

**NOTES**  
GENERAL

- 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 NYKGGD-WSP-SMN-ALL-DR-CB-0001, AND NYKGGD-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 EMPLOYER'S SITE REPRESENTATIVE WHO SHALL BE A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER. THE STRUCTURE IS ASSUMED TO BE FOUND ON SUPERFICIAL DEPOSITS. 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 NEC PROJECT MANAGER SHALL BE INFORMED IMMEDIATELY IF FORMATION MATERIAL DIFFERS FROM THAT ASSUMED WITHIN THE DESIGN.
- PRECAST UNITS ARE TO BE FOUNDED ON SPREAD FOOTINGS AND 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 6/1 STILL APPLY).
  - ALTERNATIVELY, THE LOWER 150MM MAY BE REPLACED BY A 75MM MINIMUM THICKNESS BLINDING CONCRETE COMPRISING DESIGNATED CONCRETE FND2.
- WHERE PRECAST UNITS ARE FOUNDED ON HARD MATERIAL (AS DEFINED IN BD 31) THEY SHALL BE LAID ON A TWO LAYER BED CONSISTING OF A LOWER 75MM MINIMUM BLINDING CONCRETE LAYER COMPRISING DESIGNATED CONCRETE FND2, COVERED BY AN UPPER 50MM MINIMUM GRANULAR LAYER OF CLASS 6L AS DESCRIBED ABOVE.
- ALL BEDDING OPTIONS TO BE A MIN 300MM WIDER THAN THE PRECAST ELEMENTS AT OUTER EDGES.
- THE LEVEL OF THE BOTTOM OF PRECAST UNITS TO BE ADJUSTED BASED ON THICKNESS OF CONTRACTOR DESIGNED PRECAST BOX BOTTOM SLAB IN ORDER TO ACHIEVE STATED INVERT LEVELS (ASSUMED 200MM SLAB THICKNESS WITH 300MM NATURAL BED SHOWN ON THIS DRAWING).

**STONE FACING AND STONE WALLS**

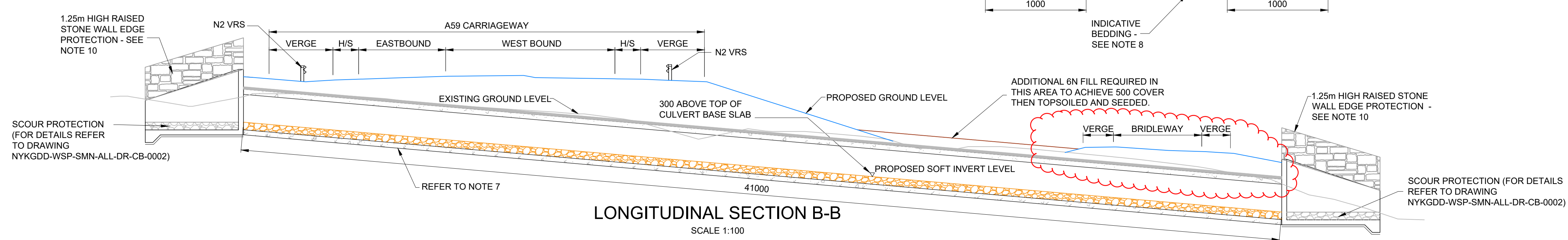
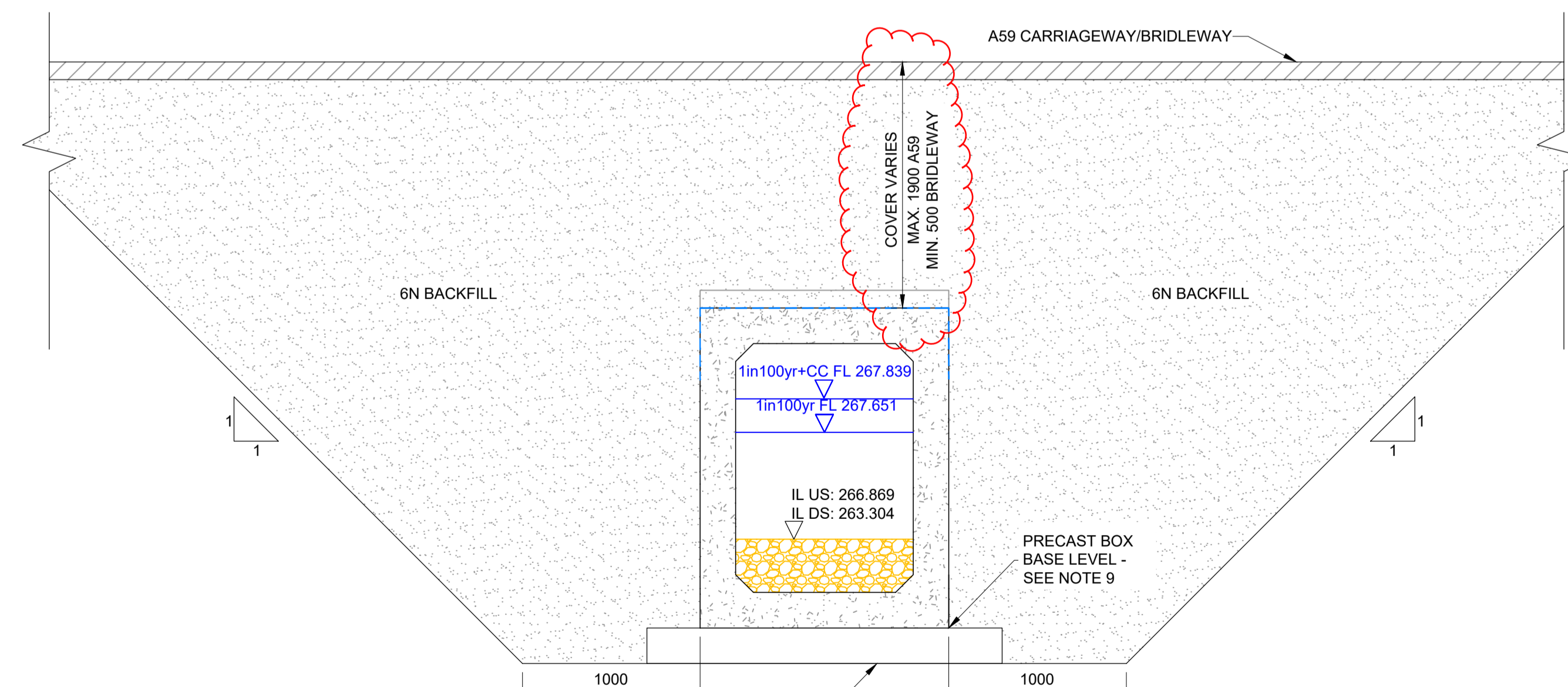
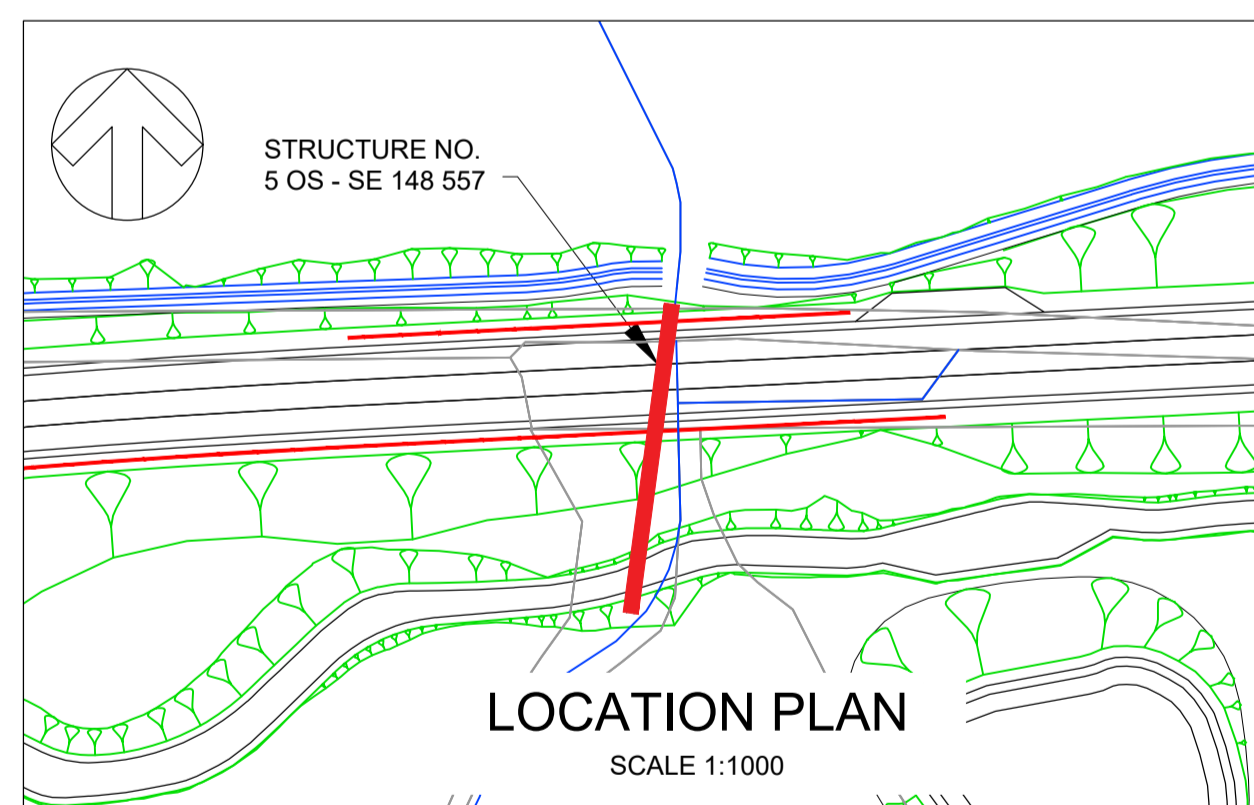
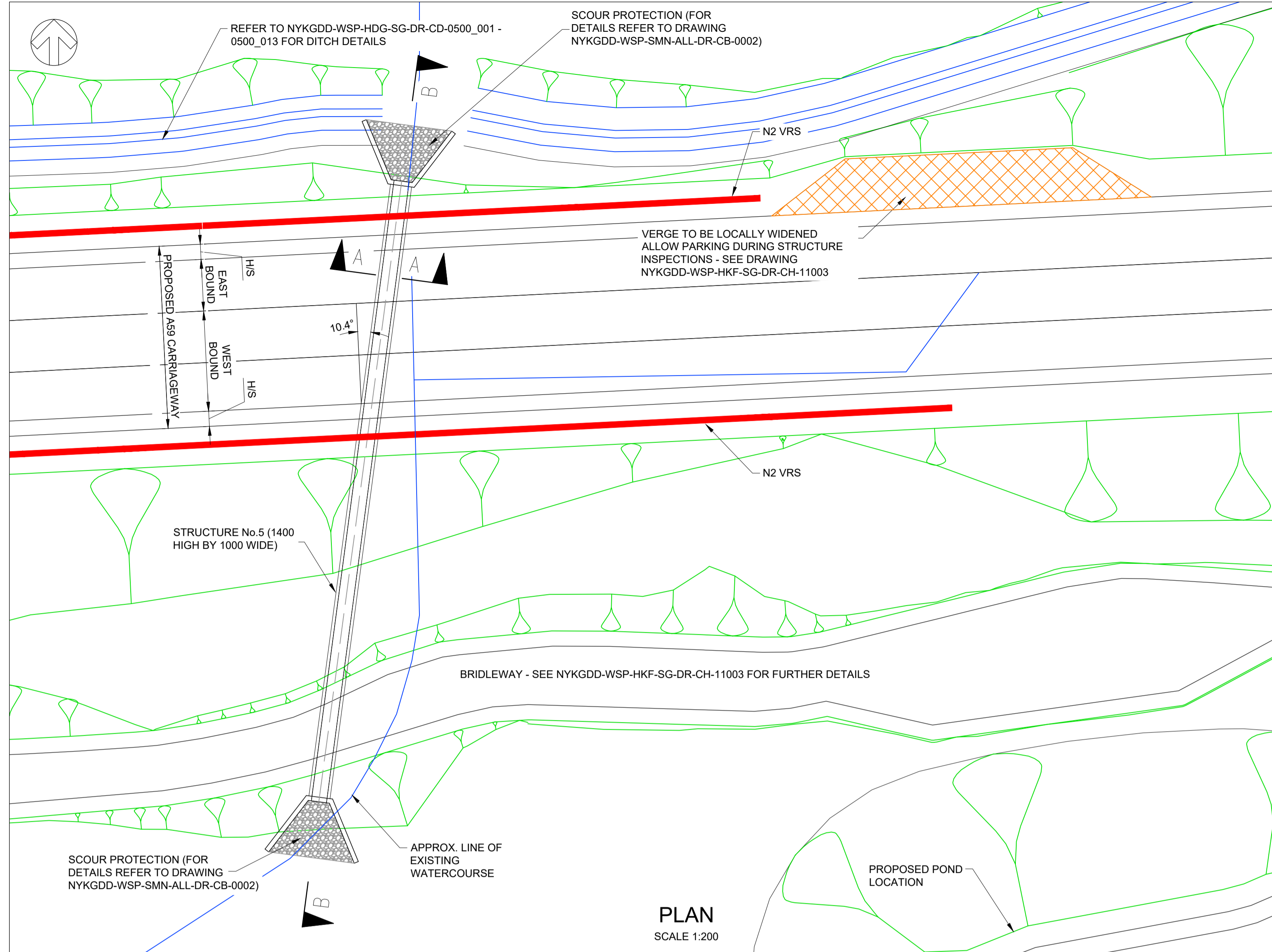
- REFER TO DRAWING NYKGGD-WSP-SMN-ALL-DR-CB-0002 AND SPECIFICATION APP 24/1 FOR DETAILS.

DRAWING SCHEDULE	
DRAWING NUMBER	TITLE
NYKGGD-WSP-SMN-ST005-DR-CB-0001	GENERAL ARRANGEMENT SHEET 1 OF 2
NYKGGD-WSP-SMN-ST005-DR-CB-0002	GENERAL ARRANGEMENT SHEET 2 OF 2
NYKGGD-WSP-SMN-ST005-DR-CB-0003	ST005 SETTING OUT DETAILS
NYKGGD-WSP-SMN-ALL-DR-CB-0001	TYPICAL CULVERT DETAILS SHEET 1 OF 2
NYKGGD-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.**

- INDICATIVE CONSTRUCTION SEQUENCE:**
- SET UP SITE COMPOUND
  - INSTALL WATERCOURSE DIVERSION TEMPORARY WORKS
  - INSTALL TEMPORARY WORKS TO SUPPORT EXCAVATION
  - EXCAVATE TO FORMATION LEVEL OF BOX CULVERT AND HEADWALL AND INSPECT GROUND CONDITIONS
  - INSTALL PRECAST CONCRETE BOX CULVERT SEGMENTS
  - INSTALL NATURAL BED AS CULVERT PROGRESS TO REDUCE CONFINED SPACE WORKING
  - INSTALL HEADWALLS TO BOTH ENDS OF THE STRUCTURE
  - RETURN WATERCOURSE TO PERMANENT CHANNEL
  - BACKFILL STRUCTURE IN A STAGED MANNER WITH HEIGHTS NOT DIFFERING BY GREATER THAN 250MM ON OPPOSING SIDES.
  - CONSTRUCT EMBANKMENTS, NEW A59 CARRIAGEWAY AND BRIDLEWAY
  - INSTALL CLADDING AND RAISED STONE WALL TO THE ENDS OF THE NEW CULVERT
  - INSTALL VRS TO THE NEW A59 VERGES
  - COMMISSION NEW A59 ROAD ALIGNMENT



**SAFETY, HEALTH AND ENVIRONMENTAL SYMBOL LEGEND**

INDICATES A RESIDUAL RISK AS A WARNING

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

CONSTRUCTION					
C15 - CONFINED SPACES (TANKS, TUNNELS, PITS, CULVERTS)					
C60 - FLOOD RISK (PLUVIAL)					
Rev.	Date	Description	By	Chk'd	App'd
C01	17/07/2023	ISSUED FOR CONSTRUCTION	SH	DM	DM

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Client  
**North Yorkshire County Council**

Project Title  
**A59 KEX GILL DIVERSION**

Drawing Title  
**A59 KEXGILL CULVERT (STR005) GENERAL ARRANGEMENT SHEET 1 OF 2**

Scale	Drawn	Checked	Approved	Authorised
AS SHOWN	LS	IM	HM	HM
Original Size	Date	Date	Date	Date
A1	31/01/20	31/01/20	31/01/20	31/01/20
Drawing Status	FOR REVIEW			Suitability
				S3
Drawing Number	Project	Originator	Volume	Project Ref. No.
NYKGGD	ST005	WSP	SMN	
Location	Type	Role	Number	Revision
	DR	CB	0001	C01