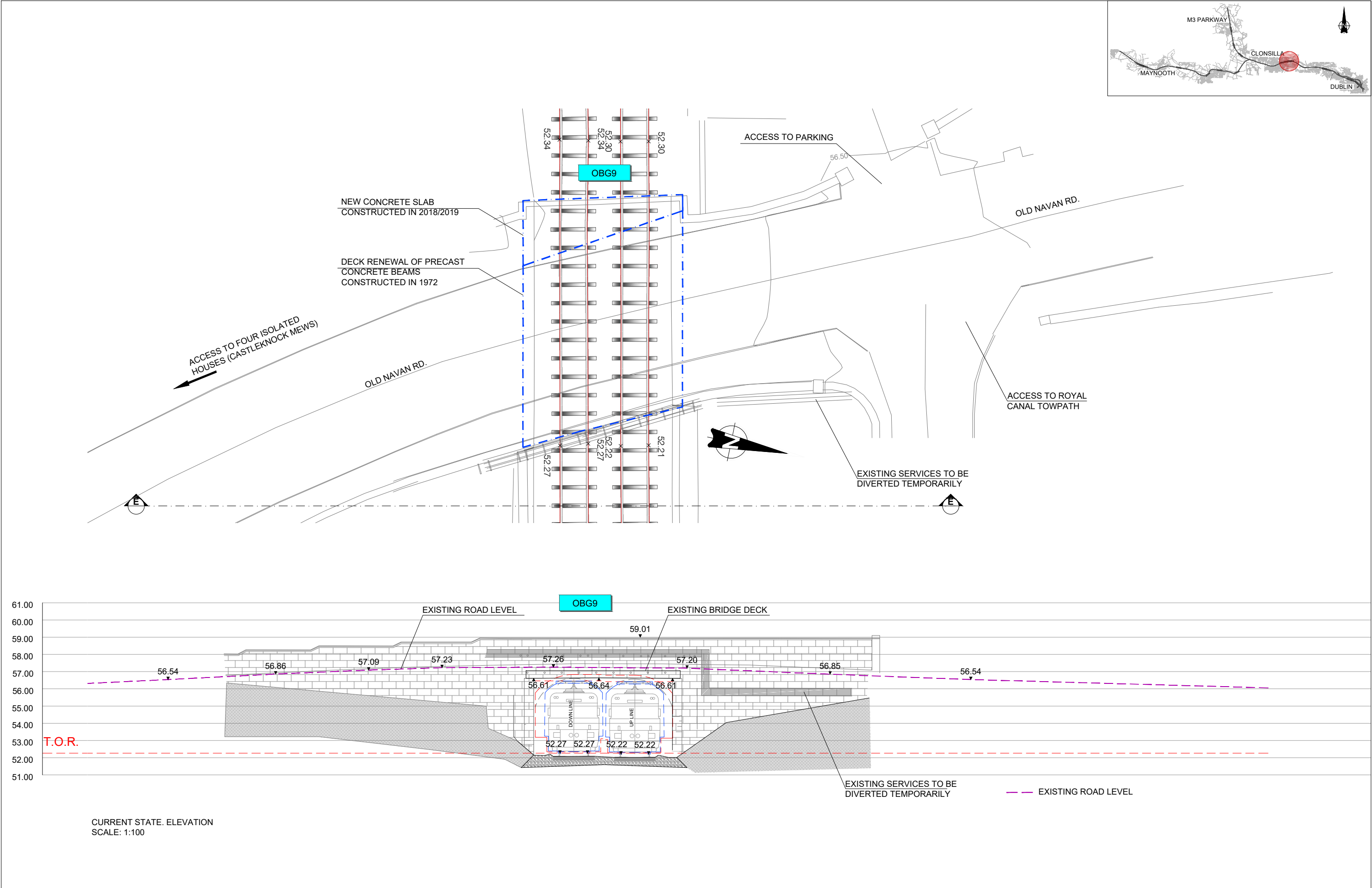
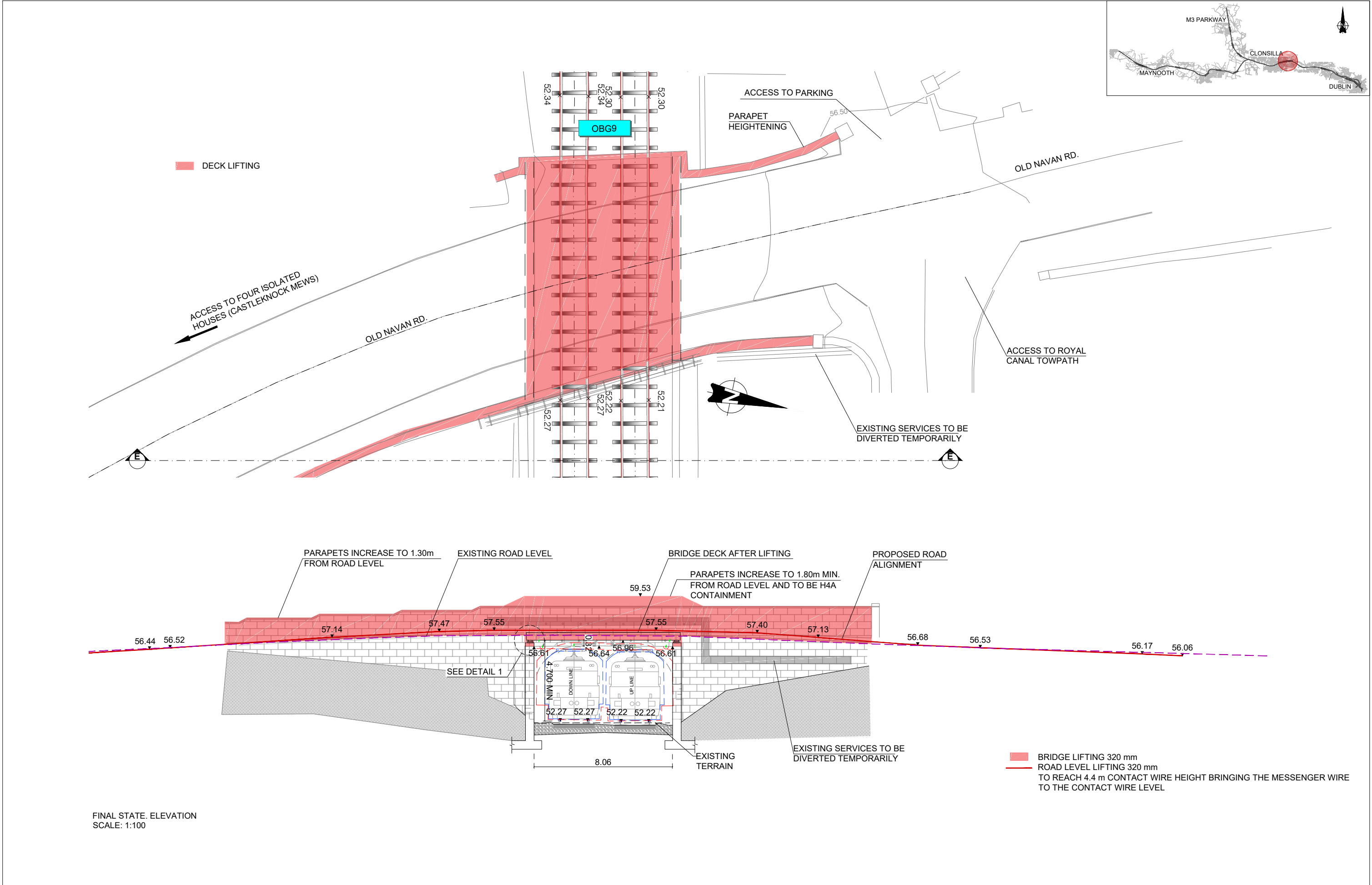




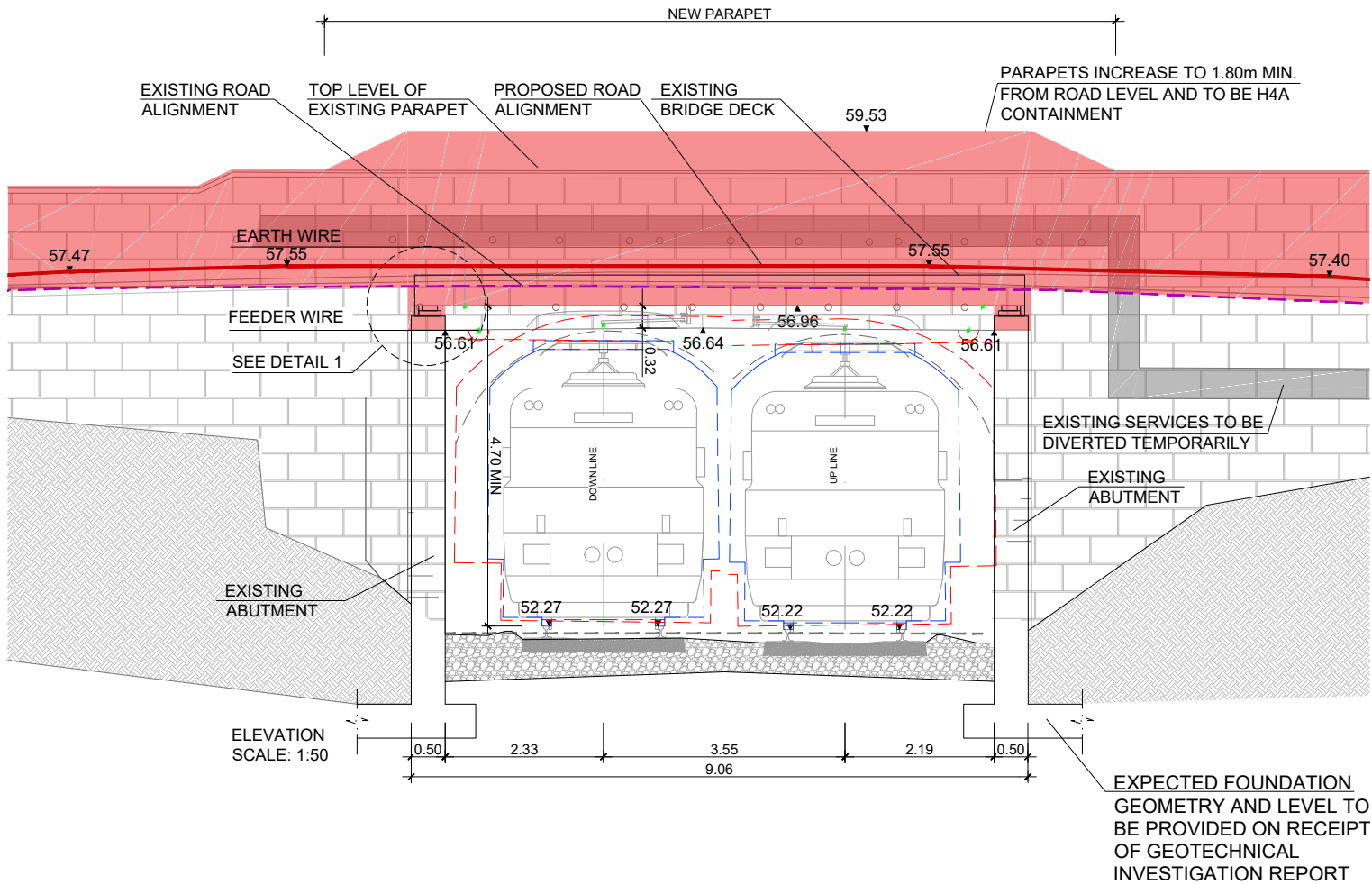
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                                                                                              |  |  |  |  |  |  |  |  |  |
|----------|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------|--|--|----------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------|--|--|-----------------|--|--|--|--|--|-----------------|--|--|--|--|--|-----------------|--|--|--|--|--|----------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
|          |  |  |  |  |  | Client                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  | Project                                                                               |  |  | Drawing Title                                                        |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                                                                                              |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  | STRUCTURE DESIGN<br>OBG9. BRIDGE DECK HEAVY LIFTING<br>CURRENT STATE |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                                                                                              |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  | Consultant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                       |  |  | Scale:                                                               |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                                                                                              |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                       |  |  | 1:1000 @ A1 1:2000 @ A3                                              |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                                                                                              |  |  |  |  |  |  |  |  |  |
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| V01 REV. |  |  |  |  |  | April 2022 DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  | PLANNING ISSUE DESCRIPTION                                           |  |  |                                                                                                   |  |  | EAC PRODUCED BY |  |  |  |  |  | ACJ REVIEWED BY |  |  |  |  |  | CCH APPROVED BY |  |  |  |  |  | Drawing Number   Project   Originator   Discipline   Location   Type   Role   Number   Phase |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | MAY MDC STR RS08 DR C 0002 D                                                                 |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | Date: April 2022                                                                             |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | Job No: P/101086                                                                             |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | Status: F1-Approved & accepted                                                               |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | Rev: V01                                                                                     |  |  |  |  |  |  |  |  |  |
|          |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                       |  |  |                                                                      |  |  |                                                                                                   |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  |                 |  |  |  |  |  | Sheet: 1 of 5                                                                                |  |  |  |  |  |  |  |  |  |



|                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                         |  |            |  |                                 |  |                              |  |               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|-----------------------------------------|--|------------|--|---------------------------------|--|------------------------------|--|---------------|--|
|                                                                                                                                                                                                                                                                  |  |  |  |  |  | Client                                  |  | Project    |  | Drawing Title                   |  |                              |  |               |  |
|                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                         |  |            |  | STRUCTURE DESIGN                |  |                              |  |               |  |
|                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                         |  |            |  | OBG9. BRIDGE DECK HEAVY LIFTING |  |                              |  |               |  |
|                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                         |  |            |  | FINAL STATE                     |  |                              |  |               |  |
| V01 April 2022 PLANNING ISSUE EAC ACJ CCH                                                                                                                                                                                                                        |  |  |  |  |  | Consultant                              |  | DART+ West |  | Scale:                          |  | Drawing Number               |  |               |  |
| REV. DATE DESCRIPTION PRODUCED BY REVIEWED BY APPROVED BY                                                                                                                                                                                                        |  |  |  |  |  | IDOM                                    |  | 0          |  | 1:1000 @ A1 1:2000 @ A3         |  | MAY MDC STR RS08 DR C 0002 D |  | Date:         |  |
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| Survey No. 0039720 (OS Aerial Data or OS Lidar Data) & Survey No. 2020/OSI_NMA_186 (OS Vector Data)                                                                                                                                                              |  |  |  |  |  | Irish Rail                              |  |            |  |                                 |  |                              |  | Sheet: 2 of 5 |  |
| All elevations are in metres and relate to OSi Geoid Model (OSGM02) Mean Head as defined by existing Project Control                                                                                                                                             |  |  |  |  |  | C3                                      |  |            |  |                                 |  |                              |  |               |  |
| All Coordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TL149).                                                                                                                                       |  |  |  |  |  | IROD                                    |  |            |  |                                 |  |                              |  |               |  |



PLAN  
SCALE: 1:50



ELEVATION  
SCALE: 1:50

EXPECTED FOUNDATION  
GEOMETRY AND LEVEL TO  
BE PROVIDED ON RECEIPT  
OF GEOTECHNICAL  
INVESTIGATION REPORT

| REV.        | DATE       | DESCRIPTION    | EAC | ACJ         | CCH |
|-------------|------------|----------------|-----|-------------|-----|
| V01         | April 2022 | PLANNING ISSUE |     |             |     |
| PRODUCED BY |            | REVIEWED BY    |     | APPROVED BY |     |

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All Coordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TL149).

Client

Tionscatal Éireann  
Project Ireland  
2040

NTA  
Údarás Náisiúnta Iompar  
National Transport Authority

Iarnród Éireann  
Irish Rail

Consultant

IDOM

C3

FIROD  
FIONNAN & D'ORR

Project

DART+  
West

Drawing Title

STRUCTURE DESIGN  
OBG9. BRIDGE DECK HEAVY LIFTING  
FINAL STATE DETAIL

Scale:

1:1000 @ A1 1:2000 @ A3

0 INDICATED

Drawing Number

Project | Originator | Discipline | Location | Type | Role | Number | Phase

MAY MDC STR RS08 DR C 0002 D

Date:

April 2022

Job No:

P/101086

Status:

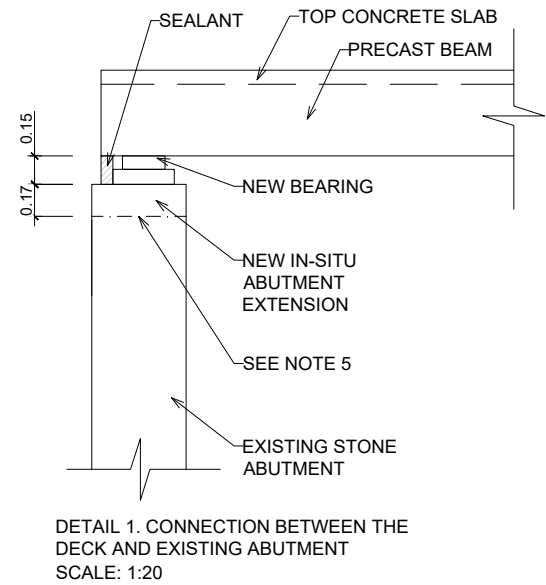
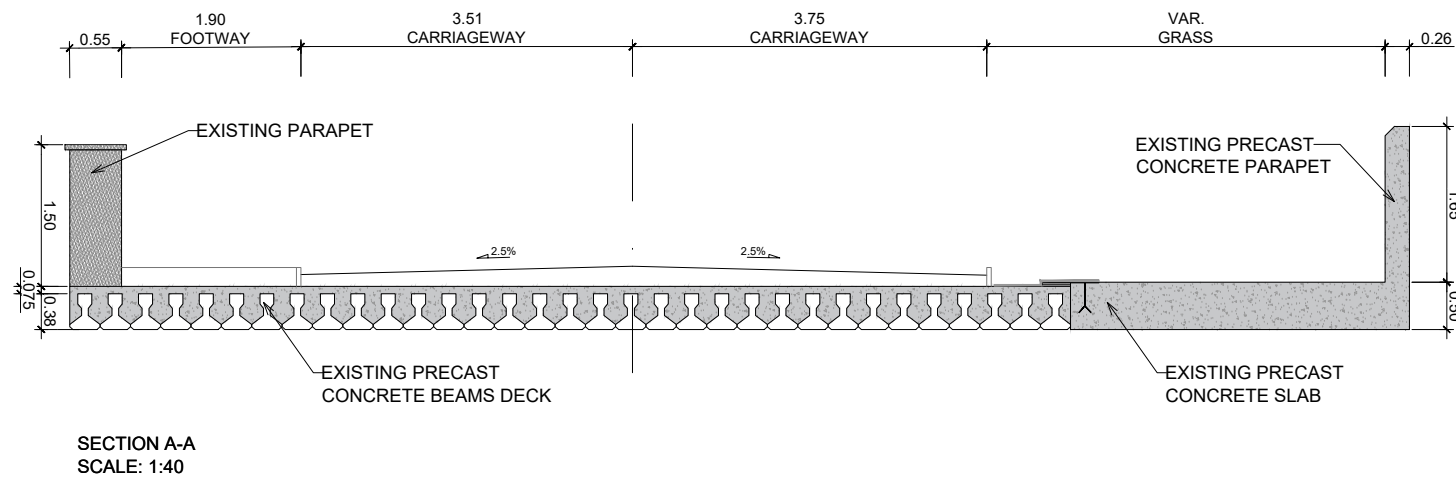
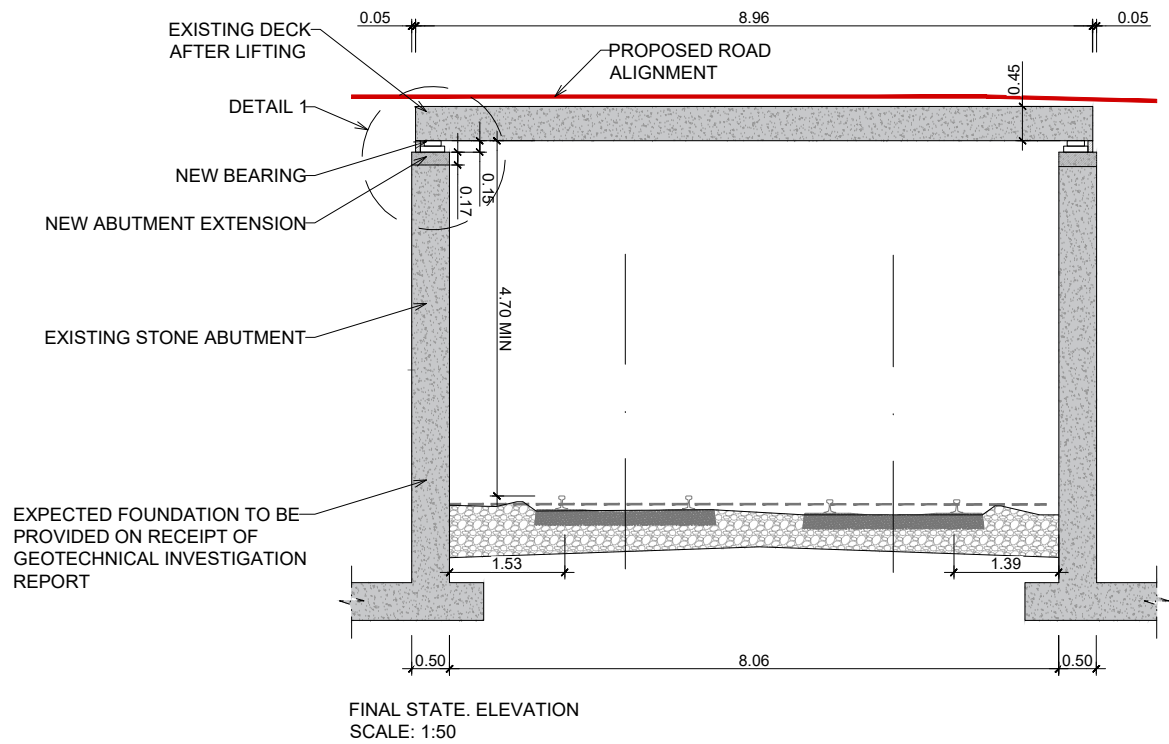
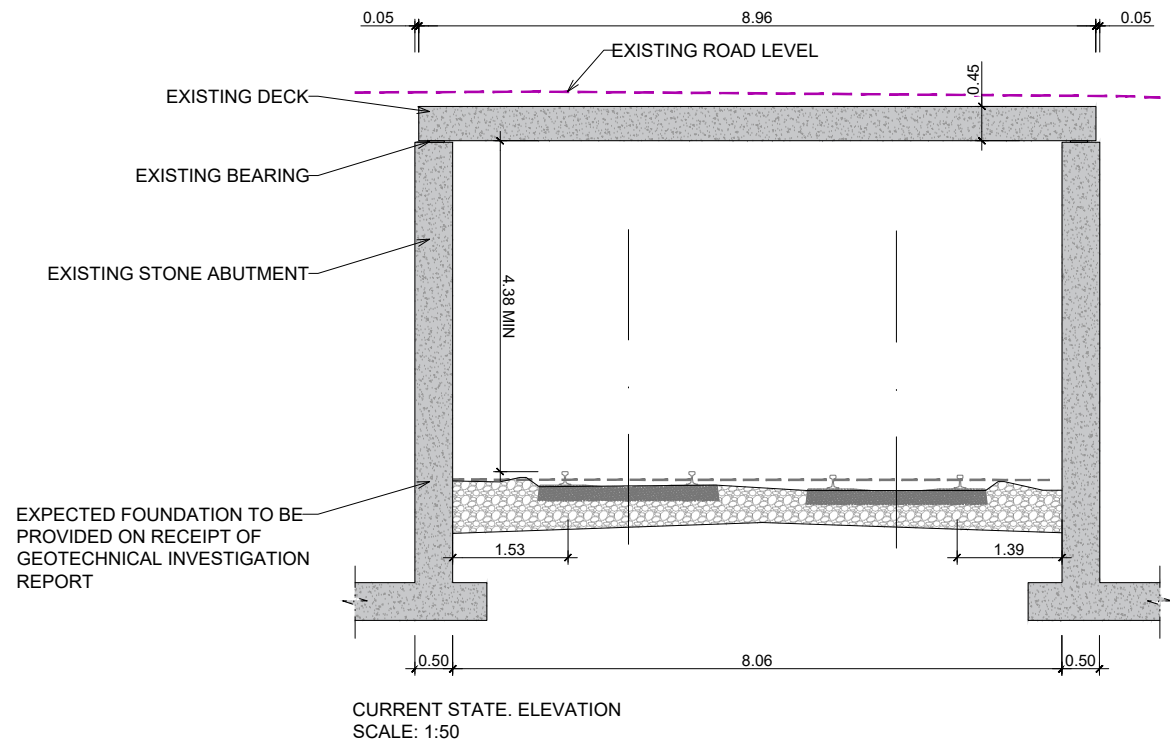
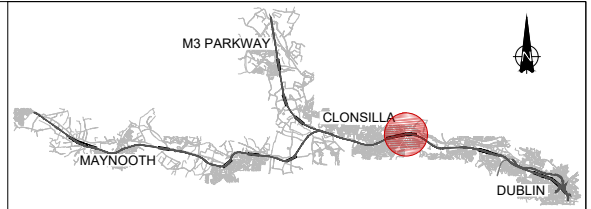
F1-Approved & accepted

Rev:

V01

Sheet: 3 of 5





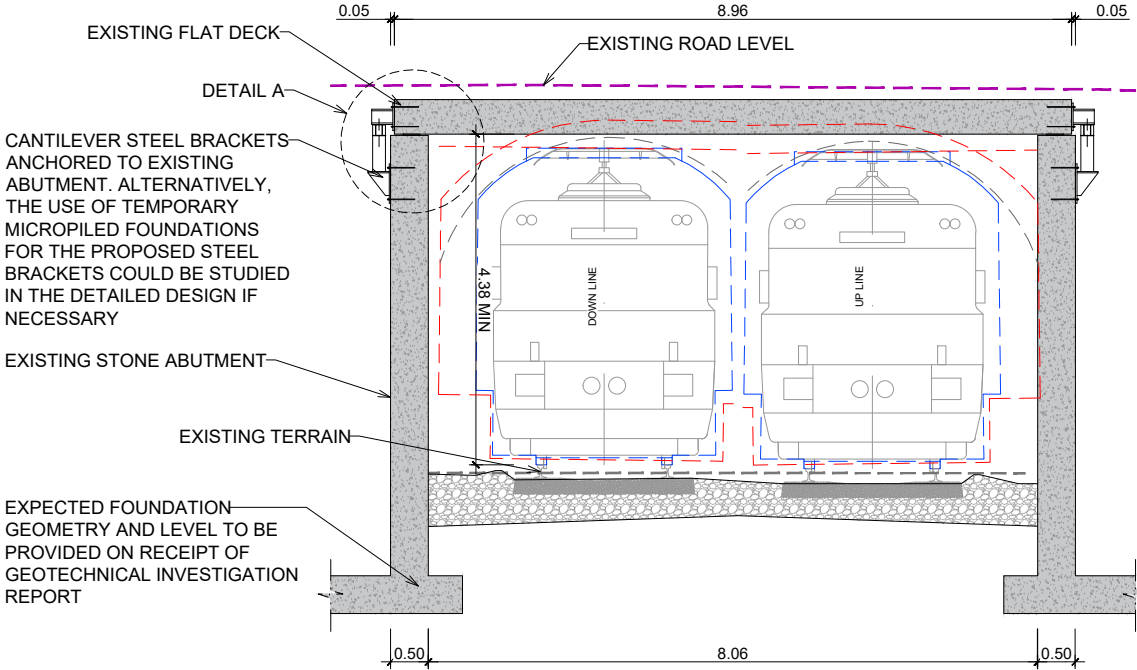
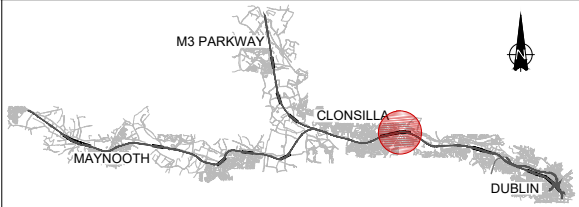
- NOTES (TOP DOWN):
- 1) STRUCTURAL CONCRETE TOPPING
  - 2) PRECAST CONCRETE BEAM
  - 3) NEW ELASTOMERIC BEARING (DESIGN DEPENDENT)
  - 4) EXTENDED ABUTMENT WALL HEAD
  - 5) FACE OF EXISTING ABUTMENT WORK: PLACE LEVELLING LAYER AND STEEL BEAM WITH ANCHOR BOLTS TO BE CAST INTO THE NEW ABUTMENT EXTENSION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

| REV.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DATE       | DESCRIPTION    | PRODUCED BY | REVIEWED BY | APPROVED BY |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|-------------|-------------|
| V01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | April 2022 | PLANNING ISSUE | EAC         | ACJ         | CCH         |
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|            |                                                                                                                                                                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client     |    |
| Consultant |    |

|         |                                                                                       |
|---------|---------------------------------------------------------------------------------------|
| Project |  |
|---------|---------------------------------------------------------------------------------------|

|                                                                                       |  |                                                                                 |  |                                   |            |            |          |             |      |               |       |
|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------|--|-----------------------------------|------------|------------|----------|-------------|------|---------------|-------|
| Drawing Title                                                                         |  | STRUCTURE DESIGN<br>OBG9. BRIDGE DECK HEAVY LIFTING<br>STRUCTURAL DESIGN DETAIL |  |                                   |            |            |          |             |      |               |       |
| Scale:<br>1:1000 @ A1 1:2000 @ A3                                                     |  | Drawing Number                                                                  |  | Project                           | Originator | Discipline | Location | Type        | Role | Number        | Phase |
|  |  |                                                                                 |  | MAY                               | MDC        | STR        | RS08     | DR          | C    | 0002          | D     |
| Date:<br>April 2022                                                                   |  | Job No:<br>P/101086                                                             |  | Status:<br>F1-Approved & accepted |            |            |          | Rev:<br>V01 |      | Sheet: 4 of 5 |       |



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

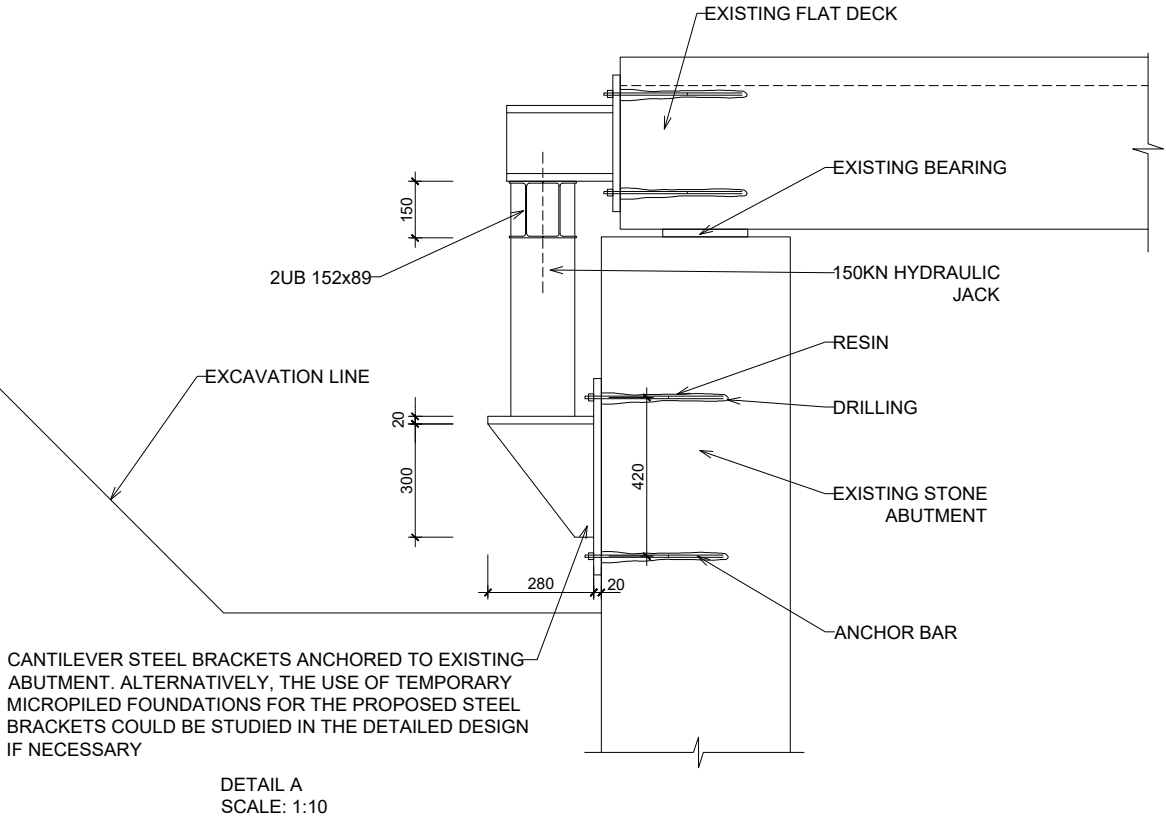
NOTE:

1. WEIGHTS  
SELF-WEIGHT OF DECK & PARAPETS APPROX. 1550KN  
DEAD LOAD OF PAVEMENT APPROX. 220KN  
TOTAL WEIGHT OF DECK, PARAPETS & PAVEMENT APPROX. 1770KN  
(WEIGHTS STATED ARE ESTIMATED VALUE ACCORDING TO EXISTING DRAWINGS & WILL BE CONFIRMED AT DETAILED DESIGN STAGE)
2. JACKS WILL BE INSERTED UNDER THE DECK AROUND EVERY 2M, WHICH IS 6 JACKS ON EACH ABUTMENT AND A TOTAL OF 12 JACKS. EACH JACK WILL CARRY AROUND 148 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      |



DETAIL A  
SCALE: 1:10

| REV. | DATE       | DESCRIPTION    | EAC | ACJ | CCH |
|------|------------|----------------|-----|-----|-----|
| V01  | April 2022 | PLANNING ISSUE |     |     |     |

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Client

Consultant

Project

Drawing Title

STRUCTURE DESIGN  
OBG9. BRIDGE DECK HEAVY LIFTING  
TEMPORARY DECK LIFTING STRUCTURE DETAIL

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

Drawing Number | Project | Originator | Discipline | Location | Type | Role | Number | Phase  
MAY MDC STR RS08 DR C 0002 D

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