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The designs relating to TMS equipment detailed on this drawing have been developed from information received from TMS but not endorsed by TfGM and as such is not warranted by MPT

NOTES:

1. DO NOT SCALE FROM DRAWING
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN
3. STATED LEVELS ARE IN METRES ABOVE ORDNANCE DATUM
4. CO-ORDINATES ARE SHOWN ON METROLINK PROJECT GRID
5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION

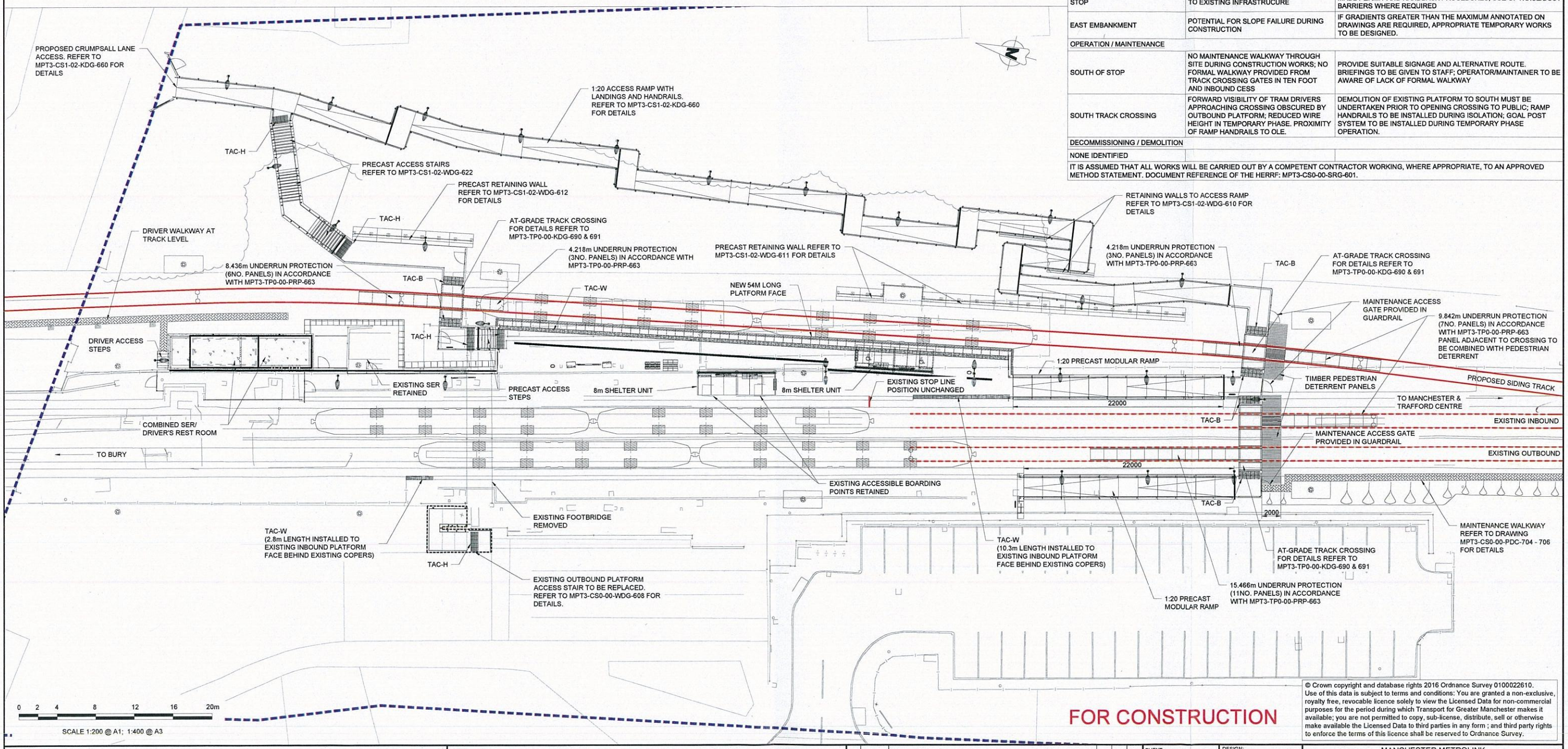
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

MPT3-CS1-02-KDP-640	CRUMPSALL STOP DRAINAGE LAYOUT
MPT3-CS1-02-KDP-650	CRUMPSALL STOP DUCTING LAYOUT
MPT3-CS1-02-KSC-651	CRUMPSALL STOP DUCTING SCHEDULE
MPT3-CS1-02-KDG-660	CRUMPSALL STOP CRUMPSALL LANE ACCESS GENERAL ARRANGEMENT
MPT3-CS1-02-KDG-661	CRUMPSALL STOP CRUMPSALL LANE ACCESS SECTIONS AND ELEVATIONS
MPT3-CS1-02-KDG-662	CRUMPSALL STOP CRUMPSALL LANE ACCESS SETTING OUT
MPT3-CS1-02-KDP-670	CRUMPSALL STOP PRECAST RAMP MODULAR LAYOUT
MPT3-CS1-02-KDG-680	CRUMPSALL STOP PRECAST RAMP FOUNDATION GENERAL ARRANGEMENT
MPT3-CS1-02-KDG-681	CRUMPSALL STOP PRECAST RAMP FOUNDATION RC DETAILS
MPT3-CS1-02-KSC-681	CRUMPSALL STOP PRECAST RAMP FOUNDATION RC SCHEDULE
MPT3-CS1-02-KDP-690	CRUMPSALL STOP PAVEMENT EXTENTS LAYOUT
MPT3-CS1-02-KDP-695	CRUMPSALL STOP WORKS TO OUTBOUND PLATFORM
MPT3-CS1-02-KDP-700	CRUMPSALL STOP LIGHTING GENERAL LAYOUT
MPT3-CS1-02-KDP-701	CRUMPSALL STOP LIGHTING LUX CONTOURS

MPT3-CS1-02-LDG-610	CRUMPSALL STOP PLATFORM FURNITURE PLAN AND ELEVATION
MPT3-CS1-02-LDP-620	CRUMPSALL STOP HANDRAIL AND GUARDRAIL LAYOUT
MPT3-CS1-02-LDP-630	CRUMPSALL STOP SIGNAGE LAYOUT
MPT3-CS1-02-LDG-631	CRUMPSALL STOP EXISTING SIGNAGE MODIFICATIONS
MPT3-TP0-00-KDG-690 - 691	STOPS TRACK CROSSING STANDARD DETAILS
MPT3-TP0-00-KDG-730 - 733	STOPS DUCTING STANDARD DETAILS
MPT3-TP0-00-KDG-740	STOPS DRAINAGE STANDARD DETAILS
MPT3-TP0-00-LDG-601 - 608	STOPS HANDRAIL/GUARDRAIL STANDARD DETAILS
MPT3-TP0-00-KDG-660	DRIVER'S REST AND STOP EQUIPMENT ROOM GENERAL ARRANGEMENT
MPT3-TP0-00-KDG-661	DRIVER'S REST AND STOP EQUIPMENT ROOM SECTIONAL DETAILS SHEET 1
MPT3-TP0-00-KDG-662	DRIVER'S REST AND STOP EQUIPMENT ROOM SECTIONAL DETAILS SHEET 2
MPT3-TP0-00-KDG-665	DRIVER'S REST AND STOP EQUIPMENT ROOM ELECTRICAL DETAILS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION - RESIDUAL HAZARD ASSESSMENT

LOCATION	RESIDUAL HAZARD	SITE MEASURES TO ADDRESS HAZARD
CONSTRUCTION		
THROUGHOUT SITE	PRESENCE OF GROUND GAS, ASBESTOS, BURIED SERVICES AND INVASIVE SPECIES	REFER TO HERRF DOCUMENT MPT3-CS0-00-SRG-601 FOR SPECIFIC DETAILS AND CONTROL MEASURES REQUIRED
EXISTING LIFT SHAFT	HYPODERMIC NEEDLES HAVE BEEN REPEATEDLY FOUND ON SITE	SHARPS SWEEP TO BE UNDERTAKEN BY TRAINED STAFF DURING CONSTRUCTION, LOOKING SPECIFICALLY FOR NEEDLES.
EXISTING FOOTBRIDGE	CONSTRUCTION WORKS ADJACENT TO CRUMPSALL STATION FOOTBRIDGE, LEADING TO UNDERMINING AND COLLAPSE.	TEMPORARY WORKS DESIGN TO BE PROVIDED BY THE CONTRACTOR WHICH CONSIDERS THE NEED TO TEMPORARILY STABILISE THE STRUCTURE AND THE CONSTRUCTION SEQUENCING PROPOSED AROUND THE BRIDGE.
EAST EMBANKMENT	DESIRE LINE FROM ADJACENT PROPERTIES DOWN THE EMBANKMENT TO THE STOP.	UNAUTHORISED ACCESS TO BE DETERRED BY TEMPORARY HOARDINGS AND MARKED WITH SIGNAGE DURING CONSTRUCTION WORKS.
EAST EMBANKMENT	WORKING ON STEEP EMBANKMENT	APPROPRIATE CONSTRUCTION METHODOLOGY TO BE DEVELOPED. CONSIDER THE USE OF EDGE RESTRAINT SYSTEMS AND HARNESSES.
WORKS ALONGSIDE OPERATIONAL MAIN LINE	WORKING ALONGSIDE OPERATIONAL MAINLINES	APPROPRIATE RAMS TO BE DEVELOPED. WORKS TO BE PLANNED IN LIAISON WITH OPERATOR USING PERMIT SYSTEM - USE OF SAFETY CRITICAL STAFF WHERE REQUIRED; ENSURE DRIVER VISIBILITY NOT OBSCURED BY CONSTRUCTION PLANT/MATERIALS
WORKS WITHIN OPERATIONAL STOP	PUBLIC ENTERING WORK AREAS; DAMAGE TO EXISTING INFRASTRUCURE	USE OF TEMPORARY HOARDINGS AND SIGNAGE; ADHERENCE TO MRDL PERMIT AND HANDBACK PROCEDURES; USE OF NOISE/DUST BARRIERS WHERE REQUIRED
EAST EMBANKMENT	POTENTIAL FOR SLOPE FAILURE DURING CONSTRUCTION	IF GRADIENTS GREATER THAN THE MAXIMUM ANNOTATED ON DRAWINGS ARE REQUIRED, APPROPRIATE TEMPORARY WORKS TO BE DESIGNED.
OPERATION / MAINTENANCE		
SOUTH OF STOP	NO MAINTENANCE WALKWAY THROUGH SITE DURING CONSTRUCTION WORKS; NO FORMAL WALKWAY PROVIDED FROM TRACK CROSSING GATES IN TEN FOOT AND INBOUND CESS	PROVIDE SUITABLE SIGNAGE AND ALTERNATIVE ROUTE. BRIEFINGS TO BE GIVEN TO STAFF; OPERATOR/MAINTAINER TO BE AWARE OF LACK OF FORMAL WALKWAY
SOUTH TRACK CROSSING	FORWARD VISIBILITY OF TRAM DRIVERS APPROACHING CROSSING OBSCURED BY OUTBOUND PLATFORM; REDUCED WIRE HEIGHT IN TEMPORARY PHASE. PROXIMITY OF RAMP HANDRAILS TO OLE.	DEMOLITION OF EXISTING PLATFORM TO SOUTH MUST BE UNDERTAKEN PRIOR TO OPENING CROSSING TO PUBLIC; RAMP HANDRAILS TO BE INSTALLED DURING ISOLATION; GOAL POST SYSTEM TO BE INSTALLED DURING TEMPORARY PHASE OPERATION.
DECOMMISSIONING / DEMOLITION		
NONE IDENTIFIED		
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. DOCUMENT REFERENCE OF THE HERRF: MPT3-CS0-00-SRG-601.		



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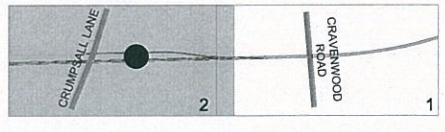
FOR CONSTRUCTION

LOCATION PLAN



KEY

- AREA OF PERMITTED DEVELOPMENT
- PROPOSED OLE POLE
- PROPOSED LIGHTING COLUMN
- ACCESSIBLE BOARDING POINT

TACTILE PAVING TYPES:

- TAC-B: PCC BLISTER TACTILES TO TRACK CROSSING; 800mm DEEP; SIZE 450x450mm; COLOUR: BUFF
- TAC-H: PCC CORDUROY HAZARD WARNING TACTILES; 800mm DEEP; SIZE 400x400mm; COLOUR BUFF
- TAC-W: PCC PLATFORM EDGE (OFF-STREET) WARNING TACTILES (STAGGERED BLISTER); 400mm DEEP; SIZE 400x400mm; COLOUR BUFF

REV	DATE	DETAIL	MADE	CHK'D	APP'D
Q01	13/04/17	ISSUED FOR CONSTRUCTION	CB	NB	ND

CLIENT: Transport for Greater Manchester

MPT Laing O'Rourke Volkerfitzl | Thales

DESIGN:	ZJ
CAD:	CB
CHK'D:	NB
APP'D:	ND
SCALE:	1:100@A1
DATE:	29/01/2017

MANCHESTER METROLINK TRAFFORD PARK LINE

TITLE: CRUMPSALL STOP GENERAL LAYOUT

DRG No: MPT3-CS1-02-KDP-610

REV: Q01

cm A1

DRG Path: C:\pworking\tgmcom_eu\wsp001\001189265\MPT3-CS1-02-KDP-610.dwg User: lwp01 Plot time: 31-03-17 @ 4:26pm

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NOTES:

1. DO NOT SCALE FROM DRAWING
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN
3. STATED LEVELS ARE IN METRES ABOVE ORDNANCE DATUM
4. CO-ORDINATES ARE SHOWN ON METROLINK PROJECT GRID
5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH SPECIFICATION FOR HIGHWAYS WORKS
6. FOR SETTING OUT OF OF PRECAST RAMP AND STAIR UNITS REFER TO MPT3-CS1-02-KDP-670
7. FOR SETTING OUT OF RAMP FOUNDATION REFER TO MPT3-CS1-02-KDG-680
8. FOR SETTING OUT OF DUCTING REFER TO MPT3-CS1-02-KDP-650
9. FOR SETTING OUT OF DRAINAGE REFER TO MPT3-CS1-02-KDP-640
10. FOR SETTING OUT OF CRUMPSALL LANE ACCESS RAMP REFER TO MPT3-CS1-02-KDG-660/661/662
11. CONSTRUCTION TOLERANCE ON SETTING OUT POINTS:
    ±10mm ON PLAN
    ±10mm ON LEVEL
    WITH THE FOLLOWING EXCEPTIONS:
    TRACK INSTALLATION TOLERANCE AT HANDOVER:
    +5mm HORIZONTAL
    +5/-0mm VERTICAL
12. OFFSET TO PLATFORM EDGE FROM NEAREST RAIL (RUNNING EDGE) TO BE 648 mm HORIZONTAL AND 915mm VERTICAL. TOLERANCE AT HANDOVER +/- 5mm
13. JOINTS BETWEEN NEW AND EXISTING ASPHALT PAVEMENT TO BE AS PER DETAILS ON DRAWING MPT3-TP0-00-HDD-617

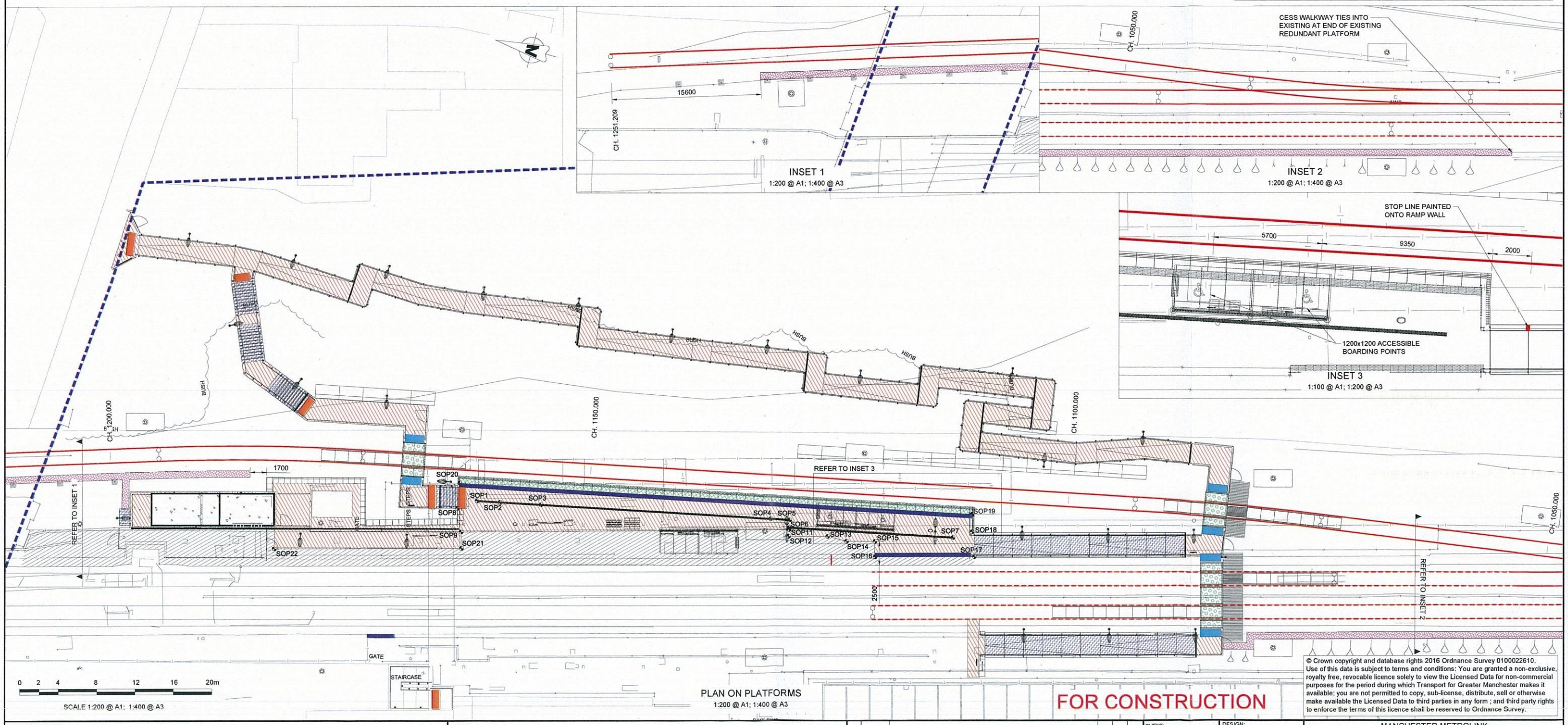
KEY:

- FLEXIBLE FOOTWAY TYPE F2 AS PER MPT3-TP0-00-HDD-618
- TRACK CROSSING PANELS AS PER MPT3-TP0-00-KDG-690
- PRECAST CONCRETE UNITS; REFER TO MPT3-CS1-02-KDP-670 FOR DETAILS
- BLISTER SURFACE TACTILE PAVING TO TRACK CROSSINGS, BUFF
- CORDUROY HAZARD WARNING SURFACE TACTILE PAVING, BUFF
- PLATFORM EDGE (OFF-STREET) WARNING SURFACE TACTILE PAVING, BUFF
- PRECAST CONCRETE COPING STONE; REFER TO MPT3-CS1-02-WDG-662
- DRIVER WALKWAY; REFER TO MPT3-CS0-00-PDC-704 - 706 FOR DETAILS
- EXISTING PLATFORM SURFACING RETAINED

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION - RESIDUAL HAZARD ASSESSMENT

LOCATION	RESIDUAL HAZARD	SITE MEASURES TO ADDRESS HAZARD
CONSTRUCTION		
THROUGHOUT SITE	PRESENCE OF GROUND GAS, ASBESTOS, BURIED SERVICES AND INVASIVE SPECIES	REFER TO HERRF DOCUMENT MPT3-CS0-00-SRG-601 FOR SPECIFIC DETAILS AND CONTROL MEASURES REQUIRED
EXISTING LIFT SHAFT	HYPODERMIC NEEDLES HAVE BEEN REPEATEDLY FOUND ON SITE	SHARPS SWEEP TO BE UNDERTAKEN BY TRAINED STAFF DURING CONSTRUCTION, LOOKING SPECIFICALLY FOR NEEDLES.
EXISTING FOOTBRIDGE	CONSTRUCTION WORKS ADJACENT TO CRUMPSALL STATION FOOTBRIDGE, LEADING TO UNDERMINING AND COLLAPSE.	TEMPORARY WORKS DESIGN TO BE PROVIDED BY THE CONTRACTOR WHICH CONSIDERS THE NEED TO TEMPORARILY STABILISE THE STRUCTURE AND THE CONSTRUCTION SEQUENCING PROPOSED AROUND THE BRIDGE.
OPERATION / MAINTENANCE		
SOUTH OF STOP	NO MAINTENANCE WALKWAY THROUGH SITE DURING CONSTRUCTION WORKS; NO FORMAL WALKWAY PROVIDED FROM TRACK CROSSING GATES IN TEN FOOT AND INBOUND CESS	PROVIDE SUITABLE SIGNAGE AND ALTERNATIVE ROUTE. BRIEFINGS TO BE GIVEN TO STAFF; OPERATOR/MAINTAINER TO BE AWARE OF LACK OF FORMAL WALKWAY
DECOMMISSIONING / DEMOLITION		
NONE IDENTIFIED		
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. DOCUMENT REFERENCE OF THE HERRF: MPT3-CS0-00-SRG-601.		

SOP No.	EASTING	NORTHING	LEVEL	LOCATION
SOP1	44119.323	52326.269	72.300	CENTRE ACO CHANNEL
SOP2	44119.900	52323.651	72.300	CENTRE ACO CHANNEL
SOP3	44120.740	52319.741	72.296	CENTRE ACO CHANNEL
SOP4	44125.747	52296.271	72.248	CENTRE ACO CHANNEL
SOP5	44126.154	52294.313	72.238	CENTRE ACO CHANNEL
SOP6	44125.376	52294.147	72.238	CENTRE ACO CHANNEL
SOP7	44128.957	52277.345	72.185	CENTRE ACO CHANNEL
SOP8	44118.081	52328.008	72.340	TOP OF PLATFORM STAIRS
SOP9	44115.798	52326.991	72.347	PLATFORM LEVEL TIE-IN
SOP10	44126.628	52288.278	72.208	CENTRE ACO CHANNEL
SOP11	44125.185	52294.106	72.249	PLATFORM LEVEL TIE-IN
SOP12	44124.494	52293.959	72.250	PLATFORM LEVEL TIE-IN
SOP13	44125.570	52290.056	72.248	PLATFORM LEVEL TIE-IN
SOP14	44125.619	52288.007	72.234	PLATFORM LEVEL TIE-IN
SOP15	44126.403	52285.156	72.250	PLATFORM LEVEL TIE-IN
SOP16	44124.846	52284.752	72.237	PLATFORM LEVEL TIE-IN
SOP17	44127.645	52274.701	72.200	TOP OF PLATFORM RAMP
SOP18	44130.032	52275.366	72.200	TOP OF PLATFORM RAMP
SOP19	44131.823	52276.065	72.234	BACK OF NEW COPING
SOP20	44120.700	52328.201	72.341	BACK OF NEW COPING
SOP21	44114.176	52326.490	72.366	PLATFORM LEVEL TIE-IN
SOP22	44108.931	52345.248	72.430	PLATFORM LEVEL TIE-IN



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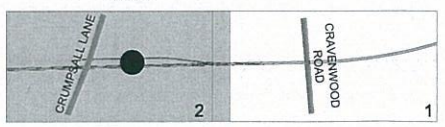
FOR CONSTRUCTION

LOCATION PLAN

CRUMPSALL STOP



KEY

- AREA OF PERMITTED DEVELOPMENT
- PROPOSED OLE POLE
- PROPOSED LIGHTING COLUMN

REV	DATE	DETAIL	MADE	CHK'D	APP'D
Q01	13/04/17	ISSUED FOR CONSTRUCTION	JL	NB	ND

CLIENT: Transport for Greater Manchester

MPT Laing O'Rourke Volker Rail Thales

DESIGN:	ZJ
CAD:	CB
CHK'D:	NB
APP'D:	ND
SCALE:	AS SHOWN
DATE:	29/01/2017

MANCHESTER METROLINK
TRAFFORD PARK LINE

TITLE: CRUMPSALL STOP PAVEMENT PLAN

DRG No: MPT3-CS1-02-KDP-690

REV: Q01

cm | A1

DRG Path: C:\pwworking\tecom_eu\brookdam\d0119895\MPT3-CS1-02-KDP-690.dwg User: brookdam Plot time: 11-04-17 @ 12:30pm

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KEY:

CAN	SHELTER UNIT
TVM	TICKET VENDING MACHINE
S	SEATS
PER	PERCH SEATS
PEC/PHP	PASSENGER EMERGENCY CONTACT POINT / PASSENGER HELP POINT
SNP	STOP NAME PLATE
PC	POSTER CASE
ABP	ACCESSIBILITY BOARDING POINT CAST INTO PLATFORM UNIT
PID	PASSENGER INFORMATION DISPLAY
LB	LITTER BIN
TPC	TRIPLE POSTER CASE
LC	LIGHT COLUMN
TV	TICKET VALIDATOR
TVTS	TICKET VALIDITY SIGN
BS	BICYCLE SIGN
OLE	OLE POLE
AB	FULL HEIGHT ADVERTISING BOARD
MRU	PCC MODULAR RAMP UNITS DARK GREY CONTRASTING EXPOSED AGGREGATE CONCRETE FINISH TO RAMP SURFACE.
STP	PCC MODULAR STEP UNITS
TAC-B	PCC TACTILE FLAGS TO TRACK CROSSING SIZE: 450x450mm: COLOUR: BUFF, PATTERN: BLISTER
TAC-W	BUFF PLATFORM EDGE (OFF STREET) WARNING TACTILE 400mm DEEP (STAGGERED BLISTER)
TAC-H	PCC TACTILE FLAGS TO TOP AND BOTTOM OF STEPS AND RAMPS; SIZE: 400x400mm: COLOUR: BUFF PATTERN: HAZARD WARNING CORDUROY; LAYOUT: 800mm DEEP
GR	GUARD RAILING
HR	HANDRAILS

GENERAL NOTES:

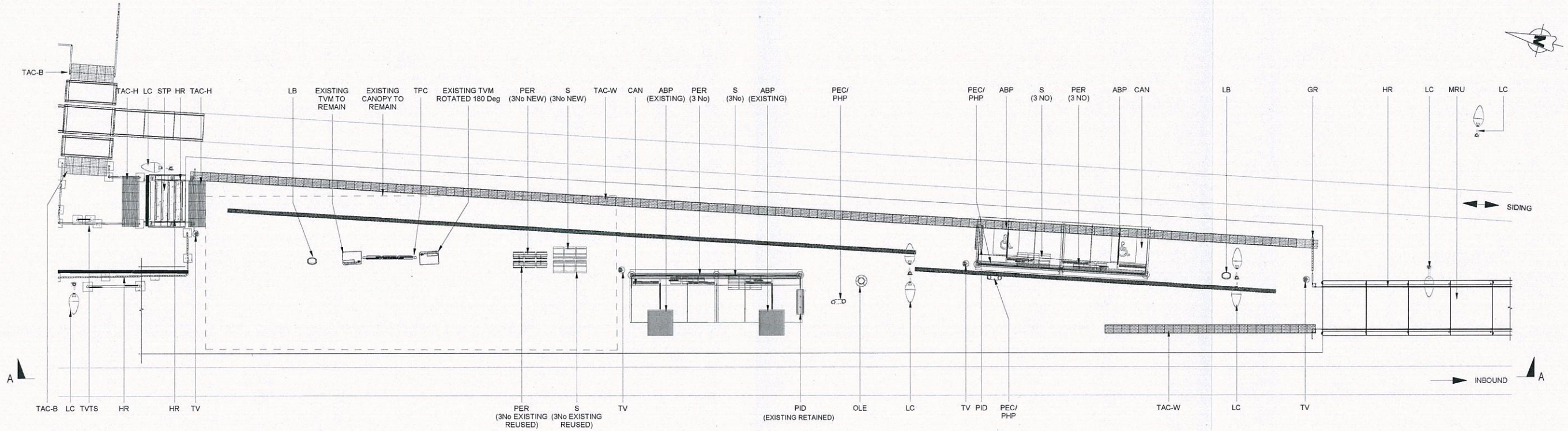
-DO NOT SCALE FROM DRAWING
-ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN
-ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION
-FURNITURE & EQUIPMENT QUANTITIES BASED ON TPL DESIGN & CONSTRUCTION SPECIFICATION V.1.18
-FOR POSITION OF CCTV CAMERAS, PA SPEAKERS AND INDUCTION LOOPS REFER TO THALES STOP EQUIPMENT DRAWINGS.
-FOR DETAILED DESIGN OF SHELTERS REFER TO SUPPLIER DRAWINGS
-FOR DETAILS OF SPECIFIC RESIDUAL HAZARDS REFER TO CRUMPSALL HERRF REF MPT3-CS0-00-SRG-601

NOTES:

PLATFORM DETAIL
- PLATFORM SURFACE TO BE ASPHALT FINISH. REFER TO DRAWING MPT3-CS1-02-KDP-690 FOR DETAILS
- SOLID WALLS TO FRONT OF PLATFORM IN CONCRETE BLOCKWORK
- FOR DETAILS OF FRONT WALL AND PLATFORM EDGE COPERS REFER TO DRAWING MPT3-CS1-02-WDG-660 to 662
- TACTILE UNITS (OFF-STREET PLATFORM EDGE TYPE [STAGGERED BLISTER]) 400mm DEEP TO FULL LENGTH OF PLATFORM - COLOUR BUFF

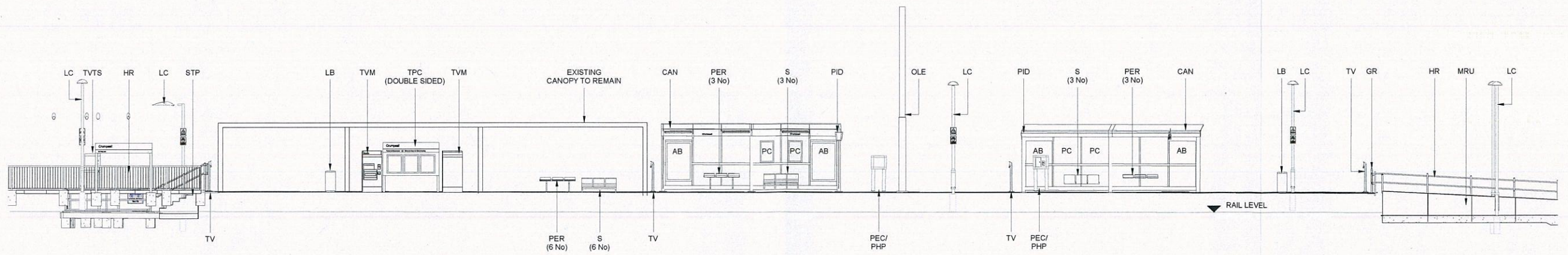
ACCESS RAMPS
- PRECAST CONCRETE MODULAR UNITS WITH CONTRASTING DARK GREY EXPOSED AGGREGATE CONCRETE
- EDGE WALLS TO HAVE 100mm UPSTAND TO RAMP SURFACE AT 1:20 MAXIMUM LENGTH 10m WITH 2m LONG LANDINGS

ACCESS STEPS
- PRECAST CONCRETE MODULAR UNITS TO MATCH PLATFORMS
- STEPS TO HAVE 300mm TREADS, 150mm RISERS, CONTRASTING NOSINGS 55mm TO TOP AND FACE OF NOSING
- TACTILE PAVING (CORDUROY HAZARD TYPE) PROVIDED 800mm DEEP TO TOP AND BOTTOM - COLOUR BUFF TO CONTRAST WITH SURROUNDING SURFACE



PLAN ON ISLAND PLATFORM

SCALE 1 : 100



ELEVATION A-A

SCALE 1 : 100

0 1 2 4 6 8 10m

SCALE 1:100 @ A1; 1:200 @ A3

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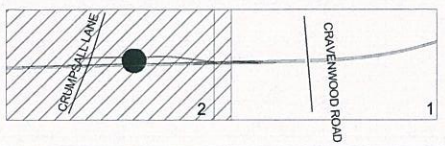
LOCATION PLAN

CRUMPSALL STOP



KEY

FOR CONSTRUCTION

REV	DATE	DETAIL	MADE	CHK'D	APP'D
Q01	13/04/17	ISSUED FOR CONSTRUCTION	JB	NB	ND

CLIENT: Transport for Greater Manchester

MPT Laing O'Rourke Volker Rail Thales

DESIGN:	ZJ
CAD:	MR
CHK'D:	NB
APP'D:	ND
SCALE:	1:100 @ A1
DATE:	11/01/2016

MANCHESTER METROLINK
TRAFFORD PARK LINE

TITLE:
CRUMPSALL STOP
PLATFORM FURNITURE
PLAN AND ELEVATION

DRG No' MPT3 -CS1 -02- L DG- 610

REV: Q01

cm | A1

C:\Users\Beccm\Documents\MPT3-CS1-02-KMD-600-CrumpsallStop_BeccmEdit.rvt

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KEY

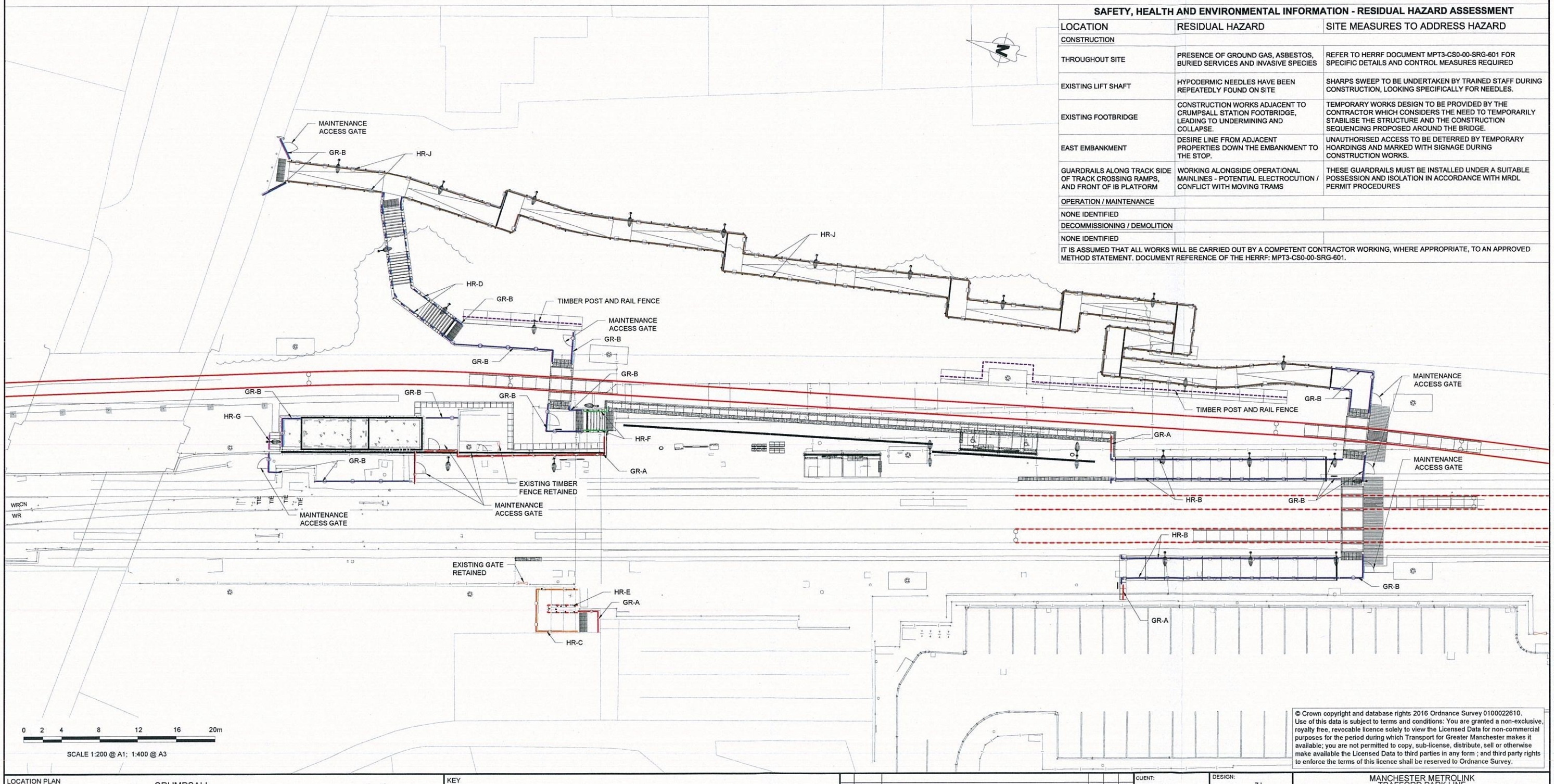
- GR-A: GUARD RAIL WITH INFILL PANEL REFER TO MPT3-TP0-00-LDG-603
- GR-B: GUARD RAIL WITHOUT INFILL PANEL REFER TO MPT3-TP0-00-LDG-603
- HR-A: HANDRAIL TO RAMP WITH INFILL PANEL REFER TO MPT3-TP0-00-LDG-601
- HR-B: HANDRAIL TO RAMP WITHOUT INFILL PANEL REFER TO MPT3-TP0-00-LDG-601
- HR-G: HANDRAIL TO MAINTENANCE STAIR REFER TO MPT3-TP0-00-LDG-604
- HR-D: HANDRAIL TO STAIR WITHOUT INFILL PANEL REFER TO MPT3-TP0-00-LDG-602
- HR-E: HANDRAIL TO STAIR WITH INFILL PANEL REFER TO MPT3-TP0-00-LDG-602
- HR-C: WALL FIXED HANDRAIL REFER TO MPT3-TP0-00-LDG-602
- HR-F: HANDRAIL TO PLATFORM END STEPS REFER TO MPT3-TP0-00-LDG-604
- HR-J: HANDRAIL TO ACCESS RAMP WITH TAPPING RAIL REFER TO MPT3-TP0-00-LDG-604
- TIMBER POST AND RAIL FENCE TYPE H15 IN ACCORDANCE WITH MCHW HIGHWAY CONSTRUCTION DETAILS
- PROPOSED OLE POLE
- PROPOSED LIGHTING COLUMN

NOTES

1. DO NOT SCALE FROM THIS DRAWING
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
3. AFC EARTHING AND BONDING DETAILS WERE NOT AVAILABLE AT TIME OF ISSUE OF THIS DRAWING. REFER TO AFC STAGE EARTHING AND BONDING DRAWINGS FOR DETAILS OF RAILINGS REQUIRING BONDING.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION - RESIDUAL HAZARD ASSESSMENT

LOCATION	RESIDUAL HAZARD	SITE MEASURES TO ADDRESS HAZARD
CONSTRUCTION		
THROUGHOUT SITE	PRESENCE OF GROUND GAS, ASBESTOS, BURIED SERVICES AND INVASIVE SPECIES	REFER TO HERRF DOCUMENT MPT3-CS0-00-SRG-601 FOR SPECIFIC DETAILS AND CONTROL MEASURES REQUIRED
EXISTING LIFT SHAFT	HYPODERMIC NEEDLES HAVE BEEN REPEATEDLY FOUND ON SITE	SHARPS SWEEP TO BE UNDERTAKEN BY TRAINED STAFF DURING CONSTRUCTION, LOOKING SPECIFICALLY FOR NEEDLES.
EXISTING FOOTBRIDGE	CONSTRUCTION WORKS ADJACENT TO CRUMPSALL STATION FOOTBRIDGE, LEADING TO UNDERMINING AND COLLAPSE.	TEMPORARY WORKS DESIGN TO BE PROVIDED BY THE CONTRACTOR WHICH CONSIDERS THE NEED TO TEMPORARILY STABILISE THE STRUCTURE AND THE CONSTRUCTION SEQUENCING PROPOSED AROUND THE BRIDGE.
EAST EMBANKMENT	DESIRE LINE FROM ADJACENT PROPERTIES DOWN THE EMBANKMENT TO THE STOP.	UNAUTHORISED ACCESS TO BE DETERRED BY TEMPORARY HOARDINGS AND MARKED WITH SIGNAGE DURING CONSTRUCTION WORKS.
GUARDRAILS ALONG TRACK SIDE OF TRACK CROSSING RAMPS, AND FRONT OF IB PLATFORM	WORKING ALONGSIDE OPERATIONAL MAINLINES - POTENTIAL ELECTROCUTION / CONFLICT WITH MOVING TRAMS	THESE GUARDRAILS MUST BE INSTALLED UNDER A SUITABLE POSSESSION AND ISOLATION IN ACCORDANCE WITH MRDL PERMIT PROCEDURES
OPERATION / MAINTENANCE		
NONE IDENTIFIED		
DECOMMISSIONING / DEMOLITION		
NONE IDENTIFIED		
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. DOCUMENT REFERENCE OF THE HERRF: MPT3-CS0-00-SRG-601.		



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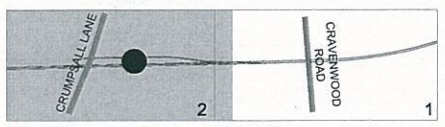
LOCATION PLAN

CRUMPSALL STOP



KEY

FOR CONSTRUCTION

REV	DATE	DETAIL	MADE	CHK'D	APP'D
Q01	13/04/17	ISSUED FOR CONSTRUCTION	CB	NB	ND

CLIENT: Transport for Greater Manchester

MPT Laing O'Rourke Volker Rail | Thales

DESIGN: ZJ
CAD: CB
CHK'D: NB
APP'D: ND
SCALE: 1:200@A1
DATE: 29/01/2017

MANCHESTER METROLINK
TRAFFORD PARK LINE

TITLE:
CRUMPSALL STOP
HANDRAIL AND GUARDRAIL LAYOUT

DRG No' MPT3-CS1-02-LDP-620

REV: Q01

cm | A1

DRG Path: C:\jworking\tascom_au\brookeam\d0119880\MPT3-CS1-02-LDP-620.dwg User: brookeam Plot time: 04-04-17 @ 3:35pm

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NOTES

1. DO NOT SCALE FROM THIS DRAWING
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN
3. ALL LEVELS IN METRES ABOVE ORDINANCE DATUM, NEWLYN
4. FOR RAMP CROSS SECTION DETAILS REFER TO DRAWING MPT3-CS1-02-KDG-661
5. FOR INFORMATION ON TYPE 6 RETAINING WALLS SEE FOLLOWING DRAWING REFERENCES;
   GENERAL ARRANGEMENTS: MPT3-TP0-00-WDG-605
   REINFORCEMENT DETAILS: MPT3-TP0-00-WDD-605
6. STANDARDISED RETAINING WALL DESIGNS TO BE USED BASED ON LOADING REQUIREMENTS, SEE BELOW FOR DESIGN REQUIREMENTS:
   a. MINIMUM BURIED DEPTH OF 500.
   b. ALLOWABLE BEARING RESISTANCE OF SOIL IS ASSUMED AS 120KPA. ANY UNSUITABLE MATERIAL AT FORMATION LEVEL IS TO BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL
   c. MOIST AND SATURATED DENSITY OF SOIL IS 19KN/M.
   d. GRANULAR FILL SHALL BE GENERAL GRADE CLASS 6N AND SHALL HAVE A CHARACTERISTIC Φ VALUE OF 33°

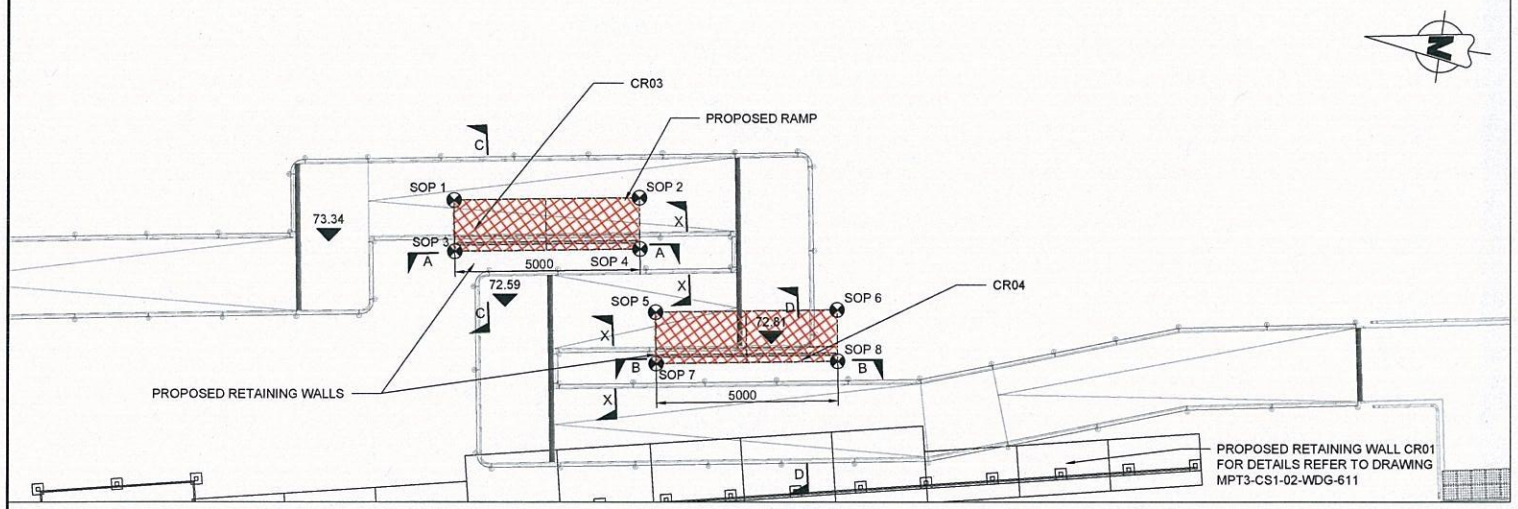
BLINDING CONCRETE CLASS: ST1, IN-SITU CONCRETE CLASS: C40/50

7. BLINDING CONCRETE TO BE CLASS : ST1

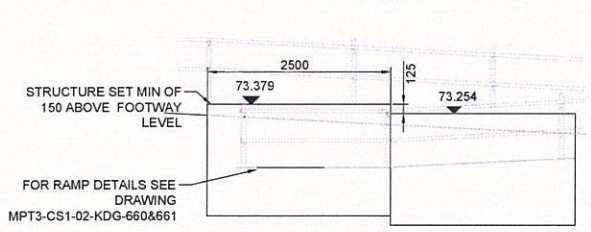
SETTING OUT INFORMATION			
REFERENCE	EASTINGS	NORTHINGS	ELEVATION (m AOD)
SOP1	44144.916	52280.878	71.859
SOP2	44145.698	52275.940	71.734
SOP3	44143.534	52280.659	71.859
SOP4	44144.316	52275.721	71.734
SOP5	44142.674	52275.046	71.428
SOP6	44143.456	52270.107	71.553
SOP7	44141.291	52274.827	71.428
SOP8	44142.073	52269.888	71.553

KEY

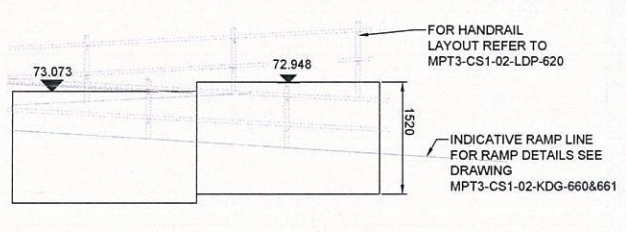
PROPOSED RAMP
RETAINING WALLS



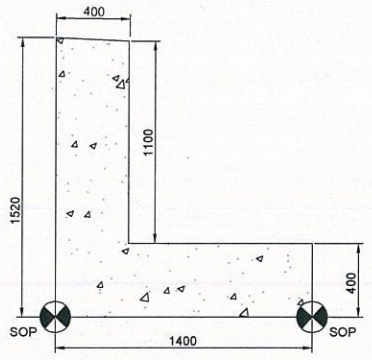
PLAN VIEW
SCALE 1:100 @ A1, 1:200 @ A3



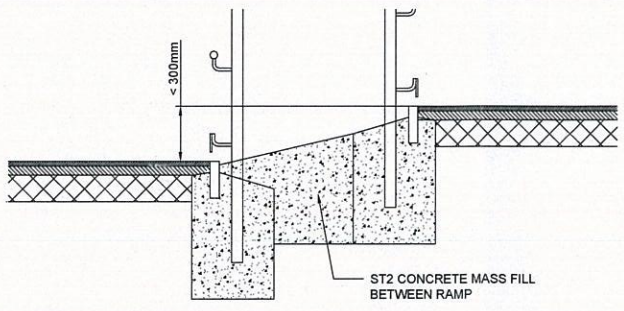
ELEVATION A-A
SCALE 1:50 @ A1, 1:100 @ A3



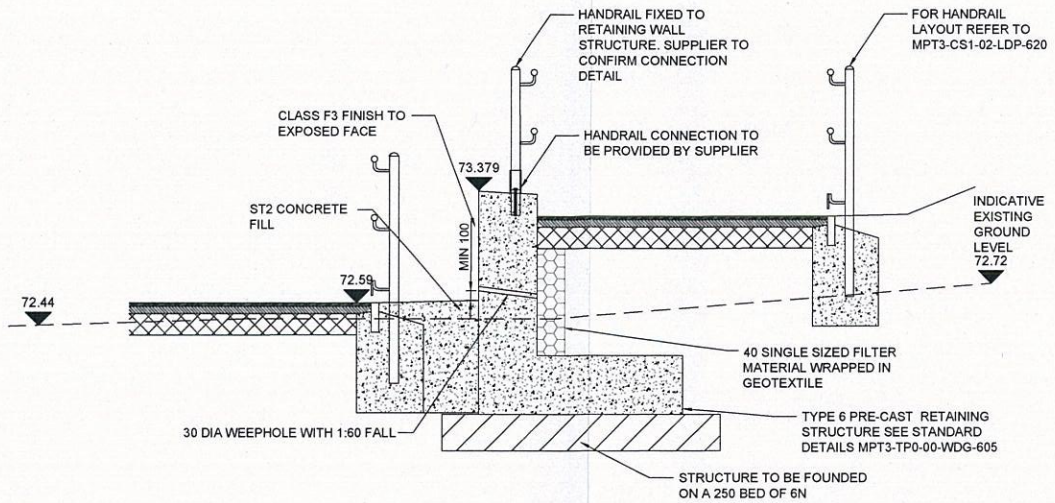
ELEVATION B-B
SCALE 1:50 @ A1, 1:100 @ A3



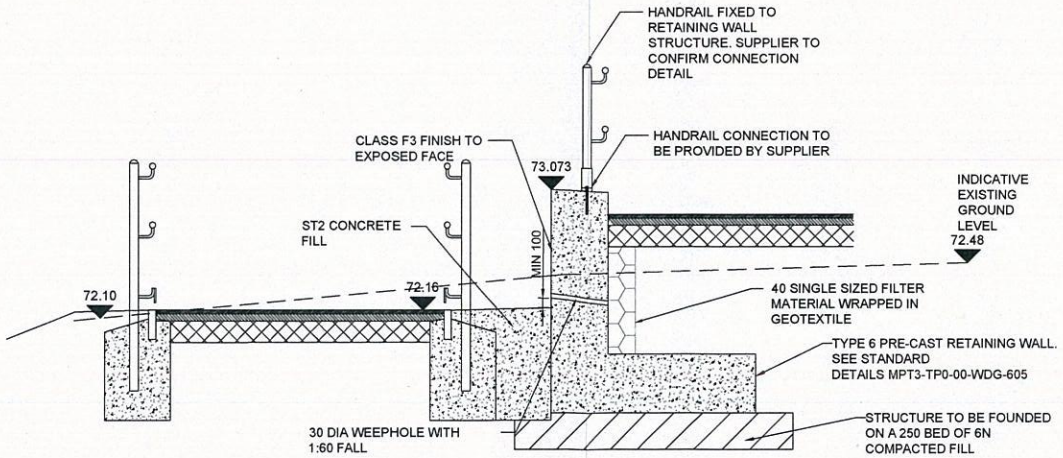
TYPICAL RETAINING WALL SECTION
SCALE 1:20 @ A1, 1:40 @ A3



TYPICAL SECTION (X)
SCALE 1:20 @ A1,
1:40 @ A3



SECTION C-C
SCALE 1:25@ A1, 1:50 @ A3



SECTION D-D
SCALE 1:25 @ A1, 1:50 @ A3

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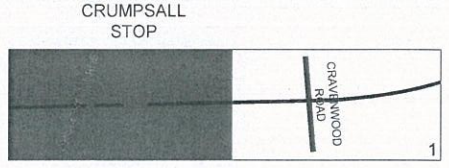
LOCATION PLAN



KEY

FOR CONSTRUCTION

REV	DATE	DETAIL	MADE	CHK'D	APP'D
Q01	12.04.17	ISSUED FOR CONSTRUCTION	AS	LH	MW

CLIENT: Transport for Greater Manchester

MPT Laing O'Rourke Volkerrail | Thales

DESIGN:	AS
CAD:	AS
CHK'D:	LH
APP'D:	MW
SCALE:	AS SHOWN
DATE:	12.04.17

MANCHESTER METROLINK
TRAFFORD PARK LINE

TITLE:
CRUMPSALL STOP
RAMP RETAINING STRUCTURE
GENERAL ARRANGEMENT

DRG No: MPT3-CS1-02-WDG-610

REV: Q01

cm | A1

DRG Path: C:\www.working\aiscom_ei\cjoner1\d0119905\MPT3-CS1-02-WDG-610.dwg User: joner1 Plot time: 13-04-17 @ 11:42am