

1202-00-61

**COUNTY:**

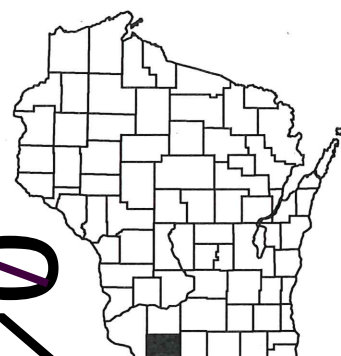
LAFAYETTE

JULY 2015

ORDER OF SHEETS

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

TOTAL SHEETS = 18



04

## DESIGN DESIGNATION

A.A.D.T.	2013	=	13,309	V.P.D.
A.A.D.T.	2032	=	19,098	V.P.D.
D.H.V.		=		
D.D.		=	54-46	
T.		=	12%	
DESIGN SPEED		=	70 MPH	
FSAL S		=		

### CONVENTIONAL SYMBOLS

PLAN  
CORPORATE LIMITS  
PROPERTY LINE  
LOT LINE  
LIMITED HIGHWAY EASEMENT  
EXISTING RIGHT OF WAY  
PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT  
REFERENCE LINE

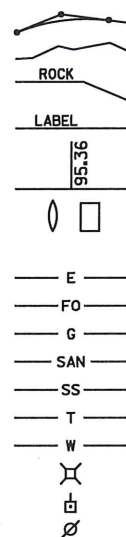
EXISTING CULVERT  
PROPOSED CULVERT  
(Box or Pipe)

## COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

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



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

### PLAN OF PROPOSED IMPROVEMENT

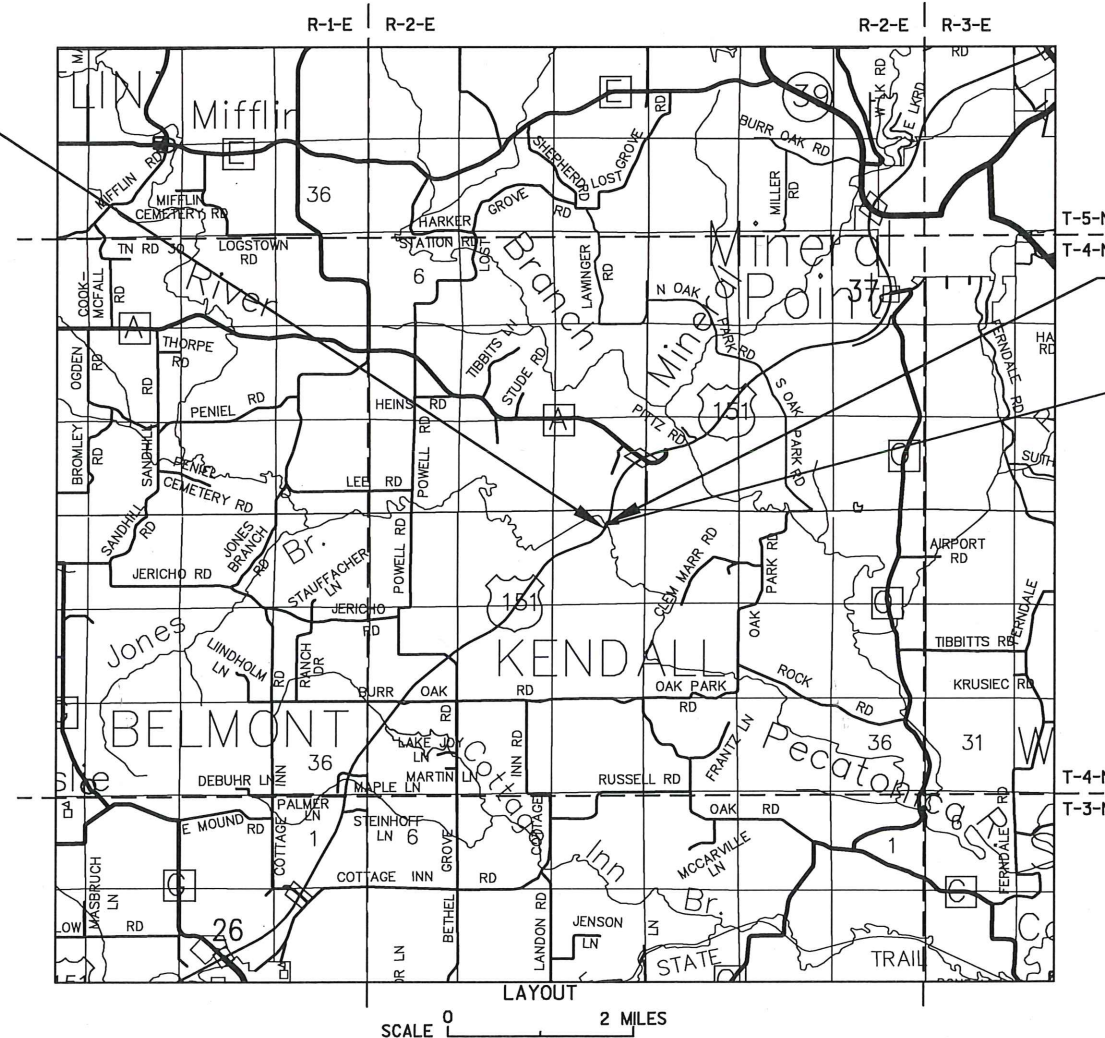
# PLATTEVILLE - DODGEVILLE

PECATONICA RIVER BRIDGE B-33-97

USH 151

LAFAYETTE COUNTY

STATE PROJECT NUMBER
1202-00-61



TOTAL NET LENGTH OF CENTERLINE = 0.070 MI. (RURAL)

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD83 (1983), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1202-00-61	WISC 2015418	1

ORIGINAL PLANS PREPARED BY



4/1/2015   
(Date) (Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor \_\_\_\_\_

Designer DAAR ENGINEERING, INC.

Project Manager MAHESH SHRESTHA, P.E.

Regional Examiner \_\_\_\_\_

Regional Supervisor WILLIAM STROBEL, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 3/30/2015 William J. Irsh  
(Signature)

□

GENERAL NOTES

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK MAY BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.

INLET PROTECTION REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY ENGINEER.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH DIGGERS HOTLINE AND/ OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

WDNR CONTACT

MS. LAURA BUB  
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
3911 FISH HATCHERY ROAD  
FITCHBURG, WI 53711-5397  
OFFICE: (608) 275-3485  
LAURA.BUB@WISCONSIN.GOV

OTHER CONTACTS

WISDOT SW REGION  
PROJECT MANAGER  
MAHESH SHRESTHA  
2101 WRIGHT STREET  
MADISON, WI 53704  
OFFICE: (608) 246-2674  
MAHESH.SHRESTHA@DOT.WI.GOV

DAAR ENGINEERING, INC.  
KEVIN KEAST  
1400 E. WASHINGTON AVENUE, SUITE 262  
MADISON, WI 53703  
OFFICE: (414) 935-4352  
KEVIN.KEAST@DAARCORP.COM

WISDOT SW REGION  
STRUCTURE MAINTENANCE & INSPECTION ENGINEER  
STEVEN KATZNER  
2101 WRIGHT STREET  
MADISON, WI 53704  
OFFICE: (608) 246-7994  
CELL: (608) 516-6425  
STEVEN.KATZNER@DOT.WI.GOV

SECTION 2 SHEETS

PROJECT OVERVIEW  
TYPICAL SECTIONS  
TRAFFIC CONTROL

UTILITY CONTACTS

PACKERLAND BROADBAND - COMMUNICATION LINE  
WAYNE CRETTON  
105 KENT ST  
P.O. BOX 190  
IRON MOUNTAIN, MI 49801  
(906) 282-3768  
WAYNE.CRETTON@PACKERLANDBROADBAND.US

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE  
ROBERT CHURCH  
2222 WEST WISCONSIN ST  
PORTAGE, WI 53901  
(608) 742-1817  
ROBERT.CHURCH@FTR.COM







PROJECT NO:1202-00-61

HWY:USH 151

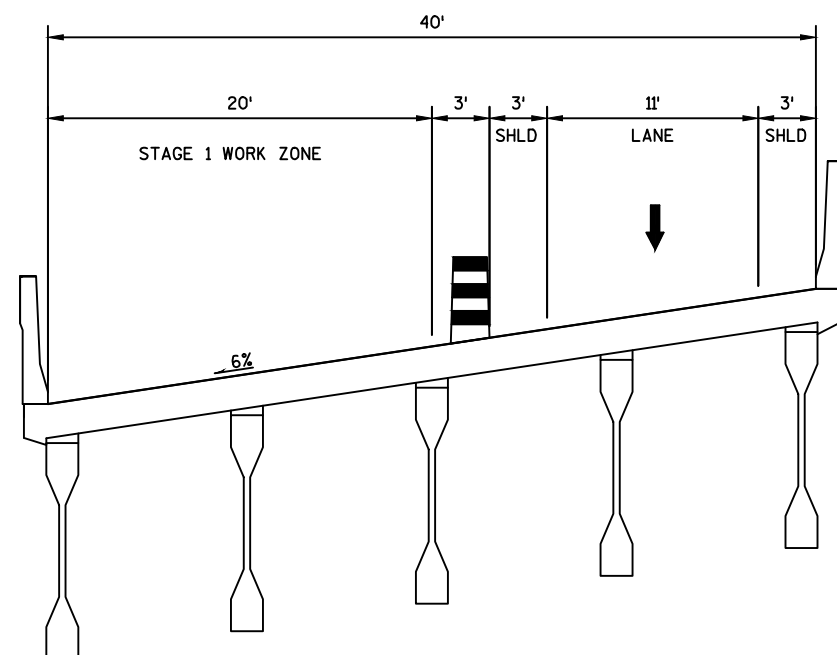
COUNTY:LAFAYETTE

PROJECT OVERVIEW

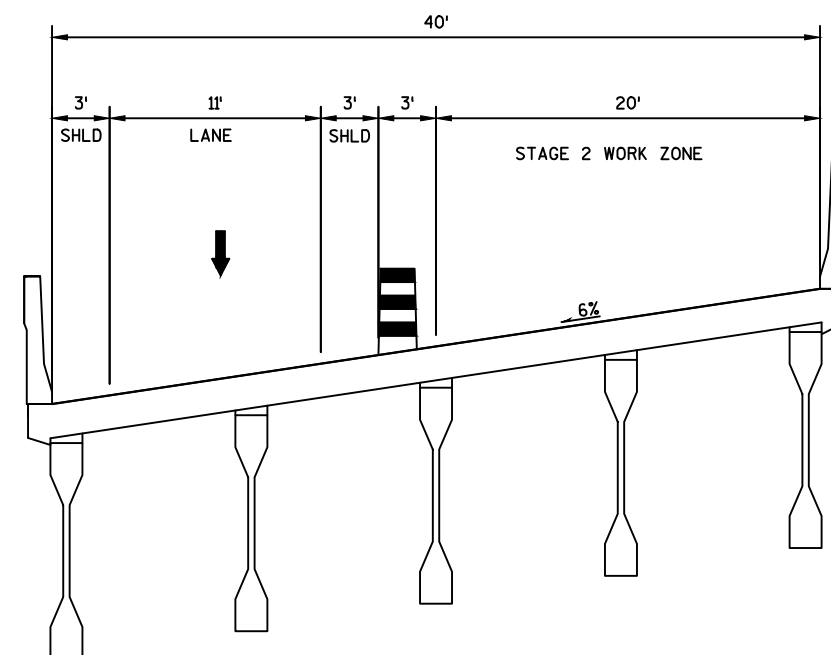
SHEET

E



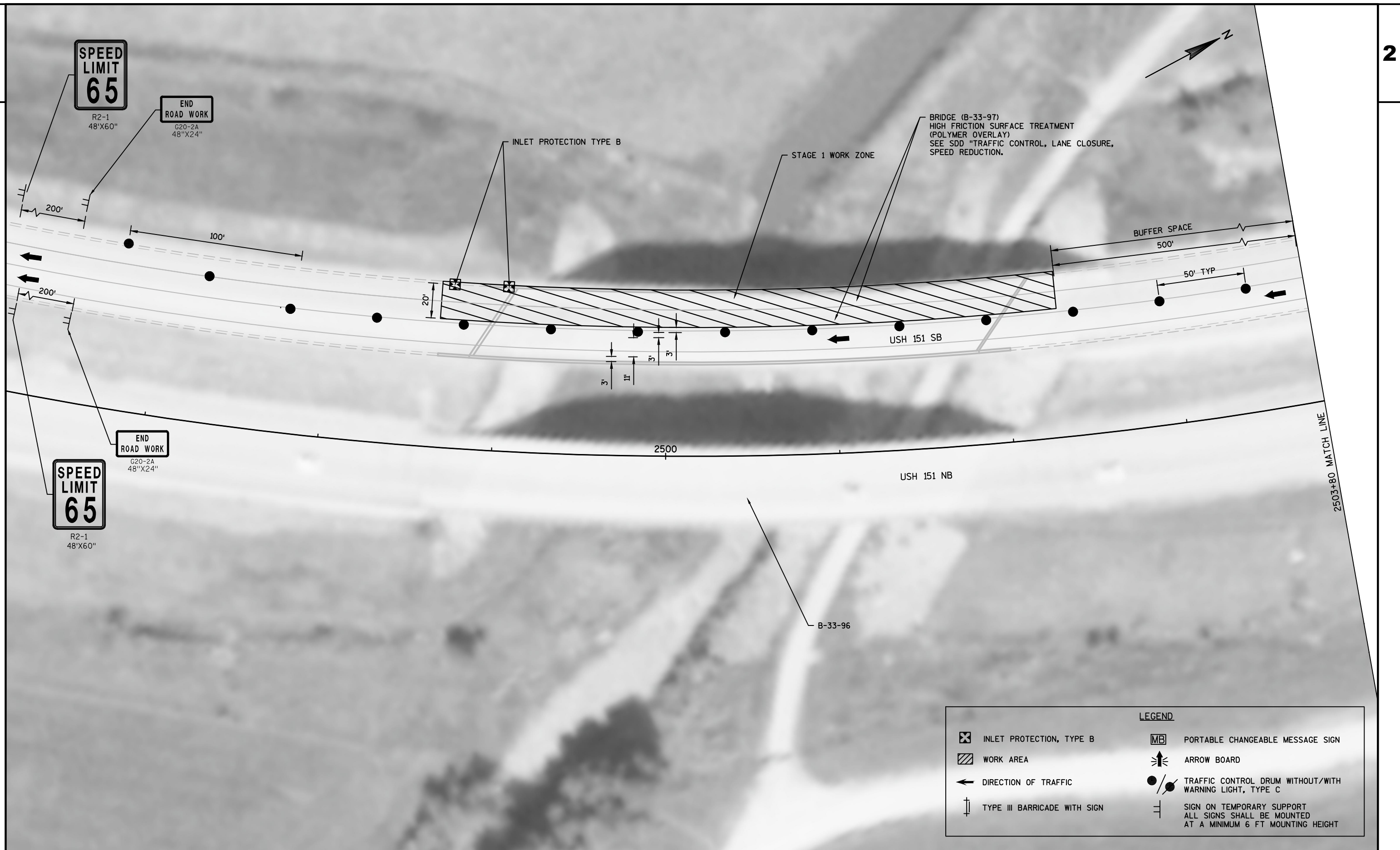


STAGE 1 CONSTRUCTION  
(LOOKING NORTH)

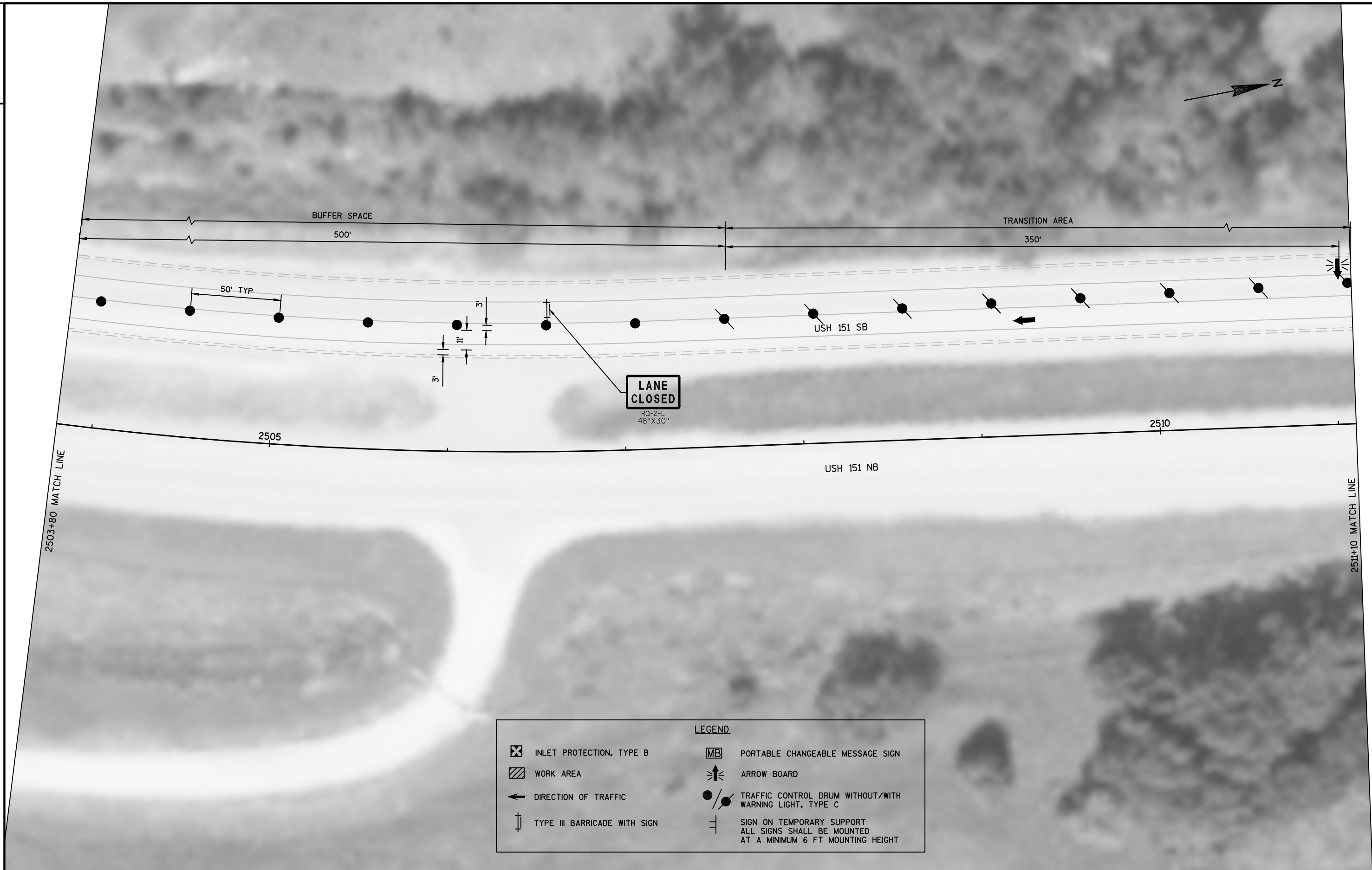


STAGE 2 CONSTRUCTION  
(LOOKING NORTH)

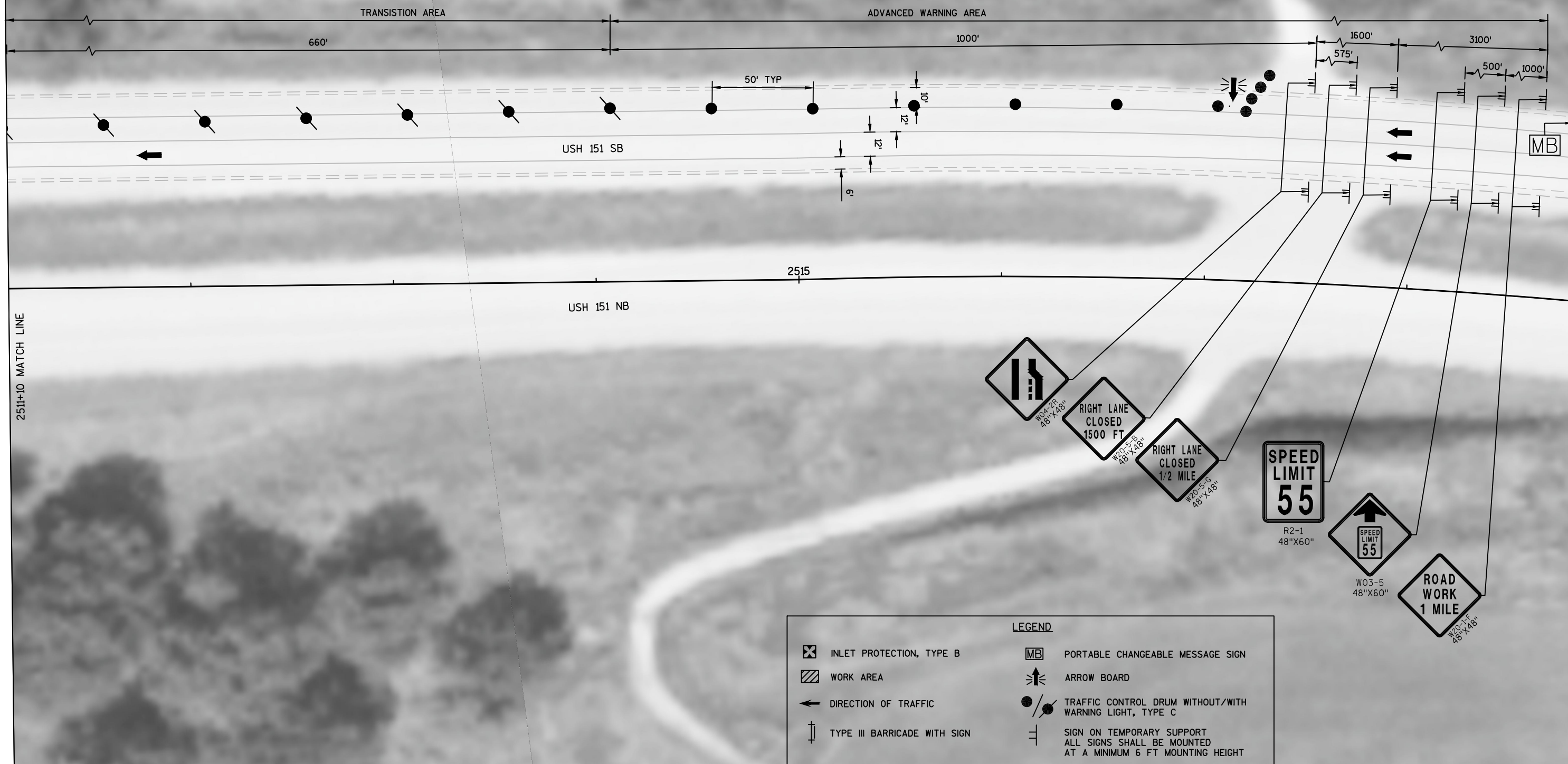




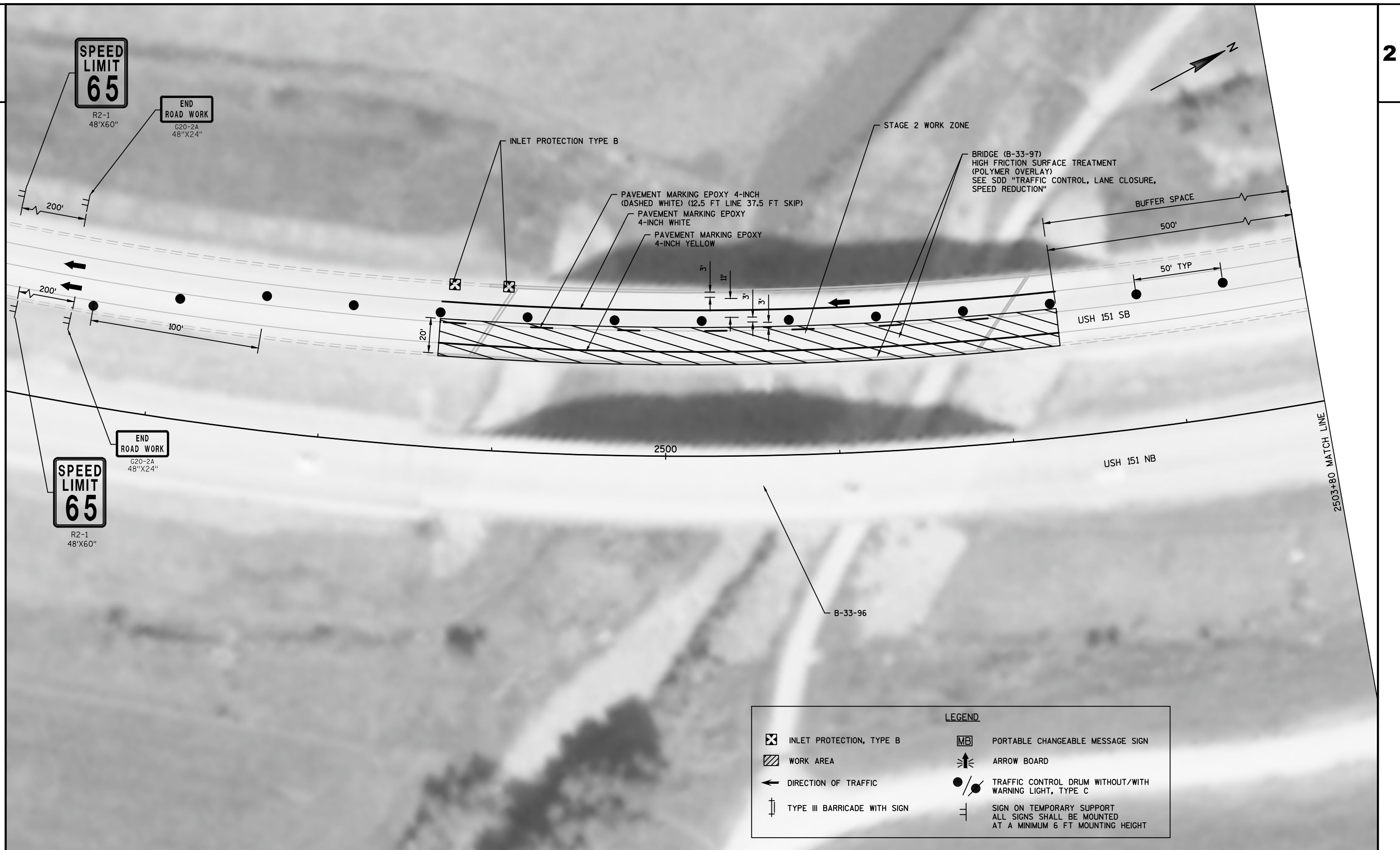














PROJECT NO:1202-00-61

HWY:USH 151

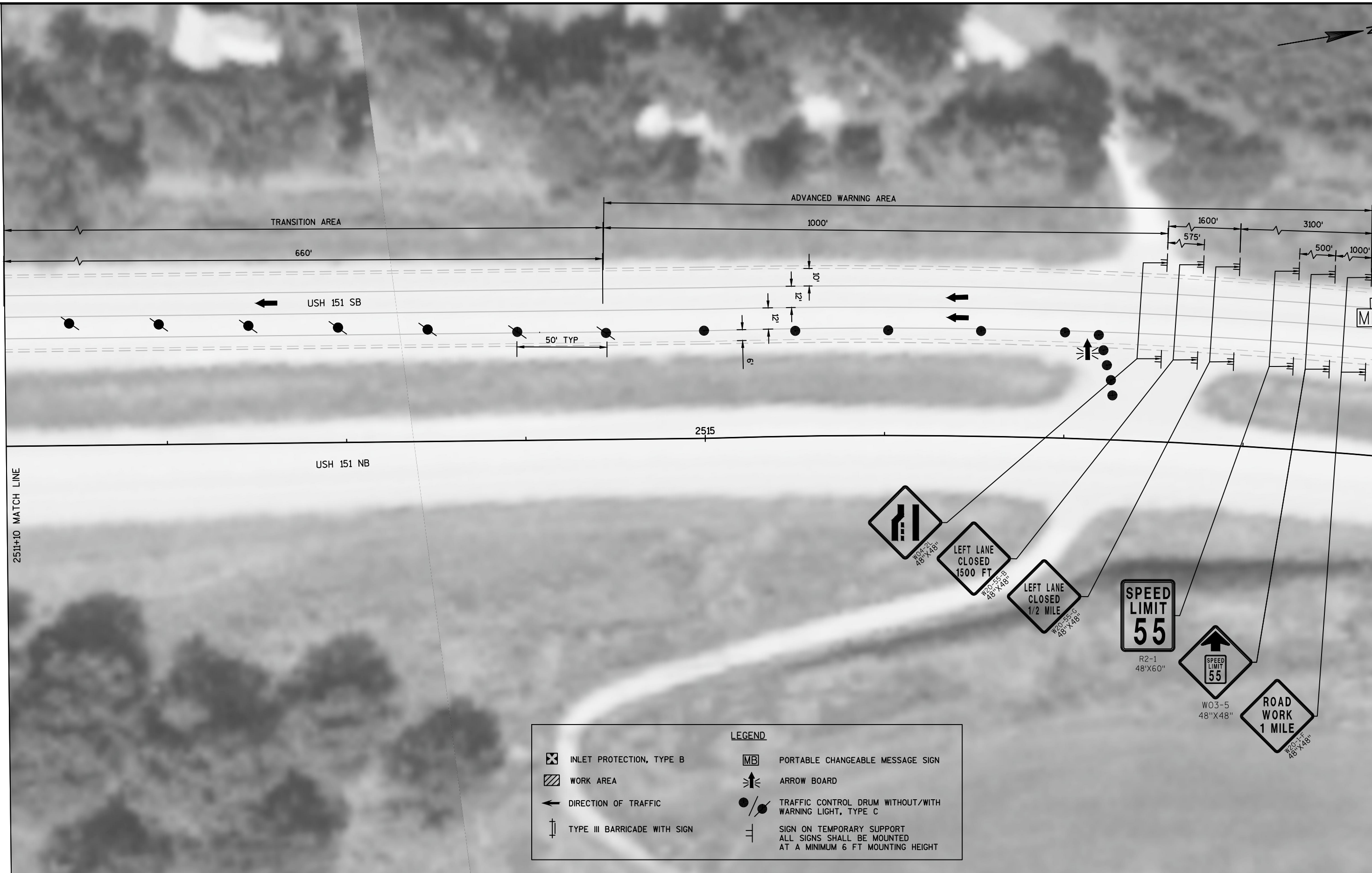
COUNTY:LAFAYETTE

STAGE 2 - TRAFFIC CONTROL

SHEET

E





DATE 21APR15			E S T I M A T E O F Q U A N T I T I E S		
LINE					1202-00-61
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	509. 5100. S	Polymer Overlay	SY	1, 510. 000	1, 510. 000
0020	619. 1000	Mobilization	EACH	1. 000	1. 000
0030	628. 7010	Inlet Protection Type B	EACH	2. 000	2. 000
0040	643. 0200	Traffic Control Surveillance and	DAY	5. 000	5. 000
		Maintenance (project) 01. 1202-00-61			
0050	643. 0300	Traffic Control Drums	DAY	230. 000	230. 000
0060	643. 0420	Traffic Control Barricades Type III	DAY	5. 000	5. 000
0070	643. 0715	Traffic Control Warning Lights Type C	DAY	80. 000	80. 000
0080	643. 0800	Traffic Control Arrow Boards	DAY	10. 000	10. 000
0090	643. 0900	Traffic Control Signs	DAY	85. 000	85. 000
0100	643. 1050	Traffic Control Signs PCMS	DAY	5. 000	5. 000
0110	646. 0106	Pavement Marking Epoxy 4-Inch	LF	700. 000	700. 000



POLYMER OVERLAY

509.5100.S*		
POLYMER OVERLAY		
	APPROACH SLABS	BRIDGE DECK
CATEGORY 0010	SY	SY
STAGE 1	106	649
STAGE 2	106	649
SUBTOTALS	212	1,298
TOTAL	1,510	

\* QUANTITES LISTED ELSEWHERE

EROSION CONTROL

628.7010	
INLET PROTECTION TYPE B	
CATEGORY 0010	EACH
STAGE 1	2
STAGE 2	
TOTALS	2

TRAFFIC CONTROL ITEMS

643.0200			643.0300		643.0420		643.0715		643.0800		643.0900		643.1050	
TRAFFIC CONTROL			DRUMS		BARRICADES		WARNING		ARROW		SIGNS		SIGNS PORTABLE	
SURVEILLANCE AND MAINTENANCE					TYPE III		LIGHTS		BOARDS				CHANGEABLE	
**							TYPE C						MESSAGE	
1202-00-61														
ESTIMATED			**		**		**		**		**		**	
CATEGORY 0010	DURATION	DAY	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS
STAGE 1	3 DAYS	3	46	138	1	3	16	48	2	6	17	51	1	3
STAGE 2	2 DAYS	2	46	92	1	2	16	32	2	4	17	34	1	2
TOTALS	5 DAYS	5		230		5		80		10		85		5

\*\* FOR INFORMATION ONLY

PAVEMENT MARKING

646.0106		
EPOXY 4-INCH		
CATEGORY 0010	WHITE	YELLOW
	LF	LF
STAGE 1		
STAGE 2	400	300
SUBTOTAL	400	300
TOTAL	700	

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C08-16A	PAVEMENT MARKING (MAINLINE)
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION





**INLET PROTECTION, TYPE A**

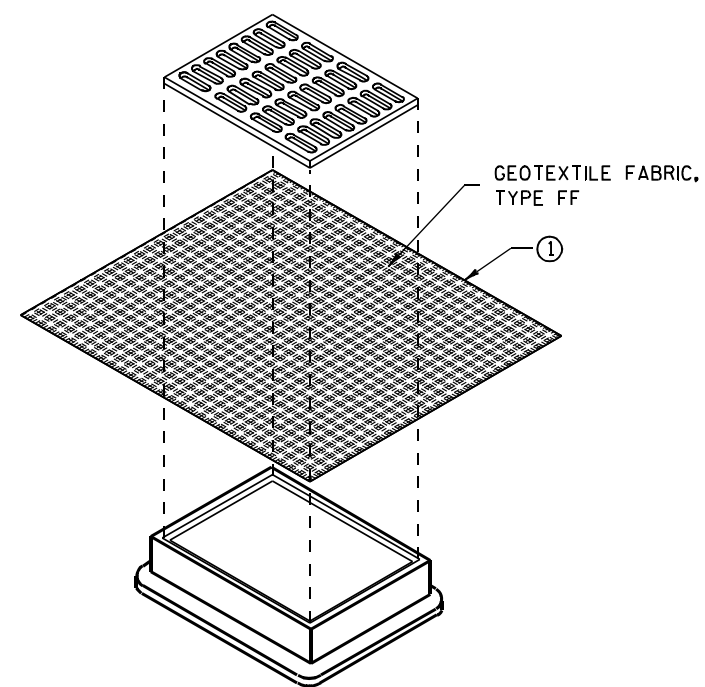
**GENERAL NOTES**

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

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

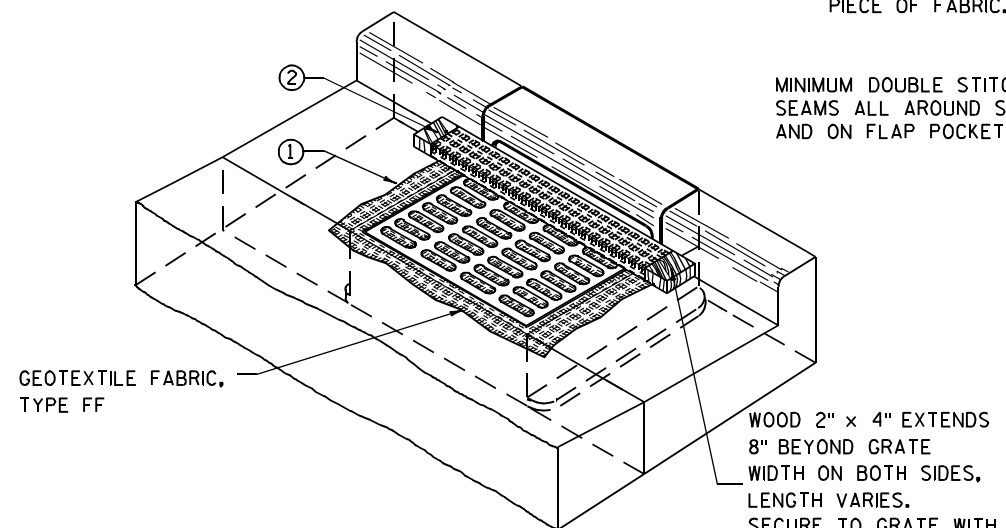
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**INSTALLATION NOTES**

**TYPE B & C**

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

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

**TYPE D**

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

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

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



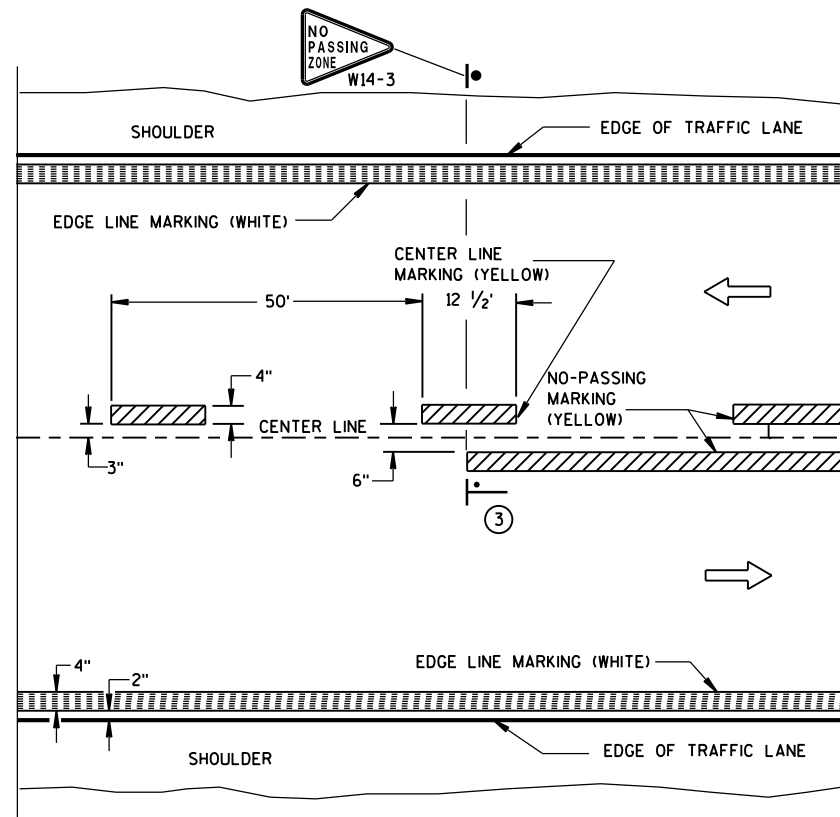
**INLET PROTECTION, TYPE D**

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

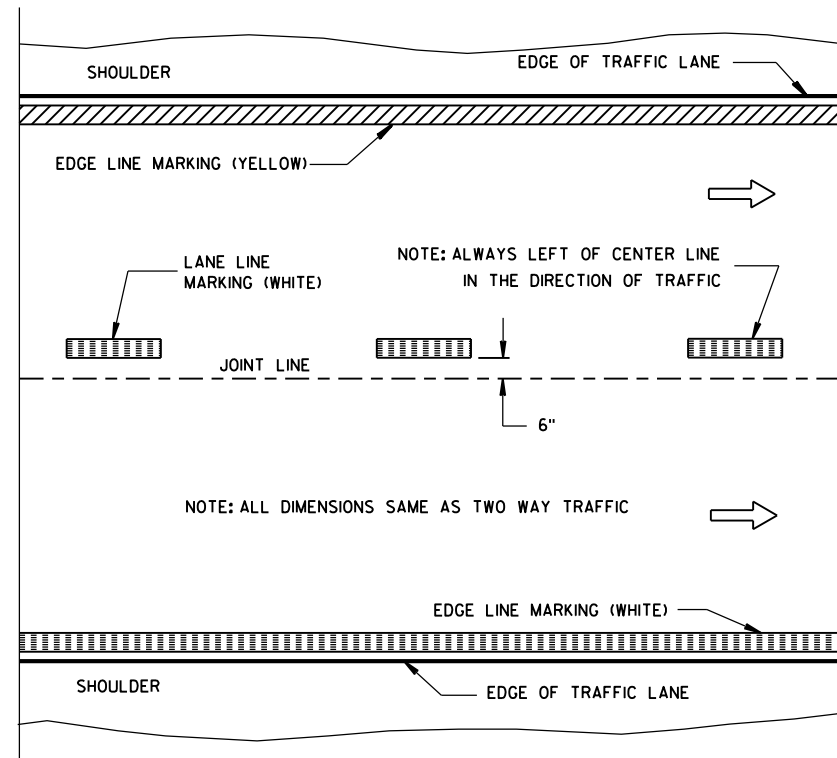
**INLET PROTECTION  
TYPE A, B, C, AND D**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

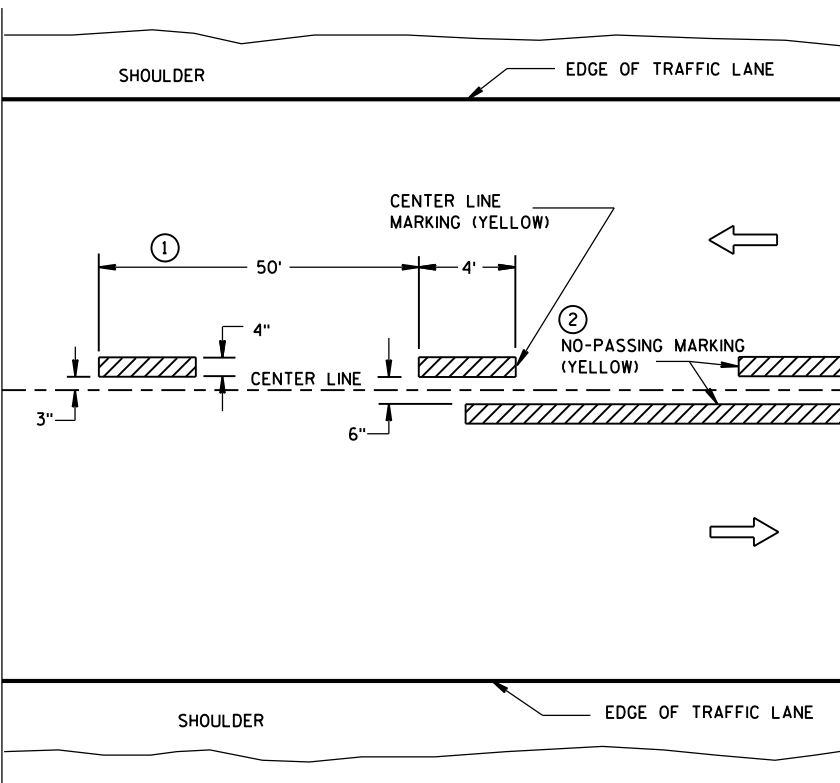


TWO WAY TRAFFIC

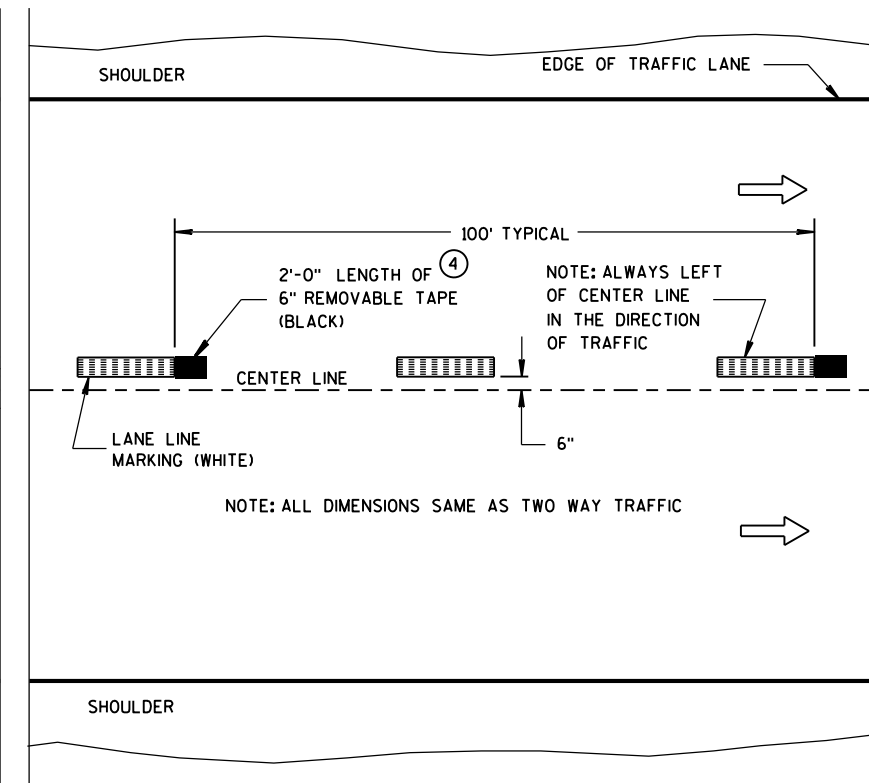


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

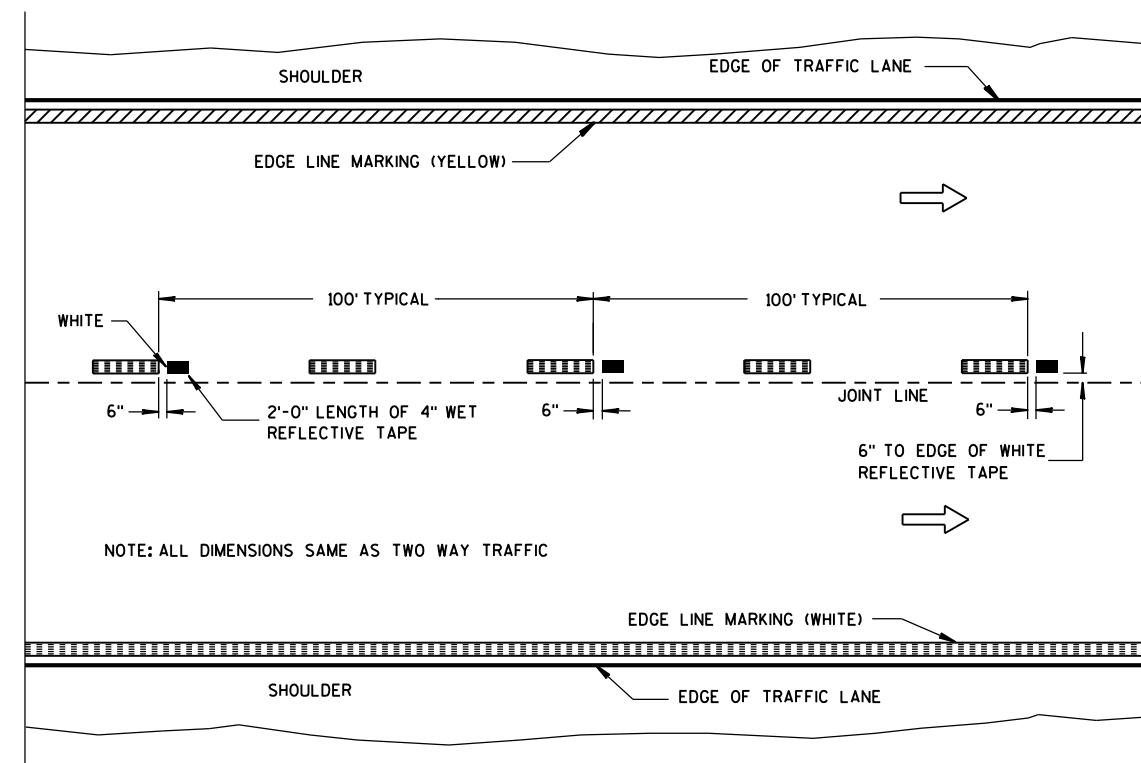
## GENERAL NOTES

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  
5-13-2013  
DATE  
FHWA

/S/ Travis Feltes  
STATE TRAFFIC ENGINEER



LEGEND

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

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

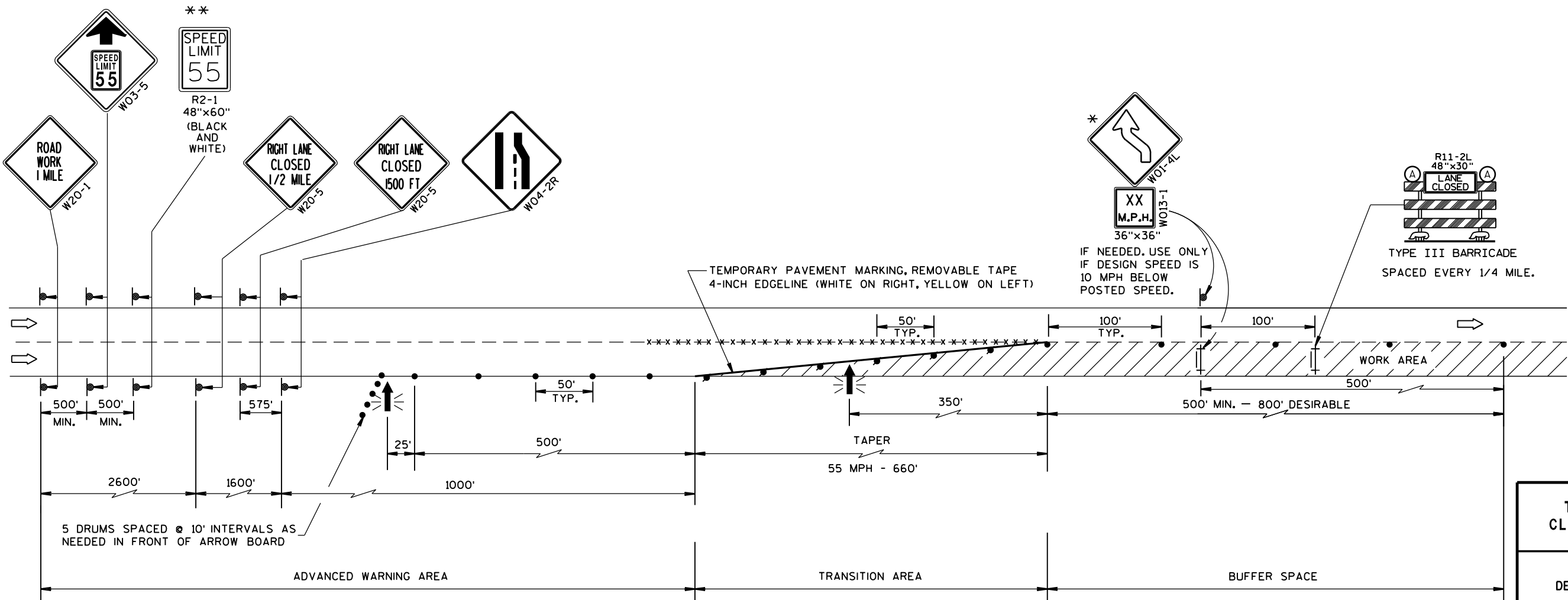
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

\* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

\*\* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3-2014 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

CURVE DATA

USH 151 SB  
P.I. STA. 2496'ARL'+89.38  
N = 295591.674  
E = 899352.445  
P.C. STA. 2485'ARL'+02.66  
P.T. STA. 2506'ARL'+49.23  
DELTA= 60°-46'-52"  
D = 2°-49'-54"  
T = 186.721'  
L = 2146.571  
R = 2023.483  
SE = 6.0%

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE.
- THE PROPOSED REHABILITATION INCLUDES PLACING AN POLYMER OVERLAY.
- DECK PREPARATIONS AND OVERLAY SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION.
- MAINTAIN EXISTING CROSS SLOPES.
- (A01) POLYMER OVERLAY TO BE PLACE IN TWO STAGES. TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION.

DESIGN DATA

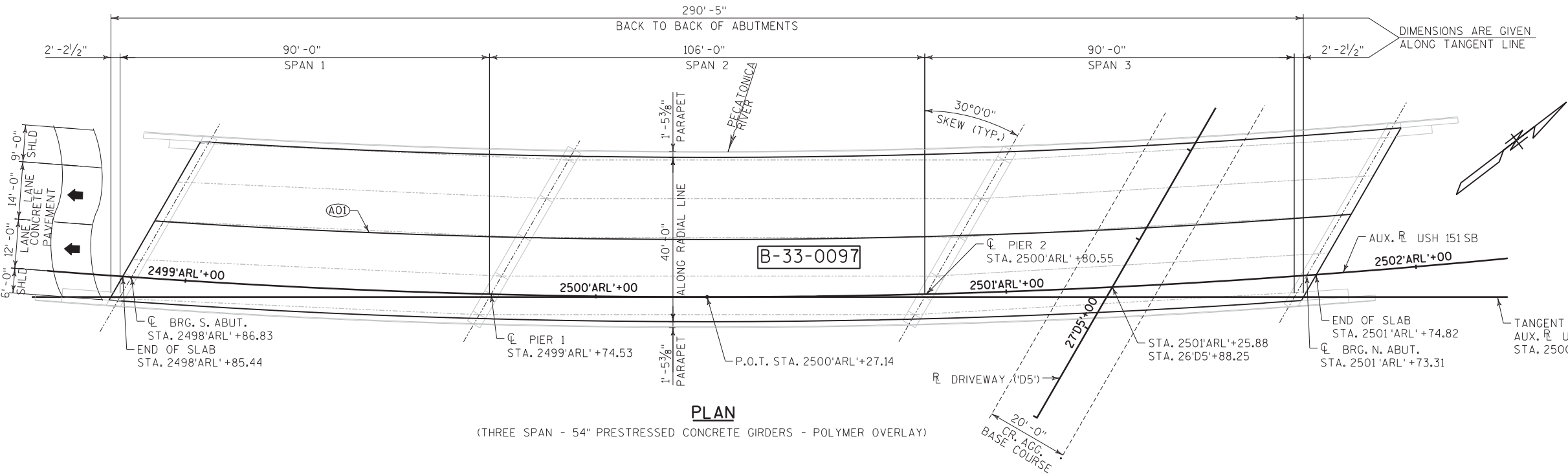
- LIVE LOAD:
- INVENTORY RATING FACTOR .....HS-20  
OPERATING RATING FACTOR .....HS-43  
WIS-SPV RATING ..... 250 KIPS
- EXISTING ULTIMATE DESIGN STRESSES:
- CONCRETE MASONRY-SLAB .....f'c=4,000 PSI  
-ALL OTHER .....f'c=3,500 PSI  
HIGH-STRENGTH BAR STEEL  
REINFORCEMENT, GRADE 60.....fy=60,000 PSI  
54" PRESTRESSED GIRDERS  
CONCRETE MASONRY .....f'c=6,500 PSI  
STRANDS - 0.5" DIA. WITH AN ULTIMATE  
TENSILE STRENGTH OF.....fu=270,000 PSI

LIST OF DRAWINGS

1. GENERAL PLAN

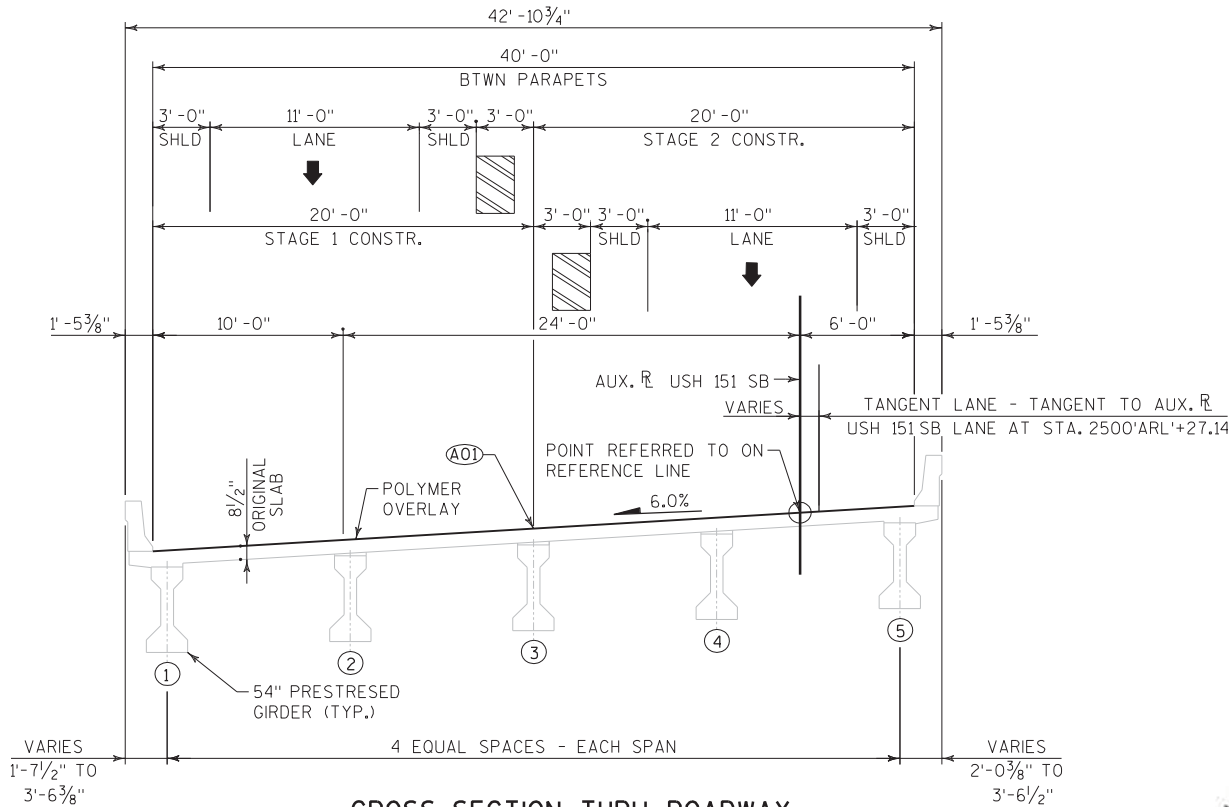
BUREAU OF STRUCTURES:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT CONTACT:  
ANN THIELMANN (608)-229-1414

NO.	DATE	REVISION	BY
DAAR ENGINEERING, INC. www.daareng.com Madison, WI 53703 608-249-8340			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	William C. Dreher		04/08/15
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-33-0097			
USH 151(SB) OVER THE PECATONICA RIVER			
COUNTY	LAFAYETTE	TOWN	KENDALL
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	ACT	DESIGN CK'D.	BRS
DRAWN BY	ACT	PLANS CK'D.	BRS
GENERAL PLAN			SHEET 1 OF 1



PLAN

(THREE SPAN - 54" PRESTRESSED CONCRETE GIRDERS - POLYMER OVERLAY)



CROSS-SECTION THRU ROADWAY

(LOOKING NORTH)  
(ALL HORIZONTAL DIMENSIONS ARE MEASURED RADIALLY)  
TRAFFIC CONTROL DRUM LOCATIONS

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNITS	QUANTITY
509.5100.S *	POLYMER OVERLAY	SY	1298

\* FOR ADDITIONAL QUANTITIES SEE ROADWAY PLANS



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions  
through innovation and exceptional service.

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