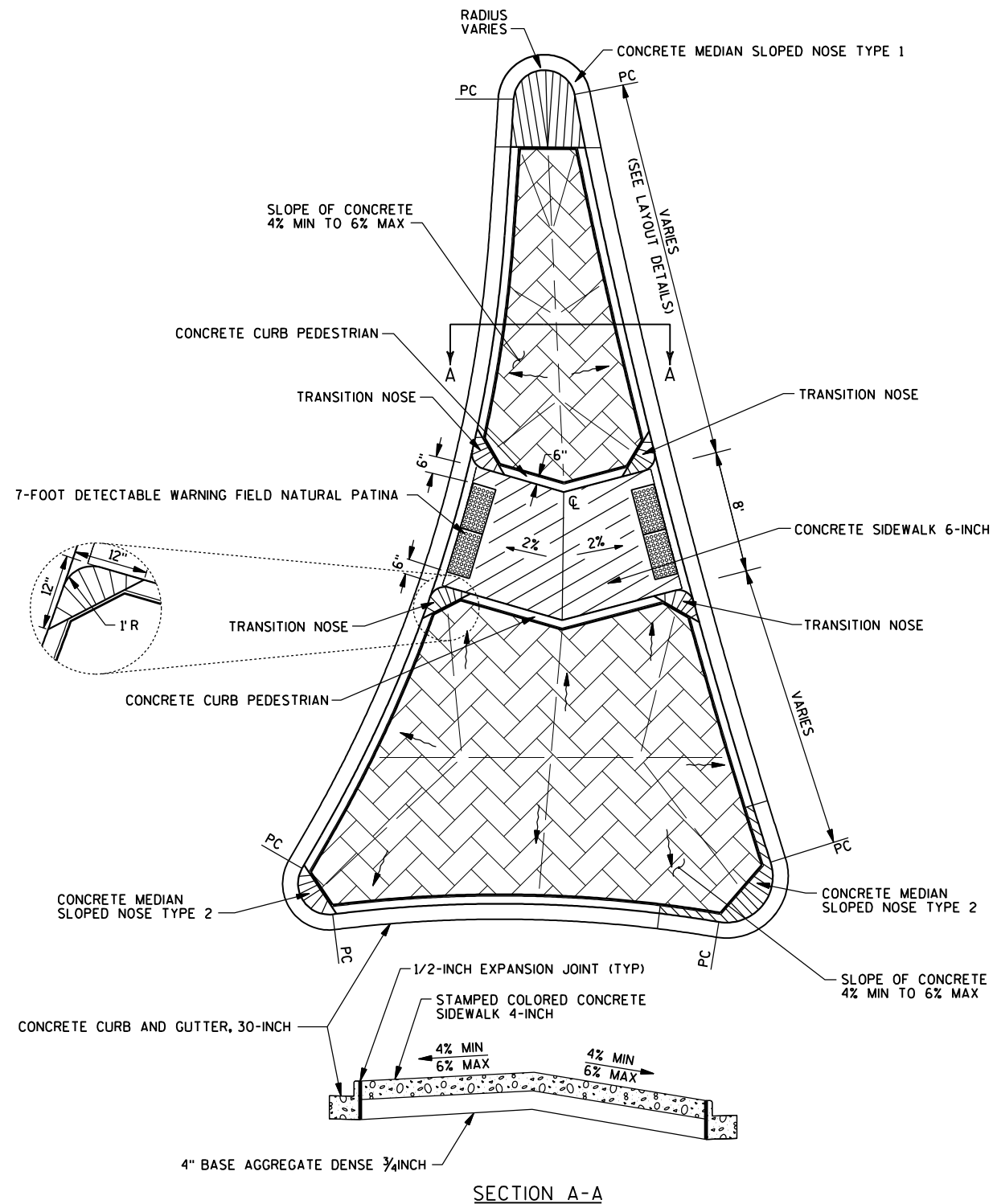
- ① TAPER HEIGHT OF CURB FROM 0 TO 6" IN 18".

BIKE RAMP ENTRANCE AND EXIT

NTS

NOTES:

1. TROWEL ISLAND NOSE TO A SMOOTH FINISH.
2. TRUNCATED DOMES IN DETECTABLE WARNING FIELD ALIGNED IN A ROW AND PERPENDICULAR TO THE CROSSWALK LOCATION.
3. JOINT SPACING TO BE DETERMINED IN FIELD.
4. BACK OF CONCRETE CURB MUST BE VERTICAL.

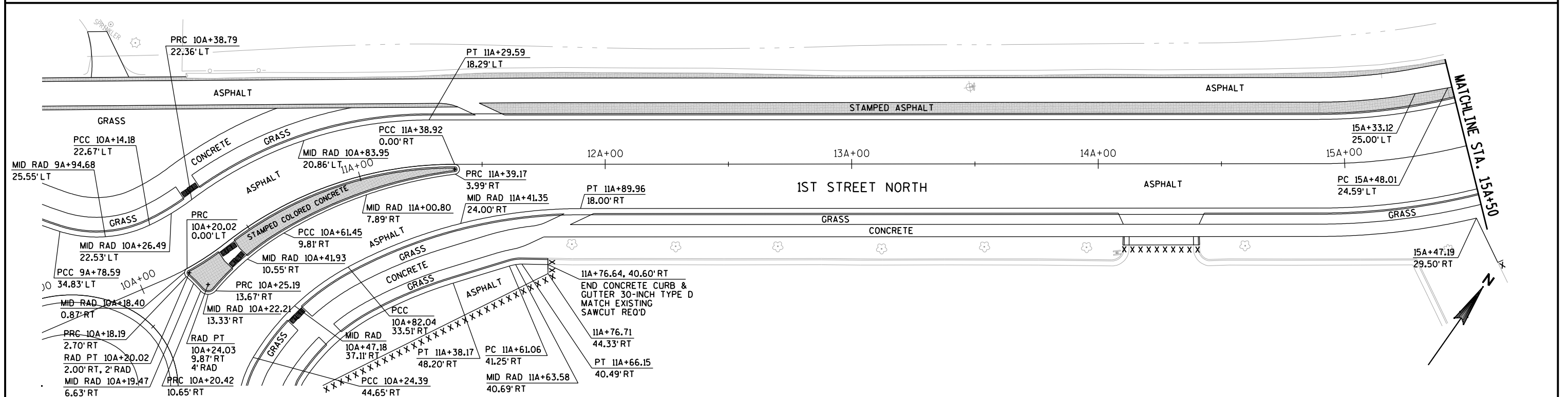
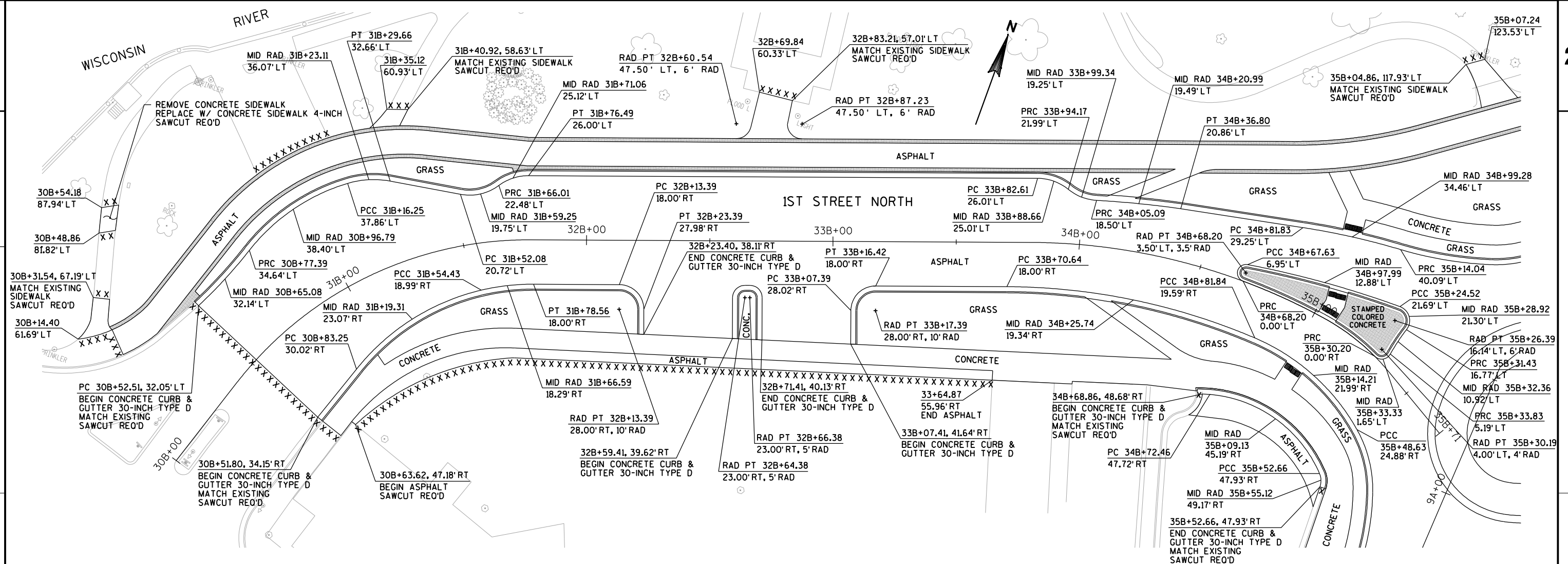


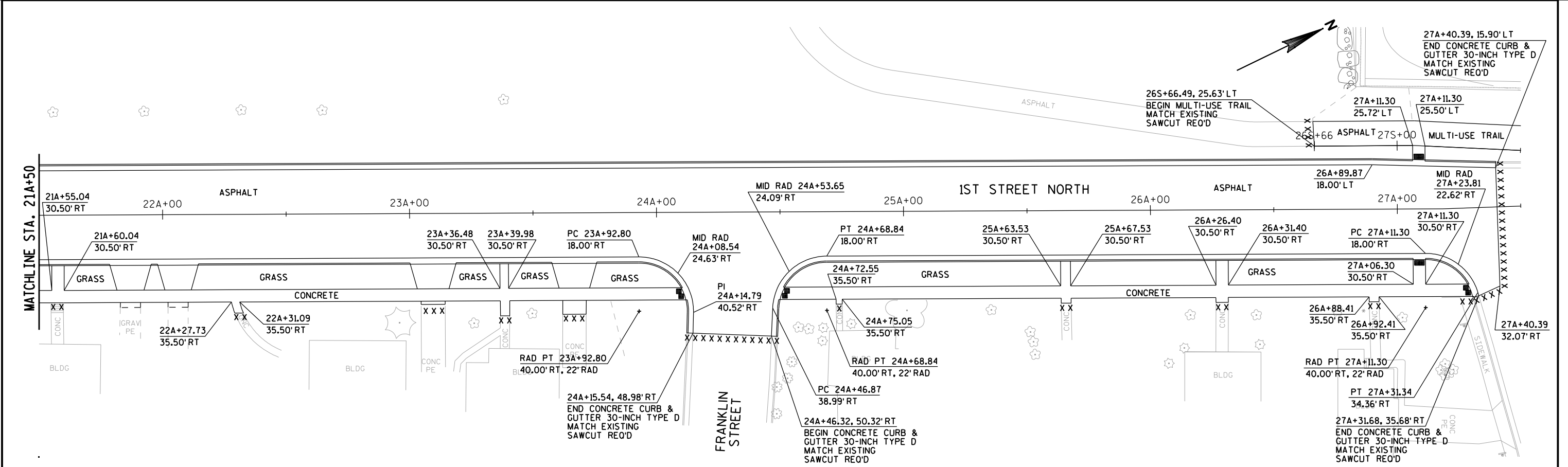
SPLITTER ISLAND DETAIL (TYP)

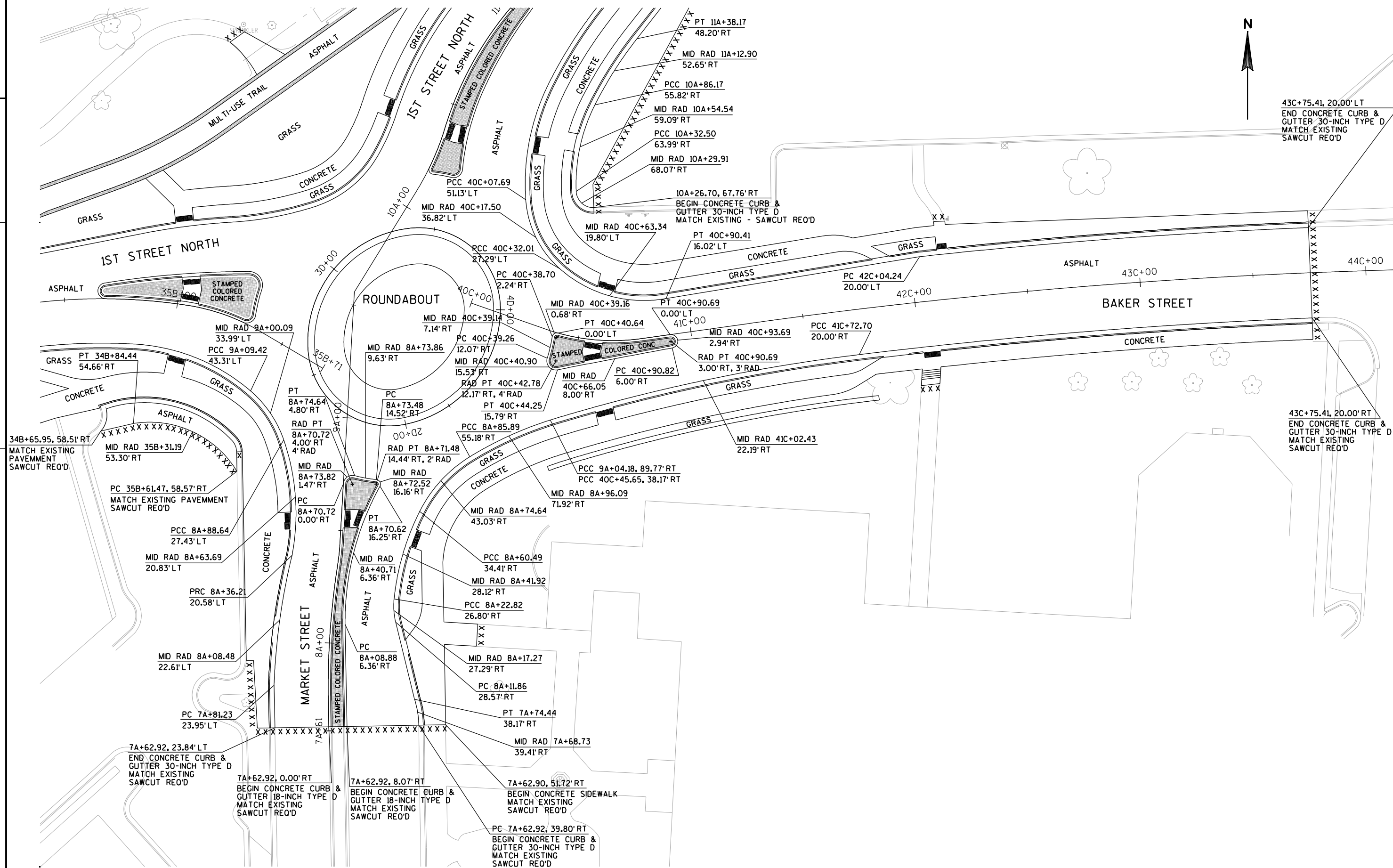
NTS

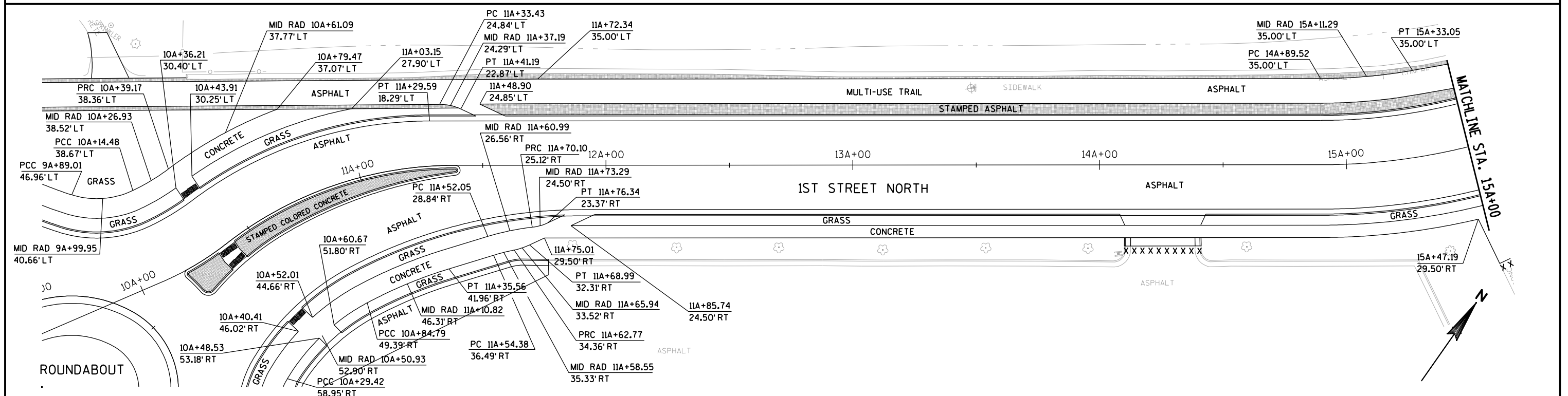


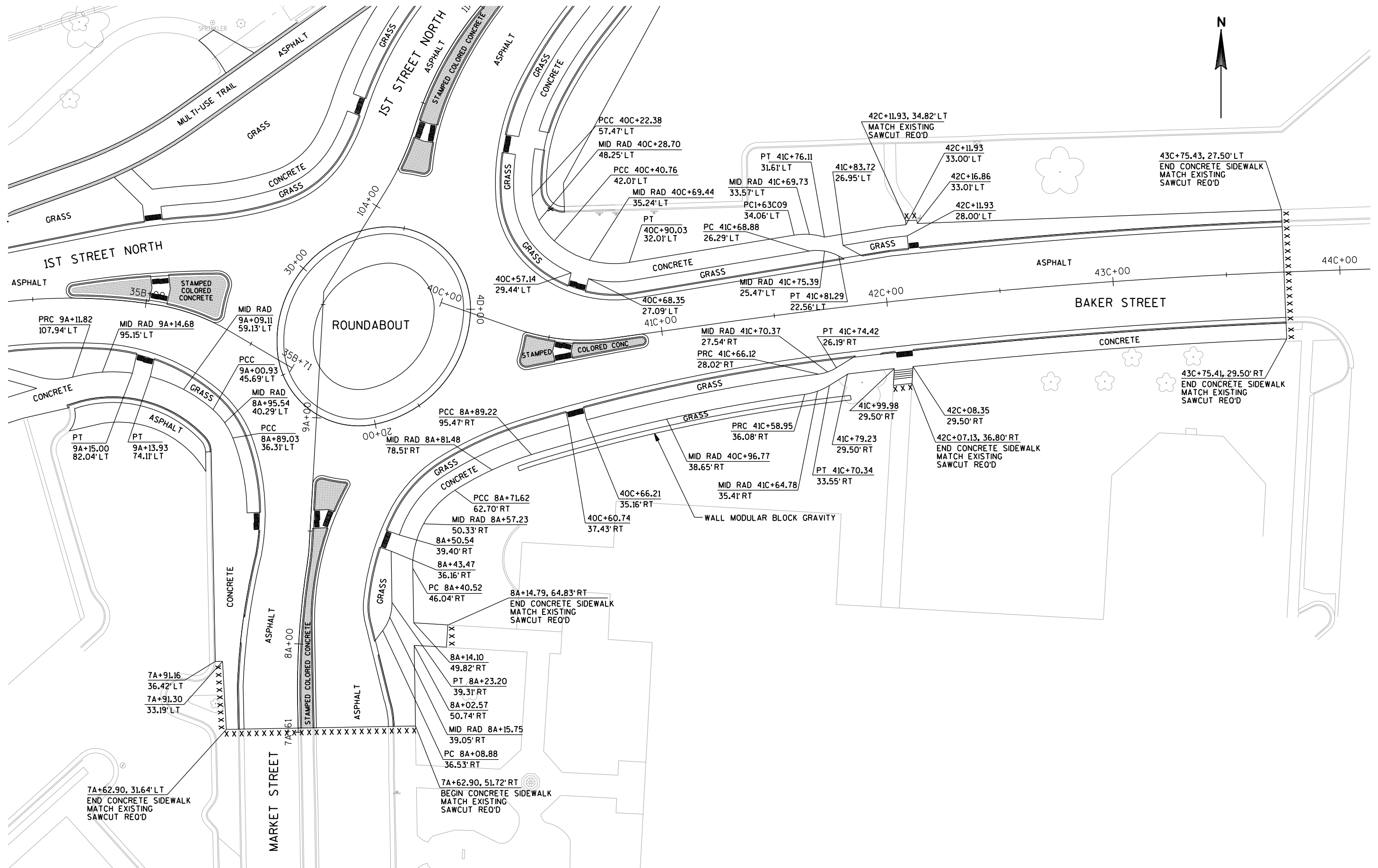
ASPHALT STAMPING EXAMPLE
DOWNTOWN WISCONSIN RAPIDS











Plan view of 1st Street North showing curb openings, curbside ramps, and a multi-use trail. The diagram includes stationing and dimensions for various features:

- MULTI-USE TRAIL** (top left)
- CONCRETE SIDEWALK** (top right and bottom left)
- 1ST STREET NORTH** (center)
- CURB OPENING 34B+19.35** (21.37' LT)
- CURB OPENING 34B+08.94** (20.71' LT)
- CURB OPENING 34B+04.18** (20.90' RT)
- CURB OPENING 34B+16.12** (21.17' RT)
- CURB RAMP TYPE 7B W/ DETECTABLE WARNING FIELD (NATURAL PATINA)** (top right and bottom right)
- CURB RAMP TYPE 5 W/ DETECTABLE WARNING FIELD (NATURAL PATINA)** (middle right)
- Stationing and Dimensions:**
 - 34B+00
 - 34B+95.21 / 35.30' LT
 - 35B+00.55 / 11.40' LT
 - 35B+01.22 / 2.00' LT
 - 34B+98.94 / 22.37' RT
 - 35B+01.97 / 37.34' LT
 - 35B+07.72 / 13.15' LT
 - 35B+09.11 / 2.00' LT
 - 35A+08.41 / 23.44' RT

11

WISDOT/CADDS SHEET 42

WISCONSIN RIVER

MULTI-USE TRAIL

1ST STREET NORTH

CONCRETE SIDEWALK

CURB RAMP TYPE 7B
W/ DETECTABLE
WARNING FIELD
(NATURAL PATINA)

CURB RAMP TYPE 5
W/ DETECTABLE WARNING FIELD
(NATURAL PATINA)

CURB RAMP TYPE 5
W/ DETECTABLE WARNING FIELD
(NATURAL PATINA)

CURB RAMP TYPE 7B
W/ DETECTABLE
WARNING FIELD
(NATURAL PATINA)

CURB OPENING

10A+35.76
24.40' LT

10A+43.66
24.26' LT

10A+34.37
1.00' RT

10A+42.37
1.00' RT

10A+34.98
10.15' RT

10A+42.91
9.50' RT

10A+39.36
40.06' RT

10A+50.08
38.80' RT

10A+49.83
57.60' RT

10A+62.53
56.16' RT

11A+47.34
20.00' LT

11A+59.17
20.00' LT

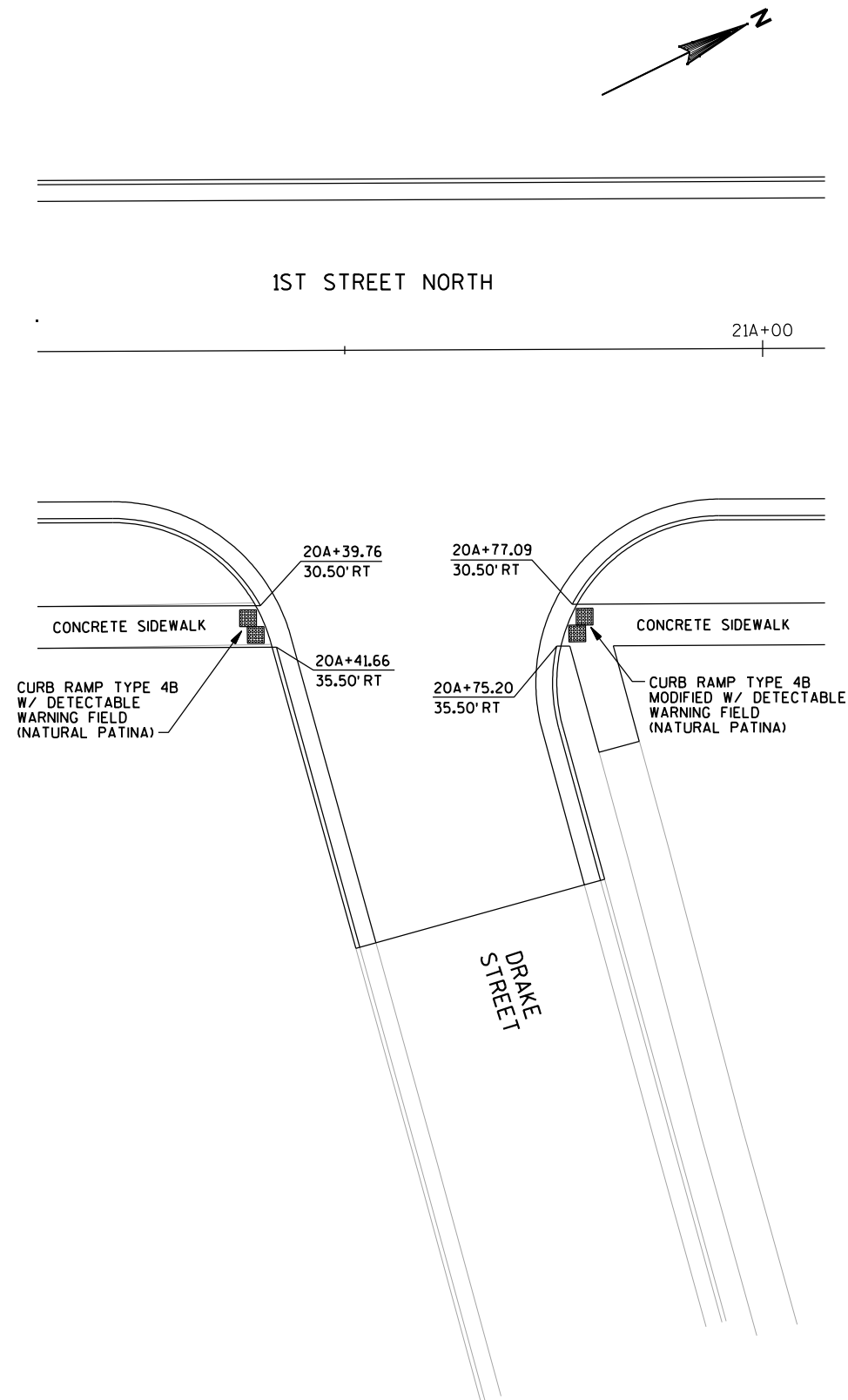
11A+83.32
20.11' RT

11A+95.39
20.00' RT

11A+00

12A+

2



PROJECT NO: 6999-09-79 & 6999-11-72

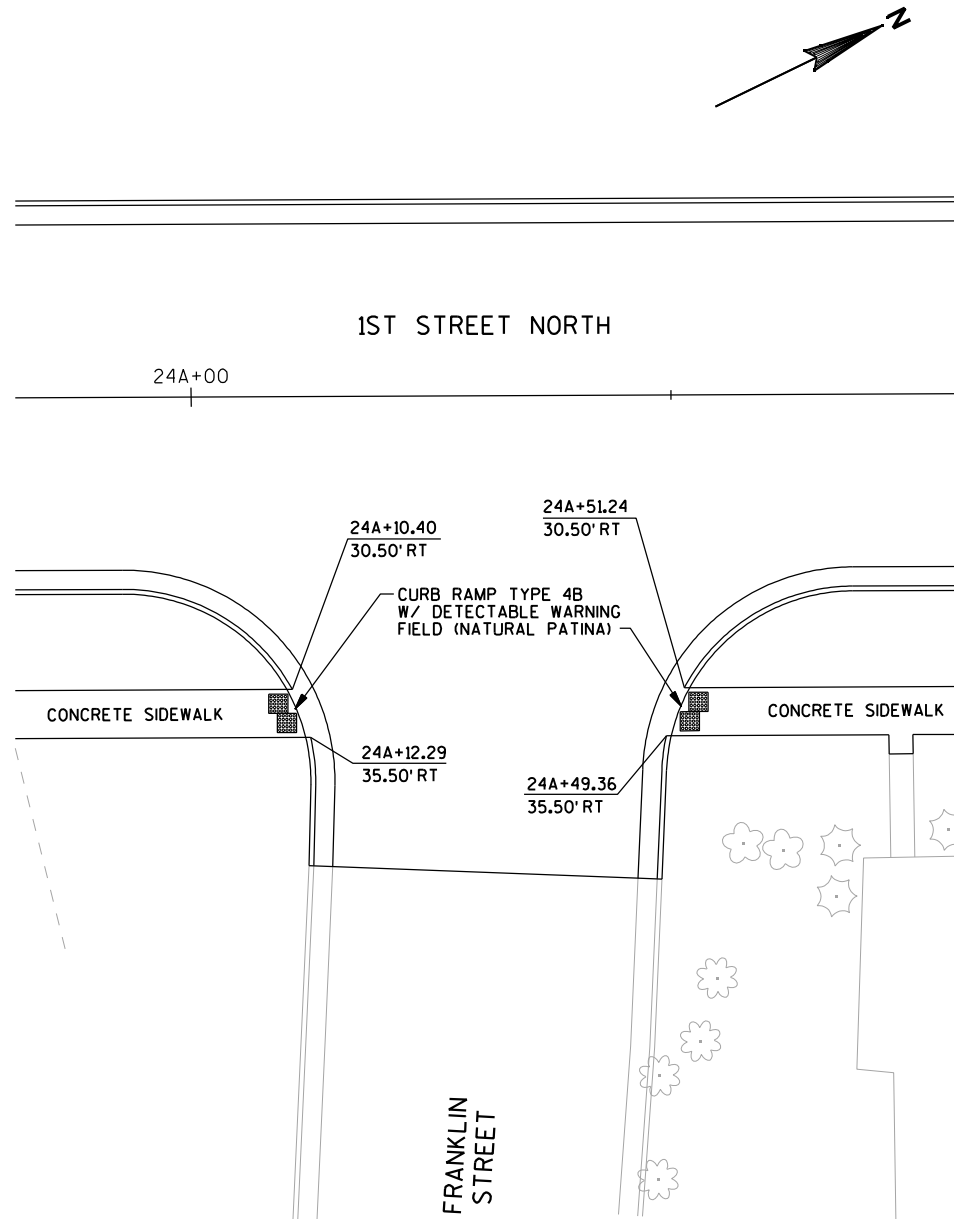
HWY: 1ST STREET NORTH

COUNTY: WOOD

LAYOUT - CURB RAMPS

SHEET 21

2



PRINTER DRIVER: L:\library\TPN.CADstds\Workspace\Clients\WisDOT\Microstation\Resources\MS.Printing\Printer_Drivers\ET_PDF_11 x 17.plt
PEN TABLE: L:\work\Projects\105776\gra\MS.Printing\Pen.Tables\ET_WisDOT.tbl

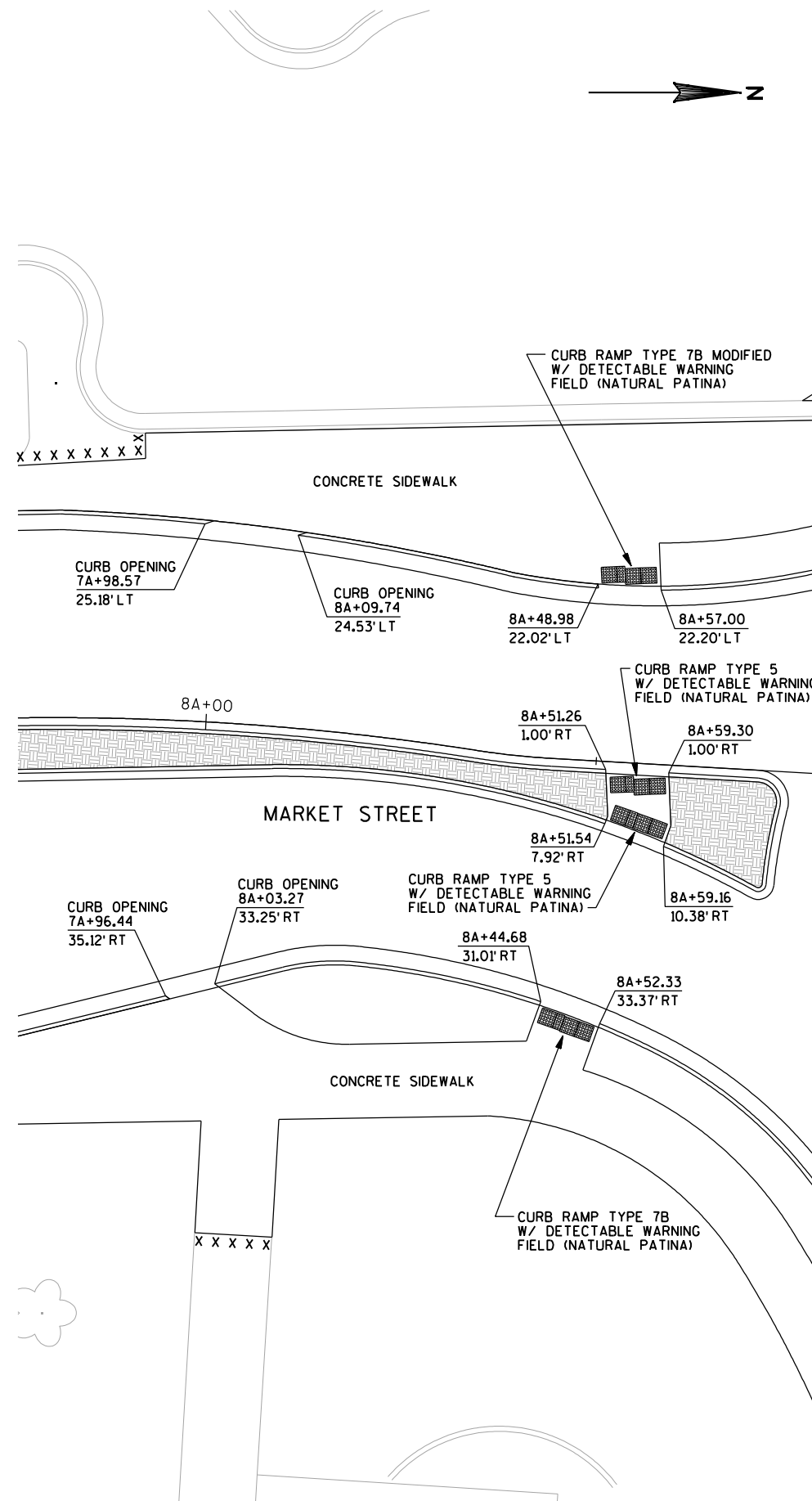
PLOT DATE: 6/6/2013
PLOT TIME: 4:21:25 PM

PLOT SCALE: 1:20

WISDOT/CADDS SHEET 42

11

2



PROJECT NO: 6999-09-79 & 6999-11-72

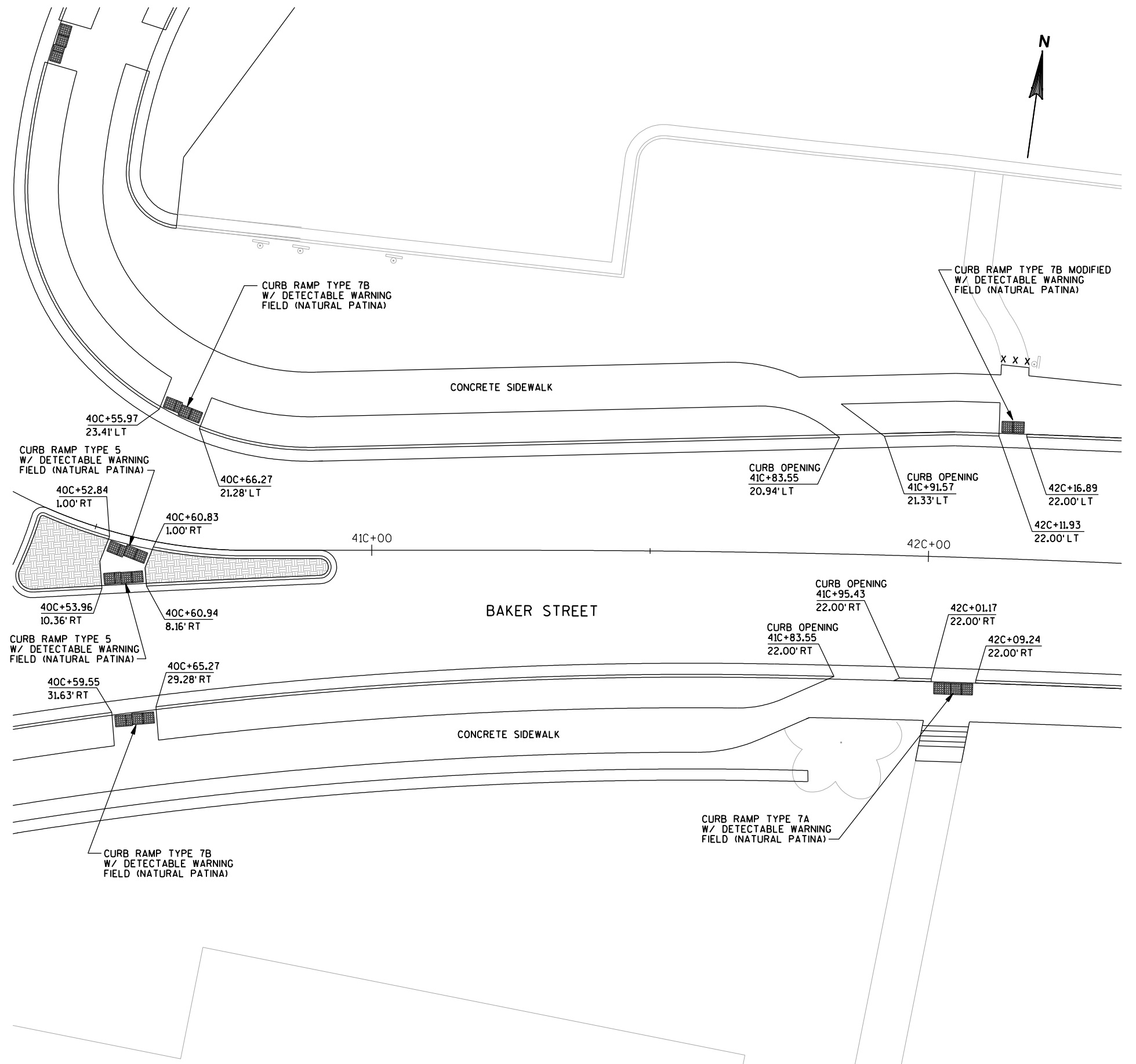
HWY: 1ST STREET NORTH

COUNTY: WOOD

LAYOUT - CURB RAMPS

SHEET 22

2



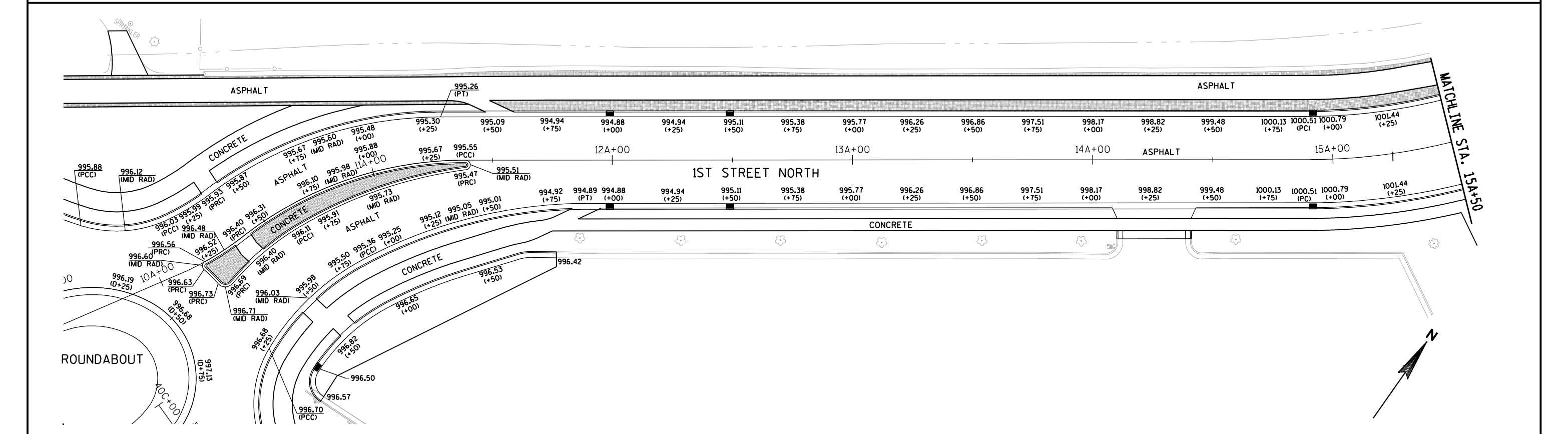
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BATCH PRINT SHEET 8 OF 8

PRINTER DRIVER: L:\Library\TPN.CADstds\Workspace\Clients\WisDOT\Microstation\Resources\MS_Printing\Printer_Drivers\ET_PDF..11 x 17.plt
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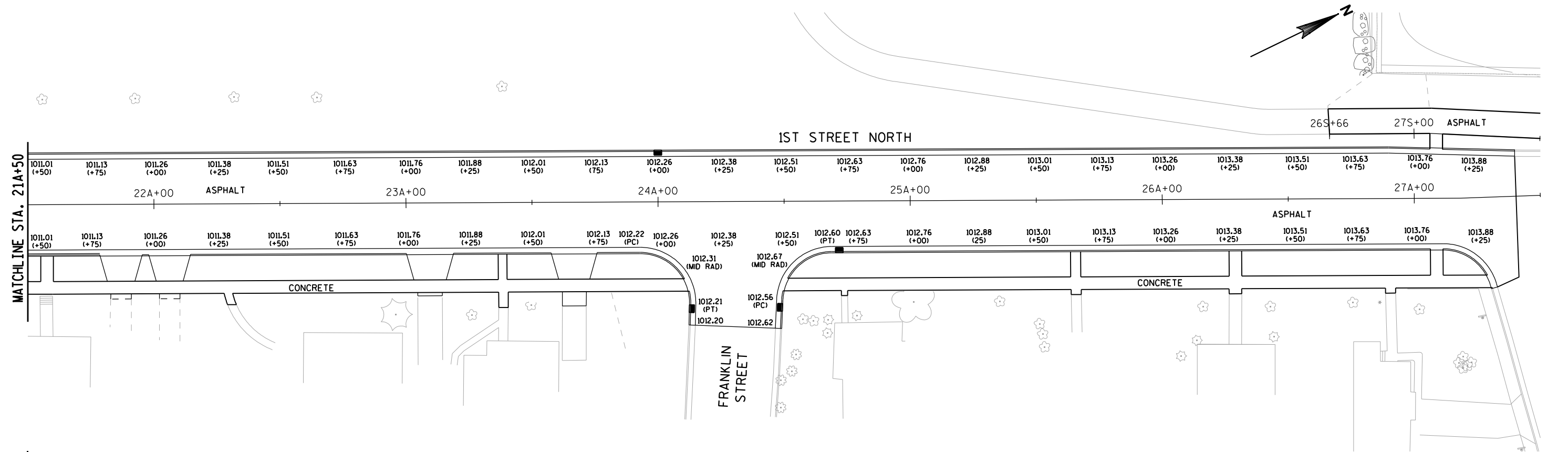
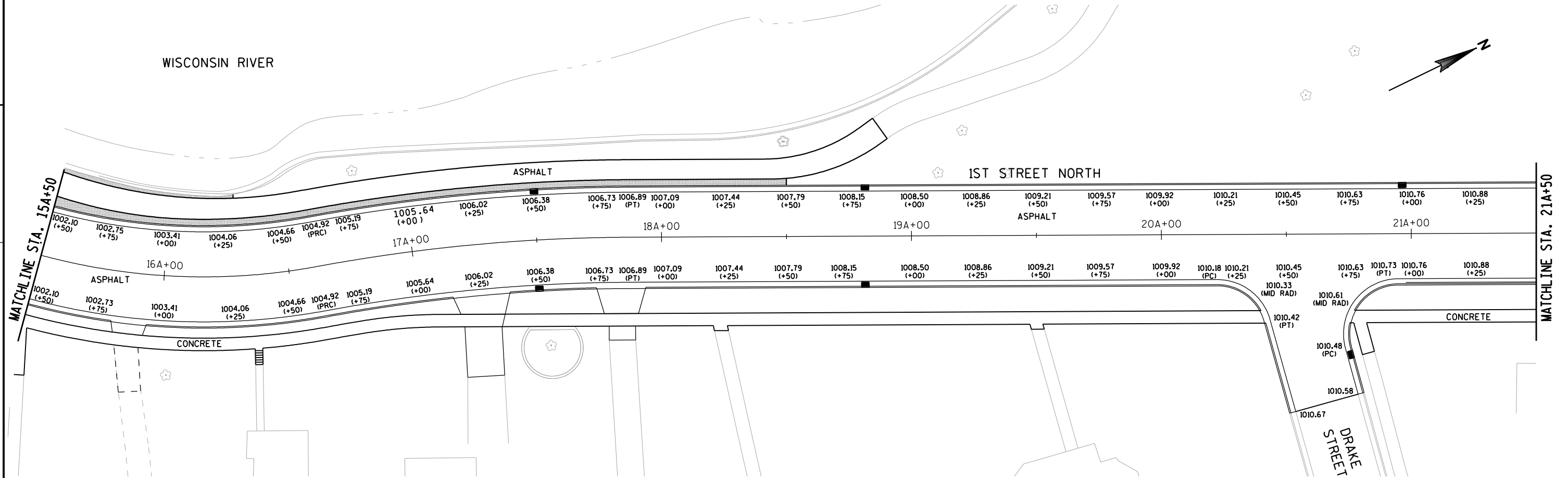
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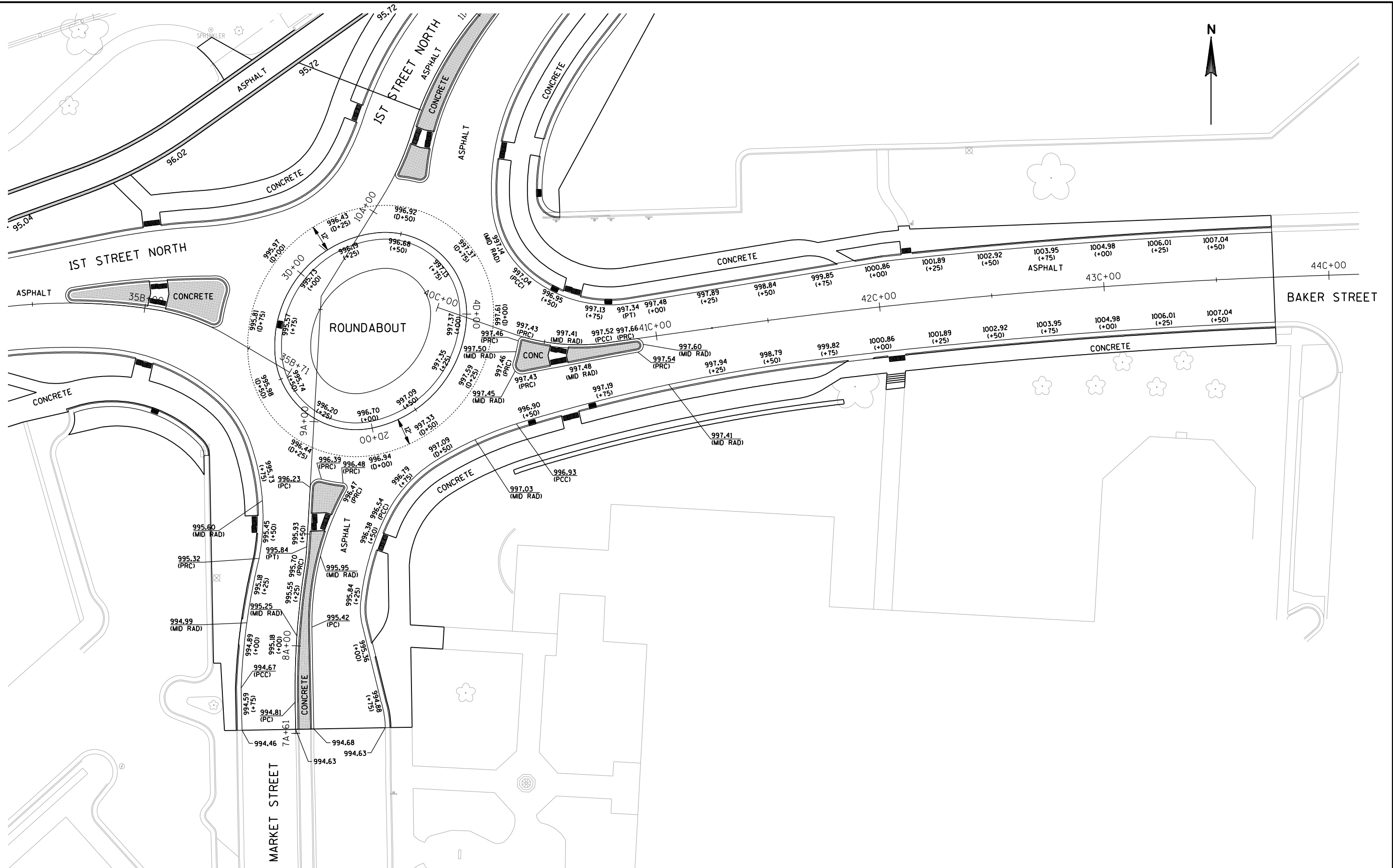
PLOT SCALE: 1:20

WISDOT/CADDS SHEET 42



WISDOT/CADDS SHEET 42





2

WISCONSIN RIVER

SPRINKLER

SLOPE INTERCEPT

FLOOD LIGHT

TLE

MULTI-USE TRAIL

R/W

1ST STREET NORTH

32B+00

33B+00

34B+00

ASPHALT

CONCRETE

30B+00

31B+00

35B+00

35B+71

9A+00

CONC.

SLOPE INTERCEPT

ASPHALT

CONCRETE

EROSION CONTROL LEGEND

- ##### EROSION MAT URBAN CLASS 1 TYPE A
- SILT FENCE
- ▣ INLET PROTECTION TYPE A PRIOR TO PAVING TYPE C AFTER PAVING

2

2

WISCONSIN RIVER

SPRINKLER

SLOPE INTERCEPT

FLOOD LIGHT

TLE

MULTI-USE TRAIL

R/W

1ST STREET NORTH

32B+00

33B+00

34B+00

ASPHALT

CONCRETE

30B+00

31B+00

35B+00

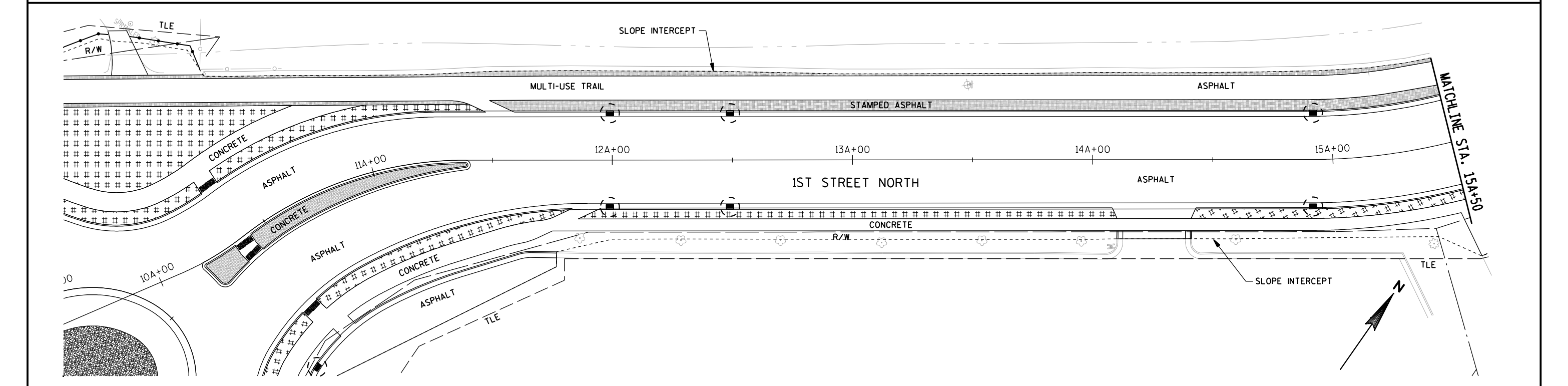
35B+71

9A+00

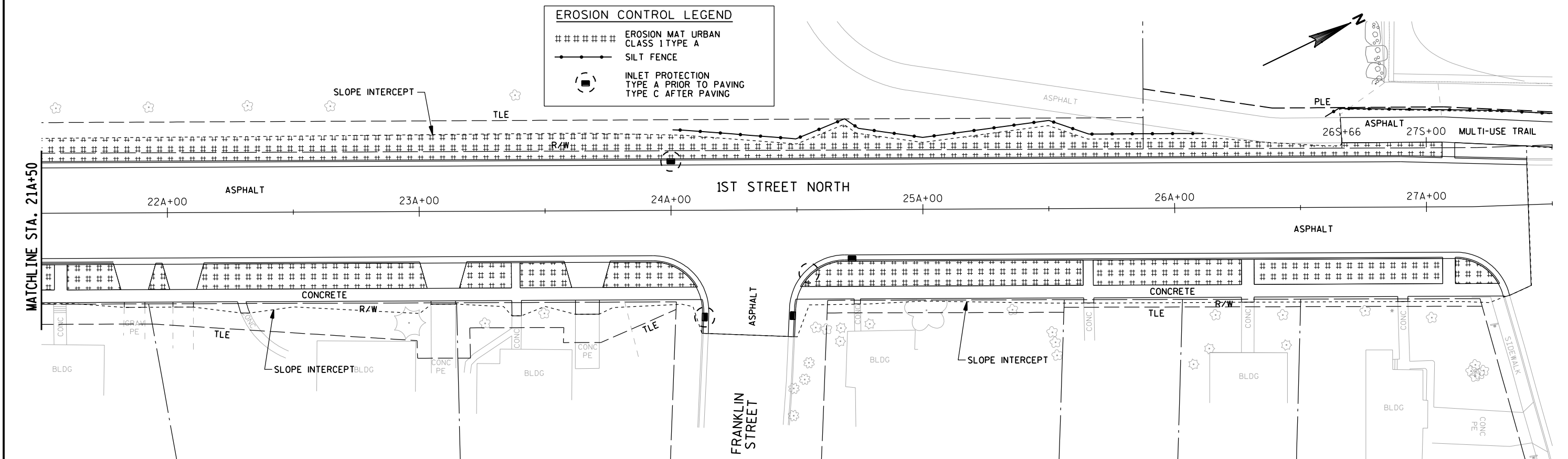
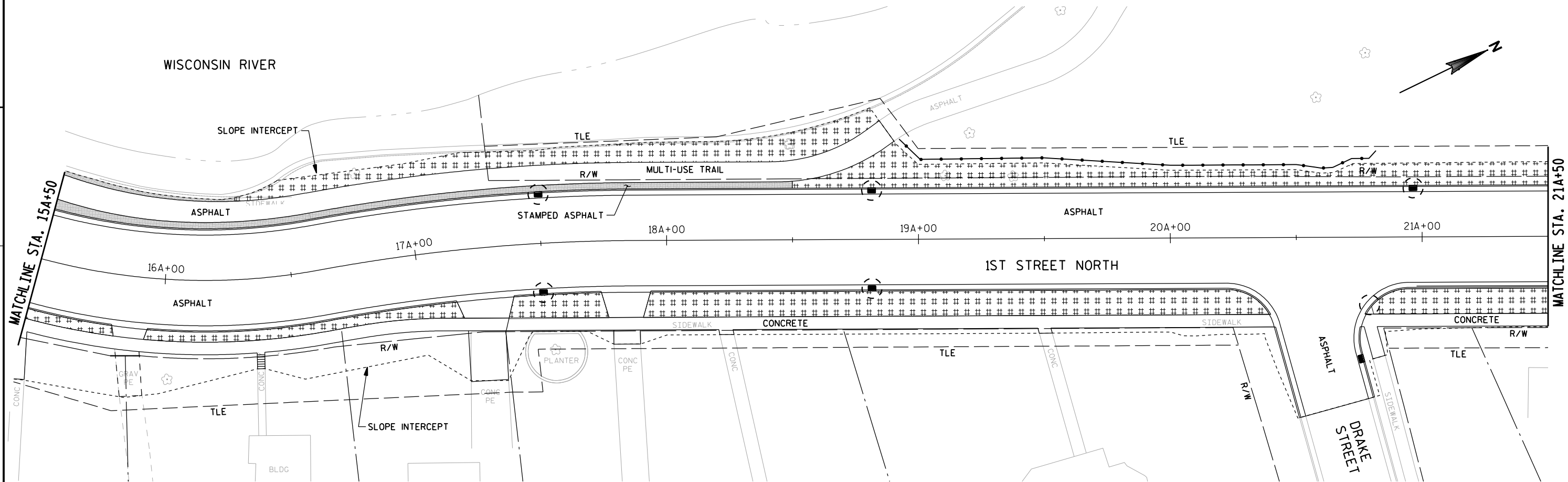
EROSION CONTROL LEGEND

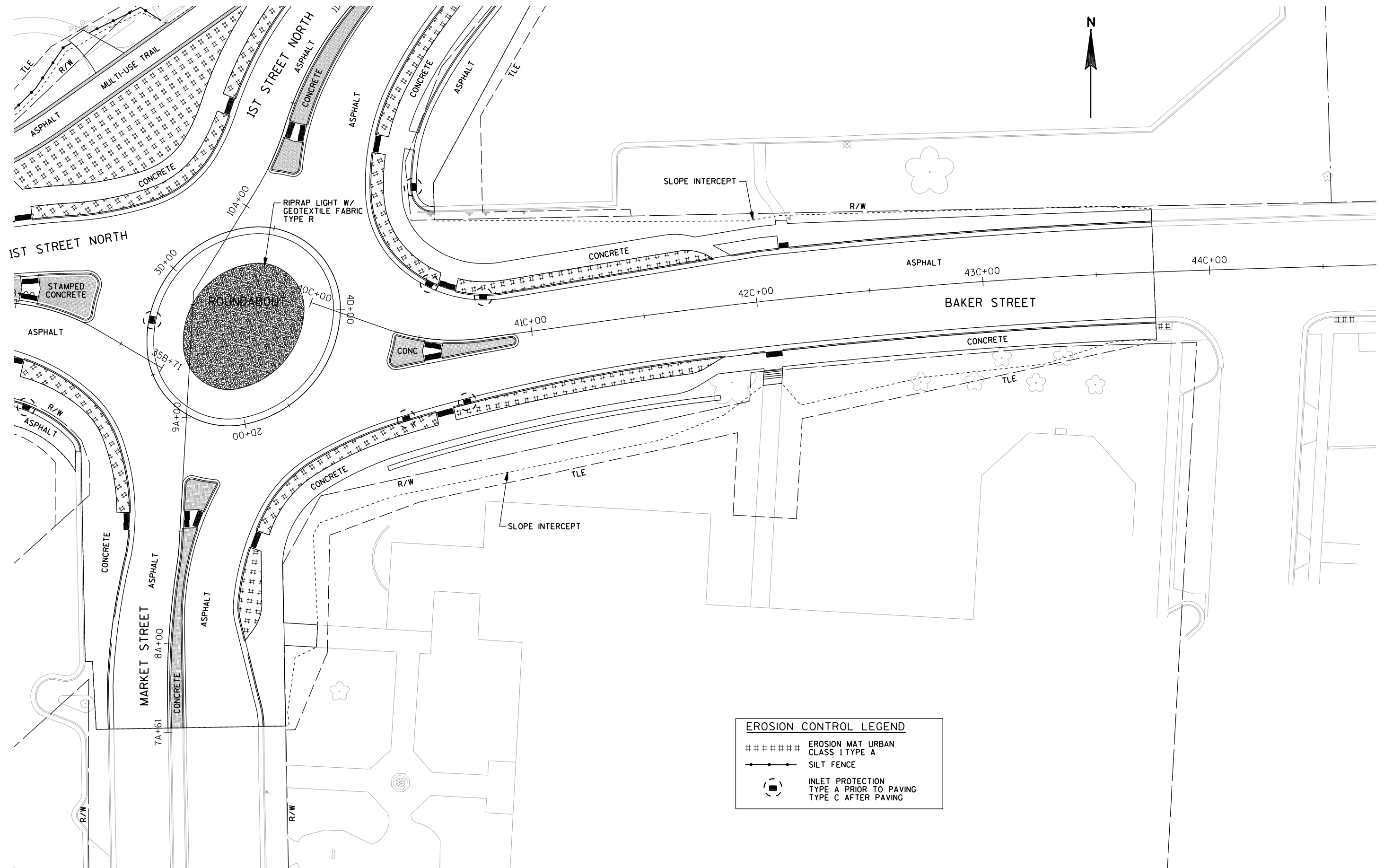
- ##### EROSION MAT URBAN CLASS 1 TYPE A
- SILT FENCE
- ▣ INLET PROTECTION TYPE A PRIOR TO PAVING TYPE C AFTER PAVING

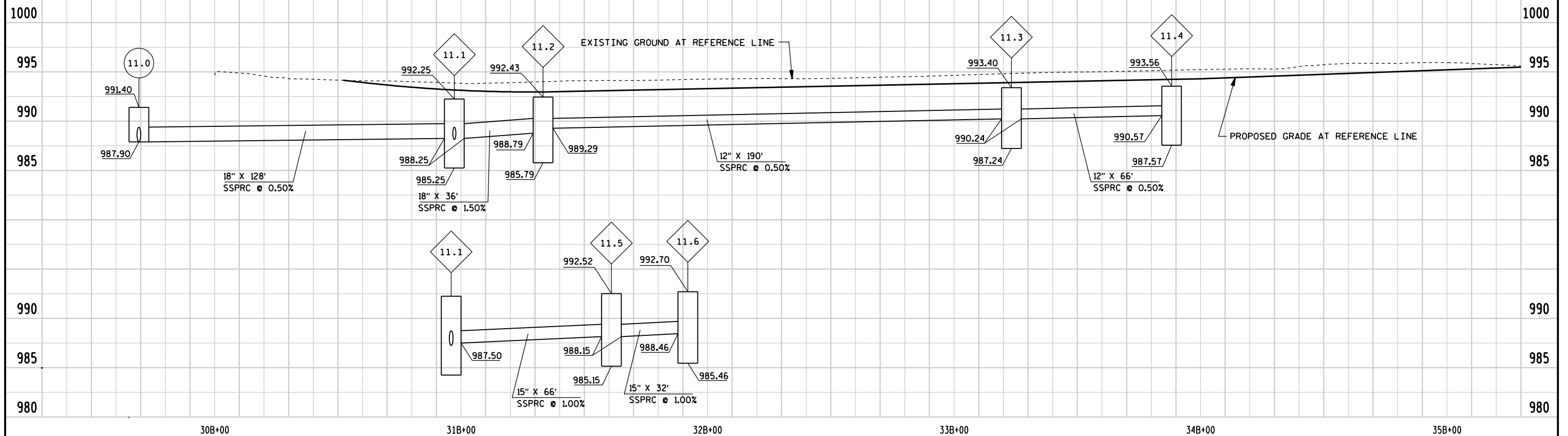
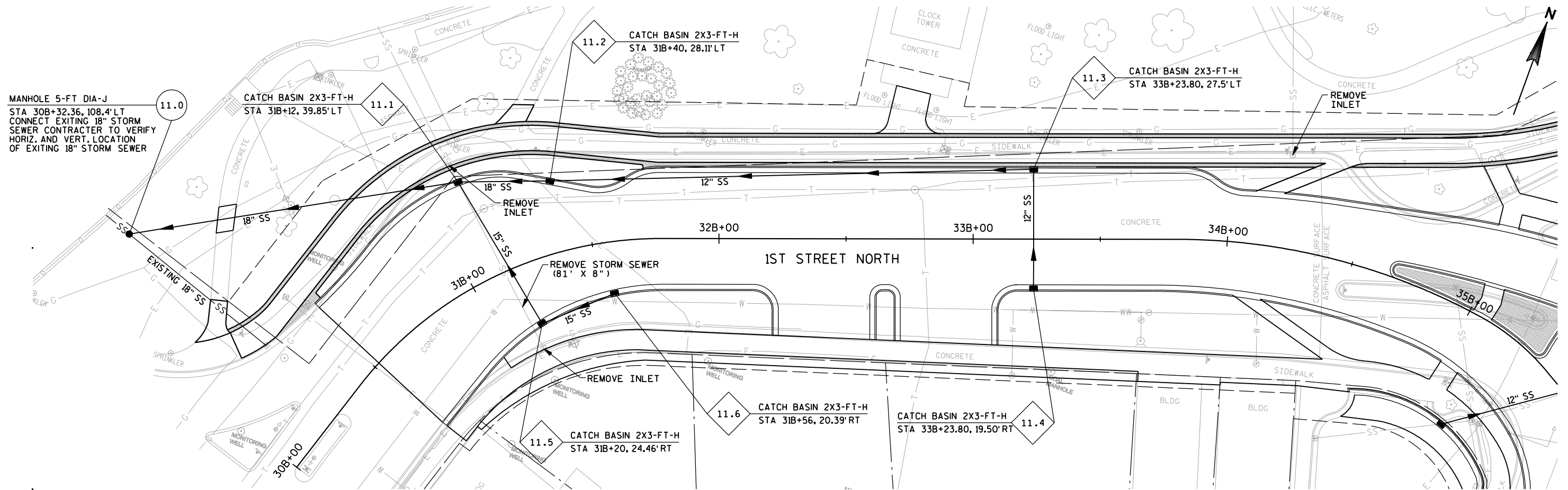
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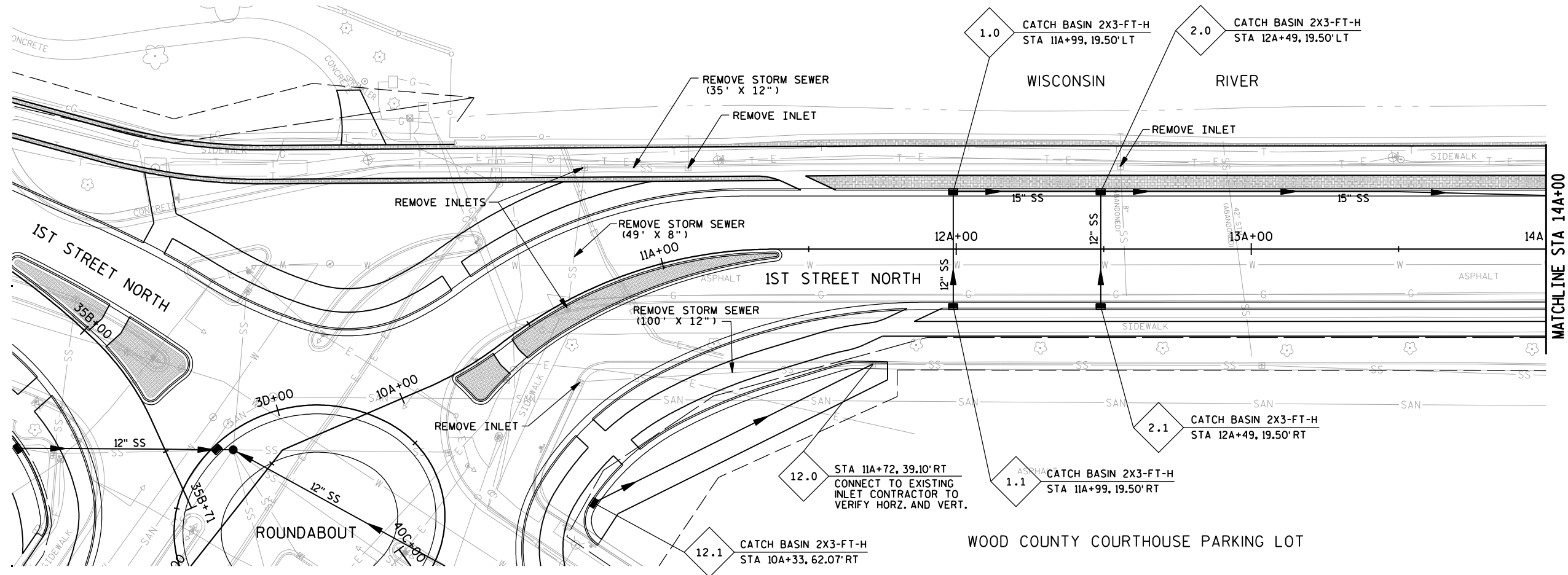


WISDOT/CADDS SHEET 42









1000

995

990

985

980

995

990

985

985

PROJECT NO: 6999-09-79 & 6999-11-72

HWY: 1ST STREET NORTH

COUNTY: WOOD

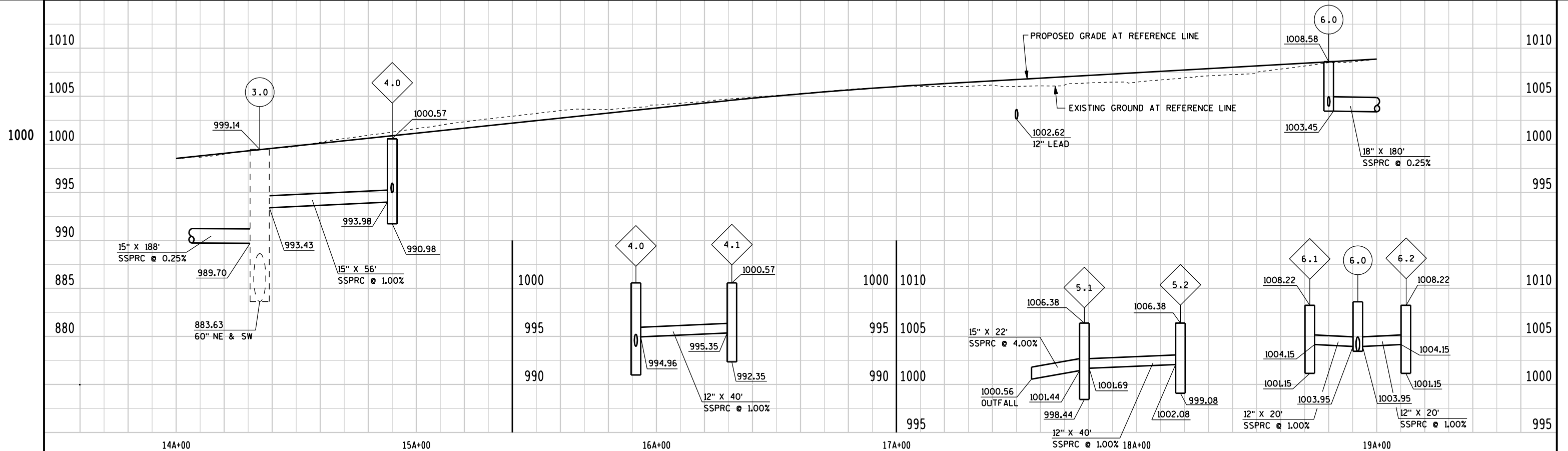
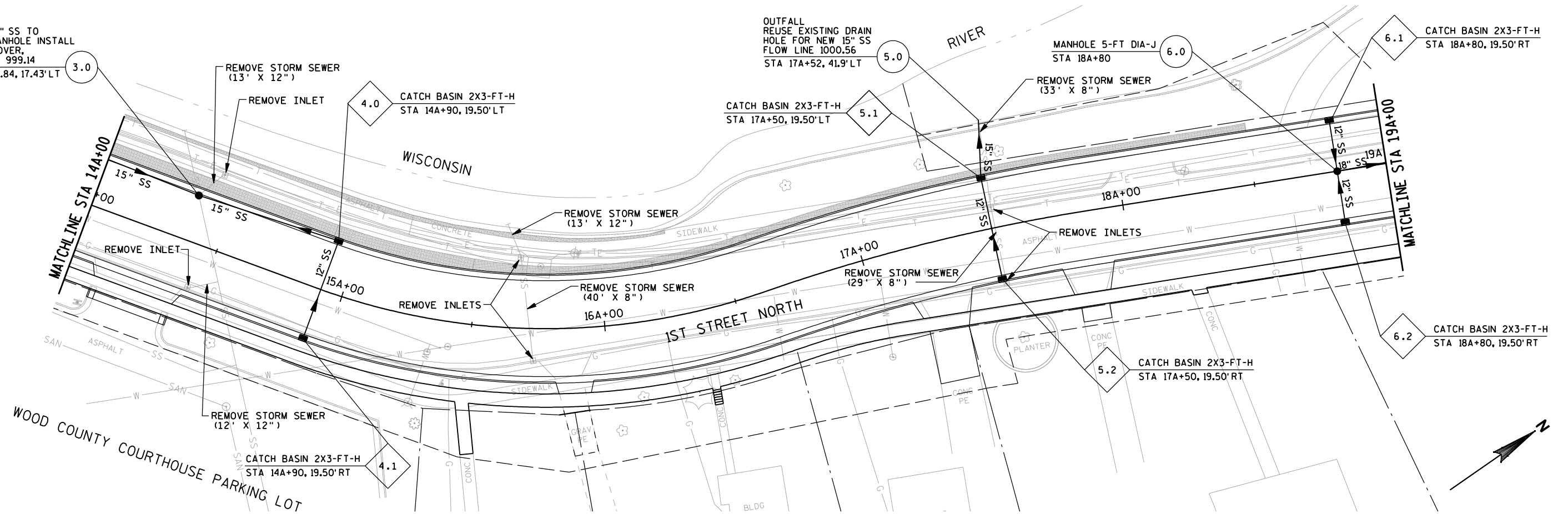
STORM SEWER

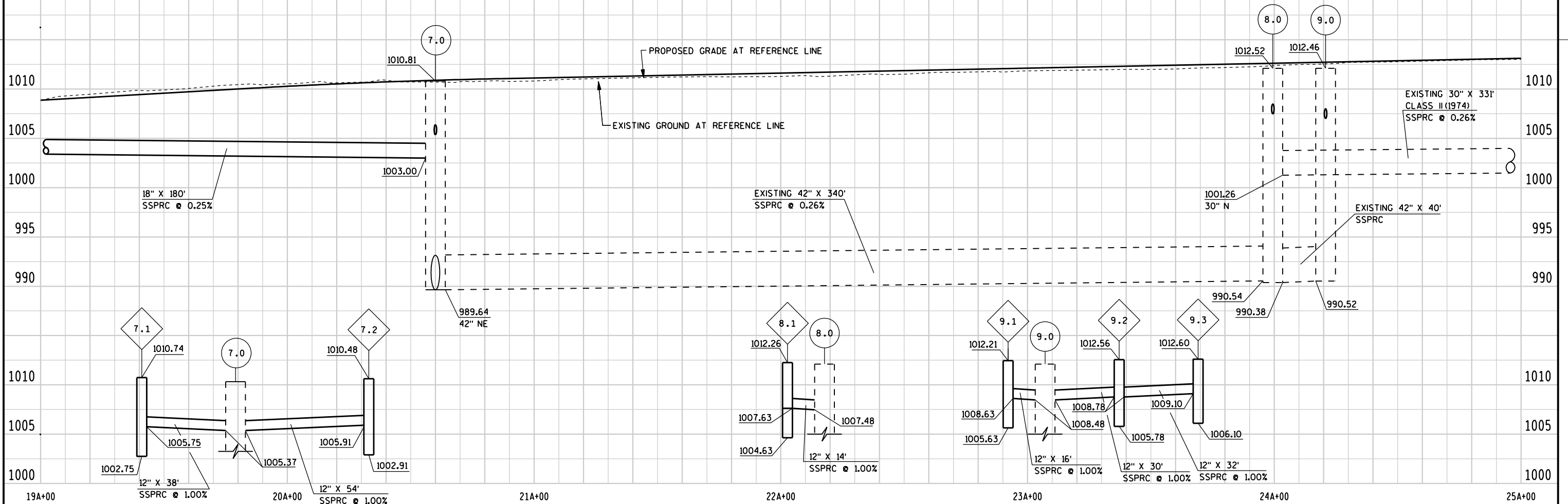
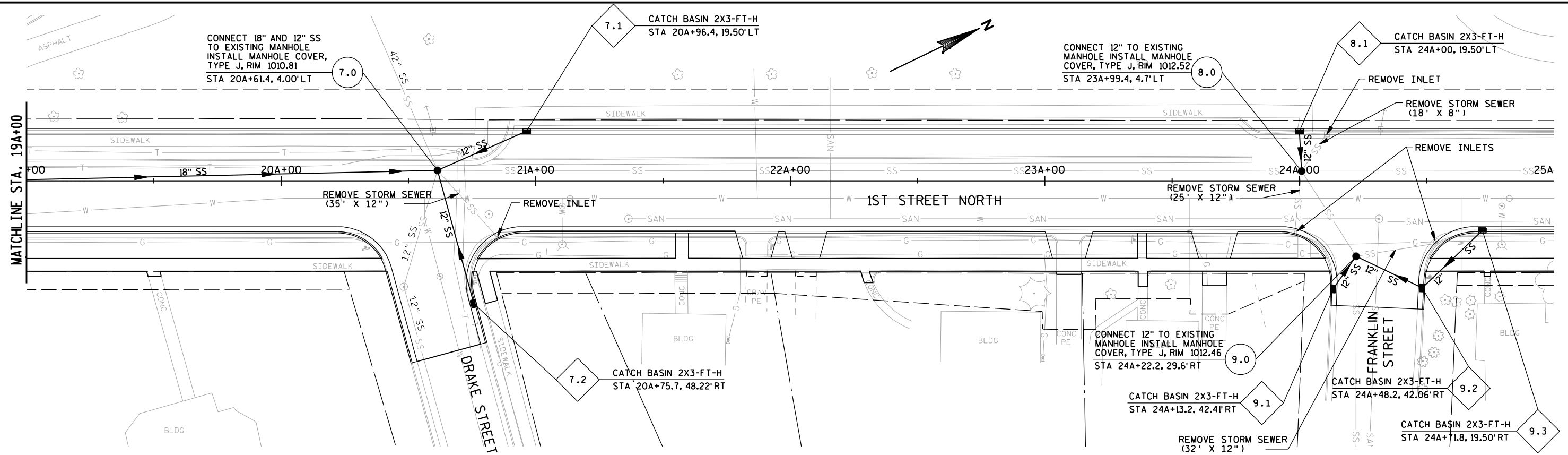
SHEET

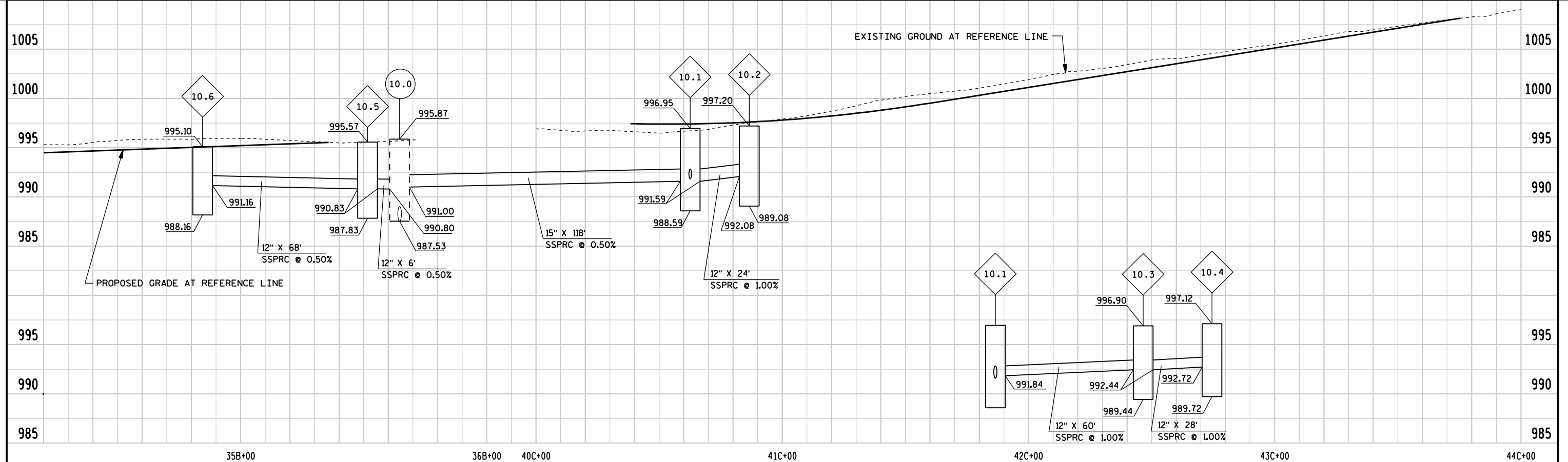
30

E

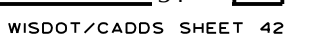
CONNECT 15" SS TO
EXISTING MANHOLE INSTALL
MANHOLE COVER,
TYPE J, RIM 999.14
STA 14A+34.84, 17.43' LT

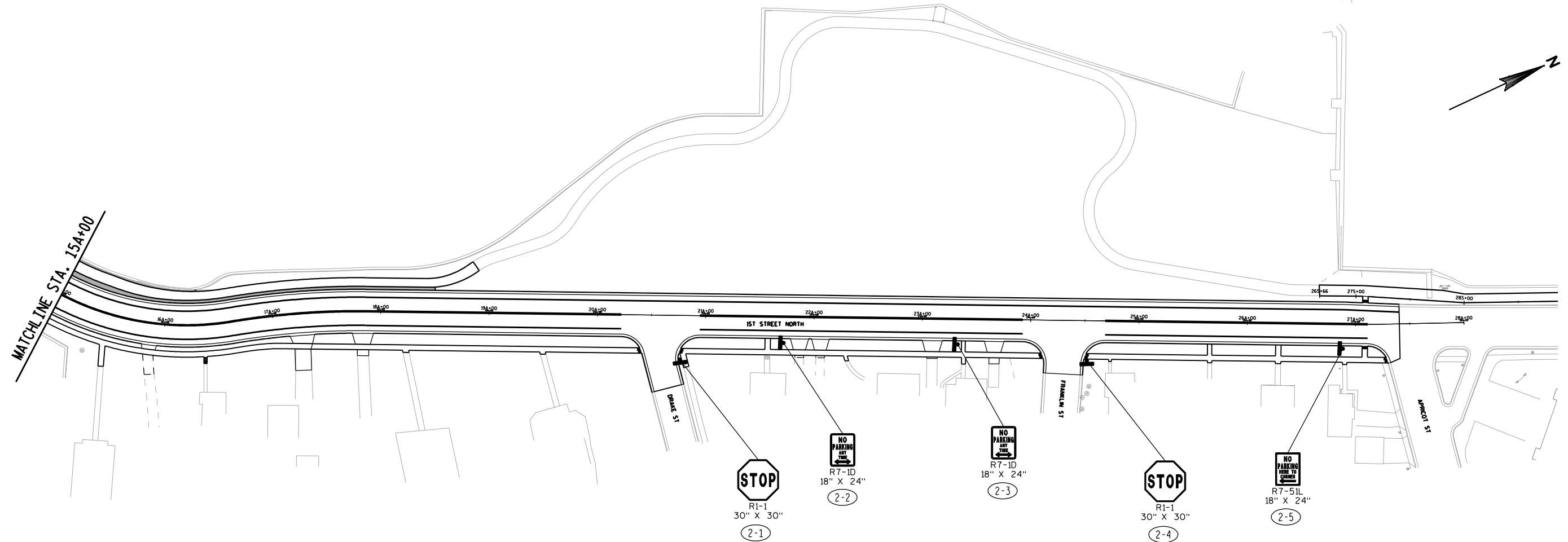


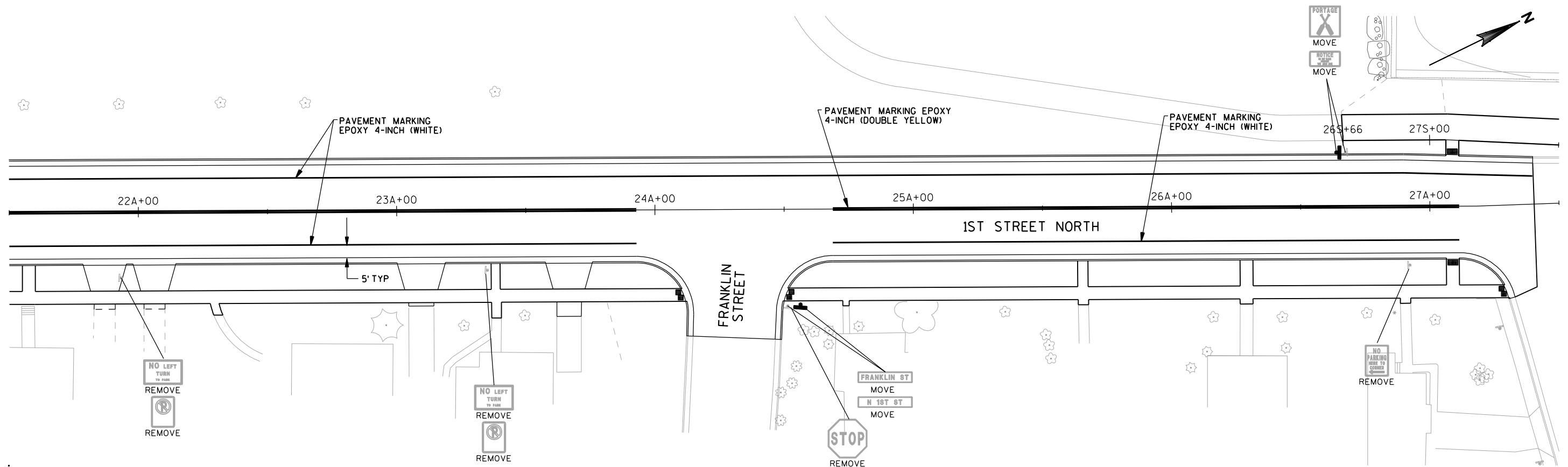
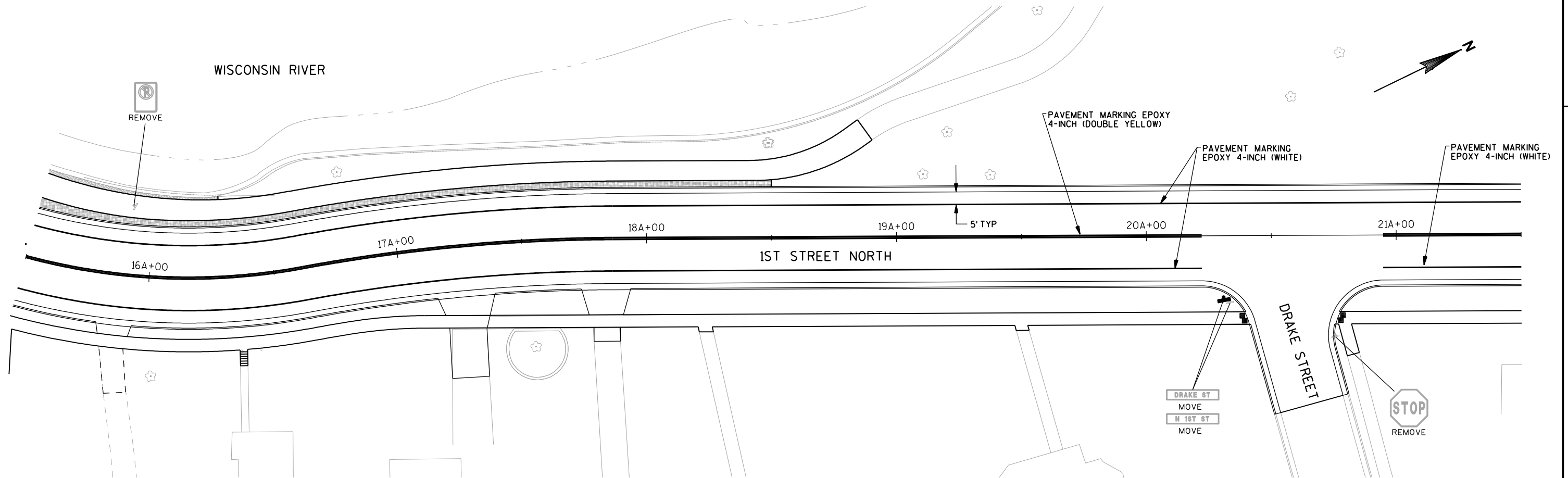


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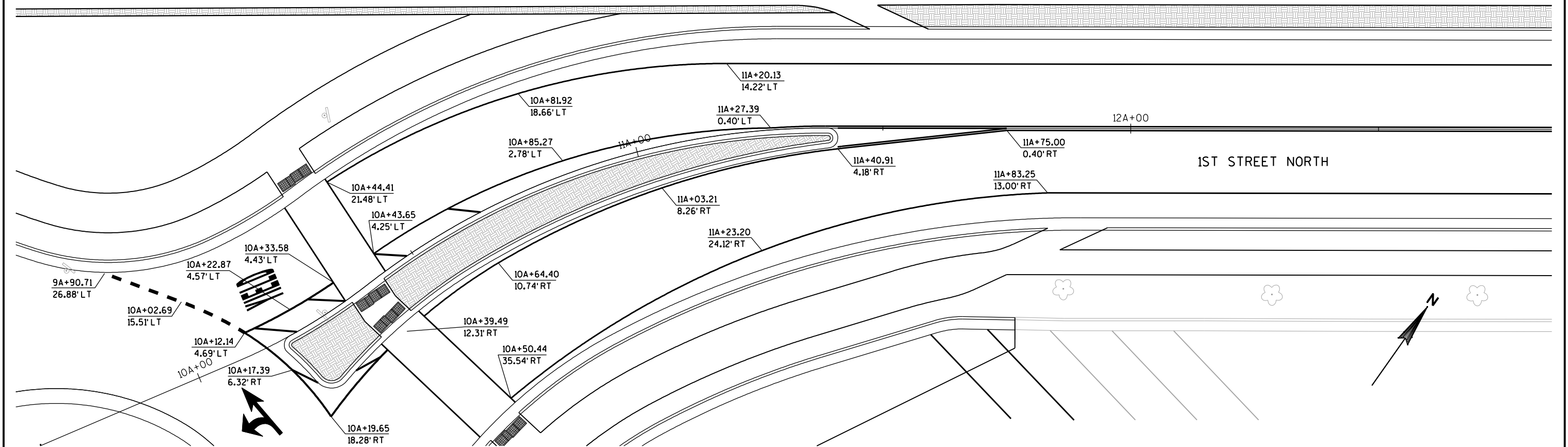
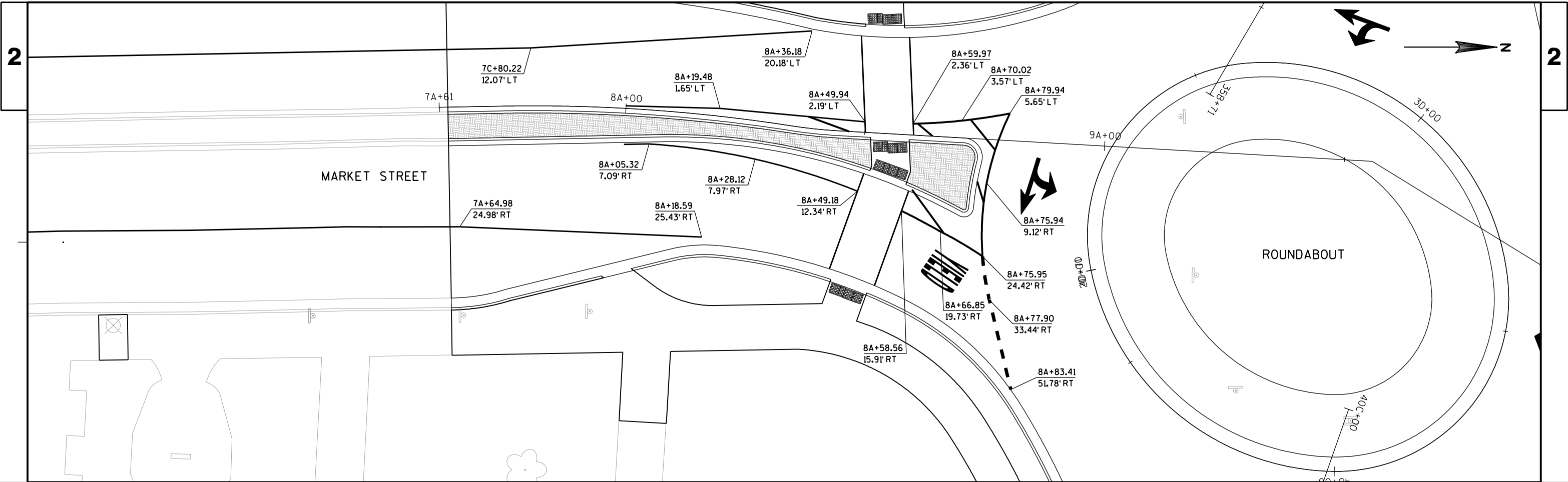
PROJECT NO: 6999-09-79 & 6999-11-72	HWY: 1ST STREET NORTH	COUNTY: WOOD	STORM SEWER	SHEET 33	E
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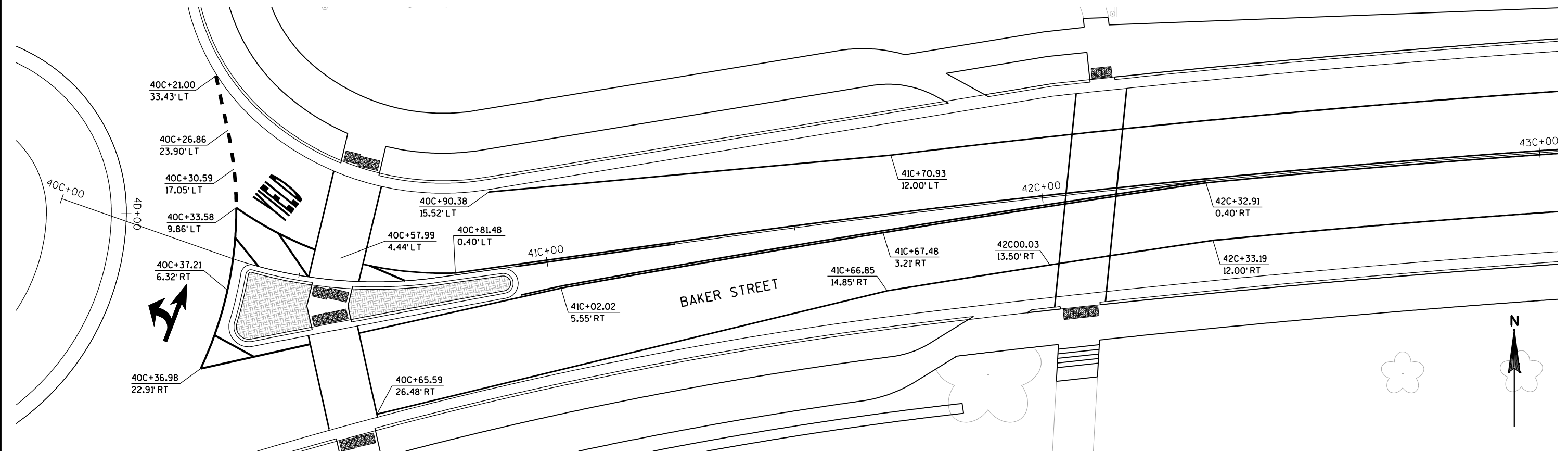
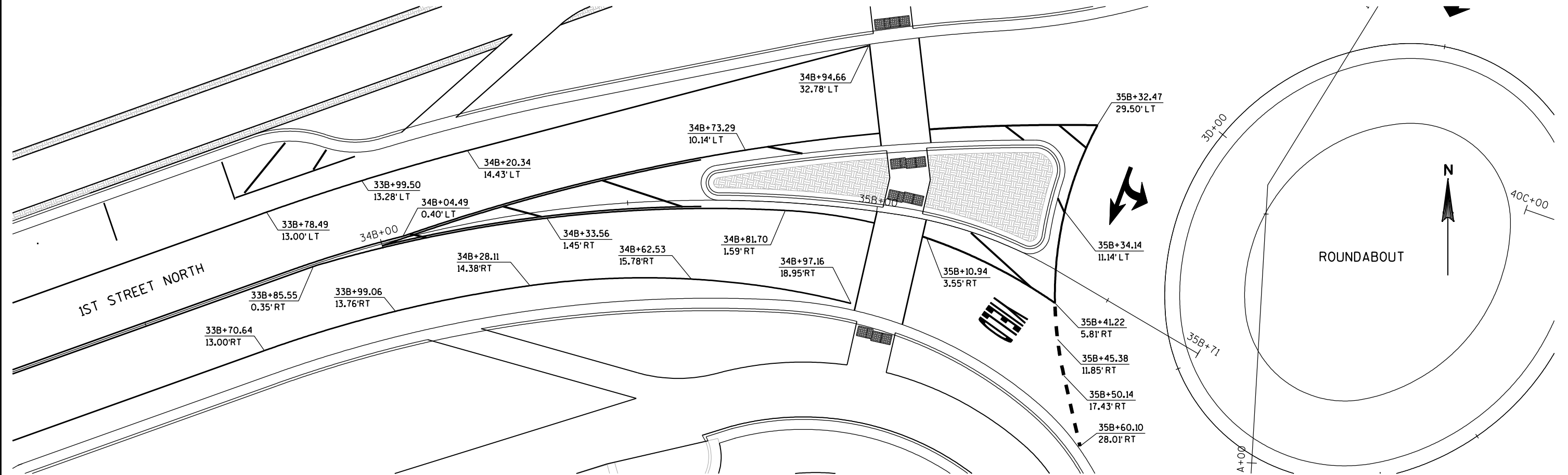












2

1ST STREET NORTH

EXISTING PARKING STALL

PAVEMENT MARKING PARKING STALL EPOXY (WHITE)

WOOD COUNTY COURTHOUSE PARKING LOT

PAVEMENT MARKING PARKING SYMBOLS EPOXY (HANDICAP PARKING SYMBOL)

PAVEMENT MARKING PARKING STALL EPOXY (WHITE)

PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE) (TYP) (2'-0" O.C. 45° TO THE PARKING STALL)

5' (TYP) 9' (TYP)

RESERVED PARKING 12" X 18"

REMOVE

RESERVED PARKING 12" X 18"

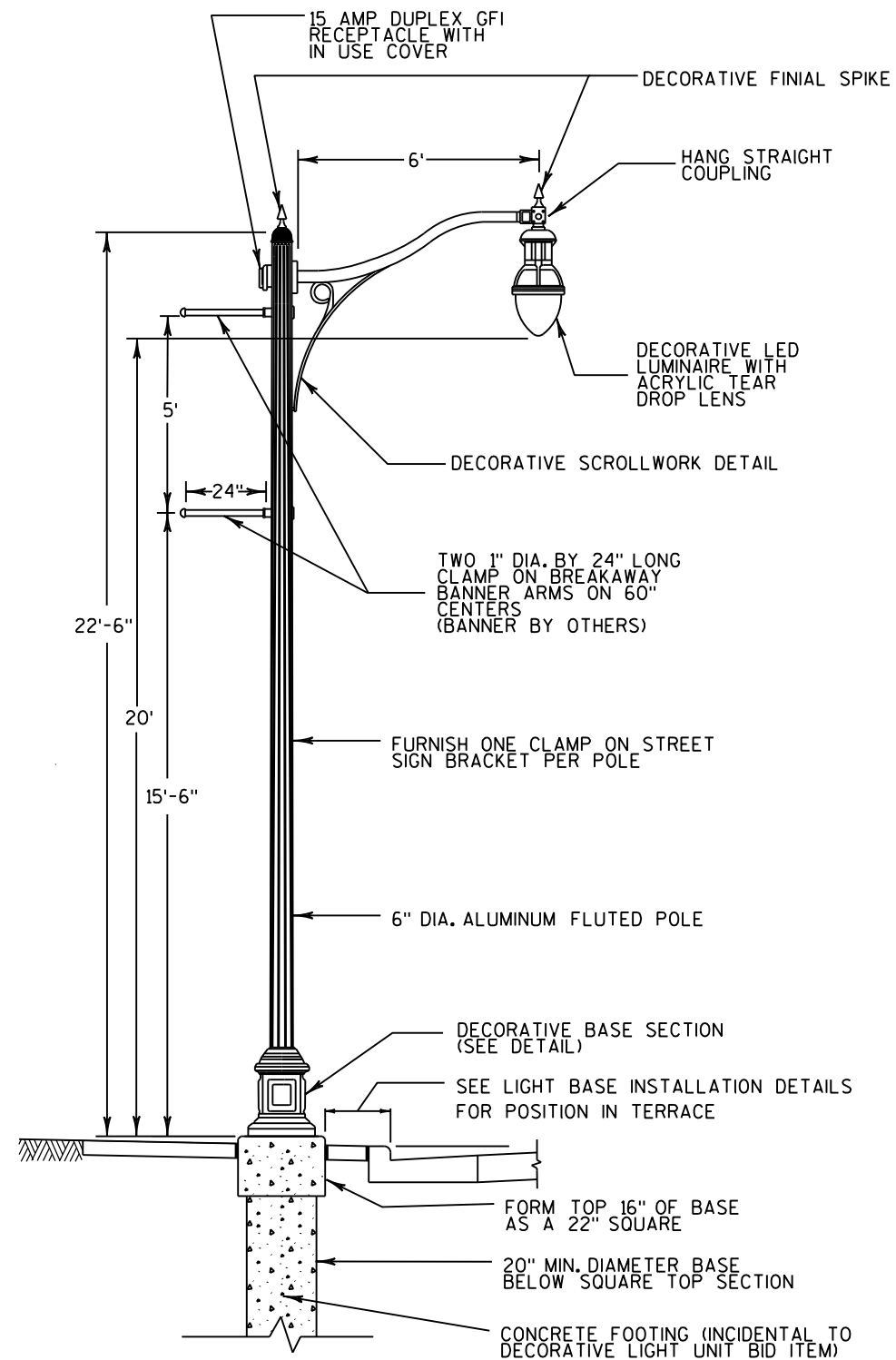
BAKER STREET

4D+0

2

11

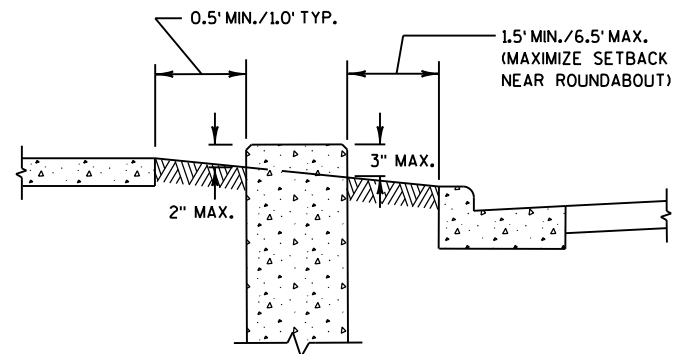
WISDOT/CADDS SHEET 42



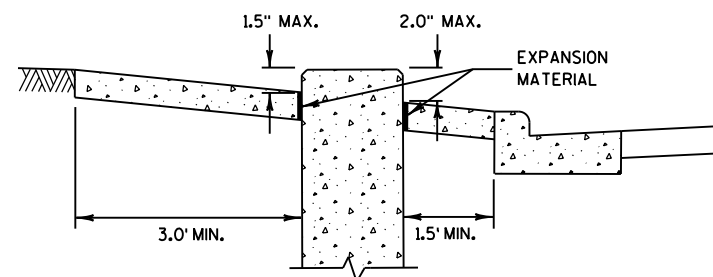
DECORATIVE LIGHT UNIT DETAIL

NO SCALE

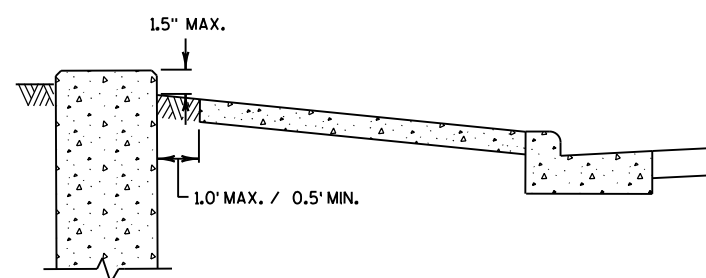
NOTE: ADJUST POSITION OF RECEPTACLE AND BANNER ARMS 90 DEGREES FOR TWIN ARM LUMINAIRE UNIT.



IN GRASS TERRACE



IN CONCRETE TERRACE



BACK OF SIDEWALK

LIGHT BASE INSTALLATION DETAIL

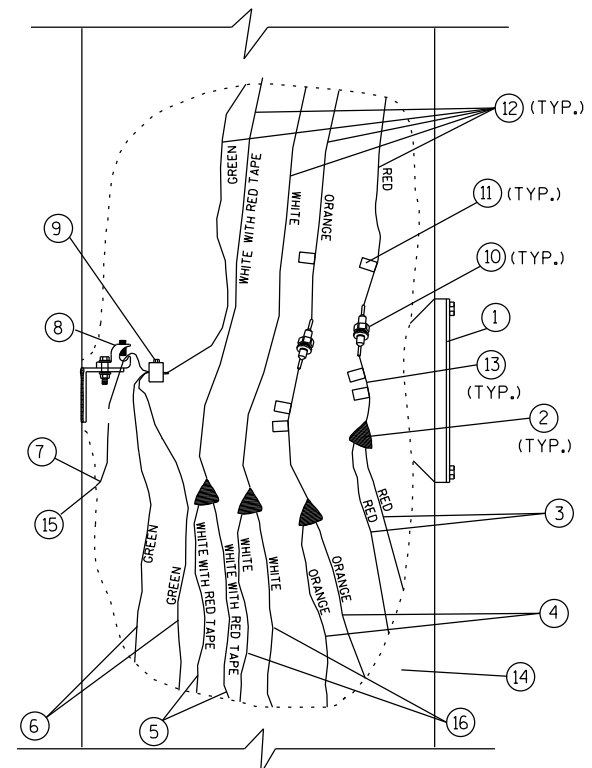
NO SCALE

- ① HANDHOLE AND COVER
- ② APPROVED INSULATED MULTITAP TERMINAL BLOCK TYPE CONNECTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
- ③ INSULATED UNGROUNDED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY
- ④ INSULATED UNGROUNDED RECEPTACLE CKT CONDUCTORS FROM SYSTEM RACEWAY
- ⑤ LIGHTING CKT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY (MARK WITH RED TAPE AT BOTH ENDS OF WIRE)
- ⑥ EQUIPMENT GROUNDING CONDUCTORS FROM SYSTEM RACEWAY
- ⑦ #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD (SEE S.D.D. FOR ADDITIONAL INFORMATION)
- ⑧ TYPICAL GROUNDING CONNECTION STAINLESS STEEL BOLT, NUT AND WASHERS 1/2" X 1 1/2" X 13 TPI
- ⑨ APPROVED MECHANICAL TYPE CONNECTOR FOR EQUIPMENT GROUNDING CONDUCTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
- ⑩ FUSE ASSEMBLY, (SEE S.D.D. FOR ADDITIONAL INFORMATION)
- ⑪ CIRCUIT TAG, BOTH SIDES OF ALL FUSES (TYP.)
- ⑫ #12 AWG CONDUCTORS TO LUMINAIRE(S)/RECEPTACLE (SEE S.D.D. FOR ADDITIONAL INFORMATION)
- ⑬ 18" PIGTAIL BETWEEN SPLICE AND FUSE
- ⑭ TWO ADDITIONAL BLACK CONDUCTORS FOR FUTURE USE IN SYSTEM RACEWAY (NOT SHOWN)
- ⑮ EXOTHERMICALLY WELDED TO GROUNDING ELECTRODE
- ⑯ RECEPTACLE CIRCUIT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY

FUSE RATING

15A - RECEPTACLES

5A - LUMINAIRES

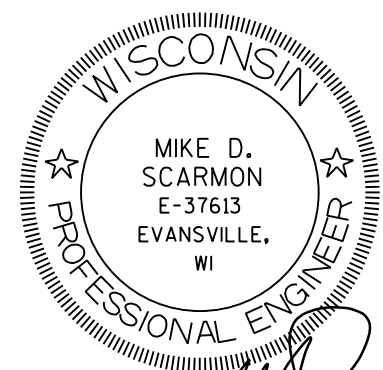


POLE WIRING DETAIL

NO SCALE

SEE SDD'S "NON FREEWAY LIGHTING UNIT POLE WIRING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL

STREET LIGHTING PLANS PREPARED BY

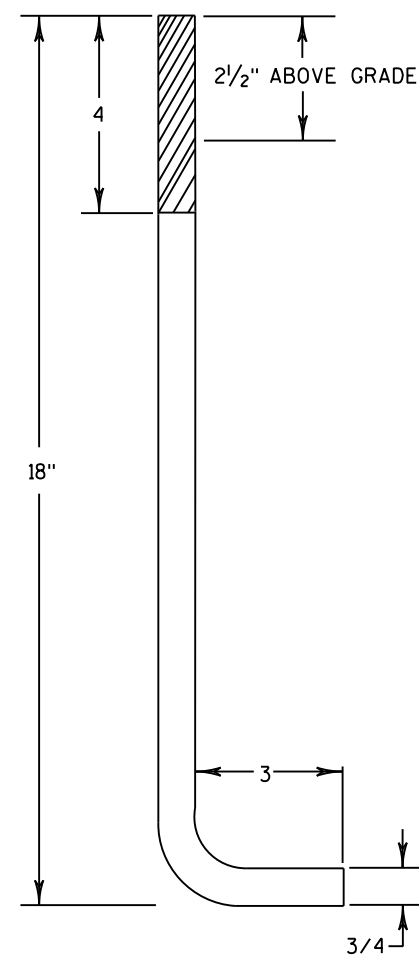


5/1/2013
(DATE)

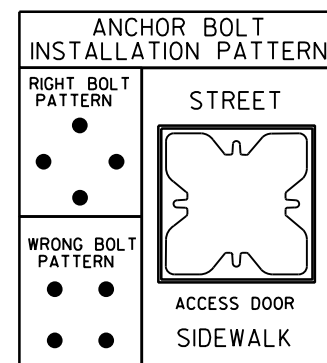
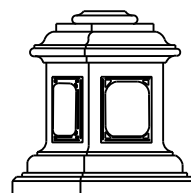
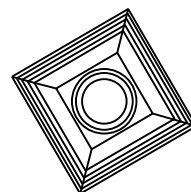
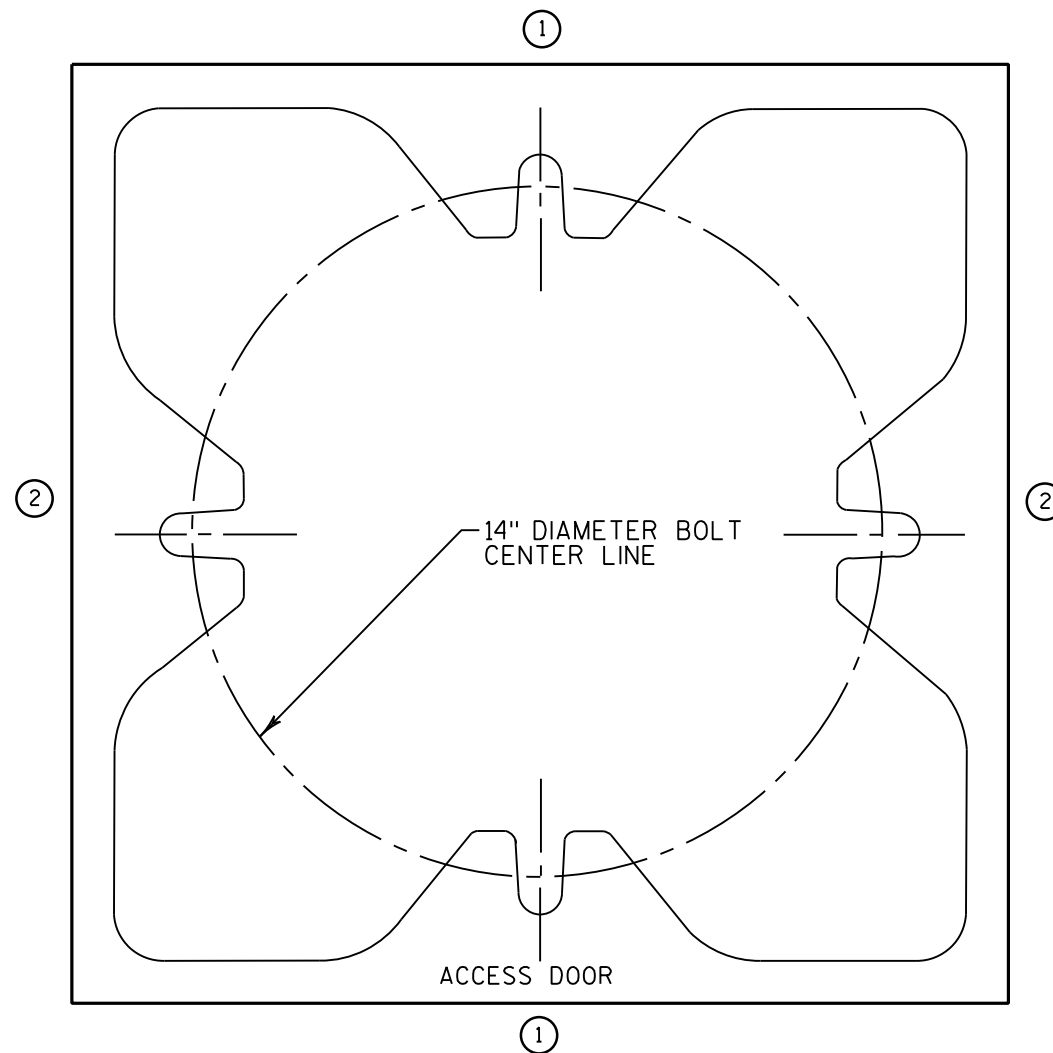
(SIGNATURE)

TYPICAL HARDWARE
REQUIRED PER BASE

- 4 ANCHOR BOLTS
- 4 NUTS
- 4 WASHERS
- 3 WASHERS FOR
LEVELING IF NEEDED.

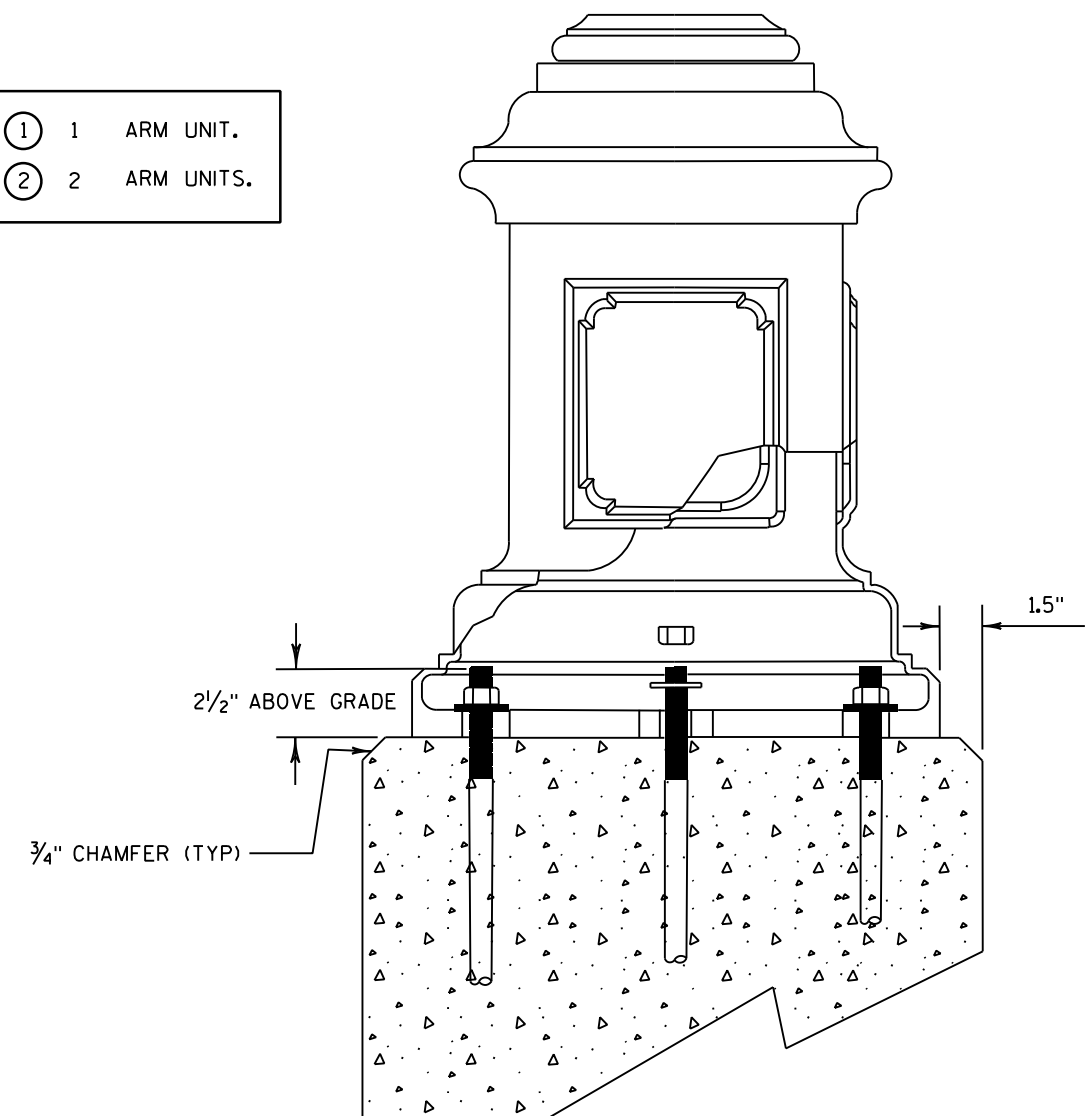


3/4" DIAMETER X 18" LONG BOLTS WITH 4" +/- 1/2" OF THREAD AND 3" +/- 1/4" HOOK.

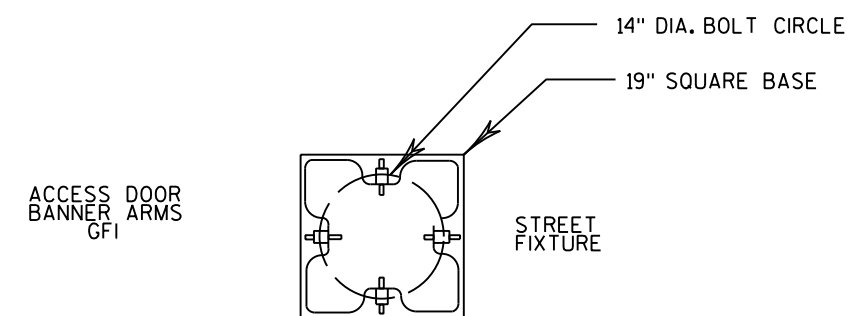


POLE BASE DETAIL

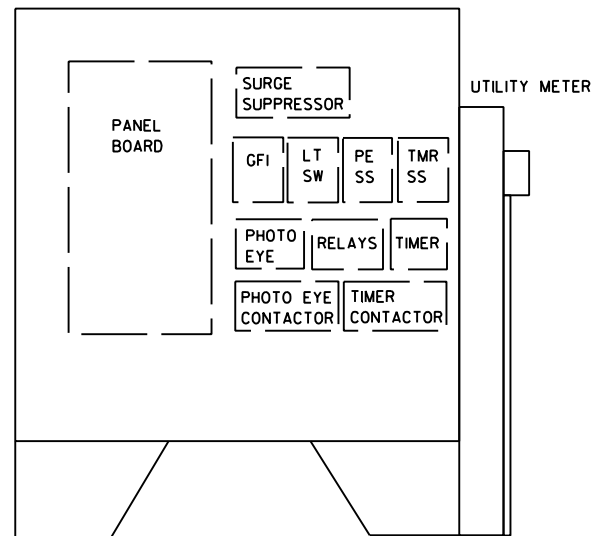
- ① 1 ARM UNIT.
② 2 ARM UNITS.



NOTE:
THE EXACT SIZE, DEPTH & REINFORCEMENT FOR THE CONCRETE
BASE TO BE DETERMINED BY POLE MANUFACTURER



SERVICE PANEL LAYOUT



NOTES:

ALL CONTROL WIRING SHALL BE COLOR CODED #12 AWG, XLP UNLESS OTHERWISE NOTED.
ALL POWER AND CONTROL WIRING SHALL BE NEATLY ROUTED, LABELED AND SUPPORTED.
THE LIGHTING CONTROL CABINET SHALL BE COMPLETELY WIRED UP TO THE FIELD WIRING TERMINATION STRIP IN THE CONTRACTOR'S SHOP AND TESTED PRIOR TO THE INSTALLATION AT SITE.

A COPY OF THIS SHEET WITH AS-BUILT (RECORD) CONDITIONS SHALL BE PUT IN A PLASTIC PROTECTOR IN THE CABINET.

THE CONTRACTOR SHALL COMPLY WITH LOCAL UTILITY INSTALLATION REQUIREMENTS.

USE #10 AWG XLP CONDUCTORS FROM THE BREAKERS TO THE FIELD WIRING TERMINATION STRIP. PROVIDE A GROUND WIRE AND NEUTRAL WIRE TO FIELD WIRING TERMINATION STRIP FROM PANELBOARD FOR EACH UNDERGROUND CABLE RUN AS REQUIRED.

SEE PLANS FOR TIME CLOCK CONTROLLED CIRCUIT NUMBERS.

THE TIME CLOCK SHALL BE SET AS THE CITY OF WISCONSIN RAPIDS DIRECTS.

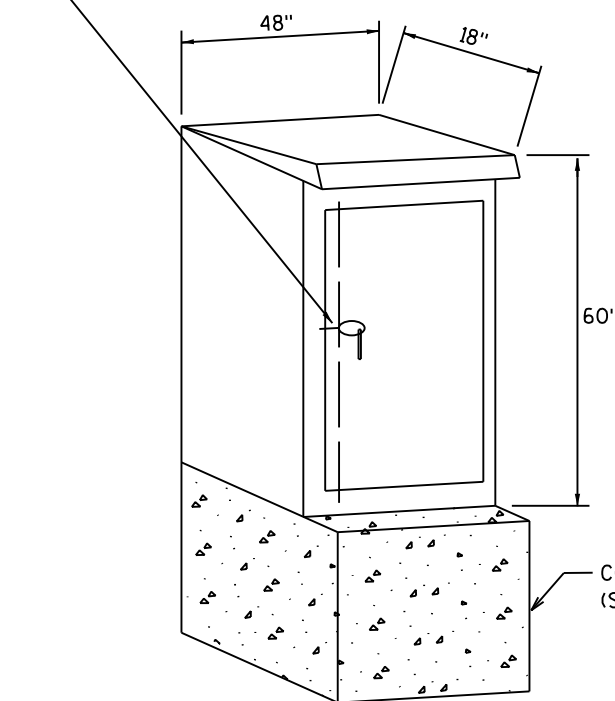
CABINET SHALL NOT OVERLAP THE CONCRETE BASE.

CABINET FEEDER AND PHOTOCELL WIRING TO CABINET TO BE INCIDENTAL TO LIGHTING CONTROL CABINET BID ITEM.

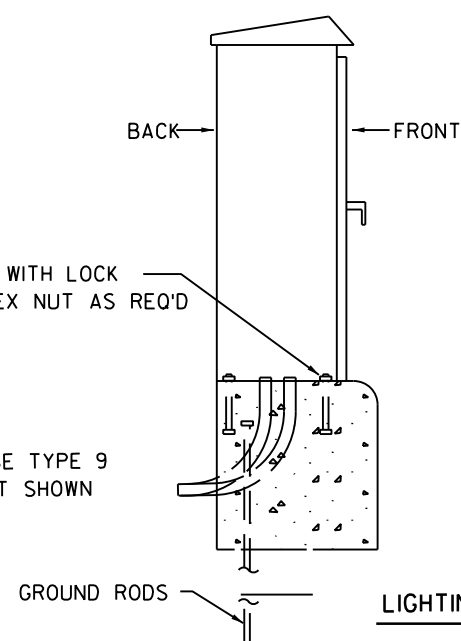
EQUIPMENT

- (A) SURGE ARRESTOR
- (B) (3) 3 POSITION SELECTOR SWITCHES WITH NAME PLATE.
- (C) 200A MCB, 120/240V, 1PH, 3W, 20CKT., PANELBOARD WITH BOLT-ON BRANCH BREAKERS, 22000 A RMS INTERRUPTING CAPACITY IN NEMA 1 ENCLOSURE.
- (D) PHOTOEYE & CONTACTOR
- (E) FIELD WIRING TERMINATION STRIP (30 BLOCKS MIN.)
- (F) (4) 120V CONTROL RELAYS
- (G) 20 AMP GFI RECEPTACLE
- (H) ASTRONOMIC TIME CLOCK, 120V & CONTACTOR
- (I) CABINET LIGHT WITH ON/OFF SWITCH

HANDLE WITH 3-POINT LATCHING AND PADLOCK

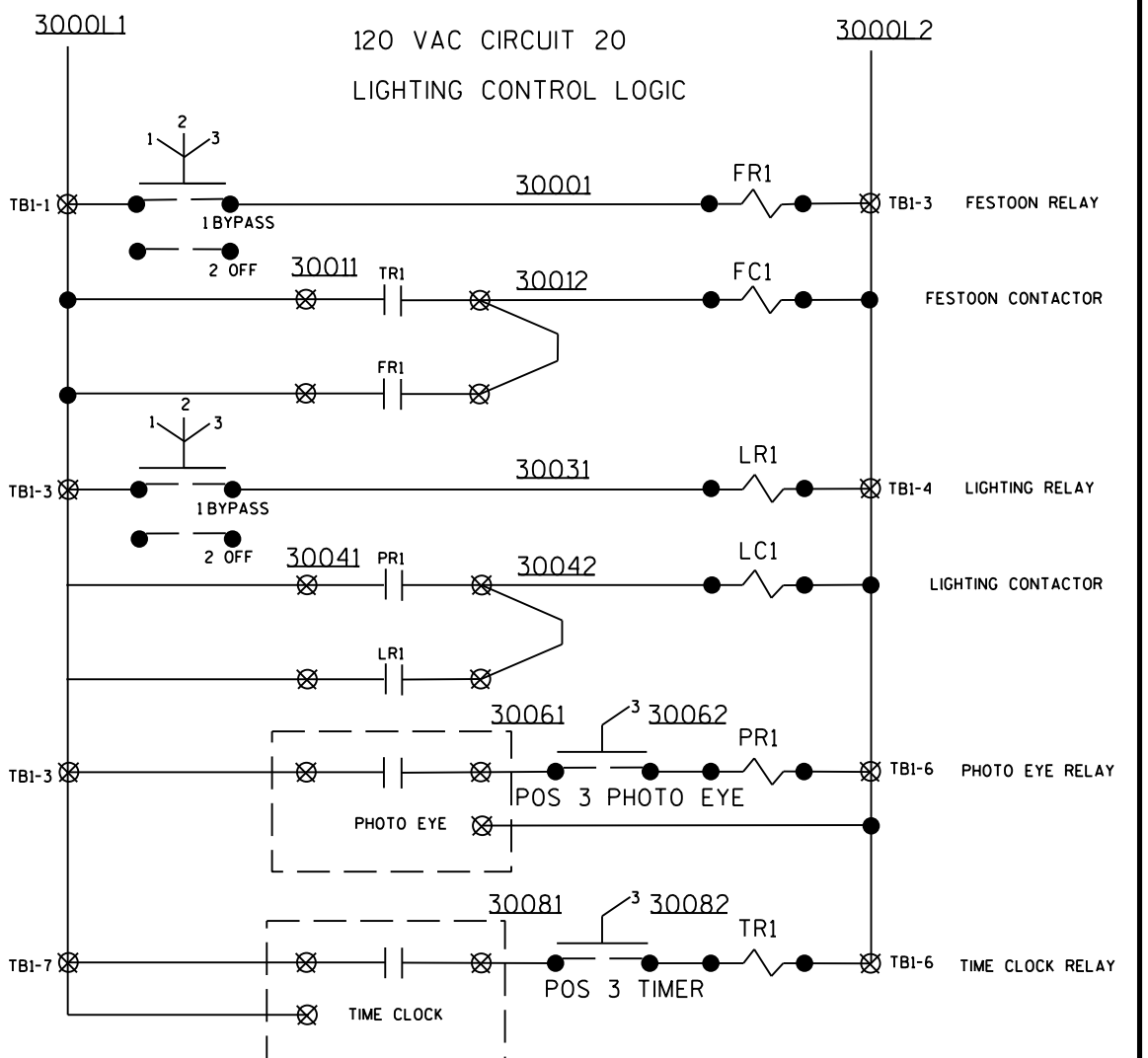
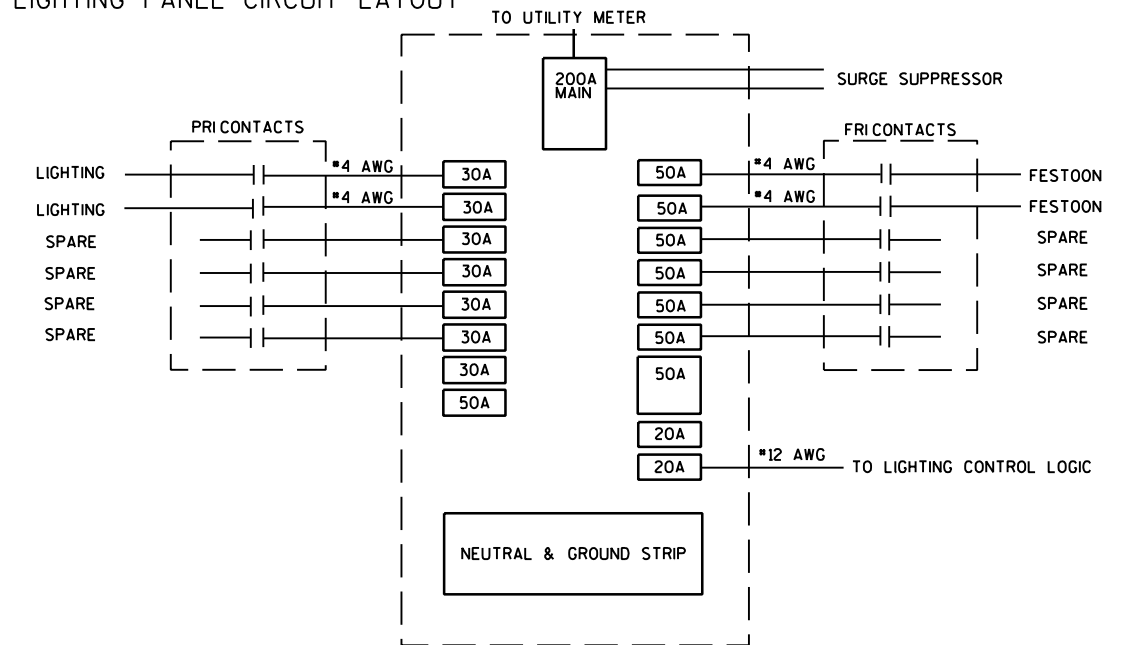


CONCRETE CONTROL CABINET BASE TYPE 9 (SEE S.D.D.) MAINT. PLATFORM NOT SHOWN



LIGHTING CONTROL CABINET DETAIL
NO SCALE

LIGHTING PANEL CIRCUIT LAYOUT



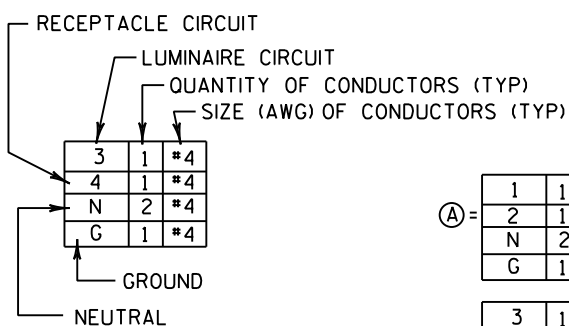
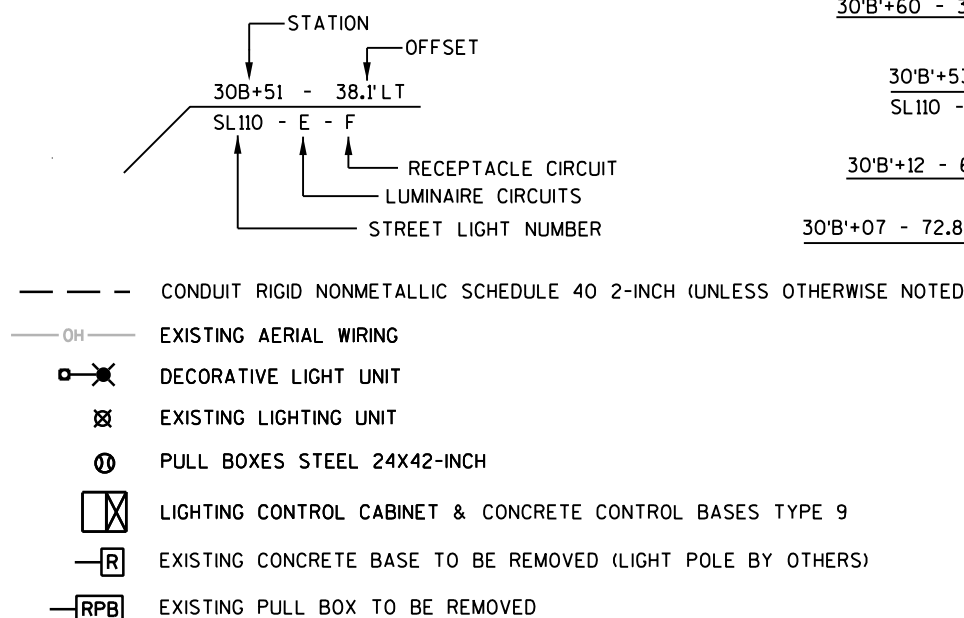
EXISTING STREET LIGHTING CIRCUITS WITHIN THE PROJECT LIMITS (WEST TO EAST):

1. EXISTING LIGHTS ALONG JACKSON STREET BRIDGE AND WEST SIDE OF 1ST STREET NORTH FROM JACKSON STREET TO MARKET STREET. REMOVE LIGHTS BACK TO THE EAST END OF THE BRIDGE.
2. EXISTING LIGHTS ALONG SOUTH SIDE OF JACKSON STREET, 2ND STREET, WEST SIDE OF MARKET STREET AND ONE LIGHT NORTH OF JACKSON STREET ON THE EAST SIDE OF 1ST STREET NORTH. REMOVE LIGHTS BACK TO 2ND STREET AND SOUTH END OF THE PARKING AREA; AND ON THE EAST SIDE OF 1ST STREET NORTH.
3. EXISTING LIGHTS ALONG NORTH SIDE OF JACKSON STREET AND EAST SIDE OF MARKET STREET. REMOVE LIGHTS BACK TO SOUTHERN PROJECT LIMITS ON MARKET STREET.
4. EXISTING LIGHTS ALONG BAKER STREET, EAST OF MARKET STREET. REMOVE LIGHTS BACK TO EASTERN PROJECT LIMITS ON BAKER STREET.
5. EXISTING LIGHTS ALONG 1ST STREET NORTH, NORTH OF BAKER STREET. REMOVE LIGHTS BACK TO NORTHER PROJECT LIMITS ON 1ST STREET NORTH.

STREET LIGHTING GENERAL NOTES:

1. COORDINATE ALL MODIFICATIONS OF EXISTING LIGHTING CIRCUITS WITH THE OPERATING MUNICIPALITY OR UTILITY.
2. REMOVAL OF ALL AERIAL CABLE WILL BE COMPLETED BY WRWWLC. ABANDONMENT OF BELOW GRADE WIRING SHALL BE INCIDENTAL TO THE REMOVING CONCRETE BASES BID ITEM.
3. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.
4. THE EXACT LOCATION OF THE STREET LIGHT BASES, PULL BOXES AND LIGHTING CONTROL CABINETS SHALL BE DETERMINED IN THE FIELD BY THE FIELD REPRESENTATIVE FOR WRWWLC AND THE ENGINEER.
5. CLEARLY LABEL UNUSED CONDUCTORS AS "SPARE" IN ALL CONDUIT RUNS CONTAINING UNUSED CONDUCTORS.

LIGHTING PLAN LEGEND



(A) =

1	1	#4
2	1	#4
N	2	#4
G	1	#4

(B) =

3	1	#4
4	1	#4
N	2	#4
G	1	#4

NOTE: SPARE CONDUCTORS NOT SHOWN

CIRCUIT ROUTING NOTES:

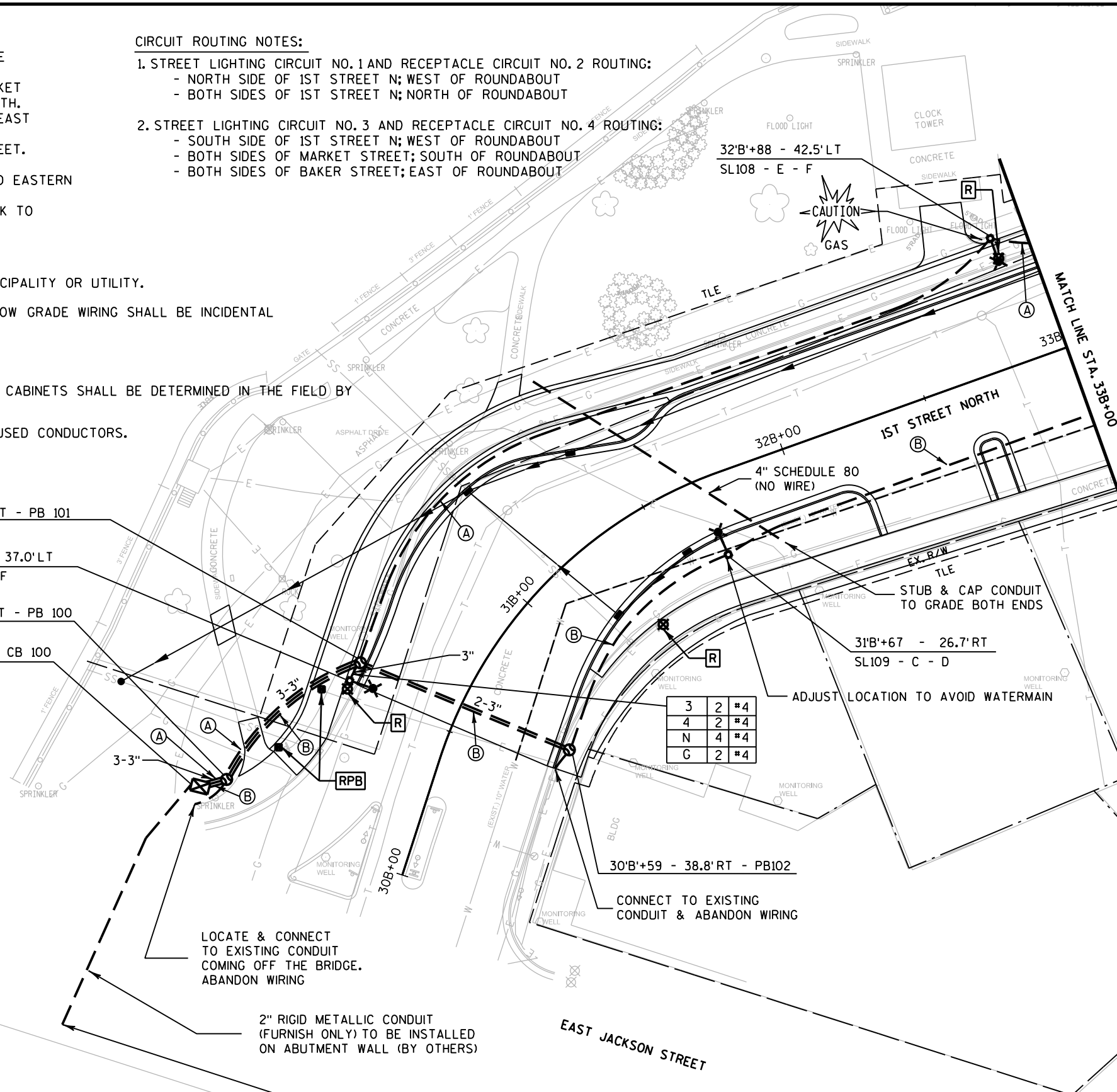
1. STREET LIGHTING CIRCUIT NO. 1 AND RECEPTACLE CIRCUIT NO. 2 ROUTING:
 - NORTH SIDE OF 1ST STREET N; WEST OF ROUNDABOUT
 - BOTH SIDES OF 1ST STREET N; NORTH OF ROUNDABOUT
2. STREET LIGHTING CIRCUIT NO. 3 AND RECEPTACLE CIRCUIT NO. 4 ROUTING:
 - SOUTH SIDE OF 1ST STREET N; WEST OF ROUNDABOUT
 - BOTH SIDES OF MARKET STREET; SOUTH OF ROUNDABOUT
 - BOTH SIDES OF BAKER STREET; EAST OF ROUNDABOUT

30'B'+60 - 36.2' LT - PB 101

30'B'+53 - 37.0' LT
SL110 - E - F

30'B'+12 - 65.1' LT - PB 100

30'B'+07 - 72.8' LT - CB 100



NOTE: INSTALL (2) SPARE #4 AWG (BLACK) CONDUCTORS
IN EACH CONDUIT LENGTH

3	3	#4
4	3	#4
N	6	#4
G	3	#4

10'A+56 - 27.9' LT
SL113 - E - F

10'A+42 - 27.2' LT - PB109

9'A+79 - 42.3' LT
SL111 - E - F

34'B+93 - 37.2' LT - PB108

34'B+05 - 27.0' LT
SL107 - E - F

CAUTION
TELECOM

34'B+92 - 24.9' RT - PB103

34'B+85 - 29.6' RT
SL106 - C - D

8'A+89 - 34.2' LT
SL105 - C - D

8'A+38 - 25.5' LT - PB104

8'A+02 - 27.9' LT - PB105

10'A+56 - 27.9' LT
SL113 - E - F

10'A+42 - 27.2' LT - PB109

9'A+79 - 42.3' LT
SL111 - E - F

34'B+93 - 37.2' LT - PB108

34'B+05 - 27.0' LT
SL107 - E - F

CAUTION
TELECOM

34'B+92 - 24.9' RT - PB103

34'B+85 - 29.6' RT
SL106 - C - D

8'A+89 - 34.2' LT
SL105 - C - D

8'A+38 - 25.5' LT - PB104

8'A+02 - 27.9' LT - PB105

NOTE- SPARE CONDUCTORS NOT SHOWN
SIZE (AWG) OF CONDUCTORS (TYP)
QUANTITY OF CONDUCTORS (TYP)

LUMINAIRE CIRCUIT

RECEPTACLE CIRCUIT

NEUTRAL

GROUND

3	1	#4
4	1	#4
N	2	#4
G	1	#4

ASPHALT

(A) =

1	1	#4
2	1	#4
N	2	#4
G	1	#4

(B) =

3	1	#4
4	1	#4
N	2	#4
G	1	#4

3	3	#4
4	3	#4
N	6	#4
G	3	#4

10'A+56 - 41.1' RT - PB110

10'A+35 - 65.3' RT
SL112 - G - H

40'C+94 - 21.3' LT - PB111

BAKER STREET

40'C+39 - 54.7' RT
SL103 - C - D

40'C+82 - 22.5' LT
SL100 - A - B

8'A+33 - 32.6' RT - PB106

3	2	#4
4	2	#4
N	4	#4
G	2	#4

8'A+26 - 36.8' RT
SL104 - C - D

STATION
OFFSET
30B+51 - 38.1' LT
SL110 - E - F

RECEPTACLE CIRCUIT
LUMINAIRE CIRCUITS
STREET LIGHT NUMBER

LIGHTING PLAN LEGEND

- CONDUIT RIGID NONMETALLIC SCHEDULE 40
2-INCH (UNLESS OTHERWISE NOTED)
- EXISTING AERIAL WIRING
- DECORATIVE LIGHT UNIT
- EXISTING LIGHTING UNIT
- PULL BOXES STEEL 24X42-INCH
- LIGHTING CONTROL CABINET &
CONCRETE CONTROL BASES TYPE 9
- EXISTING CONCRETE BASE TO BE
REMOVED (LIGHT POLE BY OTHERS)
- EXISTING PULL BOX TO BE REMOVED

CONNECT TO
EXISTING PULLBOX

2" CONDUIT SPECIAL (NO WIRE)

TERMINATE CONDUIT
AT PROJECT LIMITS

2" CONDUIT SPECIAL (PULL WIRE ONLY)

CONNECT TO NEXT STREET LIGHT BASE

NOTE: INSTALL (2) SPARE #4 AWG (BLACK) CONDUCTORS
IN EACH CONDUIT LENGTH

SIZE (AWG) OF CONDUCTORS (TYP)
QUANTITY OF CONDUCTORS (TYP)
LUMINAIRE CIRCUIT

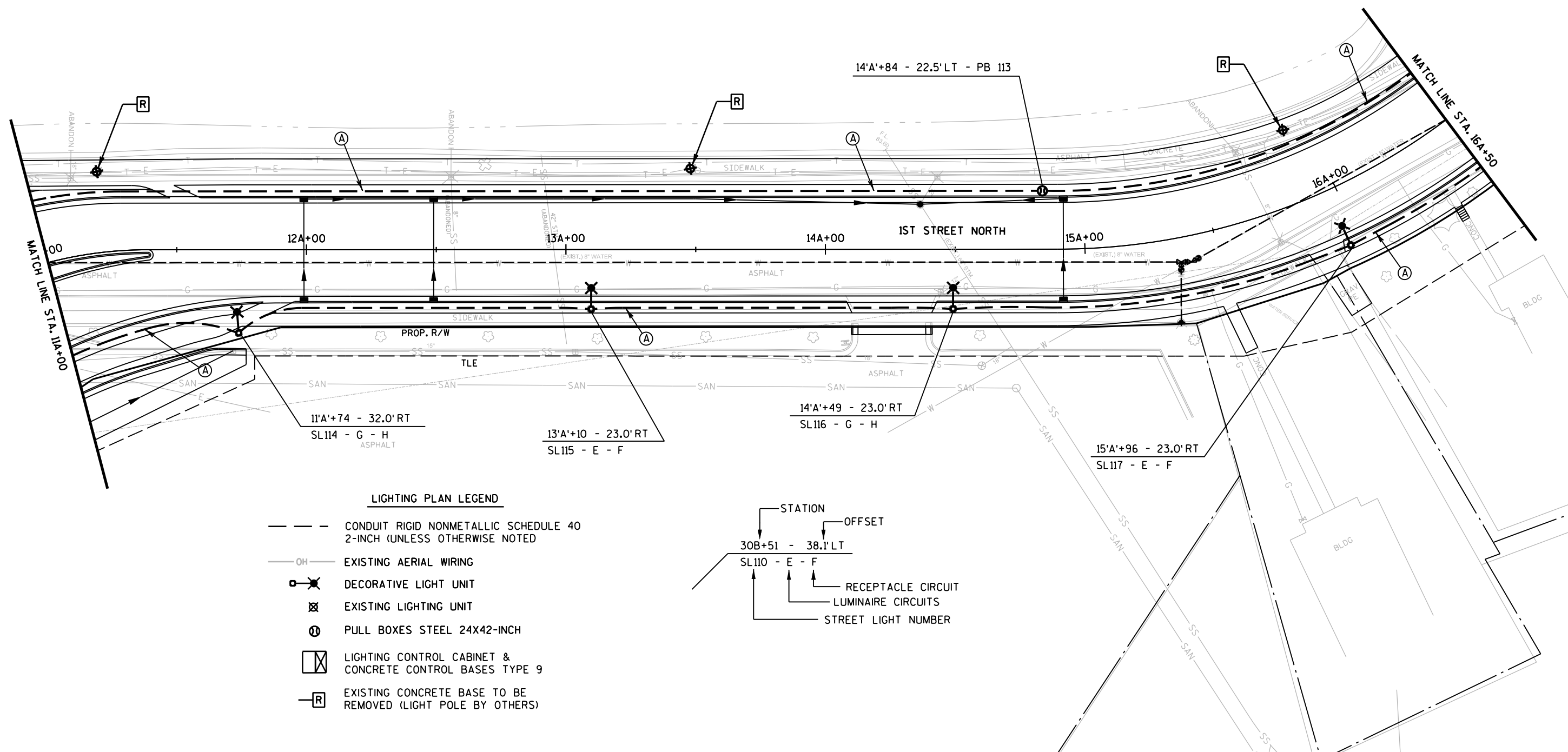
A	1	#4
B	1	#4
N	2	#4
G	1	#4

RECEPTACLE CIRCUIT
NEUTRAL
GROUND

Ⓐ =

1	1	#4
2	1	#4
N	2	#4
G	1	#4

NOTE- SPARE CONDUCTORS NOT SHOWN



LIGHTING PLAN LEGEND

- CONDUIT RIGID NONMETALLIC SCHEDULE 40
2-INCH (UNLESS OTHERWISE NOTED)
- OH EXISTING AERIAL WIRING
- ⊗ DECORATIVE LIGHT UNIT
- ⊗ EXISTING LIGHTING UNIT
- ⊗ PULL BOXES STEEL 24X42-INCH
- ⊗ LIGHTING CONTROL CABINET &
CONCRETE CONTROL BASES TYPE 9
- ⊗ EXISTING CONCRETE BASE TO BE
REMOVED (LIGHT POLE BY OTHERS)

NOTE: INSTALL (2) SPARE #4 AWG (BLACK) CONDUCTORS
IN EACH CONDUIT LENGTH

STATION
30B+51 - 38.1' LT
SL110 - E - F

OFFSET

RECEPTACLE CIRCUIT
LUMINAIRE CIRCUITS
STREET LIGHT NUMBER

NOTE- SPARE CONDUCTORS NOT SHOWN

SIZE (AWG) OF CONDUCTORS (TYP)
QUANTITY OF CONDUCTORS (TYP)
LUMINAIRE CIRCUIT

RECEPTACLE CIRCUIT
NEUTRAL
GROUND

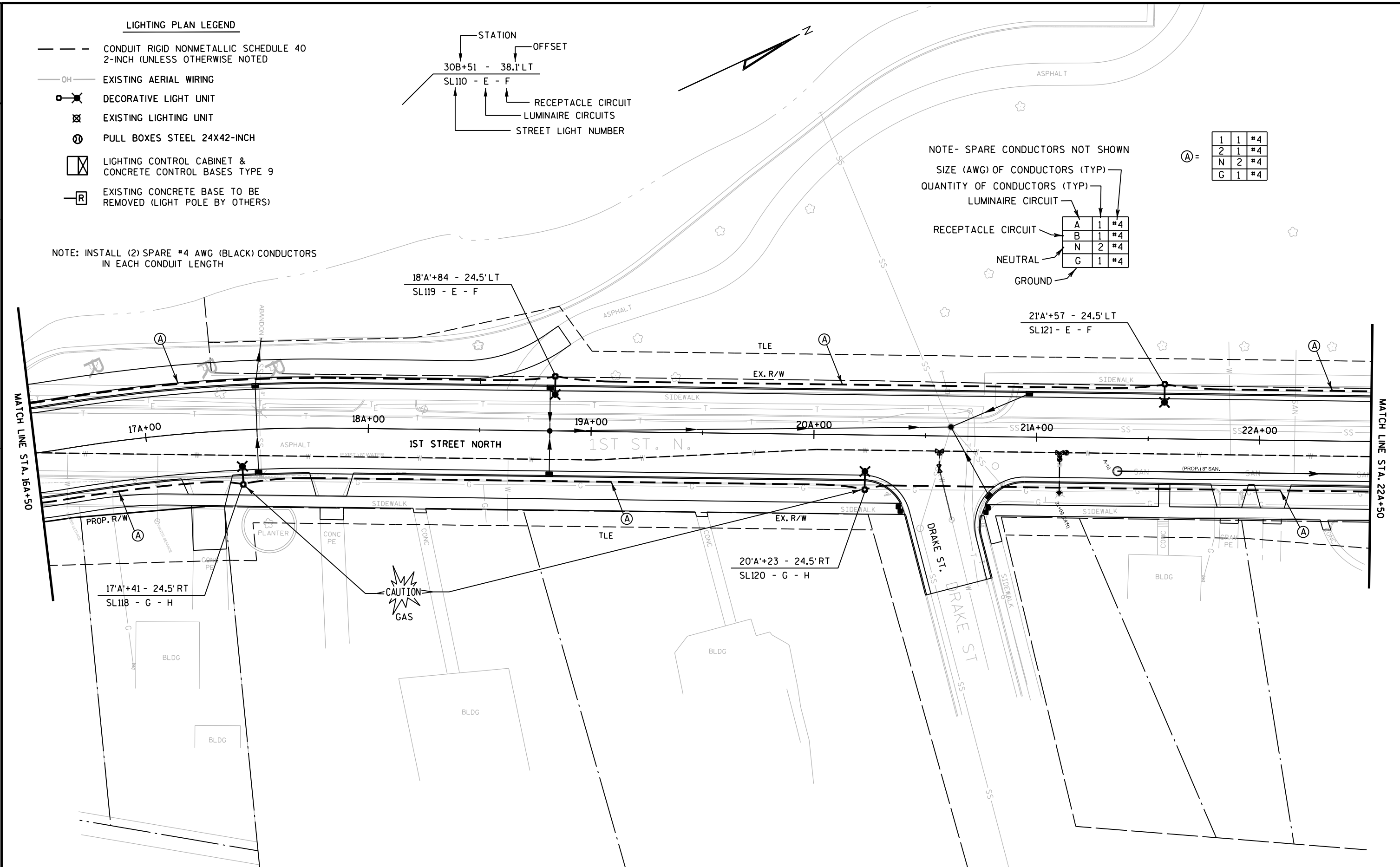
Ⓐ =

1	1	#4
2	1	#4
N	2	#4
G	1	#4

A	1	#4
B	1	#4
N	2	#4
G	1	#4

MATCH LINE STA. 16A+50

MATCH LINE STA. 22A+50



LIGHTING PLAN LEGEND

- CONDUIT RIGID NONMETALLIC SCHEDULE 40
2-INCH (UNLESS OTHERWISE NOTED)
- OH— EXISTING AERIAL WIRING
- ⊗ DECORATIVE LIGHT UNIT
- ⊗ EXISTING LIGHTING UNIT
- ⊗ PULL BOXES STEEL 24X42-INCH
- ⊗ LIGHTING CONTROL CABINET &
CONCRETE CONTROL BASES TYPE 9
- R— EXISTING CONCRETE BASE TO BE
REMOVED (LIGHT POLE BY OTHERS)

NOTE: INSTALL (2) SPARE #4 AWG (BLACK) CONDUCTORS
IN EACH CONDUIT LENGTH

STATION
30B+51 - 38.1' LT
SL110 - E - F
RECEPTACLE CIRCUIT
LUMINAIRE CIRCUITS
STREET LIGHT NUMBER

NOTE- SPARE CONDUCTORS NOT SHOWN

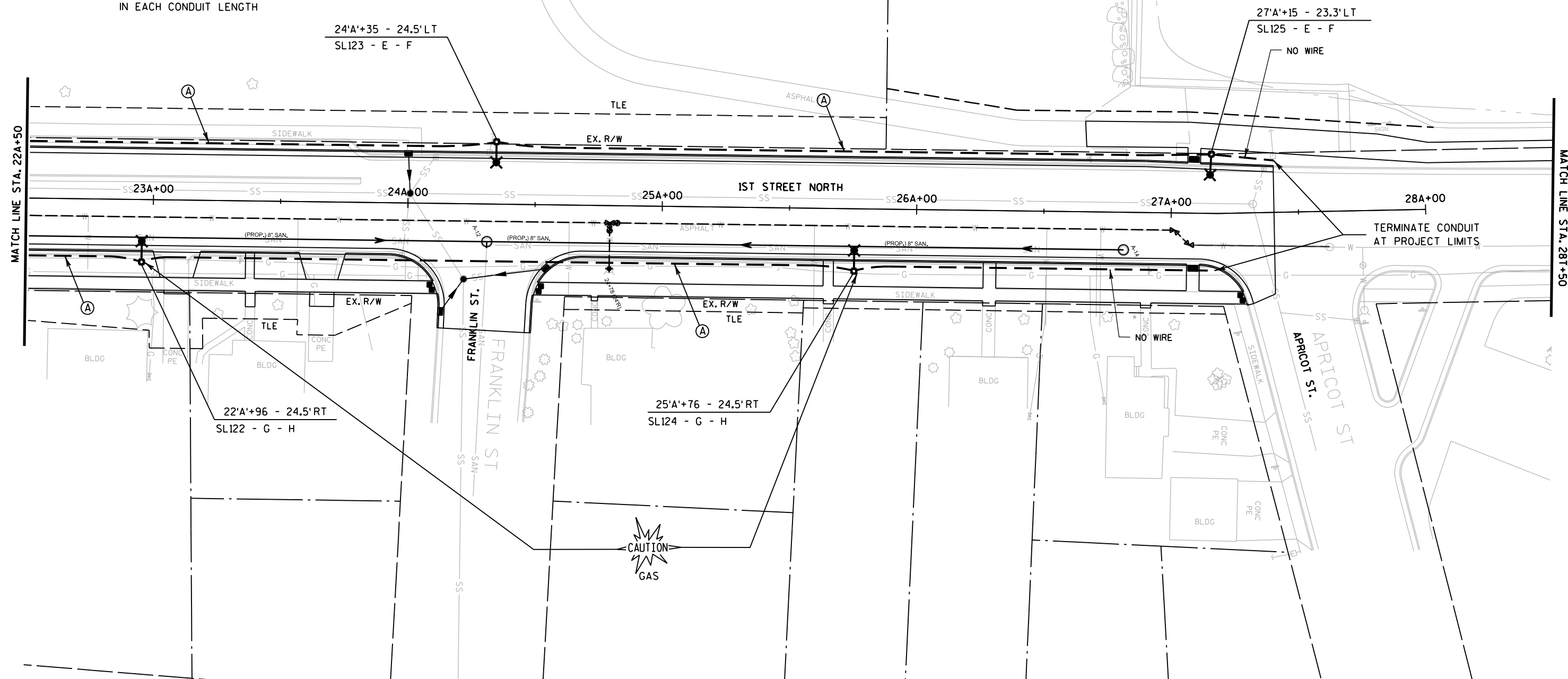
SIZE (AWG) OF CONDUCTORS (TYP)
QUANTITY OF CONDUCTORS (TYP)
LUMINAIRE CIRCUIT

RECEPTACLE CIRCUIT
NEUTRAL
GROUND

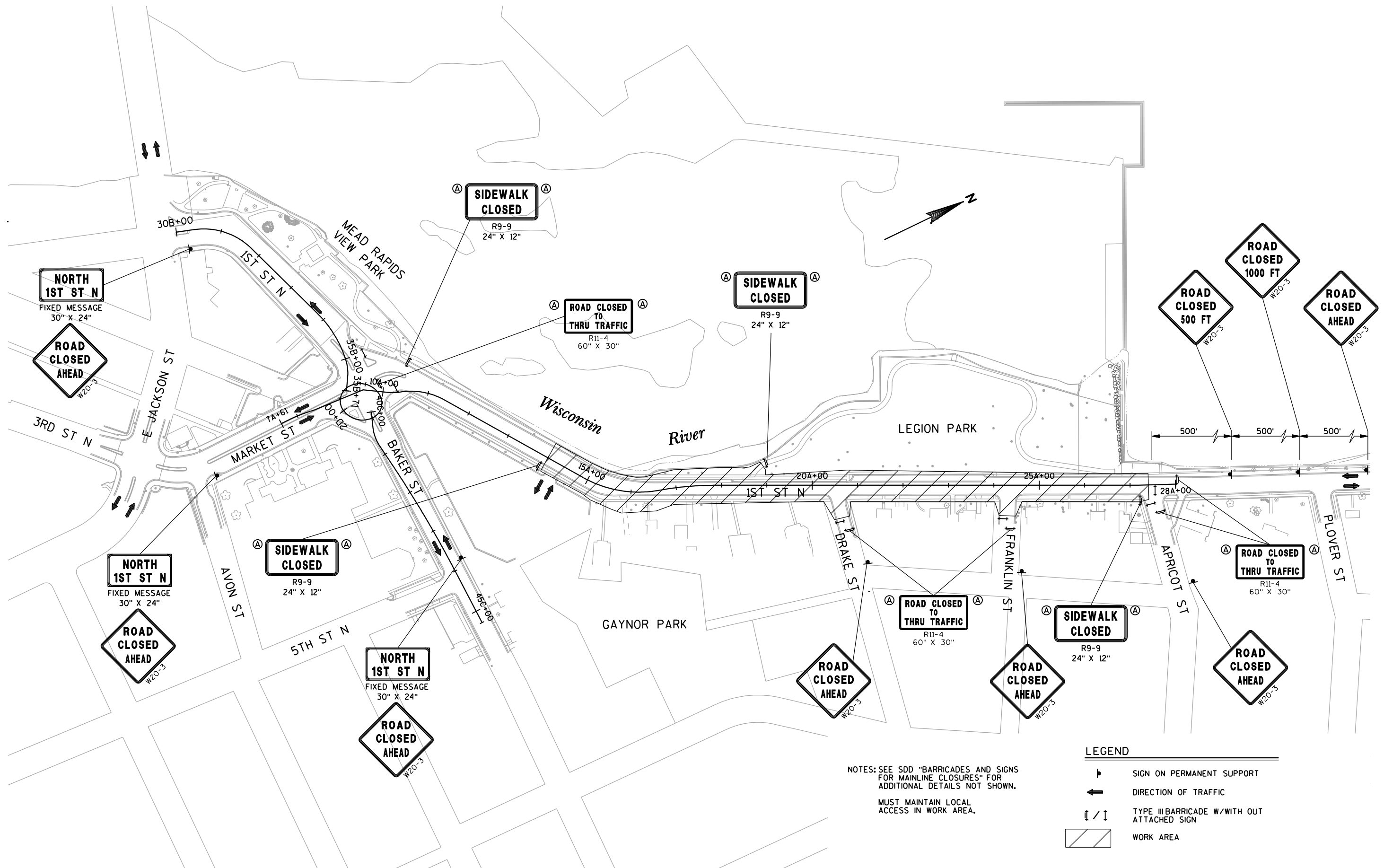
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B	1	#4
N	2	#4
G	1	#4

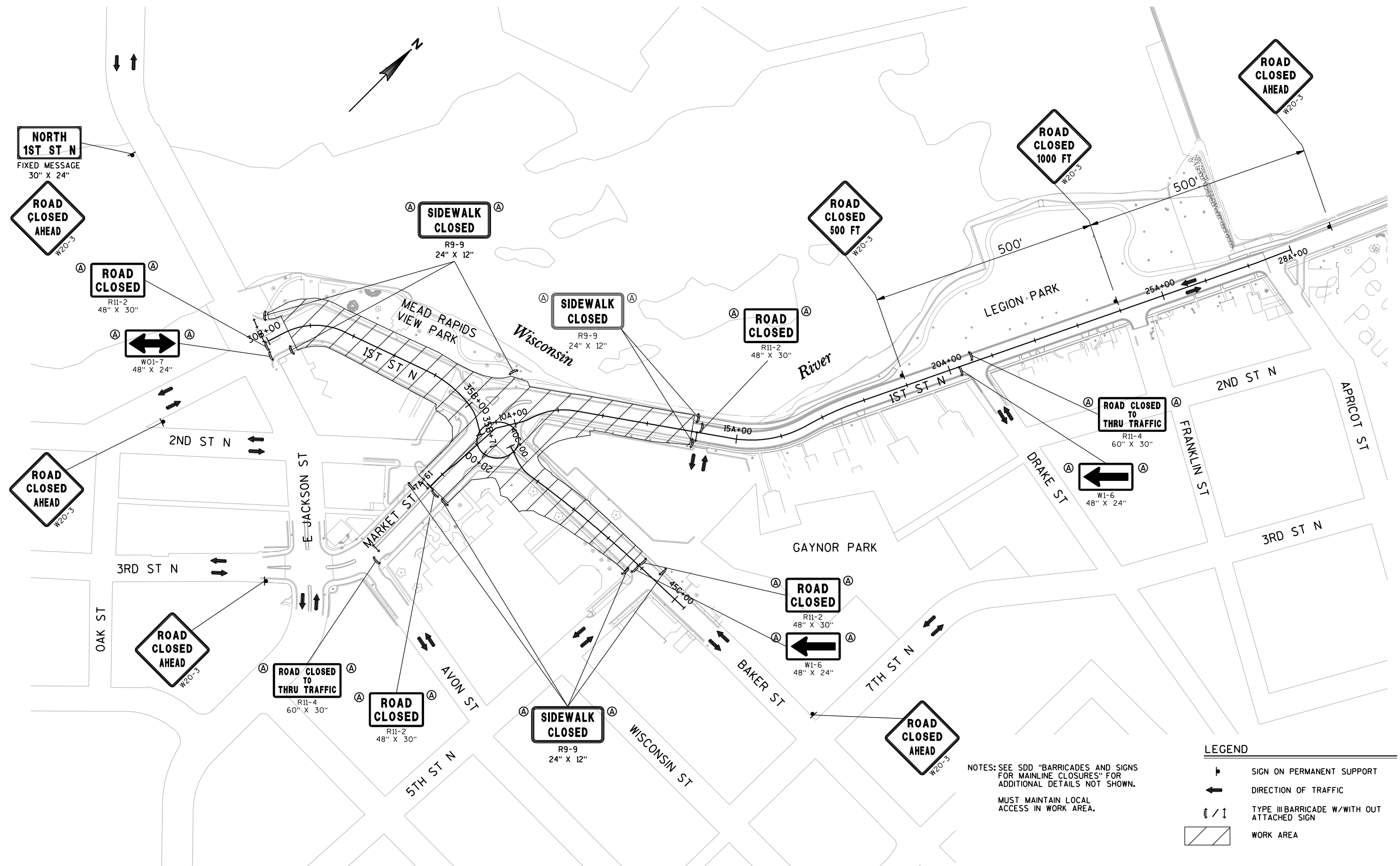
Ⓐ =

1	1	#4
2	1	#4
N	2	#4
G	1	#4









LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  TYPE III BARRICADE W/WITH OUT ATTACHED SIGN
-  WORK AREA

NOTES: SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS NOT SHOWN.

MUST MAINTAIN LOCAL ACCESS IN WORK AREA.

CURVE T 1
PISTA 33S+16.32
N=454758.57
E=731676.24
T=68.65'
L=122.74'
D=52°05'13"
DELTA=63°56'00"
R=110.00'
PC STA 32S+47.68
N=454695.89
E=731648.24
PT STA 33S+70.42
N=454811.26
E=731632.24

CURVE T 2
PISTA 34S+11.73
Y=454842.97
X=731605.76
T=13.94'
L=27.60'
D=71°37'11"
DELTA=19°45'51"
R=80.00'
PC STA 33S+97.79
Y=454832.27
X=731614.69
PT STA 34S+25.39
Y=454856.06
X=731600.97

CURVE T 3
PISTA 34S+58.54
N=454887.19
E=731589.58
T=29.84'
L=57.83'
D=60°18'41"
DELTA=34°52'38"
R=95.00'
PC STA 34S+28.70
N=454859.17
E=731599.83
PT STA 34S+86.53
N=454904.32
E=731565.14

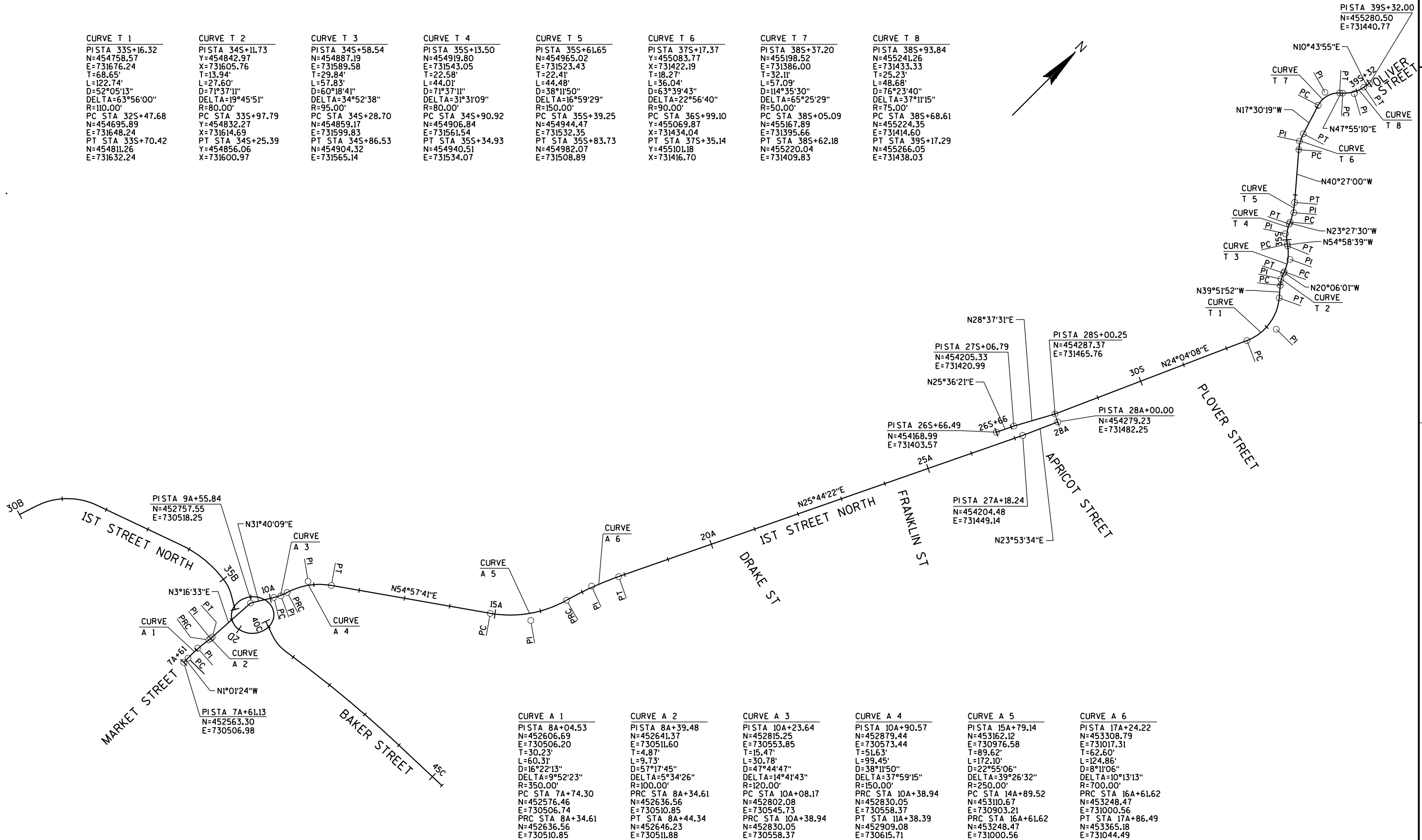
CURVE T 4
PISTA 35S+13.50
N=454919.80
E=731543.05
T=22.58'
L=44.01'
D=71°37'11"
DELTA=31°31'09"
R=80.00'
PC STA 34S+90.92
N=454906.84
E=731561.54
PT STA 35S+34.93
N=454940.51
E=731534.07

CURVE T 5
PISTA 35S+61.65
N=454965.02
E=731523.43
T=22.41'
L=44.48'
D=38°11'50"
DELTA=16°59'29"
R=150.00'
PC STA 35S+39.25
N=454944.47
E=731532.35
PT STA 35S+83.73
N=454982.07
E=731508.89

CURVE T 6
PISTA 37S+17.37
Y=455083.77
X=731422.19
T=18.27'
L=36.04'
D=63°39'43"
DELTA=22°56'40"
R=90.00'
PC STA 36S+99.10
Y=455069.87
X=731434.04
PT STA 37S+35.14
Y=455101.18
X=731416.70

CURVE T 7
PISTA 38S+37.20
N=455198.52
E=731386.00
T=32.11'
L=57.09'
D=114°35'30"
DELTA=65°25'29"
R=50.00'
PC STA 38S+05.09
N=455167.89
E=731395.66
PT STA 38S+62.18
N=455220.04
E=731409.83

CURVE T 8
PISTA 38S+93.84
N=455241.26
E=731433.33
T=25.23'
L=48.68'
D=76°23'40"
DELTA=37°11'15"
R=75.00'
PC STA 38S+68.61
N=455224.35
E=731414.60
PT STA 39S+17.29
N=455266.05
E=731438.03



CURVE A 1
PISTA 8A+04.53
N=452606.69
E=730506.20
T=30.23'
L=60.31'
D=16°22'13"
DELTA=9°52'23"
R=350.00'
PC STA 7A+74.30
N=452576.46
E=730506.74
PRC STA 8A+34.61
N=452636.56
E=730510.85

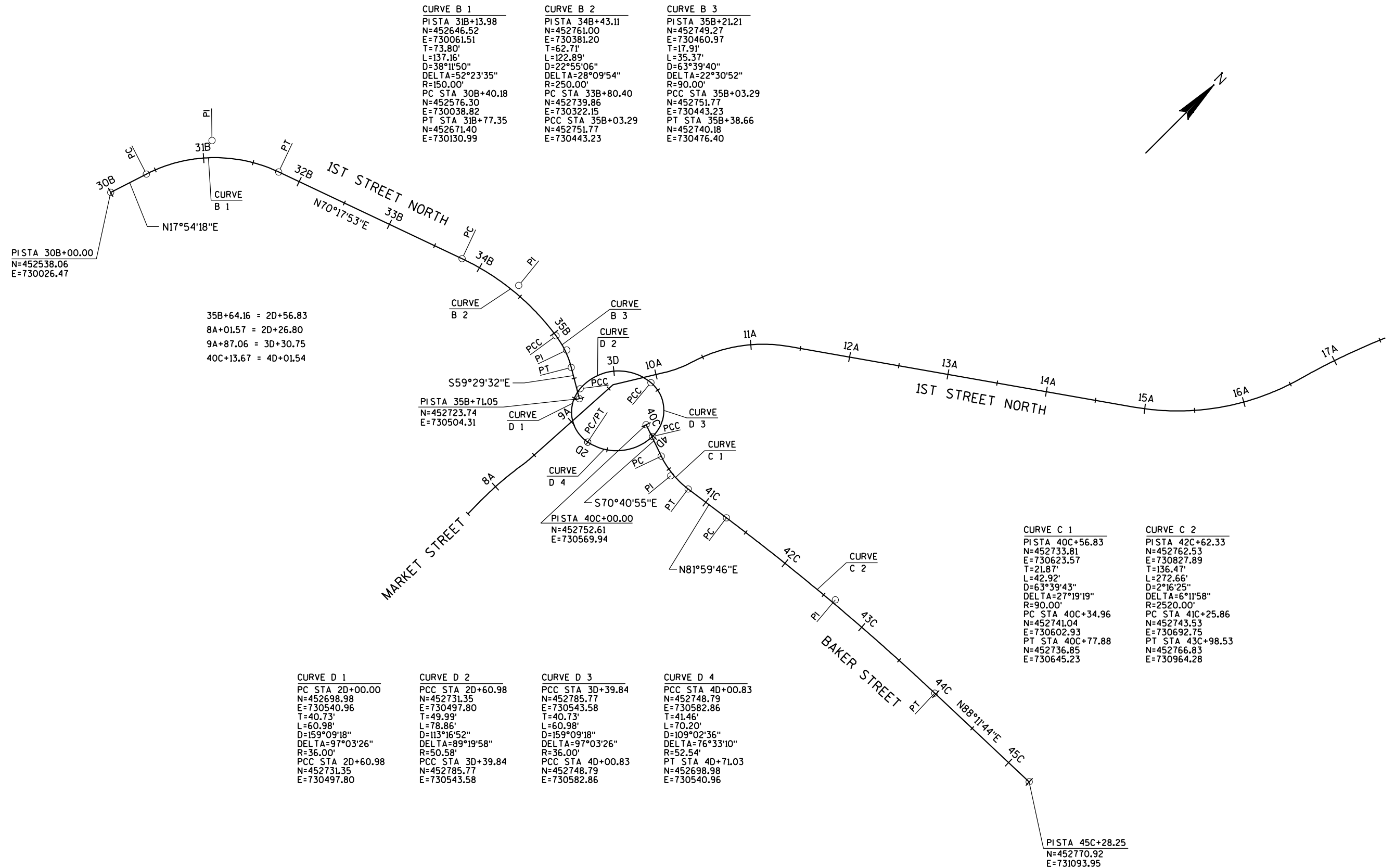
CURVE A 2
PISTA 8A+39.48
N=452641.37
E=730511.60
T=4.87'
L=9.73'
D=57°17'45"
DELTA=5°34'26"
R=100.00'
PC STA 8A+34.61
N=452636.56
E=730510.85
PT STA 8A+44.34
N=452646.23
E=730511.88

CURVE A 3
PISTA 10A+23.64
N=452815.25
E=730573.85
T=15.47'
L=30.78'
D=47°44'47"
DELTA=14°41'43"
R=120.00'
PC STA 10A+08.17
N=452802.08
E=730545.73
PRC STA 10A+38.94
N=452830.05
E=730558.37

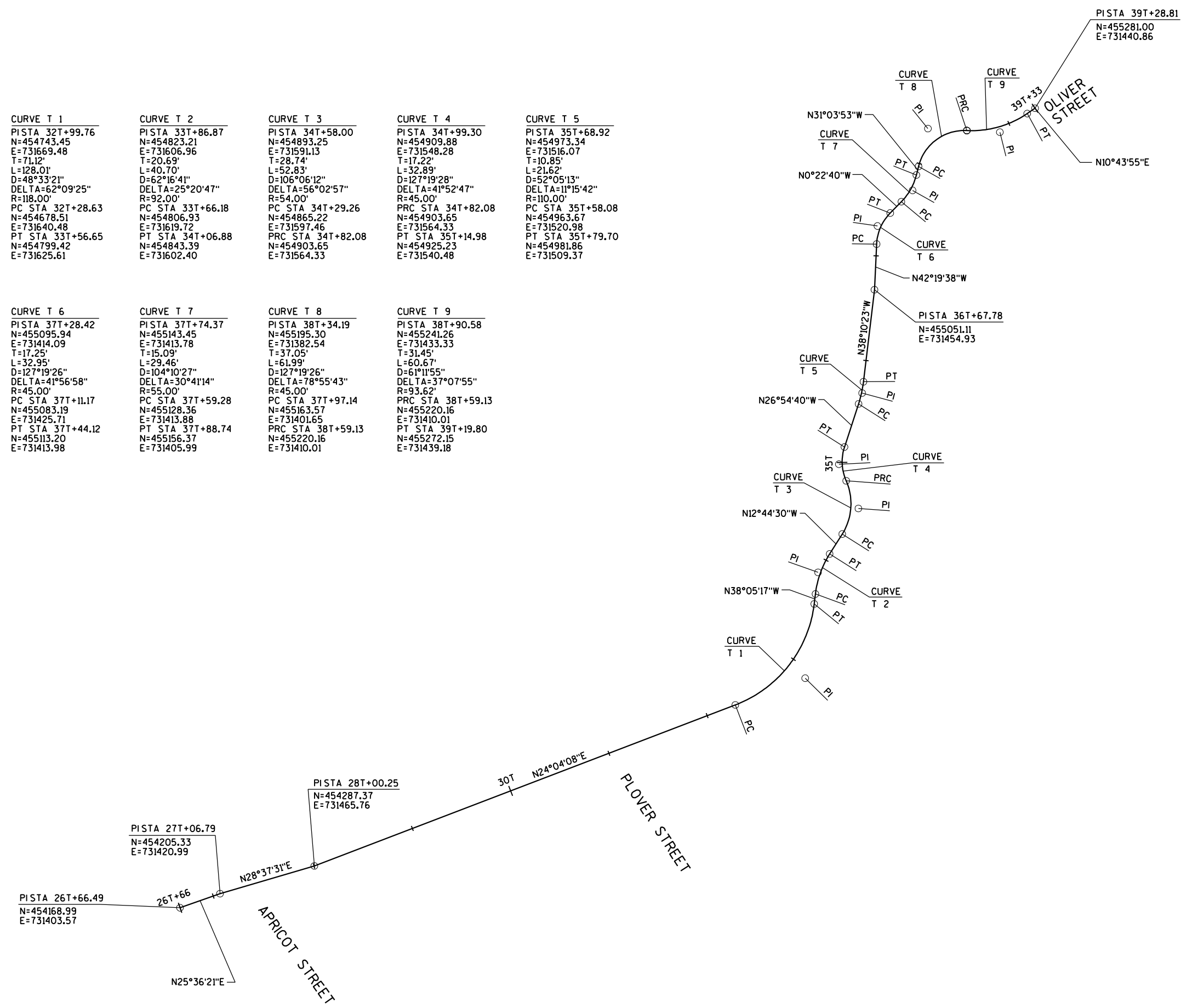
CURVE A 4
PISTA 10A+90.57
N=452879.44
E=730573.44
T=51.63'
L=99.45'
D=38°11'50"
DELTA=37°59'15"
R=150.00'
PC STA 10A+38.94
N=452830.05
E=730558.37
PT STA 11A+38.39
N=452909.08
E=730615.71

CURVE A 5
PISTA 15A+79.14
N=453162.12
E=730976.58
T=89.62'
L=172.10'
D=22°55'06"
DELTA=39°26'32"
R=250.00'
PC STA 14A+89.52
N=453110.67
E=730903.21
PRC STA 16A+61.62
N=453248.47
E=731000.56

CURVE A 6
PISTA 17A+24.22
N=453308.79
E=731017.31
T=62.60'
L=124.86'
D=8°11'06"
DELTA=10°13'13"
R=700.00'
PC STA 16A+61.62
N=453248.47
E=731000.56
PT STA 17A+86.49
N=453365.18
E=731044.49



CURVE T 1 PISTA 32T+99.76 N=454743.45 E=731669.48 T=71.12' L=128.01' D=48°33'21" DELTA=62°09'25" R=118.00' PC STA 32T+28.63 N=454678.51 E=731640.48 PT STA 33T+56.65 N=454799.42 E=731625.61	CURVE T 2 PISTA 33T+86.87 N=454823.21 E=731606.96 T=20.69' L=40.70' D=62°16'41" DELTA=25°20'47" R=92.00' PC STA 33T+66.18 N=454806.93 E=731619.72 PT STA 34T+06.88 N=454843.39 E=731602.40	CURVE T 3 PISTA 34T+58.00 N=454893.25 E=731591.13 T=28.74' L=52.83' D=106°06'12" DELTA=56°02'57" R=54.00' PC STA 34T+29.26 N=454865.22 E=731597.46 PRC STA 34T+82.08 N=454903.65 E=731564.33	CURVE T 4 PISTA 34T+99.30 N=454909.88 E=731548.28 T=17.22' L=32.89' D=127°19'28" DELTA=41°52'47" R=45.00' PRC STA 34T+82.08 N=454903.65 E=731564.33 PT STA 35T+14.98 N=454925.23 E=731540.48	CURVE T 5 PISTA 35T+68.92 N=454973.34 E=731516.07 T=10.85' L=21.62' D=52°05'13" DELTA=11°15'42" R=110.00' PC STA 35T+58.08 N=454963.67 E=731520.98 PT STA 35T+79.70 N=454981.86 E=731509.37
CURVE T 6 PISTA 37T+28.42 N=455095.94 E=731414.09 T=17.25' L=32.95' D=127°19'26" DELTA=41°56'58" R=45.00' PC STA 37T+11.17 N=455083.19 E=731425.71 PT STA 37T+44.12 N=455113.20 E=731413.98	CURVE T 7 PISTA 37T+74.37 N=455143.45 E=731413.78 T=15.09' L=29.46' D=104°10'27" DELTA=30°41'14" R=55.00' PC STA 37T+59.28 N=455128.36 E=731413.88 PT STA 37T+88.74 N=455156.37 E=731405.99	CURVE T 8 PISTA 38T+34.19 N=455195.30 E=731382.54 T=37.05' L=61.99' D=127°19'26" DELTA=78°55'43" R=45.00' PC STA 37T+97.14 N=455163.57 E=731401.65 PRC STA 38T+59.13 N=455220.16 E=731410.01	CURVE T 9 PISTA 38T+90.58 N=455241.26 E=731433.33 T=31.45' L=60.67' D=61°11'55" DELTA=37°07'55" R=93.62' PRC STA 38T+59.13 N=455220.16 E=731410.01 PT STA 39T+19.80 N=455272.15 E=731439.18	



3

DATE 01JUL13		E S T I M A T E O F Q U A N T I T I E S				
LINE				6999-09-79	6999-11-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0010	201.0120	CLEARING	ID	335.000	90.000	245.000
0020	201.0220	GRUBBING	ID	335.000	90.000	245.000
0030	204.0100	REMOVING PAVEMENT	SY	3,100.000	3,100.000	
0040	204.0130	REMOVING CURB	LF	190.000	190.000	
0050	204.0150	REMOVING CURB & GUTTER	LF	7,200.000	7,200.000	
0060	204.0155	REMOVING CONCRETE SIDEWALK	SY	3,400.000	2,800.000	600.000
0070	204.0195	REMOVING CONCRETE BASES	EACH	25.000	25.000	
0080	204.0220	REMOVING INLETS	EACH	27.000	27.000	
0090	204.0245	REMOVING STORM SEWER (SIZE) 01. 8 INCH	LF	350.000	350.000	
0100	204.0245	REMOVING STORM SEWER (SIZE) 02. 12 INCH	LF	570.000	570.000	
0110	205.0100	EXCAVATION COMMON	CY	11,480.000	11,170.000	310.000
0120	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 6999-09-79	LS	1.000	1.000	
0130	213.0100	FINISHING ROADWAY (PROJECT) 01. 6999-09-79	EACH	1.000	1.000	
0140	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,280.000	980.000	1,300.000
0150	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	12,400.000	12,400.000	
0160	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	200.000	200.000	
0170	416.0508	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH	SY	340.000	340.000	
0180	455.0115	ASPHALTIC MATERIAL PG64-22	TON	100.000	100.000	
0190	455.0120	ASPHALTIC MATERIAL PG64-28	TON	100.000	100.000	
0200	455.0605	TACK COAT	GAL	600.000	600.000	
0210	460.1101	HMA PAVEMENT TYPE E-1	TON	3,300.000	3,300.000	
0220	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	2,170.000	2,170.000	
0230	460.4200.S	HMA PAVEMENT INTERSECTION	TON	340.000	340.000	
0240	465.0105	ASPHALTIC SURFACE	TON	410.000	10.000	400.000
0250	513.2050.S	RAILING PIPE	LF	7.000	7.000	
0260	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	480.000	480.000	
0270	601.0105	CONCRETE CURB TYPE A	LF	175.000	175.000	
0280	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	770.000	770.000	
0290	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	5,790.000	5,790.000	
0300	601.0582	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T	LF	275.000	275.000	
0310	602.0405	CONCRETE SIDEWALK 4-INCH	SF	22,500.000	22,500.000	
0320	602.0415	CONCRETE SIDEWALK 6-INCH	SF	1,350.000	1,350.000	
0330	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	305.000	305.000	
0340	602.1500	CONCRETE STEPS	SF	70.000	70.000	
0350	606.0100	RIPRAP LIGHT	CY	85.000	85.000	
0360	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	796.000	796.000	
0370	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	532.000	532.000	
0380	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	344.000	344.000	
0390	611.0530	MANHOLE COVERS TYPE J	EACH	7.000	7.000	
0400	611.0624	INLET COVERS TYPE H	EACH	26.000	26.000	
0410	611.0652	INLET COVERS TYPE T	EACH	1.000	1.000	
0420	611.1230	CATCH BASINS 2X3-FT	EACH	27.000	27.000	
0430	611.2005	MANHOLES 5-FT DIAMETER	EACH	2.000	2.000	
0440	611.8110	ADJUSTING MANHOLE COVERS	EACH	6.000	6.000	
0450	611.8115	ADJUSTING INLET COVERS	EACH	1.000	1.000	
0460	619.1000	MOBILIZATION	EACH	1.000	1.000	
0470	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	270.000	270.000	
0480	625.0100	TOPSOIL	SY	6,030.000	5,550.000	480.000

3

3

DATE 01JUL13			E S T I M A T E O F Q U A N T I T I E S			
LINE					6999-09-79	6999-11-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0490	627.0200	MULCHING	SY	2,500.000	2,020.000	480.000
0500	628.1504	SILT FENCE	LF	1,800.000	520.000	1,280.000
0510	628.1520	SILT FENCE MAINTENANCE	LF	535.000	150.000	385.000
0520	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000	
0530	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	5.000	5.000	
0540	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	3,900.000	3,900.000	
0550	628.7005	INLET PROTECTION TYPE A	EACH	27.000	27.000	
0560	628.7015	INLET PROTECTION TYPE C	EACH	37.000	37.000	
0570	630.0120	SEEDING MIXTURE NO. 20	LB	44.000	35.000	9.000
0580	630.0130	SEEDING MIXTURE NO. 30	LB	95.000	95.000	
0590	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	32.000	32.000	
0600	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	8.000	8.000	
0610	637.0202	SIGNS REFLECTIVE TYPE II	SF	284.860	284.860	
0620	638.2102	MOVING SIGNS TYPE II	EACH	13.000	13.000	
0630	638.2602	REMOVING SIGNS TYPE II	EACH	39.000	39.000	
0640	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	28.000	28.000	
0650	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	10.000	10.000	
0660	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000	
0670	643.0100	TRAFFIC CONTROL (PROJECT) 01. 6999-09-79	EACH	1.000	1.000	
0680	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	2,298.000	2,298.000	
0690	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,340.000	2,340.000	
0700	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,943.000	2,943.000	
0710	645.0130	GEOTEXTILE FABRIC TYPE R	SY	250.000	250.000	
0720	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	10,000.000	10,000.000	
0730	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	580.000	580.000	
0740	646.0600	REMOVING PAVEMENT MARKINGS	LF	100.000	100.000	
0750	647.0156	PAVEMENT MARKING ARROWS EPOXY TYPE 1	EACH	2.000	2.000	
0760	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	3.000	3.000	
0770	647.0256	PAVEMENT MARKING SYMBOLS EPOXY	EACH	7.000	7.000	
0780	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	1.000	1.000	
0790	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	11.000	11.000	
0800	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	420.000	420.000	
0810	647.0716	PAVEMENT MARKING DIAGONAL EPOXY 8-INCH	LF	300.000	300.000	
0820	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	2,230.000	2,230.000	
0830	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	37.000	37.000	
0840	650.5000	CONSTRUCTION STAKING BASE	LF	4,270.000	3,000.000	1,270.000
0850	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	6,990.000	6,990.000	
0860	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 6999-09-79	LS	1.000	1.000	
0870	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 6999-09-79	LS	1.000	1.000	
0880	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 6999-11-72	LS	1.000		1.000
0890	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	4,270.000	3,000.000	1,270.000
0900	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	5,490.000	5,490.000	
0910	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	330.000	330.000	
0920	652.0335	CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH	LF	410.000	410.000	
0930	652.0340	CONDUIT RIGID NONMETALLIC SCHEDULE 80 4-INCH	LF	140.000	140.000	
0940	652.0605	CONDUIT SPECIAL 2-INCH	LF	300.000	300.000	
0950	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	14.000	14.000	

3

3

DATE 01JUL13		E S T I M A T E O F Q U A N T I T I E S				
LINE				6999-09-79	6999-11-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0960	653.0905	REMOVING PULL BOXES	EACH	2.000	2.000	
0970	654.0215	CONCRETE CONTROL CABINET BASES TYPE 9	EACH	1.000	1.000	
0980	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	4,800.000	4,800.000	
0990	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	45,000.000	45,000.000	
1000	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. CB100	LS	1.000	1.000	
1010	690.0150	SAWING ASPHALT	LF	730.000	710.000	20.000
1020	690.0250	SAWING CONCRETE	LF	340.000	320.000	20.000
1030	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5. 00/HR	HRS	1,200.000	1,200.000	
1040	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	600.000	600.000	
1050	SPV.0030	SPECIAL 01. FERTILIZER FOR LAWN TYPE TURF	CWT	5.000	4.000	1.000
1060	SPV.0060	SPECIAL 01. DECORATIVE LIGHT UNIT	EACH	25.000	25.000	
1070	SPV.0060	SPECIAL 02. DECORATIVE TWIN ARM LIGHT UNIT	EACH	1.000	1.000	
1080	SPV.0060	SPECIAL 03. DECORATIVE LIGHT UNIT FURNISH ONLY	EACH	1.000	1.000	
1090	SPV.0060	SPECIAL 04. LIGHTING CONTROL CABINET	EACH	1.000	1.000	
1100	SPV.0060	SPECIAL 05. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	EACH	4.000	4.000	
1110	SPV.0060	SPECIAL 06. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	EACH	4.000	4.000	
1120	SPV.0060	SPECIAL 07. ADJUSTING WATER VALVE BOXES	EACH	9.000	9.000	
1130	SPV.0090	SPECIAL 01. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH	LF	340.000	340.000	
1140	SPV.0090	SPECIAL 02. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH	LF	80.000	80.000	
1150	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH	LF	370.000	370.000	
1160	SPV.0090	SPECIAL 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 8-INCH	LF	130.000	130.000	
1170	SPV.0090	SPECIAL 05. CONDUIT RIGID METALLIC 2-INCH FURNISH ONLY	LF	100.000	100.000	
1180	SPV.0105	SPECIAL 01. VERIFY AND REPLACE EXISTING PROPERTY	LS	1.000	1.000	
1190	SPV.0120	SPECIAL 01. WATER FOR SEEDED AREAS	MGAL	135.000	124.000	11.000
1200	SPV.0165	SPECIAL 01. STAMPED AND COLORED PAVEMENT	SF	4,760.000		4,760.000
1210	SPV.0165	SPECIAL 02. REMOVE AND RESTORE TERRACE PAVERS	SF	410.000	410.000	
1220	SPV.0165	SPECIAL 03. STAMPED COLORED CONCRETE SIDEWALK 4-INCH	SF	2,100.000	2,100.000	
1230	SPV.0180	SPECIAL 01. PREPARING TOPSOIL FOR LAWN TYPE TURF	SY	6,030.000	5,550.000	480.000

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CLEARING AND GRUBBING

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	201.0120	201.0220
						CLEARING ID	GRUBBING ID
6999-09-79	1			16A+81	LT	25	25
	1			17A+30	LT	25	25
	1			17A+58	LT	20	20
	1			18A+49	LT	20	20
PROJECT 6999-09-79 TOTALS						90	90
6999-11-72	1			28T+52	10' LT	20	20
	1			29T+31	9' LT	20	20
	1			29T+72	8' LT	20	20
	1			30T+12	8' LT	20	20
	1			30T+53	7' LT	20	20
	1			30T+93	7' LT	20	20
	1			31T+33	6' LT	20	20
	1			31T+76	6' LT	20	20
	1			32T+16	5' LT	20	20
	1			33T+23	8' LT	25	25
	1			37T+23	7' LT	20	20
	1			38T+23	0' LT	20	20
PROJECT 6999-11-72 TOTALS						245	245
TOTALS						340	340

REMOVING PAVEMENT

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	204.0100
						REMOVING PAVEMENT SY
6999-09-79	2	30B+52		34B+38	1ST ST N	3,100
PROJECT 6999-09-79 TOTAL						3,100

REMOVING CONCRETE SIDEWALK

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	SY	REMARKS
6999-09-79	1	14A+50		20A+40	RT	370	1ST ST N
	1	20A+75		24A+12	RT	250	1ST ST N
	1	24A+50		27A+29	RT	160	1ST ST N
	1	15A+19		20A+76	LT	320	1ST ST N
	1	20A+76		24A+05	LT	200	1ST ST N
	2		30B+31		LT	13	1ST ST N
	2	30B+52		35B+30	RT	400	1ST ST N
	2		30B+55		LT	8	1ST ST N
	2	10A+12		14A+50	RT	240	1ST ST N
	2		MARKET STREET		RT	6	MARKET ST
	2	7A+63		9A+32	RT	180	MARKET ST
	2	7A+63		9A+16	LT	170	MARKET ST
	2	40C+54		43C+75	RT	240	BAKER ST
	2	40C+03		43C+75	LT	200	BAKER ST
PROJECT 5999-09-79 TOTAL						2,800	
6999-11-72	2	30B+23		10A+62	LT	600	1ST ST N
PROJECT 5999-11-72 TOTAL						600	
TOTAL						3,400	

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING STORM SEWER

PROJECT ID	STAGE	STATION	STATION	LOCATION	204.0245.01	204.0245.02
					REMOVING STORM SEWER 8" LF	REMOVING STORM SEWER 12" LF
6999-09-79	2	14A+37	14A+43	LT	---	15
	1	14A+44	14A+54	RT	---	15
	1	15A+61	15A+67	LT	---	15
	1		15A+70		40	---
	1		17A+51		30	---
	1		17A+53		35	---
	1	20A+61	20A+85	RT	---	35
	1		24A+00		---	25
	1	24A+01	24A+11	RT	20	---
	1	24A+22	24A+52	RT	---	35
	2		31B+14		---	80
	2	34B+91	35B+15	RT	---	35
	2	35B+15	35B+32	RT	15	---
	2	35B+32	35B+59	RT	---	60
	2	35B+21	35B+59	LT	55	---
	2	35B+59	10B+07	RT	---	75
	2	35B+59	9A+31	RT	45	---
	2	35B+59	8A+93	RT	---	90
	2	10A+64	10A+83	LT	50	---
	2	10A+83	11A+13	LT	---	35
	2		12A+57		45	---
	2		12A+56	LT	10	---
	2	41C+03	41C+12	LT	---	35
	2	41C+03	41C+07	RT	---	15
PROJECT 6999-09-79 TOTAL					350	570

REMOVING CURB & GUTTER

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	204.0150	REMARKS
						REMOVE CURB & GUTTER LF	
6999-09-79	1	14A+50		27A+40	LT	1300	1ST ST NORTH
	1	20A+83		23A+82	LT	300	1ST ST NORTH
	1	14A+50		27A+31	RT	1400	1ST ST NORTH
	2	30B+52		35B+00	LT	520	1ST ST NORTH
	2	30B+52		35B+58	RT	460	1ST ST NORTH
	2	34B+47		35B+26	MEDIAN	170	1ST ST NORTH
	2	35B+08		35B+22	ISLAND, LT	70	1ST ST NORTH
	2	9A+63		14A+50	LT	510	1ST ST NORTH
	2	10A+09		14A+50	RT	470	1ST ST NORTH
	2	9A+80		10A+52	MEDIAN	150	1ST ST NORTH
	2	7A+63		9A+00	LT	140	MARKET ST
	2	7A+63		9A+30	RT	200	MARKET ST
	2	7A+63		9A+20	MEDIAN	320	MARKET ST
	2	8A+94		9A+31	ISLAND, RT	140	MARKET ST
	2	40C+00		43C+75	LT	360	BAKER ST
	2	40C+50		43C+75	RT	330	BAKER ST
	2	40C+00		40C+17	MEDIAN	110	BAKER ST
	2	10A+30		11A+66	PARKING LOT, RT	170	1ST ST NORTH
	2	14A+25		14A+25	PARKING LOT, RT	5	1ST ST NORTH
	2	35B+03		35B+59	PARKING LOT, RT	50	1ST ST NORTH
PROJECT 6999-09-79 TOTAL						7,200	
REMOVING CURB							
PROJECT ID	STAGE	STATION	-	STATION	LOCATION	204.0130	REMARKS
						REMOVE CURB LF	
6999-09-79	1	21A+23		23A+60	RT	190	1ST ST NORTH
PROJECT 6999-09-79 TOTAL						190	

REMOVING INLETS

PROJECT ID	STAGE	STATION	OFFSET	LOCATION	204.0220
					REMOVING INLETS EACH
6999-09-79	2	14A+43	27.9	LT	1
	2	14A+44	16.5	RT	1
	1	15A+68	26.5	LT	1
	1	15A+73	12.1	RT	1
	1	17A+51	21.3	RT	1
	1	17A+51	7.8	LT	1
	1	20A+85	21.8	RT	1
	1	23A+98	20.8	RT	1
	1	24A+11	18.2	LT	1
	1	24A+54	24.1	RT	1
	2	10A+07	23.1	RT	1
	2	10A+54	26.1	RT	1
	2	10A+64	2.6	RT	1
	2	10A+86	39.0	LT	1
	2	11A+14	30.0	LT	1
	2	12A+56	28.1	LT	1
	2	31B+12	34.0	RT	1
	2	31B+12	47.2	LT	1
	2	34B+20	37.0	LT	1
	2	34B+91	5.9	LT	1
	2	35B+15	23.7	RT	1
	2	35B+21	50.4	LT	1
	2	35B+33	35.1	RT	1
	2	9A+31	27.2	RT	1
	2	40C+21	57.2	RT	1
	2	41C+07	4.6	RT	1
	2	41C+12	38.1	LT	1
PROJECT 6999-09-79 TOTAL					27

PREPARE FOUNDATION FOR ASPHALTIC PAVING

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	211.0100 LS
6999-09-79	2	14A+50	-	27A+41	SPLITTER ISLAND	1
PROJECT 6999-09-79 TOTAL						1

Stage	From/To Station	Location	Excavation Common (1) (item # 205.0100)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6)	Mass Ordinate +/- (7)	Waste	Borrow (item #208.0100)	Comment:
			Cut (2)	EBS Excavation (3)				Factor 1.25				
1	14A+50 - 28A+00	A-Line	3,910	0	0	3,910	110	130	3,780	3,780	0	
2	7A+61 - 14A+50	A-Line	2,100	0	0	2,100	180	220	1,880	1,880	0	
2	30B+52 - 35B+00	B-Line	2,970	0	0	2,970	10	20	2,950	2,950	0	
2	40C+50 - 43C+75	C-Line	1,800	0	0	1,800	10	10	1,790	1,790	0	
2	2D+45 - 4D+50	D-Line	390	0	0	390	560	700	-310	0	310	
Project 6999-09-79 Sub-Totals			11,170	0	0	11,170	870	1,080	10,090	10,400	310	

1	26T+66 - 39T+32	Multi-Use Trail	310	0	0	310	15	20	290	290	0	
Project 6999-11-72 Sub-Totals			310	0	0	310	15	20	290	290	0	
Grand Total			11,480	0	0	11,480	885	1,100	10,380	10,690	310	
				Total Exc Common	11,480					Total Borrow	0	

- 1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) EBS Excavation to be backfilled with Subbase Material
- 4) Salvaged/Unusable Pavement Material = Existing Asphalt
- 5) Available Material = Cut - Salvaged/Unusable Pavement Material
- 6) Expanded Fill. Factor = 1.25
- 7) 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.
- Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor
- Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
- Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
- Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

BASE AGGREGATE

						305.0105	305.0120		
PROJECT ID	STAGE	STATION	-	STATION	LOCATION	3/4-INCH TONS	1 1/4-INCH TONS		
6999-09-79	1	14A+50	-	27A+41	1st STREET NORTH	-	4,350	MAINLINE	
	1				DRAKE ST	-	140	INTERSECTION	
	1				FRANKLIN ST	-	100	INTERSECTION	
	1				APRICOT ST	-	20	INTERSECTION	
	1	14A+50	-	27A+41	1ST STREET NORTH	240	-	SIDEWALK RT	
	2	30B+52	-	35B+34	1ST STREET NORTH	-	2,200	MAINLINE	
	2	10A+18	-	14A+50	1ST STREET NORTH	-	1,450	MAINLINE	
	2	7A+63	-	9A+26	MARKET ST	-	510	MAINLINE	
	2	40A+39	-	43A+75	BAKER ST	-	1,250	MAINLINE	
	2	0D+00	-	2D+71	ROUNDAABOUT	-	1,200	MAINLINE	
	2	30B+52	-	35B+50	1ST STREET NORTH	140	-	SIDEWALK RT	
	2	34B+32	-	35B+36	1ST STREET NORTH	40	-	SIDEWALK LT	
	2	34B+67	-	35B+33	1ST STREET NORTH	30	-	ISLAND SIDEWALK LT	
	2	10A+20	-	14A+50	1ST STREET NORTH	90	-	SIDEWALK RT	
	2	10A+20	-	11A+39	1ST STREET NORTH	30	-	ISLAND SIDEWALK RT	
	2	10A+13	-	11A+04	1ST STREET NORTH	30	-	SIDEWALK LT	
	2	7A+80	-	9A+01	MARKET ST	40	-	SIDEWALK LT	
	2	7A+63	-	8A+73	MARKET ST	30	-	MEDIAN SIDEWALK RT	
	2	7A+63	-	8A+78	MARKET ST	40	-	SIDEWALK RT	
	2	40C+27	-	43C+75	BAKER ST	80	-	SIDEWALK RT	
	2	40C+40	-	40C+92	BAKER ST	20	-	ISLAND SIDEWALK RT	
	2	40C+35	-	43C+75	BAKER ST	80	-	SIDEWALK LT	
	UNDISTRIBUTED						90	1,150	
	PROJECT 6999-09-79 TOTAL						980	12,400	
6999-11-72	1	14A+00		18A+88	1ST STREET NORTH	230	-	MULTI-USE TRAIL	
	1	26T+66		39T+32	MULTI-USE TRAIL	470	-	MULTI-USE TRAIL	
	2	30B+23		40B+20	MULTI-USE TRAIL	480	-	MULTI-USE TRAIL	
	UNDISTRIBUTED					120	0		
PROJECT 6999-11-72 TOTAL						1,300	0		
TOTAL						2,300	12,400		

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK

STAMPED COLORED CONCRETE SIDEWALK, 4-INCH

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	SPV.0165.03 FS31667 SF
6999-09-79	2	7A+63	-	8A+72	SPLITTER ISLAND	493
	2	10A+20	-	11A+39	SPLITTER ISLAND	615
	2	34B+68	-	35B+30	SPLITTER ISLAND	510
	2	40C+39	-	40C+91	SPLITTER ISLAND	280
	UNDISTRIBUTED					190
	PROJECT 6999-09-79 TOTAL					2,100

CONCRETE ROUNDAABOUT TRUCK APRON

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	416.0508 CONCRETE ROUNDAABOUT TRUCK APRON 8-INCH SY
6999-09-79	2	0D+00	-	2D+71	RAB TRUCK APRON	340
PROJECT 6999-09-79 TOTAL						340

CONCRETE DRIVEWAY 6-INCH

PROJECT ID	STAGE	STATION	LOCATION	416.0160 6-INCH SY
6999-09-79	1	15A+59	1ST ST, RT	6
	1	17A+26	1ST ST, RT	50
	1	17A+84	1ST ST, RT	30
	1	21A+87	1ST ST, RT	20
	1	22A+06	1ST ST, RT	20
	1	23A+09	1ST ST, RT	20
	1	23A+67	1ST ST, RT	30
	2	17A+26	1ST ST, RT	20
	PROJECT 6999-09-79 TOTAL			200

ASPHALT PAVEMENT ITEMS

						455.0115	455.0120	455.0605	460.1101	460.4200.S	465.1105	SPV.0165.01
						ASPHALTIC MATERIAL PG64-22 TONS	ASPHALTIC MATERIAL PG64-28 TONS	TACK COAT GAL	HMA PAVEMENT TYPE E-1 TONS	HMA PAVEMENT INTERSECTIONS TONS	ASPHALTIC SURFACE TONS	STAMPED AND COLORED PAVEMENT SF
PROJECT ID	STAGE	STATION	-	STATION	LOCATION							
6999-09-79	1	14A+50	-	27A+41	1ST ST N	40	---	150	715	---	---	---
	1		20A+58		DRAKE ST INTERSECITON	1.4	---	5	25	---	---	---
	1		24A+31		FRANKLIN ST INTERSECITON	1.5	---	5	27	---	---	---
	1		27A+33		APRICOT ST INTERSECITON	0.2	---	1	4	---	---	---
	2	14A+50	-	27A+41	1ST ST N	---	40	150	715	---	---	---
	2		20A+58		DRAKE ST INTERSECITON	---	1.4	5	25	---	---	---
	2		24A+31		FRANKLIN ST INTERSECITON	---	1.5	5	27	---	---	---
	2		27A+33		APRICOT ST INTERSECITON	---	0.2	1	4	---	---	---
	2	30B+52	-	35B+30	1ST ST N	20	20	70	730	---	---	---
	2	10A+20	-	145A+00	1ST ST N	13	13	50	445	---	---	---
	2	7A+63	-	8A+71	MARKET ST	4.2	4.1	20	150	---	---	---
	2	40C+41	-	43C+75	BAKER ST	11	11	40	400	---	---	---
	2	0D+00		2D+71	ROUNDAABOUT	9.3	---	40	---	170	---	---
	2	0D+00		2D+71	ROUNDAABOUT	---	9.3	40	---	170	---	---
	2	34A+69		35A+30	PARKING LOT	0.6	---	2	10	---	10	---
	2	10A+28		11A+77	PARKING LOT	---	1.0	4	18	---	---	---
PROJECT 6999-09-79 TOTALS						100	100	600	3,300	340	10	0
6999-11-72	1	14A+50	-	18A+88	MULTI-USE TRAIL	---	---	---	---	---	46	---
	1	14A+50	-	18A+88	MULTI-USE TRAIL-STAMPED	---	---	---	---	---	16	1,320
	1	26T+66		39T+32	MULTI-USE TRAIL	---	---	---	---	---	145	---
	2	30B+23	-	14A+50	MULTI-USE TRAIL	---	---	---	---	---	150	---
	2	30B+23	-	14A+50	MULTI-USE TRAIL-STAMPED	---	---	---	---	---	37	3,000
	UNDISTRIBUTED					---	---	---	---	---	6	435
PROJECT 6999-11-72 TOTALS						0	0	0	0	0	400	4,760
TOTALS						100	100	600	3,300	340	410	4,760

CONCRETE SIDEWALK

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	602.0405	602.1500	513.2050.S	602.0415	REMARKS
						CONCRETE SIDEWALK 4-INCH SF	CONCRETE STEPS SF	RAILING PIPE LF	CONCRETE SIDEWALK 6-INCH SF	
6999-09-79	1	14A+50	-	15A+82	RT	810	---	---	---	BAKER ST - DRAKE ST
	1	15A+82	-	15A+93	RT	---	---	---	60	BAKER ST - DRAKE ST
	1	15A+93	-	17A+17	RT	650	---	---	---	BAKER ST - DRAKE ST
	1			16A+35	RT	---	20	---	---	---
	1	17A+17	-	17A+35	RT	---	---	---	90	BAKER ST - DRAKE ST
	1	17A+35	-	17A+77	RT	200	---	---	---	BAKER ST - DRAKE ST
	1	17A+77	-	17A+91	RT	---	---	---	70	BAKER ST - DRAKE ST
	1	17A+91	-	20A+41	RT	520	---	---	---	BAKER ST - DRAKE ST
	1	20A+76	-	21A+81	RT	640	---	---	---	DRAKE ST - FRANKLIN ST
	1	21A+81	-	21A+92	RT	---	---	---	60	DRAKE ST - FRANKLIN ST
	1	21A+92	-	22A+01	RT	45	---	---	---	DRAKE ST - FRANKLIN ST
	1	22A+01	-	22A+12	RT	---	---	---	55	DRAKE ST - FRANKLIN ST
	1	22A+12	-	23A+03	RT	480	---	---	---	DRAKE ST - FRANKLIN ST
	1	23A+03	-	23A+16	RT	---	---	---	65	DRAKE ST - FRANKLIN ST
	1	23A+16	-	23A+61	RT	280	---	---	---	DRAKE ST - FRANKLIN ST
	1	23A+61	-	23A+73	RT	---	---	---	65	DRAKE ST - FRANKLIN ST
	1	23A+73	-	24A+12	RT	190	---	---	---	DRAKE ST - FRANKLIN ST
	1	24A+50	-	27A+30	RT	1,600	---	---	---	FRANKLIN ST - APRICOT ST
	2	30B+52	-	32B+23	1ST ST N, RT	1,200	---	---	---	---
	2	32B+23	-	33B+07	1ST ST N, RT	---	---	---	680	---
	2	33B+07	-	35B+50	1ST ST N, RT	2,450	---	---	---	---
	2	31B+29	-	31B+37	1ST ST N, LT	70	---	---	---	---
	2	32B+61	-	32B+87	1ST ST N, LT	270	---	---	---	---
	2	34B+82	-	35B+31	1ST ST N, LT	630	---	---	---	---
	2			35B+04	1ST ST N, LT	80	---	---	---	MEDIAN CURB RAMP
	2	10A+20	-	14A+10	1ST ST N, RT	2,400	---	---	---	---
	2	14A+10	-	14A+41	1ST ST N, RT	---	---	---	160	---
	2	14A+41	-	14A+50	1ST ST N, RT	45	---	---	---	---
	2			10A+38	1ST ST N, RT	65	---	---	---	MEDIAN CURB RAMP
	2	9A+84	-	11A+03	1ST ST N, LT	910	---	---	---	---
	2	10A+33	-	10A+46	1ST ST N, LT	210	---	---	---	---
	2	7A+80	-	9A+01	MARKET ST, LT	1,800	---	---	---	---
	2			8A+55	MARKET ST, RT	60	---	---	---	MEDIAN CURB RAMP
	2	7A+63	-	8A+78	MARKET ST, RT	1,400	---	---	---	---
	2	40C+27	-	43C+75	BAKER ST, RT	2,850	---	---	---	---
	2	40C+57	-		BAKER ST, RT	60	---	---	---	MEDIAN CURB RAMP
	2	40C+23	-	43C+75	BAKER ST, LT	2,550	---	---	---	---
	2			42C+00	RT	---	50	7	---	---
PROJECT 6999-09-79 TOTAL						22,500	70	7	1,350	

WALL MODULAR BLOCK GRAVITY

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	532.0200.S SF
6999-09-79	2	40C+48	-	41C+79	RT	480

CONCRETE CURB & GUTTER

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	601.0105	601.0407	601.0411	601.0582	620.0300	REMARKS
						CONCRETE CURB TYPE A LF	CONCRETE CURB & GUTTER 18-IN TYPE D LF	CONCRETE CURB & GUTTER 30-IN TYPE D LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-IN TYPE T LF	CONCRETE MEDIAN SLOPED NOSE SF	
6999-09-79	1	14A+50	-	20A+51	RT	---	---	650	---	---	BAKER ST - DRAKE ST
	1	20A+80	-	24A+12	RT	---	---	395	---	---	DRAKE ST - FRANKLIN ST
	1	24A+48	-	27A+31	RT	---	---	315	---	---	FRANKLIN - APRICOT ST
	1	14A+50	-	27A+41	LT	---	---	1,280	---	---	BAKER ST - APRICOT ST
	2	30B+52	-	35B+34	LT	---	---	555	---	---	1ST ST N
	2	30B+52	-	32B+21	RT	---	---	165	---	---	1ST ST N
	2	32B+61	-	32B+69	RT	---	---	45	---	---	1ST ST N, MEDIAN ENT
	2	33B+09	-	34B+48	RT	---	---	240	---	---	1ST ST N
	2	34B+65	-	35B+59	RT	---	155	---	---	75	ISLAND
	2	34B+68	-	35B+56	LT	---	---	72	---	---	PARKING LOT
	2	9A+80	-	14A+50	LT	---	---	485	---	---	1ST ST N
	2	10A+16	-	14A+50	RT	---	---	430	---	---	1ST ST N
	2	10A+29	-	11A+77	RT	---	---	135	---	---	PARKING LOT
	2	10A+18	-	11A+41	RT	---	250	---	---	75	ISLAND
	2	7A+63	-	9A+08	LT	---	---	155	---	---	MARKET ST
	2	7A+63	-	8A+84	RT	---	---	130	---	---	MARKET ST
	2	7A+63	-	8A+74	RT	---	235	---	---	44	MARKET ST, MEDIAN
	2	40C+23	-	43C+75	RT	---	---	380	---	---	BAKER ST
	2	40C+19	-	43C+75	LT	---	---	355	---	---	BAKER ST
	2	40C+39	-	40C+94	RT	---	130	---	---	75	BAKER ST, ISLAND
	2	0D+00	-	2D+71	LT	---	---	---	275	---	ROUNDAABOUT
	2	0D+00	-	2D+71	LT	171	---	---	---	---	ROUNDAABOUT
PROJECT 6999-09-79 TOTAL						175	770	5,790	275	270	

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

602.0515					
PROJECT ID	STAGE	STATION	LOCATION	SF	REMARKS
6999-09-79	1	20A+41	1ST ST N, RT	8	
	1	20A+76	1ST ST N, RT	8	
	1	24A+12	1ST ST N, RT	8	
	1	24A+50	1ST ST N, RT	8	
	1	27A+09	1ST ST N, LT & RT	16	
	1	27A+30	1ST ST N, RT	8	
	2	34B+98	1ST ST N, LT	14	
	2	35B+03	1ST ST N, RT	14	
	2	35B+04	1ST ST N, RT	14	ISLAND
	2	35B+05	1ST ST N, RT	14	ISLAND
	2	10A+38	1ST ST N, RT	14	ISLAND
	2	10A+39	1ST ST N, RT	14	ISLAND
	2	10A+40	1ST ST N, LT	14	
	2	10A+44	1ST ST N, RT	14	
	2	8A+48	MARKET ST, RT	14	
	2	8A+52	MARKET ST, LT	14	
	2	8A+54	MARKET ST, RT	14	ISLAND
	2	8A+55	MARKET ST, RT	14	ISLAND
	2	40C+56	BAKER ST, RT	14	ISLAND
	2	40C+57	BAKER ST, RT	14	ISLAND
	2	40C+61	BAKER ST, LT	14	
	2	40C+62	BAKER ST, RT	14	
	2	42C+05	BAKER ST, RT	14	
	2	42C+15	BAKER ST, LT	8	
PROJECT 6999-09-79 TOTAL				305	

STORM SEWER PIPE

PROJECT ID	FROM STRUCTURE NUMBER	TO STRUCTURE NUMBER	STAGE	INVERT ELEVATION	DISCHARGE ELEVATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH
						LF	LF	LF
6999-09-79	4.0	3.0	1	993.98	993.43	--	56	--
	4.1	4.0	1	995.35	994.96	40	--	--
	5.2	5.1	1	1002.08	1001.69	40	--	--
	5.1	5.0	1	1001.44	1000.56	--	22	--
	6.1	6.0	1	1004.15	1003.95	20	--	--
	6.2	6.0	1	1004.15	1003.95	20	--	--
	6.0	7.0	1	1003.45	1003.00	--	--	180
	7.1	7.0	1	1005.75	1005.37	38	--	--
	7.2	7.0	1	1005.72	1005.37	36	--	--
	8.1	8.0	1	1007.63	1007.48	14	--	--
	9.1	9.0	1	1007.63	1007.48	16	--	--
	9.2	9.0	1	1007.81	1007.48	50	--	--
	1.1	1.0	2	990.93	990.54	40	--	--
	1.0	2.0	2	990.29	990.17	--	50	--
	2.1	2.0	2	990.81	990.42	40	--	--
	2.0	3.0	2	990.17	989.70	--	188	--
	10.6	10.5	2	991.16	990.83	68	--	--
	10.5	10.0	2	990.83	990.80	6	--	--
	10.2	10.1	2	992.08	991.59	24	--	--
	10.4	10.3	2	992.72	992.44	28	--	--
	10.3	10.1	2	992.44	991.84	60	--	--
	10.1	10.0	2	991.59	991.00	--	118	--
	11.6	11.5	2	988.46	988.15	--	32	--
	11.5	11.1	2	988.15	987.50	--	66	--
	11.4	11.3	2	990.57	990.24	66	--	--
	11.3	11.2	2	990.24	989.29	190	--	--
	11.2	11.1	2	988.79	988.25	--	--	36
	11.1	11.0	2	988.25	987.90	--	--	128
PROJECT 6999-09-79 TOTALS						796	532	344

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

MANHOLES, INLETS AND COVERS

PROJECT ID	STRUCTURE		OFFSET	LOCATION	STAGE	611.2005	611.1230	611.0530	611.0624	611.0652	RIM OR	STRUCTURE	DEPTH
	NUMBER	STATION				MANHOLES 5-FT DIAMETER EACH	CATCH BASINS 2x3-FT EACH	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE T EACH	FLANGE LINE ELEVATION	BOTTOM ELEVATION	
6999-09-79	4.0	14A+90	19.5	LT	1	--	1	--	1	--	1000.57	990.98	8.20
	4.1	14A+90	19.5	RT	1	--	1	--	1	--	1000.57	992.35	6.83
	5.1	17A+50	19.5	LT	1	--	1	--	1	--	1006.38	998.44	6.55
	5.2	17A+50	19.5	RT	1	--	1	--	1	--	1006.38	999.08	5.91
	6.0	18A+80	0		1	1	--	1	--	--	1008.58	1003.45	3.74
	6.1	18A+80	19.5	LT	1	--	1	--	1	--	1008.22	1001.15	5.68
	6.2	18A+80	19.5	RT	1	--	1	--	1	--	1008.22	1001.15	5.68
	7.0	20A+61.4	4	LT	1	--	--	1	--	--	1010.81	--	--
	7.1	20A+95	19.5	LT	1	--	1	--	1	--	1010.74	1002.75	6.60
	7.2	20A+79	26.8	RT	1	--	1	--	1	--	1010.61	1002.72	6.50
	8.0	23A+99.4	4.7	LT	1	--	--	1	--	--	1012.52	--	--
	8.1	24A+00	19.5	LT	1	--	1	--	1	--	1012.26	1004.63	6.24
	9.0	24A+22.2	29.6	RT	1	--	--	1	--	--	1012.46	--	--
	9.1	24A+13.2	42.4	RT	1	--	1	--	1	--	1012.21	1004.63	6.19
	9.2	24A+54.7	25.2	RT	1	--	1	--	1	--	1012.50	1004.97	6.14
	1.0	11A+99	19.5	LT	2	--	1	--	1	--	994.88	987.29	6.20
	1.1	11A+99	19.5	RT	2	--	1	--	1	--	994.88	987.93	5.56
	2.0	12A+49	19.5	LT	2	--	1	--	1	--	995.10	987.17	6.54
	2.1	12A+49	19.5	RT	2	--	1	--	1	--	995.10	987.81	5.90
	3.0	14A+34.8	17.4	LT	2	--	--	1	--	--	999.14	--	--
	10.0	2D+79.3	5.1	RT	2	--	--	1	--	--	995.10	--	--
	10.1	40C+50.7	24.1	LT	2	--	1	--	1	--	996.95	988.59	6.97
	10.2	40C+81	18.1	LT	2	--	1	--	1	--	997.20	989.08	6.73
	10.3	40C+50.5	36.3	RT	2	--	1	--	1	--	996.90	989.44	6.07
	10.4	40C+70	27.3	RT	2	--	1	--	1	--	997.12	989.72	6.01
	10.5	2D+74.9	1.5	RT	2	--	1	--	--	1	995.57	987.83	6.35
	10.6	35B+18.1	43.9	RT	2	--	1	--	1	--	995.10	988.16	5.55
	11.0	30B+32.4	39.9	LT	2	1	--	1	--	--	991.40	987.90	2.11
	11.1	31B+12	39.9	LT	2	--	1	--	1	--	992.25	985.25	5.61
	11.2	31B+40	28.1	LT	2	--	1	--	1	--	992.43	985.79	5.25
	11.3	33B+23.8	27.5	LT	2	--	1	--	1	--	993.40	987.24	4.77
	11.4	33B+23.8	19.5	RT	2	--	1	--	1	--	993.56	987.57	4.60
	11.5	31B+20	24.5	RT	2	--	1	--	1	--	992.52	985.15	5.98
	11.6	31B+56	20.4	RT	2	--	1	--	1	--	992.70	985.46	5.85
PROJECT 6999-09-79 TOTALS						2	27	7	26	1			

DEPTH OF STRUCTURE IS GUTTER FLANGE OR RIM ELEVATION MINUS THE DEPTH OF FRAME AND RINGS MINUS THE STRUCTURE BOTTOM ELEVATION.
DEPTH OF FRAME AND RINGS FOR TYPE J COVER IS 1.39'. (INCLUDES 0.64' FOR RINGS)
DEPTH OF FRAME AND RINGS FOR TYPE H & TYPE T COVERS IS 1.17'. (INCLUDES 0.64' FOR RINGS)
CATCH BASINS SHALL HAVE A 3' SUMP.

ADJUSTING MANHOLES AND INLETS

PROJECT ID	CATEGORY	STAGE	STATION	OFFSET	LOCATION	611.8110	611.8115	SPV.0060.07	REMARKS
						ADJUSTING MANHOLE COVERS EACH	ADJUSTING INLET COVERS EACH	ADJUSTING WATER VALVE BOXES EACH	
6999-09-79	0020	1	21A+37	15' RT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0020	1	24A+31	17' RT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0020	1	26A+81	16' RT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0010	1	27A+36	17.5' LT	1ST ST N	--	1	--	STORM SEWER INLET
	0020	1	15A+35	12' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	15A+42	10' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	21A+10	10' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	21A+13	7' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	20A+62	38' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	24A+80	12' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	24A+82	6' RT	1ST ST N	--	--	1	WATER VALVE
	0020	1	26A+82	15' RT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0020	2	35A+50	23' LT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0020	2	35B+28	18' LT	1ST ST N	--	--	1	WATER VALVE
	0020	2	35B+48	41' LT	1ST ST N	1	--	--	SANITARY SEWER MANHOLE
	0020	2	35B+45	19' LT	1ST ST N	--	--	1	WATER VALVE
PROJECT 6999-09-79 TOTAL						6	1	9	

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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LANDSCAPING

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	625.1500	627.0200	630.0120	630.0130	606.0100	645.0130	SPV.0180.01	SPV.0120.01	SPV.0030.01
						TOPSOIL	MULCHING	SEEDING	SEEDING	RIPRAP LIGHT	GEOTEXTILE	PREPARING	WATER FOR	FERTILIZER
6999-09-79	1	14A+50	-	20A+40	RT	SY	SY	MIXTURE NO. 20	MIXTURE NO. 30	CY	TYPE R	TOPSOIL FOR	SEEDED	FOR LAWN
						---	---	---	---	---	---	TURF	AREAS	TURF
						440	---	---	12	---	---	440	10	0.3
	1	20A+77	-	24A+10	RT	300	---	---	8	---	---	300	7	0.2
	1	24A+51	-	27A+28	RT	290	---	---	8	---	---	290	7	0.2
	1	18A+29	-	18A+85	LT	210	---	---	6	---	---	210	5	0.1
	1	18A+50	-	27A+06	LT	810	---	---	22	---	---	810	18	0.5
	1	14A+50	-	20A+41	RT	420	420	8	---	---	---	420	9	0.3
	1	20A+77	-	24A+12	RT	90	90	2	---	---	---	90	2	0.1
	1	24A+51	-	27A+28	RT	65	65	1	---	---	---	65	1	0.1
	2	30B+04	-	30B+32	LT	18	18	---	---	---	---	18	0	0.1
	2	30B+23	-	31B+71	LT	100	---	---	3	---	---	100	2	0.1
	2	30B+97	-	32B+21	RT	160	---	---	4	---	---	160	4	0.1
	2	33B+10	-	34B+98	RT	360	---	---	10	---	---	360	8	0.2
	2	33B+83	-	35B+40	LT	350	---	---	9	---	---	350	8	0.2
	2	8A+57	-	9A+21	LT	55	---	---	1	---	---	55	1	0.1
	2	8A+03	-	8A+84	RT	60	---	---	2	---	---	60	1	0.1
	2	10A+00	-	11A+46	LT	260	---	---	7	---	---	260	6	0.2
	2	10A+15	-	15A+50	RT	120	---	---	3	---	---	120	3	0.1
	2	30B+52	-	10A+59	LT	350	350	6	---	---	---	350	8	0.2
	2	10A+12	-	14A+50	RT	170	170	3	---	---	---	170	4	0.1
	2	7A+63	-	8A+72	RT	100	100	2	---	---	---	100	2	0.1
	2	40C+34	-	43C+75	RT	560	560	10	---	---	---	560	13	0.4
	2	40C+28	-	43C+75	LT	240	240	4	---	---	---	240	5	0.2
	2	0D+00	-	2D+71	ROUNDAABOUT	---	---	---	---	85	250	---	---	---
PROJECT 6999-09-79 TOTAL						5,550	2,020	35	95	85	250	5,550	124	4
6999-11-72														
	1	27T+11	-	39T+28	LT	168	168	3	---	---	---	168	4	0.1
	1	27T+71	-	39T+28	RT	310	310	6	---	---	---	310	7	0.2
PROJECT 6999-11-72 TOTAL						480	480	9				480	11	1
TOTAL						6,030	2,500	45	95	85	250	6,030	135	5

SILT FENCE

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	628.1504	628.1520
						SILT	SILT
6999-09-79	1	18A+92	-	20A+82	LT	FENCE	FENCE
						LF	MAINTENANCE
	1	24A+00	-	26A+11	LT	220	65
	2	9A+81	-	10A+59	LT	75	25
UNDISTRIBUTED						25	---
PROJECT 6999-09-79 TOTAL						520	150
6999-11-72							
	1	26T+60	-	39T+29		1280	385
PROJECT 6999-11-72 TOTAL						1,280	385
TOTAL						1,800	535

MOBILIZATIONS EROSION CONTROL

PROJECT ID	LOCATION	628.1905	628.1910
		MOBILIZATIONS	MOBILIZATIONS
		EROSION	EROSION
		CONTROL	CONTROL
6999-09-79	PROJECT	(EACH)	(EACH)
		3	5
PROJECT 6999-07-79 TOTAL		3	5

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

INLET PROTECTION

				628.7005		628.7015	
				TYPE A		TYPE C	
PROJECT ID	STATION	OFFSET	LOCATION	STAGE	EACH	EACH	
6999-09-79	14A+90	19.50	LT	1ST ST N	1	1	1
	14A+90	19.50	RT	1ST ST N	1	1	1
	17A+50	19.50	LT	1ST ST N	1	1	1
	17A+50	19.50	RT	1ST ST N	1	1	1
	18A+80	19.50	LT	1ST ST N	1	1	1
	18A+80	19.50	RT	1ST ST N	1	1	1
	20A+79	19.50	RT	1ST ST N	1	1	1
	20A+95	19.50	LT	1ST ST N	1	1	1
	24A+00	19.50	LT	1ST ST N	1	1	1
	24A+13	42.41	RT	1ST ST N	1	1	1
	24A+55	25.17	RT	1ST ST N	1	1	1
	31B+12	39.85	LT	1ST ST N	2	1	1
	31B+20	24.46	RT	1ST ST N	2	1	1
	31B+40	28.11	LT	1ST ST N	2	1	1
	31B+56	20.39	RT	1ST ST N	2	1	1
	33B+24	27.50	LT	1ST ST N	2	1	1
	33B+24	19.50	RT	1ST ST N	2	1	1
	11A+99	19.50	LT	1ST ST N	2	1	1
	11A+99	19.50	RT	1ST ST N	2	1	1
	12A+49	19.50	LT	1ST ST N	2	1	1
	12A+49	19.50	RT	1ST ST N	2	1	1
	40C+50	24.06	LT	1ST ST N	2	1	1
	40C+50	36.29	RT	1ST ST N	2	1	1
	40C+81	18.10	LT	1ST ST N	2	1	1
	40C+70	27.31	RT	1ST ST N	2	1	1
	35B+18	43.97	RT	PARKING LOT	2	1	1
10A+33	62.07	RT	PARKING LOT	2	1	1	
	UNDISTRIBUTED			1	---	5	
	UNDISTRIBUTED			2	---	5	
PROJECT 6999-09-79 TOTAL					27	37	

EROSION MAT

						628.2006
						EROSION MAT
						URBAN CLASS I,
						TYPE A
PROJECT ID	STATION	-	STATION	LOCATION	STAGE	SY
6999-09-79	14A+50	-	20A+40	RT	1	440
	20A+77	-	24A+10	RT	1	300
	24A+51	-	27A+28	RT	1	290
	16A+29	-	18A+85	LT	1	210
	18A+50	-	27A+06	LT	1	810
	30B+23	-	31B+71	LT	2	100
	30B+97	-	32B+21	RT	2	160
	33B+10	-	34B+98	RT	2	360
	33B+83	-	35B+40	LT	2	350
	8A+57	-	9A+21	LT	2	55
	8A+03	-	8A+84	RT	2	60
	10A+00	-	11A+46	LT	2	260
	10A+15	-	15A+50	RT	2	120
	43C+75	-	43C+82	RT	2	3
	44C+54	-	44C+64	RT	2	3
	UNDISTRIBUTED					
PROJECT 6999-09-79 TOTAL						3,900

PERMANENT SIGNING

							637.0202	634.0814		634.0816
							SIGNS	REFLECTIVE	TUBULAR STEEL POST 2X2-INCH	
							TYPE II	14 FT	16 FT	
PROJECT ID	SIGN NO.	STATION	LOCATION	STAGE	SIGN CODE/MESSAGE	SIGN SIZE IN x IN	SF	EACH	EACH	
6999-09-79	2-1	20A+75	RT	1	R1-1/STOP	30X30	5.18	1	--	
	2-2	21A+75	RT	1	R7-1D/NO PARKING ANY TIME	18X24	3.00	1	--	
	2-3	23A+25	RT	1	R7-1D/NO PARKING ANY TIME	18X24	3.00	1	--	
	2-4	24A+50	RT	1	R1-1/STOP	30X30	5.18	1	--	
	2-5	26A90	RT	1	R7-51L/NO PARKING HERE TO CORNER	18X24	3.00	1	--	
	1-1	32B+00	RT	2	W2-6/ROUNDABOUT SYMBOL	30X30	6.25	--	1	
					W2-6P/ROUNDABOUT AHEAD	30X16	3.12	--	--	
					W13-1/15 MPH	18X18	2.25	--	--	
	1-2	34B+95	RT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-3	35B+30	LT	2	R1-2/YIELD	36X31	3.88	--	1	
					R6-2R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-4	34B+60	LT	2	R4-7/KEEP RIGHT	24X30	5.00	1	--	
	1-5A	2D+50	RT	2	R6-4B/ROUNDABOUT CHEVRON	48X24	8.00	2	--	
					R6-1R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-5B	3D+30	RT	2	R6-4B/ROUNDABOUT CHEVRON	48X24	8.00	2	--	
					R6-1R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-5C	3D+90	RT	2	R6-4B/ROUNDABOUT CHEVRON	48X24	8.00	2	--	
					R6-1R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-5D	4D+60	RT	2	R6-4B/ROUNDABOUT CHEVRON	48X24	8.00	2	--	
					R6-1R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-6	35B+10	LT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-7	8A+60	LT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-8			2	W2-6/ROUNDABOUT SYMBOL	30X30	6.25	--	1	
					W2-6P/ROUNDABOUT AHEAD	30X16	3.12	--	--	
					W13-1/15 MPH	18X18	2.25	--	--	
	1-9	8A+50	RT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-10	8A+65	RT	2	R1-2/YIELD	36X31	3.88	--	1	
					R6-2R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-11	40C+50	RT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-12	40C+80	RT	2	R5-2/NO TRUCKS SYMBOL	24X24	4.00	1	--	
	1-13	40C+90	RT	2	R4-7/KEEP RIGHT	24X30	5.00	1	--	
	1-14A	41C+95	RT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-14B	42C+25	LT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
	1-15	42C+50	RT	2	R2-1/SPEED LIMIT 25 MPH	24X30	5.00	1	--	
	1-16	43C+60	RT	2	R7-53D/NO PARKING ON THIS SIDE	18X24	3.00	1	--	
	1-17	10A+30	RT	2	R1-2/YIELD	36X31	3.88	--	1	
					R6-2R/ONE WAY (RIGHT)	24X30	5.00	--	--	
	1-18	10A+45	LT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--	
					W16-7L/DIAGONAL ARROW	24X12	3.00	--	--	
1-19	11A+40	RT	2	R4-7/KEEP RIGHT	24X30	5.00	1	--		
1-20	11A+00	RT	2	R5-2/NO TRUCKS SYMBOL	24X24	4.00	1	--		
1-21	13A+50	LT	2	W2-6/ROUNDABOUT SYMBOL	30X30	6.25	--	1		
				W2-6P/ROUNDABOUT AHEAD	30X16	3.12	--	--		
				W13-1/15 MPH	18X18	2.25	--	--		
1-22A	10A+40	RT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--		
				W16-7L/DIAGONAL ARROW	24X12	3.00	--	--		
1-22B	40C+70	LT	2	W11-2/PEDESTRIAN CROSSING	30X30	6.25	1	--		
				W16-7L/DIAGONAL ARROW	24X12	3.00	--	--		
1-23	12A+00	RT	2	R2-1/SPEED LIMIT 25 MPH	24X30	5.00	1	--		
1-24	40C+40	RT	2	R1-2/YIELD	36X31	3.88	--	1		
				R6-2R/ONE WAY (RIGHT)	24X30	5.00	--	--		
1-25	42C+50	LT	2	R7-53D/NO PARKING ON THIS SIDE	18X24	3.00	1	--		
1-26	43C+30	LT	2	W2-6/ROUNDABOUT SYMBOL	30X30	6.25	--	1		
				W2-6P/ROUNDABOUT AHEAD	30X16	3.12	--	--		
				W13-1/15 MPH	18X18	2.25	--	--		
PROJECT 6999-09-79 TOTALS							284.86	32.00	8.00	

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING SIGNS

PROJECT ID	STATION	LOCATION	STAGE	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
6999-09-79	15A+40	RT	1	--	2	1	--
	15A+90	LT	1	--	1	1	--
	20A+30	RT	1	2	--	--	1
	20A+75	RT	1	1	--	--	1
	21A+95	RT	1	--	2	1	--
	23A+40	RT	1	--	2	1	--
	24A+50	RT	1	2	1	--	1
	26A+60	LT	1	2	--	--	1
	26A+90	RT	1	--	1	1	--
	30B+25	LT	2	--	1	1	--
	31B+40	LT	2	2	--	--	2
	31B+40	RT	2	1	--	--	1
	32B+70	LT	2	1	--	--	1
	33B+95	RT	2	--	1	1	--
	34B+20	LT	2	1	--	--	1
	34B+25	LT	2	1	--	--	1
	34B+50	RT	2	--	1	1	--
	34B+95	LT	2	--	1	1	--
	35B+20	LT	2	--	1	1	--
	35B+25	LT	2	--	1	1	--
	7A+65	RT	2	--	1	1	--
	7A+90	RT	2	--	3	1	--
	9A+90	LT	2	--	1	1	--
	10A+25	RT	2	--	2	1	--
	10A+50	LT	2	--	1	1	--
	11A+20	LT	2	--	1	1	--
	13A+50	LT	2	--	1	1	--
	40C+25	LT	2	--	2	1	--
	40C+25	RT	2	--	1	1	--
	40C+45	LT	2	--	1	1	--
	41C+20	RT	2	--	1	1	--
	41C+70	RT	2	--	1	1	--
	42C+10	LT	2	--	2	1	--
	2D+45	RT	2	--	1	1	--
	3D+95	RT	2	--	2	1	--
	4D+30	RT	2	--	2	1	--
	4D+60	RT	2	--	1	1	--
PROJECT 6999-09-79 TOTAL				13	39	28	10

TRAFFIC CONTROL

PROJECT ID	STAGE	DAYS IN SERVICE	643.0100	643.0420		643.0705		643.0900	
			TRAFFIC CONTROL PROJECT	TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS	
			EACH	NO.	DAYS	NO.	DAYS	NO.	DAYS
6999-09-79	1	51	0.5	14	714	12	612	21	1,071
	2	72	0.5	22	1,584	24	1,728	26	1,872
			1	2,298		2,340		2,943	

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PAVEMENT MARKING ITEMS

						646.0106	646.0106	646.0126	646.0126		647.0156	647.0166	647.0250	647.0356	647.0606	647.0656	647.0716	647.0716	
						PAVEMENT MARKING EPOXY 4-INCH YELLOW	PAVEMENT MARKING EPOXY 4-INCH WHITE	PAVEMENT MARKING EPOXY 8-INCH WHITE	PAVEMENT MARKING EPOXY 8-INCH YELLOW	646.0600 REMOVING ARROWS EPOXY MARKINGS	PAVEMENT MARKING ARROWS EPOXY TYPE 1 EACH	PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	PAVEMENT MARKING SYMBOLS EPOXY HANDICAP EACH	PAVEMENT MARKING WORDS EPOXY ONLY EACH	PAVEMENT MARKING ISLAND NOSE EPOXY YELLOW LF	PAVEMENT MARKING PARKING STALL WHITE LF	PAVEMENT MARKING DIAGONAL EPOXY 8-INCH WHITE EACH	PAVEMENT MARKING DIAGONAL EPOXY 8-INCH YELLOW EACH	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH LF
PROJECT ID	STAGE	STATION	-	STATION	LOCATION	TYPE	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF	LF	EACH	EACH	LF
6999-09-79	1	14A+50	-	27A+41	1ST STREET NORTH	VARIOUS	---	---	---	---	---	---	---	---	---	---	---	---	2,225
	2	10A+18	-	27A+41	1ST STREET NORTH	VARIOUS	3,110	3,210	---	---	---	---	---	---	3	120	---	20	---
	2	30B+52	-	35B+34	1ST STREET NORTH	VARIOUS	840	830	160	310	---	1	1	---	3	---	40	130	---
	2	7A+63	-	9A+26	MARKET ST	VARIOUS	100	510	110	---	1	2	---	1	2	---	---	100	---
	2	40C+39	-	43C+75	BAKER ST	VARIOUS	800	600	---	---	---	---	---	---	3	---	---	10	---
	2	0D+00	-	2D+71	ROUNDAABOUT	VARIOUS	---	---	---	---	---	---	---	---	---	---	---	---	---
	2	UNDISTRIBUTED			PARKING STALLS	VARIOUS	---	---	---	---	100	---	---	7	---	300	---	---	---
	SUBTOTAL						4,850	5,150	270	310	100	2	3	7	1	11	220	40	260
PROJECT 6999-09-79 TOTAL							10,000		580	100	2	3	7	1	11	420		300	2,230

PAVEMENT MARKING - GROOVED PREFORMED THERMOPLASTIC ITEMS

PAVEMENT MARKING - GROOVED PREFORMED THERMOPLASTIC ITEMS							SPV.0060.05	SPV.0060.06	SPV.0090.01	SPV.0090.02	SPV.0090.03	SPV.0090.04
PROJECT ID	STAGE	STATION	-	STATION	LOCATION	TYPE	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT
							MARKING	MARKING	MARKING	MARKING	MARKING	MARKING
							GROOVED	GROOVED	GROOVED	GROOVED	GROOVED	GROOVED
							PREFORMED	PREFORMED	PREFORMED	PREFORMED	PREFORMED	PREFORMED
							THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC
							ARROWS	WORDS	8-INCH	18-INCH	CROSSWALK	DIAGONAL
	TYPE 3	YIELD	WHITE	WHITE	6-INCH	8-INCH						
	EACH	EACH	LF	LF	WHITE	WHITE						
6999-09-79	2	10A+18	-	27A+41	1ST STREET NORTH	VARIOUS	---	1	70	20	100	30
	2	30B+52	-	35B+34	1ST STREET NORTH	VARIOUS	---	1	110	20	100	40
	2	7A+63	-	9A+26	MARKET ST	VARIOUS	---	1	80	20	80	30
	2	40C+39	-	43C+75	BAKER ST	VARIOUS	---	1	80	20	90	30
	2	0D+00	-	2D+71	ROUNDABOUT	VARIOUS	4	---	---	---	---	---
	2	UNDISTRIBUTED		PARKING STALLS	VARIOUS	---	---	---	---	---	---	---
PROJECT 6999-09-79 TOTAL							4	4	340	80	370	130

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONSTRUCTION STAKING

						650.4000				
						STORM	650.5000	650.5500	650.9910	650.9920
						SEWER	BASE	CURB &	SUPPLEMENTAL	SLOPE
								GUTTER	CONTROL	STAKES
PROJECT ID	STAGE	STATION	-	STATION	LOCATION	EACH	LF	LF	LS	LF
6999-09-79	1	14A+50	-	27A+41	1ST STREET NORTH	17	1,300	2,640	1	1,300
	2	10A+18	-	27A+41	1ST STREET NORTH	6	1,723	1,300	---	1,723
	2	30B+52	-	35B+34	1ST STREET NORTH	7	485	1,240	---	481
	2	7A+63	-	9A+26	MARKET ST	---	165	520	---	165
	2	40C+39	-	43C+75	BAKER ST	4	340	865	---	340
	2	0D+00	-	2D+71	ROUNDAABOUT	3	275	450	---	275
PROJECT 6999-09-79 TOTALS						37	4,290	7,020	1	4,290
6999-11-72	1	26T+66	-	39T+32	MULTI-USE PATH	---	1,266	---	1	1,266
	PROJECT 6999-11-72 TOTALS							1,270		1
TOTALS						37	5,560	7,020	2	5,560

SAWING PAVEMENT

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	690.0150	690.0250
						SAWING ASPHALT	SAWING CONCRETE
6999-09-79	1	14A+50			1ST ST N, RT	45	5
	1	14A+50			SIDEWALK RT	---	5
	1	15A+53			WALKWAY RT	---	5
	1	16A+35			WALKWAY RT	---	3
	1	17A+26			DRIVEWAY RT	---	15
	1	17A+84			DRIVEWAY RT	---	10
	1	18A+23			WALKWAY RT	---	6
	1	19A+50			WALKWAY RT	---	5
	1	20A+66			DRAKE ST	25	5
	1	20A+82			SIDEWALK RT	---	5
	1	21A+57			WALKWAY RT	---	5
	1	22A+31			WALKWAY RT	---	4
	1	23A+09			DRIVEWAY RT	---	10
	1	23A+38			WALKWAY RT	---	4
	1	23A+67			DRIVEWAY RT	---	10
	1	24A+30			FRANKLIN ST	35	5
	1	24A+74			SIDEWALK RT	---	3
	1	25A+65			WALKWAY RT	---	4
	1	26A+29			WALKWAY RT	---	5
	1	26A+91			WALKWAY RT	---	4
	1	27A+30	-	27A+40	1ST ST N	60	5
	2	14A+25			DRIVEWAY RT	25	5
	2	30B+52			1ST ST N	---	80
	2	31B+38			SIDEWALK LT	---	8
	2	30B+63	33B+65		PARKING LOT RT	270	---
	2	32B+76			SIDEWALK LT	---	15
	2	34B+66	-	35B+61	PARKING LOT RT	70	5
	2	10A+46			SIDEWALK LT	---	8
	2	10A+28	-	11A+77	PARKING LOT	120	5
	2	7A+63	-	7A+91	SIDEWALK LT	---	35
	2	7A+63			MARKET ST	55	30
PROJECT 6999-09-79 TOTALS						710	320
6999-11-72	1	14A+50			1ST ST N, LT	---	7
	1	18A+87			1ST ST N, LT	10	---
	1	26T+66			MULTI-USE PATH	10	---
	2	30B+23			MULTI-USE PATH	---	10
PROJECT 6999-11-72 TOTALS						20	20
TOTALS						730	340

NOTE:
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS

PROJECT ID	POINT NUMBER	Y	X	SPV.0105.01
				LS
6999-09-79	100	452,845.67	730,575.13	
	101	453,117.94	730,963.46	
	102	453,162.79	730,985.57	
	103	453,173.57	730,990.79	
	104	453,424.68	731,114.47	
	105	453,564.36	731,180.03	
	106	453,715.14	731,253.27	
	107	453,903.81	731,344.55	
	108	453,958.05	731,370.31	
	109	454,042.52	731,411.43	
	110	454,127.09	731,452.25	
	111	454,191.16	731,483.26	
	112	454,245.91	731,507.61	
	114	453,618.00	731,206.44	
	115	454,778.11	731,677.92	
6999-11-72	125	452,655.19	730,230.54	
	126	452,684.63	730,324.96	
	127	452,694.42	730,356.46	
	128	452,703.28	730,384.79	
	129	455,089.91	731,417.06	
	130	454,944.05	731,538.74	
	131	454,922.09	731,542.73	
	132	455,209.68	731,463.83	
				1

REMOVE AND RESTORE TERRACE PAVERS

PROJECT ID	STAGE	STATION	-	STATION	LOCATION	SPV.0165.02
						REMOVE AND RESTORE TERRACE PAVERS SF
6999-09-79	2	7A+50			MARKET ST, LT	410
	TOTAL					410

LIGHTING AND SIGNAL REMOVAL ITEMS

LOCATION	R/L	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULLBOX EACH
30'B'+24	LT	--	1
30'B'+48	LT	--	1
30'B'+51	LT	1	--
35'B'+06	RT	1	--
35'B'+24	RT	1	--
35'B'+24	RT	1	--
35'B'+36	RT	1	--
35'B'+23	LT	1	--
35'B'+20	LT	1	--
35'B'+27	LT	1	--
31'B'+24	RT	1	--
32'B'+89	LT	1	--
7'A'+42	LT	--	--
9'A'+15	LT	1	--
9'A'+21	RT	1	--
9'A'+84	LT	1	--
10'A'+15	RT	1	--
10'A'+12	RT	1	--
40'C'+02	LT	1	--
40'C'+04	RT	1	--
10'A'+21	LT	1	--
8'A'+28	LT	1	--
41'C'+18	RT	1	--
11'A'+27	LT	1	--
13'A'+48	LT	1	--
15'A'+91	LT	1	--
42'C'+41	RT	1	--
43'C'+67	RT	1	--
PROJECT TOTALS		25	2

LIGHTING CONDUIT AND ELECTRICAL WIRE ITEMS

			652.0225	652.0235	652.0335	652.0340	652.0605	SPV.0090.05	655.0630
			CONDUIT RIGID NONMETALLIC				CONDUIT SPECIAL 2-INCH	CONDUIT RIGID METALLIC 2-INCH FURNISH ONLY	ELECTRICAL WIRE LIGHTING 4 AWG
			SCHEDULE 40 2-INCH	SCHEDULE 40 3-INCH	SCHEDULE 80 3-INCH	SCHEDULE 80 4-INCH			
FROM	-	TO	LF	LF	LF	LF	LF	LF	LF
LIMITS	-	CB100	--	--	--	--	--	100	--
LIMITS	-	PB100	14	--	--	--	--	--	--
CB100	-	PB100	--	10	--	--	--	--	154
CB100	-	PB100	--	10	--	--	--	--	154
CB100	-	PB100	--	10	--	--	--	--	--
PB100	-	PB101	--	61	--	--	--	--	1,533
PB100	-	PB101	--	61	--	--	--	--	1,533
PB100	-	PB101	--	61	--	--	--	--	--
PB101	-	SL110	--	7	--	--	--	--	266
PB101	-	PB102	--	--	76	--	--	--	616
PB101	-	PB102	--	--	76	--	--	--	--
LIMITS	-	PB102	8	--	--	--	--	--	--
PB102	-	SL109	87	--	--	--	--	--	693
XING	-	XING	--	--	--	100	--	--	--
PB101	-	SL108	265	--	--	--	--	--	1,939
SL109	-	SL106	303	--	--	--	--	--	2,205
PB103	-	SL106	9	--	--	--	--	--	147
SL105	-	PB103	66	--	--	--	--	--	546
SL105	-	PB104	53	--	--	--	--	--	455
PB104	-	PB105	37	--	--	--	--	--	--
PB105	-	LIMITS	41	--	--	--	--	--	--
PB105	-	LIMITS	--	--	--	--	95	--	--
PB104	-	PB106	--	--	59	--	--	--	497
EXIST SL	-	EOP	--	--	--	--	71	--	--
EOP	-	PB106	69	--	--	--	--	--	--
SL104	-	PB106	--	9	--	--	--	--	294
PB106	-	SL103	75	--	--	--	--	--	609
SL103	-	PB107	--	85	--	--	--	--	1,358
PB107	-	SL102	117	--	--	--	--	--	903
PB107	-	PB111	--	--	50	--	--	--	434
SL111	-	PB106	67	--	--	--	--	--	553
PB111	-	SL101	256	--	--	--	--	--	1,876
PB111	-	SL100	--	--	--	12	--	--	504
PB111	-	SL112	64	--	--	--	--	--	532
SL112	-	PB110	42	--	--	--	--	--	--
PB110	-	SL114	98	--	--	--	--	--	770
PB110	-	PB109	--	--	69	--	--	--	--
PB109	-	PB113	452	--	--	--	--	--	3,248
PB109	-	SL113	--	--	--	10	--	--	462
PB109	-	SL111	68	--	--	--	--	--	560
SL111	-	PB108	65	--	--	--	--	--	539
PB108	-	PB103	--	--	63	--	--	--	--
PB108	-	SL107	94	--	--	--	--	--	742
SL107	-	SL108	122	--	--	--	--	--	938
SL114	-	SL115	139	--	--	--	--	--	1,057
SL115	-	SL116	140	--	--	--	--	--	1,064
SL116	-	SL117	157	--	--	--	--	--	1,183
PB113	-	SL119	389	--	--	--	--	--	2,807
SL117	-	SL118	150	--	--	--	--	--	1,134
SL118	-	SL120	280	--	--	--	--	--	2,044
SL119	-	SL121	274	--	--	--	--	--	2,002
SL120	-	SL122	273	--	--	--	--	--	1,995
SL121	-	SL123	278	--	--	--	--	--	2,030
SL122	-	SL124	281	--	--	--	--	--	2,051
SL123	-	SL125	282	--	--	--	--	--	2,058
SL124	-	LIMITS	142	--	--	--	--	--	--
SL125	-	LIMITS	25	--	--	--	--	--	--
SL102	-	EOP	158	--	--	--	--	--	--
EOP	-	PB112	--	--	--	--	84	--	--
UNDISTRIBUTED			50	16	17	18	50	--	515
PROJECT TOTALS			5,490	330	410	140	300	100	45,000

LIGHTING PULLBOX ITEMS

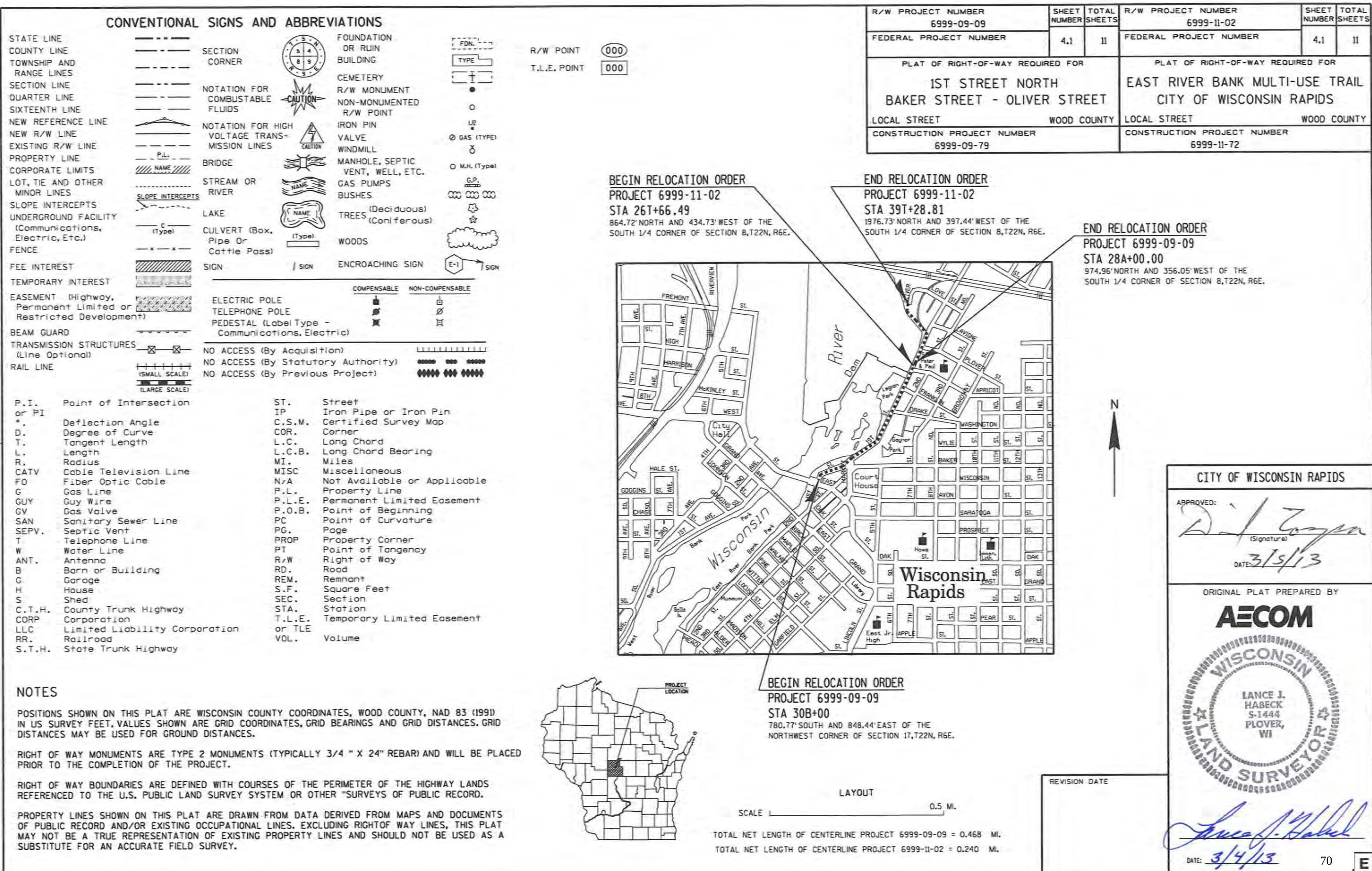
653.0140 PULL BOXES STEEL 24X42-INCH EACH				
PULLBOX NUMBER	STATION	OFFSET	R/L	
PB100	30'B'+12	65.1'	LT	1
PB101	30'B'+60	36.2'	LT	1
PB102	30'B'+59	38.8'	RT	1
PB103	34'B'+82	24.9'	RT	1
PB104	8'A'+38	25.5'	LT	1
PB105	8'A'+02	27.9'	LT	1
PB106	8'A'+33	32.6'	RT	1
PB107	40'C'+99	27.6'	RT	1
PB108	34'B'+93	37.2'	LT	1
PB109	10'A'+56	27.9	LT	1
PB110	10'A'+56	41.1'	RT	1
PB111	40'C'+94	21.3'	LT	1
PB112	44'C'+59	23.7	RT	1
PB113	14'A'+84	22.5'	LT	1
PROJECT TOTALS				14

LIGHTING UNIT ITEMS

				SPV.0060.01 DECORATIVE LIGHT UNIT EACH	SPV.0060.02 DECORATIVE TWIN ARM LIGHT UNIT EACH	SPV.0060.03 DECORATIVE LIGHT UNIT - FURNISH ONLY EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
LIGHT UNIT	STATION	OFFSET	R/L				
SL100	40'C'+82	22.5'	LT	1	--	--	171
SL101	43'C'+47	29.8'	LT	1	--	--	171
SL102	42'C'+16	25.0'	RT	1	--	--	171
SL103	40'C'+39	54.7'	RT	1	--	--	171
SL104	8'A'+26	36.8'	RT	1	--	--	171
SL105	8'A'+89	34.1'	LT	--	1	--	269
SL106	34'B'+85	29.6'	RT	1	--	--	171
SL107	34'B'+05	27.0'	LT	1	--	--	171
SL108	32'B'+88	42.5'	LT	1	--	--	171
SL109	31'B'+67	26.7'	RT	1	--	--	171
SL110	30'B'+53	37.0'	LT	1	--	--	171
SL111	9'A'+79	42.3'	LT	1	--	--	171
SL112	10'A'+35	65.3'	RT	1	--	--	171
SL113	10'A'+56	27.9'	LT	1	--	--	171
SL114	11'A'+74	32.0'	RT	1	--	--	171
SL115	13'A'+10	23.0'	RT	1	--	--	171
SL116	14'A'+49	23.0'	RT	1	--	--	171
SL117	15'A'+96	23.0'	RT	1	--	--	171
SL118	17'A'+41	24.5'	RT	1	--	--	171
SL119	18'A'+84	24.5'	LT	1	--	--	171
SL120	20'A'+23	24.5'	RT	1	--	--	171
SL121	21'A'+57	24.5'	LT	1	--	--	171
SL122	22'A'+96	24.5'	RT	1	--	--	171
SL123	24'A'+35	24.5'	LT	1	--	--	171
SL124	25'A'+76	24.5'	RT	1	--	--	171
SL125	27'A'+15	23.3'	LT	1	--	--	171
UNDISTRIBUTED				--	--	1	256
PROJECT TOTALS				25	1	1	4,800

LIGHTING CONTROL AND CABINET ITEMS

		654.0215 CONCRETE CONTROL CABINET BASES TYPE 9 EACH	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB100) LS	SPV.0060.04 LIGHTING CONTROL CABINET EACH	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (6999-09-79) LS
CABINET #	STATION	R/L			
CB100	30'B'+07	LT	1	1	1
PROJECT TOTALS			1	1	1



4

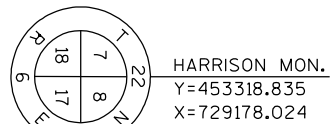
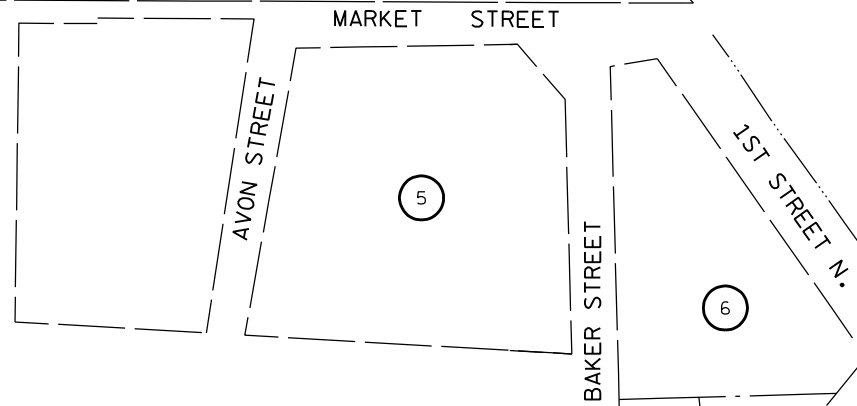
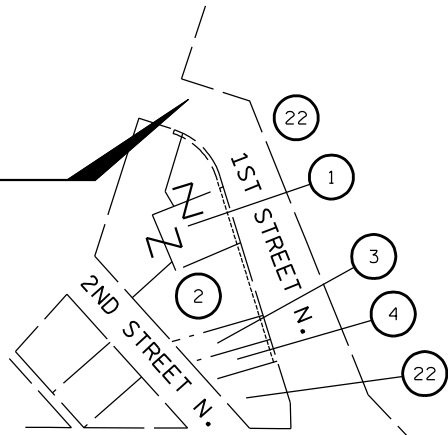
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

4

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL ACRES OR S.F.	R/W ACRES OR S.F. REQUIRED			TOTAL ACRES OR S.F.REM.	T.L.E. ACRES OR S.F.	P.L.E. ACRES OR S.F.
					NEW	EXISTING	TOTAL			
1	4.4	CHARLIES SPORTS BAR, LLC	T.L.E.	0.61	-----	-----	-----	0.61	0.02	-----
2	4.4	MICHAEL ZURFLUH & CELESTE ZURFLUH	T.L.E.	0.30	-----	-----	-----	0.30	0.01	-----
3	4.4	MICHAEL ZURFLUH & CELESTE ZURFLUH	T.L.E.	0.09	-----	-----	-----	0.09	165 S.F.	-----
4	4.4	JAMES B. SPATH & JUDITH A. SPATH	T.L.E.	0.07	-----	-----	-----	0.07	148 S.F.	-----
5	4.5	WOOD COUNTY	FEE & T.L.E.	3.41	0.16	-----	0.16	3.25	0.17	-----
6	4.5, 4.6 & 4.7	WOOD COUNTY	FEE & T.L.E.	2.04	0.09	-----	0.09	1.95	0.17	-----
7	4.7	MARY A. SCHILL	FEE & T.L.E.	0.30	0.01	-----	0.01	0.29	0.03	-----
8	4.7	PATRICK L. GOODNESS & TERRI C. GOODNESS	FEE & T.L.E.	0.31	0.02	-----	0.02	0.29	0.04	-----
9	4.7	JUDITH A. KONOPA & MARVIN E. KONOPA	FEE & T.L.E.	0.23	168 S.F.	-----	168 S.F.	0.23	0.04	-----
10	4.7	PATRICK L. GOODNESS & TERRI C. GOODNESS	T.L.E.	0.88	-----	-----	-----	0.88	0.03	-----
11	4.7 & 4.8	DOUGLAS HAFENBREDL & KATHERINE HAFENBREDL	T.L.E.	0.76	-----	-----	-----	0.76	0.03	-----
12	4.8	CAROL L. KOBZA	T.L.E.	0.15	-----	-----	-----	0.15	0.01	-----
13	4.8	KATHY J. RABIDEAU	T.L.E.	0.21	-----	-----	-----	0.21	0.01	-----
14	4.8	CHRISTOPHER S. PETERSON & KRISANN N. PETERSON	T.L.E.	0.37	-----	-----	-----	0.37	0.04	-----
15	4.8	KENNETH J. LILA & CAROL J. LILA	T.L.E.	0.15	-----	-----	-----	0.15	0.02	-----
16	4.8 & 4.9	MATTHEW P. ARNDT	T.L.E.	0.18	-----	-----	-----	0.18	0.01	-----
17	4.9	JOHN A. DEMSKI & DONNA M. DEMSKI	T.L.E.	0.18	-----	-----	-----	0.18	141 S.F.	-----
18	4.9	JANE A. ABBOTT	T.L.E.	0.19	-----	-----	-----	0.19	141 S.F.	-----
19	4.9	KENNETH J. KAWLESKI	T.L.E.	0.19	-----	-----	-----	0.19	0.01	-----
20	4.9, 4.10, 4.11	CONSOLIDATED WATER POWER COMPANY	P.L.E.	0.67	-----	-----	-----	0.67	-----	0.46
21	4.10 & 4.11	NORTHERN STEEL CASTINGS, INC.	P.L.E. & T.L.E.	1.52	-----	-----	-----	1.52	0.25	0.05
22	4.4, 4.5, 4.6, 4.7, 4.8, 4.9	CITY OF WISCONSIN RAPIDS	FEE & T.L.E.	-----	0.02	-----	0.02	-----	0.61	-----
31	4.4, 4.5, 4.6, 4.10, 4.11	WISCONSIN RAPIDS WATER WORKS & LIGHTING COMMISSION (ELECTRIC)	RELEASE OF RIGHTS	-----	-----	-----	-----	-----	-----	-----
32	4.4, 4.10, 4.11	WE ENERGIES (GAS)	RELEASE OF RIGHTS	-----	-----	-----	-----	-----	-----	-----

BEGIN RELOCATION ORDER
PROJECT 6999-09-09
STA. 30B+00
Y=452,538.063
X=730,026.468



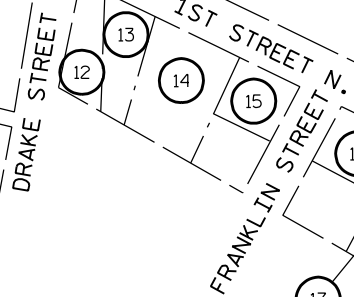
CITY OF WISCONSIN RAPIDS

WISCONSIN RIVER

END RELOCATION ORDER
PROJECT 6999-11-02
STA. 39T+28.81
Y = 455,281.001
X = 731,440.862

BEGIN RELOCATION ORDER
PROJECT 6999-11-02
STA. 26T+66.49
Y=454168.990
X=731403.574

GOV'T LOT 1
SEC. 17



GOV'T LOT 8
SEC. 8

END RELOCATION ORDER
PROJECT 6999-09-09
STA. 28A+00
Y=454279.232
X=731482.250

WISCONSIN RIVER

OLIVER ST.

PLOVER STREET

LAVIGNE STREET

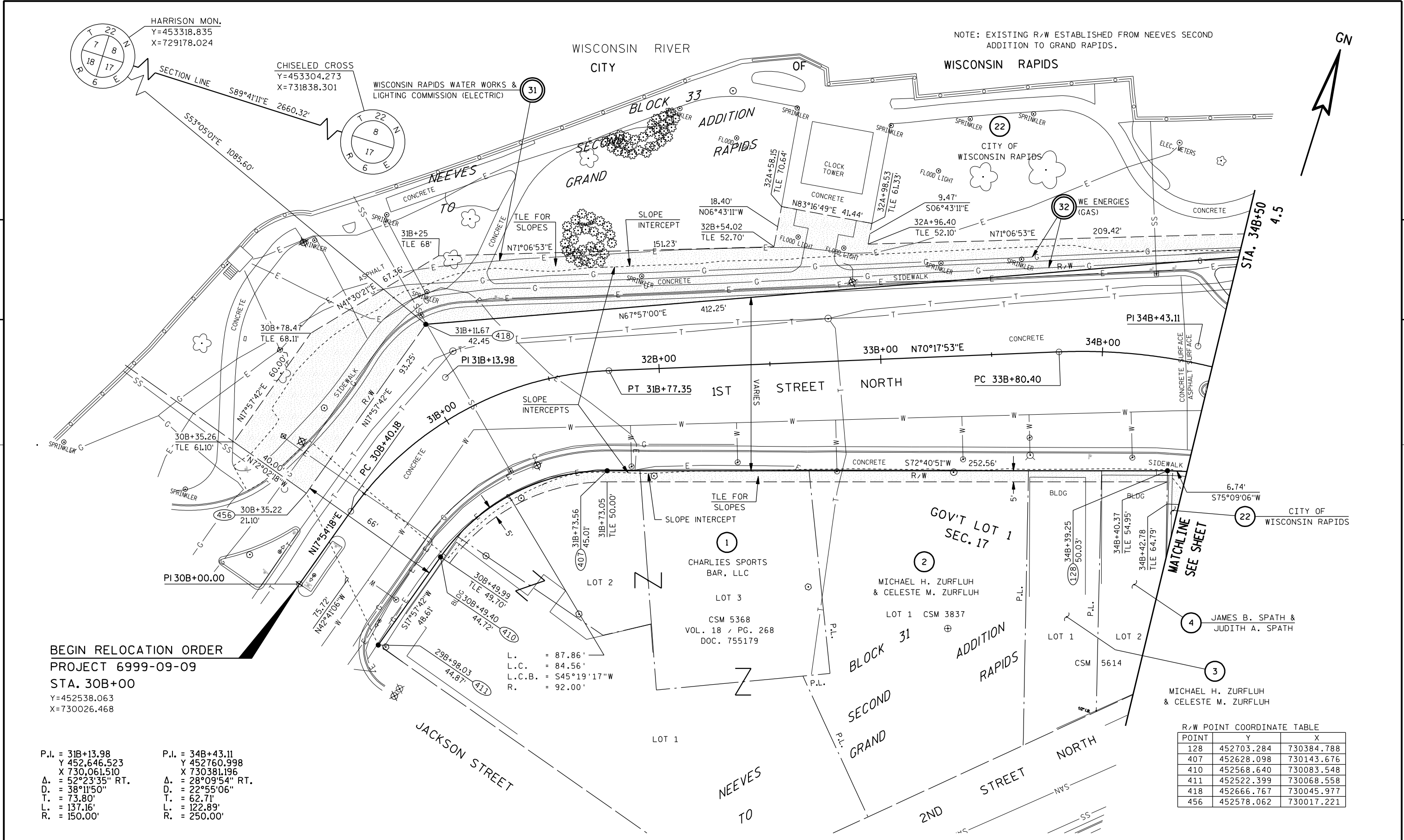
GOV'T LOT 7
SEC. 8

LOVE STREET

LOVE STREET

1ST STREET N.

REVISION DATE	DATE 3-5-13	NOT TO SCALE	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET NO: 4.3	E
			COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 72	



BEGIN RELOCATION ORDER
PROJECT 6999-09-09
STA. 30B+00
Y=452538.063
X=730026.468

P.I. = 31B+13.98
Y 452,646.523
X 730,061.510
Δ = 52°23'35" RT.
D = 38°11'50"
T = 73.80'
L = 137.16'
R = 150.00'

P.I. = 34B+43.11
Y 452,760.998
X 730,381.196
Δ = 28°09'54" RT.
D = 22°55'06"
T = 62.71'
L = 122.89'
R = 250.00'

R/W POINT COORDINATE TABLE		
POINT	Y	X
128	452703.284	730384.788
407	452628.098	730143.676
410	452568.640	730083.548
411	452522.399	730068.558
418	452666.767	730045.977
456	452578.062	730017.221

REVISION DATE	DATE 3-5-13	SCALE, FEET 0 20 40	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.4
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 73

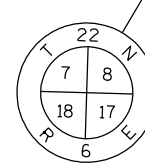
NOTE: EXISTING R/W ESTABLISHED FROM EAST SIDE
ASSESSOR'S PLAT NO. 36 AND NEEVES SECOND
ADDITION TO GRAND RAPIDS.

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
372 - 623	S88°22'05"W	62.50'
372 - 837	S88°22'05"W	22.98'
629 - 374	N01°03'28"W	25.94'
374 - 373	N48°52'55"E	94.73'
373 - 623	N88°22'05"E	269.33'
128 - 397	N72°40'51"E	56.49'
397 - 396	N88°22'05"E	33.70'
396 - 633	S00°09'15"W	39.00'
620 - 459	S88°53'25"W	29.04'
459 - 100	N09°44'25"W	58.26'
416 - 633	N00°09'15"E	14.43'
633 - 632	N19°31'50"W	10.24'

HARRISON MON.
Y=453318.835
X=729178.024

CHISELED CROSS
Y=453304.273
X=731838.301



SECTION LINE
1721.26'
NO. 36

S89°41'11"E 2660.32'
939.06'

PLAT
WISCONSIN RAPIDS

515.13'
S00°18'49"W

NO. 36

POINT	Y	X
416	452667.628	730472.263
419	452821.531	730428.074
439	452586.569	730472.045
617	452814.305	730611.347
620	452788.816	730614.017
623	452733.175	730897.626
624	452721.801	730763.774
625	452709.158	730763.225
626	452667.370	730574.151
629	452637.269	730557.519
631	452710.137	730410.636
632	452691.715	730468.877
633	452682.061	730472.302
634	452794.287	730896.442
842	452564.225	730558.868

P.I. = 34B+43.11
Y 452760.998
X 730381.196
Δ. = 28°09'54" RT.
D. = 22°55'06"
T. = 62.71'
L. = 122.89'
R. = 250.00'

P.I. = 10A+23.64
Y 452,815.254
X 730,553.851
Δ. = 14°41'43" LT.
D. = 47°44'47"
T. = 15.47'
L. = 30.78'
R. = 120.00'

P.I. = 35B+21.21
Y 452,749.275
X 730,460.968
Δ. = 22°30'52" RT.
D. = 63°39'40"
T. = 17.91'
L. = 35.37'
R. = 90.00'

P.I. = 35B+71.05
Y 452,723.736
X 730,504.309

P.I. = 40C+00
Y 452,752.607
X 730,569.937

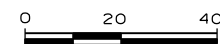
P.I. = 40C+56.83
Y 452,733.806
X 730,623.570
Δ. = 27°19'19" RT.
D. = 63°39'43"
T. = 21.87'
L. = 42.92'
R. = 90.00'

P.I. = PI 42C+62.33
Y 452,762.535
X 730,827.886
Δ. = 06°11'58" RT.
D. = 02°16'25"
T. = 136.47'
L. = 272.66'
R. = 2520.00'

REVISION DATE

DATE 3-5-13

SCALE, FEET



HWY: LOCAL STREET

COUNTY: WOOD

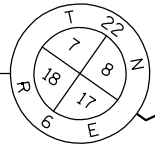
STATE R/W PROJECT NO. 6999-09-09/6999-11-02

CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72

PLAT SHEET 4.5

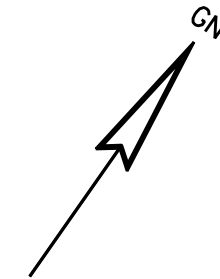
PS&E SHEET 74

HARRISON MON.
Y=453318.835
X=729178.024



P.I. = 10A+90.57
Y 452,879.436
X 730,573.441
Δ = 37°59'15" RT.
D. = 38°11'50"
T. = 51.63'
L. = 99.45'
R. = 150.00'

NOTE: EXISTING R/W ESTABLISHED FROM EAST SIDE
ASSESSOR'S PLAT NO. 36.



CITY OF WISCONSIN RAPIDS
WISCONSIN RIVER

CHISELED CROSS
Y=453304.273
X=731838.301

TLE FOR SLOPES
CITY OF WISCONSIN RAPIDS

MATCHLINE
SEE SHEET

GOV'T LOT LINE

WISCONSIN RAPIDS
WATER WORKS &
LIGHTING COMMISSION

STA. 10A+50
4.5

15A+00
TLE 38'
N35°02'19"W
15A+00
TLE 38'
11A+90.00
30.00'

15A+00
TLE 38'
N35°02'19"W
15A+00
TLE 38'

15A+00
TLE 38'
N35°02'19"W
15A+00
TLE 38'

15A+00
TLE 38'
N35°02'19"W
15A+00
TLE 38'

WOOD COUNTY

46

PLAT NO. 36

SIDE ASSESSOR'S

EAST

GOV'T LOT 1
SEC. 17

MEANDER LINE

SLOPE INTERCEPT

R/W

VARIES

ASPHALT

ASPHALT

SLOPE INTERCEPT

TLE FOR SLOPES

STA. 15A+00
4.7

MATCHLINE
SEE SHEET

R/W COURSE TABLE		
FROM - TO	BEARING	DISTANCE
459 - 100	N09°44'25"W	58.26'
100 - 101	N54°57'55"E	474.27'

R/W POINT COORDINATE TABLE		
POINT	Y	X
420	452892.709	730502.869
603	453092.849	730930.043
609	452884.896	730502.848
615	452914.144	730675.191
616	452856.347	730627.394

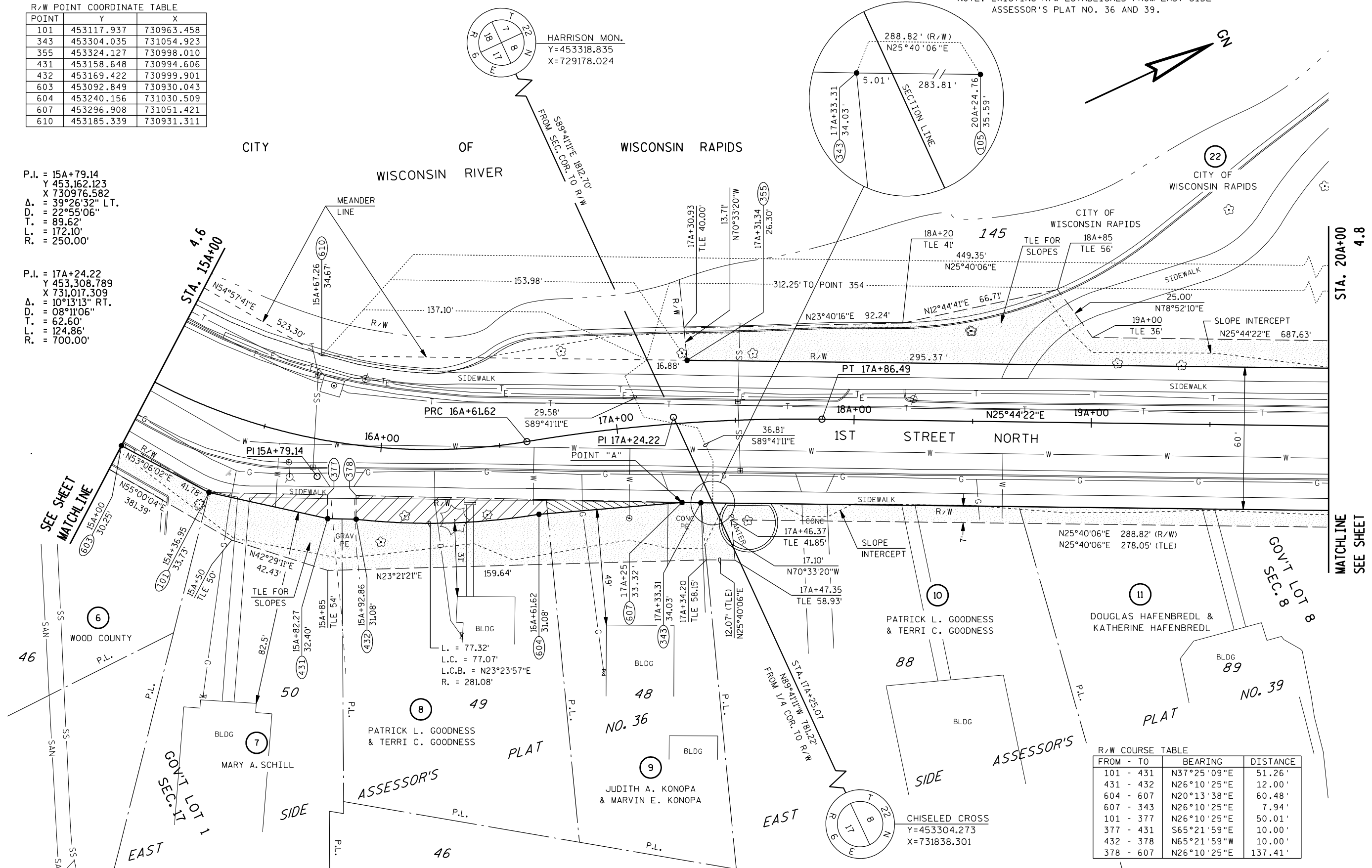
REVISION DATE	DATE 3-5-13	SCALE, FEET 0 20 40	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.6	E
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 75	

R/W POINT COORDINATE TABLE		
POINT	Y	X
101	453117.937	730963.458
343	453304.035	731054.923
355	453324.127	730998.010
431	453158.648	730994.606
432	453169.422	730999.901
603	453092.849	730930.043
604	453240.156	731030.509
607	453296.908	731051.421
610	453185.339	730931.311

P.I. = 15A+79.14
Y 453,162.123
X 730976.582
Δ = 39°26'32" LT.
D = 22°55'06"
T = 89.62'
L = 172.10'
R = 250.00'

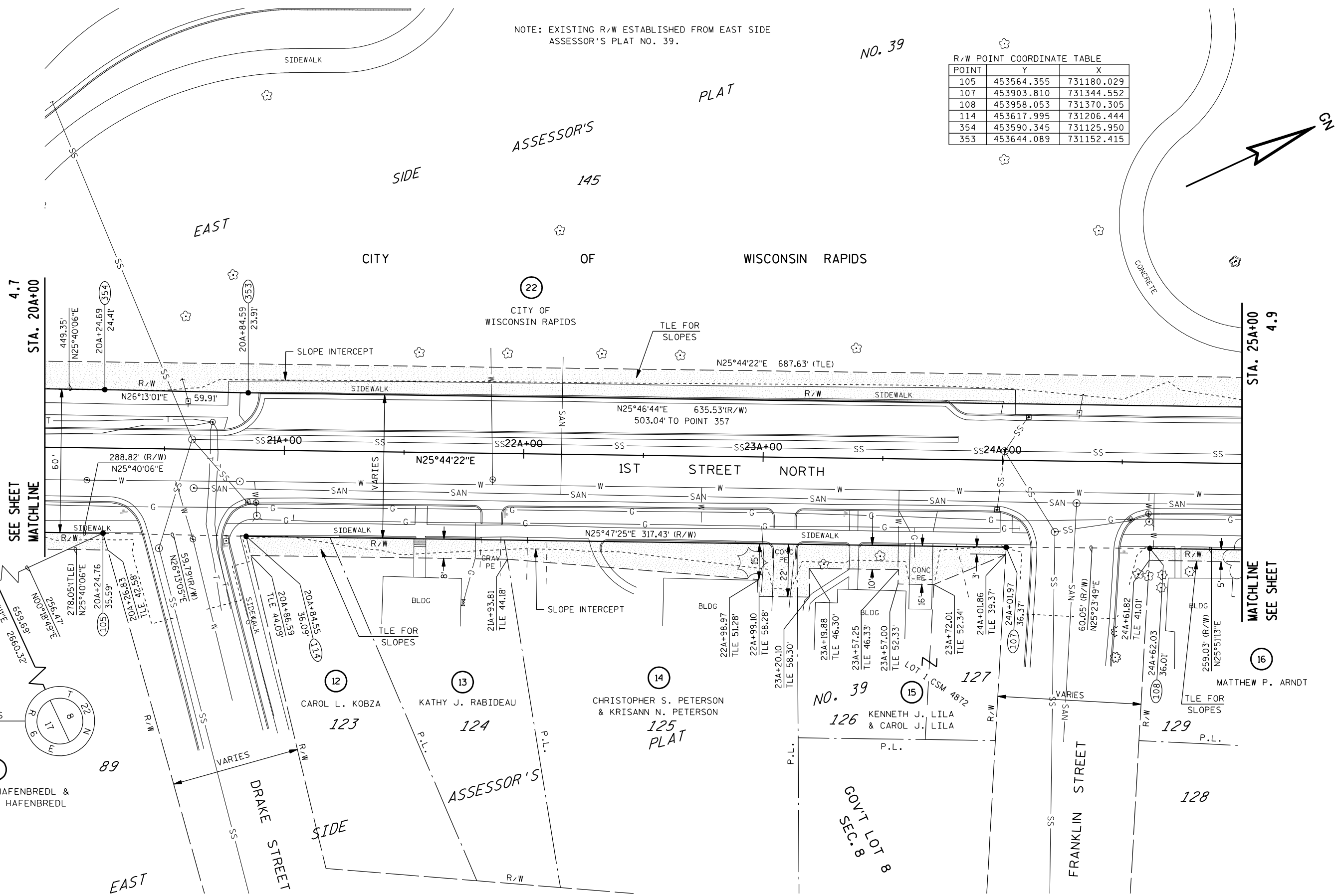
P.I. = 17A+24.22
Y 453,308.789
X 731,017.309
Δ = 10°13'13" RT.
D = 08°11'06"
T = 62.60'
L = 124.86'
R = 700.00'

NOTE: EXISTING R/W ESTABLISHED FROM EAST SIDE
ASSESSOR'S PLAT NO. 36 AND 39.



R/W COURSE TABLE		
FROM - TO	BEARING	DISTANCE
101 - 431	N37°25'09"E	51.26'
431 - 432	N26°10'25"E	12.00'
604 - 607	N20°13'38"E	60.48'
607 - 343	N26°10'25"E	7.94'
101 - 377	N26°10'25"E	50.01'
377 - 431	S65°21'59"E	10.00'
432 - 378	N65°21'59"W	10.00'
378 - 607	N26°10'25"E	137.41'

REVISION DATE	DATE 3-5-13	SCALE, FEET	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.7
	GRID FACTOR N/A	0 20 40	COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 76



R/W POINT COORDINATE TABLE		
POINT	Y	X
105	453564.355	731180.029
107	453903.810	731344.552
108	453958.053	731370.305
114	453617.995	731206.444
354	453590.345	731125.950
353	453644.089	731152.415

NOTE: EXISTING R/W ESTABLISHED FROM EAST SIDE
ASSESSOR'S PLAT NO. 39.

NO. 39

PLAT

ASSESSOR'S

145

CITY

OF

WISCONSIN RAPIDS

CITY OF
WISCONSIN RAPIDS

TLE FOR SLOPES	
1	1
2	2
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4	4
5	5
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89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

N25°44'22"E 687.63' (TLE)

1ST STREET NORTH

4.7
STA. 20A+00

STA. 25A+00
4.9

SEE SHEET
MATCHLINE

MATCHLINE
SEE SHEET

HARRISON MON.
Y=453318.835
X=729178.024

CHISELED CROSS
Y=453304.273
X=731838.301

DOUGLAS HAFENBREDL &
KATHERINE HAFENBREDL

CAROL L. KOBZA
123

KATHY J. RABIDEAU

124

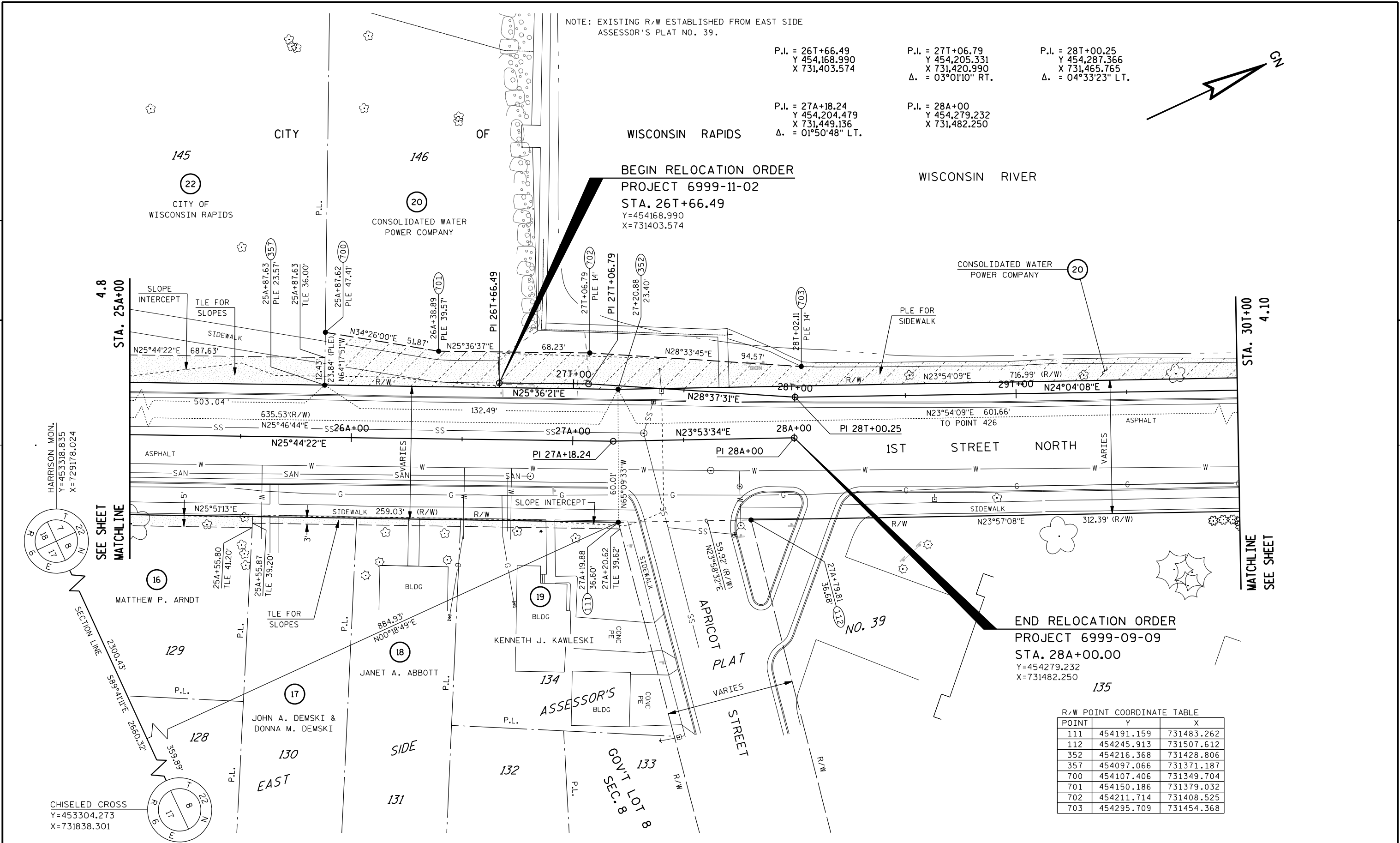
CHRISTOPHER S. PETERSON
& KRISANN N. PETERSON
125
PLAT

NO. 39 (15) CS 4872
126 KENNETH J. LILA
& CAROL J. LILA
P.L.

MATTHEW P. ARNDT

128

REVISION DATE	DATE 3-5-13	SCALE, FEET 	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.8	E
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 77	



REVISION DATE	DATE 3-5-13	SCALE, FEET	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.9
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 78

R/W POINT COORDINATE TABLE		
POINT	Y	X
113	454531.404	731634.435
116	454844.040	731772.615
205	454871.866	731719.319
297	454872.891	731790.112
300	454587.407	731659.022
426	454766.426	731672.589

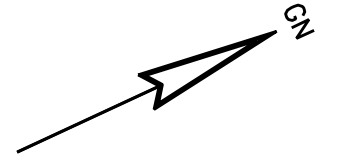
P.I. = 32T+99.76
Y 454,743.446
X 731,669.482
Δ = 62°09'25" LT.
D. = 48°33'21"
T. = 71.12'
L. = 128.01'
R. = 118.00'

P.I. = 33T+86.87
Y 454,823.213
X 731,606.963
Δ = 25°20'47" RT.
D. = 62°16'41"
T. = 20.69'
L. = 40.70'
R. = 92.00'

NOTE: EXISTING R/W ESTABLISHED FROM EAST SIDE
ASSESSOR'S PLAT NO. 39 AND 40.

CITY OF WISCONSIN RAPIDS

WISCONSIN RIVER



4.9
STA. 30T+00

SEE SHEET
MATCHLINE

SEE SHEET
MATCHLINE

4.11
STA. 34T+00

PLAT NO. 40

NORTHERN STEEL
CASTINGS, INC.

ASSESSOR'S

1ST STREET NORTH

LA VIGNE
AVENUE

GOV'T LOT 7
SEC. 8

NO. 39

PLAT
143

144

141

142

136

137

138

139

140

ASSESSOR'S

GOVERNMENT LOT 7
GOVERNMENT LOT 8

EAST

VARIES

SIDE

STREET

PLASTER

135

GOV'T LOT 8
SEC. 8

1226.00'
N00°18'49"E

N23°57'08"E 312.39' (R/W)

N23°52'32"E 280.65' (R/W)

N31°14'09"E 33.74'

33T+31.91
149.07'

33T+56.25
118.45'

33T+29.47
51.62'

33T+10.92
27.40'

POINT "B"

PI 32T+99.76

PC 32T+28.63

PT 33T+56.65

PC 33T+66.18

OUTLOT 1CSM 8804
VOL. 30 / PG. 104

WISCONSIN RAPIDS
WATER WORKS &
LIGHTING COMMISSION

CONSOLIDATED WATER
POWER COMPANY

WE ENERGIES
(GAS)

PI 33T+86.87

VACATED OLIVER STREET

TLE FOR SIDEWALK
CONSTRUCTION

PLE FOR
SIDEWALK

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

R/W

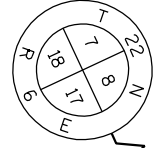
R/W

R/W

R/W

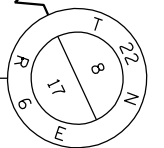
R/W

HARRISON MON.
Y=453318.835
X=729178.024

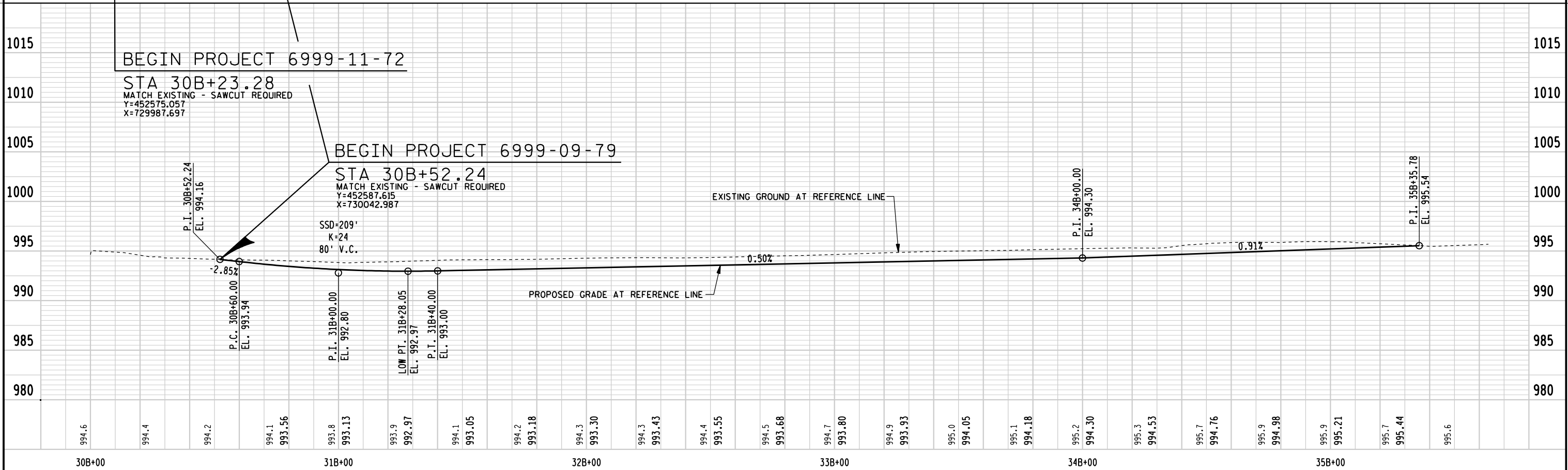
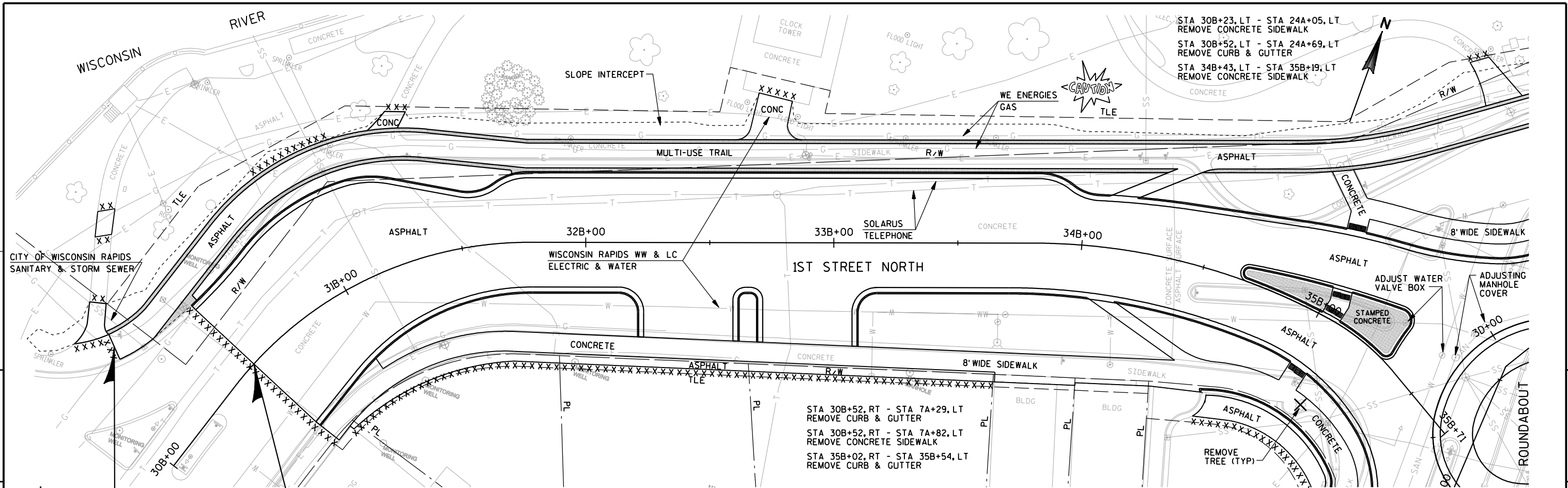


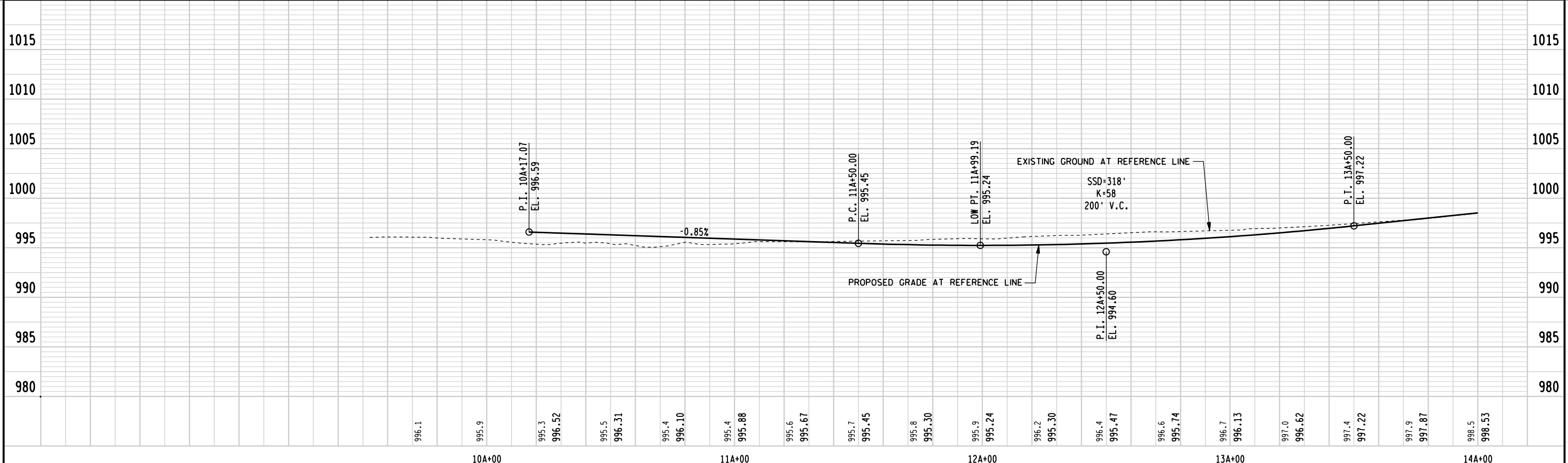
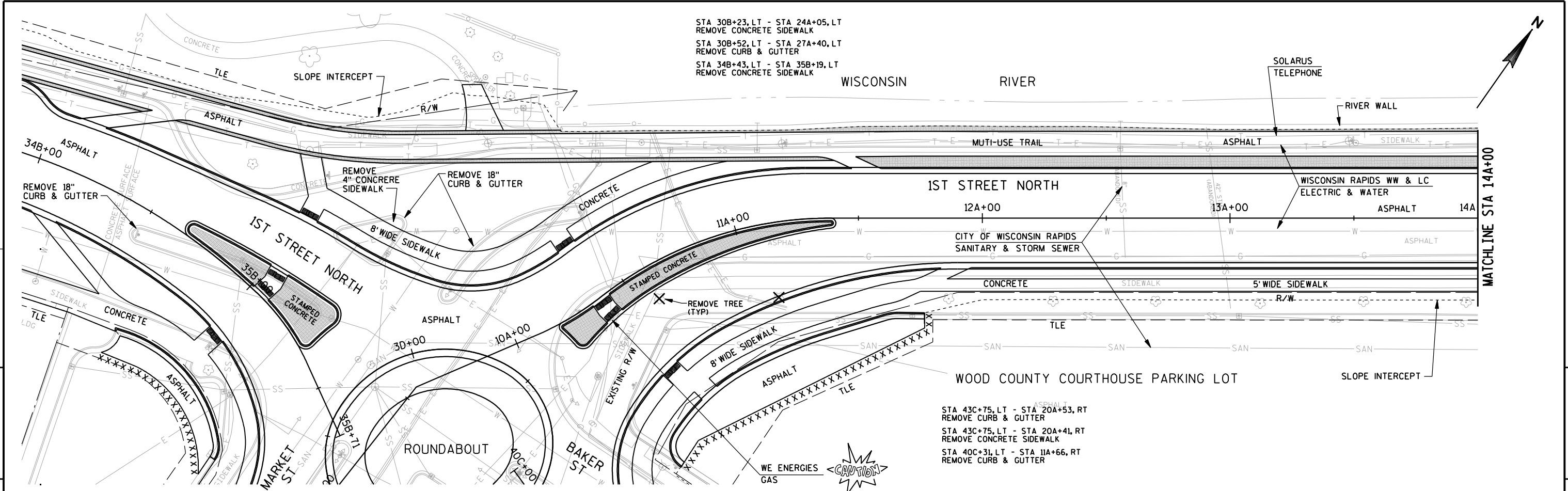
SECTION LINE
249.74
S89°41'E 260.32'

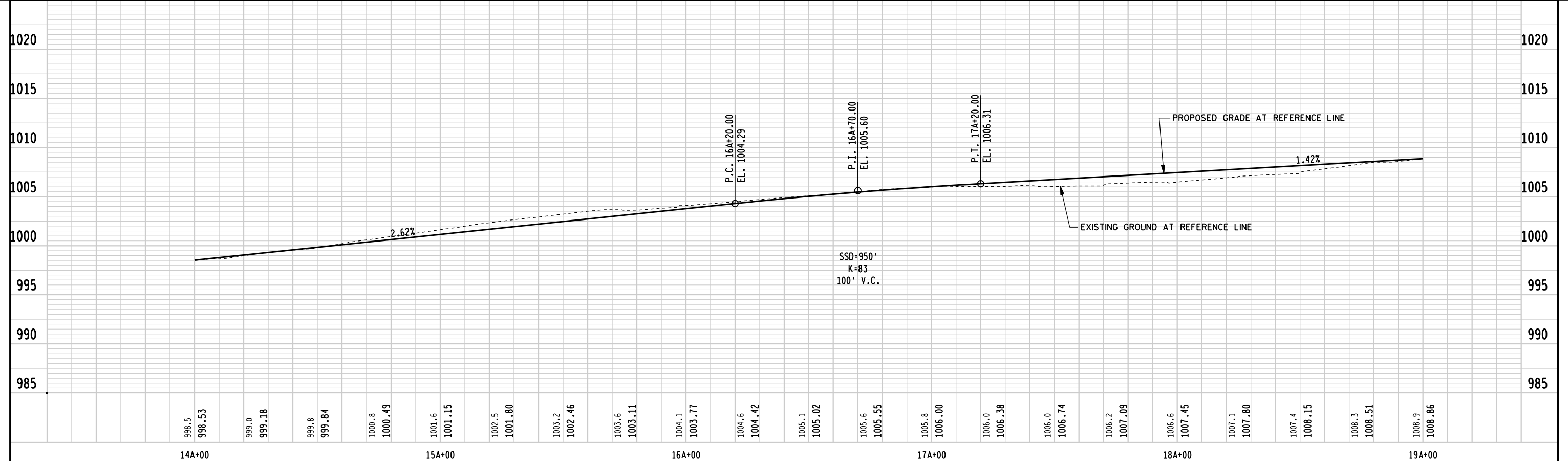
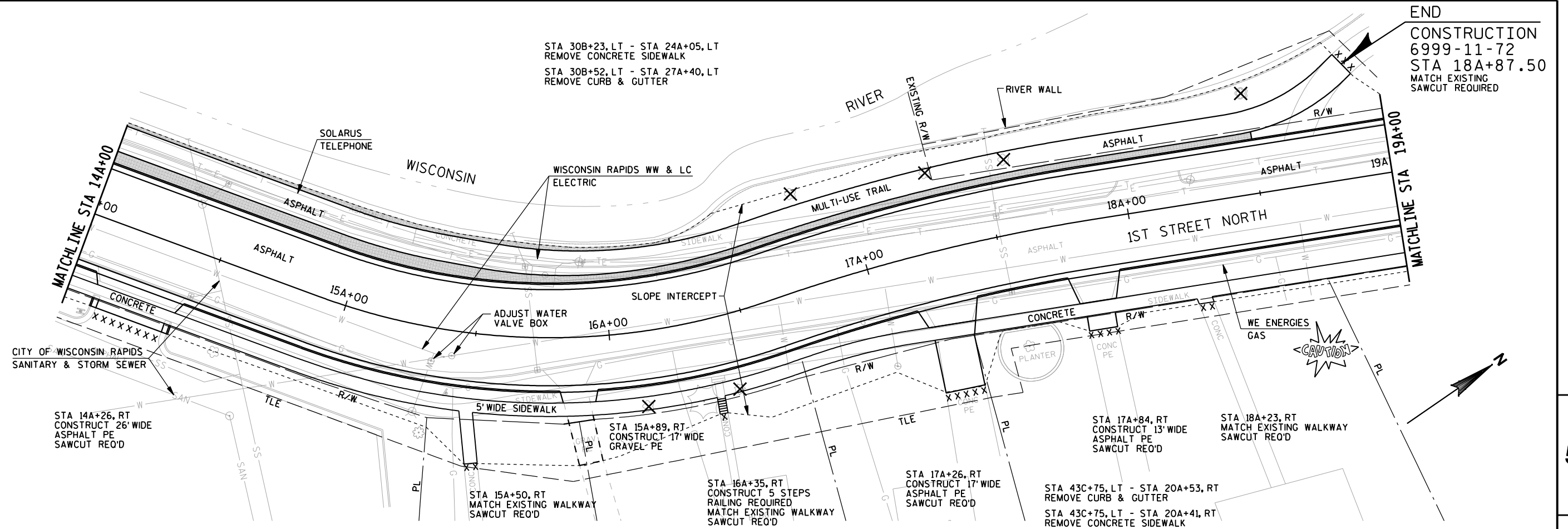
CHISELED CROSS
Y=453304.273
X=731838.301

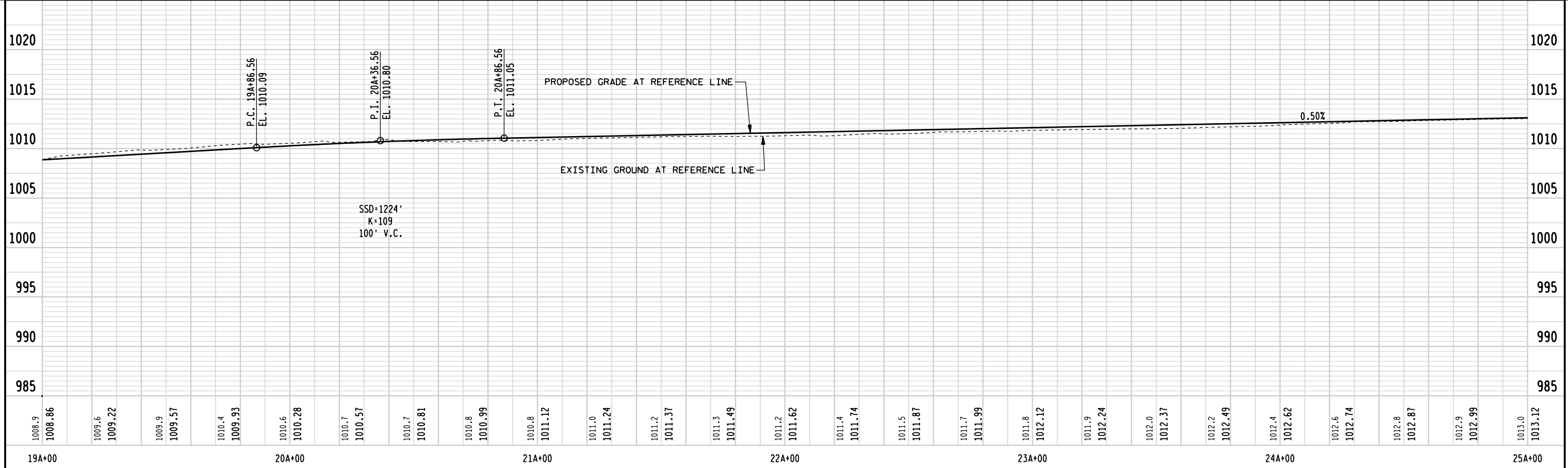
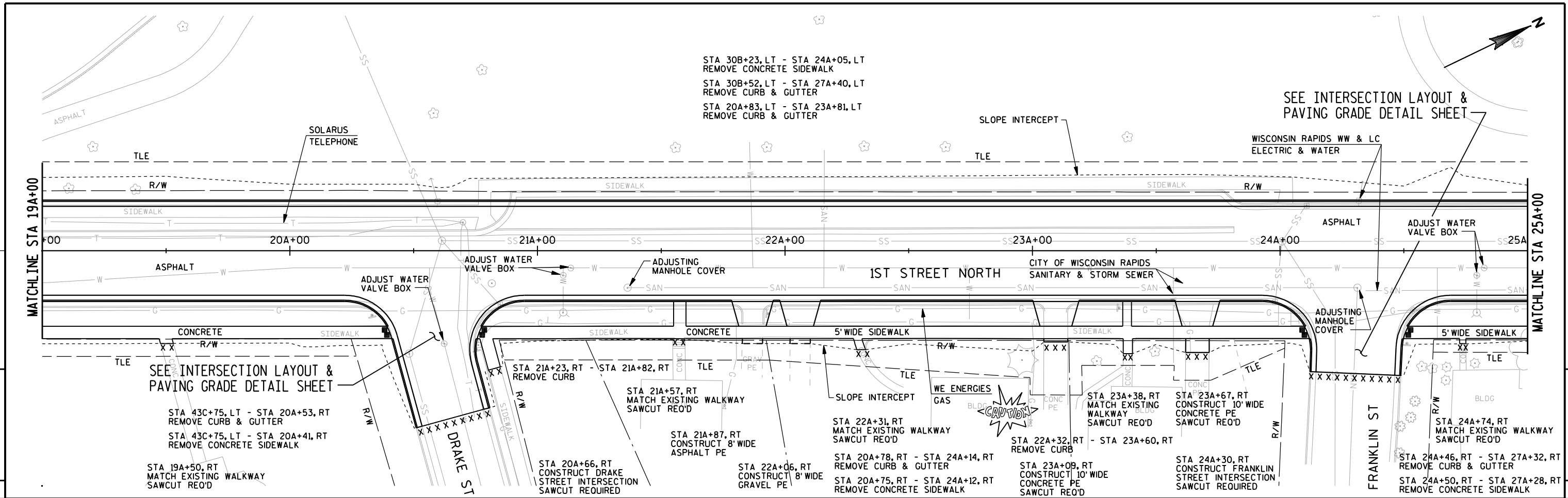


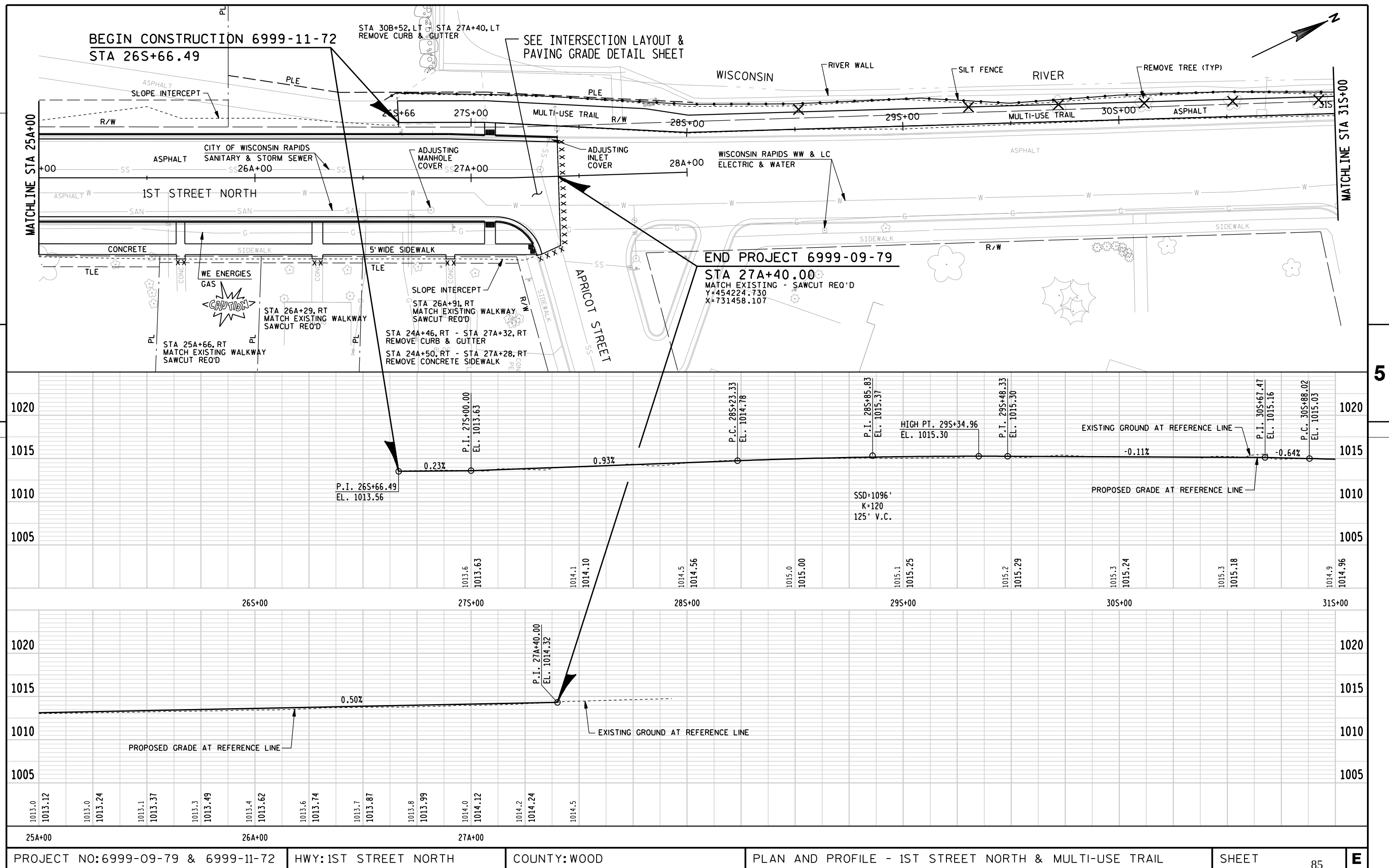
REVISION DATE	DATE 3-5-13	SCALE, FEET 0 20 40	HWY: LOCAL STREET	STATE R/W PROJECT NO. 6999-09-09/6999-11-02	PLAT SHEET 4.10
	GRID FACTOR N/A		COUNTY: WOOD	CONSTRUCTION PROJ. NO. 6999-09-79/6999-11-72	PS&E SHEET 79



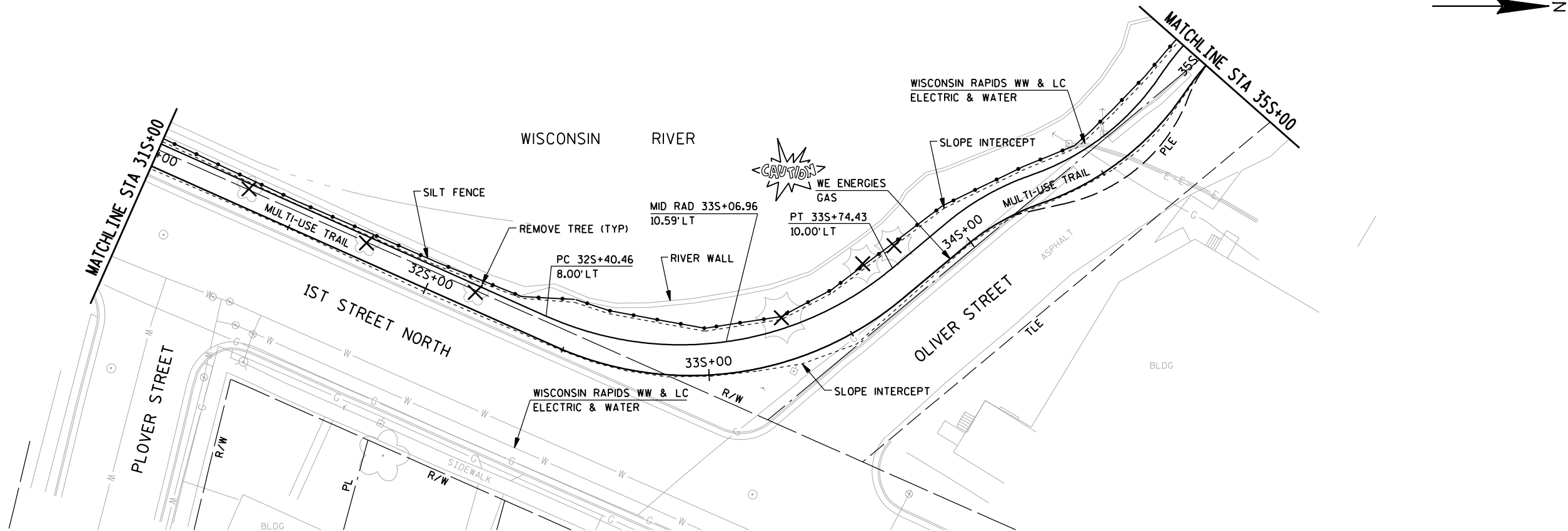




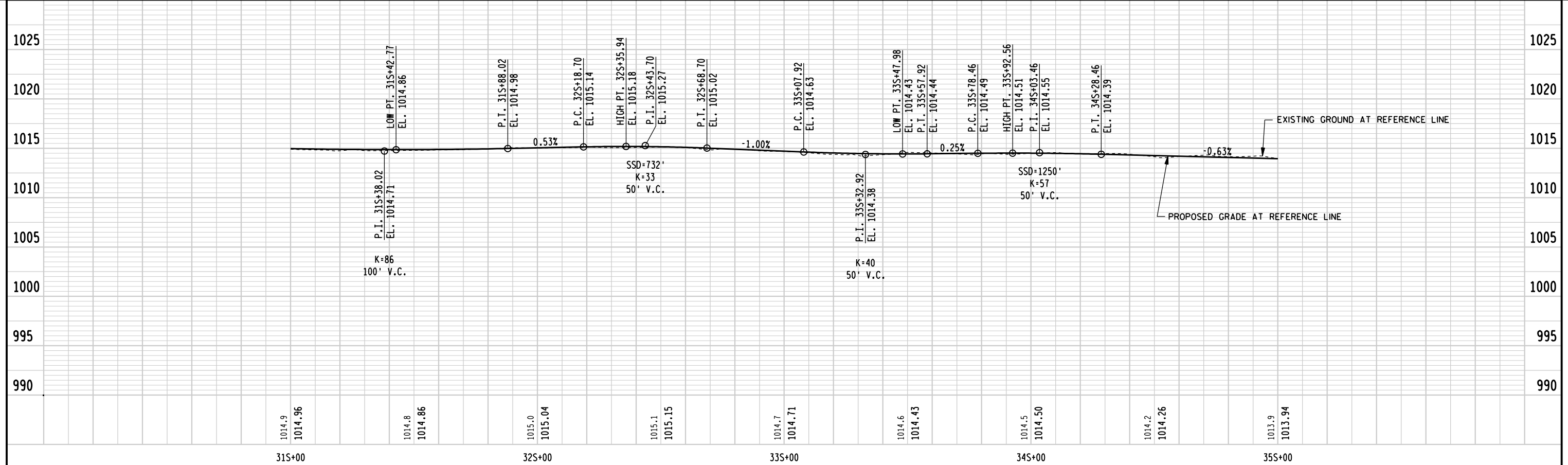




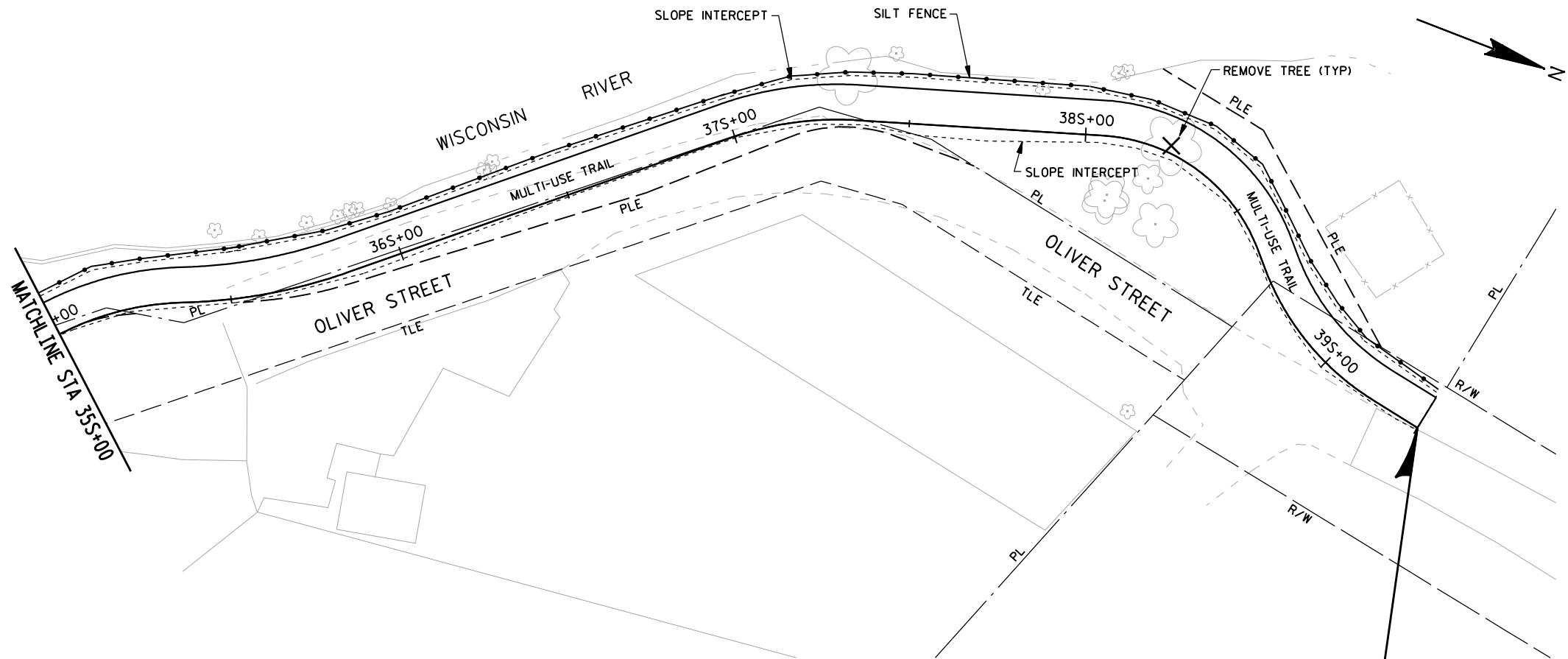
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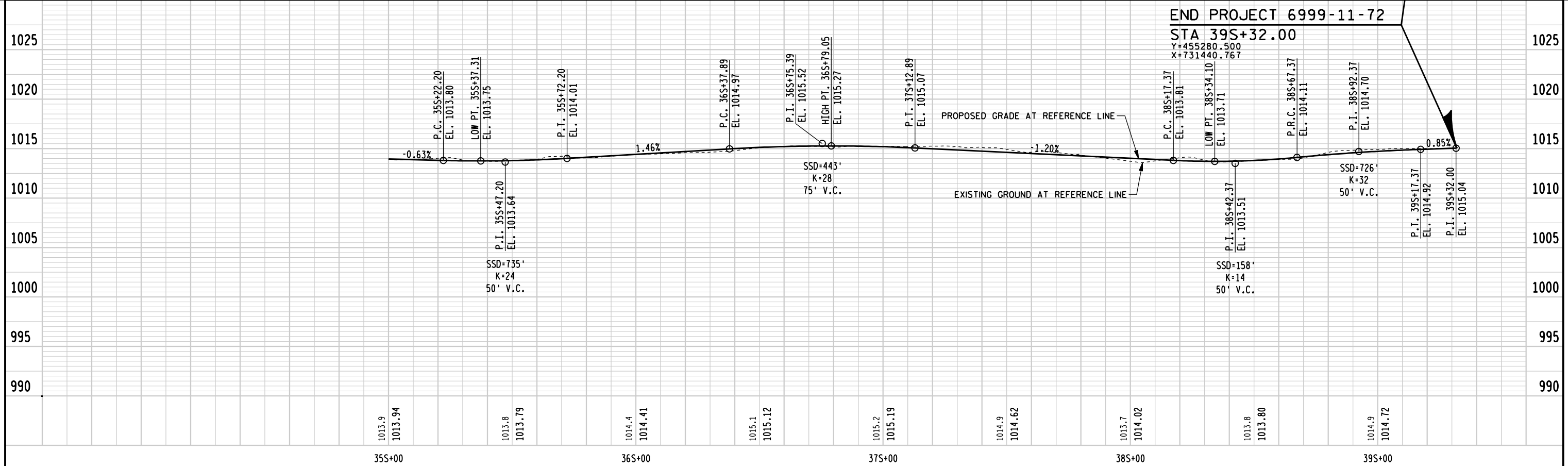
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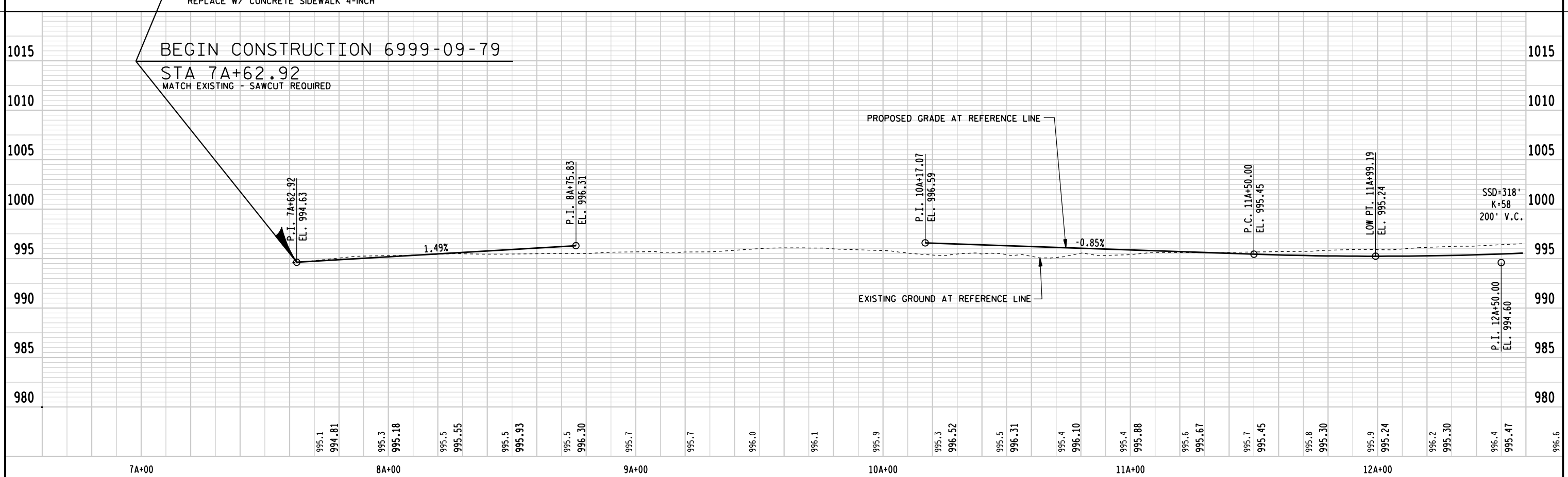
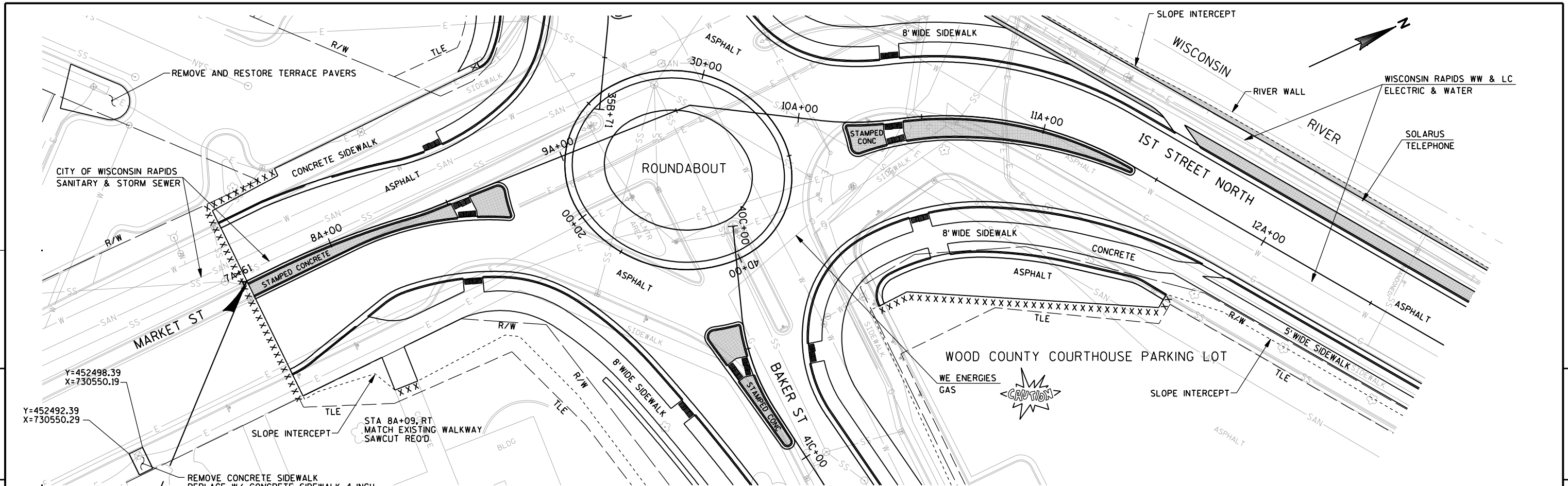


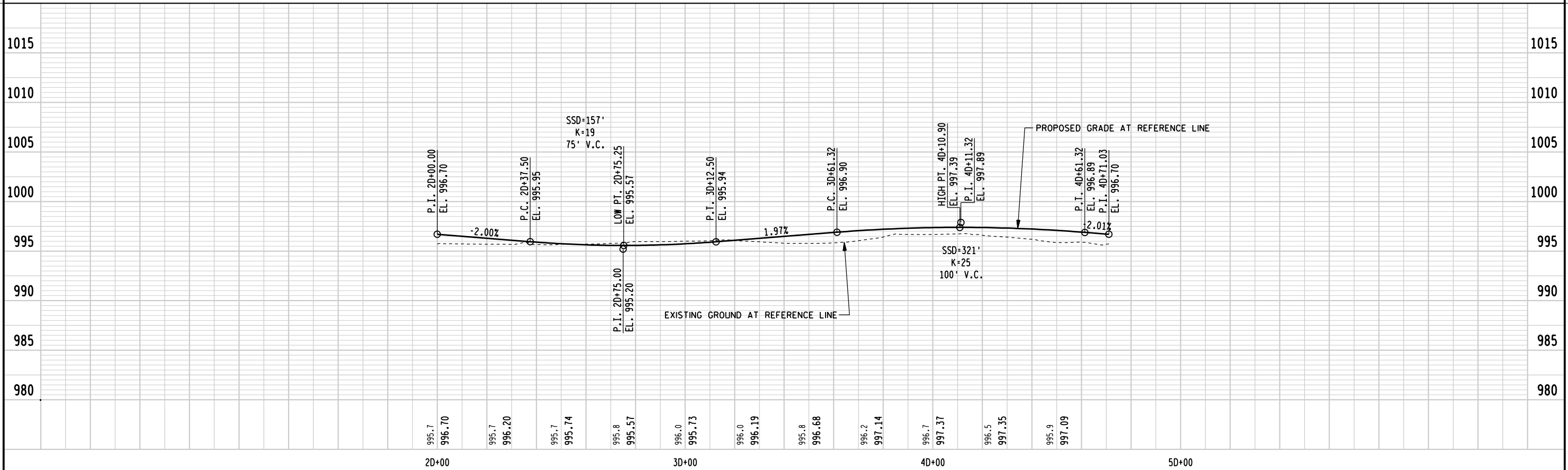
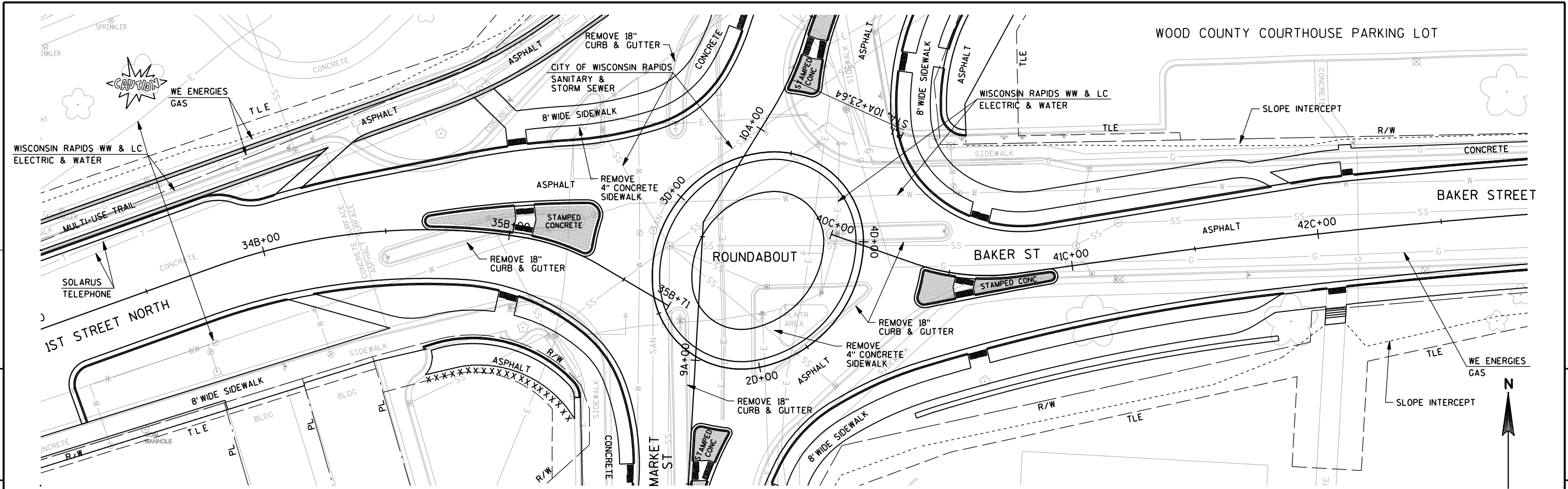
5



5

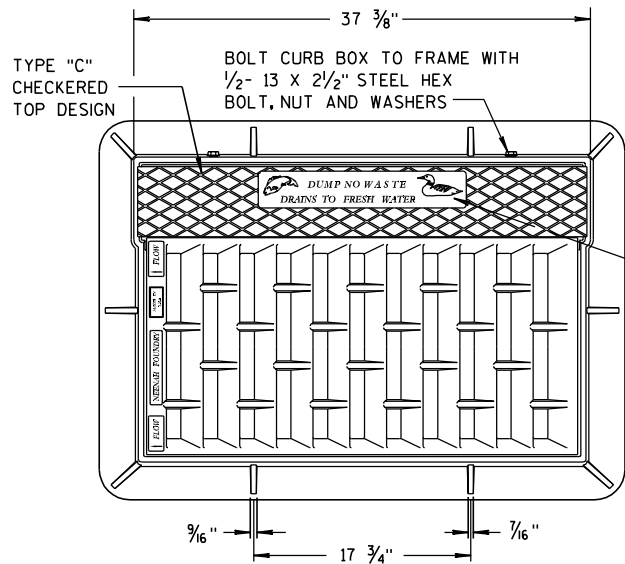




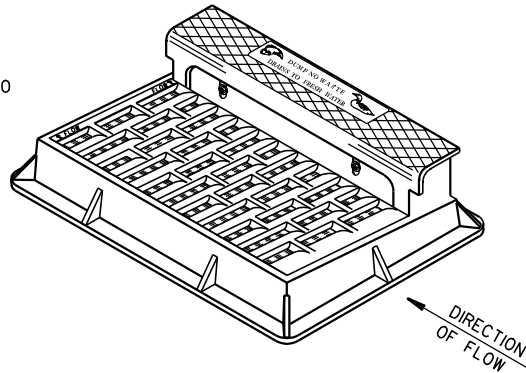


Standard Detail Drawing List

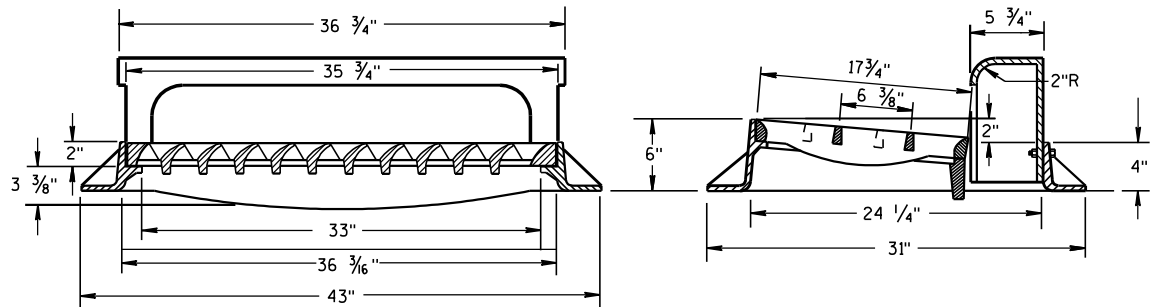
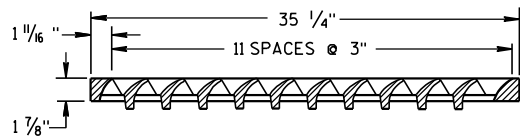
08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-07	CONDUIT
09B04-10	PULL BOX
09C05-07	CONCRETE CONTROL CABINET BASES
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02	CONCRETE MEDIAN NOSE
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)



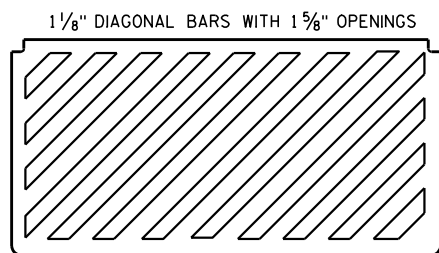
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

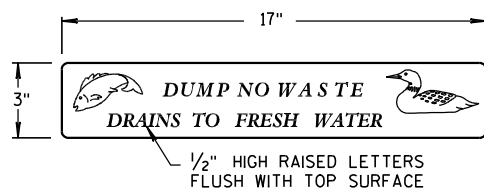


TYPE "H"
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.

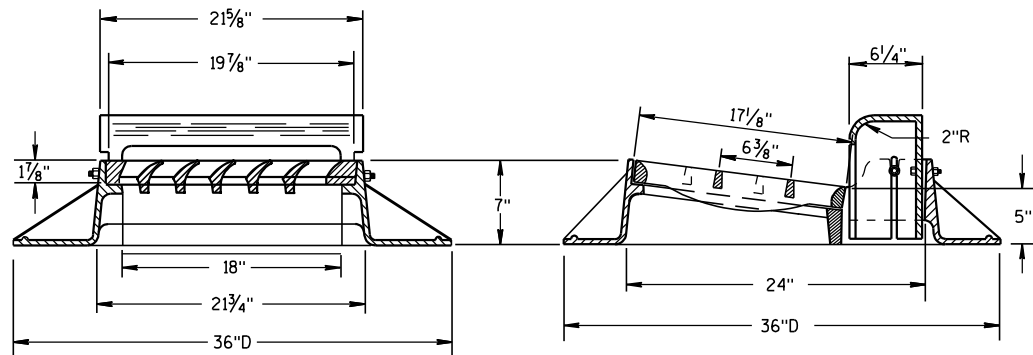
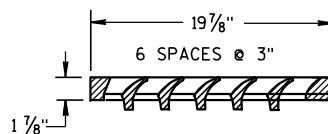
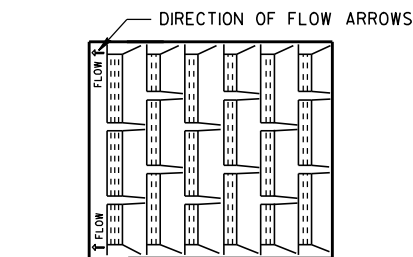


SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.

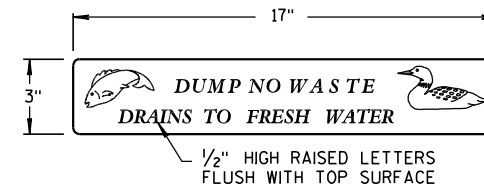
GENERAL NOTES

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

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

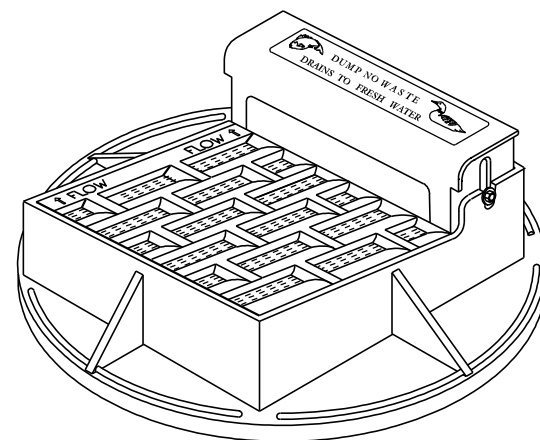
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



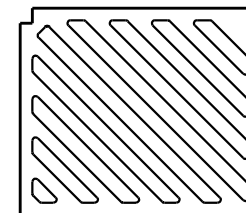
LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

1" DIAGONAL BARS WITH 1 1/2" OPENINGS



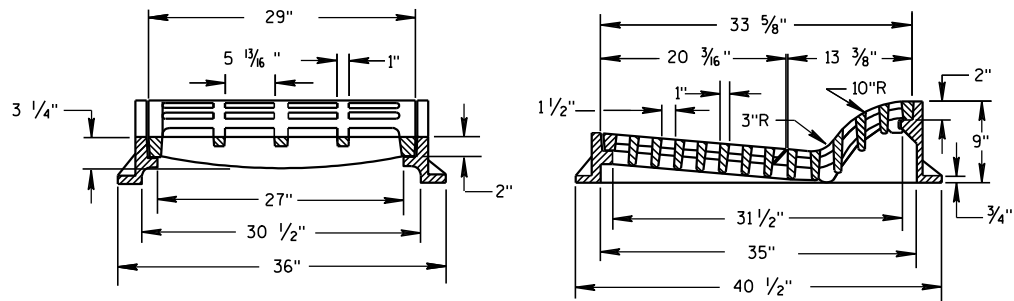
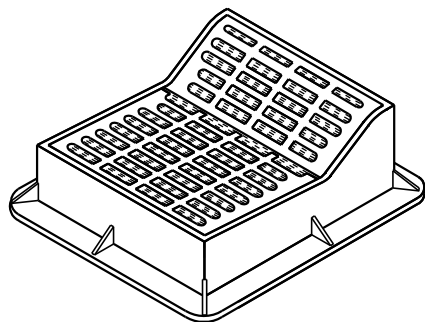
SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8")
GRATE..... 84 LBS.
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE /S/ Jerry H. Zoon ROADWAY STANDARDS 92 ENGINEER
FHWA

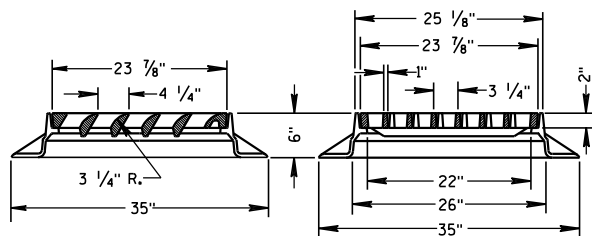
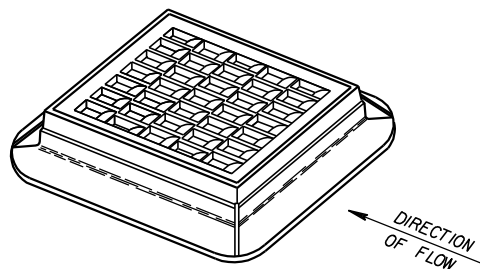


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

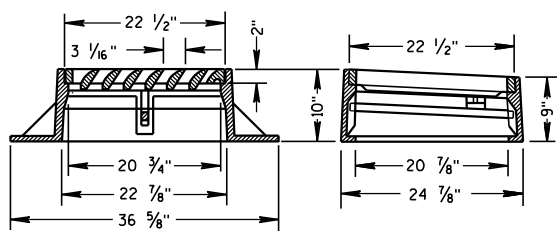
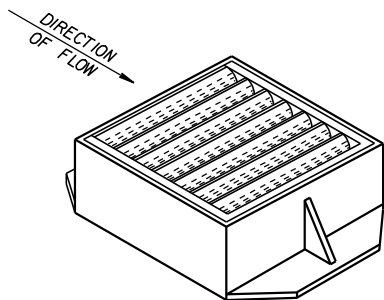
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE.....169 LBS.



TYPE "V"

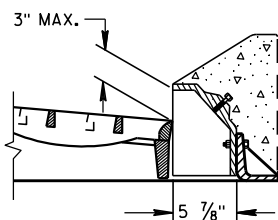
(APPROXIMATE WEIGHT 410 LBS.)

FRAME.....269 LBS.
GRATE.....136 LBS.
SAFETY BAR.....5 LBS.

**ALTERNATIVE CURB BOX
FOR TYPE "HM" COVER**

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE



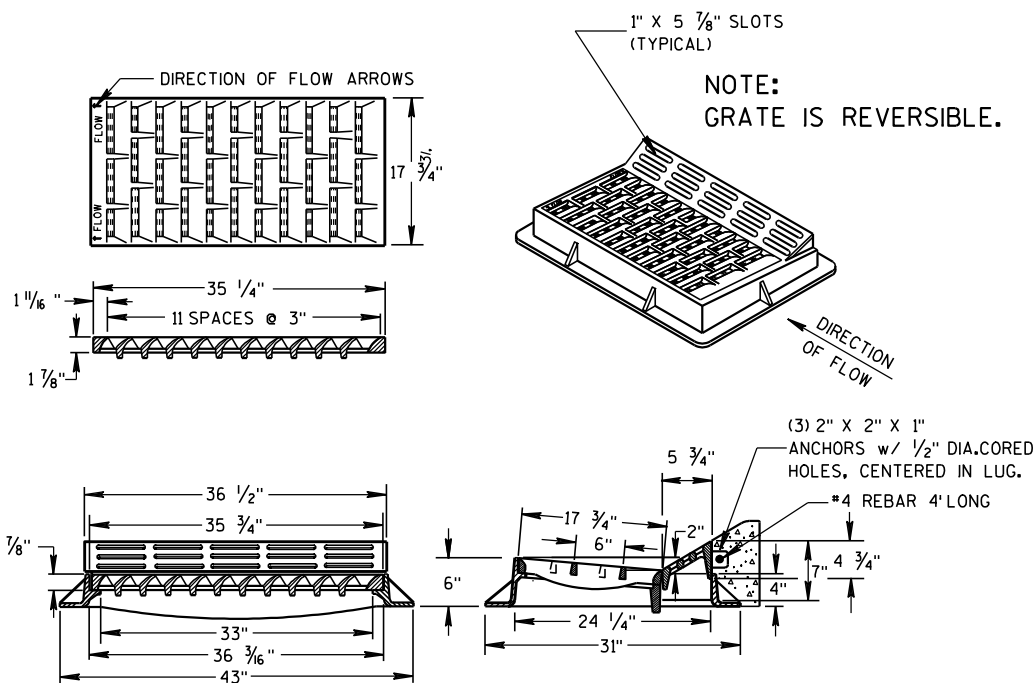
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

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

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

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



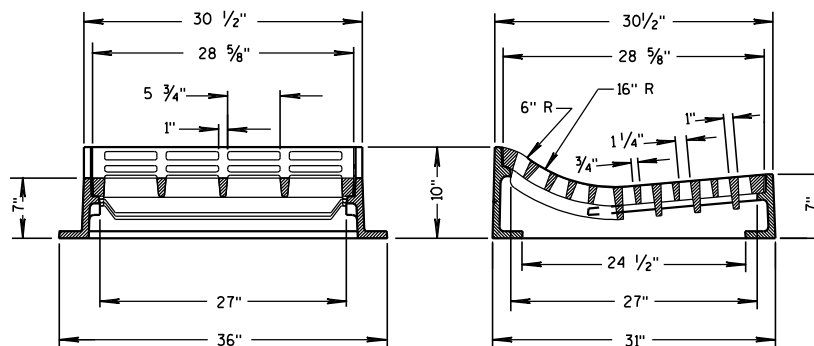
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)

FRAME.....181 LBS.
GRATE.....159 LBS.
CURB BOX.....74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

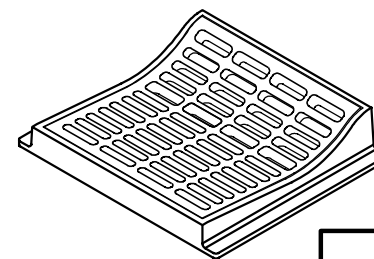


TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)

FRAME.....270 LBS.
GRATE.....260 LBS.

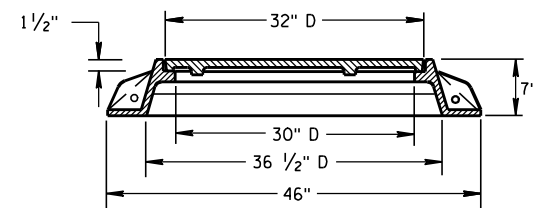
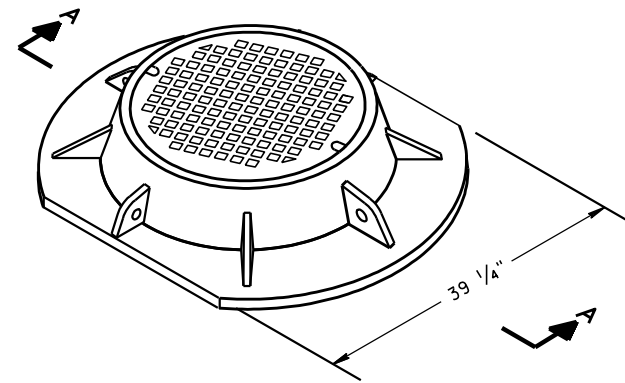
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



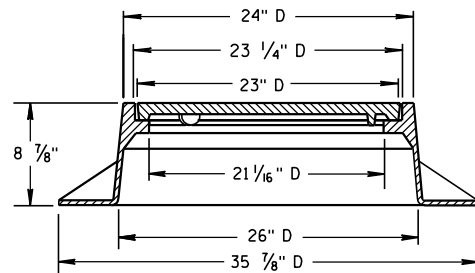
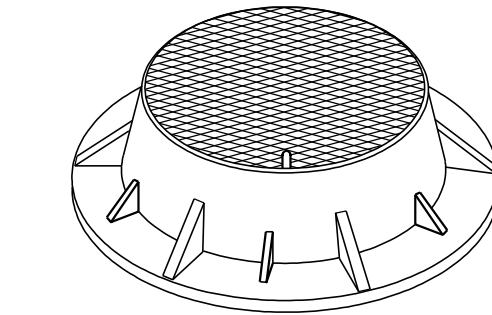
INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

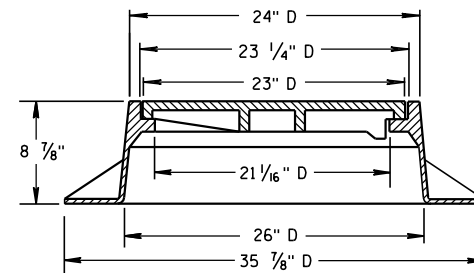
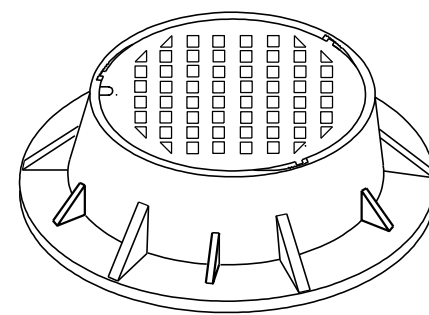
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 93
FHWA ENGINEER



SECTION A-A
TYPE "K"
 (APPROXIMATE WEIGHT 439 LBS.)
 FRAME.....216 LBS.
 LID.....223 LBS.



TYPE "J"
 (APPROXIMATE WEIGHT 267 LBS.)
 FRAME.....152 LBS.
 LID.....115 LBS.



TYPE "J" SPECIAL
 TYPE "B" NON-ROCKING SELF-SEAL LID
 (APPROXIMATE WEIGHT 267 LBS.)
 FRAME.....158 LBS.
 LID.....109 LBS.
 (NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

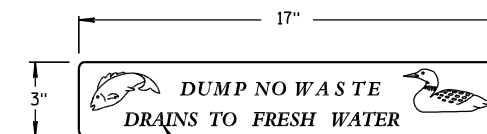
GENERAL NOTES

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

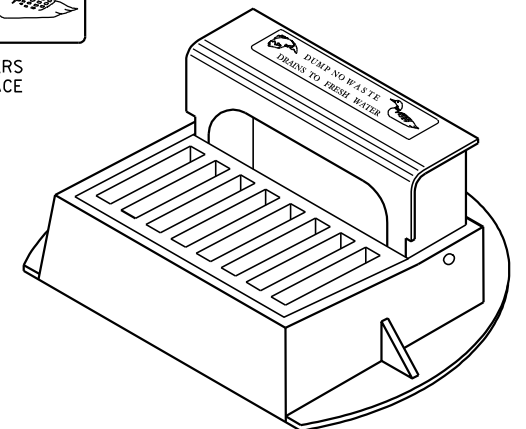
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

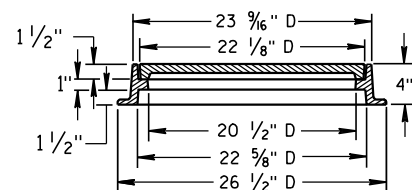
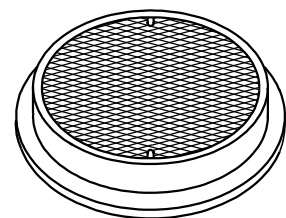
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



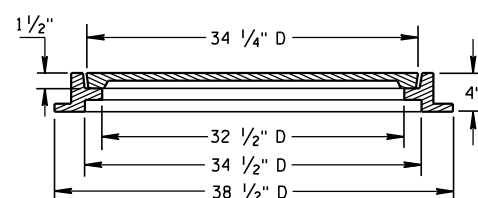
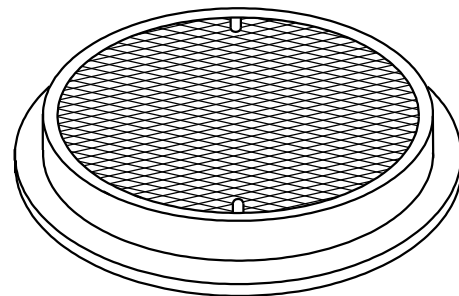
LOGO DETAIL



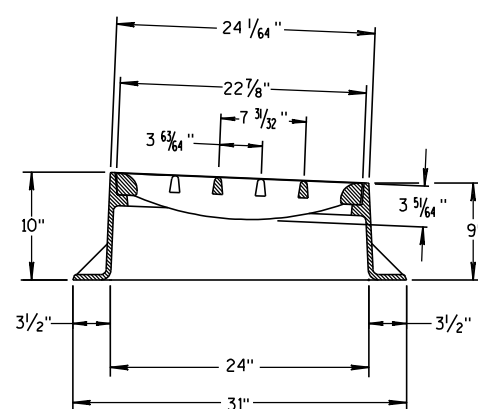
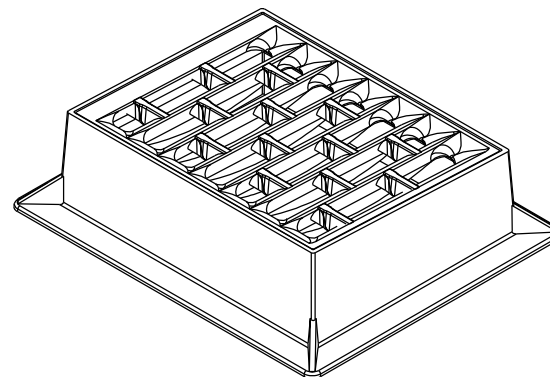
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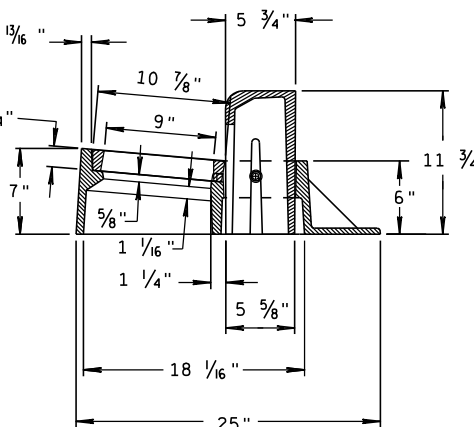
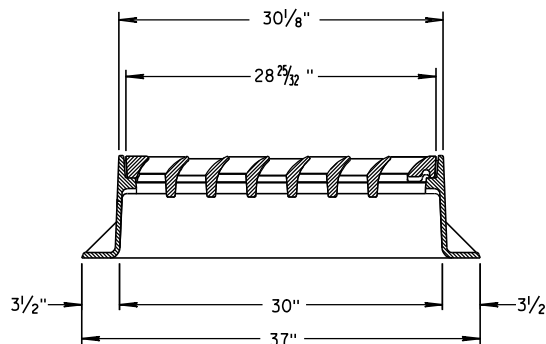
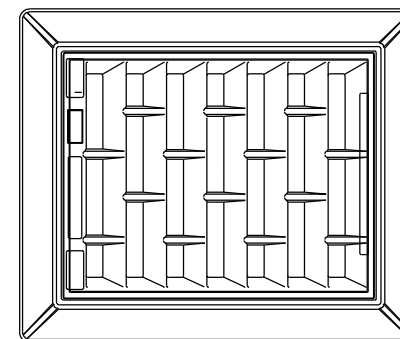
TYPE "L"
 (APPROXIMATE WEIGHT 158 LBS.)
 FRAME.....81 LBS.
 LID.....77 LBS.



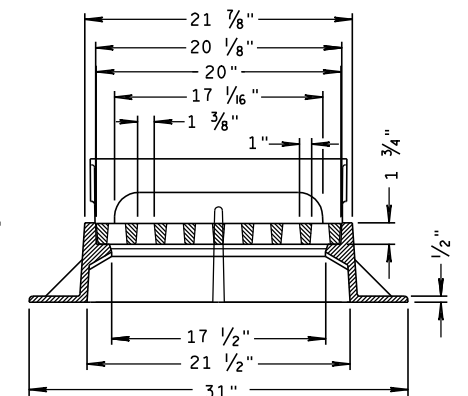
TYPE "M"
 (APPROXIMATE WEIGHT 377 LBS.)
 FRAME.....125 LBS.
 LID.....252 LBS.



INLET COVER TYPE "BW"



INLET COVER TYPE "Z"
 (APPROXIMATE WEIGHT 344 LBS.)
 FRAME.....206 LBS.
 GRATE.....46 LBS.
 CURB BOX.....92 LBS.

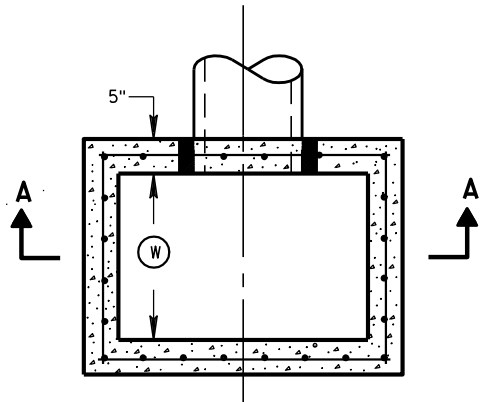


INLET COVERS, TYPE BW, Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

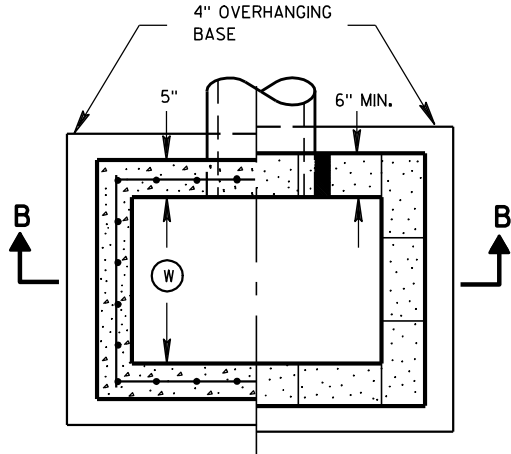
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 6/5/2012 /S/ Jerry H. Zocco
 DATE ROADWAY STANDARDS 194 NT
 FHWA ENGINEER

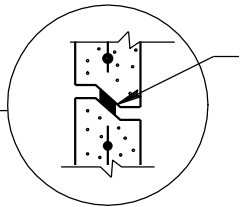
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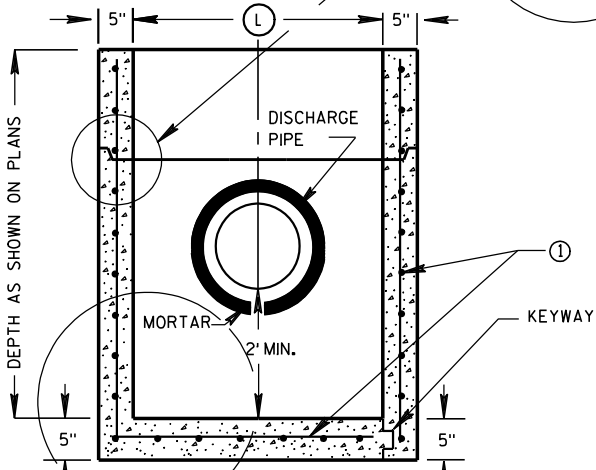
PLAN VIEW



PLAN VIEW



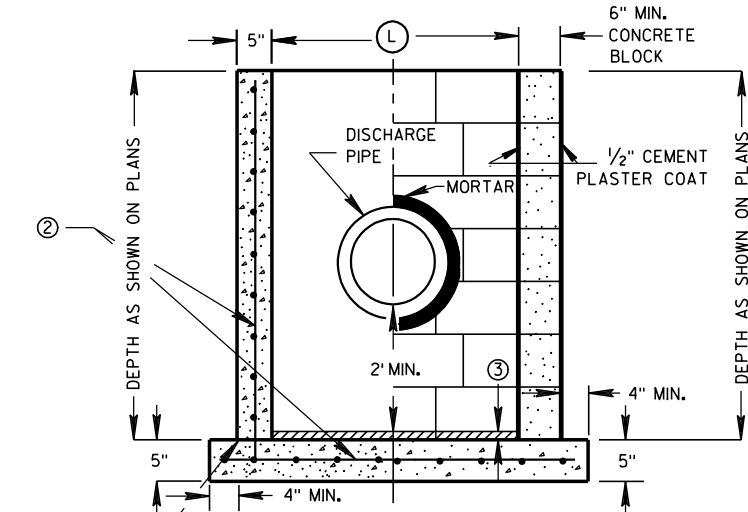
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

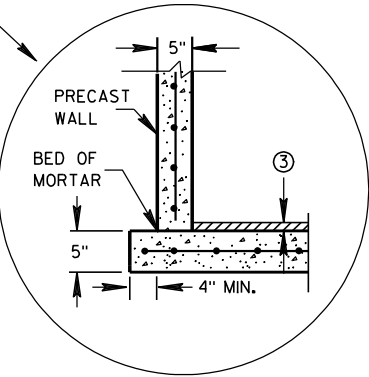
SECTION A-A



CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK ON CAST-IN-PLACE WITH PRECAST REINFORCED CONCRETE BASE ①

SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

CATCH BASINS 2X3-FT AND 2.5X3-FT

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 CATCH BASIN 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 CATCH BASIN 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 GRANULAR 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 SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

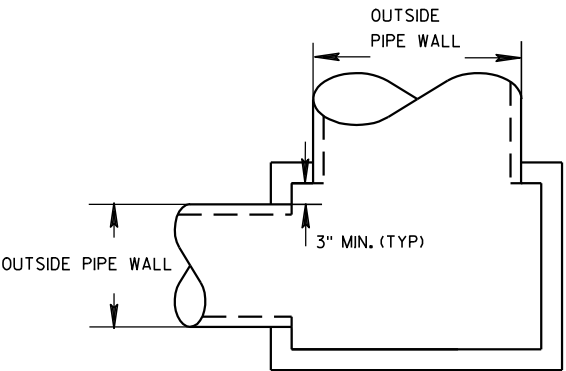
- ① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.
- ③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2'SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH ① (FT)	LENGTH ② (FT)	F	ALL H'S
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24

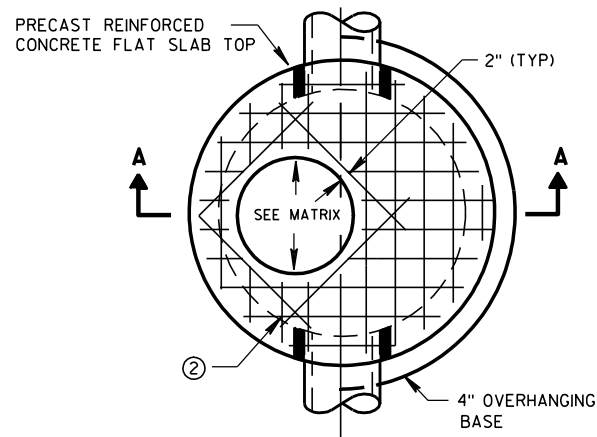


DETAIL "A"

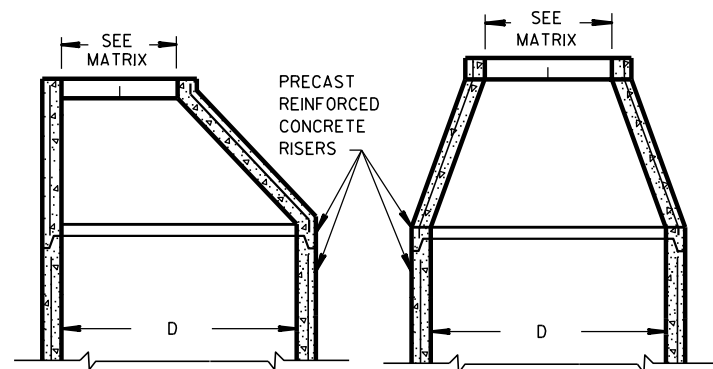
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 /S/ Jerry H. Zoon
DATE ROADWAY STANDARDS E 95
FHWA ENGINEER

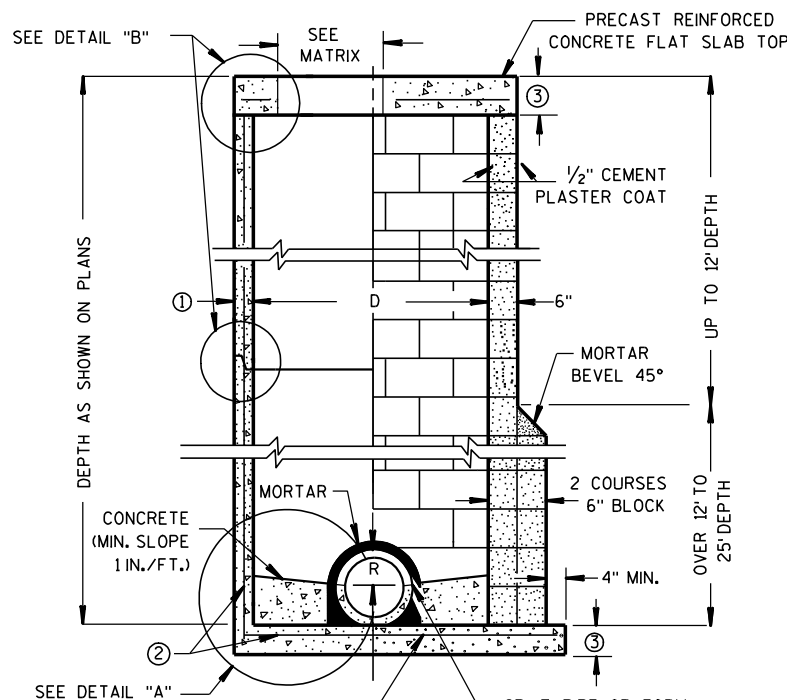


PLAN VIEW CIRCULAR OPENING



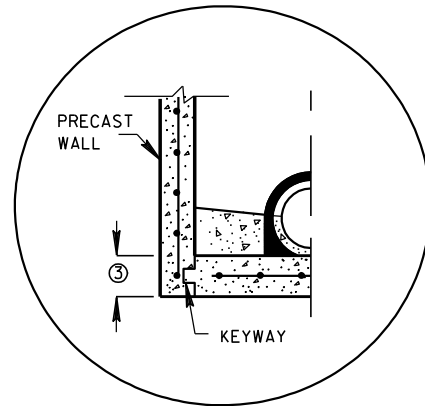
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

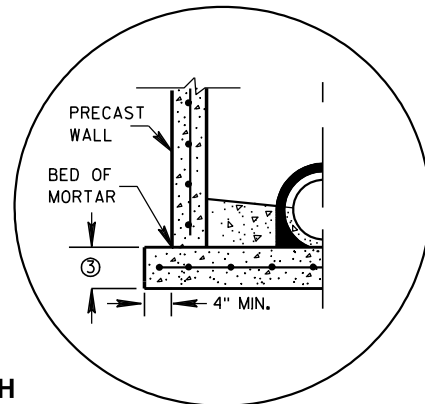


CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CONCRETE WITH MONOLITHIC BASE CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



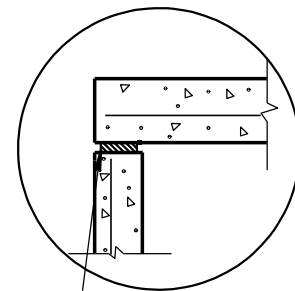
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



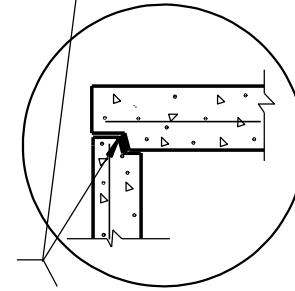
SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

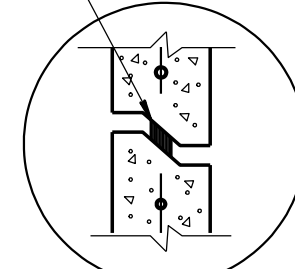
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



TOP WITH PLAIN END JOINT

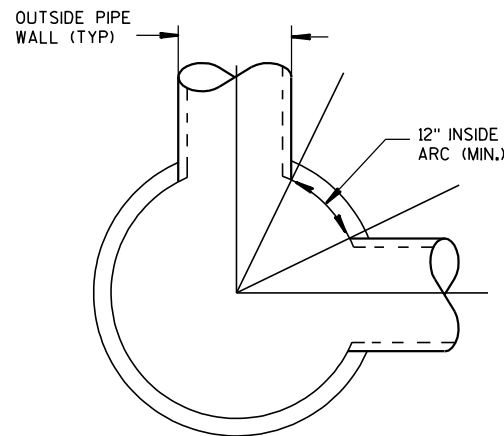


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



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 GRANULAR 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. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 1/2" 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 PERMITTED 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 SEPERATE 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

6/5/2012

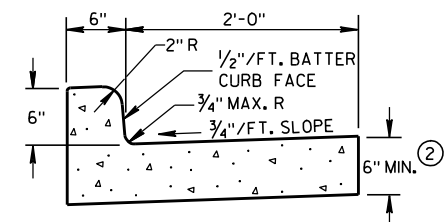
DATE

FHWA

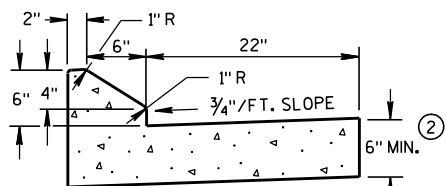
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

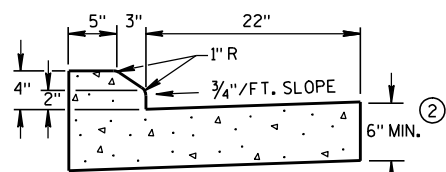
ENGINEER 96



TYPES A & D ①



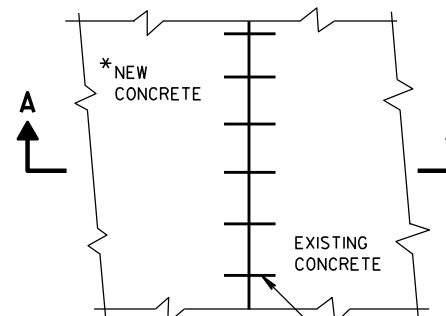
6" SLOPED CURB TYPES G & J ①



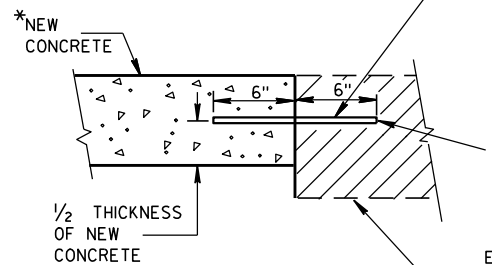
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



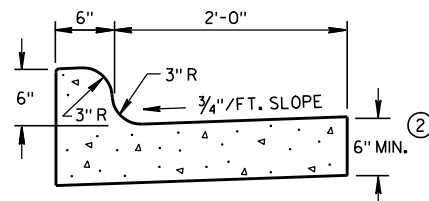
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

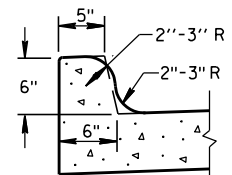
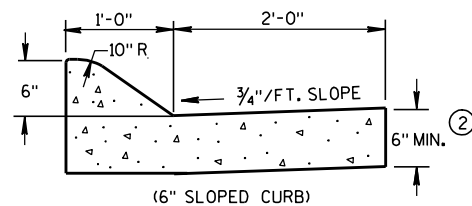
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

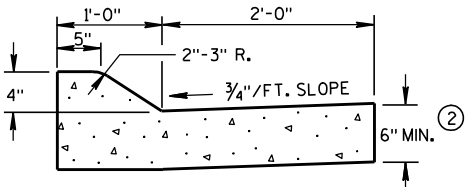
EXISTING
CONCRETE



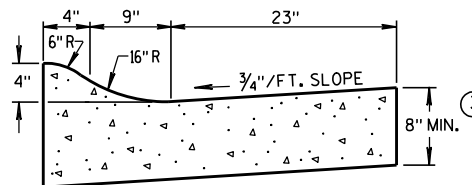
TYPES K & L ①

OPTIONAL CURB SHAPE
FOR TYPES K & L ①

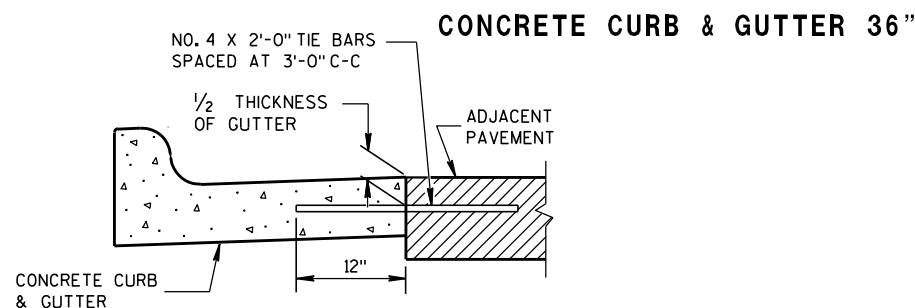
(6" SLOPED CURB)



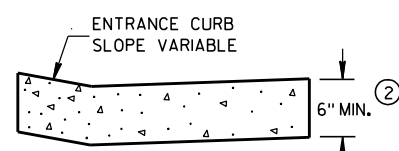
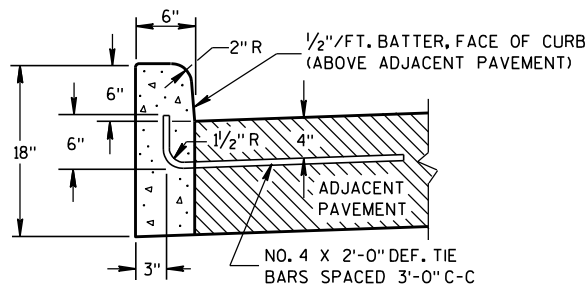
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

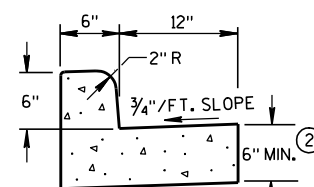
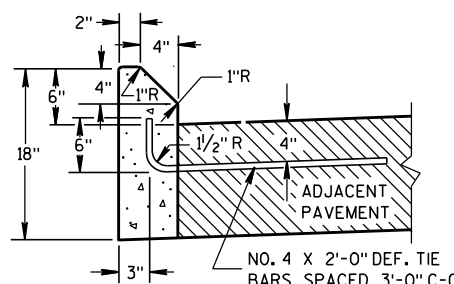


TYPICAL TIE BAR LOCATION ①

DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

TYPES A & D ①

CONCRETE CURB

TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

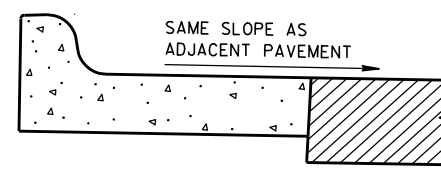
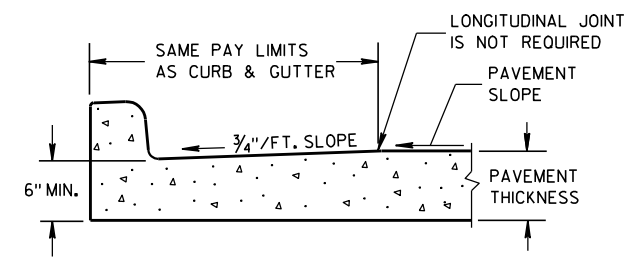
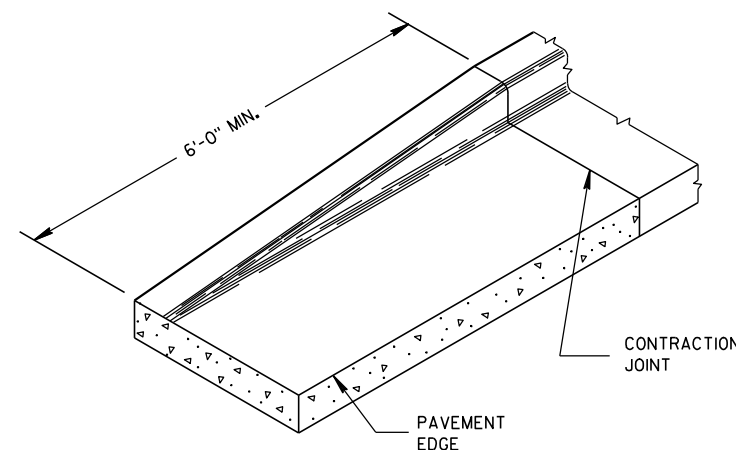
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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 AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

DATE

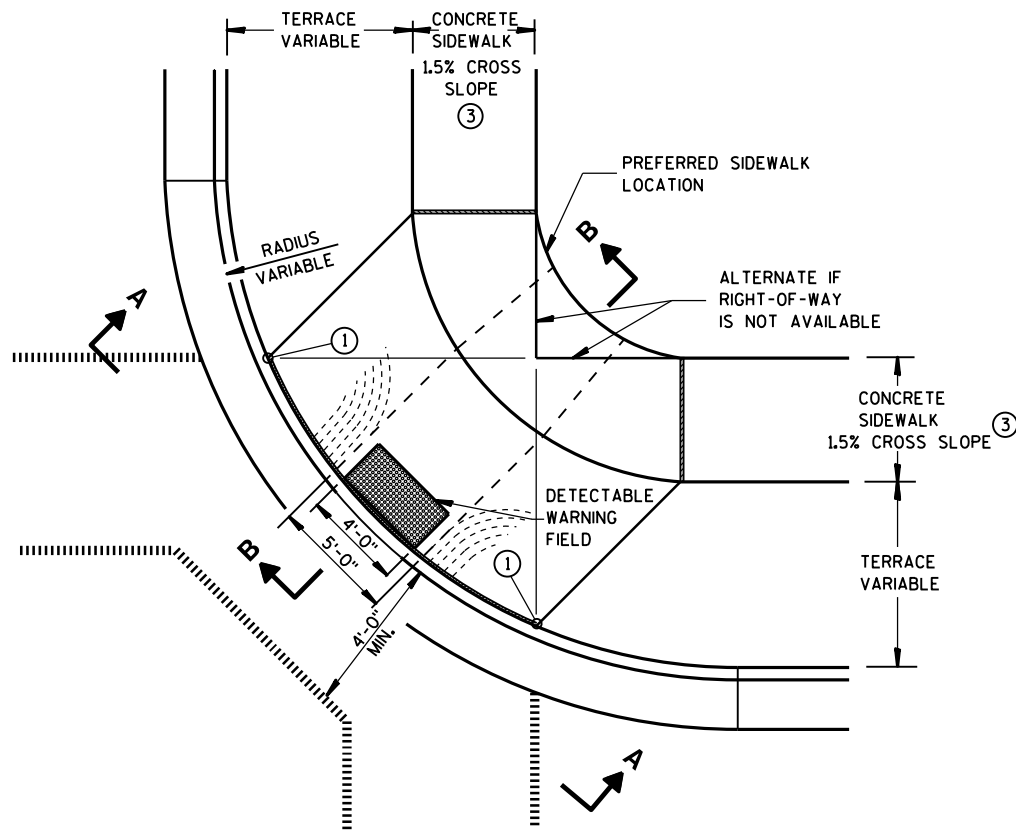
FHWA

/S/ Jerry H. 7

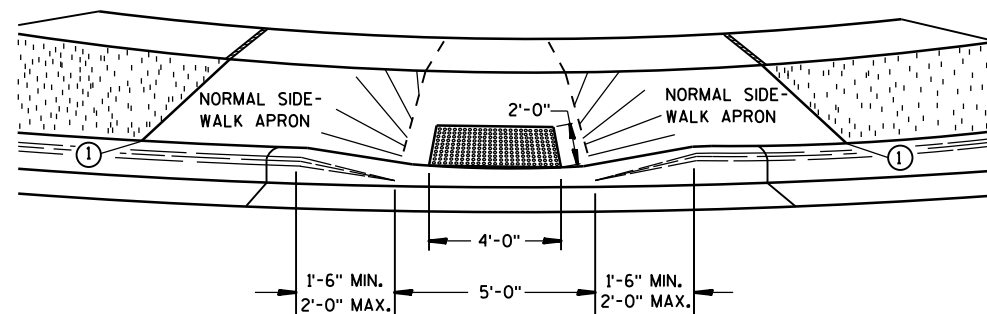
ROADWAY STANDARDS 97

ENGINEER

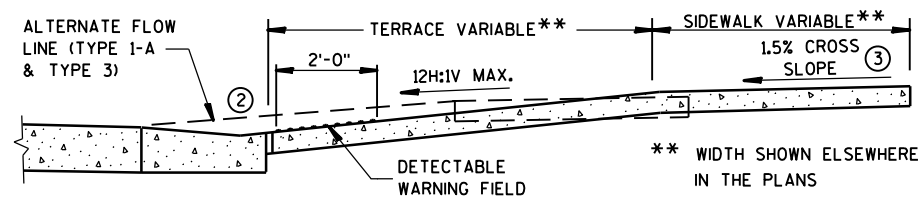
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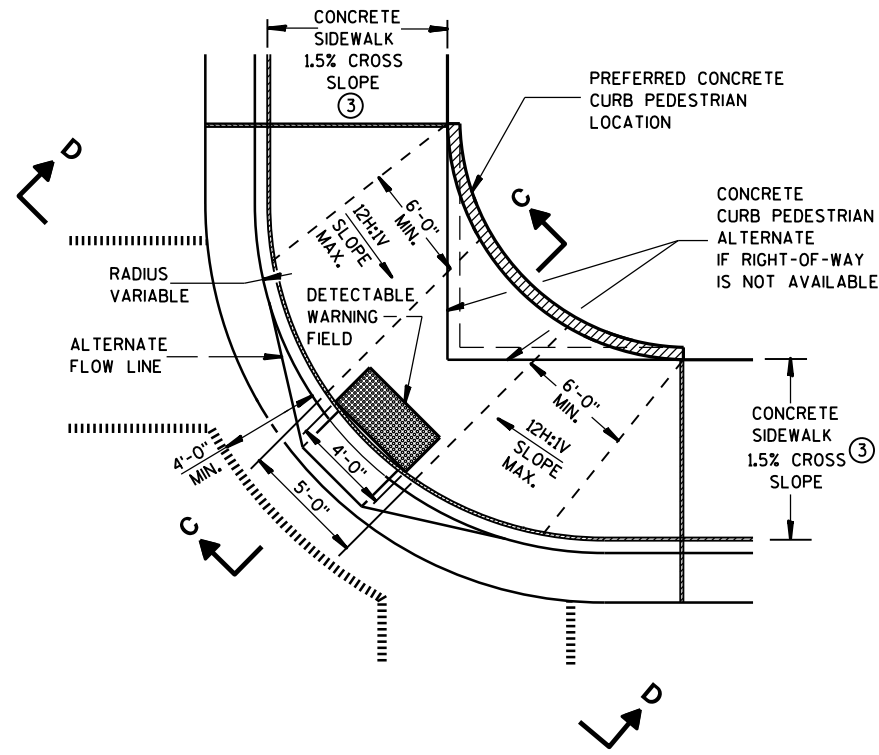
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



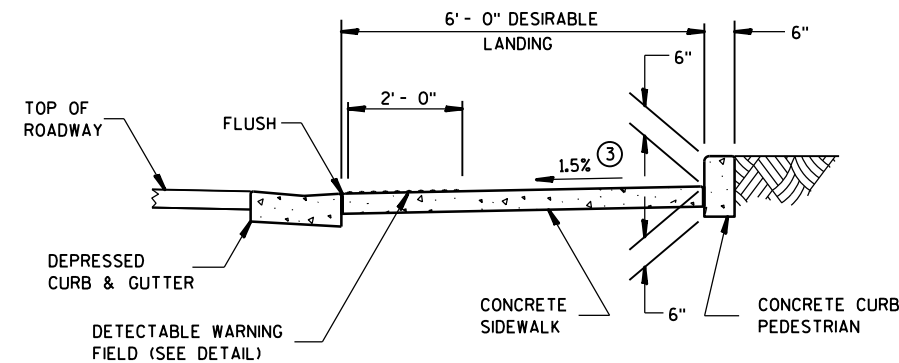
VIEW A-A



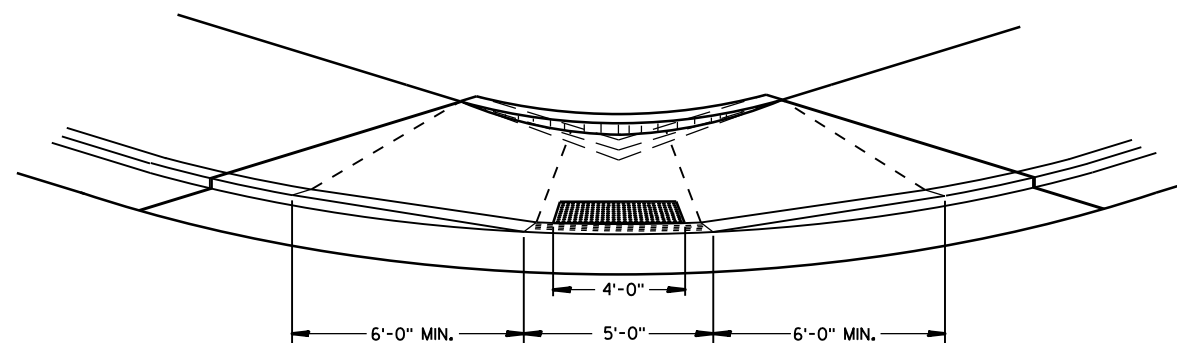
SECTION B-B



**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".

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

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

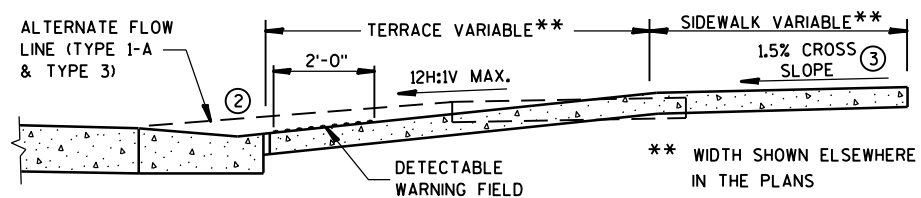
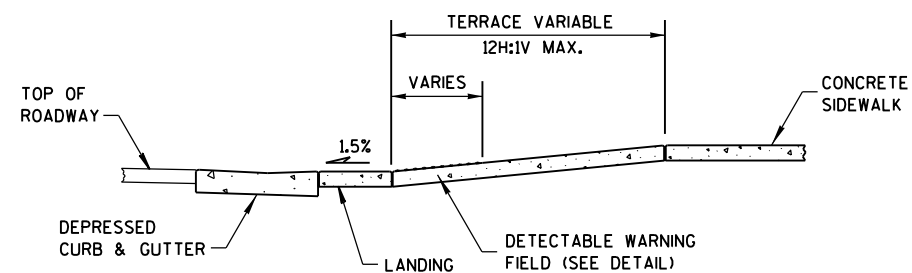
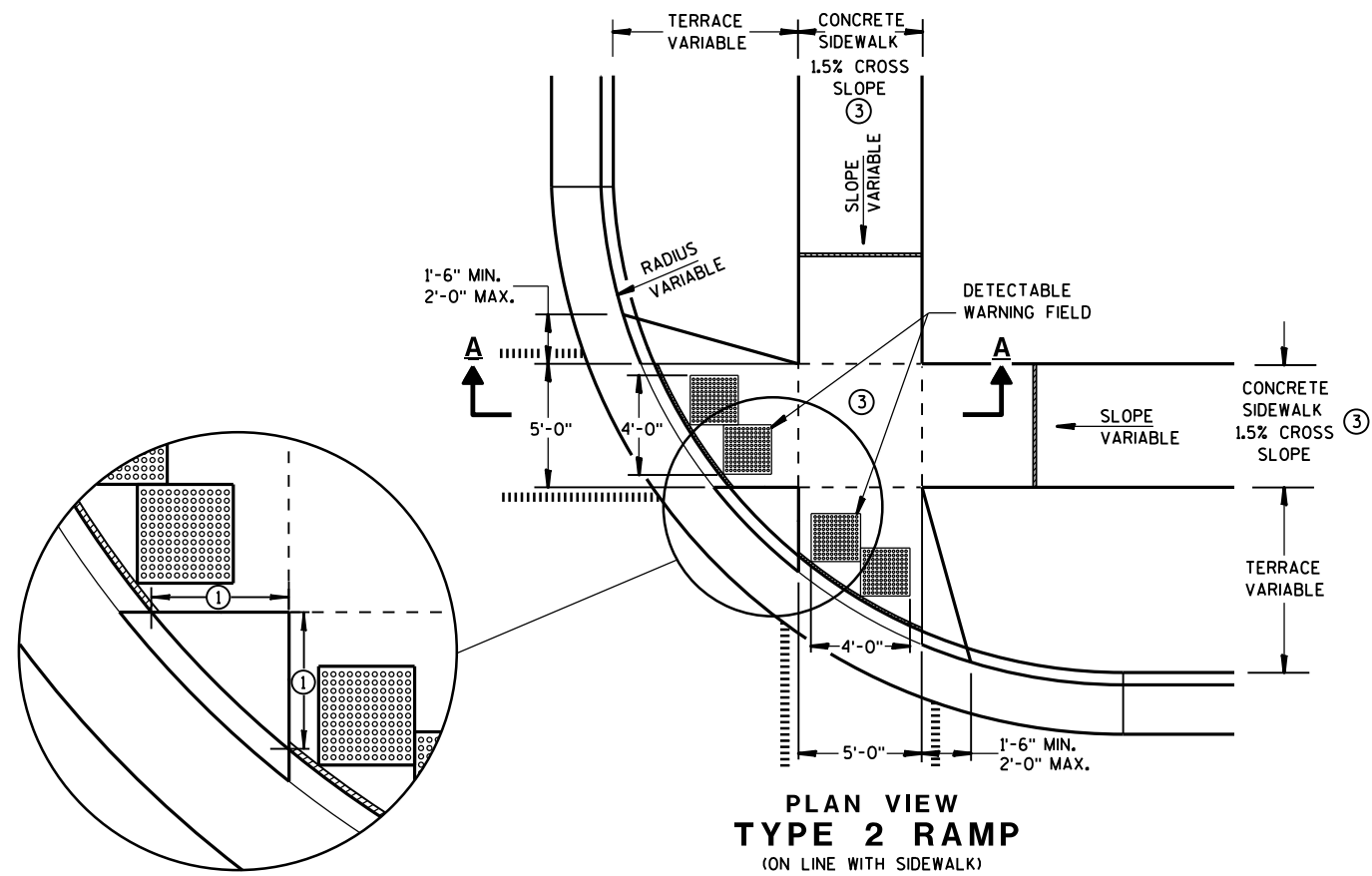
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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



GENERAL NOTES

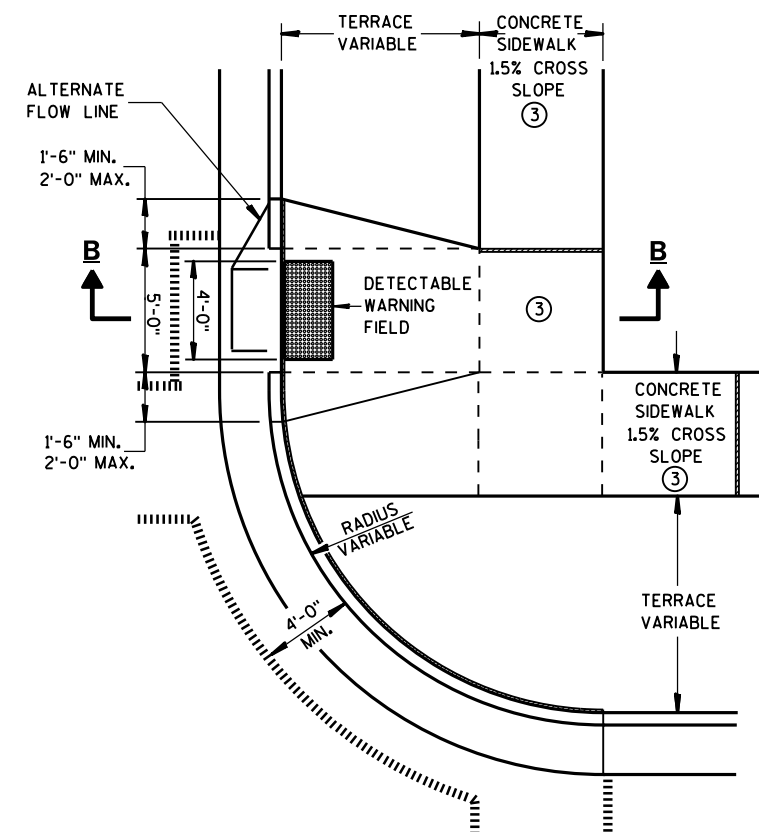
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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

- 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 $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

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



**CURB RAMPS
TYPES 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A



INTERMEDIATE RADII CAN BE INTERPOLATED



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

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

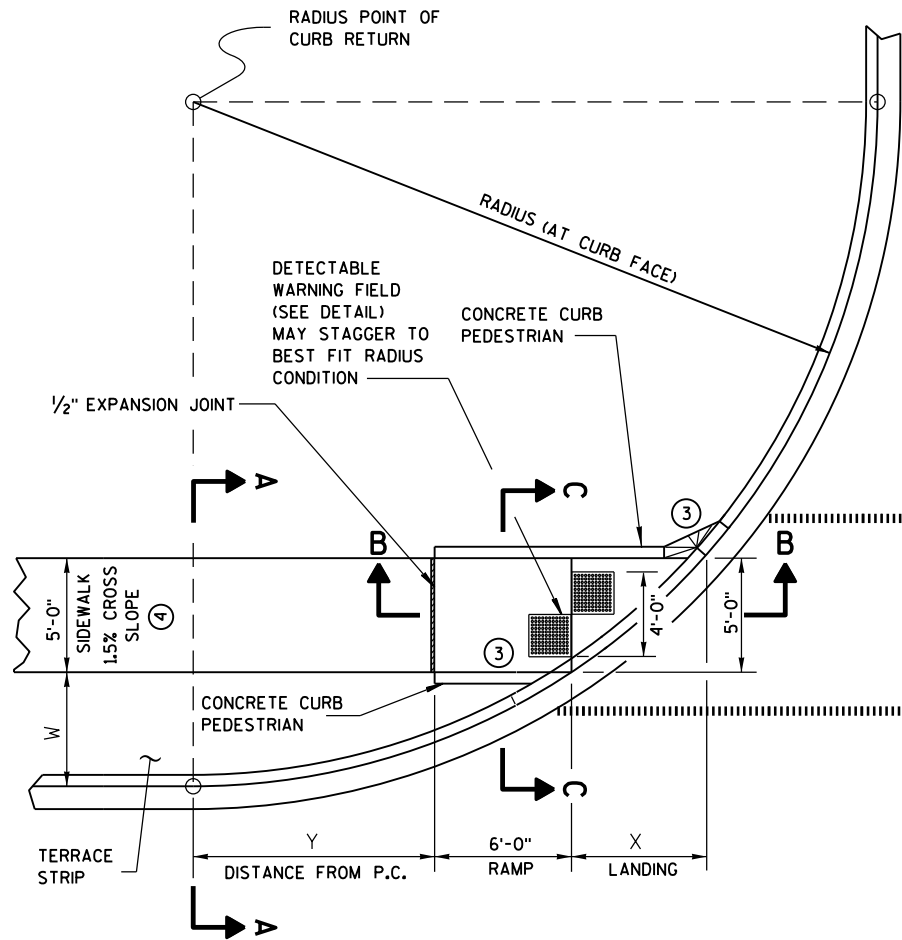
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

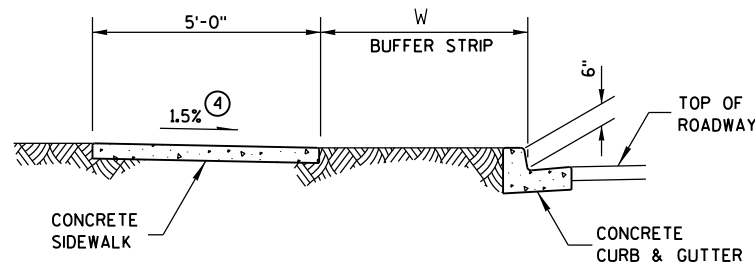


=====	1/2" EXPANSION JOINT-SIDEWALK
- - - -	CONTRACTION JOINT FIELD LOCATED
	PAVEMENT MARKING CROSSWALK (WHITE)

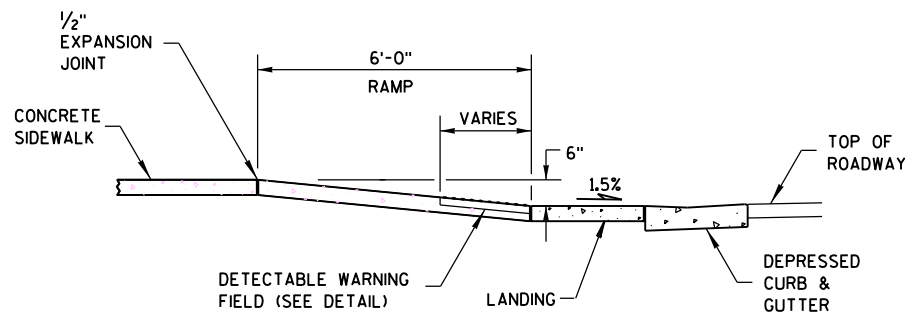
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 100



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B

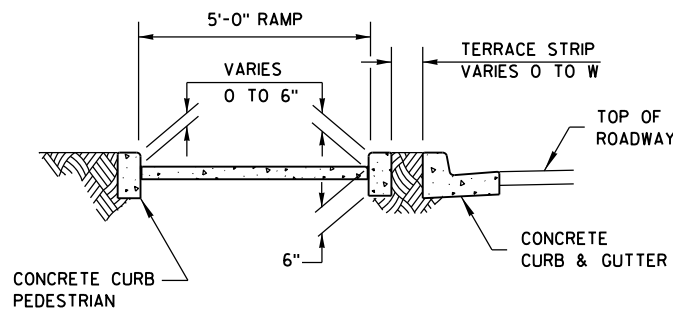


SECTION B-B FOR TYPE 4B

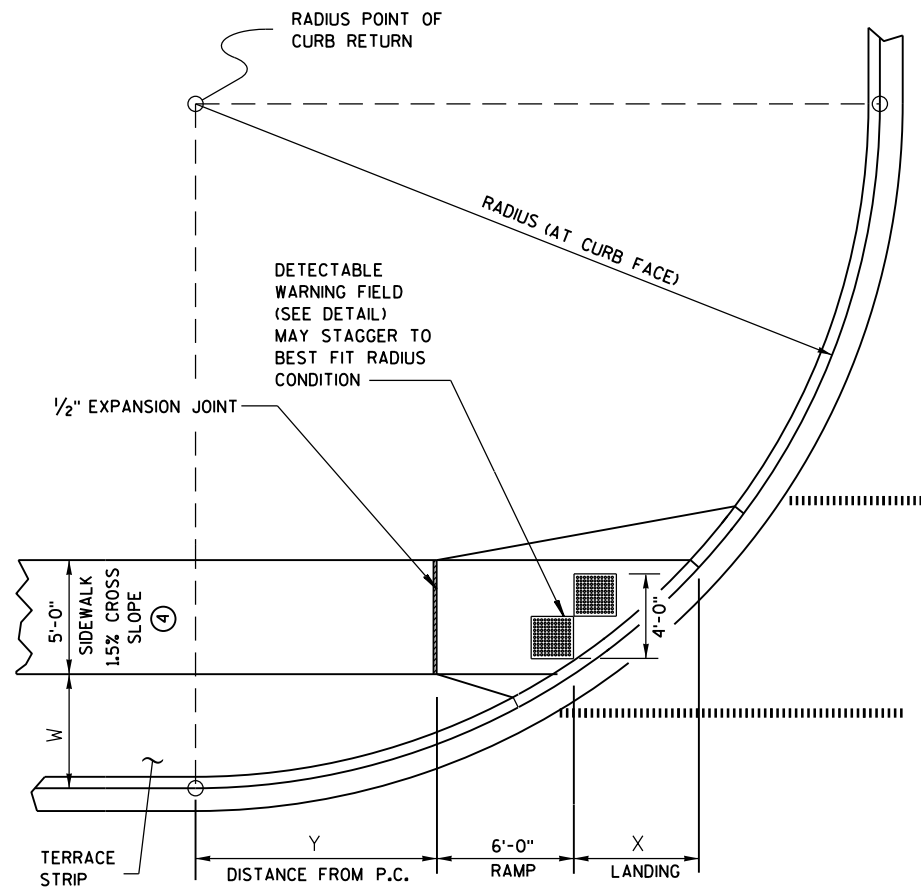
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

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'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-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'-3/4"	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"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW

GENERAL NOTES

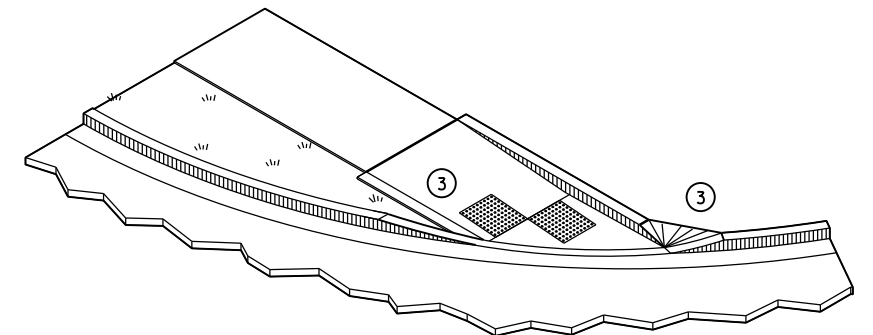
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

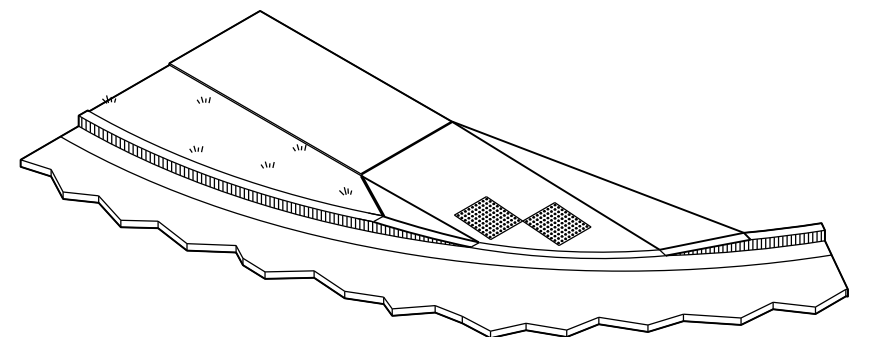
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

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



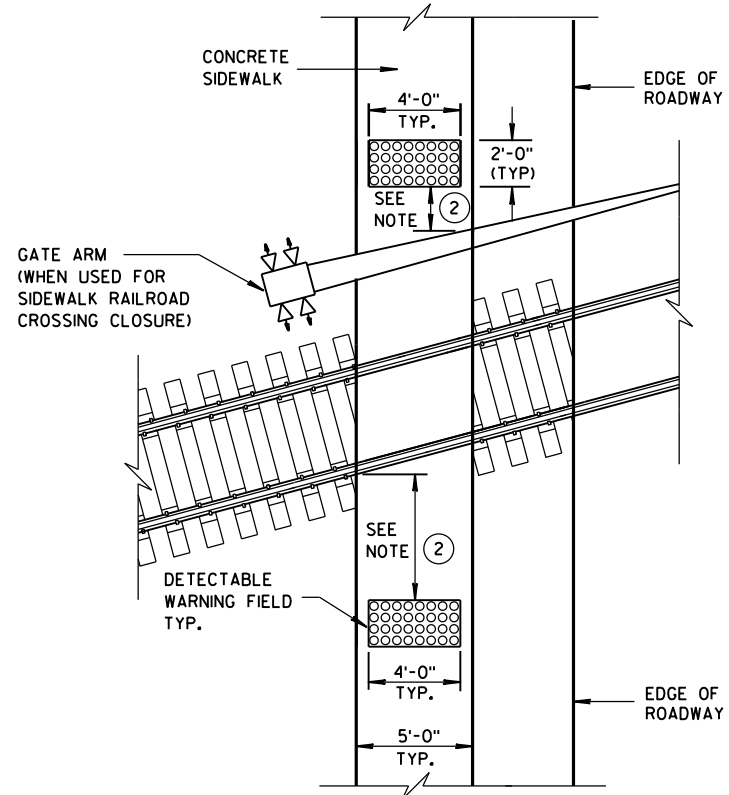
ISOMETRIC VIEW FOR TYPE 4B



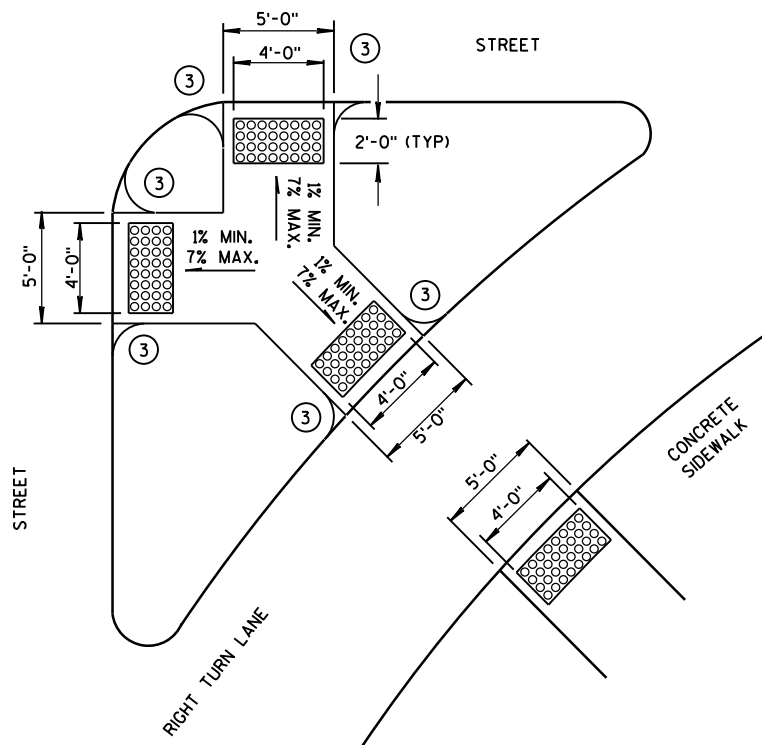
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

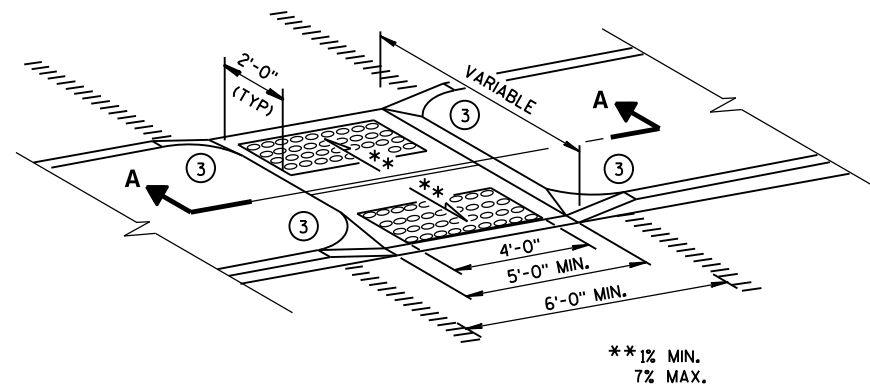
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 101



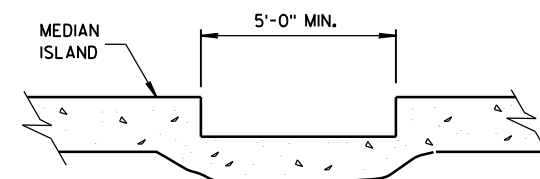
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



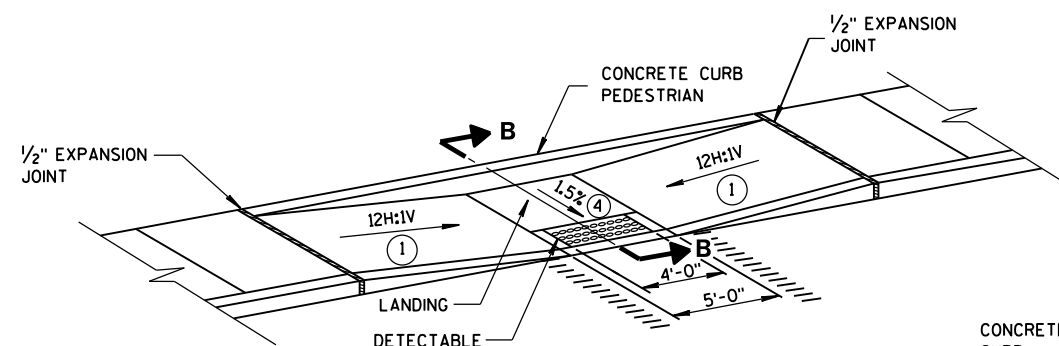
TYPE 6
DETECTABLE WARNING AT ISLANDS



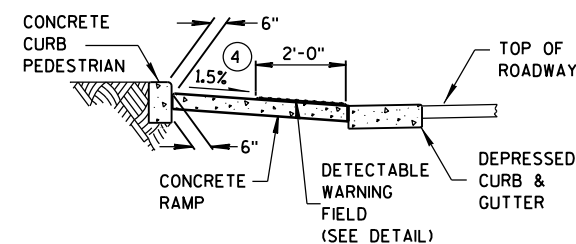
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



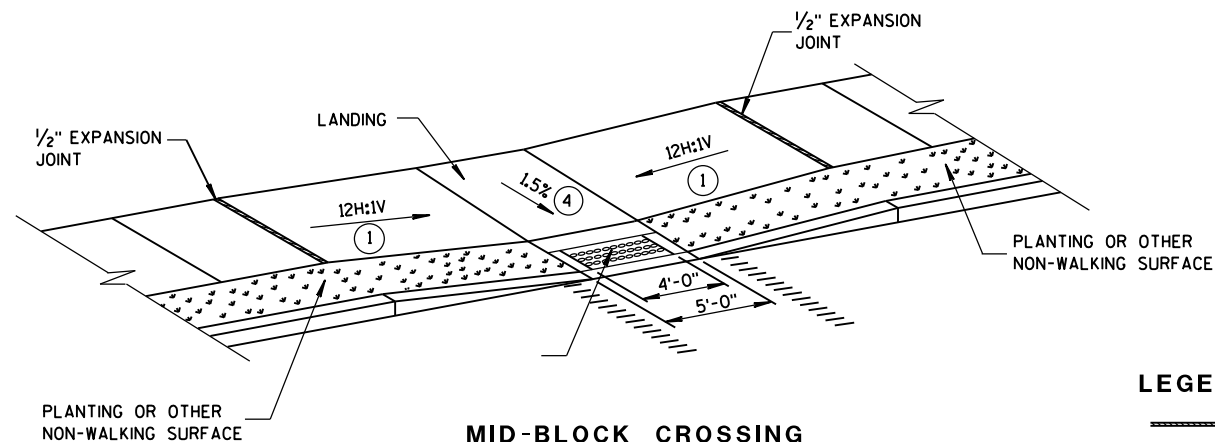
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

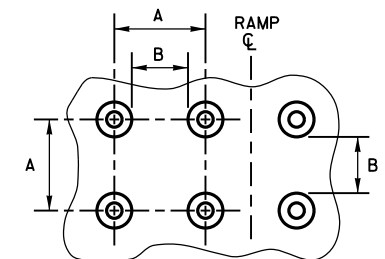
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

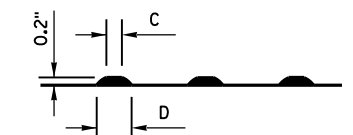
- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. 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.
- 4 $\pm$ 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



PLAN VIEW

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

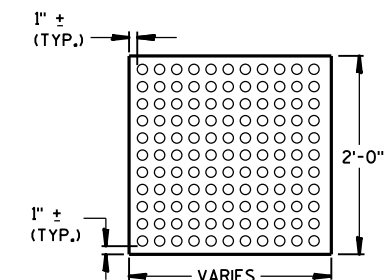
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

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

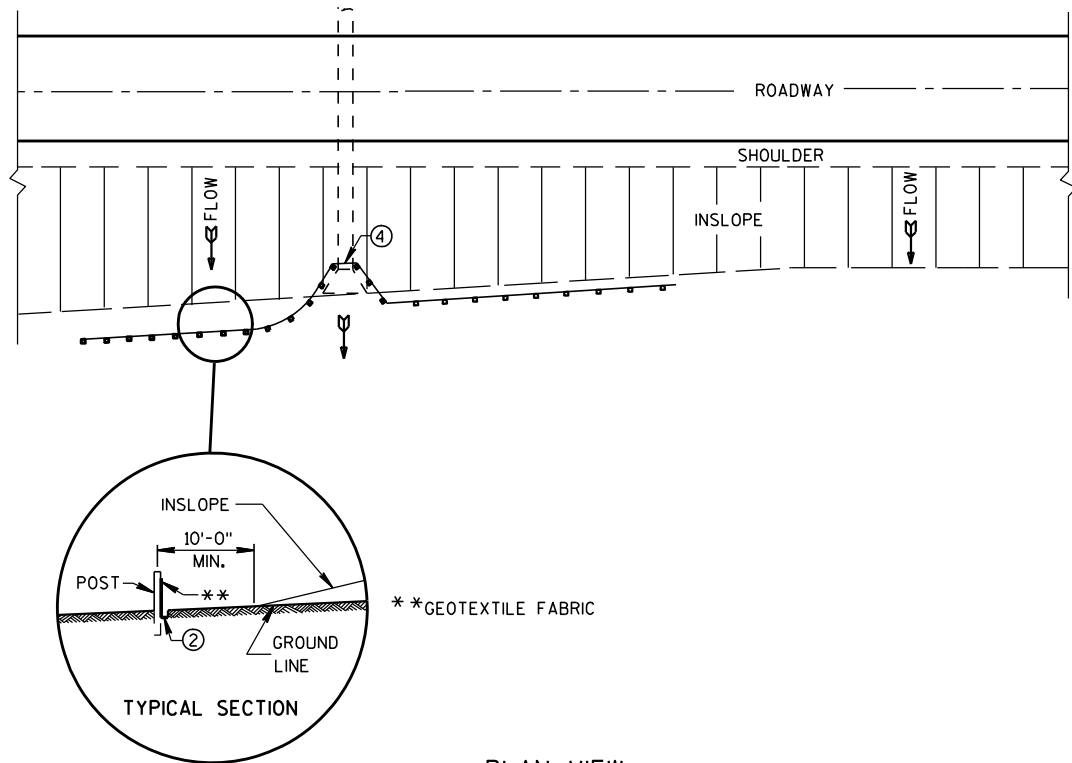
APPROVED

2-6-2013
DATE

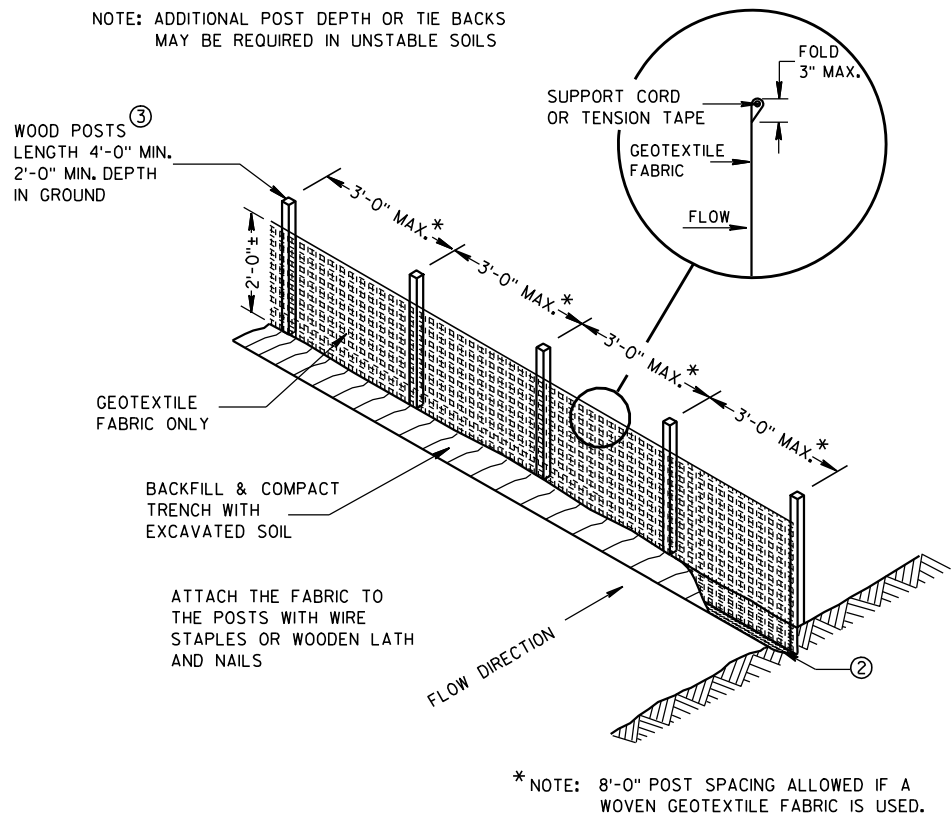
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

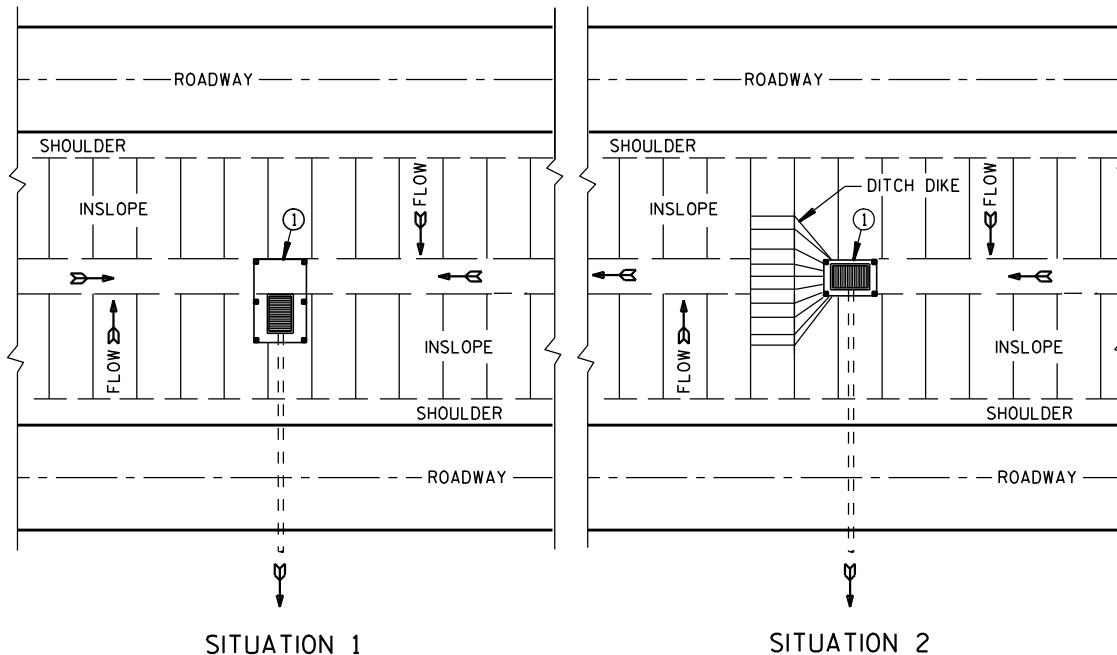
102 INT



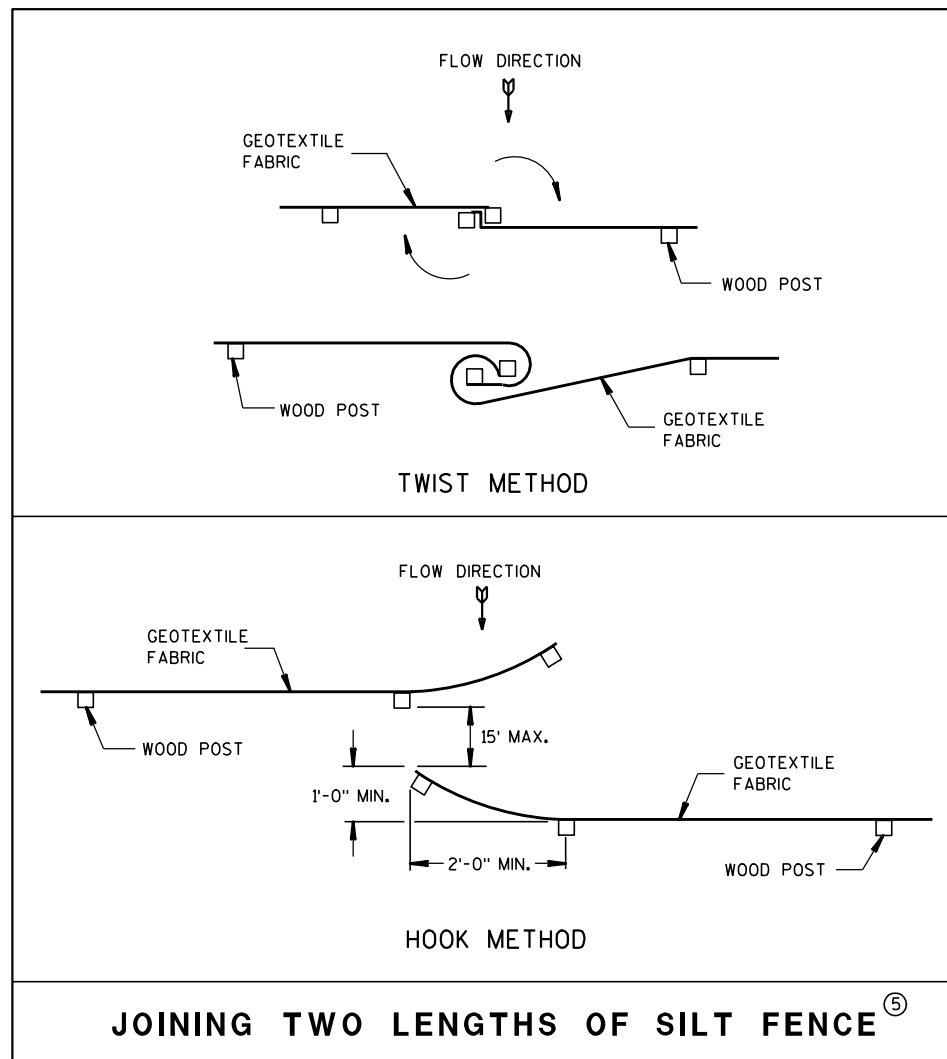
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

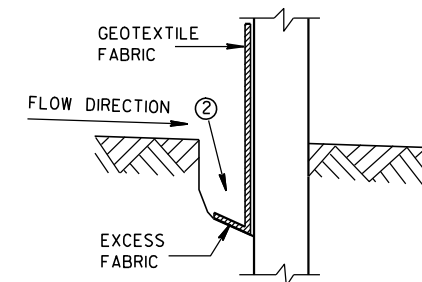


JOINING TWO LENGTHS OF SILT FENCE ⑤

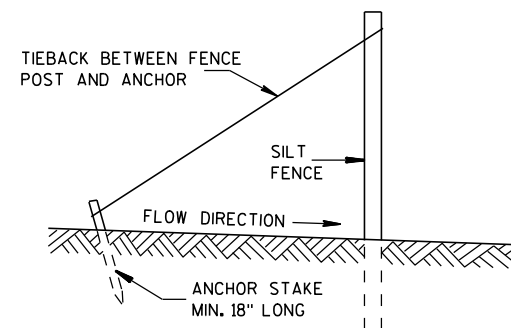
GENERAL NOTES

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 1 1/8" X 1 1/8" 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.

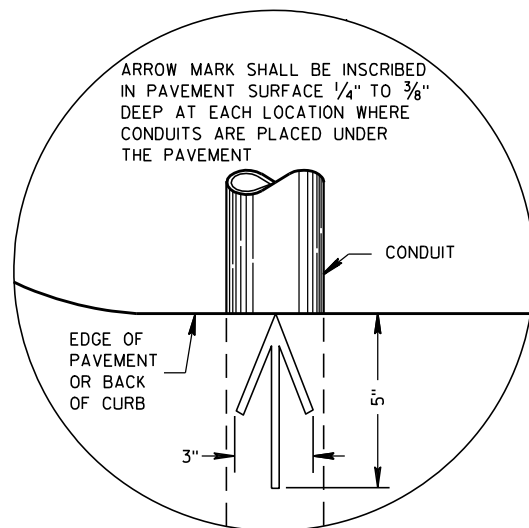


TRENCH DETAIL

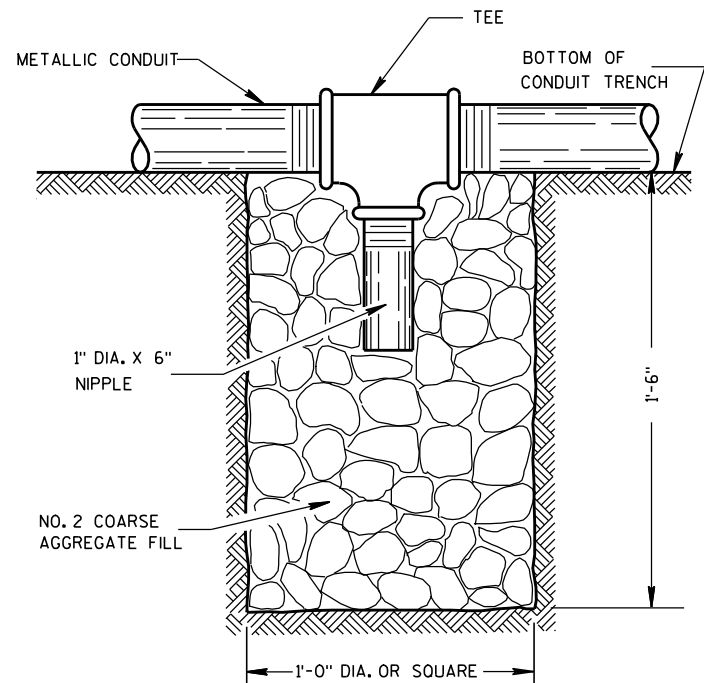


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Conn CHIEF ROADWAY DEVELOPER 103 ENGINEER
FHWA	

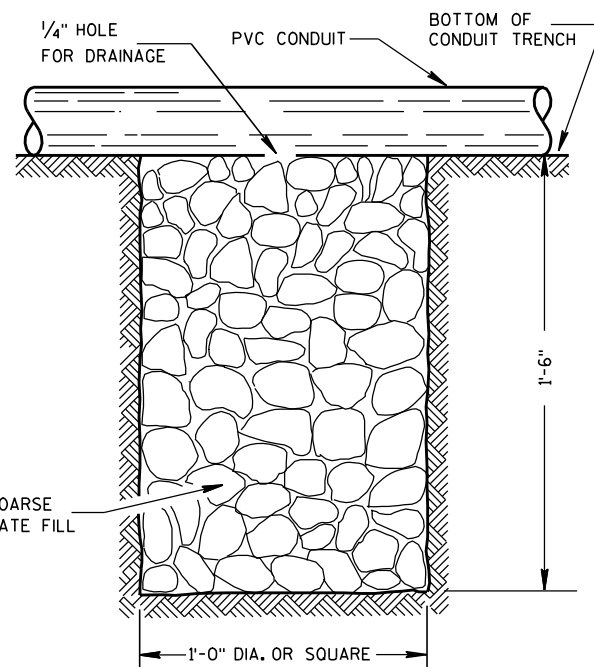


**PLAN VIEW
ARROW MARK**



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 EMERSON 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.

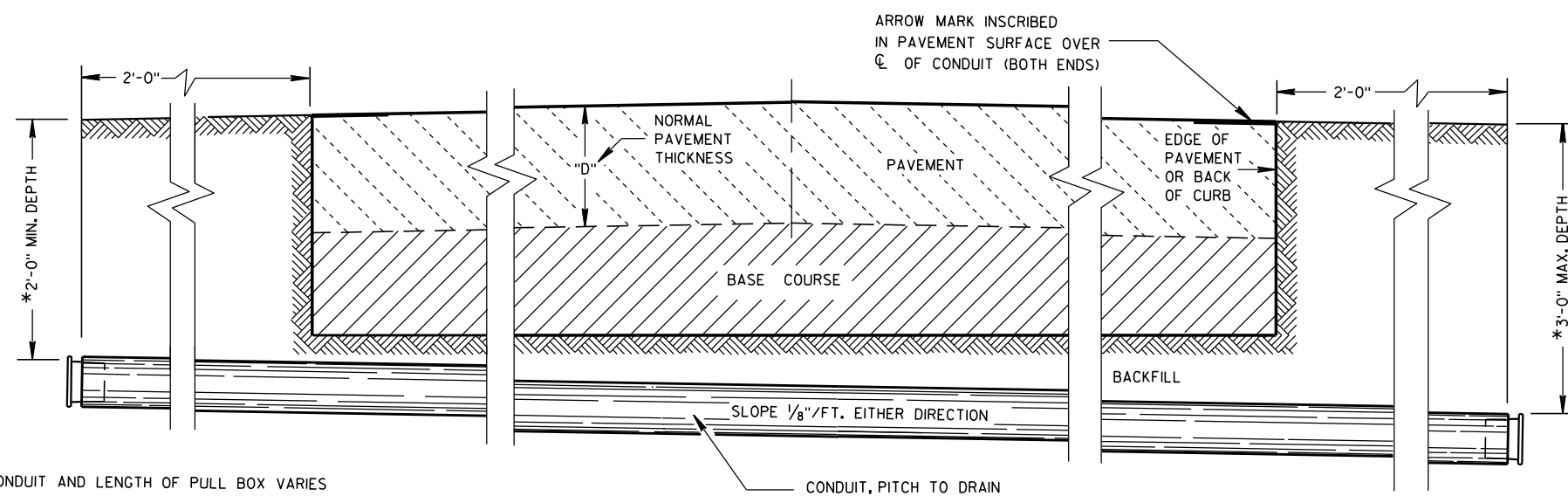
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL 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

10/23/03

DATE

FHWA

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 105 HWYS

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

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

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

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

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

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

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

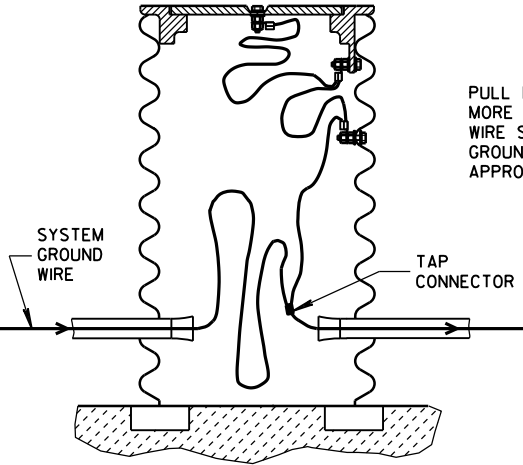
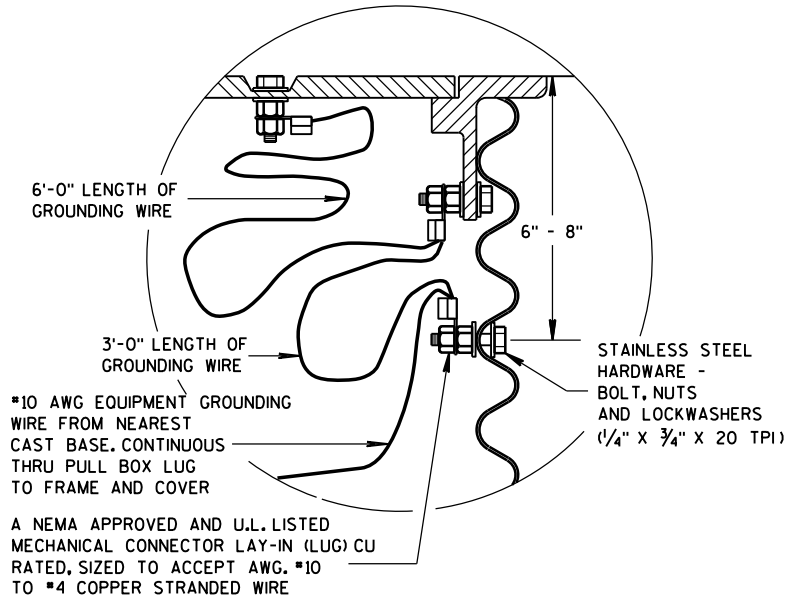
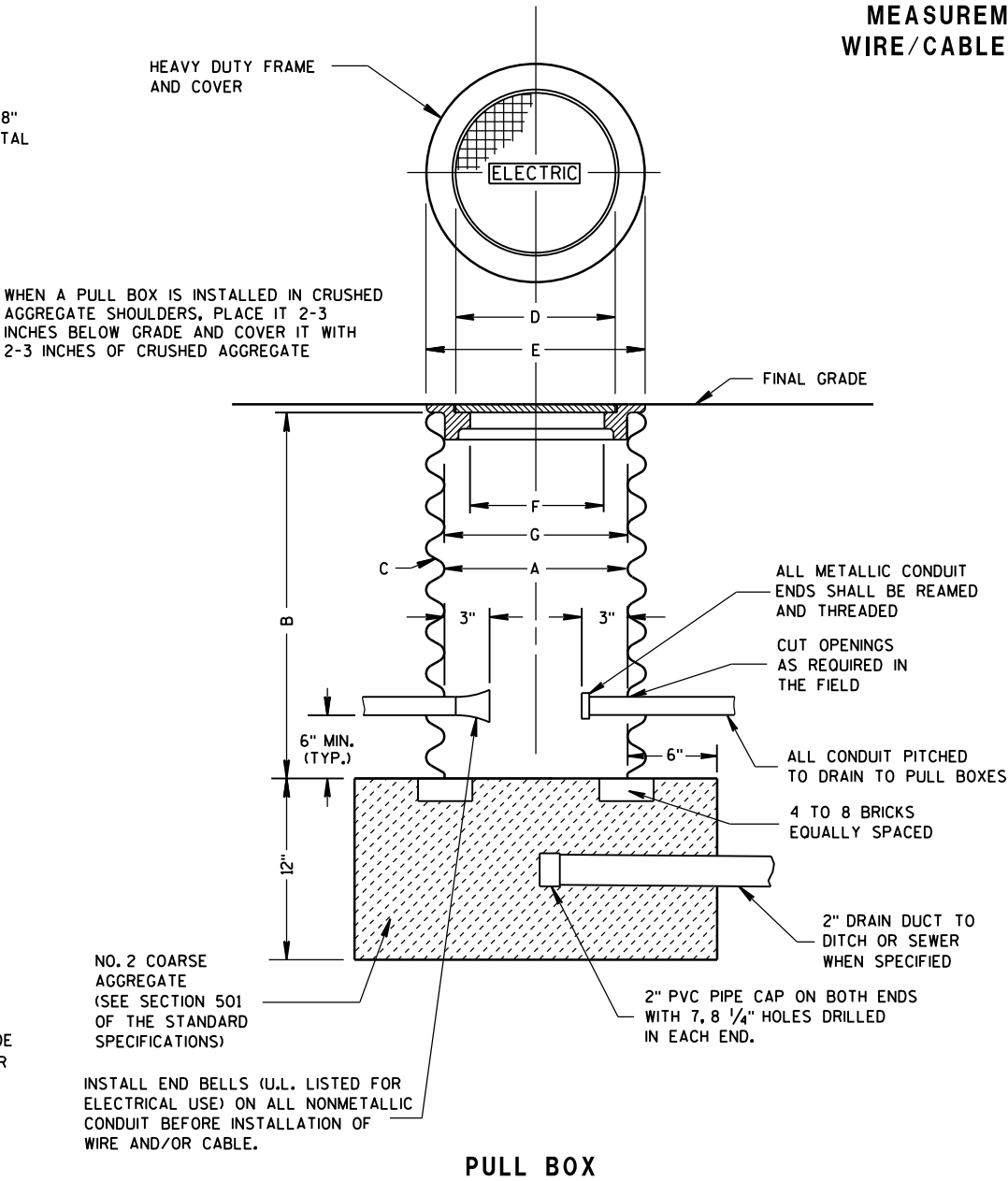
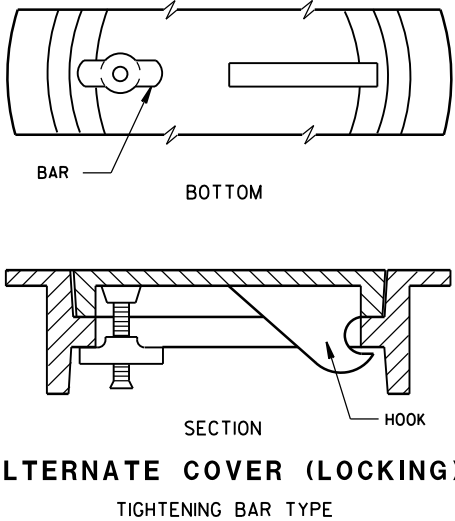
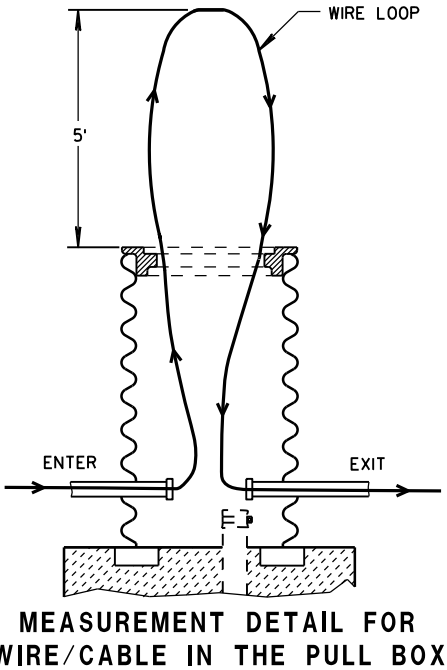
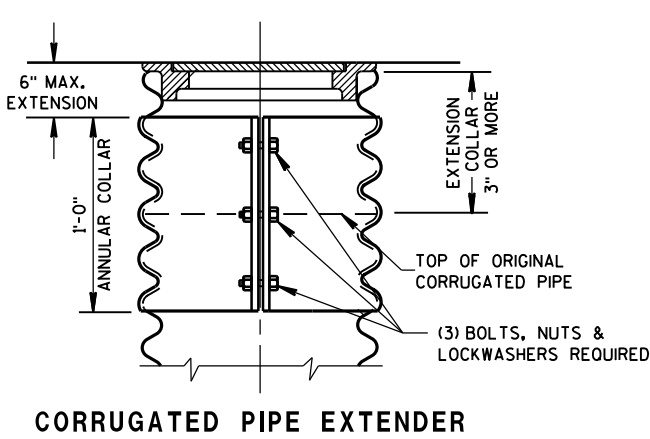
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

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

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

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

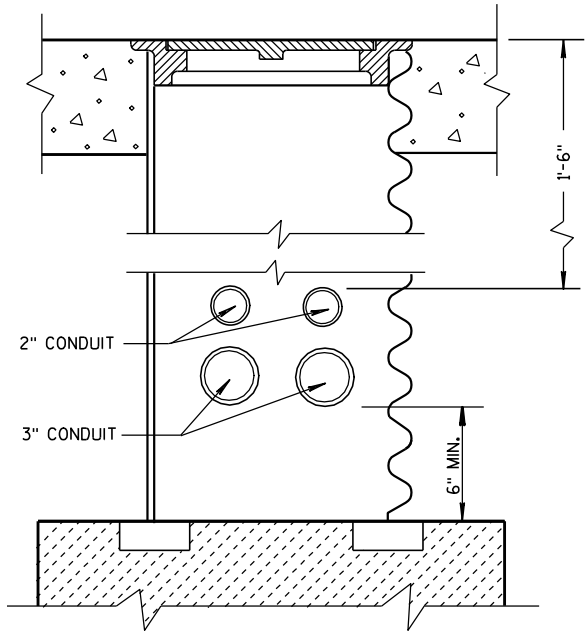
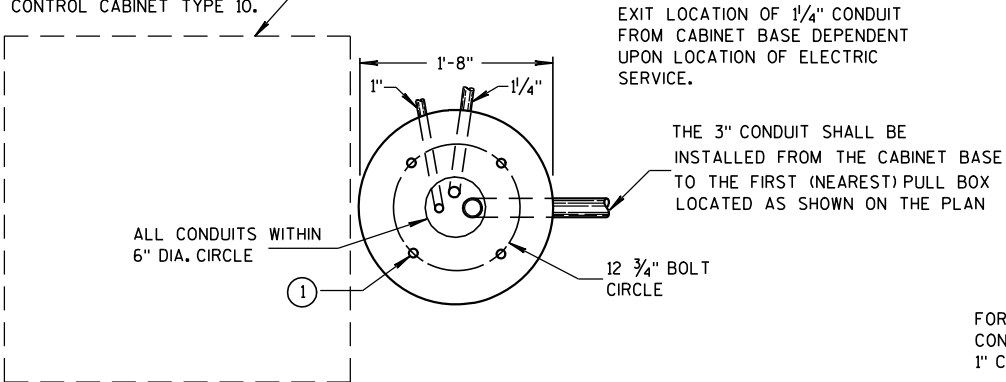


PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-7-2013 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 106
FHWA	

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

* INCLUDES MAINTENANCE PLATFORM.

TYPICAL 3'-0" X 3'-0" X 4" THICK
MAINTENANCE PLATFORM.
LOCATION TO BE DETERMINED
IN THE FIELD. COST TO BE
INCLUDED UNDER CONCRETE
CONTROL CABINET TYPE 10.



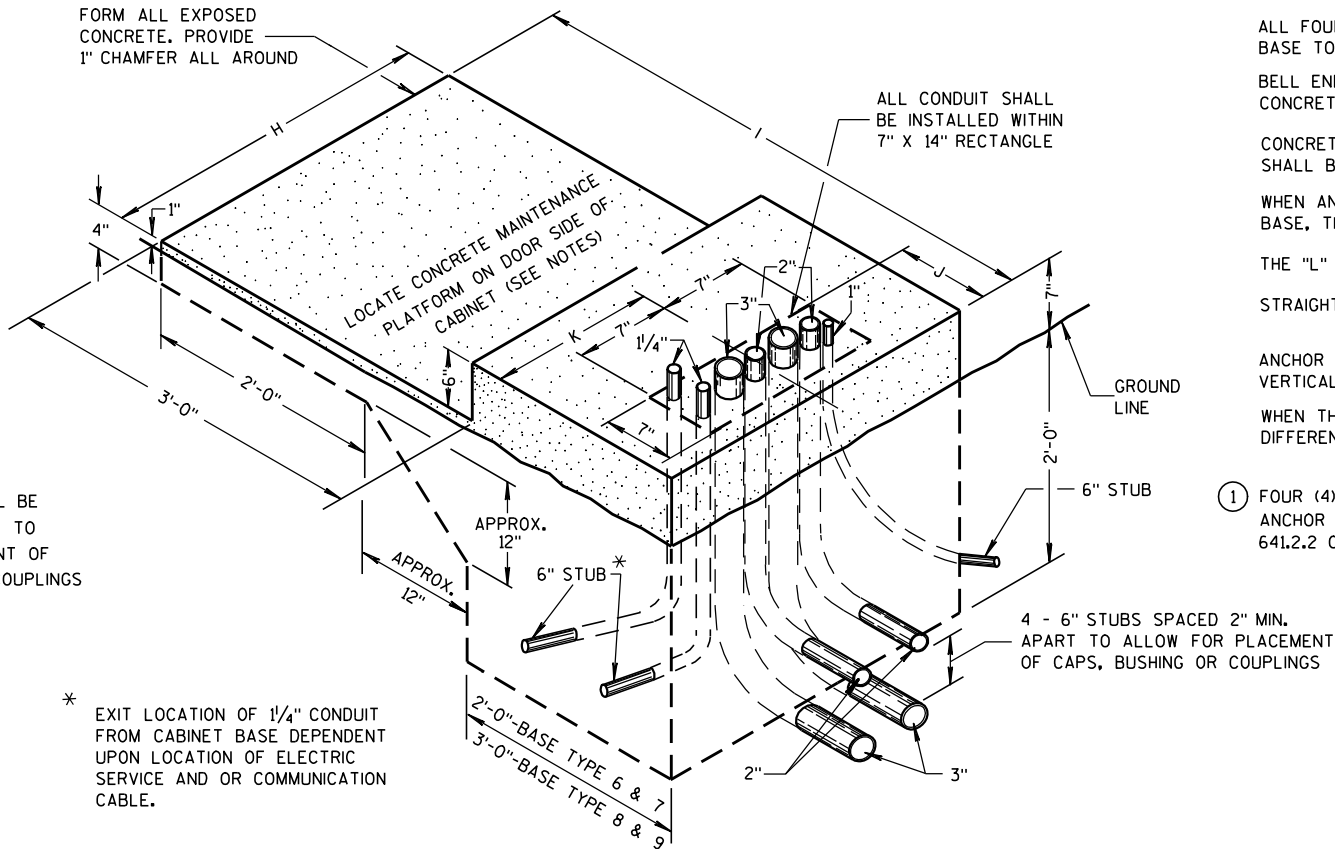
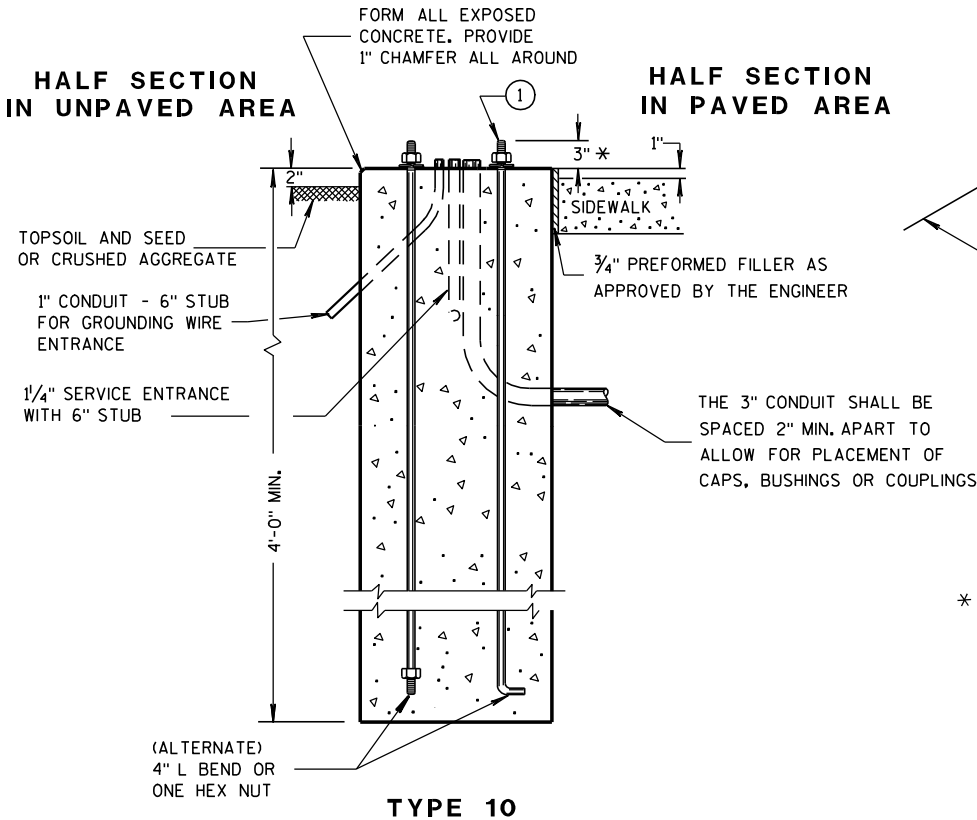
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

HALF SECTION IN UNPAVED AREA



HALF SECTION IN PAVED AREA



TYPE 6, 7, 8 AND 9 (ISOMETRIC VIEW)

GENERAL NOTES

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

INSTALL FOUR 1/2" INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

WHEN THIS DRAWING IS USED FOR STREET LIGHTING CABINET BASES, CONDUIT MAY BE DIFFERENT AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

- ① FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6" ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/3/10

DATE

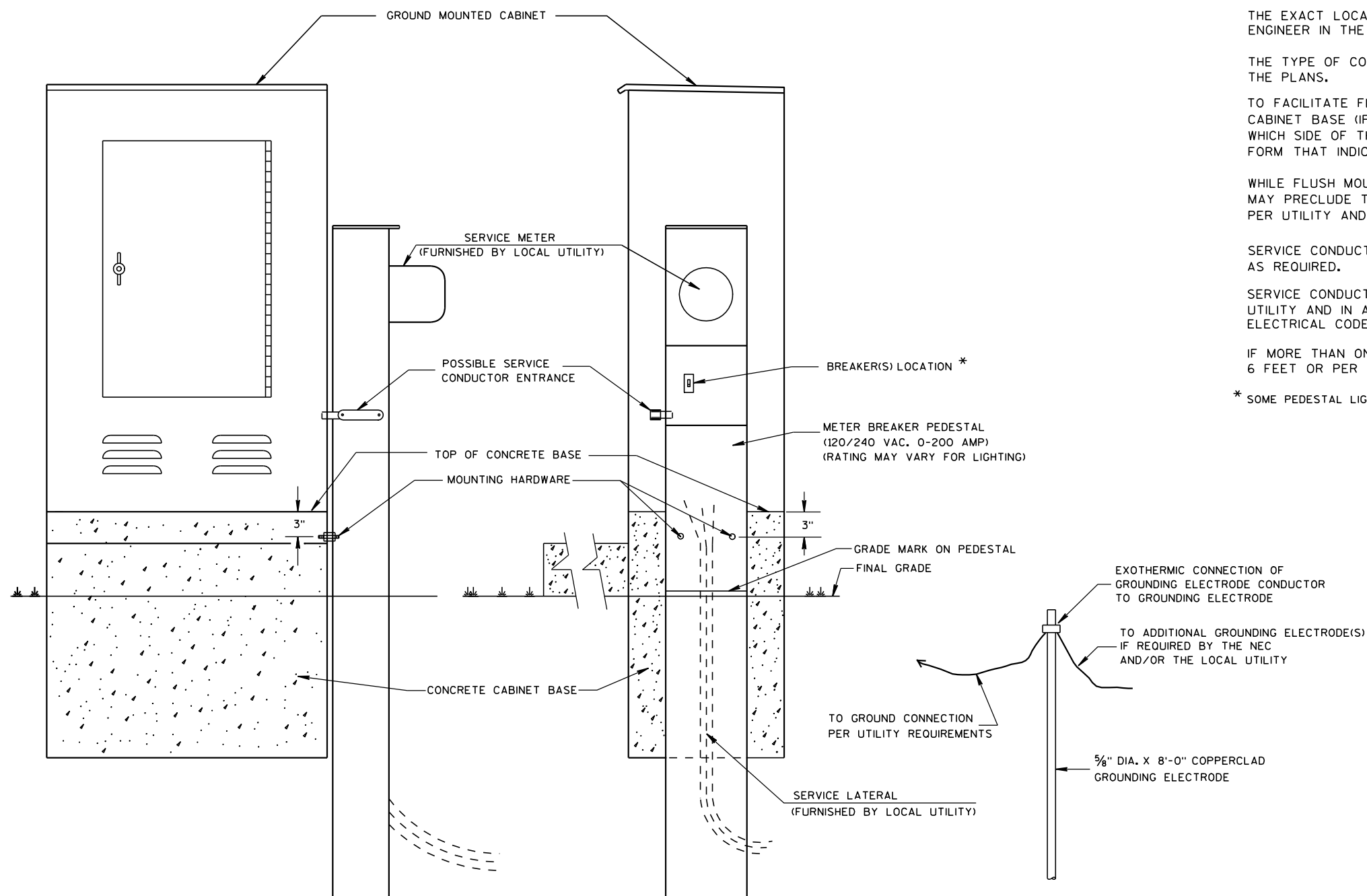
FHWA

/S/ Joanna L. ...
STATE ELECTRICAL ENGI 107

HWYS

CONCRETE CONTROL CABINET BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/27/09

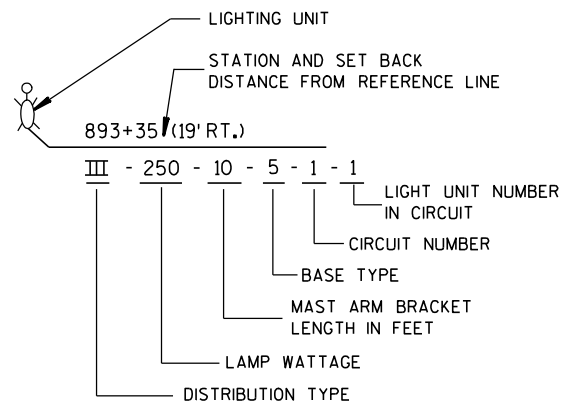
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/S/ Joanna L. Bush

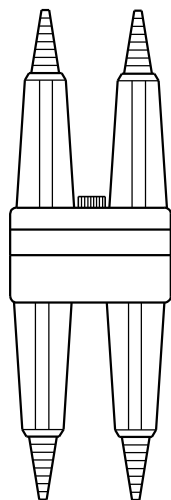
STATE ELECTRICAL ENGI 108

HWYS

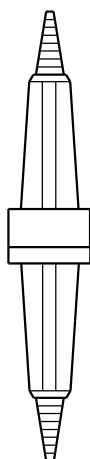
FHWA



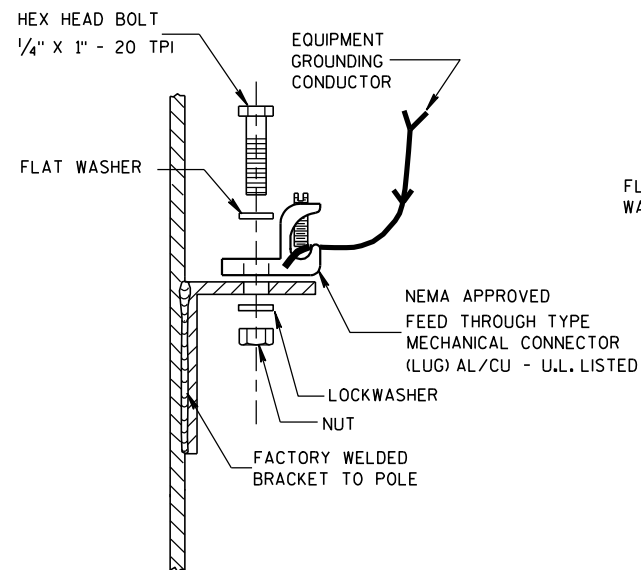
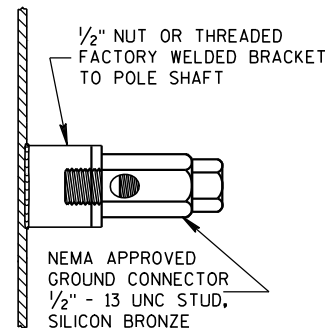
LIGHTING UNIT CODE
(TYPICAL)



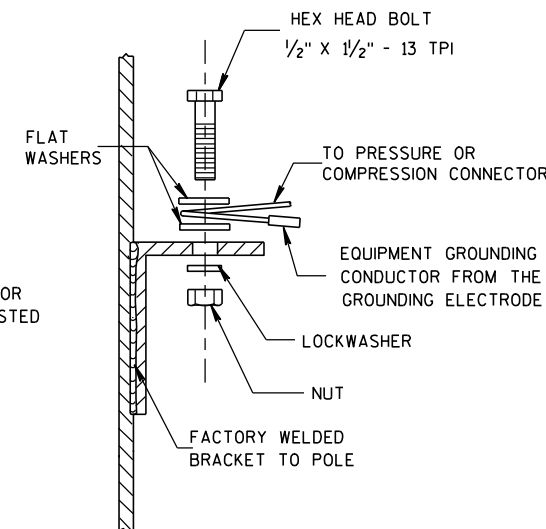
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



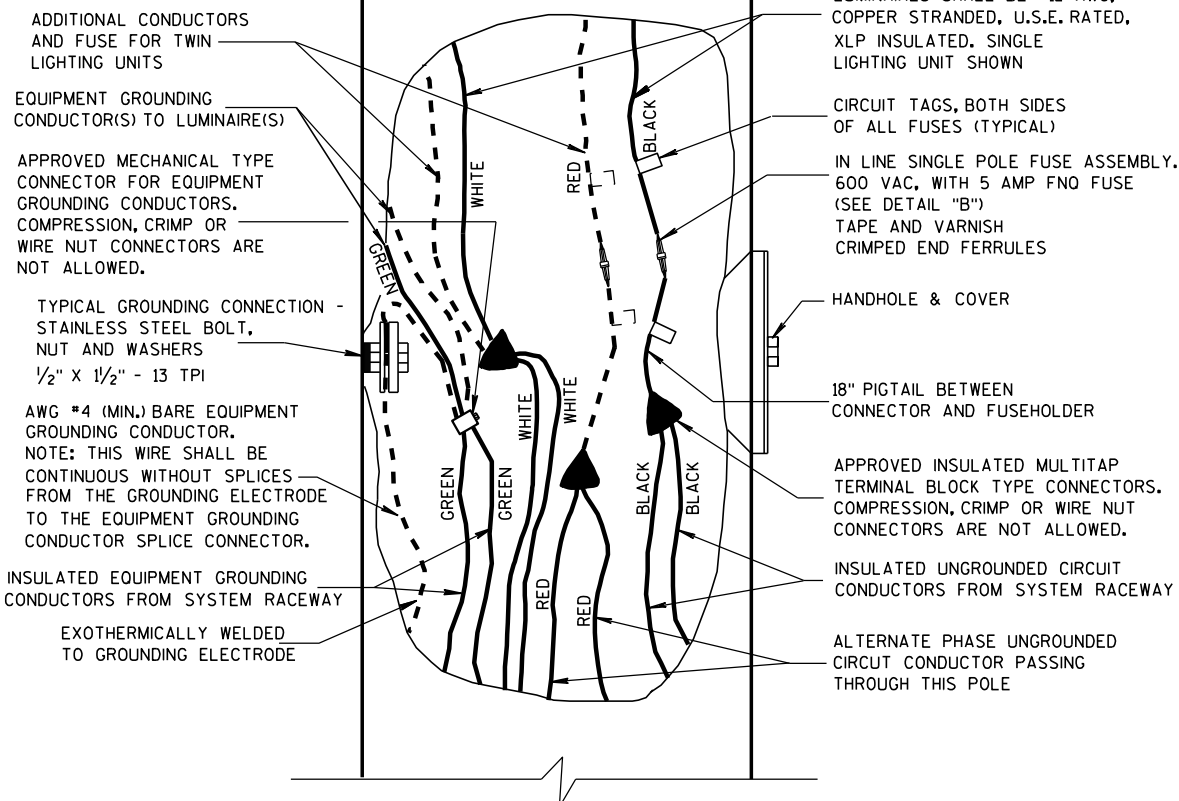
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



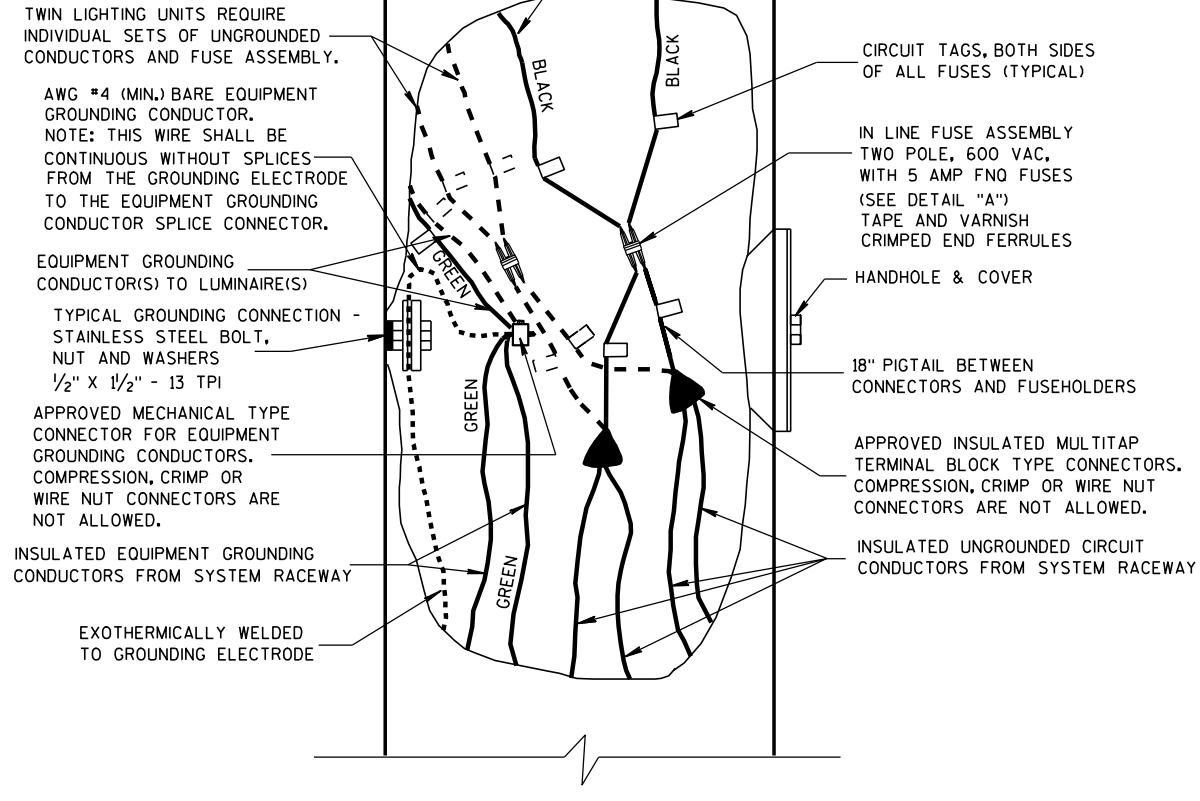
UNGROUND CONDUCTORS TO LUMINAIRES SHALL BE #12 AWG, COPPER STRANDED, U.S.E. RATED, XLP INSULATED. SINGLE LIGHTING UNIT SHOWN

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.



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

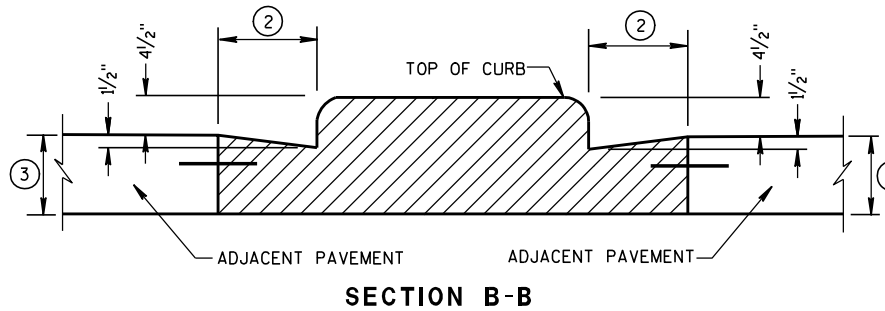
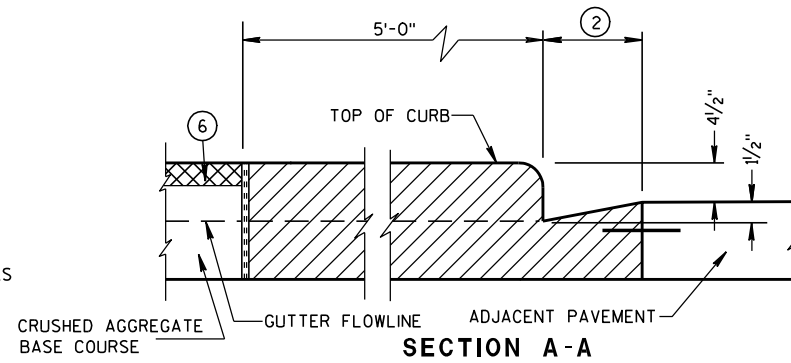
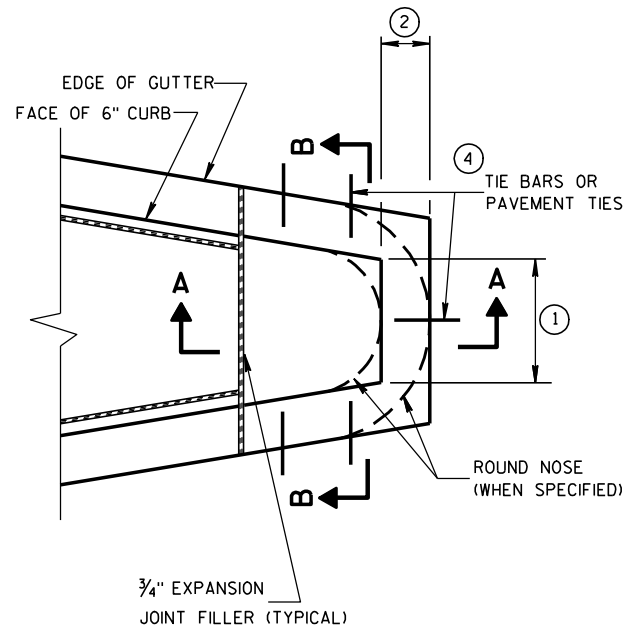
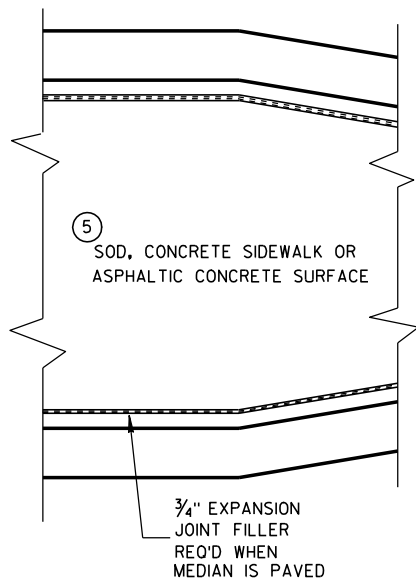


2 WIRE - 240 OR 480 VAC (UNGROUND CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

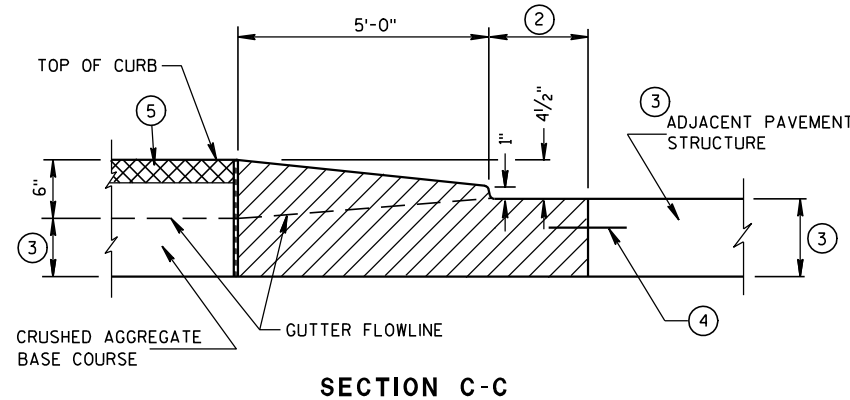
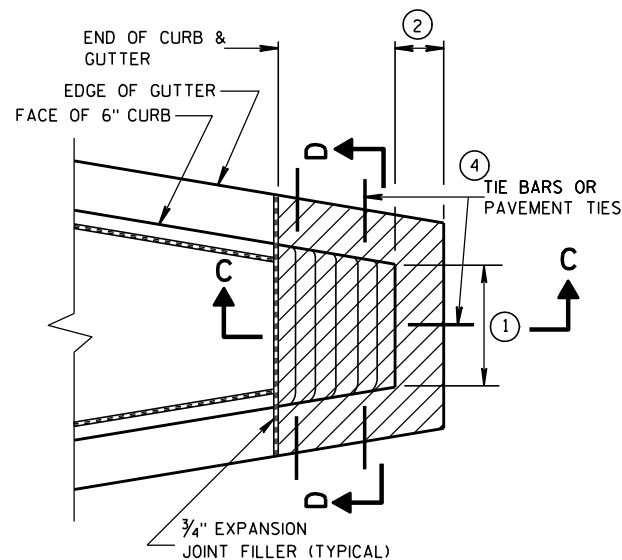
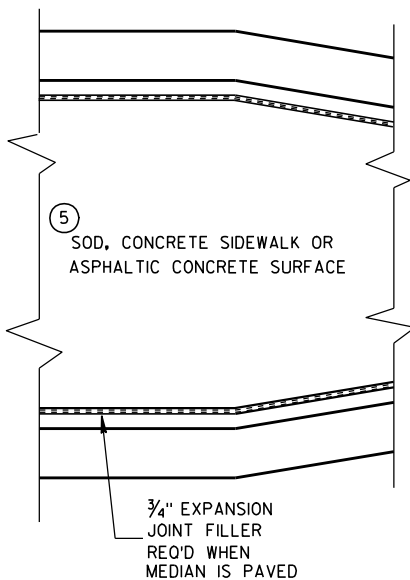
NON-FREWAY LIGHTING UNIT
POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

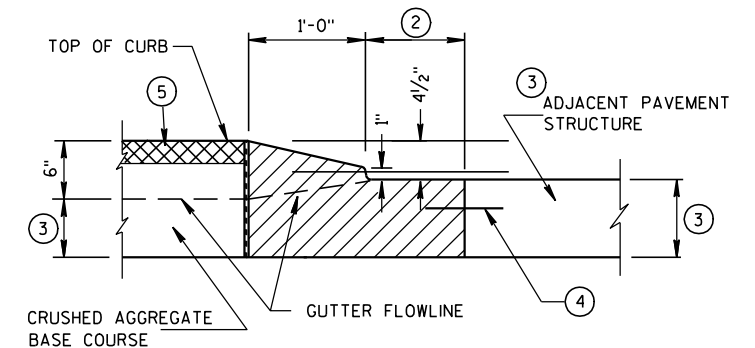
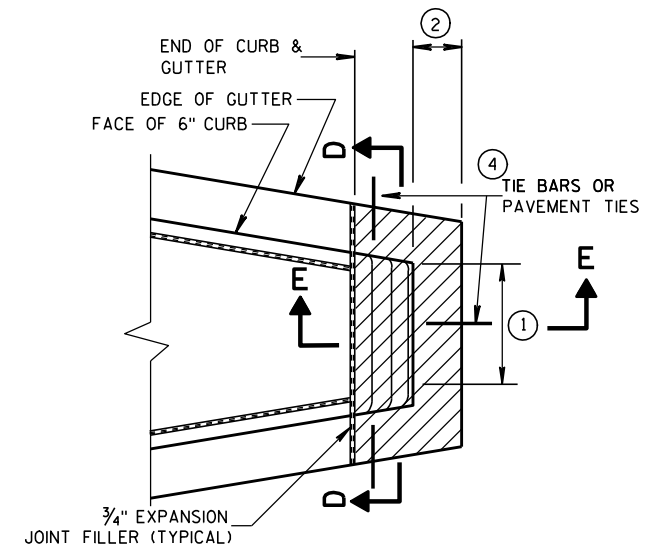
APPROVED
3/2/2011 /S/ Thomas J. Gossion
DATE STATE ELECTRICAL ENGI 109 HWYS
FHWA



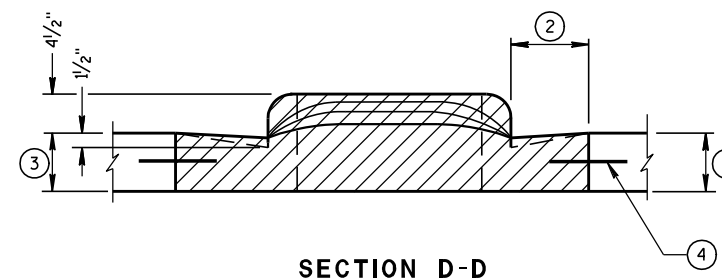
CONCRETE MEDIAN BLUNT NOSE DETAIL



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

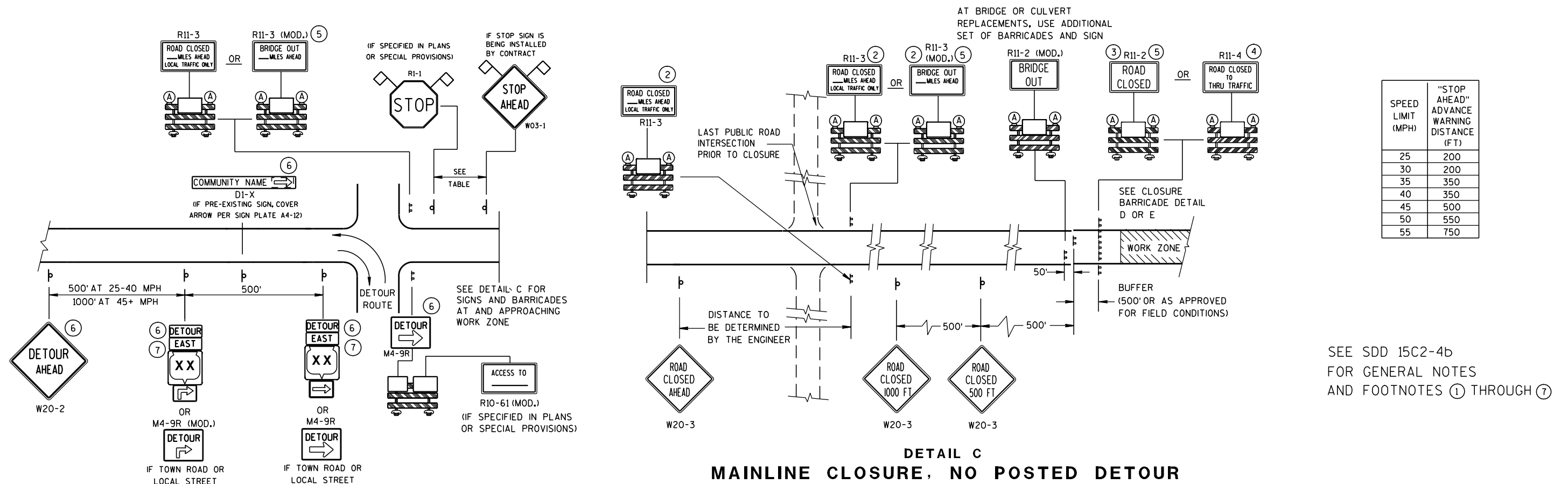
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/S/ Jerry H. 7

ROADWAY STANDARDS 110

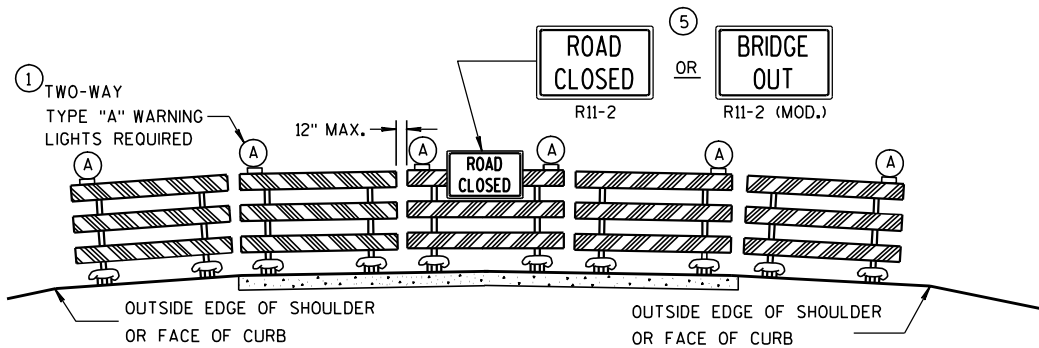
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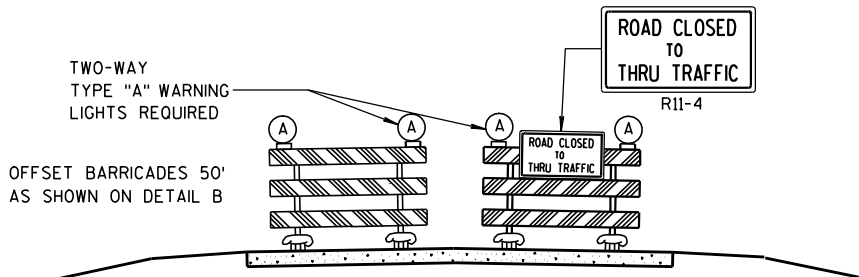


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

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.

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, M4-9, R11-4 AND R10-61 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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

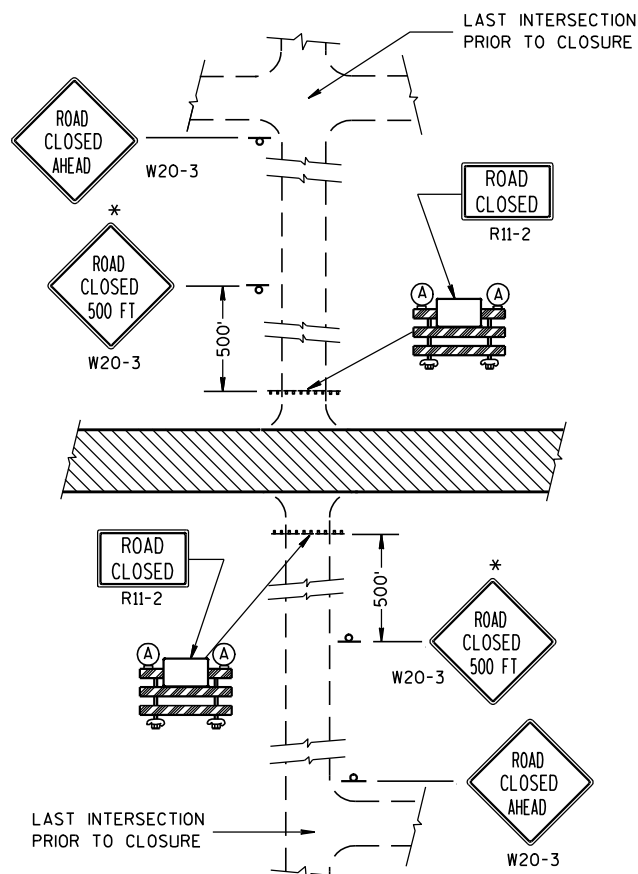
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

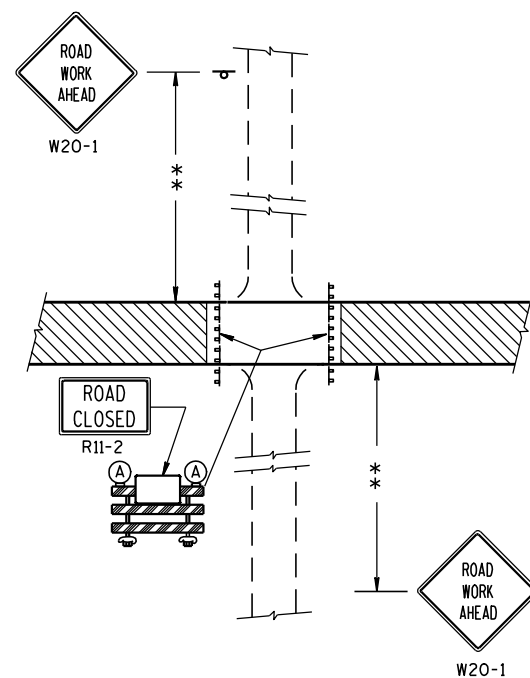
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

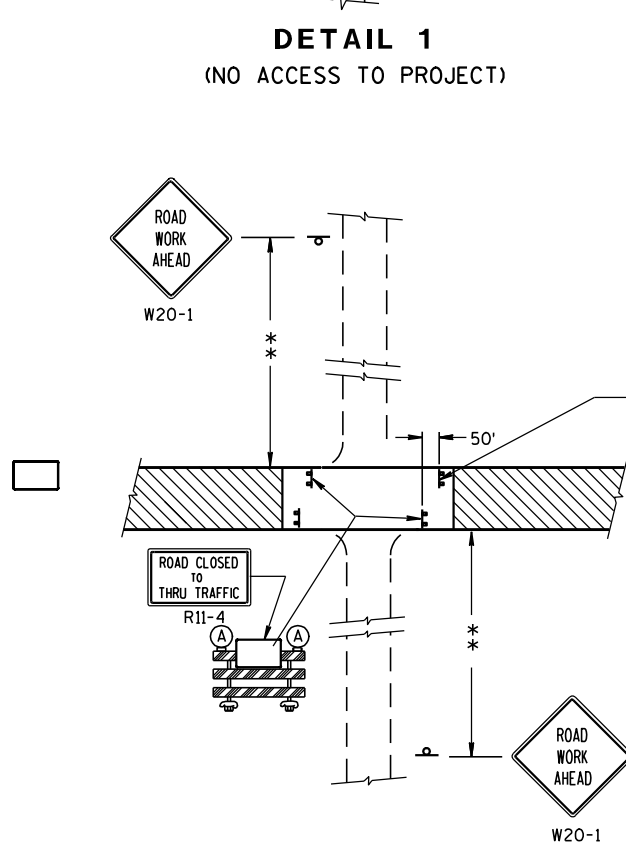
BARRICADES AND SIGNS FOR MAINLINE CLOSURES		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED		
9/16/03 DATE	/S/ Thomas N. N CHIEF SIGNS AND MAR 112	INEER
FHWA		



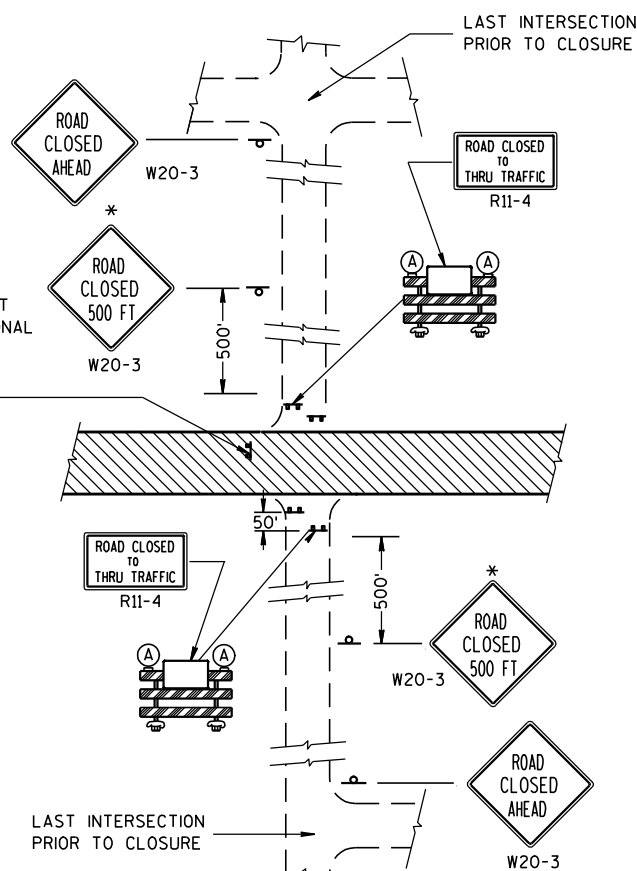
DETAIL 1
(NO ACCESS TO PROJECT)



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



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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

⌋ POST MOUNTED WARNING SIGN

⌋ TYPE III BARRICADES

Ⓐ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)

▨ WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

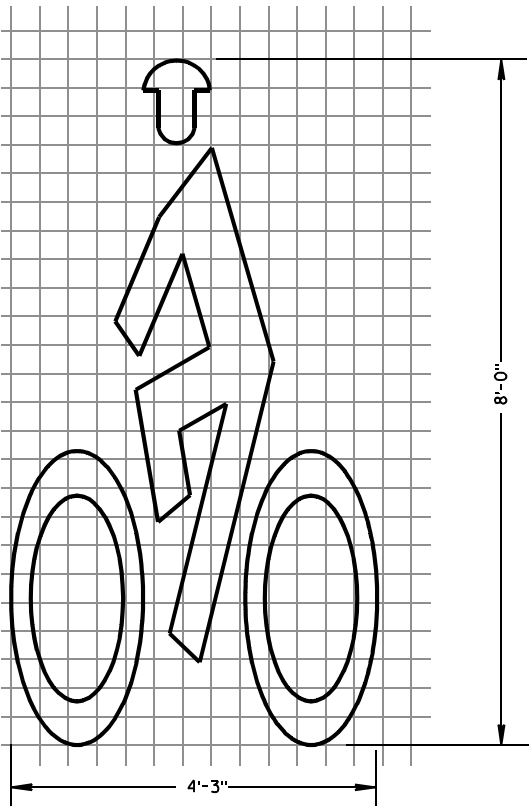
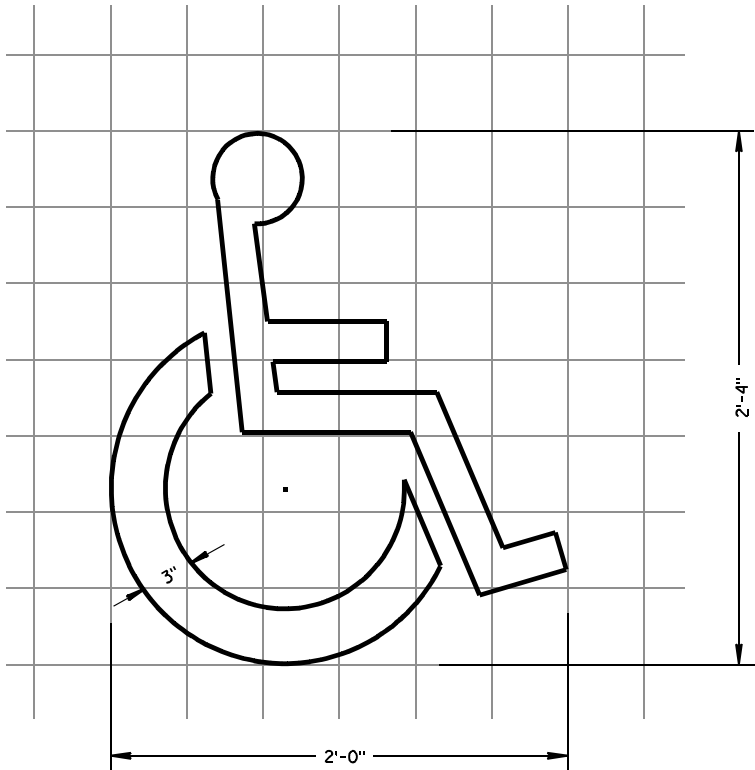
APPROVED

9-16-03

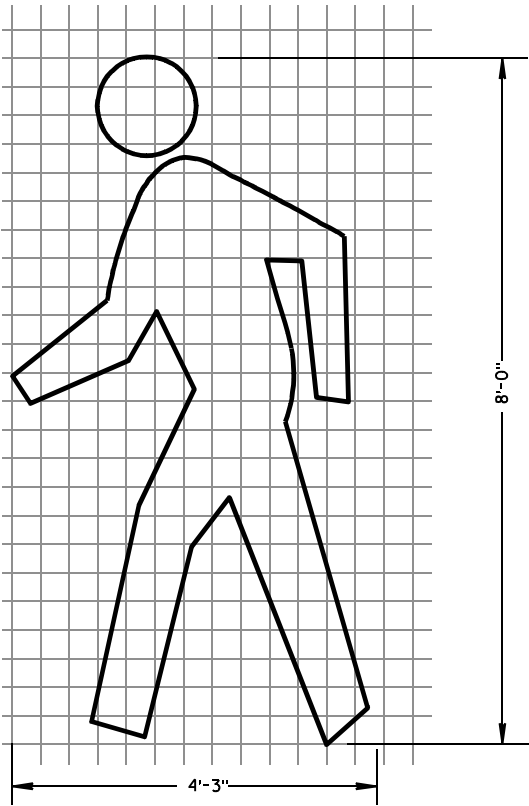
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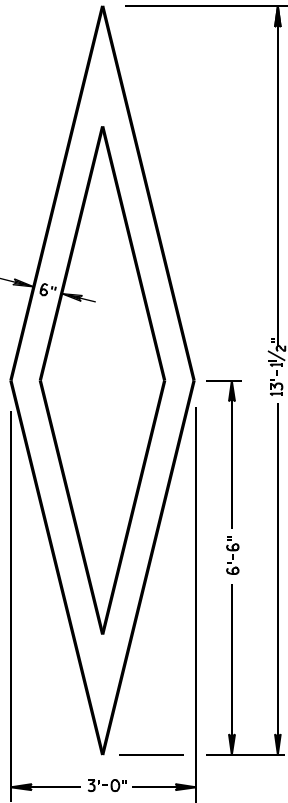
/S/ Thomas N. N...
CHIEF SIGNS AND MAR 113 INEER



BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

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.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

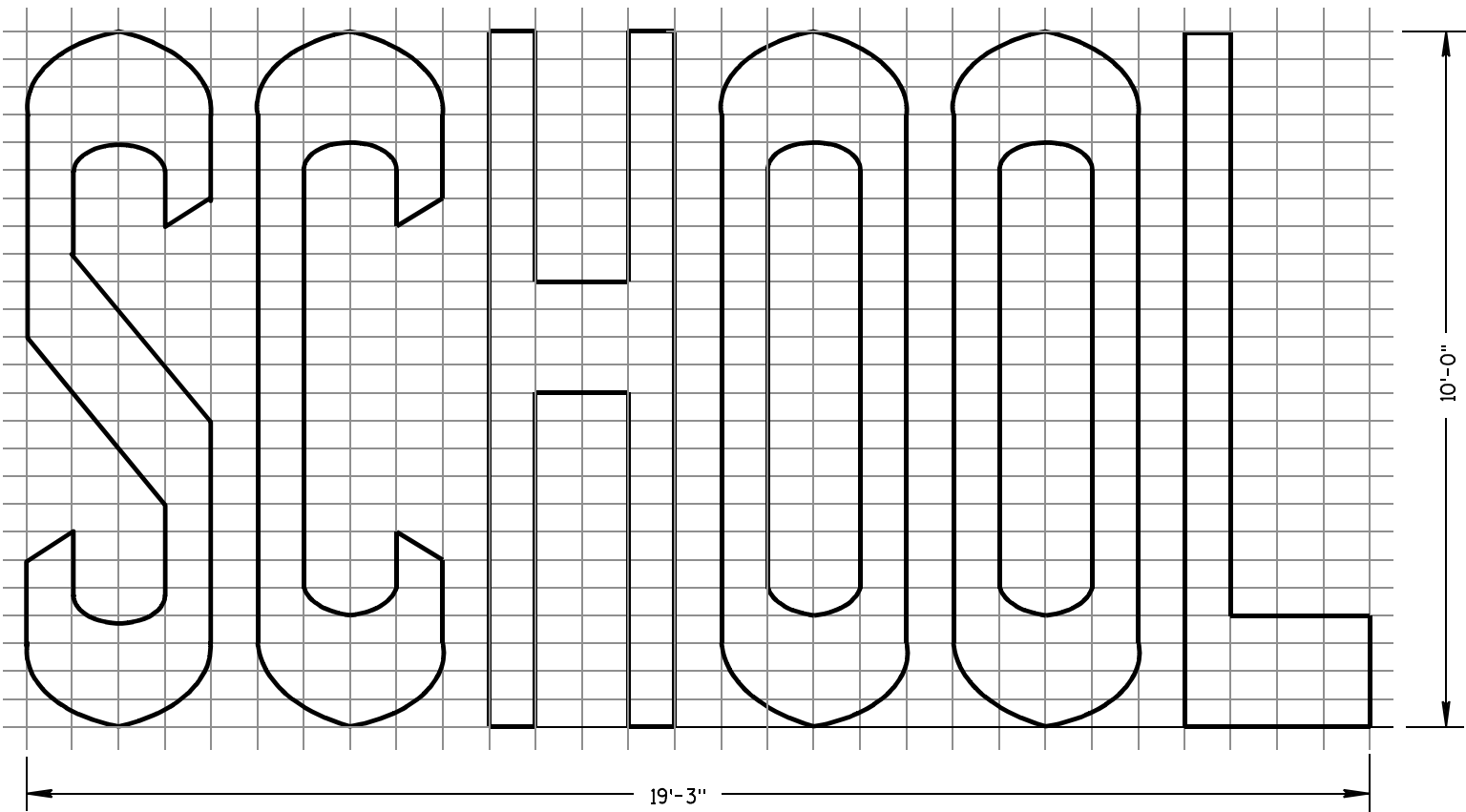
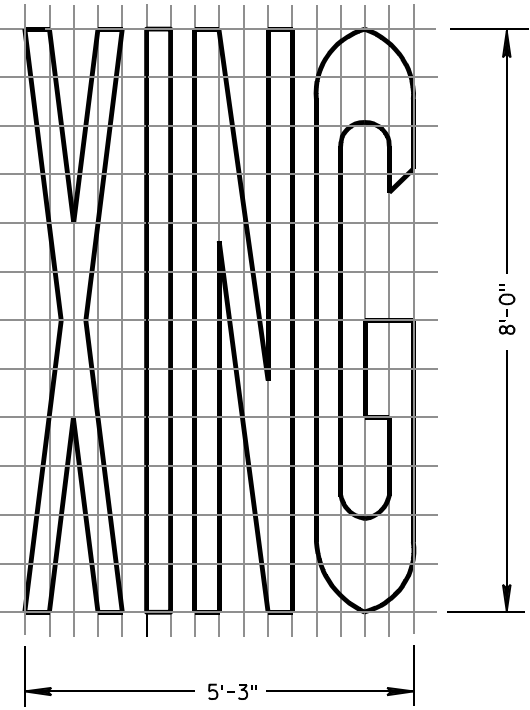
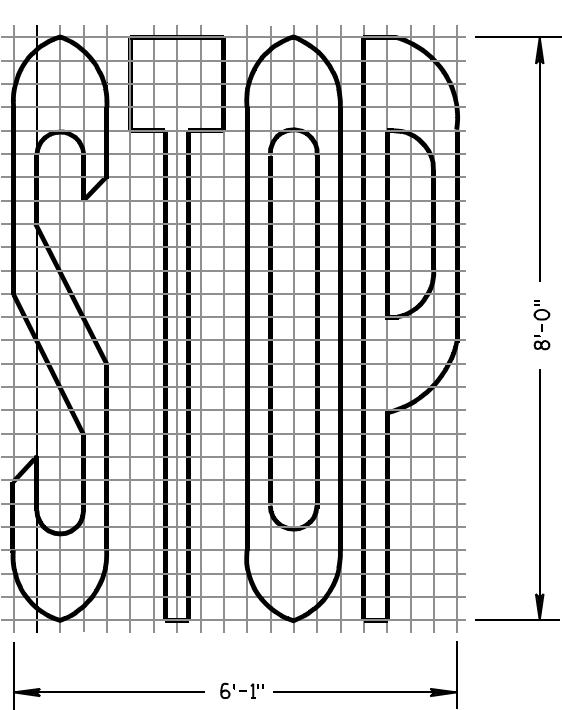
A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

PAVEMENT MARKING SYMBOLS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/1/11 DATE	/S/ Thomas N. Nathan STATE TRAFFIC ENGINEER 114 IGN FHWA

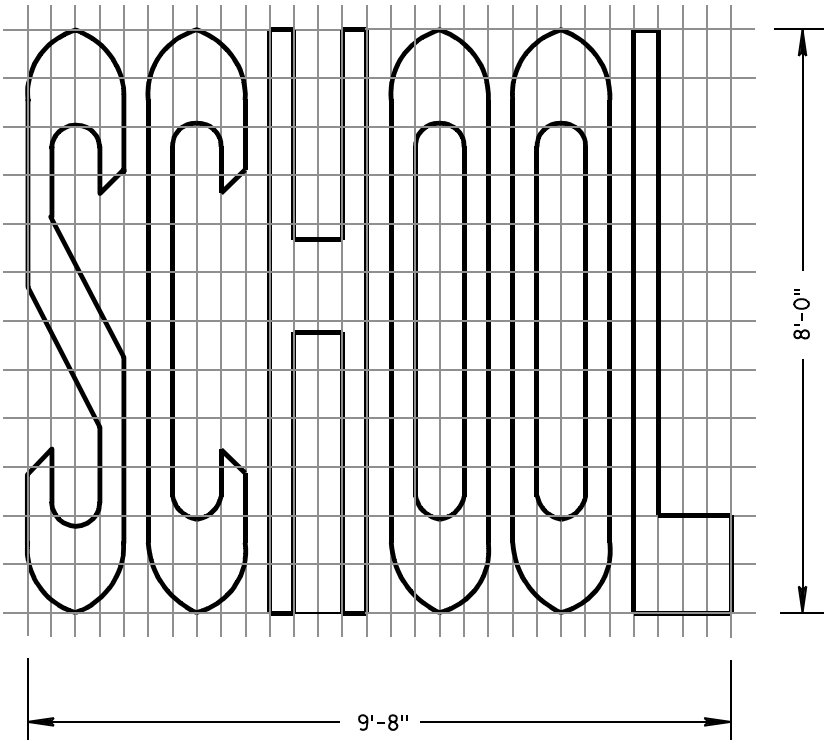
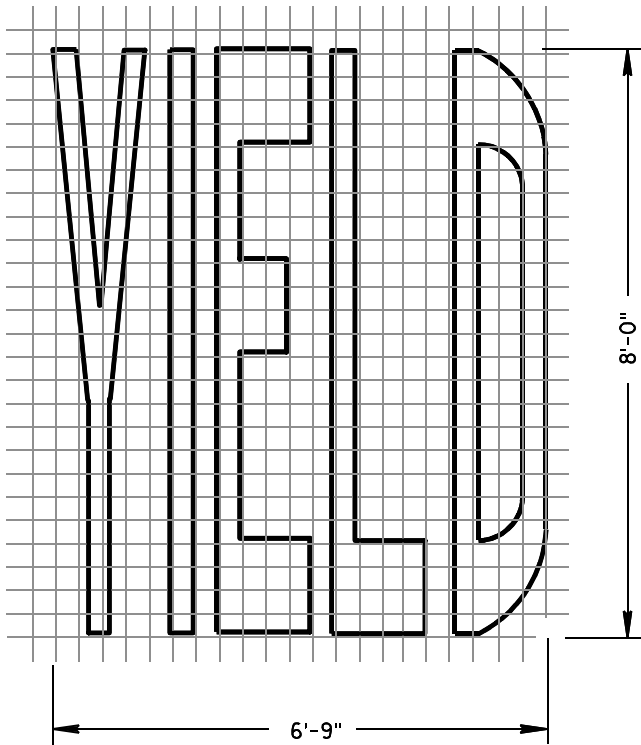
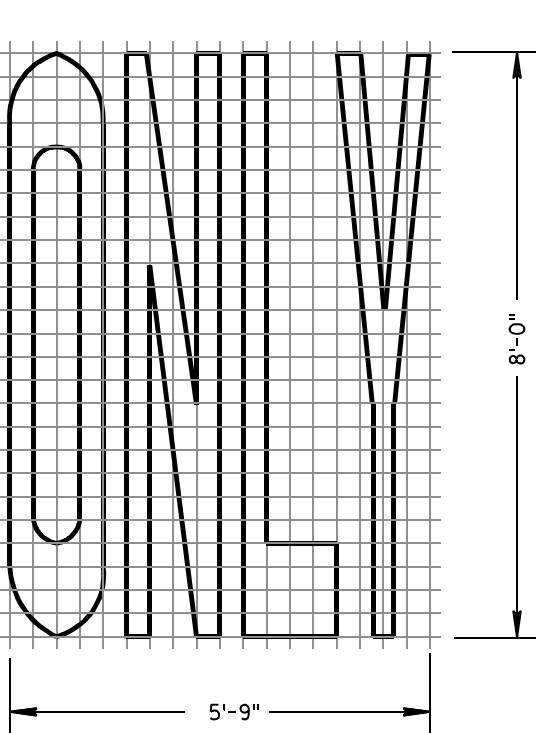
GENERAL NOTES

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.

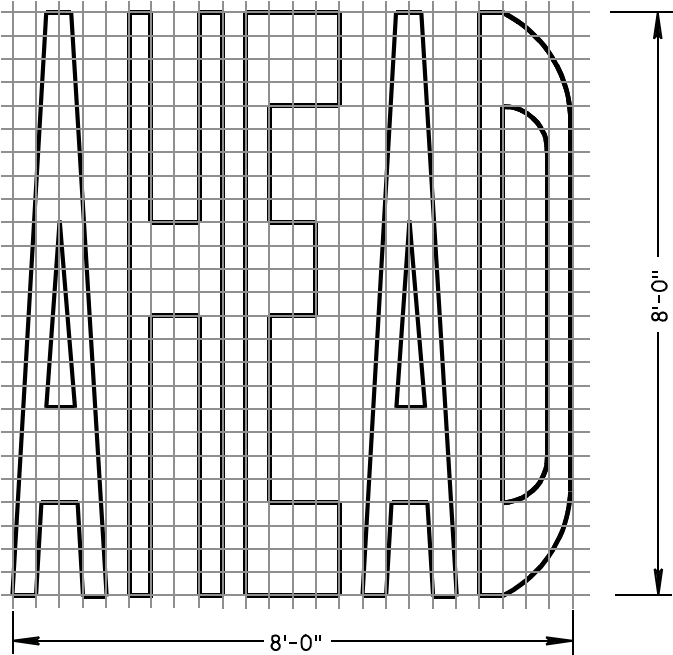
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

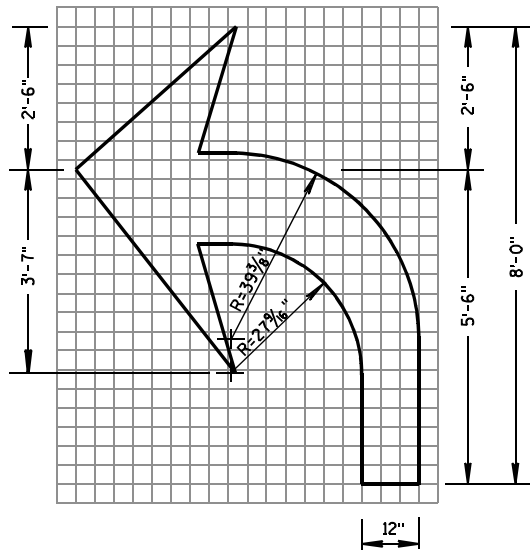
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

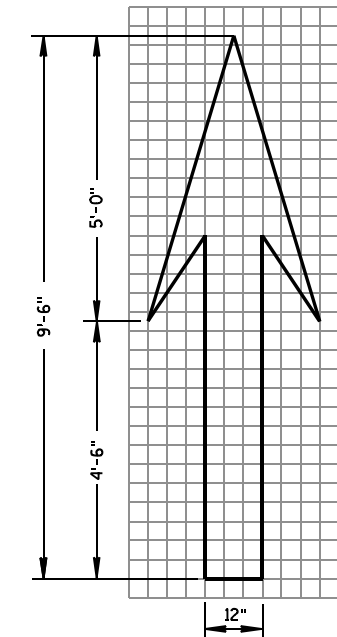
7-1-11
DATE

/S/ Thomas N. Nothmann
STATE TRAFFIC ENGINEER 115 IGN

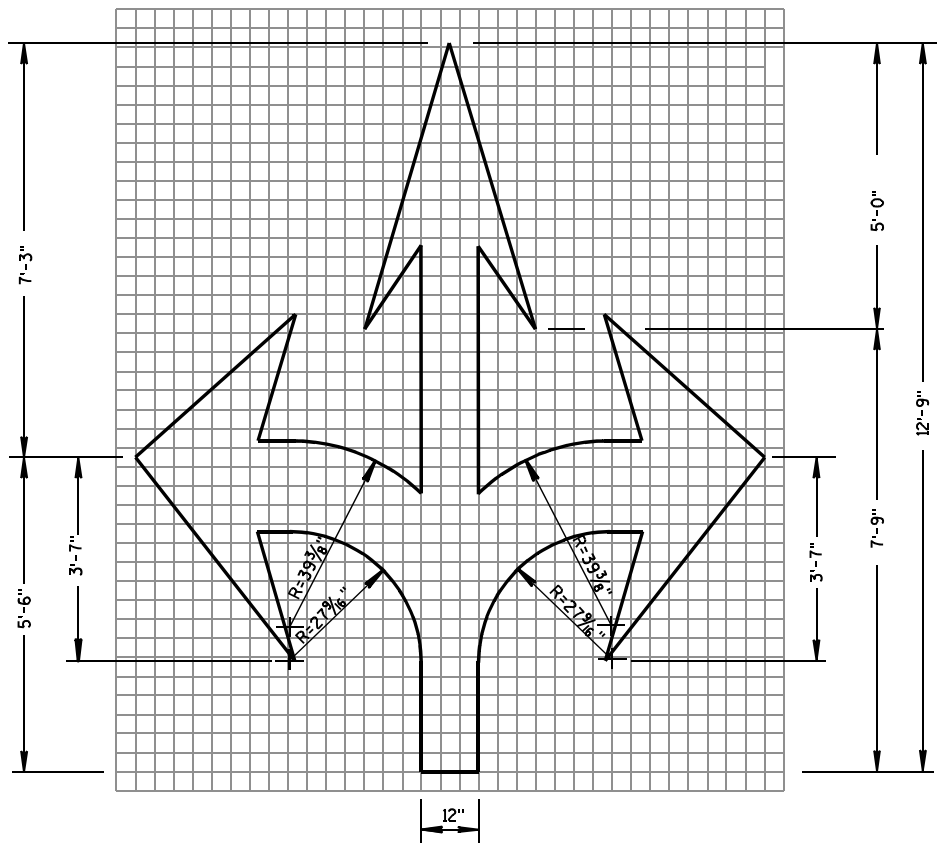
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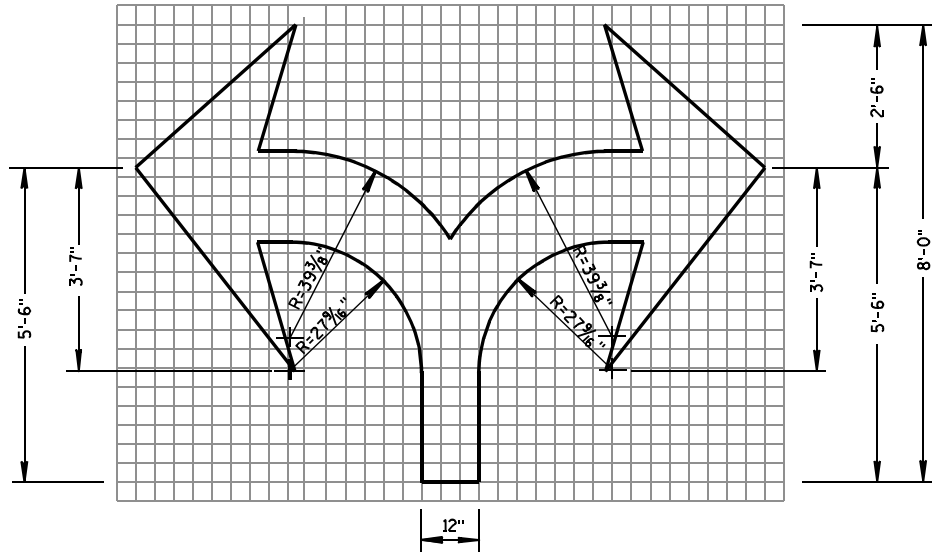
TYPE 2



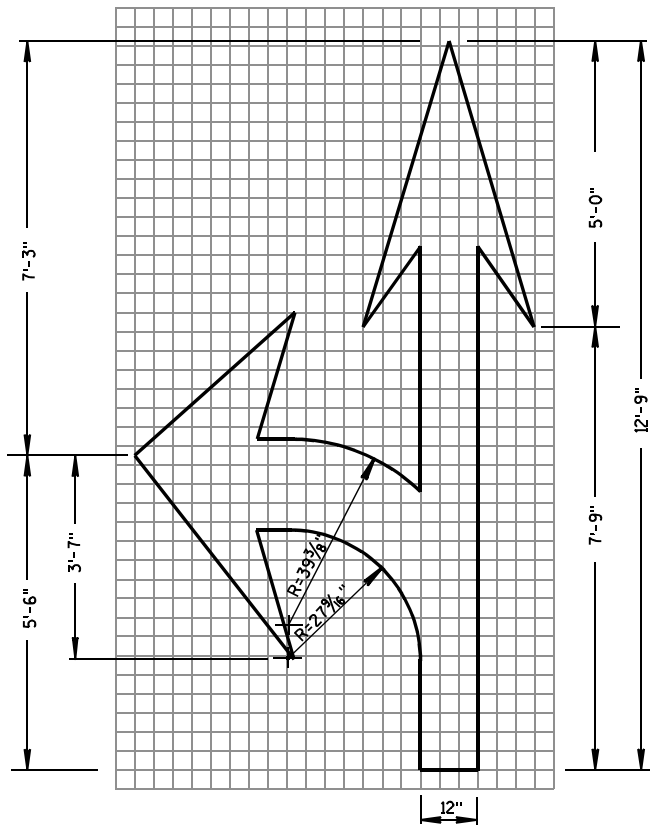
TYPE 1



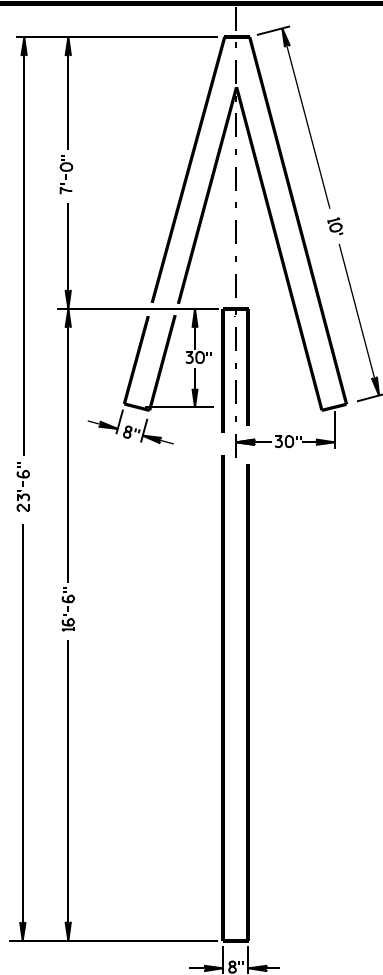
TYPE 6



TYPE 7



TYPE 3

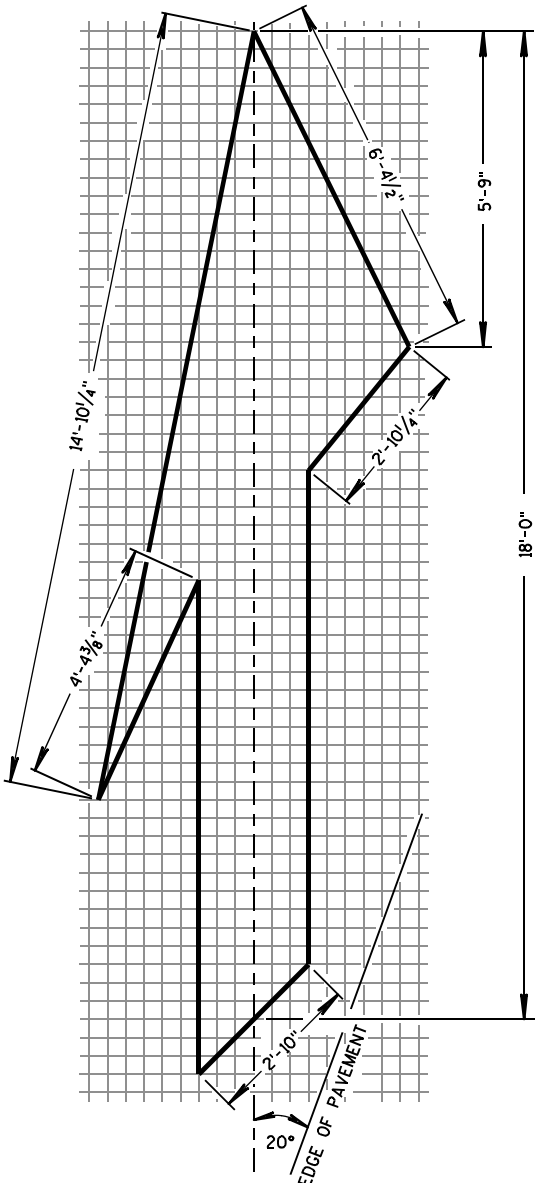


TYPE 4

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.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

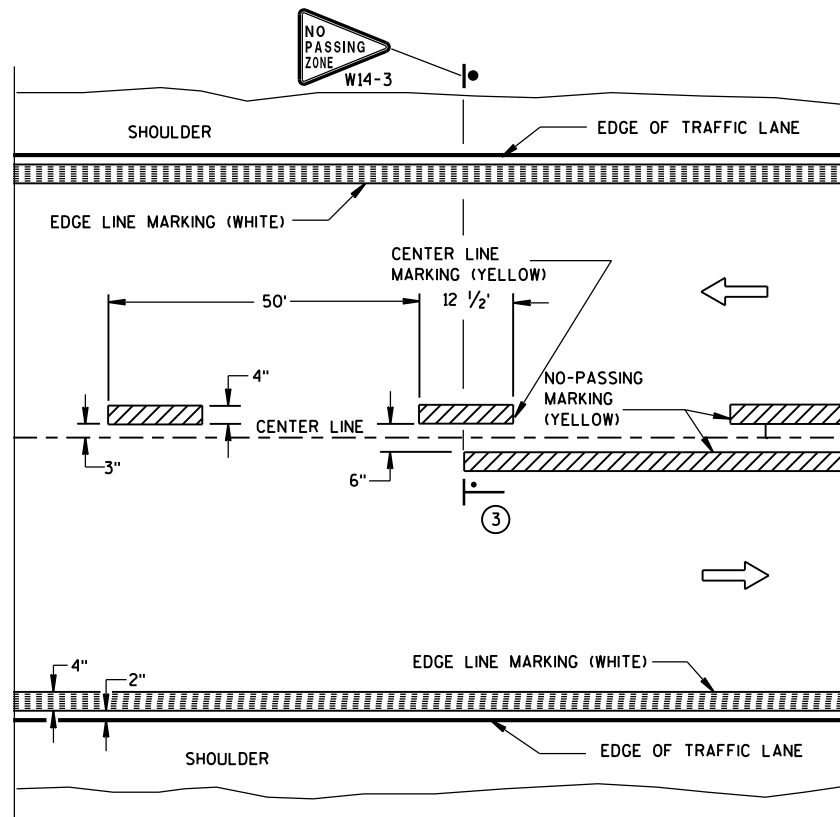


TYPE 5 LANE DROP ARROW

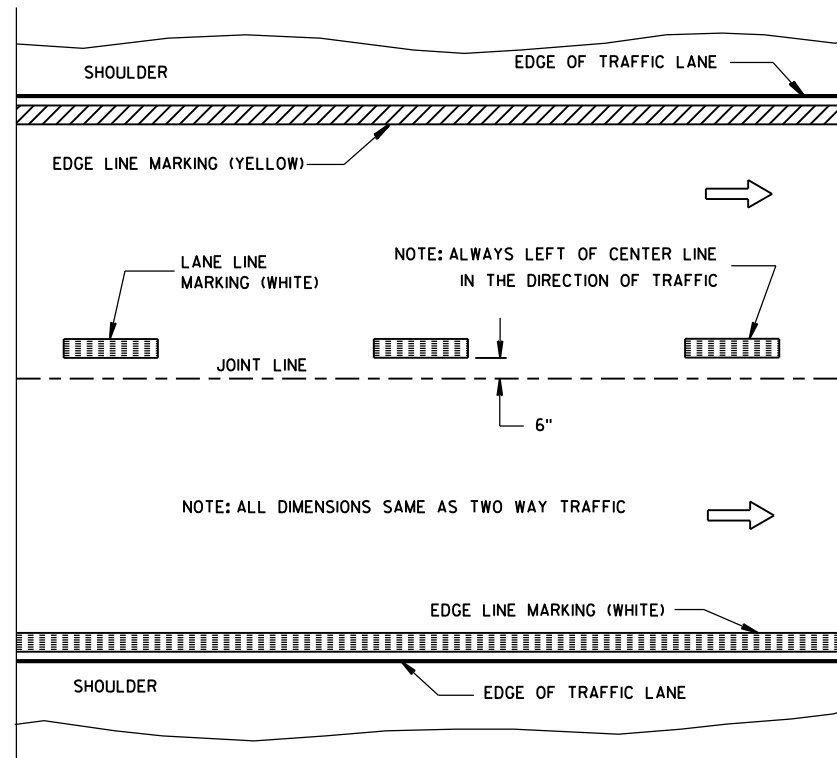
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 7/1/11
/S/ Thomas N. Nathahn
STATE TRAFFIC ENGINE 116 SIGN
FHWA

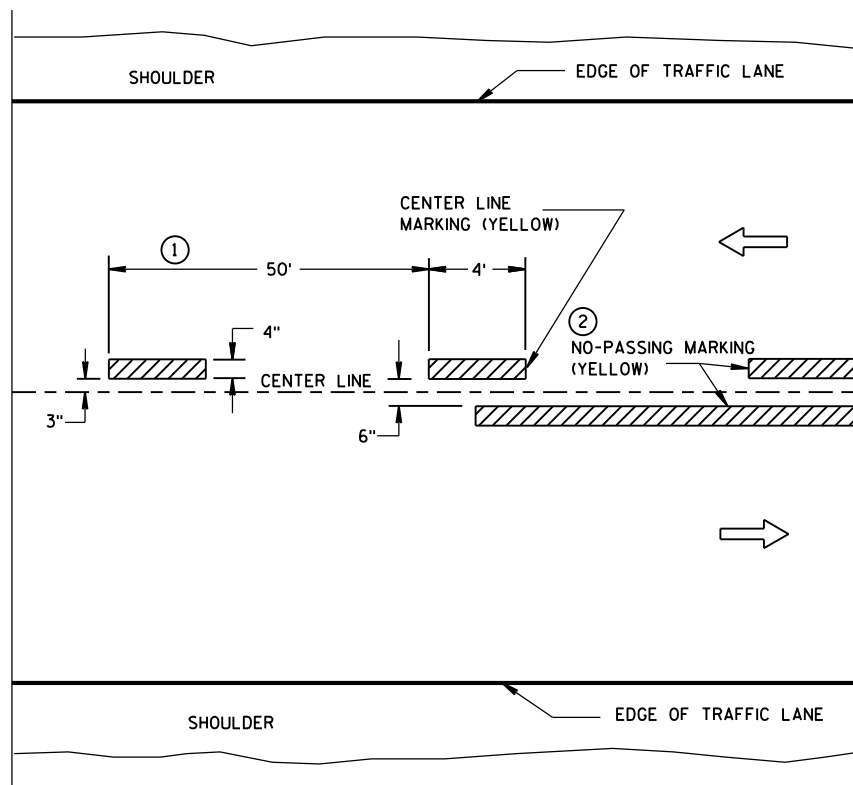


TWO WAY TRAFFIC

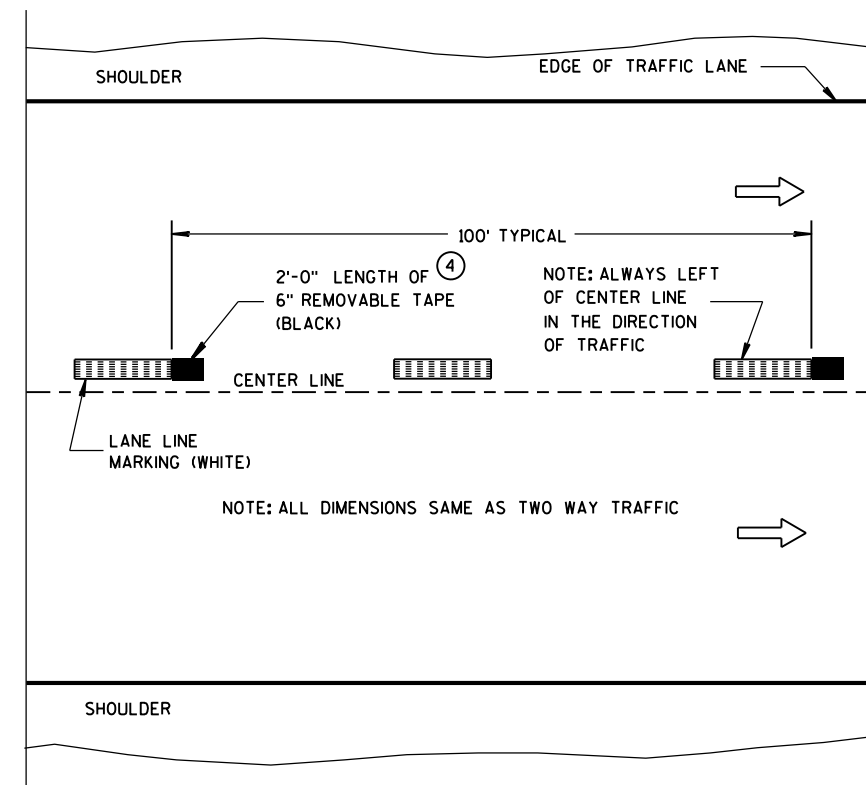


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

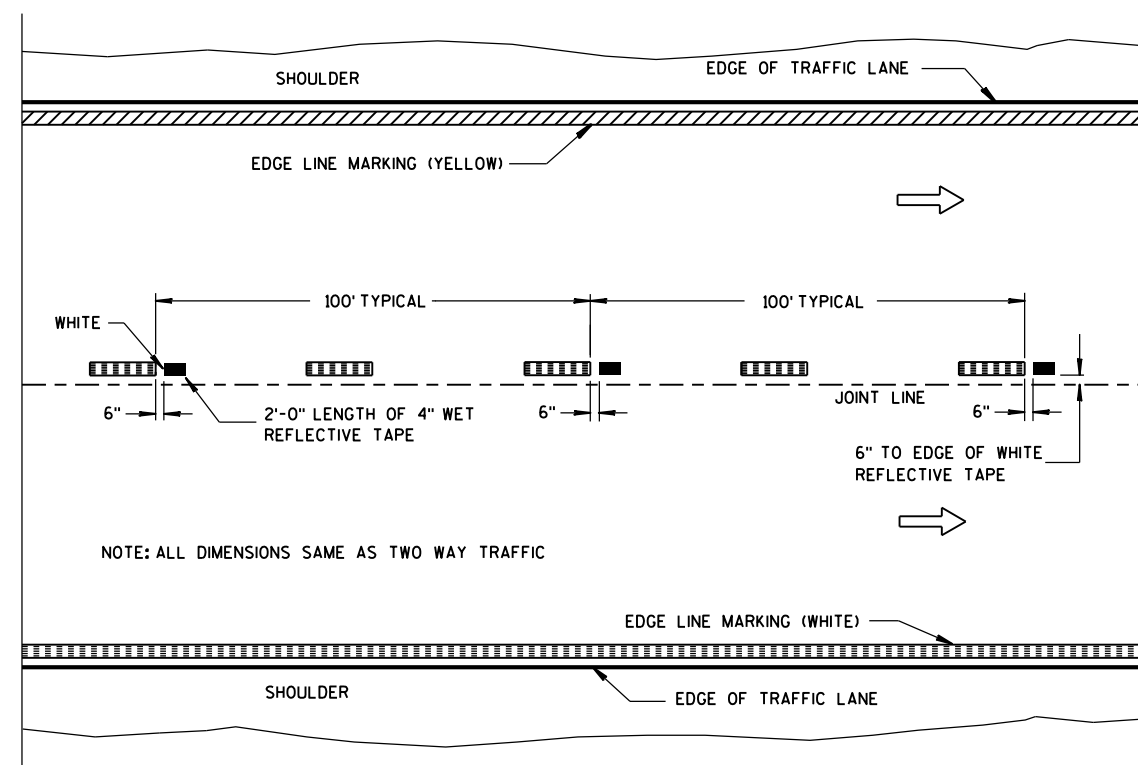
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-1-2012

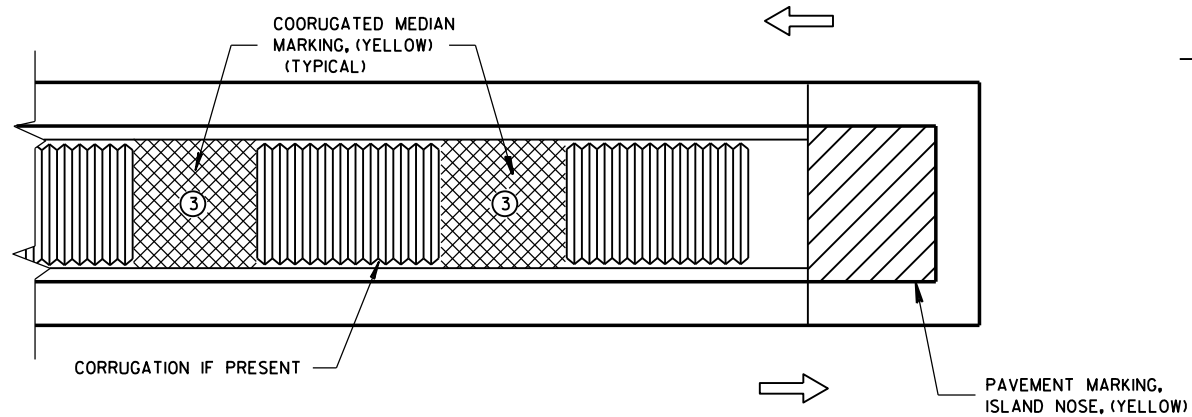
DATE

/S/ Travis Feltes

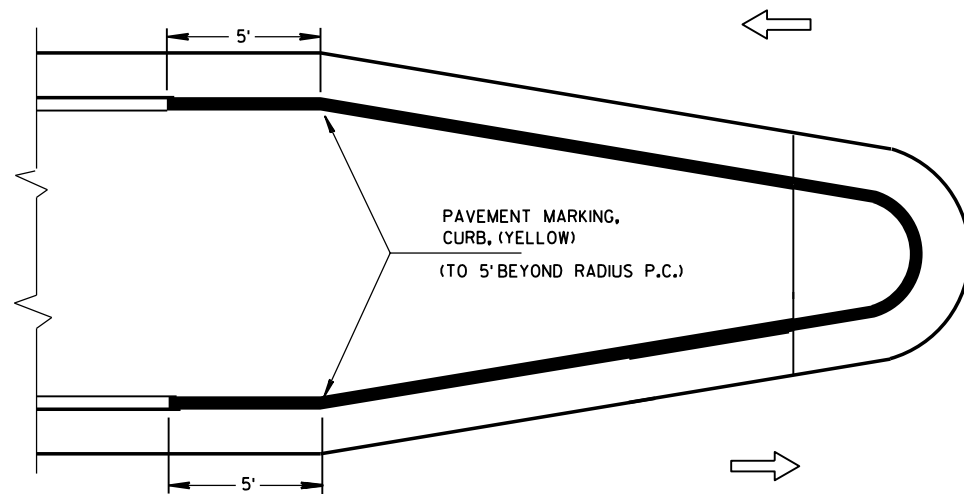
STATE TRAFFIC ENGINE 117

FHWA

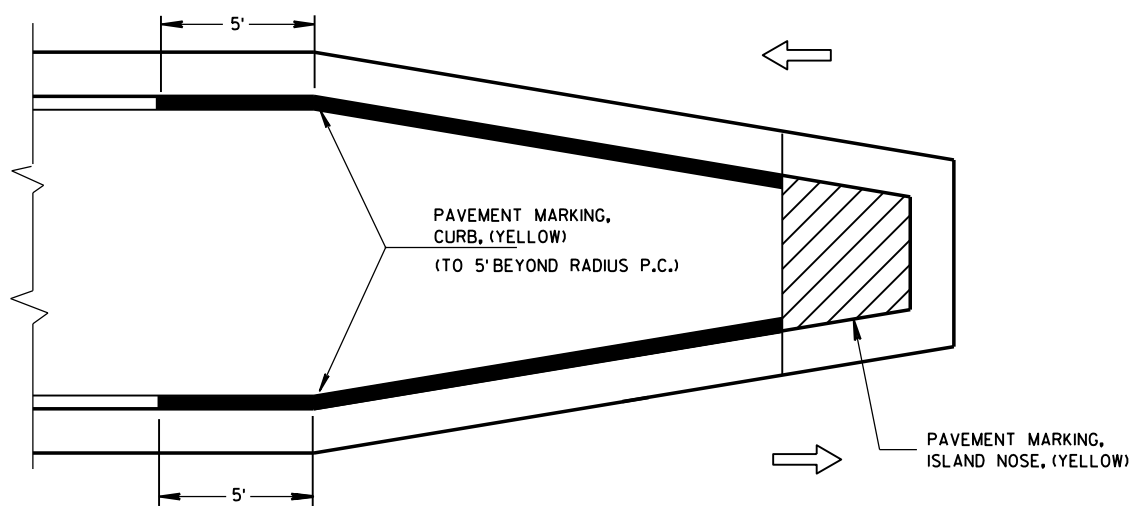
SIGN



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

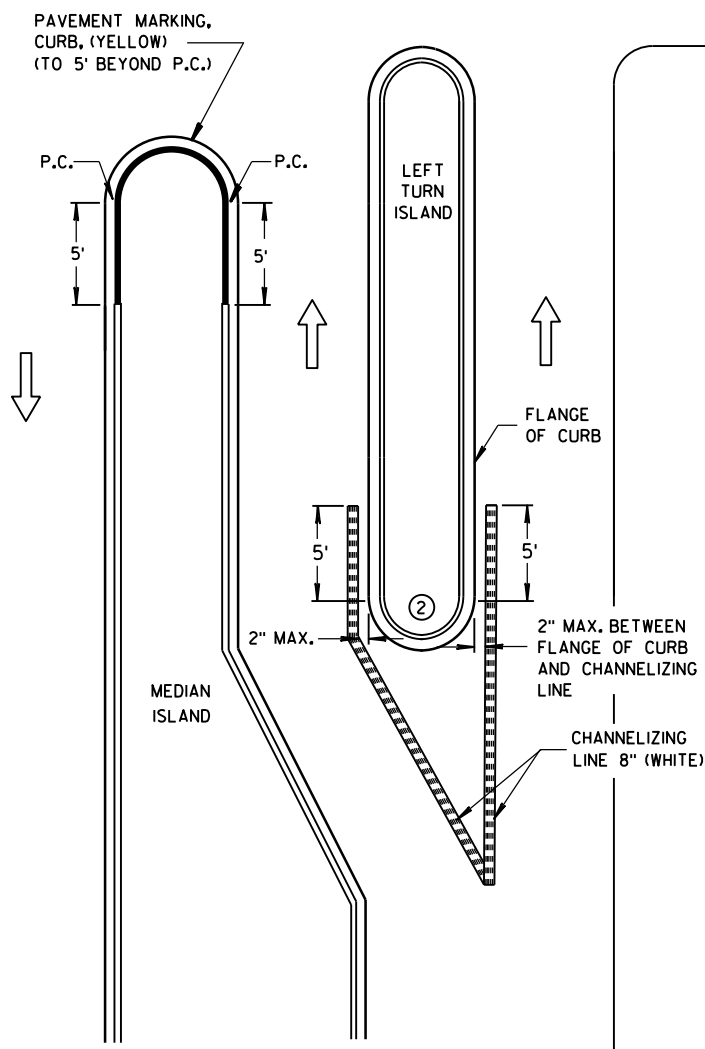


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

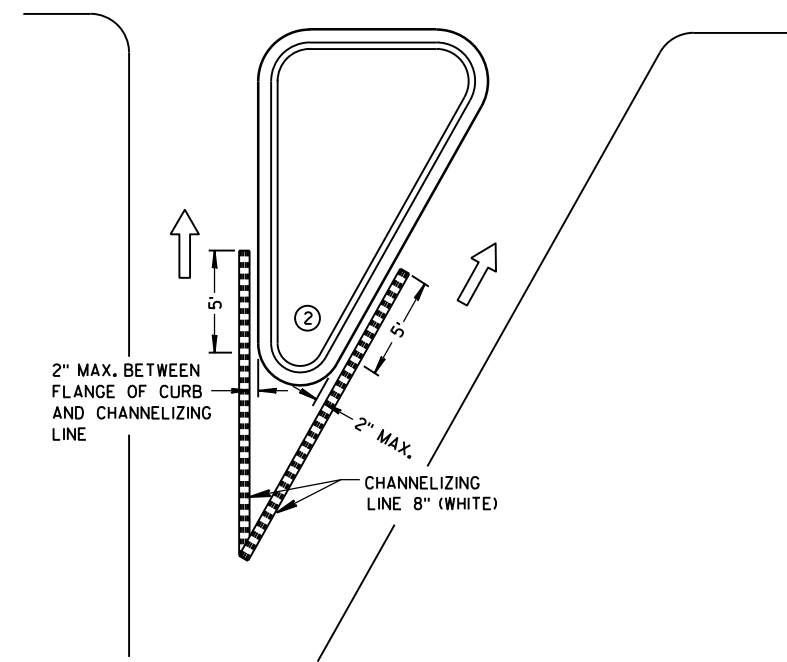
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

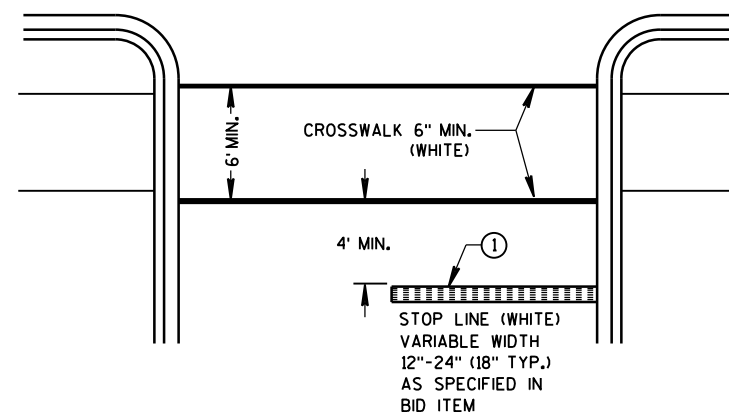
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN, THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

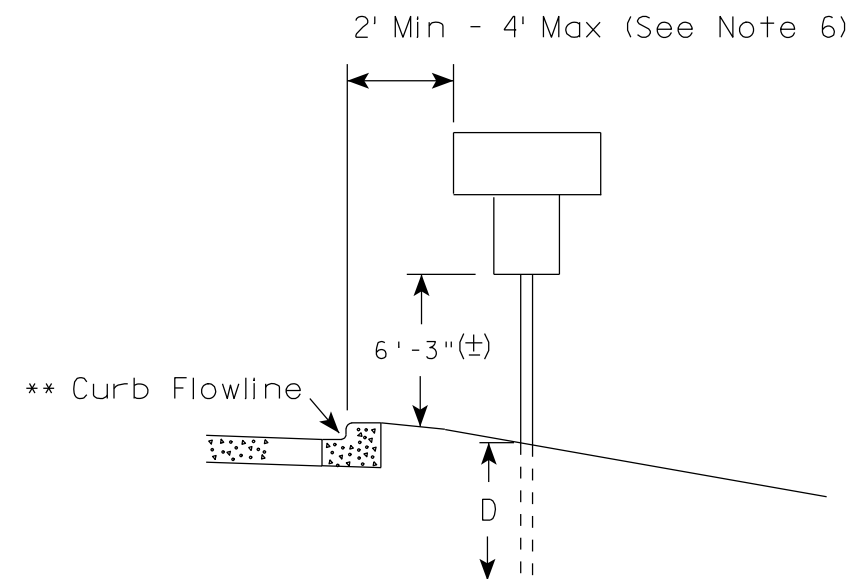
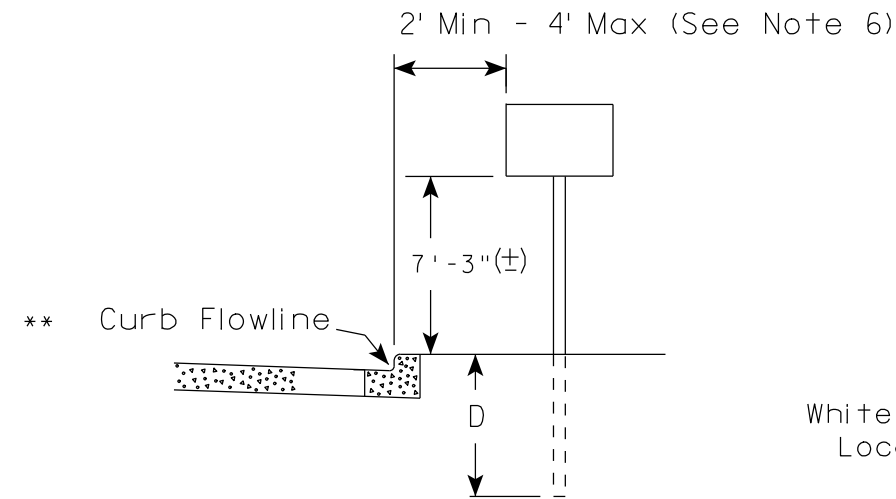


STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

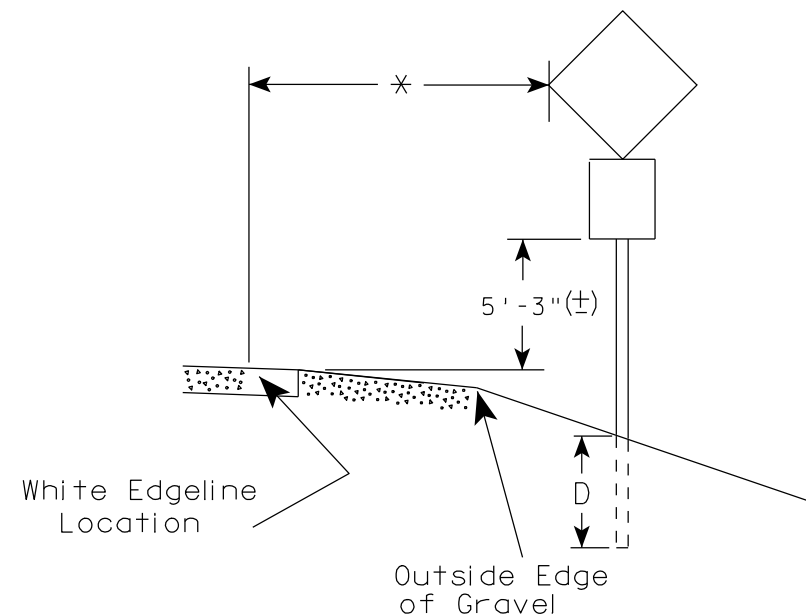
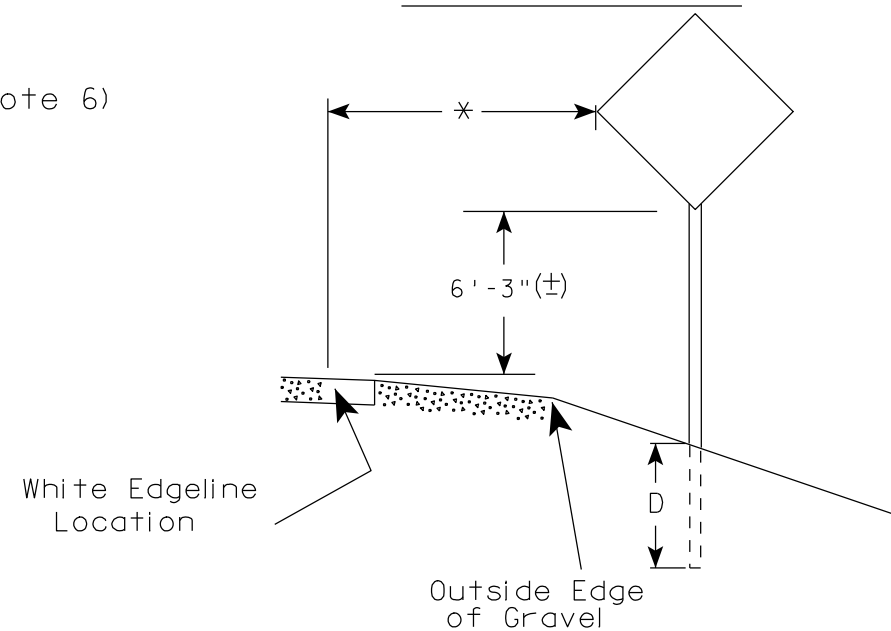
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 118

URBAN AREA



** 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.

RURAL AREA (See Note 2)



* 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.

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/24/2013 PLATE NO. A4-3.17

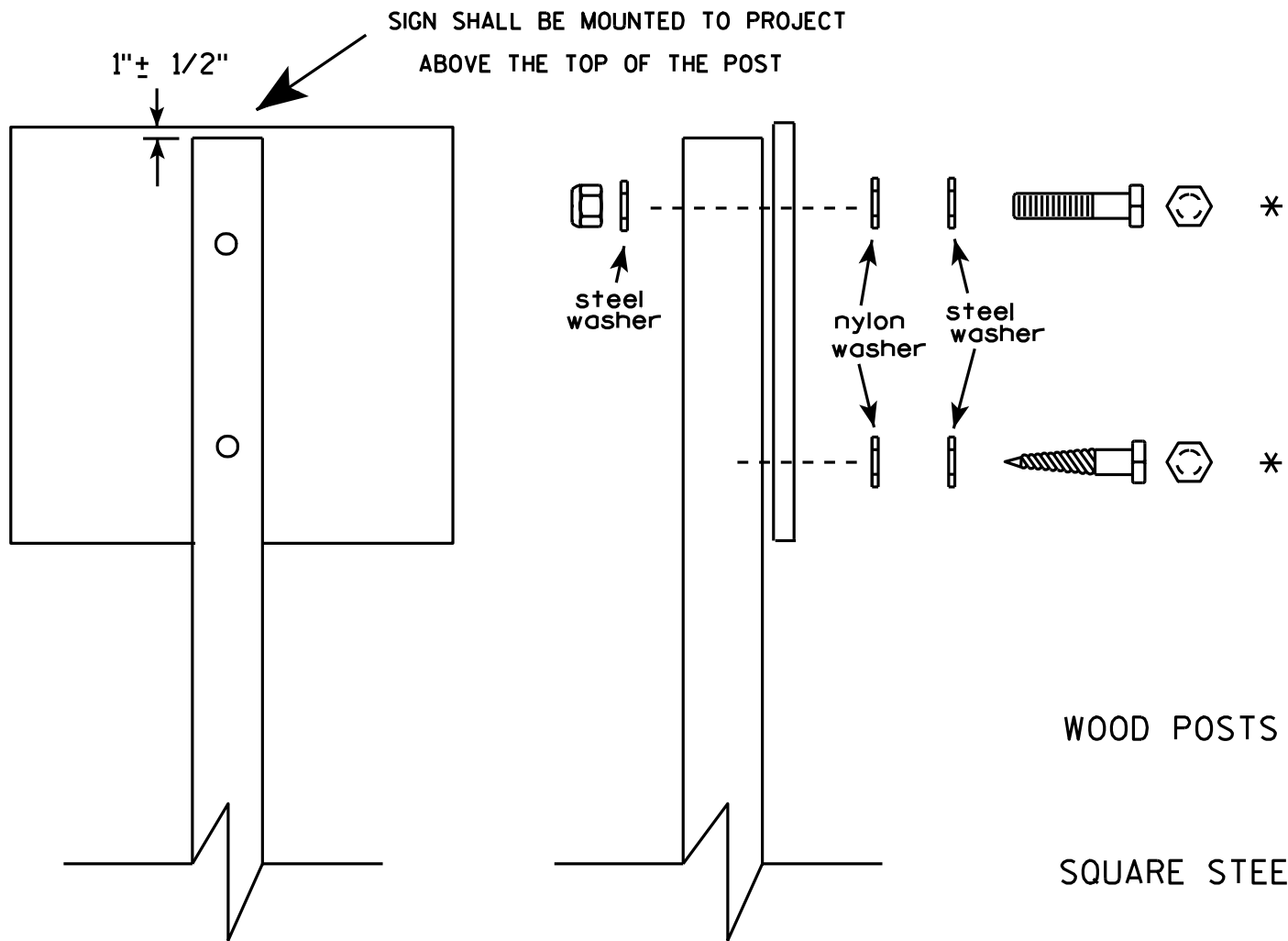
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 119

E

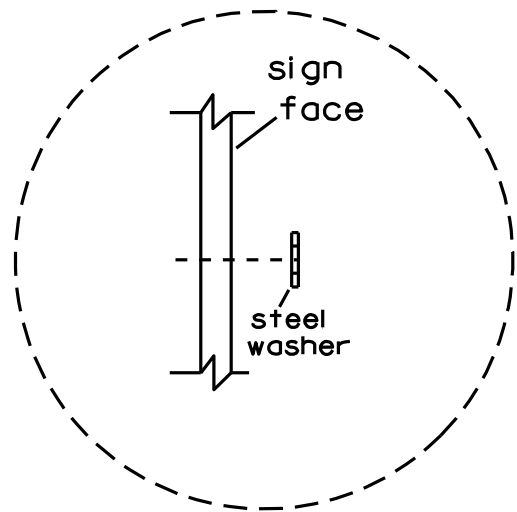


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.



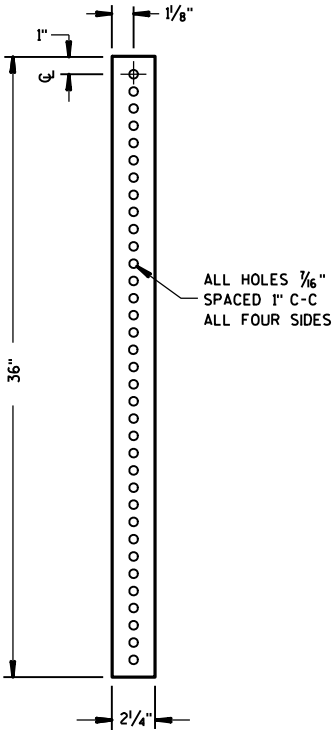
Washer Placement when Sign Has Other Than Type H or Type F Face

* 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.

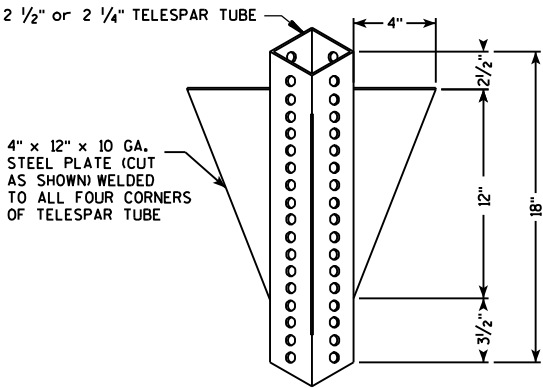
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

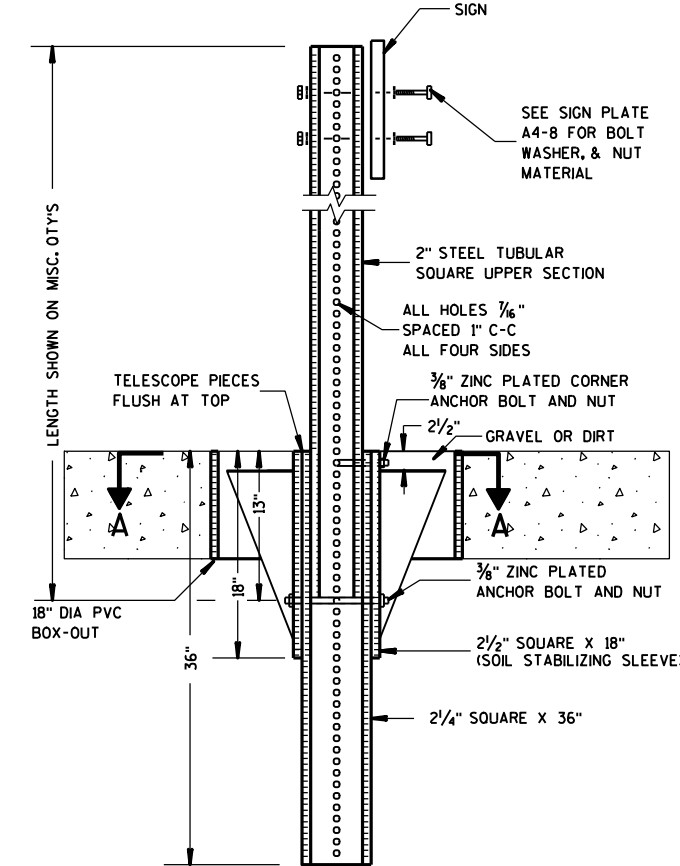
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



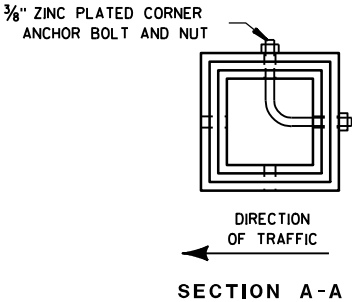
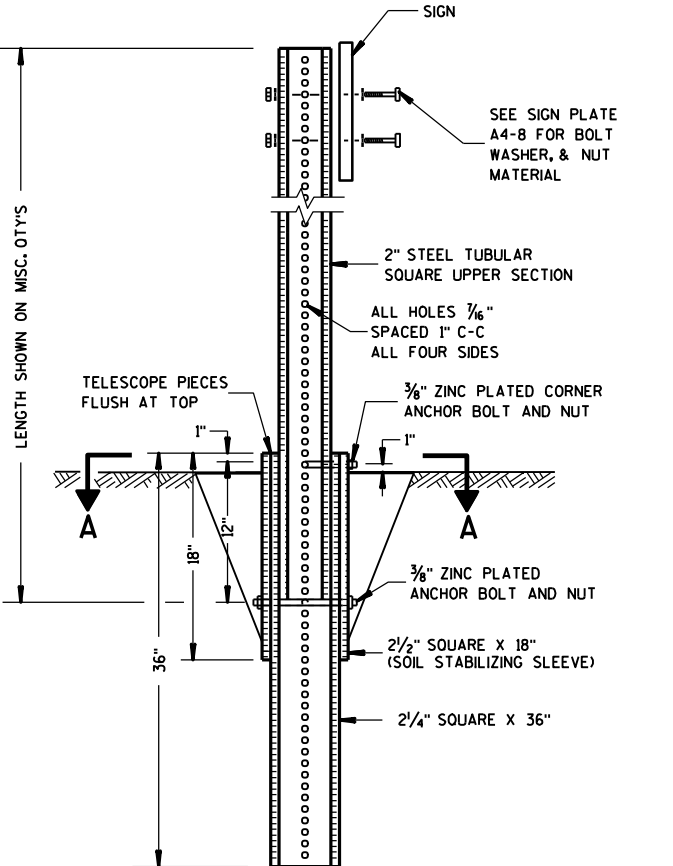
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

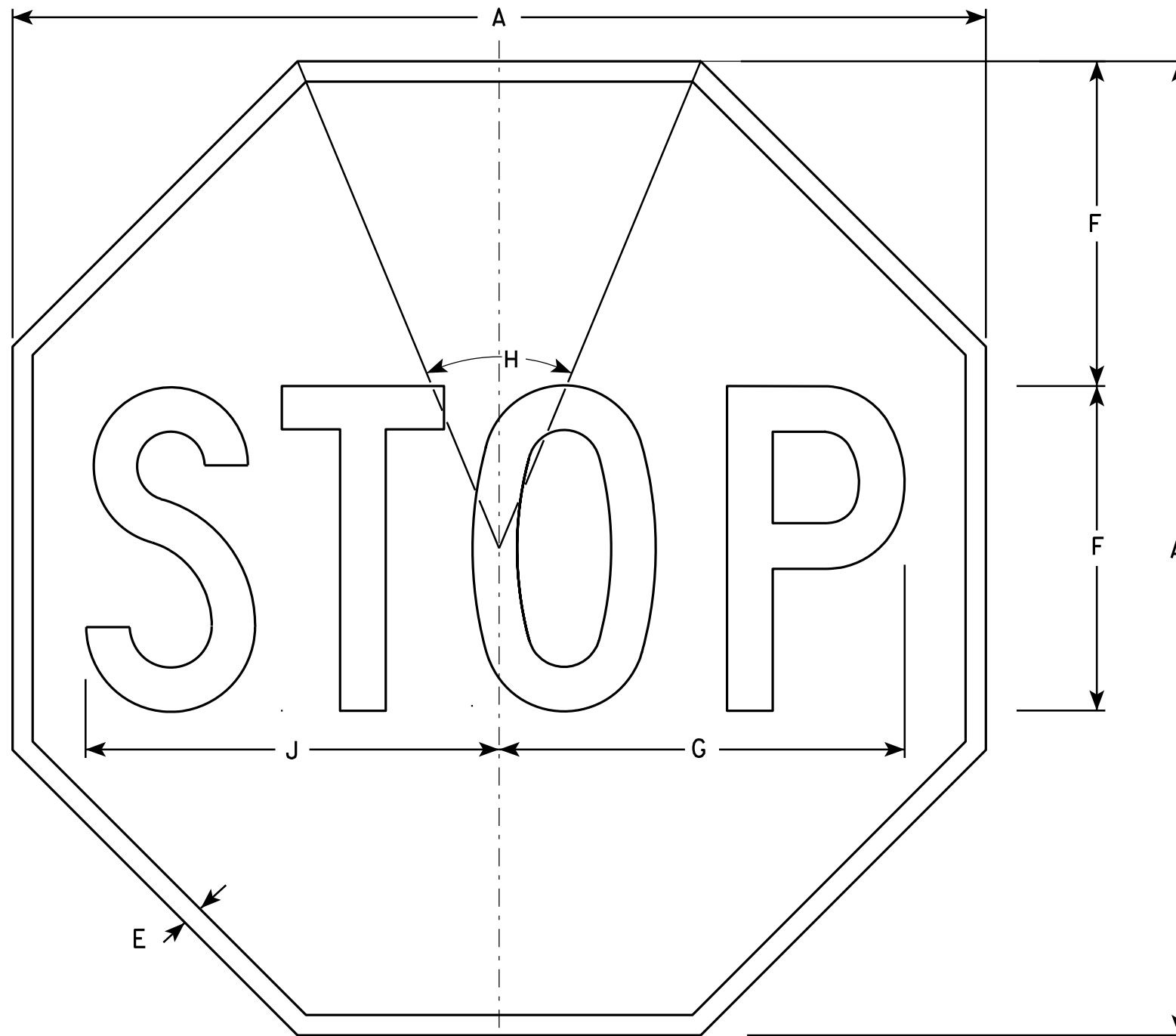
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/30/12 PLATE NO. A4-9.7



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				$\frac{3}{8}$	8	10	45°		10 $\frac{1}{4}$																	3.31
2S	30				$\frac{5}{8}$	10	12 $\frac{1}{2}$	45°		12 $\frac{3}{4}$																	5.18
2M	36				$\frac{3}{4}$	12	15	45°		15 $\frac{3}{8}$																	7.46
3	36				$\frac{3}{4}$	12	15	45°		15 $\frac{3}{8}$																	7.46
4	48				1	16	20	45°		20 $\frac{1}{2}$																	13.25
5	48				1	16	20	45°		20 $\frac{1}{2}$																	13.25
6	18				$\frac{3}{8}$	6	7 $\frac{3}{4}$	45°		7 $\frac{3}{4}$																	1.86
7	12				$\frac{1}{4}$	4	5	45°		5 $\frac{1}{8}$																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

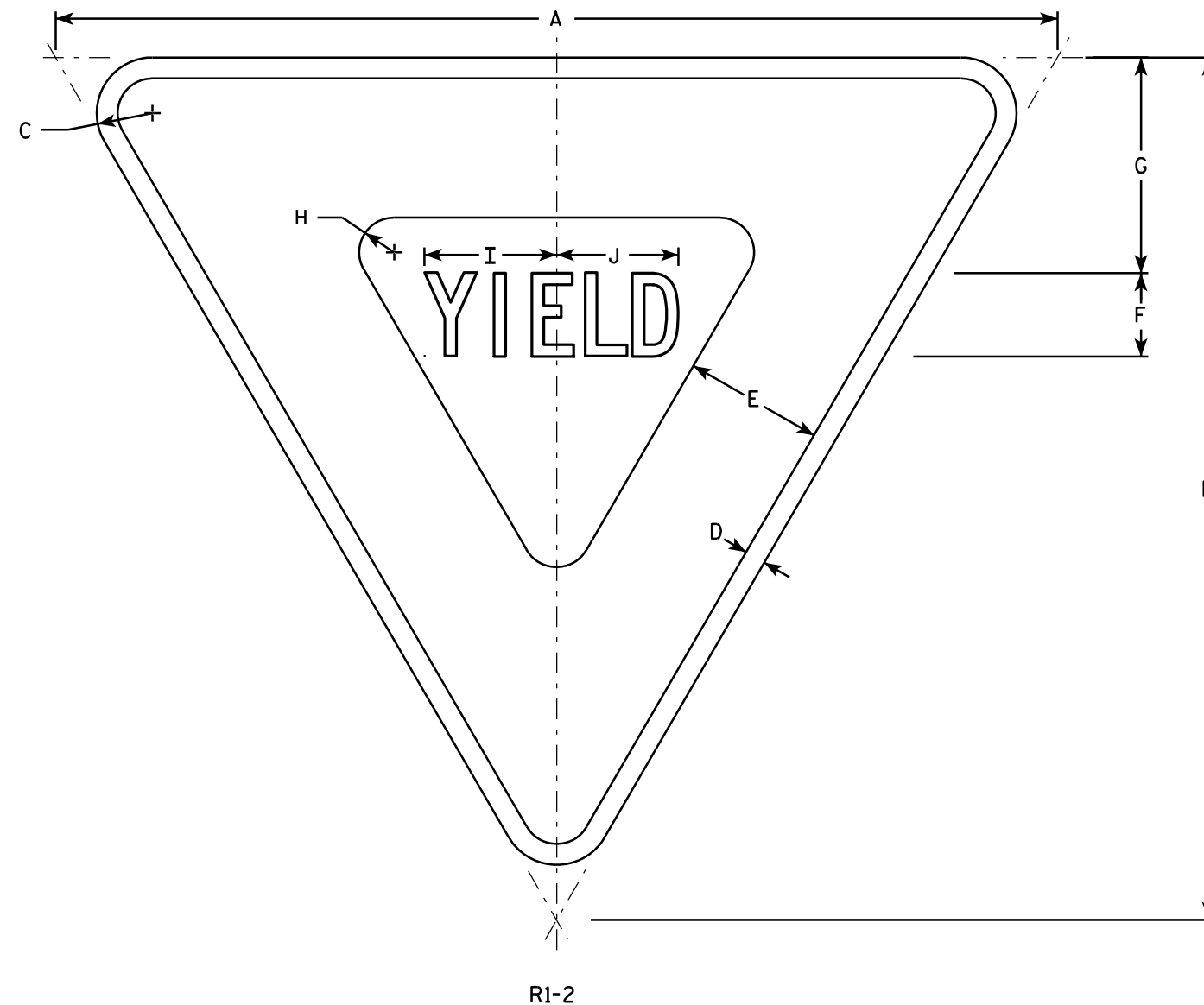
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 122

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

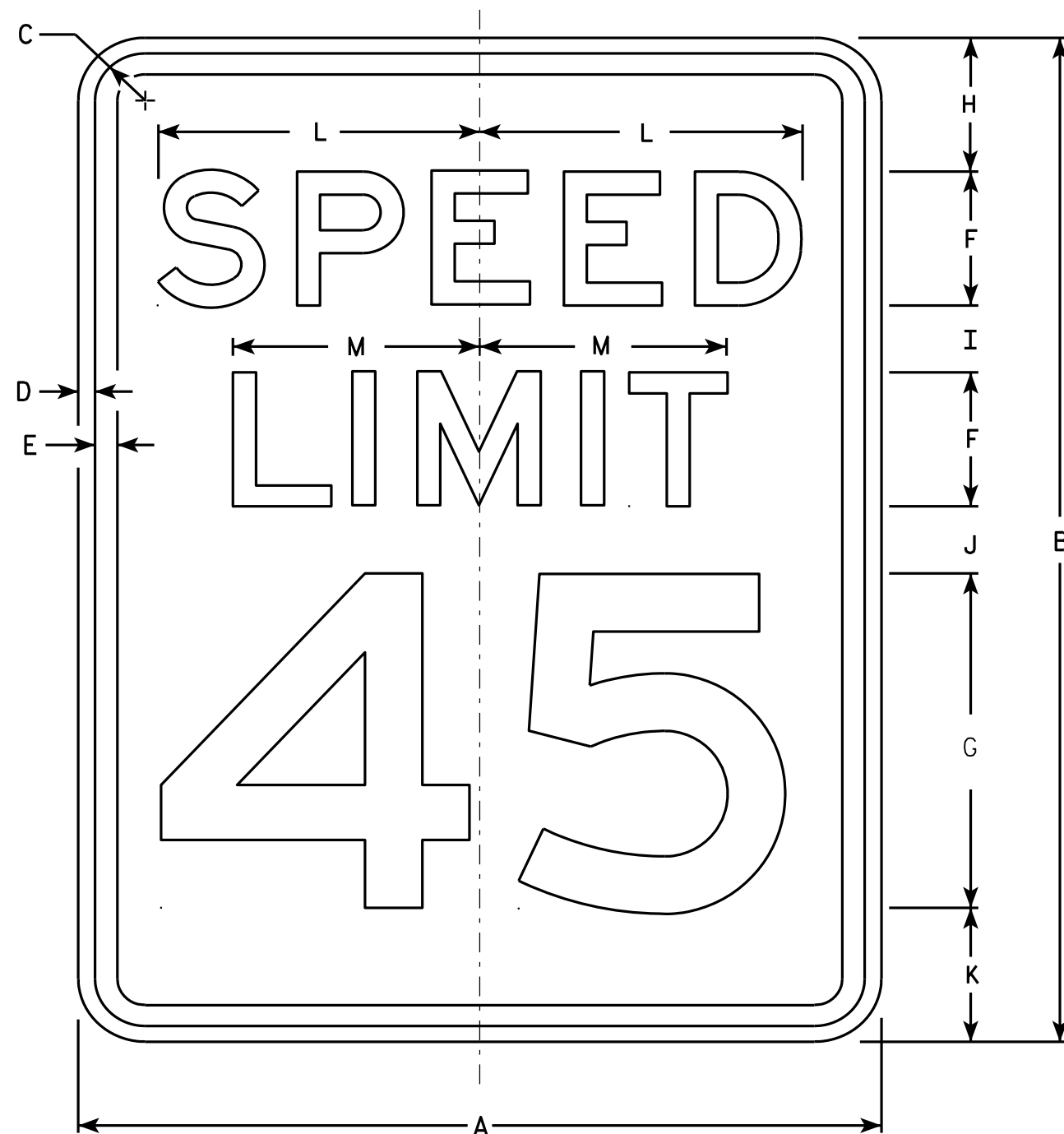
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: HWY: COUNTY: SHEET NO: 123 E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
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 numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

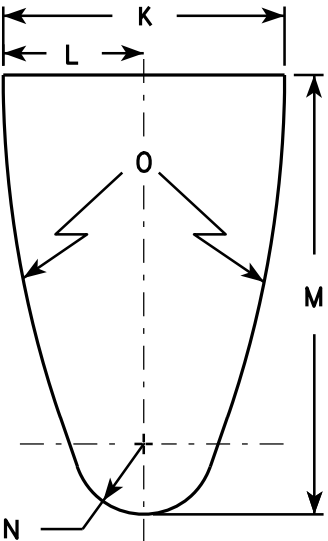
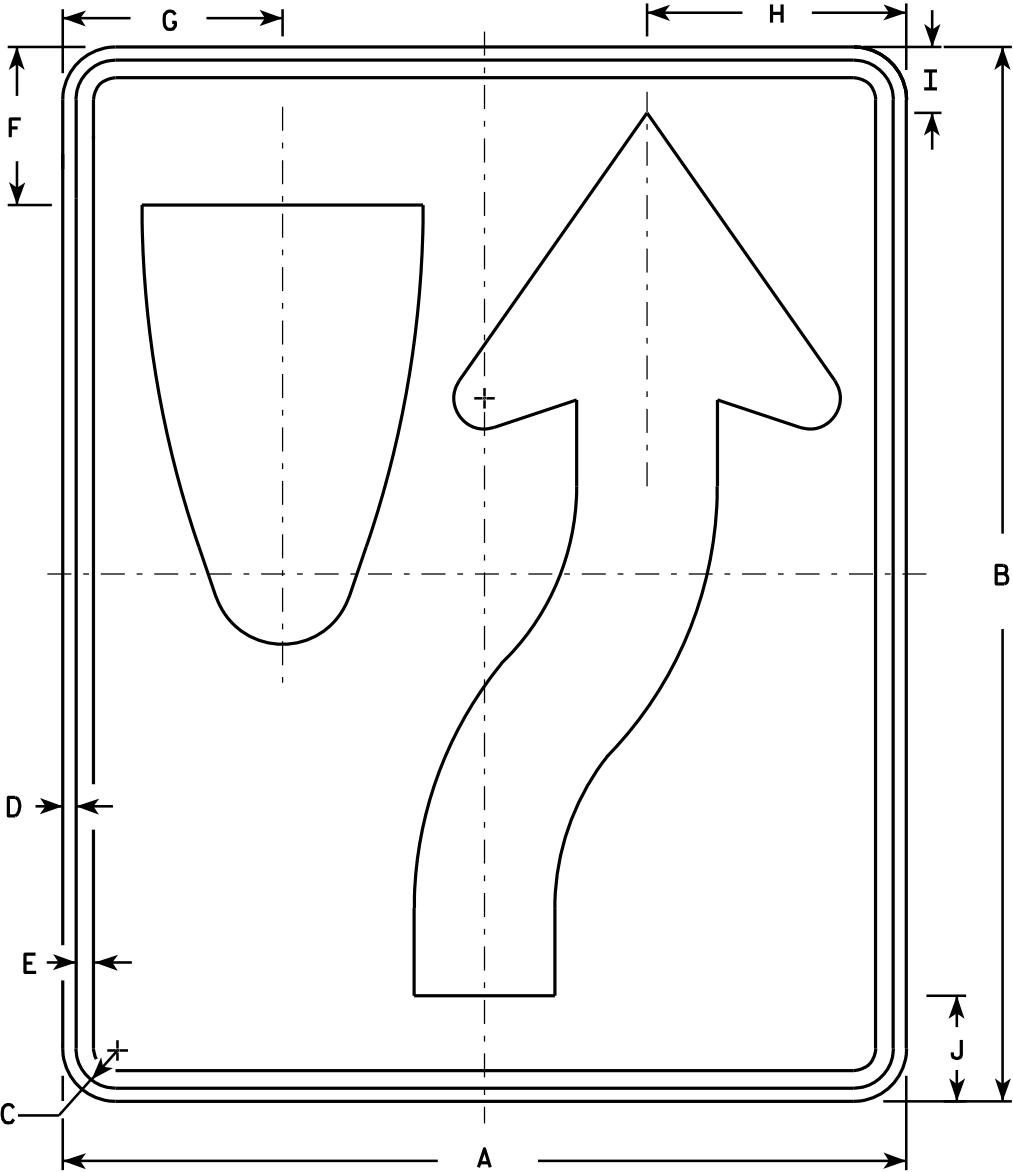
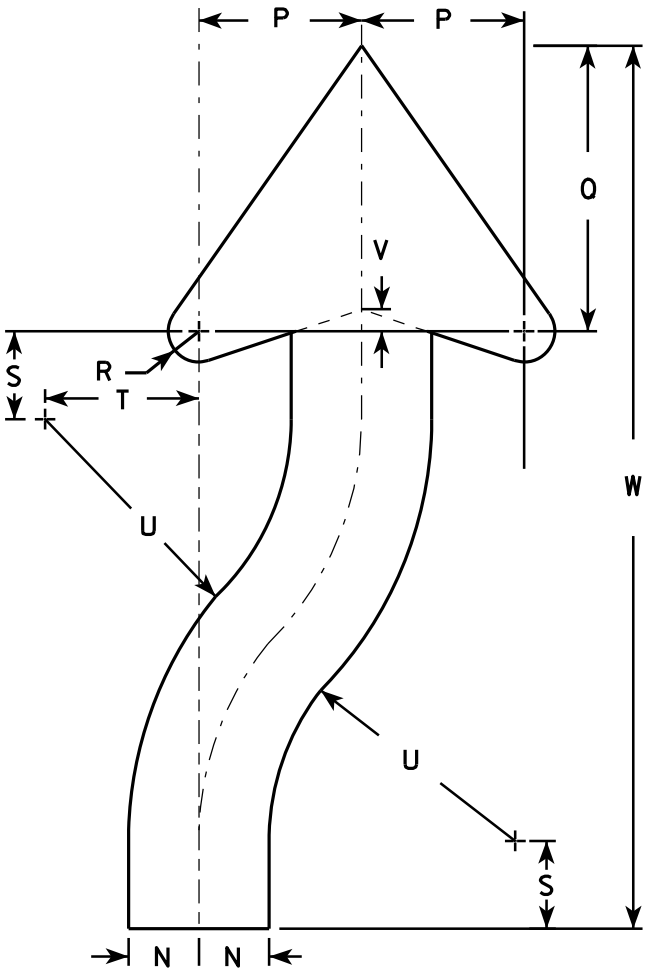
STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 124 E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

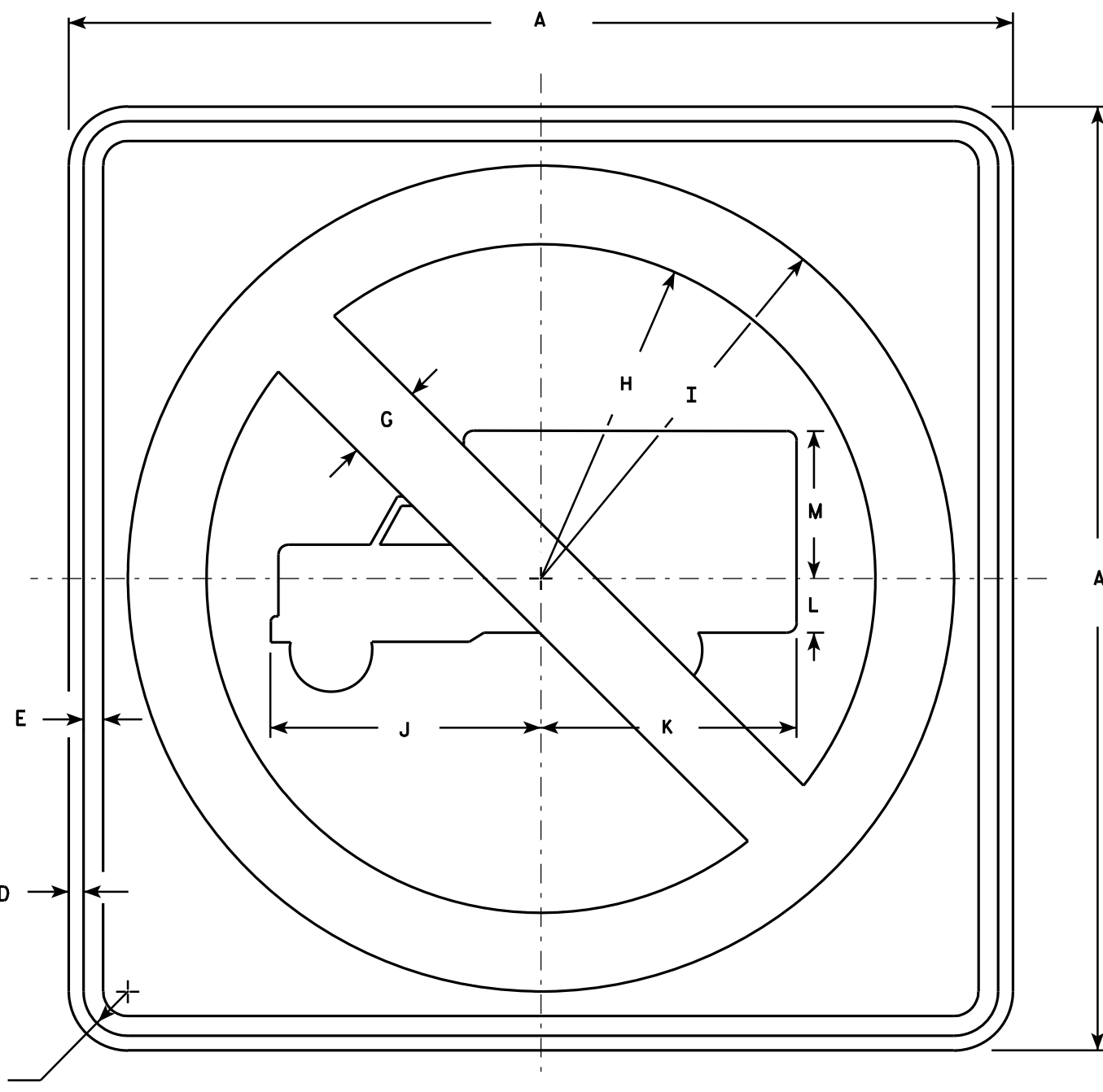
STANDARD SIGN

R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - 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. Circle & Diagonal - Reflective red.
Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

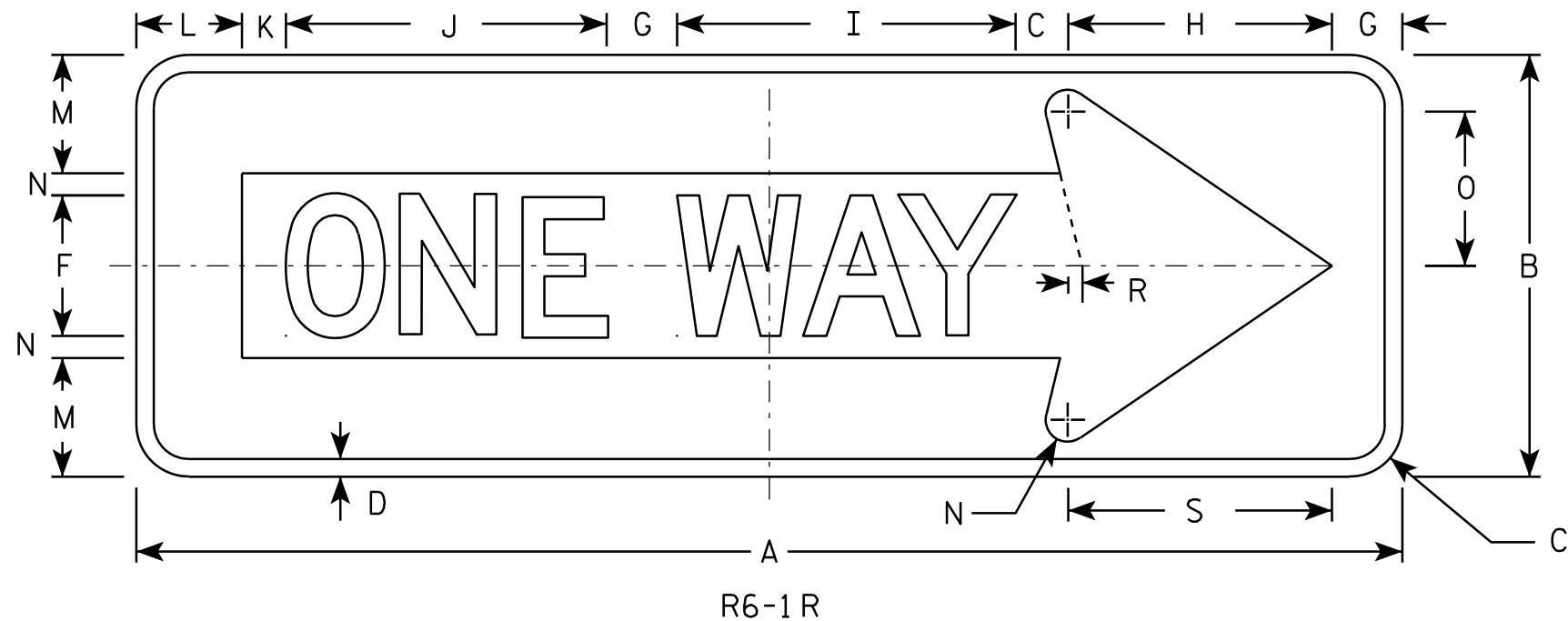
PROJECT NO:

HWY:

COUNTY:

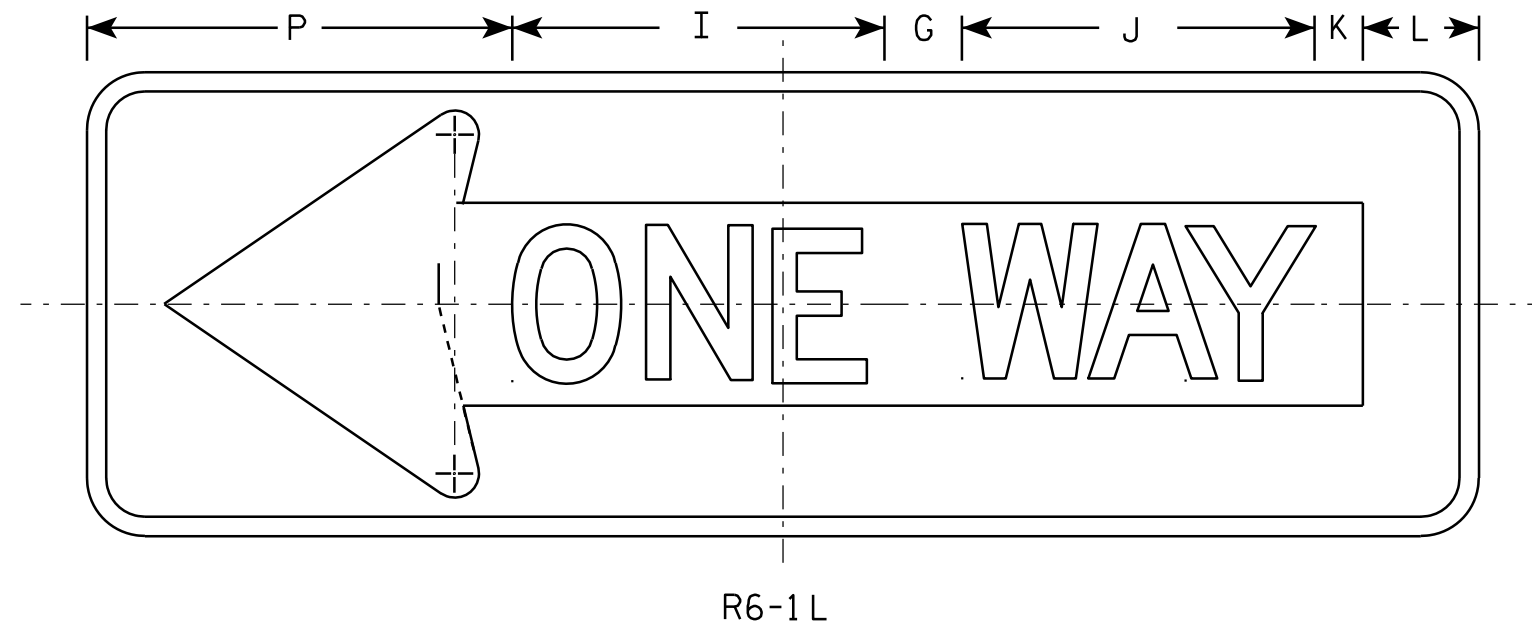
SHEET NO: 126

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - BLACK
Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-1 L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 5/8	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

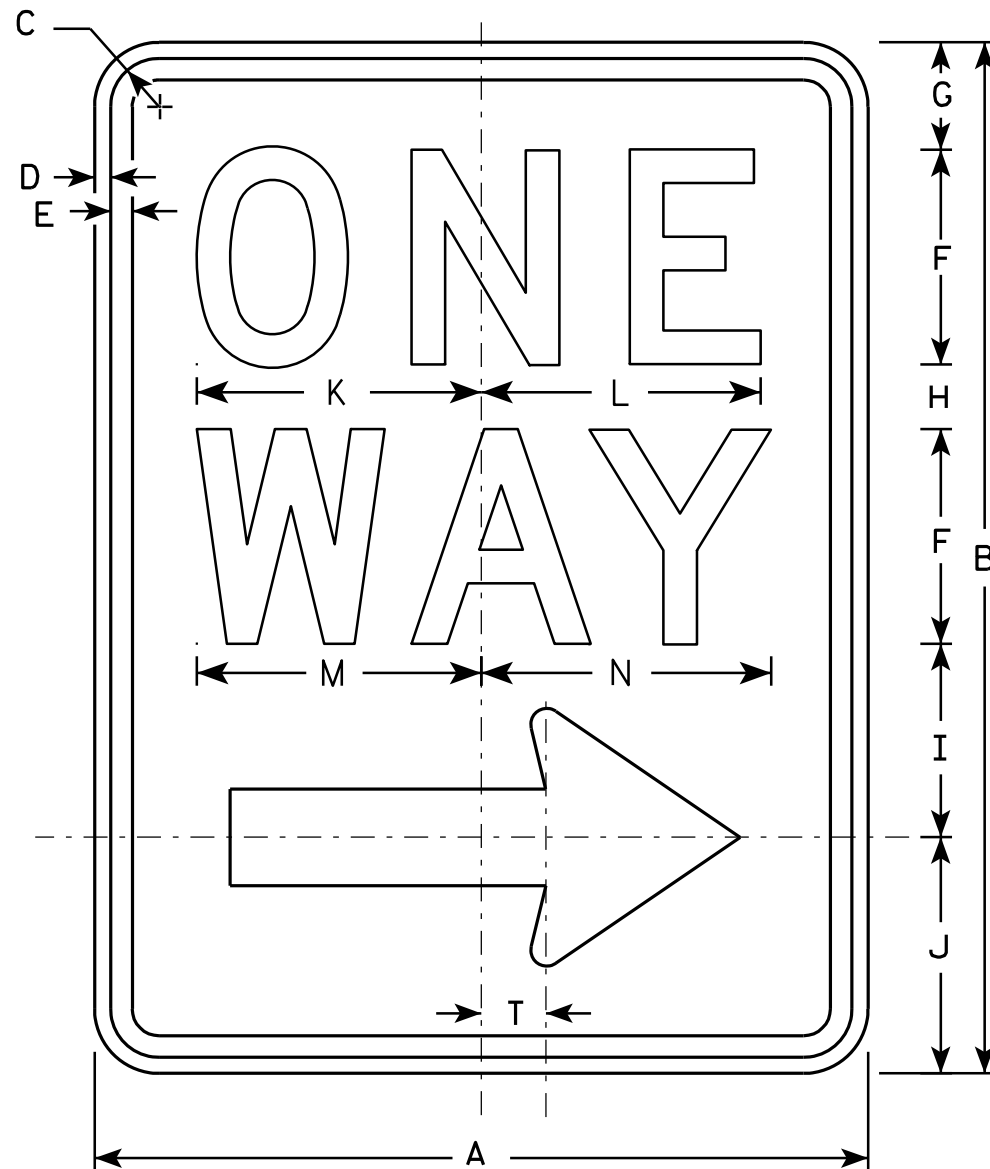
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

SHEET NO: 127

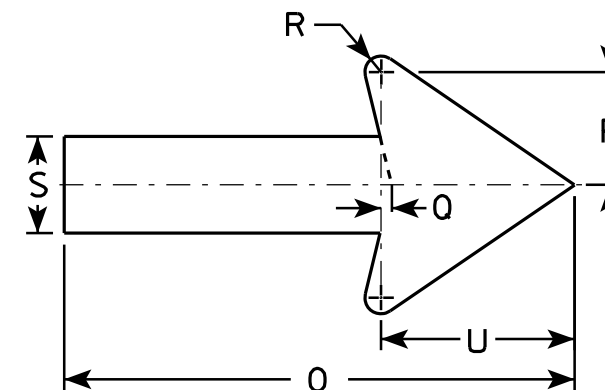
E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

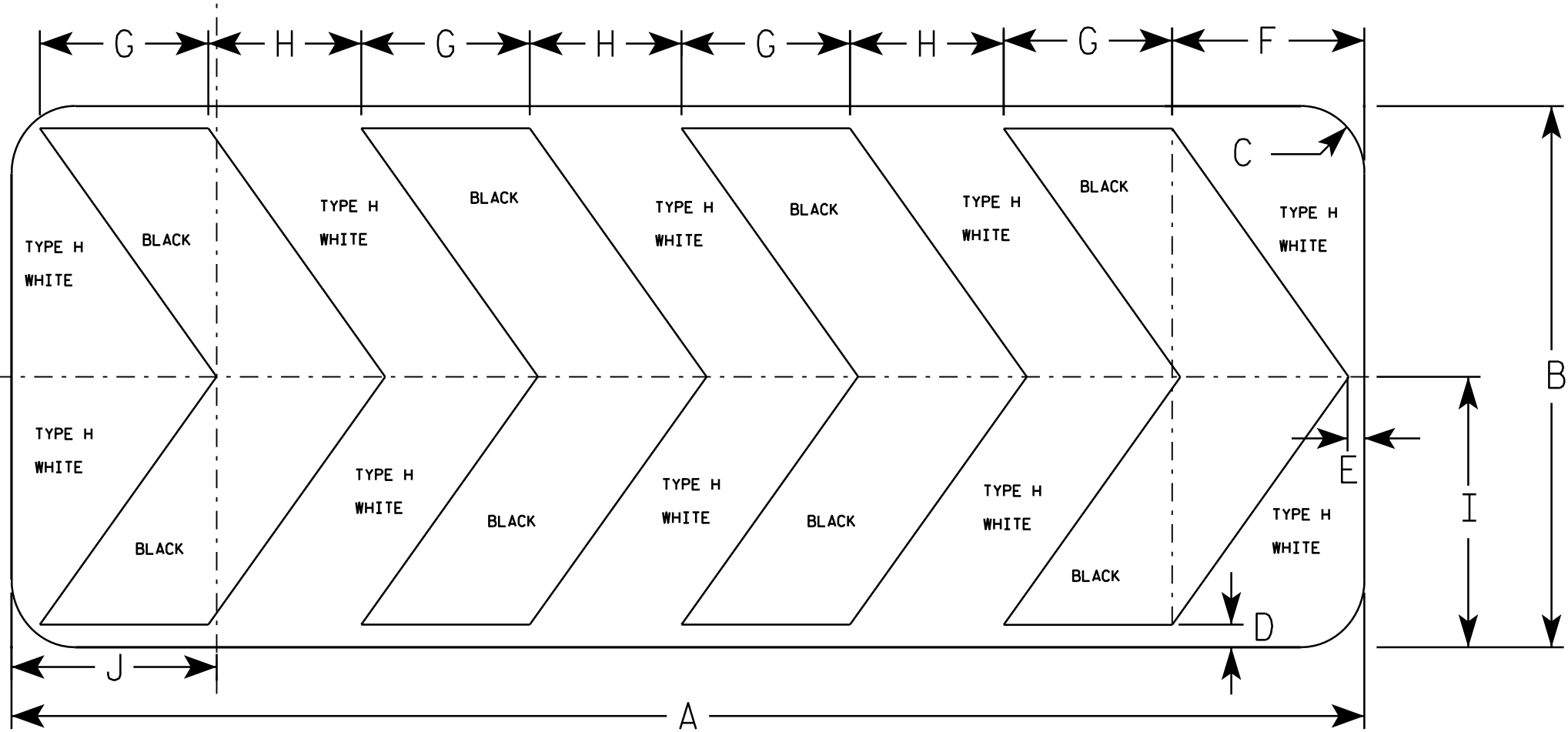
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: HWY: COUNTY: SHEET NO: 128 E

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - WHITE
Message - BLACK
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	2 1/4	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	2 1/4	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN

R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

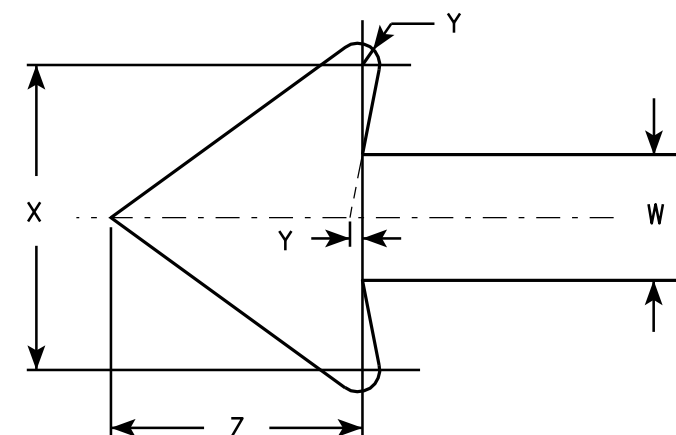
DATE 1/03/11 PLATE NO. R6-4B.2



R7-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 6
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. R7-51D (double arrow)
R7-51R (right arrow)
R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

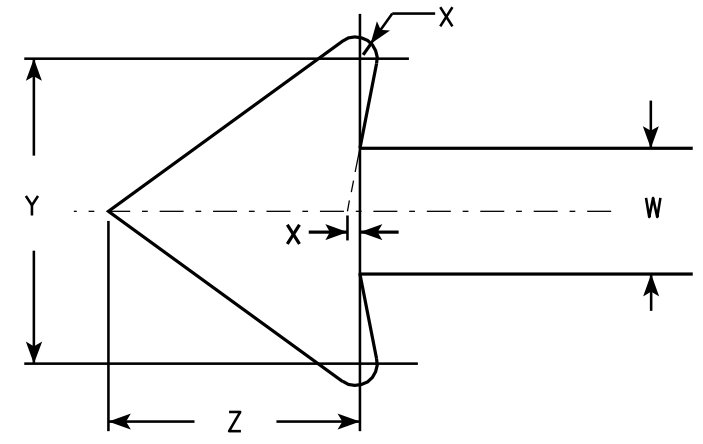
STANDARD SIGN R7-51	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/31/2011	PLATE NO. R7-51.6



R7-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-53D (double arrow)
R7-53L (left arrow)
R7-53R (right arrow)

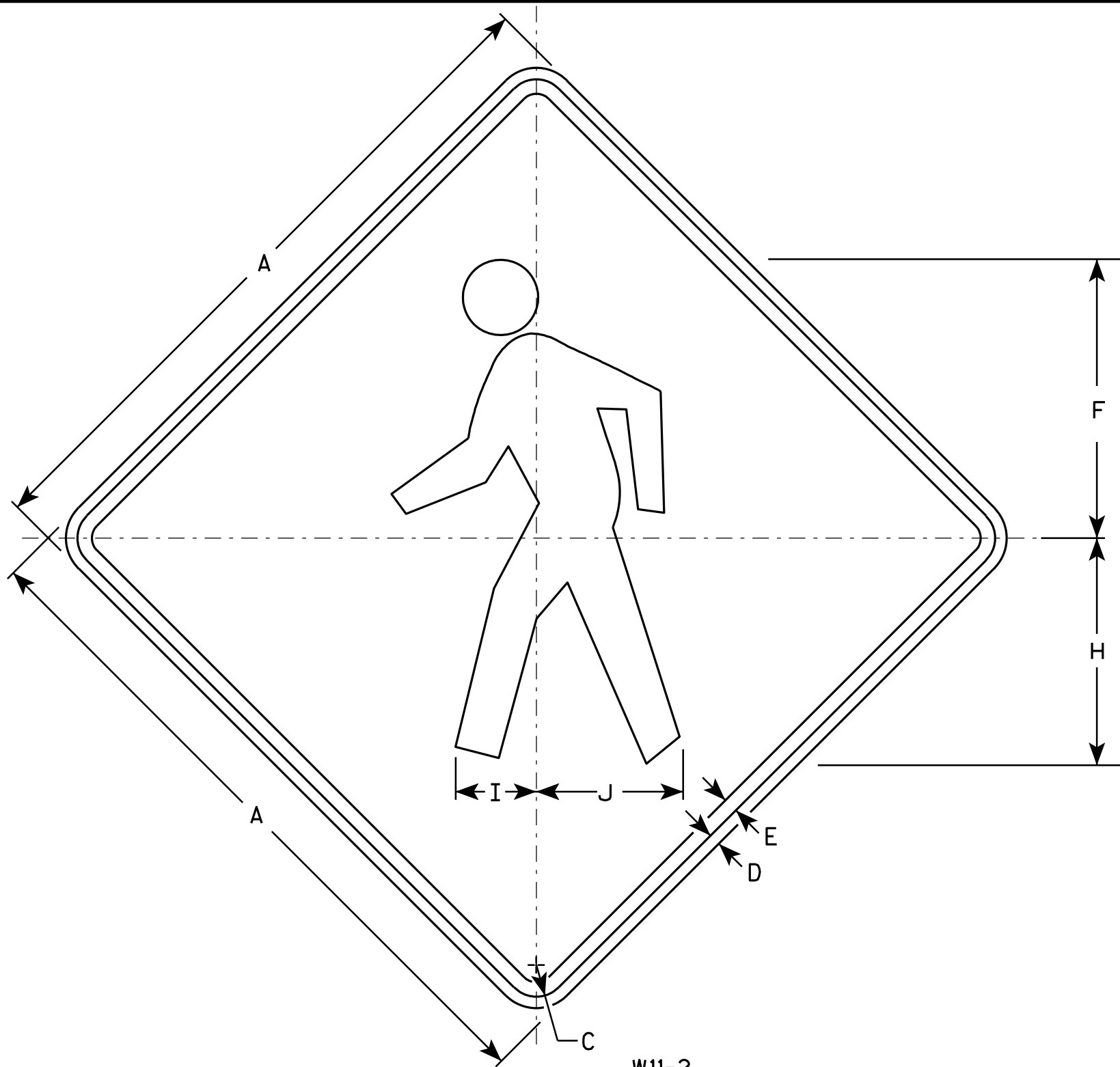


ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 5/8	1 3/4	1/4	4 1/2	2 3/8	3 7/8	3/4	1/8	1 3/4	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	3 3/8	1 1/2	5/8	5 3/8	3	5 7/8	1 1/8	1/4	2 5/8	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
4																											
5																											

STANDARD SIGN R7-53	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/31/2011	PLATE NO. R7-53.6

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 131	E
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W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

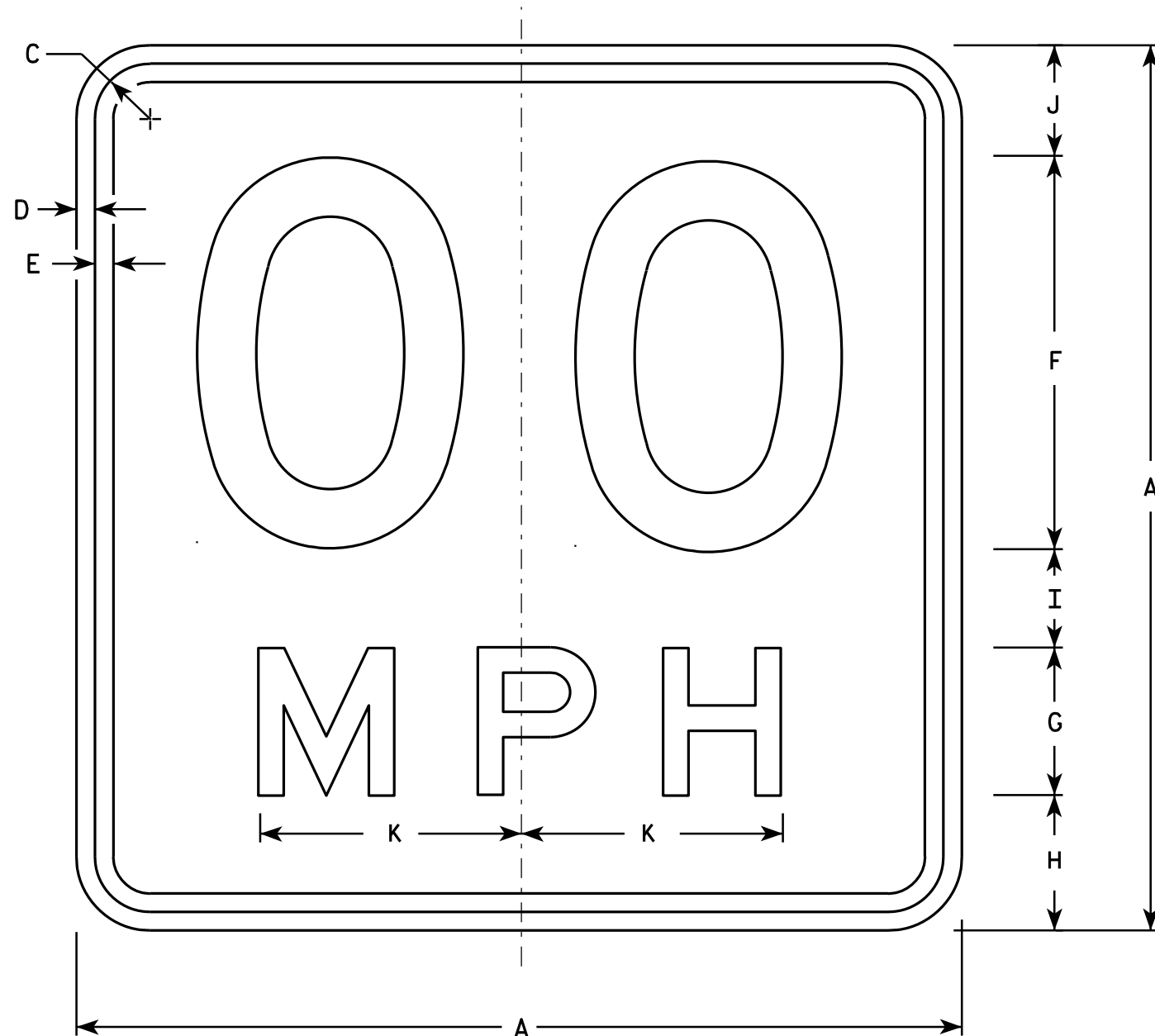
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
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 numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

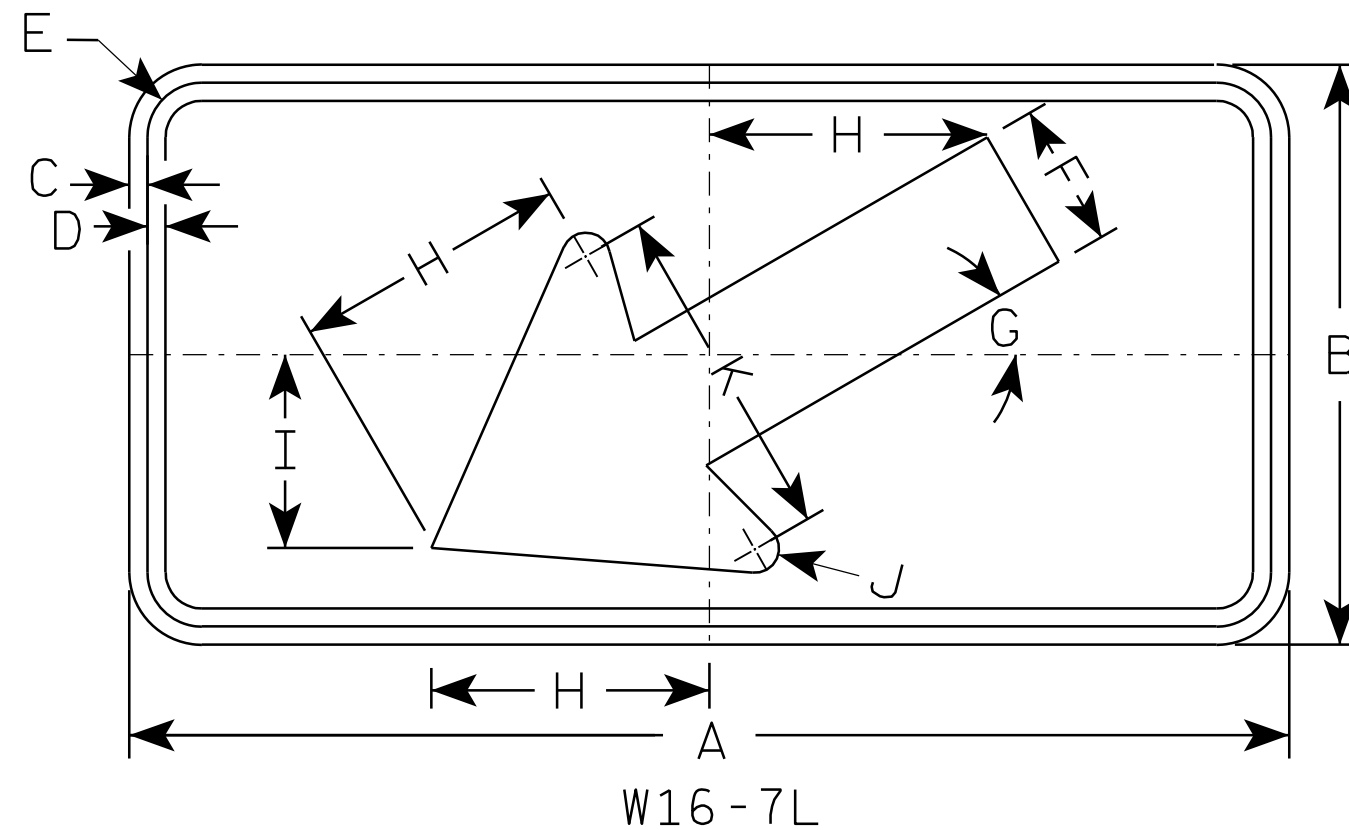
COUNTY:

SHEET NO: 133

E

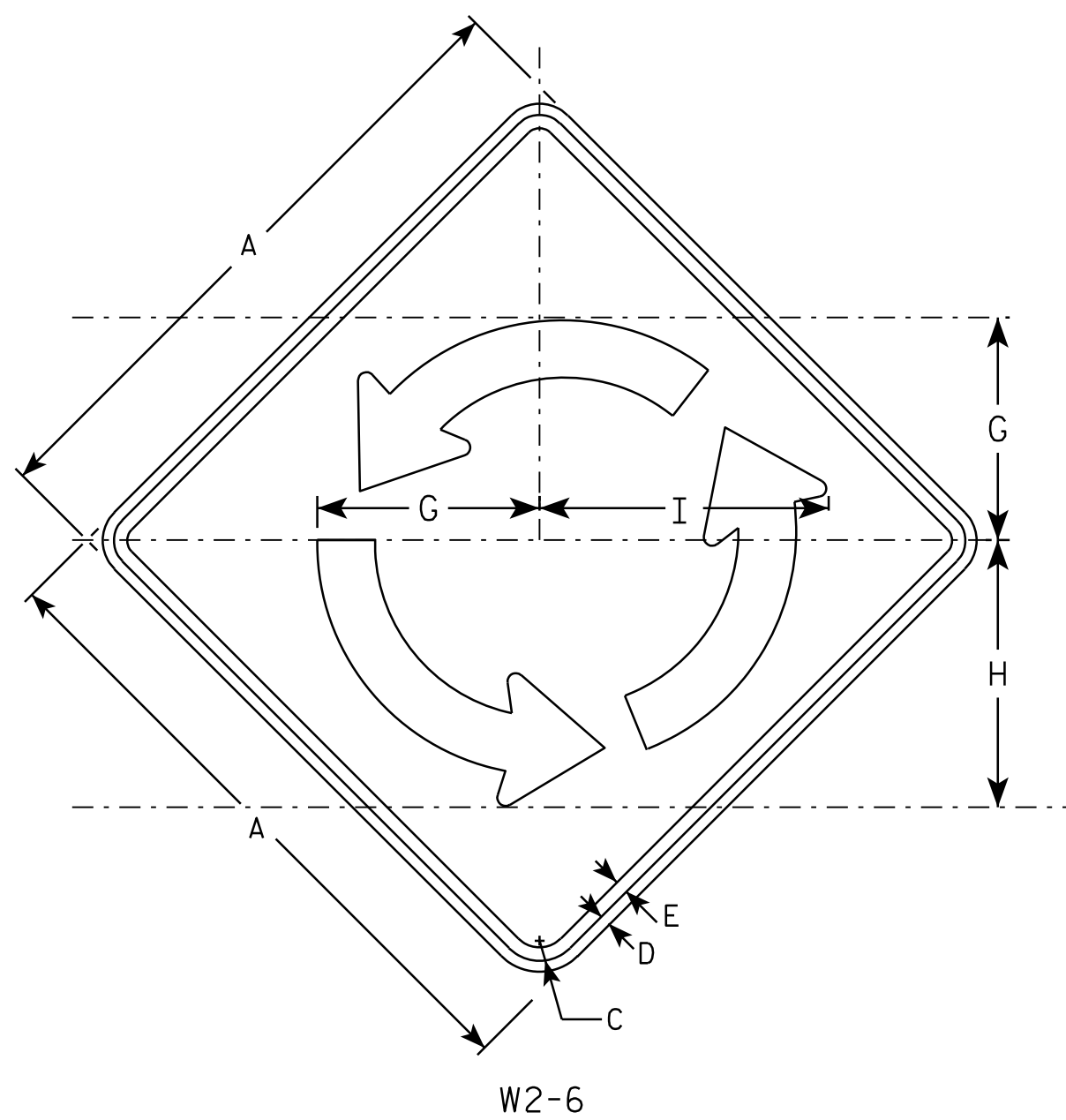
NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	$\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{1}{8}$	3	30°	5 $\frac{3}{4}$	4	$\frac{1}{2}$	7																2.0
2M	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
3	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
4																											8
5																											8

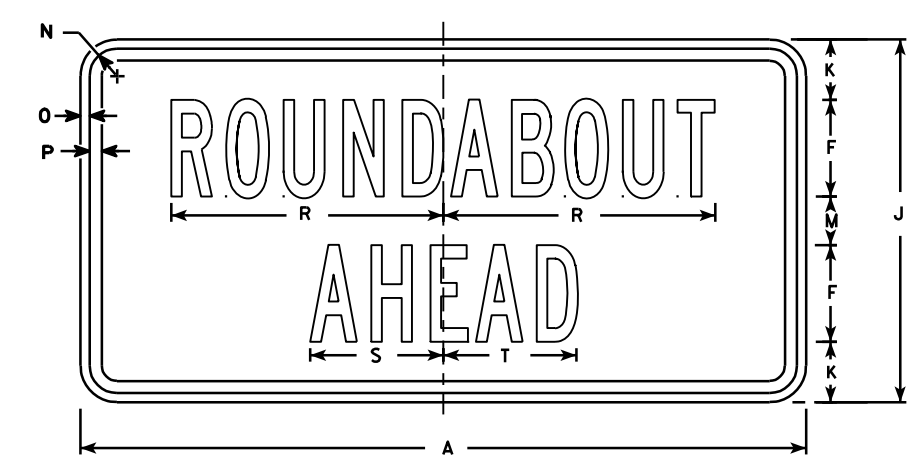
STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5



W2-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Message Series - B
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.



W2-6P

																								W2-6	W2-6P	
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Area sq. ft.	Area sq. ft.
1																										
2S	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
2M	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
3	36		1 5⁄8	5⁄8	¾	5	12 ½	15	16 ¼	18	2 5⁄8		2 ¾	1 ⅛	3⁄8	½		14	7	6 ¾					9.00	4.50
4	48		2 ¼	¾	1	6	16 5⁄8	20	16 ¼	24	4 3⁄8		3 5⁄8	1 3⁄8	½	5⁄8		17	8 ¼	8 ¼					16.0	8.0
5																										

STANDARD SIGN

W2-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5

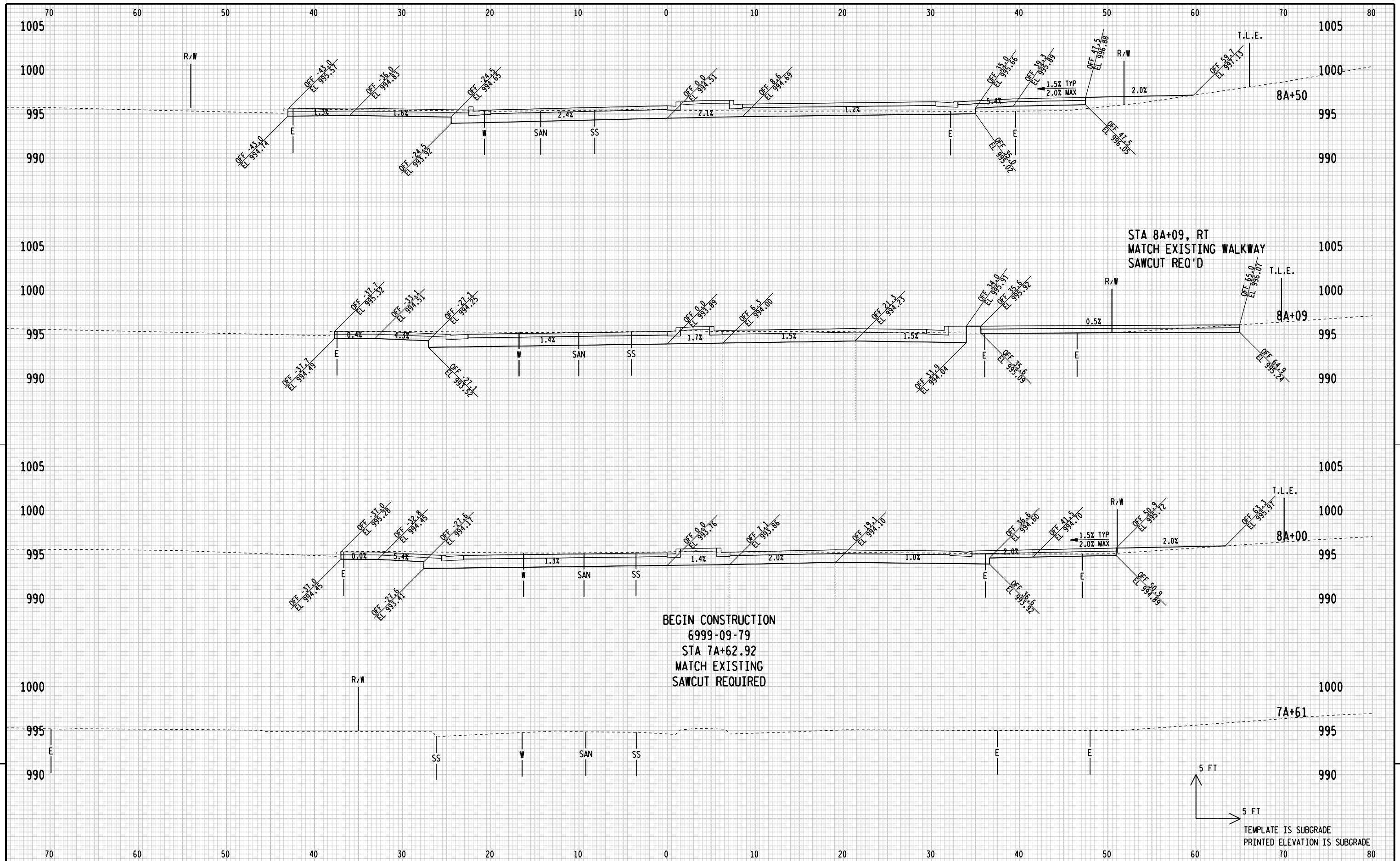
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded		Expanded Marsh	Expanded	Expanded EBS	Reduced Marsh	Reduced EBS		
															Cut 1.00	Fill 1.25	Backfill 1.50	Rock 1.10	Backfill 1.30	in Fill 0.60	In Fill 0.80		
																						Note 1	
14A+50.00	1450		70.09	0	1.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15A+00.00	1500	50	103.97	0	0.00	0	0	0	161	0	1	0	0	0	161	1	0	0	0	0	0	160	
15A+50.00	1550	50	139.52	0	0.00	0	0	0	225	0	0	0	0	0	387	1	0	0	0	0	0	385	
15A+88.55	1589	39	117.23	0	0.00	0	0	0	185	0	0	0	0	0	572	1	0	0	0	0	0	571	
16A+00.00	1600	11	126.30	0	0.00	0	0	0	50	0	0	0	0	0	622	1	0	0	0	0	0	620	
16A+35.41	1635	35	120.35	0	0.86	0	0	0	160	0	1	0	0	0	782	2	0	0	0	0	0	780	
16A+50.00	1650	15	108.52	0	2.16	0	0	0	64	0	1	0	0	0	845	3	0	0	0	0	0	842	
17A+00.00	1700	50	72.75	0	2.70	0	0	0	168	0	5	0	0	0	1013	9	0	0	0	0	0	1004	
17A+26.01	1726	26	83.42	0	4.36	0	0	0	75	0	3	0	0	0	1088	13	0	0	0	0	0	1075	
17A+50.00	1750	24	47.22	0	9.34	0	0	0	58	0	6	0	0	0	1146	20	0	0	0	0	0	1126	
17A+83.68	1784	34	50.30	0	14.31	0	0	0	61	0	15	0	0	0	1208	39	0	0	0	0	0	1169	
18A+00.00	1800	16	41.40	0	14.69	0	0	0	27	0	9	0	0	0	1235	50	0	0	0	0	0	1185	
18A+50.00	1850	50	50.04	0	8.56	0	0	0	85	0	22	0	0	0	1319	77	0	0	0	0	0	1243	
19A+00.00	1900	50	84.99	0	1.74	0	0	0	125	0	10	0	0	0	1444	89	0	0	0	0	0	1356	
19A+50.00	1950	50	99.53	0	1.06	0	0	0	171	0	3	0	0	0	1615	92	0	0	0	0	0	1523	
20A+00.00	2000	50	91.85	0	0.67	0	0	0	177	0	2	0	0	0	1793	94	0	0	0	0	0	1699	
20A+50.00	2050	50	162.55	0	1.02	0	0	0	236	0	2	0	0	0	2028	96	0	0	0	0	0	1932	
20A+65.90	2066	16	143.19	0	0.24	0	0	0	91	0	0	0	0	0	2119	96	0	0	0	0	0	2022	
21A+00.00	2100	34	67.97	0	0.55	0	0	0	133	0	0	0	0	0	2252	97	0	0	0	0	0	2155	
21A+50.00	2150	50	73.24	0	0.28	0	0	0	131	0	1	0	0	0	2382	98	0	0	0	0	0	2285	
21A+57.19	2157	7	76.92	0	0.00	0	0	0	19	0	0	0	0	0	2402	98	0	0	0	0	0	2304	
22A+00.00	2200	43	73.81	0	0.00	0	0	0	120	0	0	0	0	0	2522	98	0	0	0	0	0	2424	
22A+30.86	2231	31	72.90	0	0.05	0	0	0	84	0	0	0	0	0	2606	98	0	0	0	0	0	2508	
22A+50.00	2250	19	65.31	0	0.31	0	0	0	49	0	0	0	0	0	2655	98	0	0	0	0	0	2557	
23A+00.00	2300	50	64.69	0	0.94	0	0	0	120	0	1	0	0	0	2775	100	0	0	0	0	0	2676	
23A+09.46	2309	9	67.55	0	0.02	0	0	0	22	0	0	0	0	0	2797	100	0	0	0	0	0	2697	
23A+38.47	2338	29	70.68	0	0.00	0	0	0	74	0	0	0	0	0	2871	100	0	0	0	0	0	2772	
23A+50.00	2350	12	63.12	0	2.24	0	0	0	30	0	0	0	0	0	2901	100	0	0	0	0	0	2801	
23A+66.63	2367	17	71.29	0	0.00	0	0	0	42	0	1	0	0	0	2943	101	0	0	0	0	0	2842	
24A+00.00	2400	33	70.37	0	0.47	0	0	0	87	0	0	0	0	0	3030	102	0	0	0	0	0	2928	
24A+29.69	2430	30	109.97	0	1.71	0	0	0	100	0	1	0	0	0	3130	103	0	0	0	0	0	3027	
24A+50.00	2450	20	85.92	0	0.87	0	0	0	73	0	1	0	0	0	3203	104	0	0	0	0	0	3098	
24A+68.84	2469	19	69.56	0	5.57	0	0	0	55	0	2	0	0	0	3257	107	0	0	0	0	0	3150	
24A+73.81	2474	5	70.94	0	2.75	0	0	0	13	0	1	0	0	0	3270	108	0	0	0	0	0	3162	
25A+00.00	2500	26	66.78	0	2.05	0	0	0	66	0	2	0	0	0	3337	111	0	0	0	0	0	3226	
25A+50.00	2550	50	64.30	0	5.88	0	0	0	121	0	7	0	0	0	3458	120	0	0	0	0	0	3338	
25A+65.72	2566	16	73.29	0	1.56	0	0	0	41	0	2	0	0	0	3499	123	0	0	0	0	0	3376	
26A+00.00	2600	34	64.89	0	1.93	0	0	0	87	0	2	0	0	0	3586	126	0	0	0	0	0	3460	
26A+28.93	2629	29	74.90	0	1.09	0	0	0	75	0	2	0	0	0	3661	128	0	0	0	0	0	3533	
26A+50.00	2650	21	63.72	0	1.86	0	0	0	54	0	1	0	0	0	3715	129	0	0	0	0	0	3586	
26A+66.49	2666	16	65.13	0	0.28	0	0	0	38	0	1	0	0	0	3753	130	0	0	0	0	0	3623	
26A+90.64	2691	25	68.90	0	0.52	0	0	0	62	0	0	0	0	0	3815	130	0	0	0	0	0	3685	
27A+00.00	2700	9	69.63	0	0.95	0	0	0	23	0	0	0	0	0	3838	131	0	0	0	0	0	3707	
27A+50.00	2750	50	0.00	0	0.00	0	0	0	64	0	1	0	0	0	3903	132	0	0	0	0	0	3771	
28A+00.00	2800	50	0.00	0	0.00	0	0	0	0	0	0	0	0	0	3903	132	0	0	0	0	0	3780	
A-Line Sub-Totals									3,910	0	110	0	0	0									

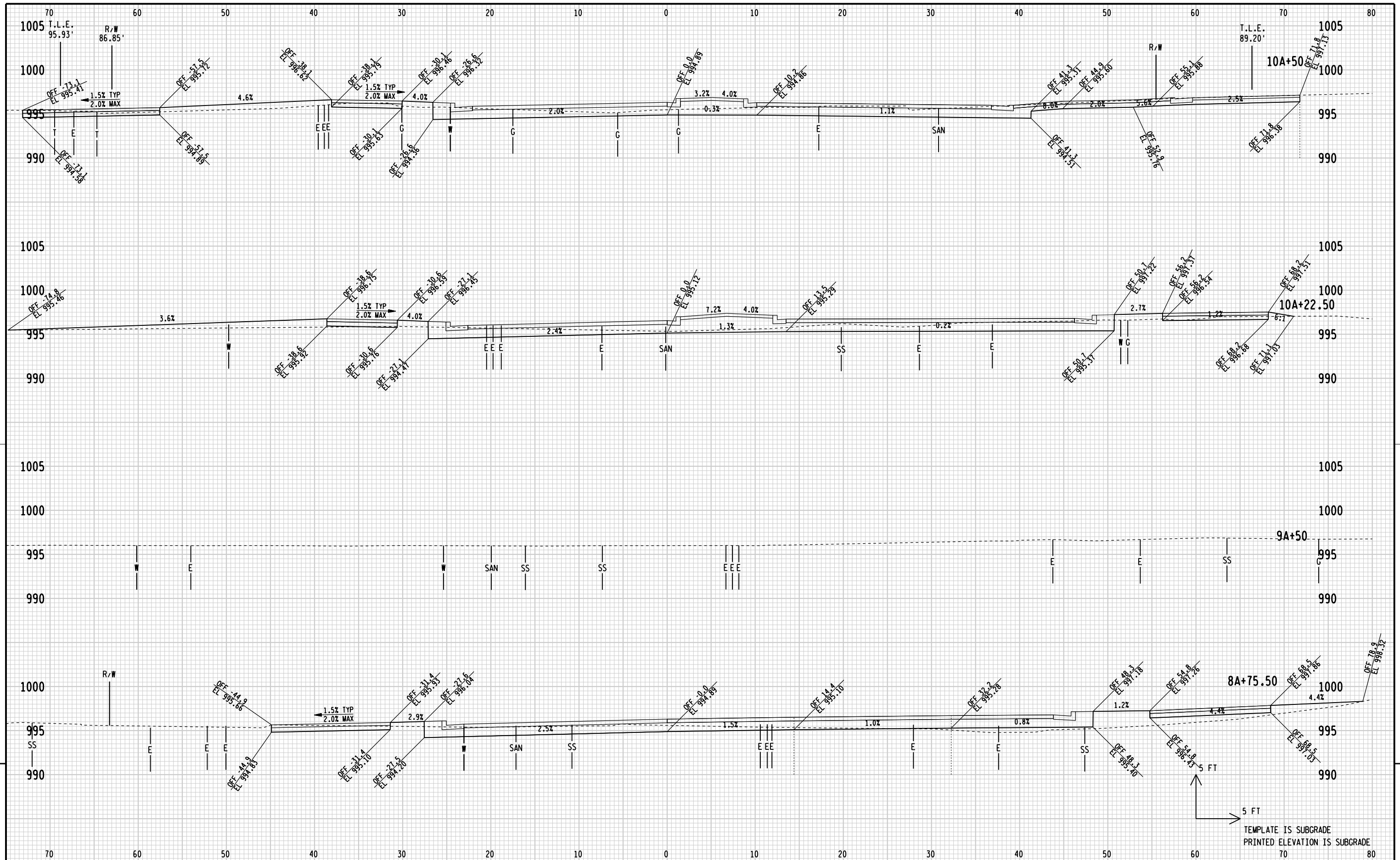
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded		Expanded Marsh	Expanded	Expanded EBS	Reduced Marsh		Reduced EBS	
															Cut 1.00	Fill 1.25	Backfill 1.50	Rock 1.10	Backfill 1.30	in Fill 0.60	In Fill 0.80		
																						Note 1	
26T+66.49	2666		6.07	0	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27T+00.00	2700	34	8.58	0	0.00	0	0	0	9	0	0	0	0	0	9	0	0	0	0	0	0	0	9
27T+50.00	2750	50	4.57	0	0.58	0	0	0	12	0	1	0	0	0	21	1	0	0	0	0	0	0	21
28T+00.00	2800	50	3.39	0	1.55	0	0	0	7	0	2	0	0	0	29	3	0	0	0	0	0	0	26
28T+50.00	2850	50	7.26	0	0.00	0	0	0	10	0	1	0	0	0	39	5	0	0	0	0	0	0	34
29T+00.00	2900	50	3.31	0	1.31	0	0	0	10	0	1	0	0	0	48	7	0	0	0	0	0	0	42
29T+50.00	2950	50	5.03	0	0.02	0	0	0	8	0	1	0	0	0	56	8	0	0	0	0	0	0	48
30T+00.00	3000	50	7.34	0	0.00	0	0	0	11	0	0	0	0	0	68	8	0	0	0	0	0	0	60
30T+50.00	3050	50	10.18	0	0.00	0	0	0	16	0	0	0	0	0	84	8	0	0	0	0	0	0	76
31T+00.00	3100	50	6.84	0	0.02	0	0	0	16	0	0	0	0	0	100	8	0	0	0	0	0	0	91
31T+50.00	3150	50	5.18	0	0.01	0	0	0	11	0	0	0	0	0	111	8	0	0	0	0	0	0	103
32T+00.00	3200	50	6.20	0	0.00	0	0	0	11	0	0	0	0	0	121	8	0	0	0	0	0	0	113
32T+50.00	3250	50	4.86	0	2.06	0	0	0	10	0	2	0	0	0	131	11	0	0	0	0	0	0	121
33T+00.00	3300	50	4.96	0	0.23	0	0	0	9	0	2	0	0	0	141	13	0	0	0	0	0	0	127
33T+50.00	3350	50	2.79	0	0.79	0	0	0	7	0	1	0	0	0	148	14	0	0	0	0	0	0	133
34T+00.00	3400	50	8.15	0	0.00	0	0	0	10	0	1	0	0	0	158	15	0	0	0	0	0	0	143
34T+50.00	3450	50	6.65	0	0.00	0	0	0	14	0	0	0	0	0	172	15	0	0	0	0	0	0	156
35T+00.00	3500	50	8.79	0	0.00	0	0	0	14	0	0	0	0	0	186	15	0	0	0	0	0	0	171
35T+50.00	3550	50	10.33	0	0.00	0	0	0	18	0	0	0	0	0	204	15	0	0	0	0	0	0	188
36T+00.00	3600	50	7.44	0	0.00	0	0	0	16	0	0	0	0	0	220	15	0	0	0	0	0	0	205
36T+50.00	3650	50	9.39	0	0.00	0	0	0	16	0	0	0	0	0	236	15	0	0	0	0	0	0	220
37T+00.00	3700	50	6.28	0	0.29	0	0	0	15	0	0	0	0	0	250	16	0	0	0	0	0	0	235
37T+50.00	3750	50	8.02	0	0.00	0	0	0	13	0	0	0	0	0	263	16	0	0	0	0	0	0	247
38T+00.00	3800	50	4.69	0	0.59	0	0	0	12	0	1	0	0	0	275	17	0	0	0	0	0	0	259
38T+50.00	3850	50	5.66	0	0.13	0	0	0	10	0	1	0	0	0	285	17	0	0	0	0	0	0	267
39T+00.00	3900	50	6.99	0	0.04	0	0	0	12	0	0	0	0	0	296	18	0	0	0	0	0	0	279
39T+32.69	3933	33	0.00	0	0.00	0	0	0	4	0	0	0	0	0	301	18	0	0	0	0	0	0	290
PROJECT 6999-11-72 Sub-Totals									310	0	15	0	0	0									

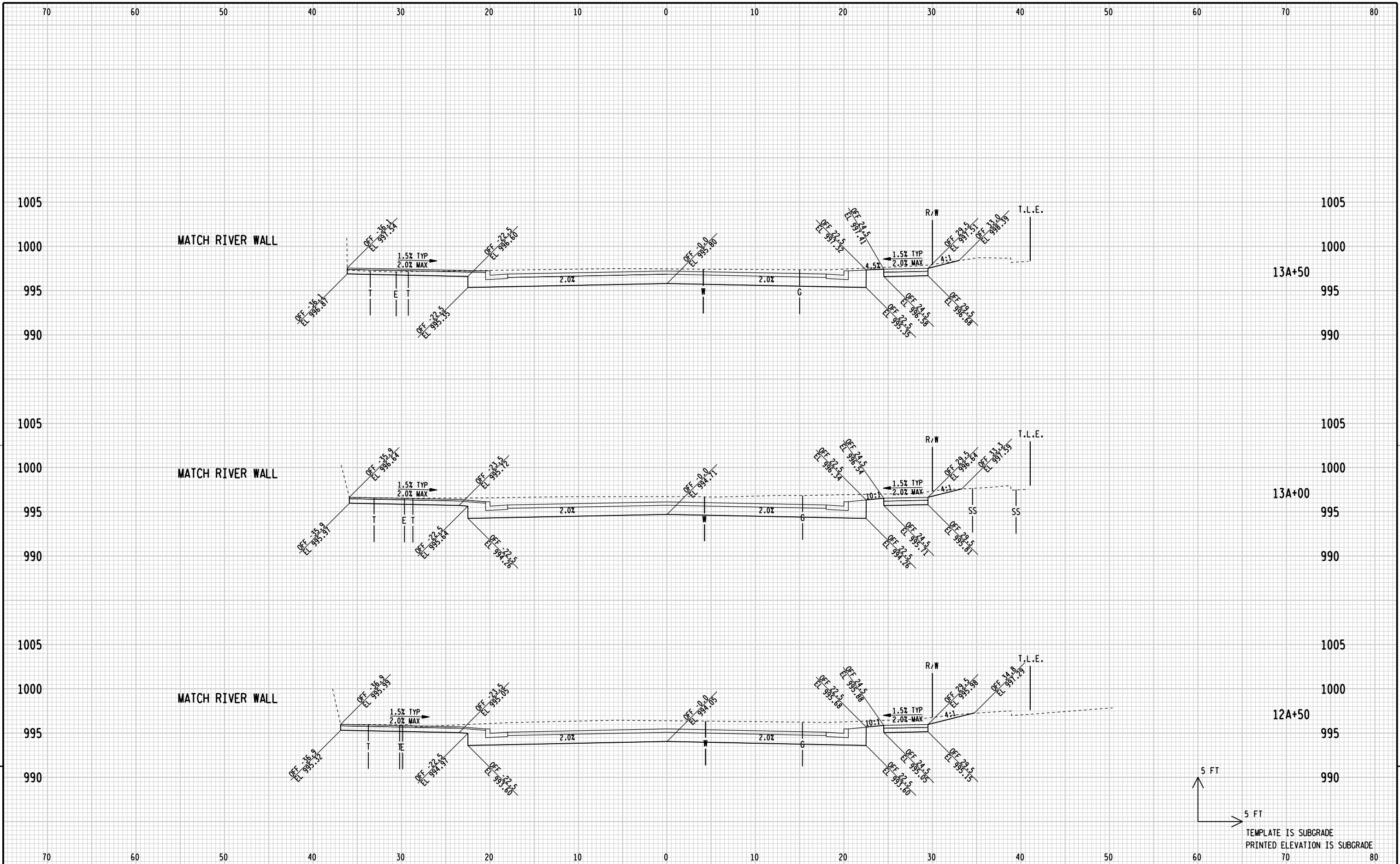
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded		Expanded Marsh	Expanded	Expanded EBS	Reduced Marsh		Reduced EBS	
															Cut 1.00	Fill 1.25	Backfill 1.50	Rock 1.10	Backfill 1.30	in Fill 0.60	In Fill 0.80		
																						Note 1	
40C+50.00	4050		101.79	0	6.79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
41C+00.00	4100	50	205.48	0	2.45	0	0	0	285	0	9	0	0	0	0	285	11	0	0	0	0	0	274
41C+50.00	4150	50	207.64	0	0.00	0	0	0	383	0	2	0	0	0	0	667	14	0	0	0	0	0	653
42C+00.00	4200	50	164.57	0	0.00	0	0	0	345	0	0	0	0	0	0	1012	14	0	0	0	0	0	998
42C+14.40	4214	14	155.94	0	0.00	0	0	0	83	0	0	0	0	0	0	1095	14	0	0	0	0	0	1081
42C+50.00	4250	36	153.60	0	0.00	0	0	0	206	0	0	0	0	0	0	1301	14	0	0	0	0	0	1288
43C+00.00	4300	50	116.35	0	0.00	0	0	0	250	0	0	0	0	0	0	1551	14	0	0	0	0	0	1538
43C+50.00	4350	50	97.41	0	0.00	0	0	0	198	0	0	0	0	0	0	1749	14	0	0	0	0	0	1735
43C+75.30	4375	25	0.00	0	0.00	0	0	0	45	0	0	0	0	0	0	1794	14	0	0	0	0	0	1790
C-Line Sub-Totals									1,800	0	10	0	0	0									

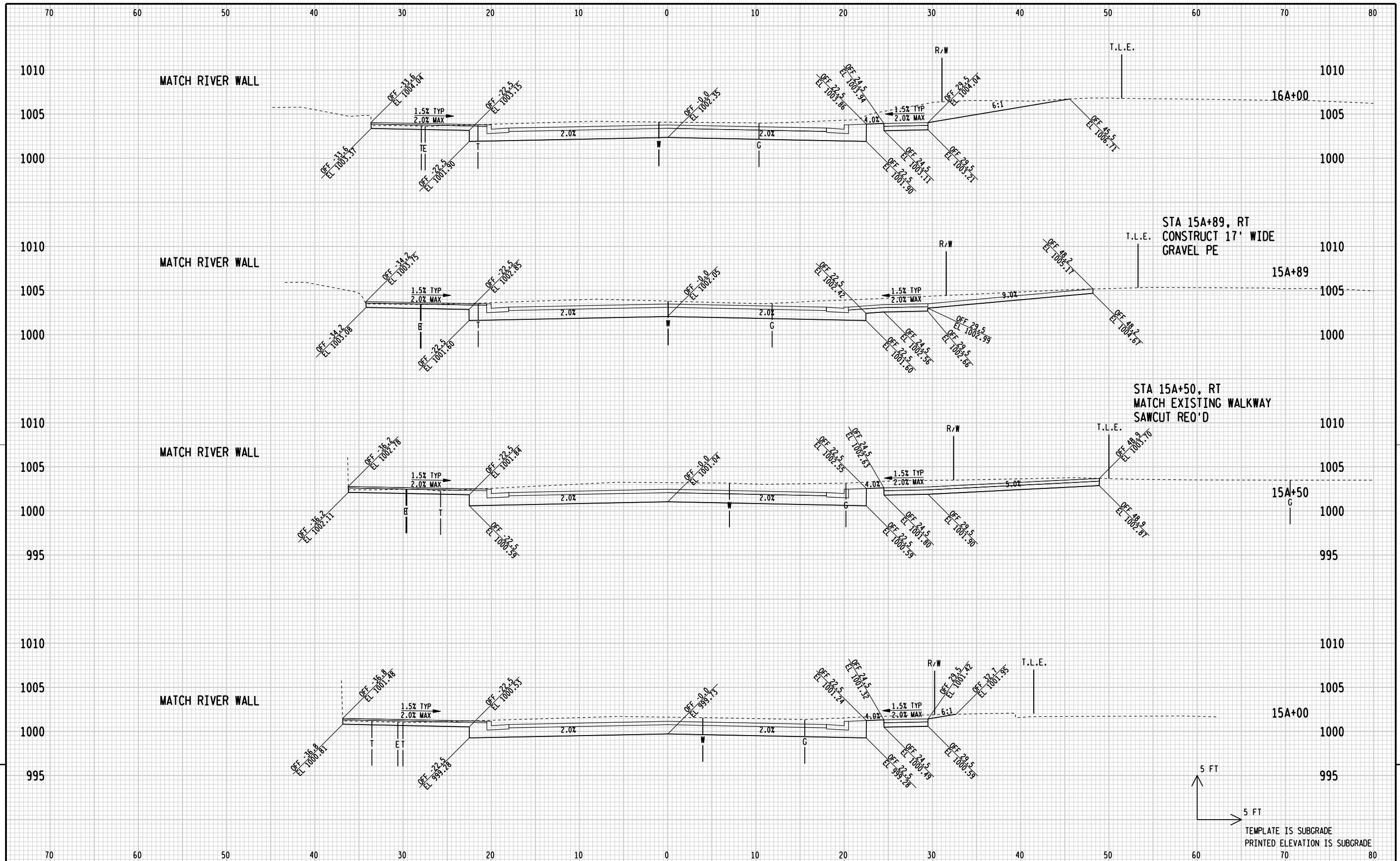
STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Expanded		Expanded Marsh	Expanded	Expanded EBS	Reduced Marsh	Reduced EBS		
															Cut	Fill	Backfill	Rock	Backfill	in Fill	In Fill		
																						1.00	
			Note 1	Note 2	Note 3				Note 1	Note 4	Note 5	Note 6	Note 7				Note 8						
2D+45	245		70.44	0	67.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3D+15	315	70	80.33	0	67.51	0	0	0	195	0	175	0	0	0	195	219	0	0	0	0	-23		
3D+80	380	65	34.94	0	72.97	0	0	0	139	0	169	0	0	0	334	430	0	0	0	0	-96		
4D+50	450	70	6.13	0	89.08	0	0	0	53	0	210	0	0	0	387	693	0	0	0	0	-310		
D-Line Sub-Totals									390	0	560	0	0	0									

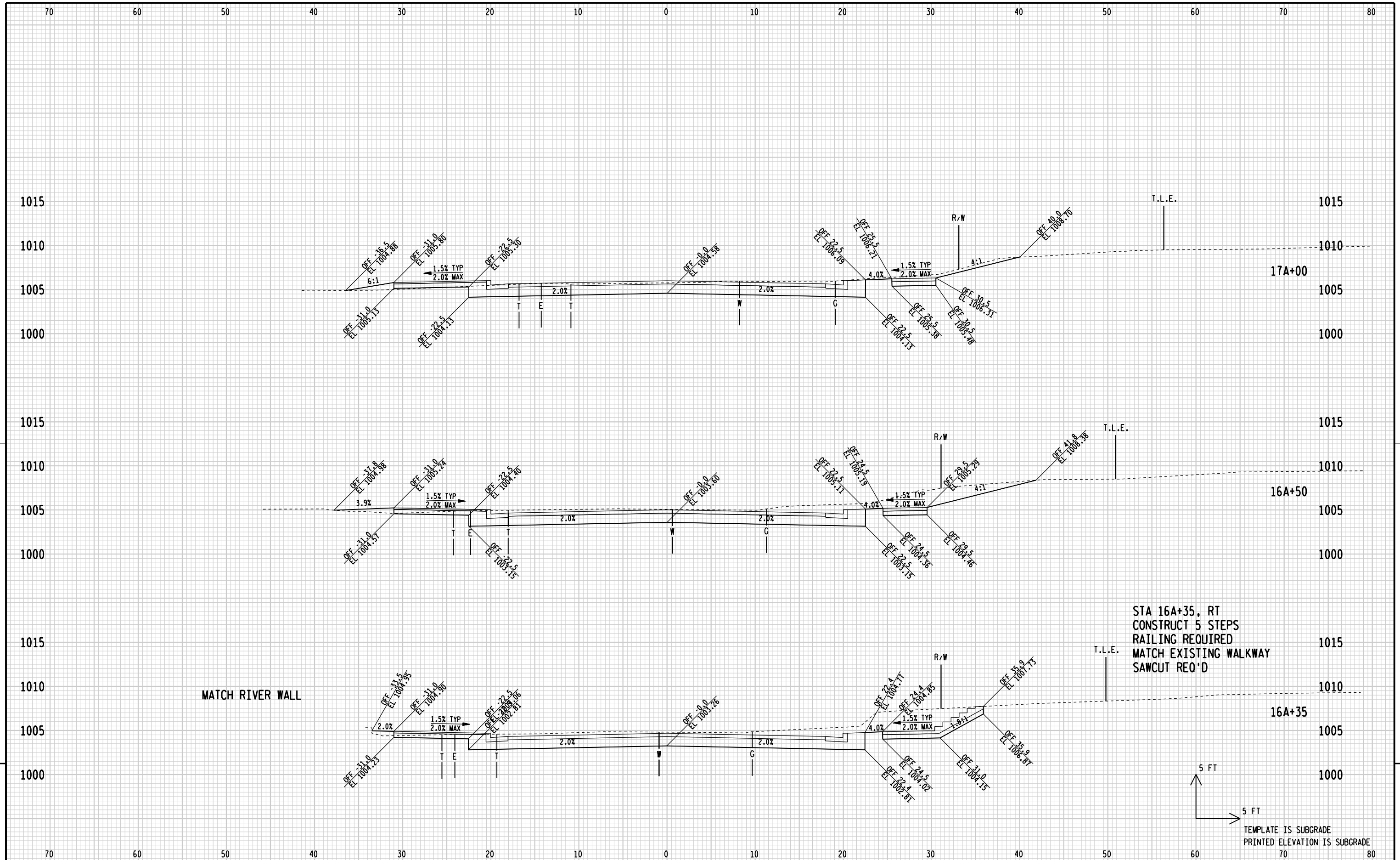
Notes:		
1 - Cut	Cut includes Salvaged/Unusable Pavement material	
2 - Salvaged/Unusable	This does not show up in cross sections	
3 - Fill	Does not include Unusable Pavement Exc volume	
4 - Expanded Marsh B	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 4 - Select one based on input dialog selection
5 - Expanded EBS	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 5 - Select one based on input dialog selection
6 - Reduced Marsh in	Reduced Marsh Excavation that can be used in Fill	Note 6 - If excavated Marsh can be used in Fill
7 - Reduced EBS in F	Reduced EBS Excavation that can be used in Fill	Note 7 - If excavated EBS can be used in Fill
8 - Mass Ordinate	If Marsh or EBS to be backfilled with Cut or Borrow: [(Cut + Marsh Exc + EBS) - ((Fill -	Note 8 - Select one based on mass haul input dialog
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [(Cut + EBS + Marsh Exc) - ((Fill -	EBS and Marsh Exc used outside 1:1 in fill slopes
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill	Marsh and EBS are not usable outside the 1:1 slopes
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Cut or Borrow: [(Cut) - ((Fill - Expanded Rock)	Marsh and EBS are not usable outside the 1:1 slopes
Notes for macro:		
This option assumes that the pavement removal is shown in the cross sections.		
Make a check box to show which option was used		
Spreadsheet option 1 or 2		
If the pavement removal is in a fill area then it needs to add the area of pavement removed to the fill area		
Mass haul does or does not include Marsh and EBS in the fills		
Common will be quantified when we do the summaries		

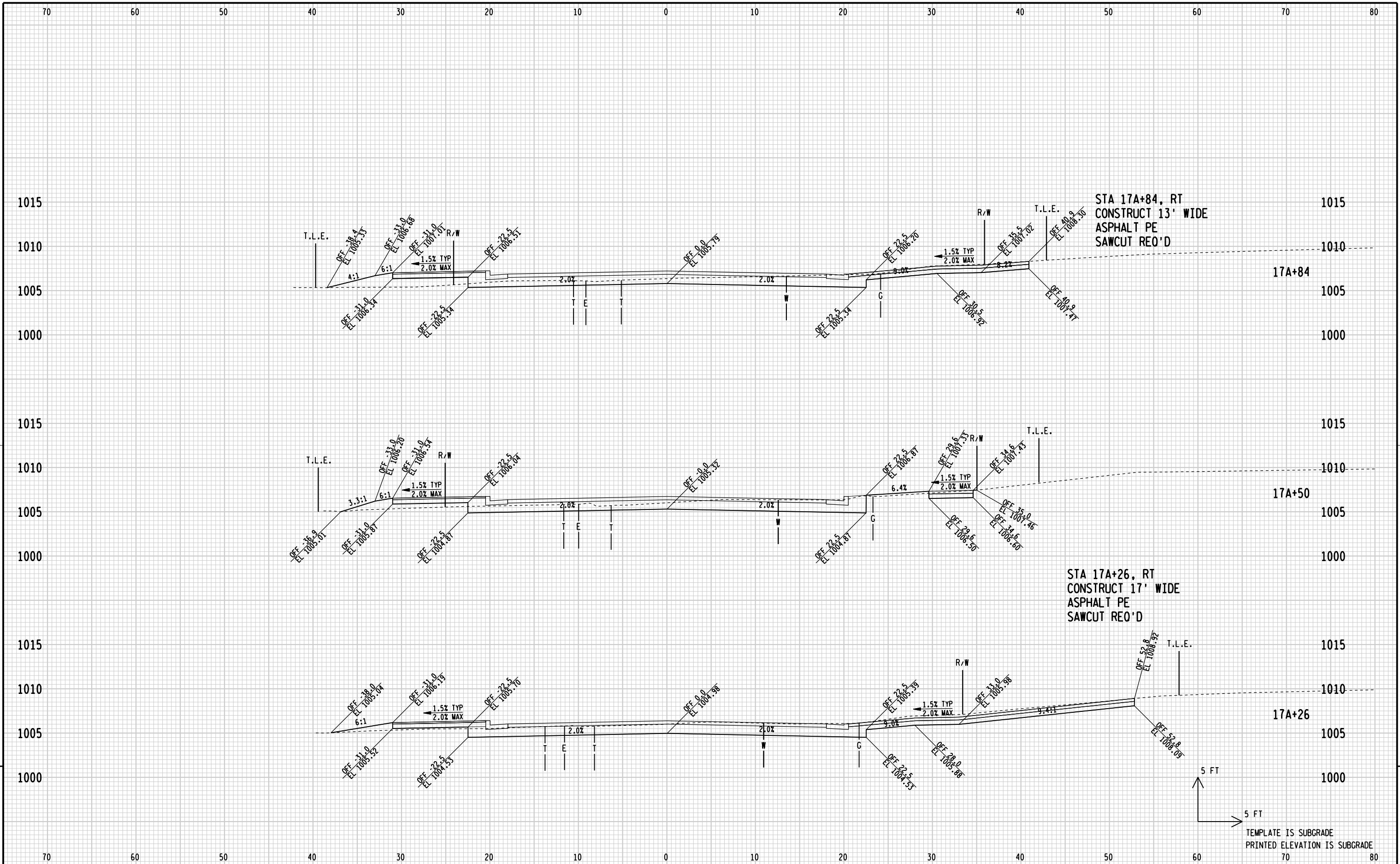


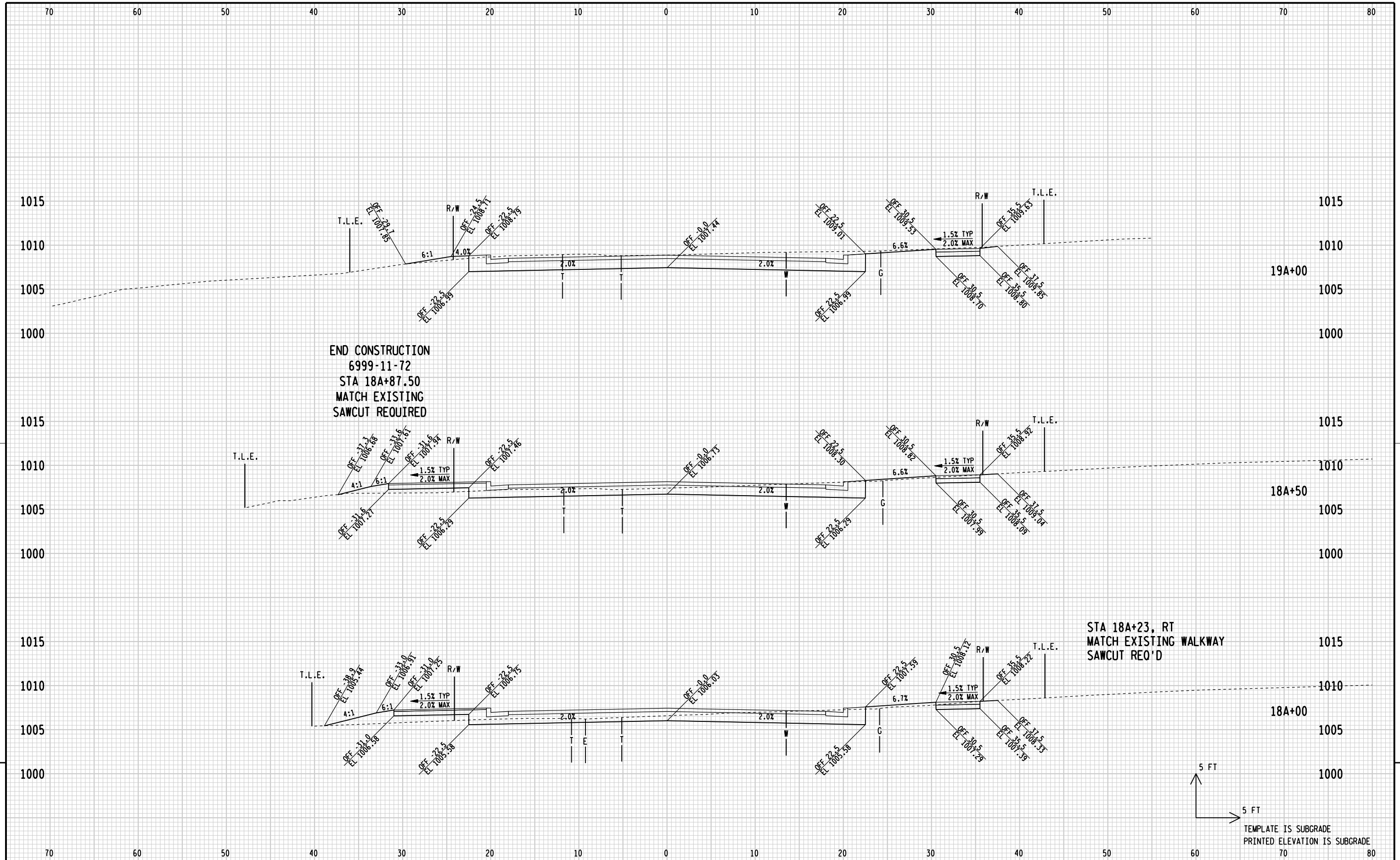


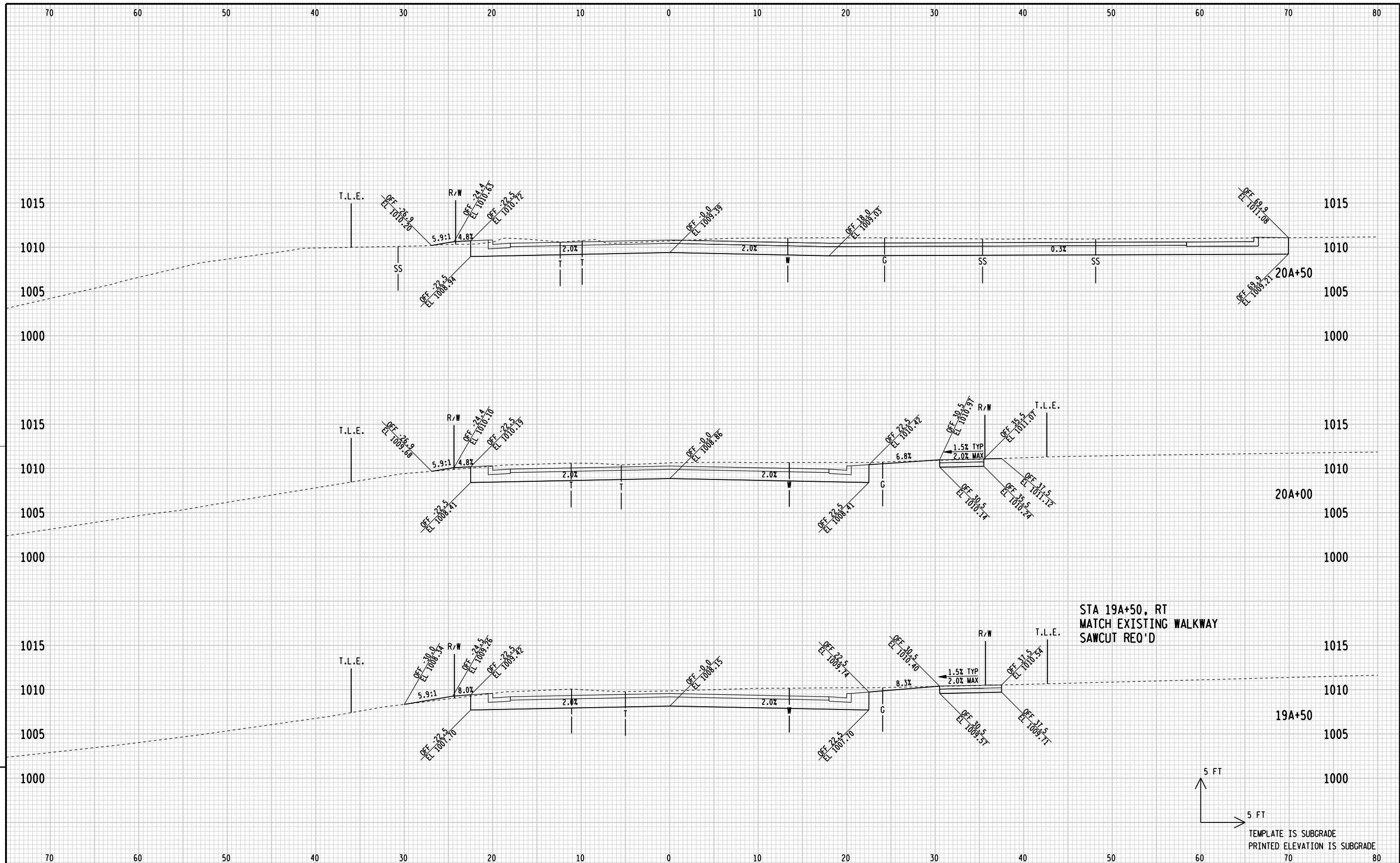


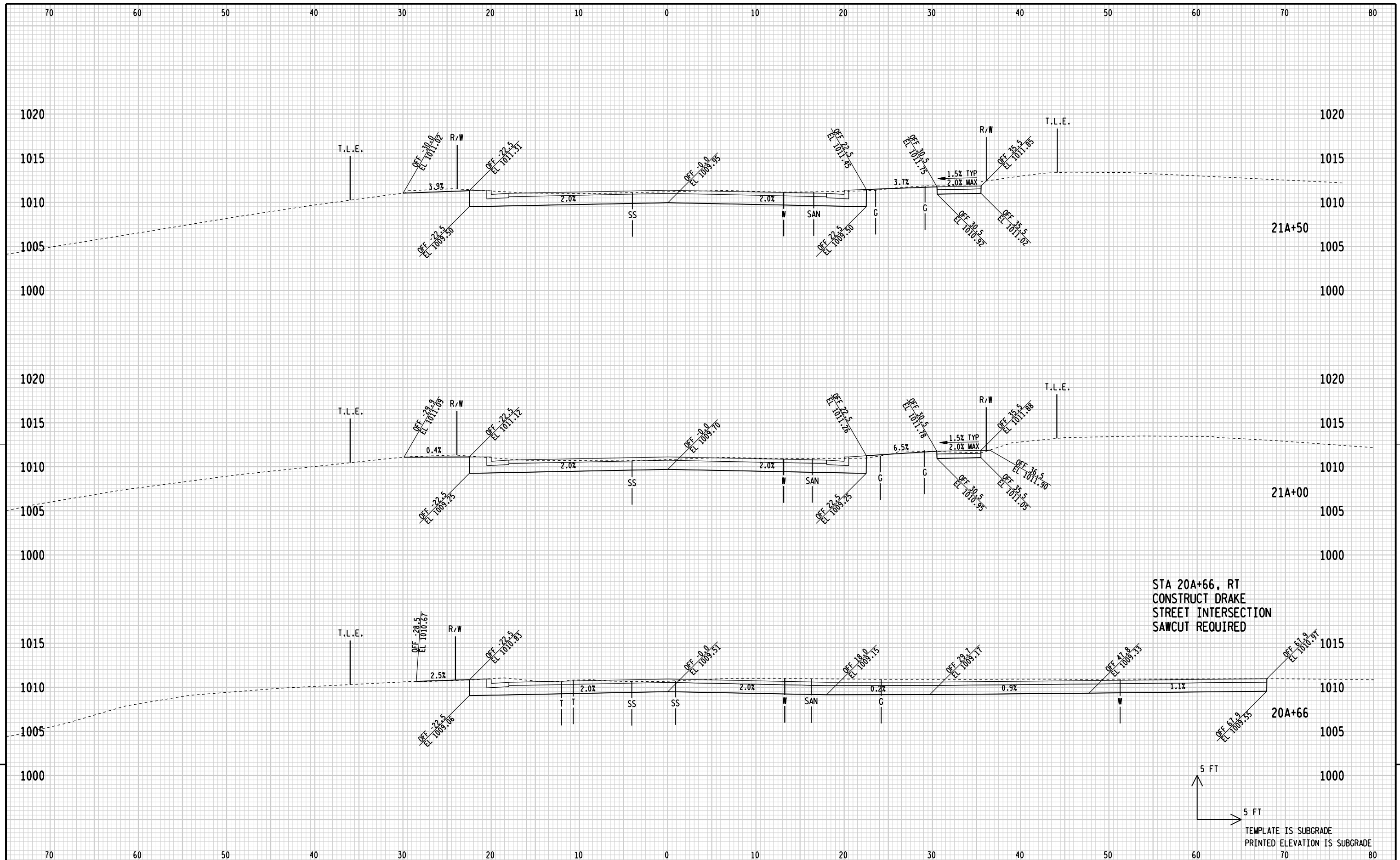


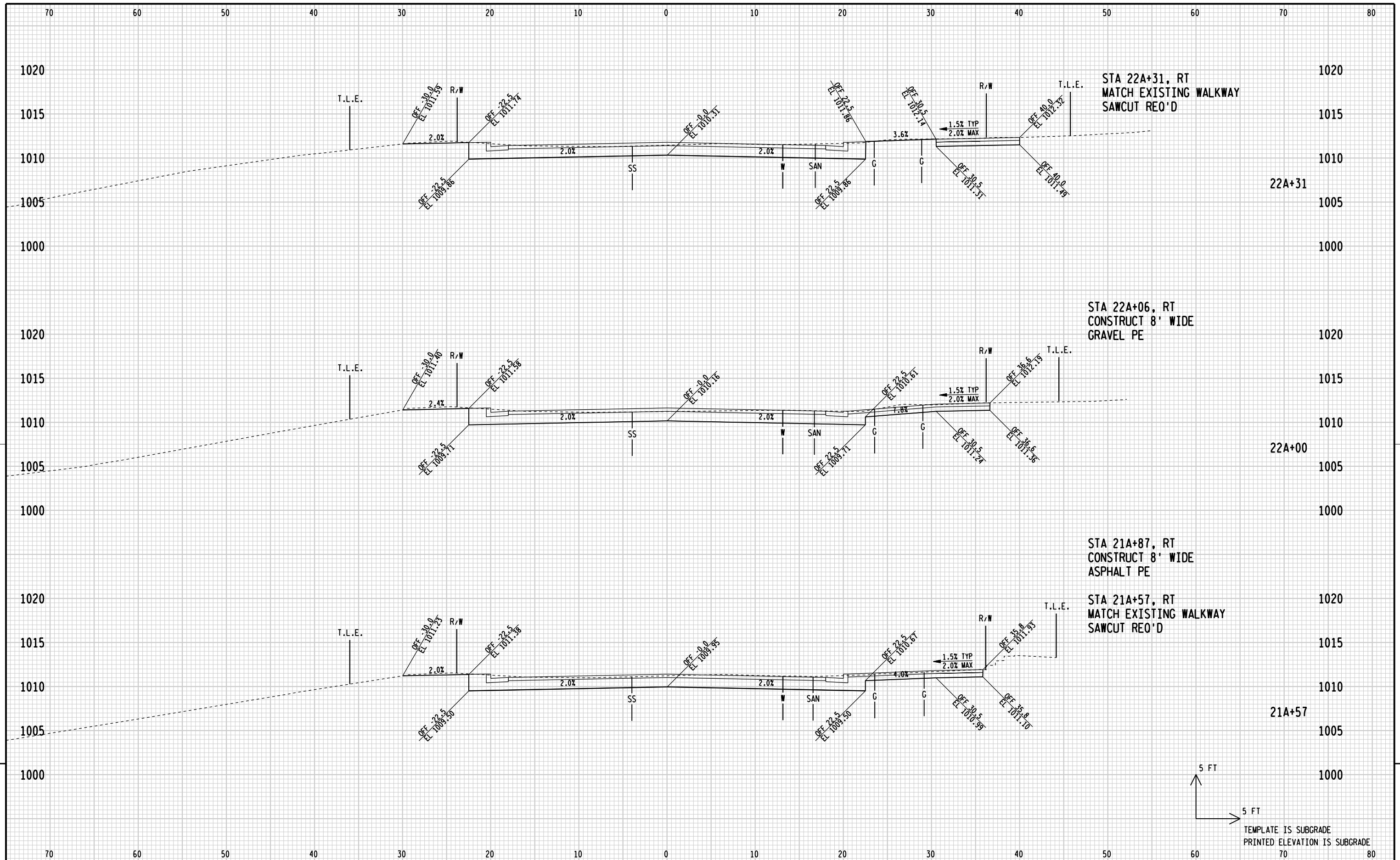


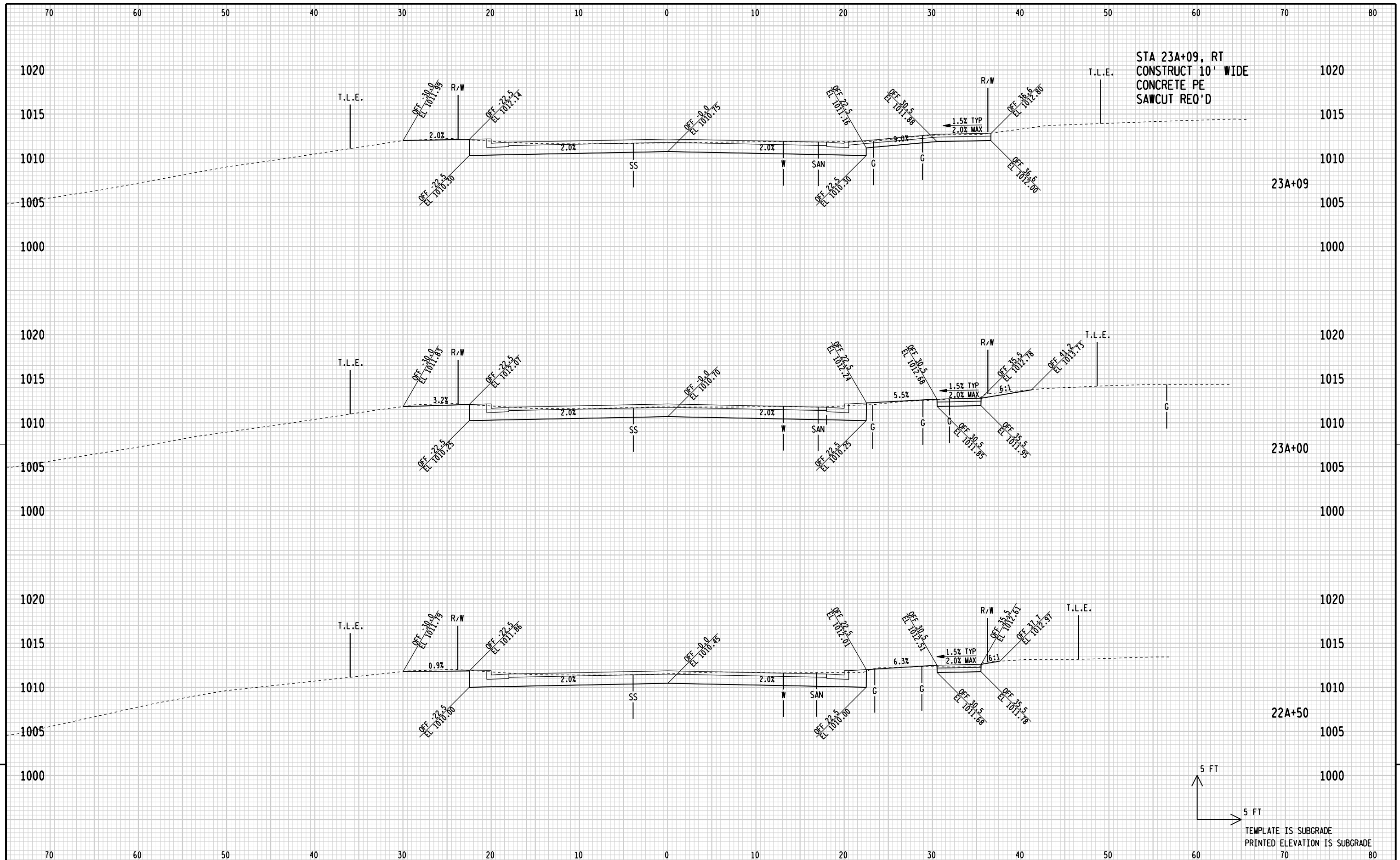


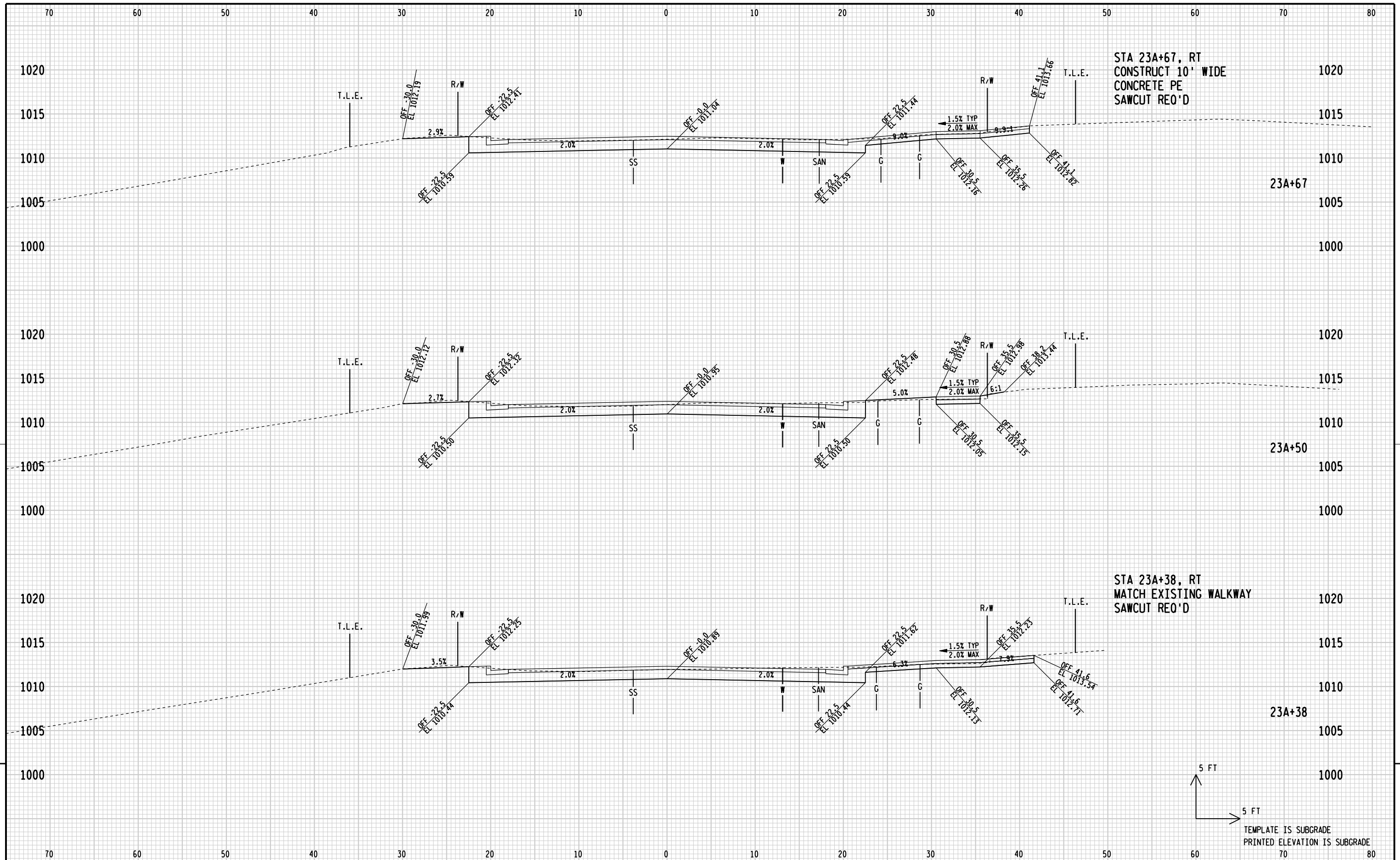


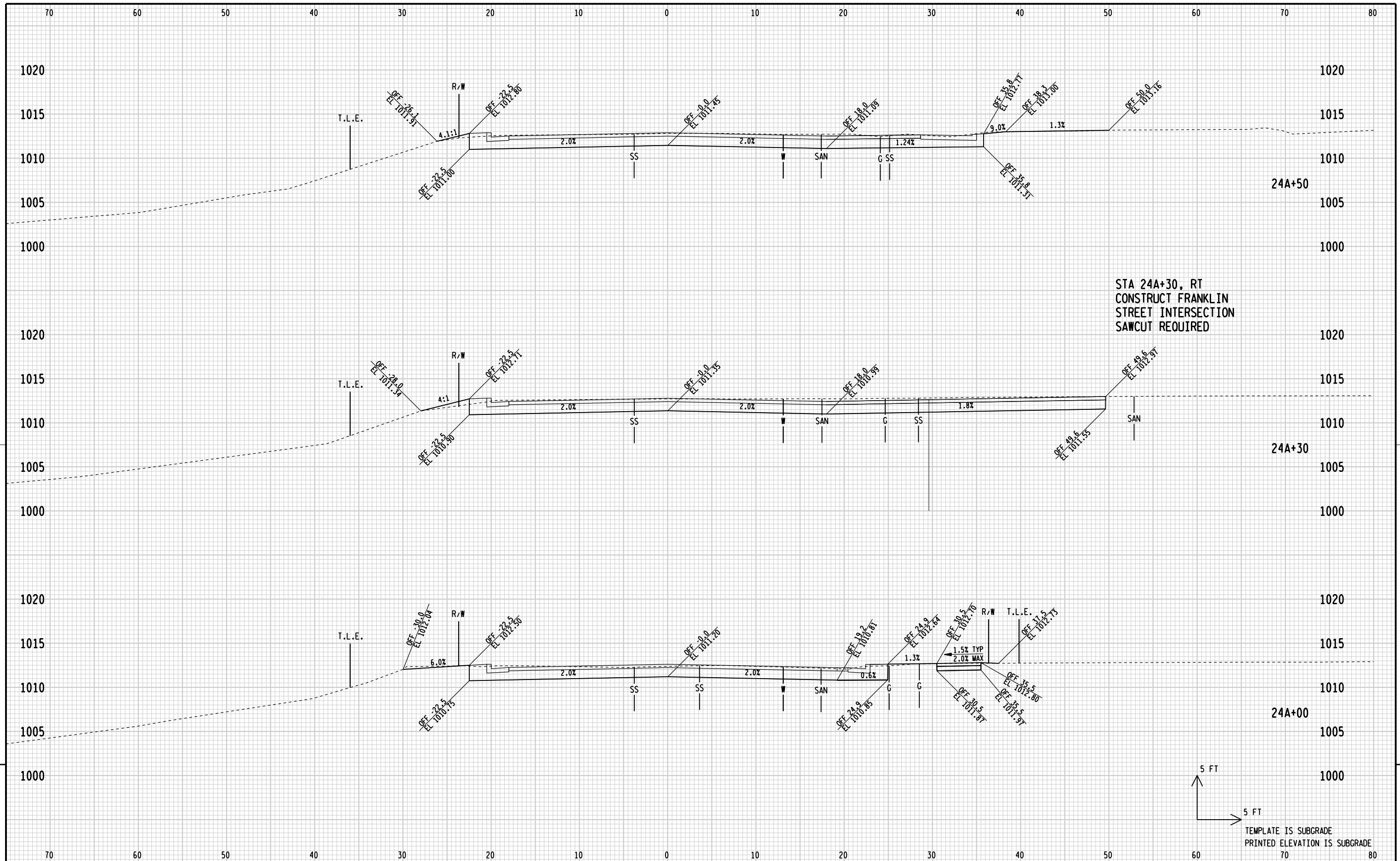


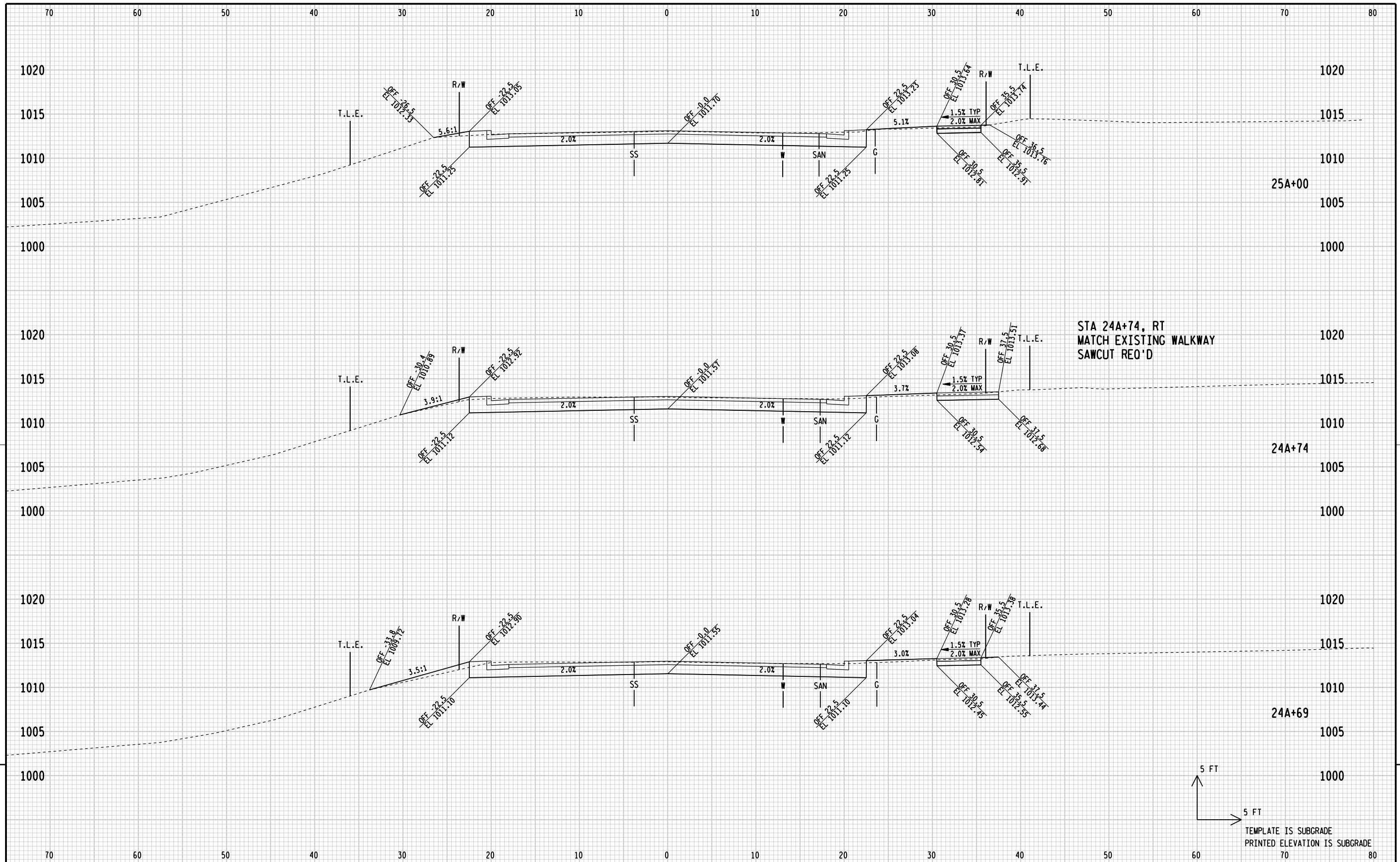


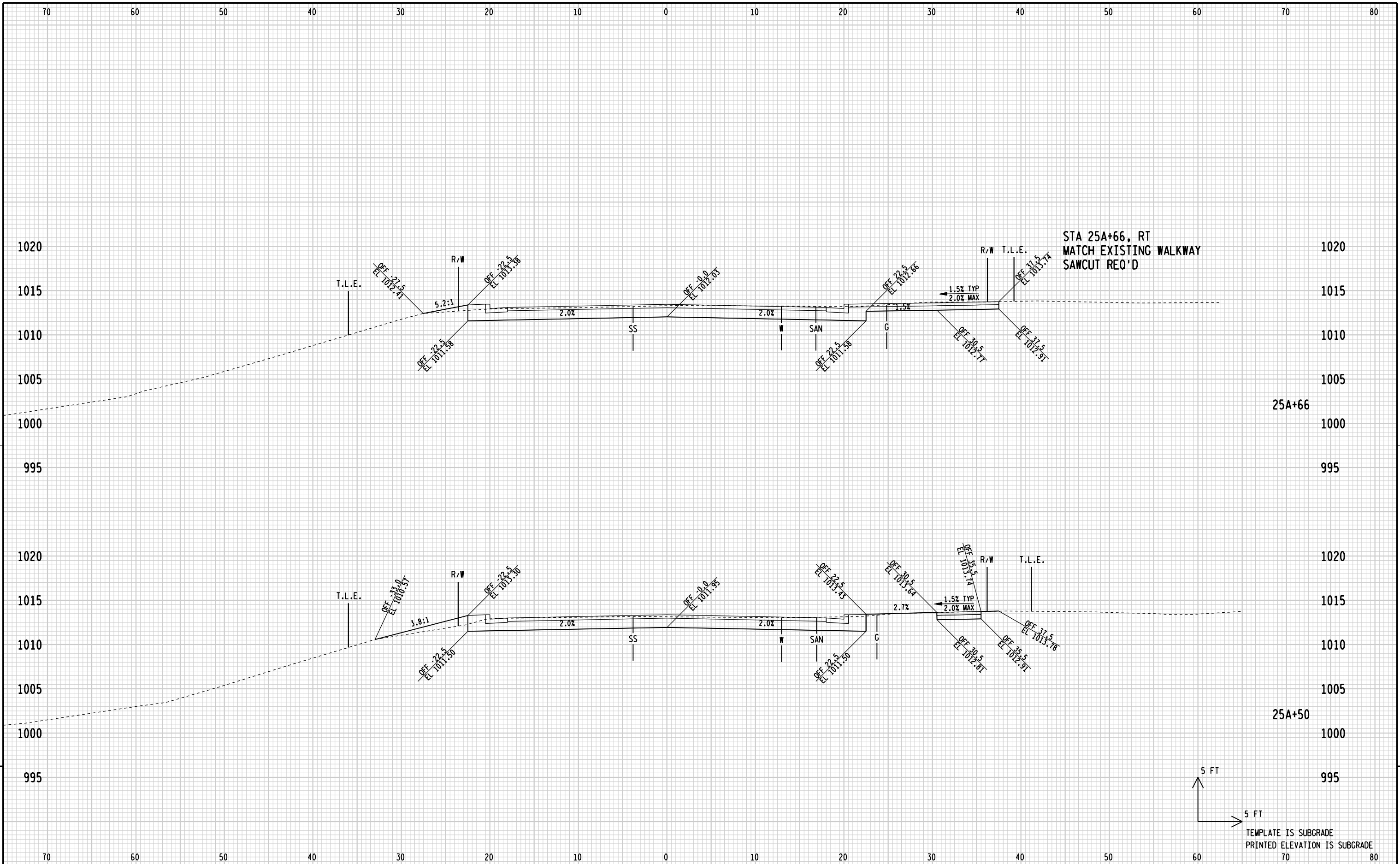


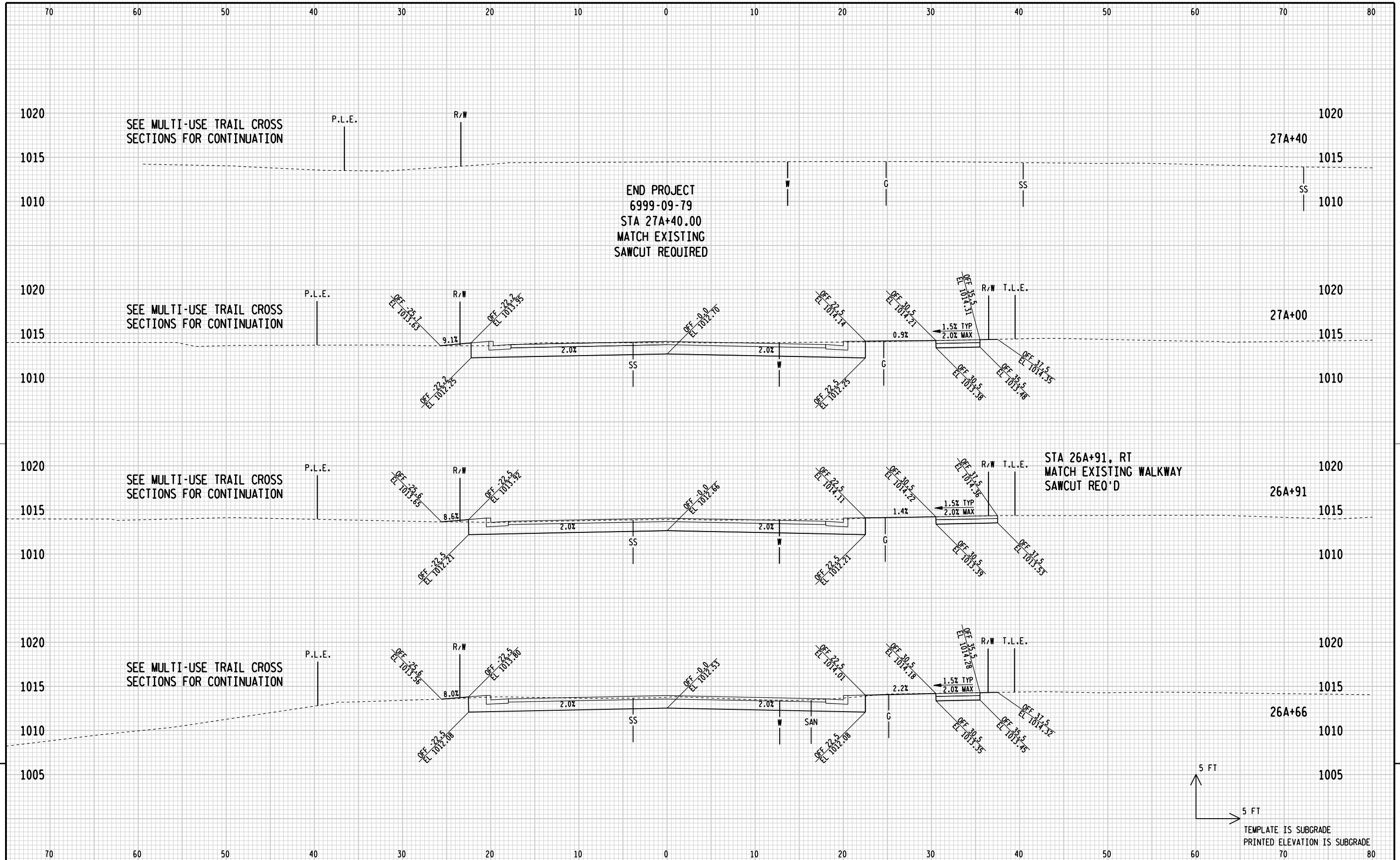


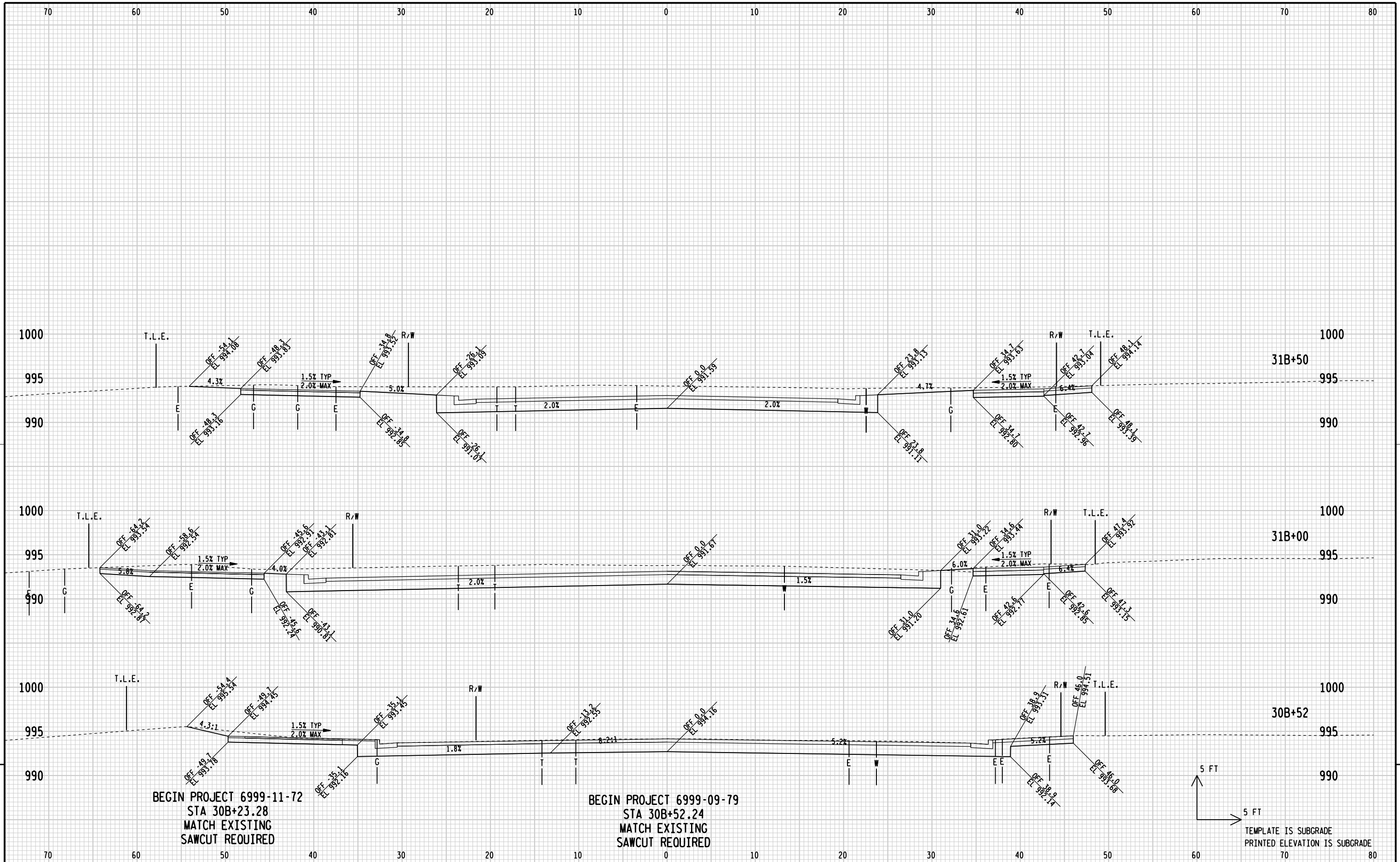


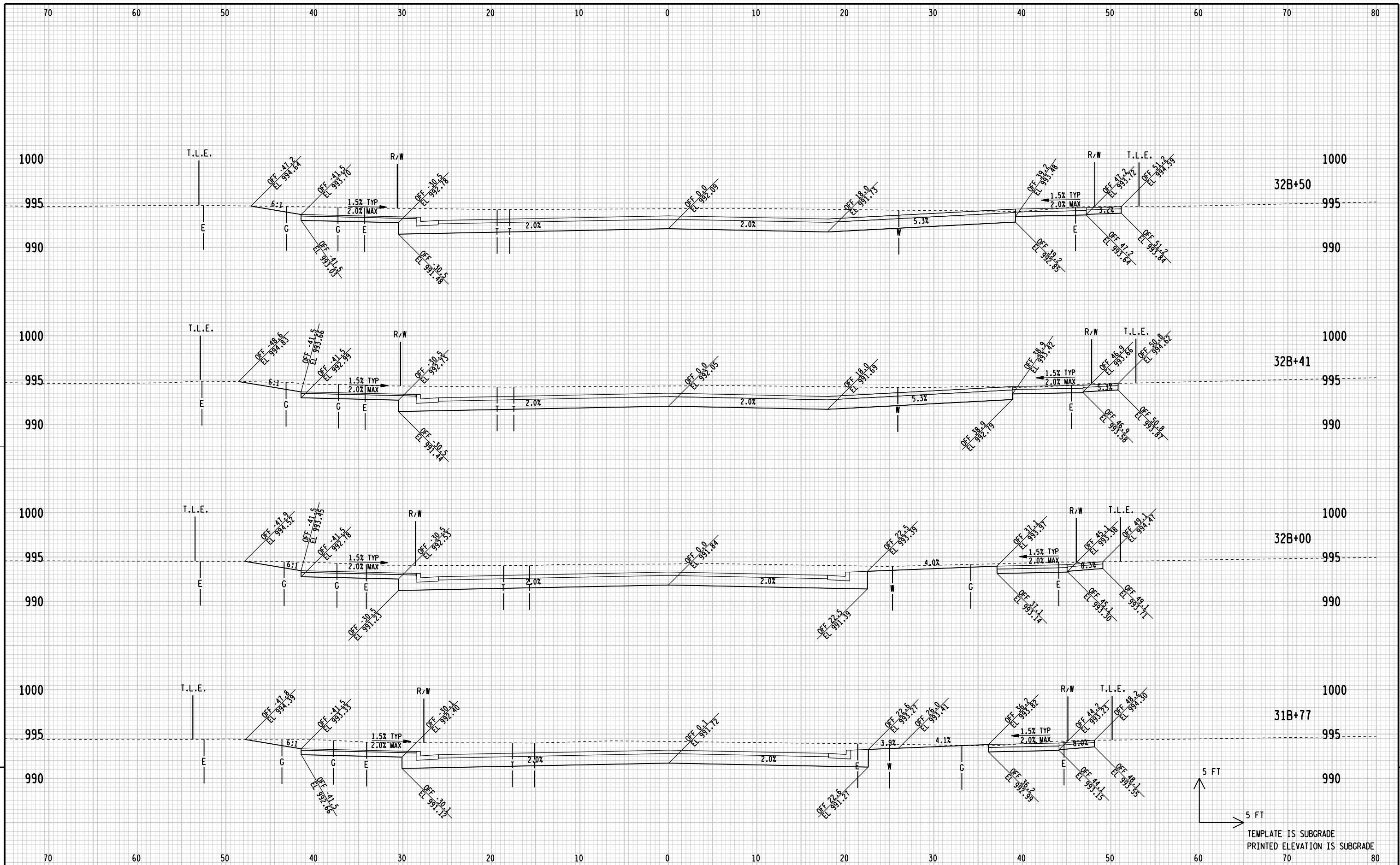


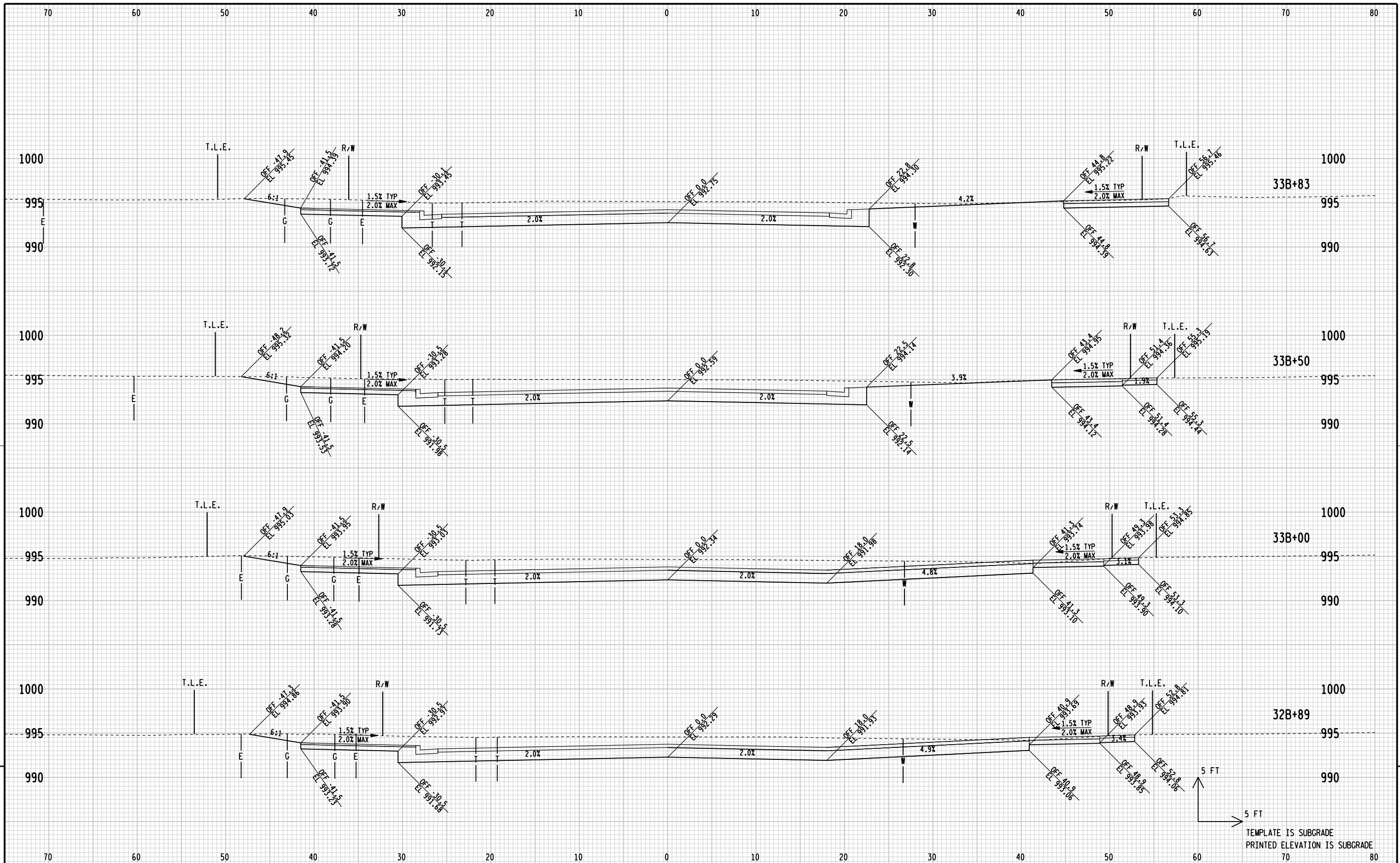


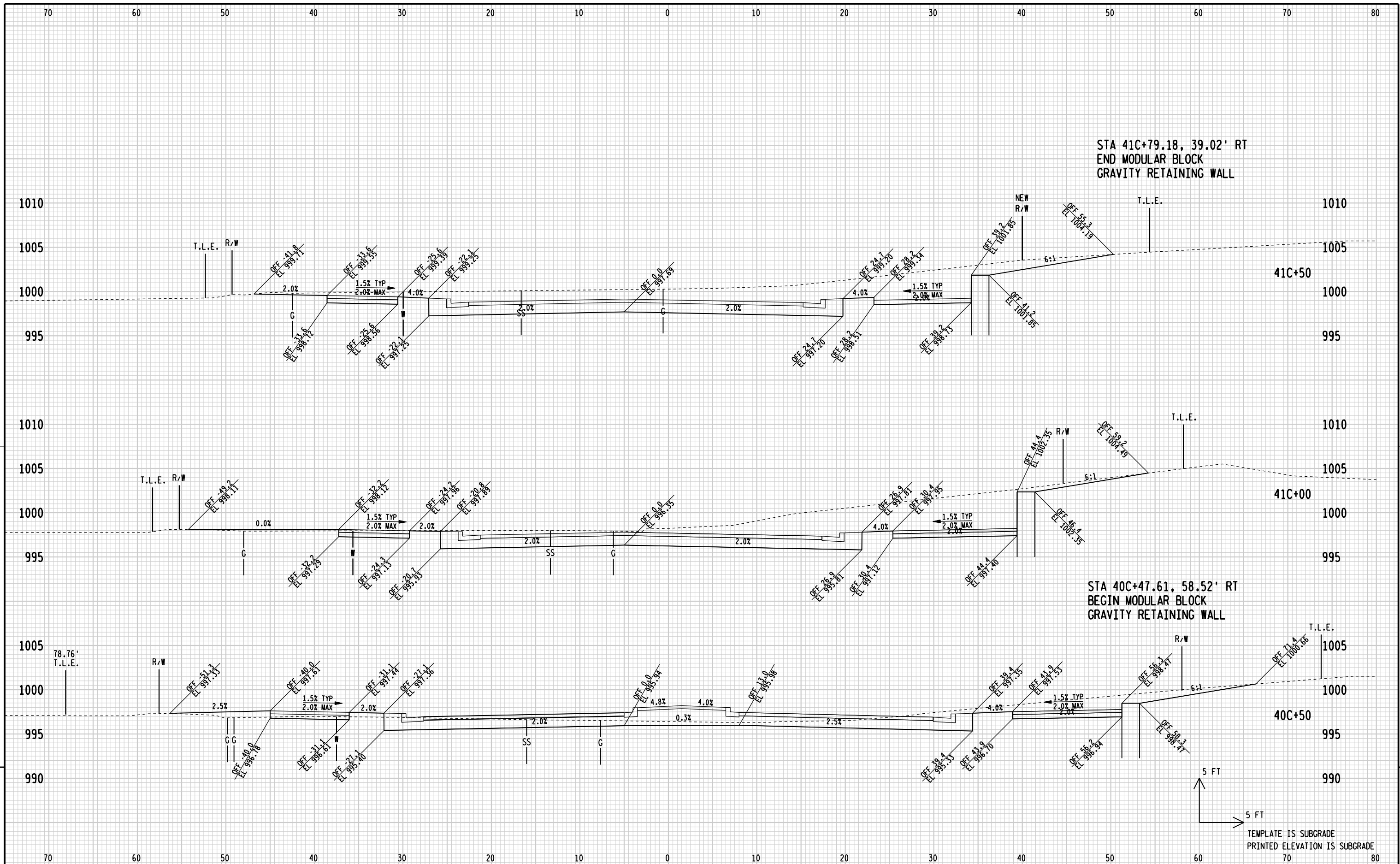


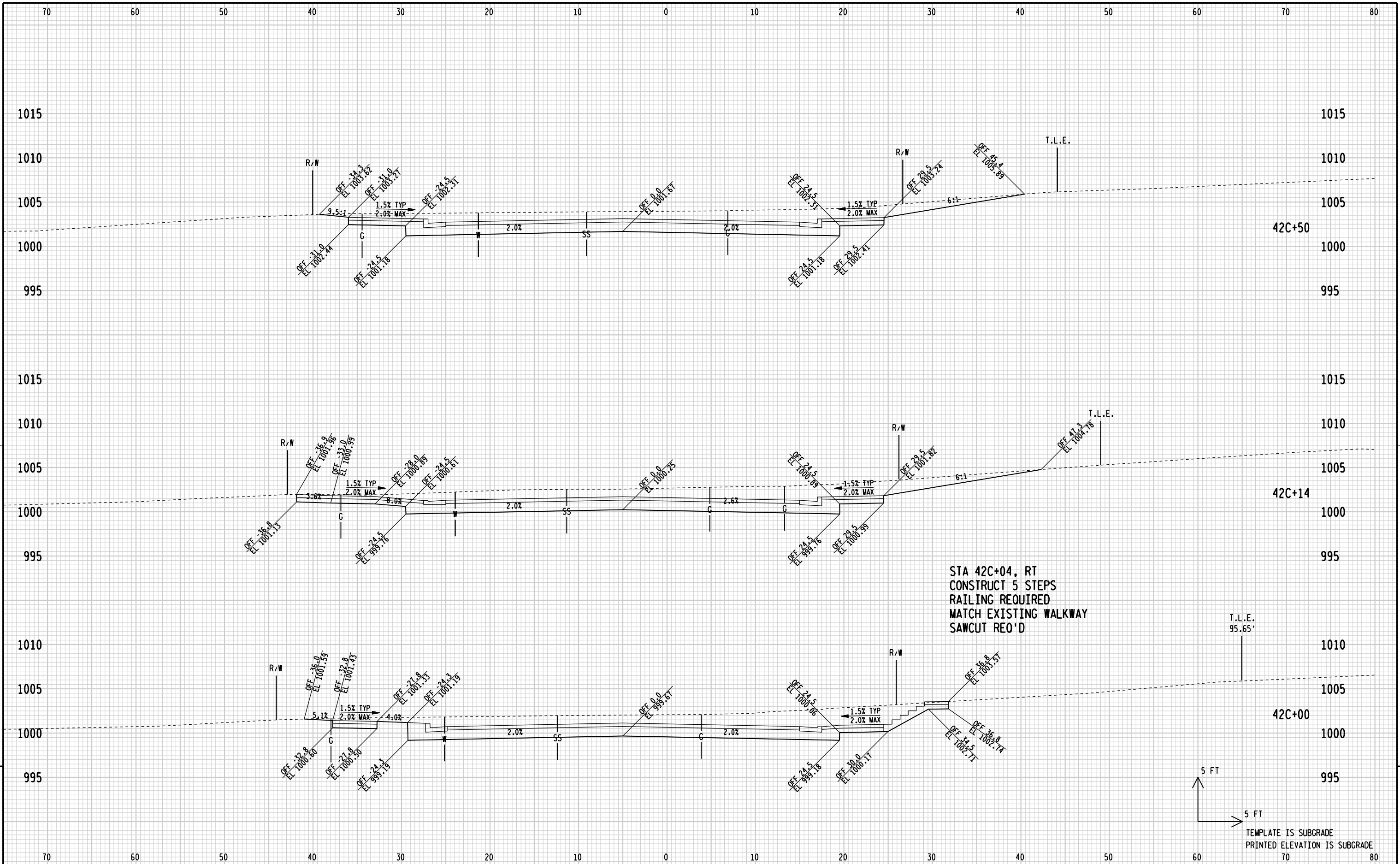


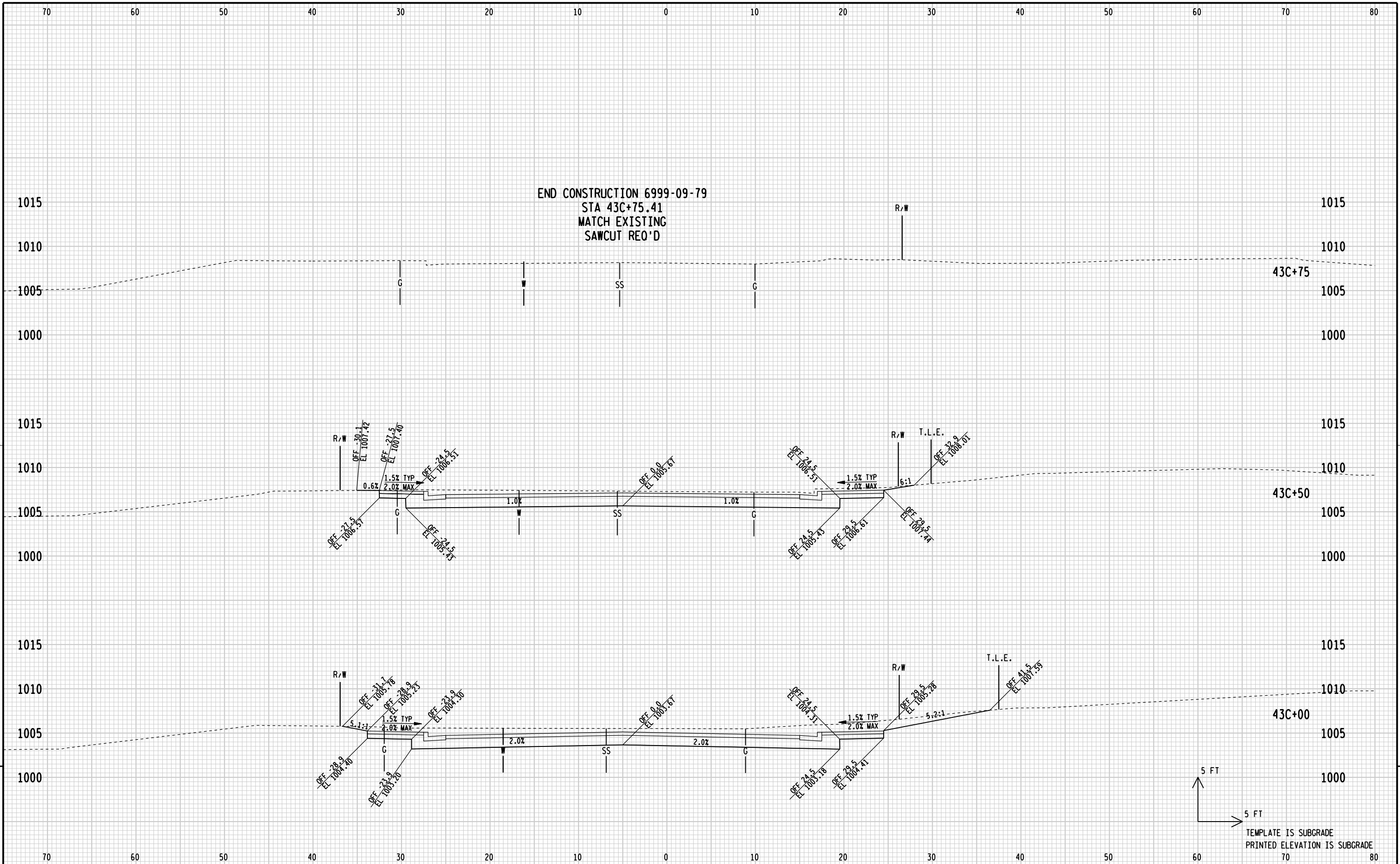


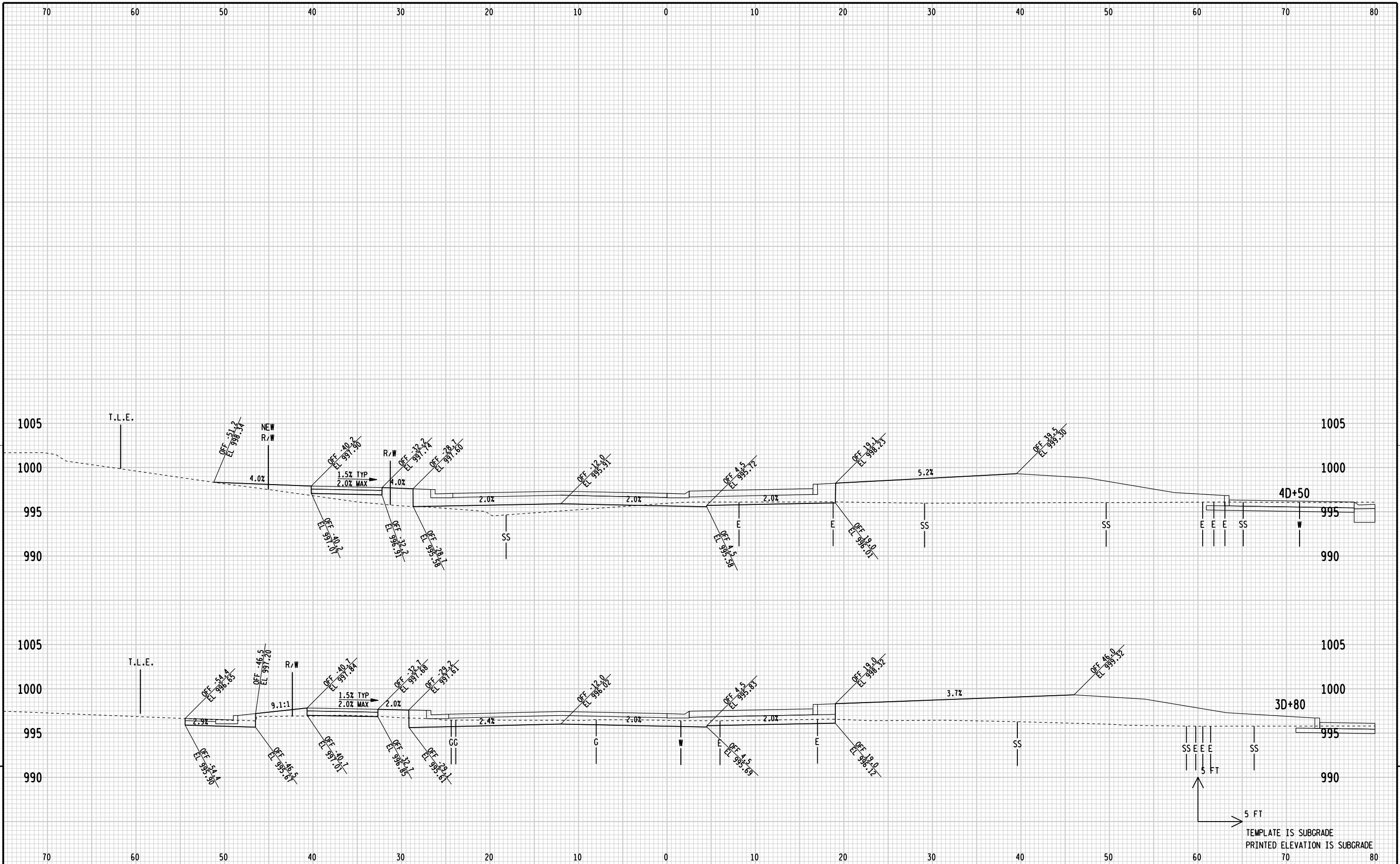


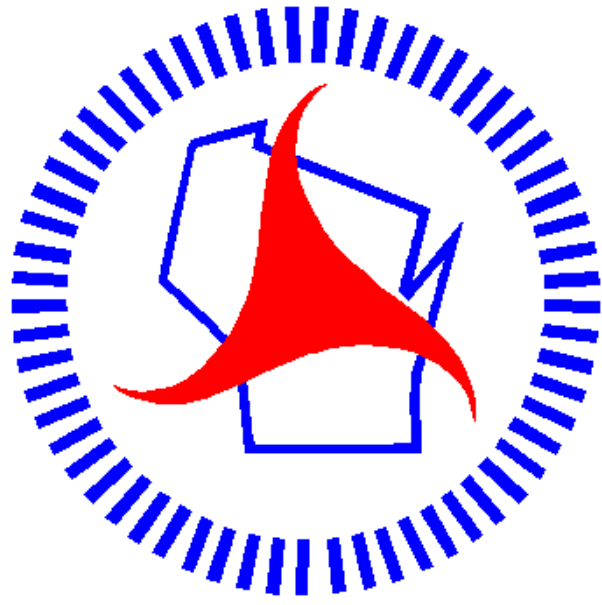












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