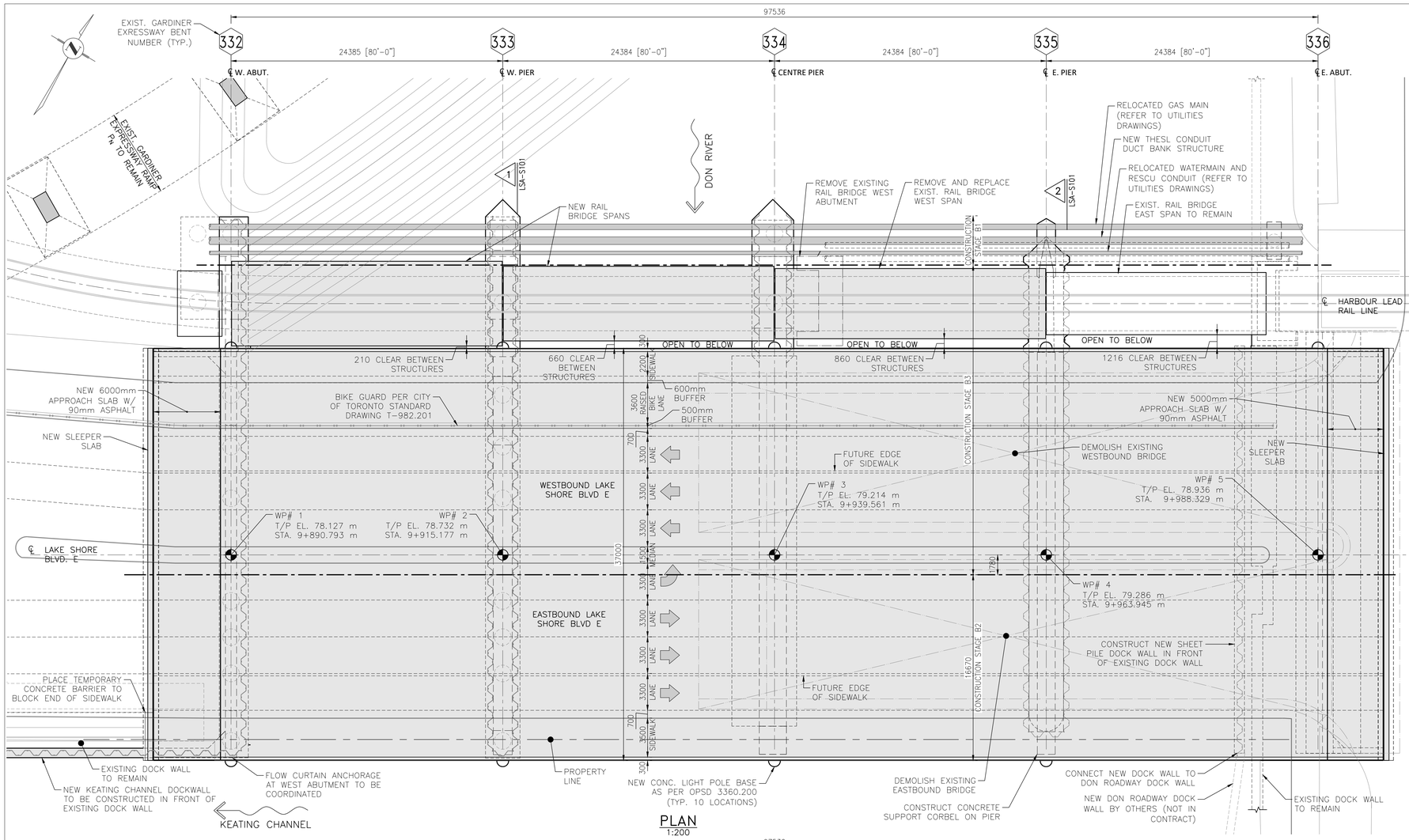

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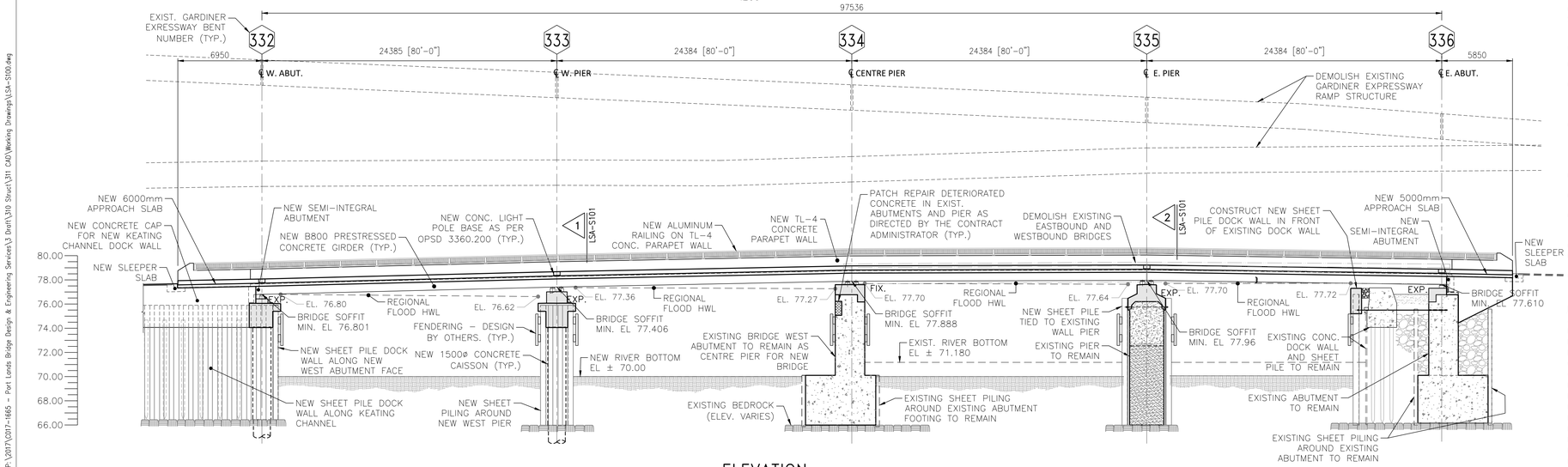

ELEVATION
1:200

GENERAL NOTES

1. CLASS OF CONCRETE

ALL CONCRETE U.N.O. 35MPa (CLASS C-1)

CLASS CONCRETE FOR PRECAST GIRDERS ARE GIVEN ON PRESTRESSED GIRDER DRAWINGS

2. CLEAR COVER TO REINFORCING STEEL

FOOTINGS/CAISSONS	100	± 25
DECK TOP	70	± 20
BOTTOM	40	± 10
PIER CAPS	70	± 10
REMAINDER	70	± 20 U.N.O.

3. REINFORCING STEEL

REINFORCING STEEL SHALL BE GRADE 400W.

UNLESS SHOWN OTHERWISE, TENSION LAP SPLICES FOR REINFORCING STEEL BARS SHALL BE CLASS B.

STAINLESS REINFORCING STEEL SHALL BE TYPE 316LN OR DUPLEX 2205 AND HAVE A MINIMUM YIELD STRENGTH OF 500 MPa, UNLESS OTHERWISE SPECIFIED.

BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS.

BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS USING MINIMUM BEND DIAMETERS, WHILE STIRRUPS AND TIES SHALL HAVE A MINIMUM HOOK DIMENSIONS. ALL HOOKS SHALL BE IN ACCORDANCE WITH STRUCTURAL STANDARD DRAWING SS12-1, UNLESS INDICATED OTHERWISE.

4. CONSTRUCTION NOTES

THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESSES FROM THE TOP OF BEARING ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS AND ELEVATIONS OF NEARBY EXISTING STRUCTURES THAT ARE RELEVANT TO THE WORK SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR AND THE PROPOSED ADJUSTMENT OF THE WORK REQUIRED TO MATCH THE EXISTING STRUCTURE SHALL BE SUBMITTED FOR APPROVAL.

BACKFILL SHALL NOT BE PLACED BEHIND THE SEMI-INTEGRAL DECK ENDS UNTIL THE CONCRETE IN THE DECK ENDS HAS REACHED 75% OF ITS DESIGN STRENGTH.

BACKFILL SHALL BE PLACED SIMULTANEOUSLY BEHIND BOTH SEMI-INTEGRAL DECK ENDS, KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME, AT NO TIME SHALL THE DIFFERENCE IN BACKFILL ELEVATION BE GREATER THAN 500mm.

SHEET PILING INDICATED ON THE CONTRACT IS REQUIRED AS A PERMANENT PART OF THE STRUCTURE. IT IS NOT INTENDED TO REPRESENT A COMPLETE SHORING SCHEME.

ALL ELEVATIONS ARE TO GEODETIC DATUM.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ADEQUATE PROTECTION OF ALL UTILITIES, SERVICES, STRUCTURES, ROADWAYS, WATERWAYS, ETC. DURING CONSTRUCTION OPERATIONS.

ROUGHEN CONSTRUCTION JOINTS TO AN AVERAGE SURFACE ROUGHNESS AMPLITUDE OF 5mm @15mm C/C

LOCATE AND AVOID EXISTING REINFORCING STEEL WHEN DRILLING INTO EXISTING CONCRETE ELEMENTS.

USE HILTI HIT-RE 500 OR APPROVED EQUIVALENT FROM THE MTO DSM FOR EPOXY GROUTED ANCHORS AND DOWELS.

PROTECTION SYSTEMS, INCLUDING THE TEMPORARY DOCK WALL, SHALL MEET THE REQUIREMENTS FOR PERFORMANCE LEVEL 2.

5. DESIGN

DESIGN CODE: CAN/CSA-S6-19 CANADIAN HIGHWAY BRIDGE DESIGN CODE & MTO STRUCTURAL MANUAL
LIVE LOAD: CL-625-ONT
SEISMIC DESIGN: CAN/CSA-S6-19 WITH SITE SPECIFIC DESIGN CRITERIA
SEISMIC DESIGN CATEGORY: MAJOR ROUTE BRIDGE

APPLICABLE STANDARD DRAWINGS

OPSD 911.160	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION – TEMPORARY 1
OPSD 911.164	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION – TEMPORARY RESTRAINT SYSTEM, STRAPPED INTO CONCRETE WITH ASPHALT
OPSD 911.171	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION – TEMPORARY RESTRAINT SYSTEM, TRANSITION TO STRAPPED TCB OPSD 3002.200 FOUNDATION, PILES, SHEET PILE STEEL ANCHORAGE
OPSD 3329.100	DECK REINFORCEMENT SUPPORTS FOR SLAB DEPTHS 300mm OR LESS
OPSD 3370.100	DECK, WATERPROOFING, HOT APPLIED ASPHALT MEMBRANE WITH PROTECTION BOARD
OPSD 3370.101	DECK, WATERPROOFING, HOT APPLIED ASPHALT MEMBRANE AT ACTIVE CRACKS GREATER THAN 2mm WIDE CONSTRUCTION JOINTS
OPSD 3390.100	DECK, DRIP CHANNEL
OPSD 3941.200	FIGURES IN CONCRETE, SITE NUMBER AND DATE, LAYOUT
OPSD 3950.100	JOINTS, CONCRETE EXPANSION AND CONSTRUCTION ON STRUCTURE

LIST OF ABBREVIATIONS

ABUT.	– DENOTES ABUTMENT	N.T.S.	– DENOTES NOT TO SCALE
BLL	– DENOTES BOTTOM LOWER LAYER	O.F.	– DENOTES OUTSIDE FACE
BUL	– DENOTES BOTTOM UPPER LAYER	SBGR	– DENOTES STEEL BEAM GUIDE RAIL
BRGS.	– DENOTES BEARINGS		
CONC.	– DENOTES CONCRETE	STA.	– DENOTES STATION
C.J.	– DENOTES CONSTRUCTION JOINT	T/C	– DENOTES TOP OF CONCRETE
DIA.	– DENOTES DIAMETER	T/FTG	– DENOTES TOP OF FOOTING
DWG.	– DENOTES DRAWING	TLL	– DENOTES TOP LOWER LAYER
E.F.	– DENOTES EACH FACE	T/P	– DENOTES TOP OF PAVEMENT
E/B	– DENOTES EASTBOUND	TUL	– DENOTES TOP UPPER LAYER
EL.	– DENOTES ELEVATION	TYP.	– DENOTES TYPICAL
EXIST.	– DENOTES EXISTING	U.N.O.	– DENOTES UNLESS NOTED OTHERWISE
EXP.	– DENOTES EXPANSION BEARINGS		
I.F.	– DENOTES INSIDE FACE	U/S	– DENOTES UNDERSIDE
FIX.	– DENOTES FIXED BEARINGS	W/B	– DENOTES WESTBOUND
MAX.	– DENOTES MAXIMUM	WP	– DENOTES WORKING POINT
MIN.	– DENOTES MINIMUM		

PORT LANDS FLOOD PROTECTION AND ENABLING INFRASTRUCTURE PROJECT

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REVISIONS

NO.	DATE	DESCRIPTION
0	2019/09/13	ISSUED FOR SCHEMATIC DESIGN
1	2020/01/30	ISSUED FOR 60% DESIGN REVIEW
2	2020/08/28	ISSUED FOR 90% DESIGN REVIEW
3	2020/12/17	ISSUED FOR TENDER

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BRIDGE NAME
LAKE SHORE BOULEVARD EAST BRIDGE

STATUS
ISSUED FOR TENDER

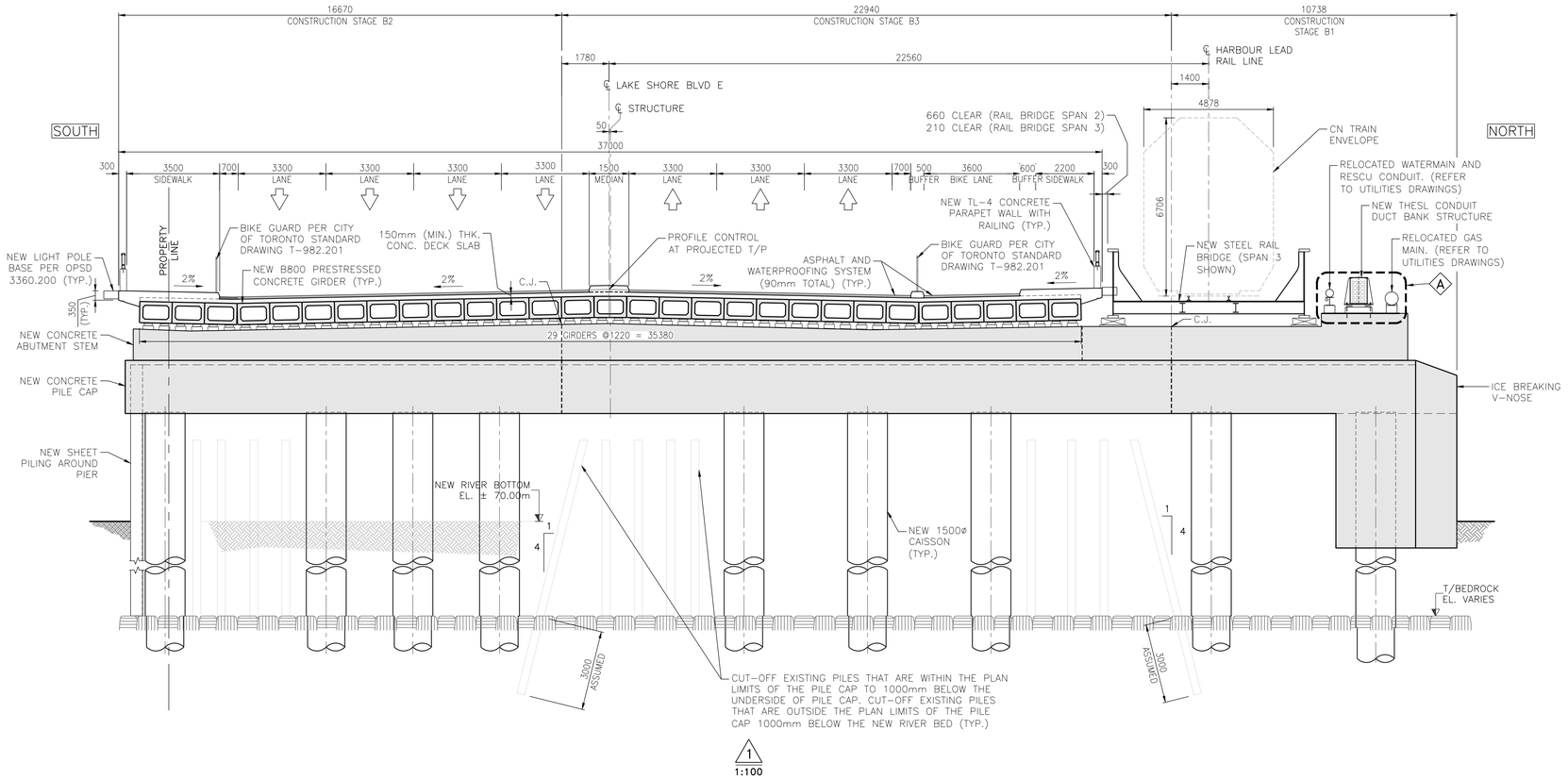
PHASE

DRAWING TITLE
GENERAL ARRANGEMENT ROADWAY BRIDGE I

JOB NUMBER: C017-1665
DATE: 2018/07/11
SCALE: 1:200
DESIGNED BY: AL
DRAWN BY: GWA\GD
CHECKED BY: JW

LSA-S100

PLOT DATE & TIME: Dec 17, 2020 - 6:23pm
FILE PATH: P:\2017\C017-1665 - Port Lands Bridge Design & Engineering Services\3 Draft\310 Street\311 CAD\Working Drawings\LSA-S100.dwg



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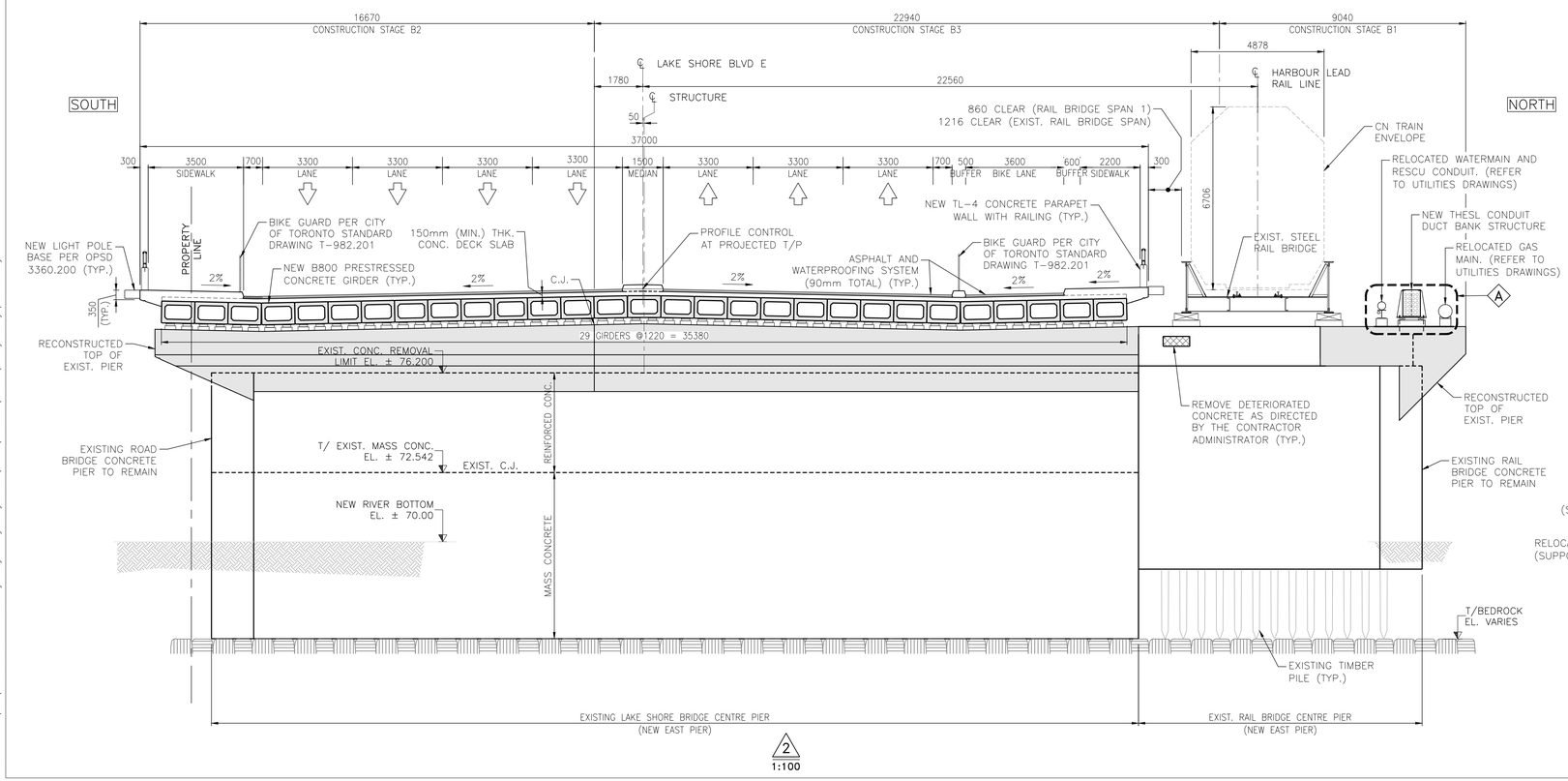

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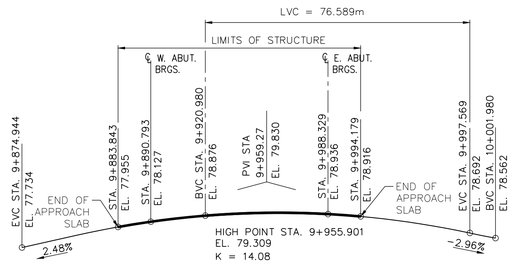
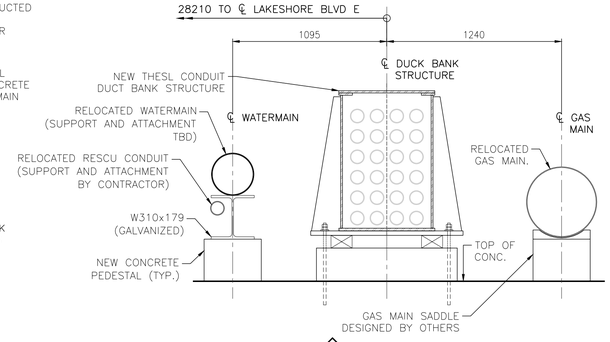


PROFILE
LAKE SHORE BOULEVARD EAST



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PORT LANDS FLOOD PROTECTION AND ENABLING INFRASTRUCTURE PROJECT

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BRIDGE NAME

LAKE SHORE BOULEVARD EAST BRIDGE

STATUS

ISSUED FOR TENDER

PHASE

DRAWING TITLE

GENERAL ARRANGEMENT ROADWAY BRIDGE II

JOB NUMBER: C017-1665
DATE: 2018/07/11
SCALE: 1:250
DESIGNED BY: AL
DRAWN BY: GWA\GD
CHECKED BY: JW

LSA-S101