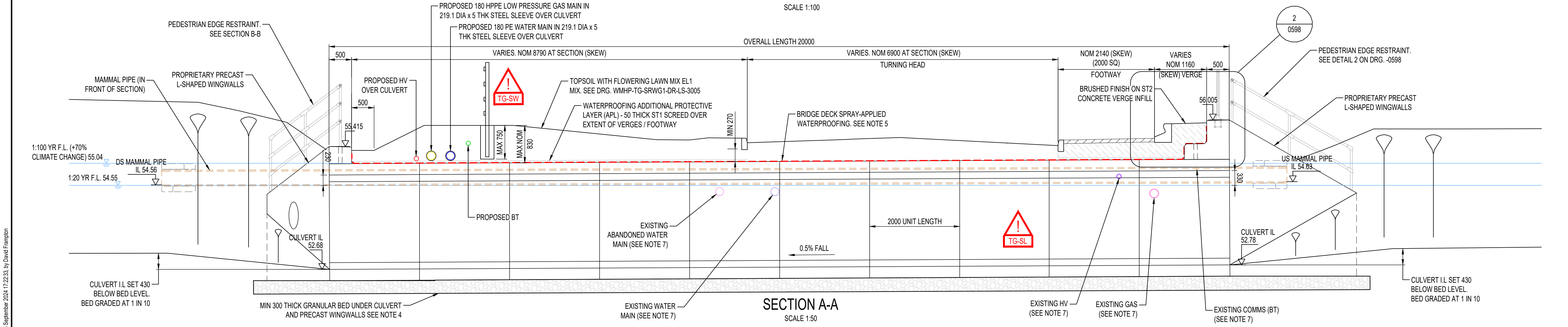
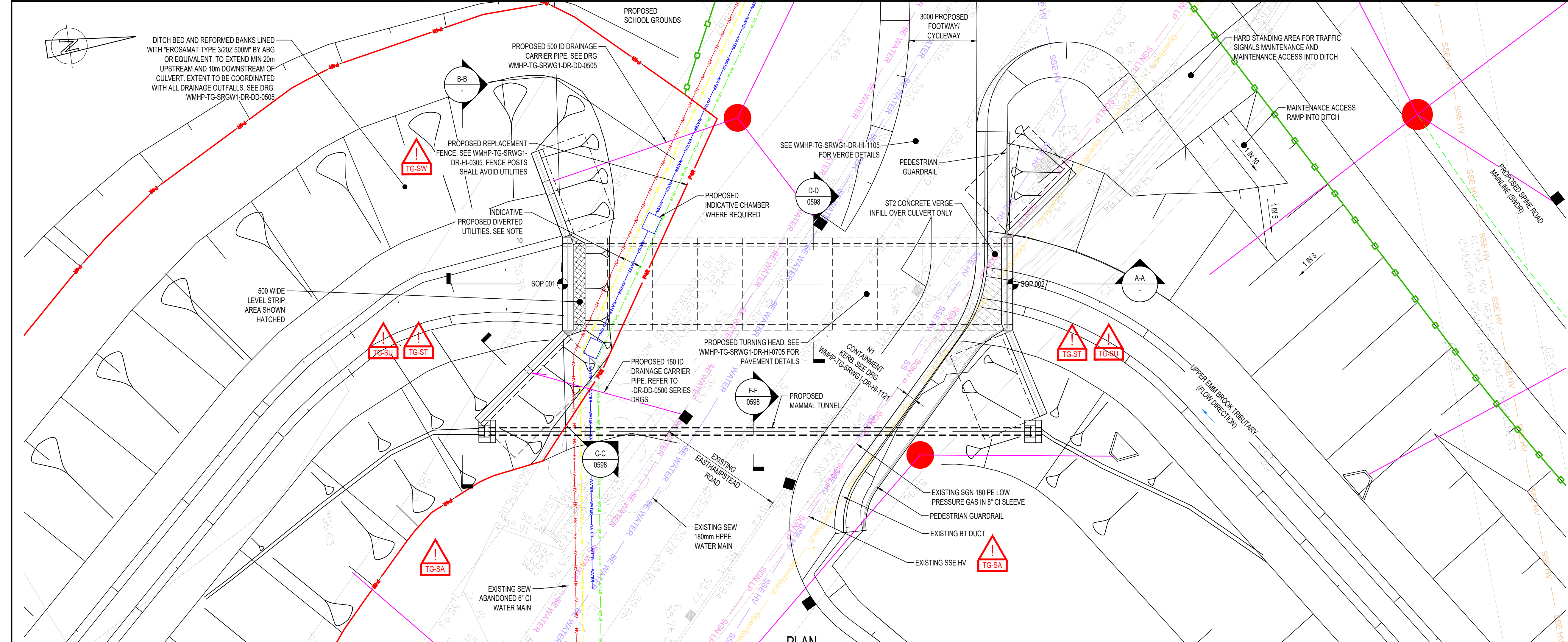


DO NOT SCALE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2. ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.

3. CULVERT UNITS TO BE CE-MARKED TO BS EN 14844 WITH SPIGOT AND SOCKET JOINING BETWEEN UNITS. PRECAST WINGWALL UNITS TO BE CE-MARKED TO BS EN 15258. UNITS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DESIGN SHALL BE IN ACCORDANCE WITH THIS DRAWING, DRGS -0598, -0599 AND THE AIP DOCUMENT (WMHP-TG-SRWG1-RP-SE-0598).

4. FORMATION LEVEL TO BE INSPECTED AND ANY SOFT AREAS (WHERE UNDRAINED SHEAR STRENGTH $c_u < 30$ kPa) TESTED IN ACCORDANCE WITH EARTHWORKS SPECIFICATION WMHP-TG-SRWG1-SP-GE-0601 WITH HAND SHEAR VANE TESTING. SOFT AREAS TO BE DUG AND REPLACED WITH MIN 300 THK CLASS 6A SELF-COMPACTING GRANULAR FILL WHERE WORKING IN GROUND WATER, OTHERWISE CLASS 1 GRANULAR FILL TO EARTHWORKS SPECIFICATION WMHP-TG-SRWG1-SP-GE-0601 GENERALLY. THIS IS TO BE OVERLAIN BY 300 THK CLASS 6A (OR CLASS 1 IF DRY) BEDDING TO CULVERT.

5. SPRAY-APPLIED WATERPROOFING TO COMPLY WITH APPENDIX 201 (WMHP-TG-SRWG1-SP-SE-2000). WATERPROOFING TERMINATION AND JOINTING DETAILS TO BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. TERMINATION AT TAPED EDGE ASSUMED. 1st APPLICATION OF WATERPROOFING (TO ENABLE UTILITIES TO BE DIVERTED OVER CULVERT UNITS) TO BE LAPPED WITH 2nd APPLICATION BY MIN OF 150mm OR AS REQUIRED BY WATERPROOFING MANUFACTURER AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. FORMED "F3" (OR OTHER) MOULD FINISH TO BE WATER-JETTED BY THE PRECASTER OR OTHER METHOD IN ACCORDANCE WITH SHW 1708.4 TO ACHIEVE U4 FINISH PRIOR TO WATERPROOFING APPLICATION.

6. 1 IN 100 YEAR FLOOD LEVEL BASED ON FLOOD MODELLING BY WSP SHOWN ON DRG. 60459-CUL-001 REV A, DATED 30/09/20.

7. EXISTING UTILITIES INFORMATION TAKEN FROM WSP DRAWING WMHP-WSP-SR-DR-UT-0001 BASED ON C2 SEARCH INFORMATION. DEPTHS SHOWN IN SECTION ARE INDICATIVE ONLY BASED ON NJUG VOL 1 ISSUE 9 "STREET WORKS UK GUIDANCE ON THE POSITIONING AND COLOUR CODING OF UNDERGROUND UTILITIES" APPARATUS". THE CONTRACTOR SHALL UNDERTAKE FURTHER SURVEYS, SCANS AND TRIAL HOLES TO CONFIRM AND LOCATE UTILITIES PRIOR TO CONSTRUCTION.

8. EXISTING BACKGROUND INFORMATION TAKEN FROM SURVEY FILE "XTOPOSURVEY" BY MURPHY SURVEYS, COMMISSIONED BY WSP, SUPPLIED BY WBC, AND FILE "XTOPO_ALL" SUPPLIED BY WSP. CONTRACTOR TO VERIFY ITS ACCURACY PRIOR TO CONSTRUCTION.

9. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWINGS WMHP-TG-SRWG1-DR-SE-0598, -0599 AND WMHP-TG-SRWG1-DR-DD-0534. REFER TO DRG. -SE-0599 FOR STANDARD DETAILS AND -DD-0534 FOR LOCATION PLAN.

10. FINAL UTILITIES DIVERSION ALIGNMENTS TO BE CONFIRMED BY CONTRACTOR IN CONJUNCTION WITH STATUTORY UNDERTAKERS FOLLOWING C3, C4

KEYPLAN

SWDR - WESTERN GATEWAY PHASE 2

SWDR - SPINE ROAD AND WESTERN GATEWAY PHASE 1

P06	25/09/2024	JB	REVISED FOR PLANNING DISCHARGE	JC	JC
P05	02/08/2022	HD	MATTERS OUTSTANDING WMHP-TG-SRWG1-RD-DM-0010	BH	JC
P04	01/11/2021	WA	TAA COMMENTS ADDRESSED	KL	CMF
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: SUITABLE FOR APPROVAL S5

DESIGNER:

Tony Gee
Consulting Civil, Structural and Geotechnical Engineers

Tony Gee and Partners LLP

Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com

CONTRACTOR:

Balfour Beatty

CLIENT:

WOKINGHAM BOROUGH COUNCIL

Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT:

WOKINGHAM MAJOR HIGHWAYS PROGRAMME

SPINE ROAD AND WESTERN GATEWAY PHASE 1

TITLE:

CULVERT C

STRUCTURE REFERENCE: 3105

GENERAL ARRANGEMENT

SHEET 1

SCALE @ A1:	AS SHOWN	CHECKED:	JC	APPROVED:	CMF
PROJECT NO:	C118047	DESIGNED:	VIA	DRAWN:	TCH
DRAWING NO:				DATE:	August 21
				REV:	

WMHP-TG-SRWG1-DR-SE-0597 P06

SIGNIFICANT RESIDUAL HAZARDS		
RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
ACCESS INSIDE BOX CULVERTS - WORKING IN / AROUND WATER	M	REMOTE METHODS OF INSPECTION TO BE USED AS FIRST METHOD. ENTRY TO ONLY OCCUR WHERE ABSOLUTELY NECESSARY. WATER ISOLATION METHODS (E.G. TEMPORARY DAM) TO BE CONSIDERED IN CONJUNCTION WITH LOW FLOW WARM, DRY WEATHER CONDITIONS, WITH EMERGENCY RESCUE PLAN READY TO BE IMPLEMENTED.
PRESENCE OF BURIED SERVICES	C/D	SERVICES SHOWN BASED ON C2 SEARCHES. CONTRACTOR TO CARRY OUT FURTHER SURVEYS AND SCANS TO CONFIRM POSITION OF SERVICES PRIOR TO CONSTRUCTION.
UNEXPLODED ORDNANCE	C/D	"LOW RISK" CATEGORY IDENTIFIED BY "1ST LINE DEFENCE" DESK STUDY RA. UXO RISK MANAGEMENT PLAN AND SITE SPECIFIC UXO AWARENESS BRIEFINGS TO BE GIVEN TO ALL PERSONNEL CONDUCTING INTRUSIVE WORKS

NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.

RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
STRIKING OF SERVICES WHILST INSTALLING BAGWORK PINS AND FENCE	C	SERVICES TO BE SCANNED AT LOCATIONS OF BAGWORK HEADWALLS AND FENCE POSTS PRIOR TO INSTALLATION OF BAGWORK ANCHOR PINS / FENCE POSTS
POSTS ENCOUNTERING GROUNDWATER IN EXCAVATION	C/D	CONTRACTOR TO IMPLEMENT SUITABLE WATER MANAGEMENT MEASURES AS NECESSARY