

CURRENT STATE. ELEVATION  
SCALE: 1:100

|      |            |                        |             |             |             |
|------|------------|------------------------|-------------|-------------|-------------|
| V06  | 28/01/2022 | STRUCTURE DETAIL ADDED | EAC         | ACJ         | CCH         |
| V01  | April 2022 | PLANNING ISSUE         | EAC         | ACJ         | CCH         |
| REV. | DATE       | DESCRIPTION            | PRODUCED BY | REVIEWED BY | APPROVED BY |

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Survey No: 6039720 (OS Aerial Data or OS Lidar Data) & Survey No: 2020OS\_NMA\_180 (OS 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 (TL49).

Client

Consultant

Project

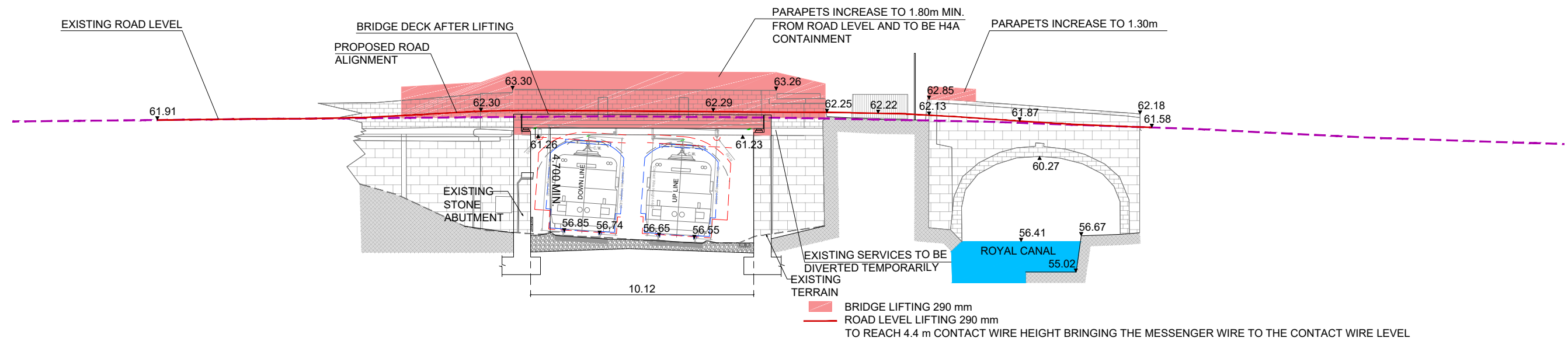
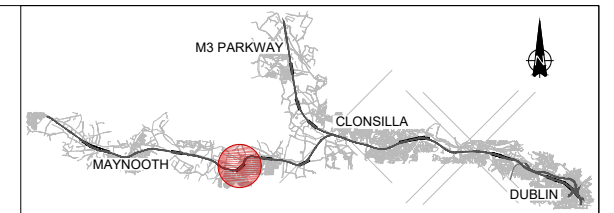
Drawing Title

STRUCTURE DESIGN  
OBG16. BRIDGE DECK HEAVY LIFTING  
CURRENT STATE

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

Drawing Number | Project | Originator | Discipline | Location | Type | Role | Number | Phase  
MAY MDC STR RS13 DR C 0002 D

Date: April 2022 Job No: P/101086 Status: F1-Approved & accepted Rev: V01 Sheet: 1 of 5



FINAL STATE. ELEVATION  
SCALE: 1:100

BRIDGE LIFTING 290 mm  
ROAD LEVEL LIFTING 290 mm  
TO REACH 4.4 m CONTACT WIRE HEIGHT BRINGING THE MESSENGER WIRE TO THE CONTACT WIRE LEVEL

|      |            |                        |             |             |             |
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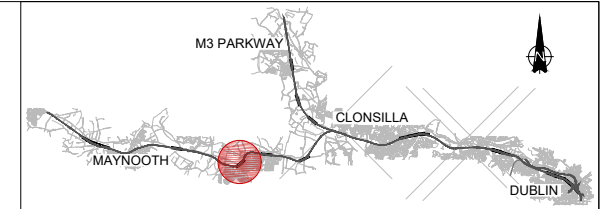
STRUCTURE DESIGN  
OBG16. BRIDGE DECK HEAVY LIFTING  
FINAL STATE

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

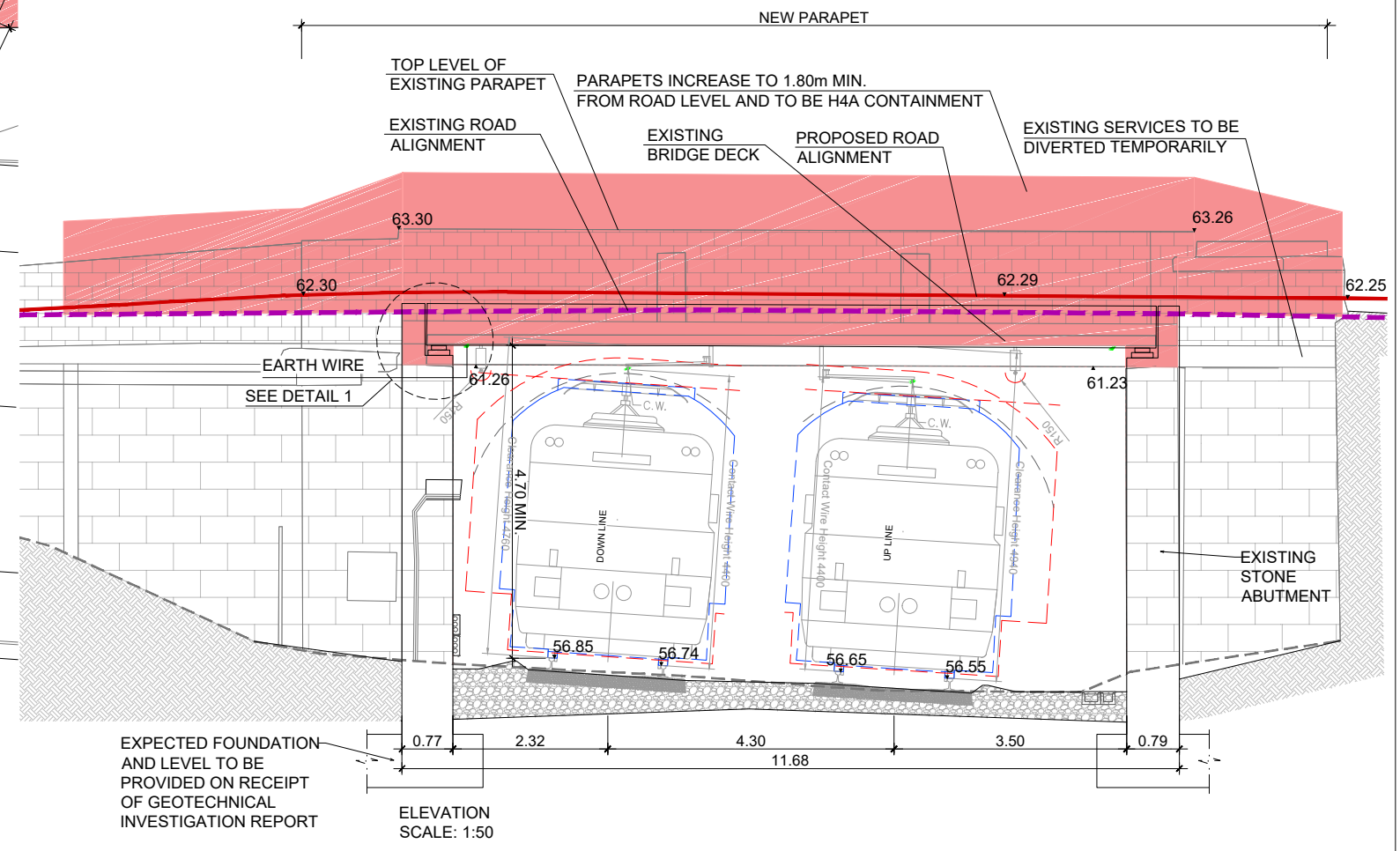
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MAY MDC STR RS13 DR C 0002 D

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PLAN  
SCALE: 1:50



EXPECTED FOUNDATION AND LEVEL TO BE PROVIDED ON RECEIPT OF GEOTECHNICAL INVESTIGATION REPORT  
ELEVATION SCALE: 1:50

|      |            |                        |             |             |             |
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Consultant

Project

Drawing Title

STRUCTURE DESIGN  
OBG16. BRIDGE DECK HEAVY LIFTING  
FINAL STATE DETAIL

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

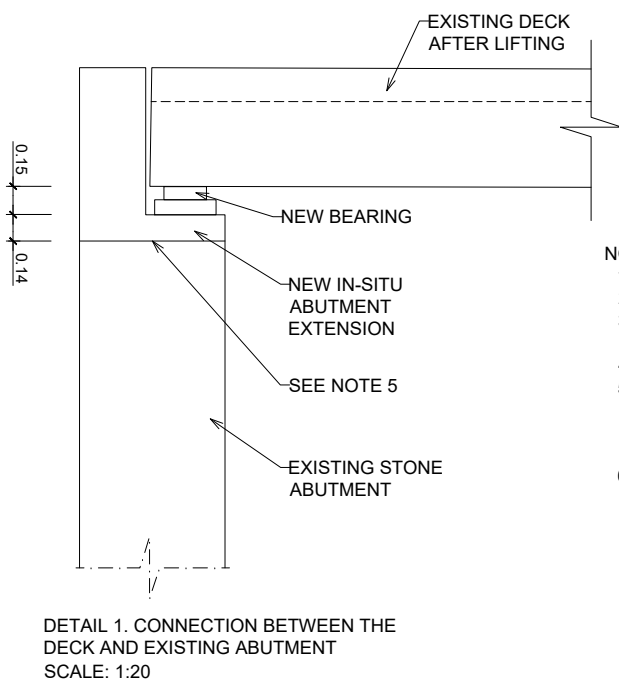
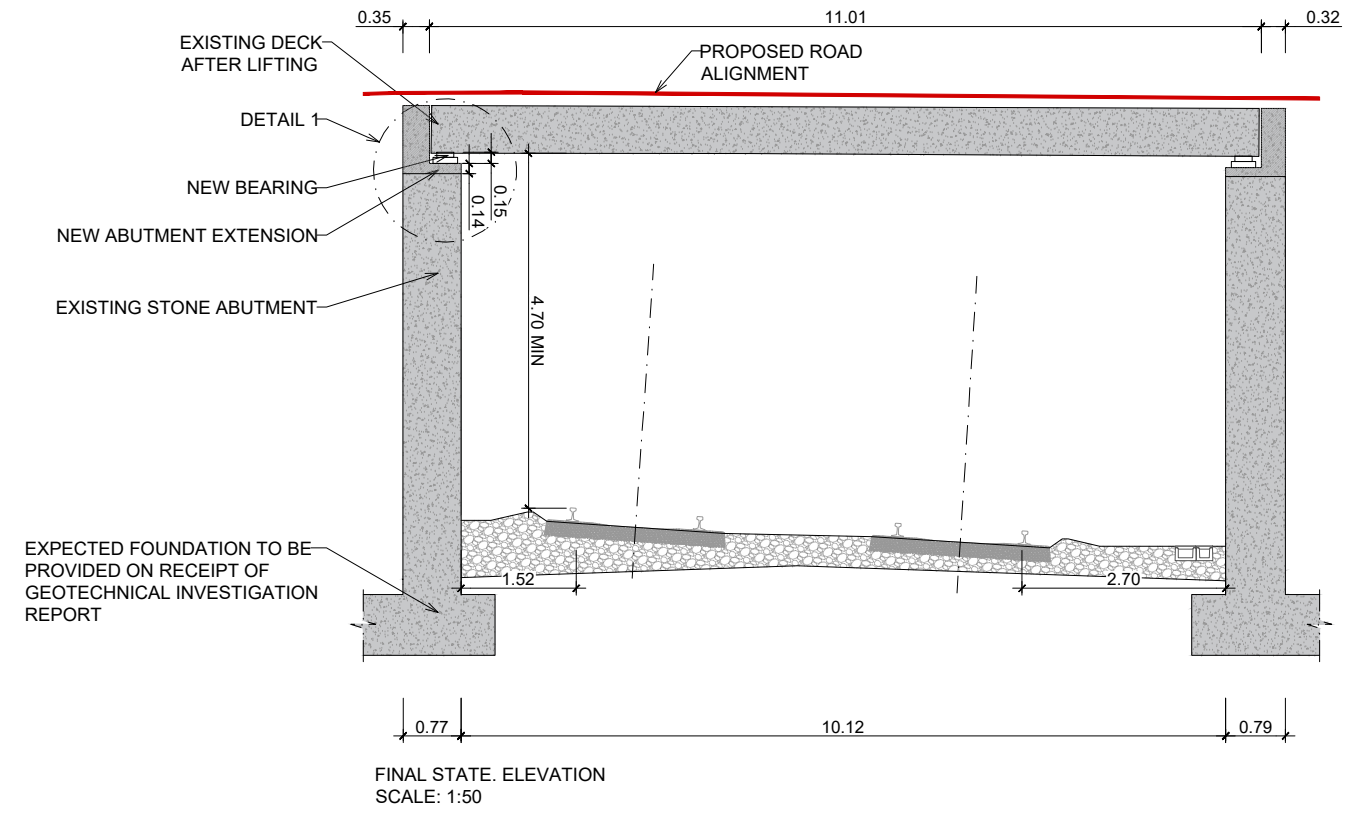
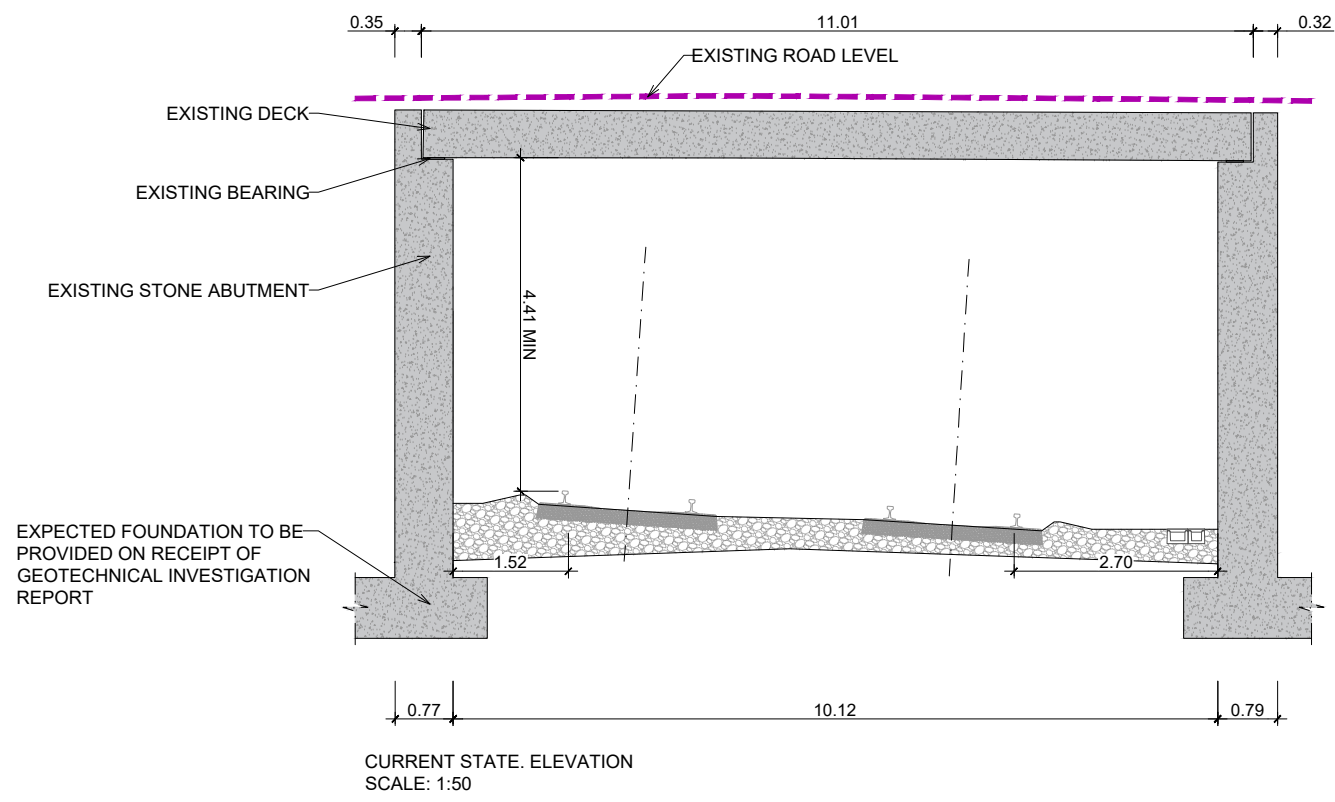
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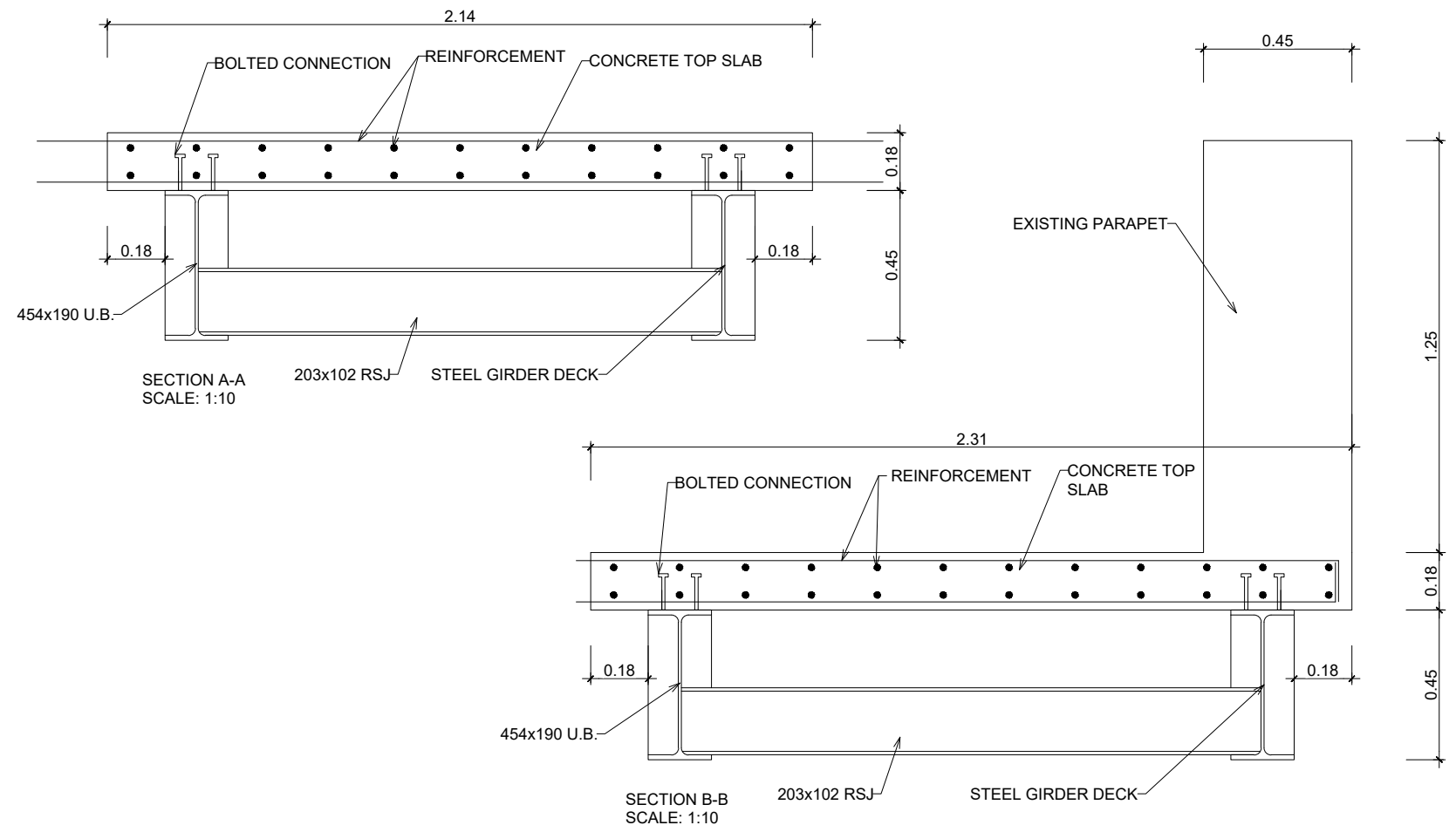
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- NOTES (TOP DOWN):
- 1) STRUCTURAL CONCRETE TOP SLAB
  - 2) STEEL GIRDER DECK
  - 3) NEW ELASTOMERIC BEARING (DESIGN DEPENDENT)
  - 4) EXTENDED ABUTMENT WALL HEAD
  - 5) FACE OF EXISTING ABUTMENT WORK: PLACE LEVELLING LAYER AND STEEL BEAM WITH ANCHOR BOLTS TO BE CAST INTO THE NEW ABUTMENT EXTENSION
  - 6) EXISTING STONE ABUTMENT



|             |            |                |             |     |     |
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Client

Tionscatal Éireann  
Project Ireland  
2040

NTA  
Údarás Náisiúnta Iompartha  
National Transport Authority

Iarnród Éireann  
Irish Rail

Consultant

IDOM

G3

IROD  
I. RODRIGUEZ & D. RODRIGUEZ

Project

DART+  
West

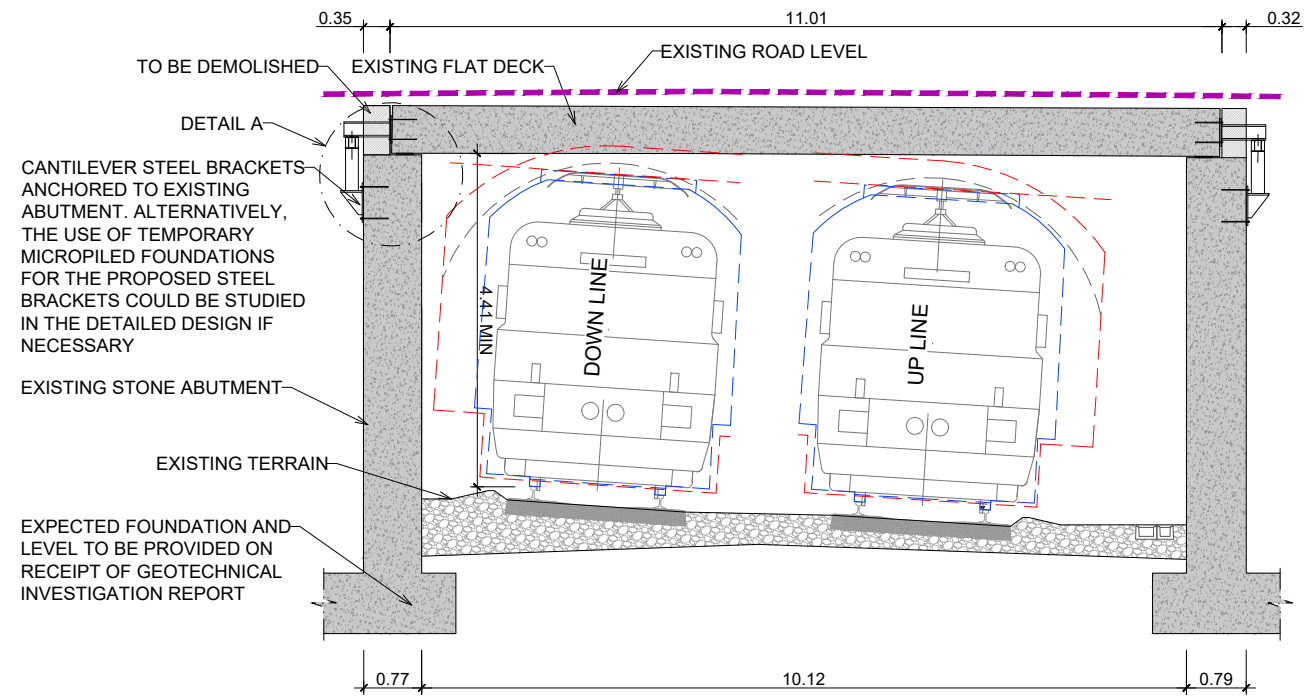
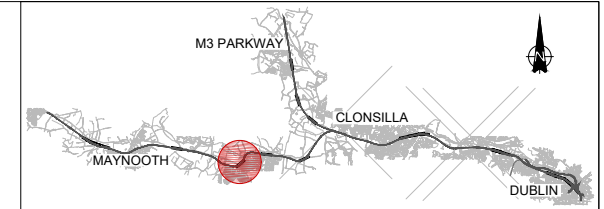
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STRUCTURE DESIGN  
OBG16. BRIDGE DECK HEAVY LIFTING  
STRUCTURAL DESIGN DETAIL

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

Drawing Number | Project | Originator | Discipline | Location | Type | Role | Number | Phase  
MAY MDC STR RS13 DR C 0002 D

Date: April 2022 Job No: P/101086 Status: F1-Approved & accepted Rev: V01 Sheet: 4 of 5



TEMPORARY SUPPORTING SYSTEM WITH CANTILEVER BRACKETS BEAMS. DECK JACKING SUPPORT STRUCTURE  
SCALE: 1:50

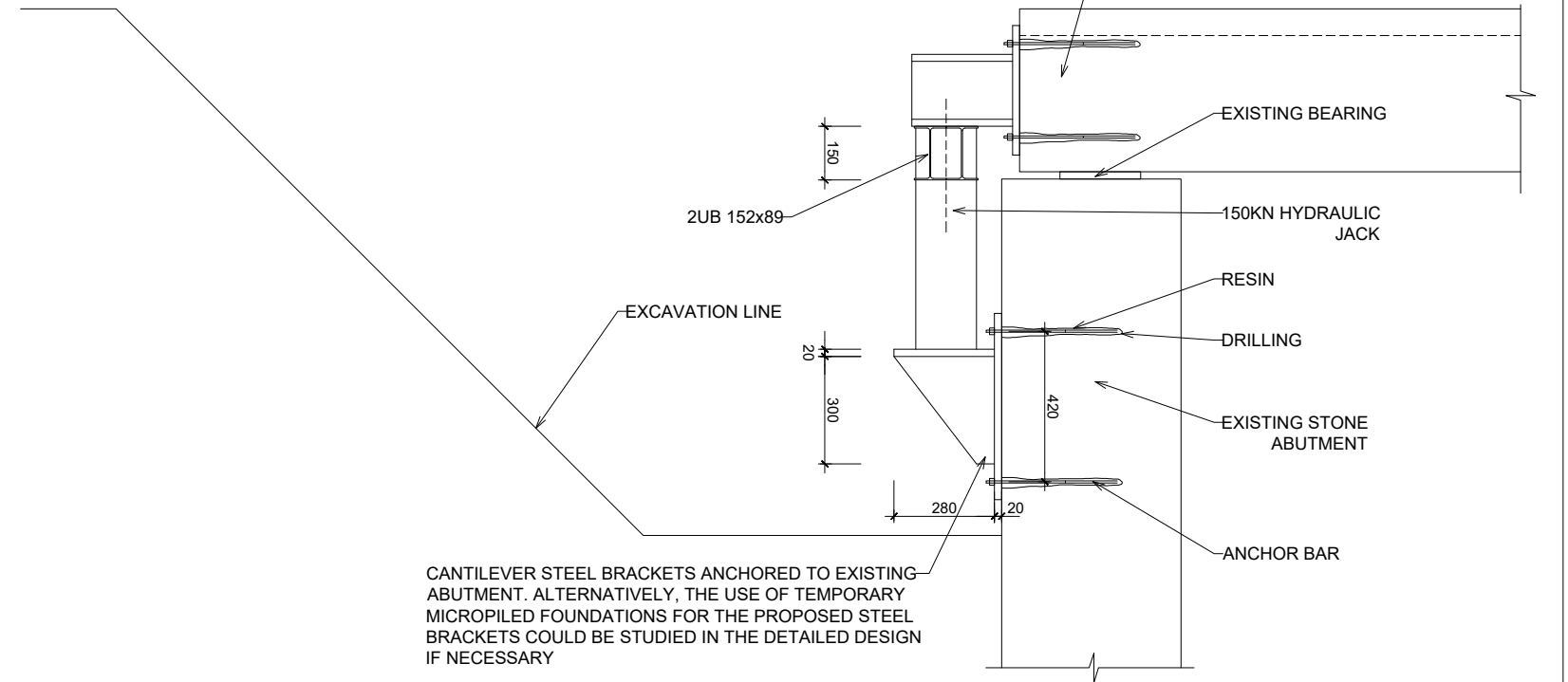
NOTE:

- WEIGHTS  
 SELF-WEIGHT OF DECK & PARAPETS APPROX. 1050KN  
 DEAD LOAD OF PAVEMENT APPROX. 250KN  
 TOTAL WEIGHT OF DECK, PARAPETS & PAVEMENT APPROX. 1300KN  
 (WEIGHTS STATED ARE ESTIMATED VALUE ACCORDING TO EXISTING DRAWINGS & WILL BE CONFIRMED AT DETAILED DESIGN STAGE)
- JACKS WILL BE INSERTED UNDER THE DECK AROUND EVERY 2M, WHICH IS 5 JACKS ON EACH ABUTMENT AND A TOTAL OF 10 JACKS. EACH JACK WILL CARRY AROUND 130 kN.



EXAMPLE OF JACK OF MAX. 150KN  
(SOURCES: LARZEP OFFICIAL WEBSITE)

| DIMENSIONS (MM)      |         |
|----------------------|---------|
| MODEL (LARZEP)       | SL01643 |
| CAPACITY (kN)        | 150     |
| STROKE (mm)          | 435     |
| CLOSED HEIGHT (mm)   | 345     |
| EXTENDED HEIGHT (mm) | 780     |
| DIAMETER (mm)        | 170     |
| WEIGHT (Kg)          | 41      |



CANTILEVER STEEL BRACKETS ANCHORED TO EXISTING ABUTMENT. ALTERNATIVELY, THE USE OF TEMPORARY MICROPILED FOUNDATIONS FOR THE PROPOSED STEEL BRACKETS COULD BE STUDIED IN THE DETAILED DESIGN IF NECESSARY

DETAIL A  
SCALE: 1:10

|             |            |                |             |     |     |
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OBG16. BRIDGE DECK HEAVY LIFTING  
TEMPORARY DECK LIFTING STRUCTURE DETAIL

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

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