

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	49	70
PROJECT FILE NO.		607214	

SLAB STRUCTURE
CROSS SECTION

DESIGN:

IN ACCORDANCE WITH THE 2020 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR HL-93 LOADING.

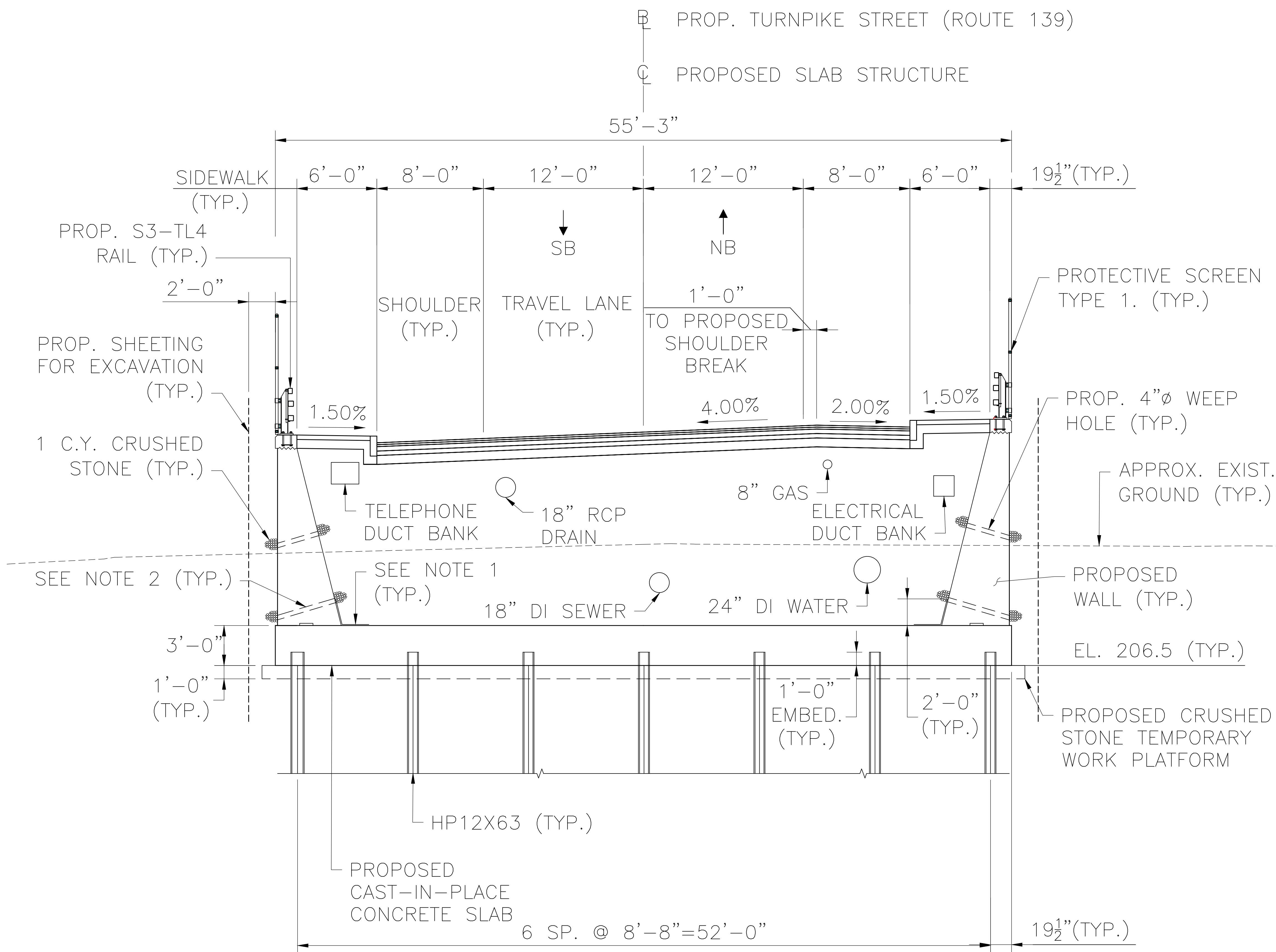
GENERAL NOTES:

1. APPROVAL DOES NOT INCLUDE STRUCTURAL ANALYSIS.
2. DIMENSIONS OF STRUCTURAL ELEMENTS ARE APPROXIMATE, AND WILL BE FINALIZED DURING THE FINAL DESIGN PHASE.
3. SEE GEOTECHNICAL REPORT, DATED APRIL 23, 2021.
4. SEISMIC GROUND SHAKING HAZARD
DESIGN RETURN PERIOD: 1000-YR
DESIGN SPECTRA:
As = 0.163
SDS = 0.325
SD1 = 0.123
SITE CLASS = E
SEISMIC DESIGN CATEGORY (SDC) = A
5. NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.

NOTES:

1. MEMBRANE WATERPROOFING AND 8"x16"x2", 4000 PSI, 1/2 IN, 610 CEMENT CONCRETE BLOCKS LAID IN MORTAR OR OTHER WATERPROOFING PROTECTIVE COURSE, MIN. 2" THICK AS SPECIFIED IN MASSDOT STANDARD SPECIFICATIONS.
2. 4" Ø WEEP HOLES 10'-0" O.C. (JUST ABOVE PROTECTIVE COURSE AND JUST ABOVE EXISTING GROUND). PROVIDE 1 CUBIC YARD OF CRUSHED STONE AT EACH END OF WEEP HOLE.
3. ALL CONCRETE SHALL BE 4000 PSI, 1 1/2 IN, 565 CEMENT CONCRETE.
4. THE FACTORED AXIAL DESIGN LOAD PER PILE IS 286 KIPS AS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS STRENGTH I LOAD COMBINATION.
5. PILES SHALL BE DRIVEN TO BEDROCK WITH AN ESTIMATED LOWEST TIP ELEVATION OF APPROXIMATELY 136.7 FEET. HEAVY DUTY PILE SHOES SHALL BE INSTALLED ON THE TIPS OF ALL PILES. PREFABRICATED PILE SHOES MAY BE USED IF APPROVED BY THE ENGINEER.

**PRELIMINARY
PLANS
SUBJECT TO CHANGE**



TYPICAL SECTION
SCALE: 1"=4'