

- ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
 - DO NOT SCALE FROM THIS DRAWING.
 - THE DRAWING TO BE READ IN CONJUNCTION WITH THE SPECIFICATION FOR HIGHWAY WORKS, CONTRACT-SPECIFIC APPENDICES, DRAWINGS NYKGDD-WSP-SMN-ALL-DR-CB-0001, AND NYKGDD-WSP-SMN-ALL-DR-CB-0002, AND THE DRAWINGS LISTED IN THE SCHEDULE ON THIS DRAWING.
 - THE CONTRACTOR SHALL MEASURE AND CONFIRM ALL DIMENSIONS/LEVELS THAT HAVE A DIRECT IMPACT ON THE WORKS PRIOR TO EXECUTION. IN CASE OF DOUBTS, OMISSIONS, OR ERRORS, THE CONTRACTOR NEEDS TO SEEK CLARIFICATION FROM THE NEC PROJECT MANAGER.
 - FOR THE AFFECTED AREAS PRIOR TO WORKS, THE CONTRACTOR SHALL OBTAIN UP-TO-DATE UTILITY PLANS AND CARRY OUT SURVEYS TO POSITIVELY IDENTIFY AND MARK-UP ANY UTILITY APPARATUS. REFER TO APPENDIX 1/16 FOR FURTHER INFORMATION.
- GEOTECHNICAL**
- FORMATION INSPECTIONS SHALL BE UNDERTAKEN BY THE DESIGNER'S SITE REPRESENTATIVE WHO SHALL BE A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER. ANY SOFT SPOTS SHALL BE EXCAVATED AND REPLACED IN ACCORDANCE WITH THE RELEVANT STANDARD EARTHWORKS DETAILS AND IN ACCORDANCE WITH THE SERIES 600 SPECIFICATION. THE DESIGNER SHALL BE INFORMED IMMEDIATELY IF FORMATION MATERIAL DIFFERS FROM THAT ASSUMED WITHIN THE DESIGN.
 - PILED SLAB DETAILS, DIMENSIONS, AND SETTING OUT POINTS ARE SHOWN ON THE FOLLOWING DRAWINGS:
 - NYKGDD-WSP-SMN-ALL-DR-CB-0004 (SLABS B, C, D, & E)
 - NYKGDD-WSP-SMN-ALL-DR-CB-0005 (SLABS A & F)
 - IF PRECAST ELEMENTS ARE INSTALLED ON PILED RC SLABS THEN THEY ARE TO BE BEDDED ON 50MM MIN OF CLASS 6L MATERIAL AS PER MCHW SERIES 600, BUT ONLY THE GRADING REQUIREMENT APPLIES AND NOT THE OTHER MATERIAL PROPERTIES LISTED IN TABLE 6/1 OF MCHW (BUT THE SULPHATE REQUIREMENTS OF CLAUSE 601 STILL APPLY).
 - IF PRECAST UNITS ARE TO BE FOUNDED ON SPREAD FOOTINGS THEY ARE TO HAVE THE FOLLOWING BEDDING DETAILS:
 - A GRANULAR BED WITH THE LOWER 150MM BEING 6N MATERIAL AND THE UPPER 50MM BEING CLASS 6L MATERIAL AS PER MCHW SERIES 600, EXCEPT FOR CLASS 6L. ONLY THE GRADING REQUIREMENT APPLIES AND NOT THE OTHER MATERIAL PROPERTIES LISTED IN TABLE 6/1 OF MCHW (BUT THE SULPHATE REQUIREMENTS OF CLAUSE 601 STILL APPLY).
 - ALTERNATIVELY, THE LOWER 150MM MAY BE REPLACED BY A 75MM MINIMUM THICKNESS BINDING CONCRETE COMPRISING DESIGNATED CONCRETE FND2.
 - EITHER BEDDING OPTION TO BE A MIN 300MM WIDER THAN THE PRECAST ELEMENTS AT OUTER EDGES.
 - THE LEVEL OF THE BOTTOM OF PRECAST UNITS AND TOP OF PILED SLAB TO BE ADJUSTED BASED ON THICKNESS OF CONTRACTOR DESIGNED PRECAST BOX BOTTOM SLAB IN ORDER TO ACHIEVE STATED INVERT LEVELS (ASSUMED 300MM SLAB THICKNESS WITH 300MM NATURAL BED SHOWN ON THIS DRAWING).
- STONE FACING**
- REFER TO DRAWING NYKGDD-WSP-SMN-ALL-DR-CB-0002 AND SPECIFICATION APP 24/1 FOR DETAILS.
- ENVIRONMENTAL**
- CONTRACTOR TO DESIGN MAMMAL LEDGES IN ACCORDANCE WITH HA81/99 DESIGN STANDARD.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS

CONSTRUCTION

- REF 004 - WORKING IN CONFINED SPACE
- REF 005 - BACKFILLING OF THE BOX CULVERT STRUCTURE
- REF 007 - WORKING WITH LIFTING PLANT DURING INSTALLATION OF PRECAST UNITS
- REF 009 - DAMAGE TO EXISTING STATUTORY SERVICES

SAFETY, HEALTH AND ENVIRONMENTAL SYMBOL LEGEND

INDICATES A RESIDUAL RISK AS A WARNING

Rev.	Date	Description	By	Chk'd	App'd
C01	07/07/2023	LENGTH/ INTERNAL HEIGHT OF CULVERT CHANGED	SH	DM	DM



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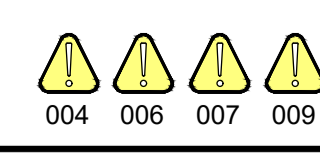
Project Title **A59 KEX GILL DIVERSION**

Drawing Title **A59 KEXGILL CULVERT (ST010) GENERAL ARRANGEMENT SHEET 1 OF 2**

Scale	Drawn	Checked	Approved	Authorised
AS SHOWN	LS	IM	HM	HM
Original Size	Date	Date	Date	Date
A1	05/05/20	05/05/20	05/05/20	05/05/20

Drawing Status **FOR REVIEW** Suitability **S3**

Drawing Number	Project	Originator	Volume	Project Ref. No.
NYKGDD	ST010	WSP	SMN	
Location	Type	Role	Number	Revision
ST010	DR	CB	0001	C01



- INDICATIVE CONSTRUCTION SEQUENCE:**
- SET UP SITE COMPOUND
 - INSTALL TEMPORARY WORKS TO SUPPORT EXCAVATION
 - EXCAVATE TO FORMATION LEVEL OF SLAB FOUNDATION AND INSPECT GROUND CONDITIONS
 - INSTALL PRECAST CONCRETE PILES
 - CONSTRUCT INSITU CONCRETE SLAB FOUNDATION
 - INSTALL PRECAST CONCRETE BOX CULVERT SEGMENTS ON TOP OF SLAB
 - INSTALL NATURAL STONE BED & FISH BAFFLES PROGRESSING TO REDUCE CONFINED SPACE WORKING
 - INSTALL WINGWALLS TO BOTH ENDS OF THE STRUCTURE AND BUILD STONE CLADDING AND SCOUR PROTECTION
 - RETURN WATERCOURSE TO PERMANENT CHANNEL AND TIE IN WATERCOURSE AT UPSTREAM/DOWNSTREAM LOCATIONS.
 - BACKFILL STRUCTURE IN A STAGED MANNER WITH HEIGHTS NOT DIFFERING BY MORE THAN 250MM AFTER COMPACTION ON OPPOSING SIDES
 - DIVERT WATERCOURSE TO NEW ALIGNMENT THROUGH CULVERT
 - CONSTRUCT APPROACH EMBANKMENTS AND NEW HALL LANE CARRIAGEWAY
 - INSTALL TIMBER FENCING TO THE ENDS OF THE NEW CULVERT
 - COMMISSION NEW HALL LANE ROAD ALIGNMENT

DRAWING SCHEDULE

DRAWING NUMBER	TITLE
NYKGDD-WSP-SMN-ST010-DR-CB-0001	GENERAL ARRANGEMENT SHEET 1 OF 2
NYKGDD-WSP-SMN-ST010-DR-CB-0002	GENERAL ARRANGEMENT SHEET 2 OF 2
NYKGDD-WSP-SMN-ST010-DR-CB-0003	CULVERT SETTING OUT POINTS
NYKGDD-WSP-SMN-ST010-DR-CB-0004	BOX CULVERT PILE SLAB RC AND SETTING OUT POINT DETAILS
NYKGDD-WSP-SMN-ST010-DR-CB-0005	EAST & WEST WINGWALL PILE SLAB RC AND SETTING OUT POINT DETAILS
NYKGDD-WSP-SMN-ALL-DR-CB-0001	TYPICAL CULVERT DETAILS SHEET 1 OF 2
NYKGDD-WSP-SMN-ALL-DR-CB-0002	TYPICAL CULVERT DETAILS SHEET 2 OF 2

NOTE WINGWALL AND HEADWALL ARRANGEMENTS/DIMENSIONS TO BE AGREED WITH NEC PROJECT MANAGER PRIOR TO CONTRACTOR FINALISING DETAILED DESIGN.

ALL CONTRACTOR DESIGNED ELEMENTS TO BE DESIGNED IN ACCORDANCE WITH APPENDIX 1/10 FOLLOWING SPECIFIED TECHNICAL APPROVAL PROCESS.

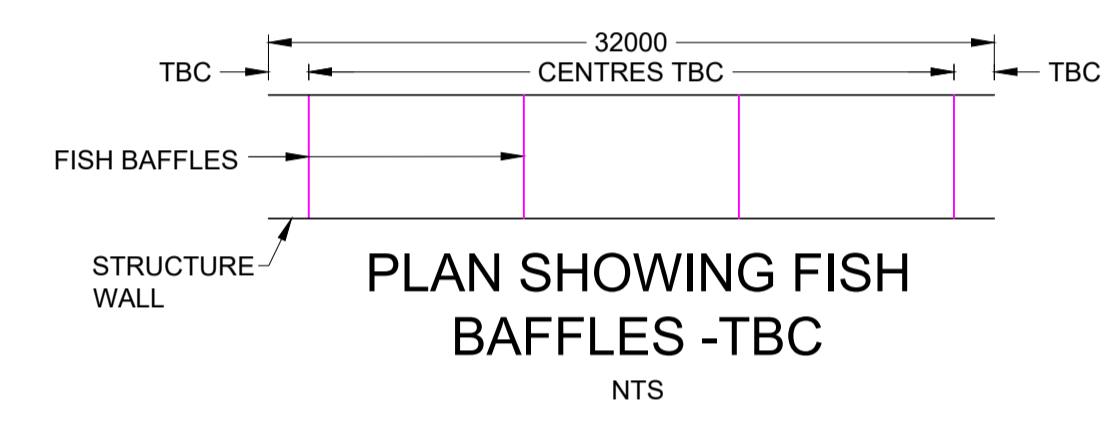
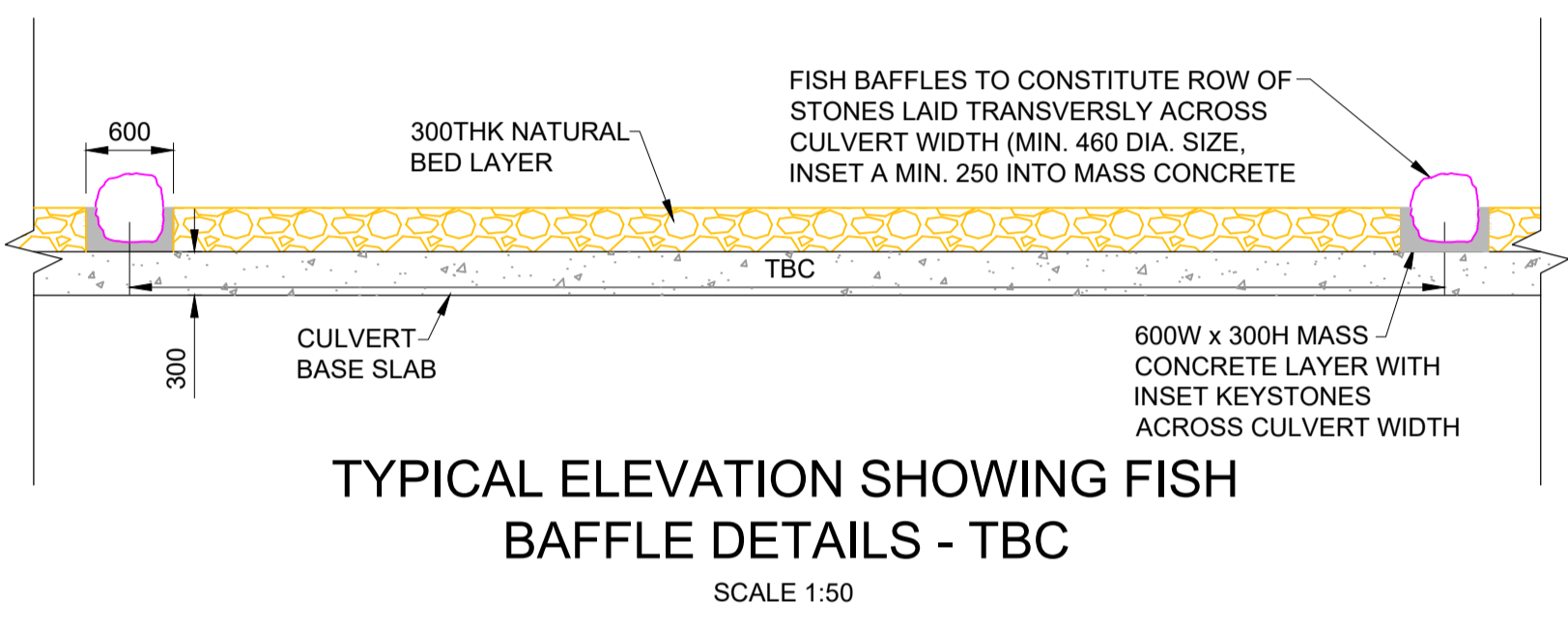
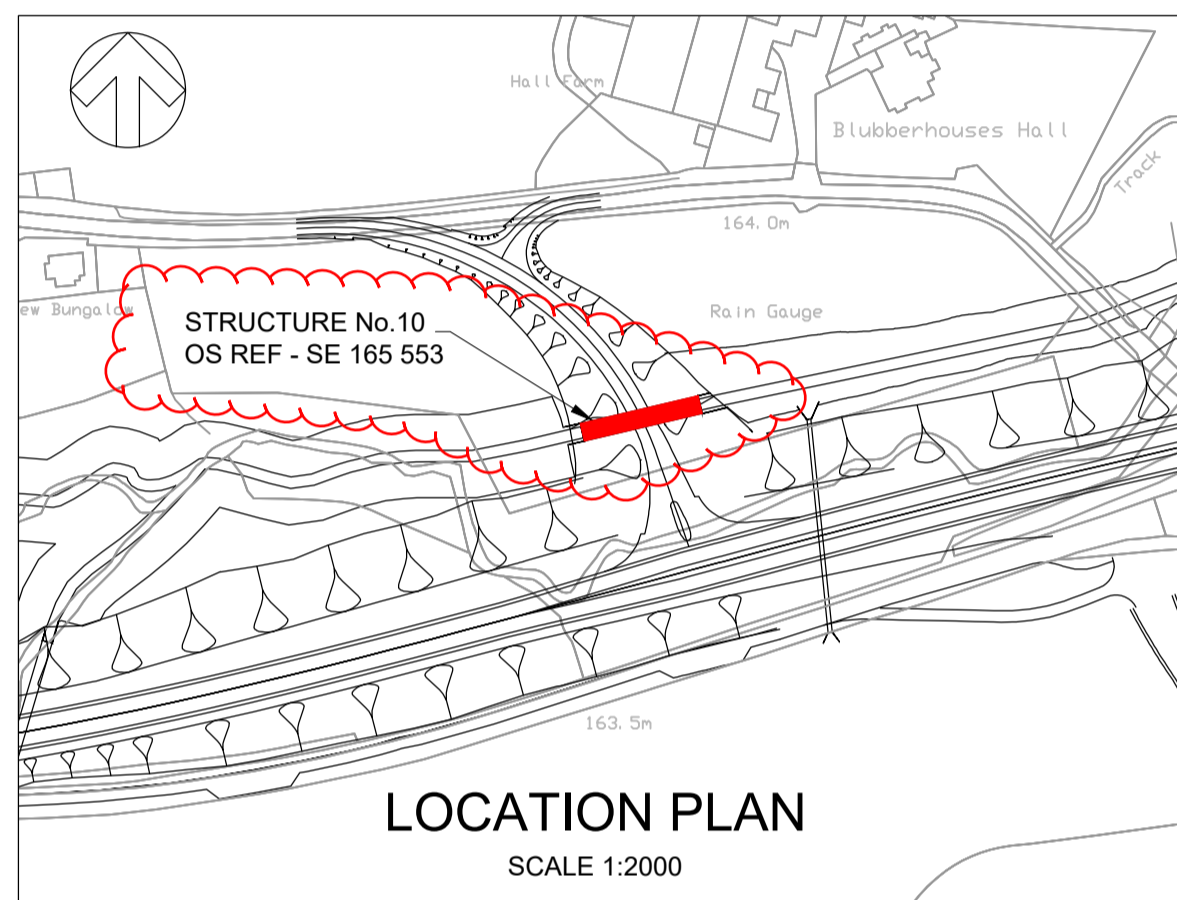
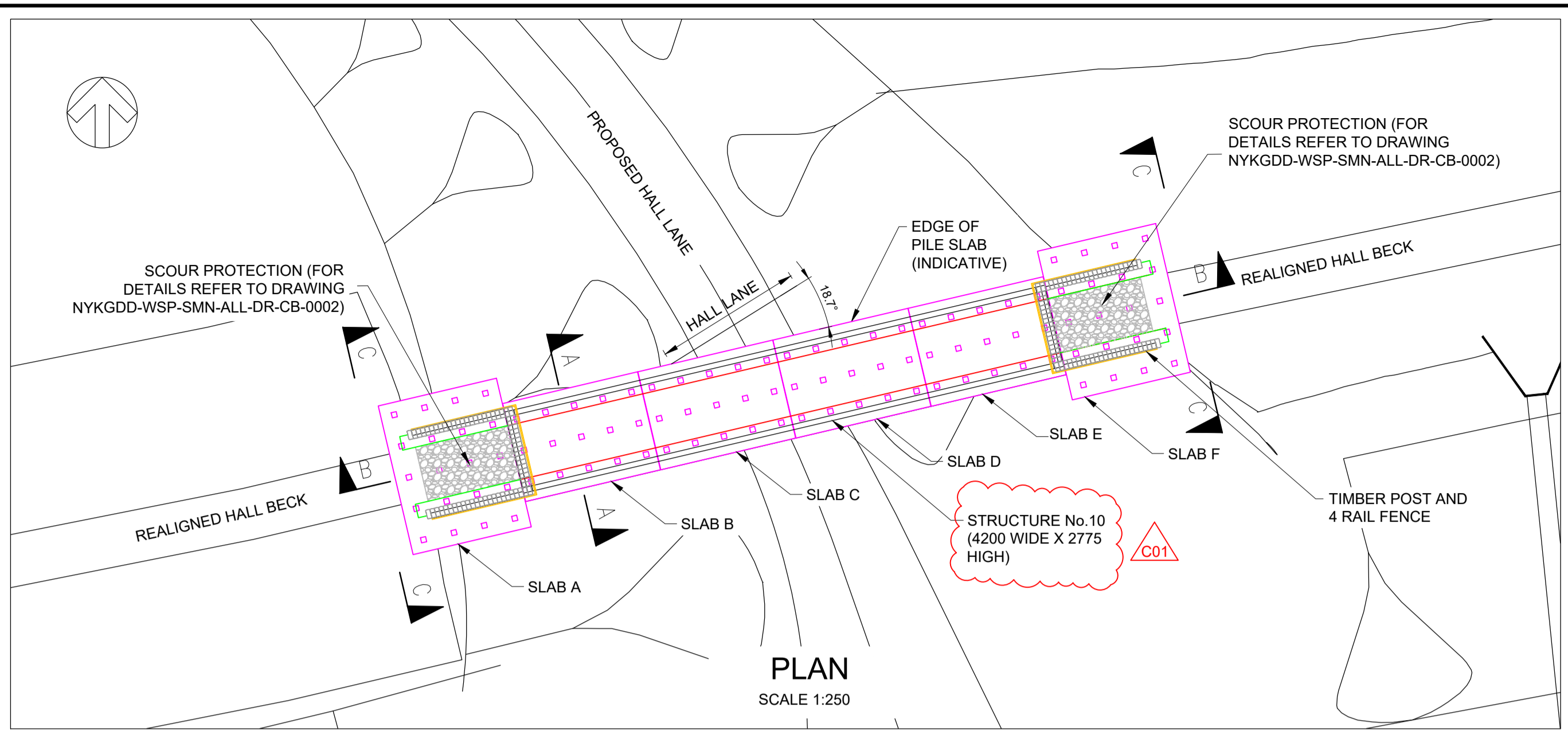


TABLE A - SEE NOTE 8

SLAB REF	DESCRIPTION	MIN TOE LEVEL mAOD	COMMENTS
SLAB A	WESTERN END BENEATH WINGWALLS	154.0	<p>PILES ARE TO BE FOUND ON BEDROCK. PILES AND SLAB A MAY BE OMITTED FROM 'SLAB A' SHOULD PROBING AND/OR TRIAL PITTING OF FORMATION LEVEL INDICATE BEDROCK AT CONSISTENT SHALLOW DEPTHS (<2.0M). IF CONFIRMED EXISTING MATERIAL ABOVE BEDROCK CAN EXCAVATED AND REPLACED WITH CLASS 1 FILL WITH BEDDING AS PER NOTE 10. THIS SHALL BE AGREED ON SITE WITH THE DESIGNER'S SITE REPRESENTATIVE.</p> <p>PILES ARE TO BE FOUNDED ON BEDROCK. PREBORING MAY BE REQUIRED TO ACHIEVE PROPOSED TOE LEVELS - CONTRACTOR TO CONFIRM.</p> <p>PILE TOE LEVELS MAY BE ADJUSTED WHERE BEDROCK IS CONSISTENTLY ENCOUNTERED AT SHALLOWER DEPTHS (PROVED BY PREBORING/PROBING/TRIAL PITTING ETC) TO BE AGREED WITH THE DESIGNER'S SITE REPRESENTATIVE.</p>
SLAB B	SUPPORTING BOX CULVERT	154.0	<p>PILES ARE TO BE FOUNDED ON BEDROCK. PREBORING MAY BE REQUIRED TO ACHIEVE PROPOSED PILE TOE LEVELS - CONTRACTOR TO CONFIRM.</p> <p>PILE TOE LEVELS MAY BE ADJUSTED WHERE BEDROCK IS CONSISTENTLY ENCOUNTERED AT SHALLOWER DEPTHS (PROVED BY PREBORING/PROBING/TRIAL PITTING ETC) TO BE AGREED WITH THE DESIGNER'S SITE REPRESENTATIVE.</p>
SLAB C	SUPPORTING BOX CULVERT	154.0	
SLAB D	SUPPORTING BOX CULVERT	151.5	
SLAB E	SUPPORTING BOX CULVERT	151.5	
SLAB F	EASTERN END BENEATH WINGWALLS	151.5	<p>PILES ARE TO BE FOUND ON BEDROCK. PREBORING MAY BE REQUIRED TO ACHIEVE PROPOSED TOE LEVELS - CONTRACTOR TO CONFIRM.</p> <p>PILE TOE LEVELS MAY BE ADJUSTED WHERE BEDROCK IS CONSISTENTLY ENCOUNTERED AT SHALLOWER DEPTHS (PROVED BY PREBORING/PROBING/TRIAL PITTING ETC) TO BE AGREED WITH THE DESIGNER'S SITE REPRESENTATIVE.</p>

