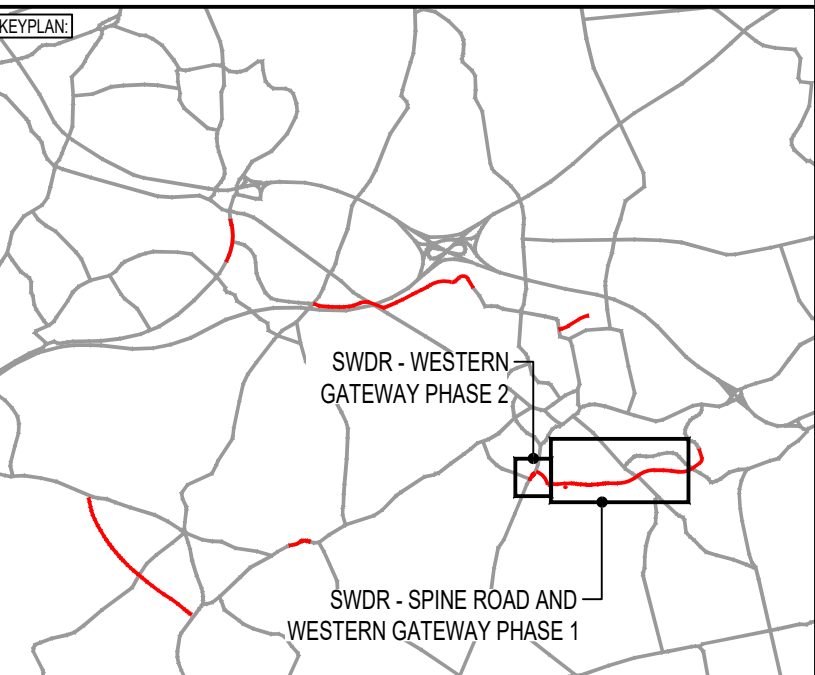


DO NOT SCALE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES ADJ UNLESS NOTED OTHERWISE.
3. CULVERT UNITS TO BE C-MARKED TO BS EN 14844 WITH SPIGOT AND SOCKET JOINING BETWEEN UNITS. PRECAST WINGWALL UNITS TO BE C-MARKED TO BS EN 12528. UNITS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DESIGN SHALL BE IN ACCORDANCE WITH THIS DRAWING, DRAWINGS -0592, -0599 AND AIP DOCUMENT WMPH-TK-SRWGI-RP-SE-0590.
4. FORMATION LEVEL TO BE INSPECTED AND ANY SOFT AREAS (WHERE UNDRAINED SHEAR STRENGTH $C_u < 30$ kPa) TESTED IN ACCORDANCE WITH EARTHWORKS SPECIFICATION WMPH-TK-SRWGI-SP-GE-0601 WITH HAND SHOWN VANE TESTING. SOFT AREAS TO BE DREDGED AND REPLACED WITH MIN 300 CLASS 6A SELF-COMPACTING GRANULAR FILL WHERE WORKING IN GRASS BARE, OTHERWISE CLASS 1 GRANULAR FILL TO EARTHWORKS SPECIFICATION WMPH-TK-SRWGI-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 (WMPH-TK-SRWGI-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 PLACE SURROUNDING 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 PRECASTOR OR OTHER METHOD IN ACCORDANCE WITH SHW 1708.4 TO ACHIEVE U4 FINISH PRIOR TO WATERPROOFING APPLICATION.
6. IN 1 IN 100 FLOOD LEVEL BASED ON FLOOD MODELLING BY WSP SHOWN ON DR. 66439-CUL-001 REV A, DATED 30/09/20.
7. EXISTING UTILITIES INFORMATION TAKEN FROM WSP DRAWING WMPH-WSP-SR-DRI-JT-001 BASED ON C2 SEARCH INFORMATION. ISSUES SHOWN IN SECTION ARE NOT NEARLY BASED ON NUGS VOL. 1, PTHS 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. PROPOSED UTILITIES ASSUMED AS PER EXISTING LOCATIONS.
8. EXISTING BACKGROUND AND EXISTING TREE INFORMATION TAKEN FROM SURVEY FILE "XTOPUSURVEY" BY MURPHY SURVEYS, COMMISSIONED BY WSP, SUPPLIED BY WBC, AND FILE "XTOPO_A1" SUPPLIED BY WSP. CONTRACTOR TO VERIFY ITS ACCURACY PRIOR TO CONSTRUCTION.
9. G248 TREES DEFINED BY DPA REPORT "ARBORICULTURAL IMPACT ASSESSMENT TO ACCOMMODATE PLANNING APPLICATION AT LAND AT PHASE 2B OF THE SOUTH WOKINGHAM SCD" DATED AUGUST 2020.



P04	01/11/2021	WA	TAA COMMENTS ADDRESSED	KL	CMF
P03	08/08/2021	WA	DETAILED DESIGN	KL	JC
P02	22/07/2021	WA	TAA COMMENTS ADDRESSED	KL	CMF
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **SUITABLE FOR REVIEW & COMMENT** **S3**

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:

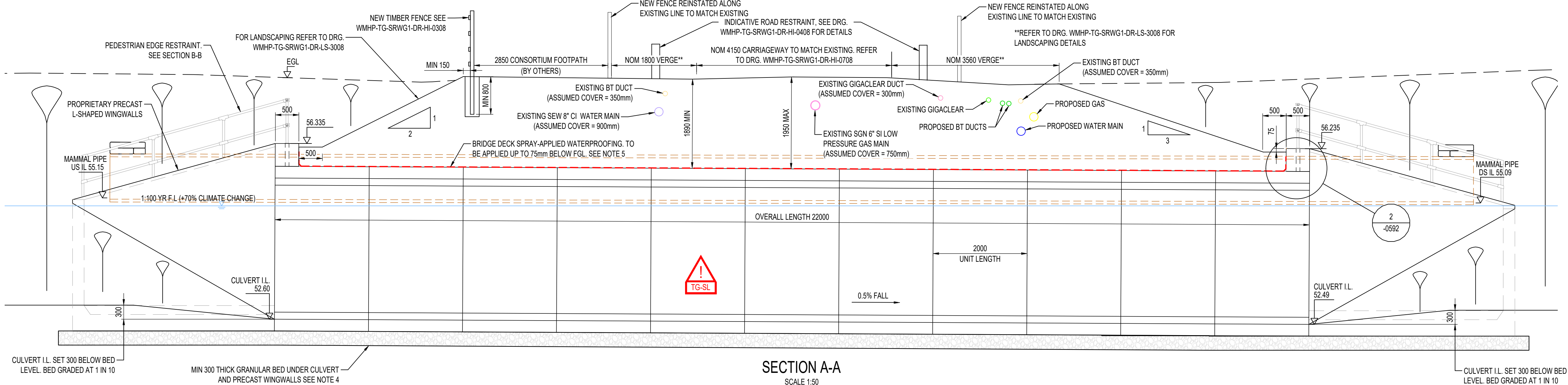
WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SPINE ROAD AND WESTERN GATEWAY PHASE 1

TITLE: SANG CULVERT D
STRUCTURE REFERENCE: 3106
GENERAL ARRANGEMENT

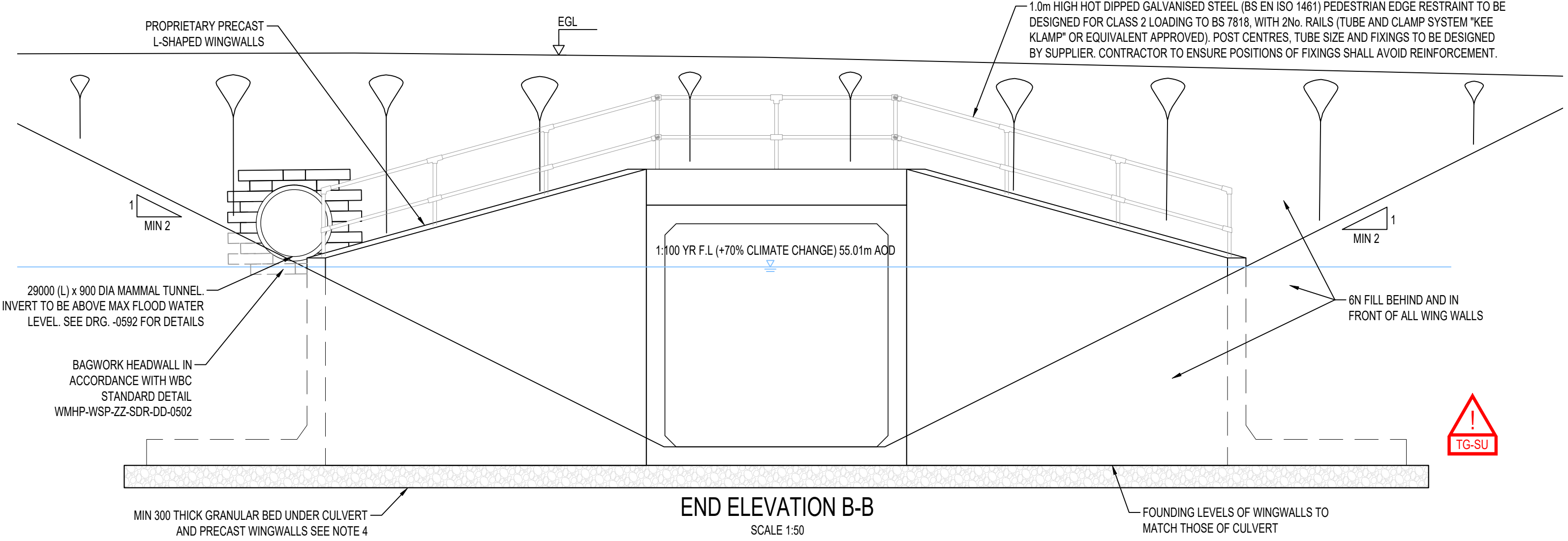
CALE @ A1: AS SHOWN	CHECKED: KL	APPROVED: CMF
PROJECT NO: C118047	DESIGNED: WA	DRAWN: PW
		DATE: May 21

WMHP-TG-SRWG1-DR-SE-0591

P04



SECTION A-A
SCALE 1:50



END ELEVATION B-B
SCALE 1:50

AFFECTED TREES LEGEND

- GROUP G248 TREE DESIGNATED FOR REMOVAL
IN DPA REPORT (DOC REF DPA7021-AIS-REV_4
(AUGUST 2020)) UNDER TPO 1434 2012
- ADDITIONAL G248 TREE POTENTIALLY
AFFECTED (ABORICULTURIST TO CONFIRM)
- G248 TREE WHERE ARBORICULTURAL
SUPERVISION MAY BE REQUIRED

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 ONLY. CONTRACTOR TO CARRY OUT FURTHER SURVEYS, SCANS AND HAND-DOG TRIAL HOLES / TRENCHES 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
ENCOUNTERING GROUNDWATER IN EXCAVATION 	C/D	CONTRACTOR TO IMPLEMENT SUITABLE WATER MANAGEMENT MEASURES AS NECESSARY