**BENCH MARKS**

BM NO.	COORDINATES	DESCRIPTION	ELEV.
BM 1	Y: 62,128.59 X: 354,745.03	NW CORNER BRIDGE DECK B-3-24 (CTH I)	1065.33
BM 2	Y: 61,303.85 X: 355,782.67	NW CORNER BRIDGE DECK B-3-20 (CHETEK RIVER)	1043.96
BM 3	Y: 66,181.31 X: 349,955.75	NW CORNER BRIDGE DECK B-3-26 (KNAPP STREET)	1077.68

NOTE: BENCH MARKS ARE OUTSIDE OF PLAN EXTENTS. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.

**DESIGN DATA****LIVE LOAD:**

DESIGN LOADING \_\_\_\_\_ HS20  
INVENTORY RATING \_\_\_\_\_ HSXX  
OPERATING RATING \_\_\_\_\_ HSXX  
WISCONSIN STANDARD PERMIT  
VEHICLE (WIS-SPV) \_\_\_\_\_ XXX KIPS

**MATERIAL PROPERTIES:**

CONCRETE SUPERSTRUCTURE  $f'_c = 4,000$  PSI  
CONCRETE SUBSTRUCTURE  $f'_c = 3,500$  PSI  
HIGH STRENGTH BAR STEEL  
REINFORCEMENT (GRADE 60)  $f_y = 60,000$  PSI  
45-INCH PRESTRESSED GIRDER:  
CONCRETE MASONRY  $f'_c = 8,000$  PSI  
PRESTRESSING STRANDS = 0.8" DIA.  
WITH ULTIMATE TENSILE STRENGTH  
OF 270,000 PSI

**TRAFFIC DATA**

USH 53  
A.D.T. (2023) = 7,320  
DESIGN SPEED = 80 MPH

**CTH AA**

A.D.T. (2000) = 270  
DESIGN SPEED = 60 MPH

**LEGEND**

\* LOCATION OF ANCHOR ASSEMBLIES FOR THRIE BEAM ATTACHMENT.

(X) DENOTES WINGWALL NUMBER.

▲ MIN. VERTICAL CLEARANCE TAKEN FROM HSI SITE.

**LIST OF DRAWINGS**

- GENERAL PLAN
- CROSS SECTIONS & QUANTITIES
- CONSTRUCTION STAGING

**STRUCTURE DESIGN CONTACTS**

BRIDGE OFFICE CONTACT:  
WILLIAM DREHER (608) 266-8489  
DESIGN CONSULTANT CONTACT:  
BRETT OFTEDAHL (608) 251-4843

NO.	DATE	REVISION	BY
910 WEST WINGRA DRIVE MADISON, WISCONSIN 53715 (608)-251-4843 (608) 251-8655 FAX WWW.STRAND.COM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		CHIEF STRUCTURES DESIGN ENGINEER	DATE
<b>STRUCTURE B-3-16</b>			
USH 53 SB OVER CTH AA			
COUNTY	BARRON	TOWN/CITY/VILLAGE	DOVRE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	EJC	DESIGN CK'D.	BMO
DRAWN BY	DTH	PLANS CK'D.	BMO
GENERAL PLAN			SHEET 1 OF 3

GENERAL NOTES

THE PROPOSED WORK INCLUDES REMOVING AND REPLACING THE CONCRETE DECK AND PARAPETS, CONCRETE SURFACE REPAIR AT ABUTMENTS, GIRDER 1/SPAN 2 REPLACEMENT, REMOVING AND REPLACING BEARINGS AND EXPANSION JOINT AT NORTH ABUTMENT, REMOVING MIDSPAN CONCRETE DIAPHRAGMS AND REPLACING WITH STEEL DIAPHRAGMS, EPOXY SEALING GIRDER ENDS AND TOP OF N. ABUT., AND REPLACING UPPER WINGWALLS.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND SUBSEQUENT REHABILITATION PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS ARE IN FEET.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR STEEL SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN REMOVING OLD DECK AS TO NOT DAMAGE THE EXISTING GIRDERS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE DECK.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP, ENDS, AND ROADWAY FACES OF NEW CONCRETE PARAPET.

VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE INCLUDED WITH BID ITEM "EXPANSION DEVICE B-3-16".

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWING. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1972.

CONTRACTOR IS RESPONSIBLE FOR GIRDER STABILITY DURING REMOVAL AND REPLACEMENT OF THE CONCRETE DECK AND GIRDER DIAPHRAGMS.

PERFORM CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITY SHOWN IS APPROXIMATE.

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

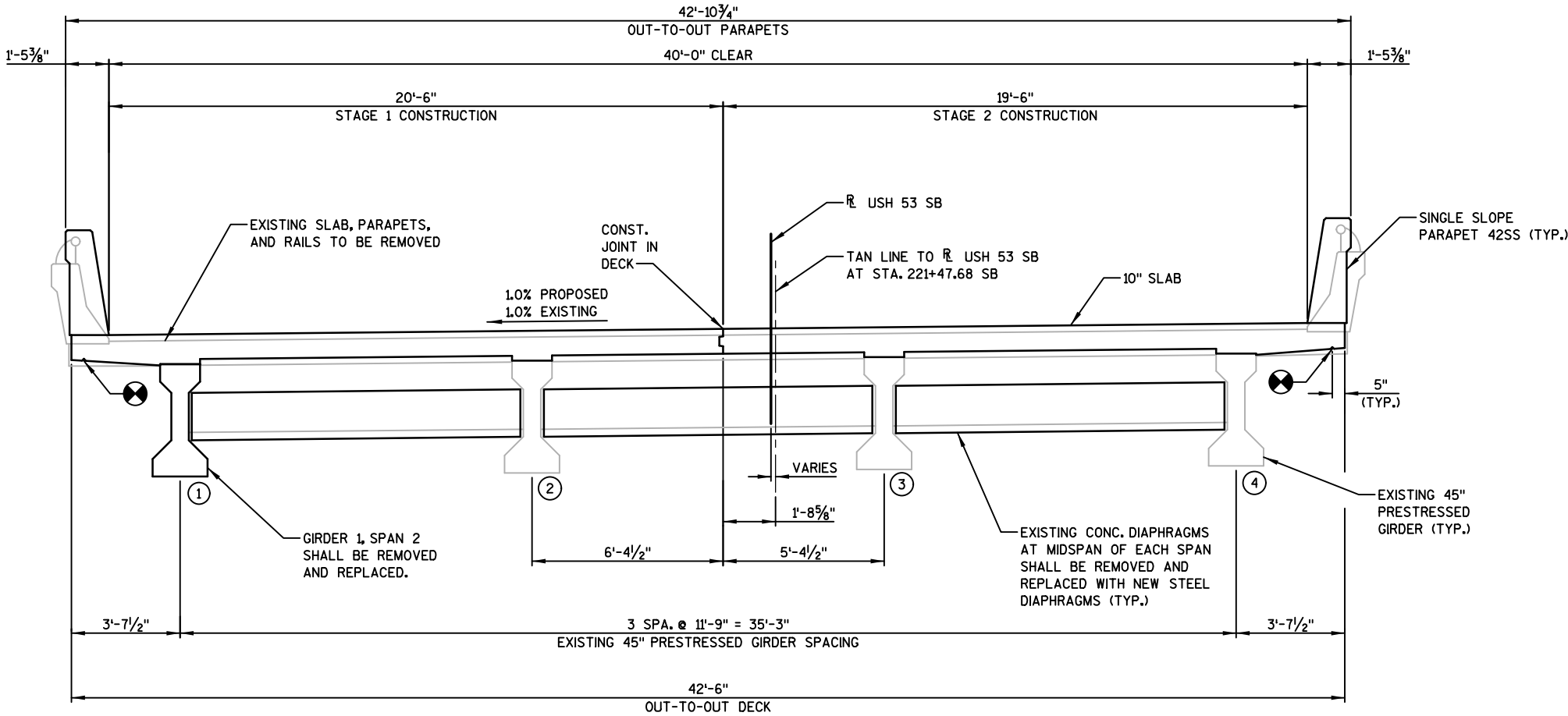
THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

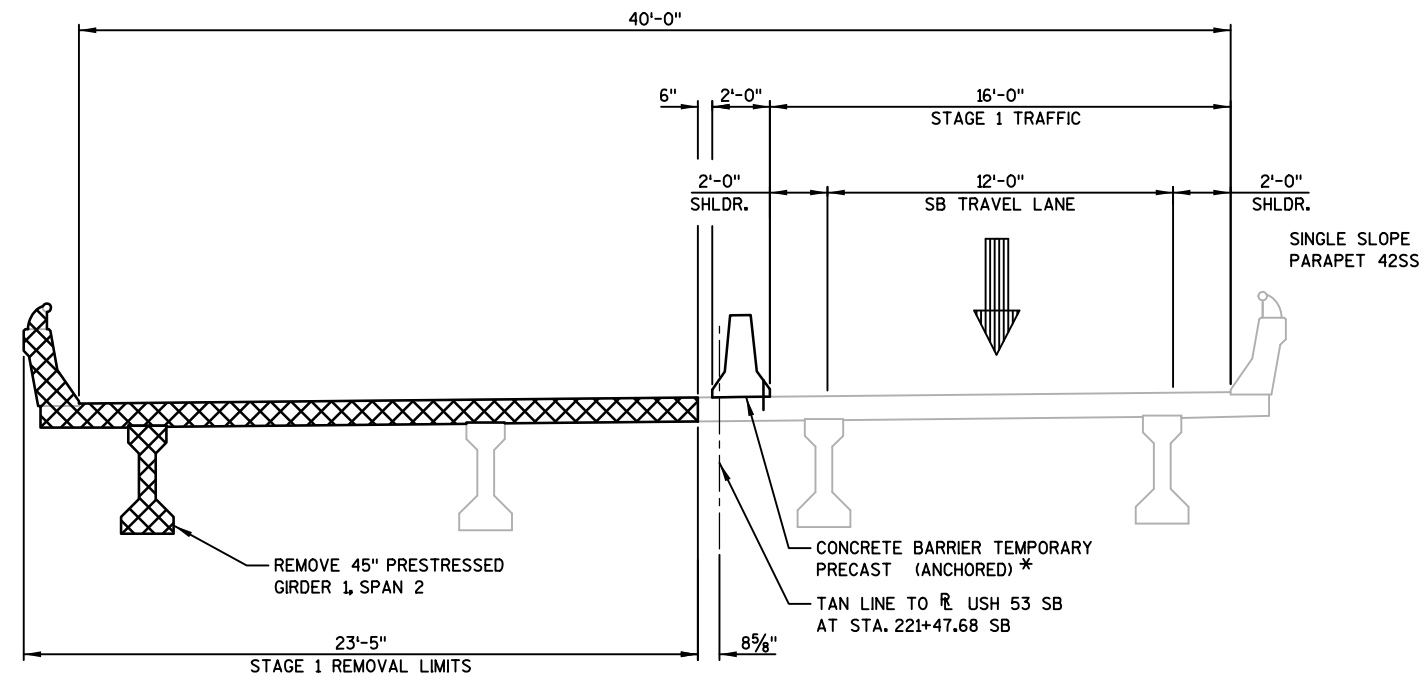
LEGEND

(X) DENOTES GIRDER NUMBER

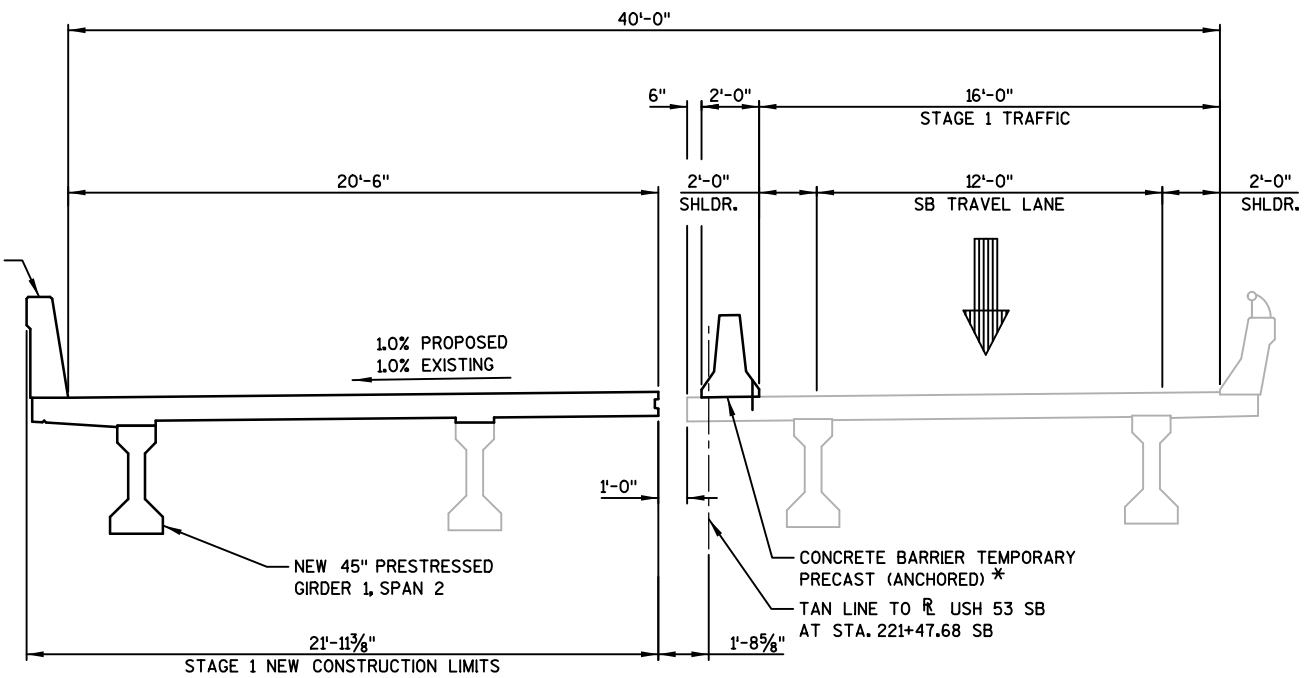
3/4" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF SOUTH ABUT. DIAPH. AND 2'-0" FROM F.F. OF NORTH ABUT. BODY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-16			
DRAWN BY		OTH	PLANS CK'D. BMO
CROSS SECTION AND QUANTITIES			SHEET 2 OF 3

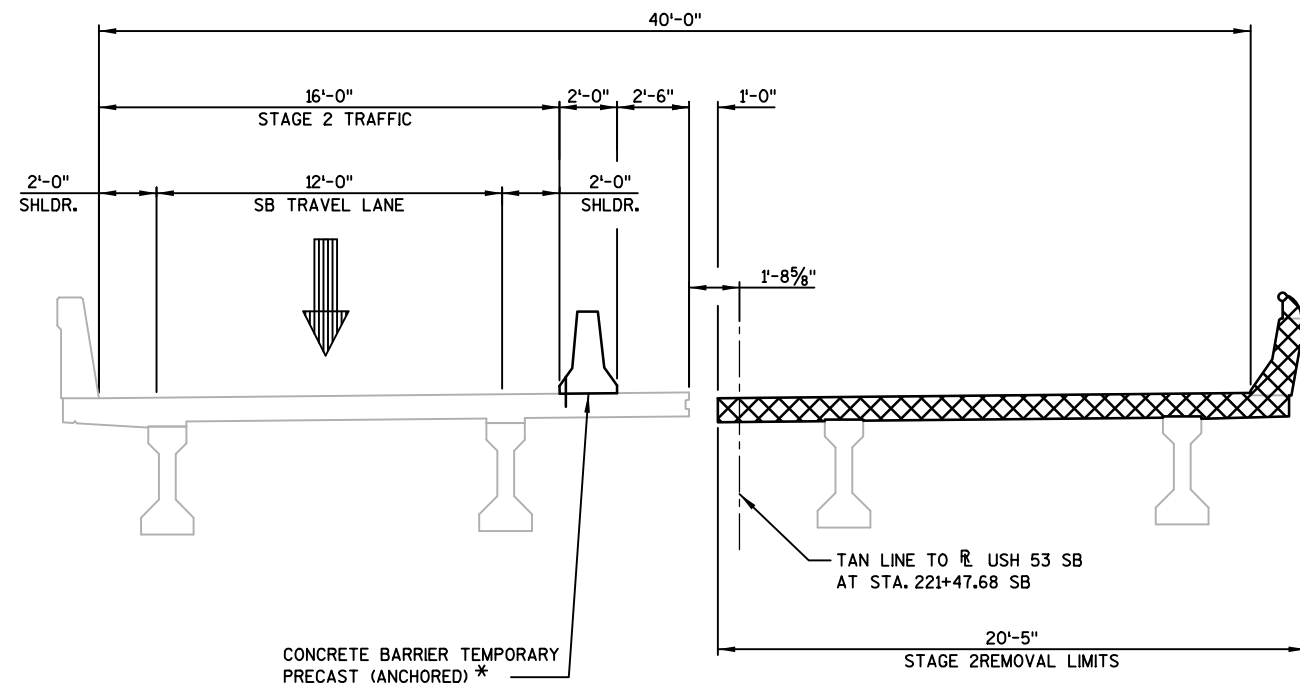


**STAGE 1 TRAFFIC AND REMOVAL**

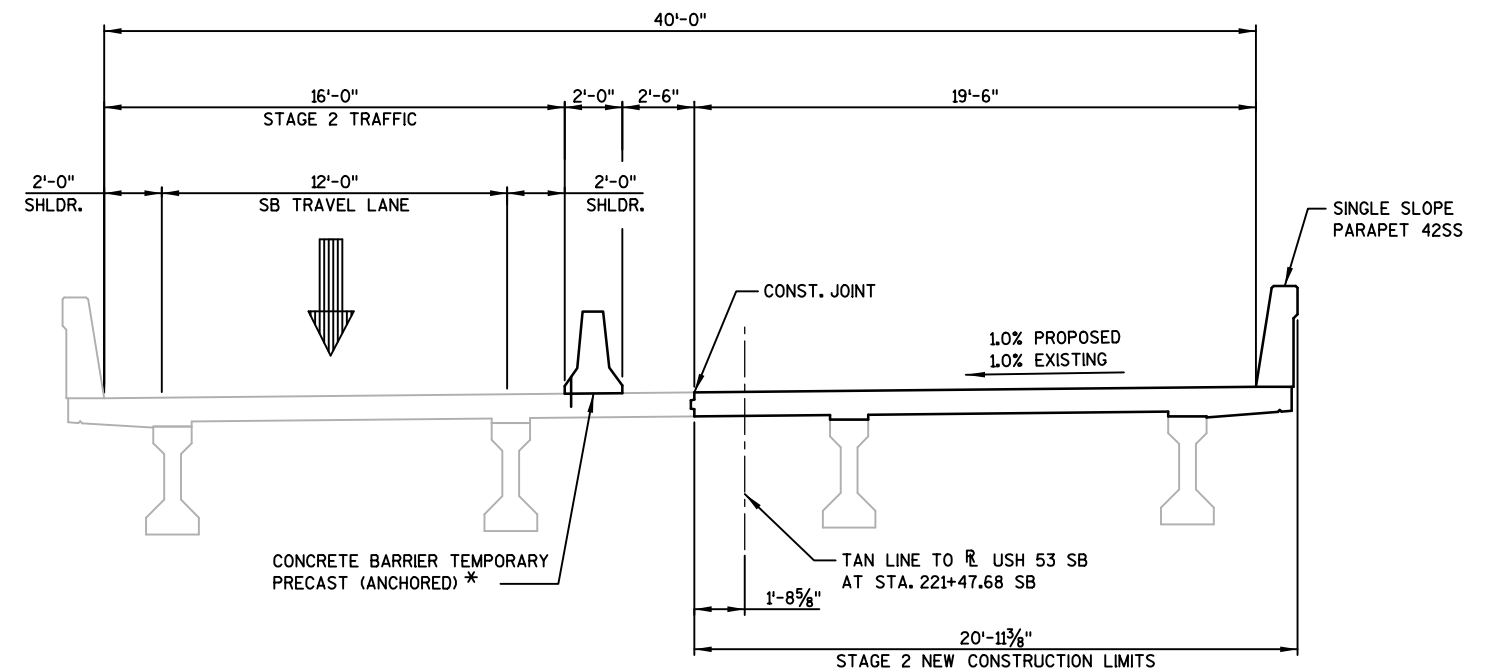
(LOOKING NORTH)

**STAGE 1 TRAFFIC AND CONSTRUCTION**

(LOOKING NORTH)

**STAGE 2 TRAFFIC AND REMOVAL**

(LOOKING NORTH)

**STAGE 2 TRAFFIC AND CONSTRUCTION**

(LOOKING NORTH)

**NOTES**

SEE ROADWAY PLANS FOR ADDITIONAL STAGING INFORMATION.

**LEGEND**

\* SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.

REMOVAL LIMITS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-16			
DRAWN BY		DTH	PLANS CK'D. BMO
CONSTRUCTION STAGING		SHEET 3 OF 3	