

Raising of the Conyngham Road Bridge parapet. Includes masonry works and fitting of IPX2 rated mesh to achieve overall 1.8m high parapet.

1.2 high paladin fence on top of 1.2m high concrete parapet on top of or incorporated into new top of River Liffey Embankment retaining wall.

Construct new 2.4m high back of platform fences on both side of the GSWR line. Including around the attenuation pond & with maintenance gates provided between platform ramp and UBO1.

2.4 high paladin fence on top of new pedestrian/cyclistway access retaining wall and extending across to the back of platform to segregate the attenuation tank site from public access. Fan type restriction fence piece on Clancy Quay side end post.

New 1.1m high pedestrian parapet set back from top of existing Clancy Quay retaining wall.

3.6m high Palisade from the Clancy Quay Turret joining up with platform edge fence and transitioning to 2.4m high fence at the top of platform ramp

Construct 1.2m palisade fence on top of cantilever retaining wall with an additional 1.2m containment parapet at the level of the internal substation road.

Construct access and egress gates, 3.6m (min.) height for the new Islandbridge substation compound

Reconstruct the 1.8m parapet wall for section crossing the new cut and cover OBC1A. Provides additional width for wider footpath reinstatement.

Relocate maintenance access gate to the revised maintenance platform located on top of new buried portal (3.5ton LCV access restriction applies)

Raising of the Riverwalk Apartments underground carpark access ramp parapet to achieve a minimum height of 1.8m.

Reconstruct the P-Way Compound fence to suit realigned Heuston West Station access road and bus set-down arrangement.

Reconstruct the Bridge Maintenance Compound fence to suit realigned Heuston West Station access road and new bus set-down passenger transfer area

Reconstruct and extend existing Guinness Sidings railway corridor 2.4m high palisade fence set back along the top the new cess edge King Post Retaining wall to meet up with the back of platform fence at the southern end of new Heuston West Station platform.

Reconstruct Heuston Station main car park boundary palisade fence along cess edge of new siding extension works. Tie into existing fences at either end.

1.8m high topped with wall is to section. The will be extension of) will run along buried portal

LEGEND:

- EXISTING CIE PROPERTY OWNERSHIP BOUNDARY
- PROPOSED ATTENUATION TANK
- EXISTING TRACK TO BE RETAINED
- PROPOSED SLAB TRACK & ELECTRIFICATION
- PROPOSED TRACK WORKS & ELECTRIFICATION
- PROPOSED TRACK WORKS, NOT ELECTRIFIED
- PROPOSED RAILWAY ELECTRIFICATION
- PROPOSED PARAPET MODIFICATIONS (INFIL PANELS AND/OR RAISING)
- PROPOSED CANTILEVER RETAINING WALL
- PROPOSED PILED RETAINING WALL
- PROPOSED KING POST RETAINING WALLS
- PROPOSED GABION RETAINING WALLS
- PROPOSED BOUNDARY WALLS
- PROPOSED BOUNDARY FENCING

NOTES

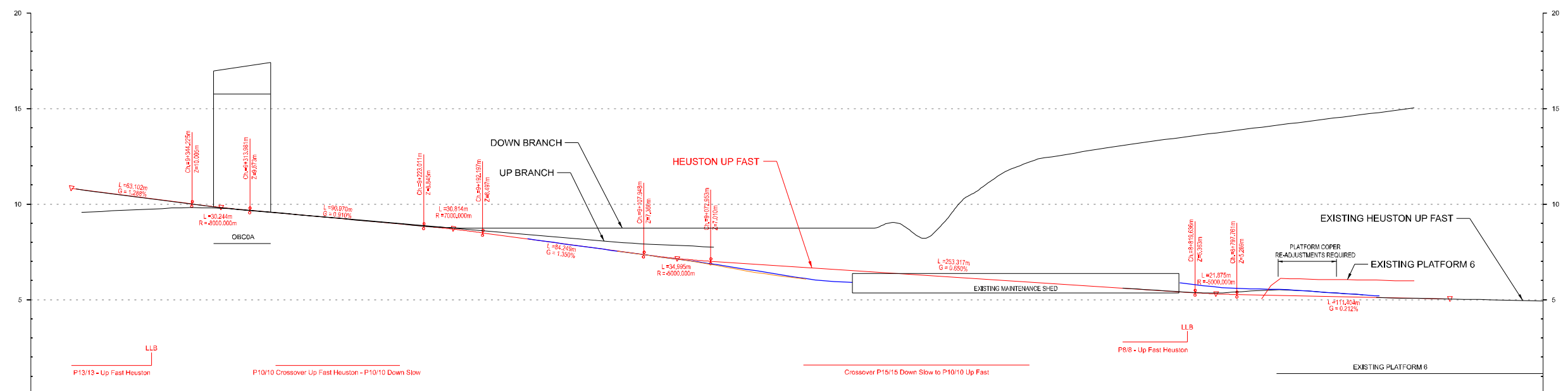
The boundary treatment drawings should be read in conjunction with the Boundary Treatment Schedule (DP-04-REP-ST-TTA-26905) which is appended to the Boundary Treatment Preliminary Design Report (DP-04-23-REP-ST-TTA-26904). Additional clarification of retaining wall details below certain boundary treatment can be found in the Geotechnical Design Report (DP-04-23-REP-CV-TTA-01276) and drawings.

I:\projects\p0423\DWG\RO\TTA-1898\3-HQ\GIS\07-5M\ITFCAD Standard\DE-04-23-REF-ZZ-ATK-30001 - The Block\DE-04-23-REF-ZZ-ATK-30001.dwg

LEGEND:

LONGITUDINAL PROFILE

- PROPOSED VERTICAL ALIGNMENT
- PROJECTED PROPOSED VERTICAL ALIGNMENT
- PROJECTED PROPOSED VERTICAL ALIGNMENT
- EXISTING VERTICAL ALIGNMENT
- ⋈ PROPOSED TANGENT POINT
- LLB LAST LONG BEARER

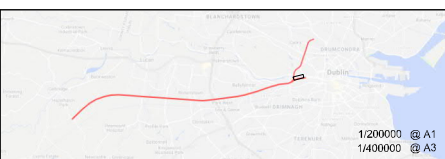


Chainage	9+400	9+350	9+300	9+250	9+200	9+150	9+100	9+050	9+000	8+950	8+900	8+850	8+800	8+750	8+700	8+650	8+600	8+550	8+500	8+450	8+400	Chainage		
Existing Level (m)																								
Proposed Level (m)	10.724	10.585	10.466	10.337	10.209	10.080	9.952	9.825	9.700	9.577	9.456	9.335	9.215	9.094	8.974	8.853	8.732	8.611	8.490	8.369	8.248	8.127		
Horizontal Slue (m)																								
LIR (+) / Lower (-) (m)																								
Horizontal Alignment (m)	R=200,391 L=1,579		R=225,000 L=20,397		R=400,000 L=29,715		STR L=58,473			R=350,000 L=62,647			STR L=89,036			R=300,000 L=203,228			STR					
Vertical Alignment (m)	L=63,102 G=1.280%		L=30,244 G=0.910%		L=90,970 G=0.810%			L=50,812 R=7000,000			L=84,249 G=1.300%			L=34,895 R=6000,000			L=253,317 G=0.650%			L=21,875 R=6000,000			L=111,404 G=0.212%	

PROFILE Scale H=1:1000 V=1:100

- NOTES**
1. CHAINAGES, LEVELS AND COORDINATES ARE SHOWN IN METRES. ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETRES, UNLESS OTHERWISE STATED. ALL CLEARANCE AND SIX-FOOT INTERVALS ARE QUOTED TO RUNNING EDGES (RE).
 2. THIS DESIGN IS BASED UPON A TOPOGRAPHICAL SURVEY DATED SEPTEMBER 2021, COMPLETED BY MURPHY GEOSPATIAL LTD.
 3. CHAINAGE DATUM 9+966.707 IS LOCATED IN THE DOWN SLOW LINE AT 1 MILEPOST (CORK LINE). DOWN LINE CHAINAGE DATUM IS SHOWN ON THIS DRAWING.
 4. NEGATIVE SLUES ARE TO THE LEFT, POSITIVE SLUES ARE TO THE RIGHT. CANT SHOWN AS POSITIVE THROUGHOUT, EXCEPT WHERE ADVERSE TO THE DIRECTION OF CURVATURE. ALL IN THE DIRECTION OF INCREASING CHAINAGE.
 5. TRACK GAUGE TO BE NOMINAL 1602MM FOR PLAIN LINE AND 1600MM FOR P&C.
 6. RADII QUOTED ARE FROM TRACK CENTRELINE, UNLESS OTHERWISE STATED.
 7. RAIL LEVELS ARE QUOTED FOR THE LOW RAIL.
 8. REFER TO INDIVIDUAL ENGINEERING DISCIPLINES' DESIGN SUBMISSION FOR THEIR RESPECTIVE DETAILS. SEE BIM MODELS FOR INTEGRATION.
 9. HEUSTON TRACK PLAN LAYOUT SHOWN IN DRAWING NUMBER DP-04-23-DWG-RO-TTA-18987-v01-S3.

© Irish Rail (2022). This drawing is confidential and the copyright in it is owned by Irish Rail. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of Irish Rail.
 © Ordnance Survey Ireland and government of Ireland. All O.S. Data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039722, (OS Aerial Data or OS Lidar Data) & Survey No. 2022/OSL_NMA_180 (OSI Vector Data).
 All elevations are in metres and relate to OS Geoid Model (OSGM02) Mean Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLG).



Rev	Date	Drn	Chkd	Apprd	Description
v01	23/11/22	CDM	JYM	PR	PLANNING ISSUE

Client

Engineering Designer

Scale
 AS SHOWN @ A1
 AS SHOWN @ A3

Date
 23/11/2022

Project Code
 5199586

Issue
 TTA

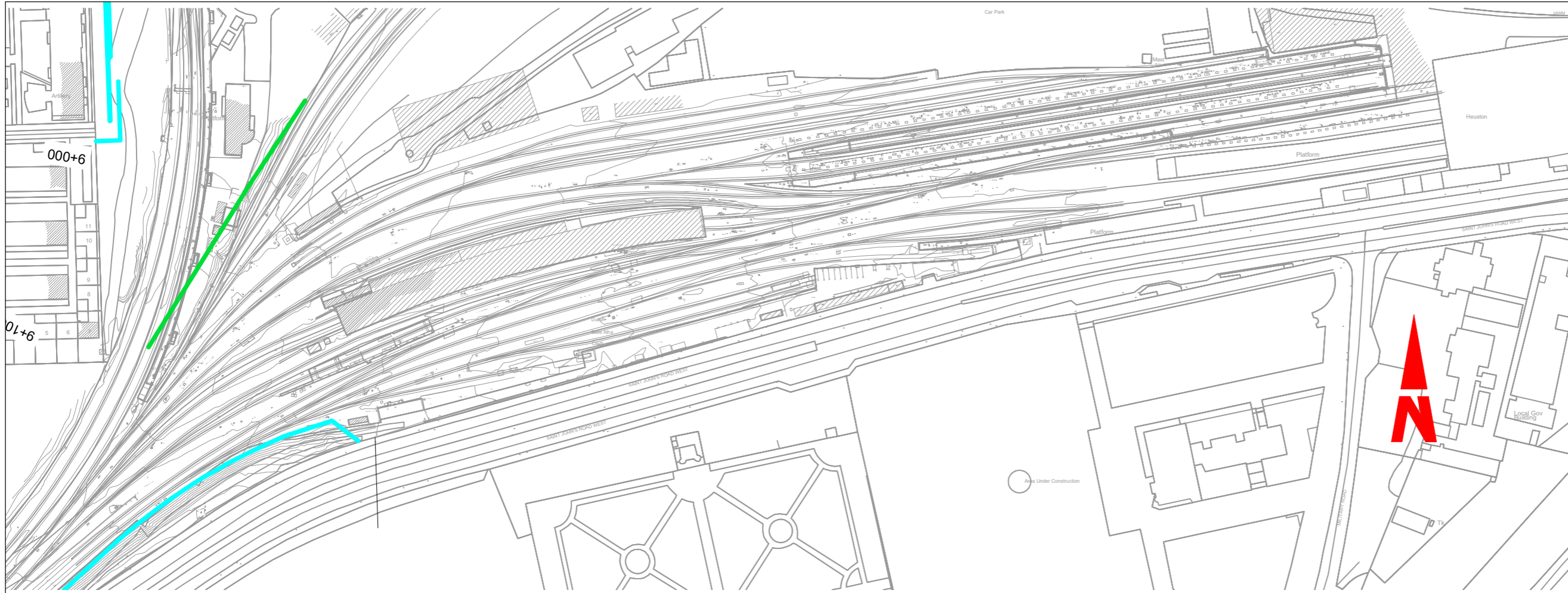
Drawn
 CDM

Checked
 JYM

Approved
 PR

Project Title DART + SOUTH WEST			
Drawing Title HEUSTON YARD LONGITUDINAL PROFILE (SHEET 2 OF 2)			
Drawing File Name DP-04-23-DWG-RO-TTA-18989	Version v01	Status S3	

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



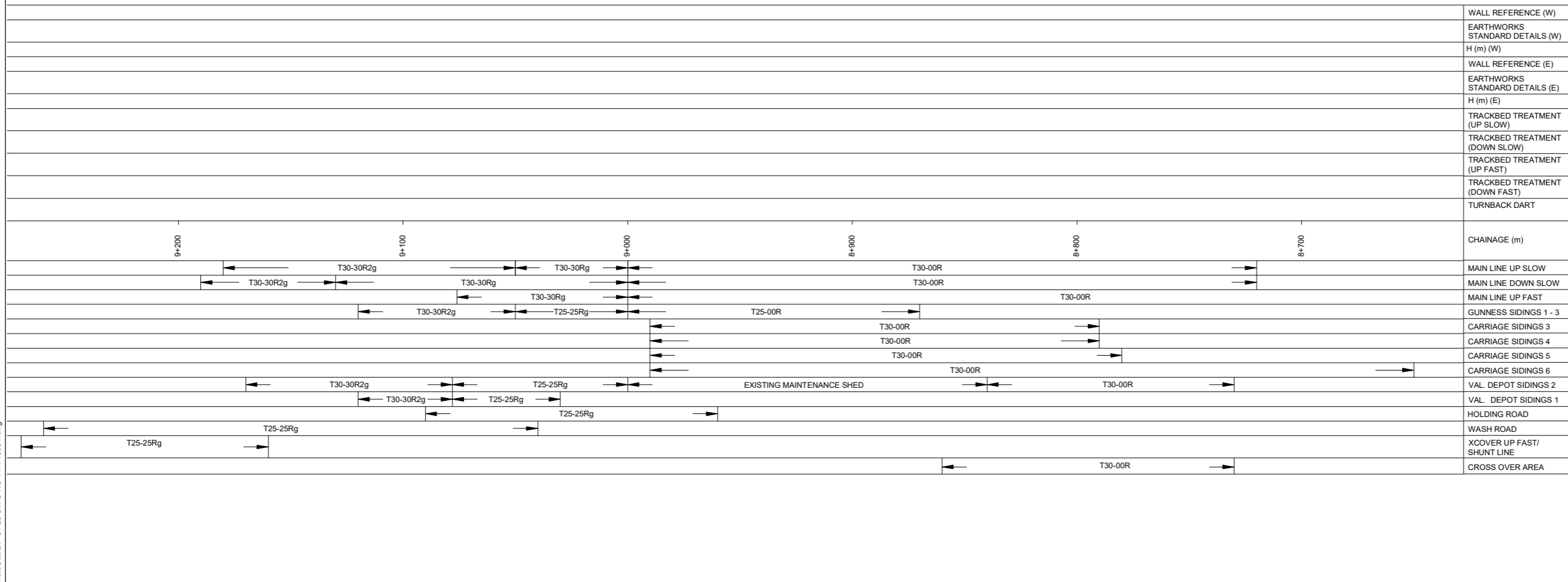
LEGEND:

- PROPOSED SECANT PILE WALL
- - - PROPOSED SECANT PILE WALL ANCHORS
- PROPOSED KING POST WALL
- - - PROPOSED ANCHOR SUBSTRATUM WAYLEAVE
- APPROACH TO EXISTING OVERBRIDGE / TUNNEL (EXTENTS ARE APPROXIMATE AND DESIGN TO BE DEVELOPED AT DETAILED DESIGN)
- PROPOSED GABION WALL
- PROPOSED CANTILEVER WALL
- INDICATIVE EXTENTS OF ADDITIONAL SOIL NAILING AS SLOPE REMEDIATION BEHIND WALL
- INDICATIVE EXTENTS OF SLOPE REGRADING / PROVISION OF GRANULAR SHOULDER AS SLOPE REMEDIATION BEHIND WALL
- END OF SECTION
- ← CONTINUATION OF SECTION
- △ EARTHWORK SLOPE
- △ H INDICATIVE BANK HEIGHT / CUTTING DEPTH

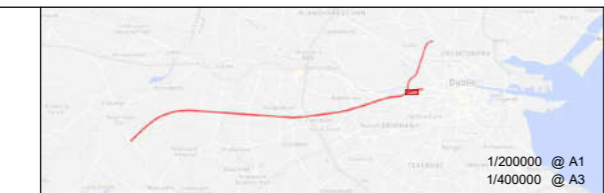
NOTES:

- FOR EARTHWORKS STANDARD DETAILS REFER TO DRAWINGS DP-04-23-DWG-RO-TTA-18960 TO DP-04-23-DWG-RO-TTA-18964.
- WALL ANCHOR LOCATIONS INDICATE ANTICIPATED TEMPORARY OR PERMANENT ANCHORS.
- TRACKBED TREATMENTS MARKED (*) SPECIFIED FOR GREENFIELD SITES. PRELIMINARY ALTERNATIVE TREATMENTS TO BE FURTHER CONSIDERED, FOLLOWING APPROVAL FROM IE, ARE PRESENTED IN TABLE BELOW:

PROPOSED TRACK TREATMENTS	ALTERNATIVE TRACK TREATMENTS
T350g	T150R2g
T350Rg	T300R2g
T450g	T300R2g
T450Rg	T300R2g
T525g	T350R2g
T525Rg	T350R2g



© Irish Rail (2022). This drawing is confidential and the copyright in it is owned by Irish Rail. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of Irish Rail.
 © Ordnance Survey Ireland and government of Ireland. All O.S. Data used for plans are printed under: "Copyright Ordnance Survey Ireland" Survey No. 0039722, (OSi Aerial Data or OSi Lidar Data) & Survey No. 2022/OSi, NIMA, 180 (OSi Vector Data).
 All elevations are in metres and relate to OSi Geoid Model (OSGM02) Malin Head as defined by existing Project Control.
 All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLLG).



Rev	Date	Drn	Chk'd	App'd	Description
v01	10.11.22	KH	PC	PC	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: Atkins

Supported by: FPS

Date: 29.11.21

Scale: 1:1000 @ A1, 1:2000 @ A3

Project Code: 5199586

Issuer: TTA

QMS Code:

Drawn: RG

Checked: PC

Approved: PC

Project Title: DART + SOUTH WEST

Drawing Title: HEUSTON YARD TO OBC1 BRIDGE EARTHWORKS SHEET 1

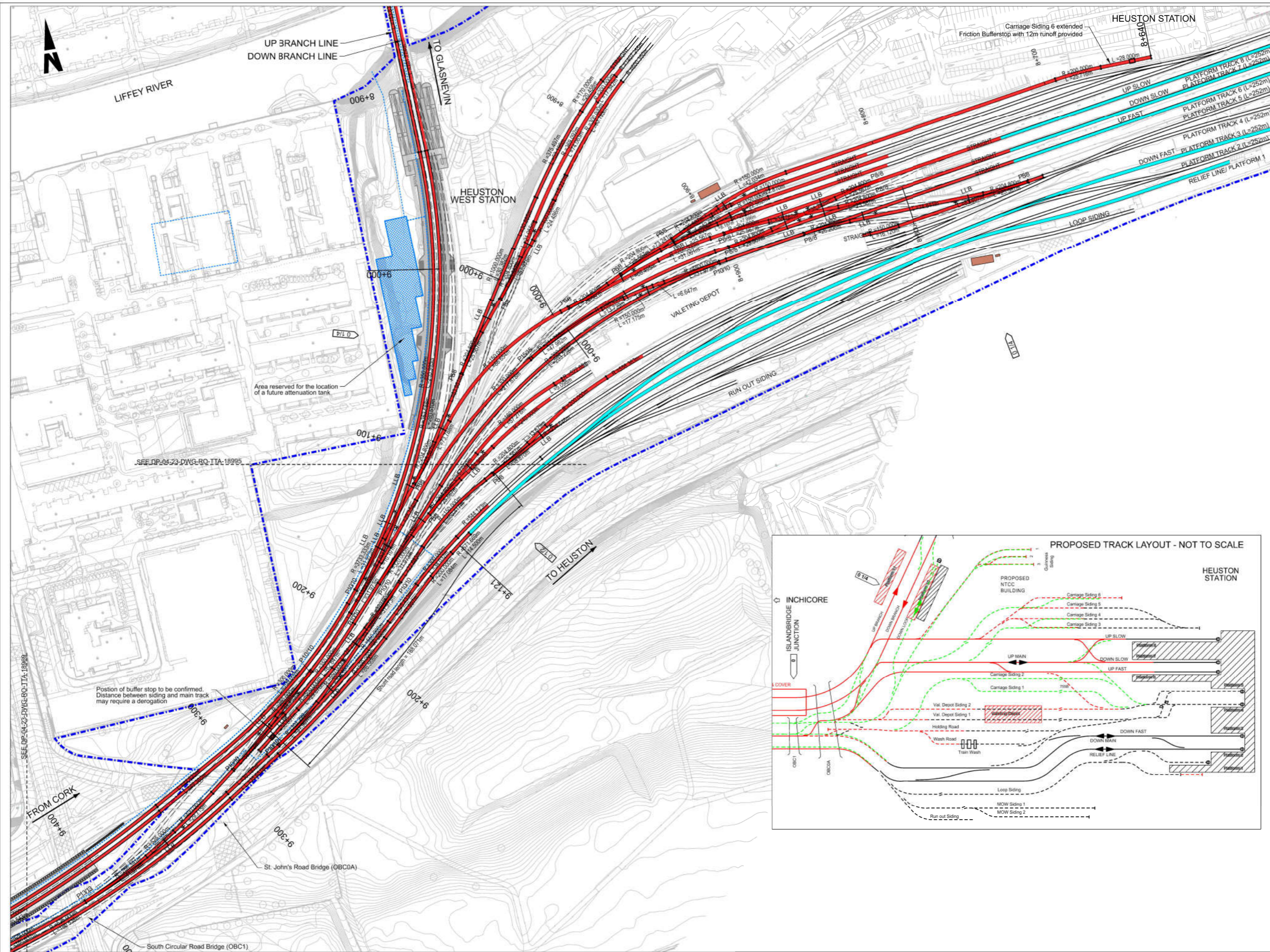
Drawing File Name: DP-04-23-DWG-RO-TTA-18951

Version: v01

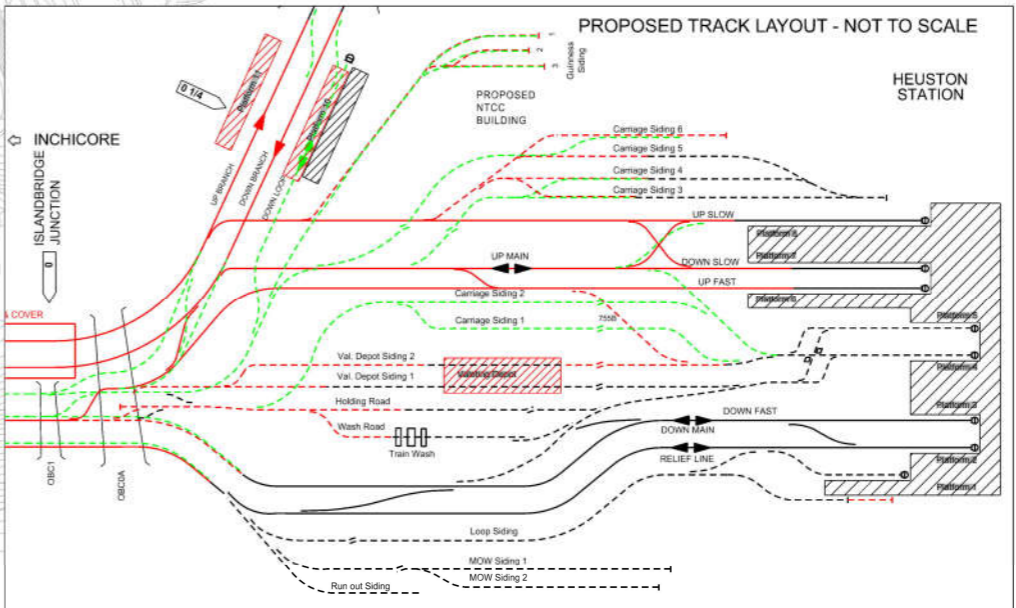
Status: S3

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

U:\5199586\DWG-Graphics\61_AutoCad\DP-04-23-DWG-RO-TTA-18951.dwg



- LEGEND:**
- PROPOSED TRACK LAYOUT**
- RENEWED TRACK / SLUED TRACK
 - EXISTING TRACK TO BE RETAINED
 - EXISTING TRACK TO BE REMOVED
- PLAN**
- RENEWED TRACK / SLUED TRACK
 - EXISTING TRACK TO BE RETAINED (MAIN LINES)
 - EXISTING TRACK TO BE RETAINED (NOT MAIN LINES)
 - EXISTING TRACK TO BE REMOVED
 - IE PROPERTY BOUNDARY
 - PROPOSED RETAINING WALL
 - P8/8 TYPE OF TURNOUT
 - ATTENUATION TANK
 - PROPOSED TRACK DRAINAGE
 - LOW VOLTAGE/TELECOMMUNICATIONS/SIGNALLING CABINETS
 - PROPOSED TANGENT POINT
 - FOULING POINT
 - LLB LAST LONG BEARER
 - MILEPOST



- NOTES**
- CHAINAGES, LEVELS AND COORDINATES ARE SHOWN IN METRES. ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETRES, UNLESS OTHERWISE STATED. ALL CLEARANCE AND SIX-FOOT INTERVALS ARE QUOTED TO RUNNING EDGES (RE).
 - THIS DESIGN IS BASED UPON A TOPOGRAPHICAL SURVEY DATED SEPTEMBER 2021, COMPLETED BY MURPHY GEOSPATIAL LTD.
 - CHAINAGE DATUM 9+906.707 IS LOCATED IN THE DOWN SLOW LINE AT 1 MILEPOST (CORK LINE). DOWN LINE CHAINAGE DATUM IS SHOWN ON THIS DRAWING.
 - NEGATIVE SLUES ARE TO THE LEFT, POSITIVE SLUES ARE TO THE RIGHT. CANT SHOWN AS POSITIVE THROUGHOUT, EXCEPT WHERE ADVERSE TO THE DIRECTION OF CURVATURE. ALL IN THE DIRECTION OF INCREASING CHAINAGE.
 - TRACK GAUGE TO BE NOMINAL 1602MM FOR PLAIN LINE AND 1600MM FOR P&C.
 - RAIL LEVELS ARE QUOTED FOR THE LOW RAIL.
 - REFER TO INDIVIDUAL ENGINEERING DISCIPLINES' DESIGN SUBMISSION FOR THEIR RESPECTIVE DETAILS. SEE BIM MODELS FOR INTEGRATION.
 - VERTICAL PROFILES FOR HEUSTON YARD ARE SHOWN ON DRAWINGS DP-04-23-DWG-RO-TTA-18988 AND 18989

© Irish Rail (2022). This drawing is confidential and the copyright in it is owned by Irish Rail. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of Irish Rail.

© Ordnance Survey Ireland and government of Ireland. All O.S. Data used for plans are printed under: "Copyright Ordnance Survey Ireland" Survey No. 0039722. (OSi Aerial Data or OSi Lidar Data) & Survey No. 2022/OSi_NMA_180 (OSi Vector Data). All elevations are in metres and relate to OSi Geoid Model (OSGM02) Mean Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLLG).



Rev	Date	Drn	Chk'd	App'd	Description
v01	22/07/22	CDM	JYM	PR	PLANNING ISSUE

Client: **Iarnród Éireann Irish Rail**

Engineering Designer: **ATKINS**

Supported by: **TYPSA**, **GPS**

Date: 22/07/2022 | Scale: 1:1000 @ A1, 1:2000 @ A3

Project Code: 5199586 | Issuer: TTA

QMS Code: CDM | Checked: JYM | Approved: PR

Project Title	DART + SOUTH WEST		
Drawing Title	HEUSTON YARD TRACK PLAN LAYOUT		
Drawing File Name	DP-04-23-DWG-RO-TTA-18987	Version	v01
Status	S3		

DO NOT SCALE USE FIGURED DIMENSIONS ONLY